Village of Arlington Heights
Plan Commission
Board Room, 3rd Floor
Arlington Heights Village Hall, 33 S. Arlington Heights Rd.
December 20, 2023
7:30 PM

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF MINUTES

A. Arlington Gateway Development/Phase 1 - 1, 15, 111 E. Algonquin Rd, 2355 S. Arlington Heights Rd. - 11/29/23

IV. PUBLIC HEARINGS

A. Chase Bank - 585 E. Palatine Rd. - PC#23-014
Amendment to Ordinance 84-10, Special Use Permit for Bank with Drive-Thru, Variation

B. Christian Pre-K Daycare - 308 N. Evergreen Ave - PC#23-015
Land Use Variation for Daycare in R-7 District, Special Use Permit for Daycare in B-2 District, Variations

V. OTHER BUSINESS

A. Public Comment

VI. PUBLIC COMMENTS

VII. ADJOURNMENT

Persons with disabilities requiring auxiliary aids or services, such as an American Sign Language interpreter or written materials in accessible formats, should contact Erin Mercado, at 33 S. Arlington Heights Road, Arlington Heights, Illinois 60005, emercado@vah.com or (847)368-5793.

Plan Commission
12/20/2023

Item:	Arlington Gateway Development/Phase 1 - 1, 15, 111 E. Algonquin Rd, 2355 S. Arlington Heights Rd. - 11/29/23
Department:	Planning & Community Development Department

ATTACHMENTS:

Description	Type
Arlington Gateway Development - 11/29/23	Minutes

PLAN
_____
_____
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REPORT OF THE PROCEEDINGS OF A PUBLIC HEARING
BEFORE THE VILLAGE OF ARLINGTON HEIGHTS
PLAN COMMISSION

COMMISSION

RE: ARLINGTON GATEWAY DEVELOPMENT/PHASE I - 1, 15, 111 EAST ALGONQUIN ROAD, 2355 SOUTH ARLINGTON HEIGHTS ROAD - PC #23-012 PLANNED UNIT DEVELOPMENT FOR MIXED-USE DEVELOPMENT, REZONING FROM THE B-3, GENERAL SERVICE, WHOLESALE, AND MOTOR VEHICLE DISTRICT TO THE B-2, GENERAL BUSINESS DISTRICT, PRELIMINARY PLAT OF SUBDIVISION APPROVAL TO CONSOLIDATE INTO ONE LOT, AND VARIATIONS FROM CHAPTER 28 MUNICIPAL CODE

REPORT OF PROCEEDINGS had before the Village of

Arlington Heights Plan Commission Meeting taken at the Arlington Heights Village

Hall, 33 South Arlington Heights Road, 3rd Floor Board Room, Arlington Heights,

Illinois on the 29th day of November, 2023 at the hour of 7:30 p.m.

MEMBERS PRESENT:

MARY JO WARSKOW, Vice Chairperson
LYNN JENSEN
JOE LORENZINI
BRUCE GREEN
TERRY ENNES
JOHN SIGALOS
JAY CHERWIN

ALSO PRESENT:

SAM HUBBARD, Development Planner
HAILEY NICHOLAS, Assistant Development Planner

DRAFT

VICE CHAIRPERSON WARSKOW: All right, I am going to call the Plan Commission meeting to order for November 29th, 2023. If we'd all please stand and say the Pledge?

(Pledge of Allegiance recited.)

VICE CHAIRPERSON WARSKOW: Great.

Sam, can we have a roll call please?

MR. HUBBARD: Yes.

Commissioner Cherwin.

COMMISSIONER CHERWIN: Here.

MR. HUBBARD: Commissioner Drost.

(No response.)

MR. HUBBARD: Commissioner Ennes.

COMMISSIONER ENNES: Here.

MR. HUBBARD: Commissioner Green.

COMMISSIONER GREEN: Here.

MR. HUBBARD: Commissioner Jensen.

COMMISSIONER JENSEN: Here.

MR. HUBBARD: Commissioner Lorenzini.

COMMISSIONER LORENZINI: Here.

MR. HUBBARD: Commissioner Sigalos.

COMMISSIONER SIGALOS: Here.

MR. HUBBARD: Vice Chair Warskow.

VICE CHAIRPERSON WARSKOW: Here.

MR. HUBBARD: And Chair Dawson.

(No response.)

VICE CHAIRPERSON WARSKOW: All right, next on the agenda is approval of the minutes from the prior Plan Commission meeting on November 8th.

COMMISSIONER ENNES: I'll make a motion to approve the minutes.

COMMISSIONER GREEN: I'll second that.

VICE CHAIRPERSON WARSKOW: Okay, all in favor?

(Chorus of ayes.)

VICE CHAIRPERSON WARSKOW: Anyone opposed?

(No response.)

VICE CHAIRPERSON WARSKOW: All right, motion passes.

All right, so we're moving on to, yes, yes, we're moving on to our hearing for this evening. Can I have the Petitioners for the Arlington Gateway Development come forward, which would include anybody who will be testifying, giving information to the Plan Commission? First thing I need to do is swear you all in, so if you'll raise your right hand and just repeat after me.

(Witnesses sworn.)

VICE CHAIRPERSON WARSKOW: Okay, thank you very much. Whosoever is starting off, if you want to give us your presentation?

MR. ROSZAK: Good evening, thank you so much. My name is Thomas Roszak. I'm with Thomas Roszak Architecture and Moceri & Roszak. We are co-developers with Bradford Allen on the Arlington Heights Gateway project.

I'd like to first introduce just part of my team that will be helping me

DRAFT

make the presentation: Bruce Huvard is our zoning attorney; we have Gail Lissner who is our market study specialist; we have Steve Greenberger from V3, civil engineer; Luay Aboona who is our traffic engineer with KLOA; my two partners, Michael Moceri and Paul Boulier, both architects and developers; and then our co-development partner Brian Carley with Bradford Allen.

So, thank you again for letting us present to you. I'm going to go through the project slide by slide and just kind of give you an introduction. I know you've seen the project and I'll just go over the highlights.

Again, I'm an Architect and a Developer. I've been doing this for about 34 years. We've done many multi-family projects throughout Chicago and in the suburbs, particularly in Evanston.

So, first slide, please.

MR. HUBBARD: Yes, there's an advancing button.

MR. ROSZAK: Oh, I get to do it?

MR. HUBBARD: Yes.

MR. ROSZAK: Beautiful.

MR. HUBBARD: Right.

MR. ROSZAK: All right, so if we can actually do the videos first, that'll be great.

So, this is a video, like if you're Superman flying around, this is you're going down Algonquin eastward. You'll see the project from above, and this gives you a sense of the scale. It's an eight-story building. Turning around at the corner here to Tonne and looking westerly, and now we turn and go across, and on the fourth floor you see their amenity space including a pool, outdoor pool and deck. I will get into more of these details. I just want to give you a sense of the scale and the details and so forth.

Then over here we have some retail, parking, cafe, florist, maybe a music shop. On the corner there, you see one of those focal points. We call them an obelisk, and I'll talk a little bit more about that later. Next slide, or next video, please.

COMMISSIONER JENSEN: Could you speak up just a little bit? I'm having a little trouble hearing you.

MR. ROSZAK: Yes, sorry. So, this is the next video. This is now going down Algonquin Road going westerly, and this is as if you're walking around the site as a pedestrian or in a vehicle. It gives you a sense of scale of what you would experience from the street or the sidewalk. Turning the corner here onto Arlington Heights Road, as we walk around, and now down this access road that we have and coming down here, that's the entrance where you drive in to drop off people or come into the front lobby. I'll show you that in a second. The next one, one more.

So, this is an entry walk, so this is as if you're coming into the front door. So, you're driving or walking towards the front entry of the lobby. You have this green portal that kind of signifies the entrance. It lets people know where the entrance is. You can drop off someone or pick up an Uber.

This is the front entrance door. There's a food drop-off there, our leasing and management center, a seating area for the lobby, there are some co-working spaces back there, mail pickup, a very hospitality-like experience, coming in through the door to the elevators that then takes you upstairs to the apartments. And then one more video.

This is the level four amenity. So, if you're on the fourth level, you're coming into kind of a social area. There's TV theater area, seating area, there's billiards and

ping-pong, there's a couple more co-working spaces, a catering kitchen. There's a golf simulator back there, a lot of public space for people to enjoy.

Then there's an outdoor area, so you could come out to the terrace and there's grilling stations. You can have dinner outside. There's a seating area, a lounging area, there's fire pits. Then kind of hover over the pool, you kind of see where the pool is. The pool is facing south obviously, lounge seating. There's actually a pool and a hot tub spa.

Then we come around and we're going to look at the fitness area. A lot of landscaping, a lot of details, architectural details. Going to come back in and then we go to the right here and then there's a workout area, both aerobic and then weight-lifting and yoga. So, a highly-amenitized building, kind of top of the market. Thanks, we can go back to the presentation.

So, our project is an eight-story, 301-unit multi-family, full-rent apartment building. We have street level retail. The building is contextual, welcoming, has a dynamic design. We are in the Overlay District and the Overlay District is all about, you know, focusing on beautification, redevelopment, walkability and place-making. We are place-making, creating a place that right now is just almost a four-acre site that has vacant and dilapidated buildings.

We are landscaping the entire site plan with ornamental trees, shade trees, shrubs, perennials and annuals. The building is eco-friendly, attractive, sparking new retail and streetscape vibrancy. Arlington Heights needs more quality housing and that's what we're providing here. Next slide.

So, this is actually four phases of the future projects. So, our Phase I is on the corner -- there's no pointer here, is there?

MR. HUBBARD: There is, but they can't see it on the Plan Commission.

MR. ROSZAK: Okay. All right, no worries.

So, at the very top corner there on Algonquin and Arlington Heights Road is our Phase I project. So, that's what we're talking about here tonight. But just to give you context, Bradford Allen has acquired the Phase III and the Phase II properties and is working on the Phase IV assemblage. So, I know we're orientated here, but again, Algonquin Road, we're on the northwest corner here, some of the site views.

So, we're 301 units. We range from 554 square-foot studios to 1,417 square-foot three-bedrooms. The average square footage is 825 square feet. We have 49 studios, 141 one-bedrooms, 19 one-bedrooms with den, 82 two-bedrooms, and then 10 three-bedrooms.

We have about 25,000 square feet of retail. We envision things like a coffee shop, perhaps some dining restaurants, and other service-orientated retail uses. We are talking to the Guitar Center as well to possibly have them move from their current location into our building. I'll show you where that is in a second.

Affordable housing. We're super proud to be providing affordable housing on site. So, 10 percent of our units are going to be affordable. So, 30 units out of the 301 will be affordable and these will be provided at the 60 percent AMI per the requirements. We've done affordable housing before, so we're very fluent in how this works and we're really excited that this is part of the project.

Amenities. We have about 21,000 square feet of indoor and outdoor amenities, and you saw the video of kind of the look and feel of that. Again, there's outdoor pools, there's fitness areas, golf simulator, social and media rooms, a business center, work from

home conference rooms which we call co-working. We have a dog walk, a dog spa. We have private grilling, catering kitchens, and then we have two butterfly gardens actually and then a lot of landscape pockets with perennials and annuals throughout the site, and I'll show you that in a second.

So, this is the site plan. If you kind of look in the middle with the stripes, that's the kind of entrance area that we drove through. That's where you would drop off somebody or pick up somebody, or you'd go into the parking garage, so through that covered area which is really nice. Then the orange area, the large orange area in the middle, that's our lobby amenity area and the leasing and management center.

The three pink areas, Retail A, B and C, are the 25,000 square feet of retail. The retail area at the top corner, that's the one that we're hoping that Guitar Center will move into. It's kind of a nice story for them to, you know, sell us their property and then move in and stay in the neighborhood. Retail B, we envision some sort of, you know, more service-orientated, maybe cafe, florist, pizza shop, breakfast place, and then Retail C, the far right side near Tonne, like a nice bistro restaurant.

We have 480 parking spaces indoor for the apartments, exceeding the requirements of the zoning. Then we have 85 exterior spaces for retail, again, meeting the requirements.

We have on-site storm detention that's underneath the parking lots outside, and a lot of landscaping, again, a lot of shade trees, ornamentals. At every entrance, we have like little flower kind of pad with perennials and annuals. They'll be kind of a signature piece for the project. At the very top there along Algonquin, it says butterfly garden with bench seating, we have that. Then we have another butterfly garden along the new access road.

The idea there is all about healthy living, it's all about, you know, butterfly and bees and pollinators and kind of expressing that idea, taking it, you know, from buzzing words, kind of bringing that concept here. I think as we move forward and we start marketing, we're going to create a brand, we're going to actually come up with a name that will be better than just Arlington Heights Gateway, something a little bit more market ready. It may have to do with that kind of thing, with nature and healthy living.

So, this is the second and third floor. It shows some residential in the blue there, and then parking in gray, and there are green roofs everywhere. This is the fourth floor and in the middle there you see the orange area, that's the amenities and the pool deck and the sun deck.

We have 50 different floor plans, 50 different unique floor plans that fit into the Studio 1s, 2s and 3s. In this kind of a market, you need a lot of variety to meet the market demands. You know, 50 or 100 square-foot difference, it not only provides a spatial difference but also provides a financial kind of offering. To some people, you know, it's $300 more but, you know, it's important. Floors five through eight are again all residential.

So, the market, we are envisioning these to be the top of the market, $3 a foot. That means like 1,000 square-foot unit will be $3,000; a 500 square-foot studio will be $1,500. Again, our affordable units would be up to 60 percent AMI. We believe there is a pent-up demand for this type of product and we envision these things being absorbed in about 12 to 18 months.

It's a sustainable building. We're going to seek Energy Star certification. Again, very energy efficient, you know, attributes to the project, eco-friendly strategies that we've used, and we've done this over and over again, so very experienced in

doing this. So, we have a, you know, energy efficient thermal envelope, high efficiency lighting, plumbing. We have heating and cooling with heat pumps, we have electric charging stations. We have on-site stormwater detention. We have a green roof and a solar array on the roof.

Here's just a sampling of a typical studio and a typical one-bedroom. If you just look at the studio, you see you have a kitchen, a living area, a dining area, a sleeping and a work area. These elements are in every single type of unit, whether it's, you know, a one-bedroom all the way up to the three-bedrooms. It's just everything gets a little bit bigger, but it's important to have a dining area or a work area even in the smallest unit.

Here's a typical two-bedroom split two with the bedrooms on each side, and again, all the components are there, just a little bit bigger. The closets get a little bit bigger and so forth. Then, a three-bedroom, and that gives you a sense of all the space kind of allocation.

The design, you know, these are smart and desirable in the marketplace, these units. You kind of have to reverse engineer the product to the market. You have to know what's desirable in the market, what price you're dealing with, and that's what we've done. These are very straightforward, efficient, they're well-lit, we make them enjoyable to be inside the units and in all the amenity spaces and all the surrounding exterior spaces.

Again, this is a catalyst, all about contributing to the rejuvenation and safety of this area. We'll transform this place that's very, you know, sparsely populated and it's going to create, you know, new life, openness and healthy green space. We are enhancing the public realm. This is, you know, architectural design that's pedestrian-friendly and has human scale detailing. You know, we have picked the materials, the materials that we have are here and we have three different colors of siding. This is a fiber cement siding board, we have a brick, a gray-colored brick, and then we have green fins, and then black detailing on the balconies and the windows to give you a sense of that. This is obviously a scale model.

So, these materials are high quality and innovative, and the detailing provides architectural delight. You know, as you walk through, I imagine myself walking through, you know, you need this kind of rhythm and proportion and scale that is appropriate for this type of a development, and I think we've tried to achieve that. We have this special chevron geometry that is accented with these green fins, and it's to kind of provide this kind of, you know, this rhythm and nice detailing so it's not the same kind of details over and over.

Here are some elevations, typical elevations. Here is a detail of the elevations and this is the chevron facade. It's triangulated; when you're looking at it in perspective, it looks flat here, but then we have these green decorative fins and the idea is that these are prairie grass blades kind of dancing in the wind, again, going back to that nature theme.

This is a section of how the building is organized. So, you have, in gray you have parking. Nested into the parking, you have a drop-off area, an amenities lobby, and then in pink you have retail spaces. Then the blue is residential that's on top. We designed the building in such a way you never see the parking from the outside, you'll never even know it's there. We have the same fenestration, whether it's siding or brick for windows.

Here are some typical details from our previous projects to show you kind of the look and feel of what we do in the interior and amenity spaces.

Landscaping, again, creating an inviting public realm, high quality paving materials, lighting, way-finding, plantings. These obelisk sculptures that we're really excited about, that was actually mentioned in the Overlay District as one of the concepts and we went with that. Bench furnishings, and again, beautiful landscaping.

Transportation. All our sidewalks are eight-foot wide and we doubled those bike paths. We meet the requirements of both the residential and retail parking.

So, these are just some views that you've seen in the video. This is, we're looking at Tonne to the left and Algonquin to the right. This gives you a sense of scale of the materials, kind of the textures of the siding and the brick and so forth. Here's a view with Algonquin to the left and Arlington Heights Road to the right. Again, with the obelisk there, in the center there. You can see the green fins there, and again, it's just a subtle detail, and we'll show you that this green theme, this nature theme is throughout the project. Here is coming in on the new access road which we'll also come up with a nice name for, you know, being a new access road. To the left is Algonquin Road and to our far right is where the Guitar Center is currently.

So, zoning. We're seeking a planned development and, as you guys know, we've been through the Design Commission and the other commissions. We've worked a lot with Sam and Charles and Steve and their teams. So, we are currently zoned B-3 and we are in the Overlay District and, you know, our goal here is to produce a mixed-use development of the highest quality. Again, this is a phased project. This is Phase I of at least three residential phases.

Here are some aerial views of the project.

We have a great team. Leading the team is Bradford Allen and their vision for the site, and we are co-developing with them and we are also the architects. We have a fabulous team of our consultants and engineers, the best in the Chicagoland.

Here's a detail of the obelisk in the day and in the nighttime. We're really excited about this. This is kind of a sculpture, it's almost like a blade, again, like a blade of grass and it's going to be lit, LED lighting. We're really excited about it, and obviously, as we go through the other phases, this element will be incorporated into the next phases. It will become kind of a signature piece.

So, here we are in the lobby. As we come in, and you guys experienced this in the video, but just to give you a snapshot, this is a hospitality-like experience. You know, it's like going into a hotel, a really nice hangout space, beautiful furniture, nice details, beautiful materials, making people feel at home, really nice lighting. We have five artists. All this artwork that you see is all original artwork from five artists.

Behind the curtain there on this first one is a co-working space, and then the farther one is actually the mailroom area. So, this is if you're in the co-working space kind of looking back, again, lots of artwork, workspaces. Then now in the fourth floor, again, more areas to kind of meet and greet, again, another artist and the co-working spaces. Then looking back in the other direction towards the TV kind of theater area, and there's a catering kitchen there so you can prep for when you do your dinner on the grill outside. This is kind of hovering over the pool and the grilling stations. So, a lot of them there are outdoor spaces, highly amenitized.

This is coming off of the elevator, we have two pieces. Actually the theme of these paintings is by Rob Larson, and again, it's going to be all about wildflowers and perennials. But here, again, you see the green tint on the carpet and the experience of the way at the entry door, a celebration of the entrance, beautiful paneling, beautiful paint work.

Here's just a taste of what the units look like. This is a studio, and these aren't final for a brochure. These are kind of hot off the presses, but I wanted to give you a sense of what they look like. So, again, you see the living, the dining and the work area. This is another view of that same studio unit and you see the bed area and the kitchen.

Then this is a larger two-bedroom unit, again, with a galley kitchen. Everything is larger obviously as the units get bigger, and you have a living room, dining room, work area.

So, that's basically what I wanted to show you guys. We're hoping for any questions you have, I have my whole team here. If I don't know the answer, these guys do know the answer. So, I'd love to answer some questions.

VICE CHAIRPERSON WARSKOW: We're going to have the Staff report given by our Staff, and then we'll take questions when that's completed.

MR. ROSZAK: Great.

VICE CHAIRPERSON WARSKOW: Sam, first of all, have all notices been given?

MR. HUBBARD: They have, yes. So, thank you, Chair Warskow.

As you've heard, the subject property is located at the southeast corner of Arlington Heights Road and Algonquin Road. That's kind of at the very southern end of the Village. It is currently in the B-3 Zoning District, but it's also part of the South Arlington Heights Road Overlay Zoning District which was established in 2019 to help facilitate some of the goals of the South Arlington Heights Road Corridor Plan. The site is designated on the Comprehensive Plan as appropriate for a mixed-use development, and the proposed mixed-use building is compliant with that designation.

They are requesting three zoning actions including a PUD and a preliminary plat of subdivision to consolidate the property into one lot, as well as a rezoning from the B-3 District to the B-2 District; rezoning was at the request of Staff. The B-3 District allows for some kind of auto-related uses, repair uses and big box uses which we didn't think were necessarily appropriate in this location, and the B-2 District was a little bit more compatible with how we see redevelopment occurring here. So, the Petitioner is agreeable to rezoning the site into the B-2 District. There are four variations being requested as part of this application, and I'll get into those throughout this presentation.

So, here's an aerial of the site. This is looking north, and you can see, I just want to point out actually this is Tonne Road that comes from the, I don't know if you can see this. Hold on. All right, this is Tonne Road that comes from the north and heading down to connect to Algonquin Road. This is a public section of road, but as it crosses Algonquin Road and reaches on to this redevelopment area, this entire stretch of Tonne Road is private. It's owned by the property owners adjacent to the road, and access rights are granted through easements governing ingress and egress along the road.

So, as I mentioned, the subject property is bounded in red that's kind of at the top of the aerial here. The larger redevelopment area is bounded in blue. The subject property and the land immediately abutting to the south are again within the B-3 District. To the east is M-2 zoning, that's a Light Manufacturing District. To the north are B-3 zoned properties, and a little bit farther north there's R-6 to the northeast and one small section of R-1 to the north. To the east, there is B-2 Zoning District.

So, from the Staff Development Committee's standpoint, we were considering the patchwork of the existing uses and zoning in the vicinity when analyzing this development. Some of the characteristics of the area, being that it's along two major arterials on the north side and the west side, and then on the south is adjacent to the I-90 Tollway, factored into our analysis on what's appropriate here. But we believe that the proposed use will integrate well with the existing uses in the vicinity and we are supportive of the PUD. This development

does comply with a lot of the goals of the South Arlington Heights Road Corridor Plan which I'll touch on briefly as well.

I want to point out the various phases of development and you've heard about those already. The subject property is the first phase of development, that's Phase I. On the southeast side of the site, the former Daily Herald building also owned by the Petitioners, is Phase II of development. That would involve the rehabilitation of the interior of that building and repurpose it for a medical office tenancy as well as the demolition of the two-story garage just to the north which is in for a demo permit currently and the replacement of that with an approximately five-story parking deck.

Phase III would be immediately south of the Phase I property. That would involve a mixed-use redevelopment with approximately 300 units, about 18,000 square-foot of ground floor retail within a building up to 10 floors. Then to the east of the Phase I site is the final phase of development. That would potentially be another mixed-use site involving a 200-room hotel and potentially another 300 multi-family units with about 5,000 square feet of ground floor retail. These future phases are conceptual at this point, but generally aligned to what the developer is thinking for future redevelopment here.

So, the Petitioner has gone through several actions to get them to the point that they're at today. Back in June of this year, they had an early review with the Village Board, and the meeting minutes of that discussion were transmitted to the Plan Commission as part of the packet. About a month later in July, they met with the Conceptual Plan Review Committee. I would say they were generally favorable of the development, they were excited to see redevelopment occur here and supportive of the general concept.

Then in August, the Petitioner held a neighborhood meeting at a nearby hotel to make some of the neighboring property owners aware of what they were proposing, but nobody showed up for that meeting. In October of this year, they appeared before the Design Commission and received a unanimous recommendation of support subject to one requirement on the hue and shade of the lights within the garage. Then on the 15th of this month, they appeared before the Housing Commission and received a unanimous recommendation of approval of the affordable housing component of this development which will comply with the inclusionary housing regulations.

So, here's an excerpt from the South Arlington Heights Road Corridor Plan. This was established in 2018 to outline a vision for redevelopment and strategies to realize that redevelopment along with some standards for redevelopment within certain key areas. I'll go through some of these briefly.

So, some of the standards were to create a mixed-use commercial development with restaurants, retail, hotel, residential and entertainment uses. So, this development as a mixed-use development complies with that standard. Additionally, the plan called for high-density development with up to 10 or 12 floors. As an eight-story development, this is compliant with the plan.

Additionally, the plan wanted to consolidate some of the access points. There are currently four curb cuts onto Arlington Heights Road to the subject property -- I'm sorry, three curb cuts on Arlington Heights Road and four are on Algonquin, and this development would be reducing that to one on Algonquin and one on Arlington Heights Road. Additionally, the plan called for the sidewalks, which are currently carriage walk style and right up against the street, to be relocated back about eight to 10 feet off the roadway to create some landscape parkways, and the plan does meet this standard as well.

Additionally, the key access to the site will still come from Tonne Road and Algonquin Road. As you've heard, they are proposing focal points in some of the corners of this site, most particularly at the northwest corner along Algonquin and Arlington Heights Road intersection with an obelisk and then some flatwork and pavers and -- and landscape elements, and then as well on the Tonne Road side. So, it is very compatible and meeting some of the development standards within the South Arlington Heights Road Corridor Plan.

Additionally, as I mentioned, the site is within the Overlay District and this development does meet all of the standards of the Overlay District. It's at seven stories in height, I'm sorry, eight stories in height which is below the 200-foot height requirement. The parking lot meets the right-of-way setback. As we discussed, the sidewalks are set back. There are variations requested to the building setbacks which I'll discuss briefly.

It is compliant relative to parking in the residential component. There are 480 spaces required for the residential parking, I'm sorry, 480 provided and 474 are required, so there's a six-space surplus above code requirements on residential parking. It does comply with the density regulations, the prohibited use regulations. PUD is requested. Commercial is located on the ground floor fronting Algonquin and Arlington Heights Road.

This development is proposed at just under 50 percent lot coverage, and is limited to a maximum of 75 percent. Again, there are a lot of green elements included in this proposal. There are solar panels on the rooftops, green roofs, EV charging stations, et cetera. So, it does meet the Overlay District standards to a “t”, with exception to the setbacks.

So, there are three setback variations requested. You can see this exhibit is highlighting them. The first one is relative to the first floor which is required to be set back 15 feet from the property line. There's a small section at the northeast corner that doesn't meet this requirement. We are supportive of this variation. As you can see, the odd configuration of the lot with this kind of cutout on the property line contributes to the need for this variation.

Additionally, the Overlay District requires floors 4 and above on a multi-family structure to be set back 50 feet from property lines. So, there are some areas on the south and east of the building, these crosshatched blue areas, that do not meet that requirement. As the building goes up, levels 4 through 8, it won’t meet these requirements in these limited areas of encroachment. This 50-foot building setback was crafted when the Overlay District was designed in consideration of the maximum height allowed, up to 200 feet. So, while, you know, on 16-story building, a 50-foot setback may be more appropriate, on an eight-story building we felt that the 20-foot and 30-foot setbacks on these small portions of the building were appropriate.

So, we are supportive of these variations. The last one relating to the balcony projections on these particular portions of the building where it projects into the setback, we're supportive of that variation as well.

The last variation relates to photometric levels, illumination at the south of the property, specifically in this area bounded in red. The standards for photometric output limit foot candle readings to two-foot candles along the property line. On the south area, these foot-candle readings reach up to just under four-foot candles, so a variation is required. We are supportive of this variation. Again, it's a small area on the southern side of the site. It's not, for example, adjacent to a single-family residential neighborhood. There's commercial on the other side and it is illuminating this access road and we feel it is appropriate to provide safe and adequate light on that road, so we are supportive of this variation as well.

Some of the areas of the plans and certain details we're still waiting

for, and the Petitioner is working with us on these things as they finalize this development. As I mentioned earlier, they are applying for a preliminary plat of subdivision approval at this point. They will have to finalize the final plat and final engineering and submit that for review and appear at a future Plan Commission meeting for approval of that.

Additionally, there are several easements that both benefit and run through the site, some of which, all of which going through the site have to be vacated and abrogated as part of this redevelopment. Then some of the improvements proposed on the shared east-west access road need to be addressed through modifications or the establishment of new easements for that access. So, the Petitioner is still working with us on these elements. They will be required to execute and have recorded all of these easement vacations and new required easements prior to final plat of subdivision recording.

Pace has a small bus stop on the northeast side of the site. We're working with Pace to upgrade that to potentially a bus shelter. There are some streetscape improvements they're still working with us on. In addition, they will be burying some of the utility lines on the north side of the site, so they're working with ComEd to work out those details. There is a small realignment of the driveway that may be needed in the future on the east side. Then when this project moves forward to the Village Board and permit, we're asking for a more detailed construction plan and some details on screening of the mechanical units on the southern side of the building. So, we've outlined a host of conditions to address some of these details that are still being finalized at this stage.

Relative to traffic and parking, I mean, this site is very well served. It's adjacent to a 10-lane arterial on the west side, and on the north side a six to seven-lane arterial road, very close to the tollway with the on-ramp and exit ramp to the south. So, it is well served by the vehicular transportation network, but regardless the Petitioner did prepare a detailed traffic study that analyzed all the neighboring intersections. It did not find that improvements were needed to accommodate for the development other than the first phase of development requires some signal timing at the Tonne Road and Algonquin Road intersection to be recalibrated. That's a minor change that the Petitioner can work with IDOT on. However, the study did point out that in the future, by the time full build-out is complete of all four phases, they will need a dual left turn lane on both legs of the Tonne Road intersection, the north leg and the south leg.

So, we'll continue to study this during all phases of redevelopment to determine at what point this is triggered and when warrants are met for this new dual left turn lane, and we have some conditions crafted to iron out the responsibility and timing of when these improvements need to be implemented, but we'll continue again to monitor this as the future phases of development come forward.

Lastly, I'll touch on parking. From a code standpoint, the development complies with code requirements with an eight-space surplus. On the residential side, there's a six-plus surplus, 480 spaces are provided and 474 are required by code. This translates to about a 1.6 parking stall per unit ratio, and we believe that this should be adequate to capture peak demand for residential parking. There may even be a small surplus, but certainly, you know, 1.6 parking stalls per unit should be adequate to accommodate for expected residential demand.

It's on the commercial parking that we start to run into problems. So, 85 commercial parking stalls are proposed; these are the exterior parking spaces, surface parking spaces on the exterior of the site. 83 parking spaces are required for the commercial uses. So,

that's only a two-space surplus, a very small surplus. The 83 parking stalls are based on only retail uses being located within the commercial spaces. So, any time a restaurant were to locate there or, you know, a barber shop or a salon or, you know, karate studio, a daycare, if any of these other types of uses were interested in locating in these commercial spaces, there would be a deficit relative to code requirements on the commercial uses.

Currently, the way that parking is structured, again, all of the commercial parking would be located in those surface parking stalls, and the 480 garage spaces would be dedicated entirely for the residential uses. Because we do have some concern that if a restaurant or a non-standard retail use were to locate in these commercial spaces, that there could be a parking problem, and there definitely would be a parking problem relative to code, we're recommending a condition of approval that if parking is insufficient to meet demand, that the Petitioner work with us on establishing use restrictions for some of the commercial tenants or shared parking in the residential garage, maybe some parking for the commercial employees or valet parking for any of the restaurants that may locate here, or arranging some off-site parking locations that can accommodate any spillover should some of these commercial uses be residential or higher parking demand generating uses as opposed to just a standard retail use.

Additionally, we want to make sure that the garage is designed to accommodate dual usage, so there may need to be some sort of segregation or separation of the commercial and any shared residential parking areas. So, that's one of the final conditions of approval we are recommending that the Petitioner make sure that they have that ability when they design the garage, that if in the future it's needed to share parking demand, that it could be easily retrofitted to do that.

So, that being said, we are supportive of this application subject to 22 recommended conditions of approval, many of which I touched on this evening but were all outlined in the Staff report. I'm happy to get into detail should the Plan Commission feel that necessary.

VICE CHAIRPERSON WARSKOW: Thank you for that very thorough Staff report, Sam. Much appreciated.

So, at this point, we're going to open it up and see if any of the Commissioners have preliminary questions before we would open up to public comment. Then we'll have public comment, we'll come back to the Commissioners, okay? So, that's the way we'll work it.

So, I'm going to start -- oh, I'm sorry, yes. Pardon me, I don't have my normal cheat sheet to go off of.

COMMISSIONER GREEN: Could I make that motion to enter the Staff report?

VICE CHAIRPERSON WARSKOW: Absolutely.

COMMISSIONER ENNES: I'll second it.

VICE CHAIRPERSON WARSKOW: Okay, could we have roll call?

MR. HUBBARD: Voice vote should be fine.

VICE CHAIRPERSON WARSKOW: Oh, just voice vote, okay.

All right, all those in favor?

(Chorus of ayes.)

VICE CHAIRPERSON WARSKOW: Anyone opposed?

(No response.)

VICE CHAIRPERSON WARSKOW: Okay, motion passes.

MR. HUBBARD: And then you may want to ask the Petitioner if they've read the condition of approval.

VICE CHAIRPERSON WARSKOW: Thank you. Thank you, everyone, for prompting me.

So, have you read all of the conditions outlined, and are you in agreement with those conditions?

MR. ROSZAK: We have and we are.

VICE CHAIRPERSON WARSKOW: Excellent, thank you.

Okay, so now I'm going to go to this end, to Jay.

COMMISSIONER CHERWIN: I'll probably just wait for public comment and then I may ask a few questions. Thank you.

VICE CHAIRPERSON WARSKOW: Okay, moving down?

COMMISSIONER SIGALOS: I was just curious as to the timeline on this. When would you anticipate, if everything goes well, starting construction and then subsequent Phase II, Phase III, Phase IV and so forth?

MR. ROSZAK: Yes. So, Phase I, we're hoping to start construction in April of next year. It'll take approximately 18 months to build the project. We don't have a timeline yet for Phases II, excuse me, Phases III and IV, but we assume we're going to be able to kind of flow through and kind of have an overlap so that, you know, every couple of years we're producing another building.

COMMISSIONER SIGALOS: So, you're looking maybe overall, like maybe eight to 10 years?

MR. ROSZAK: Something like that. That's conservative, yes.

COMMISSIONER SIGALOS: Okay, thank you. That's all I have.

MR. ROSZAK: Thank you.

COMMISSIONER ENNES: I have nothing right now.

VICE CHAIRPERSON WARSKOW: Okay, Commissioner Green?

COMMISSIONER GREEN: I remember you guys from the Plat and Sub and I think it's a great project, so I have no questions at this point.

MR. ROSZAK: Thank you.

VICE CHAIRPERSON WARSKOW: Commissioner Lorenzini?

COMMISSIONER LORENZINI: Yes, I also think it's very well thought out. It looks like it's a nice development, but one question, is there only one elevator bank at that entrance, the lobby entrance?

MR. ROSZAK: No, there's actually two banks of elevators and there's a total of, how many elevators?

MR. MOCERI: Four total, banks of two.

MR. ROSZAK: Yes.

COMMISSIONER LORENZINI: Okay, because if it's only at the entrance, I was thinking it's quite a long walk to the other end of the building.

MR. ROSZAK: Yes, we have it kind of split up, so you don't have to do that.

MR. MOCERI: You can see on the model. These are the -- elevator. The one that the video came through is this one. A lot of people will be driving to the garage and not going through the lobby, this designated one right here.

COMMISSIONER LORENZINI: Okay, that's all I had. Thank you.

COMMISSIONER GREEN: It's a healthy building though.

VICE CHAIRPERSON WARSKOW: Commissioner Jensen?

COMMISSIONER JENSEN: Yes. First of all, I do want to commend the Petitioner and Staff for their excellent reports, one of the best that I've seen since I've been on the Commission. Excellent market study as it relates to the residential. I'd like to have you talk a little bit about the commercial. I'm very concerned about a couple of things.

We see commercial and retail moving more online and a lot of buildings and shopping malls and so forth, you know, becoming vacant. I know the Village Staff loves to call for a lot of commercial, but I'd like to have your thoughts on what kind of commercial or retail you're going to have in there, and do you have any analysis that supports that, because you've got a lot of retail.

MR. ROSZAK: We do, we have 25,000 square feet. I think your comment is spot on right. It's always a little risky. I think, you know, the retail kind of market is always changing and it's been changing, I mean, for the last 10 years it's completely different, right? So, we're, you know, envisioning maybe that Guitar Center would move to that one site. I think they're a perfect use there. They have, you know, A stores, B stores and C stores, you know, this is an A store, it's one of the most profitable stores in the country. So, that would be a great use.

Then along Arlington Heights Road, we see those as being small service type, and I think when you have a population of, you know, say 400 or 500 people, you know, a coffee shop, a sandwich shop, you know, a florist, some of the service type things that, you know, a retailer that's maybe close by will want to move into a higher quality kind of space. So, that's what we envision with those. Then we'd love to see if we can get a bistro or some other type of appropriate use along Tonne there.

But your question is, I worry about that also.

COMMISSIONER JENSEN: Well, if you don't, if over time you're not able to actually use all of that retail space, is there any flexibility or alternative that you would have for that space so that it's just not vacant?

MR. ROSZAK: You know, it's usually just a question of price. It's not will it lease, will it lease that year kind of, you know, target number. We've had, not only Bradford Allen has looked at it, but also, we have other retail brokers, Bond Realty and First Realty Retail have looked at it, they think it's a fantastic location and, you know, they're very positive about it, but it does take time. I mean, you know, usually what happens is you fill up all the apartments and then the retail kind of follows but, you know, we believe we'll be successful with that.

COMMISSIONER JENSEN: Great. Well, in summary, I think it's a wonderful project. It's going to look a lot better than what's there now. I think it will be a real addition to the Village and I'm very supportive. Thank you.

MR. ROSZAK: Thank you.

VICE CHAIRPERSON WARSKOW: Okay, I am the last one and I'll save, I have a number of questions, but I will save them until after public comment.

So, I'm going to open the public comment. I know there's a lot with the project on this side, but if the gentleman in the back? No comment on this side? No comment, okay.

So, I'm going to close this portion of the public comment and come back to the Commissioners. Do you have any questions at this point?

COMMISSIONER CHERWIN: Yes, so I also was at the --

COMMISSIONER GREEN: Conceptual Plan Review, sorry.

COMMISSIONER CHERWIN: Thank you, I forget what they call it now.

COMMISSIONER GREEN: I called it the Plat and Sub.

COMMISSIONER CHERWIN: And I liked it then. I remember I was very impressed with your model then and I still am. It was a nice presentation. I thank you for all the visual, you guys went over, you know, above and beyond to help visualize what it's all about. So, very impressive.

Just a couple of questions. I really don't have any problems with it at all. I mean, I love almost everything about. The question I had for you thought, just curious, you had a 20-floor, so 200-foot limit I think in the Overlay District that allowed you to go and you guys stopped where you were. I'm just curious what kind of brought you to this particular, you know, size and everything compared to what maybe you were able to do?

MR. ROSZAK: Yes, that's a great question. I think, you know, it's architecturally, you know, like we're kind of sort of creating context. We don't really have like an adjacent building, right? So, I think, you know, in this location we thought something in that eight to maybe 12-story height was appropriate. You know, as we move along to the next phase and the next phase, we're going to study that, what's the right height and the right kind of massing.

But we thought at this corner, I think an eight-story building, that's why we worked really hard on just the fenestration to get the scale right, to make it have a lot of movement. I mean, if you look at it, it has nine outside corners and that's really unique. We did that on purpose to have this thing have this kind of very friendly scale, and it's more efficient if you are a shorter building than the taller building, you know, in this kind of location. We have almost four acres, so it's better to be able to kind of spread out a little bit than to go vertical.

We're very experienced and we do, you know, 20 to 30-story buildings in Downtown Chicago, so we know how to do that, but we thought this was more appropriate for Arlington Heights.

COMMISSIONER CHERWIN: Okay, no, that's good. Yes, I think, you know, the only other thing I guess I'd echo as usual, it's like Lynn and I are always, you know, thinking the same thing, but you know, it is a lot of retail space and that would be a concern. My thought was, you know, maybe if there's an interim type of thing. I mean, I do work in this, you know, area and represent folks that sell buildings like this all the time all over the country, so I see kind of how the square footage lays out. A lot of times you're dealing with, you know, 10,000 square feet or less of space that's not fully occupied, you know.

So, you know, we've got a lot of units here, that would be a little concern of mine because it is kind of a big thing to bite off, you know, all that retail space. My only thought would be maybe if there is, you know, you don't want a vacant space, right, that doesn't do anybody any good. That was my only concern was the lot, but I'm sure you guys will come to whatever makes the most sense for the building.

MR. ROSZAK: That's interesting. I think, you know, sometimes if you have too little of retail, it sometimes doesn't work, but if you have, you know, I mean, 25,000 is actually enough to get kind of a, you know, again, creating a place, and if we can do that and have this kind of density of people and density of retail, I think then it kind of works together. It's kind of, you know, there's a synergy to the different retail uses and the residential above.

COMMISSIONER CHERWIN: You'll have more uses coming in eventually with the later phases, too.

MR. ROSZAK: Right, right. So, I think any retail will see that as a potential that there's going to be growth, there's going to be, you know, future population of, you know, maybe 1,000 or 2,000 people.

COMMISSIONER CHERWIN: Yes. No, I think that makes a lot of sense. That's a very nice looking building. You guys did a great job. I really don't have any other questions. I looked at it, I mean, you guys agree with the, you know, the Staff recommendations. It looks good. Thank you for all your effort, and Staff.

VICE CHAIRPERSON WARSKOW: Okay, Commissioner Sigalos?

COMMISSIONER SIGALOS: I also would like to commend you for an excellent presentation, and the Staff report was excellent. I was also at the Conceptual Plan Review. I think it's a great project. It's going to be a tremendous building there as you come into the south corridor of Arlington Heights and that gets developed.

The overall site plan, the present location of the Guitar Center is in one of the future phases, is it not?

MR. ROSZAK: Yes, Phase III.

COMMISSIONER SIGALOS: So, if they did move into your building, they'd have to vacate and move elsewhere?

MR. ROSZAK: Actually, our idea is that we would complete Phase I and then be able to move them into Phase II and then start demolition on, excuse me, finish Phase I and then take them from what we're calling Phase III where their current building is and move them into there, so they only move once. That's the idea.

COMMISSIONER SIGALOS: Correct, right. So, that seems like a natural fit and they would occupy quite a few, a thousand square feet in the retail space.

MR. ROSZAK: Yes, it's almost a perfect fit.

COMMISSIONER SIGALOS: Right, correct. No, I have no further questions. I think it's an excellent project and I'm totally in favor of it.

MR. ROSZAK: Thank you. Well, the presentation, again, I have a great team. This is, you know, everybody here is an expert in this type of product, and again, it's a collaboration. I've never actually had this kind of experience that we've had with Arlington Heights. You guys are very, very professional and we've done this in Chicago, Evanston and even in Arizona. So, we appreciate that, it makes it easier.

COMMISSIONER SIGALOS: Thank you.

COMMISSIONER ENNES: I have a question for Sam. Sam, about six years ago when we were originally talking about the redevelopment of this area, we talked about the possibility of a transportation hub with train and buses and whatnot. Do you have or can we access that overlay to show us how that lays out in this area compared to where this development is?

MR. HUBBARD: I don't have that in the presentation, but I can kind of point it out a little bit. I mean, that was supposed to be --

COMMISSIONER ENNES: Farther east, right?

MR. HUBBARD: Yes, it was down kind of towards this area, even farther southeast where there was in theory supposed to be a transit stop, yes.

COMMISSIONER ENNES: Okay, that's all I have. I'm impressed with the project, with your proposal. I hope you keep the enthusiasm you have right now with this whole thing.

VICE CHAIRPERSON WARSKOW: All right, going to this side, Commissioner Jensen?

COMMISSIONER JENSEN: Well, the only thing I'd say is you do have a lot of commercial coming online with the other phases, too. So, I have the same concern I guess

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with just the commercial if you need to as you're bringing the other phases online because it's smaller amounts, but you do have commercial and retail coming up with the other phases of this project.

MR. ROSZAK: Yes, our dream would be -- if you go to the site plan, Sam, if you could?

Yes, our dream would be in Phase III where the Guitar Center is, is to have a grocery store there and that would be the 18,000 square feet. You've got to dream, right?

COMMISSIONER ENNES: Yes.

MR. ROSZAK: And then in the Phase IV, we actually only have 5,000 square feet there, and again, that could be either a restaurant or some sort of supportive use for either the hotel or the apartments. But again, I think the, you know, the concept is that it's along Algonquin and Arlington Heights Road, so once you get deeper into the thing, you don't really want to have a retail that's not really appropriate, it's not going to get rented. So, it kind of makes sense that in this corner it has the most.

COMMISSIONER JENSEN: Yes, I think you've thought it through very well. I'm very happy. I think, as I said, I think it's a great project. Looking forward to having you start construction.

COMMISSIONER LORENZINI: You mentioned doing some work somewhere in Evanston. Have you done a building similar to this in Evanston or nearby?

MR. ROSZAK: Yes, we did two large, actually the two largest planned developments that were in Evanston. One is called Sienna right off of Ridge, and that was 264 units, and then we did another one called Chicago Avenue Place on Chicago and Dempster, that was 155 units very similar to this.

COMMISSIONER LORENZINI: How is the occupancy on those projects?

MR. ROSZAK: Those are a while ago. I mean, projects that we've done recently, in Chicago we've done four projects in a row. On JeffJack 190 units, Linea 265 units, Parkline 214 units, and Fulbrix 375 units. That last one actually has 20 percent affordable. So, we've done these things, these are all 16 to 33-story buildings. The occupancy on all of those is 95 percent.

COMMISSIONER LORENZINI: Okay, thank you.

COMMISSIONER GREEN: As I said before, thumbs up, guys. Great job, and as an architect myself, I appreciate all the work you've put into this thing. It really shows. Good job.

MR. ROSZAK: Thank you.

VICE CHAIRPERSON WARSKOW: All right, so now comes to the Commissioner interested in sustainability features. My first question though for you is I see that you're going for Energy Star certification. Is that at all to take advantage of any of the current tax credits or maybe LIHTC certification --

MR. ROSZAK: We are, yes, actually we are going to -- Mike, come up here.

MR. MOCERI: Not LIHTC. There are a couple credits based on the energy performance of the building and meeting baseline code. So, they would both be applied for at the end of the development. Again, it depends on our energy model. If we're 25 percent or 50 percent or greater than code will be the amount of money that we essentially see coming back to us.

VICE CHAIRPERSON WARSKOW: Okay, great.

COMMISSIONER GREEN: Before you go, could you just give your name

and spell your last name for the court reporter?

MR. MOCERI: Yes, sorry. Mike Moceri, last name M-o-c-e-r-i.

COMMISSIONER GREEN: Thank you.

VICE CHAIRPERSON WARSKOW: See, I've got all these great people helping me along the way.

Okay, so the next question is I see you're using heat pumps, fabulous, love that idea. Central mini-splits. Is there an MEP design yet?

MR. ROSZAK: Yes, they're all individual units for each unit.

VICE CHAIRPERSON WARSKOW: Okay, and do you have gas in the units or will this be an all-electric building?

MR. ROSZAK: We do have gas in the building for water heaters and so forth, but the majority of it is all going to be electric.

VICE CHAIRPERSON WARSKOW: Okay, I had another question though I can't remember it. But I do applaud all of the uses. I do hope you achieve Energy Star certification. I'm glad to see you have additional sustainable components that I don't believe Energy Star addresses like the low VOC building materials and furnishings and things. So, I do appreciate that.

I'm very supportive of this project. I think it will be a great entrance into our community where we have some really awesome spots that people like to come to. So, I'm thinking this will be an even better entry for both residents and visitors. So, very supportive.

COMMISSIONER JENSEN: Just to follow-up on you, are you going to seek LEED certification in some way?

MR. ROSZAK: So, the Energy Star is the certification that we're going to go for. We've done this on all of our buildings, so we've done LEED, we've done Green Globes, and now we're moving to Energy Star. What I like about Energy Star is that it's actually about energy performance and actually truly counting, you know, the energy that you're spending, where the LEED was a little less so. So, this is really kind of important for the environment.

VICE CHAIRPERSON WARSKOW: Good luck in your modeling. I kind of do this for a living, so I know, you know, there can be some frustrating points in that. So, good luck.

Do I have a motion from any of the Commissioners?

COMMISSIONER CHERWIN: I'll make a motion.

A motion to recommend to the Village Board of Trustees approval of PC #23-012, a Planned Unit Development (PUD) to allow an eight-story mixed-use development with 24,972 square feet of ground floor commercial floor area and 301 multi-family residential units above; Rezoning from the B-3 General Service, Wholesale, and Motor Vehicles District to the B-2 General Business District; Preliminary Plat of Subdivision approval to consolidate the subject property into one lot; and the following Variations:

1. **Chapter 28, Section 5.1-21.1D, to allow the northeast corner of the first floor to be set back two feet from a property line where code requires a minimum setback of 15 feet for structures three floors and less in height.**
2. **Chapter 28, Section 5.1-21.1D, to allow the eastern side of floors 4 through 8 to be set back 21.1 feet from a property line, and to allow the southern side of floors 4 through 8 to be set back 19.2 feet from a property line, where code requires a**

minimum setback of 50 feet for structures over three floors in height.

3. **Chapter 28, Section 6.6-5.1, to allow balconies on the north side of the building to encroach 0.8 feet into the required 50-foot building setback and on the east and south sides of the building to encroach 16.5 feet into the required 50-foot building setback.**
4. **Chapter 28, Section 10.2-12.3B, to allow four-foot candles along a property line adjacent to a Business District where code restricts maximum foot candles to two.**

This recommendation is subject to resolution of the following:

Infrastructure/Access

1. **Petitioner shall design, permit and install all traffic required improvements, including but not limited to the Phase I Tonne Road traffic signal modifications.**
2. **Petitioner shall design, permit and construct intersection improvements at Algonquin Road/Tonne Road at the request of the Village, which shall be made when these improvements are warranted as part of the remaining phases of redevelopment (Phase II through IV). These improvements may include but shall not be limited to dual left turn lanes on Tonne Road. The share of costs for any such future improvements on the southern leg of this intersection shall be based on the cost sharing provisions within the existing easement agreement governing the private section of Tonne Road. The share of costs for any such future improvements on the northern leg of this intersection shall be 100 percent the responsibility of the Petitioner. The Village is agreeable to the establishment of a recapture agreement for the northern leg costs to be shared amongst all owners within the overall phased redevelopment area.**
3. **The Petitioner shall work in good faith with the Village to explore and implement future bicycle access improvements to Busse Woods, if feasible.**
4. **At the request of the Village, the Petitioner shall be responsible for modifying the east/west access road located on the southern side of the subject property, which shall be realigned at its intersection with Tonne Road as generally depicted within Exhibit III. Said modification shall only be required if/when approval is received from the property owner(s) of the lot directly abutting the subject property to the east, or at such time as the Petitioner becomes the controlling owner of that property.**
5. **The Petitioner shall be responsible for the burial of the overhead utility lines located on the southern side of Algonquin Road between Tonne Road and Arlington Heights Road, subject to the applicable agency approvals.**
6. **IDOT approval shall be required for the proposed side access along Arlington Heights Road and Algonquin Road, as well as for any improvements proposed within the IDOT right-of-way.**
7. **The Petitioner shall implement bus stop improvements to the satisfaction of the Village and in coordination with Pace, which shall be required as part of permit issuance.**

Easements

8. **Prior to recording of the final plat of subdivision, the plat of abrogation and grant of**

new easements shall be executed and recorded. Said document shall provide the following allowances, which shall be to the satisfaction of the Village:

- **Perpetual ingress and egress granted to Lots 1, 2 and 3 in the Lincoln Executive Plaza Subdivision, for usage of the east/west access road on the subject property and on the Guitar Center property; and**
- **Perpetual ingress and egress granted to Lot 3 in August Busse's Subdivision (the Guitar Center lot - 2375 South Arlington Heights Road) for usage of the east/west access road on the subject property.**

9. A sidewalk easement shall be required for the public sidewalk located on the subject property, which shall be included on the final plat of subdivision.

Parking

10. If parking provided is insufficient to meet demand as determined by the Village, the Petitioner shall work with the Village to develop and implement a parking mitigation plan that may include but shall not be limited to use restrictions for the commercial tenants, shared commercial parking within the residential garage, valet parking for any restaurants on the subject property (either within the on-site garage or at an off-site location) and/or the provision of off-site parking areas.

11. The residential garage shall be designed to facilitate future access restrictions/segregation between commercial parking and residential and guest parking areas should it be necessary to share parking within said garage.

Streetscape/Landscape

12. The Petitioner shall collaborate with the Village on the following streetscape/landscape improvements which shall be implemented by the Petitioner to the satisfaction of the Village:

A. Implementation of parkway trees within the Arlington Heights and Algonquin Road parkways abutting the subject property.

B. Foundation plantings shall be added adjacent to the building where turf is proposed along Arlington Heights Road, Algonquin Road and Tonne Road.

C. Decorative pedestrian crossing at Algonquin Road and Tonne Road and at Arlington Heights Road and Algonquin Road. Said crossings shall be designed, permitted and constructed by the Petitioner and subject to IDOT review and approval.

D. Prior to issuance of a permit, Petitioner shall provide a full site furnishing plan for review and approval by the Village, including the following items:

I. Decorative pavement and paver details;

II. Decorative parking lot and driveway lights within the interior of the site and along the east/west access drive;

III. Further refinement of the seat wall and pedestrian area at the southeast corner of Arlington Heights Road.

13. If Phase III is not under construction within five years of approval of this PUD, the Petitioner shall install an interim curbing and landscape plan for the south side of the east/west access road, for review and approval by the Village.

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14. Final plat of subdivision approval shall be required.
15. All restaurants on the subject property shall receive special use permit approval or a special use permit waiver (if eligible), and shall demonstrate to the satisfaction of the Village, that sufficient parking will be made available.
16. As part of final plat of subdivision approval, the Petitioner shall provide details on the proposed mechanical unit screen on the southern side of the building, which screen must be tall enough to screen the mechanical units within and shall be of materials that match the building, for review and approval by the Village.
17. Compliance with the October 24, 2023 motion approved by the Design Commission shall be required.
18. The Petitioner is responsible to ensure that the planned development is and remains in full compliance with the requirements of Article XVII of Chapter 7 of Village Code, being the Village's Inclusionary Housing Ordinance, and the Village's Inclusionary Housing Guidelines, including without limitations the following:
A. Providing, at a minimum, 10 percent of the total units (30 actual on-site units based on 301 total units) in perpetuity in the planned development in compliance with Section 7-1707 (b)(3) of the Village Code.
B. Ensuring compliance with all other provisions of the Inclusionary Housing Ordinance and the Inclusionary Housing Guidelines as applicable.
19. Land contribution fees (impact fees) shall be required at time of building permit issuance pursuant to Chapter 29 of the Municipal Code.
20. Residential units are approved as rental apartments. Conversion of the residential units from rental to condominium units will require an amendment to the planned unit development and the provision of sufficient parking for such change as determined necessary by the Village.
21. Medical office uses shall not be permitted on the subject property.
22. Prior to appearing before the Village Board, the Petitioner shall provide a preliminary construction staging plan. At time of application for a building permit, the Petitioner shall provide a detailed final construction schedule and logistics plan that identifies staging areas, material storage, lane closures and construction worker parking, for review and approval by the Village. Emergency access must be maintained at all times during each phase of construction.

VICE CHAIRPERSON WARSKOW: Do I have a second?
COMMISSIONER SIGALOS: I'll second.
VICE CHAIRPERSON WARSKOW: All right, Sam, can we have a roll call?
MR. HUBBARD: Commissioner Cherwin.
COMMISSIONER CHERWIN: Yes.
MR. HUBBARD: Commissioner Sigalos.
COMMISSIONER SIGALOS: Yes.
MR. HUBBARD: Commissioner Ennes.
COMMISSIONER ENNES: Yes.
MR. HUBBARD: Commissioner Green.
COMMISSIONER GREEN: Yes.
MR. HUBBARD: Commissioner Jensen.
COMMISSIONER JENSEN: Yes.

MR. HUBBARD: Commissioner Lorenzini.
COMMISSIONER LORENZINI: Yes.
MR. HUBBARD: And Vice Chair Warskow.
VICE CHAIRPERSON WARSKOW: Yes.

So, there you have a unanimous recommendation from the Plan Commission. Once again, we're just a recommending body, so of course you'll go in front of the Village Board, but you've already talked to them a little bit about your project so hopefully it will go as well as it did.

Tonight, Sam, is there a date for the Village Board?

MR. HUBBARD: I think we're tentatively talking about December 18th.
MS. NICHOLAS: Correct.
MR. HUBBARD: Yes.
VICE CHAIRPERSON WARSKOW: Okay, excellent. Thank you.

We don't have any other Petitioners on the agenda, but I would re-open public comment for those not specific to the project. Do we have anyone who would like to make public comment?

(No response.)

VICE CHAIRPERSON WARSKOW: No, okay. Then I will close that public comment unless there is any other business not on the agenda?

MR. HUBBARD: No, we're not having our regularly scheduled meeting for December 13th, it has been canceled. We are holding a special meeting on December 20th, and I'm waiting to hear back from three of you on your attendance for that. It's going to be on the third Wednesday of the month.

VICE CHAIRPERSON WARSKOW: Okay, those that haven't responded, and that very well could be me, please go ahead and --

COMMISSIONER GREEN: That wouldn't be me, would it?
VICE CHAIRPERSON WARSKOW: Go ahead and --
COMMISSIONER GREEN: It wasn't me, was it?
VICE CHAIRPERSON WARSKOW: Goodness, at least I owned up to it.
COMMISSIONER GREEN: I'll be there.
MR. HUBBARD: Noted, thank you.
VICE CHAIRPERSON WARSKOW: I'm sorry?
COMMISSIONER ENNES: Could I ask a question?
VICE CHAIRPERSON WARSKOW: Okay.

COMMISSIONER ENNES: Where do we go to get more information about the difference or the similarities between affordable and inclusionary housing? I see inclusionary is used an awful lot and I don't know if that's interspersed.

MR. HUBBARD: I mean, it's mostly the same term. I mean, it's affordable units included within a market rate development, that's what an inclusionary housing is as opposed to affordable units as a separate standalone kind of project or development all by themselves. So, yes, I mean, the Inclusionary Housing Ordinance is the Affordable Housing Ordinance just with a different name, but --

COMMISSIONER CHERWIN: I thought it was nicer.

COMMISSIONER ENNES: -- we have an ordinance named affordable, but now we're starting to call it inclusionary?

MR. HUBBARD: The ordinance is actually called Inclusionary Housing, yes.

COMMISSIONER ENNES: Oh, okay.
COMMISSIONER CHERWIN: It's a marketing tool.
COMMISSIONER ENNES: Okay.
VICE CHAIRPERSON WARSKOW: Well, it could be expanded for inclusionary to mean other things as well, disabled, challenged.
Okay, so do I have a motion?
COMMISSIONER JENSEN: So moved.
VICE CHAIRPERSON WARSKOW: Second?
COMMISSIONER LORENZINI: Second.
VICE CHAIRPERSON WARSKOW: Okay, we are adjourned, thank you.
COMMISSIONER ENNES: All in favor?
VICE CHAIRPERSON WARSKOW: Oh, sorry. All in favor?
(Chorus of ayes.)
VICE CHAIRPERSON WARSKOW: Okay, now we're adjourned.
(Whereupon, at 8:47 p.m., the public hearing on the above-mentioned petition was adjourned.)

DRAFT

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

I, STUART KAROUBAS, depose and say that I am a digital court reporter doing business in the State of Illinois; that I reported verbatim the foregoing proceedings and that the foregoing is a true and correct transcript to the best of my knowledge and ability.

_____
STUART KAROUBAS

SUBSCRIBED AND SWORN TO
BEFORE ME THIS _____ DAY OF
_____, A.D. 2023.

_____
NOTARY PUBLIC

DRAFT

Plan Commission
12/20/2023

Item: Chase Bank - 585 E. Palatine Rd. - PC#23-014

Department: Planning & Community Development Department

Requested Action

1. Special Use Permit for a drive through.

2. Amendment to Rezoning Ordinance #84-10 to eliminate Section Two in its entirety.

Variations Required

1. Variation to Chapter 28 of the Municipal Code, Section 6.5-2, to allow an accessory structure outside of a rear yard.

Recommendation

The Staff Development Committee reviewed the proposed Special Use Permit for a 5,941 square feet bank, including a drive through, and the amendment to rezoning Ordinance #84-10 to modify the conditions of approval, and is generally supportive of the application subject to resolution of the following:

1. Prior to building occupancy, the petitioner shall execute and record a sidewalk easement for the portions of the public sidewalk that encroach on the subject property.

2. The petitioner shall work with the Village to enhance the focal point feature at the corner of Rand Road and Palatine Road, to the satisfaction of the Village.

3. If details on the future crosswalks on the southern and western legs of the Palatine/Rand Road intersection are known prior to building permit issuance, the petitioner shall reconfigure the connection ramps between the sidewalk and crosswalk to align with the future crosswalk locations.

4. The petitioner shall resolve any outstanding engineering related issues identified in the "Round 2" review comments, dated 11/22/23, prepared by Engineering Division.

5. The seven compact junipers proposed adjacent to the dumpster enclosure shall be replaced by upright evergreen shrubs, to the satisfaction of the Village.

6. All work within the IDOT right-of-way shall require a permit from IDOT, as applicable.

7. The petitioner shall comply with all Federal, State, and Village Codes, Regulations, and Policies.

ATTACHMENTS:

Description	Type
Staff Report	Report
Public Notice	Exhibits
Aerial	Exhibits
CPRC Minutes 8-9-23	Minutes
DC Minutes 11-28-23	Minutes
DC Staff Report 11-28-23	Report
Project Narrative	Correspondence
Plat of Survey	Exhibits
Architectural Plans	Exhibits
Elevations	Exhibits
Engineering Plans	Exhibits
Landscape & Tree Preservation Plan	Exhibits
Photometric Fixture Cut Sheet	Exhibits
Photometric Plan	Exhibits
Traffic & Parking Study	Exhibits
Department Review Comments - Round 1	Exhibits
Department Review Comments - Round 1 Petitioner Response	Exhibits
Department Review Comments - Round 2	Exhibits
Department Review Comments - Round 2 Petitioner Response	Exhibits

VILLAGE OF ARLINGTON HEIGHTS

STAFF DEVELOPMENT COMMITTEE REPORT

***Project Number**: PC 23-014*
***Project Title**: Chase Bank with Drive-Through*
***Address**: 585 E. Palatine Rd.*
***PIN**: 03-20-101-002*

***To**: Plan Commission*
***Prepared By**: Sam Hubbard, Development Planner*
***Meeting Date**: December 20, 2023*
***Date Prepared**: December 15, 2023*

***Petitioner**: JPMorgan Chase Bank N.A.*
***Address**: 1111 Polaris Parkway*
Columbus, OH 43240

***Existing Zoning**: B-2: General Business District*
***Comprehensive Plan**: Commercial*

SURROUNDING LAND USES

Direction	Existing Zoning	Existing Use	Comprehensive Plan
North	B-2, General Business District	Northpoint Shopping Center	Commercial
South	B-2, General Business District	Town & Country Shopping Center	Commercial
East	B-3, General Service, Wholesale, and Motor Vehicles District	Olive Garden Restaurant	Commercial
West	B-2, General Business District	Town & Country Shopping Center	Commercial

Requested Action:

1. Special Use Permit for a drive through.
2. Amendment to Rezoning Ordinance #84-10 to eliminate Section Two in its entirety.

Variations Required:

1. Variation to Chapter 28 of the Municipal Code, Section 6.5-2, to allow an accessory structure outside of a rear yard.

Project Background:

The petitioner is proposing demolition of the existing structure on the site, which was the former home to an AT&T store. In its place, the petitioner has proposed construction of a 5,941 square foot Chase Bank, which will include two drive-through lanes. The site would contain 29 parking stalls and the existing access drive connections with the Town & Country Shopping Center would be maintained. During peak times the bank would have up to 21 employees onsite, and standard business hours would be from 9:00 am – 6:00 pm Monday through Friday, 9:00 am – 2:00 pm on Saturday. The drive-through ATM's would be accessible 24 hours a day. The existing Chase Bank location within the Northpoint Shopping Center (to the north of the subject property), which is currently leased by Chase, would be vacated and the bank would relocate to the subject property. The subject property is within TIF 5.

The subject property is a separate parcel of land that is adjacent to the Town & Country Shopping Center Shopping Center, which is bounded by Palatine Road to the north, Arlington Heights Road to the west, and Rand Road to the east. Although the subject site functions as an outlot of the shopping center, it is a separate parcel and not part of the Town & Country Planned Unit Development (PUD), which governs the larger shopping center abutting the subject property. The site is approximately 1.18 acres in size and has no direct access onto a public street. Access to the site is achieved by interior drive aisle connections within the larger Town & Country Shopping Center. The subject property has one access drive connection on the western side of the site and two on the southern side of the site. From these points, vehicles have access through the shopping center to two full access signalized intersections; one at Arlington Heights Road and one at Rand Road. Additionally, the shopping center has right-in/right-out access to Palatine Road.

Zoning and Comprehensive Plan

The subject property is zoned B-2, General Business District. Banks are allowed as permitted uses, however, the drive-through component triggers the requirement for a Special Use Permit. When this property was rezoned into the B-2 District and the existing building was constructed in 1984, a condition of the rezoning required that development on the property be substantially compliant with the plans submitted as part of the rezoning. As the proposed development will alter the approved development plan, Ordinance 84-10 must be amended as part of this application. Because the subject property is not part of the larger Town & Country Shopping Center PUD, no amendment to the PUD is required.

The Comprehensive Plan classifies this property as appropriate for "Commercial" land uses and therefore compatible with the Comprehensive Plan designation. A detailed market study is not required since the proposal involves the relocation of an existing Chase Bank (with three ATM drive-through lanes) to a new location approximately 1,800 feet to the southeast that will have two drive-through lanes. The petitioner provided brief analysis on the need for this relocation, which is a response to changing market conditions that require fewer branch locations with less square feet for increased efficiency. The new location will function primarily as an "advice center" versus the "transaction centers" of the past, meaning it will have more private offices and smaller teller lines. In consideration of this analysis, along with the existence of the current Chase Bank and the desire to relocate within the same vicinity, the Staff Development Committee (SDC) believes there is sufficient market demand to warrant the proposed use.

The Zoning Code required that Special Use Permits shall only be approved when they conform to the three criteria as outlined below:

- **That said special use is deemed necessary for the public convenience at this location.**

- **That such case will not, under any circumstances of the particular case, be detrimental to the health, safety, morals or general welfare of persons residing or working in the vicinity.**
- **That the proposed use will comply with the regulations and conditions specified in this ordinance for such use, and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.**

The Staff Development Committee notes the following relative to the criteria for approval:

- The existence of three Chase drive-thru lanes less than 2,000 feet northwest of the subject property demonstrates the need for this particular service in this location. Drive-through lanes provide a convenience to the public and streamline banking operations, provided they are appropriately located and do not interfere with surrounding land uses. The Staff Development Committee does not believe the proposed drive-through will interfere with the surrounding land uses.
- The drive-through lanes have been designed to accommodate vehicle stacking onsite and the petitioner has submitted a traffic study demonstrating that the surrounding street network is capable of handling the traffic anticipated from this development.
- The petitioner will be required to comply with all regulations and conditions of approval.

The SDC believe the necessary criteria for approval have been met and is supportive of the requested Special Use Permit to allow the drive-through component.

Conceptual Plan Review Committee:

On August 9, 2023, the petitioner's representative appeared before the Conceptual Plan Review Committee (CPRC) for a preliminary review of the conceptual development plan. The CPRC was generally favorable towards the development and had questions on the realignment of the drive aisle connections to the Towne & Country shopping center, as well as the number of parking stalls proposed. The meeting minutes are included in the materials transmitted to the Plan Commission.

Building

The petitioner has proposed a modern building design and they intend to obtain LEED certification and International Living Future Institute (ILFI) net zero carbon certification. A number of green features will be incorporated into the structure, such as the use of timber frame construction (as opposed to steel), solar panels on the roof, and a roof system designed to capture and direct all building stormwater run-off into a rain garden.

On November 28, 2023, the petitioner appeared before the Design Commission and received a unanimous recommendation of approval, subject to two requirements; one relative to the building lighting and the other relative to a one-foot height increase on the stone tower. Additionally, the Design Commission made three recommendations, two of which related to the green features on the site and one relative to the entry tower height. The complete minutes from the Design Commission meeting are included in the materials transmitted to the Plan Commission.

Site, Landscaping:

The proposed building and site conform to all bulk, height, and setback regulations of the B-2 Zoning District, with one exception: a proposed canopy over the drive-through. Specifically, the petitioner is proposing an approximately 13' x 6' canopy over the second drive-through lane, which canopy is classified as an accessory

structure and per code, must be located within a rear yard. As the canopy is not located entirely within the rear yard, the following variation is required:

- **Variation to Chapter 28 of the Municipal Code, Section 6.5-2, to allow an accessory structure outside of a rear yard**

The Staff Development Committee is supportive of the variation given that the structure will not exceed 10' in height, is partially screened by the building, and is necessary to shield drive-through customers from rain/snow while using the ATM.

The petitioner has made several modifications to the site and incorporated a number of features that were requested by staff, such as incorporating additional shade trees along Rand Road, incorporating a focal feature at the corner of Rand Road and Palatine Road, eliminating the need for landscape and lighting variations, and enhancing the sidewalk along both street frontages to be 10' in width for usage as a multi-use bike path. A portion of the sidewalk is outside of the public right-of-way, which creates the need for a sidewalk easement. The petitioner shall be required to execute an easement for this sidewalk, which must be recorded prior to occupancy of the building.

The petitioner must further refine the design to provide an enhanced focal feature for the prominent corner of Palatine and Rand Road as a condition of approval. The SDC recommended that the petitioner shift the proposed dumpster enclosure slightly to the west to provide for better screening. The petitioner has opted to keep the enclosure in the location as proposed, and if the enclosure is to remain in this area, the SDC recommends that the seven low growing evergreen shrubs (Kallay's Compact Juniper) adjacent to the enclosure be replaced with upright evergreens for improved screening of the enclosure.

The petitioner has proposed an underground stormwater vault beneath the drive aisles and parking areas. Prior to entering this vault, a portion of the stormwater will pass through the rain garden, providing a natural filtration mechanism for the stormwater. The proposed development will increase the amount of greenspace on the site in comparison to the existing development on the subject property. There are a few minor engineering details that will still need to be worked out as the building and site design are finalized as part of the building permit process, such as details on the existing utility service lines and where they need to be plugged/removed, and the final calculations for the restrictor within the underground detention vault. Theses outstanding items must be addressed prior to building permit, and a condition of approval outlining such has been recommended below.

The Village is currently studying the streetscape along this portion of Rand Road with the intention to implement pedestrian improvements that will be compatible with the Rand Road Corridor Beautification Plan. There will likely be modifications to the existing crosswalks on Palatine Road and Rand Road, which abut the subject property on the north side, and these modifications may entail the reconfiguration of the ADA ramped connections from the sidewalk abutting the site to the crosswalks within the street. Should final details for this reconfiguration be known prior to building permit issuance, the petitioner shall be required to modify the existing ADA ramp connections between the sidewalk abutting the site and the crosswalks at the northeast corner of the site so that the ADA ramps and connections align with the future crosswalks adjacent to the site.

Parking and Traffic:

As required per Chapter 28, Section 6.12-1(2)a, the petitioner has provided a traffic and parking study by a certified traffic engineer that assessed access (location, design, and Level of Service), on-site circulation, drive

through stacking/queuing, trip generation and distribution, and parking. The study concluded that the surrounding street network and intersections are expected to adequately accommodate the traffic volumes expected to be generated by the proposed Chase Bank facility. It should also be noted that the existing building onsite is approximately 11,000 square feet and the proposed Chase Bank will be 5,941 square feet, resulting in an approximately 46% decrease in overall floor area.

The proposed onsite parking supply is code-compliant and detailed parking calculations are shown below:

Tenant	Address	Use	Square Footage	Parking Ratio	Parking Required
Chase Bank	585 E Palatine	Bank	5,941	1 space per 300 square feet	20
				PARKING REQUIRED	**20**
				PARKING PROVIDED	**29**
				SURPLUS */ (DEFICIT)*	**9**

The petitioner had originally proposed 34 parking stalls on the site, resulting in a 70% surplus above minimum parking code requirements. During review of this application, the parking supply has been reduced to 29 spaces, which should accommodate typical peak parking demand for the bank and also preserve greenspace on the site. The drive-through lanes have capacity for up to 13 cars to queue before they would impact the north/south drive aisle and parking area on the subject property, which is sufficient to accommodate expected peak demand. The site is compliant with the bike parking regulations.

RECOMMENDATION

The Staff Development Committee reviewed the proposed Special Use Permit for a 5,941 square feet bank, including a drive through, and the amendment to rezoning Ordinance #84-10 to modify the conditions of approval, and is generally supportive of the application subject to resolution of the following:

1. Prior to building occupancy, the petitioner shall execute and record a sidewalk easement for the portions of the public sidewalk that encroach on the subject property.
2. The petitioner shall work with the Village to enhance the focal point feature at the corner of Rand Road and Palatine Road, to the satisfaction of the Village.
3. If details on the future crosswalks on the southern and western legs of the Palatine/Rand Road intersection are known prior to building permit issuance, the petitioner shall reconfigure the connection ramps between the sidewalk and crosswalk to align with the future crosswalk locations.
4. The petitioner shall resolve any outstanding engineering related issues identified in the "Round 2" review comments, dated 11/22/23, prepared by Engineering Division.
5. The seven compact junipers proposed adjacent to the dumpster enclosure shall be replaced by upright evergreen shrubs, to the satisfaction of the Village.
6. All work within the IDOT right-of-way shall require a permit from IDOT, as applicable.
7. The petitioner shall comply with all Federal, State, and Village Codes, Regulations, and Policies.

_____ December 15, 2023

Michael Lysicatos, Assistant Director of Planning and Community Development

Cc: Randy Recklaus, Village Manager
All Department Heads

legal notices

legals@dailyherald.com

Probate

IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS
COUNTY DEPARTMENT – PROBATE DIVISION
IN THE MATTER OF THE ESTATE OF (DECEDENT):
Case No.: 2023 P 1434
Name: DANIEL J. MCDONOUGH
Address: 1807 N. 7th Avenue
City, State, Zip: Elmwood Park, IL 60707
Date and Place of Death: 1/4/2023; 1807 N. 74th Ave., Elmwood Park, IL 60707
PUBLICATION NOTICE
INDEPENDENT ADMINISTRATION
TO: CREDITORS, CLAIMANTS, UNKNOWN HEIRS AND LEGATEES
1. Notice is hereby given of the death of DANIEL J. MCDONOUGH who died on January 4, 2023, a resident of Elmwood Park, Illinois.
2. The Representative for the estate is: James E. McDonough; 48 Woodland Hills Rd., Batavia, IL 60510.
3. The Attorney for the estate is: Kiley M. Whitty, Laraia & Whitty, P.C. 1761 S. Naperville Road, Ste. 201,Wheaton, IL 60189
4. Claims against the estate may be filed on or before May 21, 2024 with the Clerk of the Court of Cook County, Illinois, 50 W. Washington St., #1202, Chicago, IL 60602, or with the Representative, or both. Any claim not filed within that period is barred. Copies of a claim filed with the Clerk must be mailed or delivered to the Representative and to the attorney within 10 days after it has been filed.
5. On April 3, 2023, an Order Admitting the Will to Probate and Appointing the Representative was entered.
6. Within forty-two (42) days after the effective date of the original Order Admitting the Will to Probate, you may file a petition with the Court to require proof of the validity of the Will by testimony or witnesses to the Will in open Court, or other evidence, as provided in Article VI 5/6-21 (755 ILCS 5/6/21).
7. Within six (6) months after the effective date of the original Order Admitting the Will to Probate, you may file a petition with the Court to contest the validity of the Will as provided under Article VIII 5/8-1 of the Probate Act (755 ILCS 5/8-1).
8. The estate will be administrated without Court supervision unless an interested party terminates independent supervision administration by filing a petition to terminate under Article XXVIII 5/28-4 of the Probate Act (755 ILCS 5/28-4).
LARAIA & WHITTY, P.C.
Kiley M. Whitty
Attorney No. 91007
1761 S. Naperville Road, Suite 201
Wheaton, Illinois 60189
(630) 690-6800
service@laraiawhitty.com
Published in Daily Herald Nov. 21, 28, Dec. 5, 2023 (4608435)

LEGAL NOTICE
UNITED STATES OF AMERICA
STATE OF ILLINOIS
COUNTY OF DUPAGE
IN THE CIRCUIT COURT OF THE EIGHTEENTH JUDICIAL CIRCUIT
Estate of Leonard J. Maniscalco
Case No.: 2023PR000825
Notice is given of the death of Leonard J. Maniscalco whose address was 3 Forest Gate Circle, Oak Brook IL 60523-2129
Letters of Office were issued on November 17, 2023, to John Peter Curielli 126 S. Northwest Hwy, Barrington, IL 60010 as Independent Executor whose attorney is Peter J. Curielli
Claims against the estate may be filed in the Office of CANDICE ADAMS, Circuit Court Clerk, 505 N. County Farm Road, Wheaton, Illinois, or with the representative or both on or before May 21, 2024, any claim not filed within that period is barred. Copies of a claim filed with the Circuit Court Clerk must be mailed or delivered to the representative and to the attorney, if any, within ten (10) days after it has been filed with the Circuit Clerk.
/s/ Candice Adams,
Clerk of the Eighteenth Judicial Circuit Court
Peter J. Curielli
DuPage Atty. No.: 18475
Atty. For: Executor
126 S. Northwest Hwy
Barrington, IL 60010
847-381-7555 ext 102
peterjohn@curielli.com
Published in Daily Herald Nov 21,28,Dec 5,2023 4608410

LEGAL NOTICE
UNITED STATES OF AMERICA
STATE OF ILLINOIS
COUNTY OF DUPAGE
IN THE CIRCUIT COURT OF THE EIGHTEENTH JUDICIAL CIRCUIT
Estate of John E. Colwell
Case No.: 2023PR000778
Notice is given of the death of JOHN E. COLWELL whose address was 1015 Wilson Ave., Wheaton, Illinois 60189
Letters of Office were issued on November 6, 2023, to Anne M. Frost of 1748 Murray Clark Road, Danville, Illinois 61832 as Independent Administrator whose attorney is Eric Eeves of Acton & Snyder, LLP, 220 N. Vermilion St., Danville, Illinois 61832.
Notice to Heirs & Legatees
To probate a will and whose name and address is not stated in the petition to admit the will to probate, an order was entered by the Court on October 13, 2023, admitting the estate to probate. Within 42 days after the effective date of the original order of admission, you may file a petition with the Court to require proof of the will by testimony of the witnesses to the will in open court or other evidence, as provided in section 6-21 of the Probate Act of 1975 (755 ILCS 5/6-21). You will also have the right under section 8-2 of the Probate Act of 1975 (755 ILCS 5/8-1) to contest the validity of the will by filing a petition with the Court within 6 months after the admission of the will to probate.
The estate will be administered without Court Supervision, unless under Section 28-4 of the Probate Act of 1975 (755 ILCS 5/28-4) any interested person terminates independent administration at any time by mailing or delivering a petition to terminate to the Circuit Court Clerk.
Claims against the estate may be filed in the Office of CANDICE ADAMS, Circuit Court Clerk, 505 N. County Farm Road, Wheaton, Illinois, or with the representative or both on or before May 21, 2024, any claim not filed within that period is barred. Copies of a claim filed with the Circuit Court Clerk must be mailed or delivered to the representative and to the attorney, if any, within ten (10) days after it has been filed with the Circuit Clerk. E-filing is now mandatory for documents in civil cases with limited exemptions. To e-file, you must first create an account with an e-filing service provider. If you need additional help or have trouble e-filing, visit http://www.illinoiscourts.gov/FAQ/gethelp.asp
/s/ Candice Adams,
Clerk of the Eighteenth Judicial Circuit Court
Hovde & Tufo Law
107 3rd St, Ste 3
Bloomingdale, IL 60108
DuPage Atty. No.: 29
Atty. For: INDEPENDENT EXECUTOR
Published in Daily Herald Nov 21,28,Dec 5, 2023 4608402

LEGAL NOTICE
UNITED STATES OF AMERICA
STATE OF ILLINOIS
COUNTY OF DUPAGE
IN THE CIRCUIT COURT OF THE EIGHTEENTH JUDICIAL CIRCUIT
Estate of TERESINA DELIA SPERANZA, DECEASED
Case No.: 2023 PR 571
Notice is given of the death of TERESINA DELIA SPERANZA whose address was 190 Annalisa Court, Bloomingdale, IL 60108
Letters of Office were issued on September 27, 2023 to ASSUNTA SPERANZA SULTAN 190 Annalisa Court, Bloomingdale, IL 60108 as Independent Executor whose attorney is Michael D. Hovde, Jr. HOVDE & TUFO LAW 107 3rd St, Ste 3, Bloomingdale, IL 60108
Notice to Heirs & Legatees
Notice is hereby given to and Unknown Heirs, who are heirs or legatees of the above proceeding.
To probate a will and whose name and address is not stated in the petition to admit the will to probate, that an order was entered by the Court on September 27, 2023 admitting the will to probate. Within 42 days after the effective date of the original order of admission, you may file a petition with the Court to require proof of the will by testimony of the witnesses to the will in open court or other evidence, as provided in section 6-21 of the Probate Act of 1975 (755 ILCS 5/6-21). You will also have the right under section 8-2 of the Probate Act of 1975 (755 ILCS 5/8-1) to contest the validity of the will by filing a petition with the Court within 6 months after the admission of the will to probate.
The estate will be administered without Court Supervision, unless under Section 28-4 of the Probate Act of 1975 (755 ILCS 5/28-4) any interested person terminates independent administration at any time by mailing or delivering a petition to terminate to the Circuit Court Clerk.
Claims against the estate may be filed in the Office of CANDICE ADAMS, Circuit Court Clerk, 505 N. County Farm Road, Wheaton, Illinois, or with the representative or both on or before May 21, 2024, any claim not filed within that period is barred. Copies of a claim filed with the Circuit Court Clerk must be mailed or delivered to the representative and to the attorney, if any, within ten (10) days after it has been filed with the Circuit Clerk. E-filing is now mandatory for documents in civil cases with limited exemptions. To e-file, you must first create an account with an e-filing service provider. Visit http://efile.illinoiscourts.gov/service-providers.htm to learn more and to select a service provider. If you need additional help or have trouble e-filing, visit http://www.illinoiscourts.gov/FAQ/gethelp.asp
/s/ Candice Adams,
Clerk of the Eighteenth Judicial Circuit Court
Hovde & Tufo Law
107 3rd St, Ste 3
Bloomingdale, IL 60108
DuPage Atty. No.: 29
Atty. For: INDEPENDENT EXECUTOR
Published in Daily Herald Nov 21,28,Dec 5, 2023 4608401

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Public Hearings & Notices

Docket No. PV23-0008
NOTICE OF PUBLIC HEARING
Notice is hereby given that the Plan Commission of the Village of Wheeling will hold a public hearing on December 20, 2023 at 6:30 p.m. in the Board Room of the Village Hall at 2 Community Boulevard, Wheeling, Illinois, to act on a petition by Michael Torssell, property owner, seeking a variation from Title 19, Zoning, of the Wheeling Municipal Code, Chapter 19.10 Use Regulations, and associated sections, to permit an increase in the maximum fence height in the front yard from 4 feet to 5 feet, located at 555 Briarwood Drive, which is zoned R-3, single-family residential.
All interested persons are invited to attend and be heard.
Docket No. PV23-0008
Published in Daily Herald December 5, 2023 (4608867)

LEGAL NOTICE
GENERAL PRIMARY ELECTION
SIMULTANEOUS FILERS LOTTERY
Tuesday, December 12, 2023
Lotteries will be held on Tuesday, December 12, 2023, at 1:00 p.m. in the lobby of the Lake County Main Courthouse, located at 18 North County Street, Waukegan; to determine ballot placement order for the first and last candidates who simultaneously filed at the Lake County Clerk's Office for the March 19, 2024, General Primary Election.
Dated: December 5, 2023
/s/ Anthony Vega
Lake County Clerk
Published in Daily Herald December 5, 2023 (4608463)

NOTICE OF PUBLIC HEARING CONCERNING THE INTENT OF THE BOARD OF PARK COMMISSIONERS OF THE PALATINE PARK DISTRICT, COOK COUNTY, ILLINOIS TO SELL NOT TO EXCEED $200,000 GENERAL OBLIGATION LIMITED TAX PARK BONDS
PUBLIC NOTICE IS HEREBY GIVEN that the Palatine Park District, Cook County, Illinois (the "*District*"), will hold a public hearing on the 12th day of December, 2023, at 5:00 o'clock P.M. The hearing will be held in the Village of Palatine Community Center, Community Room B, 200 E. Wood Street, Palatine, Illinois. The purpose of the hearing will be to receive public comments on the proposal to sell bonds of the District in an amount not to exceed $200,000 for the payment of land condemned or purchased for parks, for the building, maintaining, improving and protecting of the same and the existing land and facilities of the District and for the payment of the expenses incident thereto.
By order of the President of the Board of Park Commissioners of the Palatine Park District, Cook County, Illinois.
DATED the 1st day of December, 2023.
/s/ Lisa Allie
Secretary, Board of Park Commissioners,
Palatine Park District, Cook County, Illinois
Published in Daily Herald December 5, 2023 (4609004)

Public Notice of EXAMINATION AND HEARING ON APPEAL OF DENIAL OF PETITION TO VACATE A PORTION OF THE SEWARD STREET RIGHT-OF-WAY LOCATED WITHIN THE TOWNSHIP OF SCHAUMBURG ROAD DISTRICT
On **Monday, December 11, 2023, at 7:00 p.m.**, in the Rasmussen South Room at the Schaumburg Township District Library, located at 130 South Roselle Road, Schaumburg, Illinois 60193, the Superintendent of the Cook County Department of Transportation and Highways will examine and hold a hearing on an appeal of the decision of the Schaumburg Township Highway Commissioner denying a petition, filed by at least 12 legal voters, to vacate a portion of the Seward Street right-of-way, laying north of vacated North Shore Avenue (and south of the Elgin O'Hare Expressway), within unincorporated Township of Schaumburg Road District (an area approximately 65' x 150' immediately adjacent to PIN 07-34-303-006). On such date and time, the Superintendent of the Cook County Department of Transportation and Highways will examine the route of the Schaumburg Township Road District subject to the petition and will hear reasons for or against vacating said right-of-way.
By order of the Superintendent of the Cook County Department of Transportation and Highways, Cook County, Illinois.
/s/ Jennifer "Sis" Killen, P.E., PTOE
Superintendent
Published in Daily Herald December 4-8, 2023 (4609000)

NOTICE OF PUBLIC HEARING
NOTICE IS HEREBY GIVEN THAT THE PLAN COMMISSION OF THE VILLAGE OF ARLINGTON HEIGHTS WILL CONDUCT A PUBLIC HEARING ON DECEMBER 20, 2023, AT 7:30 P.M. in the Municipal Building, 33 South Arlington Heights Road, Arlington Heights, Illinois to consider Petition No. 23-015, a request for a Land Use Variation to allow a Day Care Center in the R-7 District and a Special Use Permit to allow a Day Care Center in the B-2 District. The subject property is located at 308 N Evergreen Ave in Arlington Heights, Illinois. The PIN for the subject property is 03-29-318-005 and the subject property is legally described as follows:
LOT 1, 2, 3, AND 4 IN BLOCK 11 IN THE TOWN OF DUNTON, BEING A SUBDIVISION OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.
As part of said petition the applicant is requesting the following variations from the Municipal Code:
- Variation to Chapter 28, Section 6.12-1(3), to waive the requirement for a traffic and parking study from a qualified professional engineer.
- Variation to Chapter 28, Section 10.4, to reduce the required parking from 137 to 50 spaces.

The Plan Commission will consider any zoning and Subdivision actions or relief from Chapter 28 and 29 that may be necessary or convenient to allow development of the type described in this notice, or development that is less dense than the type described in this notice, including, without limitation, special use permits, variations, map or text amendments, or other special approvals. Complete list of all final zoning actions and staff report may be viewed at www.vah.com.
At the public hearing, the Plan Commission will accept and consider all testimony and evidence pertaining to the application.
All persons desiring to be heard shall be given the opportunity to be heard. Should any individual need auxiliary aid or service, such as a sign language interpreter or materials in alternative formats, please contact the Health Department at 33 South Arlington Heights Road, Arlington Heights, Illinois 60005, (847) 368-5760, TDD# (847) 368-5794.
Susan Dawson, Chair
ARLINGTON HEIGHTS PLAN COMMISSION
Published in Daily Herald December 5, 2023 (4608997)

LEGAL NOTICE
VILLAGE OF SOUTH BARRINGTON
COOK COUNTY, ILLINOIS
NOTICE OF HEARING ON PROPOSED (VARIATION) FOR PROPERTY LOCATED AT
8 Rainier Circle,
SOUTH BARRINGTON, ILLINOIS
NOTICE IS HEREBY GIVEN that the Plan Commission of the Village of South Barrington, Cook County, Illinois, will hold a public hearing on Tuesday, December, 19, 2023 at the South Barrington Village Hall, 30 South Barrington Road, South Barrington, Illinois 60010 commencing at 7:00 pm to consider, make recommendations and conduct a public hearing as required by the applicable statues of the State of Illinois and the Zoning Ordinance of the Village of South Barrington regarding a proposed *variation of a fence* for property located at 8 Rainier Circle, South Barrington, Illinois and legally described as follows:
LOT 335, WOODS OF SOUTH BARRINGTON PHASE 2, UNIT 1 BEING A SUBDIVISION IN THAT PART OF SECTION 21, TOWNSHIP 42 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN IN COOK COUNTY, ILLINOIS. ACCORDING TO THE PLAT THEREOF RECORDED AS DOCUMENT No. 0907245089.
The applicant for the proposed *variation* is Nick Luisi- Sunset Pools and Spas of 1675 Hicks Road, Rolling Meadows, IL, 60008.
Copies of the proposed *variation* will be on file with the Village Clerk and may be inspected during business hours.
All persons present at the public hearing will be afforded an opportunity to be heard. Written comments may be submitted to the attention of the Plan Commission Chairperson, c/o South Barrington Village Hall at the address aforesaid and will be considered if received at least five (5) days prior to the hearing. The Plan Commission reserves the right to continue the public hearing from time to time in accordance with the requirements of the Illinois Open Meetings Act.
Individuals with disabilities who plan to attend the hearing and require certain accommodations in order to allow them to observe and participate or who have questions regarding the accessibility of the meeting or facilities are requested to contact the Office of the Village Clerk at 847-381-7510.
This Notice is given pursuant to law.
Published by authority of the Plan Commission of the Village of South Barrington.
Dated: 11/30/2023 /s/ Michael McCombie, Chairman
Published in Daily Herald December 5, 2023 (4609001)

NOTICE OF PUBLIC HEARING
NOTICE IS HEREBY GIVEN THAT THE PLAN COMMISSION OF THE VILLAGE OF ARLINGTON HEIGHTS WILL CONDUCT A PUBLIC HEARING ON DECEMBER 20, 2023, AT 7:30 P.M. in the Municipal Building, 33 South Arlington Heights Road, Arlington Heights, Illinois to consider Petition No. 23-014 a request for an amendment to rezoning ordinance #84-10 to eliminate Section Two in its entirety, as well as approval of a Special Use Permit to allow a bank with a drive-through on the subject property, located at 585 E. Palatine Road in Arlington Heights, Illinois.
The PIN for the subject property is 03-20-101-002.
The subject property is legally described as follows:
PARCEL 1:
THE EAST 33 FEET OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.
PARCEL 2:
THAT PART OF TIHE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 20, TOWNSHIP 42 NORTIH, RANGE 11 EAST OF TIHE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.
EXCEPTING FROM TIHE ABOVE-DESCRIBED PARCELS 1 AND 2, IHAT PART THEREOF LYING NORTHERLY OF TIHE FOLLOWING DESCRIBED LINE:
BEGINNING IN THE WEST LINE OF THE EAST 33 FEET OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 20, 149.2 FEET SOUTH OF THE NORTH LINE OF SAID NORTHWEST 1/4 (AS MEASURED ON SAID WEST LINE); THENCE EASTERLY PARALLEL TO THE NORTH LINE OF SAID NORTHWEST 1/4 131.0 FEET; THENCE SOUTHEASTERLY TO THE INTERSECTION WITH A LINE 50 FEET SOUTHWESTERLY OF AND PARALLEL TO THE CENTER LINE OF RAND ROAD AT A POINT 193.59 FEET NORTHWESTERLY OF THE EAST LINE OF THE NORTHWEST 1/4 AFORESAID (AS MEASURED ON THE SOUTHWESTERLY LINE): THENCE SOUTHEASTERLY ALONG SAID SOUTHWESTERLY LINE OF RAND ROAD TO ITS INTERSECTION WITH THE EAST LINE OF AFORESAID NORTHWEST 1/4, ALL IN COOK COUNTY, ILLINOIS.
As part of said petition the applicant is requesting the following variations from Chapter 28 of the Municipal Code:
- Section 10.2-12.3b, to allow foot candle readings at a neighboring property line to exceed 2.0.
- Section 10.2-12.3c.3, to allow certain light poles to encroach into the required 3:1 spacing ratio.
- Section 6.5-2, to allow accessory structure(s) (bank drive-through canopies) to be located within a side yard.

The Plan Commission will consider any zoning and Subdivision actions or relief from Chapter 28 and 29 that may be necessary or convenient to allow development of the type described in this notice, or development that is less dense than the type described in this notice, including, without limitation, special use permits, variations, map or text amendments, or other special approvals. Complete list of all final zoning actions and staff report may be viewed at www.vah.com.
At the public hearing, the Plan Commission will accept and consider all testimony and evidence pertaining to the application.
All persons desiring to be heard shall be given the opportunity to be heard. Should any individual need auxiliary aid or service, such as a sign language interpreter or materials in alternative formats, please contact the Health Department at 33 South Arlington Heights Road, Arlington Heights, Illinois 60005, (847) 368-5760, TDD# (847) 368-5794.
Susan Dawson, Chair
ARLINGTON HEIGHTS PLAN COMMISSION
Published in Daily Herald December 5, 2023 (4608998)

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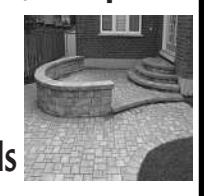

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NOTIFICATION AFFIDAVIT

I, Terron Wright hereby certify as follows:

1. That on the 5th day of December, 20 23, affiant caused to be mailed in the Post Office of 211 S Clark St, Chicago, IL 60604, copies of the attached Notice of Public Hearing to all listed taxpayers of real estate within 250 feet, excluding all Public Right-of-Ways of the subject property and to the owners, or representatives, of property listed as exempt, and to all Condominium Associations whose property is within 250 feet of the subject site for which the hearing is being held..

2. That the parties to whom said notice was mailed are set forth on the attached list.

3. That the petitioner stated that the required sign(s) were erected as required by the Village of Arlington Heights.

Signature

Subscribed and Sworn to before me
this 6 day of December, 2023.

Notary Public

MICHELLE KETCHUM
MY COMMISSION #HH278566
EXPIRES: JUL 13, 2026
Bonded through 1st State Insurance

The Architects Partnership, Ltd. 200 South Michigan Avenue, Suite 1020, Chicago, IL 60604

November 30, 2023.

NOTICE OF PUBLIC HEARING

Please be advised that a petition has been filed with the Village of Arlington Heights for an Amendment to Rezoning Ordinance #84-10 to eliminate Section Two in its entirety, a Special Use Permit to allow a bank with a drive-through, and possible Variations from Chapter 28 of the Municipal Code, as follows:

Section 6.5-2 to allow an accessory structure outside of a rear yard.

The location of the property is ***585 E Palatine Road, Arlington Heights, IL 60004.***

GW Rand Palatine AH LLC. Is the beneficial owner of the property.

At the public hearing the Plan Commission will accept and consider all testimony and evidence pertaining to the application, and will consider any zoning actions or relief that may be necessary or convenient to allow development of the type described in this notice, or development that is less dense than the type described in this notice, including, without limitation, special use permits, variations, map or text amendments, or other special approvals.

This hearing is open to the public and comments from the public on the proposal are invited. Hearing on said petition will be held by the Arlington Heights Plan Commission at the Municipal Building, 33 South Alington Heights Road, Arlington Heights, Illinois, 3rd Floor, at 7:30 PM, on Wednesday December 20, 2023.

Timothy R. Meseck
The Architects Partnership, LTD.
Architect of Record for JP Morgan Chase Bank NA

Persons with disabilities requiring auxiliary aids or services, such as American Sign Language Interpreters or written materials in accessible formats, should contact Erin Mercado at 33 South Arlington Heights Road, Arlington Heights, Illinois 6005, (847) 368-5793 (Voice) or (847) 368-5980 (Fax) or emercado@vah.com

PINs that must receive a mailing	Mailing Address (Searched by TAP)
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03-17-303-013	GEORGE CALLAS 1791 HAPP RD NORTHBROOK, IL 60062
03-17-303-014	BK OF AMER NC10010381 101 N TYRON STREET CHARLOTTE, NC 28255
03-20-101-002	GW RAND PALATINE AH 2211 N ELSTON AVE#400 CHICAGO, IL 60614
03-20-101-016	TOWN & COUNTRY CHICAGO 30050 CHAGRIN BLVD 360 PEPPER PIKE, OH 44124
03-20-200-014	OLIVE GARDEN 1154 PO BOX 695019 ORLANDO, FL 32869
03-20-200-015	INLAND SOUTHPOINT 2211 YORK ROAD STE 222 OAK BROOK, IL 60523
03-20-200-016	CC SOUTHPOINT LLC 27 N GREEN ST CHICAGO, IL 60607
03-17-411-024	DANNY JOHN 704 E PALATINE RD ARLINGTN HTS, IL 60004
03-17-411-023	WENZHUO LIANG 1906 N EASTWOOD DR ARLNGTON HTS, IL 60004
03-17-411-022	DANIEL K RATEIKE 1910 EASTWOOD DR ARLNGTON HTS, IL 60004
03-17-411-001	LINDSEY J FRANK 1903 N PINETREE DR ARLNGTON HTS, IL 60004
03-17-411-002	STEVEN INIGUEZ OR AREL 1907 N PINETREE DR ARLNGTON HTS, IL 60004
03-17-411-003	BOEHM 1911 N PINETREE DR ARLINGTON HT, IL 60004
03-17-411-004	SUSAN WERES 1915 N PINETREE DRIVE ARLNGTON HTS, IL 60004

03-17-409-024	GLEEN&RACHEL J ADUANA 1902 N PINETREE DR ARLINGTON HT, IL 60004
03-17-409-023	LAWRENCE T BURNETTE 1906 N PINETREE DR ARLINGTON HT, IL 60004
03-17-409-022	RICHARD C BENBON 1910 N PINETREE DR ARLNGTON HTS, IL 60004
03-17-409-021	JOHN R OYEN LIVING TRU 1914 N PINETREE DR ARLNGTON HTS, IL 60004
03-17-301-021	AMCAP NORTHPOINTII LLC 333 LUDLOW ST 8TH FLR STAMFORD, CT 06902
03-17-301-022	AMCAP NORTHPOINTII LLC 333 LUDLOW ST 8TH FLR STAMFORD, CT 06902

NOTICE OF PUBLIC MEETING

NOTICE OF PUBLIC MEETING
MEETING FOR:
AMENDMENT TO ORDINANCE #84-10 TO ELIMINATE SECTION TWO IN ITS ENTIRETY: SPECIAL USE FOR A BANK WITH A DRIVE THROUGH AND VARIATIONS FROM CHAPTER 28 OF THE MUNICIPAL CODE
MEETING LOCATION:
Arlington Heights Municipal Building
33 S. Arlington Heights Road, Arlington Heights, IL 60005
DATE: DECEMBER 20, 2023
TIME: 7:30 PM
PUBLIC ATTENDANCE & COMMENTS INVITED
FOR DETAILS CALL:
KENNETH COLLANDER
OR:
VILLAGE OF ARLINGTON HEIGHTS
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
PHONE: (847) 368-5200

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REPORT OF THE PROCEEDINGS OF

THE CONCEPTUAL PLAN REVIEW COMMITTEE

OF THE VILLAGE OF ARLINGTON HEIGHTS PLAN COMMISSION

A MEETING HELD ON: August 9, 2023

Project Title: Chase Bank with Drive-Through

Address: 585 E. Palatine Rd.

Petitioner: Terron Wright
The Architects Partnership, Ltd.

Address: 200 S. Michigan Ave, Suite 1020
Chicago, IL 60604

Requested Action:

1. Special Use Permit approval for a 5,941 square feet bank, including a drive through.
2. Amendment to Rezoning Ordinance #84-10 to modify the conditions of approval.

Variations Required:

1. None identified at this time.

Attendees: Amy Ferguson, The Architects Partnership, LTD (project architect)
Jay Cherwin, Plan Commissioner
Lynn Jensen, Plan Commissioner
John Sigalos, Plan Commissioner
Bruce Green, Plan Commissioner
Sam Hubbard, Planning Department

Project Summary:

The subject property is a separate parcel of land that is adjacent to the Town & Country Shopping Center Shopping Center, which is bounded by Palatine Road to the north, Arlington Heights Road to the west, and Rand Road to the east. Although the subject site functions as an out lot of the shopping center, it is a separate parcel and not part of the Town & Country Planned Unit Development (PUD), which governs the larger shopping center abutting the subject property. The site is approximately 1.18 acres in size and has no direct access onto a public street. Access to the site is achieved by interior drive aisle connections within the larger Town & Country Shopping Center. The subject property has one access drive connection on the western side of the site and two on the southern side of the site. From these points, vehicles have access through the shopping center to two full access signalized intersections; one at Arlington Heights Road, one at Rand Road. Additionally, the shopping center has right-in/right-out access to Palatine Road.

The petitioner is proposing demolition of the existing structure on the site, which was the former home to an AT&T store. In its place, the petitioner has proposed construction of a 5,971 square foot Chase Bank, which will include two drive-through lanes. The site would contain 34 parking stalls and the existing access drive connections with the Town & Country Shopping Center would be maintained. At peak shift, the bank would have between 8-10 employees onsite and standard business hours would be from 9:00 am – 6:00 pm Monday through Friday, 9:00 am – 2:00 pm on Saturday. The existing Chase Bank located within Northpoint to the north of the subject property would be vacated and the bank would relocate to the subject property. The subject property is within TIF 5.

Meeting Discussion:

Ms. Ferguson – purposed demolition of the existing AT&T building on the subject property and construction of an approximately 5,900 square foot Chase Bank building in its place. This is a confidential project internally at Chase, this will be a relocation of two existing bank branches and they estimate it will be well used by customers. They have taken into

account the preliminary comments from the Village and are trying to comply. They have reached out to the abutting shopping center owner regarding alignment of the subject property drive aisles with the existing drive aisles to the south of the property, but the southern property owner was unwilling to authorize this change as it could cause problems with their existing tenants.

The current Chase location located nearby was leased and would be vacated upon completion of this building. This facility would have between 10-20 employees onsite at any one time and so they will need to exceed the minimum 20 parking stalls required by code. The proposed building utilized a modern design with sloping roofs, exposed wood within the building interior, and large interior open spaces.

Mr. Hubbard – explained that the property is a parcel of land that's adjacent to the Town and Country Shopping Center, but is not actually a part of the Town and Country Shopping Center PUD. The site gets 100% of its access through the shopping center via private access easement agreements. Chase Bank would like to demolish the AT&T store and construct an approximately 6,000 square foot Chase Bank with two drive-throughs. The site is zoned B-2. Banks are permitted uses in the B-2. District, however, the drive-throughs kick in the requirement for a special use permit. Additionally, when the AT&T store was developed back in 1984, the site was rezoned and the rezoning was conditioned upon compliance with the development plans submitted at that time. Given that Chase is proposing a redevelopment plan for the site, the previous rezoning ordinance needs to be amended as part of the special use permit process.

Chase would need to justify the drive-through use given the three criteria for special use approval as outlined in the code. Staff is aware that they have already reached out to the Town and Country Shopping Center owner to discuss the drive aisle realignment. Staff would like further discussion on this matter and would be willing to reach out to the property owner to assist in brokering an agreement. But ultimately, if the neighboring property owner is not amenable to this modification, it may not be feasible. Based on a preliminary review, no variations are required. Design Commission review will be required. Staff asked that Chase explore further revisions to the drive-through to better conceal it behind the building.

Staff has also asked Chase to provide additional data on the 34 parking stalls. The proposed parking supply was about 70% above code requirements. Staff would prefer greenspace or land-banked parking rather than a parking lot if that parking is not absolutely necessary to accommodate typical peak parking demand. Staff will also review the plans to ensure that all drive-through stacking is contained on the site. The site is well served through the existing access points serving the Town and Country Shopping Center and traffic is not expected to be an issue. Staff is generally supportive of this project subject to resolution of some of these comments.

Commissioner Cherwin – believes it to be a good project. The access agreement may have some language that would allow for slight modifications to the drive aisles. He encouraged staff to help facilitate a resolution between Chase and the Town & Country Shopping Center owner. He didn't want to see this project held up simply because the neighboring property owner was unwilling to agree to the realignment.

Commissioner Sigalos – asked about the lease on the current Chase Bank site in Northpoint.

Ms. Ferguson – replied that she believed the lease at Northpoint was terminating in the near future and the site would be entirely vacated by Chase.

Commissioner Sigalos – stated he thought it was a good concept and encouraged the petitioner to move forward.

Commissioner Jensen – asked about the significance of the drive aisle realignment. If they could not be realigned, would the Village oppose this project?

Mr. Hubbard – replied that this would be a Department decision and it was unknown at this preliminary stage.

Commissioner Cherwin – asked why the Town & Country owner would be opposed to the realignment.

Mr. Hubbard – explained that he believed the owner stated that modifications to the parking areas may be a violation of the

existing leases as those leases may have require a certain number of parking spaces and location of parking spaces be maintained for their existing tenants.

Ms. Ferguson – confirmed this to be true.

Commissioner Green – said the outer drive aisle within the shopping center could use some enhancements. It was not well striped and the landscaping could use some upgrades. This was a good project and he encouraged the petitioner to move forward. He believed the drive aisle alignment could get resolved one way or another. He opened up the floor for public comment.

Mr. Moens – encouraged the Village to be more prompt about completing the CPRC minutes and putting them on the website.

RECOMMENDATION

The Conceptual Plan Review Committee encouraged the petitioner to proceed forward with their application.

Bruce Green, Chair
CONCEPTUAL PLAN REVIEW COMMITTEE
Kendra Maher, Recorder

APPROVED

MINUTES OF
THE VILLAGE OF ARLINGTON HEIGHTS
DESIGN COMMISSION

HELD AT THE ARLINGTON HEIGHTS MUNICIPAL BUILDING
33 S. ARLINGTON HEIGHTS RD.
NOVEMBER 28, 2023

Acting Chair Eckhardt called the meeting to order at 6:30 p.m.

Members Present:	Ted Eckhardt, Acting Chair Kirsten Kingsley John Fitzgerald
Members Absent:	Jonathan Kubow, Chair Scott Seyer
Also Present:	Bruce Adreani, Norwood Builders for *Arlington 425/Campbell Building* Rob Losselyoung, Tinaglia Architects for *Arlington 425/Campbell Building* Therese Thompson, Cordogan Clark for *Grace Terrace* Emma O'Connor-Brooks, Full Circle Communities for *Grace Terrace* Denise Reyes, Full Circle Communities for *Grace Terrace* Rafal Koniecki, Owner of *709 W. Fairview St.* John Krissoff, JP Morgan Chase for *Chase Bank* Eugene Boldt, JP Morgan Chase for *Chase Bank* Amy Ferguson, The Architects Partnership for *Chase Bank* Steve Hautzinger, Planning Staff

REVIEW OF MEETING MINUTES FOR NOVEMBER 14, 2023

A MOTION WAS MADE BY COMMISSIONER FITZGERALD, SECONDED BY COMMISSIONER KINGSLEY, TO APPROVE THE MEETING MINUTES OF NOVEMBER 14, 2023. ALL WERE IN FAVOR. MOTION CARRIED.

Acting Chair Eckhardt explained that with only 3 of the 5 commissioners here tonight, a unanimous vote is required for a motion to pass. The petitioner has the option to continue the review of their project to a future meeting where more commissioners are in attendance.

ITEM 4. COMMERCIAL REVIEW

DC#23-055 – Chase Bank – 585 E. Palatine Rd.

John Krissoff, Market Director of Real Estate for *JPMorgan Chase*, Eugene Boldt, Principal Designer for *JPMorgan Chase*, and Amy Ferguson, representing *The Architects Foundation*, were present on behalf of the project.

Mr. Hautzinger summarized Staff comments. This project requires Plan Commission review and Village Board approval for a Special Use Permit to allow a bank with a drive-through. Because this project is going to the Plan Commission, the role of the Design Commission is limited to building and signage only. The petitioner is proposing to demolish an existing retail building, previously occupied by an AT&T store, to build a new free-standing bank building with two drive-through lanes. The subject property functions as an outlot of the Town & Country Shopping Center, but it is a separate parcel of land and is not part of the shopping center Planned Unit Development (PUD). The site is located on the corner of Palatine Road and Rand Road. The scope of the project includes a complete redevelopment of the site with a new parking area, drive-through lanes, and landscaping.

The proposed design appears to be based on current Chase Bank prototype design standards as seen in the internet examples in the Staff report, with the same materials, colors, and wall signage. However, the proposed design includes a sloped standing seam metal roof over the majority of the building, with one smaller portion of the design having a flat roof. The proposed sloped roof massing combined with the flat roof massing has a somewhat random and odd appearance that is out of context in this location. The prototype examples with varying combinations of flat roof massing are nicely designed with a much more cohesive, modern, and refined appearance.

The proposed palette of exterior materials and colors looks very good, and they are nicely coordinated, but due to the sloping roof, the north wall of brown siding becomes quite tall and monotonous. Additionally, the flat roof portion of the building with tall stone walls is also lacking detail. If the Design Commission agrees with the proposed sloped roof concept, then further design development of the large north wall of brown siding and the tall blank stone walls is recommended. Overall, Staff feels the quality of the proposed design needs improvement and recommends omitting the sloped roof, and revising the design based on the flat roof prototype examples shown in the Staff report.

All exterior mechanical equipment and utility meters are required to be screened from view. The proposed design includes a large rooftop mechanical unit which is located on the flat roof, and fully screened by the tall parapet walls. The design also includes wall mounted utility meters located on the east elevation. The meters appear to be screened by some type of fence, but the petitioner should confirm and clarify the material and appearance of the fencing. According to the roof plan, the proposed design includes the potential to cover the roof with solar panels. While the use of solar energy is encouraged, the proposed solar panels mounted on the sloped metal roof will be highly visible and will have a poor appearance. A revised flat roof design for the building would have the added benefit of fully screening the solar panels with parapet walls on all sides.

Per code, only one wall sign is allowed per street frontage. The subject site has frontage on Palatine and Rand Road, allowing two wall signs. The proposed design includes five wall signs, which is excessive and not allowed. The signs will either need to be revised to comply with code, or if the petitioner feels there is a unique circumstance and hardship, sign variations can be requested. The plans include one small free standing exterior trash enclosure, which is proposed to be built with the same stone to match the building.

Staff recommends the Design Commission require revisions and re-review the proposed design with the comments and suggestions given and included in the Staff report.

Mr. Krissoff said that Arlington Heights is extremely important for them, it is one of their largest customer bases in Chicagoland and Chicagoland is their second largest customer base in the country. This project represents a very significant investment in this community for them as they continue to transform their network from where banking was in the past to where retail banking is going in the future, which includes less transactions and a more consultative

approach with their customers, as well as bringing technology in, and introducing sustainable features. Their design team is here tonight to talk about the design of the new building.

Mr. Boldt said that he is an architect, but his usual role at JPMorgan Chase is to manage their national prototype design, and he is also a resident of the Village for over 20 years. This location is one of their prominent branches and the project started out as more of an overgrown prototype, and the design clearly did not fit well within the site and clearly did not respond well to the context of this prominent intersection. He felt a responsibility to the community to look at the building design again and to re-think how to respond to the unique conditions of this site. The general style of the building which derives from their prototype is best described as contemporary modern, with intentionally simple intersecting masses and a limited use of materials. The intent is to both fit in within the site context and set an example of how to break away from the cookie cutter buildings that surround it. In customizing this design, they reference their brand standard style, but scaled appropriately for this prominent intersection.

Mr. Boldt said that they disagree with Staff's assessment that the quality of the design is an issue. They speak to design quality in a language of simple building massing and refined details as scale appropriately to this particular site, with the bold forms that communicate Chase's brand. They did make some intentional choices for the design of this building that do depart somewhat from their prototype and from the context of the surrounding buildings. The scale of the site with greater frontage and prominence than adjacent sites, combined with the width and traffic volume of both Rand and Palatine Roads, demands that the building be scaled for visibility from the far drive lines and from as far as possible in each direction. The sloping roof design is probably the most significant departure, allowing them to establish a scale that visibly reaches the broad distance of the intersection, while the interior facade is scaled down to the human approach. Part of that design employs wood beam outriggers and soffits reaching outwards to the street, creating a sense that the building is welcoming or pulling the streetscape toward it. Accent lighting can be added to the street facades to enhance the interface of public and private space. Landscaping up to the building façade with the inclusion of a small seating area for pedestrians will soften the boundary between public and private. Further, projecting natural materials toward the public right-of-way communicates their commitment to sustainable development. At the interior side of the site, the lower end of the roof pulls the scale of the building down to human proportions at the entry tower. They have effectively designed a building with two scales, one more grand towards the wide streets and one scaled down to a human approach. The split pitches of the roof abut and forms a focal point at the low end, drawing the eye in or toward the living room and large video screen, further bridging interior and exterior space.

Mr. Boldt said this new building will be LEED certified and ILFI net zero carbon certified. In addition to careful building material selection and structural design choices, the sloping roof and general building massing allows them to maximize energy harvesting and manage stormwater. Run-off will travel the roof toward a single point converging at a planned bio-swale or raingarden near the entrance. They chose to deliberately communicate their commitments to energy conservation by showing how to integrate solar harvesting within the architecture, rather than treating it as an afterthought. At the customer approach, a two-story tower has been designed with an oversized vestibule to clearly define the entrance and anchor the western end of the building. In contrast, the drive-up ATM lanes are pulled to the side of the building with their view from the street and the pedestrian entrance minimized. They will however, be readily accessible directly off the main site entry point, keeping them safely separated from customers approaching on foot. Offices are held to the street side of the building, keeping the custom facing areas activated with foot traffic. The project's program guided them toward upscaling this building from our prototype, applying the design standards for our 3200 square foot pulled prototype to this building with a low flat roof on a simple central rectangular building mass, simply would not address the needs of this building, which would be nearly double that size. In our investigations with various roof forms, a lower, coat, flat roof, while consistent with our smaller buildings, made the walls seem overly long and not as well proportioned. Raising the walls on the street facades provides appropriate scale and some additional visual interest. They also found that the enlarged floor plate with many private offices dictated a larger interior volume with a grander scale for arriving clients. They further decided to punctuate the high, street facing walls with clear storage windows. That move reduces the visual mass of that wall and puts more light into the interior, reinforcing the visual connection of the interior and exterior spaces with continuity of beams and ceiling finishes that extend from inside to outside. These windows will also help reduce other lines of artificial light. Their typical branch design always includes proportionally heavy stone mass, which serves several purposes. As in their standard design, that building mass is

intended to be relatively featureless, providing an anchor to the primary building mass which is much more open and transparent. The anchoring quality of the stone mass is particularly important to branch bank buildups, visually communicating the permanence and solidity of the bank as a community institution, rather than just any business, while also serving some critical functional needs. First, the parapet obscures mechanical equipment. As part of their push toward more sustainable development, they have adopted an all-electric variable refrigerant flow or VRF mechanical system. While this highly energy efficient technology has a much smaller footprint, it is unfortunately also much taller than the old gas fire RTUs. We are lowering the roof structure on the interior, but the BRF unit plus roof curve typically tops out around 8-feet above the roof deck. Combining that requirement with a suitable interior ceiling height and the required interstitial space, we need to grow that end of the building somewhat for it to effectively cover the equipment. Architecturally, the stone wall suitably terminates the sloping roof. They raised it just a bit more to avoid an overlap in the sloping roof above the stone wall coping, which would have been deep and an odd intersection, which Staff actually spoke to. The solid walls also conceal integral shear structures that counteract the structural openness of the adjacent customer space.

Mr. Boldt appreciated the opportunity to speak generally about the design of the building and how they arrived at this unique design solution, but he also wanted to address Staff's comments directly. There were six comments from Staff, a couple of which were general points of clarification. Three of the comments were focused on building design, and he wanted to verbally clarify their design attempt around those issues, and explain why they feel the building design appropriately suits the site and addresses the Village's needs. As he noted earlier, the sloping roof design, while a departure from their prototype, serves several purposes here. They contextually respond to the angles of the streets at the high side by reaching outward toward the wide open space by setting the roof form with the high point facing the primary street frontages they establish a scale that reaches the broad plaza scale distance, while facilitating a much smaller, more approachable scale at the entrance. Sloping the roof also facilitates achievement of their corporate sustainability goals, providing a canvas for a field of visible solar panels and highlighting their stormwater management strategy of incorporating a bio swale for natural stormwater filtration adjacent to the customer entrance. Although they do utilize a flat roof on their typical prototype building, that is not always the case. They do build a lot of these, and there are considerable variations due to site context and other limitations. The example cited in the Staff report is their own prototype rendering used for marketing purposes, and a recently completed project, both of which are around 3200 square feet. This building needs around 6000 square feet and the prototypical massing was just not working well. They did explore a flat roof option as well as other options for pitched roofs, but none really balanced their needs as well as the final design does.

In planning for the interior office spaces, they found that keeping the ceiling low would not lend to the open and spacious feel that they need in the expanded floor plan. The sloping roof adds significant volume to the interior space, appropriate to the increased staff presence and anticipated customer volume. The interior volume would also be preferred for future uses, should they ever leave the property. For enhanced sustainability, they do consider adaptive reuse in the planning of their ground up new builds, especially when it comes to a larger building like this. With regards to Staff's comment that if the Design Commission agrees with the proposed sloped roof concept, which he hopes they do, then the design development of the large north wall, brown siding and the tall stone walls is recommended. They do not feel that the amount of solid wall facing the street is excessive, in fact, they often have problems with having too much glazing to meet energy code and have to dial that back or make other compromises. Their building is designed with just 20% of the linear front edge being a solid wall, floor to ceiling, and that is in the brown siding area not including the stone. Vertically, they provide enough solid wall space to permit a signage band over the interstitial space behind the wall. Because of the added wall height at this project, they have incorporated an additional ribbon of high clear-story glazing which also contributes to minimizing the artificial light. The stone mass on at the south end of the building is intentionally minimally detailed. As in their standard design, that building mass is intended to be relatively featureless, intentionally contrasting with the customer areas. The solidity of that portion of the building visually anchors the structure and is an important feature of our brand's architecture. It also serves the critical infrastructure needs than ever before. They are consistent in that approach with all of their buildings, and this aesthetic is complementary of their brand experience.

Mr. Boldt said it is important to note that the light fixtures, which are really the only decorative feature of the stone mass, can be specified to wash up and down, throwing narrow cones of light across the building to accent the walls at night. They found that decorative lighting and surface mount fixtures provide suitable detail accents. The stone wall was actually pushed out and up just a bit so that it suitably terminates the sloping roof, avoiding an odd overlapping condition. They worked through a few options for that intersection, and landed on a somewhat higher stone wall as the best solution. If facade articulation is a concern, they feel they have addressed that appropriately within the constraints of the overall building style by rhythmically spacing the fenestration, including a thin massing element resembling a residential chimney to break up the facade at the primary quarter, and extending the roof structure structural beams as outriggers under the natural wood soffit, reaching outward over the front yard and providing texture. There is an opportunity for additional fenestration at the west facade. Over the ground floor windows, after experimenting with some options, they decided that the current fenestration design was most consistent with the overall style of the building. In response to Staff's comment to confirm and clarify the fence screening material and appearance of the wall mounted utility equipment on the east elevation, Mr. Boldt agreed and said the utilities will be screened from view with complementary materials as shown in the rendering. With regards to Staff's comments about the proposed solar panels that the Design Commission should evaluate, Mr. Boldt said they are intentionally placing the solar panels on display, visually expressing their company's commitment to sustainable building operations. As such, they have every intent of designing that system to be seen, with considerations for alignment, details, and minimizing exposure of infrastructure. They are currently exploring adjustments to their prototype that would incorporate visible energy production wherever that is permitted. They are currently running a program to add solar panels to existing bank branches and are mounting those directly to sloping roofing, with the intent that it be visible. They would like to do the same here, expressing their direction towards a more sustainable future.

Mr. Boldt understood Staff's comments and concerns about the extent of signage being shown, with code only allowing one wall sign per street frontage. They understand that and agree, and they are going to adjust the final signage submittal to whatever the Design Commission stipulates. Signage is shown on the elevations and renderings for example purposes only, showing how they would address signage on any particular façade, should that be approved. They would not argue that there is a particular hardship nature here per se; however, they would ask the Design Commission to consider the long stretch of street frontage at this site, as well as their choice to place the entrance at the backside of the building, as mitigating factors. That choice keeps the level of traffic away from the street façade and provides an enhanced pedestrian experience with expanded landscape. It seems fair that they would be permitted at least the two street frontage signs, as well as at least one over the walk-up entrance at the rear. With those signs, there would be very few points around the building where more than one sign would be visible at any time. Since the ground sign will be approved by right and if they can have only two more, they would choose signage on Palatine Road and the south facing sign over the entry tower. Mr. Boldt said they also understand the comment in the Staff report that this review deals with the architectural design only and should be not be considered as anything else.

In closing, Mr. Boldt thanked the Design Commission and the Village for this opportunity. He felt the building design responds appropriately to the site context, while pushing the level of design above the surrounding architecture in this area. It is time this prominent intersection has a building that suitably marks its importance as a gateway to the community and that anchors the surrounding ongoing retail development. JP Morgan Chase is looking forward to a long and successful presence as a fixture in the Arlington Heights community.

Acting Chair Eckhardt asked if the sloping roof design is intended to be a new prototype, or is this a one-off for this location. Mr. Boldt replied that as of today it is a one-off, but also a bit of an experiment. There are a couple of experiments going on here, and one is the timber frame construction because typically their buildings are steel; however, this will be a wood building, which led them to the idea of the projecting wood beams that can carry a bigger roof, which then led them in the direction of solar panels on every building going forward. This is an ideal instance where they can show them off to the community and show their commitment to sustainability. Acting Chair Eckhardt also asked about the blue/black light color at the 2-story entry element, and Mr. Boldt said it will be on the interior, which is their standard. He added that this light on the Mt. Prospect branch is the wrong color and not what is proposed for this new building.

Acting Chair Eckhardt asked if there was any public comment on the project and there was response from the audience.

PUBLIC COMMENT

Vivian Menzies, 212 W. Fremont. She did not come here for this project but said it is a really interesting project to see. Her first reaction is that she does not really love it, but it is growing on her the longer she looks at it. This corner needs something different, it is such a funny corner where the Gap used to be and nobody ever went in because the entrance faced Palatine Road and the door was hard to find. She felt a unique design is a great idea here, and the solar panels are an awesome idea, but they did not show up in the picture, and without them she did not like the sloping roof. It would be cool to see how it looks with solar panels. Acting Chair Eckhardt asked about the color of the solar panels and Mr. Boldt replied that they will be a dark color, and if they have control over the color then they will be completely black. Acting Chair Eckhardt was not in favor of a white color for the solar panels. Ms. Menzies had no further questions.

The commissioners summarized their comments. Commissioner Fitzgerald liked the project and felt that this is the proper architecture for the site. He said it is interesting that the building will look different from any angle. He liked the materials and he liked the colors, and had no issues with that. With regards to the flat roof option, he said the roof is interesting, and if there were any changes, it could be interesting if the entrance tower was flat to match the other tower; however, he is not opposed to it because coming from the south or from the southwest, it will just surprise people, which is a good thing. He liked the big landscape beds being shown, and said if there are going to be solar panels on this building, then he wanted them to be visible and part of the architecture, they should be more accepted. With regards to signage, Commissioner Fitzgerald said he has been more lenient with variances in this area of the Village because of the different angles and streets. He encouraged the petitioner to ask for sign variations and suggested looking at variations approved for other buildings in the area. Mr. Boldt said that he could not find a lot of exceptions for businesses in this area, but they want to maximize what they can get with signage, while not overdoing it.

Commissioner Kingsley gave kudos to the petitioner for doing something that is different, and she loved that the petitioner is going to the extent to make the building LEED certified, sustainable, solar panels, and timber construction, which is all pretty cool. She said at first she felt this design belonged in Denver Colorado, but if this is what the petitioner is trying to say and it is being carried all the way through, then she feels better about the design. She understood that the petitioner wants the building to be taller on Palatine and Rand Roads, but she had concerns about the second-floor clerestory windows that face those roads, and that there is nothing up there; the main roof should be lower. She suggesting doing a zigzag angle of a slope and then a clerestory facing north, and then another slope and clerestory facing north, to bring the whole thing down a little bit. She did not mind the big sloping roof and she loved the solar panels, and it actually reminds her of Alvar Aalto's auditorium in Finland that has a sloping metal roof that comes down; however, the chimney element is not doing anything for the building and something has to be done on that. She also said that the solid box element needs to be taller than the roof, so it looks more prominent, and the angled roof at the entry seems a little too tall; why does it have the overhang if the building is sustainable. Commissioner Kingsley also said that the east elevation is a prominent element when going north on Rand Road, and there is not much to see there, it looks like the back of the building. The petitioner commented that there are a lot of existing trees around the building that will remain and help to obscure the part of the building where the drive-up is located. Commissioner Kingsley reiterated her concerns about the height of the entry vestibule and the size of the roof, and sustainability; that tower is going to cast a shadow on a lot of the solar panels and it is facing the wrong way for solar panels; maybe consider it to look a different way. The petitioner said they considered a flat roof there, but found it to be so diminutive and they want that tower to have more presence to it, which the sloping roof achieved.

Commissioner Kingsley also said that she understood the petitioner wanting enough signage on the building, but sometimes a lot of signs are not needed, and the building itself is going to be a sign. She also said that the blue light reminds her of the emergency button in a parking lot. Mr. Boldt said there will be interior lighting that will be visible through the windows, and those lights will be off at night. The cube element that projects at the corner of the building will have a blue ring of light that goes around it, with the vestibule and recessed ceiling terrain in the middle of the

space. He also reiterated that the Mount Prospect bank should not be used as an example of the blue light color because the wrong color is being used there. Commissioner Kingsley also commented that the light fixtures shown on the stone wall might not meet the Village night/sky requirements.

Acting Chair Eckhardt said that to be able to really appreciate the massing of what is being proposed for this building and the juxtaposition of things, a massing model would really help. To him, this building looks like a large Mid-century home with sloping roofs. He liked the project, he liked the sloping roofs, but there are some oddities such as the visibility of the HVAC tower on the south elevation that is coming out of the roof. He understood why it is there, but felt it needed to be a little taller than the wingspan, which is fabulous and beautiful and he loved the elegance of it especially with the timber coming out, the solid box needs to be a foot taller so it looks like it is really engaged into it instead of being so close to the top; it is pinching. Acting Chair Eckhardt liked every aspect of the project, and acknowledged this is a difficult corner to design on, with the two roads coming together and the angle. He liked the sustainability being proposed, and he supports 3 signs for the building; two signs on the upper right and either one of the two signs at the entry. With regards to the blue lighting at the entry, he understood the importance of the color, but the color being used at the Chase bank in Mt. Prospect is hideous and looks like an arcade; it needs to be changed. He did not want to see that color used on this new building, and the petitioner agreed. Acting Chair Eckhardt was okay with the stone wall that serves a dual purpose and is an important element; it also ties the elevation together. He respectfully disagreed with Staff about the sloped roof, which he supports here. He had no further comments.

Mr. Boldt asked if the project will need to come back and if so, can more guidance be given on the entry tower. Acting Chair Eckhardt said that he likes the size of it as long as it is not like a purple people eater or an x-ray machine like the Mt. Prospect branch. Commissioner Fitzgerald was okay with the tower entry as proposed, and the fact that it faces east for the solar panels will still pick up light, although it might not be optimal, but he is still okay with it. He said from the outside, he liked the second-floor windows on the north and west elevation, and the light coming from above in the tower entry will be fascinating. Commissioner Kingsley referenced the Chase Bank in Downtown Arlington Heights where lights are visible through the 2-story windows and said that she could understand where that is important, but said it needs to be detailed well on the inside of this building. Acting Chair Eckhardt said the entry tower is the main entrance to the building and he liked the massing and tall height as proposed. Commissioner Fitzgerald said that it will also take the water onto the other roof, or at a minimum, make it easier to get to the stormwater pond located next to the building. He liked the surprise of the tower entry, which is an interesting way to interact with the building.

Other than the downlights shown, Commissioner Kingsley asked about lighting on the outside of the solid box element on the building. Mr. Boldt said they have not determined what that lighting will be and their concern is how the commissioners feel about it and what code requirements are. However, he could see splashing up lights, especially on the solid portions and maybe splashing across the roofs so this facade gets highlighted at night. Acting Chair Eckhardt said the wood is beautiful and it should be lit because it will have a warm glow to it, and these materials are beautiful. Commissioner Kingsley said this area should be lit from above and not down lit so it looks like a spaceship; it has to be done really well. The petitioner agreed and said that uplighting is their preference to enhance the appearance of that area. Mr. Hautzinger said that to his knowledge, the Village does not require or enforce dark sky compliance for lighting. The petitioner said they prefer the building to be dark sky compliant.

Commissioner Kingsley said that the solid box element on the building should be a 1-foot taller, and the entry could be 1-foot shorter, it is just a little too tall for her. Commissioner Fitzgerald could see the solid box element being 1-foot taller, and he was very open to the tower entry being 1-foot lower. Acting Chair Eckhardt agreed, but did not want it to get much lower, and if it works proportionately, then he was okay with 1-foot; he did not want to see it become junior to the rest of the building.

Commissioner Kingsley said that collecting the rainwater might be something the petitioner should think about on the V portion on the inside opposite the chimney; what is done with that and how it gets from there to the rainwater pool. The petitioner said this is something they considered but have not gotten that far with details.

A MOTION WAS MADE BY COMMISSIONER FITZGERALD, SECONDED BY COMMISSIONER KINGSLEY, TO APPROVE THE PROPOSED ARCHITECTURAL DESIGN FOR CHASE BANK TO BE LOCATED AT 585 E. PALATINE ROAD. THIS RECOMMENDATION IS BASED ON PLANS RECEIVED 9/22/23, EXTERIOR ELEVATIONS RECEIVED 11/15/23, DESIGN COMMISSION RECOMMENDATIONS, COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND VILLGE CODES, REGULATIONS, AND POLICIES, THE ISSUANCE OF ALL REQUIRED PERMITS, AND THE FOLLOWING:

1. A REQUIREMENT THAT THE HEIGHT OF THE STONE TOWER BE RAISED 1-FOOT.
2. A RECOMMENDATION THAT THE HEIGHT OF THE ENTRANCE TOWER BOX BE LOWERED 1-FOOT OR SIMILAR, TO BE APPROVED BY STAFF.
3. A REQUIREMENT THAT THE EXTERIOR BUILDING LIGHTING PLAN BE APPROVED BY STAFF.

Commissioner Kingsley wanted the motion to say approximately 1-foot, so the petitioner has some flexibility with the height, and that the motion include a recommendation that the collection of the rainwater be celebrated and detailed, and that the solar panels are supported.

A MOTION WAS MADE BY COMMISSIONER FITZGERALD TO AMEND THE MOTION AS FOLLOWS:

1. A REQUIREMENT THAT THE HEIGHT OF THE STONE TOWER BE RAISED APPROXIMATELY 1-FOOT.
2. A RECOMMENDATION THAT THE HEIGHT OF THE ENTRANCE TOWER BOX BE LOWERED APPROXIMATELY 1-FOOT, TO BE APPROVED BY STAFF.
3. A REQUIREMENT THAT THE EXTERIOR BUILDING LIGHTING PLAN BE APPROVED BY STAFF.
4. A RECOMMENDATION THAT THE WATER COLLECTION POINT OF THE ROOF BE CELEBRATED WITH A RAIN CHAIN OR SOMETHING INTERESTING, TO BE APPROVED BY STAFF.
5. A RECOMMENDATION TO INCLUDE THE SOLAR PANELS ON THE BUILDING, AND THAT THEY BE A DARK COLOR, TO BE APPROVED BY STAFF.
6. THIS REVIEW DEALS WITH ARCHITECTURAL DESIGN ONLY AND SHOULD NOT BE CONSTRUED TO BE AN APPROVAL OF, OR TO HAVE ANY OTHER IMPACT ON, NOR REPRESENT ANY TACIT APPROVAL OR SUPPORT FOR THE PROPOSED LAND USE OR ANY OTHER ZONING AND/OR LAND USE ISSUES OR DECISIONS THAT STEM FROM ZONING, BUILDING, SIGNAGE OR ANY OTHER REVIEWS. IN ADDITION TO THE NORMAL TECHNICAL REVIEW, PERMIT DRAWINGS WILL BE REVIEWED FOR CONSISTENCY WITH THE DESIGN COMMISSION AND ANY OTHER COMMISSION OR BOARD APPROVAL CONDITIONS. IT IS THE PETITIONER'S RESPONSIBILTY TO INCORPORATE ALL REQUIREMENTS LISTED ON THE CERTIFICATE OF APPROPRIATENESS INTO THE PERMIT DRAWINGS, AND TO ENSURE THAT BUILDING PERMIT PLANS AND SIGN PERMIT PLANS COMPLY WITH ALL ZONING CODE, BUILDING CODE AND SIGN CODE REQUIREMENTS.

Commissioner Kingsley asked about the seating wall shown right at the corner of Palatine and Rand Road. Ms. Ferguson replied that this is shown on the site plan and Staff requested them to add a feature there that is pedestrian friendly, so they developed a 2-foot curved, stamped concrete area for people to visit, along with a permanent seating wall that is low maintenance with landscaping. A proposed landscape plan was shown to the commissioners, and it was noted that landscaping will be part of the Plan Commission review.

KINGSLEY, AYE; ;FITZGERALD, AYE; ECKHARDT, AYE.
ALL WERE IN FAVOR. MOTION CARRIED.

S T A F F D E S I G N C O M M I S S I O N R E P O R T

PROJECT INFORMATION:		**PETITION INFORMATION:**	
Project Name:	Chase Bank	**DC Number:**	23-055
Project Address:	585 E. Palatine Road	**Petitioner Name:**	Terron Wright
Prepared By:	Steve Hautzinger	**Petitioner Address:**	The Architects Partnership 200 S. Michigan Avenue, Suite 1020 Chicago, IL 60604
Date Prepared:	November 17, 2023	**Meeting Date:**	November 28, 2023

Requested Action(s):
Approval of the proposed architectural design for a new bank building.

Design Commission Responsibility for Projects Being Reviewed by Plan Commission:
The subject design is being forwarded to the Design Commission for review pursuant to Chapter 6 of the Municipal Code.

This project requires Plan Commission review and Village Board approval for a Special Use Permit to allow a bank with a drive-through. Because this project is going to the Plan Commission, the role of the Design Commission is limited. The Design Commission's responsibility is as outlined in Chapter 28 of the Municipal Code, Section 14.2-1, which states:

"*For developments where a public hearing is necessary before the Plan Commission or Zoning Board of Appeals, the design review process should, if feasible, be completed by the time of the public hearing. Development proposals requiring rezoning, PUD or other Plan Commission approvals, shall be reviewed by the Design Commission* ***for building and signage only****."*

Summary:
The petitioner is proposing to demolish an existing retail building, previously occupied by an AT&T store, to build a new free-standing bank building with two drive-through lanes. The subject property functions as an outlot of the Town & Country Shopping Center, but it is a separate parcel of land and is not part of the shopping center Planned Unit Development (PUD). The site is located on the corner of Palatine Road and Rand Road. The scope of the project includes a complete redevelopment of the site with a new parking area, drive-through lanes, and landscaping.

Architectural Design:
The proposed design appears to be based on current Chase Bank prototype design standards as seen in the internet examples below, with the same materials, colors, and wall signage. However, the proposed design includes a sloped standing seam metal roof over the majority of the building, with one smaller portion of the design having a flat roof. The proposed sloped roof massing combined with the flat roof massing has a somewhat random and odd appearance that is out of context in this location. The prototype examples with varying combinations of flat roof massing are nicely designed with a much more cohesive, modern, and refined appearance.

The proposed palette of exterior materials and colors looks very good, and they are nicely coordinated, but due to the sloping roof, the north wall of brown siding becomes quite tall and monotonous. Additionally, the flat roof portion of the building with tall stone walls is also lacking detail. If the Design Commission agrees with the proposed sloped roof concept, then further design development of the large north wall of brown siding and the tall blank stone walls is recommended.

Overall, Staff feels that the quality of the proposed design needs improvement. Staff recommends omitting the sloped roof, and revising the design based on the flat roof prototype examples below.

Chase Bank Building – Prototype Example 1

Chase Bank Building – Prototype Example 2

Mechanical Equipment Screening:
All exterior mechanical equipment and utility meters are required to be screened from view. The proposed design includes a large rooftop mechanical unit which is located on the flat roof, and fully screened by the tall parapet walls. The design also includes wall mounted utility meters located on the east elevation. The meters appear to be screened by some type of fence, but the petitioner should confirm and clarify the material and appearance of the fencing.

According to the roof plan, the proposed design includes the potential to cover the roof with solar panels. While the use of solar energy is encouraged, the proposed solar panels mounted on the sloped metal roof will be highly visible and will have a poor appearance. A revised flat roof design for the building would have the added benefit of fully screening the solar panels with parapet walls on all sides.

Signage:
Per code, only one wall sign is allowed per street frontage. The subject site has frontage on Palatine and Rand Road, allowing two wall signs. The proposed design includes five wall signs, which is excessive and not allowed. The signs will either need to be revised to comply with code, or if the petitioner feels there is a unique circumstance and hardship, sign variations can be requested.

Trash Screening:
The plans include one small free standing exterior trash enclosure, which is proposed to be built with the same stone to match the building.

RECOMMENDATION:

It is recommended that the Design Commission **require revisions and re-review** the proposed architectural design for Chase Bank to be located at 585 E. Palatine Road. This recommendation is based on the plans received 9/22/23, exterior elevations received 11-15-23, Design Commission recommendations, compliance with all applicable Federal, State, and Village codes regulations and policies, the issuance of all required permits, and the following:

1. The proposed sloped roof massing combined with the flat roof massing has a somewhat random and odd appearance that is out of context in this location. Overall, Staff feels that the quality of the proposed design needs improvement. Staff recommends omitting the sloped roof, and revising the design based on the flat roof prototype examples included in the Staff Report.
2. If the Design Commission agrees with the proposed sloped roof concept, then further design development of the large north wall of brown siding and the tall blank stone walls is recommended.
3. Confirm and clarify the fence/screening material and appearance for the wall-mounted utility equipment on the east elevation.
4. The proposed solar panels mounted on the sloped metal roof will be highly visible and will have a poor appearance, which the Design Commission should evaluate. A revised flat roof design for the building would have the added benefit of fully screening the solar panels with parapet walls on all sides.
5. Per code, only one wall sign is allowed per street frontage. The subject site has frontage on Palatine and Rand Road, allowing two wall signs. The proposed design includes five wall signs, which is excessive and not allowed. The signs will either need to be revised to comply with code, or if the petitioner feels there is a unique circumstance and hardship, sign variations can be requested.
6. This review deals with architectural design only and should not be construed to be an approval of, or to have any other impact on, any other zoning and/or land use issues or decisions that stem from zoning, sign code or building or any other reviews. In addition to the normal technical review, permit drawings will be reviewed for consistency with the Design Commission and any other Commission or Board approval conditions. It is the architect/owner/builder's responsibility to comply with the Design Commission approval and ensure that building permit plans and sign permit plans comply with all zoning code, building code and sign code requirements.

November 17, 2023

Steve Hautzinger AIA, Design Planner
Department of Planning & Community Development

Cc: Charles Witherington Perkins, Director of Planning and Community Development, Michael Lysicatos, Assistant Director of Planning and Community Development, Sam Hubbard, Development Planner, Petitioner, DC File 23-055

The Architects Partnership, Ltd. 200 South Michigan Avenue, Suite 1020, Chicago, IL 60604

Sam Hubbard
Development Planner
Department of planning and
Community Development
Village of Arlington Heights
33 S Arlington Heights Road
Arlington Heights, IL 60005

November 03, 2023

Re: Project narrative for the property 585 E Palatine Road

Dear Mr. Hubbard,

This letter is to detail our application for Design Commission Approval to build a new single-story +/- 5,941 SF freestanding retail banking center with two ATM Drive through lanes.
The proposed Chase Bank building and associated parking lot will be located at the southwest corner of E Palatine Road and E Rand Road. New parking and landscaping will be implemented to improve the aesthetics of the area.

The need of a special use for the ATM drive through lanes is to provide service to customers any time of day. In addition, the drive through lanes add a safety element for banking customers as they do not need to leave their vehicle to conduct a transaction during the restricted ATM hours.

Lastly, the use of the drive-through will not have a negative impact to the surrounding businesses, as stated above, the 24 hr. use will maintain and enhance customer safety and interaction with the local businesses in the area.

If a special use permit is granted, the nature of the drive up will commence the first day the branch opens to the public. As of today, the proposed schedule has the construction commencing early Spring 2024 (pending regulatory approvals) and an anticipated occupancy date of Fall 2024.

The design intent of the proposed Chase Bank is to complement the surrounding architecture of the area. The proposed Banking Center is comprised of cultured stone (limestone color), Nichiha fiber cement panels in color “Ash” and “Bark”, PSL (parallel strand lumber), tongue and grove system in natural wood color, Berridge standing seam roof system in “Cityscape” color, and black roof fascia in black aluminum, along with a black anodized storefront system, clear glassing, and spandrel glass in “warm gray” shade. All the exterior cladding options are modern finishes and are long lasting cladding materials that will mesh well with the development growth of the area. Additionally, the proposed floor to ceiling glazing was incorporated to provide connectivity to the retail customers navigating the area and pedestrians traversing the adjacent public thoroughfares.

Lighting Design and Locations:

To provide the best and most efficient lighting design and locations, a photometric study has been developed and included in this submittal. A fully new layout of site lighting will be proposed along with complementary architectural lighting within the building which will enrich the architectural design of the site at night and will also add to the security for the users during night hours.

The Architects Partnership, Ltd. 200 South Michigan Avenue, Suite 1020, Chicago, IL 60604

Sustainability Components:

The project will contain the following components which would contribute to sustainability practices the City is encouraging:

- Installation of additional trees/landscaping within development area
- LED lighting
- Solar panels potentially to be provided in the future

Parties Involved:

Applicant / Buyer
Kenneth Colliander
Obo JPMorgan Chase Bank, N.A.

Architect of Record
Timothy Meseck
The Architects Partnership, LTD (TAP)

Property Owner
Mitch Goltz
GW Properties

Landscape Architect
Craig Most
Terra Engineering LTD.

Civil Engineer
Alexa
Kimley-Horn and Associates, INC.

Application Contact/Buyer's AOR Contact
Terron Wright
The Architects Partnership, LTD (TAP)

Zoning Classification:

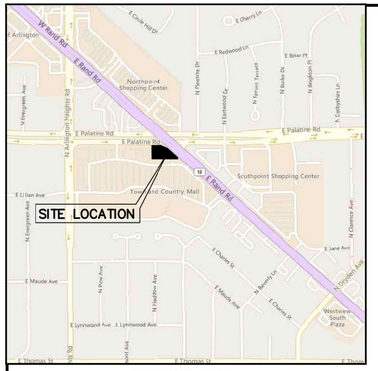
The property in question is in a zoning district classified as B-2 General Business.

Type of Business:

The type of business is a retail banking center. The hours of operation will be Monday – Friday 9 AM – 6 PM and Saturday 9 AM – 2 PM. The total number of employees and any one time will be twenty one. The twenty one employees will consist of three (3) tellers, one (1) lead teller, thirteen (13) bankers, (1) branch manager, (1) mortgage loan office, (1) financial advisor and (1) business banker.

Timothy R. Meseck
The Architects Partnership, LTD.

ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY



VICINITY MAP
NO SCALE

SCHEDULE B EXCEPTIONS NOTED OR SHOWN HEREON

8. TERMS, CONDITIONS, PROVISIONS AND RESTRICTIONS AS CONTAINED IN A RESERVATION FOR PUBLIC HIGHWAY RECORDED MAY 6, 1932 AS DOCUMENT 11084966.

9. TERMS, CONDITIONS, PROVISIONS AND RESTRICTIONS AS CONTAINED IN AN EASEMENT FOR INGRESS AND EGRESS RECORDED AUGUST 27, 1981 AS DOCUMENT 25981904.

NOTES

REGARDING SCHEDULE B EXCEPTIONS:

SCHEDULE B EXCEPTIONS 1, 2, 3, 4, 5, 6, 7, 10, 11 AND 12 ARE NOT SURVEY RELATED AND THEREFORE NOT SHOWN.

8. 40 FOOT RESERVATION FOR PUBLIC HIGHWAY PER DOCUMENT 11084966, PLOTTED HEREON.

9. EASEMENT FOR INGRESS AND EGRESS RECORDED AUGUST 27, 1981 AS DOCUMENT 25981904 IS BLANKET IN NATURE OVER THE ADJOINING SHOPPING CENTER DRIVES. NOT PLOTTABLE.

LEGEND

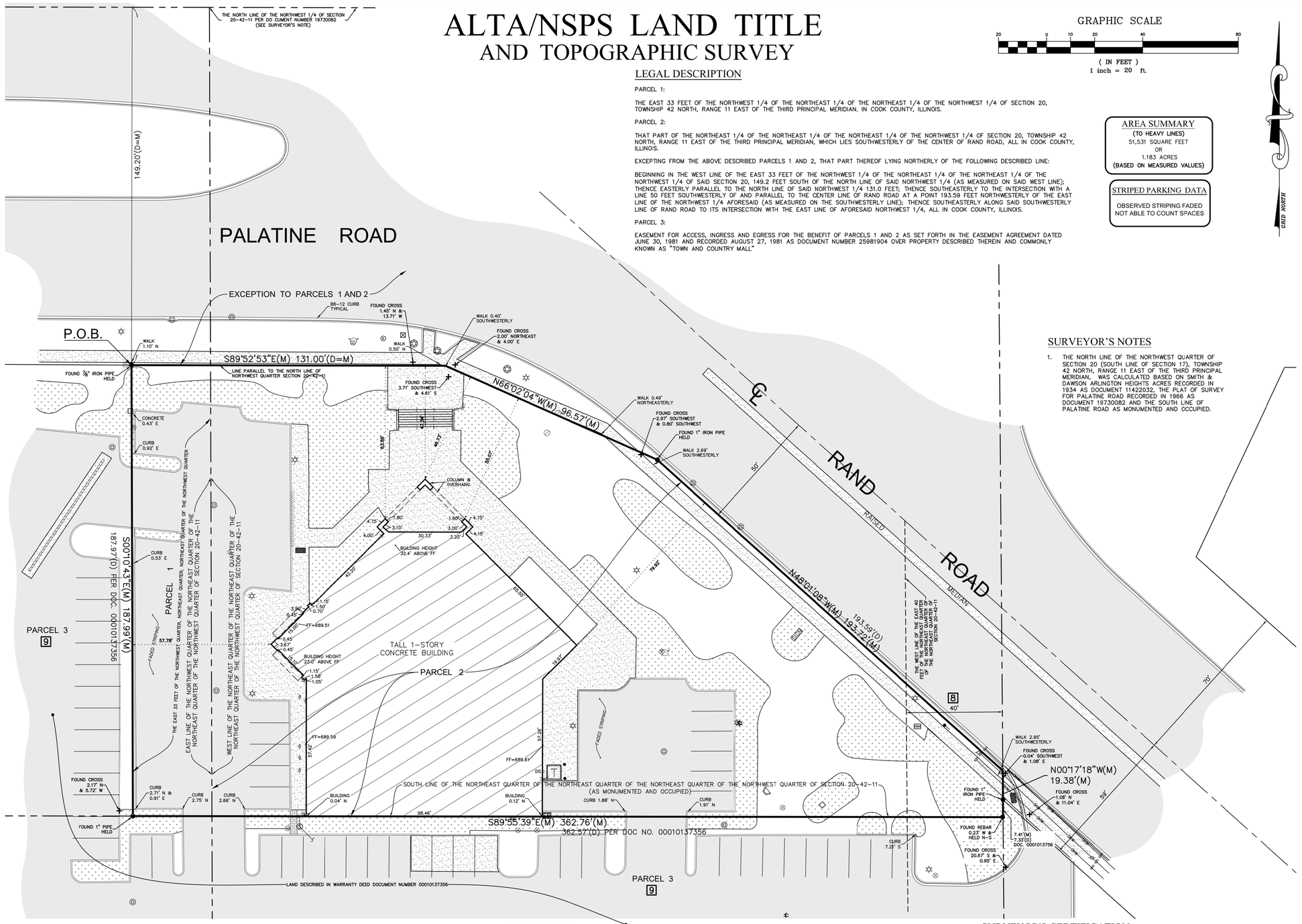
- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- TELEPHONE PEDESTAL
- CABLE TELEVISION PEDESTAL
- CONTROL BOX
- WETLAND FLAG
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN
- STORM SEWER — STM
- WATER MAIN — W
- GAS MAIN — G
- ELECTRIC LINE — E
- OVERHEAD WIRES — OHW
- COMMUNICATION LINE — T
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER MS=MULTI-STEM (DRIP LINE SHOWN IS APPROXIMATE)
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE
- METAL GUARDRAIL
- OVERHEAD TRAFFIC ARM

ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
BC = BACK OF CURB
BDC = BACK OF DEPRESSED
FL = FLOW LINE
C = CONCRETE
P = PAVEMENT
G = GRAVEL
EW = EDGE OF WALK
TW = TOP OF WALL
TP = TOP OF PIPE
IE = INVERT ELEVATION
PL = PROPERTY LINE
DS = DOWN SPOUT
S.F. = SQUARE FEET
SL = SHORE LINE
TSF = TRANSFORMER
B = PAVERS

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND
- PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- EXISTING CONTOUR



GRAPHIC SCALE

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

LEGAL DESCRIPTION

PARCEL 1:

THE EAST 33 FEET OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, WHICH LIES SOUTHWESTERLY OF THE CENTER OF RAND ROAD, ALL IN COOK COUNTY, ILLINOIS.

EXCEPTING FROM THE ABOVE DESCRIBED PARCELS 1 AND 2, THAT PART THEREOF LYING NORTHERLY OF THE FOLLOWING DESCRIBED LINE:

BEGINNING IN THE WEST LINE OF THE EAST 33 FEET OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 20, 149.2 FEET SOUTH OF THE NORTH LINE OF SAID NORTHWEST 1/4 (AS MEASURED ON SAID WEST LINE); THENCE EASTERLY PARALLEL TO THE NORTH LINE OF SAID NORTHWEST 1/4 131.0 FEET; THENCE SOUTHEASTERLY TO THE INTERSECTION WITH A LINE 50 FEET SOUTHWESTERLY OF AND PARALLEL TO THE CENTER LINE OF RAND ROAD AT A POINT 193.59 FEET NORTHWESTERLY OF THE EAST LINE OF THE NORTHWEST 1/4 AFORESAID (AS MEASURED ON THE SOUTHWESTERLY LINE); THENCE SOUTHEASTERLY ALONG SAID SOUTHWESTERLY LINE OF RAND ROAD TO ITS INTERSECTION WITH THE EAST LINE OF AFORESAID NORTHWEST 1/4, ALL IN COOK COUNTY, ILLINOIS.

PARCEL 3:

EASEMENT FOR ACCESS, INGRESS AND EGRESS FOR THE BENEFIT OF PARCELS 1 AND 2 AS SET FORTH IN THE EASEMENT AGREEMENT DATED JUNE 30, 1981 AND RECORDED AUGUST 27, 1981 AS DOCUMENT NUMBER 25981904 OVER PROPERTY DESCRIBED THEREIN AND COMMONLY KNOWN AS "TOWN AND COUNTRY MALL"

AREA SUMMARY

(TO HEAVY LINES)
51,531 SQUARE FEET
OR
1.183 ACRES
(BASED ON MEASURED VALUES)

STRIPED PARKING DATA

OBSERVED STRIPING FADED
NOT ABLE TO COUNT SPACES

SURVEYOR'S NOTES

1. THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 20 (SOUTH LINE OF SECTION 17), TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, WAS CALCULATED BASED ON SMITH & DAWSON ARLINGTON HEIGHTS ACRES RECORDED IN 1934 AS DOCUMENT 11422032, THE PLAT OF SURVEY FOR PALATINE ROAD RECORDED IN 1966 AS DOCUMENT 19730082 AND THE SOUTH LINE OF PALATINE ROAD AS MONUMENTED AND OCCUPIED.

GENERAL NOTES

1. THIS SURVEY IS BASED ON THE LEGAL DESCRIPTION AND EASEMENTS OF RECORD AS IDENTIFIED IN TITLE COMMITMENT NUMBER NCS-1148959-CHI2 ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY HAVING AN EFFECTIVE DATE OF SEPTEMBER 20, 2022.

2. THE BASIS OF BEARINGS FOR THIS SURVEY IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 (2011), ZONE 1201 (ILLINOIS EAST)

3. THIS SITE FALLS WITHIN "OTHER AREAS: ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DEFINED BY THE FLOOD INSURANCE RATE MAP, MAP NUMBER 17031C0201J, HAVING A REVISED DATE OF AUGUST 19, 2008.

4. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYS, AND IS BASED ON FIELD WORK PERFORMED ON 10/21 AND 10/24/2022.

PIN: 03-20-101-016
OWNER: TOWN & COUNTRY CHICAGO

5. THE SURVEYOR CONTACTED J.U.L.I.E. (JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS) FOR AN ON-SITE LOCATE WHICH WAS ASSIGNED A DIG NUMBER OF X222871567. THE UTILITIES AS MARKED ON-SITE AT THE TIME OF THE SURVEY ARE SHOWN HEREON. ADDITIONALLY, THE SURVEYOR CONTACTED J.U.L.I.E. FOR A DESIGN STAGE REQUEST FOR THIS SITE WHICH WAS ASSIGNED A DIG NUMBER OF X222840567. INQUIRIES WERE SENT OUT TO THE VARIOUS UTILITY COMPANIES REQUESTING MAPS AND/OR ATLASES OF THEIR RESPECTIVE FACILITIES. THE INFORMATION RECEIVED TO DATE IS SHOWN HEREON. ALSO, PRIOR TO FIELD WORK ON THIS SITE, THE UNDERGROUND DETECTIVE PROVIDED UTILITY LOCATING SERVICES ON SITE AND THE INFORMATION OBTAINED BY THE SURVEYOR FROM THESE MARKS ARE SHOWN HEREON.

6. IN ACCORDANCE WITH TABLE A ITEM 10, NO PARTY WALLS WERE OBSERVED ALONG PROPERTY LINES CONTIGUOUS WITH ADJOINING PROPERTIES.

7. IN ACCORDANCE WITH TABLE A ITEM 16, NO OBSERVED EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.

8. IN ACCORDANCE WITH TABLE A ITEM 17, NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES BASED ON INFORMATION RECEIVED FROM THE CONTROLLING JURISDICTION AT THE TIME OF THE SURVEY. NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

9. IN ACCORDANCE WITH TABLE A ITEM 6(B), A ZONING REPORT WAS NOT PROVIDED TO THE SURVEYOR.

UTILITY CONTACTS

CABLE
COMCAST – MARTHA GIERAS
224-229-5862
MARTHA_GIERAS@COMCAST.COM

ELECTRIC
COMED
630-576-7094

GAS
NICOR GAS
GASMAPS@NICOR.COM

COMMUNICATIONS
AT&T
G11629@ATT.COM

MCI/VERIZON – INVESTIGATIONS TEAM
ASG.INVESTIGATIONSTEAM@ASGINC.US
CC: INVESTIGATIONS@VERIZON.COM

WIDE OPEN WEST – PAUL FLINKOW
630-536-3139
PAUL.FLINKOW@ASTOUND.COM

WATER / SANITARY / STORM
VILLAGE OF ARLINGTON HEIGHTS –
STEVE MULLANY
847-368-5800
SMULLANY@VAH.COM

SURVEYOR'S CERTIFICATION

TO: FIRST AMERICAN TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(B), 7(A), 7(B1), 7(C), 8, 9, 10, 11(A), 11(B), 13, 14, 16, 17, 18 AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 10-24-22.

COMPASS SURVEYING LTD
PROFESSIONAL DESIGN FIRM
LAND SURVEYOR CORPORATION NO. 184-002778
LICENSE EXPIRES 4/30/2023

DATE OF PLAT OR MAP: 11/02/2022

BY: _____
SCOTT C. KREBS
IL PROFESSIONAL LAND SURVEYOR NO. 3509
LICENSE EXPIRES 11/30/24

SCOTT C. KREBS 35-3509 AURORA, ILLINOIS
PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS

Know what's below. Call before you dig.

UTILITY STATEMENT
THE UNDERGROUND UTILITIES SHOWN HEREON WERE LOCATED FROM VISIBLE FIELD EVIDENCE AND EXISTING DRAWINGS, MAPS AND RECORDS SUPPLIED TO SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM AVAILABLE INFORMATION. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND LINES.

NO.	REVISIONS	DRAWN BY	CHECKED BY	BOOK 638 PG 69-71
		MRA	SK	DATE / BY

DATE: 11-2-22 PC TK

CLIENT
Kimley»Horn
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINFIELD ROAD, SUITE 600,
WARRENVILLE, IL 60555
PHONE: 630-487-9900 FAX: 630-487-9922
WWW.KIMLEY-HORN.COM

PROJECT
CHASE BANK
ARLINGTON HEIGHTS, IL

COMPASS SURVEYING LTD
ALTA SURVEYS • TOPOGRAPHY • CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

SCALE: 1" = 20'

1 OF 2

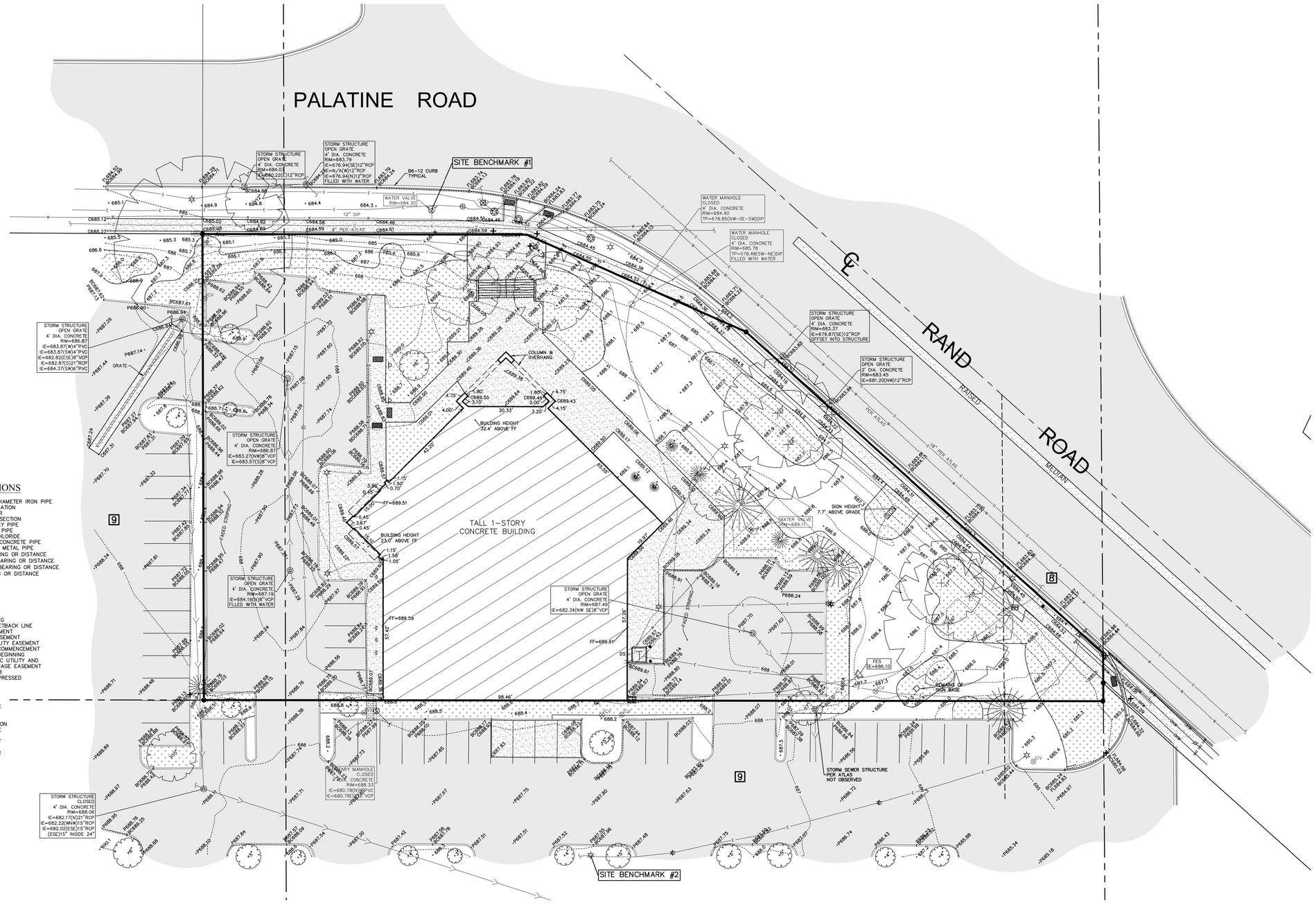
PROJ. NO.: 22.0290

J:\PSDATA\2022 PROJECTS\22.0290\22.0290 LTS TOPO.DWG

ALTA/NSPS LAND TITLE
AND TOPOGRAPHIC SURVEY

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

GRID NORTH



BENCHMARKS

REFERENCE BENCHMARK:

COOK COUNTY BENCHMARK DM3905, LOCATED IN PALATINE, 36 FEET NORTH OF THE CENTERLINE OF ANDERSON DRIVE, 17 FEET EAST OF THE CENTERLINE OF REYNOLDS DRIVE, 2.5 FEET WEST OF BACK OF SIDEWALK

DATUM: NAVD88
ELEVATION = 719.509

SITE BENCHMARKS:

SITE BENCHMARK #1

SOUTHWEST BOLT ON FIRE HYDRANT AT SOUTHWEST CORNER OF INTERSECTION OF PALATINE ROAD AND RAND ROAD

ELEVATION = 685.08

SITE BENCHMARK #2

NORTHEAST BOLT ON LIGHT POLE IN ISLAND SOUTH OF SURVEYED BUILDING

ELEVATION = 689.55

LEGEND

- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- TELEPHONE PEDESTAL
- CABLE TELEVISION PEDESTAL
- CONTROL BOX
- WETLAND FLAG
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN —
- STORM SEWER — STM —
- WATER MAIN
- GAS MAIN
- ELECTRIC LINE
- OVERHEAD WIRES
- COMMUNICATION LINE
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER MS=MULTI-STEM (DRIP LINE SHOWN IS APPROXIMATE)
- TREE LINE
- + ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE
- METAL GUARDRAIL
- OVERHEAD TRAFFIC ARM

ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
BC = BACK OF CURB
BDC = BACK OF DEPRESSED
FL = FLOW LINE
C = CONCRETE
P = PAVEMENT
G = GRAVEL
EW = EDGE OF WALK
TW = TOP OF WALK
TP = TOP OF PIPE
IE = INVERT ELEVATION
PL = PROPERTY LINE
DS = DOWN SPOUT
S.F. = SQUARE FEET
SL = SHORE LINE
TSF = TRANSFORMER
B = PAVERS

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND
- PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- EXISTING CONTOUR

811 Know what's below. Call before you dig.

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HEREON WERE LOCATED FROM VISIBLE FIELD EVIDENCE AND EXISTING DRAWINGS, MAPS AND RECORDS SUPPLIED TO THE SURVEYOR. THE SURVEYOR MAKES NO GUARANTEES AS TO THE COMPLETENESS OR ACCURACY OF THIS PURPOSE. ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, MAY NOT BE SHOWN ON THIS PLAT. IT IS POSSIBLE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES NOT GUARANTEE THIS AS POSSIBLE FROM AVAILABLE INFORMATION, THE SURVEYOR HAS PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. WHERE, HE HAS NOT PHYSICALLY LOCATED THE UNDERGROUND LINES.

NO.	DATE	REVISIONS	DRAWN BY	CHECKED BY
	DATE: 11-2-22	PC TK	MRA	SK

BOOK 638 PG 69-71

CLIENT
Kimley»Horn

© 2020 KIMLEY-HORN AND ASSOCIATES, INC.

4201 WINFIELD ROAD, SUITE 600,
WARRENVILLE, IL 60555
PHONE: 630-487-2550
WWW.KIMLEY-HORN.COM

PROJECT
CHASE BANK
ARLINGTON HEIGHTS, IL

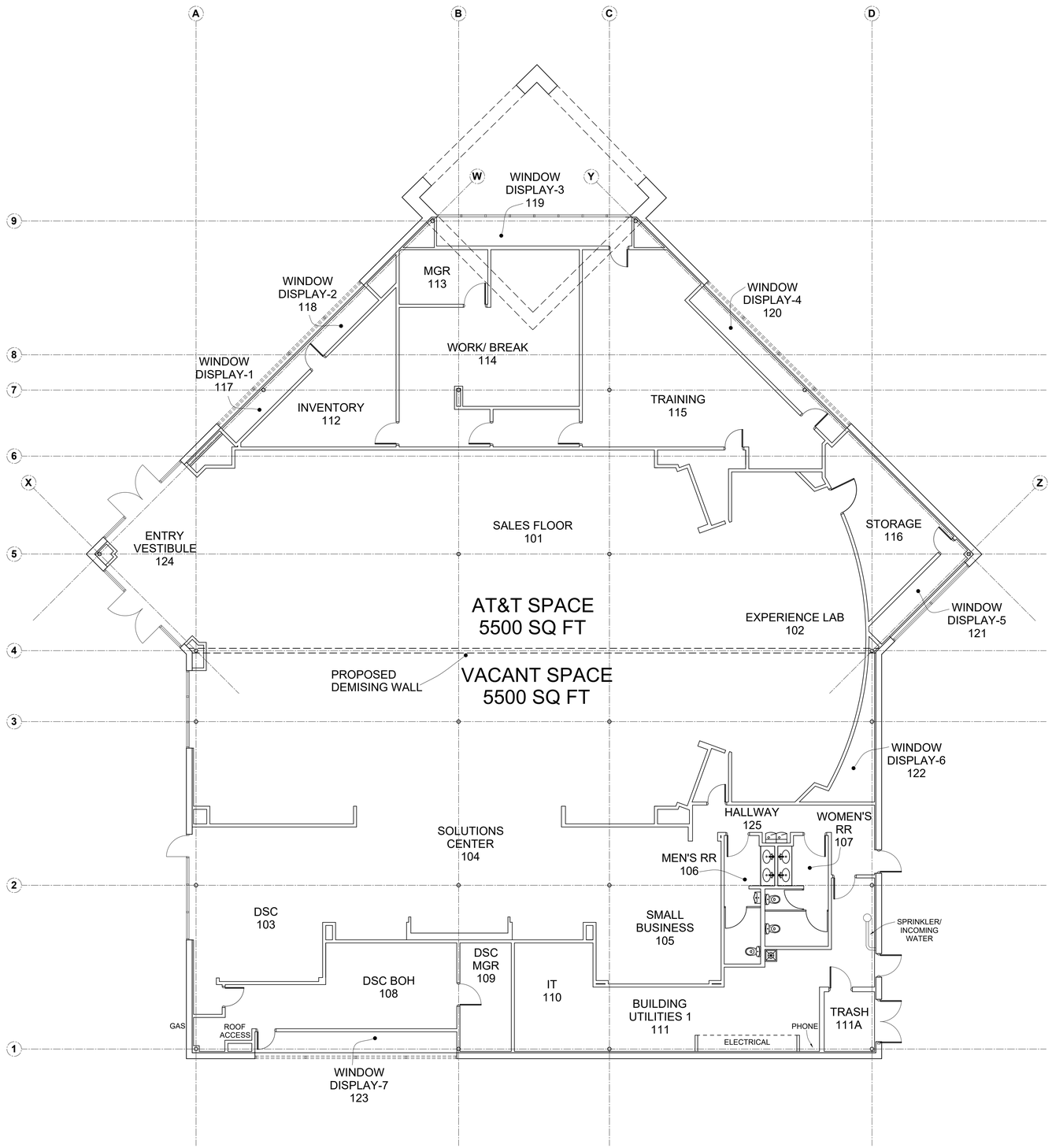
COMPASS SURVEYING LTD
ALTA SURVEYS • TOPOGRAPHY • CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

SCALE: 1" = 20'

2 OF 2

PROJ. NO.: 22.0290

J:\PSDATA\2022 PROJECTS\22.0290\22.0290 LTS TOPO.DWG



1 EXISTING FLOOR PLAN

1/8" =1'-0" (ARCH D)

PRINTED BY: ARCHITECTS
DRAWING NAME: FLOOR PLAN EXIST 04.18.2022.DWG PRINT DATE: Apr 19, 2022 - 1:18pm

EXISTING FLOOR PLAN

GW PROPERTIES
585 E PALATINE RD
ARLINGTON HEIGHTS, IL 60004

DESIGN STUDIO 24, LLC.
ARCHITECTS
2211 N. ELSTON AVE., CHICAGO IL 60614 Fax: 847.885.7751
PLANNERS
Tel: 847.885.8300

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STATEMENT OF COMPLIANCE

I have prepared, or caused to be prepared under my supervision, the attached plans and specifications and state that, to the best of my knowledge and belief and to the extent of my contractural obligation, they are in compliance with the Codes and Ordinances of Schaumburg, Illinois

STATEMENT OF COMPLIANCE

I have prepared, or caused to be prepared under my supervision, the attached plans and specifications and state that, to the best of my knowledge and belief and to the extent of my contractural obligation, they are in compliance with the Environmental Barriers Act [l Rev Stat 1985, ch 111 1/2, pars 3711 at seq as amended] and the Illinois Accessibility Code, 71 ll, Adm, Code 400.

DATE	04.15.2022
REVISIONS	
SCALE	AS SHOWN
DRAWN BY:	MITESH PATEL

MARK T. DiGANCI
REG. ARCHITECT

STATE OF ILLINOIS MARK DIGANCI 001.013413 REGISTERED ARCHITECT

LICENSE EXPIRES: 11.30.2022

A 1.0

SCALE: $\frac{3}{16}$" = 1'

0 5' 15' 30'

CHASE

PALATINE RD. AND RAND

585 E Palatine Rd.
Arlington Heights, IL 60004

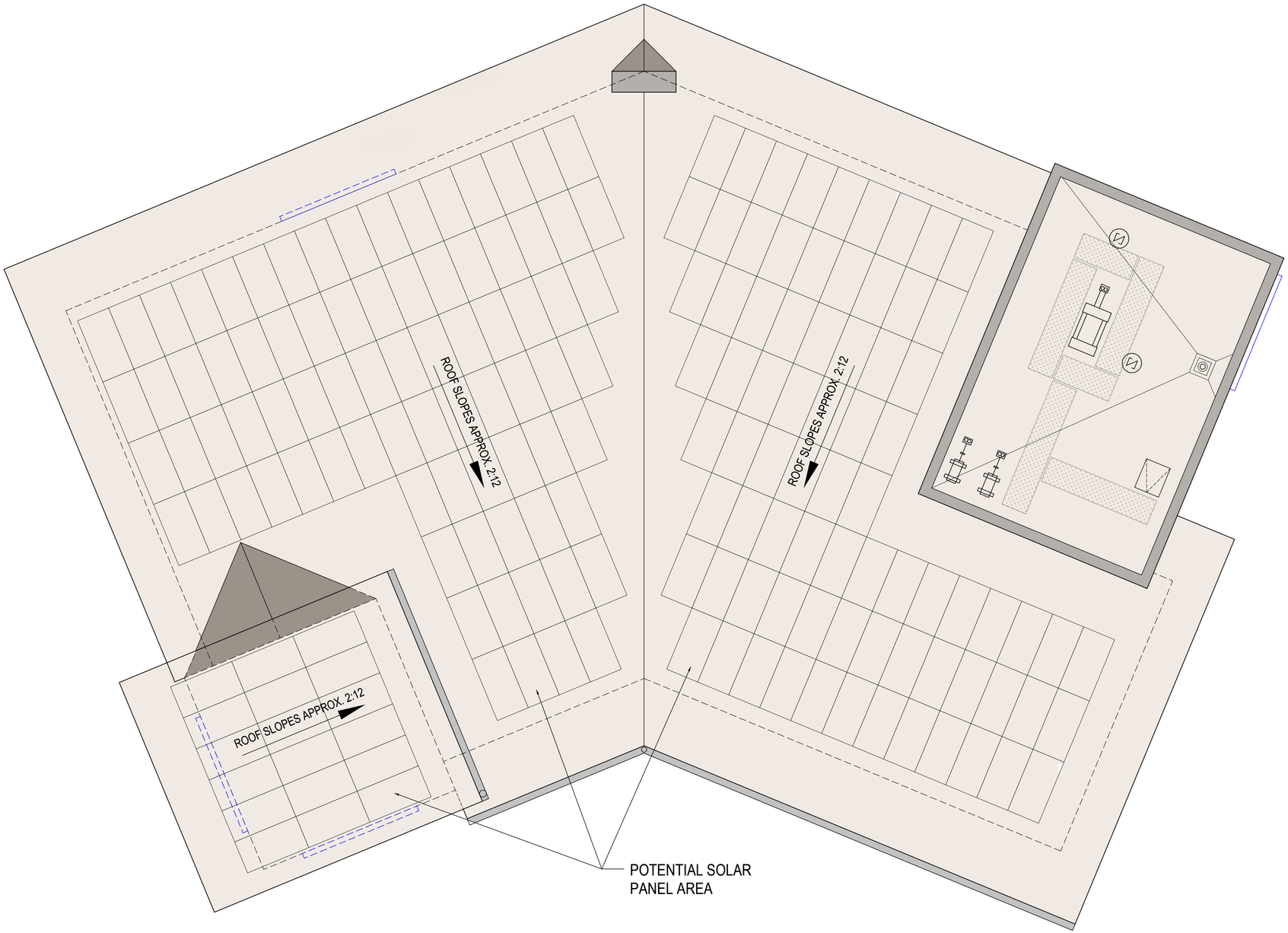
FLOOR PLAN

09.19.2023

Architect/Designer

The Architects Partnership, Ltd.
200 South Michigan Avenue
Chicago, IL 60604
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 23019

tap



SCALE: $\frac{3}{16}$" = 1'

0 5' 15' 30'

CHASE

PALATINE RD. AND RAND

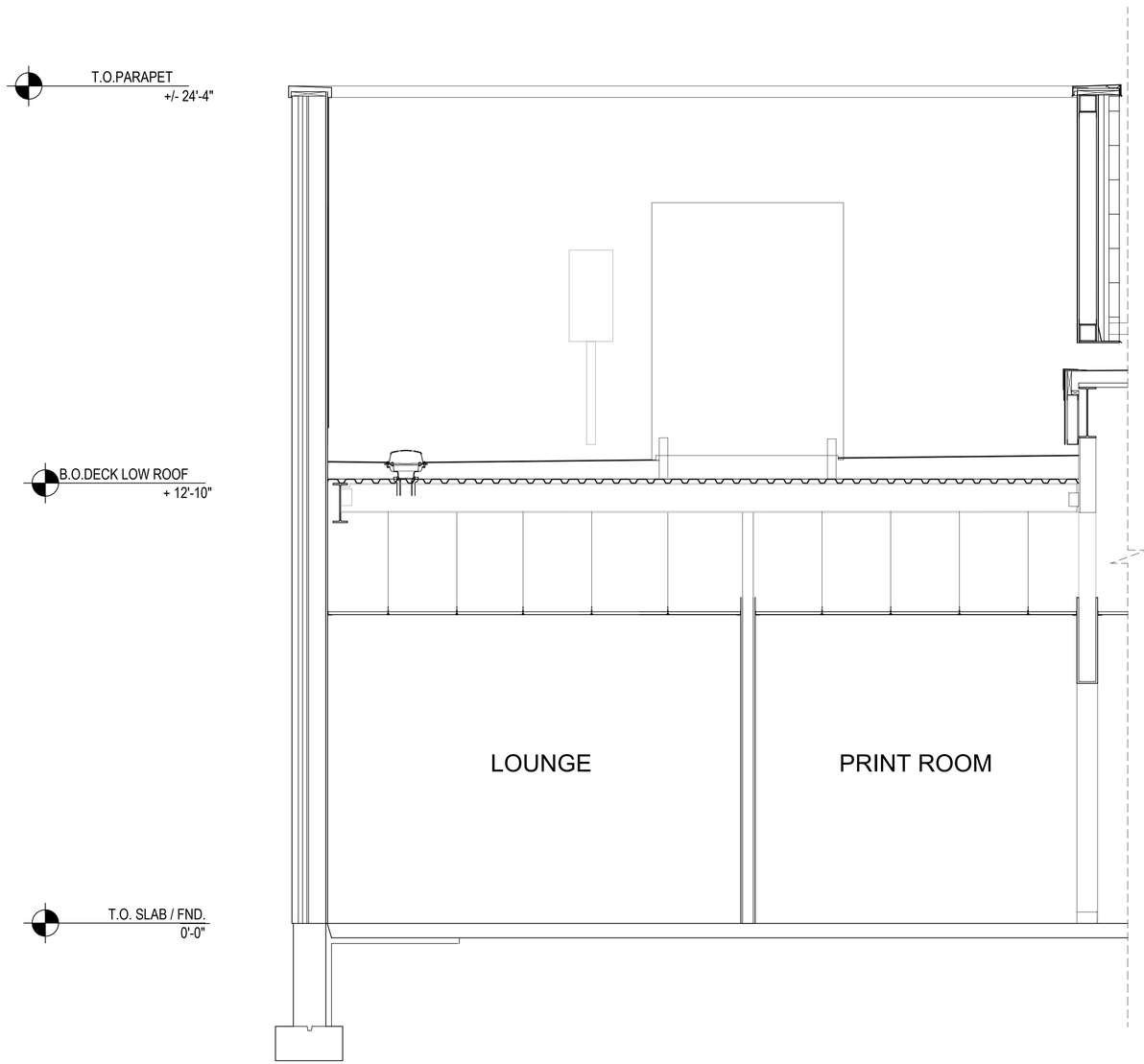
585 E Palatine Rd.
Arlington Heights, IL 60004

ROOF PLAN

09.19.2023

Architect/Designer

The Architects Partnership, Ltd.
200 South Michigan Avenue
Chicago, IL 60604
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 23019



SCALE: $\frac{1}{4}$" = 1'

0 5' 10' 15'

CHASE

PALATINE RD. AND RAND

585 E Palatine Rd.
Arlington Heights, IL 60004

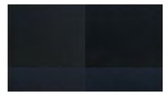
BUILDING SECTION

09.19.2023

Architect/Designer

The Architects Partnership, Ltd.
200 South Michigan Avenue
Chicago, IL 60604
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 23019

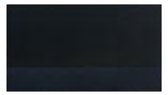
tap



STORE FRONT
COLOR: BLACK ANODIZED
ALUM.

CLEAR GLASS

CAST STONE
COLOR: LIMESTONE
CORONADO



METAL CANOPY & SUNSHADES
COLOR: BLACK ANODIZED
ALUM.

FIBER CEMENT
COLOR: BARK
NICHIHA

FIBER CEMENT
COLOR: ASH NICHIHA

ROOF STANDING SEAM SYSTEM
COLOR: CITYSCAPE
BERRIDGE

BEAMS
COLOR: NATURAL
WOOD

SOFFIT - T&G SYSTEM
COLOR: NATURAL
WOOD

ROOF FASCIA
COLOR: BLACK ALUMINUM
PAC-CONTINUOUS

NORTH ELEVATION

SCALE: $\frac{1}{4}$" = 1'

0 5' 10' 15'

CHASE

PALATINE RD. AND RAND
585 E Palatine Rd.
Arlington Heights, IL 60004

ARCHITECTURAL ELEVATIONS

11.15.2023

Architect/Designer

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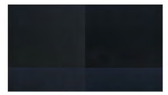
200 South Michigan Avenue
Chicago, IL 60604
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 23019

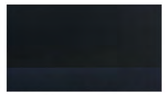
tap



STORE FRONT
COLOR: BLACK ANODIZED
ALUM.

CLEAR GLASS

CAST STONE
COLOR: LIMESTONE
CORONADO



METAL CANOPY & SUNSHADES
COLOR: BLACK ANODIZED
ALUM.

FIBER CEMENT
COLOR: BARK
NICHIHA

FIBER CEMENT
COLOR: ASH NICHIHA

ROOF STANDING SEAM SYSTEM
COLOR: CITYSCAPE
BERRIDGE

BEAMS
COLOR: NATURAL
WOOD

SOFFIT - T&G SYSTEM
COLOR: NATURAL
WOOD

ROOF FASCIA
COLOR: BLACK ALUMINUM
PAC-CONTINUOUS

WEST ELEVATION

SCALE: 1/4" = 1'

0 5' 10' 15'

CHASE

PALATINE RD. AND RAND
585 E Palatine Rd.
Arlington Heights, IL 60004

ARCHITECTURAL ELEVATIONS

11.15.2023

Architect/Designer
The Architects Partnership, Ltd.
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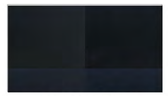
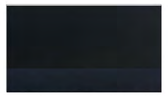


STORE FRONT
COLOR: BLACK ANODIZED
ALUM.

CLEAR GLASS

CAST STONE
COLOR: LIMESTONE
CORONADO



METAL CANOPY & SUNSHADES
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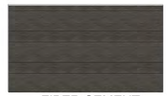
ALUM.



FIBER CEMENT
COLOR: BARK
NICHIHA

FIBER CEMENT
COLOR: ASH NICHIHA

ROOF STANDING SEAM SYSTEM
COLOR: CITYSCAPE
BERRIDGE

BEAMS
COLOR: NATURAL
WOOD

SOFFIT - T&G SYSTEM
COLOR: NATURAL
WOOD

ROOF FASCIA
COLOR: BLACK ALUMINUM
PAC-CONTINUOUS

SOUTH ELEVATION

SCALE: $\frac{1}{4}$" = 1'

0 5' 10' 15'

CHASE

PALATINE RD. AND RAND
585 E Palatine Rd.
Arlington Heights, IL 60004

ARCHITECTURAL ELEVATIONS

11.15.2023

Architect/Designer
The Architects Partnership, Ltd.
200 South Michigan Avenue
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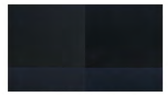
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 23019

tap



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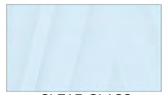
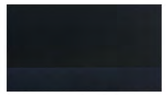


CLEAR GLASS

CAST STONE
COLOR: LIMESTONE
CORONADO



METAL CANOPY & SUNSHADES
COLOR: BLACK ANODIZED
ALUM.

FIBER CEMENT
COLOR: BARK
NICHIHA

FIBER CEMENT
COLOR: ASH NICHIHA

ROOF STANDING SEAM SYSTEM
COLOR: CITYSCAPE
BERRIDGE

BEAMS
COLOR: NATURAL
WOOD

SOFFIT - T&G SYSTEM
COLOR: NATURAL
WOOD

ROOF FASCIA
COLOR: BLACK ALUMINUM
PAC-CONTINUOUS

EAST ELEVATION

SCALE: $\frac{1}{4}$" = 1'

0 5' 10' 15'

CHASE

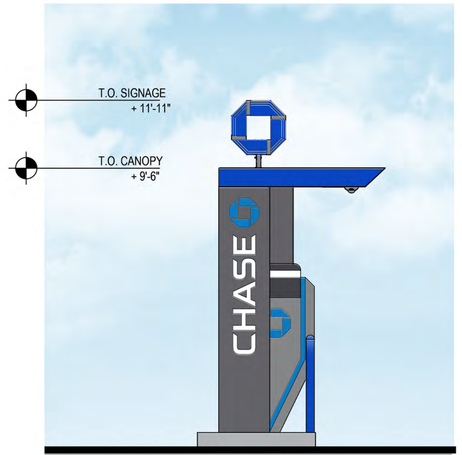
PALATINE RD. AND RAND
585 E Palatine Rd.
Arlington Heights, IL 60004

ARCHITECTURAL ELEVATIONS

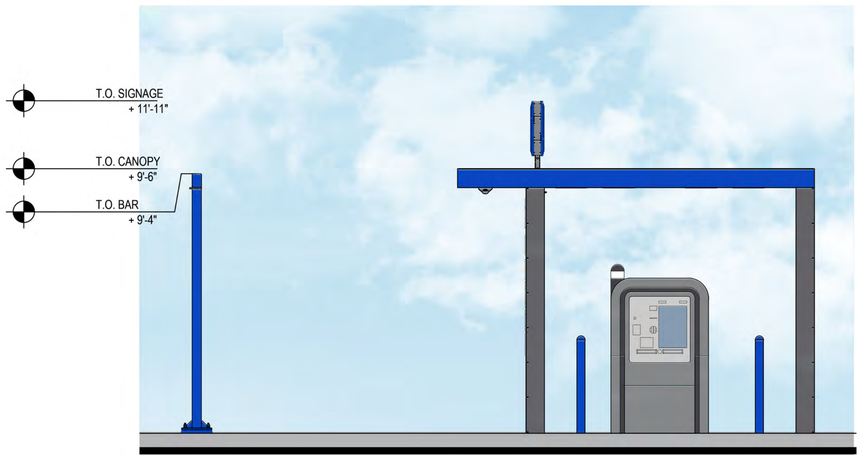
11.15.2023

Architect/Designer
The Architects Partnership, Ltd.
200 South Michigan Avenue
Chicago, IL 60604
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 23019

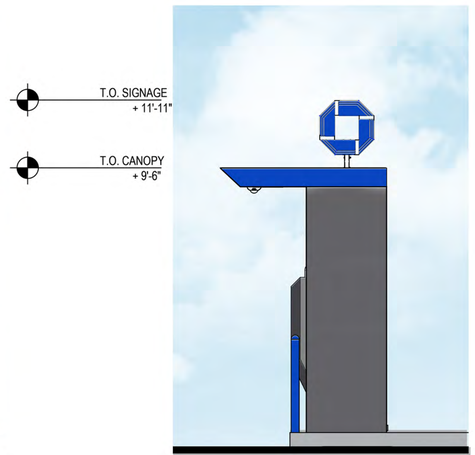
tap



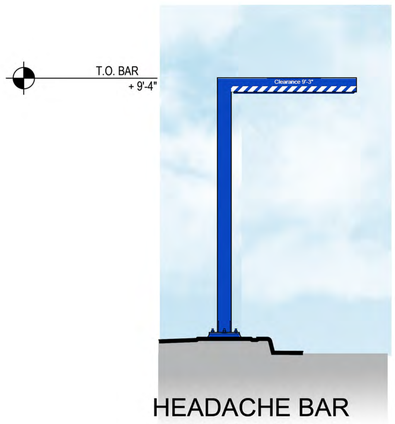
DRIVE-THRU
SOUTHWEST ELEVATION



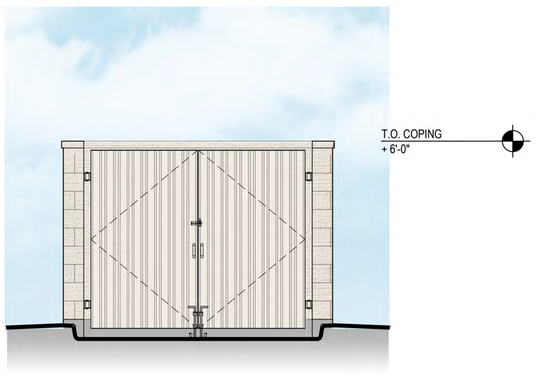
DRIVE-THRU
SOUTHEAST ELEVATION

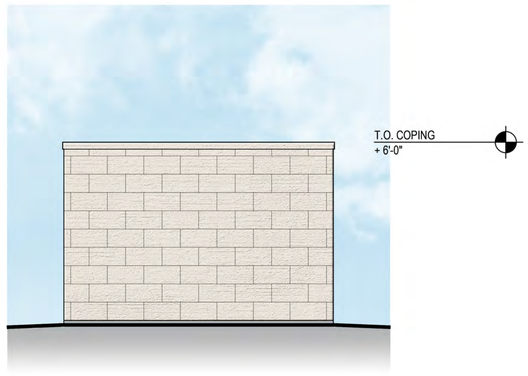


DRIVE-THRU
NORTHEAST ELEVATION



HEADACHE BAR
ELEVATION





TRASH ENCLOSURE

ALUMINUM PANELS
COLOR: DARK NICKEL

CANOPY
COLOR: CHASE BLUE
WOOD

SIGNAGE
COLOR: CHASE BLUE
ILLUMINATED OCTAGON

CAST STONE
COLOR: LIMESTONE
CORONADO

SCALE: $\frac{1}{4}$" = 1'

0 5' 10' 15'

CHASE

PALATINE RD. AND RAND
585 E Palatine Rd.
Arlington Heights, IL 60004

ARCHITECTURAL ELEVATIONS

11.03.2023

Architect/Designer
The Architects Partnership, Ltd.
200 South Michigan Avenue
Chicago, IL 60604
t: 312.583.9800
f: 312.583.9890
TAP Project Number: 23019

tap

PRELIMINARY ENGINEERING PLANS

CHASE BANK

585 E PALATINE ROAD

ARLINGTON HEIGHTS, ILLINOIS 60004

Call Before You Dig
JULIE
1-800-892-0123

PROJECT TEAM

TRAFFIC ENGINEER
KIMLEY–HORN AND ASSOCIATES, INC.
4201 WINFIELD RD, SUITE 600
WARRENVILLE, IL 60555
TEL: (630) 487–5550
CONTACT: RORY FANCLER

SURVEYOR
COMPASS SURVEYING LTD
2631 GINGER WOODS PARKWAY
AURORA, IL 60502
TEL: (630) 820–9100
CONTACT: SCOTT KREBS, P.L.S.

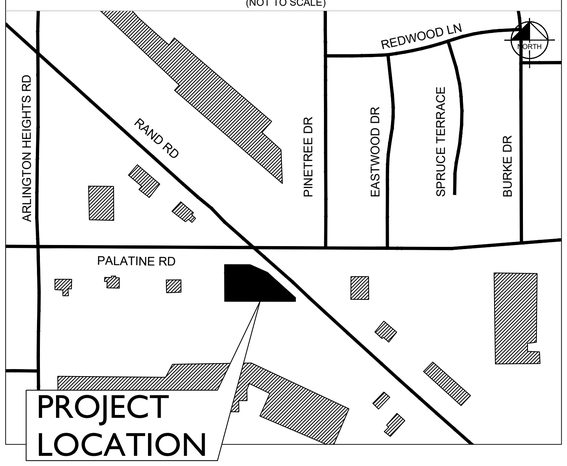
CIVIL ENGINEER
KIMLEY–HORN AND ASSOCIATES, INC.
4201 WINFIELD RD, SUITE 600
WARRENVILLE, IL 60555
TEL: (630) 216–4972
EMAIL: ALEXA.FALBO@KIMLEY–HORN.COM
CONTACT: ALEXA FALBO, P.E.

LANDSCAPE ARCHITECT
TERRA ENGINEERING LTD.
225 W OHIO ST
CHICAGO, IL 60654
TEL: (312) 467–0123
CONTACT: CRAIG MOST

SURVEYOR
THE ARCHITECT'S PARTNERSHIP, LTD.
200 S. MICHIGAN AVE, SUITE 1020
CHICAGO, IL 60604
TEL: (312) 583–9800
CONTACT: TERRON WRIGHT

LOCATION MAP

(NOT TO SCALE)



Sheet List Table	
Sheet Number	Sheet Title
C0.0	COVER SHEET
V0.0	ALTA SURVEY (BY OTHERS)
V0.1	TOPOGRAPHIC SURVEY (BY OTHERS)
C1.0	DEMOLITION PLAN
C2.0	SITE PLAN
C2.1	FIRE TRUCK TURN EXHIBIT
C3.0	GRADING AND DRAINAGE PLAN
C4.0	UTILITY PLAN

LEGAL DESCRIPTION

PARCEL 1:

THE EAST 33 FEET OF THE NORTHWEST ¼ OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, WHICH LIES SOUTHWESTERLY OF THE CENTER OF RAND ROAD, ALL IN COOK COUNTY, ILLINOIS.

EXCEPTING FROM THE ABOVE DESCRIBED PARCELS 1 AND 2, THAT PART THEREOF LYING NORTHERLY OF THE FOLLOWING DESCRIBED LINE:

BEGINNING IN THE WEST LINE OF THE EAST 33 FEET IF THE NORTHWEST ¼ OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SAID SECTION 20, 149.2 FEET SOUTH OF THE NORTH LINE OF SAID NORTHWEST ¼ (AS MEASURED ON SAID WEST LINE); THENCE EASTERLY PARALLEL TO THE NORTH LINE OF SAID NORTHWEST ¼ 131.0 FEET; THENCE SOUTHEASTERLY TO THE INTERSECTION WITH A LINE 50 FEET SOUTHWESTERLY OF AND PARALLEL TO THE CENTER OF RAND ROAD AT A POINT 193.59 FEET NORTHWESTERLY OF THE EAST LINE OF THE NORTHWEST ¼ AFORESAID (AS MEASURED ON THE SOUTHWESTERLY LINE); THENCE SOUTHEASTERLY ALONG SAID SOUTHWESTERLY LINE OF RAND ROAD TO ITS INTERSECTION WITH THE EAST LINE OF AFORESAID NORTHWEST ¼, ALL IN COOK COUNTY, ILLINOIS.

PARCEL 3:

EASEMENT FOR ACCESS, INGRESS AND EGRESS FOR THE BENEFIT OF PARCELS 1 AND 2 AS SET FORTH IN THE EASEMENT AGREEMENT DATED JUNE 30, 1981 AND RECORDED AUGUST 27. 1981 AS DOCUMENT NUMBER 25981904 OVER PROPERTY DESCRIBED THEREIN AND COMMONLY KNOWN AS "TOWN AND COUNTY MALL"

BENCHMARKS

SITE BENCHMARKS:
(LOCATIONS SHOWN ON SURVEY)

SBM #1 SOUTHWEST BOLT ON FIRE HYDRANT AT SOUTHWEST CORNER OF INTERSECTION OF PALATINE ROAD AND RAND ROAD
ELEVATION=686.08

SBM #2 NORTHEAST BOLT ON LIGHT POLE IN ISLAND SOUTH OF SURVEYED BUILING
ELEVATION=689.55

COOK COUNTY BENCHMARKS:

BENCHMARK DM3905
ELEVATION=719.509 (NAVD 88)

PROFESSIONAL ENGINEER'S CERTIFICATION

I, ALEXANDRA FALBO, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THIS SUBMISSION, PERTAINING ONLY TO THE "C" SERIES CIVIL SHEETS LISTED ABOVE BUT EXCLUDING DETAILS PREPARED BY OTHERS, WAS PREPARED ON BEHALF OF THE ARCHITECT'S PARTNERSHIP, LTD. BY KIMLEY–HORN AND ASSOCIATES, INC. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS 7TH DAY OF DECEMBER, A.D., 2023.

Alexandra Falbo

ILLINOIS LICENSED PROFESSIONAL ENGINEER 062–073907
MY LICENSE EXPIRES ON NOVEMBER 30TH, 2023
DESIGN FIRM REGISTRATION NUMBER: 184002012–0006

LICENSED PROFESSIONAL ENGINEER
ALEXANDRA FALBO
062.073907
OF ILLINOIS

NO.	REVISIONS	DATE	BY
1	VILLAGE COMMENTS	12/07/23	JW
2	VILLAGE COMMENTS	11/02/23	JW

Kimley»Horn

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4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: JTW | DRAWN BY: JTW | CHECKED BY: ANF

LICENSED PROFESSIONAL ENGINEER
ALEXANDRA FALBO
062.073907
OF ILLINOIS

CHASE

COVER SHEET

CHASE BANK
585 E. PALATINE RD
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE: 06/12/23
KHA PROJECT NO. 168558032
SHEET NUMBER C0.0

Drawing name: K:\CHS_LDEV\168558032_Chase_ArlingtonHeights_IL\2 Design\CAD\PlanSheets\C0.0 - COVER SHEET.dwg C0.0 Dec 07, 2023 11:58am by: ALEXA.FALBO
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LOCATION MAP (N.T.S)

585 E PALATINE ROAD
ARLINGTON HEIGHTS, IL 60004

SHEET NUMBER
1 OF 1.

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4201 WINFIELD ROAD, SUITE 600, WARRENVILLE, IL 60555
PHONE: 630-487-5550 WWW.KIMLEY-HORN.COM

Plotted By:—— September 21, 2023 6:11:04 PM K:\CHS_LDEV\168580032_Chase_ArlingtonHeights_A1\2 Design\CAD\Exhibits\Site Location Map.dwg
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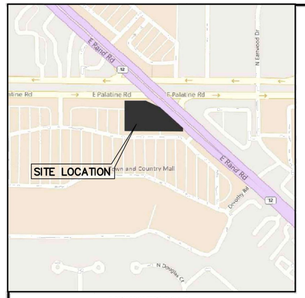
ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY



VICINITY MAP
NO SCALE

SCHEDULE B EXCEPTIONS NOTED OR SHOWN HEREON

I RESERVATION FOR THE EAST 40 FEET OF THAT PART OF THE LAND . . . FALLING IN THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 FOR PUBLIC HIGHWAY, AS CONTAINED IN DEED FROM CHICAGO TITLE AND TRUST COMPANY, AS TRUSTEE UNDER TRUST NUMBER 14890 TO AMELIA I. MCDONNELL AND MARY T. CASSIN, DATED MARCH 11, 1932 AND RECORDED MAY 6, 1932 AS DOCUMENT 11084966.
(AFFECTS PARCEL 2)

J AGREEMENT BY AMELIA I. MCDONNELL AND MARY T. CASSIN THAT IF A ROAD OR HIGHWAY IS OPENED UP OVER, UPON AND ACROSS THE EAST 40 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11, SOUTH OF RAND ROAD (EXCEPT THAT PART FALLING WITHIN PARCEL 2 OF THE LAND) THEY WILL JOIN IN SUCH INSTRUMENT OF DEDICATION FOR THE PURPOSE OF DEDICATING THE EAST 40 FEET OF PARCEL 2 FOR THE PURPOSES OF SUCH ROAD OR HIGHWAY, AS CONTAINED IN DEED TO THEM FROM CHICAGO TITLE AND TRUST COMPANY, AS TRUSTEE UNDER TRUST NUMBER 14890 DATED MARCH 11, 1932 AND RECORDED MAY 6, 1932 AS DOCUMENT 11084966.

K GRANT DATED FEBRUARY 27, 1946 AND RECORDED MARCH 4, 1946 AS DOCUMENT 13732606 MADE BY GUSTAV A. REINHART AND CLARA M. REINHART, HIS WIFE, TO PUBLIC SERVICE COMPANY OF NORTHERN ILLINOIS, RELATING TO THE RIGHT TO LAY, MAINTAIN AND OPERATE AN 18 INCH GAS MAIN AND NECESSARY APPURTENANCES IN, UNDER AND ALONG THE SOUTHWEST SIDE OF PUBLIC WAY KNOWN AS RAND ROAD WHICH EXTENDS ALONG THE NORTHEAST SIDE OF THE PROPERTY OF SAID GRANTORS.
(AFFECTS PARCEL 3)

L RIGHTS, IF ANY, OF THE ILLINOIS BELL TELEPHONE COMPANY UNDER GRANT FROM HERB LESEBERG DATED SEPTEMBER 24, 1923 AND RECORDED APRIL 9, 1924 AS DOCUMENT 8355761 OF THE AUTHORITY TO CONSTRUCT, OPERATE AND MAINTAIN ITS LINE OF TELEPHONE AND TELEGRAPH EQUIPMENT UPON AND ACROSS PROPERTY WHICH SHE OWNS, OR IN WHICH SHE MAY BE INTERESTED, IN THE NORTHWEST ¼ OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN.
(AFFECTS PARCEL 3)

M PLAT OF EASEMENT FOR WATER MAIN DATED JANUARY 7, 1980 AND RECORDED JANUARY 16, 1980 AS DOCUMENT 25322430 MADE BY LASALLE NATIONAL BANK, AS TRUSTEE UNDER TRUST NUMBER 45228 OVER THE FOLLOWING LAND.

THAT PART OF THE NORTH EAST 1/4 OF THE NORTH WEST 1/4 OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT 146.2 FEET SOUTH OF THE NORTH LINE OF SAID SECTION 20, AS MONUMENTED BY COOK COUNTY HIGHWAY DEPARTMENT (EVIDENCED BY PROPOSED ACQUISITION PLAT RECORDED FEBRUARY 3, 1956 AS DOCUMENT NUMBER 19730083) AND 50 FEET EAST OF THE CENTER LINE OF ARLINGTON HEIGHTS ROAD; THENCE NORTHEASTERLY ALONG THE LAST DESCRIBED LINE OF A DISTANCE OF 15.76 FEET, MORE OR LESS, TO A POINT IN A LINE 60 FEET EAST OF AND PARALLEL WITH THE CENTER LINE OF ARLINGTON HEIGHTS ROAD AND THE POINT OF BEGINNING OF LAND HEREIN DESCRIBED; THENCE CONTINUING NORTHEASTERLY ALONG SAID DESCRIBED LINE 40.39 FEET, MORE OR LESS, TO THE SOUTH LINE OF PALATINE ROAD AS DEDICATED BY DOCUMENT NUMBER 8355761; THENCE EASTERLY ALONG SAID SOUTH LINE 594.82 FEET TO THE LINE 33 FEET WEST OF AND PARALLEL WITH THE EAST LINE OF THE NORTH WEST 1/4 OF THE NORTHEAST 1/4 OF THE NORTH EAST 1/4 OF THE NORTH WEST 1/4 OF SECTION 20, AFORESAID; THENCE SOUTH ALONG SAID PARALLEL LINE 10 FEET; THENCE WEST ALONG A LINE 10 FEET SOUTH OF AND PARALLEL WITH THE SOUTH LINE OF AFOREMENTIONED AS DOCUMENT NUMBER 19730083 A DISTANCE OF 860.13 FEET TO A POINT; THENCE SOUTHWESTERLY ALONG A LINE FORMING AN ANGLE OF 128 DEGREES 49 MINUTES 57 SECONDS, MEASURED FROM EAST TO SOUTHWEST, AND BEING 10 FEET SOUTHEASTERLY OF AND PARALLEL WITH AFOREMENTIONED COURSE OF 48.39 FEET, A DISTANCE OF 40.02 FEET TO A POINT TO A LINE 70 FEET EAST OF AND PARALLEL WITH THE CENTER LINE OF ARLINGTON HEIGHTS ROAD; THENCE SOUTHERLY ALONG A LINE 70 FEET EAST OF AND PARALLEL WITH SAID ROAD 1,048.48 FEET; THENCE WEST ALONG A LINE FORMING AN ANGLE OF 89 DEGREES 59 MINUTES 36 SECONDS, MEASURED SOUTH TO WEST, 10 FEET TO A POINT IN A LINE 60 FEET EAST OF AND PARALLEL WITH THE CENTER OF ARLINGTON HEIGHTS ROAD; THENCE SOUTH ALONG SAID PARALLEL LINE 590.23 FEET TO A POINT IN A LINE 250 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF THE NORTH EAST 1/4 OF THE NORTH WEST 1/4 OF SAID SECTION 20; THENCE WEST ALONG SAID PARALLEL LINE 10 FEET TO A POINT TO A LINE 60 FEET EAST OF AND PARALLEL WITH THE CENTER LINE OF ARLINGTON HEIGHTS ROAD; THENCE NORTH ALONG SAID PARALLEL LINE 600.23 FEET TO A POINT, THENCE EAST ALONG A LINE FORMING AN ANGLE OF 89 DEGREES 41 MINUTES 24 SECONDS, MEASURED SOUTH TO EAST, 10 FEET TO A POINT IN A LINE 60 FEET EAST OF AND PARALLEL WITH THE CENTER LINE OF 59 DEGREES 41 MINUTES 24 SECONDS MEASURED SOUTH TO EAST 10 FEET TO A POINT IN A LINE 60 FEET EAST OF AND PARALLEL WITH THE CENTER LINE OF ARLINGTON HEIGHTS ROAD AND 295 FEET SOUTH OF THE POINT OF BEGINNING; THENCE NORTH ALONG LAST DESCRIBED PARALLEL LINE 295 FEET TO THE POINT OF BEGINNING IN COOK COUNTY, ILLINOIS.
(AFFECTS PARCEL 3)

N PLAT OF EASEMENT FOR STORM SEWER DATED JANUARY 7, 1980 AND RECORDED JANUARY 16, 1980 AS DOCUMENT 25322429 MADE BY LASALLE NATIONAL BANK, AS TRUSTEE UNDER TRUST NUMBER 45228 OVER THE FOLLOWING PORTION OF THE LAND:

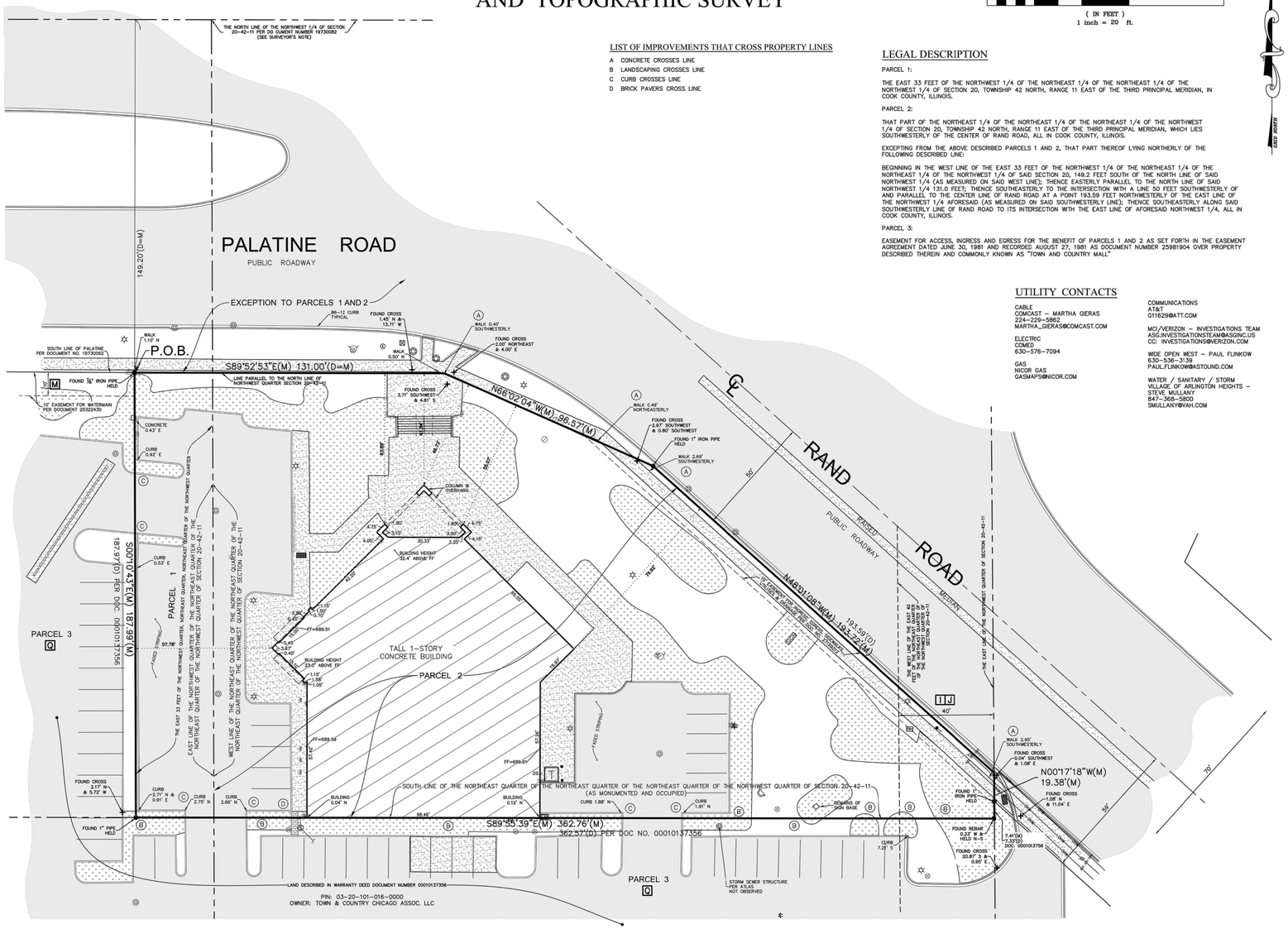
THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 20, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT OF INTERSECTION OF THE NORTHWESTERLY LINE OF DOROTHY AVENUE, AS ACCORDING TO C. A. COTLE'S ARLINGTON HEIGHTS GARDENS RECORDED AS DOCUMENT NUMBER 396997 (SAID NORTHWESTERLY LINE BEING A LINE DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTH WEST CORNER OF SAID NORTH WEST 1/4 OF THE NORTH EAST 1/4 AND RUNNING THENCE NORTH 46 DEGREES 56 MINUTES 25 SECONDS EAST 834.30 FEET TO THE CENTER LINE OF RAND ROAD), WITH THE NORTHERLY EXTENSION OF THE NORTHEASTERLY LINE OF CHARLES STREET (FORMERLY GEORGE STREET) IN AFORESAID ARLINGTON HEIGHTS GARDENS) THENCE NORTH 46 DEGREES 56 MINUTES 25 SECONDS EAST ALONG THE NORTHWESTERLY LINE OF DOROTHY AVENUE A SOUTH AVENUE A DISTANCE OF 501.90 FEET TO THE SOUTHWESTERLY LINE OF RAND ROAD, THENCE NORTHWESTERLY ALONG SAID SOUTHWESTERLY LINE OF RAND ROAD 10.15 FEET; THENCE SOUTH 46 DEGREES 50 MINUTES 22 SECONDS WEST 507.38 FEET TO A LINE 50 FEET NORTHWESTERLY OF AND PARALLEL WITH THE AFOREMENTIONED NORTHWESTERLY LINE OF DOROTHY AVENUE A DISTANCE OF 507.38 FEET TO A POINT AS A CURVED LINE, CORNER NORTHERLY AND HAVING A RADIUS OF 60 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVED LINE 11.07 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.
(AFFECTS PARCEL 3)

O NON-EXCLUSIVE EASEMENTS, RIGHTS AND PRIVILEGES OF PASSAGE AND USE, BOTH PEDESTRIAN AND VEHICULAR, FOR THE PURPOSE OF INGRESS, EGRESS OF AND PARKING OVER, UPON AND ACROSS ALL DRIVES, PARKING AREAS, SERVICE AREAS AND SIDEWALKS FROM TIME TO TIME LOCATED ON THE LAND AS SAID AREAS THERE MAY EXIST FROM TIME TO TIME, AS CREATED BY DECLARATION MADE BY LA SALLE NATIONAL BANK, AS TRUSTEE UNDER TRUST AGREEMENT DATED AUGUST 8, 1979 KNOWN AS TRUST NUMBER 101500, DATED OCTOBER 30, 1979 AND RECORDED OCTOBER 31, 1979 AS DOCUMENT 25219795.
(AFFECTS PARCEL 3)

P EASEMENTS FOR GAS MAIN IN FAVOR OF THE NORTHERN ILLINOIS GAS COMPANY AS SHOWN IN THE DOCUMENTS RECORDED AUGUST 12, 1980 AS DOCUMENT NUMBER 25545751 AND RECORDED AUGUST 8, 1980 AS DOCUMENT NUMBER 25541564.
(AFFECTS PARCEL 3)

Q EASEMENTS, TERMS, PROVISIONS AND CONDITIONS CONTAINED IN THE EASEMENT AGREEMENT FOR INGRESS AND EGRESS EXECUTED BY AND BETWEEN LASALLE NATIONAL BANK, AS TRUSTEE UNDER TRUST AGREEMENT DATED AUGUST 8, 1979 AND KNOWN AS TRUST NUMBER 101500 AND ROBERT A. ASHER, WHICH AMONG OTHER MATTERS PROVIDES FOR RECIPROCAL ACCESS RIGHTS, RECORDED AUGUST 27, 1981 AS DOCUMENT 25981904.


PALATINE ROAD
PUBLIC ROADWAY
EXCEPTION TO PARCELS 1 AND 2
THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 20-42-11 PER DO CUMENT NUMBER 19730082 (SEE SURVEYOR'S NOTE)
SOUTH LINE OF PALATINE, PER DOCUMENT NO. 19730082
P.O.B.
S89°52'53"E(M) 131.00'(D=M)
LINE PARALLEL TO THE NORTH LINE OF NORTHWEST QUARTER SECTION 20-42-11
149.20'(D=M)
FOUND 3/4" IRON PIPE HELD
10' EASEMENT FOR WATERMAIN PER DOCUMENT 25322430
CONCRETE 0.43' E
CURB 0.92' E
CURB 0.53' E
PARCEL 1
PARCEL 3
Q
PARCEL 2
TALL 1-STORY CONCRETE BUILDING
BUILDING HEIGHT 32.4' ABOVE 1'F
BUILDING HEIGHT 23.0' ABOVE 1'F
FF=689.55
FF=689.51
FF=689.61
FF=689.63
FF=689.64
FF=689.66
FF=689.67
FF=689.68
FF=689.69
FF=689.70
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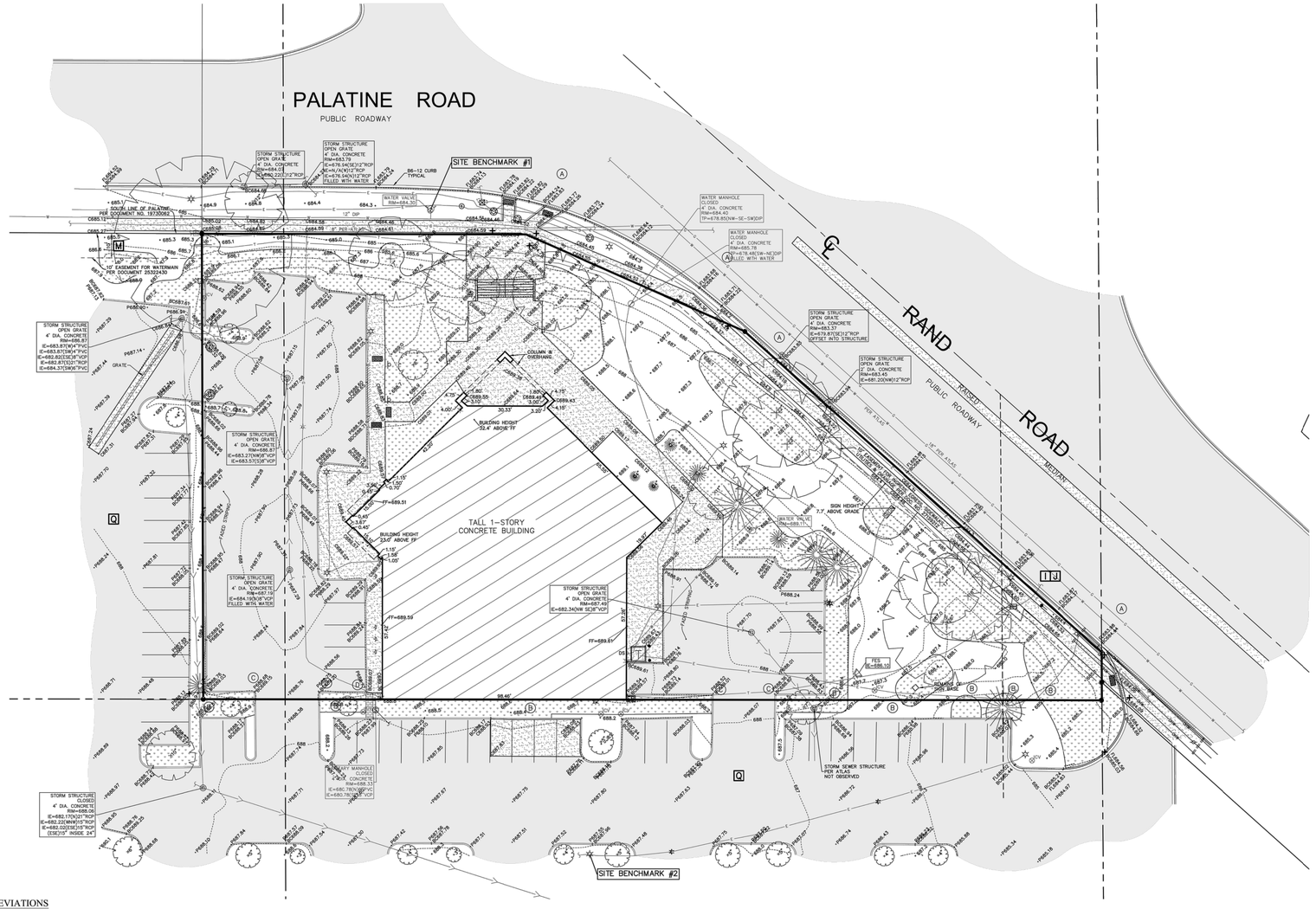
FF=690.04
FF=690.05

ALTA/NSPS LAND TITLE
AND TOPOGRAPHIC SURVEY

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

GRID NORTH



LEGEND

- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- GUY POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- POST INDICATOR VALVE
- SIAMESE WATER CONNECTION
- WATER MARKER
- WATER METER
- VALVE BOX
- B/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- COMMUNICATION MARKER
- TELEPHONE PEDESTAL
- CABLE TELEVISION PEDESTAL
- CONTROL BOX
- WETLAND FLAG
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER — SAN —
- STORM SEWER — STM —
- WATER MAIN — W —
- GAS MAIN — G —
- ELECTRIC LINE — E —
- OVERHEAD WIRES — OHW —
- COMMUNICATION LINE — T —
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER MS=MULTI-STEM (DRIP LINE SHOWN IS APPROXIMATE)
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE
- METAL GUARDRAIL
- OVERHEAD TRAFFIC ARM

ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
FES = FLARED END SECTION
VCP = VITRIFIED CLAY PIPE
DIP = DUCTILE IRON PIPE
PVC = POLYVINYL CHLORIDE
RCP = REINFORCED CONCRETE PIPE
CMP = CORRUGATED METAL PIPE
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
P.U. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
BC = BACK OF CURB
BDC = BACK OF DEPRESSED
FL = FLOW LINE
C = CONCRETE
P = PAVEMENT
G = GRAVEL
EW = EDGE OF WALK
TW = TOP OF WALL
TP = TOP OF PIPE
IE = INVERT ELEVATION
PL = PROPERTY LINE
DS = DOWN SPOUT
S.F. = SQUARE FEET
SL = SHORE LINE
TSF = TRANSFORMER
B = PAVERS

LINE LEGEND

- LIMITS OF LAND PIER
- LEGAL DESCRIPTION
- ADJACENT LAND
- PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- EXISTING CONTOUR

BENCHMARKS

REFERENCE BENCHMARK:

COOK COUNTY BENCHMARK DM3505, LOCATED IN PALATINE, 36 FEET NORTH OF THE CENTERLINE OF ANDERSON DRIVE, 17 FEET EAST OF THE CENTERLINE OF REYNOLDS DRIVE, 2.5 FEET WEST OF BACK OF SIDEWALK

DATUM: NAVD88
ELEVATION = 718.509

SITE BENCHMARKS:

SITE BENCHMARK #1

SOUTHWEST BOLT ON FIRE HYDRANT AT SOUTHWEST CORNER OF INTERSECTION OF PALATINE ROAD AND RAND ROAD

ELEVATION = 686.08

SITE BENCHMARK #2

NORTHEAST BOLT ON LIGHT POLE IN ISLAND SOUTH OF SURVEYED BUILDING

ELEVATION = 689.55

Know what's below. Call before you dig.

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HEREON WERE LOCATED FROM FIELD EVIDENCE AND EXISTING DRAWINGS, MAPS, AND RECORDS OBTAINED FROM THE RESPECTIVE COMPANIES. ALL SUCH UTILITIES SHALL BE CONSIDERED APPROXIMATE IN NATURE AND LOCATION. THE UNDERSIGNED FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH IT DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM AVAILABLE INFORMATION. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND LINES.

NO.	DATE	REVISIONS	BY
1	5/15/23	PER CLIENT COMMENTS	MRA
2	6/26/23	PER UPDATED TITLE COMMITMENT	MRA
3	7/19/23	PER UPDATED TITLE COMMITMENT	MRA
4	8/4/23	PER ATTORNEY COMMENTS	MRA
5	10/27/23	ADDED EASEMENT PER DOC. NO. 2739612	RMA

DATE: 11/2/22 | PC: TK | DRAWN BY: MRA | CHECKED BY: SK | BOOK 638 PG 69-71

CLIENT
Kimley»Horn
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
767 EASTWAY DRIVE, SUITE 204,
WARRENVILLE, IL 60555
PHONE: (630) 487-9900
WWW.KIMLEY-HORN.COM

PROJECT
CHASE BANK
ARLINGTON HEIGHTS, IL

COMPASS SURVEYING LTD
ALTA, SURVEYS • TOPOGRAPHY • CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY, STE. 100
AURORA, IL 60502
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

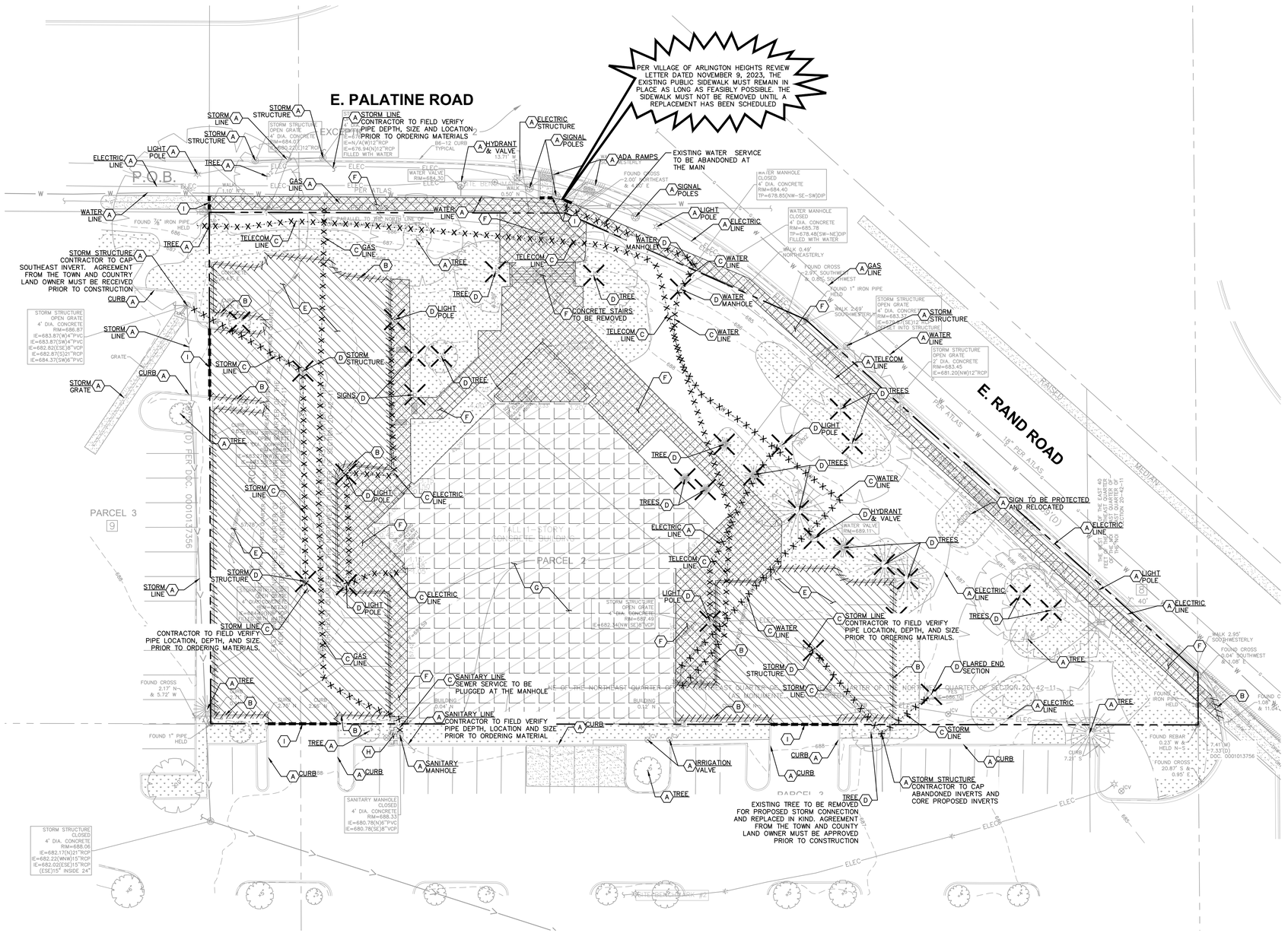
SCALE: 1" = 20'

2 OF 2

PROJ. NO.: 22.0290

J:\PSDATA\2022 PROJECTS\22.0290\22.0290 LTS TOPO.DWG

V0.1



DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
2. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
3. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT. CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS SHEET.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
5. IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING IDOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.
6. QUANTITIES DEPICTED ON THIS SHEET SHALL SERVE AS A GUIDE ONLY. CONTRACTOR TO VERIFY ALL DEMOLITION QUANTITIES.
7. REFER TO GEOTECHNICAL REPORT PROVIDED BY OTHERS FOR ALL SUBSURFACE INFORMATION.
8. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.
9. EROSION CONTROL MUST BE ESTABLISHED PRIOR TO ANY WORK ON SITE INCLUDING DEMOLITION.
10. THE EXTENT OF SITE DEMOLITION WORK IS AS SHOWN ON THE CONTRACT DOCUMENTS AND AS SPECIFIED HEREIN.
11. CONTRACTOR MUST RECEIVE APPROVAL FROM CIVIL ENGINEER AND GEOTECHNICAL ENGINEER FOR THE MATERIAL TYPE AND USE IF CONTRACTOR DESIRES TO REUSE DEMOLISHED SITE PAVEMENT AS STRUCTURAL FILL.
12. EXISTING UTILITIES, WHICH DO NOT SERVICE STRUCTURES BEING DEMOLISHED, ARE TO BE KEPT IN SERVICE AND PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL ARRANGE FOR SHUT-OFF OF UTILITIES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR TURNING OFF, DISCONNECTING, AND SEALING INDICATED UTILITIES BEFORE STARTING DEMOLITION OPERATIONS. EXISTING UTILITIES TO BE ABANDONED ARE TO BE CAPPED AT BOTH ENDS AND FILLED WITH FA-1 OR APPROVED EQUAL. ALL UNDERGROUND UTILITIES TO BE REMOVED ARE TO BE BACKFILLED WITH ENGINEERED FILL OR SELECT EXCAVATED MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER, TO 95% OF MODIFIED PROCTOR DENSITY WITHIN PAVED AREAS AND TO 90% OF MODIFIED PROCTOR DENSITY FOR GREEN SPACE AREAS, IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS. ALL PRIVATE UTILITIES (ELECTRIC, CABLE, TELEPHONE, FIBER OPTIC, GAS) SHALL BE REMOVED AND RELOCATED PER THE UTILITY OWNER AND THE LOCAL MUNICIPALITY'S REQUIREMENTS.
13. UNDERGROUND UTILITIES SHOWN ARE BASED ON ATLASES AND AVAILABLE INFORMATION PRESENTED AT THE TIME OF SURVEY. CONTRACTOR SHOULD CALL "JULIE" (1-800-892-0123) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UNDERGROUND AND OVERHEAD UTILITIES DURING CONSTRUCTION. UTILITY PROTECTION SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY OWNER AND AS DIRECTED BY THE GOVERNING MUNICIPALITY. DAMAGED CABLES/CONDUITS SHALL BE REPLACED IMMEDIATELY. ALL EXISTING STRUCTURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS. ALL DAMAGED STRUCTURES SHALL BE REPLACED IN-KIND AND THEIR REPLACEMENT COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. PROPER NOTIFICATION TO THE OWNERS OF THE EXISTING UTILITIES SHALL BE MADE AT LEAST 48 HOURS BEFORE CONSTRUCTION COMMENCES.
14. USE WATER SPRINKLING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN THE AIR TO THE LOWEST LEVEL. COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. SEE EROSION CONTROL SHEETS FOR FURTHER EROSION CONTROL REQUIREMENTS.
15. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES TO THE FINAL LINES AND GRADES SHOWN ON THE CONTRACT DOCUMENTS. BACKFILL MATERIAL SHALL BE IDOT APPROVED CRUSHED LIMESTONE (CA-6) OR APPROVED EQUAL. USE SATISFACTORY SOIL MATERIALS CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. PRIOR TO PLACEMENT OF FILL MATERIALS, ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH AND DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 9" IN LOOSE DEPTH. COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF FILL MATERIAL TO 95% OF MODIFIED PROCTOR DENSITY UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED.

DEMOLITION LEGEND

- (A) ITEM TO REMAIN, PROTECT DURING CONSTRUCTION
- (B) CURB REMOVAL
- (C) UTILITY REMOVAL
- (D) ITEM TO BE REMOVED
- (E) FULL-DEPTH ASPHALT PAVEMENT REMOVAL
- (F) CONCRETE REMOVAL
- (G) BUILDING REMOVAL
- (H) ASPHALT 1.5" MILL
- (I) SAWCUT LINE
- (J) FENCE REMOVAL

Call Before You Dig JULIE 1-800-892-0123

NO.	REVISIONS	DATE	BY
1	VILLAGE COMMENTS	12/07/23	JW
2	VILLAGE COMMENTS	11/02/23	JW

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LICENSED PROFESSIONAL ENGINEER ALEXANDRA FALBO 062.073907 OF ILLINOIS

CHASE

DEMOLITION PLAN

CHASE BANK
585 E. PALATINE RD
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE: 06/12/23
KHA PROJECT NO. 168558032
SHEET NUMBER C1.0

Drawing name: K:\CHS_LDEV\168558032_Chase_ArlingtonHeights_IL\2 Design\CAD\PlanSheets\C1.0 - DEMO PLAN.dwg Layout1 Dec 07, 2023 11:58am by ALEXA.FALBO
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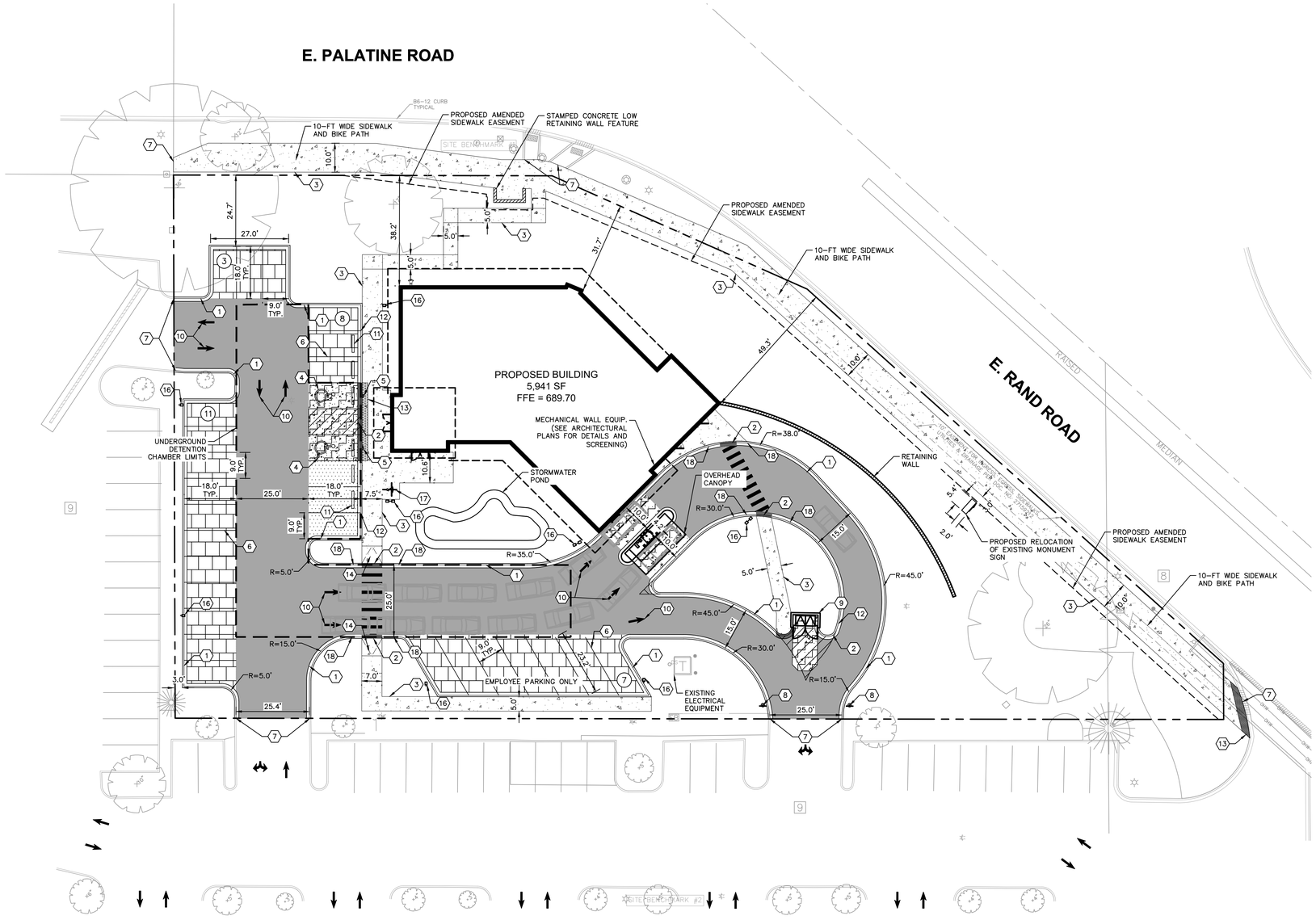


NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

GENERAL NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.
5. REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

KEY NOTES

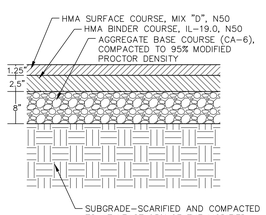
1. B6.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
2. DEPRESSED CURB AND GUTTER
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
5. ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8, SEE DETAILS)
6. 4" WIDE PAINTED SOLID LINE, TYP.
7. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
8. DO NOT ENTER SIGN, TYP.
9. TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
10. SITE DIRECTIONAL MARKINGS
11. WHEEL STOP (SEE DETAILS)
12. TRANSITION FROM DEPRESSED CURB TO B6.12 OVER TWO PARKING STALLS
13. 2' WIDE DETECTIBLE WARNING TRUNCATED DOME STRIP (SEE DETAILS)
14. ACCESSIBLE RAMP (SEE DETAILS)
15. 12" WHITE PAINTED SOLID LINE, TYP. (3' C-C)
16. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE PHOTOMETRIC PLANS)
17. BIKE RACK (SEE ARCHITECTURAL PLANS FOR DETAILS)
18. 3-FEET TRANSITION FROM DEPRESSED CURB TO B6.12
19. RIP-RAP (SEE DETAILS)

PAVING AND CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE DETAIL BELOW FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE DETAIL BELOW FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE DETAIL BELOW FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE DETAIL BELOW FOR PAVEMENT SECTION
- PERMEABLE PAVERS
- STANDARD PITCH CONCRETE CURB AND GUTTER
- REVERSE PITCH CONCRETE CURB AND GUTTER
- CONCRETE DEPRESSED CURB AND GUTTER

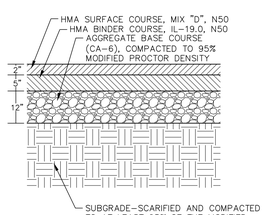
PARKING SUMMARY

PARKING SPACES REQUIRED (VILLAGE STANDARD)	=	20 SPACES
STANDARD PARKING SPACES PROVIDED	=	27 SPACES
ACCESSIBLE PARKING SPACES REQUIRED	=	2 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	=	2 SPACES
TOTAL PARKING SPACES PROVIDED	=	29 SPACES
BICYCLE PARKING SPACES REQUIRED (VILLAGE STANDARD)	=	2 SPACES
TOTAL BICYCLE PARKING SPACES PROVIDED	=	5 SPACES



NOTE:
1. PAVEMENT THICKNESS, SUBGRADE PREP, ETC. DETERMINED FROM GEOTECHNICAL REPORT PERFORMED BY ECS MIDWEST, LLC DATED 02/09/2023. REFER TO REPORT FOR ALL INFORMATION RELATED TO PAVING.
2. SEE PAVING NOTES ON THE GENERAL NOTES SHEET FOR PRIME COAT AND TACK-COAT REQUIREMENTS.
3. ASSUMED 50,000 EQUIVALENT SINGLE-AXLE LOAD (ESAL).

STANDARD DUTY ASPHALT PAVEMENT SECTION
N.T.S. 10/19/20



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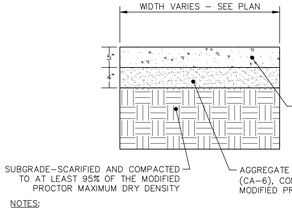
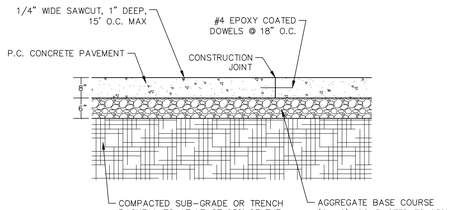
2. SEE PAVING NOTES ON THE GENERAL NOTES SHEET FOR PRIME COAT AND TACK-COAT REQUIREMENTS.
3. EQUIVALENT SINGLE-AXLE LOAD TO BE CONFIRMED WITH CLIENT.

HEAVY DUTY ASPHALT PAVEMENT SECTION
N.T.S.



NOTES:
1. PROVIDE 1/2" EXPANSION JOINTS AT 20', MAXIMUM, SPACING AND FILLED WITH PREMOLDED BITUMINOUS EXPANSION JOINT FILLER MATERIAL OR REDWOOD. EXPANSION JOINTS SHALL HAVE #4 DOWELS, LUBRICATED, 18" LONG, AT 12" CENTERS, 6" FROM EDGE.
2. PROVIDE 3/8" GROOVED CONTROL JOINTS AT 5' CENTERS.
3. WELDED WIRE FABRIC (6X6-6X6) SHALL BE INSTALLED THROUGH DRIVEWAYS AT 2" ABOVE SLAB BOTTOM.
4. PROVIDE 1/2" BITUMINOUS EXPANSION JOINT FILLER MATERIAL WHERE WALK ABUTS EXISTING IMPROVEMENTS AND AT ALL CHANGES IN GRADE.
5. USE 2-#4 REINFORCING BARS, 10' LONG OVER ALL UTILITY TRENCHES FOR NEW SIDEWALK AND CONNECTIONS TO EXISTING SIDEWALK.
6. AT DRIVE APPROACHES, SIDEWALK PCC AND BASE THICKNESS SHALL MATCH THAT OF THE DRIVE.

CONCRETE SIDEWALK
N.T.S.



NOTES:
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CONCRETE COMPRESSIVE STRENGTH SHALL COMPLY WITH ASTM DESIGNATION C31. MINIMUM 28-DAY STRENGTH = 4000 PSI

HEAVY DUTY CONCRETE PAVEMENT SECTION
N.T.S.

Call Before You Dig JULIE 1-800-892-0123

NO.	REVISIONS	DATE	BY
1	VILLAGE COMMENTS	12/07/23	JW
2	VILLAGE COMMENTS	11/02/23	JW

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LICENSED PROFESSIONAL ENGINEER
ALEXANDRA FALBO
062.073907
OF ILLINOIS

CHASE

SITE PLAN

CHASE BANK
585 E. PALATINE RD
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE: 06/12/23
KHA PROJECT NO. 168558032
SHEET NUMBER C2.0

Drawing name: K:\CHS_LDEV\168558032_Chase_ArlingtonHeights_IL\2 Design\2 CAD\PlanSheets\C1.0 - SITE PLAN.dwg C1.0 Dec 07, 2023 11:58am by: ALEXA.FALBO
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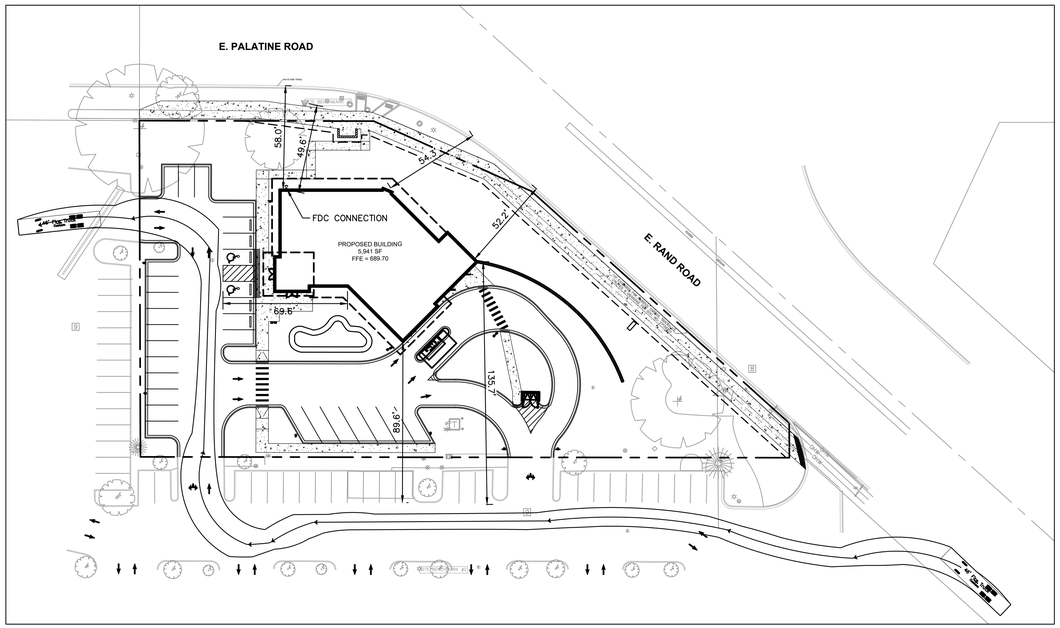
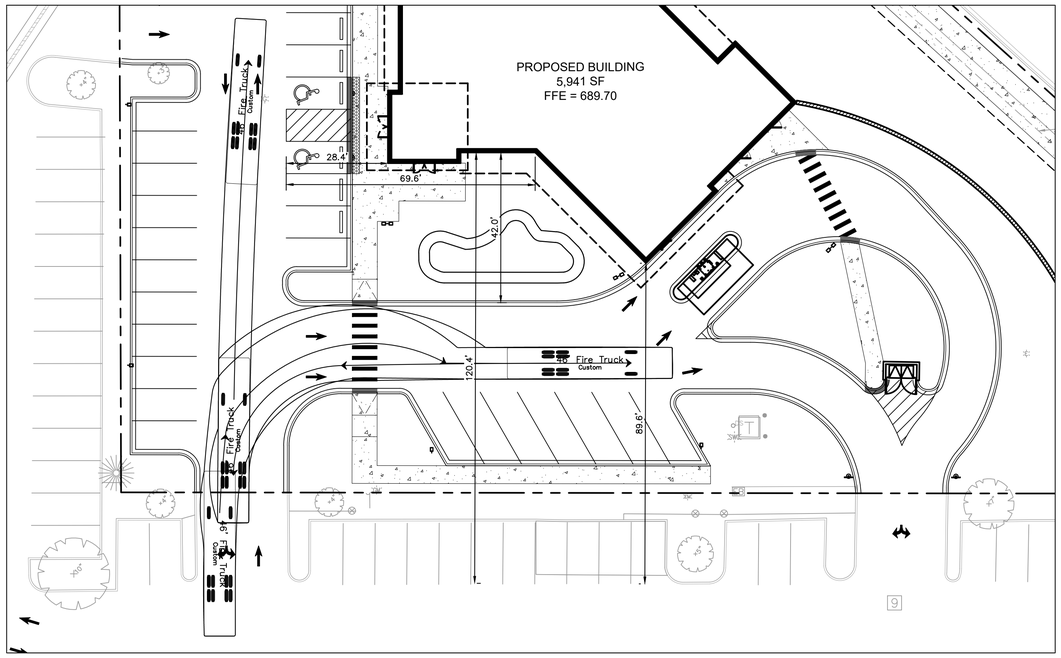
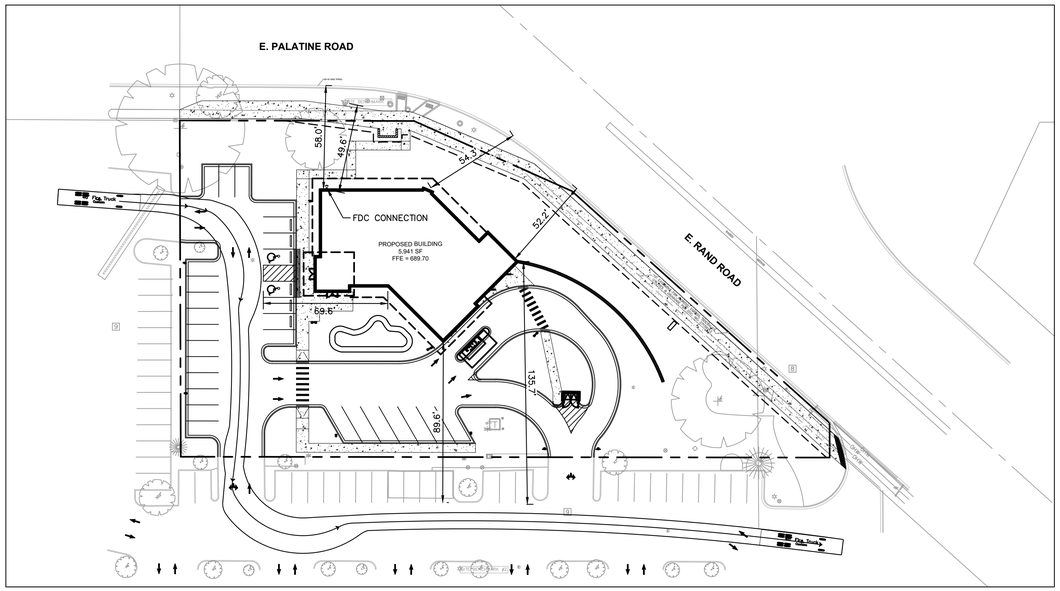


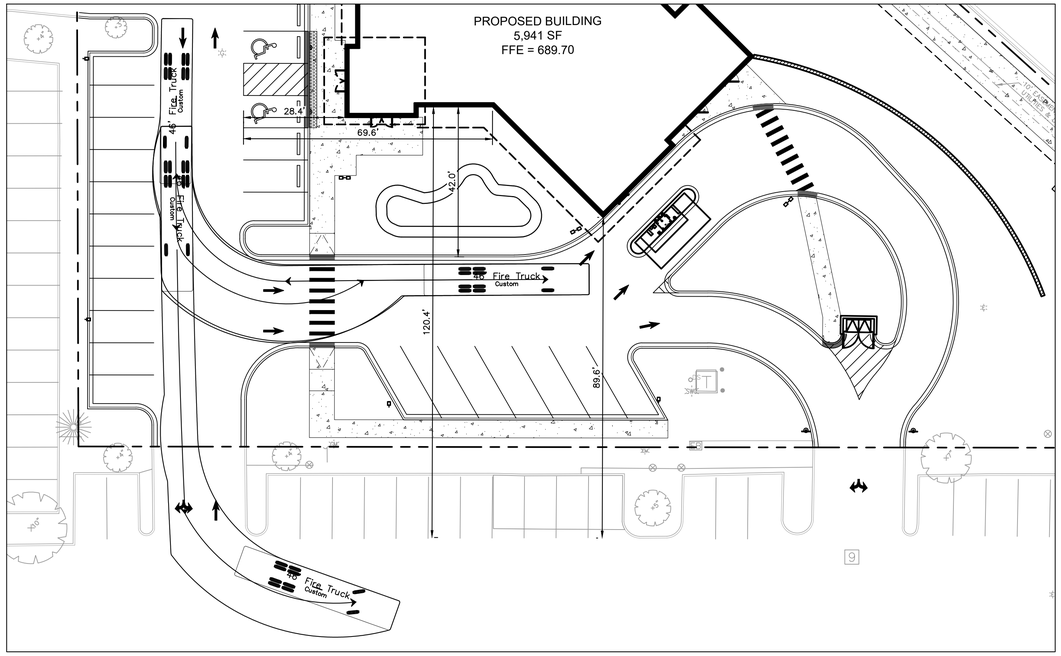
SOUTH WEST ENTRANCE ROUTE
1" = 40'



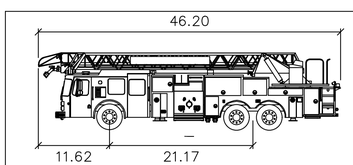
SOUTH WEST ENTRANCE TURN AROUND
1" = 20'



NORTH WEST ENTRANCE ROUTE
1" = 40'



NORTH WEST ENTRANCE TURN AROUND
1" = 20'



46' Fire Truck

	feet
Width	: 8.73
Track	: 6.91
Lock to Lock Time	: 3.0
Steering Angle	: 35.1

FIRE TRUCK PROFILE
N.T.S.

GENERAL NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.

NORTH

Call Before You Dig
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SCALE: AS NOTED
DESIGNED BY: JTW
DRAWN BY: JTW
CHECKED BY: ANF

LICENSED PROFESSIONAL ENGINEER
ALEXANDRA FALBO
062.073907
OF ILLINOIS

CHASE

FIRE TRUCK TURN EXHIBIT

CHASE BANK
585 E. PALATINE RD
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE: 06/12/23
KHA PROJECT NO. 168558032
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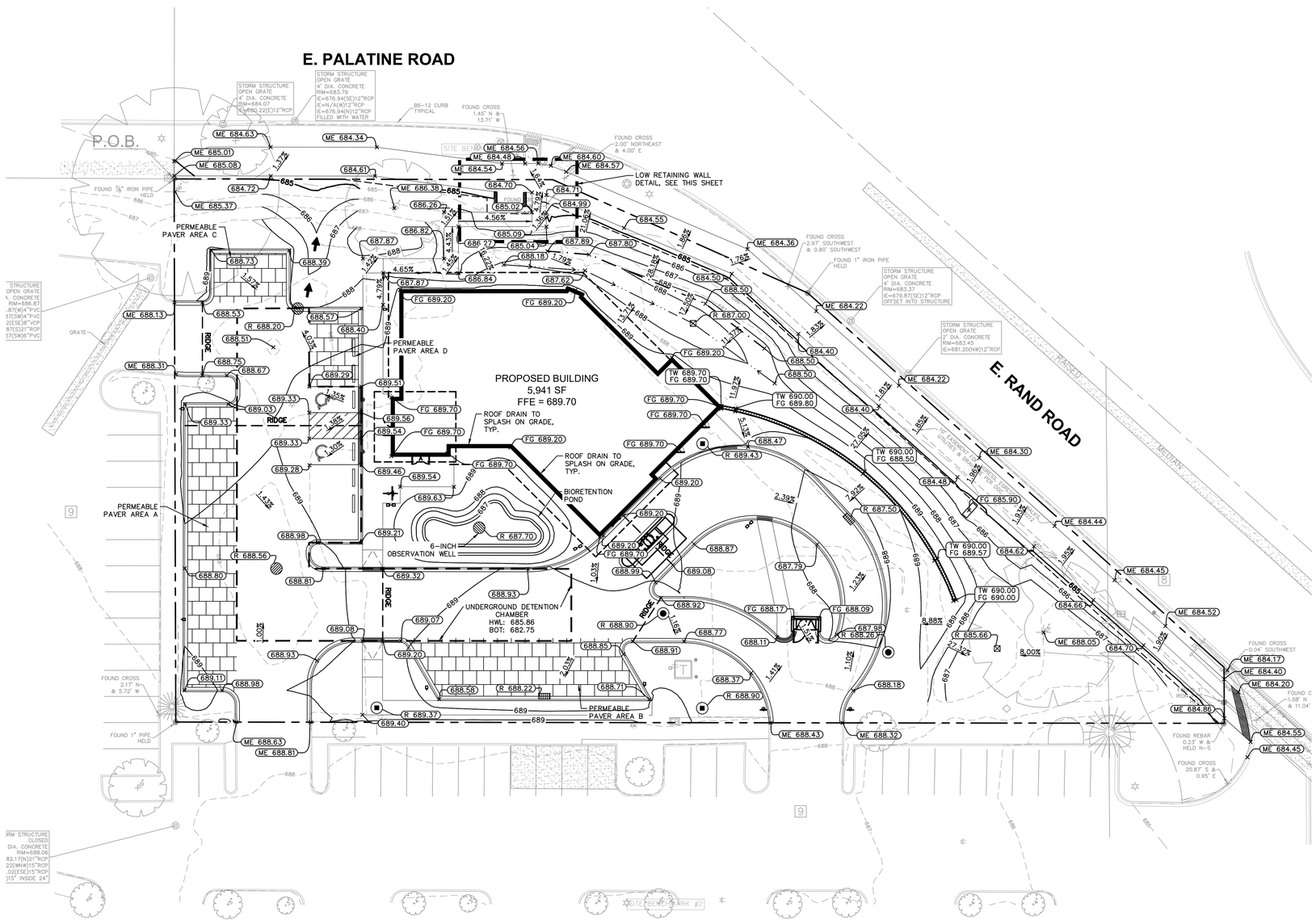

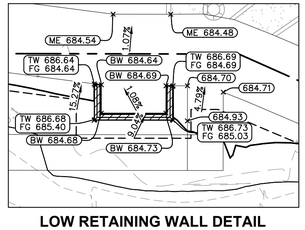

LOW RETAINING WALL DETAIL
1" = 10'

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

GRADING NOTES

1. CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
5. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
6. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
7. WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
8. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.

GRADING LEGEND

	TP = TOP OF PAVEMENT
	EP = EDGE OF PAVEMENT
	FL = FLOW LINE
	TC = TOP OF CURB
	ME = MATCH ELEVATION
	TF = TOP OF FOUNDATION
	R = RIM ELEVATION
	TW = TOP OF WALL
	FG = FINISHED GRADE
	TS = TOP OF STAIRS
	BS = BOTTOM OF STAIRS
——XXX——	PROPOSED CONTOUR
– – XXX – –	EXISTING CONTOUR
RIDGE	RIDGE LINE
X.XX%	SLOPE AND FLOW DIRECTION
	100-YEAR OVERLAND OVERFLOW ROUTE
	DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
	PROPOSED SWALE
	PROPOSED BERM
	PROPOSED RETAINING WALL
	REVERSED PITCH CURB AND GUTTER
AR	ACCESSIBLE ROUTE
	RIP RAP (SEE DETAILS)
	PERMEABLE PAVERS

DETENTION STATISTICS

1.	PROPERTY/DEVELOPMENT AREA	1.184 ACRES
2.	ONSITE TRIBUTARY AREA	0.883 ACRES
3.	INLET TIME OF CONCENTRATION	10 MINUTES
4.	RAINFALL DEPTH FOR 100-YR 24-HR EVENT	8.57 INCH
5.	GROSS ALLOWABLE RELEASE RATE	0.21 CFS
6.	ACTUAL RELEASE RATE AT HWL	0.05 CFS
7.	RESTRICTOR TYPE	VORTEX RESTRICTOR
8.	COMPOSITE C FOR TOTAL TRIB AREA	0.65
9.	COMPOSITE CN FOR TOTAL TRIB AREA	91.88
10.	AJUSTED CN FOR TOTAL TRIB AREA	85.34
11.	DETENTION REQUIRED	0.56 AC-FT
12.	TOTAL DETENTION PROVIDED	0.59 AC-FT
13.	DETENTION PROVIDED AT HWL	0.47 AC-FT
14.	VOLUME CONTROL REQUIRED	0.055 AC-FT
15.	VOLUME CONTROL PROVIDED	0.058 AC-FT

BIORETENTION POND STAGE STORAGE

Pond				Total Pond
Elevation	Area	Volume	Storage	Storage
(ft)	(sf)	(cf)	(cf)	(ac-ft)
686.70	350.0	0.00	0.00	**0.00**
687.70	668.0	500.51	500.51	**0.011**

UNDERGROUND DETENTION CHAMBER STAGE STORAGE

	Pond			Total Pond
Elevation	Area	Volume	Storage	Storage
(ft)	(sf)	(cf)	(cf)	(ac-ft)
682.50	6113.0	0.00	0.00	**0.00**
683.50	6113.0	6113.00	6113.00	**0.140**
684.50	6113.0	6113.00	12226.00	**0.281**
685.50	6113.0	6113.00	18339.00	**0.421**
686.50	6113.0	6113.00	24452.00	**0.561**
686.75	6113.0	1528.25	25980.25	**0.596**

PERMEABLE PAVERS VOLUME CONTROL CALCS

VOLUME TYPE	SECTION	SURFACE AREA (sft)	DEPTH	POROSITY	STORAGE VOLUME	VOLUME (ac-ft) PROVIDED
V_A:	A	1654	0.5	0.36	0.5 x 0.36 x V_A	0.003
V_B:	A	1654	1	0.36	0.36 x V_B	0.014
V_A:	B	1426	0.5	0.36	0.5 x 0.36 x V_A	0.003
V_B:	B	1426	1	0.36	0.36 x V_B	0.012
V_A:	C	426	1.33	0.36	0.5 x 0.36 x V_A	0.002
V_B:	C	426	1	0.36	0.36 x V_B	0.004
V_A:	D	442	1.33	0.36	0.5 x 0.36 x V_A	0.002
V_B:	D	442	1	0.36	0.36 x V_B	0.004
					TOTAL:	**0.044**

BIORETENTION FACILITY VOLUME CONTROL CALCS

VOLUME TYPE	SURFACE AREA (sft)	DEPTH	POROSITY	STORAGE VOLUME	VOLUME (ac-ft) PROVIDED	BOTTOM OF FACILITY
V_A:	668	1	1	1.00 x V_A	0.008	687.70
V_B:	668	1.5	0.25	0.5 x 0.25 x V_B	0.002	686.20
V_C:	668	0.5	0.36	0.5 x 0.36 x V_C	0.001	685.70
V_D:	668	0.5	0.36	0.36 x V_D	0.003	685.20
				TOTAL:	**0.014**	

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JULIE
1-800-892-0123

NO.	REVISIONS	DATE	BY
1	VILLAGE COMMENTS	12/07/23	JW
2	VILLAGE COMMENTS	11/02/23	JW

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
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WARRENVILLE, IL 60555
PHONE: 630-487-9900
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: JTW | DRAWN BY: JTW | CHECKED BY: ANF

LICENSED PROFESSIONAL ENGINEER
ALEXANDRA FALBO
062.073907
OF ILLINOIS

CHASE

GRADING AND DRAINAGE PLAN

CHASE BANK
585 E. PALATINE RD
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE: 06/12/23
KHA PROJECT NO. 168558032
SHEET NUMBER
C3.0

Drawing name: K:\CHS_LOEV\168558032_Chase_ArlingtonHeights_IL\2 Design\CAD\PlanSheets\C2.0 - GRADING PLAN.dwg C2.0 Dec 07, 2023 11:59am by: ALEXA.FALBO
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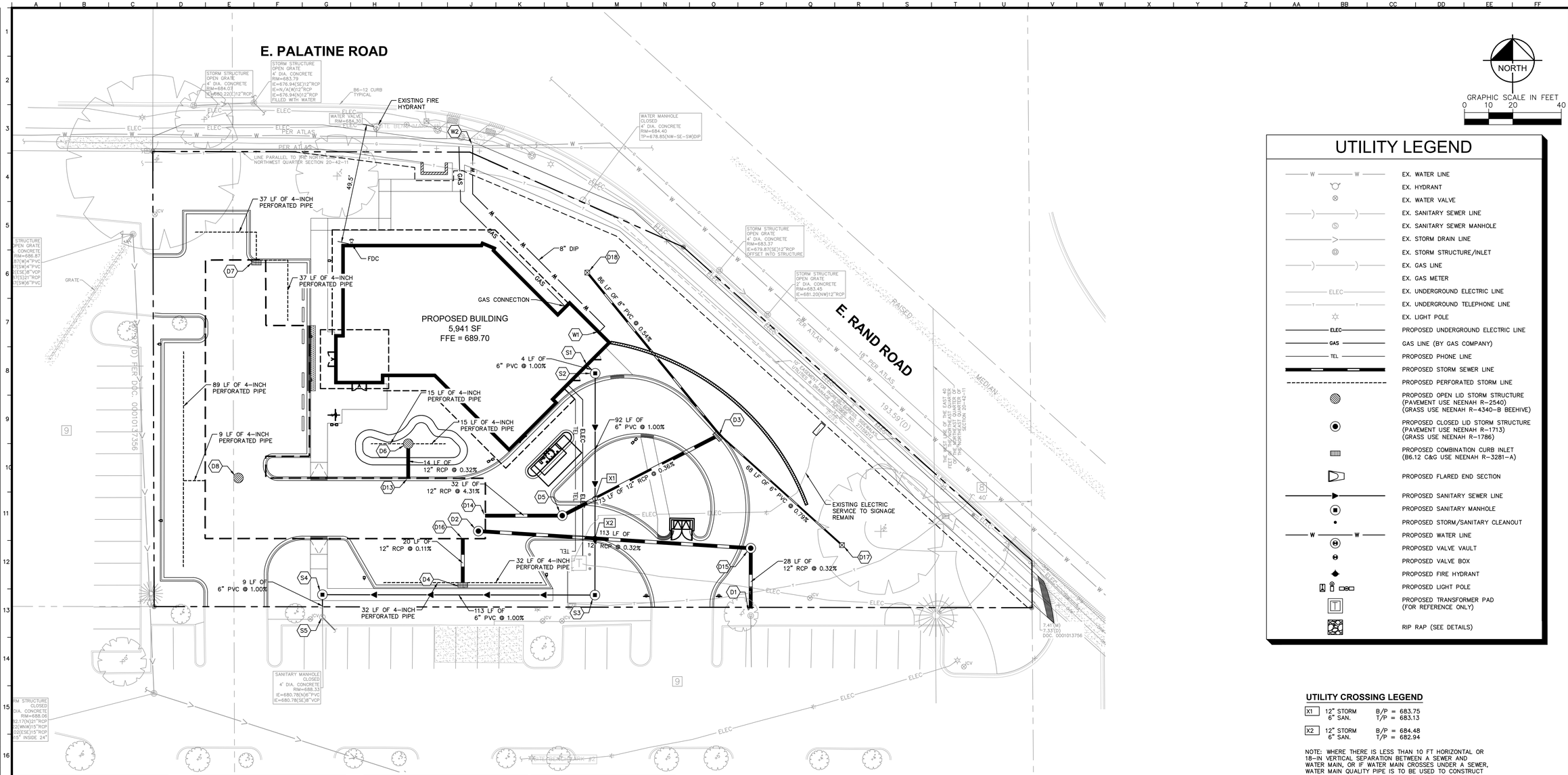


UTILITY LEGEND

- EX. WATER LINE
- EX. HYDRANT
- EX. WATER VALVE
- EX. SANITARY SEWER LINE
- EX. SANITARY SEWER MANHOLE
- EX. STORM DRAIN LINE
- EX. STORM STRUCTURE/INLET
- EX. GAS LINE
- EX. GAS METER
- EX. UNDERGROUND ELECTRIC LINE
- EX. UNDERGROUND TELEPHONE LINE
- EX. LIGHT POLE
- PROPOSED UNDERGROUND ELECTRIC LINE
- GAS LINE (BY GAS COMPANY)
- PROPOSED PHONE LINE
- PROPOSED STORM SEWER LINE
- PROPOSED PERFORATED STORM LINE
- PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
- PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1713) (GRASS USE NEENAH R-1786)
- PROPOSED COMBINATION CURB INLET (B6.12 C&G USE NEENAH R-3281-A)
- PROPOSED FLARED END SECTION
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM/SANITARY CLEANOUT
- PROPOSED WATER LINE
- PROPOSED VALVE VAULT
- PROPOSED VALVE BOX
- PROPOSED FIRE HYDRANT
- PROPOSED LIGHT POLE
- PROPOSED TRANSFORMER PAD (FOR REFERENCE ONLY)
- RIP RAP (SEE DETAILS)

STORM STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
D1	CONNECT TO EXIST STORM RIM: 686.05 INV IN: 682.05 (N, 12") INV OUT: 681.94 (E, 12")
D3	OPEN LID MANHOLE RIM: 687.50 INV IN: 684.10 (SE, 6") INV IN: 684.10 (NW, 8") INV OUT: 684.10 (SW, 12")
D4	OPEN LID MANHOLE RIM: 688.22 INV OUT: 685.10 (N, 12")
D5	CLOSED LID MANHOLE RIM: 688.90 INV IN: 683.84 (NE, 12") INV OUT: 683.84 (W, 12")
D6	6-INCH OBSERVATION WELL RIM: 687.70 INV OUT: 684.05 (S, 12")
D7	OPEN LID MANHOLE RIM: 688.20
D8	OPEN LID MANHOLE RIM: 688.56
D15	CLOSED LID MANHOLE RIM: 688.26 INV IN: 682.14 (W, 12") INV OUT: 682.14 (S, 12")
D17	24" YARD DRAIN RIM: 685.66 INV OUT: 684.64 (NW, 6")
D18	24" YARD DRAIN RIM: 687.00 INV OUT: 684.57 (SE, 8")

MISCELLANEOUS STORM STRUCTURE TABLE

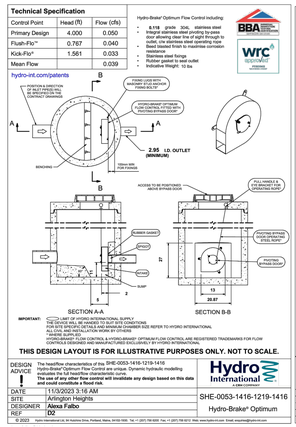
STRUCTURE NAME:	DETAILS:
D2	OULET CONTROL STRUCTURE WITH VORTEX RESTRICTOR. SEE DETAIL, THIS SHEET. INV OUT: 682.50 (E, 12")
D13	CONNECTION TO UNDERGROUND VAULT INV IN: 684.00 (N, 12")
D14	CONNECTION TO UNDERGROUND VAULT INV IN: 682.47 (E, 12")
D16	CONNECTION TO UNDERGROUND VAULT INV IN: 685.08 (S, 12")

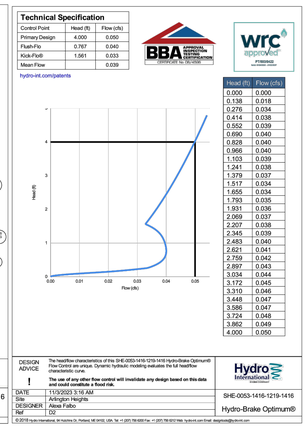
SANITARY STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
S1	CONNECTION TO BUILDING INV OUT: 683.18 (SE, 6")
S2	SANITARY INSPECTION MANHOLE RIM: 689.43 INV IN: 683.13 (NW, 6") INV OUT: 683.13 (S, 6")
S3	SANITARY MANHOLE RIM: 688.90 INV IN: 682.22 (N, 6") INV OUT: 682.22 (W, 6")
S4	SANITARY MANHOLE RIM: 689.37 INV IN: 681.09 (E, 6") INV OUT: 681.09 (S, 6")
S5	CONNECTION TO EXISTING SANITARY RIM: 688.33 INV IN: 681.00 (N, 6") INV OUT: 680.78 (SE, 8")

WATER STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:
W1	CONNECTION TO BUILDING FG ELEV: 689.56
W2	CONNECTION TO EXISTING WATER MAIN FG ELEV: 684.60





VORTEX RESTRICTOR DETAIL

UTILITY CROSSING LEGEND

X1	12" STORM 6" SAN.	B/P = 683.75 T/P = 683.13
X2	12" STORM 6" SAN.	B/P = 684.48 T/P = 682.94

NOTE: WHERE THERE IS LESS THAN 10 FT HORIZONTAL OR 18-IN VERTICAL SEPARATION BETWEEN A SEWER AND WATER MAIN, OR IF WATER MAIN CROSSES UNDER A SEWER, WATER MAIN QUALITY PIPE IS TO BE USED TO CONSTRUCT THE SEWER OR EITHER PIPE IS TO BE ENCASED. THE PROTECTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE DISTANCE BETWEEN THE WATER MAIN AND SEWER IS AT LEAST 10 FT. ACCEPTABLE WATER MAIN QUALITY PIPE INCLUDES PVC SDR/WMQ MEETING ASTM D2241 WITH JOINTS MEETING ASTM D3139 OR DUCTILE IRON PIPE. RCP STORM SEWER WITH FLEXIBLE GASKET JOINTS MEETING ASTM C361 OR ASTM C443 IS ALSO ACCEPTABLE AT CROSSINGS.

NO.	DATE	BY
1	12/07/23	JW
2	11/02/23	JW

VILLAGE COMMENTS
VILLAGE COMMENTS
REVISIONS

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
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SCALE: AS NOTED
DESIGNED BY: JTW
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CHECKED BY: ANF

LICENSED PROFESSIONAL ENGINEER
ALEXANDRA FALBO
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OF ILLINOIS

CHASE

UTILITY PLAN

CHASE BANK
585 E. PALATINE RD
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE: 06/12/23
KHA PROJECT NO. 168558032
SHEET NUMBER
C4.0

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Drawing name: K:\CHS_LDEV\168558032_Chase_ArlingtonHeights_IL\2 Design\CAD\PlanSheets\C3.0 - UTILITY PLAN.dwg C3.0 Dec 07, 2023 11:59am by ALEXA.FALBO
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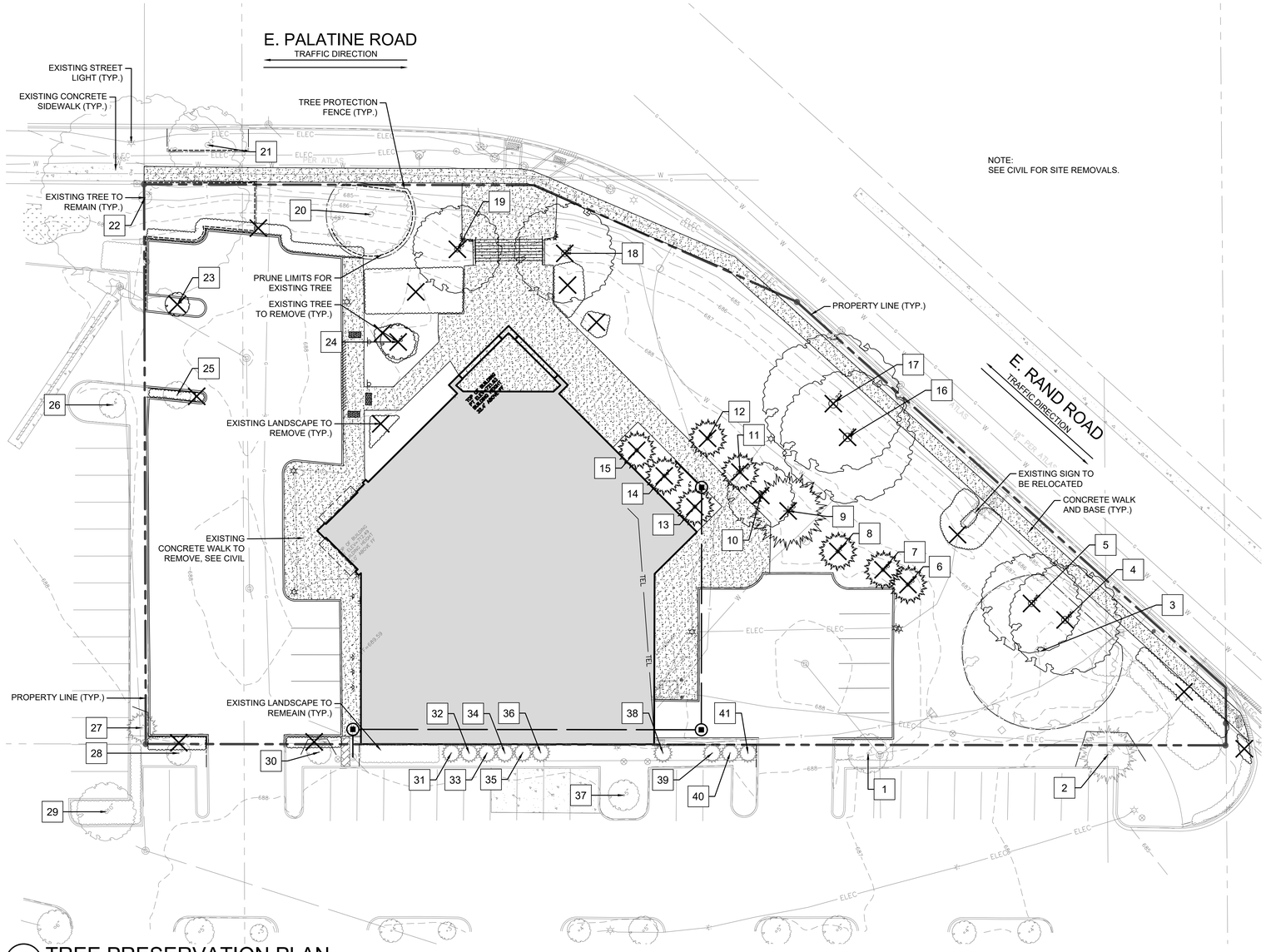

1 TREE PRESERVATION PLAN

SCALE: 1" = 20'-0"

N

Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- REMOVE BUILDING AND APPURTENANCES
- REMOVE CONCRETE PAVEMENT AND BASE
- REMOVE CONCRETE WALK AND BASE
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- TREE PROTECTION FENCE
- TREE PRUNING LIMITS
- EXISTING LANDSCAPE TO REMAIN
- EXISTING LANDSCAPE TO REMOVE

Tree Survey

Chase Bank - 585 E. Palatine Rd.

#	DBH (inches)	Tree Type	Common Name	Condition	Notes	Removal
1	6"	*Gleditsia spp.*	Honey Locust	Good	Off site	No
2	15"	*Pinus spp.*	Austrian Pine	Fair	Off site	No
3	26"	*Pyrus spp.*	Pear	Fair		No
4	18"	*Pyrus spp.*	Pear	Fair	Removal for widened bike path	Yes
5	17"	*Pyrus spp.*	Pear	Good	Removal for widened bike path	Yes
6	12"	*Picea spp.*	Spruce	Fair	Removal for new site work	Yes
7	12"	*Picea spp.*	Spruce	Poor	Dying	Yes
8	6"	*Juniperus spp.*	Cedar	Good	Removal for new site work	Yes
9	12"	*Picea spp.*	Spruce	Good	Removal for new site work	Yes
10	8"	*Malus spp.*	Crabapple	Poor	Multi-stem, dying	Yes
11	4"	*Juniperus spp.*	Cedar	Good	Removal for new site work	Yes
12	1"	*Juniperus spp.*	Cedar	Good	Prune deadwood	Yes
13	3"	*Juniperus spp.*	Cedar	Good	Removal for new site work	Yes
14	3"	*Juniperus spp.*	Cedar	Fair	Removal for new site work	Yes
15	3"	*Juniperus spp.*	Cedar	Good	Removal for new site work	Yes
16	24"	*Pyrus spp.*	Pear	Fair	Removal for new site work	Yes
17	17"	*Pyrus spp.*	Pear	Fair	Limb damage	Yes
18	14"	*Gleditsia spp.*	Honey Locust	Poor	Removal for new site work	Yes
19	14"	*Gleditsia spp.*	Honey Locust	Good	Removal for new site work	Yes
20	18"	*Gleditsia spp.*	Honey Locust	Good	Critical tree to save	No
21	12"	*Gleditsia spp.*	Honey Locust	Good	Street tree	No
22	24"	*Populas spp.*	Cottonwood	Fair	Critical tree to save	No
23	4"	*Gleditsia spp.*	Honey Locust	Good	Removal for new site work	Yes
24	6"	*Gleditsia spp.*	Honey Locust	Good	Removal for new site work	Yes
25	3"	*Gleditsia spp.*	Honey Locust	Good	Removal for new site work	No
26	4"	*Celtis spp.*	Hackberry	Good	Off site	No
27	10"	*Pinus spp.*	Austrian Pine	Poor	Off site	No
28	4"	*Gleditsia spp.*	Honey Locust	Good	Off site	No
29	10"	*Gleditsia spp.*	Honey Locust	Good	Off site	No
30	4"	*Gleditsia spp.*	Honey Locust	Good	Off site	No
31	3"	*Juniperus spp.*	Cedar	Poor	Off site	No
32	3"	*Juniperus spp.*	Cedar	Poor	Off site	No
33	3"	*Juniperus spp.*	Cedar	Fair	Off site	No
34	3"	*Juniperus spp.*	Cedar	Fair	Off site	No
35	3"	*Juniperus spp.*	Cedar	Fair	Off site	No
36	3"	*Juniperus spp.*	Cedar	Fair	Off site	No
37	5"	*Gleditsia spp.*	Honey Locust	Good	Off site	No
38	3"	*Juniperus spp.*	Cedar	Fair	Off site	No
49	3"	*Juniperus spp.*	Cedar	Fair	Off site	No
40	3"	*Juniperus spp.*	Cedar	Fair	Off site	No
41	3"	*Juniperus spp.*	Cedar	Fair	Off site	No

Tree Removal Quantity: 18

Note:

1. All existing plant material to remain shall be pruned to remove any deadwood.
2. Any trees designated for preservation that are removed, will need to be replaced per Village Code.

CHASE

CHASE BANK

585 E. Palatine Rd.
Arlington Heights, IL
60004

Project Team

LANDSCAPE ARCHITECT

TERRA ENGINEERING LTD.
225 W Ohio Street - Suite 400, Chicago, IL 60654
(T) 312-467-0123 | (F) 312-467-0220

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Chicago, IL. 60604
312-583-9800

CIVIL ENGINEER

KIMLEY HORN
4201 Winfield Road
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Warrenville, IL. 60555
630-487-5550

Revisions

	Date	Issue
	5/30/2023	SUBMITTAL REVIEW
	9/22/2023	SUBMITTAL REVIEW
	11/3/2023	SUBMITTAL REVIEW
	11/17/2023	SUBMITTAL REVIEW
	12/7/2023	SUBMITTAL REVIEW

Stamp

LICENSED LANDSCAPE ARCHITECT
KEVEN GRAHAM
157.000150
State of Illinois

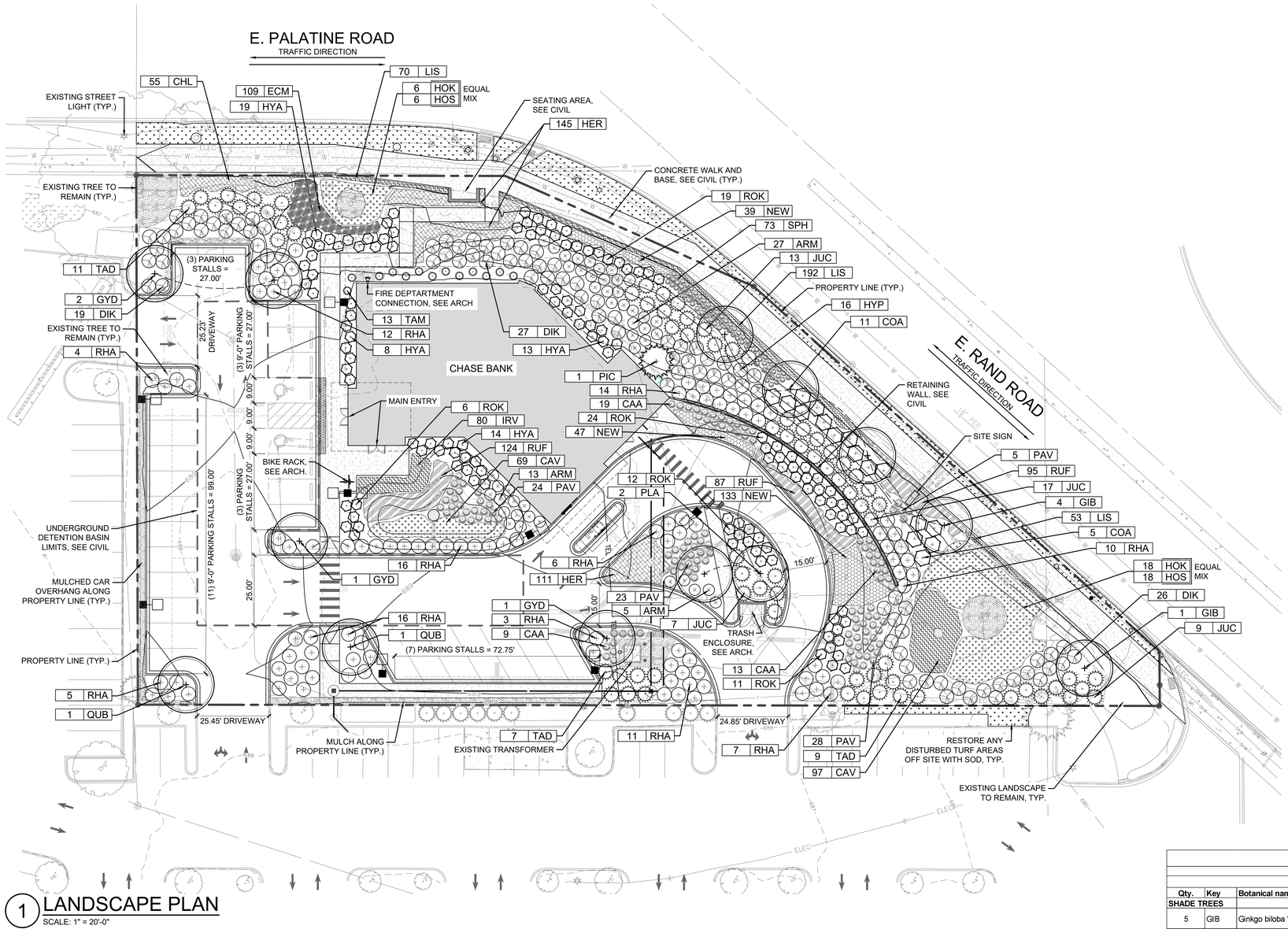
Title

TREE PRESERVATION PLAN

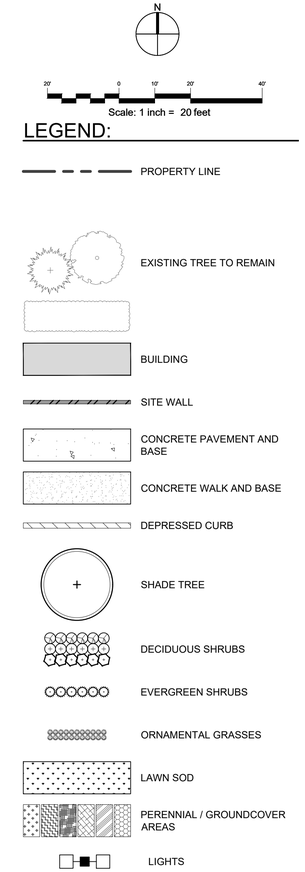
Sheet No.

L0.0

TERRA Project No. 18-162-035



1 LANDSCAPE PLAN
SCALE: 1" = 20'-0"



Landscape Requirements

Chase Bank 585 E. Palatine Rd. Arlington Heights, IL 60004
B-2 General Business District

FRONT YARD
Requirement: When 80% of lot frontage directly across from a lot that fronts on a street is in a residential district, the front yard regulations for the residential district shall apply.

Proposed: Property lot frontage is on street, but not across from a residential district, no front yard required.

SIDE YARD
Requirement: Where side lot line coincides with a side or rear lot line of a property in a residential district, a side yard will be required equal to the minimum requirement for the adjacent property.

Proposed: Property does not coincide with a property in a residential district, no side yard required.

REAR YARD
Requirement: Where rear lot line coincides with a side or rear lot line of a property in a residential district, a 20' rear yard will be required.

Proposed: Property does not coincide with a property in a residential district, no rear yard required.

PARKING LOT INTERNAL
Requirement: (1) parking lot island equal to one parking spot with (1) shade tree at a minimum of 4" diameter at end of every 20 parking spaces, or below each light, whichever results in greater amount of planted islands.

32 total parking stalls requires 1.6 islands with 1 shade tree each

Proposed: (7) proposed parking lot islands with (1) existing and (6) new shade trees.

Plant Schedule

Chase Bank Arlington Heights, IL

Qty.	Key	Botanical name	Common name	Size	Notes
SHADE TREES					
5	GIB	Ginkgo biloba 'Autumn Gold'	Autumn Gold Ginkgo	2.5" B&B	Central leader, Street Trees along Rand Rd.
4	GYD	Gymnocladus dioicus 'Espresso'	Espresso Kentucky Coffeetree	4" B&B	Central leader, Interior Parking
2	PLA	Platanus x acerfolia 'Bloodgood'	Bloodgood London Planetree	4" B&B	Central leader, Interior Parking
2	QUB	Quercus bicolor	Swamp White Oak	4" B&B	Central leader, Interior Parking
EVERGREEN TREES					
1	PIC	Pinus cembra	Swiss Stone Pine	8' B&B	Central leader
DECIDUOUS SHRUBS					
45	ARM	Aronia melanocarpa 'Morton'	Iroquois Beauty Black Chokeberry	24" B&B	4' o.c.
16	COA	Cotoneaster adpressus 'Little Gem'	Little Gem Creeping Cotoneaster	24" B&B	6' o.c.
72	DIK	Diervilla 'G2X88544'	Diervilla Kodiak Orange	#5 Cont.	5' o.c.
54	HYA	Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea	#5 Cont.	4' o.c.
16	HYP	Hydrangea paniculata 'Bulk'	Quick Fire Hydrangea	#5 Cont.	5' o.c.
104	RHA	Rhus aromatica 'Gro-Low'	Gro-Low Sumac	#5 Cont.	5' o.c., 18" Ht.
72	ROK	Rosa 'Knock Out'	Knock-Out Rose	#5 Cont.	4' o.c.
EVERGREEN SHRUBS					
46	JUC	Juniperus chinesis 'Kallay's Compact'	Kallay's Compact Pfitzer Juniper	24" B&B	6' o.c.
27	TAD	Taxus media 'Densiformis'	Dense Spreading Yew	24" B&B	5' o.c.
13	TAM	Taxus media 'Everlow'	Everlow Yew	18" B&B	5' o.c.
PERENNIALS AND ORNAMENTAL GRASSES					
41	CAA	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	#1 Cont.	3' o.c.
166	CAV	Carex vulpinoidea	Fox Sedge	#1 Cont.	2' o.c.
55	CHL	Chasmanthium latifolium	Northern Sea Oats	#1 Cont.	24" o.c.
109	ECM	Echinacea purpurea 'Magnus'	Purple Coneflower	#1 Cont.	18" o.c.
256	HER	Hemerocallis 'Rosy Returns'	Rosy Returns Daylily	#1 Cont.	18" o.c.
24	HOK	Hosta 'Krossa Regal'	Krossa Regal Hosta	#1 Cont.	5' o.c.
24	HOS	Hosta 'Sum and Substance'	Sum and Substance Hosta	#1 Cont.	5' o.c.
80	IRV	Iris virginica var. shrevei	Blue Flag Iris	#1 Cont.	18" o.c.
315	LIS	Liriope spicata	Creeping Lilyturf	4" pots	12" o.c.
219	NEW	Nepeta racemosa 'Walker's Low'	Walkers Low Catmint	#1 Cont.	18" o.c.
80	PAV	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	#1 Cont.	3' o.c.
306	RUF	Rudbeckia fulgida 'Viette's Little Suzy'	Little Suzy Black-Eyed Susan	#1 Cont.	18" o.c.
73	SPH	Sporobolus heterolepis	Prairie Dropseed	#1 Cont.	2' o.c.

CHASE

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	11/17/2023	SUBMITTAL REVIEW
	12/7/2023	SUBMITTAL REVIEW

Stamp

LICENSED LANDSCAPE ARCHITECT
KEVEN GRAHAM
157.000150
State of Illinois

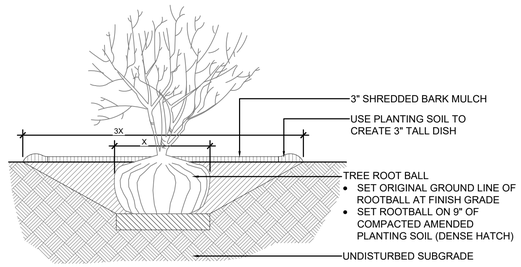
Title

LANDSCAPE PLAN

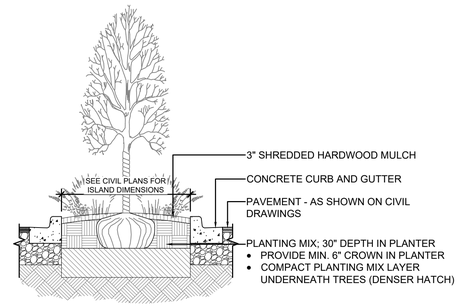
Sheet No.

L1.0

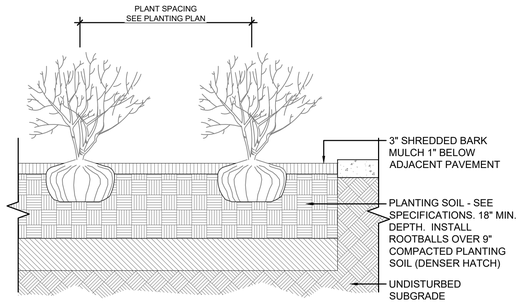
TERRA Project No. 18-162-035



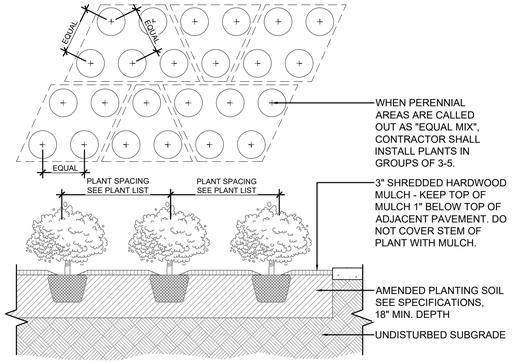
1 SHADE/ORNAMENTAL TREE PLANTING DETAIL
SCALE: NTS



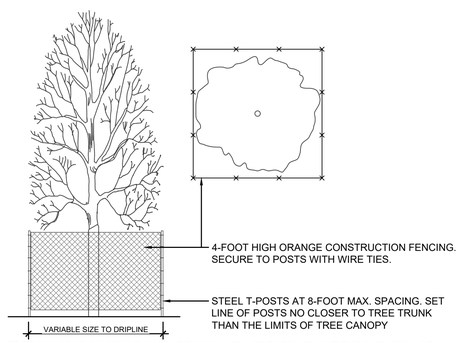
2 SHADE TREE PLANTING - PARKING LOT ISLAND
SCALE: NTS



3 SHRUB PLANTING DETAIL
SCALE: NTS



4 GROUNDCOVER / PERENNIAL PLANTING DETAIL
SCALE: NTS



TREE PROTECTION FENCE SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION AND SHALL BE REMOVED ONLY BY PERMISSION OF THE OWNER. CONTRACTOR SHALL NOT STORE ANY MATERIALS OR EQUIPMENT WITHIN TREE PROTECTION ZONE.

MULTIPLE TREES MAY BE ENCLOSED BY A SINGLE FENCE LINE PROVIDED FENCE INCLUDES LIMITS OF TREE CANOPY.

5 TREE PROTECTION DETAIL
SCALE: 1/2" = 1'-0"

CHASE

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Arlington Heights, IL
60004

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Warrenville, IL. 60555
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Revisions

	Date	Issue
	5/30/2023	SUBMITTAL REVIEW
	9/22/2023	SUBMITTAL REVIEW
	11/3/2023	SUBMITTAL REVIEW
	11/17/2023	SUBMITTAL REVIEW
	12/7/2023	SUBMITTAL REVIEW

Stamp

LICENSED LANDSCAPE ARCHITECT
KEVEN GRAHAM
157.000150
State of Illinois

Title

LANDSCAPE DETAILS

Sheet No.

L2.0

TERRA Project No. 18-162-035

Submitting Agency:	Description: EACL010F4AF740-DIMMING- D1-FINISH	Type:
lighting > electrical > energy technology > signs 214-351-6266	Project: JPMC WAUWATOSA Notes:	SL2

EVOLVE

CUSTOMER NAME _____

PROJECT NAME _____

DATE _____ TYPE _____

CATALOG NUMBER _____

EACL® Series

LED Area Light/Compact Low Wattage

Current's EAL Series of Area Light Luminaires offer a wide range of optical patterns, color temperatures, lumen packages, and mounting configurations to optimize area light applications, as well as provide versatility in lighting design within the same form factor.

Construction

Housing:	Die-cast aluminum housing with integral heat sink for maximum heat transfer
Paint:	Corrosion resistant polyester powder paint, minimum 2.0 mil thickness Standard = Black, Dark Bronze Gray, White (RAL & custom colors available) Optional coastal finish available.
Weight:	18 lbs (8.16 kg) Max depending on configuration

Optical System

Lumens:	2,900 - 20,400
Distribution:	Asymmetric Forward Type IV Asymmetric Wide Type III Asymmetric Narrow/Auto Type II
Efficacy:	123 - 143 LPW
CCT:	3000K, 4000K, 5000K
CRI:	≥70

Electrical

Input Voltage:	120-277V & 347-480V
Input Frequency:	50/60Hz
Power Factor:	> 90% at rated watts
Total Harmonic Distortion:	< 20% at rated watts

Surge Protection*

TYPCIAL (120 STRIKES)	ENHANCED (40 STRIKES)	
6kV/3kA*	10kV/5kA*	

*Per ANSI C136.2-2015

Warranty

5 Year (Standard)

Lumen Maintenance

Projected Lxx per IES TM-21-11 at 25°C

LUMEN CODES	LXX(10K) @ HOURS		
	25,000 HR	50,000 HR	60,000 HR
A2, A3, A4, B2, B3, B4, C2, C3, C4D2, D3, D4, E2, E3, E4, F2, F3, F4	L94	L90	L88
H2,H3, H4	L97	L96	L96

Note: Projected Lxx based on LM80 (≥ 10,000 hour testing). Accepted Industry tolerances apply to initial luminous flux and lumen maintenance measurements.

Luminaire Ambient Temperature Factor

AMBIENT TEMP (°C)	INITIAL FLUX FACTOR	AMBIENT TEMP (°C)	INITIAL FLUX FACTOR
10	1.02	30	0.99
20	1.01	40	0.98
25	1.00	50	0.97

Ratings

Operating Temperature:	-40°C to 50°C
Vibration:	3G vibration per ANSI C136.31-2018
LM-79:	Testing in accordance with IESNA Standards

Controls

Dimming:	Standard - 0-10V Optional - DALI (Option U)
Sensors:	Photo Electric Sensors (PE) available LightGrid and Daintree Compatible

DLC LISTED · UL LISTED · UL CERTIFIED · UL1598 · IP66 Optical Only · IK08

Not all product variations listed on this page are DLC qualified.
Visit www.designlights.org/search to confirm qualifications.

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Submitting Agency:	Description: EACL010F4AF740-DIMMING- D1-FINISH	Type:
FSG lighting > electrical > energy technology > signs FACILITY SOLUTIONS GROUP 214-351-6266	Project: JPMC WAUWATOSA Notes:	SL2

EVOLVE

EACL® Series
LED Area Light/Compact Low Wattage

CUSTOMER NAME _____

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DATE _____ TYPE _____

CATALOG NUMBER _____

Ordering Information

EACL 01 7

- - - - -- - -- -- - -- - - -- - - - - - - - -

PROD. ID	GEN	VOLTAGE	OPTIC CODE	DISTRIBUTION	CRI (MIN)	CCT	DIMMING[2]	CONTROLS	MOUNTING ARM	COLOR	OPTIONS
E = Evolve	01	0 = 120-277V[1]	Ax=3000 lm	AF = Asymmetric Forward	7 = 70	30 = 3000K[11]	N = Dimming thru PE receptacle	1 = None	C1 = Integral Slip-fitter for 1.25"- 2" Pipe (1.66in. OD - 2.378 in. OD)[4]	GRAY = Gray	F = Fusing
AC = Compact Area Light		H = 347-480V[1]	Bx=5000 lm	AW = Asymmetric Wide		40 = 4000K	D = External Dimming 18/2-3ft cable	A = ANSI 7-pin PE receptacle (no control)	D1 = Universal Mounting Arm, fitted for round or square pole mounting[5]	BLCK = Black	H1 = Motion Sensor w/ LightGrid
L = Low Voltage		1 = 120V	Cx=7500 lm	AN = Asymmetric Narrow/Auto		50 = 5000K	X = No External Dimming Leads	D = ANSI 7-pin PE receptacle with shorting cap provided	K1 = Knuckle Slipfitter for 1.9 in - 2.3in. OD Tenon[5,6]	DKBZ = Dark Bronze	H2 = Motion Sensor (Daintree)[8]
		2 = 208V	Dx=10000 lm					E = ANSI C136.41 7-pin with Non-Dimming PE Control[3]	S1 = Knuckle Slipfitter for 2.3in. - 3.0in OD Tenon[5,6]	WHTE = White	H4 = Motion Sensor (Wattstopper)
		3 = 240V	Dx=10000 lm						V1 = Knuckle Wall Mount [5,6]		J = cUL/Canada
		4 = 277V	Ex=12500 lm								L = Tool-Less Entry
		5 = 480V	Fx=15000 lm								R= Enhanced Surge Protection (10kV/5kA)
		D = 347V	Hx=20000 lm								U = DALI dimming[7]
											V = 3-Position Terminal Block
											Y = Coastal Finish[10]
											XXX = Special Options

[1] Not Available with Fusing, Must Choose a Discrete Voltage with "F" Option Code
[2] Note Standard Dimming is 0-10V
[3] PE Control only available for 120-277V, 347V or 480V Discrete Voltage.
[4] Supplied with 3ft leads
[5] Supplied with 16/3 ft Cable
[6] Restricted Aiming Angle of 0-45°
[7] Compatible with LightGrid Wireless Control Nodes, Not Compatible with Motion Sensor Control
[8] H2 Sensor is not available in High Voltage (347V, 480V or 347-480V)
[10] Recommended for installations within 750 feet from coast. Lead time varies, check with factory.
[11] Select 3000K CCT for IDA approved fixtures.

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EVOLVE

EACL® Series

LED Area Light/Compact Low Wattage

CUSTOMER NAME _____

PROJECT NAME _____

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OPTICAL CODE	DIST CODE	CLASSIFICATION	TYPICAL LUMENS		TYPICAL SYSTEM WATTAGE		BUG RATING	
			3000K	4000K &5000K	120-277V	347-480V	3000K	4000K &5000K
A4	AF	TYPE IV	2900	2900	21	23	B1-UO-G1	B1-UO-G1
B4			4900	4900	36	38	B1-UO-G1	B1-UO-G1
C4			7300	7300	55		B1-UO-G2	B1-UO-G2
D4			9800	9800	73		B2-UO-G2	B2-UO-G2
E4			12200	12200	95		B2-UO-G2	B2-UO-G2
F4			14700	14700	122		B2-UO-G2	B2-UO-G2
H4			19000	19000	153		B3-UO-G3	B3-UO-G3
A3	AW	TYPE III	2900	3000	21	23	B1-UO-G1	B1-UO-G1
B3			4900	5100	36	38	B1-UO-G1	B1-UO-G1
C3			7400	7600	55		B1-UO-G2	B1-UO-G2
D3			9900	10200	73		B2-UO-G2	B2-UO-G2
E3			12400	12700	95		B2-UO-G2	B2-UO-G2
F3			14900	15300	122		B2-UO-G2	B2-UO-G2
H3			19300	20400	153		B3-UO-G2	B3-UO-G2
A2	AN	TYPE II	2900	3000	21	23	B1-UO-G1	B1-UO-G1
B2			4900	5000	36	38	B1-UO-G1	B1-UO-G1
C2			7300	7500	55		B2-UO-G1	B2-UO-G2
D2			9800	10100	73		B2-UO-G2	B2-UO-G2
E2			12300	12600	95		B2-UO-G2	B2-UO-G2
F2			14700	15100	122		B3-UO-G2	B3-UO-G3
H2			19100	20200	153		B3-UO-G3	B3-UO-G3

For additional information on Non-Shielded and Shielded EACL IES files, please refer to LED.com

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lighting > electrical > energy technology > signs 214-351-6266		

EVOLVE

EACL® Series

LED Area Light/Compact Low Wattage

CUSTOMER NAME _____

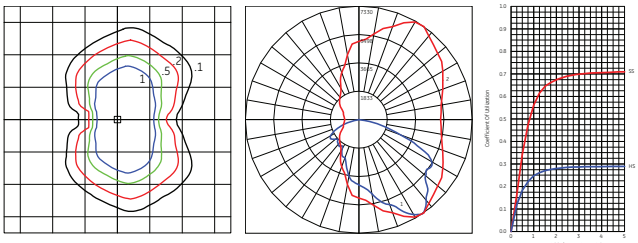
PROJECT NAME _____

DATE _____ TYPE _____

CATALOG NUMBER _____

EACL - Type II - Very Short

15,100 lumens
EACL01_F2AN750___.IES



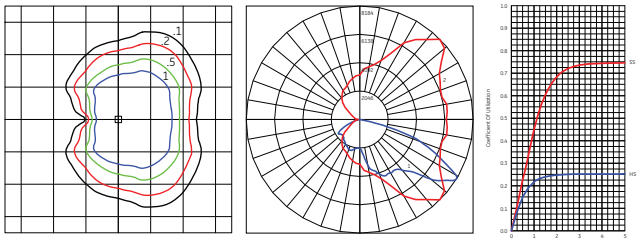
Grid Distance in Units of Mounting Height at 20' Initial Footcandle Values at Grade

Vertical plane through horizontal angle of maximum candlepower at XX°

Vertical plane through horizontal angle of XX°

EACL - Type III - Short

15,300 lumens
EACL01_F3AW750___.IES



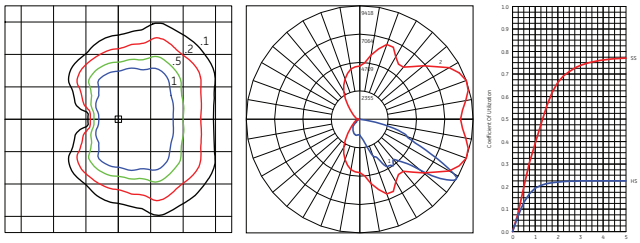
Grid Distance in Units of Mounting Height at 20' Initial Footcandle Values at Grade

Vertical plane through horizontal angle of maximum candlepower at XX°

Vertical plane through horizontal angle of XX°

EACL - Type III - Very Short

15,000 lumens
EACL01_F4AF750___.IES



Grid Distance in Units of Mounting Height at 20' Initial Footcandle Values at Grade

Vertical plane through horizontal angle of maximum candlepower at XX°

Vertical plane through horizontal angle of XX°

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lighting > electrical > energy technology > signs 214-351-6266		

EVOLVE

EACL® Series
LED Area Light/Compact Low Wattage

CUSTOMER NAME _____

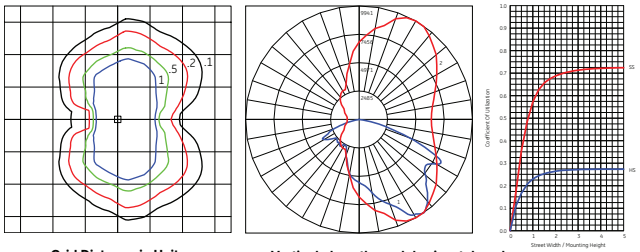
PROJECT NAME _____

DATE _____ TYPE _____

CATALOG NUMBER _____

EACL - Type II- Very Short

20,200 lumens
EACL01_H2AN750___.IES



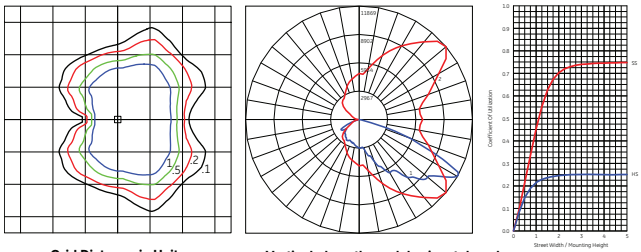
Grid Distance in Units of Mounting Height at 20' Initial Footcandle Values at Grade

Vertical plane through horizontal angle of maximum candlepower at XX°

Vertical plane through horizontal angle of XX°

EACL - Type III - Short

20,400 lumens
EACL01_H3AW750___.IES



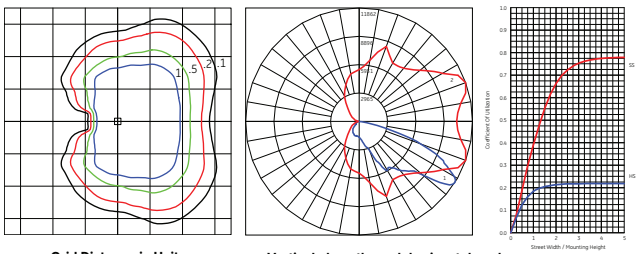
Grid Distance in Units of Mounting Height at 20' Initial Footcandle Values at Grade

Vertical plane through horizontal angle of maximum candlepower at XX°

Vertical plane through horizontal angle of XX°

EACL - Type IV - Very Short

20,000 lumens
EACL01_H4AF750___.IES



Grid Distance in Units of Mounting Height at 20' Initial Footcandle Values at Grade

Vertical plane through horizontal angle of maximum candlepower at XX°

Vertical plane through horizontal angle of XX°

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EVOLVE

EACL® Series

LED Area Light/Compact Low Wattage

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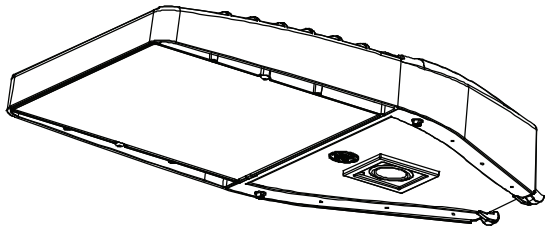
H-Motion Sensing Option

- Recommended Mounting Height: 15-30’ (4.6-9.1m
- For mounting heights exceeding 30 ft., pole mounted sensors are recommended
- Coverage Radius: 15-20’ (4.6-6.1 m).
- Provides 270 degree of coverage (approx 90 is blocked by the pole)
- Default Settings:
  – Output: Occupied - 100%/Unoccupied - 50%
  – Integral PE Sensor.
  – 5 minute post-occupancy time delay, 5 minute dimming ramp-down.
- Fixture power increase of 1W expected with sensor use.

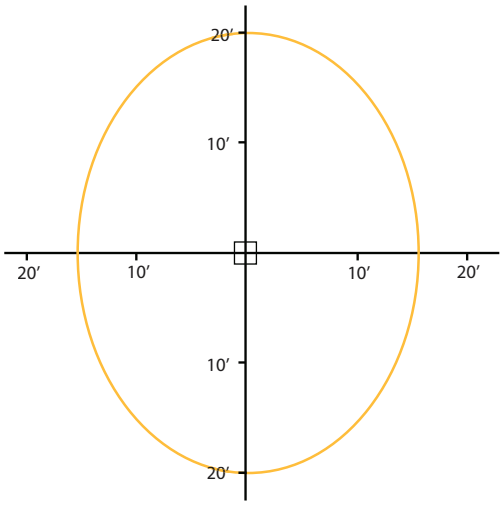


H1/4 - Motion Sensing Option (WattStopper)

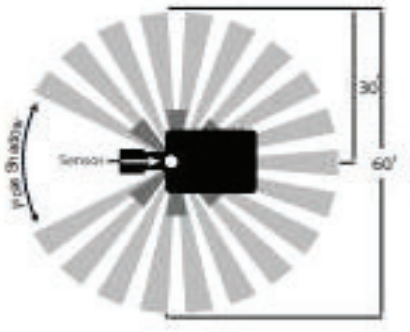
- Recommended Mounting Height: 15-30’ (4.6-9.1m
- For mounting heights exceeding 30 ft., pole mounted sensors are recommended
- Coverage Radius: 15-20’ (4.6-6.1 m).
- Provides 270 degree of coverage (approx 90 is blocked by the pole)
- Default Settings:
  – Output: Occupied - 100%/Unoccupied - 50%
  – PE Sensor: Enabled
  – Ramp/Fade: 5 Minutes/5 Minutes
- Adds < 1W to fixture power rating
- Field programmable using FSIR-100 hand held programmer

H2 - Daintree Enabled Motion Sensing Option

- Recommended Mounting Height: 15-30’ (4.6-9.1m
- For mounting heights exceeding 30 ft., pole mounted sensors are recommended
- Provides a coverage area radius for walking motion of 15-20 ft. (4.57-6.10m)
- Provides 270 degree of coverage (approx 90 is blocked by the pole)
- Default Settings:
  – Output: Occupied - 100%/Unoccupied - 50%
  – PE Sensor: Enabled
  – Ramp/Fade: 5 Minutes/5 Minutes
- Adds < 1W to fixture power rating
- Requires wide area control (WAC)



Sensing Pattern Area Fixture
Up to 30 ft. Mounting Height



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lighting > electrical > energy technology > signs 214-351-6266		

EVOLVE

EACL® Series

LED Area Light/Compact Low Wattage

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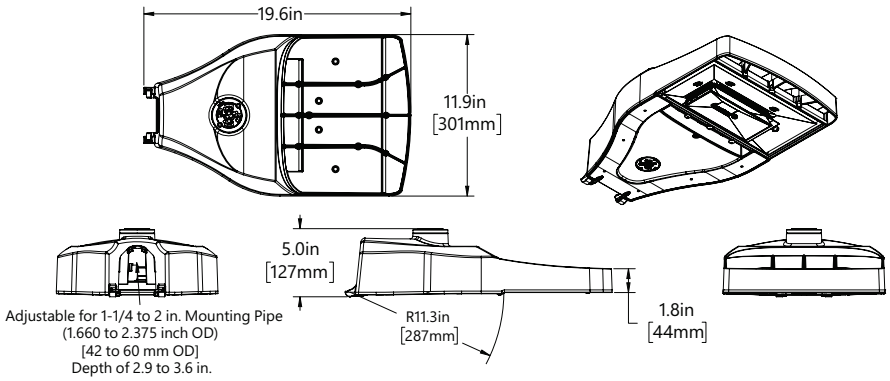
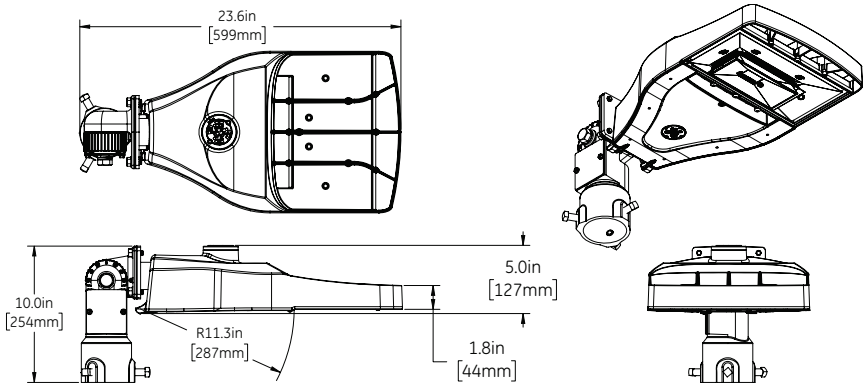
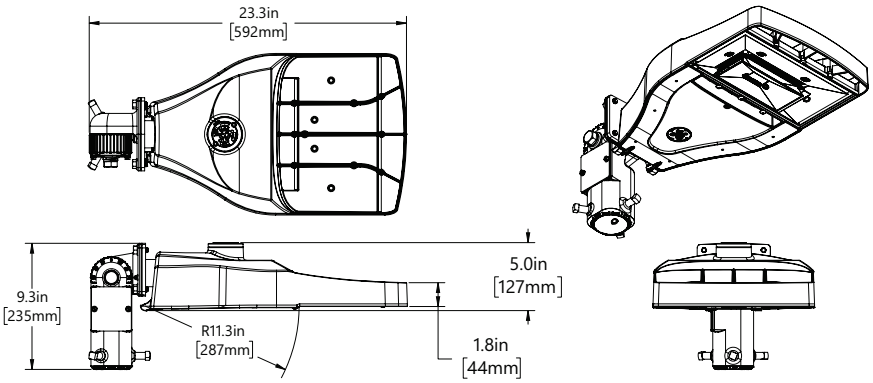
Integral Slipfitter: C1



Knuckle Slipfitter: S1



Knuckle Slipfitter: K1



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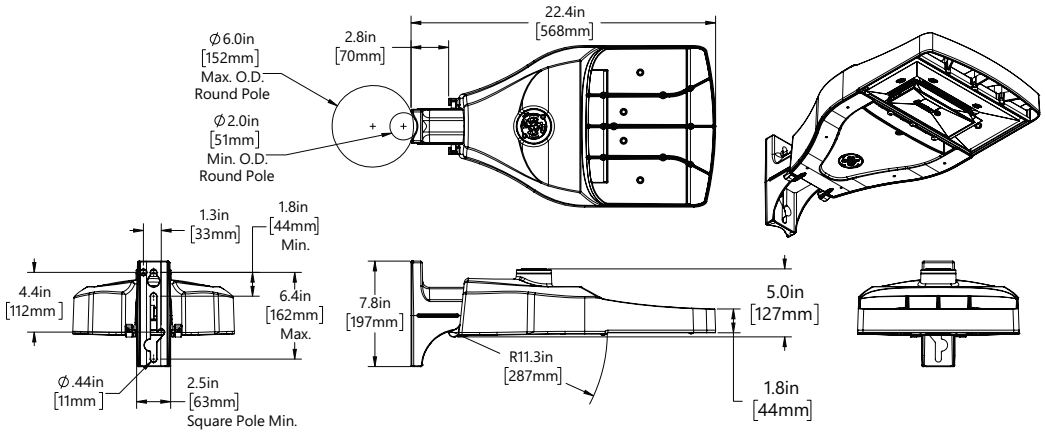
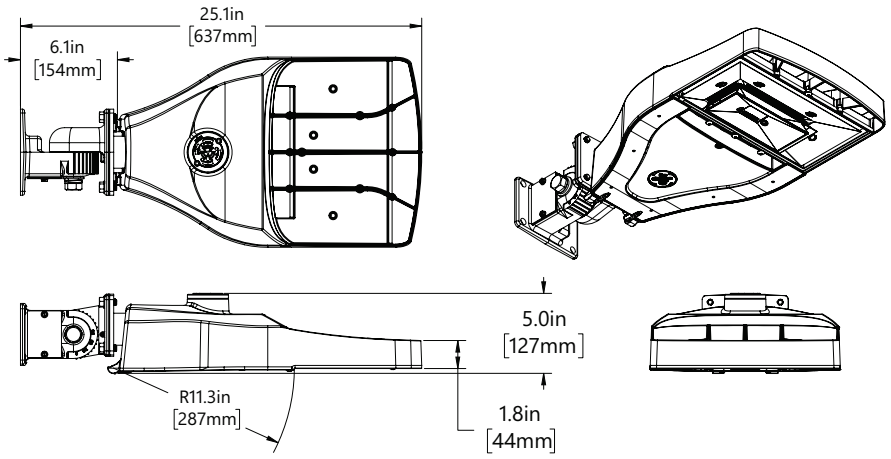
Universal Mounting Arm: D1



Knuckle Wall Mount: V1



Weight

- 18 lbs (8.16 kg) Max depending on configuration

Effective Projected Area

- Integral Slipfitter C1, EPA = 0.31 Min/0.37 Max
- Universal Arm Mount D1, EPA = 0.31 Min / 0.52 Max
- Knuckle Slipfitter S1, K1 downward aim, EPA = 0.46 Min / 0.56 Ma
- Knuckle Slipfitter S1, K1 45° aim, EPA = 0.56 Min / 1.03 Max

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214-351-6266

EVOLVE

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LED Area Light/Compact Low Wattage

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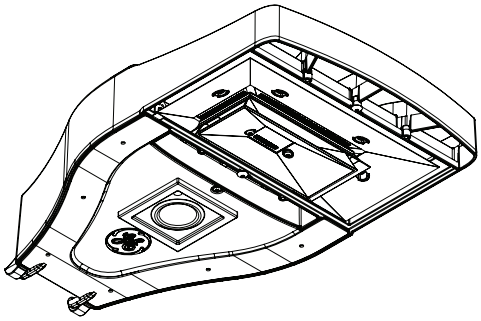

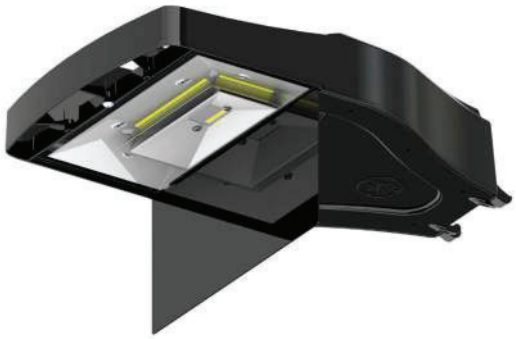

PE Accessories (To Be Order Separately)

SAP NUMBER	PART NUMBER	DESCRIPTION
93123552	WANSI - 277	ANSI 136.41 Dimming PE Danitree Enable, 105-305V
93123553	WANSI - 480	ANSI 136.41 Dimming PE Danitree Enable, 312-530V
93029237	PED-MV-LED-7	ANSI C136.41 Dimming PE, 120-277V
93029238	PED-347-LED-7	ANSI C136.41 Dimming PE, 347V
93029239	PED-480-LED-7	ANSI C136.41 Dimming PE, 480V

SAP NUMBER	PART NUMBER	DESCRIPTION
28299	PEC0TL	STANDARD 120-277V
28294	PEC5TL	STANDARD 480V
80436	PECDTL	STANDARD 347V
73251	SCCL-PECTL	Shorting cap

Back Light Shied

SHIELD ORIENTATIONS	CUTOFF DISTANCE	SHIELD ORDER LOGIC
Back	Long	ELS-EACL-RBL-BLCK

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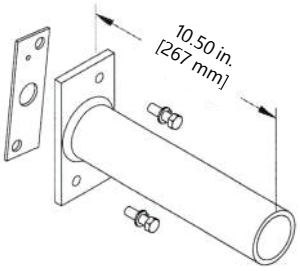
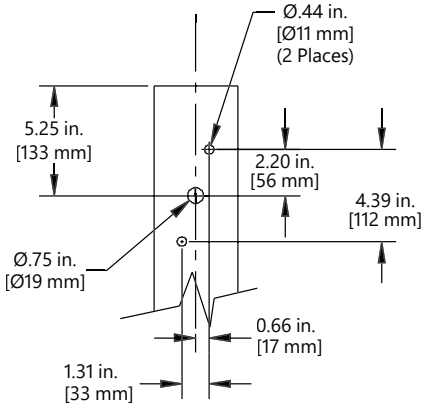
Mounting Arms for Slipfitter Order separately with Mounting Option C1 (Slipfitter)

Square pole mounting arm

• 3.5 to 4.5-inch (89 to 114mm) square (will allow 4 fixtures per pole @ 90 degrees.)

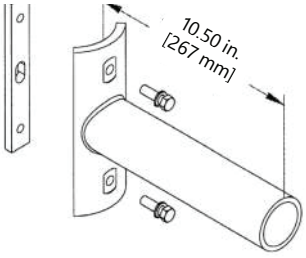


Square pole mounting drilling template



Round Pole Mounting Arm

• 3.5 to 4.5-inch (89 to 114mm) od (will allow 4 fixtures per pole @ 90 degrees.)



Order separately from fixture as catalog number

- RPA-EAMT10BLCK “Black”
- RPA-EAMT10DKBZ “Dark Bronze”
- RPA-EAMT10WHTE “White”
- RPA-EAMT10GRAY “Gray”

Wall Mounting Bracket Adapter Plate

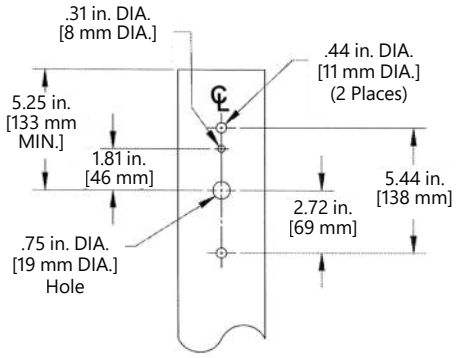
Order seperately from fixture as catalog number WMB-EAMT06

***NOTE: For Wall Mounting, order luminaire with mounting arm: C1 = Slipfitter 2” Pipe (2.378 in. OD) supplied with leads.**

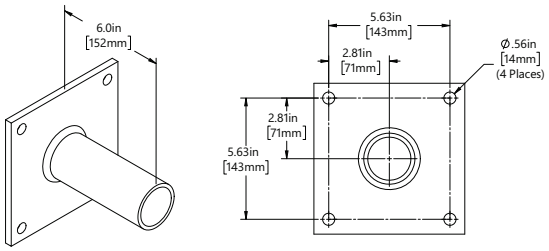
Other mounting patterns are available for retrofit installations. Contact manufacturing for other available mounting patterns.

Round Pole Mounting Drilling Template

• 3.5 TO 4.5-inch (89 to 114mm) OD round pole mounting arm



Wall MOUNTING Bracket Hole Pattern



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Submitting Agency:	Description: XTOR6B-W Project: JPMC WAUWATOSA Notes:	Type: L21-B

FSG lighting > electrical > energy technology > signs
FACILITY SOLUTIONS GROUP
214-351-6266

Lumark

DESCRIPTION

The patented Lumark Crosstour™ MAXX LED wall pack series of luminaries provides low-profile architectural style with super bright, energy-efficient LEDs. The rugged die-cast aluminum construction, back box with secure lock hinges, stainless steel hardware along with a sealed and gasketed optical compartment make Crosstour impervious to contaminants. The Crosstour MAXX wall luminaire is ideal for wall/surface, inverted mount for facade/canopy illumination, perimeter and site lighting. Typical applications include pedestrian walkways, building entrances, multi-use facilities, industrial facilities, perimeter parking areas, storage facilities, institutions, schools and loading docks.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Low-profile LED design with rugged one-piece, die-cast aluminum back box and hinged removable door. Matching housing styles incorporate both a full cutoff and refractive lens design. Full cutoff and refractive lens models are available in 58W, 81W and 102W. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes four 1/2" NPT threaded conduit entry points. The back box is secured by four lag bolts (supplied by others). External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Not recommended for car wash applications.

Optical
Silicone sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Full cutoff models integrate an impact-resistant molded refractive prism optical lens assembly meeting requirements for Dark Sky compliance. Refractive lens models incorporate a molded lens assembly designed for maximum forward throw. Solid state LED Crosstour MAXX luminaries are thermally optimized with eight lumen packages in cool 5000K, neutral 4000K, or warm 3000K LED color temperature (CCT).

Electrical
LED driver is mounted to the die-cast aluminum housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 58W, 81W and 102W models operate in -40°C to 40°C [-40°F to 104°F]. High ambient 50°C [122°F] models available in 58W and 81W models only. Crosstour MAXX luminaires maintain greater than 89% of initial light output after 72,000 hours of operation. Four half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 120-277V 50/60Hz, 480V 60Hz, or 347V 60Hz electrical operation. 480V is compatible for use with 480V Wye systems only.

Emergency Egress
Optional integral cold weather battery emergency egress includes emergency operation test switch (available in 58W and 81W models only), an AC-ON indicator light and a premium extended rated sealed maintenance-free nickel-metal hydride battery pack. The separate emergency lighting LEDs are wired to provide redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

Area and Site Pole Mounting
Optional extruded aluminum 6-1/2" arm features internal bolt guides for supplied twin support rods, allowing for easy positioning of the fixture during installation to pole. Supplied with round plate adapter plate. Optional tenon adapter fits 2-3/8" or 3-1/2" O.D. Tenon.

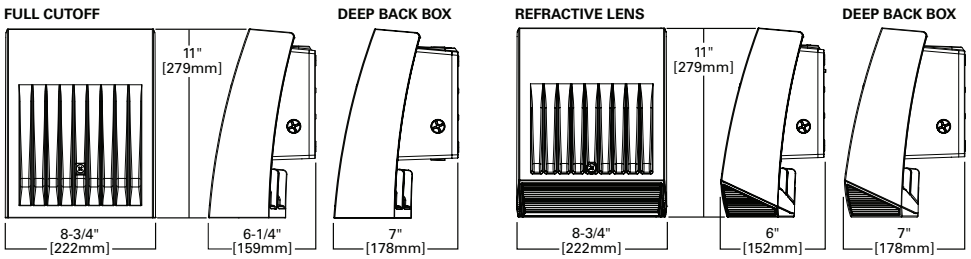
Finish
Crosstour MAXX is protected with a super TGIC carbon bronze or summit white polyester powder coat paint. Super TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty
Five-year warranty.

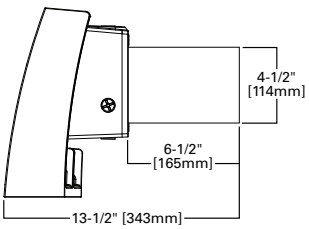
XTOR
CROSSTOUR
MAXX LED

APPLICATIONS:
WALL / SURFACE
INVERTED
SITE LIGHTING

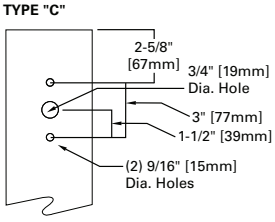
DIMENSIONS



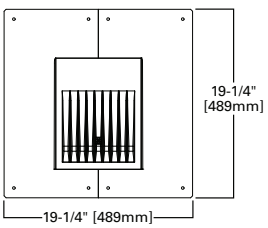
OPTIONAL POLE MOUNT ARM



ARM DRILLING



ESCUTCHEON PLATES



CERTIFICATION DATA

UL/cUL Wet Location Listed
LM79 / LM80 Compliant
ROHS Compliant
NOM Compliant Models
3G Vibration Tested
UL924 Listed (CBP Models)
IP66 Rated
DesignLights Consortium® Qualified*

TECHNICAL DATA

40°C Ambient Temperature
External Supply Wiring 90°C Minimum

EPA

Effective Projected Area (Sq. Ft.):
XTOR6B, XTOR8B, XTOR12B=0.54
With Pole Mount Arm=0.98

SHIPPING DATA:

Approximate Net Weight:
12-15 lbs. [5.4-6.8 kgs.]

EATON
Powering Business Worldwide

*www.designlights.org

Submitting Agency:	Description: XTOR6B-W	Type:
lighting > electrical > energy technology > signs 214-351-6266	Project: JPMC WAUWATOSA Notes:	L21-B

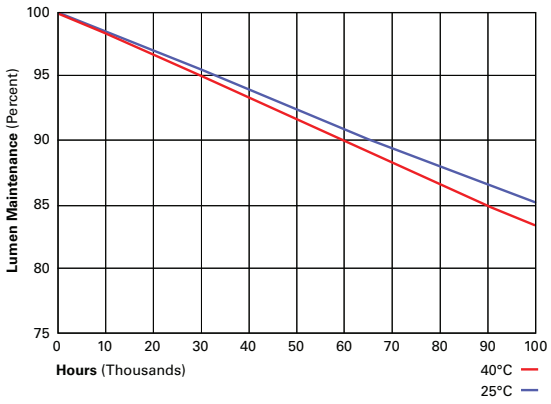
POWER AND LUMENS BY FIXTURE MODEL

58W Series						
LED Information	**XTOR6B**	**XTOR6BRL**	**XTOR6B-W**	**XTOR6BRL-W**	**XTOR6B-Y**	**XTOR6BRL-Y**
Delivered Lumens	6,129	6,225	6,038	6,133	5,611	5,826
B.U.G. Rating	B1-U0-G1	B2-U4-G3	B1-U0-G1	B2-U4-G3	B1-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	58W	58W	58W	58W	58W	58W
81W Series						
LED Information	**XTOR8B**	**XTOR8BRL**	**XTOR8B-W**	**XTOR8BRL-W**	**XTOR8B-Y**	**XTOR8BRL-Y**
Delivered Lumens	8,502	8,635	8,373	8,504	7,748	8,079
B.U.G. Rating	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	81W	81W	81W	81W	81W	81W
102W Series						
LED Information	**XTOR12B**	**XTOR12BRL**	**XTOR12B-W**	**XTOR12BRL-W**	**XTOR12B-Y**	**XTOR12BRL-Y**
Delivered Lumens	12,728	13,458	12,539	13,258	11,861	12,595
B.U.G. Rating	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3	B2-U0-G1	B2-U4-G3
CCT (Kelvin)	5000K	5000K	4000K	4000K	3000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70
Power Consumption (Watts)	102W	102W	102W	102W	102W	102W

EGRESS Information	**XTOR6B, XTOR8B and XTOR12B Full Cutoff CBP Egress LED**	**XTOR6B, XTOR8B and XTOR12B Refractive Lens CBP Egress LED**
Delivered Lumens	509	468
B.U.G. Rating	N.A.	N.A.
CCT (Kelvin)	4000K	4000K
CRI (Color Rendering Index)	65	65
Power Consumption (Watts)	1.8W	1.8W

LUMEN MAINTENANCE

Ambient Temperature	**TM-21 Lumen Maintenance** (72,000 Hours)	**Theoretical L70** (Hours)
XTOR6B Model		
25°C	> 90%	246,000
40°C	> 88%	217,000
50°C	> 88%	201,000
XTOR8B Model		
25°C	> 89%	219,000
40°C	> 87%	195,000
50°C	> 86%	181,000
XTOR12B Model		
25°C	> 89%	222,000
40°C	> 87%	198,000



CURRENT DRAW

Voltage	**Model Series**				
	XTOR6B	**XTOR8B**	**XTOR12B**	**XTOR6B-CBP (Fixture/Battery)**	**XTOR8B-CBP (Fixture/Battery)**
120V	0.51	0.71	0.94	0.60/0.25	0.92/0.25
208V	0.25	0.39	0.52	- -	- -
240V	0.25	0.35	0.45	- -	- -
277V	0.22	0.31	0.39	0.36/0.21	0.50/0.21
347V	0.19	0.25	0.33		- -
480V	0.14	0.19	0.24		- -

Submitting Agency:	Description: XTOR6B-W Project: JPMC WAUWATOSA Notes:	Type: L21-B
FSG lighting > electrical > energy technology > signs 214-351-6266		

ORDERING INFORMATION

Sample Number: XTOR6B-W-WT-PC1

Series [1]	**LED Kelvin Color**	**Housing Color**	**Options** (Add as Suffix)
Full Cutoff **XTOR6B**=58W **XTOR8B**=81W **XTOR12B**=102W **Refractive Lens** **XTOR6BRL**=58W **XTOR8BRL**=81W **XTOR12BRL**=102W	**[Blank]**=Bright White (Standard) 5000K **W**=Neutral, 4000K **Y**=Warm, 3000K	**[Blank]**=Carbon Bronze (Standard) **WT**=Summit White **BK**=Black **BZ**=Bronze **AP**=Grey **GM**=Graphite Metallic **DP**=Dark Platinum	**347V**=347V [2, 3, 4, 5] **480V**=480V [2, 3, 4, 5, 6] **PC1**=Photocontrol 120V [7] **PC2**=Photocontrol 208-277V [7, 8] **PMA**=Pole Mount Arm (C Drilling) with Round Adapter [3, 9] **MS-L20**=Motion Sensor for ON/OFF Operation [2, 3, 10, 11] **MS/DIM-L20**=Motion Sensor for Dimming Operation [2, 3, 10, 11, 12, 13, 14] **CBP**=Cold Weather Battery Pack [2, 3, 15, 16, 17] **HA**=50°C High Ambient [17]

Accessories (Order Separately)	
WG-XTORMX=Crosstour MAXX Wire Guard	**VA1033-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon [18]
PB120V=Field Installed 120V Photocontrol	**VA1034-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon [18]
PB277V BUTTON PC=Field Installed 208-277V Photocontrol [8]	**VA1035-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon [18]
VA1040-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon [18]	**VA1036-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon [18]
VA1041-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon [18]	**VA1037-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon [18]
VA1042-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon [18]	**VA1038-XX**=3@90° Tenon Adapter for 2-3/8" O.D. Tenon [18]
VA1043-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon [18]	**VA1039-XX**=2@120° Tenon Adapter for 2-3/8" O.D. Tenon [18]
VA1044-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon [18]	**EWP/XTORMX**=Escutcheon Wall Plate, Carbon Bronze
VA1045-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon [18]	**EWP/XTORMX-WT**=Escutcheon Wall Plate, Summit White
VA1046-XX=2@120° Tenon Adapter for 3-1/2" O.D. Tenon [18]	**FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [14]

NOTES:

1. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
2. Not available with HA option.
3. Deep back box is standard for 347V, 480V, CBP, PMA, MS-L20 and MS/DIM-L20.
4. Not available with CBP option.
5. Thru-branch wiring not available with HA option or with 347V.
6. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
7. Not available with MS-L20 and MS/DIM-L20 options.
8. Use PC2 with 347V or 480V option for photocontrol. Factory wired to 208-277V lead.
9. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
10. For use in downlight orientation only. Optimal coverage at mounting heights of 9'-20'.
11. 120V thru 277V only.
12. Factory set to 50% power reduction after 15-minutes of inactivity. Dimming driver included.
13. Includes integral photo sensor.
14. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff, and more. Consult your lighting representative at Eaton for more information.
15. 120V or 277V operation only.
16. Operating temperatures -20°C to 25°C.
17. Not available in XTOR12B or XTOR12BRL models.
18. Replace XX with housing color.

STOCK ORDERING INFORMATION

58W Series	**81W Series**	**102W Series**
Full Cutoff		
XTOR6B=58W, 5000K, Carbon Bronze	**XTOR8B**=81W, 5000K, Carbon Bronze	**XTOR12B**=102W, 5000K, Carbon Bronze
XTOR6B-PC1=58W, 5000K, 120V PC, Carbon Bronze	**XTOR8B-PC1**=81W, 5000K, 120V PC, Carbon Bronze	**XTOR12B-PC1**=102W, 5000K, 120V PC, Carbon Bronze
XTOR6B-WT= 58W, 5000K, Summit White	**XTOR8B-WT**=81W, 5000K, Summit White	**XTOR12B-WT**=102W, 5000K, Summit White
XTOR6B-W=58W, 4000K, Carbon Bronze	**XTOR8B-PC2**=81W, 5000K, 208-277V PC, Carbon Bronze	**XTOR12B-PC2**=102W, 5000K, 208-277V PC, Carbon Bronze
XTOR6B-PMA= 58W, 5000K, Pole Mount Arm, Carbon Bronze	**XTOR8B-PMA**=81W, 5000K, Pole Mount Arm, Carbon Bronze	**XTOR12B-PMA**=102W, 5000K, Pole Mount Arm, Carbon Bronze
XTOR6B-W-PMA=58W, 4000K, Pole Mount Arm, Carbon Bronze	**XTOR8B-W**=81W, 4000K, Carbon Bronze	**XTOR12B-W**=102W, 4000K, Carbon Bronze
XTOR6B-PC2= 58W, 5000K, 208-277V PC, Carbon Bronze	**XTOR8B-W-PC1**=81W, 4000K, 120V PC, Carbon Bronze	**XTOR12B-W-PC1**=102W, 4000K, 120V PC, Carbon Bronze
XTOR6B-W-PC2=58W, 4000K, 208-277V PC, Carbon Bronze	**XTOR8B-W-PC2**=81W, 4000K, 208-277V PC, Carbon Bronze	**XTOR12B-W-PC2**=102W, 4000K, 208-277V PC, Carbon Bronze
XTOR6B-W-PC1=58W, 4000K, 120V PC, Carbon Bronze	**XTOR8B-W-PMA**=81W,4000K, Pole Mount Arm, Carbon Bronze	**XTOR12B-W-PMA**=102W,4000K, Pole Mount Arm, Carbon Bronze
Refractive Lens		
XTOR6BRL=58W, 5000K, Refractive Lens, Carbon Bronze	**XTOR8BRL**=81W, 5000K, Refractive Lens, Carbon Bronze	**XTOR12BRL**=102W, 5000K, Refractive Lens, Carbon Bronze
XTOR6BRL-PC1=58W, 5000K, Refractive Lens, 120V PC, Carbon Bronze	**XTOR8BRL-PC1**=81W, 5000K, Refractive Lens, 120V PC, Carbon Bronze	**XTOR12BRL-PC1**=102W, 5000K, Refractive Lens, 120V PC, Carbon Bronze
XTOR6BRL-WT=58W, 5000K, Refractive Lens, Summit White	**XTOR8BRL-WT**=81W, 5000K, Refractive Lens, Summit White	**XTOR2BRL-WT**=102W, 5000K, Refractive Lens, Summit White
XTOR6BRL-W=58W, 4000K, Refractive Lens, Carbon Bronze	**XTOR8BRL-PC2**=81W, 5000K, Refractive Lens, 208-277V PC, Carbon Bronze	**XTOR12BRL-PC2**=102W, 5000K, Refractive Lens, 208-277V PC, Carbon Bronze
XTOR6BRL-PMA=58W, 5000K, Refractive Lens, Pole Mount Arm, Carbon Bronze	**XTOR8BRL-PMA**=81W, 5000K, Refractive Lens, Pole Mount Arm, Carbon Bronze	**XTOR12BRL-PMA**=102W, 5000K, Refractive Lens, Pole Mount Arm, Carbon Bronze
XTOR6BRL-W-PMA=58W,4000K, Refractive Lens, Pole Mount Arm, Carbon Bronze	**XTOR8BRL-W**=81W, 4000K, Refractive Lens, Carbon Bronze	**XTOR12BRL-W**=102W, 4000K, Refractive Lens, Carbon Bronze
XTOR6BRL-PC2=58W, 5000K, Refractive Lens, 208-277V PC, Carbon Bronze	**XTOR8BRL-W-PC1**=81W, 4000K, Refractive Lens, 120V PC, Carbon Bronze	**XTOR12BRL-W-PC1**=102W, 4000K, Refractive Lens, 120V PC, Carbon Bronze
XTOR6BRL-W-PC2=58W, 4000K, Refractive Lens, 208-277V PC, Carbon Bronze	**XTOR8BRL-W-PC2**=81W, 4000K, Refractive Lens, 208-277V PC, Carbon Bronze	**XTOR12BRL-W-PC2**=102W, 4000K, Refractive Lens, 208-277V PC, Carbon Bronze
XTOR6BRL-W-PC1=58W, 4000K, Refractive Lens, 120V PC, Carbon Bronze	**XTOR8BRL-W-PMA**=81W,4000K, Refractive Lens, Pole Mount Arm, Carbon Bronze	**XTOR12BRL-W-PMA**=102W,4000K, Refractive Lens, Pole Mount Arm, Carbon Bronze

Submitting Agency:	Description: ECLS01_T5SM740-SM-WH-TE Project: JPMC WAUWATOSA Notes:	Type: NL6-A

FSG lighting > electrical > energy technology > signs
FACILITY SOLUTIONS GROUP
214-351-6266

EVOLVE

CUSTOMER NAME _____

PROJECT NAME _____

DATE _____ TYPE _____

CATALOG NUMBER _____

ECLS Soffit

LED Canopy Light

The Evolve® Canopy LED Soffit (ECLS) offers energy efficiency and quality of light in a sleek low-profile look and style. The ECLS features a diffused aperture which spreads the source lumens for even light distribution and low glare. To be used for sealed deck applications only (enclosed canopy or soffit).

Construction

Housing:	Aluminum die cast enclosure. Integral heat sink for maximum heat transfer
Lens:	Impact resistant tempered glass
Paint:	Corrosion resistant polyester powder paint, minimum 2.0 mil thickness Standard = Black, Dark Bronze Gray, White (RAL & custom colors available)
Weight:	10 lbs (4.5 kg) - 12.5 lbs (5.7 kg)

Optical System

Lumens:	3,600 - 7,100
Distribution:	Symmetric Medium
Efficacy:	119 - 138 LPW
CCT:	3000K, 4000K, 5000K
CRI:	≥70

Electrical

Input Voltage:	120-277V & 347V
Input Frequency:	50/60Hz
Power Factor:	>90% at rated watts
Total Harmonic Distortion:	<20% at rated watts
Surge Protection:	Standard Surge 6kV/3kA

***Per ANSI C136.2-**

Warranty

5 Year (Standard)

Lumen Maintenance

Projected Lxx per IES TM-21-11 at

LUMEN CODES	LXX(10K) @ HOURS		
	25,000 HR	50,000 HR	60,000 HR
T5	L96	L92	L91
A5	L95	L93	L92
B5	L95	L93	L92

Note: Projected Lxx based on LM80 (≥ 10,000 hour testing). Accepted Industry tolerances apply to initial luminous flux and lumen maintenance measurements.

Luminaire Ambient Temperature Factor

AMBIENT TEMP (°C)	INITIAL FLUX FACTOR	AMBIENT TEMP (°C)	INITIAL FLUX FACTOR
10	1.02	30	0.99
20	1.01	40	0.98
25	1.00	50	0.97

Ratings

Operating Temperature:	-40°C to 50°C
Vibration:	1.5G per Per ANSI C136.31-2010:
LM-79:	Testing in accordance with IESNA Standards

Controls

Dimming:	Standard - 0-10V
Sensors:	Motion with Integrated Photoelectric control, Daintree Compatible

IP65 IK08

Not all product variations listed on this page are DLC qualified. Visit www.designlights.org/search to confirm qualifications.

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Submitting Agency:	Description: ECLS01_T5SM740-SM-WH-TE Project: JPMC WAUWATOSA Notes:	Type: NL6-A

FSG FACILITY SOLUTIONS GROUP lighting > electrical > energy technology > signs 214-351-6266

EVOLVE

ECLS Soffit
LED Canopy Light

CUSTOMER NAME _____

PROJECT NAME _____

DATE _____ TYPE _____

CATALOG NUMBER _____

Ordering Information

ECLS 01 SM 7

____ __ _ __ __ _ __ _ _ __ ____ ____

PROD. ID	GEN	VOLTAGE	OPTIC CODE	DISTRIBUTION[3]	CRI (MIN)	CCT	DIMMING	CONTROLS	MOUNTING	COLOR	OPTIONS
E = Evole	01	0 = 120-277V	T5 = 3,700 lm	SM = Symmetric Medium	7 = 70	30 = 3000K	1 = None Only Controls '1' available	1 = None	JM = J-Box Mount	BLCK = Black	SC = Side Conduit Holes
C = Canopy		D = 347V[1]	A5 = 5,400 lm			40 = 4000K	A = Wired to Control	A = Motion Sensor IR Program[2]	PM = Pendant Mount	DKBZ = Dark Bronze	XXX = Special Options
LS = Soffit			B5 = 7,100 lm			50 = 5000K	D = External Wired 0-10V/Leads Only Controls '1' available	B = Daintree Motion Sensor[2]	RM = Reccessed Mount	GRAY = Gray	Y = Coastal Finish[3]
									SM = Surface Mount		
									SB = Surface Mount w/ Beauty Plate	WHTE = White	

[1] **Not Available with Optical Code T5**
[2] **Requires Dimming Option A**
[3] **Reccomended for installations within 750 feet from coast. Lead time varies, check with factory.**

OPTICAL CODE	DIST CODE	TYPICAL LUMENS			TYPICAL SYSTEM WATTAGE	
		3000K	4000K	5000K	120-277V	347-480V
T5		3600	3700	3700	29	N/A
A5	SM	5200	5400	5400	39	43
B5		6900	7100	7100	54	58

For additional information on ECLS IES files, please click the following link: ECLS IES Files

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Submitting Agency:	Description: ECLS01_T5SM740-SM-WH-TE Project: JPMC WAUWATOSA Notes:	Type: NL6-A

FSG lighting > electrical > energy technology > signs
214-351-6266

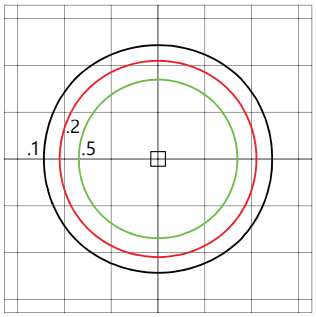
EVOLVE

ECLS Soffit
LED Canopy Light

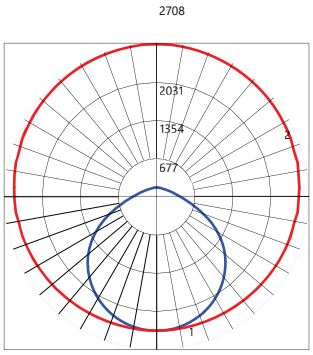
CUSTOMER NAME _____
PROJECT NAME _____
DATE _____ TYPE _____
CATALOG NUMBER _____

ECLS - Symmetric Medium

7,100 lumens, 5000K
ECLS01_B5SM750_.IES



- Mounting Height at 15'
- Initial Footcandle at Grade



- Vertical plane through horizontal angle of Max. Cd at 90°
- Horizontal cone through vertical angle of Max. Cd at 1°

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Submitting Agency:	Description: ECLS01_T5SM740-SM-WH-TE Project: JPMC WAUWATOSA Notes:	Type: NL6-A

lighting > electrical > energy
technology > signs
214-351-6266

EVOLVE

ECLS Soffit
LED Canopy Light

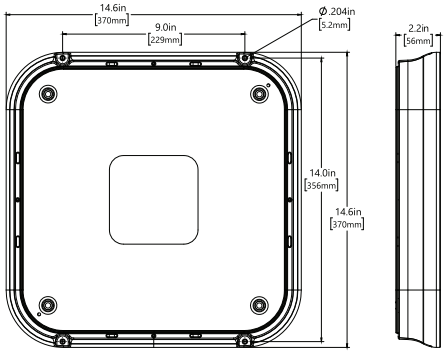
CUSTOMER NAME _____

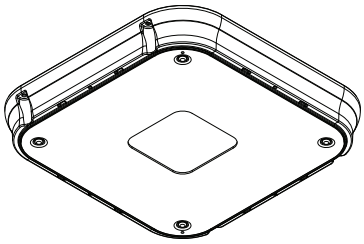
PROJECT NAME _____

DATE _____ TYPE _____

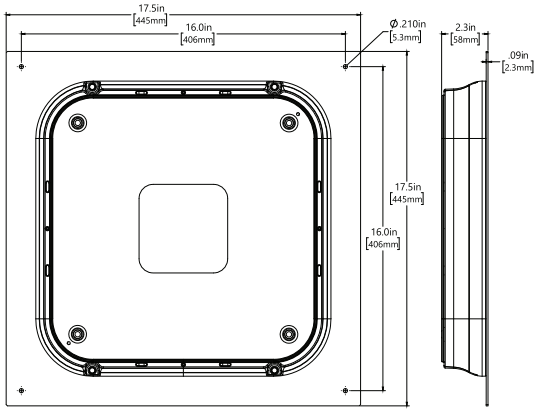
CATALOG NUMBER _____

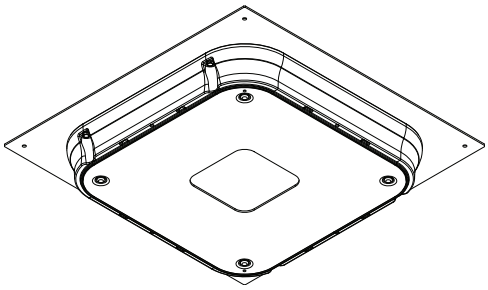
Surface Mount: SM
TOTAL WEIGHT (LBS.): 10.1



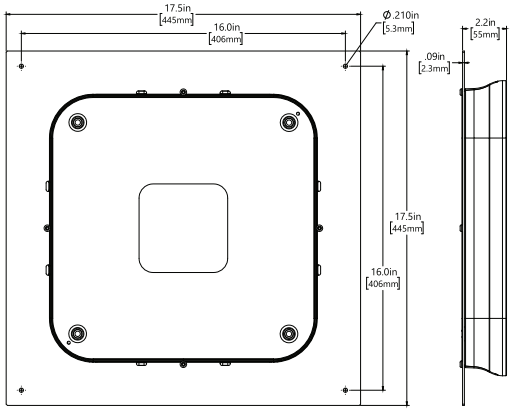


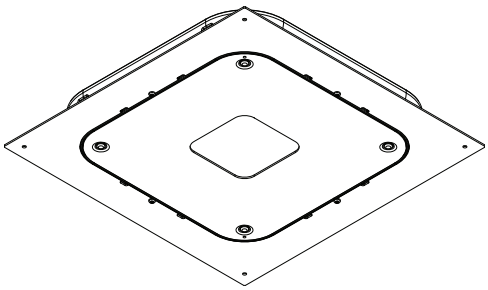
Surface Mount with Beauty Plate: SB
TOTAL WEIGHT (LBS.): 10.7





Recessed Mount: RM
TOTAL WEIGHT (LBS.): 12.4





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Submitting Agency:	Description: ECLS01_T5SM740-SM-WH-TE Project: JPMC WAUWATOSA Notes:	Type: NL6-A

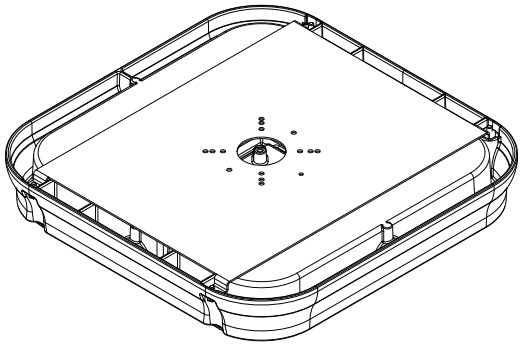
FSG lighting > electrical > energy technology > signs
FACILITY SOLUTIONS GROUP
214-351-6266

EVOLVE

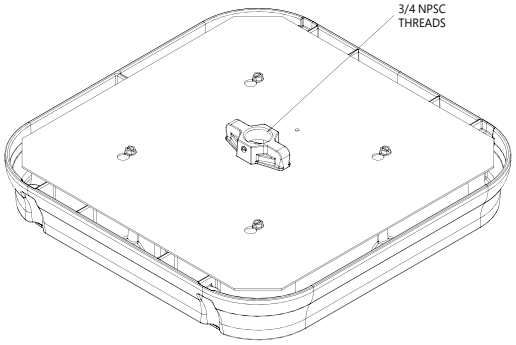
ECLS Soffit
LED Canopy Light

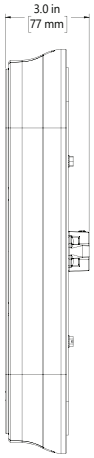
CUSTOMER NAME _____
PROJECT NAME _____
DATE _____ TYPE _____
CATALOG NUMBER _____

J-Box Mount (JM) for 3" or 4" J-box
Total Weight (lbs.): 11.1

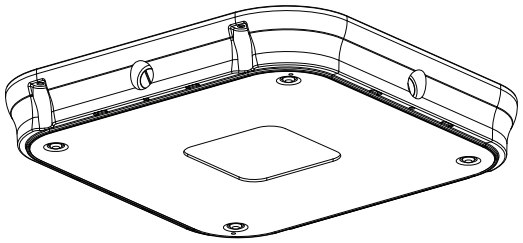


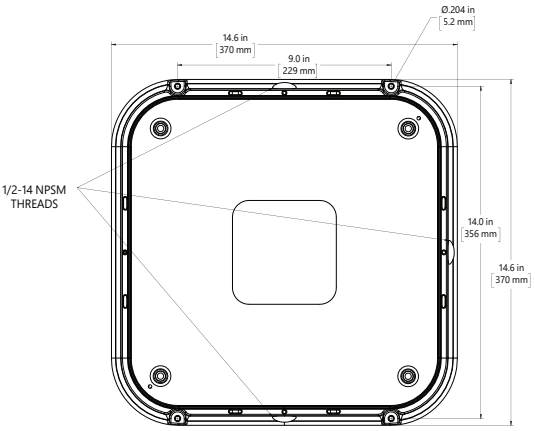
Pendant Mount (PM) *for rigid conduit only
Total Weight (lbs.): 11.5





Side Conduit Holes: SC
Total Weight (lbs.): XX





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Submitting Agency:	Description: ECLS01_T5SM740-SM-WH-TE Project: JPMC WAUWATOSA Notes:	Type: NL6-A

FSG lighting > electrical > energy technology > signs
FACILITY SOLUTIONS GROUP
214-351-6266

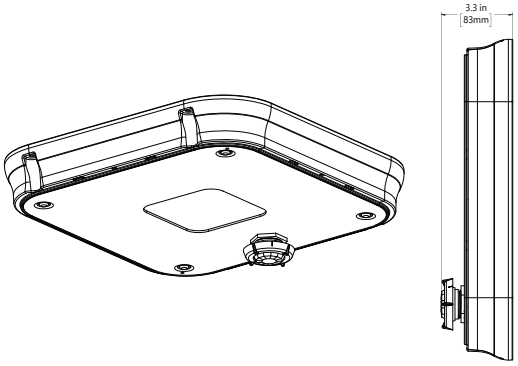
EVOLVE

ECLS Soffit
LED Canopy Light

CUSTOMER NAME _____
PROJECT NAME _____
DATE _____ TYPE _____
CATALOG NUMBER _____

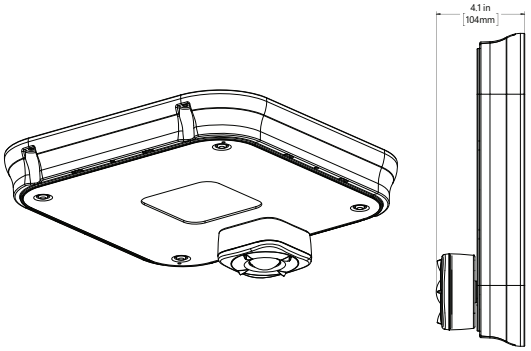
A Motion Sensing Option - Wattstopper: Sensor FSP-211, Lens FSP-L2

Recommended Mounting Height:	8-25’
Coverage Radius:	15-20’ (4.6-6.1 m)
Lateral Coverage	360°
Default Settings:	
Output:	Occupied - 100% / Unoccupied - 50%
PE Sensor:	Enabled
Ramp/Fade:	5 Minutes/5 Minutes
	Adds < 1W to fixture power rating
	Field programmable using FSIR-100 hand held programmer



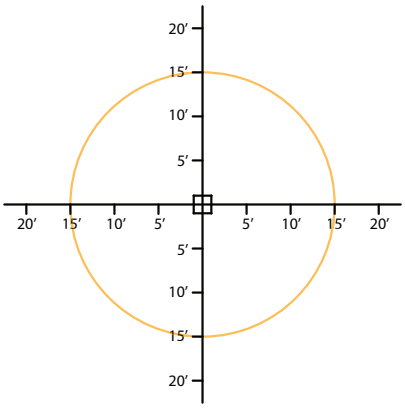
B Motion Sensing Option - Daintree: WHS100-BM

Recommended Mounting Height:	8-25’
Coverage Radius:	15-20’ (4.6-6.1 m)
Lateral Coverage	360°
Default Settings:	
Output:	Occupied - 100%/Unoccupied - 50%
PE Sensor:	Enabled
Ramp/Fade:	5 Minutes/5 Minutes
	Adds < 1W to fixture power rating
	Requires Daintree Enterprise and wide area control (WAC)



Approximate Sensor Pattern for A & B Option

• Canopy Fixture 15 ft. Mounting Height



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Submitting Agency:	Description: ECLS01_T5SM740-SM-WH-TE Project: JPMC WAUWATOSA Notes:	Type: NL6-A

lighting > electrical > energy
technology > signs
214-351-6266

EVOLVE

ECLS Soffit
LED Canopy Light

CUSTOMER NAME _____

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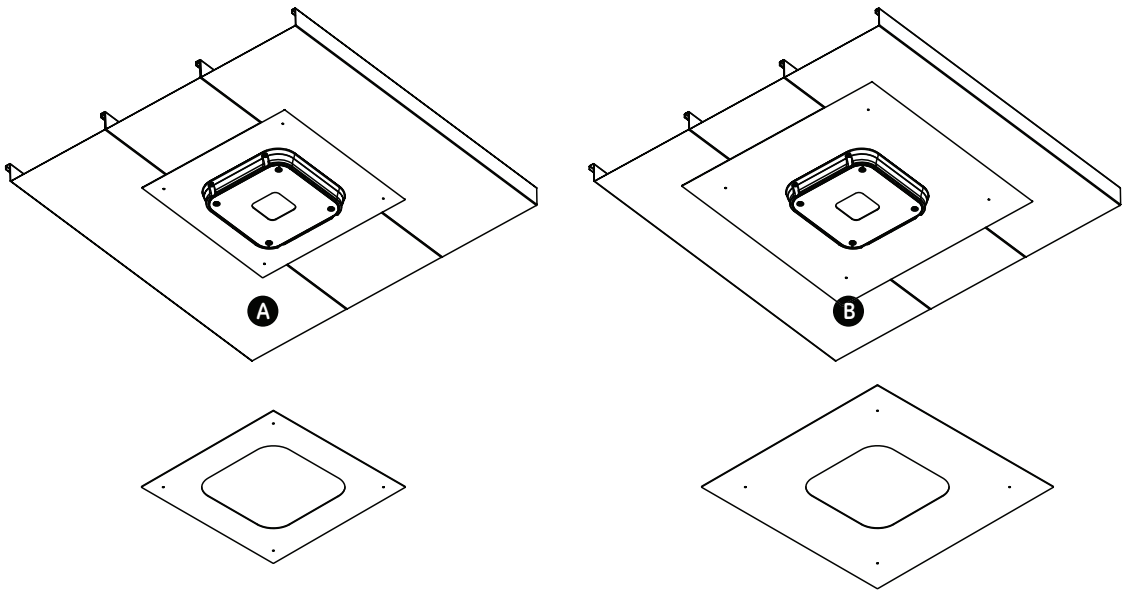

mounting

- J-Box
- Pendant Mount
- Surface Mount
- Surface Mount with 17.5" x 17.5 Beauty Plate
- Reccessed Mount with 17.5" x 17.5 Mounting Plate

Beauty Plates

- 24" & 32" Escutcheon plates designed to cover unsighltly canopy ceilings

PRODUCT	SERIES	DESCRIPTION	COLOR
ECL	E = Escutcheon Plate	1 = 24" x 24" ECLS	BLCK = Black
		2 = 32" x 32" ECLS	DKBZ = Dark Bronze
		3 = 24" x 24" ECLP	WHTE = White
		4 = 32" x 32" ECLP	

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Submitting Agency:	Description: 9004-W2-RW-LED3090-W-BK-L1-UNV	Type:
lighting > electrical > energy technology > signs 214-351-6266	Project: JPMC WAUWATOSA Notes:	W1

DESCRIPTION

Lanterra 9004-W1 (Up or Down) and 9004-W2 (Up and Down) are 4.25" O.D., line voltage cylinder fixtures with dimmable LED. The luminiare comes in various mountings, surface mount with integral driver in the housing, remote driver mount with round and square wall plates and square wall integral driver, all of which can be mounted over standard 4 inch j-box. The luminaire also comes with various field replaceable optics. It also comes with various lens, louvers and colors or dichroic filters, which can combine up to two at once to create multiple lighting effects. The fixture may be used indoors or outdoors and carries IP66 rating.

Lumiere

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Material
Housing, hood and mounting stem are precision-machined from corrosion resistant billet stock 6061-T6 aluminum.

Finish
Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS complaint chemical film undercoating and polyester powder coat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available.

Hood
Hood is removable and accepts up to two internal accessories at once (lenses, louvers and filters) to achieve multiple lighting effects. Weep holes prevents water and mineral stains from collecting on the lens, even in the straight up position. The flush lens design reduces fixture length, minimizes debris collection and prevents water and mineral stains from collecting on the lens.

Gasket
Housing and hood are sealed with a high temperature silicone O-ring gasket to prevent water intrusion.

Lens
Tempered glass lens, factory sealed with high temperature silicone O-ring to prevent water intrusion and breakage due to thermal stock.

Hardware
Stainless steel hardware is standard to provide maximum corrosion resistance.

Electrical
Long life LED system coupled with electronic driver (120-277V/50-60Hz) is compatible with TRIAC (Trailing Edge), ELV (Forward phase) and 0-10V dimming to deliver optical performance. Light can be dimmed from 100-1% while maintaining constant CCT. It will operate in -30°C to 50°C unless noted otherwise. The driver incorporates surge protection. LED's are available in 2700K, 3000K, 3500K at 90CRI and 97CRI, 4000K at 80CRI and 97CRI, 5000K at 80CRI and are industry leading high output with 87% lumen maintenance at 60,000hrs.

Compliance
Components are UL recognized and luminaires are cULus listed for 50˚C ambient environments unless noted otherwise, wet location listed, and ROHS compliant. IP66 Rated. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

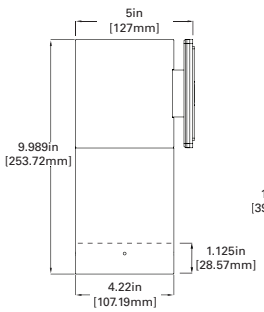
Warranty
Lumiere warrants the Lanterra series of fixtures against defects in material and workmanship for five (5) years. Auxiliary equipment such as LED drivers carries the original manufacturer's warranty.

Lanterra 9004

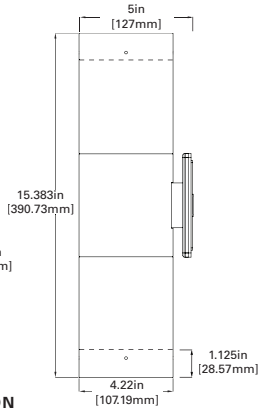
LED
INTERIOR / EXTERIOR
CYLINDER FLOOD LIGHT
CERTIFICATION DATA
cULus - 1598
Wet Location Listed - IP66
LM79/LM80 Compliant
ROHS Compliant
10W LED, L70/102,000@25° Celcius
20W LED, L70/102,000@25° Celcius
30W LED, L70/102,000@25° Celcius

DIMENSIONS

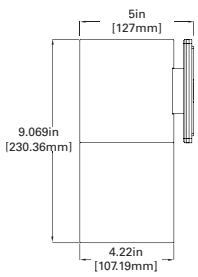
9004-W1-RW



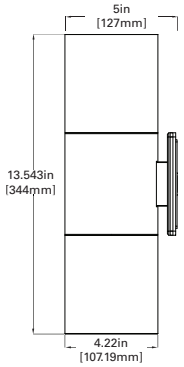
9004-W2-RW



9004-W1-FL



9004-W2-FL



ORDERING INFORMATION

SERIES	DIRECTION	HOOD	LED CCT & CRI	FIELD REPLACEABLE OPTIC 1	FIELD REPLACEABLE OPTIC 2 [1]	FINISH	LIGHT LEVEL	VOLTAGE	MOUNTING	OPTIONS
9004	W1 Up or Down W2 [5] Up and Down	RW Standard-Recessed Lens with weep holes - Outdoor RI Recessed Lens with no weep holes - Indoor FL Flush lens hood	**Standard CRI** LED2790 - 2700K, 90 CRI LED 3090 - 3000K, 90 CRI LED 3590 - 3500K, 90 CRI LED 4080 - 4000K, 80 CRI LED 5080 - 5000K, 80 CRI **Premium CRI** LED 2797 - 2700K, 97 CRI LED 3097 - 3000K, 97 CRI LED 3597 - 3500K, 97 CRI LED 4097 - 4000K, 97 CRI	S Spot M Medium F Flood W Wide Flood	S Spot M Medium F Flood W Wide Flood	**Standard Paint Finish** BK Black BZ Bronze CS City Silver WT White	L1 Light Level 1 (10W) L2 Light Level 2 (20W) L3 Light Level 3 (30W)	UNV 120-277V	Surface Mount - Wall, Ceiling, Ground RSM Round Surface Mount- mounts directly to junction box Thermal Limitations (unless otherwise noted 50C) 9004-W1-xxx-L3-xxx-RSM (45C) 9004-W2-xxx-L3-xxx-RSM (35C) 9004-W2-xxx-LC2-xxx-RSM (40C) Remote Driver Housing WRR [6] Remote Driver Housing - Round Wall Plate WRS [6] Remote Driver Housing - Square Wall Plate Thermal Limitations (unless otherwise noted 50C) 9004-W1-xxx-L3-xxx-WRx (45C) 9004-W2-xxx-L3-xxx-WRx (35C) 9004-W2-xxx-LC2-xxx-WRx (40C) Integral Driver Mount WIS [2,3] Wall Integral Driver Plate Thermal Limitations (unless otherwise noted 45C) 9004-(W1,W2)-xx-L1-xx-WIS (50C)	SVPD2 [4] Standalone integral sensor

Notes: 1. Only available for double head option (W2)
2. 9004-W1 not available in L3
3. 9004-W2 not available in L2, L3
4. Only available for Single head, Up or down (W1) with RSM only
5. W2 doubles input wattage listed
6. Remote Driver distance up to 60', For L3 (30W) remote distance up to 15'

Submitting Agency:	Description: 9004-W2-RW-LED3090-W-BK-L1-UNV	Type:
lighting > electrical > energy technology > signs 214-351-6266	Project: JPMC WAUWATOSA Notes:	W1

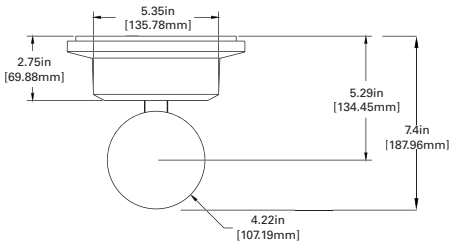
ACCESSORIES - ORDER SEPARATELY

ACCESSORIES								OPTICS	
ISHH01LUM	Programming Remote for sensor	**Filters**		**Lens**		**Louver**		LLR-S-3-4	15° Spot
ISHH02LUM	Personal Control Remote for sensor	F71-4	Peach Dichroic	LSL-4	Linear Spread Lens	LVR-4	45° Hex Cell Louver	LLR-M-3-4	25° Medium
		F72-4	Amber Dichroic	DIF-4	Diffused Lens			LLR-F-3-4	36° Flood
		F73-4	Green Dichroic	OSL-4	Overall Spread Lens			LLR-W-3-4	60° Wide Flood
		F74-4	Medium Blue					LLR-K-3-4	Spot, Medium, Flood, Wide Flood Optic Kit
		F75-4	Yellow Dichroic						
		F76-4	Red Dichroic						
		F77-4	Dark Blue Dichroic						
		F78-4	Light Blue Dichroic						
		F79-4	Neutral Density Dichroic						
		F80-4	Magenta Dichroic						
		F22-4	Red Color						
		F33-4	Blue Color						
		F44-4	Green Color						
		F55-4	Yellow Color						
		F66-4	Mercury Color						

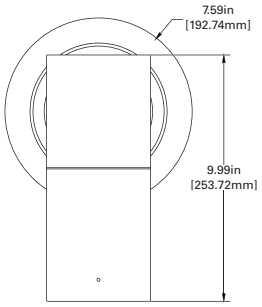
MOUNTINGS

ROUND SURFACE MOUNT (RSM)

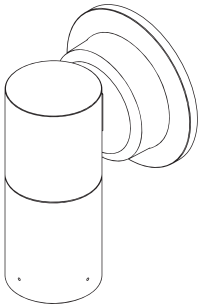
RSM-W1 (Up or down)



TOP VIEW



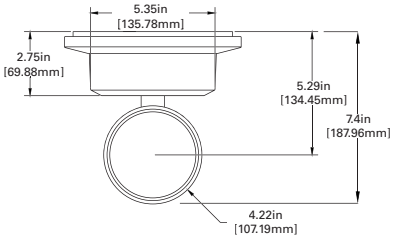
FRONT VIEW



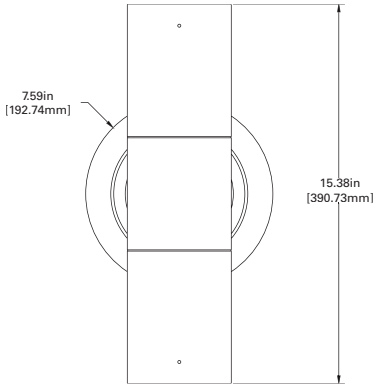
ISO VIEW

ROUND SURFACE MOUNT (RSM)

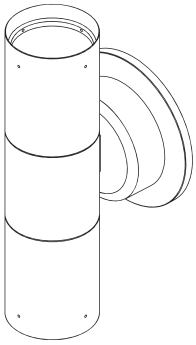
RSM-W2 (Up and down)



TOP VIEW



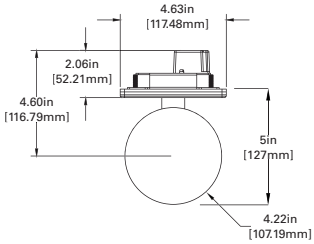
FRONT VIEW



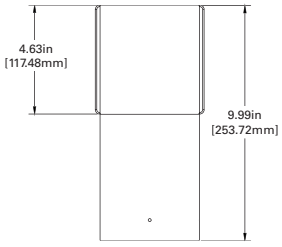
ISO VIEW

WALL INTEGRAL DRIVER PLATE (WIS)

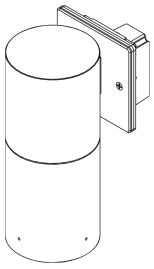
WIS-W1 (Up or down)



TOP VIEW



FRONT VIEW



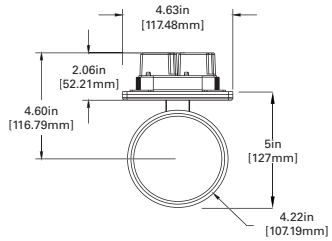
ISO VIEW

Submitting Agency:	Description: 9004-W2-RW-LED3090-W-BK-L1-UNV	Type:
lighting > electrical > energy technology > signs 214-351-6266	Project: JPMC WAUWATOSA Notes:	W1

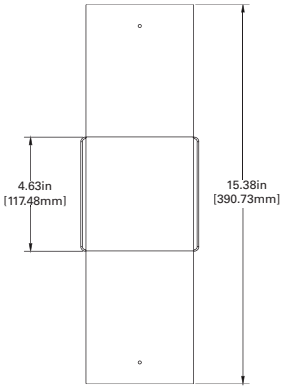
LANTERRA 9004

WALL INTEGRAL DRIVER PLATE (WIS)

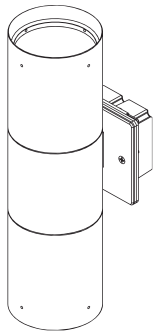
WIS-W2 (Up and down)



TOP VIEW



FRONT VIEW

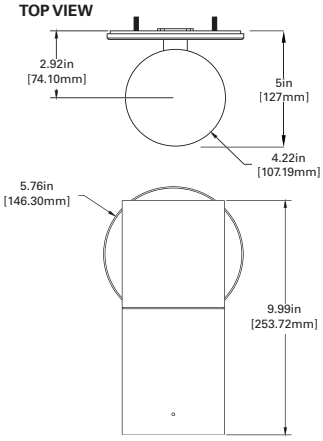


ISO VIEW

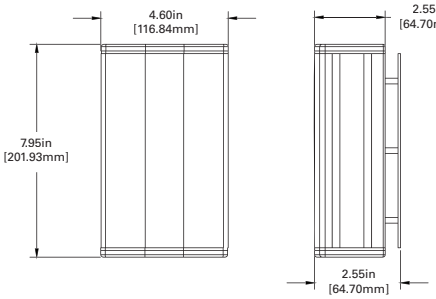
REMOTE DRIVER HOUSING ROUND WALL (WRR)

WRR-W1 (Up or down), as shown
WRS-W1 (Square option also available)

TOP VIEW

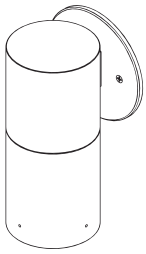


FRONT VIEW



Remote Driver distance up to 60',
For L3 remote distance up to 15'

REMOTE BOX

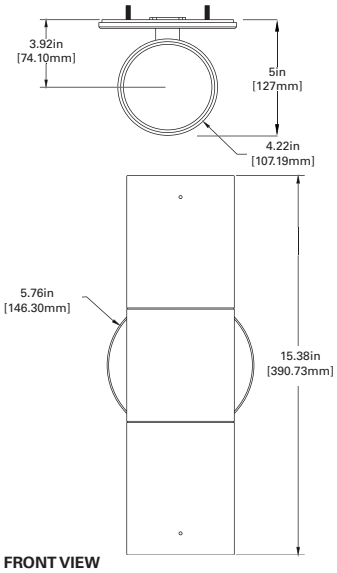


ISO VIEW

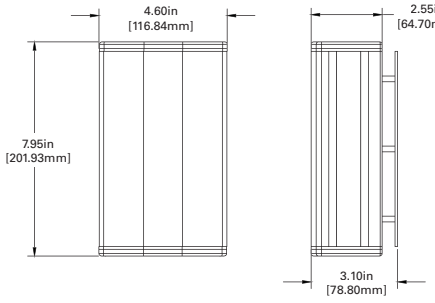
REMOTE DRIVER HOUSING ROUND WALL (WRR)

WRR-W2 (Up and down)
WRS-W2 (Square option also available)

TOP VIEW

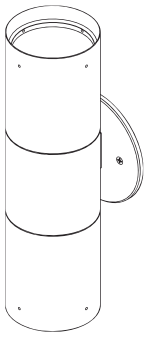


FRONT VIEW



Remote Driver distance up to 60',
For L3 remote distance up to 15'

REMOTE BOX



ISO VIEW

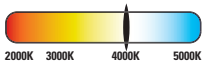
Submitting Agency:	Description: 9004-W2-RW-LED3090-W-BK-L1-UNV	Type:
lighting > electrical > energy technology > signs 214-351-6266	Project: JPMC WAUWATOSA Notes:	W1

PHOTOMETRICS

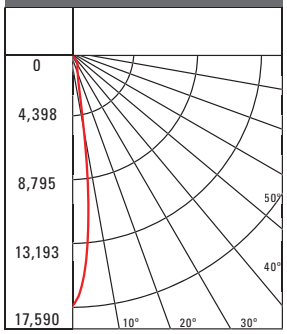
Test Number	P29496
Lumcat	9004-[W1]-X-FL-LED4080-S-BK-L3-UNV
Lumens	2801 Lm
Watts	28.6 W
LPW	97.9 Lm/W
CCT	4000K
SC (0/90/45)	0.27 / 0.27 / 0.27
Beam Angle	15.9°

COLOR METRIC SUMMARY

TM-30-15	Rf = 82.5 Rg = 94.3
CRI/CIE	Ra = 83.1 R9 = 11.4



CANDLE POWER DISTRIBUTION



CONE OF LIGHT

Horizontal Illuminance on Floor			
MH	FC	L	W
2'	4397.5	0.4	0.4
4'	1099.4	1	1
6'	488.6	1.6	1.6
8'	274.8	2	2
10'	175.9	2.6	2.6
15'	78.2	4	4
20'	44	5.4	5.4
30'	19.5	8.2	8.2
40'	11	10.8	10.8

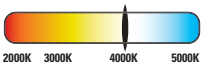
CANDELA TABLE

Angle	0-deg
0	17590
5	13640
10	5616
15	2329
20	1555
30	1057
40	161
50	11
60	4
70	1
80	0
90	0

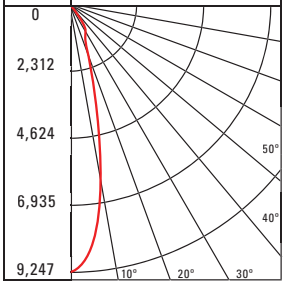
Test Number	P29497
Lumcat	9004-[W1]-X-FL-LED4080-M-BK-L3-UNV
Lumens	2826 Lm
Watts	28.6 W
LPW	98.8 Lm/W
CCT	4000K
SC (0/90/45)	0.43 / 0.43 / 0.44
Beam Angle	25.5°

COLOR METRIC SUMMARY

TM-30-15	Rf = 82.5 Rg = 94.3
CRI/CIE	Ra = 83.1 R9 = 11.4



CANDLE POWER DISTRIBUTION



CONE OF LIGHT

Horizontal Illuminance on Floor			
MH	FC	L	W
2'	2311.8	0.8	0.8
4'	577.9	1.6	1.6
6'	256.9	2.4	2.4
8'	144.5	3.4	3.4
10'	92.5	4.2	4.2
15'	41.1	6.4	6.4
20'	23.1	8.6	8.6
30'	10.3	12.8	12.8
40'	5.8	17.2	17.2

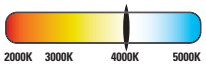
CANDELA TABLE

Angle	0-deg
0	9247
5	8453
10	6140
15	3506
20	1860
30	1098
40	170
50	13
60	4
70	1
80	0
90	0

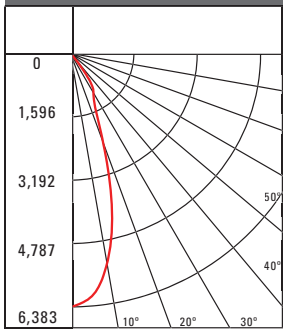
Test Number	P29498
Lumcat	9004-[W1]-X-FL-LED4080-F-BK-L3-UNV
Lumens	2871 Lm
Watts	28.5 W
LPW	100.7 Lm/W
CCT	4000K
SC (0/90/45)	0.58 / 0.58 / 0.56
Beam Angle	35.1°

COLOR METRIC SUMMARY

TM-30-15	Rf = 82.5 Rg = 94.3
CRI/CIE	Ra = 83.1 R9 = 11.4



CANDLE POWER DISTRIBUTION



CONE OF LIGHT

Horizontal Illuminance on Floor			
MH	FC	L	W
2'	1595.8	1	1
4'	398.9	2.2	2.2
6'	177.3	3.4	3.4
8'	99.7	4.6	4.6
10'	63.8	5.8	5.8
15'	28.4	8.6	8.6
20'	16	11.6	11.6
30'	7.1	17.4	17.4
40'	4	23.2	23.2

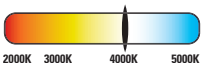
CANDELA TABLE

Angle	0-deg
0	6383
5	6141
10	5345
15	4027
20	2423
30	1153
40	178
50	6
60	4
70	1
80	0
90	0

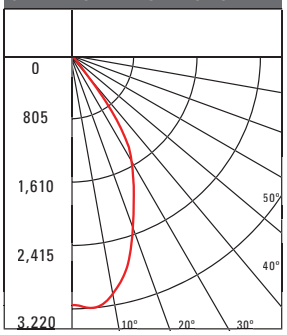
Test Number	P29499
Lumcat	9004-[W1]-X-FL-LED4080-W-BK-L3-UNV
Lumens	2790 Lm
Watts	28.5 W
LPW	97.9 Lm/W
CCT	4000K
SC (0/90/45)	0.86 / 0.86 / 0.91
Beam Angle	58.5°

COLOR METRIC SUMMARY

TM-30-15	Rf = 82.5 Rg = 94.3
CRI/CIE	Ra = 83.1 R9 = 11.4



CANDLEPOWER DISTRIBUTION



CONE OF LIGHT

Horizontal Illuminance on Floor			
MH	FC	L	W
2'	796.9	1.6	1.6
4'	199.2	3.4	3.4
6'	88.5	5	5
8'	49.8	6.8	6.8
10'	31.9	8.4	8.4
15'	14.2	12.8	12.8
20'	8	17	17
30'	3.5	25.6	25.6
40'	2	34.2	34.2

CANDELA TABLE

Angle	0-deg
0	3173
5	3220
10	3082
15	2784
20	2321
30	1560
40	366
50	95
60	25
70	3
80	0
90	0

CCT/CRI	LED2790	LED3090	LED3590	LED4080	LED5080	LED2797	LED3097	LED3597	LED4097
FC Multiplier	0.754	0.798	0.808	1.000	1.039	0.699	0.706	0.801	0.793

Light Level	L1	L2	L3
FC Multiplier	0.418	0.772	1.000

Note: Photometric tables show lumen output for W1 only. For W2 (Up and Down) option, uplight and downlight both match lumen output as W1.

Submitting Agency:	Description: 9004-W2-RW-LED3090-W-BK-L1-UNV	Type:
lighting > electrical > energy technology > signs 214-351-6266	Project: JPMC WAUWATOSA	W1
	Notes:	

LUMEN TABLE

		9004-[W1] Regressed Hood - Black								
		L1 - 10 W			L2 - 20 W			L3 - 30W		
		CBCP	Lumens	LPW	CBCP	Lumens	LPW	CBCP	Lumens	LPW
Spot 15°	LED2790	5584	783	79.5	10310	1445	71.9	13357	1872	65.7
	LED3090	5907	828	84.1	10906	1529	76.1	14130	1981	69.5
	LED3590	5983	839	85.1	11047	1549	77.0	14311	2006	70.4
	LED4080	7401	1038	105.3	13666	1916	95.3	17705	2482	87.1
	LED5080	7689	1078	109.4	14197	1990	99.0	18393	2578	90.5
	LED2797	5175	726	73.7	9556	1340	66.6	12380	1736	60.9
	LED3097	5224	732	74.4	9646	1352	67.3	12497	1752	61.5
	LED3597	5926	831	84.3	10941	1534	76.3	14175	1987	69.7
	LED4097	5869	823	83.5	10836	1519	75.6	14038	1968	69.1
Medium Flood 25°	LED2790	2907	781	79.2	5368	1441	71.7	6954	1867	65.5
	LED3090	3075	826	83.8	5678	1525	75.8	7357	1975	69.3
	LED3590	3115	836	84.9	5751	1544	76.8	7451	2001	70.2
	LED4080	3853	1035	105.0	7115	1910	95.0	9218	2475	86.8
	LED5080	4003	1075	109.1	7391	1984	98.7	9576	2571	90.2
	LED2797	2695	723	73.4	4975	1336	66.5	6446	1731	60.7
	LED3097	2720	730	74.1	5022	1348	67.1	6505	1747	61.3
	LED3597	3085	828	84.1	5696	1529	76.1	7380	1981	69.5
	LED4097	3055	820	83.3	5642	1515	75.4	7309	1962	68.9
Flood 36°	LED2790	2006	792	80.4	3704	1463	72.8	4799	1895	66.3
	LED3090	2122	838	85.1	3918	1547	77.0	5076	2004	70.1
	LED3590	2149	849	86.2	3969	1567	78.0	5142	2030	71.0
	LED4080	2659	1050	106.6	4910	1939	96.4	6361	2512	87.8
	LED5080	2762	1091	110.7	5101	2014	100.2	6608	2609	91.2
	LED2797	1859	734	74.5	3233	1356	67.4	4448	1756	61.4
	LED3097	1877	741	75.2	3466	1368	68.1	4490	1773	62.0
	LED3597	2129	841	85.3	3931	1552	77.2	5093	2011	70.3
	LED4097	2108	832	84.5	3893	1537	76.5	5044	1991	69.6
Wide Flood 60°	LED2790	1012	753	76.4	1869	1390	69.2	2422	1801	63.0
	LED3090	1071	796	80.8	1977	1470	73.2	2562	1905	66.6
	LED3590	1085	807	81.9	2003	1489	74.1	2595	1929	67.5
	LED4080	1342	998	101.3	2478	1842	91.7	3210	2387	83.5
	LED5080	1394	1037	105.2	2574	1914	95.2	3335	2480	86.7
	LED2797	938	698	70.8	1733	1288	64.1	2245	1669	58.4
	LED3097	947	704	71.5	1749	1300	64.7	2266	1685	58.9
	LED3597	1074	799	81.1	1984	1475	73.4	2570	1911	66.8
	LED4097	1064	791	80.3	1965	1461	72.7	2545	1893	66.2

TM30 DATA

	CCT/CRI	Rf	Rg	Ra	R9
9004	2790	90.9	98.9	91.7	58.3
	3090	90.8	99.1	92.5	62.6
	3590	90.6	100.4	92.7	67.5
	4080	82.5	94.3	83.1	11.4
	5080	81.6	94.1	82	6
	2797	94.9	100	98.1	86.9
	3097	94	100.3	97.8	88.9
	3597	92.9	99.3	97.2	89.1
	4097	91.5	98.7	95.4	84

LUMEN MAINTENANCE

Ambient Tempurature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C, 40°C, 50°C	> 87%	> 102,000

POWER TABLE

Number of Heads	Light Level	Input Current (A) at 120 VAC	Input Current (A) at 277 VAC	Input Power (W)
W1	L1	0.08	0.03	10
	L2	0.177	0.088	20.93
	L3	0.252	0.118	30.02
	LC1	0.1	0.085	11.4
	LC2	0.183	0.088	21.44
W2	L1	0.16	0.06	20
	L2	0.354	0.176	41.86
	L3	0.504	0.236	60.04
	LC1	0.2	0.17	22.8
	LC2	0.366	0.176	42.88

Submitting Agency:	Description: 9004-W2-RW-LED3090-W-BK-L1-UNV Project: JPMC WAUWATOSA Notes:	Type: W1
lighting > electrical > energy technology > signs 214-351-6266		

INTEGRATED SENSOR - SVPD2

The Lanterra Cylinder 9004 with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally, these types of energy savings required coordination between the luminaire and a lighting control system. The Lanterra Cylinder 9004 delivers superior lighting with integrated PIR occupancy sensing and daylighting controls.

Capture the benefits of traditional lighting controls, without complicated circuit planning or special wiring. The Lanterra Cylinder 9004 delivers automatic ON to an energy saving light level, while ensuring lighting is turned OFF when the space is unoccupied.

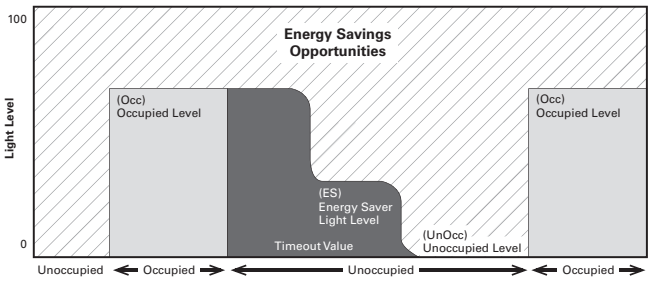
The SVPD2 sensor is configured for outdoor use, so the integral daylight sensor will enable the luminaire to automatically adjust to daylight conditions by turning off when sufficient sunlight is present. Consult factory for indoor configuration.

Occupied light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH01LUM). While the default unoccupied level is OFF, a lower light level can be saved instead using the programming remote. The integrated sensor personal remote (Catalog Number: ISHH02LUM) provides code compliant manual raise, lower, ON, OFF control.

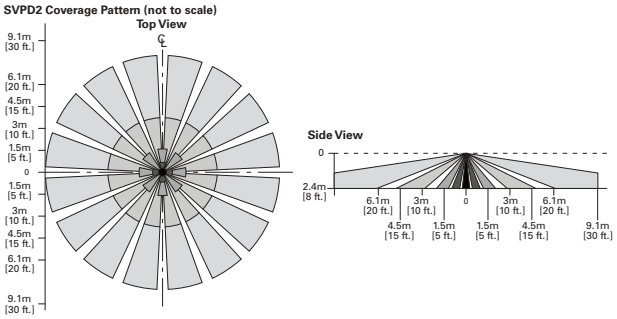
The Lanterra Cylinder 9004 with Integrated Sensor is easy to install with no special wiring and ensures energy savings out-of-the-box with default control settings.

HOW IT WORKS

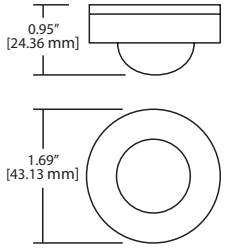
- As the user enters the space controlled by the integral sensor, the lighting turns ON to the occupied light level.
- Lighting will remain at the occupied level until the space is unoccupied. This will start the occupancy timeout period (default 20 minutes).
- If the space remains unoccupied for half of the timeout period, the lighting will automatically reduce to the Energy Saver light level (default matches occupied level). This adjustable light level is often set to half of the occupied daylight level using the programming remote.
- At the end of the timeout period the lighting will go to the unoccupied light level. This adjustable light level uses the OFF default setting.
- If sufficient sunlight is present, the luminaire will remain OFF, regardless of occupancy.



Coverage



Sensor Dimensions



Optional Remote Controls

ISHH01LUM Programming Remote

ISHH02LUM Personal Control Remote

Submitting Agency:	Description: 5811-1SAT20L8040W	Type:
lighting > electrical > energy technology > signs 214-351-6266	Project: JPMC WAUWATOSA Notes:	L7

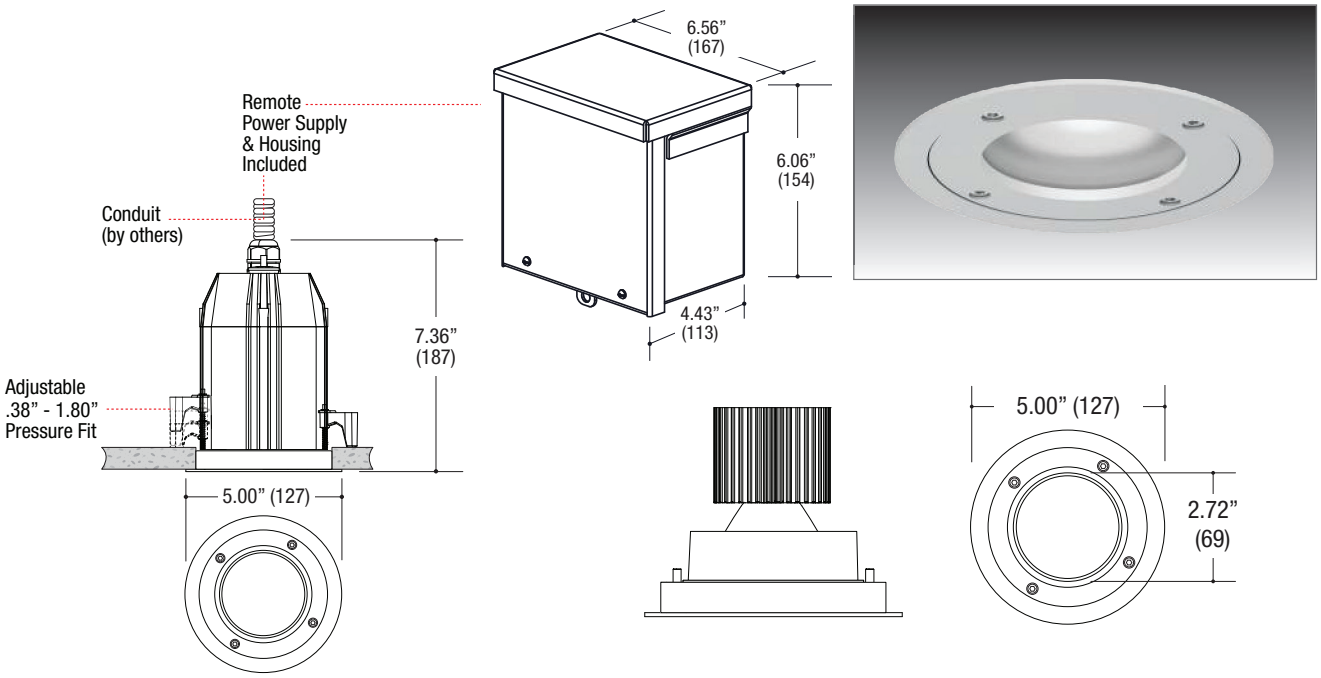
LF ILLUMINATION

BULLET

OUTDOOR RECESSED FIXED DOWNLIGHT

WET LOCATION - IP66 **LED**

PROJECT	TYPE	CATALOG NUMBER



DOWNLIGHT
- Recessed fixed downlight
- Die-cast aluminum trim
- Powder coat finish

HOUSING
- Extruded aluminum central housing
- Powder coat finish
- Dust and water jet tight sealed
- **Ceiling Cut-Out - Ø4.65"**

LED SOURCE
- Field-changeable optic
- 20W / 1670lm, 80CRI / 3000K

ELECTRICAL
- Remotely installed LED driver included
- Separated primary wiring compartment with power supply
- Double cable entry for through wiring
- Superpure aluminum reflector
- Dimmable

MOUNTING
- Swing out pressure fit mounting clips
- Adjustable up to 1.80" max. ceiling thickness

LABELS
- Suitable for wet location
- IP66 rated

5 YEAR WARRANTY Limited

ORDERING INFO

SERIES	WATTAGE	CRI / COLOR	BEAM	DRIVER	VOLTAGE	FINISH	OPTIONS
5811-1SA-T **BULLET Recessed** Die-Cast Aluminum Trim Fixed Downlight Trimmed Fixture	**20L** 20W LED 1670 lm nom.	**8027** 80CRI / 2700K **8030** 80CRI / 3000K **8035** 80CRI / 3500K **8040** 80CRI / 4000K **9027** 90CRI / 2700K **9030** 90CRI / 3000K **9727** 97CRI / 2700K **9730** 97CRI / 3000K	**N** Narrow 25° **M** Medium 45° **W** Wide 55°	**DM** Dimming Multiple Forward/Reverse (@ 120V only) 0-10V Wires Present (@ 120-277V only **D3** Lutron Hi-lume™* Forward Phase 2 wire 1% (120V only) **DE** Lutron Hi-lume™ EcoSystem™* 1% w/Soft-On, Fade-to-Black™ 1% (120-277V only)	**1** 120V **U** 120-277V	**SS** Silver	**EM** Remotely Mounted Emergency LED Inverter (Field wiring required)

Ordering Example: **5811-1SA-T-20L-8030-M-DM-U-SS**

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We reserve the right to change or withdraw specifications without prior notice.

HEADQUARTERS
9200 Deering Avenue
Chatsworth CA 91311

Telephone: 818-885-1335
Toll Free: 855-885-1335
Fax: 818-576-1335

www.lfillumination.com
rev: 120419

Submitting Agency:	Description: 5811-1SAT20L8040W Project: JPMC WAUWATOSA Notes:	Type: L7

FSG FACILITY SOLUTIONS GROUP lighting > electrical > energy technology > signs 214-351-6266

LF ILLUMINATION

EMERGENCY INVERTERS

LED **ELV** **MLV**

PROJECT	TYPE	CATALOG NUMBER

The emergency inverter provides full power up to its load rating for no less than 90 minutes as prescribed by UL 924 Listed for US and Canada & CSA C22 No. 141 Unit Equipment for Emergency Lighting.

The inverter is installed remotely, behind an access panel or with above ceiling access required (behind grid ceilings are also acceptable). The inverter is not accessible through the fixture opening in the ceiling. The inverters are rated for 120-277V and will work for LED, ELV, MLV, incandescent & fluorescent loads.

The inverter is paired for the connected load wattage of the light source(s).

25W

*If the load rating requirement is 25W (or less) then we recommend **LF #EMREM25***

IOTA #IIS-25-I: http://www.iotaengineering.com/iis25.htm
Instructions: http://iotaengineering.com/Inverter/iis25_manual.pdf
Wiring Diagram: http://iotaengineering.com/diagrams/ad10.pdf

35W

*If the load rating requirement is 25-35W then we recommend **LF #EMREM35***

IOTA #IIS-35-I: http://iotaengineering.com/Inverter/iis35_spec.pdf
Instructions: http://iotaengineering.com/Inverter/iis35_manual.pdf
Wiring Diagram: http://iotaengineering.com/diagrams/ad10.pdf

50W

*If the load rating requirement is 35-50W then we recommend **LF #EMREM50***

IOTA #IIS-50-I: http://iotaengineering.com/Inverter/iis50_spec.pdf
Instructions: http://iotaengineering.com/Inverter/iis50_manual.pdf
Wiring Diagram: http://iotaengineering.com/diagrams/ad10.pdf

Consult LF Illumination for higher wattage inverter offerings.

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We reserve the right to change or withdraw specifications without prior notice.

HEADQUARTERS
9200 Deering Avenue
Chatsworth CA 91311

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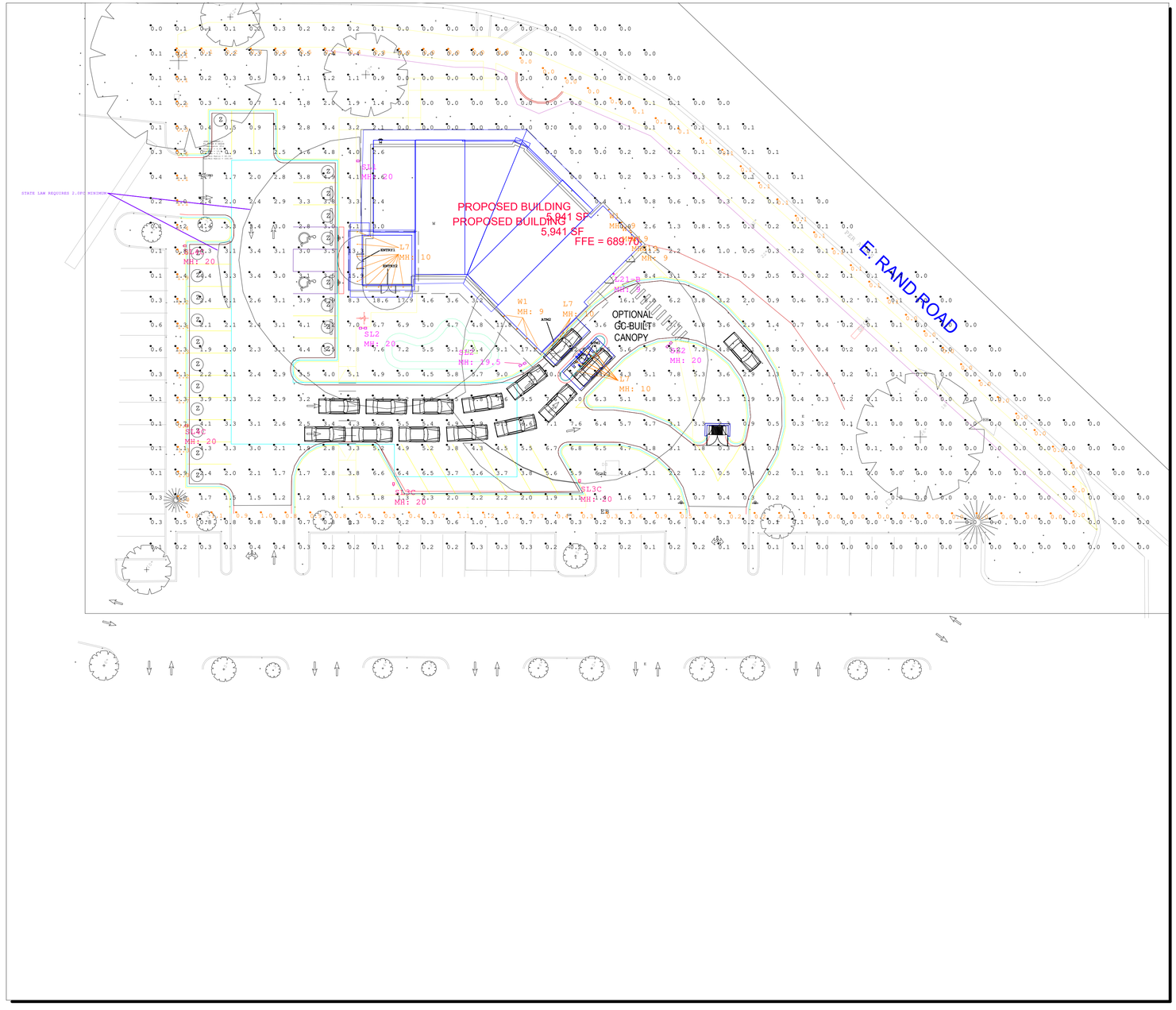
Toll Free: 855-885-1335
Fax: 818-576-1335

www.lfillumination.com

Calculation Summary							
Label	**Units**	**Avg**	**Max**	**Min**	**Avg/Min**	**Max/Min**	**Description**
60' PARKING	Fc	2.96	3.8	2.1	1.41	1.81	FC TAKEN 60' FROM ENTRY @ 3'-0" AFG
ATM1 5'	Fc	33.38	51.4	11.4	2.93	4.51	FC TAKEN 5' FROM ATM1 @ 3'-0" AFG
ATM2 5'	Fc	28.32	35.3	13.2	2.15	2.67	FC TAKEN 5' FROM ATM2 @ 3'-0" AFG
DRIVE TRHU ATM 50'	Fc	8.10	54.1	2.0	4.05	27.05	FC TAKEN 50' FROM D/T ATM @ 3'-0" AFG
DT 60' PARKING	Fc	3.20	4.2	2.4	1.33	1.75	FC TAKEN AT 60' FROM ATM1 @ 3'-0" AFG
ENTRY 50	Fc	5.62	35.6	0.5	11.24	71.20	FC TAKEN 50' FROM ENTRY @ 3'-0" AFG
ENTRY1	Fc	18.07	39.1	1.0	18.07	39.10	FC TAKEN 10' FROM ENTRY1 @ 3'-0" AFG
ENTRY2	Fc	20.84	38.9	6.5	3.21	5.98	FC TAKEN 10' FROM ENTRY2 @ 3'-0" AFG
PROPERTY LINE	Fc	0.39	1.9	0.0	N.A.	N.A.	FC TAKEN AT GRADE
SITE	Fc	1.90	18.6	0.0	N.A.	N.A.	FC TAKEN AT GRADE
JPMC PAVEMENT_1	Fc	4.05	16.6	0.1	40.50	166.00	FC TAKEN @ GRADE

Luminaire Schedule				
Symbol	**Label**	**Qty**	**Part Number**	**Description**
	SL4C	2	EACL010D4AF740-DIMMING-D1-FINISH WITH ELS-EAC-ABL-BLCK	FULL CUTOFF AREA LIGHT W/SHIELD
	SL3C	2	EACL010F4AF740-DIMMING-D1-FINISH W/ELS-ERL-ABL-BLCK	FULL CUTOFF AREA LIGHT W/SHIELD
	L21-B	1	XTOR6B-W	WALL MOUNT FULL CUTOFF HO WALLPACK
	L7	17	5811-1SAT20L8040W	RECESSED DOWNLIGHT
	W1	8	9004-W2-RW-LED3090-W-BK-L1-UNV	WALL MOUNT UP/ DN LIGHT
	SL1	1	EACL010E4AF740-DIMMING-D1-FINISH	FULL CUTOFF AREA LIGHT
	SL2	3	EACL010E4AF740-DIMMING-D1-FINISH	FULL CUTOFF AREA LIGHT


PROPOSED BUILDING
PROPOSED BUILDING
5,941 SF
5,941 SF
FFE = 689.70
E RAND ROAD
OPTIONAL
GC-BUILT
CANOPY
STATE LAW REQUIRES 2.0FC MINIMUM
SL4C
MH: 20
SL2
MH: 20
SL2
MH: 20
SL3C
MH: 20
SL3C
MH: 20
SL2
MH: 20
SL2
MH: 20
SL2

CHASE BANK

Traffic Impact Study

Arlington Heights, IL

November 2023

Prepared for:

The Architects Patnership, Ltd.

Kimley»Horn

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EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained by The Architects Partnership, Ltd to perform a traffic impact study for a proposed bank on the southwest quadrant of Rand Road/Palatine Road in Arlington Heights, Illinois. The proposed bank would occupy an outlot within the existing shopping center known as Town & Country Center. Access to the bank would be provided via the existing Town & Country Center driveways along Arlington Heights Road (Access A and Access B), Palatine Road (Access C), and Rand Road (Access D and Access E). Internal to the shopping center, two full-access driveways and one outbound-only driveway would be provided for the proposed bank.

As part of this traffic impact study, existing and future traffic conditions were evaluated for the signalized intersections of Arlington Heights Road/Palatine Road, Arlington Heights Road/Lillian Avenue-Access B, and Rand Road/Access E. In addition, the unsignalized intersections of Arlington Heights Road/Access A, Palatine Road/Access C, and Rand Road/Access D were evaluated.

Based on a review of future traffic conditions, it is anticipated that future background traffic growth and site-generated trips would be accommodated at the study intersections. The existing Town & Country Center access driveways are projected to operate with acceptable delay and limited queues. At the internal site access driveways proposed for the Chase Bank, a single inbound lane and single outbound lane is recommended for the two full-access driveways. The outbound-only driveway should provide a single lane. Stop control should be posted for outbound traffic at each bank driveway. In addition, onsite wayfinding should be provided to direct motorists to the drive-through ATM. Additional details related to the improvements identified above are provided in the *Recommendations & Conclusions* section of this report.

1. INTRODUCTION

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained by The Architects Partnership, Ltd to perform a traffic impact study for a proposed outlot redevelopment at Town & Country Center, located on the southwest quadrant of the intersection of Rand Road/Palatine Road in Arlington Heights, Illinois. The proposed outlot redevelopment would provide an approximately 5,941 square-foot bank with two drive-through ATM lanes.

Existing site access for the Town & Country Center would be maintained with the outlot redevelopment; internal cross-access would continue to be provided. Access to the proposed bank would be provided via three internal driveways, including two full-access driveways and one outbound-only driveway. An aerial view of the study location and surrounding roadway network is presented in **Exhibit 1.**

As a part of this study, the existing network was analyzed to determine the current operations at the study intersections. In order to assess the site's impact on the area roadway network, site-generated trips were established and added to background traffic volumes. This report presents and documents Kimley-Horn's data collection, summarizes the evaluation of existing and projected future traffic conditions on the surrounding roadways, and identifies recommendations to address the potential impact of site-generated traffic on the adjacent roadway network.

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EXHIBIT 1

SITE LOCATION MAP

2. EXISTING CONDITIONS

Kimley-Horn conducted a field visit to collect relevant information pertaining to existing land uses in the surrounding area, the adjacent street system, current traffic volumes and operating conditions, lane configurations and traffic controls at nearby intersections, and other key roadway characteristics. This section of the report details information on these existing conditions.

Area Land Uses & Connectivity

Located on the southwest quadrant of the intersection of Rand Road/Palatine Road, Town & Country Center is an existing commercial shopping center. The shopping center provides both inline commercial tenants and outlots fronting Palatine Road. The bank redevelopment is proposed for an existing outlot which is currently occupied by a retail store.

Near Town & Country Center, commercial uses front Palatine Road and Rand Road. East of Rand Road, the north side of Palatine Road is developed with single-family residences. Single-family residences are also located on the north and south sides of Palatine Road west of Arlington Heights Road. South of Palatine Road, Arlington Heights Road provides access to single- and multi-family residences with limited commercial uses on the west side of the street.

Located along the northern boundary of the Town & Country Center, Palatine Road provides east-west access from South Barrington on the west to Northbrook on the east. Approximately one mile west of the subject site, Palatine Road provides a full interchange with IL Route 53. IL 53 provides access to Interstate 90 (I-90) and Interstate 290 (I-290) less than five miles south of the Palatine Road interchange. Nearly six miles east of the subject site, Palatine Road provides a full interchange with Interstate 294 (I-294). Regional connectivity is also provided by Arlington Heights Road and Rand Road (US Route 12), located on the eastern and western boundaries of the Town & Country Center, respectively.

Existing Roadway Characteristics

A field investigation was conducted within the study area. As a result of this visit, the following information was obtained about the existing roadway network.

Arlington Heights Road travels in a north-south direction along the west boundary of the Town & Country Center. The Illinois Department of Transportation (IDOT) classifies Arlington Heights Road as a Minor Arterial roadway. Through the study area, Arlington Heights Road provides two travel lanes in each direction with channelized turn lanes provided at key intersections. At its signalized intersection with Palatine Road, Arlington Heights Road provides a dedicated left-turn lane, two through lanes, and a channelized right-turn lane on both the north and south legs. At its signalized intersection with Lillian Avenue-Access B, Arlington Heights Road provides a dedicated left-turn lane, a single through lane, and a shared through/right-turn lane on both legs. At its unsignalized intersection with Access A (loading dock), Arlington Heights provides one dedicated left-turn lane and two through lanes on the north leg and one through lane and one shared through/right-turn lane on

the south leg. The posted speed limit is 35 miles per hour (MPH) through the study area. Arlington Heights Road is under IDOT jurisdiction.

Rand Road (US 12) travels in a northwesterly-southeasterly direction along the eastern boundary of the Town & Country Center. IDOT classifies Rand Road as a Strategic Regional Arterial (SRA) roadway. The SRA system was established by IDOT to promote mobility on key routes throughout the Chicago area by applying various strategies, such as access control and limited signalization. Through the study area, Rand Road generally provides two travel lanes in each direction; however, along the property frontage three travel lanes are provided. A signalized access to the Town & Country Center is provided on Rand Road (Access E); the signalized intersection also provides access to the Southpoint shopping center located on the east side of the street. At this intersection, Rand Road provides a dedicated left-turn lane, two through lanes, and a shared through/right-turn lane on the north leg; the south leg provides a dedicated left-turn lane, one through lane, and one shared through/right-turn lane. A 35 MPH speed limit is posted on Rand Road through the study area. Rand Road is under IDOT jurisdiction.

Palatine Road travels in an east-west direction along the northern boundary of the subject site. IDOT classifies Palatine Road as an SRA roadway. Palatine Road generally provides three travel lanes in each direction with left-turn channelization. A landscape center median is provided through the study area. At its signalized intersection with Arlington Heights Road, Palatine Road provides a dedicated left-turn lane, three through lanes, and a channelized right-turn lane on the west leg. On the east leg, Palatine Road provides a dedicated left-turn lane, two through lanes, and a shared through/right-turn lane. A 35 MPH speed limit is posted on Palatine Road through the study area. Palatine Road is under IDOT jurisdiction.

Lillian Avenue is an east-west roadway which extends west of Arlington Heights Road opposite Access B. Classified as a local roadway, Lillian Avenue generally provides a single travel lane in each direction. At its signalized intersection with Arlington Heights Road, Lillian Avenue provides a dedicated left-turn lane and a shared through/right-turn lane. A speed limit is not posted on Lillian Avenue; therefore, a 25 MPH speed limit was assumed for the purposes of this analysis. Lillian Avenue is under the jurisdiction of the Village of Arlington Heights.

Site Access Driveways for the Town & Country Center are currently provided along Arlington Heights Road, Palatine Road, and Rand Road. For purposes of this analysis, the driveways are labeled Access A through Access E in a clockwise orientation. Two full-access driveways are provided on Arlington Heights Road; the south access driveway (Access A) facilitates loading activity in the rear of the inline commercial buildings, and the north access driveway (Access B) provides signalized customer and employee access to the shopping center. A right-in/right-out (RIRO) access driveway (Access C) is provided on Palatine Road. Two site access driveways are provided on Rand Road, including a RIRO access driveway (Access D) and a signalized full-access driveway (Access E) located opposite the Southpoint shopping center. Each site access driveway provides a single inbound lane and a single outbound lane, with the exception of Access B and Access E. Access B provides a dedicated left-turn lane, a single through lane, and a dedicated right-turn lane in the outbound direction; a single lane is provided in the inbound direction. Access E provides a dedicated left-turn lane and a shared through/right-turn lane in the outbound direction, and two lanes for inbound

traffic. For purposes of this analysis, a 25 MPH speed limit was assumed for each site access driveway.

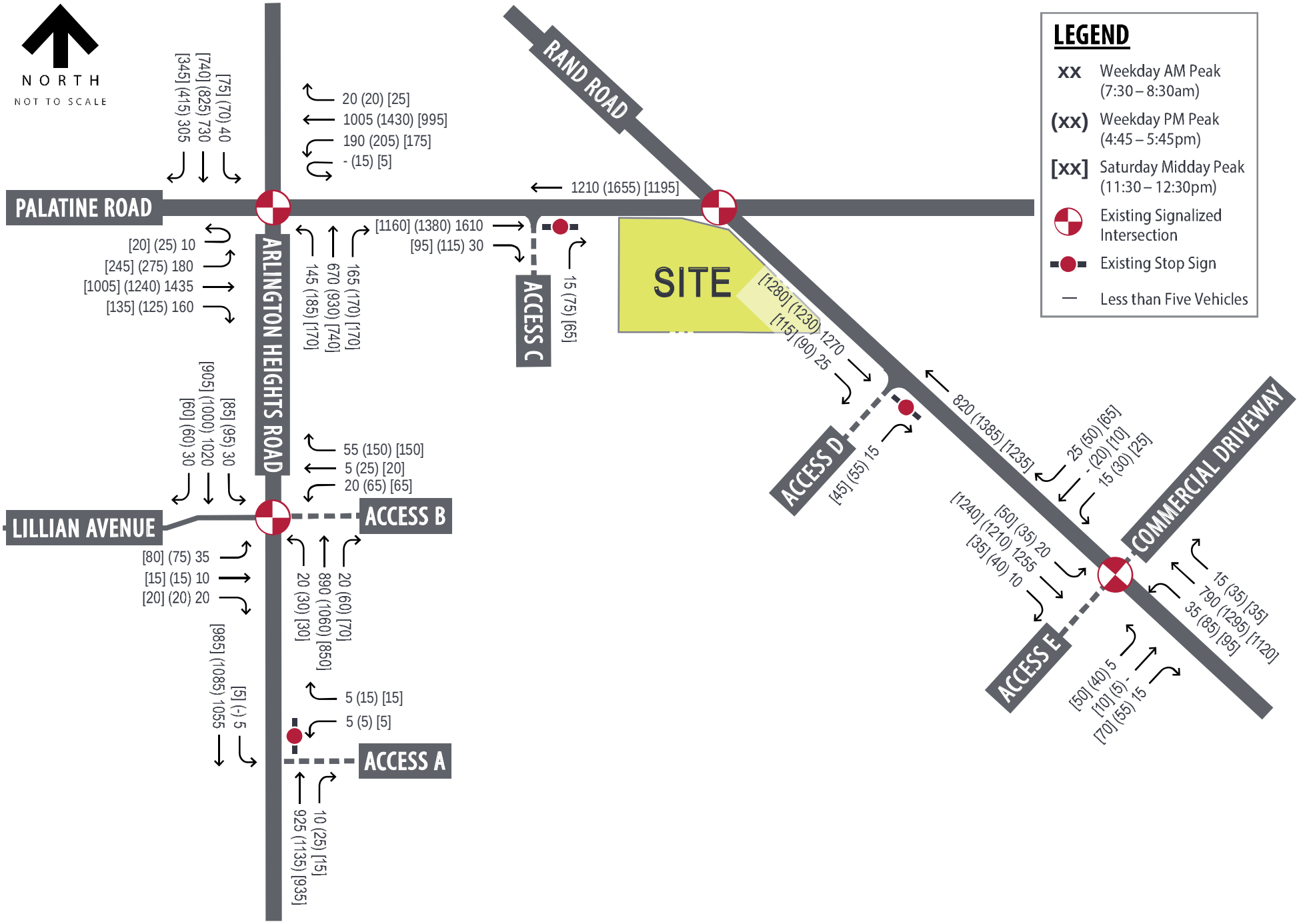
Commercial Driveway, providing access to the Southpoint shopping center, is located on the east side of Rand Road opposite Access E. This driveway provides a dedicated left-turn lane and shared through/right-turn lane in the outbound direction, and a single lane for inbound traffic. For purposes of this analysis, a 25 MPH speed limit was assumed.

Data Collection

Turning movement count data was collected in May 2023 at the intersections listed below. Counts were conducted on a typical weekday from 7:00 to 9:00AM and 4:00 to 6:00PM in order to capture peak traffic conditions. In addition, counts were conducted from 11:00AM to 1:00PM on a typical Saturday.

- Arlington Heights Road / Access A
- Arlington Heights Road / Lillian Avenue-Access B
- Arlington Heights Road / Palatine Road
- Palatine Road / Access C
- Rand Road / Access D
- Rand Road / Access E-Commercial Driveway

The traffic count data indicates that peak traffic volumes occur within the study area on weekdays from 7:30 to 8:30AM and 4:45 to 5:45PM. During the Saturday midday period, the peak hour occurs from 11:30AM to 12:30PM. For purposes of the analysis, the peak hour traffic volumes were rounded to the nearest multiple of five and balanced between intersections. Existing peak hour vehicle traffic volumes are presented in **Exhibit 2**. A summary of the traffic count data is provided in the appendix.



Kimley»Horn

EXHIBIT 2

EXISTING (2023) TRAFFIC VOLUMES

Existing Capacity Analyses

Per IDOT standards, Synchro capacity software was used to evaluate existing operational conditions at the study intersections during the weekday and Saturday peak hours. The capacity of an intersection quantifies its ability to accommodate traffic volumes and is expressed in terms of level of service (LOS), measured in average delay per vehicle. LOS grades range from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated conditions). The lowest LOS grade typically accepted by jurisdictional transportation agencies in Northeastern Illinois is LOS D, and a minimum LOS C is required for through movements on SRA routes such as US 12 (Rand Road) and Palatine Road.

The LOS grades shown below, which are provided in the Transportation Research Board's Highway Capacity Manual (HCM), quantify and categorize the driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 2.1**.

Table 2.1. Level of Service Grading Descriptions[1]

Level of Service	Description
A	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	High control delay; average travel speed no more than 33 percent of free flow speed.
F	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

[1] Highway Capacity Manual 6th Edition

The range of control delay for each rating (as detailed in the HCM) is shown in **Table 2.2**. Because signalized intersections are expected to carry a higher volume of vehicles and stopping is required during red time, note that higher delays are tolerated for the corresponding LOS ratings.

Table 2.2. Level of Service Grading Criteria[1]

Level of Service	Average Control Delay (s/veh) at:	
	Unsignalized Intersections	Signalized Intersections
A	0 – 10	0 – 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F[2]	> 50	> 80

[1] Highway Capacity Manual 6th Edition

[2] All movements with a Volume to Capacity (v/C) ratio greater than 1 receive a rating of LOS F.

Based on these standards, capacity results were identified for the study intersections under existing conditions. In order to evaluate existing traffic operation, signal timings for the Arlington Heights Road/Palatine Road intersection were obtained from IDOT. The intersection of Arlington Heights Road/Lillian Avenue/Access B and Rand Road/Access E were assumed to be "free" running stand-alone traffic signals and do not currently operate on a coordinated signal system. In order to evaluate traffic conditions and reflect the responsive nature of the signal cycles, the signal was optimized with an assumed minimum cycle length of 90 seconds. Per IDOT requirements, right-turn-on-red (RTOR) movements were not included in the capacity analysis.

The results of capacity analysis for existing conditions are summarized in **Table 2.3**. In this table, operation on each approach is quantified according to the average delay per vehicle and the corresponding LOS. Overall intersection operations are reported for the signalized intersections of Arlington Heights Road/Palatine Road, Arlington Heights Road/Lillian Avenue/Access B, and Rand Road/Access E. Overall intersection LOS is not reported for minor-leg stop-controlled intersections, since the majority of vehicles are able to move through the intersection with little to no delay.

The results presented in Table 2.3 are based on Synchro's HCM 6th Edition reports with the exception of Arlington Heights Road/Palatine Road, which is reported using Synchro's Lanes, Volumes, Timings Report. Due to the presence of U-turn movements on the east and west legs, the Synchro HCM 6th Edition report is not available for this intersection.

Table 2.3. Existing (Year 2023) Levels of Service

Intersection	Weekday				Saturday	
	AM Peak Hour		PM Peak Hour		Midday Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Arlington Heights Road / Palatine Road ★						
Eastbound	52	D[1]	67	E[1]	43	D[2]
Westbound	43	D[1]	60	E[1]	52	D[2]
Northbound	60	E[1]	68	E[1]	47	D[1]
Southbound	58	E	62	E[1]	47	D[3]
Intersection	*53*	*D*	*64*	*E*	*47*	*D*
Arlington Heights Road / Lillian Avenue-Access B ★						
Eastbound	27	C	29	C	26	C
Westbound	28	C	36	D	30	C
Northbound	10+	B	14	B	14	B
Southbound	11	B	12	B	13	B
Intersection	*12*	*B*	*16*	*B*	*16*	*B*
Arlington Heights Road / Access A (Loading Dock) △						
Westbound	34	D	25-	C	19	C
Southbound (Left)	10+	B	11	B	10+	B
Palatine Road / Access C (RIRO) △						
Northbound (Right)	20	C	22	C	18	C
Rand Road / Access D (RIRO) △						
Eastbound (Right)	17	C	18	C	19	C
Rand Road / Access E-Commercial Driveway ★						
Eastbound	30	C	36	D	31	C
Westbound	32	C	36	D	31	C
Northbound	6	A	8	A	9	A
Southbound	6	A	7	A	8	A
Intersection	*6*	*A*	*10-*	*A*	*10+*	*B*

★ Signalized Intersection △ Minor-Leg Stop-Controlled Intersection

[1] Left-turn operates at LOS F.

[2] Left-turn operates at LOS E.

[3] Left-turn and through movements operate at LOS E.

The intersection of Arlington Heights Road/Palatine Road operates at LOS E during the evening peak hour, and LOS D during the morning and Saturday midday peak hours. During the morning peak hour, the northbound and southbound approaches operate at LOS E. During the evening peak hour, each approach operates at LOS E. The delay estimated for the weekday peak hours is likely a function of a relatively long cycle length (140 seconds during the morning peak hour and 150 seconds during the evening peak hour) and priority given to east-west traffic on Palatine Road. As a result, long periods of green time are allocated to the east-west through movements and the minor street (Arlington Heights Road) approach receives shorter green times.

According to the capacity analysis completed for the intersection of Arlington Heights Road/Palatine Road, the 95th percentile queues are generally accommodated within the existing storage lanes with several exceptions. In the morning peak hour, the 95th percentile queue estimated for the northbound

left-turn is approximately 290 feet (12 vehicles) which exceeds the existing storage lane by approximately 150 feet (6 vehicles), and the estimated queue for the southbound right-turn movement is approximately 300 feet (12 vehicles), exceeding the provided storage lane by approximately 25 feet (1 vehicle). During the evening peak hour, 95th percentile queues exceed the storage lanes for the eastbound and westbound left-turn movements by approximately 130 feet (5 vehicles) and 145 feet (6 vehicles), respectively. The queues estimated for the northbound left-turn movement exceeds the storage lane by 225 feet (9 vehicles), and the southbound right-turn movement exceeds the storage lane by roughly 170 feet (7 vehicles). During the Saturday midday peak hour, the 95th percentile queues are generally accommodated within the storage lanes with the exception of the northbound left-turn movement which exceeds the turn lane by approximately 125 feet (5 vehicles) and the westbound left-turn movement which exceeds the turn lane by approximately 25 feet (1 vehicle). The results of the capacity analysis are considered conservative as they do not reflect RTOR movements, which were observed in the field.

The signalized intersections of Arlington Heights Road/Lillian Avenue/Access B and Rand Road/Access E operate at overall LOS B or better during each peak hour, with each approach operating at LOS D or better. During each peak hour, the 95th percentile queues are estimated to be contained within the existing storage lanes.

The approaches and turn movements at the unsignalized intersections operate at LOS C or better, with the exception of the westbound movement at Arlington Heights Road/Access A, which operates at LOS D during the morning peak hour. The 95th percentile queues estimated for the unsignalized Town & Country Center access driveways are approximately 25 feet (1 vehicle) or less during each peak hour.

3. FUTURE CONDITIONS

This section of the report outlines the proposed site plan, summarizes site-specific traffic characteristics, and develops future traffic projections for analysis.

Development Characteristics & Site Access

The proposed redevelopment would include an approximately 5,941 square-foot bank with two drive-through ATM lanes. To accommodate the proposed bank, the existing 11,051 square-foot retail store would be removed.

Existing site access for the overall Town & Country Center would be maintained with the outlot redevelopment. For purposes of this analysis, the existing access driveways along Arlington Heights Road, Palatine Road, and Rand Road were labeled Access A through Access E in a clockwise orientation. Internal cross-access would be maintained to facilitate access to the proposed bank. Internal to Town & Country Center, access to the proposed bank would be provided via two-full-access driveways and one outbound-only driveway. A copy of the site plan is provided in the appendix.

Trip Generation

In order to calculate trips generated by the proposed bank, data was referenced from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Trip generation rates for ITE Land Use Code (LUC) 912, Drive-in Bank, are shown in **Table 3.1**. The data provided for the variable (unit) per 1,000 square feet of gross floor area was selected as it provides the most conservative estimate of site-generated trips. A copy of the ITE data is provided in the appendix.

Table 3.1. ITE Trip Generation Data by Land Use

ITE Land Use	Unit	Weekday			Saturday
		Daily	AM Peak Hour	PM Peak Hour	Midday Peak Hour
Drive-in Bank (LUC 912)	Per 1,000 sq. ft.	100.35X 50% in / 50% out	9.95X 58% in / 42% out	21.01X 50% in / 50% out	26.35X 51% in / 49% out

For the purpose of this study, site-generated trips are expected to exhibit multiple routing patterns when traveling to and from the subject site, as described below:

- **Pass-by** – Pass-by traffic reflects the travel patterns of motorists who are already traveling on the adjacent study roadways and stop at the site en route to another destination. Data in the ITE Trip Generation Manual, 11th Edition, indicates that pass-by trips for a Drive-In Bank (LUC 912) account for 29 percent of trips in the morning peak hour, 35 percent of trips during the evening peak hour, and 38 percent of trips during the Saturday peak hour.
- **Primary Trips** – Vehicles that travel to the subject redevelopment and then return directly to their place of origin are called “primary trips.” Primary trips reflect new traffic volumes

generated by the proposed redevelopment that would approach and depart on the same route. Trips to/from the site that are not pass-by trips are expected to be primary trips.

Per these assumptions, site-generated traffic projections are presented in **Table 3.2**.

Table 3.2. Site-Generated Traffic Projections

Land Use	Size	Weekday							Saturday		
		Daily	AM Peak			PM Peak			Midday Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Drive-in Bank	5,941 sq. ft.	600	35	25	60	65	60	125	80	75	155
Less Pass-by Trips[1]		*-170*	*-10*	*-10*	*-20*	*-20*	*-20*	*-40*	*-30*	*-30*	*-60*
Total New Trips to the Study Area		430	25	15	40	45	40	85	50	45	95

[1]Pass-by trips were applied at a rate of 29 percent during the morning peak hour, 35 percent during the evening peak hour, and 38 percent during the Saturday peak hour, based on data provided in the ITE Trip Generation Manual, 11th Edition.

Directional Distribution

The estimated distribution of site-generated traffic on the surrounding roadway network as it approaches and departs the site is a function of several variables, such as the nature of surrounding land uses, prevailing traffic volumes/patterns, characteristics of the street system, and the ease with which motorists can travel over various sections of that system. The anticipated directional distributions estimated for primary trips are outlined in **Table 3.3.**

Table 3.3. Estimated Trip Distribution

Traveling to/from:	Portion of Primary Trips
North on Arlington Heights Road	15%
South on Arlington Heights Road	15%
North on Rand Road	15%
South on Rand Road	15%
East on Palatine Road	20%
West on Palatine Road	20%
Total	100%

Pass-by trips are expected to travel to and from the site in a manner that is proportional to existing travel patterns. Pass-by trip distribution estimates account for the expectation that site trips are likely to travel eastbound along Palatine Road and southbound along Rand Road. Based on the preceding trip distribution assumptions, the site trip assignments for primary trips and pass-by trips are illustrated on **Exhibits 3 and 4,** respectively. Total site trip assignment is depicted in **Exhibit 5**.

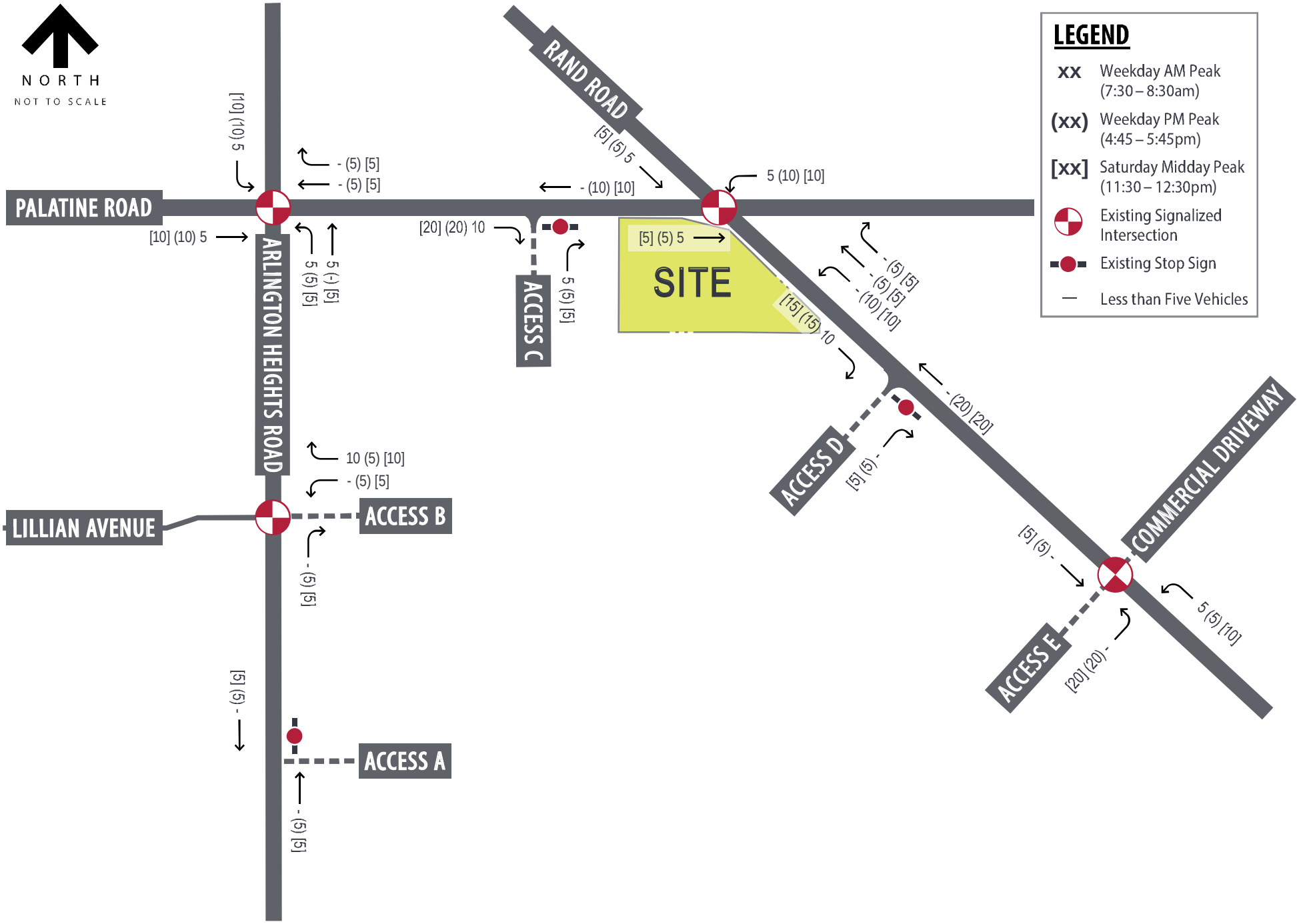


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EXHIBIT 3

SITE TRIP ASSIGNMENT - PRIMARY

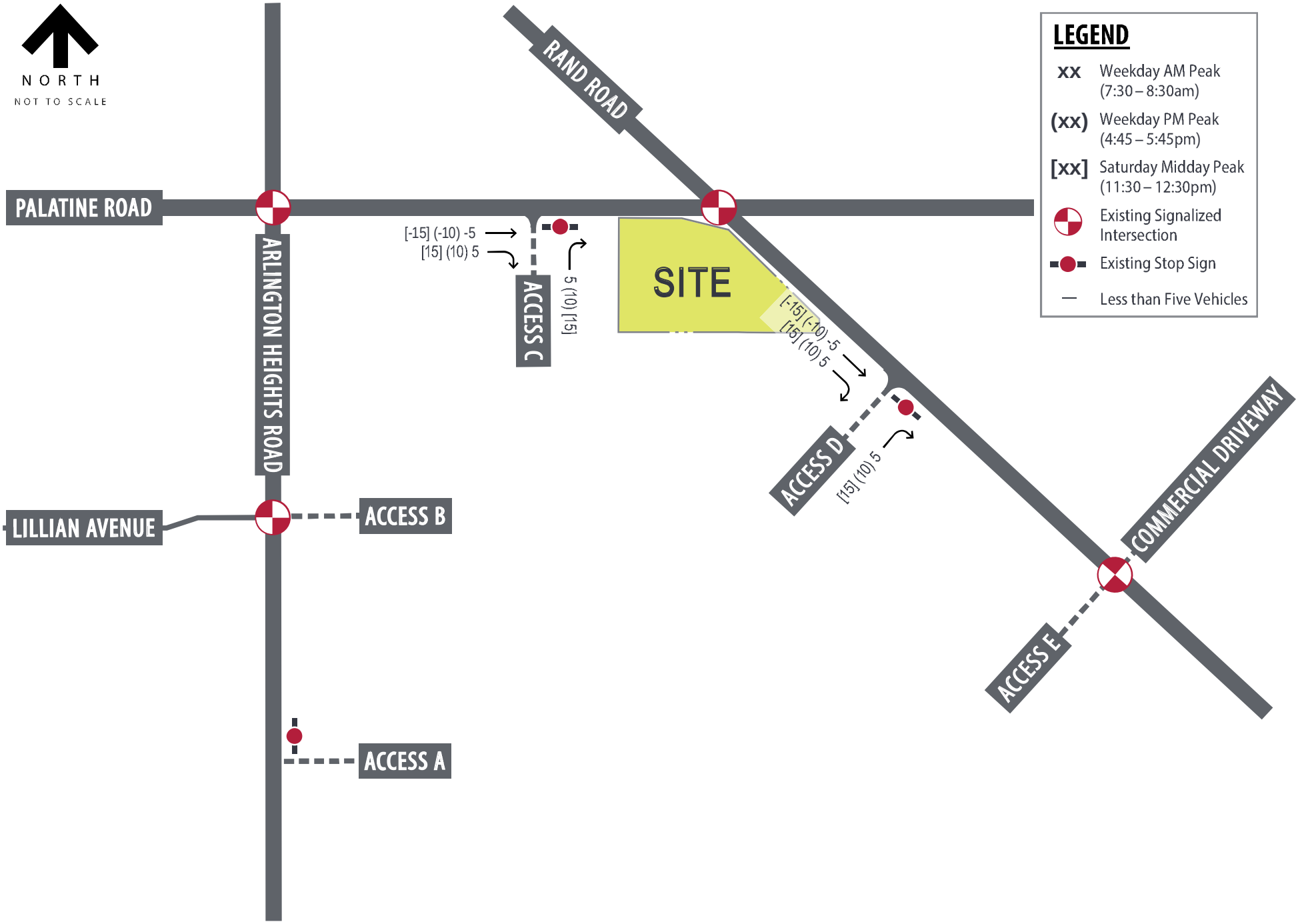

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EXHIBIT 4

SITE TRIP ASSIGNMENT - PASS-BY

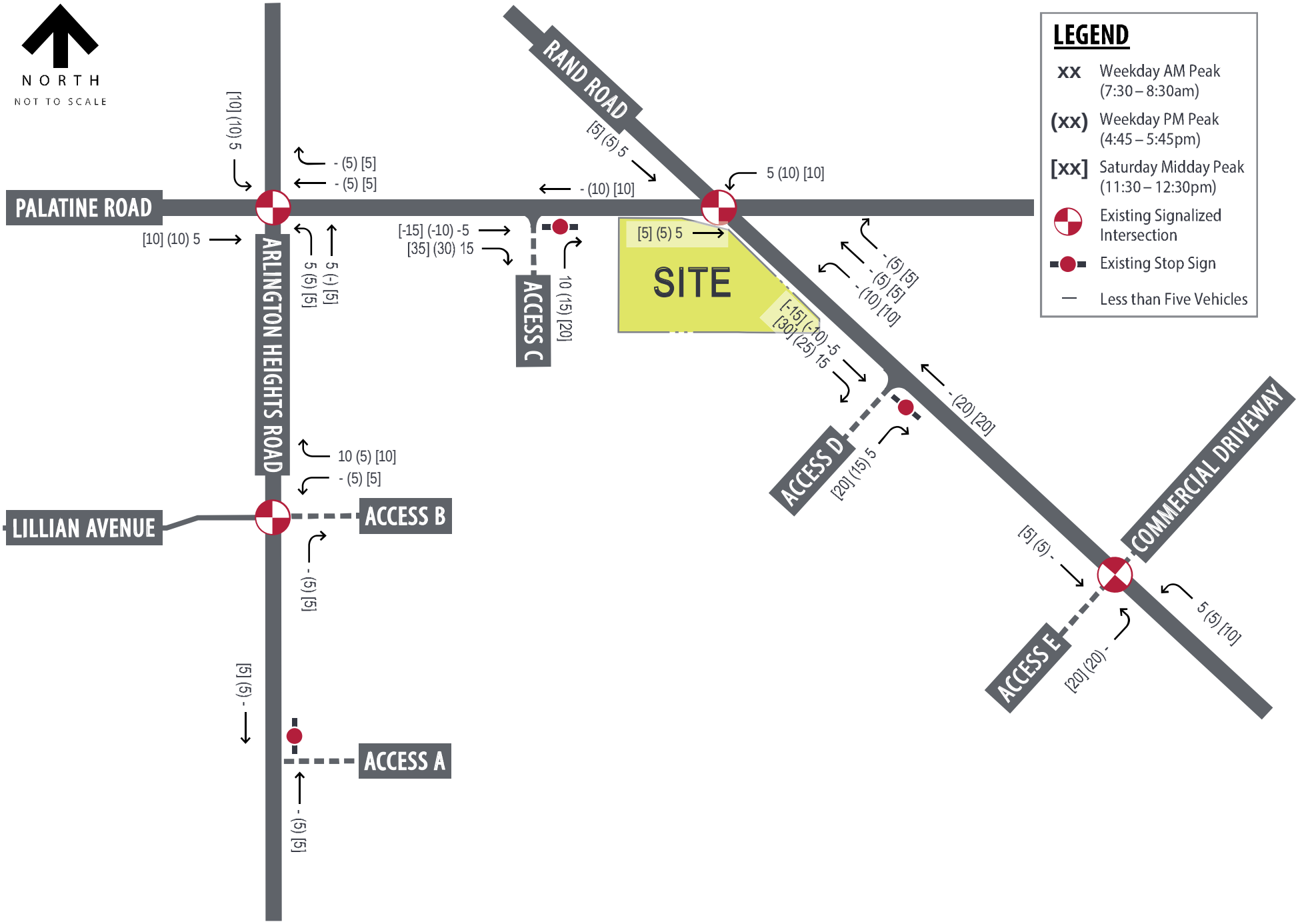

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EXHIBIT 5

SITE TRIP ASSIGNMENT - TOTAL

Future Capacity Analysis

The proposed redevelopment is expected to be constructed by Year 2024; Kimley-Horn therefore evaluated future traffic conditions for a Year 2029 design horizon (build-plus-five conditions) per typical IDOT requirements.

Future No-Build Traffic Projections

Background traffic volumes were estimated using data from the Chicago Metropolitan Agency for Planning (CMAP). Based on information received from CMAP, traffic growth on the roadway network is projected at a compounded rate of roughly 0.50 percent annually through Year 2050. Therefore, an annual growth rate of 0.50 percent was applied to existing traffic volumes at all study intersections (Exhibit 2) through Year 2029 to account for background traffic growth. The Future (2029) No-Build traffic projections are presented in **Exhibit 6**. An official letter from CMAP documenting the projected Year 2050 traffic volume on the roadway network is included in the appendix.

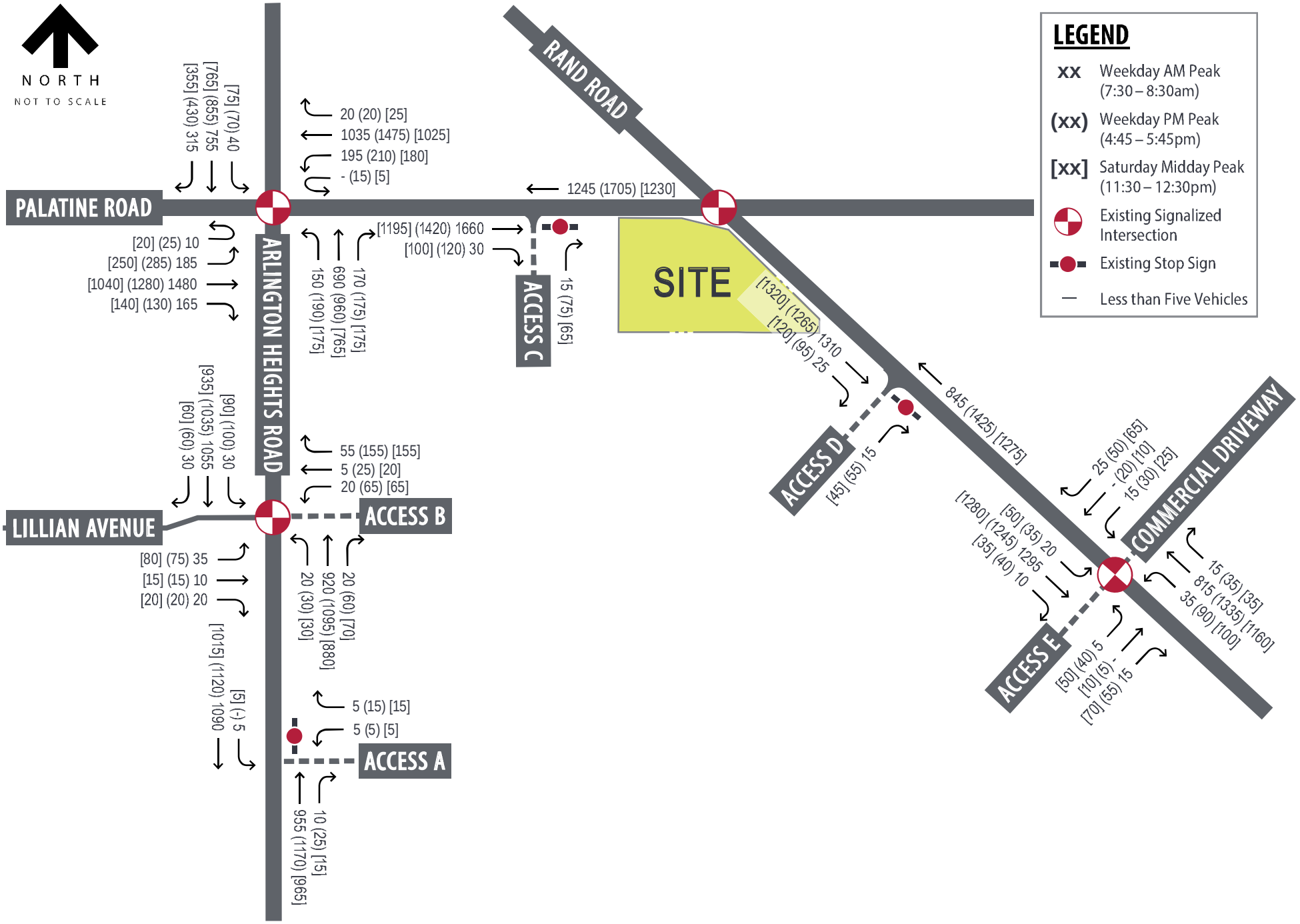

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EXHIBIT 6

FUTURE (2029) NO-BUILD TRAFFIC PROJECTIONS

Based on the assumptions applied to the traffic projections for the future no-build scenario, future capacity results are provided in **Table 3.4**. The results are based on Synchro's HCM 6th Edition reports with the exception of Arlington Heights Road/Palatine Road, which is reported using Synchro's Lanes, Volumes, Timings Report. Due to the presence of U-turn movements on the east and west legs of Palatine Road at Arlington Heights Road, the Synchro HCM 6th Edition report is not available for this intersection. Additional capacity analysis details are included in the appendix.

Table 3.4. Future (Year 2029) No-Build Levels of Service

Intersection	Weekday				Saturday	
	AM Peak Hour		PM Peak Hour		Midday Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Arlington Heights Road / Palatine Road ★						
Eastbound	55	D[1]	71	E[1]	44	D[2]
Westbound	44	D[1]	62	E[1]	54	D[2]
Northbound	61	E[1]	71	E[1]	47	D[1]
Southbound	61	E	66	E[1]	49	D[3]
Intersection	*55-*	*D*	*67*	*E*	*49*	*D*
Arlington Heights Road / Lillian Avenue-Access B ★						
Eastbound	28	C	30	C	27	C
Westbound	29	C	37	D	31	C
Northbound	10+	B	15	B	14	B
Southbound	11	B	12	B	13	B
Intersection	*12*	*B*	*16*	*B*	*16*	*B*
Arlington Heights Road / Access A (Loading Dock) △						
Westbound	36	E	26	D	20	C
Southbound (Left)	10+	B	12	B	11	B
Palatine Road / Access C (RIRO) △						
Northbound (Right)	21	C	23	C	18	C
Rand Road / Access D (RIRO) △						
Eastbound (Right)	17	C	19	C	19	C
Rand Road / Access E-Commercial Driveway ★						
Eastbound	30	C	36	D	32	C
Westbound	33	C	36	D	31	C
Northbound	6	A	9	A	9	A
Southbound	6	A	7	A	8	A
Intersection	*6*	*A*	*10-*	*A*	*10+*	*B*

★ Signalized Intersection △Minor-Leg Stop-Controlled Intersection

[1] Left-turn operates at LOS F.

[2] Left-turn operates at LOS E.

[3] Left-turn and through movements operate at LOS E.

With the addition of background traffic growth, the study intersections are expected to operate similar to existing conditions. The LOS for each approach and movement is consistent with existing conditions with some exceptions noted at the intersection of Arlington Heights/Access A. The westbound approach at Arlington Heights/Access A is projected to operate at LOS E during the morning peak hour (compared to LOS D under existing conditions) and LOS D during the evening

peak hour (compared to LOS C under existing conditions). The 95th percentile queues projected for Arlington Heights/Access A are expected to be similar to existing conditions.

At the intersection of Arlington Heights Road/Palatine Road, the projected LOS is consistent with existing conditions. During each peak hour, the 95th percentile queues are projected to increase minimally as compared to existing conditions. The queues estimated for the eastbound, westbound, and northbound left-turn lanes would continue to exceed the available storage, consistent with existing conditions.

At the intersection of Arlington Heights Road/Lillian Avenue/Access B, the projected LOS is consistent with existing conditions. The 95th percentile queues are expected to be accommodated by the available storage lanes during all peak hours. The results of the capacity analysis are considered conservative as they do not reflect RTOR movements, which were observed in the field.

At the intersection of Palatine Road/Access C, the projected LOS is consistent with existing conditions. During each peak hour, the 95th percentile queues are approximately 25 feet (1 vehicle) or less.

The intersection of Rand Road/Access E is expected to operate similar to existing conditions, with no projected change in the LOS for any movement. The projected 95th percentile queues are expected to be similar to existing conditions.

Future Build Traffic Projections

Total traffic projections for Year 2025 were calculated by adding site trips (Exhibit 5) to Future (2029) No-Build traffic projections (Exhibit 6). Although the existing retail store was operational at the time of the traffic count data collection, minimal site-generated traffic was observed during the peak hours. Therefore, for purposes of a conservative analysis, existing site-generated traffic was not removed from the area roadway network. Traffic projections for the Year 2029 future build scenario are illustrated in **Exhibit 7**.

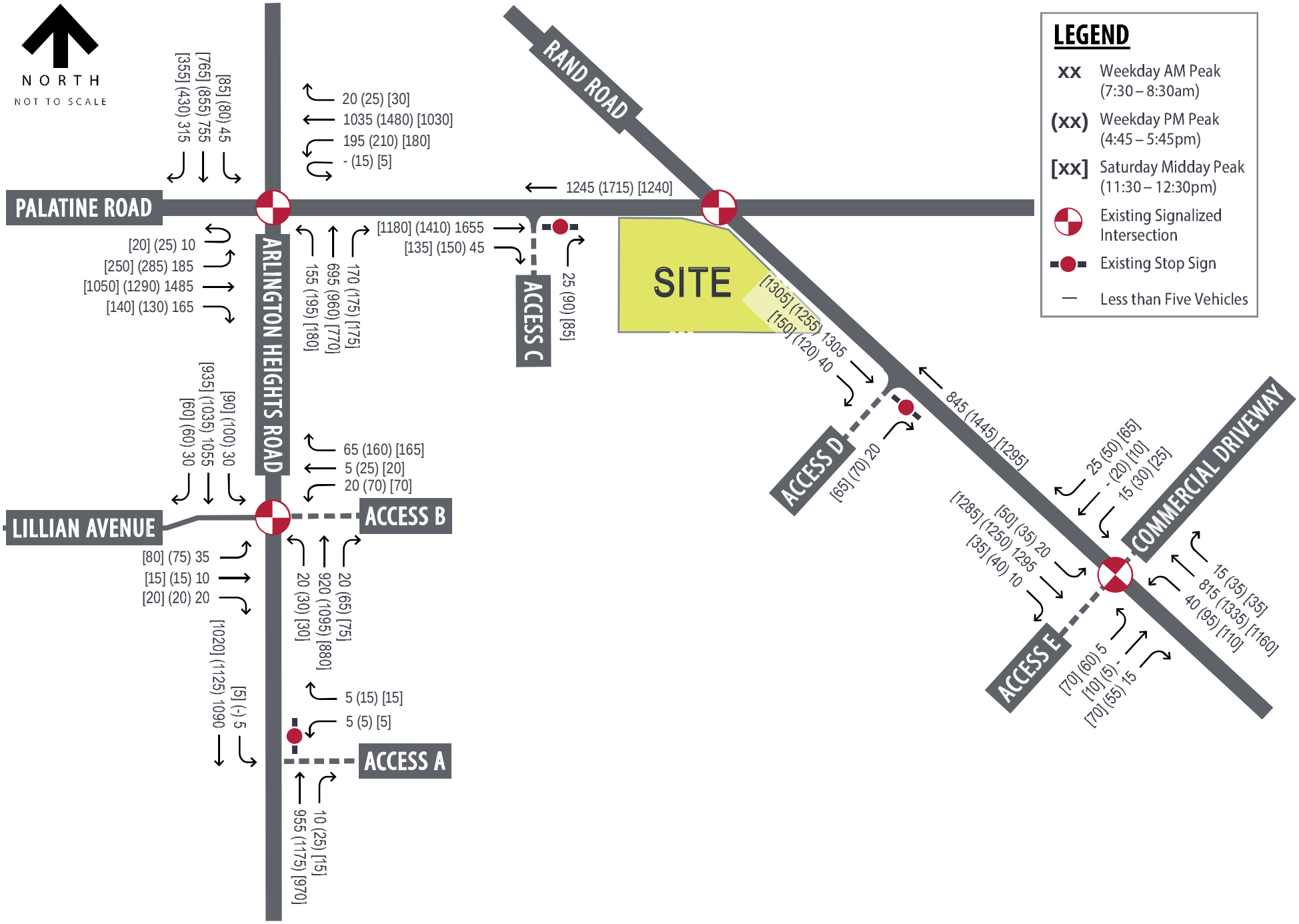
For the analysis of future traffic conditions, turn lane warrants were evaluated for the study intersections and the proposed site access driveways using guidelines in the IDOT *Bureau of Design and Environment (BDE) Manual*. At the intersection of Arlington Heights Road/Palatine Road, dedicated left- and right-turn lanes are provided on each leg, with the exception of the east and west legs which provide a left-turn lane only. Based on the IDOT *BDE Manual* volume guidance provided for signalized intersections, projected future traffic volumes (Exhibit 7) do not meet warrant criteria for a right-turn lane on the east leg of Palatine Road at Arlington Heights Road. On the west leg, a right-turn lane is warranted under existing (2023) traffic volumes; however, site traffic is not expected to contribute to this movement and based on a review of the study area, right-turn lanes are generally not provided on Palatine Road. Therefore, an eastbound right-turn lane was not included in the analysis of future conditions at Arlington Heights Road/Palatine Road.

At the signalized site access driveways, dedicated right-turn lanes are not currently provided. Based on the IDOT *BDE Manual* volume guidance for signalized intersections, projected future traffic volumes (Exhibit 7) do not meet the minimum warrant criteria for a northbound right-turn lane on

Arlington Heights Road at Access B and based on a review of the corridor, exclusive right-turn lanes are generally not provided along Arlington Heights Road. Therefore, a northbound right-turn lane was not included in the analysis of future conditions at Arlington Heights Road/Lilian Avenue-Access B. At the intersection of Rand Road/Access E, the projected future traffic volumes (Exhibit 7) do not meet warrant criteria for a southbound right-turn lane on Rand Road. Therefore, a right-turn lane was not included in the analysis of future conditions at Rand Road/Access E.

Right-turn lanes were also evaluated for the unsignalized Town & Country Center access driveways. The IDOT *BDE Manual* does not provided specific volume guidance for four-lane roadways with a design speed less than 50 MPH (design speed on Arlington Heights Road is 40 MPH, posted speed limit is 35 MPH). Per IDOT guidance, a right-turn lane may also be considered to meet the level of service criteria or to provide uniform intersection design along a corridor. At Arlington Heights Road/Access A, the northbound right-turn is projected to operate under “free-flow” conditions and right-turn lanes are generally not provided along the corridor; therefore, a dedicated northbound right-turn lane was not included in the analysis of future conditions. The IDOT *BDE Manual* does not provide specific volume guidance for unsignalized intersections on a six-lane roadway with a design speed of 40 MPH (posted speed limit on Palatine Road and Rand Road is 35 MPH). Per guidance in the IDOT *BDE Manual*, a right-turn lane may also be considered where right-turn lanes are consistently provided along the corridor. Based on a review of the study area, right-turn lanes are generally not provided on Palatine Road or Rand Road at commercial driveways. Therefore, an eastbound right-turn lane on Palatine Road at Access C was not included in the analysis of future conditions. Similarly, a southbound right-turn lane on Rand Road at Access D was not included in the analysis of future conditions.

At the internal site access driveways proposed for the bank, a single inbound lane and single outbound lane should be provided for the full-access driveways. The outbound-only driveway should provide a single lane. Stop control should be posted for outbound traffic at each internal driveway. Wayfinding signage should be provided to direct motorists to the drive-through ATM lanes.



Kimley»Horn

EXHIBIT 7

FUTURE (2029) BUILD TRAFFIC PROJECTIONS

Based on the assumptions applied to the traffic projections for the future build scenario, future capacity results are provided in **Table 3.5**. The results are based on Synchro's HCM 6th Edition reports with the exception of Arlington Heights Road/Palatine Road, which is reported using Synchro's Lanes, Volumes, Timings Report. Due to the presence of U-turn movements on the east and west legs, the Synchro HCM 6th Edition report is not available for this intersection. Additional capacity analysis details are included in the appendix.

Table 3.5. Future (Year 2029) Build Levels of Service

Intersection	Weekday				Saturday	
	AM Peak Hour		PM Peak Hour		Midday Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Arlington Heights Road / Palatine Road ★						
Eastbound	55+	E[1]	71	E[1]	45	D[2]
Westbound	44	D[1]	63	E[1]	55-	D[2]
Northbound	63	E[1]	73	E[1]	51	D[1]
Southbound	61	E	67	E[1]	50	D[3]
Intersection	*55+*	*E*	*68*	*E*	*50*	*D*
Arlington Heights Road / Lillian Avenue / Access B ★						
Eastbound	28	C	30	C	27	C
Westbound	29	C	38	D	32	C
Northbound	10+	B	15	B	14	B
Southbound	11	B	12	B	13	B
Intersection	*12*	*B*	*16*	*B*	*16*	*B*
Arlington Heights Road / Access A (Loading Dock) △						
Westbound	36	E	26	D	20	C
Southbound (Left)	10+	B	12	B	11	B
Palatine Road / Access C (RIRO) △						
Northbound (Right)	22	C	25+	D	20	C
Rand Road / Access D (RIRO) △						
Eastbound (Right)	17	C	20	C	21	C
Rand Road / Access E ★						
Eastbound	30	C	36	D	32	C
Westbound	33	C	35	D	30	C
Northbound	6	A	9	A	10-	A
Southbound	6	A	7	A	9	A
Intersection	*6*	*A*	*10+*	*B*	*11*	*B*

★ Signalized Intersection △ Minor-Leg Stop-Controlled Intersection

[1] Left-turn operates at LOS F.

[2] Left-turn operates at LOS E.

[3] Left-turn and through movements operate at LOS E.

With the addition of site-generated traffic, the study intersections are expected to operate similar to future-no build conditions. The LOS for each approach and movement is consistent with some exceptions. At the intersection of Arlington Heights Road/Palatine Road, the overall intersection is projected to operate at LOS E during the morning peak hour (compared to LOS D under future no-

build conditions). The change in delay for this intersection is less than 1 second per vehicle.; under future no-build conditions this intersection was approaching the threshold for LOS E.

At the intersection of Palatine Road/Access C, the northbound right-turn movement is projected to operate at LOS D during the evening peak hour (compared to LOS C under future no-build conditions). The projected delay is not unusual for a minor-street stop-controlled intersection with a heavily traveled arterial such as Palatine Road. The projected 95th percentile queues are approximately 40 feet (2 vehicles) or less during each peak hour. The queue is expected to be accommodated within the existing throat length provided for Access C; and therefore, impacts to onsite circulation are not anticipated. Furthermore, Town & Country Center provides flexibility for motorists to select an alternate outbound access driveway if long delays or queues are observed at Access C.

At the intersection of Rand Road/Access E, the intersection is projected to operate at LOS B during the evening peak hour (compared to LOS A under future no-build conditions).

For each study intersection, the projected 95th percentile queues are expected to be similar to existing and no-build conditions. The addition of site-generated traffic is not expected to materially change queues at the study intersections. The 95th percentile queues projected for the existing unsignalized Town & Country Center access driveways are approximately 40 feet (2 vehicles) or less during each peak hour.

4. RECOMMENDATIONS & CONCLUSIONS

Based on Kimley-Horn's review of the proposed site plan and evaluation of existing and future traffic conditions, the study intersections are expected to adequately accommodate the proposed redevelopment with the following recommendations:

- Provide a single inbound lane and a single outbound lane at the two full-access internal driveways.
- Provide a single lane for the outbound-only driveway located near the southeast quadrant of the outlot.
- Install minor-leg stop control for outbound traffic at the internal site access driveways.
- Consider onsite wayfinding to direct motorists to the dedicated drive-through ATM lanes.

Regardless of the final configuration of the intersection geometrics, several additional items should be taken into consideration when preparing site and roadway improvement plans for the subject redevelopment. As the site design progresses, care should be taken with landscaping, signage, and monumentation at the site access locations to ensure that adequate horizontal sight distance is provided from the new stop bars. If alterations to the site plan or land use should occur, changes to the analysis provided within this traffic impact study may be needed.

APPENDIX

Conceptual Site Plan

Traffic Count Data

Existing Capacity Reports

CMAP Year 2050 Projections

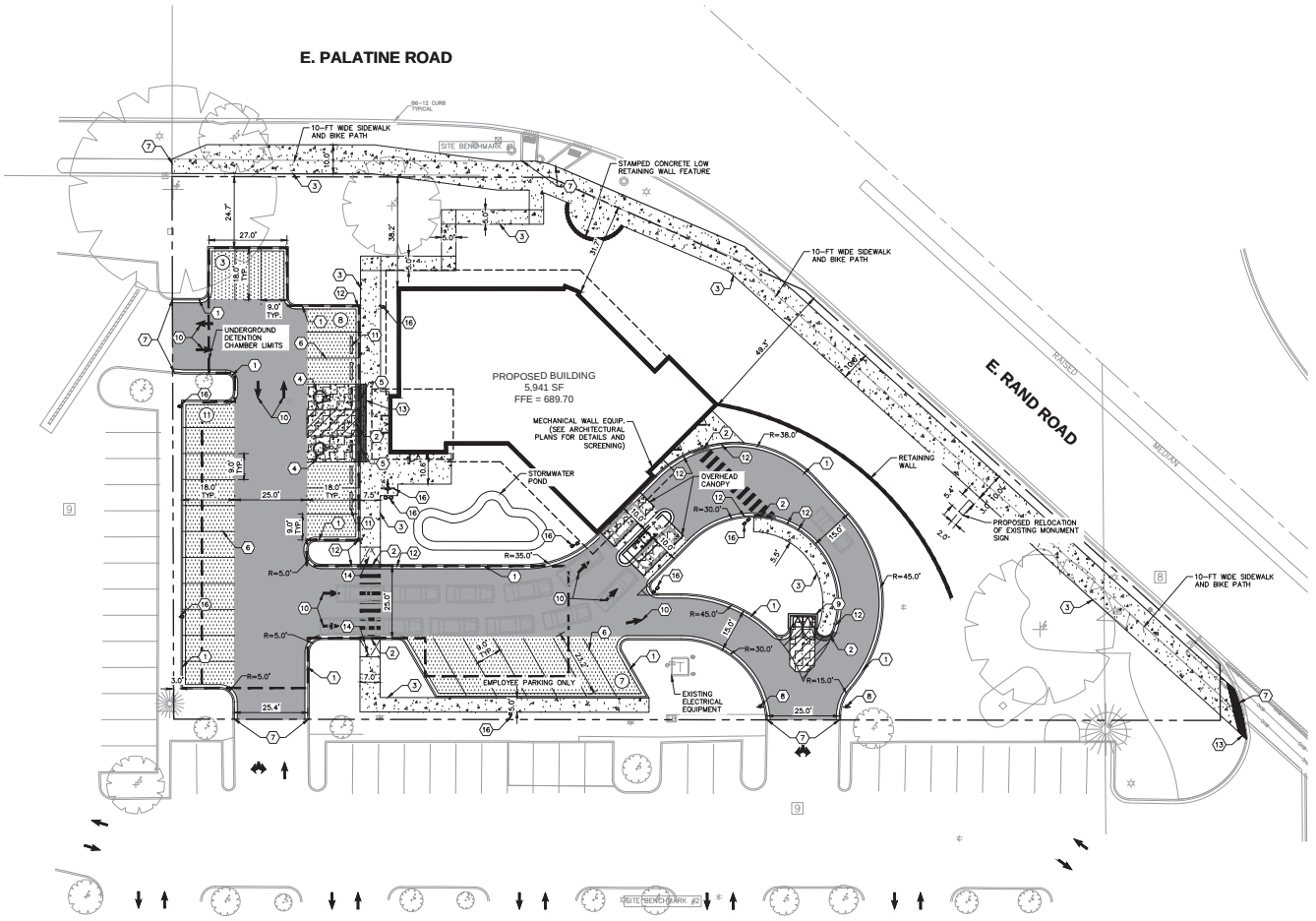
Data from the ITE Trip Generation Manual, 11th Edition

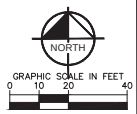
Future No-Build Capacity Reports

Future Build Capacity Reports

Parking Study

CONCEPTUAL SITE PLAN





GENERAL NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.
5. REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

KEY NOTES

1. B6.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
2. DEPRESSED CURB AND GUTTER
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
5. ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8, SEE DETAILS)
6. 4" WIDE PAINTED SOLID LINE, TYP.
7. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
8. DO NOT ENTER SIGN, TYP.
9. TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
10. SITE DIRECTIONAL MARKINGS
11. WHEEL STOP (SEE DETAILS)
12. TRANSITION FROM DEPRESSED CURB TO B6.12 OVER TWO PARKING STALLS
13. 2' WIDE DETECTIBLE WARNING TRUNCATED DOME STRIP (SEE DETAILS)
14. ACCESSIBLE RAMP (SEE DETAILS)
15. 12" WHITE PAINTED SOLID LINE, TYP. (3' C-C)
16. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE PHOTOMETRIC PLANS)
17. BIKE RACK (SEE ARCHITECTURAL PLANS FOR DETAILS)

PAVING AND CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STANDARD PITCH CONCRETE CURB AND GUTTER
- REVERSE PITCH CONCRETE CURB AND GUTTER
- CONCRETE DEPRESSED CURB AND GUTTER

PARKING SUMMARY

PARKING SPACES REQUIRED (VILLAGE STANDARD)	=	20 SPACES
STANDARD PARKING SPACES PROVIDED	=	27 SPACES
ACCESSIBLE PARKING SPACES REQUIRED	=	2 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	=	2 SPACES
TOTAL PARKING SPACES PROVIDED	=	29 SPACES
BICYCLE PARKING SPACES REQUIRED (VILLAGE STANDARD)	=	2 SPACES
TOTAL BICYCLE PARKING SPACES PROVIDED	=	5 SPACES

Call Before You Dig JULIE 1-800-892-0123

No.	REVISIONS	DATE	BY
1	VILLAGE COMMENTS	11/02/23	JW

Kimley»Horn
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421 FEHLEY PARK ROAD, SUITE 200
ARLINGTON HEIGHTS, IL 60005
PHONE: (847) 437-9000
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: RKG
DRAWN BY: RKG
CHECKED BY: TJS

CHASE

SITE PLAN

CHASE BANK
595 E. PALATINE RD
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE: 06/12/23
KHA PROJECT NO. 168558032
SHEET NUMBER
C2.0

Drawing name: K:\ARL_LDEV\168558032_Chase_Arlingtonheights_IL\2 Design\CAD\PlanSheets\C1.0 - SITE PLAN.dwg C1.0 Oct 25, 2023 - 4:59pm by AlexuFabio
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TRAFFIC COUNT DATA

01_Arlington Heights Road / Palatine Road - TMC

Wed May 17, 2023
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068587, Location: 42.109852, -87.980456

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-17 7:30AM	46	348	36	2	**432**	0	35	225	3	0	**263**	0	36	151	41	0	**228**	0	8	221	79	0	**308**	0	**1231**
7:45AM	51	382	40	3	**476**	2	51	261	6	0	**318**	0	46	177	47	0	**270**	0	17	186	86	0	**289**	0	**1353**
8:00AM	36	339	33	1	**409**	0	52	262	6	0	**320**	0	33	175	37	0	**245**	0	7	158	77	0	**242**	0	**1216**
8:15AM	48	339	35	5	**427**	1	52	227	6	0	**285**	0	29	167	40	0	**236**	1	10	147	61	0	**218**	1	**1166**
Total	181	1408	144	11	**1744**	3	190	975	21	0	**1186**	0	144	670	165	0	**979**	1	42	712	303	0	**1057**	1	**4966**
% Approach	10.4%	80.7%	8.3%	0.6%	**-**	-	16.0%	82.2%	1.8%	0%	**-**	-	14.7%	68.4%	16.9%	0%	**-**	-	4.0%	67.4%	28.7%	0%	**-**	-	-
% Total	3.6%	28.4%	2.9%	0.2%	**35.1%**	-	3.8%	19.6%	0.4%	0%	**23.9%**	-	2.9%	13.5%	3.3%	0%	**19.7%**	-	0.8%	14.3%	6.1%	0%	**21.3%**	-	-
PHF	0.887	0.921	0.934	0.550	**0.919**	-	0.913	0.930	0.875	-	**0.927**	-	0.783	0.946	0.878	-	**0.906**	-	0.618	0.805	0.896	-	**0.856**	-	0.920
Lights	163	1334	137	11	**1645**	-	184	912	19	0	**1115**	-	140	640	162	0	**942**	-	39	681	289	0	**1009**	-	4711
% Lights	90.1%	94.7%	95.1%	100%	**94.3%**	-	96.8%	93.5%	90.5%	0%	**94.0%**	-	97.2%	95.5%	98.2%	0%	**96.2%**	-	92.9%	95.6%	95.4%	0%	**95.5%**	-	94.9%
Articulated Trucks	8	29	1	0	**38**	-	1	26	0	0	**27**	-	1	6	1	0	**8**	-	0	8	3	0	**11**	-	84
% Articulated Trucks	4.4%	2.1%	0.7%	0%	**2.2%**	-	0.5%	2.7%	0%	0%	**2.3%**	-	0.7%	0.9%	0.6%	0%	**0.8%**	-	0%	1.1%	1.0%	0%	**1.0%**	-	1.7%
Buses and Single-Unit Trucks	10	45	4	0	**59**	-	5	37	2	0	**44**	-	3	24	2	0	**29**	-	3	23	9	0	**35**	-	167
% Buses and Single-Unit Trucks	5.5%	3.2%	2.8%	0%	**3.4%**	-	2.6%	3.8%	9.5%	0%	**3.7%**	-	2.1%	3.6%	1.2%	0%	**3.0%**	-	7.1%	3.2%	3.0%	0%	**3.3%**	-	3.4%
Bicycles on Road	0	0	2	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	2	0	**2**	-	4
% Bicycles on Road	0%	0%	1.4%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.7%	0%	**0.2%**	-	0.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

01_Arlington Heights Road / Palatine Road - TMC

Wed May 17, 2023
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068587, Location: 42.109852, -87.980456

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-17 4:45PM	62	311	36	3	**412**	3	50	363	6	0	**419**	0	50	224	42	0	**316**	0	22	209	105	0	**336**	0	**1483**
5:00PM	71	296	40	5	**412**	0	44	378	4	3	**429**	1	45	212	44	0	**301**	0	11	206	120	1	**338**	0	**1480**
5:15PM	69	314	18	9	**410**	1	59	319	8	8	**394**	0	45	245	36	0	**326**	0	16	199	104	0	**319**	0	**1449**
5:30PM	73	318	31	8	**430**	1	50	353	3	2	**408**	1	44	226	47	0	**317**	0	22	213	87	0	**322**	0	**1477**
Total	275	1239	125	25	**1664**	5	203	1413	21	13	**1650**	2	184	907	169	0	**1260**	0	71	827	416	1	**1315**	0	**5889**
% Approach	16.5%	74.5%	7.5%	1.5%	**-**	-	12.3%	85.6%	1.3%	0.8%	**-**	-	14.6%	72.0%	13.4%	0%	**-**	-	5.4%	62.9%	31.6%	0.1%	**-**	-	-
% Total	4.7%	21.0%	2.1%	0.4%	**28.3%**	-	3.4%	24.0%	0.4%	0.2%	**28.0%**	-	3.1%	15.4%	2.9%	0%	**21.4%**	-	1.2%	14.0%	7.1%	0%	**22.3%**	-	-
PHF	0.942	0.974	0.781	0.694	**0.967**	-	0.860	0.935	0.656	0.406	**0.962**	-	0.920	0.926	0.913	-	**0.965**	-	0.807	0.971	0.867	0.250	**0.973**	-	0.993
Lights	273	1198	124	25	**1620**	-	203	1390	21	13	**1627**	-	182	903	168	0	**1253**	-	71	821	411	1	**1304**	-	5804
% Lights	99.3%	96.7%	99.2%	100%	**97.4%**	-	100%	98.4%	100%	100%	**98.6%**	-	98.9%	99.6%	99.4%	0%	**99.4%**	-	100%	99.3%	98.8%	100%	**99.2%**	-	98.6%
Articulated Trucks	0	17	0	0	**17**	-	0	8	0	0	**8**	-	0	3	0	0	**3**	-	0	0	2	0	**2**	-	30
% Articulated Trucks	0%	1.4%	0%	0%	**1.0%**	-	0%	0.6%	0%	0%	**0.5%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0.5%	0%	**0.2%**	-	0.5%
Buses and Single-Unit Trucks	2	24	1	0	**27**	-	0	15	0	0	**15**	-	2	1	0	0	**3**	-	0	6	3	0	**9**	-	54
% Buses and Single-Unit Trucks	0.7%	1.9%	0.8%	0%	**1.6%**	-	0%	1.1%	0%	0%	**0.9%**	-	1.1%	0.1%	0%	0%	**0.2%**	-	0%	0.7%	0.7%	0%	**0.7%**	-	0.9%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.6%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	- 60.0%		-	-	-	-	- 100%		-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	- 40.0%		-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

01_Arlington Heights Road / Palatine Road - TMC

Sat May 20, 2023
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068593, Location: 42.109852, -87.980456

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-20 11:30AM	55	253	34	5	**347**	2	42	193	6	0	**241**	0	35	167	47	0	**249**	0	22	206	82	0	**310**	1	**1147**
11:45AM	72	230	34	7	**343**	1	49	232	9	1	**291**	0	46	174	31	0	**251**	1	19	186	78	0	**283**	0	**1168**
12:00PM	63	289	37	4	**393**	1	42	251	7	0	**300**	1	49	194	47	0	**290**	0	12	173	94	1	**280**	0	**1263**
12:15PM	57	220	30	2	**309**	4	43	290	4	2	**339**	1	42	204	46	0	**292**	0	20	176	92	0	**288**	0	**1228**
Total	247	992	135	18	**1392**	8	176	966	26	3	**1171**	2	172	739	171	0	**1082**	1	73	741	346	1	**1161**	1	**4806**
% Approach	17.7%	71.3%	9.7%	1.3%	**-**	-	15.0%	82.5%	2.2%	0.3%	**-**	-	15.9%	68.3%	15.8%	0%	**-**	-	6.3%	63.8%	29.8%	0.1%	**-**	-	**-**
% Total	5.1%	20.6%	2.8%	0.4%	**29.0%**	-	3.7%	20.1%	0.5%	0.1%	**24.4%**	-	3.6%	15.4%	3.6%	0%	**22.5%**	-	1.5%	15.4%	7.2%	0%	**24.2%**	-	**-**
PHF	0.858	0.858	0.912	0.643	**0.885**	-	0.898	0.833	0.722	0.375	**0.864**	-	0.878	0.906	0.910	-	**0.926**	-	0.830	0.899	0.920	0.250	**0.936**	-	0.951
Lights	244	974	133	18	**1369**	-	173	955	26	3	**1157**	-	171	734	171	0	**1076**	-	72	737	344	1	**1154**	-	4756
% Lights	98.8%	98.2%	98.5%	100%	**98.3%**	-	98.3%	98.9%	100%	100%	**98.8%**	-	99.4%	99.3%	100%	0%	**99.4%**	-	98.6%	99.5%	99.4%	100%	**99.4%**	-	99.0%
Articulated Trucks	0	6	1	0	**7**	-	1	3	0	0	**4**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	12
% Articulated Trucks	0%	0.6%	0.7%	0%	**0.5%**	-	0.6%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.3%	0%	**0.1%**	-	0.2%
Buses and Single-Unit Trucks	3	12	1	0	**16**	-	2	8	0	0	**10**	-	1	5	0	0	**6**	-	1	4	1	0	**6**	-	38
% Buses and Single-Unit Trucks	1.2%	1.2%	0.7%	0%	**1.1%**	-	1.1%	0.8%	0%	0%	**0.9%**	-	0.6%	0.7%	0%	0%	**0.6%**	-	1.4%	0.5%	0.3%	0%	**0.5%**	-	0.8%
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%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

01_Arlington Heights Road / Palatine Road - TMC

Wed May 17, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068587, Location: 42.109852, -87.980456

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-05-17 7:00AM	35	362	18	2	**417**	3	18	175	4	1	**198**	0	26	103	27	0	**156**	0	8	139	83	0	**230**	0	**1001**
7:15AM	54	389	36	2	**481**	2	29	292	3	0	**324**	0	30	98	36	0	**164**	1	8	154	74	0	**236**	0	**1205**
7:30AM	46	348	36	2	**432**	0	35	225	3	0	**263**	0	36	151	41	0	**228**	0	8	221	79	0	**308**	0	**1231**
7:45AM	51	382	40	3	**476**	2	51	261	6	0	**318**	0	46	177	47	0	**270**	0	17	186	86	0	**289**	0	**1353**
Hourly Total	186	1481	130	9	**1806**	7	133	953	16	1	**1103**	0	138	529	151	0	**818**	1	41	700	322	0	**1063**	0	**4790**
8:00AM	36	339	33	1	**409**	0	52	262	6	0	**320**	0	33	175	37	0	**245**	0	7	158	77	0	**242**	0	**1216**
8:15AM	48	339	35	5	**427**	1	52	227	6	0	**285**	0	29	167	40	0	**236**	1	10	147	61	0	**218**	1	**1166**
8:30AM	41	377	24	6	**448**	0	33	278	8	2	**321**	0	22	139	41	0	**202**	0	12	162	72	0	**246**	0	**1217**
8:45AM	62	277	32	3	**374**	0	51	218	2	0	**271**	0	20	161	34	0	**215**	0	8	117	67	0	**192**	0	**1052**
Hourly Total	187	1332	124	15	**1658**	1	188	985	22	2	**1197**	0	104	642	152	0	**898**	1	37	584	277	0	**898**	1	**4651**
4:00PM	64	327	39	9	**439**	0	37	322	5	0	**364**	0	39	215	35	0	**289**	2	14	195	91	0	**300**	0	**1392**
4:15PM	74	314	43	5	**436**	0	50	362	5	2	**419**	0	45	214	33	0	**292**	0	17	198	106	0	**321**	0	**1468**
4:30PM	65	294	30	6	**395**	0	53	387	8	2	**450**	0	33	222	46	0	**301**	0	14	212	91	0	**317**	0	**1463**
4:45PM	62	311	36	3	**412**	3	50	363	6	0	**419**	0	50	224	42	0	**316**	0	22	209	105	0	**336**	0	**1483**
Hourly Total	265	1246	148	23	**1682**	3	190	1434	24	4	**1652**	0	167	875	156	0	**1198**	2	67	814	393	0	**1274**	0	**5806**
5:00PM	71	296	40	5	**412**	0	44	378	4	3	**429**	1	45	212	44	0	**301**	0	11	206	120	1	**338**	0	**1480**
5:15PM	69	314	18	9	**410**	1	59	319	8	8	**394**	0	45	245	36	0	**326**	0	16	199	104	0	**319**	0	**1449**
5:30PM	73	318	31	8	**430**	1	50	353	3	2	**408**	1	44	226	47	0	**317**	0	22	213	87	0	**322**	0	**1477**
5:45PM	73	313	38	5	**429**	0	45	347	5	2	**399**	0	54	235	39	0	**328**	0	17	203	110	0	**330**	0	**1486**
Hourly Total	286	1241	127	27	**1681**	2	198	1397	20	15	**1630**	2	188	918	166	0	**1272**	0	66	821	421	1	**1309**	0	**5892**
Total	924	5300	529	74	**6827**	13	709	4769	82	22	**5582**	2	597	2964	625	0	**4186**	4	211	2919	1413	1	**4544**	1	**21139**
% Approach	13.5%	77.6%	7.7%	1.1%	**-**	-	12.7%	85.4%	1.5%	0.4%	**-**	-	14.3%	70.8%	14.9%	0%	**-**	-	4.6%	64.2%	31.1%	0%	**-**	-	**-**
% Total	4.4%	25.1%	2.5%	0.4%	**32.3%**	-	3.4%	22.6%	0.4%	0.1%	**26.4%**	-	2.8%	14.0%	3.0%	0%	**19.8%**	-	1.0%	13.8%	6.7%	0%	**21.5%**	-	**-**
Lights	895	5070	516	74	**6555**	-	695	4587	78	22	**5382**	-	589	2903	615	0	**4107**	-	207	2858	1377	1	**4443**	-	20487
% Lights	96.9%	95.7%	97.5%	100%	**96.0%**	-	98.0%	96.2%	95.1%	100%	**96.4%**	-	98.7%	97.9%	98.4%	0%	**98.1%**	-	98.1%	97.9%	97.5%	100%	**97.8%**	-	96.9%
Articulated Trucks	12	87	3	0	**102**	-	1	85	0	0	**86**	-	1	13	1	0	**15**	-	0	9	7	0	**16**	-	219
% Articulated Trucks	1.3%	1.6%	0.6%	0%	**1.5%**	-	0.1%	1.8%	0%	0%	**1.5%**	-	0.2%	0.4%	0.2%	0%	**0.4%**	-	0%	0.3%	0.5%	0%	**0.4%**	-	1.0%
Buses and Single-Unit Trucks	17	143	7	0	**167**	-	13	97	4	0	**114**	-	7	48	8	0	**63**	-	4	51	27	0	**82**	-	426
% Buses and Single-Unit Trucks	1.8%	2.7%	1.3%	0%	**2.4%**	-	1.8%	2.0%	4.9%	0%	**2.0%**	-	1.2%	1.6%	1.3%	0%	**1.5%**	-	1.9%	1.7%	1.9%	0%	**1.8%**	-	2.0%
Bicycles on Road	0	0	3	0	**3**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	1	2	0	**3**	-	7
% Bicycles on Road	0%	0%	0.6%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.2%	0%	**0%**	-	0%	0%	0.1%	0%	**0.1%**	-	0%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	69.2%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	30.8%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

01_Arlington Heights Road / Palatine Road - TMC

Sat May 20, 2023
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068593, Location: 42.109852, -87.980456

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-20 11:00AM	57	205	25	11	**298**	2	43	254	11	4	**312**	0	51	198	48	0	**297**	0	16	188	73	1	**278**	0	**1185**
11:15AM	51	232	43	7	**333**	0	48	208	6	1	**263**	0	64	210	47	0	**321**	0	23	205	75	0	**303**	0	**1220**
11:30AM	55	253	34	5	**347**	2	42	193	6	0	**241**	0	35	167	47	0	**249**	0	22	206	82	0	**310**	1	**1147**
11:45AM	72	230	34	7	**343**	1	49	232	9	1	**291**	0	46	174	31	0	**251**	1	19	186	78	0	**283**	0	**1168**
Hourly Total	235	920	136	30	**1321**	5	182	887	32	6	**1107**	0	196	749	173	0	**1118**	1	80	785	308	1	**1174**	1	**4720**
12:00PM	63	289	37	4	**393**	1	42	251	7	0	**300**	1	49	194	47	0	**290**	0	12	173	94	1	**280**	0	**1263**
12:15PM	57	220	30	2	**309**	4	43	290	4	2	**339**	1	42	204	46	0	**292**	0	20	176	92	0	**288**	0	**1228**
12:30PM	66	224	32	4	**326**	0	39	232	6	4	**281**	0	41	192	37	0	**270**	0	8	176	91	1	**276**	0	**1153**
12:45PM	54	207	33	3	**297**	1	50	224	8	2	**284**	0	42	178	43	0	**263**	1	26	178	93	1	**298**	0	**1142**
Hourly Total	240	940	132	13	**1325**	6	174	997	25	8	**1204**	2	174	768	173	0	**1115**	1	66	703	370	3	**1142**	0	**4786**
Total	475	1860	268	43	**2646**	11	356	1884	57	14	**2311**	2	370	1517	346	0	**2233**	2	146	1488	678	4	**2316**	1	**9506**
% Approach	18.0%	70.3%	10.1%	1.6%	**-**	-	15.4%	81.5%	2.5%	0.6%	**-**	-	16.6%	67.9%	15.5%	0%	**-**	-	6.3%	64.2%	29.3%	0.2%	**-**	-	-
% Total	5.0%	19.6%	2.8%	0.5%	**27.8%**	-	3.7%	19.8%	0.6%	0.1%	**24.3%**	-	3.9%	16.0%	3.6%	0%	**23.5%**	-	1.5%	15.7%	7.1%	0%	**24.4%**	-	-
Lights	469	1831	265	43	**2608**	-	352	1858	56	14	**2280**	-	368	1510	346	0	**2224**	-	145	1482	674	4	**2305**	-	9417
% Lights	98.7%	98.4%	98.9%	100%	**98.6%**	-	98.9%	98.6%	98.2%	100%	**98.7%**	-	99.5%	99.5%	100%	0%	**99.6%**	-	99.3%	99.6%	99.4%	100%	**99.5%**	-	99.1%
Articulated Trucks	0	11	1	0	**12**	-	1	10	0	0	**11**	-	0	0	0	0	**0**	-	0	0	2	0	**2**	-	25
% Articulated Trucks	0%	0.6%	0.4%	0%	**0.5%**	-	0.3%	0.5%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.3%	0%	**0.1%**	-	0.3%
Buses and Single-Unit Trucks	6	18	2	0	**26**	-	3	16	1	0	**20**	-	2	7	0	0	**9**	-	1	6	2	0	**9**	-	64
% Buses and Single-Unit Trucks	1.3%	1.0%	0.7%	0%	**1.0%**	-	0.8%	0.8%	1.8%	0%	**0.9%**	-	0.5%	0.5%	0%	0%	**0.4%**	-	0.7%	0.4%	0.3%	0%	**0.4%**	-	0.7%
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%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	72.7%	-	-	-	-	-	50.0%	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	27.3%	-	-	-	-	-	50.0%	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

02_Arlington Heights Road / Lillian Avenue /... - TMC

Wed May 17, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068588, Location: 42.108131, -87.980481

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Lillian						Lillian						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-05-17 7:30AM	11	4	8	0	**23**	0	5	1	15	0	**21**	0	5	186	8	0	**199**	0	9	263	8	1	**281**	0	**524**
7:45AM	10	2	5	0	**17**	2	2	2	11	0	**15**	1	7	249	3	0	**259**	1	9	271	9	0	**289**	0	**580**
8:00AM	6	1	3	0	**10**	0	6	2	16	0	**24**	0	2	230	3	0	**235**	0	9	247	6	0	**262**	0	**531**
8:15AM	9	1	4	0	**14**	0	8	1	12	0	**21**	0	4	202	6	0	**212**	0	5	233	5	0	**243**	0	**490**
Total	36	8	20	0	**64**	2	21	6	54	0	**81**	1	18	867	20	0	**905**	1	32	1014	28	1	**1075**	0	**2125**
% Approach	56.3%	12.5%	31.3%	0%	**-**	-	25.9%	7.4%	66.7%	0%	**-**	-	2.0%	95.8%	2.2%	0%	**-**	-	3.0%	94.3%	2.6%	0.1%	**-**	-	-
% Total	1.7%	0.4%	0.9%	0%	**3.0%**	-	1.0%	0.3%	2.5%	0%	**3.8%**	-	0.8%	40.8%	0.9%	0%	**42.6%**	-	1.5%	47.7%	1.3%	0%	**50.6%**	-	-
PHF	0.818	0.500	0.625	-	**0.696**	-	0.656	0.750	0.844	-	**0.844**	-	0.643	0.870	0.625	-	**0.874**	-	0.889	0.935	0.778	0.250	**0.930**	-	0.916
Lights	33	7	20	0	**60**	-	19	6	51	0	**76**	-	18	839	18	0	**875**	-	29	979	26	1	**1035**	-	2046
% Lights	91.7%	87.5%	100%	0%	**93.8%**	-	90.5%	100%	94.4%	0%	**93.8%**	-	100%	96.8%	90.0%	0%	**96.7%**	-	90.6%	96.5%	92.9%	100%	**96.3%**	-	96.3%
Articulated Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	3	0	0	**3**	-	1	15	1	0	**17**	-	21
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	4.8%	0%	0%	0%	**1.2%**	-	0%	0.3%	0%	0%	**0.3%**	-	3.1%	1.5%	3.6%	0%	**1.6%**	-	1.0%
Buses and Single-Unit Trucks	3	1	0	0	**4**	-	1	0	3	0	**4**	-	0	25	2	0	**27**	-	2	20	1	0	**23**	-	58
% Buses and Single-Unit Trucks	8.3%	12.5%	0%	0%	**6.3%**	-	4.8%	0%	5.6%	0%	**4.9%**	-	0%	2.9%	10.0%	0%	**3.0%**	-	6.3%	2.0%	3.6%	0%	**2.1%**	-	2.7%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

02_Arlington Heights Road / Lillian Avenue /... - TMC

Wed May 17, 2023
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068588, Location: 42.108131, -87.980481

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Lillian						Lillian						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-17 4:45PM	12	7	7	0	**26**	2	18	5	37	0	**60**	0	6	265	9	0	**280**	2	27	258	14	0	**299**	0	**665**
5:00PM	25	1	5	0	**31**	0	15	5	27	0	**47**	0	3	251	11	1	**266**	0	24	243	18	0	**285**	0	**629**
5:15PM	15	6	3	0	**24**	1	15	8	46	0	**69**	0	5	265	25	0	**295**	2	26	234	16	0	**276**	0	**664**
5:30PM	23	3	5	0	**31**	0	17	8	42	0	**67**	0	14	267	14	0	**295**	2	17	261	12	0	**290**	0	**683**
Total	75	17	20	0	**112**	3	65	26	152	0	**243**	0	28	1048	59	1	**1136**	6	94	996	60	0	**1150**	0	**2641**
% Approach	67.0%	15.2%	17.9%	0%	**-**	-	26.7%	10.7%	62.6%	0%	**-**	-	2.5%	92.3%	5.2%	0.1%	**-**	-	8.2%	86.6%	5.2%	0%	**-**	-	-
% Total	2.8%	0.6%	0.8%	0%	**4.2%**	-	2.5%	1.0%	5.8%	0%	**9.2%**	-	1.1%	39.7%	2.2%	0%	**43.0%**	-	3.6%	37.7%	2.3%	0%	**43.5%**	-	-
PHF	0.750	0.571	0.714	-	**0.895**	-	0.903	0.813	0.826	-	**0.880**	-	0.500	0.981	0.590	0.250	**0.963**	-	0.870	0.954	0.833	-	**0.962**	-	0.968
Lights	74	16	20	0	**110**	-	64	26	152	0	**242**	-	28	1040	59	1	**1128**	-	94	989	58	0	**1141**	-	2621
% Lights	98.7%	94.1%	100%	0%	**98.2%**	-	98.5%	100%	100%	0%	**99.6%**	-	100%	99.2%	100%	100%	**99.3%**	-	100%	99.3%	96.7%	0%	**99.2%**	-	99.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses and Single-Unit Trucks	1	0	0	0	**1**	-	1	0	0	0	**1**	-	0	5	0	0	**5**	-	0	7	2	0	**9**	-	16
% Buses and Single-Unit Trucks	1.3%	0%	0%	0%	**0.9%**	-	1.5%	0%	0%	0%	**0.4%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0.7%	3.3%	0%	**0.8%**	-	0.6%
Bicycles on Road	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	5.9%	0%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

02_Arlington Heights Road / Lillian Avenue /... - TMC

Sat May 20, 2023
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068594, Location: 42.108131, -87.980481

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Lillian						Lillian						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-20 11:30AM	22	2	5	0	**29**	1	21	3	38	0	**62**	0	10	184	17	0	**211**	1	15	226	11	0	**252**	0	**554**
11:45AM	18	6	6	0	**30**	0	13	6	30	0	**49**	0	12	211	19	0	**242**	2	27	243	15	0	**285**	0	**606**
12:00PM	27	1	6	0	**34**	0	17	7	44	0	**68**	0	5	230	17	0	**252**	2	25	205	21	2	**253**	0	**607**
12:15PM	12	5	3	0	**20**	1	12	3	37	0	**52**	0	4	227	15	0	**246**	0	17	210	13	0	**240**	0	**558**
Total	79	14	20	0	**113**	2	63	19	149	0	**231**	0	31	852	68	0	**951**	5	84	884	60	2	**1030**	0	**2325**
% Approach	69.9%	12.4%	17.7%	0%	**-**	-	27.3%	8.2%	64.5%	0%	**-**	-	3.3%	89.6%	7.2%	0%	**-**	-	8.2%	85.8%	5.8%	0.2%	**-**	-	**-**
% Total	3.4%	0.6%	0.9%	0%	**4.9%**	-	2.7%	0.8%	6.4%	0%	**9.9%**	-	1.3%	36.6%	2.9%	0%	**40.9%**	-	3.6%	38.0%	2.6%	0.1%	**44.3%**	-	**-**
PHF	0.731	0.583	0.833		**- 0.831**	-	0.750	0.679	0.847		**- 0.849**	-	0.646	0.926	0.895		**- 0.943**	-	0.778	0.909	0.714	0.250	**0.904**	-	0.958
Lights	79	14	20	0	**113**	-	63	19	149	0	**231**	-	31	845	68	0	**944**	-	84	877	59	2	**1022**	-	2310
% Lights	100%	100%	100%	0%	**100%**	-	100%	100%	100%	0%	**100%**	-	100%	99.2%	100%	0%	**99.3%**	-	100%	99.2%	98.3%	100%	**99.2%**	-	99.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	0	6	1	0	**7**	-	14
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.8%	0%	0%	**0.7%**	-	0%	0.7%	1.7%	0%	**0.7%**	-	0.6%
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%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

02_Arlington Heights Road / Lillian Avenue /... - TMC

Wed May 17, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068588, Location: 42.108131, -87.980481

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Lillian						Lillian						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-05-17 7:00AM	8	0	3	0	**11**	0	6	0	10	0	**16**	0	1	135	3	0	**139**	1	12	166	4	0	**182**	0	**348**
7:15AM	7	1	3	0	**11**	0	4	1	10	0	**15**	1	2	164	4	0	**170**	0	7	211	2	0	**220**	0	**416**
7:30AM	11	4	8	0	**23**	0	5	1	15	0	**21**	0	5	186	8	0	**199**	0	9	263	8	1	**281**	0	**524**
7:45AM	10	2	5	0	**17**	2	2	2	11	0	**15**	1	7	249	3	0	**259**	1	9	271	9	0	**289**	0	**580**
Hourly Total	36	7	19	0	**62**	2	17	4	46	0	**67**	2	15	734	18	0	**767**	2	37	911	23	1	**972**	0	**1868**
8:00AM	6	1	3	0	**10**	0	6	2	16	0	**24**	0	2	230	3	0	**235**	0	9	247	6	0	**262**	0	**531**
8:15AM	9	1	4	0	**14**	0	8	1	12	0	**21**	0	4	202	6	0	**212**	0	5	233	5	0	**243**	0	**490**
8:30AM	10	1	4	0	**15**	1	7	0	14	0	**21**	0	5	193	10	0	**208**	0	3	194	10	0	**207**	0	**451**
8:45AM	10	4	3	0	**17**	0	2	1	11	0	**14**	0	7	195	4	0	**206**	1	18	218	9	0	**245**	0	**482**
Hourly Total	35	7	14	0	**56**	1	23	4	53	0	**80**	0	18	820	23	0	**861**	1	35	892	30	0	**957**	0	**1954**
4:00PM	13	3	1	0	**17**	2	23	6	37	0	**66**	0	4	259	19	0	**282**	8	20	235	14	0	**269**	0	**634**
4:15PM	12	4	4	0	**20**	3	14	5	31	0	**50**	0	5	227	13	0	**245**	10	18	262	15	0	**295**	0	**610**
4:30PM	15	3	5	0	**23**	4	18	12	31	0	**61**	0	6	263	15	0	**284**	8	21	252	17	0	**290**	0	**658**
4:45PM	12	7	7	0	**26**	2	18	5	37	0	**60**	0	6	265	9	0	**280**	2	27	258	14	0	**299**	0	**665**
Hourly Total	52	17	17	0	**86**	11	73	28	136	0	**237**	0	21	1014	56	0	**1091**	28	86	1007	60	0	**1153**	0	**2567**
5:00PM	25	1	5	0	**31**	0	15	5	27	0	**47**	0	3	251	11	1	**266**	0	24	243	18	0	**285**	0	**629**
5:15PM	15	6	3	0	**24**	1	15	8	46	0	**69**	0	5	265	25	0	**295**	2	26	234	16	0	**276**	0	**664**
5:30PM	23	3	5	0	**31**	0	17	8	42	0	**67**	0	14	267	14	0	**295**	2	17	261	12	0	**290**	0	**683**
5:45PM	12	4	6	0	**22**	0	20	5	36	0	**61**	0	8	253	13	0	**274**	1	19	245	12	0	**276**	0	**633**
Hourly Total	75	14	19	0	**108**	1	67	26	151	0	**244**	0	30	1036	63	1	**1130**	5	86	983	58	0	**1127**	0	**2609**
Total	198	45	69	0	**312**	15	180	62	386	0	**628**	2	84	3604	160	1	**3849**	36	244	3793	171	1	**4209**	0	**8998**
% Approach	63.5%	14.4%	22.1%	0%	**-**	-	28.7%	9.9%	61.5%	0%	**-**	-	2.2%	93.6%	4.2%	0%	**-**	-	5.8%	90.1%	4.1%	0%	**-**	-	-
% Total	2.2%	0.5%	0.8%	0%	**3.5%**	-	2.0%	0.7%	4.3%	0%	**7.0%**	-	0.9%	40.1%	1.8%	0%	**42.8%**	-	2.7%	42.2%	1.9%	0%	**46.8%**	-	-
Lights	194	43	68	0	**305**	-	171	61	383	0	**615**	-	84	3536	158	1	**3779**	-	241	3717	166	1	**4125**	-	8824
% Lights	98.0%	95.6%	98.6%	0%	**97.8%**	-	95.0%	98.4%	99.2%	0%	**97.9%**	-	100%	98.1%	98.8%	100%	**98.2%**	-	98.8%	98.0%	97.1%	100%	**98.0%**	-	98.1%
Articulated Trucks	0	0	0	0	**0**	-	7	0	0	0	**7**	-	0	8	0	0	**8**	-	1	18	1	0	**20**	-	35
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	3.9%	0%	0%	0%	**1.1%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.4%	0.5%	0.6%	0%	**0.5%**	-	0.4%
Buses and Single-Unit Trucks	4	1	1	0	**6**	-	2	0	3	0	**5**	-	0	60	2	0	**62**	-	2	58	3	0	**63**	-	136
% Buses and Single-Unit Trucks	2.0%	2.2%	1.4%	0%	**1.9%**	-	1.1%	0%	0.8%	0%	**0.8%**	-	0%	1.7%	1.3%	0%	**1.6%**	-	0.8%	1.5%	1.8%	0%	**1.5%**	-	1.5%
Bicycles on Road	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	3
% Bicycles on Road	0%	2.2%	0%	0%	**0.3%**	-	0%	1.6%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.6%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	11	-	-	-	-	-	2	-	-	-	-	-	33	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	73.3%	-	-	-	-	-	100%	-	-	-	-	-	91.7%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	26.7%	-	-	-	-	-	0%	-	-	-	-	-	8.3%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

02_Arlington Heights Road / Lillian Avenue /... - TMC

Sat May 20, 2023
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068594, Location: 42.108131, -87.980481

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Lillian						Lillian						Arlington Heights Rd						Arlington Heights Rd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-05-20 11:00AM	20	2	4	0	**26**	1	10	7	34	0	**51**	0	12	259	17	0	**288**	0	17	226	6	0	**249**	0	**614**
11:15AM	11	5	7	0	**23**	0	19	2	38	0	**59**	0	7	254	16	0	**277**	1	16	262	8	0	**286**	0	**645**
11:30AM	22	2	5	0	**29**	1	21	3	38	0	**62**	0	10	184	17	0	**211**	1	15	226	11	0	**252**	0	**554**
11:45AM	18	6	6	0	**30**	0	13	6	30	0	**49**	0	12	211	19	0	**242**	2	27	243	15	0	**285**	0	**606**
Hourly Total	71	15	22	0	**108**	2	63	18	140	0	**221**	0	41	908	69	0	**1018**	4	75	957	40	0	**1072**	0	**2419**
12:00PM	27	1	6	0	**34**	0	17	7	44	0	**68**	0	5	230	17	0	**252**	2	25	205	21	2	**253**	0	**607**
12:15PM	12	5	3	0	**20**	1	12	3	37	0	**52**	0	4	227	15	0	**246**	0	17	210	13	0	**240**	0	**558**
12:30PM	16	4	7	0	**27**	0	15	2	41	0	**58**	0	9	218	18	0	**245**	2	24	214	13	1	**252**	0	**582**
12:45PM	13	2	5	0	**20**	0	18	9	41	0	**68**	0	12	200	9	0	**221**	1	32	211	14	0	**257**	0	**566**
Hourly Total	68	12	21	0	**101**	1	62	21	163	0	**246**	0	30	875	59	0	**964**	5	98	840	61	3	**1002**	0	**2313**
Total	139	27	43	0	**209**	3	125	39	303	0	**467**	0	71	1783	128	0	**1982**	9	173	1797	101	3	**2074**	0	**4732**
% Approach	66.5%	12.9%	20.6%	0%	**-**	-	26.8%	8.4%	64.9%	0%	**-**	-	3.6%	90.0%	6.5%	0%	**-**	-	8.3%	86.6%	4.9%	0.1%	**-**	-	**-**
% Total	2.9%	0.6%	0.9%	0%	**4.4%**	-	2.6%	0.8%	6.4%	0%	**9.9%**	-	1.5%	37.7%	2.7%	0%	**41.9%**	-	3.7%	38.0%	2.1%	0.1%	**43.8%**	-	**-**
Lights	139	27	43	0	**209**	-	125	39	303	0	**467**	-	70	1772	128	0	**1970**	-	173	1786	100	3	**2062**	-	4708
% Lights	100%	100%	100%	0%	**100%**	-	100%	100%	100%	0%	**100%**	-	98.6%	99.4%	100%	0%	**99.4%**	-	100%	99.4%	99.0%	100%	**99.4%**	-	99.5%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	1	0	0	**1**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.4%	0%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	11	0	0	**11**	-	0	10	1	0	**11**	-	22
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.6%	0%	0%	**0.6%**	-	0%	0.6%	1.0%	0%	**0.5%**	-	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%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	77.8%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	22.2%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

03_Arlington Heights Road / Town & Country S... - TMC

Wed May 17, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068589, Location: 42.107327, -87.980438

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Access Westbound					Arlington Heights Rd Northbound					Arlington Heights Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2023-05-17 7:30AM	0	0	0	**0**	1	203	2	0	**205**	0	0	270	0	**270**	0	**475**
7:45AM	0	1	0	**1**	1	263	3	0	**266**	0	0	279	1	**280**	0	**547**
8:00AM	0	1	0	**1**	1	235	1	0	**236**	0	1	255	0	**256**	0	**493**
8:15AM	3	1	0	**4**	0	215	4	0	**219**	0	2	250	0	**252**	0	**475**
Total	3	3	0	**6**	3	916	10	0	**926**	0	3	1054	1	**1058**	0	**1990**
% Approach	50.0%	50.0%	0%	**-**	-	98.9%	1.1%	0%	**-**	-	0.3%	99.6%	0.1%	**-**	-	-
% Total	0.2%	0.2%	0%	**0.3%**	-	46.0%	0.5%	0%	**46.5%**	-	0.2%	53.0%	0.1%	**53.2%**	-	-
PHF	0.250	0.750	-	**0.417**	-	0.871	0.563	-	**0.869**	-	0.375	0.944	0.250	**0.945**	-	0.909
Lights	2	3	0	**5**	-	886	9	0	**895**	-	3	1021	1	**1025**	-	1925
% Lights	66.7%	100%	0%	**83.3%**	-	96.7%	90.0%	0%	**96.7%**	-	100%	96.9%	100%	**96.9%**	-	96.7%
Articulated Trucks	0	0	0	**0**	-	4	0	0	**4**	-	0	10	0	**10**	-	14
% Articulated Trucks	0%	0%	0%	**0%**	-	0.4%	0%	0%	**0.4%**	-	0%	0.9%	0%	**0.9%**	-	0.7%
Buses and Single-Unit Trucks	0	0	0	**0**	-	26	0	0	**26**	-	0	23	0	**23**	-	49
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	2.8%	0%	0%	**2.8%**	-	0%	2.2%	0%	**2.2%**	-	2.5%
Bicycles on Road	1	0	0	**1**	-	0	1	0	**1**	-	0	0	0	**0**	-	2
% Bicycles on Road	33.3%	0%	0%	**16.7%**	-	0%	10.0%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	2	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

03_Arlington Heights Road / Town & Country S... - TMC

Wed May 17, 2023
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068589, Location: 42.107327, -87.980438

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Access Westbound					Arlington Heights Rd Northbound					Arlington Heights Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2023-05-17 4:45PM	3	3	0	**6**	0	282	7	0	**289**	0	1	280	0	**281**	0	**576**
5:00PM	4	4	0	**8**	0	263	5	0	**268**	0	1	261	0	**262**	0	**538**
5:15PM	0	3	0	**3**	0	295	6	0	**301**	0	0	253	1	**254**	0	**558**
5:30PM	0	4	0	**4**	0	293	6	0	**299**	0	0	278	0	**278**	0	**581**
Total	7	14	0	**21**	0	1133	24	0	**1157**	0	2	1072	1	**1075**	0	**2253**
% Approach	33.3%	66.7%	0%	**-**	-	97.9%	2.1%	0%	**-**	-	0.2%	99.7%	0.1%	**-**	-	-
% Total	0.3%	0.6%	0%	**0.9%**	-	50.3%	1.1%	0%	**51.4%**	-	0.1%	47.6%	0%	**47.7%**	-	-
PHF	0.438	0.875	-	**0.656**	-	0.960	0.821	-	**0.960**	-	0.500	0.957	0.250	**0.956**	-	0.969
Lights	7	14	0	**21**	-	1128	23	0	**1151**	-	2	1066	1	**1069**	-	2241
% Lights	100%	100%	0%	**100%**	-	99.6%	95.8%	0%	**99.5%**	-	100%	99.4%	100%	**99.4%**	-	99.5%
Articulated Trucks	0	0	0	**0**	-	2	0	0	**2**	-	0	1	0	**1**	-	3
% Articulated Trucks	0%	0%	0%	**0%**	-	0.2%	0%	0%	**0.2%**	-	0%	0.1%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	**0**	-	3	0	0	**3**	-	0	5	0	**5**	-	8
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	0.3%	0%	0%	**0.3%**	-	0%	0.5%	0%	**0.5%**	-	0.4%
Bicycles on Road	0	0	0	**0**	-	0	1	0	**1**	-	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	4.2%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

03_Arlington Heights Road / Town & Country S... - TMC

Sat May 20, 2023
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068595, Location: 42.107284, -87.980467

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Access Westbound					Arlington Heights Rd Northbound					Arlington Heights Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2023-05-20 11:30AM	1	1	0	**2**	0	218	6	0	**224**	0	0	256	0	**256**	0	**482**
11:45AM	0	4	0	**4**	0	223	2	0	**225**	0	1	251	0	**252**	0	**481**
12:00PM	1	6	0	**7**	3	251	4	0	**255**	0	1	226	1	**228**	0	**490**
12:15PM	2	3	0	**5**	1	236	2	0	**238**	0	1	221	1	**223**	0	**466**
Total	4	14	0	**18**	4	928	14	0	**942**	0	3	954	2	**959**	0	**1919**
% Approach	22.2%	77.8%	0%	**-**	-	98.5%	1.5%	0%	**-**	-	0.3%	99.5%	0.2%	**-**	-	**-**
% Total	0.2%	0.7%	0%	**0.9%**	-	48.4%	0.7%	0%	**49.1%**	-	0.2%	49.7%	0.1%	**50.0%**	-	**-**
PHF	0.500	0.583	-	**0.643**	-	0.924	0.583	-	**0.924**	-	0.750	0.932	0.500	**0.937**	-	0.979
Lights	4	14	0	**18**	-	920	14	0	**934**	-	3	946	2	**951**	-	1903
% Lights	100%	100%	0%	**100%**	-	99.1%	100%	0%	**99.2%**	-	100%	99.2%	100%	**99.2%**	-	99.2%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	2	0	**2**	-	2
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0.2%	0%	**0.2%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	**0**	-	8	0	0	**8**	-	0	6	0	**6**	-	14
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	0.9%	0%	0%	**0.8%**	-	0%	0.6%	0%	**0.6%**	-	0.7%
Bicycles on Road	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%
Pedestrians	-	-	-	-	2	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

03_Arlington Heights Road / Town & Country S... - TMC

Wed May 17, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068589, Location: 42.107327, -87.980438

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Access					Arlington Heights Rd					Arlington Heights Rd					
Direction	Westbound					Northbound					Southbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2023-05-17 7:00AM	1	0	0	**1**	0	142	1	0	**143**	0	1	172	0	**173**	0	**317**
7:15AM	1	1	0	**2**	1	170	2	0	**172**	0	1	217	0	**218**	0	**392**
7:30AM	0	0	0	**0**	1	203	2	0	**205**	0	0	270	0	**270**	0	**475**
7:45AM	0	1	0	**1**	1	263	3	0	**266**	0	0	279	1	**280**	0	**547**
Hourly Total	2	2	0	**4**	3	778	8	0	**786**	0	2	938	1	**941**	0	**1731**
8:00AM	0	1	0	**1**	1	235	1	0	**236**	0	1	255	0	**256**	0	**493**
8:15AM	3	1	0	**4**	0	215	4	0	**219**	0	2	250	0	**252**	0	**475**
8:30AM	0	0	0	**0**	0	204	2	0	**206**	0	0	212	0	**212**	0	**418**
8:45AM	1	1	0	**2**	0	204	1	0	**205**	0	0	227	0	**227**	0	**434**
Hourly Total	4	3	0	**7**	1	858	8	0	**866**	0	3	944	0	**947**	0	**1820**
4:00PM	0	4	0	**4**	1	265	9	0	**274**	0	0	262	0	**262**	0	**540**
4:15PM	1	2	0	**3**	0	244	7	0	**251**	0	0	285	0	**285**	0	**539**
4:30PM	1	2	0	**3**	0	285	10	0	**295**	0	0	272	0	**272**	0	**570**
4:45PM	3	3	0	**6**	0	282	7	0	**289**	0	1	280	0	**281**	0	**576**
Hourly Total	5	11	0	**16**	1	1076	33	0	**1109**	0	1	1099	0	**1100**	0	**2225**
5:00PM	4	4	0	**8**	0	263	5	0	**268**	0	1	261	0	**262**	0	**538**
5:15PM	0	3	0	**3**	0	295	6	0	**301**	0	0	253	1	**254**	0	**558**
5:30PM	0	4	0	**4**	0	293	6	0	**299**	0	0	278	0	**278**	0	**581**
5:45PM	2	0	0	**2**	0	276	3	0	**279**	0	1	273	0	**274**	0	**555**
Hourly Total	6	11	0	**17**	0	1127	20	0	**1147**	0	2	1065	1	**1068**	0	**2232**
Total	17	27	0	**44**	5	3839	69	0	**3908**	0	8	4046	2	**4056**	0	**8008**
% Approach	38.6%	61.4%	0%	**-**	-	98.2%	1.8%	0%	**-**	-	0.2%	99.8%	0%	**-**	-	-
% Total	0.2%	0.3%	0%	**0.5%**	-	47.9%	0.9%	0%	**48.8%**	-	0.1%	50.5%	0%	**50.6%**	-	-
Lights	16	27	0	**43**	-	3763	66	0	**3829**	-	8	3969	2	**3979**	-	7851
% Lights	94.1%	100%	0%	**97.7%**	-	98.0%	95.7%	0%	**98.0%**	-	100%	98.1%	100%	**98.1%**	-	98.0%
Articulated Trucks	0	0	0	**0**	-	9	0	0	**9**	-	0	18	0	**18**	-	27
% Articulated Trucks	0%	0%	0%	**0%**	-	0.2%	0%	0%	**0.2%**	-	0%	0.4%	0%	**0.4%**	-	0.3%
Buses and Single-Unit Trucks	0	0	0	**0**	-	67	1	0	**68**	-	0	59	0	**59**	-	127
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	1.7%	1.4%	0%	**1.7%**	-	0%	1.5%	0%	**1.5%**	-	1.6%
Bicycles on Road	1	0	0	**1**	-	0	2	0	**2**	-	0	0	0	**0**	-	3
% Bicycles on Road	5.9%	0%	0%	**2.3%**	-	0%	2.9%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	4	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	80.0%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	20.0%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

03_Arlington Heights Road / Town & Country S... - TMC

Sat May 20, 2023
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068595, Location: 42.107284, -87.980467

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Access Westbound					Arlington Heights Rd Northbound					Arlington Heights Rd Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2023-05-20 11:00AM	2	1	0	**3**	0	293	6	0	**299**	0	0	252	1	**253**	0	**555**
11:15AM	1	0	0	**1**	0	261	4	0	**265**	0	0	280	1	**281**	0	**547**
11:30AM	1	1	0	**2**	0	218	6	0	**224**	0	0	256	0	**256**	0	**482**
11:45AM	0	4	0	**4**	0	223	2	0	**225**	0	1	251	0	**252**	0	**481**
Hourly Total	4	6	0	**10**	0	995	18	0	**1013**	0	1	1039	2	**1042**	0	**2065**
12:00PM	1	6	0	**7**	3	251	4	0	**255**	0	1	226	1	**228**	0	**490**
12:15PM	2	3	0	**5**	1	236	2	0	**238**	0	1	221	1	**223**	0	**466**
12:30PM	0	2	0	**2**	0	243	5	0	**248**	0	1	233	0	**234**	0	**484**
12:45PM	3	2	0	**5**	3	217	3	0	**220**	0	2	219	0	**221**	0	**446**
Hourly Total	6	13	0	**19**	7	947	14	0	**961**	0	5	899	2	**906**	0	**1886**
Total	10	19	0	**29**	7	1942	32	0	**1974**	0	6	1938	4	**1948**	0	**3951**
% Approach	34.5%	65.5%	0%	**-**	-	98.4%	1.6%	0%	**-**	-	0.3%	99.5%	0.2%	**-**	-	**-**
% Total	0.3%	0.5%	0%	**0.7%**	-	49.2%	0.8%	0%	**50.0%**	-	0.2%	49.1%	0.1%	**49.3%**	-	**-**
Lights	9	19	0	**28**	-	1928	31	0	**1959**	-	6	1925	4	**1935**	-	3922
% Lights	90.0%	100%	0%	**96.6%**	-	99.3%	96.9%	0%	**99.2%**	-	100%	99.3%	100%	**99.3%**	-	99.3%
Articulated Trucks	1	0	0	**1**	-	1	0	0	**1**	-	0	2	0	**2**	-	4
% Articulated Trucks	10.0%	0%	0%	**3.4%**	-	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	**0**	-	13	0	0	**13**	-	0	11	0	**11**	-	24
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	0.7%	0%	0%	**0.7%**	-	0%	0.6%	0%	**0.6%**	-	0.6%
Bicycles on Road	0	0	0	**0**	-	0	1	0	**1**	-	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	3.1%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	3	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	42.9%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	4	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	57.1%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

04_Palatine Road / Town & Country Access - TMC

Wed May 17, 2023
Forced Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068590, Location: 42.109759, -87.978402

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Access						Access						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-17 7:30AM	0	405	5	0	**410**	0	0	294	1	0	**295**	0	0	0	6	0	**6**	0	0	0	2	0	**2**	0	**713**
7:45AM	0	439	8	0	**447**	0	0	318	0	0	**318**	0	0	0	4	0	**4**	0	0	0	1	0	**1**	0	**770**
8:00AM	0	412	8	0	**420**	0	0	315	0	0	**315**	0	0	0	3	0	**3**	0	0	0	1	2	**3**	0	**741**
8:15AM	0	373	7	0	**380**	0	0	306	1	0	**307**	0	0	0	0	0	**0**	0	0	0	2	0	**2**	0	**689**
Total	0	1629	28	0	**1657**	0	0	1233	2	0	**1235**	0	0	0	13	0	**13**	0	0	0	6	2	**8**	0	**2913**
% Approach	0%	98.3%	1.7%	0%	**-**	-	0%	99.8%	0.2%	0%	**-**	-	0%	0%	100%	0%	**-**	-	0%	0%	75.0%	25.0%	**-**	-	**-**
% Total	0%	55.9%	1.0%	0%	**56.9%**	-	0%	42.3%	0.1%	0%	**42.4%**	-	0%	0%	0.4%	0%	**0.4%**	-	0%	0%	0.2%	0.1%	**0.3%**	-	**-**
PHF	-	0.928	0.875	-	**0.927**	-	-	0.969	0.500	-	**0.971**	-	-	-	0.542	-	**0.542**	-	-	-	0.750	0.250	**0.667**	-	0.946
Lights	0	1553	28	0	**1581**	-	0	1151	2	0	**1153**	-	0	0	13	0	**13**	-	0	0	6	2	**8**	-	2755
% Lights	0%	95.3%	100%	0%	**95.4%**	-	0%	93.3%	100%	0%	**93.4%**	-	0%	0%	100%	0%	**100%**	-	0%	0%	100%	100%	**100%**	-	94.6%
Articulated Trucks	0	35	0	0	**35**	-	0	28	0	0	**28**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	63
% Articulated Trucks	0%	2.1%	0%	0%	**2.1%**	-	0%	2.3%	0%	0%	**2.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.2%
Buses and Single-Unit Trucks	0	41	0	0	**41**	-	0	54	0	0	**54**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	95
% Buses and Single-Unit Trucks	0%	2.5%	0%	0%	**2.5%**	-	0%	4.4%	0%	0%	**4.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	3.3%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

04_Palatine Road / Town & Country Access - TMC

Wed May 17, 2023
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068590, Location: 42.109759, -87.978402

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Access						Access						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-17 4:45PM	0	353	24	0	**377**	0	0	413	0	0	**413**	0	0	0	12	0	**12**	0	0	0	3	0	**3**	0	**805**
5:00PM	0	325	33	0	**358**	0	0	435	1	0	**436**	0	0	0	15	0	**15**	0	0	0	4	0	**4**	0	**813**
5:15PM	0	352	27	0	**379**	0	0	394	1	0	**395**	0	0	0	18	0	**18**	0	0	0	4	0	**4**	1	**796**
5:30PM	0	350	33	0	**383**	0	0	422	2	0	**424**	0	0	0	28	0	**28**	0	0	0	2	0	**2**	0	**837**
Total	0	1380	117	0	**1497**	0	0	1664	4	0	**1668**	0	0	0	73	0	**73**	0	0	0	13	0	**13**	1	**3251**
% Approach	0%	92.2%	7.8%	0%	**-**	-	0%	99.8%	0.2%	0%	**-**	-	0%	0%	100%	0%	**-**	-	0%	0%	100%	0%	**-**	-	**-**
% Total	0%	42.4%	3.6%	0%	**46.0%**	-	0%	51.2%	0.1%	0%	**51.3%**	-	0%	0%	2.2%	0%	**2.2%**	-	0%	0%	0.4%	0%	**0.4%**	-	**-**
PHF	-	0.977	0.886	-	**0.977**	-	-	0.956	0.500	-	**0.956**	-	-	-	0.652	-	**0.652**	-	-	-	0.813	-	**0.813**	-	0.971
Lights	0	1337	117	0	**1454**	-	0	1644	3	0	**1647**	-	0	0	73	0	**73**	-	0	0	13	0	**13**	-	3187
% Lights	0%	96.9%	100%	0%	**97.1%**	-	0%	98.8%	75.0%	0%	**98.7%**	-	0%	0%	100%	0%	**100%**	-	0%	0%	100%	0%	**100%**	-	98.0%
Articulated Trucks	0	21	0	0	**21**	-	0	12	0	0	**12**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	33
% Articulated Trucks	0%	1.5%	0%	0%	**1.4%**	-	0%	0.7%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.0%
Buses and Single-Unit Trucks	0	22	0	0	**22**	-	0	8	1	0	**9**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	31
% Buses and Single-Unit Trucks	0%	1.6%	0%	0%	**1.5%**	-	0%	0.5%	25.0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.0%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	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	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

04_Palatine Road / Town & Country Access - TMC

Sat May 20, 2023
Midday Peak (WKND), Forced Peak (11:30 AM - 12:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068596, Location: 42.109759, -87.978402

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Access						Access						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-20 11:30AM	0	316	19	0	**335**	0	0	283	0	0	**283**	0	0	0	14	1	**15**	0	0	0	2	0	**2**	0	**635**
11:45AM	0	248	25	0	**273**	0	0	288	0	0	**288**	0	0	0	13	0	**13**	0	0	0	1	0	**1**	0	**575**
12:00PM	0	325	23	0	**348**	0	0	287	0	0	**287**	0	0	0	18	0	**18**	0	0	0	2	0	**2**	0	**655**
12:15PM	0	284	28	0	**312**	0	0	360	0	0	**360**	0	0	0	20	0	**20**	1	0	0	1	0	**1**	0	**693**
Total	0	1173	95	0	**1268**	0	0	1218	0	0	**1218**	0	0	0	65	1	**66**	1	0	0	6	0	**6**	0	**2558**
% Approach	0%	92.5%	7.5%	0%	**-**	-	0%	100%	0%	0%	**-**	-	0%	0%	98.5%	1.5%	**-**	-	0%	0%	100%	0%	**-**	-	-
% Total	0%	45.9%	3.7%	0%	**49.6%**	-	0%	47.6%	0%	0%	**47.6%**	-	0%	0%	2.5%	0%	**2.6%**	-	0%	0%	0.2%	0%	**0.2%**	-	-
PHF	-	0.902	0.848	-	**0.911**	-	-	0.846	-	-	**0.846**	-	-	-	0.813	0.250	**0.825**	-	-	-	0.750	-	**0.750**	-	0.923
Lights	0	1155	95	0	**1250**	-	0	1206	0	0	**1206**	-	0	0	65	1	**66**	-	0	0	6	0	**6**	-	2528
% Lights	0%	98.5%	100%	0%	**98.6%**	-	0%	99.0%	0%	0%	**99.0%**	-	0%	0%	100%	100%	**100%**	-	0%	0%	100%	0%	**100%**	-	98.8%
Articulated Trucks	0	5	0	0	**5**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	8
% Articulated Trucks	0%	0.4%	0%	0%	**0.4%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Buses and Single-Unit Trucks	0	13	0	0	**13**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	22
% Buses and Single-Unit Trucks	0%	1.1%	0%	0%	**1.0%**	-	0%	0.7%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.9%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

04_Palatine Road / Town & Country Access - TMC

Sat May 20, 2023
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068596, Location: 42.109759, -87.978402

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Access						Access						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-20 11:00AM	0	254	24	0	**278**	0	0	288	0	0	**288**	0	0	0	23	0	**23**	0	0	0	1	0	**1**	0	**590**
11:15AM	0	284	21	0	**305**	0	0	281	0	0	**281**	1	0	0	15	1	**16**	0	0	0	1	0	**1**	0	**603**
11:30AM	0	316	19	0	**335**	0	0	283	0	0	**283**	0	0	0	14	1	**15**	0	0	0	2	0	**2**	0	**635**
11:45AM	0	248	25	0	**273**	0	0	288	0	0	**288**	0	0	0	13	0	**13**	0	0	0	1	0	**1**	0	**575**
Hourly Total	0	1102	89	0	**1191**	0	0	1140	0	0	**1140**	1	0	0	65	2	**67**	0	0	0	5	0	**5**	0	**2403**
12:00PM	0	325	23	0	**348**	0	0	287	0	0	**287**	0	0	0	18	0	**18**	0	0	0	2	0	**2**	0	**655**
12:15PM	0	284	28	0	**312**	0	0	360	0	0	**360**	0	0	0	20	0	**20**	1	0	0	1	0	**1**	0	**693**
12:30PM	0	246	20	0	**266**	0	0	254	0	0	**254**	0	0	0	16	0	**16**	0	0	0	5	0	**5**	0	**541**
12:45PM	0	263	26	0	**289**	0	0	313	0	0	**313**	0	0	0	14	0	**14**	1	0	0	0	0	**0**	0	**616**
Hourly Total	0	1118	97	0	**1215**	0	0	1214	0	0	**1214**	0	0	0	68	0	**68**	2	0	0	8	0	**8**	0	**2505**
Total	0	2220	186	0	**2406**	0	0	2354	0	0	**2354**	1	0	0	133	2	**135**	2	0	0	13	0	**13**	0	**4908**
% Approach	0%	92.3%	7.7%	0%	**-**	-	0%	100%	0%	0%	**-**	-	0%	0%	98.5%	1.5%	**-**	-	0%	0%	100%	0%	**-**	-	**-**
% Total	0%	45.2%	3.8%	0%	**49.0%**	-	0%	48.0%	0%	0%	**48.0%**	-	0%	0%	2.7%	0%	**2.8%**	-	0%	0%	0.3%	0%	**0.3%**	-	**-**
Lights	0	2191	186	0	**2377**	-	0	2322	0	0	**2322**	-	0	0	131	2	**133**	-	0	0	13	0	**13**	-	4845
% Lights	0%	98.7%	100%	0%	**98.8%**	-	0%	98.6%	0%	0%	**98.6%**	-	0%	0%	98.5%	100%	**98.5%**	-	0%	0%	100%	0%	**100%**	-	98.7%
Articulated Trucks	0	9	0	0	**9**	-	0	11	0	0	**11**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	21
% Articulated Trucks	0%	0.4%	0%	0%	**0.4%**	-	0%	0.5%	0%	0%	**0.5%**	-	0%	0%	0.8%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses and Single-Unit Trucks	0	20	0	0	**20**	-	0	21	0	0	**21**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	42
% Buses and Single-Unit Trucks	0%	0.9%	0%	0%	**0.8%**	-	0%	0.9%	0%	0%	**0.9%**	-	0%	0%	0.8%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.9%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

04_Palatine Road / Town & Country Access - TMC

Wed May 17, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068590, Location: 42.109759, -87.978402

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Palatine Rd						Palatine Rd						Access						Access						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-17 7:00AM	0	405	3	0	**408**	0	0	214	0	0	**214**	0	0	0	2	0	**2**	0	0	0	0	0	**0**	0	**624**
7:15AM	0	436	5	0	**441**	0	0	336	0	0	**336**	0	0	0	3	1	**4**	0	0	0	1	0	**1**	0	**782**
7:30AM	0	405	5	0	**410**	0	0	294	1	0	**295**	0	0	0	6	0	**6**	0	0	0	2	0	**2**	0	**713**
7:45AM	0	439	8	0	**447**	0	0	318	0	0	**318**	0	0	0	4	0	**4**	0	0	0	1	0	**1**	0	**770**
Hourly Total	0	1685	21	0	**1706**	0	0	1162	1	0	**1163**	0	0	0	15	1	**16**	0	0	0	4	0	**4**	0	**2889**
8:00AM	0	412	8	0	**420**	0	0	315	0	0	**315**	0	0	0	3	0	**3**	0	0	0	1	2	**3**	0	**741**
8:15AM	0	373	7	0	**380**	0	0	306	1	0	**307**	0	0	0	0	0	**0**	0	0	0	2	0	**2**	0	**689**
8:30AM	0	433	7	0	**440**	0	0	304	0	0	**304**	0	0	0	7	0	**7**	0	0	0	2	0	**2**	0	**753**
8:45AM	0	324	7	0	**331**	0	0	281	0	0	**281**	0	0	0	7	0	**7**	0	0	0	0	0	**0**	0	**619**
Hourly Total	0	1542	29	0	**1571**	0	0	1206	1	0	**1207**	0	0	0	17	0	**17**	0	0	0	5	2	**7**	0	**2802**
4:00PM	0	354	27	0	**381**	0	0	351	0	0	**351**	0	0	0	17	0	**17**	2	0	0	6	0	**6**	0	**755**
4:15PM	0	335	33	0	**368**	0	0	426	1	0	**427**	0	0	0	12	0	**12**	0	0	0	1	0	**1**	0	**808**
4:30PM	0	344	27	0	**371**	0	0	453	1	0	**454**	0	0	0	10	0	**10**	0	0	0	5	0	**5**	0	**840**
4:45PM	0	353	24	0	**377**	0	0	413	0	0	**413**	0	0	0	12	0	**12**	0	0	0	3	0	**3**	0	**805**
Hourly Total	0	1386	111	0	**1497**	0	0	1643	2	0	**1645**	0	0	0	51	0	**51**	2	0	0	15	0	**15**	0	**3208**
5:00PM	0	325	33	0	**358**	0	0	435	1	0	**436**	0	0	0	15	0	**15**	0	0	0	4	0	**4**	0	**813**
5:15PM	0	352	27	0	**379**	0	0	394	1	0	**395**	0	0	0	18	0	**18**	0	0	0	4	0	**4**	1	**796**
5:30PM	0	350	33	0	**383**	0	0	422	2	0	**424**	0	0	0	28	0	**28**	0	0	0	2	0	**2**	0	**837**
5:45PM	0	353	31	0	**384**	0	0	404	2	0	**406**	0	0	0	15	0	**15**	0	0	0	2	0	**2**	0	**807**
Hourly Total	0	1380	124	0	**1504**	0	0	1655	6	0	**1661**	0	0	0	76	0	**76**	0	0	0	12	0	**12**	1	**3253**
Total	0	5993	285	0	**6278**	0	0	5666	10	0	**5676**	0	0	0	159	1	**160**	2	0	0	36	2	**38**	1	**12152**
% Approach	0%	95.5%	4.5%	0%	**-**	-	0%	99.8%	0.2%	0%	**-**	-	0%	0%	99.4%	0.6%	**-**	-	0%	0%	94.7%	5.3%	**-**	-	**-**
% Total	0%	49.3%	2.3%	0%	**51.7%**	-	0%	46.6%	0.1%	0%	**46.7%**	-	0%	0%	1.3%	0%	**1.3%**	-	0%	0%	0.3%	0%	**0.3%**	-	**-**
Lights	0	5766	284	0	**6050**	-	0	5464	9	0	**5473**	-	0	0	159	1	**160**	-	0	0	35	2	**37**	-	11720
% Lights	0%	96.2%	99.6%	0%	**96.4%**	-	0%	96.4%	90.0%	0%	**96.4%**	-	0%	0%	100%	100%	**100%**	-	0%	0%	97.2%	100%	**97.4%**	-	96.4%
Articulated Trucks	0	105	0	0	**105**	-	0	84	0	0	**84**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	189
% Articulated Trucks	0%	1.8%	0%	0%	**1.7%**	-	0%	1.5%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.6%
Buses and Single-Unit Trucks	0	122	1	0	**123**	-	0	118	1	0	**119**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	243
% Buses and Single-Unit Trucks	0%	2.0%	0.4%	0%	**2.0%**	-	0%	2.1%	10.0%	0%	**2.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	2.8%	0%	**2.6%**	-	2.0%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

05_Rand Road / Town & Country North Access - TMC

Wed May 17, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068591, Location: 42.109071, -87.975307

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Access Eastbound					US 12 Northbound					US 12 Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2023-05-17 7:30AM	0	3	0	**3**	2	0	208	0	**208**	0	334	3	0	**337**	0	**548**
7:45AM	0	4	0	**4**	1	0	201	0	**201**	0	345	4	1	**350**	0	**555**
8:00AM	0	5	0	**5**	0	0	195	0	**195**	0	275	9	0	**284**	0	**484**
8:15AM	0	3	0	**3**	0	0	206	0	**206**	0	314	7	0	**321**	0	**530**
Total	0	15	0	**15**	3	0	810	0	**810**	0	1268	23	1	**1292**	0	**2117**
% Approach	0%	100%	0%	**-**	-	0%	100%	0%	**-**	-	98.1%	1.8%	0.1%	**-**	-	-
% Total	0%	0.7%	0%	**0.7%**	-	0%	38.3%	0%	**38.3%**	-	59.9%	1.1%	0%	**61.0%**	-	-
PHF	-	0.750	-	**0.750**	-	-	0.974	-	**0.974**	-	0.919	0.639	0.250	**0.923**	-	0.954
Lights	0	14	0	**14**	-	0	771	0	**771**	-	1236	23	1	**1260**	-	2045
% Lights	0%	93.3%	0%	**93.3%**	-	0%	95.2%	0%	**95.2%**	-	97.5%	100%	100%	**97.5%**	-	96.6%
Articulated Trucks	0	0	0	**0**	-	0	10	0	**10**	-	10	0	0	**10**	-	20
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	1.2%	0%	**1.2%**	-	0.8%	0%	0%	**0.8%**	-	0.9%
Buses and Single-Unit Trucks	0	1	0	**1**	-	0	29	0	**29**	-	22	0	0	**22**	-	52
% Buses and Single-Unit Trucks	0%	6.7%	0%	**6.7%**	-	0%	3.6%	0%	**3.6%**	-	1.7%	0%	0%	**1.7%**	-	2.5%
Bicycles on Road	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%
Pedestrians	-	-	-	-	3	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

05_Rand Road / Town & Country North Access - TMC

Wed May 17, 2023
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068591, Location: 42.109071, -87.975307

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Access					US 12					US 12					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2023-05-17 4:45PM	0	16	0	**16**	0	0	334	0	**334**	0	296	18	0	**314**	0	**664**
5:00PM	0	11	0	**11**	0	0	343	0	**343**	0	309	18	0	**327**	0	**681**
5:15PM	0	10	0	**10**	0	1	364	0	**365**	0	318	30	0	**348**	0	**723**
5:30PM	1	17	0	**18**	0	0	340	0	**340**	0	307	24	0	**331**	0	**689**
Total	1	54	0	**55**	0	1	1381	0	**1382**	0	1230	90	0	**1320**	0	**2757**
% Approach	1.8%	98.2%	0%	**-**	-	0.1%	99.9%	0%	**-**	-	93.2%	6.8%	0%	**-**	-	**-**
% Total	0%	2.0%	0%	**2.0%**	-	0%	50.1%	0%	**50.1%**	-	44.6%	3.3%	0%	**47.9%**	-	**-**
PHF	0.250	0.794	-	**0.764**	-	0.250	0.948	-	**0.947**	-	0.967	0.750	-	**0.948**	-	0.953
Lights	1	54	0	**55**	-	1	1360	0	**1361**	-	1217	90	0	**1307**	-	2723
% Lights	100%	100%	0%	**100%**	-	100%	98.5%	0%	**98.5%**	-	98.9%	100%	0%	**99.0%**	-	98.8%
Articulated Trucks	0	0	0	**0**	-	0	2	0	**2**	-	3	0	0	**3**	-	5
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0.1%	0%	**0.1%**	-	0.2%	0%	0%	**0.2%**	-	0.2%
Buses and Single-Unit Trucks	0	0	0	**0**	-	0	19	0	**19**	-	10	0	0	**10**	-	29
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	1.4%	0%	**1.4%**	-	0.8%	0%	0%	**0.8%**	-	1.1%
Bicycles on Road	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%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

05_Rand Road / Town & Country North Access - TMC

Sat May 20, 2023
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068597, Location: 42.109071, -87.975307

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Access Eastbound					US 12 Northbound					US 12 Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2023-05-20 11:30AM	0	9	0	**9**	0	1	301	0	**302**	0	319	31	0	**350**	0	**661**
11:45AM	0	13	0	**13**	0	0	284	0	**284**	0	301	26	0	**327**	0	**624**
12:00PM	0	13	0	**13**	0	0	300	0	**300**	0	332	28	0	**360**	0	**673**
12:15PM	0	11	0	**11**	0	0	335	0	**335**	0	338	31	0	**369**	0	**715**
Total	0	46	0	**46**	0	1	1220	0	**1221**	0	1290	116	0	**1406**	0	**2673**
% Approach	0%	100%	0%	**-**	-	0.1%	99.9%	0%	**-**	-	91.7%	8.3%	0%	**-**	-	-
% Total	0%	1.7%	0%	**1.7%**	-	0%	45.6%	0%	**45.7%**	-	48.3%	4.3%	0%	**52.6%**	-	-
PHF	-	0.885	-	**0.885**	-	0.250	0.910	-	**0.910**	-	0.954	0.935	-	**0.953**	-	0.934
Lights	0	46	0	**46**	-	1	1205	0	**1206**	-	1279	115	0	**1394**	-	2646
% Lights	0%	100%	0%	**100%**	-	100%	98.8%	0%	**98.8%**	-	99.1%	99.1%	0%	**99.1%**	-	99.0%
Articulated Trucks	0	0	0	**0**	-	0	1	0	**1**	-	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0.1%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	0	**0**	-	0	13	0	**13**	-	11	1	0	**12**	-	25
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	1.1%	0%	**1.1%**	-	0.9%	0.9%	0%	**0.9%**	-	0.9%
Bicycles on Road	0	0	0	**0**	-	0	1	0	**1**	-	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0.1%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

05_Rand Road / Town & Country North Access - TMC

Wed May 17, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068591, Location: 42.109071, -87.975307

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Access					US 12					US 12					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-05-17 7:00AM	0	4	0	**4**	0	1	128	0	**129**	0	284	2	0	**286**	0	**419**
7:15AM	0	4	0	**4**	0	0	168	0	**168**	0	286	6	0	**292**	0	**464**
7:30AM	0	3	0	**3**	2	0	208	0	**208**	0	334	3	0	**337**	0	**548**
7:45AM	0	4	0	**4**	1	0	201	0	**201**	0	345	4	1	**350**	0	**555**
Hourly Total	0	15	0	**15**	3	1	705	0	**706**	0	1249	15	1	**1265**	0	**1986**
8:00AM	0	5	0	**5**	0	0	195	0	**195**	0	275	9	0	**284**	0	**484**
8:15AM	0	3	0	**3**	0	0	206	0	**206**	0	314	7	0	**321**	0	**530**
8:30AM	0	2	0	**2**	0	0	215	0	**215**	0	286	7	0	**293**	0	**510**
8:45AM	0	5	0	**5**	0	0	182	0	**182**	0	263	6	0	**269**	0	**456**
Hourly Total	0	15	0	**15**	0	0	798	0	**798**	0	1138	29	0	**1167**	0	**1980**
4:00PM	0	10	0	**10**	0	0	312	0	**312**	0	274	19	0	**293**	0	**615**
4:15PM	1	7	0	**8**	0	0	328	0	**328**	0	305	25	0	**330**	0	**666**
4:30PM	0	11	0	**11**	1	0	337	0	**337**	0	324	8	0	**332**	0	**680**
4:45PM	0	16	0	**16**	0	0	334	0	**334**	0	296	18	0	**314**	0	**664**
Hourly Total	1	44	0	**45**	1	0	1311	0	**1311**	0	1199	70	0	**1269**	0	**2625**
5:00PM	0	11	0	**11**	0	0	343	0	**343**	0	309	18	0	**327**	0	**681**
5:15PM	0	10	0	**10**	0	1	364	0	**365**	0	318	30	0	**348**	0	**723**
5:30PM	1	17	0	**18**	0	0	340	0	**340**	0	307	24	0	**331**	0	**689**
5:45PM	1	16	0	**17**	0	1	298	0	**299**	0	306	24	0	**330**	0	**646**
Hourly Total	2	54	0	**56**	0	2	1345	0	**1347**	0	1240	96	0	**1336**	0	**2739**
Total	3	128	0	**131**	4	3	4159	0	**4162**	0	4826	210	1	**5037**	0	**9330**
% Approach	2.3%	97.7%	0%	**-**	-	0.1%	99.9%	0%	**-**	-	95.8%	4.2%	0%	**-**	-	-
% Total	0%	1.4%	0%	**1.4%**	-	0%	44.6%	0%	**44.6%**	-	51.7%	2.3%	0%	**54.0%**	-	-
Lights	3	126	0	**129**	-	3	4048	0	**4051**	-	4742	210	1	**4953**	-	9133
% Lights	100%	98.4%	0%	**98.5%**	-	100%	97.3%	0%	**97.3%**	-	98.3%	100%	100%	**98.3%**	-	97.9%
Articulated Trucks	0	0	0	**0**	-	0	23	0	**23**	-	25	0	0	**25**	-	48
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0.6%	0%	**0.6%**	-	0.5%	0%	0%	**0.5%**	-	0.5%
Buses and Single-Unit Trucks	0	2	0	**2**	-	0	88	0	**88**	-	59	0	0	**59**	-	149
% Buses and Single-Unit Trucks	0%	1.6%	0%	**1.5%**	-	0%	2.1%	0%	**2.1%**	-	1.2%	0%	0%	**1.2%**	-	1.6%
Bicycles on Road	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%
Pedestrians	-	-	-	-	4	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

05_Rand Road / Town & Country North Access - TMC

Sat May 20, 2023
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068597, Location: 42.109071, -87.975307

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Access					US 12					US 12					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2023-05-20 11:00AM	1	10	0	**11**	1	1	268	0	**269**	0	283	23	0	**306**	0	**586**
11:15AM	0	11	0	**11**	0	0	277	0	**277**	0	255	20	0	**275**	0	**563**
11:30AM	0	9	0	**9**	0	1	301	0	**302**	0	319	31	0	**350**	0	**661**
11:45AM	0	13	0	**13**	0	0	284	0	**284**	0	301	26	0	**327**	0	**624**
Hourly Total	1	43	0	**44**	1	2	1130	0	**1132**	0	1158	100	0	**1258**	0	**2434**
12:00PM	0	13	0	**13**	0	0	300	0	**300**	0	332	28	0	**360**	0	**673**
12:15PM	0	11	0	**11**	0	0	335	0	**335**	0	338	31	0	**369**	0	**715**
12:30PM	0	13	0	**13**	0	0	313	0	**313**	0	308	19	0	**327**	0	**653**
12:45PM	0	14	0	**14**	0	2	284	0	**286**	0	343	17	0	**360**	0	**660**
Hourly Total	0	51	0	**51**	0	2	1232	0	**1234**	0	1321	95	0	**1416**	0	**2701**
Total	1	94	0	**95**	1	4	2362	0	**2366**	0	2479	195	0	**2674**	0	**5135**
% Approach	1.1%	98.9%	0%	**-**	-	0.2%	99.8%	0%	**-**	-	92.7%	7.3%	0%	**-**	-	**-**
% Total	0%	1.8%	0%	**1.9%**	-	0.1%	46.0%	0%	**46.1%**	-	48.3%	3.8%	0%	**52.1%**	-	**-**
Lights	1	94	0	**95**	-	4	2341	0	**2345**	-	2455	194	0	**2649**	-	5089
% Lights	100%	100%	0%	**100%**	-	100%	99.1%	0%	**99.1%**	-	99.0%	99.5%	0%	**99.1%**	-	99.1%
Articulated Trucks	0	0	0	**0**	-	0	1	0	**1**	-	4	0	0	**4**	-	5
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.2%	0%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	**0**	-	0	19	0	**19**	-	20	1	0	**21**	-	40
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	0.8%	0%	**0.8%**	-	0.8%	0.5%	0%	**0.8%**	-	0.8%
Bicycles on Road	0	0	0	**0**	-	0	1	0	**1**	-	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

06_Rand Road / Town & Country South Access - TMC

Wed May 17, 2023
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068592, Location: 42.108207, -87.973939

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg / Direction	Dorothy Eastbound						Dorothy Westbound						US 12 Northbound						US 12 Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-17 7:30AM	3	0	7	0	**10**	3	5	0	6	0	**11**	0	7	201	2	0	**210**	0	5	324	3	0	**332**	0	**563**
7:45AM	0	0	4	0	**4**	1	3	0	10	0	**13**	0	4	199	4	0	**207**	0	3	353	1	0	**357**	0	**581**
8:00AM	2	0	2	0	**4**	0	4	0	5	0	**9**	0	9	181	4	0	**194**	0	9	271	3	0	**283**	0	**490**
8:15AM	2	1	2	0	**5**	0	4	2	6	0	**12**	0	15	207	3	0	**225**	0	4	306	2	0	**312**	0	**554**
Total	7	1	15	0	**23**	4	16	2	27	0	**45**	0	35	788	13	0	**836**	0	21	1254	9	0	**1284**	0	**2188**
% Approach	30.4%	4.3%	65.2%	0%	**-**	-	35.6%	4.4%	60.0%	0%	**-**	-	4.2%	94.3%	1.6%	0%	**-**	-	1.6%	97.7%	0.7%	0%	**-**	-	-
% Total	0.3%	0%	0.7%	0%	**1.1%**	-	0.7%	0.1%	1.2%	0%	**2.1%**	-	1.6%	36.0%	0.6%	0%	**38.2%**	-	1.0%	57.3%	0.4%	0%	**58.7%**	-	-
PHF	0.583	0.250	0.536	-	**0.575**	-	0.800	0.250	0.675	-	**0.865**	-	0.583	0.952	0.813	-	**0.929**	-	0.583	0.888	0.750	-	**0.899**	-	0.941
Lights	5	1	15	0	**21**	-	16	1	26	0	**43**	-	35	750	13	0	**798**	-	20	1227	9	0	**1256**	-	2118
% Lights	71.4%	100%	100%	0%	**91.3%**	-	100%	50.0%	96.3%	0%	**95.6%**	-	100%	95.2%	100%	0%	**95.5%**	-	95.2%	97.8%	100%	0%	**97.8%**	-	96.8%
Articulated Trucks	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	9	0	0	**9**	-	0	10	0	0	**10**	-	20
% Articulated Trucks	14.3%	0%	0%	0%	**4.3%**	-	0%	0%	0%	0%	**0%**	-	0%	1.1%	0%	0%	**1.1%**	-	0%	0.8%	0%	0%	**0.8%**	-	0.9%
Buses and Single-Unit Trucks	1	0	0	0	**1**	-	0	1	1	0	**2**	-	0	29	0	0	**29**	-	1	17	0	0	**18**	-	50
% Buses and Single-Unit Trucks	14.3%	0%	0%	0%	**4.3%**	-	0%	50.0%	3.7%	0%	**4.4%**	-	0%	3.7%	0%	0%	**3.5%**	-	4.8%	1.4%	0%	0%	**1.4%**	-	2.3%
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%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

06_Rand Road / Town & Country South Access - TMC

Wed May 17, 2023
Forced Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068592, Location: 42.108207, -87.973939

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Dorothy						Dorothy						US 12						US 12						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-17 4:45PM	7	2	12	0	**21**	0	9	5	16	0	**30**	0	22	321	12	0	**355**	0	10	301	6	0	**317**	0	**723**
5:00PM	15	0	12	1	**28**	0	7	4	9	0	**20**	2	26	316	8	0	**350**	0	9	291	16	0	**316**	0	**714**
5:15PM	9	2	12	0	**23**	0	7	4	15	0	**26**	0	25	337	8	0	**370**	0	11	312	9	0	**332**	0	**751**
5:30PM	8	2	19	0	**29**	0	8	6	12	0	**26**	1	14	320	6	0	**340**	0	5	305	9	0	**319**	1	**714**
Total	39	6	55	1	**101**	0	31	19	52	0	**102**	3	87	1294	34	0	**1415**	0	35	1209	40	0	**1284**	1	**2902**
% Approach	38.6%	5.9%	54.5%	1.0%	**-**	-	30.4%	18.6%	51.0%	0%	**-**	-	6.1%	91.4%	2.4%	0%	**-**	-	2.7%	94.2%	3.1%	0%	**-**	-	-
% Total	1.3%	0.2%	1.9%	0%	**3.5%**	-	1.1%	0.7%	1.8%	0%	**3.5%**	-	3.0%	44.6%	1.2%	0%	**48.8%**	-	1.2%	41.7%	1.4%	0%	**44.2%**	-	-
PHF	0.650	0.750	0.724	0.250	**0.871**	-	0.861	0.792	0.813	-	**0.850**	-	0.837	0.960	0.708	-	**0.956**	-	0.795	0.969	0.625	-	**0.967**	-	0.966
Lights	39	6	55	1	**101**	-	30	19	52	0	**101**	-	87	1280	34	0	**1401**	-	35	1198	40	0	**1273**	-	2876
% Lights	100%	100%	100%	100%	**100%**	-	96.8%	100%	100%	0%	**99.0%**	-	100%	98.9%	100%	0%	**99.0%**	-	100%	99.1%	100%	0%	**99.1%**	-	99.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	3	0	0	**3**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	11	0	0	**11**	-	0	8	0	0	**8**	-	20
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	3.2%	0%	0%	0%	**1.0%**	-	0%	0.9%	0%	0%	**0.8%**	-	0%	0.7%	0%	0%	**0.6%**	-	0.7%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	- 33.3%	-	-	-	-	-	-	-	-	-	-	-	- 100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	- 66.7%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

06_Rand Road / Town & Country South Access - TMC

Sat May 20, 2023
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068598, Location: 42.108207, -87.973939

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Dorothy						Dorothy						US 12						US 12						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2023-05-20 11:30AM	10	1	22	0	**33**	0	6	2	8	0	**16**	0	25	289	10	0	**324**	0	14	323	7	0	**344**	0	**717**
11:45AM	15	1	16	0	**32**	2	8	2	21	0	**31**	0	24	247	6	0	**277**	0	18	278	7	0	**303**	0	**643**
12:00PM	7	1	15	0	**23**	0	3	4	10	0	**17**	1	22	291	5	0	**318**	0	10	309	9	0	**328**	0	**686**
12:15PM	16	5	16	0	**37**	0	7	2	24	0	**33**	0	22	301	12	0	**335**	0	8	316	12	0	**336**	0	**741**
Total	48	8	69	0	**125**	2	24	10	63	0	**97**	1	93	1128	33	0	**1254**	0	50	1226	35	0	**1311**	0	**2787**
% Approach	38.4%	6.4%	55.2%	0%	**-**	-	24.7%	10.3%	64.9%	0%	**-**	-	7.4%	90.0%	2.6%	0%	**-**	-	3.8%	93.5%	2.7%	0%	**-**	-	-
% Total	1.7%	0.3%	2.5%	0%	**4.5%**	-	0.9%	0.4%	2.3%	0%	**3.5%**	-	3.3%	40.5%	1.2%	0%	**45.0%**	-	1.8%	44.0%	1.3%	0%	**47.0%**	-	-
PHF	0.750	0.400	0.784		**0.845**	-	0.750	0.625	0.656		**0.735**	-	0.930	0.937	0.688		**0.936**	-	0.694	0.949	0.729		**0.953**	-	0.940
Lights	48	8	69	0	**125**	-	23	10	62	0	**95**	-	92	1116	33	0	**1241**	-	50	1218	35	0	**1303**	-	2764
% Lights	100%	100%	100%	0%	**100%**	-	95.8%	100%	98.4%	0%	**97.9%**	-	98.9%	98.9%	100%	0%	**99.0%**	-	100%	99.3%	100%	0%	**99.4%**	-	99.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	1	0	1	0	**2**	-	1	11	0	0	**12**	-	0	7	0	0	**7**	-	21
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	4.2%	0%	1.6%	0%	**2.1%**	-	1.1%	1.0%	0%	0%	**1.0%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.8%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

06_Rand Road / Town & Country South Access - TMC

Wed May 17, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068592, Location: 42.108207, -87.973939

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Dorothy						Dorothy						US 12						US 12						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-05-17 7:00AM	0	0	6	0	**6**	0	5	0	4	0	**9**	0	6	123	2	0	**131**	0	3	279	3	0	**285**	0	**431**
7:15AM	4	0	5	0	**9**	0	5	1	5	0	**11**	1	6	156	2	0	**164**	0	1	285	2	0	**288**	0	**472**
7:30AM	3	0	7	0	**10**	3	5	0	6	0	**11**	0	7	201	2	0	**210**	0	5	324	3	0	**332**	0	**563**
7:45AM	0	0	4	0	**4**	1	3	0	10	0	**13**	0	4	199	4	0	**207**	0	3	353	1	0	**357**	0	**581**
Hourly Total	7	0	22	0	**29**	4	18	1	25	0	**44**	1	23	679	10	0	**712**	0	12	1241	9	0	**1262**	0	**2047**
8:00AM	2	0	2	0	**4**	0	4	0	5	0	**9**	0	9	181	4	0	**194**	0	9	271	3	0	**283**	0	**490**
8:15AM	2	1	2	0	**5**	0	4	2	6	0	**12**	0	15	207	3	0	**225**	0	4	306	2	0	**312**	0	**554**
8:30AM	6	0	6	0	**12**	0	4	0	13	0	**17**	0	9	202	1	0	**212**	0	7	267	6	0	**280**	0	**521**
8:45AM	0	0	3	0	**3**	0	2	1	7	0	**10**	0	13	173	2	0	**188**	0	4	254	1	1	**260**	0	**461**
Hourly Total	10	1	13	0	**24**	0	14	3	31	0	**48**	0	46	763	10	0	**819**	0	24	1098	12	1	**1135**	0	**2026**
4:00PM	7	1	12	0	**20**	0	10	3	14	0	**27**	0	19	301	2	0	**322**	0	9	276	2	0	**287**	0	**656**
4:15PM	13	1	13	0	**27**	0	10	0	19	0	**29**	0	23	304	6	0	**333**	0	9	290	5	0	**304**	0	**693**
4:30PM	8	3	14	0	**25**	0	8	0	12	0	**20**	0	18	322	12	0	**352**	0	15	315	4	0	**334**	0	**731**
4:45PM	7	2	12	0	**21**	0	9	5	16	0	**30**	0	22	321	12	0	**355**	0	10	301	6	0	**317**	0	**723**
Hourly Total	35	7	51	0	**93**	0	37	8	61	0	**106**	0	82	1248	32	0	**1362**	0	43	1182	17	0	**1242**	0	**2803**
5:00PM	15	0	12	1	**28**	0	7	4	9	0	**20**	2	26	316	8	0	**350**	0	9	291	16	0	**316**	0	**714**
5:15PM	9	2	12	0	**23**	0	7	4	15	0	**26**	0	25	337	8	0	**370**	0	11	312	9	0	**332**	0	**751**
5:30PM	8	2	19	0	**29**	0	8	6	12	0	**26**	1	14	320	6	0	**340**	0	5	305	9	0	**319**	1	**714**
5:45PM	14	5	11	0	**30**	1	9	7	24	0	**40**	0	18	274	9	0	**301**	0	19	303	5	0	**327**	0	**698**
Hourly Total	46	9	54	1	**110**	1	31	21	60	0	**112**	3	83	1247	31	0	**1361**	0	44	1211	39	0	**1294**	1	**2877**
Total	98	17	140	1	**256**	5	100	33	177	0	**310**	4	234	3937	83	0	**4254**	0	123	4732	77	1	**4933**	1	**9753**
% Approach	38.3%	6.6%	54.7%	0.4%	**-**	-	32.3%	10.6%	57.1%	0%	**-**	-	5.5%	92.5%	2.0%	0%	**-**	-	2.5%	95.9%	1.6%	0%	**-**	-	-
% Total	1.0%	0.2%	1.4%	0%	**2.6%**	-	1.0%	0.3%	1.8%	0%	**3.2%**	-	2.4%	40.4%	0.9%	0%	**43.6%**	-	1.3%	48.5%	0.8%	0%	**50.6%**	-	-
Lights	94	16	140	1	**251**	-	99	32	173	0	**304**	-	233	3845	82	0	**4160**	-	122	4654	76	1	**4853**	-	9568
% Lights	95.9%	94.1%	100%	100%	**98.0%**	-	99.0%	97.0%	97.7%	0%	**98.1%**	-	99.6%	97.7%	98.8%	0%	**97.8%**	-	99.2%	98.4%	98.7%	100%	**98.4%**	-	98.1%
Articulated Trucks	1	0	0	0	**1**	-	0	0	2	0	**2**	-	0	22	0	0	**22**	-	0	27	0	0	**27**	-	52
% Articulated Trucks	1.0%	0%	0%	0%	**0.4%**	-	0%	0%	1.1%	0%	**0.6%**	-	0%	0.6%	0%	0%	**0.5%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.5%
Buses and Single-Unit Trucks	3	0	0	0	**3**	-	1	1	2	0	**4**	-	1	70	0	0	**71**	-	1	51	1	0	**53**	-	131
% Buses and Single-Unit Trucks	3.1%	0%	0%	0%	**1.2%**	-	1.0%	3.0%	1.1%	0%	**1.3%**	-	0.4%	1.8%	0%	0%	**1.7%**	-	0.8%	1.1%	1.3%	0%	**1.1%**	-	1.3%
Bicycles on Road	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	2
% Bicycles on Road	0%	5.9%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	1.2%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

06_Rand Road / Town & Country South Access - TMC

Sat May 20, 2023
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1068598, Location: 42.108207, -87.973939

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Dorothy						Dorothy						US 12						US 12						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-05-20 11:00AM	10	1	22	0	**33**	1	7	1	7	0	**15**	0	18	259	9	0	**286**	0	6	257	6	0	**269**	0	**603**
11:15AM	10	2	21	0	**33**	0	6	2	10	0	**18**	0	23	257	12	0	**292**	0	14	236	0	0	**250**	0	**593**
11:30AM	10	1	22	0	**33**	0	6	2	8	0	**16**	0	25	289	10	0	**324**	0	14	323	7	0	**344**	0	**717**
11:45AM	15	1	16	0	**32**	2	8	2	21	0	**31**	0	24	247	6	0	**277**	0	18	278	7	0	**303**	0	**643**
Hourly Total	45	5	81	0	**131**	3	27	7	46	0	**80**	0	90	1052	37	0	**1179**	0	52	1094	20	0	**1166**	0	**2556**
12:00PM	7	1	15	0	**23**	0	3	4	10	0	**17**	1	22	291	5	0	**318**	0	10	309	9	0	**328**	0	**686**
12:15PM	16	5	16	0	**37**	0	7	2	24	0	**33**	0	22	301	12	0	**335**	0	8	316	12	0	**336**	0	**741**
12:30PM	16	2	24	0	**42**	0	5	2	15	0	**22**	0	25	286	6	0	**317**	0	6	307	3	0	**316**	0	**697**
12:45PM	12	0	19	0	**31**	0	11	5	11	0	**27**	0	26	264	12	0	**302**	0	12	296	10	2	**320**	0	**680**
Hourly Total	51	8	74	0	**133**	0	26	13	60	0	**99**	1	95	1142	35	0	**1272**	0	36	1228	34	2	**1300**	0	**2804**
Total	96	13	155	0	**264**	3	53	20	106	0	**179**	1	185	2194	72	0	**2451**	0	88	2322	54	2	**2466**	0	**5360**
% Approach	36.4%	4.9%	58.7%	0%	**-**	-	29.6%	11.2%	59.2%	0%	**-**	-	7.5%	89.5%	2.9%	0%	**-**	-	3.6%	94.2%	2.2%	0.1%	**-**	-	**-**
% Total	1.8%	0.2%	2.9%	0%	**4.9%**	-	1.0%	0.4%	2.0%	0%	**3.3%**	-	3.5%	40.9%	1.3%	0%	**45.7%**	-	1.6%	43.3%	1.0%	0%	**46.0%**	-	**-**
Lights	96	12	154	0	**262**	-	52	20	105	0	**177**	-	184	2175	71	0	**2430**	-	88	2300	53	2	**2443**	-	5312
% Lights	100%	92.3%	99.4%	0%	**99.2%**	-	98.1%	100%	99.1%	0%	**98.9%**	-	99.5%	99.1%	98.6%	0%	**99.1%**	-	100%	99.1%	98.1%	100%	**99.1%**	-	99.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	5	0	0	**5**	-	7
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	1.4%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.1%
Buses and Single-Unit Trucks	0	0	1	0	**1**	-	1	0	1	0	**2**	-	1	18	0	0	**19**	-	0	17	1	0	**18**	-	40
% Buses and Single-Unit Trucks	0%	0%	0.6%	0%	**0.4%**	-	1.9%	0%	0.9%	0%	**1.1%**	-	0.5%	0.8%	0%	0%	**0.8%**	-	0%	0.7%	1.9%	0%	**0.7%**	-	0.7%
Bicycles on Road	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	7.7%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

EXISTING CAPACITY REPORTS

Weekday Morning Peak Hour

Weekday Evening Peak Hour

Saturday Midday Peak Hour

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	180	1435	160	190	1005	20	145	670	165	40	730
Future Volume (vph)	10	180	1435	160	190	1005	20	145	670	165	40	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	12	13	12	12	13	12	12	12	12	12	12	12
Storage Length (ft)		415		0	215		0	140		220	155	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		110			165			170			230	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor		1.00	1.00		1.00	1.00		1.00				
Frt			0.985			0.997				0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1702	4860	0	1811	4874	0	1752	3619	1583	1687	3654
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	1699	4860	0	1810	4874	0	1748	3619	1583	1687	3654
Right Turn on Red				No			No			No		
Satd. Flow (RTOR)												
Link Speed (mph)			35			35			35			35
Link Distance (ft)			601			560			640			500
Travel Time (s)			11.7			10.9			12.5			9.7
Confl. Peds. (#/hr)	3	1		1	1		1	3				
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	10%	5%	5%	3%	6%	10%	3%	5%	2%	7%	4%
Adj. Flow (vph)	11	189	1511	168	200	1058	21	153	705	174	42	768
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	200	1679	0	200	1079	0	153	705	174	42	768
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			52			52			17			17
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00	0.94
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	2	1	1	2
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100		20	100		20	100	20	20	100
Trailing Detector (ft)	0	0	0		0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0		0	0	0	0	0
Detector 1 Size(ft)	20	20	6		20	6		20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	305
Future Volume (vph)	305
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Storage Length (ft)	275
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1538
Flt Permitted	
Satd. Flow (perm)	1509
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Peak Hour Factor	0.95
Heavy Vehicles (%)	5%
Adj. Flow (vph)	321
Shared Lane Traffic (%)	
Lane Group Flow (vph)	321
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	7!	7	4		3	8		5	2	3	1	6
Permitted Phases										2		
Detector Phase	7	7	4		3	8		5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	15.0		3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	7.5	7.5	21.5		7.5	21.5		7.5	21.5	7.5	7.5	21.5
Total Split (s)	24.0	24.0	60.0		24.0	60.0		17.0	39.0	24.0	17.0	39.0
Total Split (%)	17.1%	17.1%	42.9%		17.1%	42.9%		12.1%	27.9%	17.1%	12.1%	27.9%
Maximum Green (s)	19.5	19.5	53.5		19.5	53.5		12.5	32.5	19.5	12.5	32.5
Yellow Time (s)	3.5	3.5	4.5		3.5	4.5		3.5	4.5	3.5	3.5	4.5
All-Red Time (s)	1.0	1.0	2.0		1.0	2.0		1.0	2.0	1.0	1.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5		4.5	6.5		4.5	6.5	4.5	4.5	6.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	7.0		4.0	7.0	4.0	4.0	7.0
Recall Mode	None	None	None		None	None		None	C-Min	None	None	C-Min
Walk Time (s)									7.0			7.0
Flash Dont Walk (s)									11.0			11.0
Pedestrian Calls (#/hr)									0			0
Act Effct Green (s)		18.9	54.3		18.7	54.1		12.5	37.5	62.7	9.7	32.5
Actuated g/C Ratio		0.14	0.39		0.13	0.39		0.09	0.27	0.45	0.07	0.23
v/c Ratio		0.87	0.89		0.83	0.57		0.98	0.73	0.25	0.36	0.91
Control Delay		92.6	47.3		86.0	35.5		129.8	52.8	26.2	70.0	67.4
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		92.6	47.3		86.0	35.5		129.8	52.8	26.2	70.0	67.4
LOS		F	D		F	D		F	D	C	E	E
Approach Delay			52.1			43.4			59.7			58.3
Approach LOS			D			D			E			E
90th %ile Green (s)	19.5	19.5	53.5		19.5	53.5		12.5	32.5	19.5	12.5	32.5
90th %ile Term Code	Max	Max	Max		Max	Max		Max	Coord	Max	Max	Coord
70th %ile Green (s)	19.5	19.5	53.5		19.5	53.5		12.5	33.8	19.5	11.2	32.5
70th %ile Term Code	Max	Max	Max		Max	Max		Max	Coord	Max	Gap	Coord
50th %ile Green (s)	19.5	19.5	53.5		19.5	53.5		12.5	35.2	19.5	9.8	32.5
50th %ile Term Code	Max	Max	Max		Max	Max		Max	Coord	Max	Gap	Coord
30th %ile Green (s)	19.5	19.5	53.6		19.4	53.5		12.5	36.5	19.4	8.5	32.5
30th %ile Term Code	Max	Max	Max		Gap	Hold		Max	Coord	Gap	Gap	Coord
10th %ile Green (s)	16.6	16.6	57.6		15.4	56.4		12.5	49.5	15.4	0.0	32.5
10th %ile Term Code	Gap	Gap	Max		Gap	Hold		Max	Coord	Gap	Skip	Coord
Queue Length 50th (ft)		180	525		179	283		141	316	99	37	361
Queue Length 95th (ft)		#316	595		#302	332		#287	401	160	77	#472
Internal Link Dist (ft)			521			480			560			420
Turn Bay Length (ft)		415			215			140		220	155	
Base Capacity (vph)		237	1886		252	1882		156	969	717	150	848
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0

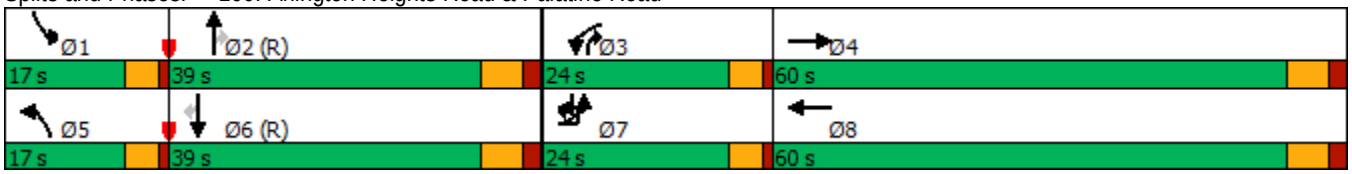
Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	pm+ov
Protected Phases	7!
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	7.5
Total Split (s)	24.0
Total Split (%)	17.1%
Maximum Green (s)	19.5
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	53.4
Actuated g/C Ratio	0.38
v/c Ratio	0.55
Control Delay	34.9
Queue Delay	0.0
Total Delay	34.9
LOS	C
Approach Delay	
Approach LOS	
90th %ile Green (s)	19.5
90th %ile Term Code	Max
70th %ile Green (s)	19.5
70th %ile Term Code	Max
50th %ile Green (s)	19.5
50th %ile Term Code	Max
30th %ile Green (s)	19.5
30th %ile Term Code	Max
10th %ile Green (s)	16.6
10th %ile Term Code	Gap
Queue Length 50th (ft)	213
Queue Length 95th (ft)	306
Internal Link Dist (ft)	
Turn Bay Length (ft)	275
Base Capacity (vph)	586
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Reduced v/c Ratio		0.84	0.89		0.79	0.57		0.98	0.73	0.24	0.28	0.91

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 57.4 (41%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 52.8		Intersection LOS: D	
Intersection Capacity Utilization 87.4%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 100: Arlington Heights Road & Palatine Road

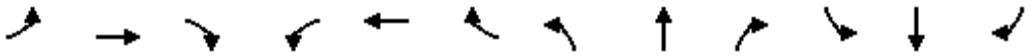


Lane Group	SBR
Reduced v/c Ratio	0.55

Intersection Summary

HCM 6th Edition methodology cannot be performed with phasing conflicts.

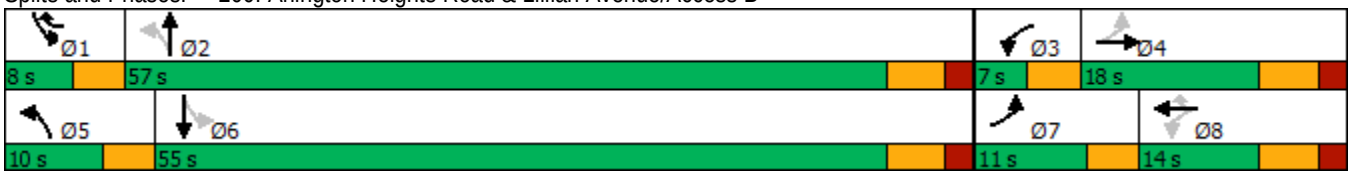
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	10	20	20	5	55	20	890	20	30	1020	30
Future Volume (vph)	35	10	20	20	5	55	20	890	20	30	1020	30
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		1.00			1.00	1.00		1.00	1.00	
Frt		0.902				0.850		0.997			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1671	1606	0	1641	1961	1524	1770	3487	0	1656	3452	0
Flt Permitted	0.976						0.226			0.268		
Satd. Flow (perm)	1717	1606	0	1725	1961	1524	421	3487	0	467	3452	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			1	1			2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	13%	2%	10%	2%	6%	2%	3%	10%	9%	4%	7%
Adj. Flow (vph)	37	11	21	21	5	58	21	937	21	32	1074	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	32	0	21	5	58	21	958	0	32	1106	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

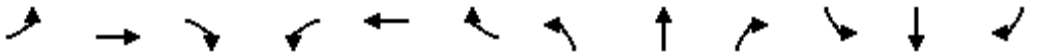


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	11.0	18.0		7.0	14.0	8.0	10.0	57.0		8.0	55.0	
Total Split (%)	12.2%	20.0%		7.8%	15.6%	8.9%	11.1%	63.3%		8.9%	61.1%	
Maximum Green (s)	7.5	12.0		3.5	8.0	4.5	6.5	51.0		4.5	49.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	10.9	9.8		5.3	8.8	6.9	52.6	49.9		52.2	52.9	
Actuated g/C Ratio	0.17	0.15		0.08	0.14	0.11	0.82	0.77		0.81	0.82	
v/c Ratio	0.13	0.13		0.15	0.02	0.35	0.04	0.35		0.07	0.39	
Control Delay	26.4	32.6		33.2	35.2	37.7	3.9	6.8		3.9	7.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	26.4	32.6		33.2	35.2	37.7	3.9	6.8		3.9	7.3	
LOS	C	C		C	D	D	A	A		A	A	
Approach Delay		29.3			36.4			6.8			7.2	
Approach LOS		C			D			A			A	
90th %ile Green (s)	7.5	12.0		3.5	8.0	4.5	6.4	51.0		4.5	49.1	
90th %ile Term Code	Max	Hold		Max	Max	Max	Gap	Max		Max	Hold	
70th %ile Green (s)	19.6	10.1		3.5	0.0	4.5	6.1	50.6		4.5	49.0	
70th %ile Term Code	Hold	Gap		Max	Skip	Max	Gap	Hold		Max	Max	
50th %ile Green (s)	0.0	0.0		0.0	0.0	4.5	0.0	37.4		4.5	45.4	
50th %ile Term Code	Skip	Skip		Skip	Skip	Max	Skip	Gap		Max	Hold	
30th %ile Green (s)	0.0	0.0		0.0	0.0	0.0	0.0	42.7		0.0	42.7	
30th %ile Term Code	Skip	Skip		Skip	Skip	Skip	Skip	Dwell		Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0	0.0	0.0	38.5		0.0	38.5	
10th %ile Term Code	Skip	Skip		Skip	Skip	Skip	Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	10	8		6	1	17	1	38		1	0	
Queue Length 95th (ft)	41	43		28	13	61	10	207		13	268	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	313	327		137	266	164	494	2887		468	2801	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.12	0.10		0.15	0.02	0.35	0.04	0.33		0.07	0.39	

Intersection Summary		
Area Type:	Other	
Cycle Length: 90		
Actuated Cycle Length: 64.5		
Natural Cycle: 55		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.39		
Intersection Signal Delay: 8.8		Intersection LOS: A
Intersection Capacity Utilization 48.0%		ICU Level of Service A
Analysis Period (min) 15		
90th %ile Actuated Cycle: 90		
70th %ile Actuated Cycle: 87.7		
50th %ile Actuated Cycle: 51.4		
30th %ile Actuated Cycle: 48.7		
10th %ile Actuated Cycle: 44.5		

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	10	20	20	5	55	20	890	20	30	1020	30
Future Volume (veh/h)	35	10	20	20	5	55	20	890	20	30	1020	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1707	1870	1752	1969	1811	1870	1856	1752	1767	1841	1796
Adj Flow Rate, veh/h	37	11	21	21	5	58	21	937	21	32	1074	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	13	2	10	2	6	2	3	10	9	4	7
Cap, veh/h	279	60	115	255	207	192	328	2005	45	369	1992	59
Arrive On Green	0.02	0.12	0.12	0.01	0.11	0.11	0.01	0.57	0.57	0.02	0.57	0.57
Sat Flow, veh/h	1697	524	1000	1668	1969	1531	1781	3525	79	1682	3467	103
Grp Volume(v), veh/h	37	0	32	21	5	58	21	469	489	32	542	564
Grp Sat Flow(s),veh/h/ln	1697	0	1524	1668	1969	1531	1781	1763	1841	1682	1749	1822
Q Serve(g_s), s	1.3	0.0	1.3	0.8	0.2	2.3	0.3	10.5	10.5	0.5	12.9	12.9
Cycle Q Clear(g_c), s	1.3	0.0	1.3	0.8	0.2	2.3	0.3	10.5	10.5	0.5	12.9	12.9
Prop In Lane	1.00		0.66	1.00		1.00	1.00		0.04	1.00		0.06
Lane Grp Cap(c), veh/h	279	0	176	255	207	192	328	1003	1047	369	1004	1047
V/C Ratio(X)	0.13	0.00	0.18	0.08	0.02	0.30	0.06	0.47	0.47	0.09	0.54	0.54
Avail Cap(c_a), veh/h	426	0	271	317	233	212	474	1332	1391	447	1269	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	27.0	26.5	27.1	26.9	7.1	8.5	8.5	6.7	8.9	8.9
Incr Delay (d2), s/veh	0.2	0.0	1.1	0.1	0.1	1.9	0.1	1.6	1.5	0.1	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	0.9	0.5	0.1	1.7	0.2	6.5	6.8	0.3	7.8	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.4	0.0	28.0	26.6	27.2	28.7	7.2	10.1	10.0	6.8	10.9	10.9
LnGrp LOS	C	A	C	C	C	C	A	B	B	A	B	B
Approach Vol, veh/h		69			84			979			1138	
Approach Delay, s/veh		27.1			28.1			10.0			10.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	44.4	4.5	13.8	4.5	44.8	5.2	13.1
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	4.5	51.0	3.5	12.0	6.5	49.0	7.5	8.0
Max Q Clear Time (g_c+I1), s	2.5	12.5	2.8	3.3	2.3	14.9	3.3	4.3
Green Ext Time (p_c), s	0.0	22.4	0.0	0.1	0.0	23.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	5	925	10	5	1055
Future Volume (vph)	5	5	925	10	5	1055
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.850	0.998			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1357	1583	3495	0	1770	3689
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1357	1583	3495	0	1770	3689
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Confl. Peds. (#/hr)				3	3	
Confl. Bikes (#/hr)		1		1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	33%	2%	3%	10%	2%	3%
Adj. Flow (vph)	5	5	974	11	5	1111
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	5	985	0	5	1111
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	5	925	10	5	1055
Future Vol, veh/h	5	5	925	10	5	1055
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	33	2	3	10	2	3
Mvmt Flow	5	5	974	11	5	1111

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1549	496	0	0	988	0
Stage 1	983	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	7.46	6.94	-	-	4.14	-
Critical Hdwy Stg 1	6.46	-	-	-	-	-
Critical Hdwy Stg 2	6.46	-	-	-	-	-
Follow-up Hdwy	3.83	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	77	519	-	-	695	-
Stage 1	260	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	76	518	-	-	693	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	259	-	-	-	-	-
Stage 2	450	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.9	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	76	518	693	-
HCM Lane V/C Ratio	-	-	0.069	0.01	0.008	-
HCM Control Delay (s)	-	-	55.9	12	10.2	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1610	30	0	1210	0	15
Future Volume (vph)	1610	30	0	1210	0	15
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	4928	0	0	5103	0	1611
Flt Permitted						
Satd. Flow (perm)	4928	0	0	5103	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	2%	2%	7%	2%	2%
Adj. Flow (vph)	1695	32	0	1274	0	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1727	0	0	1274	0	16
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

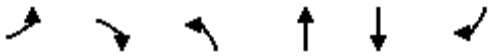
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1610	30	0	1210	0	15
Future Vol, veh/h	1610	30	0	1210	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	7	2	2
Mvmt Flow	1695	32	0	1274	0	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	864
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	255
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	255
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	255	-	-	-
HCM Lane V/C Ratio	0.062	-	-	-
HCM Control Delay (s)	20	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	15	0	820	1270	25
Future Volume (vph)	0	15	0	820	1270	25
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.865			0.997	
Flt Protected						
Satd. Flow (prot)	0	1741	0	5200	5022	0
Flt Permitted						
Satd. Flow (perm)	0	1741	0	5200	5022	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	5%	3%	2%
Adj. Flow (vph)	0	16	0	863	1337	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	16	0	863	1363	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.1%		ICU Level of Service A	
Analysis Period (min) 15			

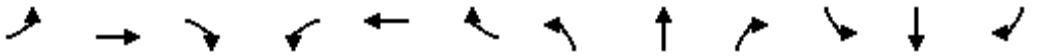
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	15	0	820	1270	25
Future Vol, veh/h	0	15	0	820	1270	25
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	7	2	5	3	2
Mvmt Flow	0	16	0	863	1337	26

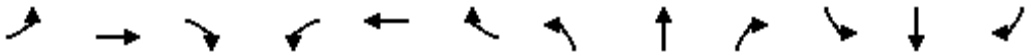
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	685	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.24	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.97	-	-	-	-
Pot Cap-1 Maneuver	0	326	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	325	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	325	-	-
HCM Lane V/C Ratio	-	0.049	-	-
HCM Control Delay (s)	-	16.6	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	15	15	1	25	35	790	15	20	1255	10
Future Volume (vph)	5	1	15	15	1	25	35	790	15	20	1255	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor							1.00				1.00	
Frt		0.859			0.856			0.997			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1399	1600	0	1770	1539	0	1770	3430	0	1719	5079	0
Flt Permitted	0.784			0.784			0.179			0.333		
Satd. Flow (perm)	1155	1600	0	1460	1539	0	333	3430	0	603	5079	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	29%	2%	2%	2%	50%	4%	2%	5%	2%	5%	2%	2%
Adj. Flow (vph)	5	1	16	16	1	26	37	832	16	21	1321	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	17	0	16	27	0	37	848	0	21	1332	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



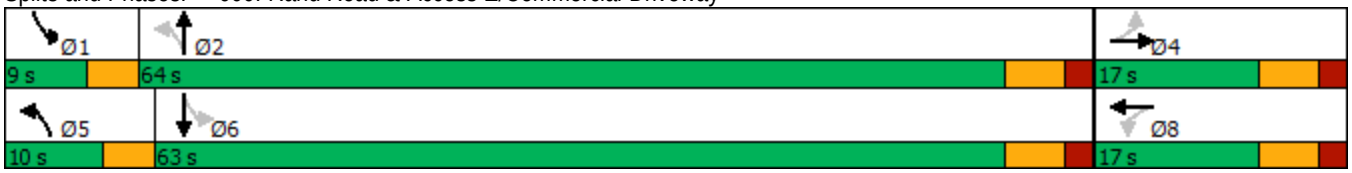
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	17.0	17.0		17.0	17.0		10.0	64.0		9.0	63.0	
Total Split (%)	18.9%	18.9%		18.9%	18.9%		11.1%	71.1%		10.0%	70.0%	
Maximum Green (s)	11.0	11.0		11.0	11.0		6.5	58.0		5.5	57.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	9.4	9.4		9.4	9.4		63.9	62.2		62.4	60.1	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.83	0.81		0.81	0.78	
v/c Ratio	0.04	0.09		0.09	0.14		0.09	0.30		0.04	0.33	
Control Delay	36.0	36.6		36.8	37.3		2.6	4.8		2.4	5.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.0	36.6		36.8	37.3		2.6	4.8		2.4	5.7	
LOS	D	D		D	D		A	A		A	A	
Approach Delay		36.4			37.1			4.7			5.7	
Approach LOS		D			D			A			A	
90th %ile Green (s)	11.0	11.0		11.0	11.0		6.5	58.0		5.5	57.0	
90th %ile Term Code	Hold	Hold		Max	Max		Max	Hold		Max	Max	
70th %ile Green (s)	9.8	9.8		9.8	9.8		6.5	58.0		5.5	57.0	
70th %ile Term Code	Hold	Hold		Gap	Gap		Max	Hold		Max	Max	
50th %ile Green (s)	8.9	8.9		8.9	8.9		6.5	67.0		0.0	57.0	
50th %ile Term Code	Hold	Hold		Gap	Gap		Max	Hold		Skip	Max	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	58.4		0.0	58.4	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	45.9		0.0	45.9	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	3	9		8	14		3	61		2	114	
Queue Length 95th (ft)	13	28		27	39		10	141		6	152	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	174	241		220	232		405	2785		575	3985	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.07		0.07	0.12		0.09	0.30		0.04	0.33	

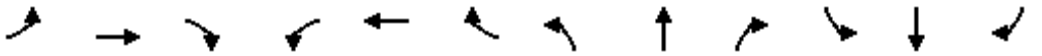
Intersection Summary

Area Type: Other

Cycle Length: 90	
Actuated Cycle Length: 76.6	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.33	
Intersection Signal Delay: 6.2	Intersection LOS: A
Intersection Capacity Utilization 46.6%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 90	
70th %ile Actuated Cycle: 88.8	
50th %ile Actuated Cycle: 87.9	
30th %ile Actuated Cycle: 64.4	
10th %ile Actuated Cycle: 51.9	

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway

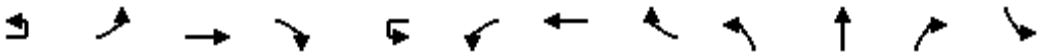




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	15	15	1	25	35	790	15	20	1255	10
Future Volume (veh/h)	5	1	15	15	1	25	35	790	15	20	1255	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1470	1870	1870	1870	1159	1841	1870	1826	1870	1826	1870	1870
Adj Flow Rate, veh/h	5	1	16	16	1	26	37	832	16	21	1321	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	29	2	2	2	50	4	2	5	2	5	2	2
Cap, veh/h	170	8	126	210	3	80	373	2335	45	492	3463	29
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.67	0.67	0.01	0.66	0.66
Sat Flow, veh/h	1087	94	1505	1396	37	951	1781	3481	67	1739	5223	43
Grp Volume(v), veh/h	5	0	17	16	0	27	37	415	433	21	861	471
Grp Sat Flow(s),veh/h/ln	1087	0	1599	1396	0	988	1781	1735	1814	1739	1702	1862
Q Serve(g_s), s	0.3	0.0	0.7	0.7	0.0	1.7	0.4	6.9	6.9	0.3	7.7	7.7
Cycle Q Clear(g_c), s	2.0	0.0	0.7	1.4	0.0	1.7	0.4	6.9	6.9	0.3	7.7	7.7
Prop In Lane	1.00		0.94	1.00		0.96	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	170	0	134	210	0	83	373	1164	1217	492	2257	1235
V/C Ratio(X)	0.03	0.00	0.13	0.08	0.00	0.33	0.10	0.36	0.36	0.04	0.38	0.38
Avail Cap(c_a), veh/h	258	0	262	322	0	162	505	1499	1568	609	2892	1582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	0.0	28.5	29.1	0.0	29.0	3.9	4.8	4.8	3.8	5.1	5.1
Incr Delay (d2), s/veh	0.1	0.0	0.9	0.3	0.0	4.8	0.1	0.9	0.8	0.0	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.5	0.5	0.0	0.9	0.2	3.5	3.6	0.1	3.6	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	0.0	29.4	29.4	0.0	33.8	4.0	5.6	5.6	3.9	5.6	6.0
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		22			43			885			1353	
Approach Delay, s/veh		29.5			32.1			5.5			5.7	
Approach LOS		C			C			A			A	

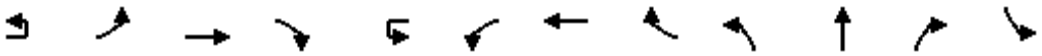
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.5	51.0		11.6	5.0	50.5		11.6				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	5.5	58.0		11.0	6.5	57.0		11.0				
Max Q Clear Time (g_c+I1), s	2.3	8.9		4.0	2.4	9.7		3.7				
Green Ext Time (p_c), s	0.0	22.1		0.0	0.0	34.8		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			6.4									
HCM 6th LOS			A									



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	25	275	1240	125	15	205	1430	20	185	930	170	70
Future Volume (vph)	25	275	1240	125	15	205	1430	20	185	930	170	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	13	12	12	12	13	12	12	12	12	12	12
Storage Length (ft)		415		0		215		0	140		220	155
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		110				165			170			230
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00							1.00		0.98	1.00
Frt			0.986				0.998				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1829	4970	0	0	1829	5075	0	1770	3725	1583	1770
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1826	4970	0	0	1829	5075	0	1763	3725	1557	1767
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			35		
Link Distance (ft)			601				560			640		
Travel Time (s)			11.7				10.9			12.5		
Confl. Peds. (#/hr)	5								5		2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	26	289	1305	132	16	216	1505	21	195	979	179	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	315	1437	0	0	232	1526	0	195	979	179	74
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			52				52			17		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	825	415
Future Volume (vph)	825	415
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Storage Length (ft)		275
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3725	1583
Flt Permitted		
Satd. Flow (perm)	3725	1545
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	500	
Travel Time (s)	9.7	
Confl. Peds. (#/hr)		5
Peak Hour Factor	0.95	0.95
Heavy Vehicles (%)	2%	2%
Adj. Flow (vph)	868	437
Shared Lane Traffic (%)		
Lane Group Flow (vph)	868	437
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	17	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	0.94	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4		3!	3	8		5	2	3!	1
Permitted Phases											2	
Detector Phase	7	7	4		3	3	8		5	2	3	1
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	3.0	15.0		3.0	15.0	3.0	3.0
Minimum Split (s)	7.5	7.5	21.5		7.5	7.5	21.5		7.5	21.5	7.5	7.5
Total Split (s)	28.0	28.0	57.0		28.0	28.0	57.0		21.0	50.0	28.0	15.0
Total Split (%)	18.7%	18.7%	38.0%		18.7%	18.7%	38.0%		14.0%	33.3%	18.7%	10.0%
Maximum Green (s)	23.5	23.5	50.5		23.5	23.5	50.5		16.5	43.5	23.5	10.5
Yellow Time (s)	3.5	3.5	4.5		3.5	3.5	4.5		3.5	4.5	3.5	3.5
All-Red Time (s)	1.0	1.0	2.0		1.0	1.0	2.0		1.0	2.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5			4.5	6.5		4.5	6.5	4.5	4.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	4.0	7.0		4.0	7.0	4.0	4.0
Recall Mode	None	None	None		None	None	None		None	C-Min	None	None
Walk Time (s)										7.0		
Flash Dont Walk (s)										11.0		
Pedestrian Calls (#/hr)										0		
Act Effct Green (s)		23.5	51.7			22.3	50.5		16.5	44.0	68.2	10.0
Actuated g/C Ratio		0.16	0.34			0.15	0.34		0.11	0.29	0.45	0.07
v/c Ratio		1.10	0.84			0.86	0.89		1.01	0.90	0.25	0.63
Control Delay		139.6	51.0			89.7	55.0		130.8	62.6	23.5	91.2
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.7	0.0	0.0
Total Delay		139.6	51.0			89.7	55.0		130.8	63.2	23.5	91.2
LOS		F	D			F	E		F	E	C	F
Approach Delay			66.9				59.6			67.7		
Approach LOS			E				E			E		
90th %ile Green (s)	23.5	23.5	50.5		23.5	23.5	50.5		16.5	43.5	23.5	10.5
90th %ile Term Code	Max	Max	Max		Max	Max	Max		Max	Coord	Max	Max
70th %ile Green (s)	23.5	23.5	50.5		23.5	23.5	50.5		16.5	43.5	23.5	10.5
70th %ile Term Code	Max	Max	Max		Max	Max	Max		Max	Coord	Max	Max
50th %ile Green (s)	23.5	23.5	50.5		23.5	23.5	50.5		16.5	43.5	23.5	10.5
50th %ile Term Code	Max	Max	Max		Max	Max	Max		Max	Coord	Max	Max
30th %ile Green (s)	23.5	23.5	51.3		22.7	22.7	50.5		16.5	43.5	22.7	10.5
30th %ile Term Code	Max	Max	Max		Gap	Gap	Max		Max	Coord	Gap	Max
10th %ile Green (s)	23.5	23.5	55.8		18.2	18.2	50.5		16.5	45.8	18.2	8.2
10th %ile Term Code	Max	Max	Max		Gap	Gap	Max		Max	Coord	Gap	Gap
Queue Length 50th (ft)		~348	480			222	518		~194	487	99	72
Queue Length 95th (ft)		#545	545			#359	585		#364	#606	151	#136
Internal Link Dist (ft)			521				480			560		
Turn Bay Length (ft)		415				215			140		220	155
Base Capacity (vph)		286	1713			286	1708		194	1091	725	123
Starvation Cap Reductn		0	0			0	0		0	17	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0

Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	21.5	7.5
Total Split (s)	44.0	28.0
Total Split (%)	29.3%	18.7%
Maximum Green (s)	37.5	23.5
Yellow Time (s)	4.5	3.5
All-Red Time (s)	2.0	1.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.5	4.5
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	7.0	4.0
Recall Mode	C-Min	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	37.5	63.0
Actuated g/C Ratio	0.25	0.42
v/c Ratio	0.93	0.67
Control Delay	71.9	38.0
Queue Delay	0.0	0.0
Total Delay	71.9	38.0
LOS	E	D
Approach Delay	62.2	
Approach LOS	E	
90th %ile Green (s)	37.5	23.5
90th %ile Term Code	Coord	Max
70th %ile Green (s)	37.5	23.5
70th %ile Term Code	Coord	Max
50th %ile Green (s)	37.5	23.5
50th %ile Term Code	Coord	Max
30th %ile Green (s)	37.5	23.5
30th %ile Term Code	Coord	Max
10th %ile Green (s)	37.5	23.5
10th %ile Term Code	Coord	Max
Queue Length 50th (ft)	440	321
Queue Length 95th (ft)	#565	442
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		275
Base Capacity (vph)	931	654
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Reduced v/c Ratio		1.10	0.84			0.81	0.89		1.01	0.91	0.25	0.60

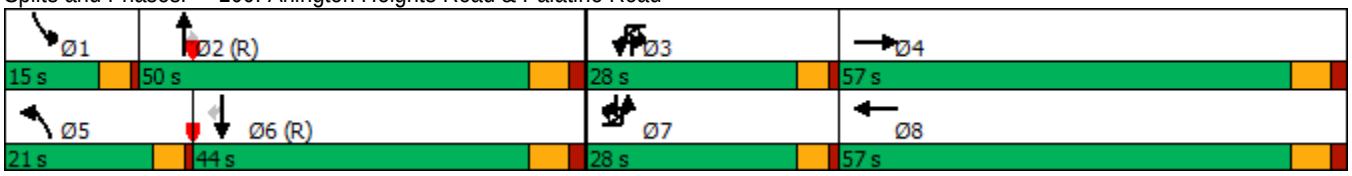
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 61.5 (41%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 64.0		Intersection LOS: E	
Intersection Capacity Utilization 97.8%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

! Phase conflict between lane groups.

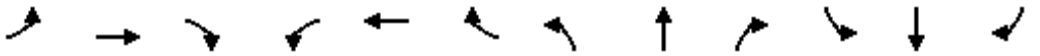
Splits and Phases: 100: Arlington Heights Road & Palatine Road



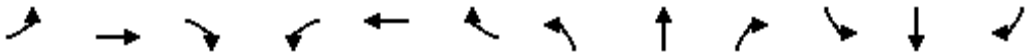
Lane Group	SBT	SBR
Reduced v/c Ratio	0.93	0.67

Intersection Summary

HCM 6th Edition methodology cannot be performed with phasing conflicts.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	15	20	65	25	150	30	1060	60	95	1000	60
Future Volume (vph)	75	15	20	65	25	150	30	1060	60	95	1000	60
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		0.99			1.00				1.00	
Frt		0.915				0.850		0.992			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1654	0	1770	1961	1583	1770	3511	0	1770	3504	0
Flt Permitted	0.755						0.242			0.159		
Satd. Flow (perm)	1406	1654	0	1847	1961	1583	450	3511	0	296	3504	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			6	6			3					3
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	6%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%
Adj. Flow (vph)	79	16	21	68	26	158	32	1116	63	100	1053	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	37	0	68	26	158	32	1179	0	100	1116	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

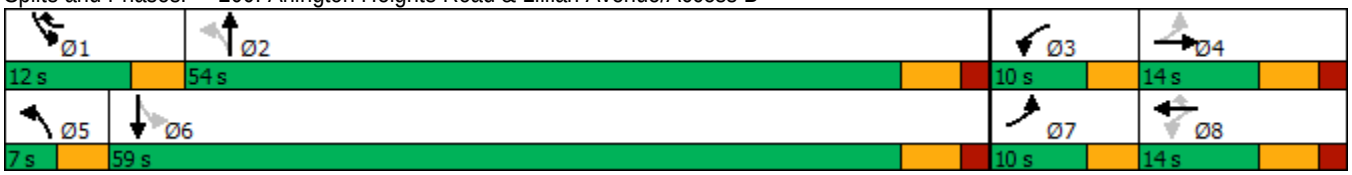


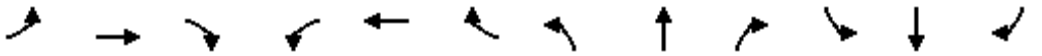
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	10.0	14.0		10.0	14.0	12.0	7.0	54.0		12.0	59.0	
Total Split (%)	11.1%	15.6%		11.1%	15.6%	13.3%	7.8%	60.0%		13.3%	65.6%	
Maximum Green (s)	6.5	8.0		6.5	8.0	8.5	3.5	48.0		8.5	53.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	12.7	8.3		10.2	8.3	13.4	52.4	46.2		60.8	56.2	
Actuated g/C Ratio	0.16	0.10		0.13	0.10	0.17	0.66	0.58		0.77	0.71	
v/c Ratio	0.30	0.21		0.30	0.13	0.59	0.09	0.58		0.26	0.45	
Control Delay	31.8	40.9		34.5	39.1	41.4	5.1	13.6		5.8	9.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	31.8	40.9		34.5	39.1	41.4	5.1	13.6		5.8	9.1	
LOS	C	D		C	D	D	A	B		A	A	
Approach Delay		34.7			39.3			13.4			8.8	
Approach LOS		C			D			B			A	
90th %ile Green (s)	6.5	8.0		6.5	8.0	8.5	3.5	48.0		8.5	53.0	
90th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Max	
70th %ile Green (s)	6.5	8.0		6.5	8.0	7.7	3.5	48.8		7.7	53.0	
70th %ile Term Code	Max	Max		Max	Max	Gap	Max	Hold		Gap	Max	
50th %ile Green (s)	20.5	8.0		6.5	0.0	8.5	3.5	48.0		8.5	53.0	
50th %ile Term Code	Hold	Max		Max	Skip	Max	Max	Max		Max	Hold	
30th %ile Green (s)	6.5	0.0		6.5	0.0	8.5	0.0	42.9		8.5	54.9	
30th %ile Term Code	Max	Skip		Max	Skip	Max	Skip	Gap		Max	Hold	
10th %ile Green (s)	0.0	0.0		0.0	0.0	7.7	0.0	38.8		7.7	50.0	
10th %ile Term Code	Skip	Skip		Skip	Skip	Gap	Skip	Dwell		Gap	Dwell	
Queue Length 50th (ft)	36	20		38	14	~100	5	233		16	185	
Queue Length 95th (ft)	75	50		66	39	133	13	300		31	239	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	270	173		236	205	274	357	2206		390	2444	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio	0.29	0.21		0.29	0.13	0.58	0.09	0.53		0.26	0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 79.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 14.6		Intersection LOS: B	
Intersection Capacity Utilization 61.4%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 90			
30th %ile Actuated Cycle: 70.9			
10th %ile Actuated Cycle: 56			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	15	20	65	25	150	30	1060	60	95	1000	60
Future Volume (veh/h)	75	15	20	65	25	150	30	1060	60	95	1000	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1811	1870	1870	1969	1870	1870	1870	1870	1870	1870	1856
Adj Flow Rate, veh/h	79	16	21	68	26	158	32	1116	63	100	1053	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	6	2	2	2	2	2	2	2	2	2	3
Cap, veh/h	301	79	104	302	208	237	320	1861	105	330	1942	116
Arrive On Green	0.05	0.11	0.11	0.05	0.11	0.11	0.02	0.54	0.54	0.05	0.57	0.57
Sat Flow, veh/h	1781	698	916	1781	1969	1558	1781	3419	193	1781	3406	204
Grp Volume(v), veh/h	79	0	37	68	26	158	32	580	599	100	549	567
Grp Sat Flow(s),veh/h/ln	1781	0	1613	1781	1969	1558	1781	1777	1835	1781	1777	1833
Q Serve(g_s), s	2.9	0.0	1.6	2.5	0.9	7.2	0.6	16.7	16.7	1.8	14.5	14.5
Cycle Q Clear(g_c), s	2.9	0.0	1.6	2.5	0.9	7.2	0.6	16.7	16.7	1.8	14.5	14.5
Prop In Lane	1.00		0.57	1.00		1.00	1.00		0.11	1.00		0.11
Lane Grp Cap(c), veh/h	301	0	183	302	208	237	320	967	999	330	1013	1045
V/C Ratio(X)	0.26	0.00	0.20	0.23	0.12	0.67	0.10	0.60	0.60	0.30	0.54	0.54
Avail Cap(c_a), veh/h	360	0	183	373	208	237	368	1129	1166	449	1246	1286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	30.4	28.3	30.6	30.3	8.4	11.6	11.7	9.0	10.1	10.1
Incr Delay (d2), s/veh	0.5	0.0	1.2	0.4	0.6	9.2	0.1	2.7	2.7	0.5	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.0	1.2	2.0	0.8	5.9	0.4	10.4	10.7	1.1	9.1	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	31.6	28.6	31.2	39.5	8.6	14.4	14.3	9.5	12.2	12.1
LnGrp LOS	C	A	C	C	C	D	A	B	B	A	B	B
Approach Vol, veh/h		116			252			1211			1216	
Approach Delay, s/veh		29.4			35.7			14.2			11.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	47.1	7.0	14.6	5.0	49.1	7.5	14.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	48.0	6.5	8.0	3.5	53.0	6.5	8.0
Max Q Clear Time (g_c+I1), s	3.8	18.7	4.5	3.6	2.6	16.5	4.9	9.2
Green Ext Time (p_c), s	0.1	22.4	0.0	0.1	0.0	25.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	15	1135	25	1	1085
Future Volume (vph)	5	15	1135	25	1	1085
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3527	0	1770	3725
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	3527	0	1770	3725
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%
Adj. Flow (vph)	5	16	1195	26	1	1142
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	16	1221	0	1	1142
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	15	1135	25	1	1085
Future Vol, veh/h	5	15	1135	25	1	1085
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	4	2	2
Mvmt Flow	5	16	1195	26	1	1142

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1781	611	0	0	1221	0
Stage 1	1208	-	-	-	-	-
Stage 2	573	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	73	437	-	-	567	-
Stage 1	246	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	73	437	-	-	567	-
Mov Cap-2 Maneuver	73	-	-	-	-	-
Stage 1	246	-	-	-	-	-
Stage 2	526	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	73	437	567	-
HCM Lane V/C Ratio	-	-	0.072	0.036	0.002	-
HCM Control Delay (s)	-	-	58.1	13.5	11.4	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1380	115	0	1655	0	75
Future Volume (vph)	1380	115	0	1655	0	75
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Ped Bike Factor						
Frt	0.988					0.865
Flt Protected						
Satd. Flow (prot)	4979	0	0	5353	0	1611
Flt Permitted						
Satd. Flow (perm)	4979	0	0	5353	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Confl. Peds. (#/hr)		1				
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1453	121	0	1742	0	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1574	0	0	1742	0	79
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			

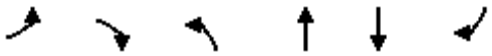
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1380	115	0	1655	0	75
Future Vol, veh/h	1380	115	0	1655	0	75
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	2	2	2
Mvmt Flow	1453	121	0	1742	0	79

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	788
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	287
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	287
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	22.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	287	-	-	-
HCM Lane V/C Ratio	0.275	-	-	-
HCM Control Delay (s)	22.2	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	55	0	1385	1230	90
Future Volume (vph)	0	55	0	1385	1230	90
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.865			0.990	
Flt Protected						
Satd. Flow (prot)	0	1826	0	5353	5034	0
Flt Permitted						
Satd. Flow (perm)	0	1826	0	5353	5034	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	58	0	1458	1295	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	58	0	1458	1390	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

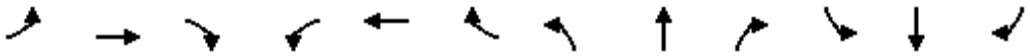
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	55	0	1385	1230	90
Future Vol, veh/h	0	55	0	1385	1230	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	58	0	1458	1295	95

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	695	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	330	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	330	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	330	-	-
HCM Lane V/C Ratio	-	0.175	-	-
HCM Control Delay (s)	-	18.2	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	5	55	30	20	50	85	1295	35	35	1210	40
Future Volume (vph)	40	5	55	30	20	50	85	1295	35	35	1210	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00				1.00		1.00		
Frt		0.862			0.893			0.996			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1585	0	1752	1663	0	1770	3523	0	1770	5060	0
Flt Permitted	0.709			0.716			0.171			0.162		
Satd. Flow (perm)	1321	1585	0	1318	1663	0	319	3523	0	302	5060	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)			1	1					3	3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	42	5	58	32	21	53	89	1363	37	37	1274	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	63	0	32	74	0	89	1400	0	37	1316	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



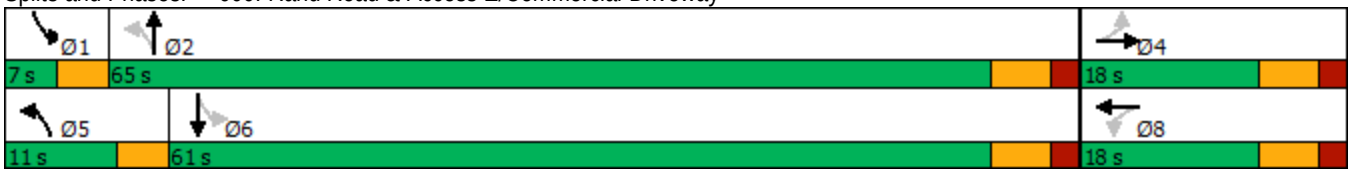
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	18.0	18.0		18.0	18.0		11.0	65.0		7.0	61.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.2%	72.2%		7.8%	67.8%	
Maximum Green (s)	12.0	12.0		12.0	12.0		7.5	59.0		3.5	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	10.6	10.6		10.6	10.6		65.1	60.5		60.1	56.6	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.80	0.74		0.74	0.69	
v/c Ratio	0.25	0.31		0.19	0.34		0.24	0.54		0.13	0.37	
Control Delay	38.9	39.6		37.7	40.2		4.2	7.9		3.9	7.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.9	39.6		37.7	40.2		4.2	7.9		3.9	7.9	
LOS	D	D		D	D		A	A		A	A	
Approach Delay		39.3			39.5			7.7			7.8	
Approach LOS		D			D			A			A	
90th %ile Green (s)	12.0	12.0		12.0	12.0		7.5	59.0		3.5	55.0	
90th %ile Term Code	Max	Max		Max	Max		Max	Max		Max	Max	
70th %ile Green (s)	12.0	12.0		12.0	12.0		7.0	59.0		3.5	55.5	
70th %ile Term Code	Max	Max		Max	Max		Gap	Max		Max	Hold	
50th %ile Green (s)	11.2	11.2		11.2	11.2		6.5	59.0		3.5	56.0	
50th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Max		Max	Hold	
30th %ile Green (s)	9.5	9.5		9.5	9.5		6.2	59.6		0.0	49.9	
30th %ile Term Code	Hold	Hold		Gap	Gap		Gap	Hold		Skip	Gap	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	51.7		0.0	51.7	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	22	33		16	39		10	205		4	123	
Queue Length 95th (ft)	53	71		44	81		20	271		10	160	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	200	240		199	251		392	2612		287	3528	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.21	0.26		0.16	0.29		0.23	0.54		0.13	0.37	

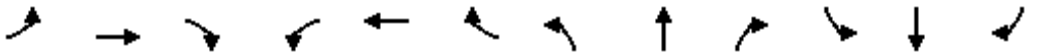
Intersection Summary

Area Type: Other

Cycle Length: 90	
Actuated Cycle Length: 81.6	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 10.0	Intersection LOS: A
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 90	
70th %ile Actuated Cycle: 90	
50th %ile Actuated Cycle: 89.2	
30th %ile Actuated Cycle: 81.1	
10th %ile Actuated Cycle: 57.7	

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway





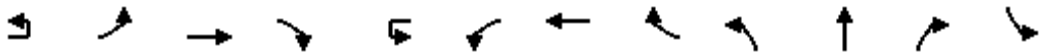
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	5	55	30	20	50	85	1295	35	35	1210	40
Future Volume (veh/h)	40	5	55	30	20	50	85	1295	35	35	1210	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	5	58	32	21	53	89	1363	37	37	1274	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	2	2	2	2	2	2	2	2
Cap, veh/h	175	13	152	182	48	122	386	2379	65	312	3341	110
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.04	0.67	0.67	0.02	0.66	0.66
Sat Flow, veh/h	1323	127	1473	1326	469	1184	1781	3534	96	1781	5077	167
Grp Volume(v), veh/h	42	0	63	32	0	74	89	685	715	37	854	462
Grp Sat Flow(s),veh/h/ln	1323	0	1600	1326	0	1653	1781	1777	1853	1781	1702	1840
Q Serve(g_s), s	2.4	0.0	2.8	1.8	0.0	3.2	1.2	15.7	15.7	0.5	8.8	8.8
Cycle Q Clear(g_c), s	5.6	0.0	2.8	4.6	0.0	3.2	1.2	15.7	15.7	0.5	8.8	8.8
Prop In Lane	1.00		0.92	1.00		0.72	1.00		0.05	1.00		0.09
Lane Grp Cap(c), veh/h	175	0	165	182	0	171	386	1196	1248	312	2240	1211
V/C Ratio(X)	0.24	0.00	0.38	0.18	0.00	0.43	0.23	0.57	0.57	0.12	0.38	0.38
Avail Cap(c_a), veh/h	245	0	250	253	0	259	495	1367	1426	355	2442	1320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	32.1	34.2	0.0	32.3	4.4	6.7	6.7	5.6	6.0	6.0
Incr Delay (d2), s/veh	1.5	0.0	3.1	1.0	0.0	3.7	0.3	2.0	1.9	0.2	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	2.2	1.1	0.0	2.6	0.6	8.6	8.9	0.3	4.6	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	0.0	35.2	35.2	0.0	36.0	4.7	8.6	8.6	5.7	6.5	6.9
LnGrp LOS	D	A	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		105			106			1489			1353	
Approach Delay, s/veh		35.7			35.7			8.4			6.6	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	57.6		13.9	6.3	56.5		13.9				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	3.5	59.0		12.0	7.5	55.0		12.0				
Max Q Clear Time (g_c+I1), s	2.5	17.7		7.6	3.2	10.8		6.6				
Green Ext Time (p_c), s	0.0	33.9		0.2	0.1	32.8		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	20	245	1005	135	5	175	995	25	170	740	170	75
Future Volume (vph)	20	245	1005	135	5	175	995	25	170	740	170	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	13	12	12	12	13	12	12	12	12	12	12
Storage Length (ft)		415		0		215		0	140		220	155
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		110				165			170			230
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.982				0.996				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1829	4986	0	0	1829	5063	0	1770	3725	1583	1770
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1824	4986	0	0	1826	5063	0	1760	3725	1558	1767
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			35		
Link Distance (ft)			601				560			640		
Travel Time (s)			11.7				10.9			12.5		
Confl. Peds. (#/hr)	8	1		1	2	1		1	8		2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	258	1058	142	5	184	1047	26	179	779	179	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	279	1200	0	0	189	1073	0	179	779	179	79
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			52				52			17		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	740	345
Future Volume (vph)	740	345
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Storage Length (ft)		275
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		0.97
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3725	1583
Flt Permitted		
Satd. Flow (perm)	3725	1540
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	500	
Travel Time (s)	9.7	
Confl. Peds. (#/hr)		8
Peak Hour Factor	0.95	0.95
Adj. Flow (vph)	779	363
Shared Lane Traffic (%)		
Lane Group Flow (vph)	779	363
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	17	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	0.94	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

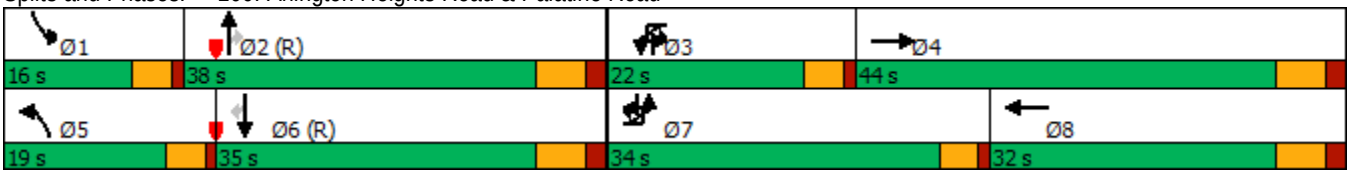


Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4		3!	3	8		5	2	3!	1
Permitted Phases											2	
Detector Phase	7	7	4		3	3	8		5	2	3	1
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	3.0	15.0		3.0	15.0	3.0	3.0
Minimum Split (s)	7.5	7.5	21.5		7.5	7.5	21.5		7.5	21.5	7.5	7.5
Total Split (s)	34.0	34.0	44.0		22.0	22.0	32.0		19.0	38.0	22.0	16.0
Total Split (%)	28.3%	28.3%	36.7%		18.3%	18.3%	26.7%		15.8%	31.7%	18.3%	13.3%
Maximum Green (s)	29.5	29.5	37.5		17.5	17.5	25.5		14.5	31.5	17.5	11.5
Yellow Time (s)	3.5	3.5	4.5		3.5	3.5	4.5		3.5	4.5	3.5	3.5
All-Red Time (s)	1.0	1.0	2.0		1.0	1.0	2.0		1.0	2.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5			4.5	6.5		4.5	6.5	4.5	4.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	4.0	7.0		4.0	7.0	4.0	4.0
Recall Mode	None	None	None		None	None	None		None	C-Min	None	None
Walk Time (s)										7.0		
Flash Dont Walk (s)										11.0		
Pedestrian Calls (#/hr)										0		
Act Effct Green (s)		24.2	38.7			16.3	30.8		14.3	35.0	53.3	10.4
Actuated g/C Ratio		0.20	0.32			0.14	0.26		0.12	0.29	0.44	0.09
v/c Ratio		0.76	0.75			0.77	0.83		0.85	0.72	0.26	0.52
Control Delay		58.3	40.0			70.1	49.1		85.2	43.6	20.4	64.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay		58.3	40.0			70.1	49.1		85.2	43.6	20.4	64.3
LOS		E	D			E	D		F	D	C	E
Approach Delay			43.4				52.3			46.5		
Approach LOS			D				D			D		
90th %ile Green (s)	29.5	29.5	37.5		17.5	17.5	25.5		14.5	31.5	17.5	11.5
90th %ile Term Code	Max	Max	Max		Max	Max	Max		Max	Coord	Max	Max
70th %ile Green (s)	28.1	28.1	37.5		17.5	17.5	26.9		14.5	31.5	17.5	11.5
70th %ile Term Code	Gap	Gap	Max		Max	Max	Max		Max	Coord	Max	Max
50th %ile Green (s)	25.1	25.1	37.5		17.5	17.5	29.9		14.5	31.5	17.5	11.5
50th %ile Term Code	Gap	Gap	Max		Max	Max	Max		Max	Coord	Max	Max
30th %ile Green (s)	21.3	21.3	38.8		16.2	16.2	33.7		14.5	33.1	16.2	9.9
30th %ile Term Code	Gap	Gap	Max		Gap	Gap	Max		Max	Coord	Gap	Gap
10th %ile Green (s)	16.8	16.8	42.4		12.6	12.6	38.2		13.5	47.5	12.6	0.0
10th %ile Term Code	Gap	Gap	Max		Gap	Gap	Max		Gap	Coord	Gap	Skip
Queue Length 50th (ft)		203	307			141	291		138	297	82	59
Queue Length 95th (ft)		287	364			#240	#409		#263	372	132	111
Internal Link Dist (ft)			521				480			560		
Turn Bay Length (ft)		415				215			140		220	155
Base Capacity (vph)		449	1609			266	1300		213	1086	711	169
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.62	0.75			0.71	0.83		0.84	0.72	0.25	0.47

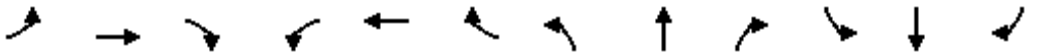
Lane Group	SBT	SBR
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	21.5	7.5
Total Split (s)	35.0	34.0
Total Split (%)	29.2%	28.3%
Maximum Green (s)	28.5	29.5
Yellow Time (s)	4.5	3.5
All-Red Time (s)	2.0	1.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.5	4.5
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	7.0	4.0
Recall Mode	C-Min	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	28.7	54.9
Actuated g/C Ratio	0.24	0.46
v/c Ratio	0.88	0.51
Control Delay	56.1	22.4
Queue Delay	0.0	0.0
Total Delay	56.1	22.4
LOS	E	C
Approach Delay	46.6	
Approach LOS	D	
90th %ile Green (s)	28.5	29.5
90th %ile Term Code	Coord	Max
70th %ile Green (s)	28.5	28.1
70th %ile Term Code	Coord	Gap
50th %ile Green (s)	28.5	25.1
50th %ile Term Code	Coord	Gap
30th %ile Green (s)	28.5	21.3
30th %ile Term Code	Coord	Gap
10th %ile Green (s)	29.5	16.8
10th %ile Term Code	Coord	Gap
Queue Length 50th (ft)	307	176
Queue Length 95th (ft)	#411	238
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		275
Base Capacity (vph)	890	783
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.88	0.46

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 21.6 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 47.1		Intersection LOS: D	
Intersection Capacity Utilization 82.8%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
! Phase conflict between lane groups.			

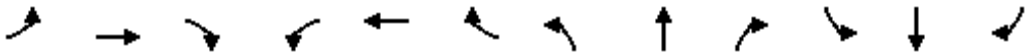
Splits and Phases: 100: Arlington Heights Road & Palatine Road



HCM 6th Edition methodology cannot be performed with phasing conflicts.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	15	20	65	20	150	30	850	70	85	905	60
Future Volume (vph)	80	15	20	65	20	150	30	850	70	85	905	60
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		0.99			1.00				1.00	
Frt		0.915				0.850		0.989			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1686	0	1770	1961	1583	1770	3500	0	1770	3502	0
Flt Permitted	0.606						0.278			0.207		
Satd. Flow (perm)	1129	1686	0	1849	1961	1583	517	3500	0	386	3502	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			5	5			2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	16	21	68	21	158	32	895	74	89	953	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	37	0	68	21	158	32	969	0	89	1016	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	

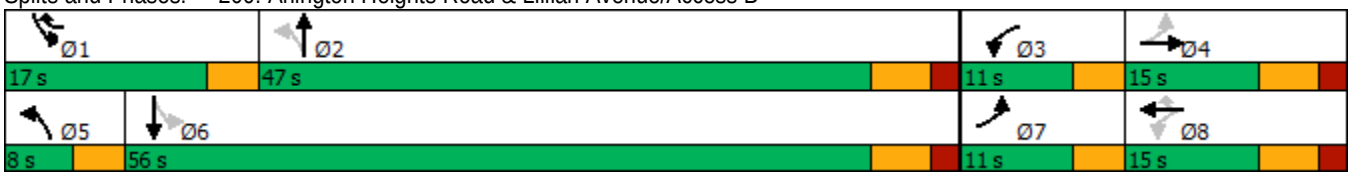


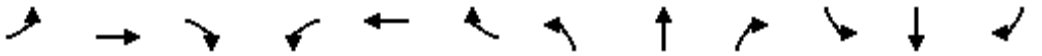
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	11.0	15.0		11.0	15.0	17.0	8.0	47.0		17.0	56.0	
Total Split (%)	12.2%	16.7%		12.2%	16.7%	18.9%	8.9%	52.2%		18.9%	62.2%	
Maximum Green (s)	7.5	9.0		7.5	9.0	13.5	4.5	41.0		13.5	50.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	14.7	9.0		11.1	8.9	14.9	47.7	40.3		56.4	51.6	
Actuated g/C Ratio	0.19	0.12		0.14	0.12	0.19	0.62	0.52		0.73	0.67	
v/c Ratio	0.28	0.19		0.26	0.09	0.51	0.08	0.53		0.19	0.43	
Control Delay	29.1	39.1		32.0	37.9	35.7	5.7	15.0		5.8	10.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	29.1	39.1		32.0	37.9	35.7	5.7	15.0		5.8	10.4	
LOS	C	D		C	D	D	A	B		A	B	
Approach Delay		32.2			34.9			14.7			10.0	
Approach LOS		C			C			B			B	
90th %ile Green (s)	7.5	9.0		7.5	9.0	8.5	4.5	46.0		8.5	50.0	
90th %ile Term Code	Max	Max		Max	Max	Gap	Max	Hold		Gap	Max	
70th %ile Green (s)	7.5	9.0		7.5	9.0	7.6	4.5	46.9		7.6	50.0	
70th %ile Term Code	Max	Max		Max	Max	Gap	Max	Hold		Gap	Max	
50th %ile Green (s)	22.5	9.0		7.5	0.0	13.5	4.5	41.0		13.5	50.0	
50th %ile Term Code	Hold	Max		Max	Skip	Max	Max	Max		Max	Hold	
30th %ile Green (s)	10.6	8.1		0.0	0.0	10.3	0.0	31.1		10.3	44.9	
30th %ile Term Code	Hold	Hold		Skip	Skip	Gap	Skip	Gap		Gap	Hold	
10th %ile Green (s)	0.0	0.0		0.0	0.0	7.4	0.0	32.0		7.4	42.9	
10th %ile Term Code	Skip	Skip		Skip	Skip	Gap	Skip	Dwell		Gap	Dwell	
Queue Length 50th (ft)	38	20		38	11	86	5	210		15	177	
Queue Length 95th (ft)	76	50		64	33	131	14	242		30	231	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	317	209		278	244	401	399	2069		542	2406	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.26	0.18		0.24	0.09	0.39	0.08	0.47		0.16	0.42	

Intersection Summary

Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 76.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 15.5		Intersection LOS: B	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			
90th %ile Actuated Cycle: 90			
70th %ile Actuated Cycle: 90			
50th %ile Actuated Cycle: 90			
30th %ile Actuated Cycle: 65			
10th %ile Actuated Cycle: 48.9			

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	15	20	65	20	150	30	850	70	85	905	60
Future Volume (veh/h)	80	15	20	65	20	150	30	850	70	85	905	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	16	21	68	21	158	32	895	74	89	953	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	97	127	337	241	261	331	1685	139	370	1798	119
Arrive On Green	0.06	0.13	0.13	0.05	0.12	0.12	0.02	0.51	0.51	0.04	0.53	0.53
Sat Flow, veh/h	1781	729	957	1781	1969	1566	1781	3322	275	1781	3383	224
Grp Volume(v), veh/h	84	0	37	68	21	158	32	479	490	89	501	515
Grp Sat Flow(s),veh/h/ln	1781	0	1685	1781	1969	1566	1781	1777	1820	1781	1777	1830
Q Serve(g_s), s	2.9	0.0	1.4	2.3	0.7	6.6	0.6	12.8	12.8	1.6	12.9	12.9
Cycle Q Clear(g_c), s	2.9	0.0	1.4	2.3	0.7	6.6	0.6	12.8	12.8	1.6	12.9	12.9
Prop In Lane	1.00		0.57	1.00		1.00	1.00		0.15	1.00		0.12
Lane Grp Cap(c), veh/h	337	0	224	337	241	261	331	901	923	370	945	973
V/C Ratio(X)	0.25	0.00	0.17	0.20	0.09	0.60	0.10	0.53	0.53	0.24	0.53	0.53
Avail Cap(c_a), veh/h	427	0	224	446	252	270	409	1036	1061	633	1263	1301
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	0.0	27.0	25.3	27.4	27.2	9.0	11.7	11.7	8.8	10.7	10.7
Incr Delay (d2), s/veh	0.4	0.0	0.7	0.3	0.3	5.6	0.1	2.2	2.2	0.3	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.0	1.1	1.8	0.6	5.0	0.4	8.4	8.6	1.0	8.4	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	27.8	25.6	27.7	32.8	9.1	13.9	13.9	9.1	12.9	12.8
LnGrp LOS	C	A	C	C	C	C	A	B	B	A	B	B
Approach Vol, veh/h		121			247			1001			1105	
Approach Delay, s/veh		26.1			30.4			13.7			12.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	41.7	6.7	15.3	4.9	43.4	7.4	14.6
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	13.5	41.0	7.5	9.0	4.5	50.0	7.5	9.0
Max Q Clear Time (g_c+I1), s	3.6	14.8	4.3	3.4	2.6	14.9	4.9	8.6
Green Ext Time (p_c), s	0.1	17.5	0.0	0.1	0.0	22.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	15	935	15	5	985
Future Volume (vph)	5	15	935	15	5	985
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.850	0.998			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3532	0	1770	3725
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	3532	0	1770	3725
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Confl. Peds. (#/hr)				4	4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	16	984	16	5	1037
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	16	1000	0	5	1037
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	15	935	15	5	985
Future Vol, veh/h	5	15	935	15	5	985
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	16	984	16	5	1037

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1525	504	0	0	1004	0
Stage 1	996	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	109	513	-	-	686	-
Stage 1	318	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	108	511	-	-	683	-
Mov Cap-2 Maneuver	108	-	-	-	-	-
Stage 1	317	-	-	-	-	-
Stage 2	551	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.2	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	108	511	683	-
HCM Lane V/C Ratio	-	-	0.049	0.031	0.008	-
HCM Control Delay (s)	-	-	40	12.3	10.3	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1160	95	0	1195	0	65
Future Volume (vph)	1160	95	0	1195	0	65
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.989					0.865
Flt Protected						
Satd. Flow (prot)	5029	0	0	5353	0	1611
Flt Permitted						
Satd. Flow (perm)	5029	0	0	5353	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1221	100	0	1258	0	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1321	0	0	1258	0	68
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.2%		ICU Level of Service A	
Analysis Period (min) 15			

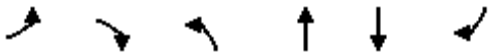
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1160	95	0	1195	0	65
Future Vol, veh/h	1160	95	0	1195	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1221	100	0	1258	0	68

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	661
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	347
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	347
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	347	-	-	-
HCM Lane V/C Ratio	0.197	-	-	-
HCM Control Delay (s)	17.9	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	45	0	1235	1280	115
Future Volume (vph)	0	45	0	1235	1280	115
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.865			0.988	
Flt Protected						
Satd. Flow (prot)	0	1826	0	5353	5024	0
Flt Permitted						
Satd. Flow (perm)	0	1826	0	5353	5024	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	47	0	1300	1347	121
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	47	0	1300	1468	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.3

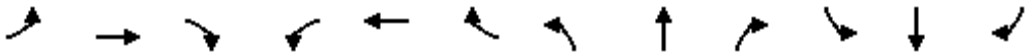
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	45	0	1235	1280	115
Future Vol, veh/h	0	45	0	1235	1280	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	47	0	1300	1347	121

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	734	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	311	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	311	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	311	-	-
HCM Lane V/C Ratio	-	0.152	-	-
HCM Control Delay (s)	-	18.6	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.5	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	10	70	25	10	65	95	1120	35	50	1240	35
Future Volume (vph)	50	10	70	25	10	65	95	1120	35	50	1240	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor							1.00	1.00		1.00	1.00	
Frt		0.869			0.871			0.995			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1619	0	1736	1622	0	1770	3519	0	1770	5062	0
Flt Permitted	0.706			0.702			0.162			0.203		
Satd. Flow (perm)	1315	1619	0	1282	1622	0	302	3519	0	378	5062	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)							2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	53	11	74	26	11	68	100	1179	37	53	1305	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	85	0	26	79	0	100	1216	0	53	1342	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



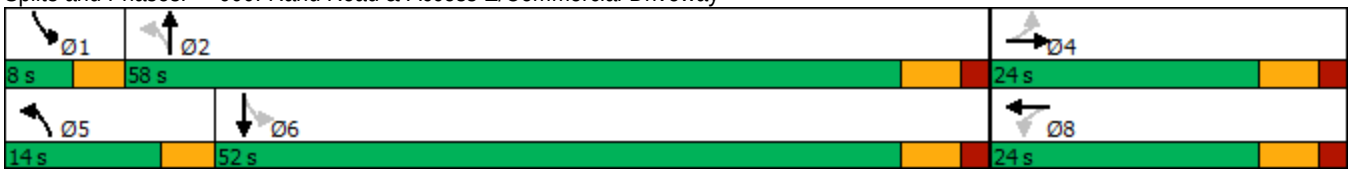
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	24.0	24.0		24.0	24.0		14.0	58.0		8.0	52.0	
Total Split (%)	26.7%	26.7%		26.7%	26.7%		15.6%	64.4%		8.9%	57.8%	
Maximum Green (s)	18.0	18.0		18.0	18.0		10.5	52.0		4.5	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	11.6	11.6		11.6	11.6		59.8	54.9		55.5	51.3	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.77	0.71		0.72	0.66	
v/c Ratio	0.27	0.35		0.14	0.33		0.27	0.49		0.15	0.40	
Control Delay	35.5	36.5		32.8	35.9		5.2	8.8		4.5	9.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	35.5	36.5		32.8	35.9		5.2	8.8		4.5	9.5	
LOS	D	D		C	D		A	A		A	A	
Approach Delay		36.1			35.1			8.6			9.3	
Approach LOS		D			D			A			A	
90th %ile Green (s)	15.6	15.6		15.6	15.6		8.3	52.0		4.5	48.2	
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Max		Max	Hold	
70th %ile Green (s)	13.2	13.2		13.2	13.2		7.3	52.0		4.5	49.2	
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Max		Max	Hold	
50th %ile Green (s)	11.6	11.6		11.6	11.6		6.7	52.0		4.5	49.8	
50th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Max		Max	Hold	
30th %ile Green (s)	10.0	10.0		10.0	10.0		6.7	56.2		0.0	46.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Hold		Skip	Max	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	46.9		0.0	46.9	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	25	41		12	38		11	174		6	129	
Queue Length 95th (ft)	59	84		35	79		27	260		17	190	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	316	389		308	390		440	2482		354	3352	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.17	0.22		0.08	0.20		0.23	0.49		0.15	0.40	

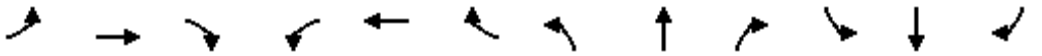
Intersection Summary

Area Type: Other

Cycle Length: 90	
Actuated Cycle Length: 77.5	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 58.2%	ICU Level of Service B
Analysis Period (min) 15	
90th %ile Actuated Cycle: 87.6	
70th %ile Actuated Cycle: 85.2	
50th %ile Actuated Cycle: 83.6	
30th %ile Actuated Cycle: 78.2	
10th %ile Actuated Cycle: 52.9	

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	70	25	10	65	95	1120	35	50	1240	35
Future Volume (veh/h)	50	10	70	25	10	65	95	1120	35	50	1240	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	11	74	26	11	68	100	1179	37	53	1305	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	4	2	2	2	2	2	2	2	2
Cap, veh/h	207	26	172	200	28	170	376	2192	69	354	3099	88
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.04	0.62	0.62	0.03	0.61	0.61
Sat Flow, veh/h	1320	209	1408	1292	225	1394	1781	3517	110	1781	5103	145
Grp Volume(v), veh/h	53	0	85	26	0	79	100	595	621	53	870	472
Grp Sat Flow(s),veh/h/ln	1320	0	1617	1292	0	1619	1781	1777	1850	1781	1702	1844
Q Serve(g_s), s	2.6	0.0	3.3	1.3	0.0	3.1	1.4	13.0	13.0	0.8	9.2	9.2
Cycle Q Clear(g_c), s	5.7	0.0	3.3	4.6	0.0	3.1	1.4	13.0	13.0	0.8	9.2	9.2
Prop In Lane	1.00		0.87	1.00		0.86	1.00		0.06	1.00		0.08
Lane Grp Cap(c), veh/h	207	0	198	200	0	198	376	1108	1153	354	2067	1120
V/C Ratio(X)	0.26	0.00	0.43	0.13	0.00	0.40	0.27	0.54	0.54	0.15	0.42	0.42
Avail Cap(c_a), veh/h	393	0	425	382	0	426	571	1350	1406	421	2288	1240
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	0.0	27.8	30.0	0.0	27.7	5.2	7.3	7.3	5.9	7.1	7.1
Incr Delay (d2), s/veh	1.4	0.0	3.1	0.6	0.0	2.8	0.4	1.9	1.8	0.2	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	2.6	0.8	0.0	2.4	0.7	7.6	7.8	0.4	4.9	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.7	0.0	31.0	30.6	0.0	30.5	5.6	9.2	9.1	6.1	7.7	8.3
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		138			105			1316			1395	
Approach Delay, s/veh		31.2			30.5			8.9			7.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	48.7		14.4	6.5	47.6		14.4				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	4.5	52.0		18.0	10.5	46.0		18.0				
Max Q Clear Time (g_c+I1), s	2.8	15.0		7.7	3.4	11.2		6.6				
Green Ext Time (p_c), s	0.0	27.6		0.7	0.1	27.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		10.2	
HCM 6th LOS		B	

CMAP YEAR 2050 PROJECTIONS

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

May 9, 2023

Sami Bijonowski
Civil Analyst
Kimley-Horn
4201 Winfield Road
Suite 600
Warrenville, IL 60555

Subject: ***Arlington Heights Road - Palatine Road - Rand Road***
IDOT

Dear Ms. Bijonowski:

In response to a request made on your behalf and dated May 9, 2023, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Arlington Hts Rd north of Palatine Rd	19,600	22,800
Arlington Hts Rd south of Palatine Rd	22,800	26,000
Palatine Rd west of Arlington Hts Rd	33,000	36,800
Palatine Rd east of Arlington Hts Rd	29,100	32,900
Palatine Rd east of Rand Rd	27,500	32,200
Rand Rd north of Arlington Hts Rd	24,200	28,400
Rand Rd south of Arlington Hts Rd	26,700	30,000

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2022 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

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

Sincerely,

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

cc: Rios (IDOT)
2023_TrafficForecasts\ArlingtonHeights\ck-73-23\ck-73-23.docx

Kimley»Horn

May 9, 2023

Mr. Jose Rodriguez
Chicago Metropolitan Agency for Planning
233 S. Wacker Drive, Suite 800
Chicago, IL 60606

RE: Request for 2050 Traffic Projections
Arlington Heights Road / Palatine Road Area
Arlington Heights, Illinois

Dear Mr. Rodriguez:

Per requirements of the Illinois Department of Transportation (IDOT), Kimley-Horn is formally requesting Year 2050 traffic projections for the following roadway segments in Arlington Heights, Illinois for use in developing an annual growth rate for area traffic volumes. For your use, the existing Average Daily Traffic volume (Year 2022 and 2021) on the relevant roadway segments are identified by IDOT as follows:

Arlington Heights Road, south of Palatine Road	19,600 (2022)
Arlington Heights Road, north of Palatine Road	22,800 (2022)
Palatine Road, west of Arlington Heights Road	33,000 (2022)
Palatine Road, east of Arlington Heights Road	29,100 (2022)
Palatine Road, east of Rand Road	27,500 (2022)
Rand Road, north of Arlington Heights Road	24,200 (2021)
Rand Road, south of Arlington Heights Road	26,700 (2021)

Please do not hesitate to contact me at (630) 447-4125 or via email at Sami.Bijonowski@kimley-horn.com should you have any questions on this matter.

Sincerely,

Sami Bijonowski

DATA FROM THE ITE TRIP GENERATION MANUAL, 11TH EDITION

Land Use: 912
Drive-in Bank

Description

A bank is a financial institution that can offer a wide variety of financial services. A drive-in bank provides banking services for a motorist through a teller station. A drive-in bank may also serve patrons who walk into the building. The drive-in lanes may or may not provide an automatic teller machine (ATM). Walk-in bank (Land Use 911) is a related use.

Additional Data

The independent variable—drive-in lanes—refers to all lanes at a banking facility used for financial transactions, including ATM-only lanes.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 2000s and the 2010s in Colorado, Kentucky, Minnesota, Nebraska, New Jersey, New York, Oregon, Pennsylvania, Texas, Vermont, Virginia, Washington, and Wisconsin.

To assist in the future analysis of this land use, it is important that Friday data be collected and reported separately from weekday data. It is also important to specify the date and month of the data collection period and the number of drive-through lanes that are open at the time of the study.

Source Numbers

535, 539, 553, 555, 573, 577, 600, 624, 626, 629, 630, 637, 656, 657, 710, 724, 728, 866, 869, 883, 884, 927, 935, 961, 1047

Drive-in Bank
(912)

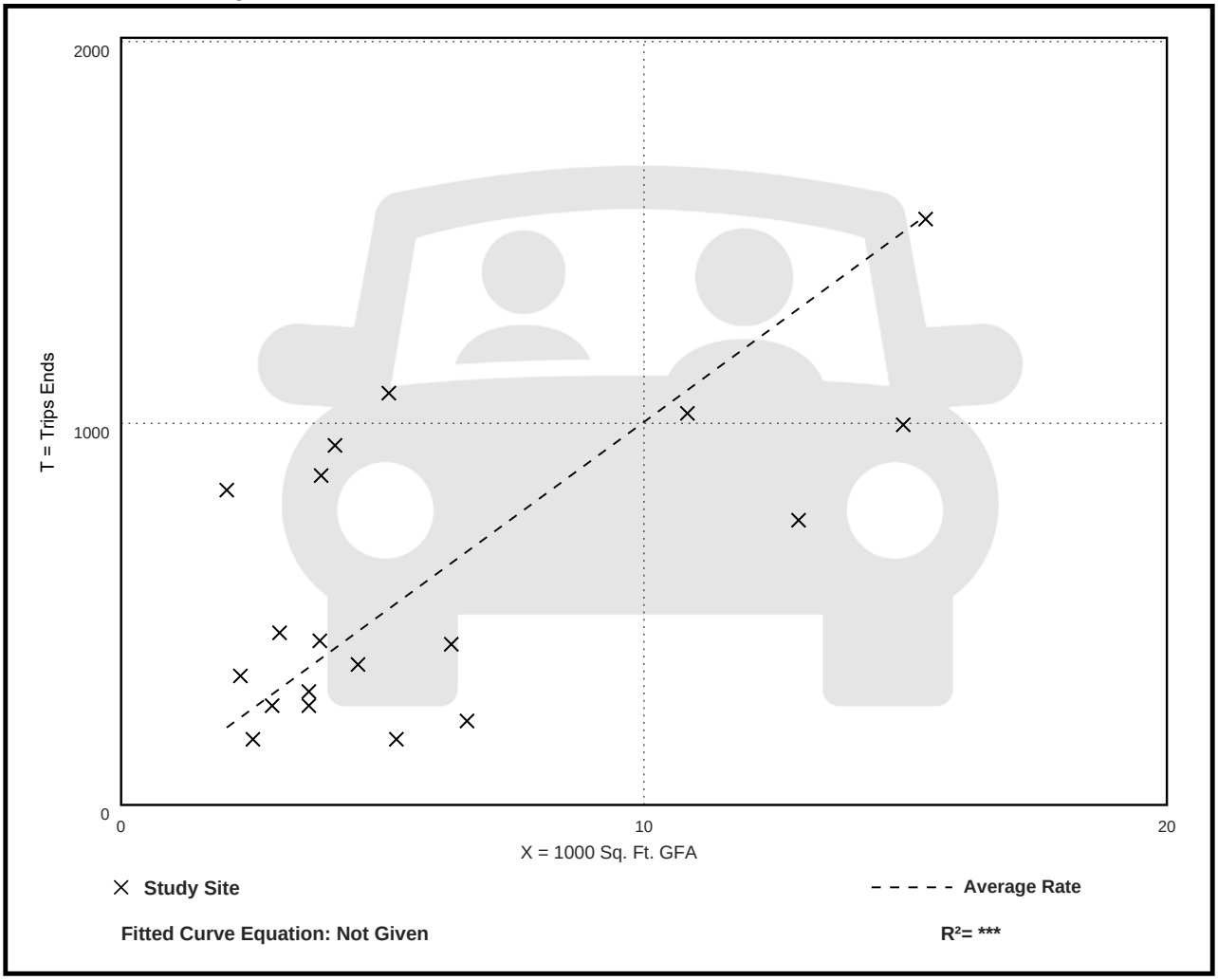
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 19
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
100.35	32.67 - 408.42	68.62

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= *

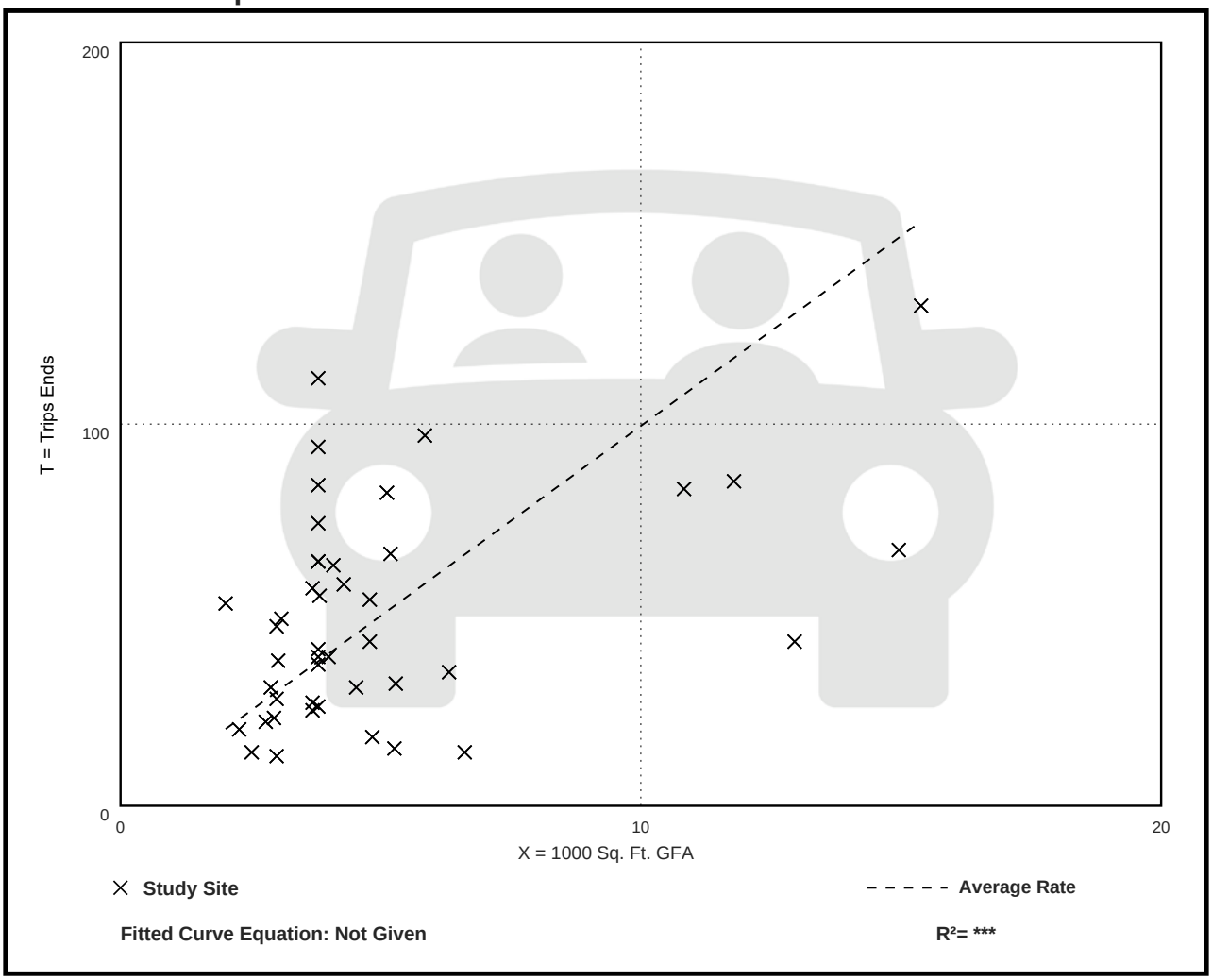
Drive-in Bank
(912)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 44
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 58% entering, 42% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.95	2.12 - 29.47	6.00

Data Plot and Equation



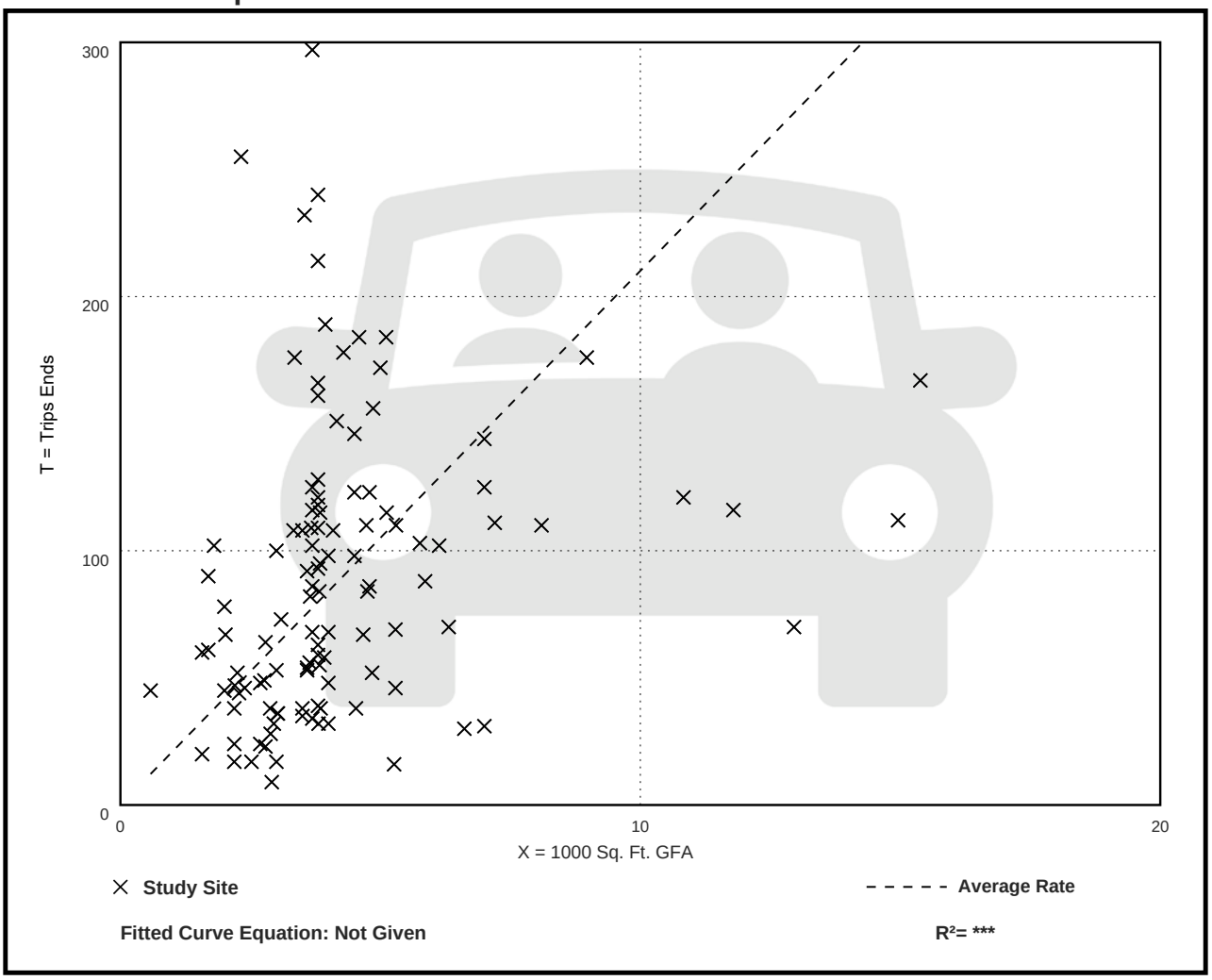
Drive-in Bank
(912)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 114
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
21.01	3.04 - 109.91	15.13

Data Plot and Equation



Drive-in Bank
(912)

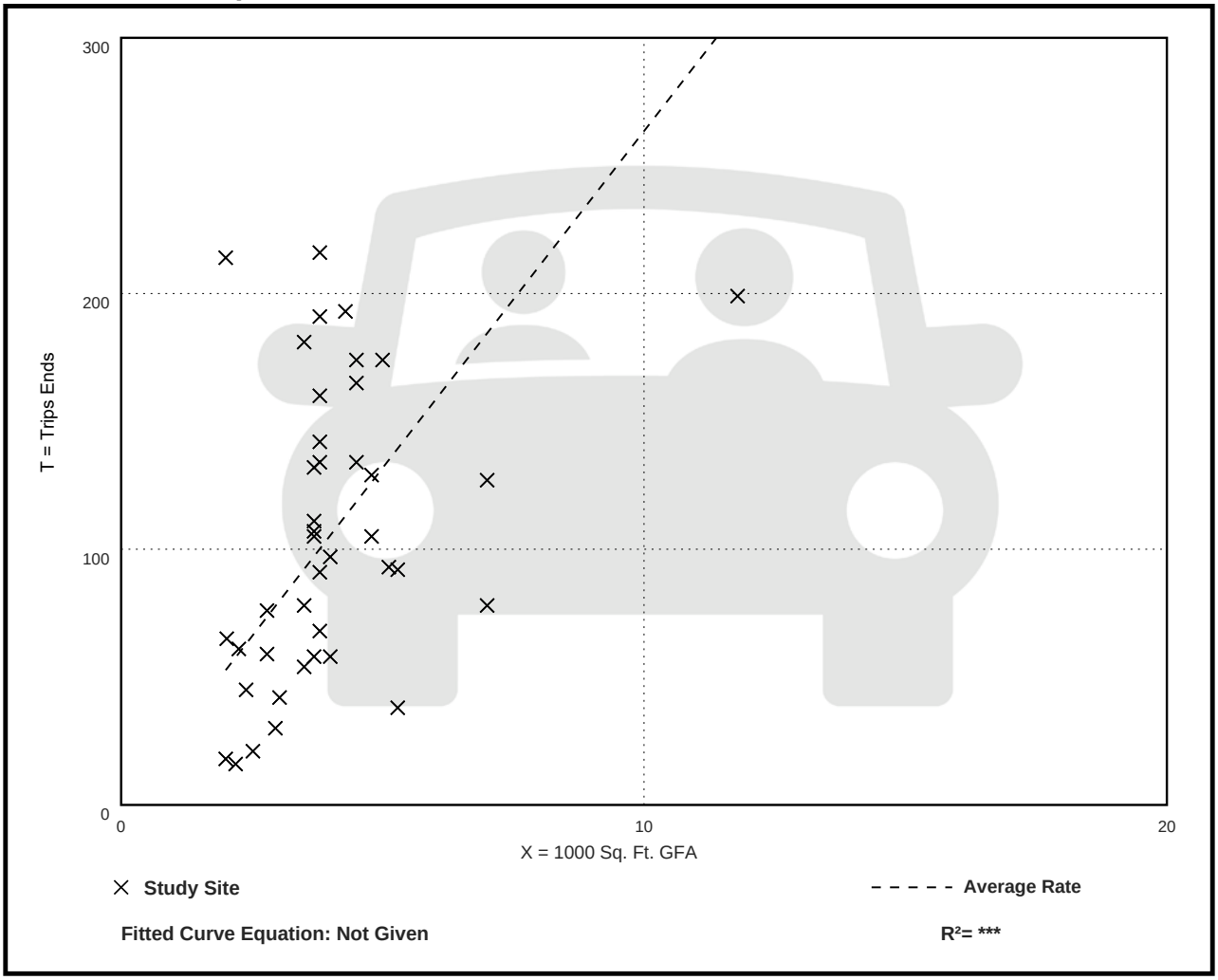
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 41
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
26.35	7.18 - 107.00	15.32

Data Plot and Equation



Drive-in Bank
(912)

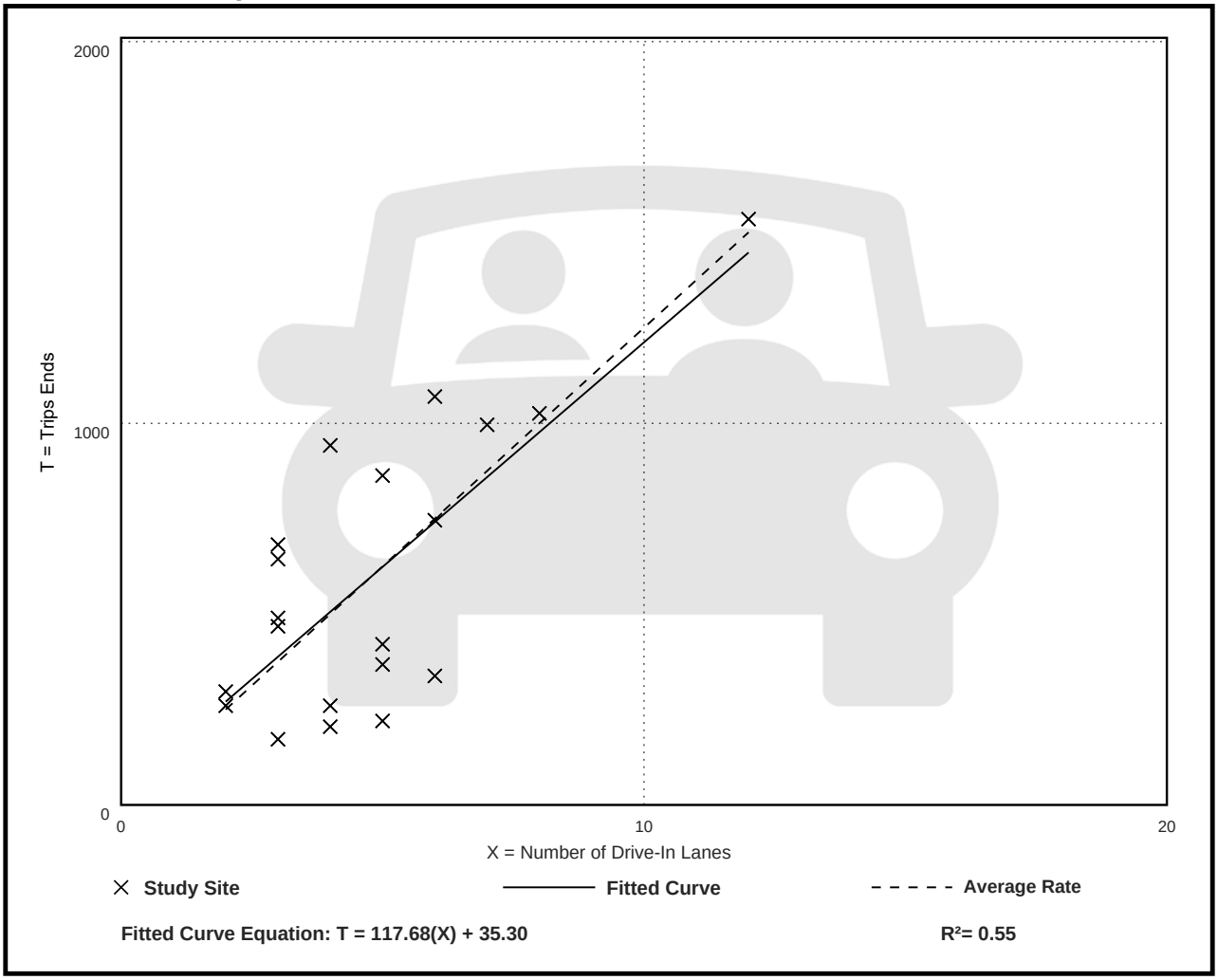
Vehicle Trip Ends vs: Drive-In Lanes
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 20
Avg. Num. of Drive-In Lanes: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Drive-In Lane

Average Rate	Range of Rates	Standard Deviation
125.03	44.00 - 235.50	55.01

Data Plot and Equation



Fitted Curve Equation: T = 117.68(X) + 35.30

R^2= 0.55

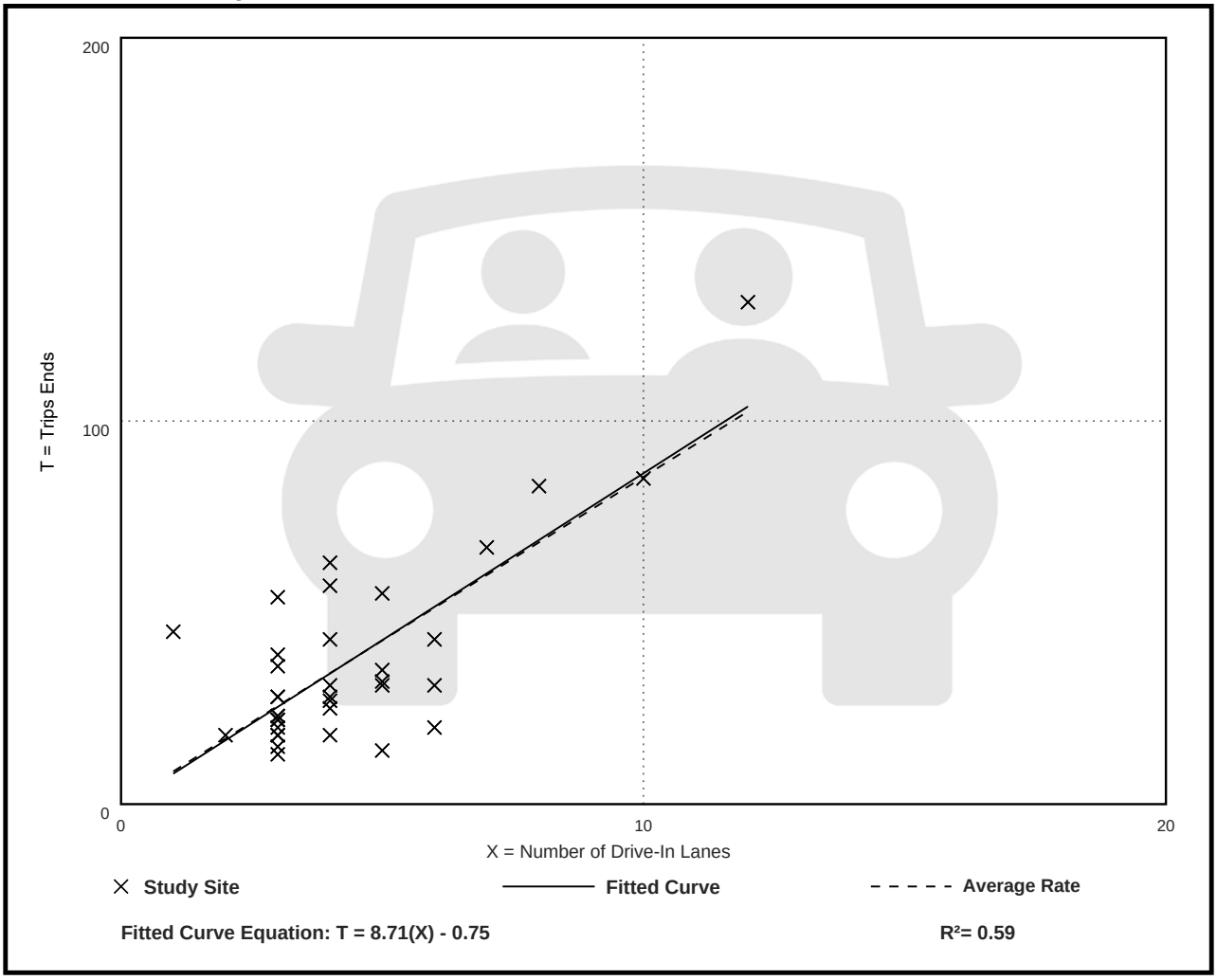
Drive-in Bank
(912)

Vehicle Trip Ends vs: Drive-In Lanes
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 36
Avg. Num. of Drive-In Lanes: 4
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Drive-In Lane

Average Rate	Range of Rates	Standard Deviation
8.54	2.80 - 45.00	4.37

Data Plot and Equation



Fitted Curve Equation: T = 8.71(X) - 0.75

R^2= 0.59

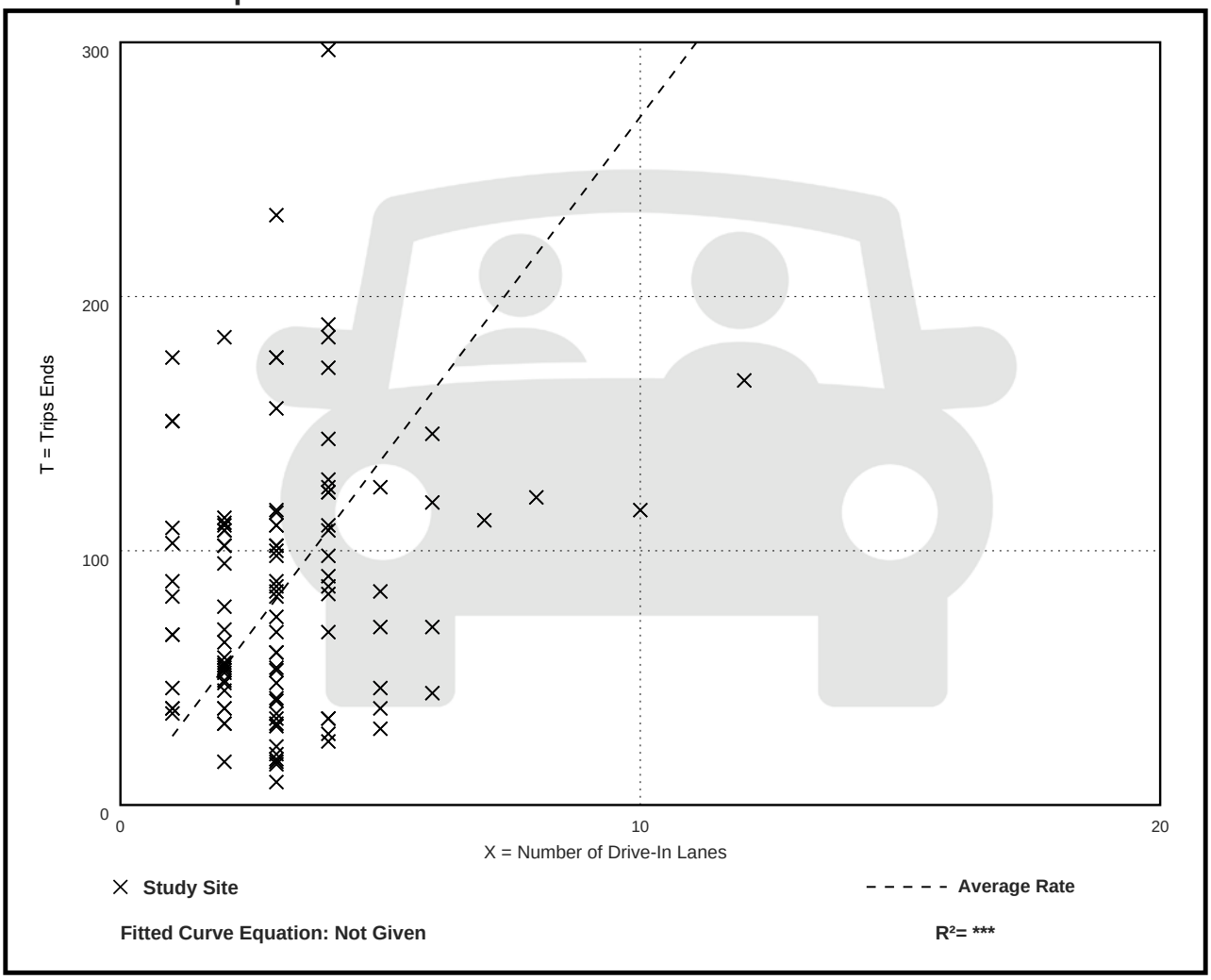
Drive-in Bank
(912)

Vehicle Trip Ends vs: Drive-In Lanes
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 109
Avg. Num. of Drive-In Lanes: 3
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per Drive-In Lane

Average Rate	Range of Rates	Standard Deviation
27.07	3.00 - 176.00	22.13

Data Plot and Equation



Drive-in Bank
(912)

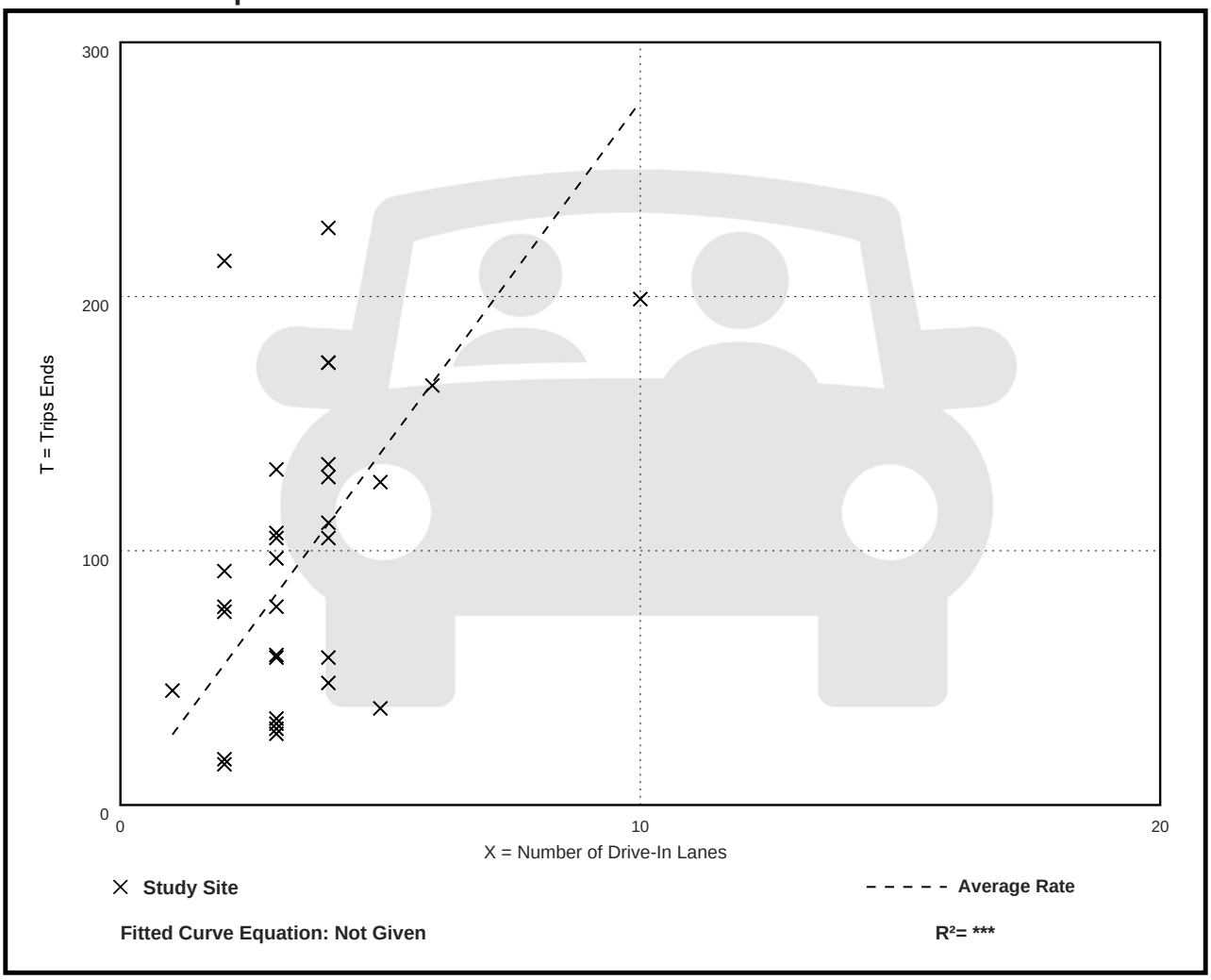
Vehicle Trip Ends vs: Drive-In Lanes
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 31
Avg. Num. of Drive-In Lanes: 3
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per Drive-In Lane

Average Rate	Range of Rates	Standard Deviation
27.67	7.60 - 107.00	17.13

Data Plot and Equation



FUTURE NO-BUILD CAPACITY REPORTS

Weekday Morning Peak Hour

Weekday Evening Peak Hour

Saturday Midday Peak Hour

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	185	1480	165	195	1035	20	150	690	170	40	755
Future Volume (vph)	10	185	1480	165	195	1035	20	150	690	170	40	755
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	12	13	12	12	13	12	12	12	12	12	12	12
Storage Length (ft)		415		0	215		0	140		220	155	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		110			165			170			230	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor		1.00	1.00		1.00	1.00		1.00				
Frt			0.985			0.997				0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1702	4860	0	1811	4874	0	1752	3619	1583	1687	3654
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	1699	4860	0	1810	4874	0	1748	3619	1583	1687	3654
Right Turn on Red				No			No			No		
Satd. Flow (RTOR)												
Link Speed (mph)			35			35			35			35
Link Distance (ft)			601			560			640			500
Travel Time (s)			11.7			10.9			12.5			9.7
Confl. Peds. (#/hr)	3	1		1	1		1	3				
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	10%	5%	5%	3%	6%	10%	3%	5%	2%	7%	4%
Adj. Flow (vph)	11	195	1558	174	205	1089	21	158	726	179	42	795
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	206	1732	0	205	1110	0	158	726	179	42	795
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			52			52			17			17
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00	0.94
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	2	1	1	2
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100		20	100		20	100	20	20	100
Trailing Detector (ft)	0	0	0		0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0		0	0	0	0	0
Detector 1 Size(ft)	20	20	6		20	6		20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	315
Future Volume (vph)	315
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Storage Length (ft)	275
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1538
Flt Permitted	
Satd. Flow (perm)	1509
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Peak Hour Factor	0.95
Heavy Vehicles (%)	5%
Adj. Flow (vph)	332
Shared Lane Traffic (%)	
Lane Group Flow (vph)	332
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	7!	7	4		3	8		5	2	3	1	6
Permitted Phases										2		
Detector Phase	7	7	4		3	8		5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	15.0		3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	7.5	7.5	21.5		7.5	21.5		7.5	21.5	7.5	7.5	21.5
Total Split (s)	24.0	24.0	60.0		24.0	60.0		17.0	39.0	24.0	17.0	39.0
Total Split (%)	17.1%	17.1%	42.9%		17.1%	42.9%		12.1%	27.9%	17.1%	12.1%	27.9%
Maximum Green (s)	19.5	19.5	53.5		19.5	53.5		12.5	32.5	19.5	12.5	32.5
Yellow Time (s)	3.5	3.5	4.5		3.5	4.5		3.5	4.5	3.5	3.5	4.5
All-Red Time (s)	1.0	1.0	2.0		1.0	2.0		1.0	2.0	1.0	1.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5		4.5	6.5		4.5	6.5	4.5	4.5	6.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	7.0		4.0	7.0	4.0	4.0	7.0
Recall Mode	None	None	None		None	None		None	C-Min	None	None	C-Min
Walk Time (s)									7.0			7.0
Flash Dont Walk (s)									11.0			11.0
Pedestrian Calls (#/hr)									0			0
Act Effct Green (s)		19.1	54.2		18.8	53.9		12.5	37.5	62.8	9.7	32.5
Actuated g/C Ratio		0.14	0.39		0.13	0.38		0.09	0.27	0.45	0.07	0.23
v/c Ratio		0.89	0.92		0.85	0.59		1.01	0.75	0.25	0.36	0.94
Control Delay		95.3	50.0		87.9	36.0		137.3	53.6	26.3	70.0	71.7
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		95.3	50.0		87.9	36.0		137.3	53.6	26.3	70.0	71.7
LOS		F	D		F	D		F	D	C	E	E
Approach Delay			54.8			44.0			61.4			61.3
Approach LOS			D			D			E			E
Queue Length 50th (ft)		186	550		184	294		~148	327	102	37	376
Queue Length 95th (ft)		#330	#630		#313	343		#300	#433	165	77	#500
Internal Link Dist (ft)			521			480			560			420
Turn Bay Length (ft)		415			215			140		220	155	
Base Capacity (vph)		237	1883		252	1877		156	969	717	150	848
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0
Reduced v/c Ratio		0.87	0.92		0.81	0.59		1.01	0.75	0.25	0.28	0.94

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 57.4 (41%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.01

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	pm+ov
Protected Phases	7!
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	7.5
Total Split (s)	24.0
Total Split (%)	17.1%
Maximum Green (s)	19.5
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	53.6
Actuated g/C Ratio	0.38
v/c Ratio	0.57
Control Delay	35.4
Queue Delay	0.0
Total Delay	35.4
LOS	D
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	222
Queue Length 95th (ft)	319
Internal Link Dist (ft)	
Turn Bay Length (ft)	275
Base Capacity (vph)	586
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.57

Intersection Summary

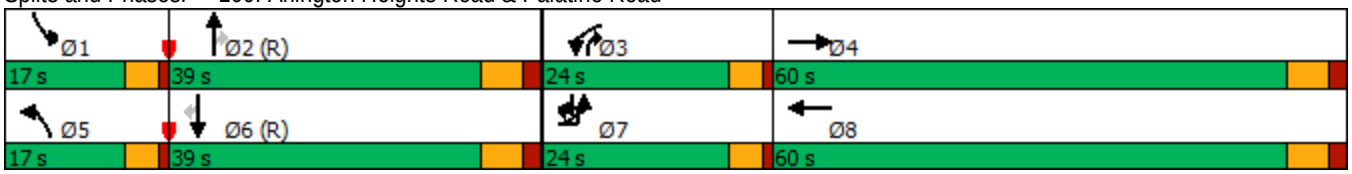
Intersection Signal Delay: 54.9	Intersection LOS: D
Intersection Capacity Utilization 89.6%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

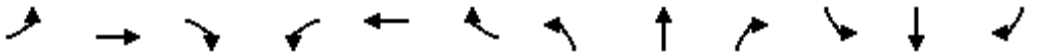
! Phase conflict between lane groups.

Splits and Phases: 100: Arlington Heights Road & Palatine Road

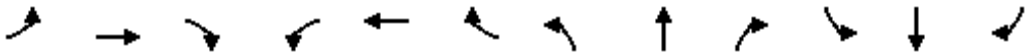


HCM 6th Edition methodology cannot be performed with phasing conflicts.

HCM 6th Edition methodology cannot be performed with phasing conflicts.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	10	20	20	5	55	20	920	20	30	1055	30
Future Volume (vph)	35	10	20	20	5	55	20	920	20	30	1055	30
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		1.00			1.00	1.00		1.00	1.00	
Frt		0.902				0.850		0.997			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1671	1606	0	1641	1961	1524	1770	3488	0	1656	3452	0
Flt Permitted	0.952						0.221			0.247		
Satd. Flow (perm)	1675	1606	0	1725	1961	1524	411	3488	0	430	3452	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			1	1			2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	13%	2%	10%	2%	6%	2%	3%	10%	9%	4%	7%
Adj. Flow (vph)	37	11	21	21	5	58	21	968	21	32	1111	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	32	0	21	5	58	21	989	0	32	1143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

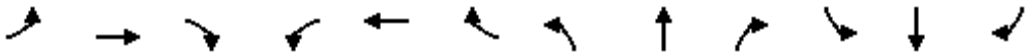


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	11.0	18.0		7.0	14.0	8.0	10.0	57.0		8.0	55.0	
Total Split (%)	12.2%	20.0%		7.8%	15.6%	8.9%	11.1%	63.3%		8.9%	61.1%	
Maximum Green (s)	7.5	12.0		3.5	8.0	4.5	6.5	51.0		4.5	49.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	10.9	9.8		5.3	8.7	6.9	52.4	46.7		52.6	53.4	
Actuated g/C Ratio	0.17	0.15		0.08	0.13	0.11	0.81	0.72		0.81	0.82	
v/c Ratio	0.13	0.13		0.15	0.02	0.36	0.05	0.39		0.07	0.40	
Control Delay	26.6	32.7		33.4	35.2	38.0	3.9	7.5		4.0	7.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	26.6	32.7		33.4	35.2	38.0	3.9	7.5		4.0	7.5	
LOS	C	C		C	D	D	A	A		A	A	
Approach Delay		29.4			36.7			7.4			7.4	
Approach LOS		C			D			A			A	
Queue Length 50th (ft)	11	9		6	1	18	1	40		1	0	
Queue Length 95th (ft)	41	43		28	13	61	10	216		13	281	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	308	322		136	263	162	482	2866		440	2780	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.12	0.10		0.15	0.02	0.36	0.04	0.35		0.07	0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 65			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 9.1		Intersection LOS: A	
Intersection Capacity Utilization 48.9%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	10	20	20	5	55	20	920	20	30	1055	30
Future Volume (veh/h)	35	10	20	20	5	55	20	920	20	30	1055	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1707	1870	1752	1969	1811	1870	1856	1752	1767	1841	1796
Adj Flow Rate, veh/h	37	11	21	21	5	58	21	968	21	32	1111	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	13	2	10	2	6	2	3	10	9	4	7
Cap, veh/h	276	60	114	251	204	190	319	2027	44	361	2014	58
Arrive On Green	0.02	0.11	0.11	0.01	0.10	0.10	0.01	0.57	0.57	0.02	0.58	0.58
Sat Flow, veh/h	1697	524	1000	1668	1969	1531	1781	3528	77	1682	3471	100
Grp Volume(v), veh/h	37	0	32	21	5	58	21	484	505	32	560	583
Grp Sat Flow(s),veh/h/ln	1697	0	1524	1668	1969	1531	1781	1763	1842	1682	1749	1823
Q Serve(g_s), s	1.3	0.0	1.3	0.8	0.2	2.4	0.3	11.0	11.0	0.5	13.6	13.6
Cycle Q Clear(g_c), s	1.3	0.0	1.3	0.8	0.2	2.4	0.3	11.0	11.0	0.5	13.6	13.6
Prop In Lane	1.00		0.66	1.00		1.00	1.00		0.04	1.00		0.05
Lane Grp Cap(c), veh/h	276	0	174	251	204	190	319	1013	1058	361	1014	1057
V/C Ratio(X)	0.13	0.00	0.18	0.08	0.02	0.31	0.07	0.48	0.48	0.09	0.55	0.55
Avail Cap(c_a), veh/h	420	0	267	312	230	209	462	1310	1369	438	1249	1302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	0.0	27.5	27.0	27.6	27.4	7.2	8.6	8.6	6.7	8.9	8.9
Incr Delay (d2), s/veh	0.2	0.0	1.1	0.1	0.1	1.9	0.1	1.6	1.5	0.1	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	0.9	0.6	0.1	1.7	0.2	6.8	7.1	0.3	8.2	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	0.0	28.6	27.2	27.7	29.3	7.3	10.2	10.1	6.8	11.1	11.0
LnGrp LOS	C	A	C	C	C	C	A	B	B	A	B	B
Approach Vol, veh/h		69			84			1010			1175	
Approach Delay, s/veh		27.7			28.7			10.1			10.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	45.4	4.5	13.8	4.5	45.8	5.2	13.1
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	4.5	51.0	3.5	12.0	6.5	49.0	7.5	8.0
Max Q Clear Time (g_c+I1), s	2.5	13.0	2.8	3.3	2.3	15.6	3.3	4.4
Green Ext Time (p_c), s	0.0	23.0	0.0	0.1	0.0	24.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	10	20	20	5	55	20	920	20	30	1055	30
Future Volume (veh/h)	35	10	20	20	5	55	20	920	20	30	1055	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1781	1707	1870	1752	1969	1811	1870	1856	1752	1767	1841	1796
Adj Flow Rate, veh/h	37	11	21	21	5	58	21	968	21	32	1111	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	13	2	10	2	6	2	3	10	9	4	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	276	60	114	251	204	190	319	2027	44	361	2014	58
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.11	0.11	0.01	0.10	0.10	0.01	0.57	0.57	0.02	0.58	0.58
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.9	0.0	28.6	27.2	27.7	29.3	7.3	10.2	10.1	6.8	11.1	11.0
Ln Grp LOS	C	A	C	C	C	C	A	B	B	A	B	B
Approach Vol, veh/h		69			84			1010			1175	
Approach Delay, s/veh		27.7			28.7			10.1			10.9	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	4.9	45.4	4.5	13.8	4.5	45.8	5.2	13.1
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green (Gmax), s	4.5	51.0	3.5	12.0	6.5	49.0	7.5	8.0
Max Allow Headway (MAH), s	3.8	9.1	3.9	7.7	3.8	9.1	3.9	6.2
Max Q Clear (g_c+I1), s	2.5	13.0	2.8	3.3	2.3	15.6	3.3	4.4
Green Ext Time (g_e), s	0.0	23.0	0.0	0.1	0.0	24.2	0.0	0.1
Prob of Phs Call (p_c)	0.46	1.00	0.33	0.92	0.33	1.00	0.51	0.89
Prob of Max Out (p_x)	1.00	0.51	1.00	0.50	0.50	0.69	0.66	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1682		1668		1781		1697	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3528		524		3471		1969

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		77		1000		100		1531

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	32	0	21	0	21	0	37	0
Grp Sat Flow (s), veh/h/ln	1682	0	1668	0	1781	0	1697	0
Q Serve Time (g_s), s	0.5	0.0	0.8	0.0	0.3	0.0	1.3	0.0
Cycle Q Clear Time (g_c), s	0.5	0.0	0.8	0.0	0.3	0.0	1.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	538	0	1286	0	492	0	1272	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.4	0.0	7.1	0.0	39.4	0.0	7.1	0.0
Perm LT Serve Time (g_u), s	28.4	0.0	6.5	0.0	26.2	0.0	7.0	0.0
Perm LT Q Serve Time (g_ps), s	0.7	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	361	0	251	0	319	0	276	0
V/C Ratio (X)	0.09	0.00	0.08	0.00	0.07	0.00	0.13	0.00
Avail Cap (c_a), veh/h	438	0	312	0	462	0	420	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	6.7	0.0	27.0	0.0	7.2	0.0	26.6	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.1	0.0	0.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.8	0.0	27.2	0.0	7.3	0.0	26.9	0.0
1st-Term Q (Q1), veh/ln	0.1	0.0	0.3	0.0	0.1	0.0	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.3	0.0	0.6	0.0	0.2	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.10	0.00	0.10	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	484	0	0	0	560	0	5
Grp Sat Flow (s), veh/h/ln	0	1763	0	0	0	1749	0	1969
Q Serve Time (g_s), s	0.0	11.0	0.0	0.0	0.0	13.6	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	11.0	0.0	0.0	0.0	13.6	0.0	0.2
Lane Grp Cap (c), veh/h	0	1013	0	0	0	1014	0	204
V/C Ratio (X)	0.00	0.48	0.00	0.00	0.00	0.55	0.00	0.02
Avail Cap (c_a), veh/h	0	1310	0	0	0	1249	0	230
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	0.0	0.0	8.9	0.0	27.6
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	2.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.2	0.0	0.0	0.0	11.1	0.0	27.7
1st-Term Q (Q1), veh/ln	0.0	3.3	0.0	0.0	0.0	4.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.76	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	6.8	0.0	0.0	0.0	8.2	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	0.00	0.00	0.41	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	505	0	32	0	583	0	58
Grp Sat Flow (s), veh/h/ln	0	1842	0	1524	0	1823	0	1531
Q Serve Time (g_s), s	0.0	11.0	0.0	1.3	0.0	13.6	0.0	2.4
Cycle Q Clear Time (g_c), s	0.0	11.0	0.0	1.3	0.0	13.6	0.0	2.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1534.8
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Prop RT Outside Lane (P_R)	0.00	0.04	0.00	0.66	0.00	0.05	0.00	1.00
Lane Grp Cap (c), veh/h	0	1058	0	174	0	1057	0	190
V/C Ratio (X)	0.00	0.48	0.00	0.18	0.00	0.55	0.00	0.31
Avail Cap (c_a), veh/h	0	1369	0	267	0	1302	0	209
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	27.5	0.0	8.9	0.0	27.4
Incr Delay (d2), s/veh	0.0	1.5	0.0	1.1	0.0	2.1	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.1	0.0	28.6	0.0	11.0	0.0	29.3
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	0.5	0.0	4.2	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.75	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.1	0.0	0.9	0.0	8.4	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.10	0.00	0.42	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	5	955	10	5	1090
Future Volume (vph)	5	5	955	10	5	1090
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.850	0.998			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1357	1583	3495	0	1770	3689
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1357	1583	3495	0	1770	3689
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Confl. Peds. (#/hr)				3	3	
Confl. Bikes (#/hr)		1		1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	33%	2%	3%	10%	2%	3%
Adj. Flow (vph)	5	5	1005	11	5	1147
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	5	1016	0	5	1147
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	5	955	10	5	1090
Future Vol, veh/h	5	5	955	10	5	1090
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	33	2	3	10	2	3
Mvmt Flow	5	5	1005	11	5	1147

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1598	511	0	0	1019	0
Stage 1	1014	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	7.46	6.94	-	-	4.14	-
Critical Hdwy Stg 1	6.46	-	-	-	-	-
Critical Hdwy Stg 2	6.46	-	-	-	-	-
Follow-up Hdwy	3.83	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	71	508	-	-	677	-
Stage 1	249	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	70	507	-	-	675	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	248	-	-	-	-	-
Stage 2	440	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	36.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	70	507	675	-
HCM Lane V/C Ratio	-	-	0.075	0.01	0.008	-
HCM Control Delay (s)	-	-	60.6	12.2	10.4	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1660	30	0	1245	0	15
Future Volume (vph)	1660	30	0	1245	0	15
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	4928	0	0	5103	0	1611
Flt Permitted						
Satd. Flow (perm)	4928	0	0	5103	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	2%	2%	7%	2%	2%
Adj. Flow (vph)	1747	32	0	1311	0	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1779	0	0	1311	0	16
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.7%		ICU Level of Service A	
Analysis Period (min) 15			

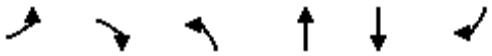
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1660	30	0	1245	0	15
Future Vol, veh/h	1660	30	0	1245	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	7	2	2
Mvmt Flow	1747	32	0	1311	0	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	890
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	245
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	245
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	245	-	-	-
HCM Lane V/C Ratio	0.064	-	-	-
HCM Control Delay (s)	20.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	15	0	845	1310	25
Future Volume (vph)	0	15	0	845	1310	25
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.865			0.997	
Flt Protected						
Satd. Flow (prot)	0	1741	0	5200	5022	0
Flt Permitted						
Satd. Flow (perm)	0	1741	0	5200	5022	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	5%	3%	2%
Adj. Flow (vph)	0	16	0	889	1379	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	16	0	889	1405	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.1

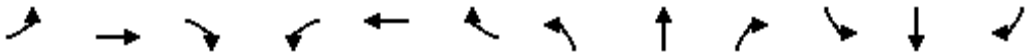
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	15	0	845	1310	25
Future Vol, veh/h	0	15	0	845	1310	25
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	7	2	5	3	2
Mvmt Flow	0	16	0	889	1379	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	706	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.24	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.97	-	-	-	-
Pot Cap-1 Maneuver	0	316	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	315	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	315	-	-
HCM Lane V/C Ratio	-	0.05	-	-
HCM Control Delay (s)	-	17	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

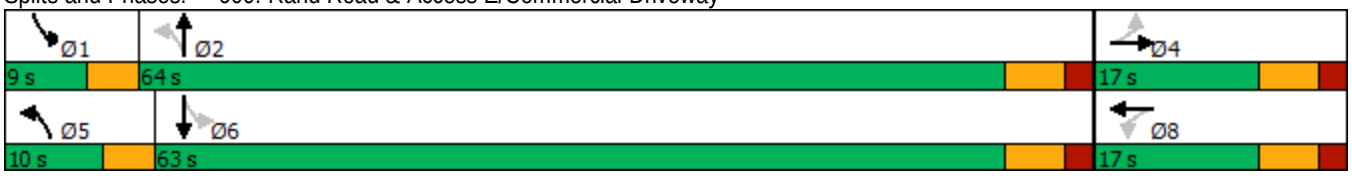
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	15	15	1	25	35	815	15	20	1295	10
Future Volume (vph)	5	1	15	15	1	25	35	815	15	20	1295	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor							1.00				1.00	
Frt		0.859			0.856			0.997			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1399	1600	0	1770	1539	0	1770	3430	0	1719	5079	0
Flt Permitted	0.769			0.769			0.170			0.323		
Satd. Flow (perm)	1133	1600	0	1432	1539	0	317	3430	0	584	5079	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	29%	2%	2%	2%	50%	4%	2%	5%	2%	5%	2%	2%
Adj. Flow (vph)	5	1	16	16	1	26	37	858	16	21	1363	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	17	0	16	27	0	37	874	0	21	1374	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

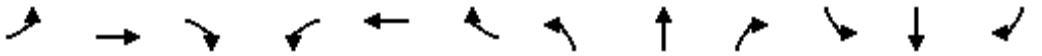


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	17.0	17.0		17.0	17.0		10.0	64.0		9.0	63.0	
Total Split (%)	18.9%	18.9%		18.9%	18.9%		11.1%	71.1%		10.0%	70.0%	
Maximum Green (s)	11.0	11.0		11.0	11.0		6.5	58.0		5.5	57.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	9.3	9.3		9.3	9.3		65.2	63.4		63.7	61.3	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.83	0.81		0.82	0.78	
v/c Ratio	0.04	0.09		0.09	0.15		0.10	0.31		0.04	0.34	
Control Delay	36.0	36.6		36.9	37.5		2.6	4.8		2.4	5.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.0	36.6		36.9	37.5		2.6	4.8		2.4	5.8	
LOS	D	D		D	D		A	A		A	A	
Approach Delay		36.5			37.2			4.8			5.7	
Approach LOS		D			D			A			A	
Queue Length 50th (ft)	3	9		8	14		3	64		2	119	
Queue Length 95th (ft)	13	28		27	39		10	146		6	158	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	165	234		209	225		390	2785		559	3985	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.07		0.08	0.12		0.09	0.31		0.04	0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 78.1			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.2		Intersection LOS: A	
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	15	15	1	25	35	815	15	20	1295	10
Future Volume (veh/h)	5	1	15	15	1	25	35	815	15	20	1295	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1470	1870	1870	1870	1159	1841	1870	1826	1870	1826	1870	1870
Adj Flow Rate, veh/h	5	1	16	16	1	26	37	858	16	21	1363	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	29	2	2	2	50	4	2	5	2	5	2	2
Cap, veh/h	168	8	125	208	3	79	362	2353	44	483	3489	28
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.68	0.68	0.01	0.67	0.67
Sat Flow, veh/h	1087	94	1505	1396	37	951	1781	3484	65	1739	5225	42
Grp Volume(v), veh/h	5	0	17	16	0	27	37	427	447	21	888	486
Grp Sat Flow(s),veh/h/ln	1087	0	1599	1396	0	988	1781	1735	1814	1739	1702	1863
Q Serve(g_s), s	0.3	0.0	0.7	0.7	0.0	1.8	0.4	7.2	7.2	0.3	8.0	8.0
Cycle Q Clear(g_c), s	2.1	0.0	0.7	1.4	0.0	1.8	0.4	7.2	7.2	0.3	8.0	8.0
Prop In Lane	1.00		0.94	1.00		0.96	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	168	0	133	208	0	82	362	1172	1225	483	2273	1244
V/C Ratio(X)	0.03	0.00	0.13	0.08	0.00	0.33	0.10	0.36	0.36	0.04	0.39	0.39
Avail Cap(c_a), veh/h	253	0	258	317	0	159	492	1474	1541	598	2843	1555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	29.0	29.7	0.0	29.5	3.9	4.8	4.8	3.8	5.1	5.1
Incr Delay (d2), s/veh	0.2	0.0	0.9	0.3	0.0	4.9	0.1	0.9	0.8	0.0	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.5	0.5	0.0	0.9	0.2	3.6	3.8	0.1	3.7	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	0.0	29.9	30.0	0.0	34.4	4.0	5.6	5.6	3.9	5.6	6.0
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		22			43			911			1395	
Approach Delay, s/veh		30.1			32.8			5.6			5.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.5	52.1		11.7	5.0	51.6		11.7				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	5.5	58.0		11.0	6.5	57.0		11.0				
Max Q Clear Time (g_c+I1), s	2.3	9.2		4.1	2.4	10.0		3.8				
Green Ext Time (p_c), s	0.0	22.9		0.0	0.0	35.6		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	15	15	1	25	35	815	15	20	1295	10
Future Volume (veh/h)	5	1	15	15	1	25	35	815	15	20	1295	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1470	1870	1870	1870	1159	1841	1870	1826	1870	1826	1870	1870
Adj Flow Rate, veh/h	5	1	16	16	1	26	37	858	16	21	1363	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	29	2	2	2	50	4	2	5	2	5	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	168	8	125	208	3	79	362	2353	44	483	3489	28
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.68	0.68	0.01	0.67	0.67
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.6	0.0	29.9	30.0	0.0	34.4	4.0	5.6	5.6	3.9	5.6	6.0
Ln Grp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		22			43			911			1395	
Approach Delay, s/veh		30.1			32.8			5.6			5.7	
Approach LOS		C			C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	4.0		6.0	1.1	4.0		6.0
Phs Duration (G+Y+Rc), s	4.5	52.1		11.7	5.0	51.6		11.7
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0
Max Green (Gmax), s	5.5	58.0		11.0	6.5	57.0		11.0
Max Allow Headway (MAH), s	3.8	9.1		7.5	3.8	9.1		7.1
Max Q Clear (g_c+I1), s	2.3	9.2		4.1	2.4	10.0		3.8
Green Ext Time (g_e), s	0.0	22.9		0.0	0.0	35.6		0.1
Prob of Phs Call (p_c)	0.33	1.00		0.71	0.50	1.00		0.71
Prob of Max Out (p_x)	1.00	0.29		1.00	0.66	0.67		0.93

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1739			1087	1781			1396

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3484		94		5225		37

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		65		1505		42		951

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

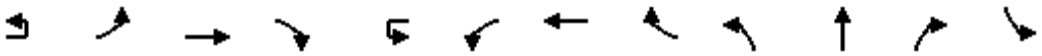
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	21	0	0	5	37	0	0	16
Grp Sat Flow (s), veh/h/ln	1739	0	0	1087	1781	0	0	1396
Q Serve Time (g_s), s	0.3	0.0	0.0	0.3	0.4	0.0	0.0	0.7
Cycle Q Clear Time (g_c), s	0.3	0.0	0.0	2.1	0.4	0.0	0.0	1.4
Perm LT Sat Flow (s_l), veh/h/ln	619	0	0	1087	395	0	0	1396
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	45.6	0.0	0.0	5.7	45.6	0.0	0.0	5.7
Perm LT Serve Time (g_u), s	38.9	0.0	0.0	3.9	37.6	0.0	0.0	5.0
Perm LT Q Serve Time (g_ps), s	0.2	0.0	0.0	0.3	0.8	0.0	0.0	0.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	483	0	0	168	362	0	0	208
V/C Ratio (X)	0.04	0.00	0.00	0.03	0.10	0.00	0.00	0.08
Avail Cap (c_a), veh/h	598	0	0	253	492	0	0	317
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	3.8	0.0	0.0	30.5	3.9	0.0	0.0	29.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	3.9	0.0	0.0	30.6	4.0	0.0	0.0	30.0
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.1	0.0	0.0	0.2	0.2	0.0	0.0	0.5
%ile Storage Ratio (RQ%)	0.02	0.00	0.00	0.03	0.03	0.00	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	427	0	0	0	888	0	0
Grp Sat Flow (s), veh/h/ln	0	1735	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	7.2	0.0	0.0	0.0	8.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.2	0.0	0.0	0.0	8.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1172	0	0	0	2273	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1474	0	0	0	2843	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.8	0.0	0.0	0.0	5.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.6	0.0	0.0	0.0	5.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	1.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	3.6	0.0	0.0	0.0	3.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	0.26	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	447	0	17	0	486	0	27
Grp Sat Flow (s), veh/h/ln	0	1814	0	1599	0	1863	0	988
Q Serve Time (g_s), s	0.0	7.2	0.0	0.7	0.0	8.0	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	7.2	0.0	0.7	0.0	8.0	0.0	1.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.04	0.00	0.94	0.00	0.02	0.00	0.96
Lane Grp Cap (c), veh/h	0	1225	0	133	0	1244	0	82
V/C Ratio (X)	0.00	0.36	0.00	0.13	0.00	0.39	0.00	0.33
Avail Cap (c_a), veh/h	0	1541	0	258	0	1555	0	159
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.8	0.0	29.0	0.0	5.1	0.0	29.5
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.9	0.0	0.9	0.0	4.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.6	0.0	29.9	0.0	6.0	0.0	34.4
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	0.3	0.0	2.1	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.8	0.0	0.5	0.0	4.3	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.07	0.00	0.30	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A



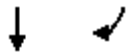
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	25	285	1280	130	15	210	1475	20	190	960	175	70
Future Volume (vph)	25	285	1280	130	15	210	1475	20	190	960	175	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	13	12	12	12	13	12	12	12	12	12	12
Storage Length (ft)		415		0		215		0	140		220	155
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		110				165			170			230
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00							1.00		0.98	1.00
Frt			0.986				0.998				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1829	4970	0	0	1829	5075	0	1770	3725	1583	1770
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1827	4970	0	0	1829	5075	0	1763	3725	1557	1767
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			35		
Link Distance (ft)			601				560			640		
Travel Time (s)			11.7				10.9			12.5		
Confl. Peds. (#/hr)	5								5		2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	26	300	1347	137	16	221	1553	21	200	1011	184	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	326	1484	0	0	237	1574	0	200	1011	184	74
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			52				52			17		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	855	430
Future Volume (vph)	855	430
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Storage Length (ft)		275
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3725	1583
Flt Permitted		
Satd. Flow (perm)	3725	1545
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	500	
Travel Time (s)	9.7	
Confl. Peds. (#/hr)		5
Peak Hour Factor	0.95	0.95
Heavy Vehicles (%)	2%	2%
Adj. Flow (vph)	900	453
Shared Lane Traffic (%)		
Lane Group Flow (vph)	900	453
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	17	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	0.94	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4		3!	3	8		5	2	3!	1
Permitted Phases											2	
Detector Phase	7	7	4		3	3	8		5	2	3	1
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	3.0	15.0		3.0	15.0	3.0	3.0
Minimum Split (s)	7.5	7.5	21.5		7.5	7.5	21.5		7.5	21.5	7.5	7.5
Total Split (s)	28.0	28.0	57.0		28.0	28.0	57.0		21.0	50.0	28.0	15.0
Total Split (%)	18.7%	18.7%	38.0%		18.7%	18.7%	38.0%		14.0%	33.3%	18.7%	10.0%
Maximum Green (s)	23.5	23.5	50.5		23.5	23.5	50.5		16.5	43.5	23.5	10.5
Yellow Time (s)	3.5	3.5	4.5		3.5	3.5	4.5		3.5	4.5	3.5	3.5
All-Red Time (s)	1.0	1.0	2.0		1.0	1.0	2.0		1.0	2.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5			4.5	6.5		4.5	6.5	4.5	4.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	4.0	7.0		4.0	7.0	4.0	4.0
Recall Mode	None	None	None		None	None	None		None	C-Min	None	None
Walk Time (s)										7.0		
Flash Dont Walk (s)										11.0		
Pedestrian Calls (#/hr)										0		
Act Effct Green (s)		23.5	51.5			22.5	50.5		16.5	44.0	68.5	10.0
Actuated g/C Ratio		0.16	0.34			0.15	0.34		0.11	0.29	0.46	0.07
v/c Ratio		1.14	0.87			0.86	0.92		1.03	0.93	0.26	0.63
Control Delay		151.0	52.9			90.5	57.6		136.2	65.9	23.6	91.2
Queue Delay		0.0	0.0			0.0	0.0		0.0	1.1	0.0	0.0
Total Delay		151.0	52.9			90.5	57.6		136.2	67.0	23.6	91.2
LOS		F	D			F	E		F	E	C	F
Approach Delay			70.6				61.9			71.2		
Approach LOS			E				E			E		
Queue Length 50th (ft)		~371	503			228	542		~208	510	102	72
Queue Length 95th (ft)		#572	568			#369	610		#377	#640	155	#136
Internal Link Dist (ft)			521				480			560		
Turn Bay Length (ft)		415				215			140		220	155
Base Capacity (vph)		286	1706			286	1708		194	1091	725	123
Starvation Cap Reductn		0	0			0	0		0	17	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		1.14	0.87			0.83	0.92		1.03	0.94	0.25	0.60

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 61.5 (41%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.14



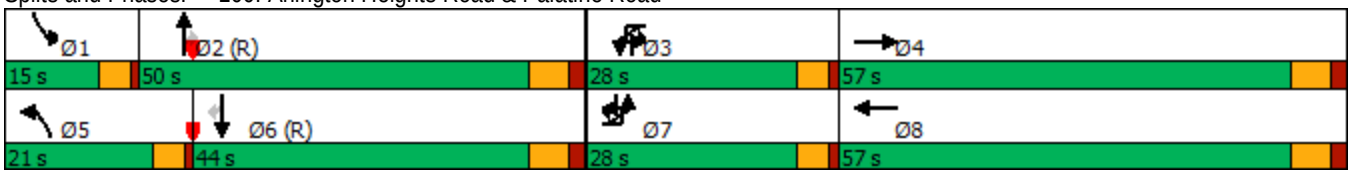
Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	21.5	7.5
Total Split (s)	44.0	28.0
Total Split (%)	29.3%	18.7%
Maximum Green (s)	37.5	23.5
Yellow Time (s)	4.5	3.5
All-Red Time (s)	2.0	1.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.5	4.5
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	7.0	4.0
Recall Mode	C-Min	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	37.5	63.0
Actuated g/C Ratio	0.25	0.42
v/c Ratio	0.97	0.69
Control Delay	77.7	39.2
Queue Delay	0.0	0.0
Total Delay	77.7	39.2
LOS	E	D
Approach Delay	66.2	
Approach LOS	E	
Queue Length 50th (ft)	462	337
Queue Length 95th (ft)	#600	464
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		275
Base Capacity (vph)	931	654
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.97	0.69

Intersection Summary

Intersection Signal Delay: 67.3	Intersection LOS: E
Intersection Capacity Utilization 100.5%	ICU Level of Service G
Analysis Period (min) 15	

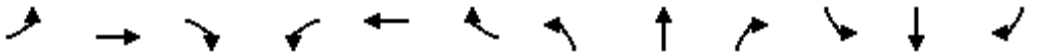
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 100: Arlington Heights Road & Palatine Road

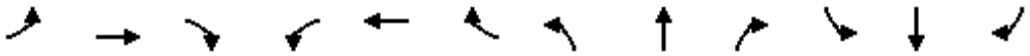


HCM 6th Edition methodology cannot be performed with phasing conflicts.

HCM 6th Edition methodology cannot be performed with phasing conflicts.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	15	20	65	25	155	30	1095	60	100	1035	60
Future Volume (vph)	75	15	20	65	25	155	30	1095	60	100	1035	60
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		0.99			1.00				1.00	
Frt		0.915				0.850		0.992			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1654	0	1770	1961	1583	1770	3511	0	1770	3504	0
Flt Permitted	0.755						0.230			0.150		
Satd. Flow (perm)	1406	1654	0	1847	1961	1583	428	3511	0	279	3504	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			6	6			3					3
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	6%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%
Adj. Flow (vph)	79	16	21	68	26	163	32	1153	63	105	1089	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	37	0	68	26	163	32	1216	0	105	1152	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

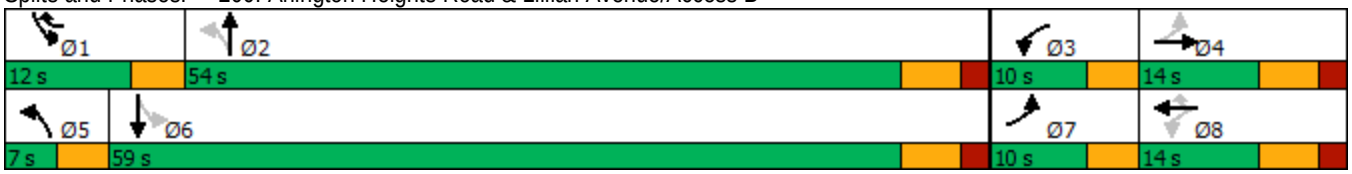


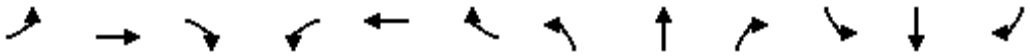
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	10.0	14.0		10.0	14.0	12.0	7.0	54.0		12.0	59.0	
Total Split (%)	11.1%	15.6%		11.1%	15.6%	13.3%	7.8%	60.0%		13.3%	65.6%	
Maximum Green (s)	6.5	8.0		6.5	8.0	8.5	3.5	48.0		8.5	53.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	12.7	8.3		10.2	8.3	13.4	52.9	46.7		61.4	56.8	
Actuated g/C Ratio	0.16	0.10		0.13	0.10	0.17	0.66	0.58		0.77	0.71	
v/c Ratio	0.30	0.22		0.30	0.13	0.61	0.09	0.59		0.28	0.46	
Control Delay	32.0	41.1		34.7	39.2	42.6	5.1	13.9		6.0	9.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	32.0	41.1		34.7	39.2	42.6	5.1	13.9		6.0	9.2	
LOS	C	D		C	D	D	A	B		A	A	
Approach Delay		34.9			40.2			13.7			9.0	
Approach LOS		C			D			B			A	
Queue Length 50th (ft)	36	20		38	14	~106	5	245		17	194	
Queue Length 95th (ft)	75	50		66	39	137	13	314		32	250	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	269	171		234	203	272	343	2185		378	2444	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.29	0.22		0.29	0.13	0.60	0.09	0.56		0.28	0.47	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 80			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 14.8		Intersection LOS: B	

Intersection Capacity Utilization 62.6% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	15	20	65	25	155	30	1095	60	100	1035	60
Future Volume (veh/h)	75	15	20	65	25	155	30	1095	60	100	1035	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1811	1870	1870	1969	1870	1870	1870	1870	1870	1870	1856
Adj Flow Rate, veh/h	79	16	21	68	26	163	32	1153	63	105	1089	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	6	2	2	2	2	2	2	2	2	2	3
Cap, veh/h	298	78	102	298	206	236	312	1877	102	323	1963	114
Arrive On Green	0.05	0.11	0.11	0.05	0.10	0.10	0.02	0.55	0.55	0.05	0.58	0.58
Sat Flow, veh/h	1781	698	916	1781	1969	1558	1781	3426	187	1781	3414	197
Grp Volume(v), veh/h	79	0	37	68	26	163	32	598	618	105	567	585
Grp Sat Flow(s),veh/h/ln	1781	0	1613	1781	1969	1558	1781	1777	1836	1781	1777	1834
Q Serve(g_s), s	3.0	0.0	1.6	2.6	0.9	7.6	0.6	17.6	17.6	1.9	15.2	15.3
Cycle Q Clear(g_c), s	3.0	0.0	1.6	2.6	0.9	7.6	0.6	17.6	17.6	1.9	15.2	15.3
Prop In Lane	1.00		0.57	1.00		1.00	1.00		0.10	1.00		0.11
Lane Grp Cap(c), veh/h	298	0	180	298	206	236	312	973	1006	323	1022	1055
V/C Ratio(X)	0.27	0.00	0.21	0.23	0.13	0.69	0.10	0.61	0.61	0.33	0.55	0.55
Avail Cap(c_a), veh/h	354	0	180	368	206	236	359	1113	1150	438	1229	1269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	0.0	30.9	28.8	31.1	30.8	8.5	11.8	11.8	9.2	10.2	10.2
Incr Delay (d2), s/veh	0.5	0.0	1.2	0.4	0.6	10.5	0.1	2.9	2.8	0.6	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.0	1.2	2.0	0.8	6.3	0.4	10.9	11.2	1.2	9.4	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	32.1	29.1	31.7	41.3	8.7	14.7	14.6	9.8	12.3	12.3
LnGrp LOS	C	A	C	C	C	D	A	B	B	A	B	B
Approach Vol, veh/h		116			257			1248			1257	
Approach Delay, s/veh		29.9			37.1			14.5			12.1	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	48.0	7.0	14.6	5.0	50.1	7.6	14.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	48.0	6.5	8.0	3.5	53.0	6.5	8.0
Max Q Clear Time (g_c+I1), s	3.9	19.6	4.6	3.6	2.6	17.3	5.0	9.6
Green Ext Time (p_c), s	0.1	22.4	0.0	0.1	0.0	25.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	15	20	65	25	155	30	1095	60	100	1035	60
Future Volume (veh/h)	75	15	20	65	25	155	30	1095	60	100	1035	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.97	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1811	1870	1870	1969	1870	1870	1870	1870	1870	1870	1856
Adj Flow Rate, veh/h	79	16	21	68	26	163	32	1153	63	105	1089	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	6	2	2	2	2	2	2	2	2	2	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	298	78	102	298	206	236	312	1877	102	323	1963	114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.11	0.11	0.05	0.10	0.10	0.02	0.55	0.55	0.05	0.58	0.58
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.9	0.0	32.1	29.1	31.7	41.3	8.7	14.7	14.6	9.8	12.3	12.3
Ln Grp LOS	C	A	C	C	C	D	A	B	B	A	B	B
Approach Vol, veh/h		116			257			1248			1257	
Approach Delay, s/veh		29.9			37.1			14.5			12.1	
Approach LOS		C			D			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	7.1	48.0	7.0	14.6	5.0	50.1	7.6	14.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green (Gmax), s	8.5	48.0	6.5	8.0	3.5	53.0	6.5	8.0
Max Allow Headway (MAH), s	3.8	9.1	3.9	7.6	3.8	9.1	3.9	6.3
Max Q Clear (g_c+I1), s	3.9	19.6	4.6	3.6	2.6	17.3	5.0	9.6
Green Ext Time (g_e), s	0.1	22.4	0.0	0.1	0.0	25.7	0.0	0.0
Prob of Phs Call (p_c)	0.89	1.00	0.76	1.00	0.49	1.00	0.81	1.00
Prob of Max Out (p_x)	0.42	0.78	1.00	1.00	1.00	0.67	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3426		698		3414		1969

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		187		916		197		1558

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	105	0	68	0	32	0	79	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	1.9	0.0	2.6	0.0	0.6	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	1.9	0.0	2.6	0.0	0.6	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	459	0	1350	0	488	0	1179	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	42.6	0.0	8.0	0.0	42.0	0.0	8.0	0.0
Perm LT Serve Time (g_u), s	24.4	0.0	7.0	0.0	28.8	0.0	7.1	0.0
Perm LT Q Serve Time (g_ps), s	5.4	0.0	0.1	0.0	0.9	0.0	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	323	0	298	0	312	0	298	0
V/C Ratio (X)	0.33	0.00	0.23	0.00	0.10	0.00	0.27	0.00
Avail Cap (c_a), veh/h	438	0	368	0	359	0	354	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	9.2	0.0	28.8	0.0	8.5	0.0	28.5	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.4	0.0	0.1	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.8	0.0	29.1	0.0	8.7	0.0	28.9	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	1.1	0.0	0.2	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.2	0.0	2.0	0.0	0.4	0.0	2.3	0.0
%ile Storage Ratio (RQ%)	0.16	0.00	0.33	0.00	0.19	0.00	0.49	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	598	0	0	0	567	0	26
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1969
Q Serve Time (g_s), s	0.0	17.6	0.0	0.0	0.0	15.2	0.0	0.9
Cycle Q Clear Time (g_c), s	0.0	17.6	0.0	0.0	0.0	15.2	0.0	0.9
Lane Grp Cap (c), veh/h	0	973	0	0	0	1022	0	206
V/C Ratio (X)	0.00	0.61	0.00	0.00	0.00	0.55	0.00	0.13
Avail Cap (c_a), veh/h	0	1113	0	0	0	1229	0	206
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	0.0	0.0	10.2	0.0	31.1
Incr Delay (d2), s/veh	0.0	2.9	0.0	0.0	0.0	2.2	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.7	0.0	0.0	0.0	12.3	0.0	31.7
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	0.0	0.0	4.9	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.00	0.00	1.70	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.9	0.0	0.0	0.0	9.4	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	1.23	0.00	0.00	0.00	0.47	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	618	0	37	0	585	0	163
Grp Sat Flow (s), veh/h/ln	0	1836	0	1613	0	1834	0	1558
Q Serve Time (g_s), s	0.0	17.6	0.0	1.6	0.0	15.3	0.0	7.6
Cycle Q Clear Time (g_c), s	0.0	17.6	0.0	1.6	0.0	15.3	0.0	7.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Prop RT Outside Lane (P_R)	0.00	0.10	0.00	0.57	0.00	0.11	0.00	1.00
Lane Grp Cap (c), veh/h	0	1006	0	180	0	1055	0	236
V/C Ratio (X)	0.00	0.61	0.00	0.21	0.00	0.55	0.00	0.69
Avail Cap (c_a), veh/h	0	1150	0	180	0	1269	0	236
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	30.9	0.0	10.2	0.0	30.8
Incr Delay (d2), s/veh	0.0	2.8	0.0	1.2	0.0	2.1	0.0	10.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.6	0.0	32.1	0.0	12.3	0.0	41.3
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	0.6	0.0	5.1	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.6	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.63	0.00	1.80	0.00	1.69	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.2	0.0	1.2	0.0	9.6	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	1.26	0.00	0.12	0.00	0.48	0.00	1.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	15	1170	25	1	1120
Future Volume (vph)	5	15	1170	25	1	1120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3527	0	1770	3725
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	3527	0	1770	3725
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%
Adj. Flow (vph)	5	16	1232	26	1	1179
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	16	1258	0	1	1179
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	15	1170	25	1	1120
Future Vol, veh/h	5	15	1170	25	1	1120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	4	2	2
Mvmt Flow	5	16	1232	26	1	1179

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1837	629	0	0	1258	0
Stage 1	1245	-	-	-	-	-
Stage 2	592	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	67	425	-	-	549	-
Stage 1	235	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	67	425	-	-	549	-
Mov Cap-2 Maneuver	67	-	-	-	-	-
Stage 1	235	-	-	-	-	-
Stage 2	515	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.2	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	67	425	549	-
HCM Lane V/C Ratio	-	-	0.079	0.037	0.002	-
HCM Control Delay (s)	-	-	63.3	13.8	11.6	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1420	120	0	1705	0	75
Future Volume (vph)	1420	120	0	1705	0	75
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Ped Bike Factor						
Frt	0.988					0.865
Flt Protected						
Satd. Flow (prot)	4979	0	0	5353	0	1611
Flt Permitted						
Satd. Flow (perm)	4979	0	0	5353	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Confl. Peds. (#/hr)		1				
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1495	126	0	1795	0	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1621	0	0	1795	0	79
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.4%		ICU Level of Service A	
Analysis Period (min) 15			

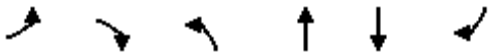
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1420	120	0	1705	0	75
Future Vol, veh/h	1420	120	0	1705	0	75
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	2	2	2
Mvmt Flow	1495	126	0	1795	0	79

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	812
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	276
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	276
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	23.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	276	-	-	-
HCM Lane V/C Ratio	0.286	-	-	-
HCM Control Delay (s)	23.2	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	55	0	1425	1265	95
Future Volume (vph)	0	55	0	1425	1265	95
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.865			0.990	
Flt Protected						
Satd. Flow (prot)	0	1826	0	5353	5034	0
Flt Permitted						
Satd. Flow (perm)	0	1826	0	5353	5034	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	58	0	1500	1332	100
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	58	0	1500	1432	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

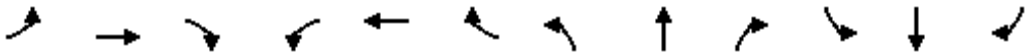
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	55	0	1425	1265	95
Future Vol, veh/h	0	55	0	1425	1265	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	58	0	1500	1332	100

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	716	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	320	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	320	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	320	-	-
HCM Lane V/C Ratio	-	0.181	-	-
HCM Control Delay (s)	-	18.7	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.7	-	-

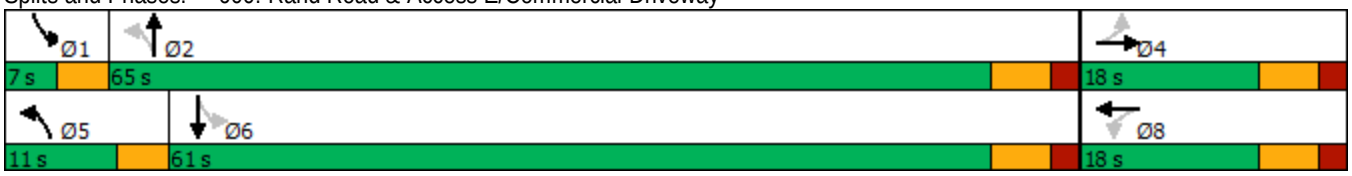
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	5	55	30	20	50	90	1335	35	35	1245	40
Future Volume (vph)	40	5	55	30	20	50	90	1335	35	35	1245	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00				1.00		1.00		
Frt		0.862			0.893			0.996			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1585	0	1752	1663	0	1770	3523	0	1770	5060	0
Flt Permitted	0.709			0.716			0.163			0.153		
Satd. Flow (perm)	1321	1585	0	1318	1663	0	304	3523	0	285	5060	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)			1	1					3	3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	42	5	58	32	21	53	95	1405	37	37	1311	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	63	0	32	74	0	95	1442	0	37	1353	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

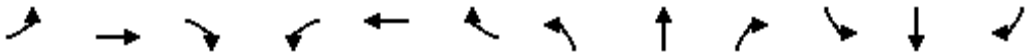


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	18.0	18.0		18.0	18.0		11.0	65.0		7.0	61.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.2%	72.2%		7.8%	67.8%	
Maximum Green (s)	12.0	12.0		12.0	12.0		7.5	59.0		3.5	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	10.6	10.6		10.6	10.6		66.3	61.6		61.2	57.7	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.80	0.74		0.74	0.70	
v/c Ratio	0.25	0.31		0.19	0.35		0.26	0.55		0.13	0.38	
Control Delay	39.2	39.9		37.8	40.6		4.4	8.1		4.0	8.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	39.2	39.9		37.8	40.6		4.4	8.1		4.0	8.0	
LOS	D	D		D	D		A	A		A	A	
Approach Delay		39.6			39.8			7.9			7.9	
Approach LOS		D			D			A			A	
Queue Length 50th (ft)	22	33		16	39		10	216		4	128	
Queue Length 95th (ft)	53	71		44	81		21	285		10	167	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	196	235		195	246		379	2607		275	3459	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.21	0.27		0.16	0.30		0.25	0.55		0.13	0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 82.8			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 10.0		Intersection LOS: B	
Intersection Capacity Utilization 63.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	5	55	30	20	50	90	1335	35	35	1245	40
Future Volume (veh/h)	40	5	55	30	20	50	90	1335	35	35	1245	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	5	58	32	21	53	95	1405	37	37	1311	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	2	2	2	2	2	2	2	2
Cap, veh/h	172	13	150	179	48	121	379	2395	63	302	3356	108
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.04	0.68	0.68	0.02	0.66	0.66
Sat Flow, veh/h	1323	127	1473	1326	469	1184	1781	3537	93	1781	5082	163
Grp Volume(v), veh/h	42	0	63	32	0	74	95	705	737	37	878	475
Grp Sat Flow(s),veh/h/ln	1323	0	1600	1326	0	1653	1781	1777	1853	1781	1702	1841
Q Serve(g_s), s	2.4	0.0	2.9	1.8	0.0	3.3	1.3	16.5	16.5	0.5	9.2	9.2
Cycle Q Clear(g_c), s	5.7	0.0	2.9	4.7	0.0	3.3	1.3	16.5	16.5	0.5	9.2	9.2
Prop In Lane	1.00		0.92	1.00		0.72	1.00		0.05	1.00		0.09
Lane Grp Cap(c), veh/h	172	0	163	179	0	169	379	1203	1255	302	2248	1216
V/C Ratio(X)	0.24	0.00	0.39	0.18	0.00	0.44	0.25	0.59	0.59	0.12	0.39	0.39
Avail Cap(c_a), veh/h	242	0	247	249	0	255	483	1350	1408	345	2411	1304
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	0.0	32.6	34.8	0.0	32.8	4.4	6.7	6.7	5.7	6.0	6.0
Incr Delay (d2), s/veh	1.6	0.0	3.2	1.0	0.0	3.8	0.3	2.1	2.0	0.2	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	2.2	1.1	0.0	2.7	0.7	8.9	9.2	0.3	4.8	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.0	0.0	35.8	35.8	0.0	36.6	4.8	8.8	8.7	5.9	6.5	7.0
LnGrp LOS	D	A	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		105			106			1537			1390	
Approach Delay, s/veh		36.3			36.3			8.5			6.7	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	58.6		13.9	6.4	57.3		13.9				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	3.5	59.0		12.0	7.5	55.0		12.0				
Max Q Clear Time (g_c+I1), s	2.5	18.5		7.7	3.3	11.2		6.7				
Green Ext Time (p_c), s	0.0	34.0		0.2	0.1	33.3		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		9.6	
HCM 6th LOS		A	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	5	55	30	20	50	90	1335	35	35	1245	40
Future Volume (veh/h)	40	5	55	30	20	50	90	1335	35	35	1245	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	5	58	32	21	53	95	1405	37	37	1311	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	172	13	150	179	48	121	379	2395	63	302	3356	108
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.04	0.68	0.68	0.02	0.66	0.66
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.0	0.0	35.8	35.8	0.0	36.6	4.8	8.8	8.7	5.9	6.5	7.0
Ln Grp LOS	D	A	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		105			106			1537			1390	
Approach Delay, s/veh		36.3			36.3			8.5			6.7	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	4.0		6.0	1.1	4.0		6.0
Phs Duration (G+Y+Rc), s	5.1	58.6		13.9	6.4	57.3		13.9
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0
Max Green (Gmax), s	3.5	59.0		12.0	7.5	55.0		12.0
Max Allow Headway (MAH), s	3.8	9.1		7.0	3.8	9.1		7.1
Max Q Clear (g_c+I1), s	2.5	18.5		7.7	3.3	11.2		6.7
Green Ext Time (g_e), s	0.0	34.0		0.2	0.1	33.3		0.3
Prob of Phs Call (p_c)	0.55	1.00		0.99	0.87	1.00		0.99
Prob of Max Out (p_x)	1.00	0.81		1.00	0.64	0.68		1.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1323	1781			1326

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3537		127		5082		469

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		93		1473		163		1184

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	37	0	0	42	95	0	0	32
Grp Sat Flow (s), veh/h/ln	1781	0	0	1323	1781	0	0	1326
Q Serve Time (g_s), s	0.5	0.0	0.0	2.4	1.3	0.0	0.0	1.8
Cycle Q Clear Time (g_c), s	0.5	0.0	0.0	5.7	1.3	0.0	0.0	4.7
Perm LT Sat Flow (s_l), veh/h/ln	370	0	0	1323	403	0	0	1326
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	51.3	0.0	0.0	7.9	51.3	0.0	0.0	7.9
Perm LT Serve Time (g_u), s	36.0	0.0	0.0	4.6	42.1	0.0	0.0	5.1
Perm LT Q Serve Time (g_ps), s	1.7	0.0	0.0	2.4	2.8	0.0	0.0	1.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	302	0	0	172	379	0	0	179
V/C Ratio (X)	0.12	0.00	0.00	0.24	0.25	0.00	0.00	0.18
Avail Cap (c_a), veh/h	345	0	0	242	483	0	0	249
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	5.7	0.0	0.0	35.4	4.4	0.0	0.0	34.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.6	0.3	0.0	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	5.9	0.0	0.0	37.0	4.8	0.0	0.0	35.8
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	0.8	0.3	0.0	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.3	0.0	0.0	1.5	0.7	0.0	0.0	1.1
%ile Storage Ratio (RQ%)	0.05	0.00	0.00	0.24	0.09	0.00	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	705	0	0	0	878	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	16.5	0.0	0.0	0.0	9.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	16.5	0.0	0.0	0.0	9.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1203	0	0	0	2248	0	0
V/C Ratio (X)	0.00	0.59	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1350	0	0	0	2411	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.7	0.0	0.0	0.0	6.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.8	0.0	0.0	0.0	6.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	0.0	0.0	2.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	0.0	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.00	0.00	0.33	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	737	0	63	0	475	0	74
Grp Sat Flow (s), veh/h/ln	0	1853	0	1600	0	1841	0	1653
Q Serve Time (g_s), s	0.0	16.5	0.0	2.9	0.0	9.2	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	16.5	0.0	2.9	0.0	9.2	0.0	3.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.05	0.00	0.92	0.00	0.09	0.00	0.72
Lane Grp Cap (c), veh/h	0	1255	0	163	0	1216	0	169
V/C Ratio (X)	0.00	0.59	0.00	0.39	0.00	0.39	0.00	0.44
Avail Cap (c_a), veh/h	0	1408	0	247	0	1304	0	255
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.7	0.0	32.6	0.0	6.0	0.0	32.8
Incr Delay (d2), s/veh	0.0	2.0	0.0	3.2	0.0	0.9	0.0	3.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	35.8	0.0	7.0	0.0	36.6
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	1.1	0.0	2.7	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.1	0.0	0.3	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.2	0.0	2.2	0.0	5.4	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.38	0.00	0.29	0.00	0.38	0.00	0.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	20	250	1040	140	5	180	1025	25	175	765	175	75
Future Volume (vph)	20	250	1040	140	5	180	1025	25	175	765	175	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	13	12	12	12	13	12	12	12	12	12	12
Storage Length (ft)		415		0		215		0	140		220	155
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		110				165			170			230
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.982				0.996				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1829	4986	0	0	1829	5063	0	1770	3725	1583	1770
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1824	4986	0	0	1827	5063	0	1760	3725	1558	1767
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			35		
Link Distance (ft)			601				560			640		
Travel Time (s)			11.7				10.9			12.5		
Confl. Peds. (#/hr)	8	1		1	2	1		1	8		2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	263	1095	147	5	189	1079	26	184	805	184	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	1242	0	0	194	1105	0	184	805	184	79
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			52				52			17		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	765	355
Future Volume (vph)	765	355
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Storage Length (ft)		275
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		0.97
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3725	1583
Flt Permitted		
Satd. Flow (perm)	3725	1540
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	500	
Travel Time (s)	9.7	
Confl. Peds. (#/hr)		8
Peak Hour Factor	0.95	0.95
Adj. Flow (vph)	805	374
Shared Lane Traffic (%)		
Lane Group Flow (vph)	805	374
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	17	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	0.94	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4		3!	3	8		5	2	3!	1
Permitted Phases											2	
Detector Phase	7	7	4		3	3	8		5	2	3	1
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	3.0	15.0		3.0	15.0	3.0	3.0
Minimum Split (s)	7.5	7.5	21.5		7.5	7.5	21.5		7.5	21.5	7.5	7.5
Total Split (s)	34.0	34.0	44.0		22.0	22.0	32.0		19.0	38.0	22.0	16.0
Total Split (%)	28.3%	28.3%	36.7%		18.3%	18.3%	26.7%		15.8%	31.7%	18.3%	13.3%
Maximum Green (s)	29.5	29.5	37.5		17.5	17.5	25.5		14.5	31.5	17.5	11.5
Yellow Time (s)	3.5	3.5	4.5		3.5	3.5	4.5		3.5	4.5	3.5	3.5
All-Red Time (s)	1.0	1.0	2.0		1.0	1.0	2.0		1.0	2.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5			4.5	6.5		4.5	6.5	4.5	4.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	4.0	7.0		4.0	7.0	4.0	4.0
Recall Mode	None	None	None		None	None	None		None	C-Min	None	None
Walk Time (s)										7.0		
Flash Dont Walk (s)										11.0		
Pedestrian Calls (#/hr)										0		
Act Effct Green (s)		24.4	38.6			16.4	30.6		14.4	35.0	53.5	10.4
Actuated g/C Ratio		0.20	0.32			0.14	0.26		0.12	0.29	0.45	0.09
v/c Ratio		0.76	0.78			0.78	0.86		0.87	0.74	0.26	0.52
Control Delay		58.4	41.1			70.9	51.1		87.8	44.4	20.4	64.3
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay		58.4	41.1			70.9	51.1		87.8	44.4	20.4	64.3
LOS		E	D			E	D		F	D	C	E
Approach Delay			44.3				54.0			47.4		
Approach LOS			D				D			D		
Queue Length 50th (ft)		207	321			145	303		142	309	85	59
Queue Length 95th (ft)		293	380			#248	#429		#271	387	135	111
Internal Link Dist (ft)			521				480			560		
Turn Bay Length (ft)		415				215			140		220	155
Base Capacity (vph)		449	1602			266	1290		213	1086	711	169
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.63	0.78			0.73	0.86		0.86	0.74	0.26	0.47

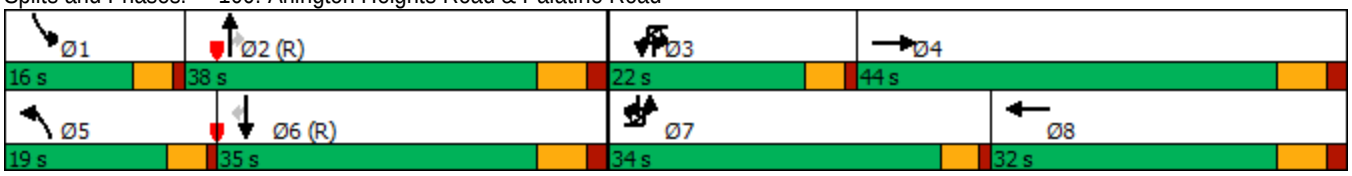
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 21.6 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 48.5	Intersection LOS: D

Lane Group	SBT	SBR
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	21.5	7.5
Total Split (s)	35.0	34.0
Total Split (%)	29.2%	28.3%
Maximum Green (s)	28.5	29.5
Yellow Time (s)	4.5	3.5
All-Red Time (s)	2.0	1.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.5	4.5
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	7.0	4.0
Recall Mode	C-Min	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	28.6	55.0
Actuated g/C Ratio	0.24	0.46
v/c Ratio	0.91	0.52
Control Delay	59.5	22.7
Queue Delay	0.0	0.0
Total Delay	59.5	22.7
LOS	E	C
Approach Delay	48.8	
Approach LOS	D	
Queue Length 50th (ft)	321	182
Queue Length 95th (ft)	#434	246
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		275
Base Capacity (vph)	887	781
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.91	0.48

Intersection Summary

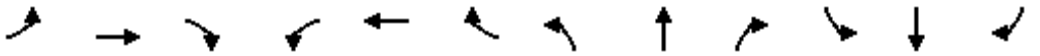
Intersection Capacity Utilization 84.5% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 100: Arlington Heights Road & Palatine Road

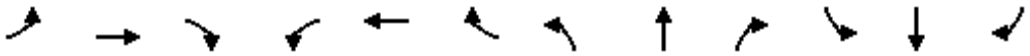


HCM 6th Edition methodology cannot be performed with phasing conflicts.

HCM 6th Edition methodology cannot be performed with phasing conflicts.



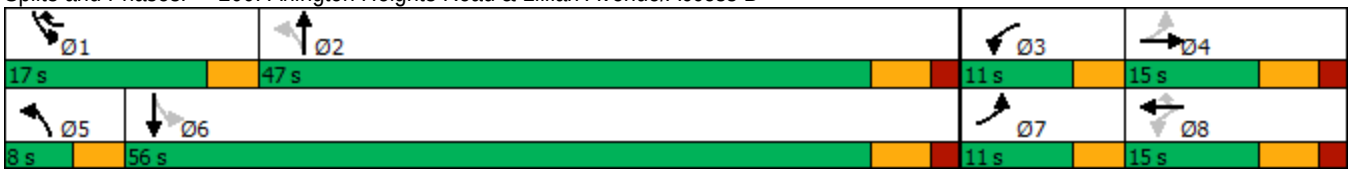
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	15	20	65	20	155	30	880	70	90	935	60
Future Volume (vph)	80	15	20	65	20	155	30	880	70	90	935	60
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		0.99			1.00				1.00	
Frt		0.915				0.850		0.989			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1686	0	1770	1961	1583	1770	3500	0	1770	3502	0
Flt Permitted	0.606						0.267			0.196		
Satd. Flow (perm)	1129	1686	0	1849	1961	1583	497	3500	0	365	3502	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			5	5			2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	16	21	68	21	163	32	926	74	95	984	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	37	0	68	21	163	32	1000	0	95	1047	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	

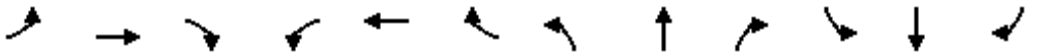


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	11.0	15.0		11.0	15.0	17.0	8.0	47.0		17.0	56.0	
Total Split (%)	12.2%	16.7%		12.2%	16.7%	18.9%	8.9%	52.2%		18.9%	62.2%	
Maximum Green (s)	7.5	9.0		7.5	9.0	13.5	4.5	41.0		13.5	50.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	14.6	9.0		11.1	8.9	15.1	47.8	40.3		56.6	51.8	
Actuated g/C Ratio	0.19	0.12		0.14	0.12	0.20	0.62	0.52		0.74	0.67	
v/c Ratio	0.28	0.19		0.26	0.09	0.53	0.08	0.55		0.21	0.44	
Control Delay	29.2	39.2		32.1	37.9	36.0	5.7	15.4		5.9	10.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	29.2	39.2		32.1	37.9	36.0	5.7	15.4		5.9	10.5	
LOS	C	D		C	D	D	A	B		A	B	
Approach Delay		32.3			35.1			15.1			10.2	
Approach LOS		C			D			B			B	
Queue Length 50th (ft)	38	20		38	11	89	5	220		16	185	
Queue Length 95th (ft)	76	50		64	33	134	14	253		32	240	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	316	209		277	244	400	387	2065		530	2392	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.27	0.18		0.25	0.09	0.41	0.08	0.48		0.18	0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 77			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	15	20	65	20	155	30	880	70	90	935	60
Future Volume (veh/h)	80	15	20	65	20	155	30	880	70	90	935	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	16	21	68	21	163	32	926	74	95	984	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	98	129	337	244	267	322	1696	136	363	1816	116
Arrive On Green	0.06	0.13	0.13	0.05	0.12	0.12	0.02	0.51	0.51	0.05	0.54	0.54
Sat Flow, veh/h	1781	729	957	1781	1969	1566	1781	3332	266	1781	3391	217
Grp Volume(v), veh/h	84	0	37	68	21	163	32	494	506	95	516	531
Grp Sat Flow(s),veh/h/ln	1781	0	1685	1781	1969	1566	1781	1777	1822	1781	1777	1831
Q Serve(g_s), s	2.9	0.0	1.4	2.4	0.7	6.9	0.6	13.6	13.6	1.8	13.6	13.6
Cycle Q Clear(g_c), s	2.9	0.0	1.4	2.4	0.7	6.9	0.6	13.6	13.6	1.8	13.6	13.6
Prop In Lane	1.00		0.57	1.00		1.00	1.00		0.15	1.00		0.12
Lane Grp Cap(c), veh/h	336	0	227	337	244	267	322	905	927	363	952	981
V/C Ratio(X)	0.25	0.00	0.16	0.20	0.09	0.61	0.10	0.55	0.55	0.26	0.54	0.54
Avail Cap(c_a), veh/h	423	0	227	443	247	270	398	1015	1041	616	1238	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	0.0	27.5	25.7	27.8	27.6	9.1	12.0	12.0	8.9	10.9	10.9
Incr Delay (d2), s/veh	0.4	0.0	0.7	0.3	0.3	5.8	0.1	2.4	2.3	0.4	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.0	1.1	1.8	0.6	5.3	0.4	8.9	9.0	1.1	8.7	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	28.2	26.0	28.2	33.4	9.3	14.3	14.3	9.3	13.1	13.1
LnGrp LOS	C	A	C	C	C	C	A	B	B	A	B	B
Approach Vol, veh/h		121			252			1032			1142	
Approach Delay, s/veh		26.5			31.0			14.2			12.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	42.5	6.8	15.7	4.9	44.4	7.5	14.9
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	13.5	41.0	7.5	9.0	4.5	50.0	7.5	9.0
Max Q Clear Time (g_c+I1), s	3.8	15.6	4.4	3.4	2.6	15.6	4.9	8.9
Green Ext Time (p_c), s	0.1	17.6	0.0	0.1	0.0	22.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	15	20	65	20	155	30	880	70	90	935	60
Future Volume (veh/h)	80	15	20	65	20	155	30	880	70	90	935	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	16	21	68	21	163	32	926	74	95	984	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	336	98	129	337	244	267	322	1696	136	363	1816	116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.13	0.13	0.05	0.12	0.12	0.02	0.51	0.51	0.05	0.54	0.54
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.7	0.0	28.2	26.0	28.2	33.4	9.3	14.3	14.3	9.3	13.1	13.1
Ln Grp LOS	C	A	C	C	C	C	A	B	B	A	B	B
Approach Vol, veh/h		121			252			1032			1142	
Approach Delay, s/veh		26.5			31.0			14.2			12.8	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	6.8	42.5	6.8	15.7	4.9	44.4	7.5	14.9
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green (Gmax), s	13.5	41.0	7.5	9.0	4.5	50.0	7.5	9.0
Max Allow Headway (MAH), s	3.8	9.1	3.9	7.6	3.8	9.1	3.9	6.3
Max Q Clear (g_c+I1), s	3.8	15.6	4.4	3.4	2.6	15.6	4.9	8.9
Green Ext Time (g_e), s	0.1	17.6	0.0	0.1	0.0	22.8	0.0	0.0
Prob of Phs Call (p_c)	0.85	1.00	0.74	1.00	0.47	1.00	0.81	1.00
Prob of Max Out (p_x)	0.00	0.69	1.00	1.00	1.00	0.60	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3332		729		3391		1969

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		266		957		217		1566

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	95	0	68	0	32	0	84	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	1.8	0.0	2.4	0.0	0.6	0.0	2.9	0.0
Cycle Q Clear Time (g_c), s	1.8	0.0	2.4	0.0	0.6	0.0	2.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	563	0	1356	0	539	0	1189	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	36.9	0.0	8.9	0.0	36.5	0.0	8.9	0.0
Perm LT Serve Time (g_u), s	23.0	0.0	8.3	0.0	24.8	0.0	8.2	0.0
Perm LT Q Serve Time (g_ps), s	2.8	0.0	0.0	0.0	0.7	0.0	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	363	0	337	0	322	0	336	0
V/C Ratio (X)	0.26	0.00	0.20	0.00	0.10	0.00	0.25	0.00
Avail Cap (c_a), veh/h	616	0	443	0	398	0	423	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	8.9	0.0	25.7	0.0	9.1	0.0	25.3	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.3	0.0	0.1	0.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.3	0.0	26.0	0.0	9.3	0.0	25.7	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	1.0	0.0	0.2	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.1	0.0	1.8	0.0	0.4	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	0.15	0.00	0.30	0.00	0.20	0.00	0.47	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	494	0	0	0	516	0	21
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1969
Q Serve Time (g_s), s	0.0	13.6	0.0	0.0	0.0	13.6	0.0	0.7
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	0.0	0.0	13.6	0.0	0.7
Lane Grp Cap (c), veh/h	0	905	0	0	0	952	0	244
V/C Ratio (X)	0.00	0.55	0.00	0.00	0.00	0.54	0.00	0.09
Avail Cap (c_a), veh/h	0	1015	0	0	0	1238	0	247
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	0.0	0.0	10.9	0.0	27.8
Incr Delay (d2), s/veh	0.0	2.4	0.0	0.0	0.0	2.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.3	0.0	0.0	0.0	13.1	0.0	28.2
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	0.0	0.0	4.5	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.00	0.00	1.73	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	0.0	0.0	8.7	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	1.00	0.00	0.00	0.00	0.43	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	506	0	37	0	531	0	163
Grp Sat Flow (s), veh/h/ln	0	1822	0	1685	0	1831	0	1566
Q Serve Time (g_s), s	0.0	13.6	0.0	1.4	0.0	13.6	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	1.4	0.0	13.6	0.0	6.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Prop RT Outside Lane (P_R)	0.00	0.15	0.00	0.57	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	927	0	227	0	981	0	267
V/C Ratio (X)	0.00	0.55	0.00	0.16	0.00	0.54	0.00	0.61
Avail Cap (c_a), veh/h	0	1041	0	227	0	1275	0	270
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	27.5	0.0	10.9	0.0	27.6
Incr Delay (d2), s/veh	0.0	2.3	0.0	0.7	0.0	2.1	0.0	5.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.3	0.0	28.2	0.0	13.1	0.0	33.4
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	0.6	0.0	4.6	0.0	2.5
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.80	0.00	1.72	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.0	0.0	1.1	0.0	8.9	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	1.02	0.00	0.10	0.00	0.44	0.00	0.87
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	15	965	15	5	1015
Future Volume (vph)	5	15	965	15	5	1015
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.850	0.998			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3532	0	1770	3725
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	3532	0	1770	3725
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Confl. Peds. (#/hr)				4	4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	16	1016	16	5	1068
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	16	1032	0	5	1068
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	15	965	15	5	1015
Future Vol, veh/h	5	15	965	15	5	1015
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	16	1016	16	5	1068

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1572	520	0	0	1036	0
Stage 1	1028	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	101	501	-	-	667	-
Stage 1	306	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	100	499	-	-	664	-
Mov Cap-2 Maneuver	100	-	-	-	-	-
Stage 1	305	-	-	-	-	-
Stage 2	542	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.1	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	100	499	664	-
HCM Lane V/C Ratio	-	-	0.053	0.032	0.008	-
HCM Control Delay (s)	-	-	43	12.5	10.5	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1195	100	0	1230	0	65
Future Volume (vph)	1195	100	0	1230	0	65
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.988					0.865
Flt Protected						
Satd. Flow (prot)	5024	0	0	5353	0	1611
Flt Permitted						
Satd. Flow (perm)	5024	0	0	5353	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1258	105	0	1295	0	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1363	0	0	1295	0	68
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

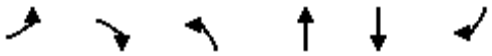
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1195	100	0	1230	0	65
Future Vol, veh/h	1195	100	0	1230	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1258	105	0	1295	0	68

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	682
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	336
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	336
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	336	-	-	-
HCM Lane V/C Ratio	0.204	-	-	-
HCM Control Delay (s)	18.4	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	45	0	1275	1320	120
Future Volume (vph)	0	45	0	1275	1320	120
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.865			0.988	
Flt Protected						
Satd. Flow (prot)	0	1826	0	5353	5024	0
Flt Permitted						
Satd. Flow (perm)	0	1826	0	5353	5024	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	47	0	1342	1389	126
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	47	0	1342	1515	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.3

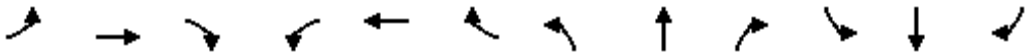
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	45	0	1275	1320	120
Future Vol, veh/h	0	45	0	1275	1320	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	47	0	1342	1389	126

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	758	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	300	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	300	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	300	-	-
HCM Lane V/C Ratio	-	0.158	-	-
HCM Control Delay (s)	-	19.2	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

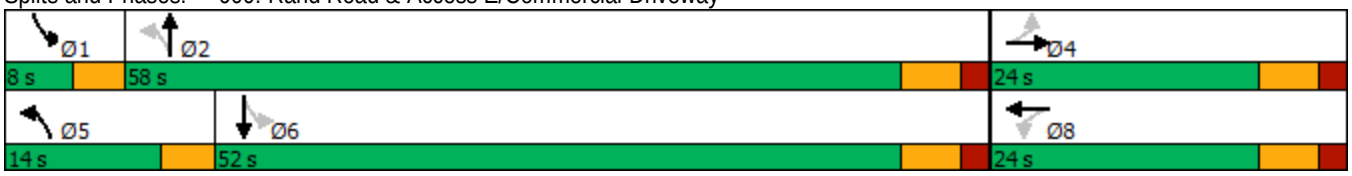
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	10	70	25	10	65	100	1160	35	50	1280	35
Future Volume (vph)	50	10	70	25	10	65	100	1160	35	50	1280	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor							1.00	1.00		1.00	1.00	
Frt		0.869			0.871			0.996			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1619	0	1736	1622	0	1770	3523	0	1770	5062	0
Flt Permitted	0.706			0.702			0.153			0.191		
Satd. Flow (perm)	1315	1619	0	1282	1622	0	285	3523	0	356	5062	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)							2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	53	11	74	26	11	68	105	1221	37	53	1347	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	85	0	26	79	0	105	1258	0	53	1384	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

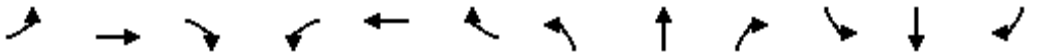


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	24.0	24.0		24.0	24.0		14.0	58.0		8.0	52.0	
Total Split (%)	26.7%	26.7%		26.7%	26.7%		15.6%	64.4%		8.9%	57.8%	
Maximum Green (s)	18.0	18.0		18.0	18.0		10.5	52.0		4.5	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	11.6	11.6		11.6	11.6		60.1	55.2		55.8	51.6	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.77	0.71		0.72	0.66	
v/c Ratio	0.27	0.35		0.14	0.33		0.30	0.50		0.16	0.41	
Control Delay	35.5	36.5		32.8	35.9		5.5	9.0		4.6	9.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	35.5	36.5		32.8	35.9		5.5	9.0		4.6	9.6	
LOS	D	D		C	D		A	A		A	A	
Approach Delay		36.1			35.2			8.7			9.4	
Approach LOS		D			D			A			A	
Queue Length 50th (ft)	25	41		12	38		12	183		6	135	
Queue Length 95th (ft)	59	84		35	79		29	272		17	199	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	313	385		305	385		427	2458		339	3350	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.17	0.22		0.09	0.21		0.25	0.51		0.16	0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 77.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 11.2		Intersection LOS: B	
Intersection Capacity Utilization 59.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	70	25	10	65	100	1160	35	50	1280	35
Future Volume (veh/h)	50	10	70	25	10	65	100	1160	35	50	1280	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	11	74	26	11	68	105	1221	37	53	1347	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	4	2	2	2	2	2	2	2	2
Cap, veh/h	205	25	171	198	27	170	368	2212	67	343	3120	86
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.05	0.63	0.63	0.03	0.61	0.61
Sat Flow, veh/h	1320	209	1408	1292	225	1394	1781	3521	107	1781	5109	140
Grp Volume(v), veh/h	53	0	85	26	0	79	105	616	642	53	898	486
Grp Sat Flow(s),veh/h/ln	1320	0	1617	1292	0	1619	1781	1777	1851	1781	1702	1845
Q Serve(g_s), s	2.7	0.0	3.4	1.3	0.0	3.1	1.5	13.7	13.8	0.8	9.7	9.7
Cycle Q Clear(g_c), s	5.8	0.0	3.4	4.7	0.0	3.1	1.5	13.7	13.8	0.8	9.7	9.7
Prop In Lane	1.00		0.87	1.00		0.86	1.00		0.06	1.00		0.08
Lane Grp Cap(c), veh/h	205	0	197	198	0	197	368	1116	1163	343	2079	1127
V/C Ratio(X)	0.26	0.00	0.43	0.13	0.00	0.40	0.29	0.55	0.55	0.15	0.43	0.43
Avail Cap(c_a), veh/h	385	0	418	374	0	418	556	1326	1382	408	2248	1218
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	28.4	30.5	0.0	28.2	5.3	7.4	7.4	6.0	7.2	7.2
Incr Delay (d2), s/veh	1.4	0.0	3.2	0.6	0.0	2.8	0.4	2.0	1.9	0.2	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	2.6	0.8	0.0	2.4	0.8	7.9	8.2	0.4	5.2	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	0.0	31.5	31.2	0.0	31.0	5.7	9.3	9.3	6.2	7.8	8.4
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		138			105			1363			1437	
Approach Delay, s/veh		31.9			31.1			9.0			8.0	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	49.8		14.5	6.6	48.5		14.5				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	4.5	52.0		18.0	10.5	46.0		18.0				
Max Q Clear Time (g_c+I1), s	2.8	15.8		7.8	3.5	11.7		6.7				
Green Ext Time (p_c), s	0.0	28.0		0.7	0.1	27.8		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		10.3	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	70	25	10	65	100	1160	35	50	1280	35
Future Volume (veh/h)	50	10	70	25	10	65	100	1160	35	50	1280	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	11	74	26	11	68	105	1221	37	53	1347	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	4	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	205	25	171	198	27	170	368	2212	67	343	3120	86
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.05	0.63	0.63	0.03	0.61	0.61
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.4	0.0	31.5	31.2	0.0	31.0	5.7	9.3	9.3	6.2	7.8	8.4
Ln Grp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		138			105			1363			1437	
Approach Delay, s/veh		31.9			31.1			9.0			8.0	
Approach LOS		C			C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	4.0		6.0	1.1	4.0		6.0
Phs Duration (G+Y+Rc), s	5.4	49.8		14.5	6.6	48.5		14.5
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0
Max Green (Gmax), s	4.5	52.0		18.0	10.5	46.0		18.0
Max Allow Headway (MAH), s	3.8	9.1		7.0	3.8	9.1		7.3
Max Q Clear (g_c+I1), s	2.8	15.8		7.8	3.5	11.7		6.7
Green Ext Time (g_e), s	0.0	28.0		0.7	0.1	27.8		0.6
Prob of Phs Call (p_c)	0.64	1.00		0.99	0.87	1.00		0.99
Prob of Max Out (p_x)	1.00	0.74		0.28	0.03	0.77		0.17

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1320	1781			1292

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3521		209		5109		225

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		107		1408		140		1394

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	53	0	0	53	105	0	0	26
Grp Sat Flow (s), veh/h/ln	1781	0	0	1320	1781	0	0	1292
Q Serve Time (g_s), s	0.8	0.0	0.0	2.7	1.5	0.0	0.0	1.3
Cycle Q Clear Time (g_c), s	0.8	0.0	0.0	5.8	1.5	0.0	0.0	4.7
Perm LT Sat Flow (s_l), veh/h/ln	441	0	0	1320	391	0	0	1292
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	42.5	0.0	0.0	8.5	42.5	0.0	0.0	8.5
Perm LT Serve Time (g_u), s	30.0	0.0	0.0	5.3	32.8	0.0	0.0	5.1
Perm LT Q Serve Time (g_ps), s	1.7	0.0	0.0	2.7	3.6	0.0	0.0	1.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	343	0	0	205	368	0	0	198
V/C Ratio (X)	0.15	0.00	0.00	0.26	0.29	0.00	0.00	0.13
Avail Cap (c_a), veh/h	408	0	0	385	556	0	0	374
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	6.0	0.0	0.0	30.9	5.3	0.0	0.0	30.5
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.4	0.4	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.2	0.0	0.0	32.4	5.7	0.0	0.0	31.2
1st-Term Q (Q1), veh/ln	0.2	0.0	0.0	0.8	0.4	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.4	0.0	0.0	1.7	0.8	0.0	0.0	0.8
%ile Storage Ratio (RQ%)	0.07	0.00	0.00	0.26	0.10	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	616	0	0	0	898	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	13.7	0.0	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	0.0	0.0	9.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1116	0	0	0	2079	0	0
V/C Ratio (X)	0.00	0.55	0.00	0.00	0.00	0.43	0.00	0.00
Avail Cap (c_a), veh/h	0	1326	0	0	0	2248	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.4	0.0	0.0	0.0	7.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.3	0.0	0.0	0.0	7.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	0.0	0.0	2.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.78	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	7.9	0.0	0.0	0.0	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.00	0.00	0.36	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	642	0	85	0	486	0	79
Grp Sat Flow (s), veh/h/ln	0	1851	0	1617	0	1845	0	1619
Q Serve Time (g_s), s	0.0	13.8	0.0	3.4	0.0	9.7	0.0	3.1
Cycle Q Clear Time (g_c), s	0.0	13.8	0.0	3.4	0.0	9.7	0.0	3.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.06	0.00	0.87	0.00	0.08	0.00	0.86
Lane Grp Cap (c), veh/h	0	1163	0	197	0	1127	0	197
V/C Ratio (X)	0.00	0.55	0.00	0.43	0.00	0.43	0.00	0.40
Avail Cap (c_a), veh/h	0	1382	0	418	0	1218	0	418
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.4	0.0	28.4	0.0	7.2	0.0	28.2
Incr Delay (d2), s/veh	0.0	1.9	0.0	3.2	0.0	1.2	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.3	0.0	31.5	0.0	8.4	0.0	31.0
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	1.3	0.0	2.9	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.2	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.76	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.2	0.0	2.6	0.0	6.0	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.34	0.00	0.41	0.00	0.56
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

FUTURE BUILD CAPACITY REPORTS

Weekday Morning Peak Hour

Weekday Evening Peak Hour

Saturday Midday Peak Hour

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	185	1485	165	195	1035	20	155	695	170	45	755
Future Volume (vph)	10	185	1485	165	195	1035	20	155	695	170	45	755
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	12	13	12	12	13	12	12	12	12	12	12	12
Storage Length (ft)		415		0	215		0	140		220	155	
Storage Lanes		1		0	1		0	1		1	1	
Taper Length (ft)		110			165			170			230	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00	0.95
Ped Bike Factor		1.00	1.00		1.00	1.00		1.00				
Frt			0.985			0.997				0.850		
Flt Protected		0.950			0.950			0.950			0.950	
Satd. Flow (prot)	0	1702	4860	0	1811	4874	0	1752	3619	1583	1687	3654
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	1699	4860	0	1810	4874	0	1748	3619	1583	1687	3654
Right Turn on Red				No			No			No		
Satd. Flow (RTOR)												
Link Speed (mph)			35			35			35			35
Link Distance (ft)			601			560			640			500
Travel Time (s)			11.7			10.9			12.5			9.7
Confl. Peds. (#/hr)	3	1		1	1		1	3				
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	10%	5%	5%	3%	6%	10%	3%	5%	2%	7%	4%
Adj. Flow (vph)	11	195	1563	174	205	1089	21	163	732	179	47	795
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	206	1737	0	205	1110	0	163	732	179	47	795
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)			52			52			17			17
Link Offset(ft)			0			0			0			0
Crosswalk Width(ft)			16			16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00	0.94
Turning Speed (mph)	9	15		9	15		9	15		9	15	
Number of Detectors	1	1	2		1	2		1	2	1	1	2
Detector Template	Left	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100		20	100		20	100	20	20	100
Trailing Detector (ft)	0	0	0		0	0		0	0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0		0	0	0	0	0
Detector 1 Size(ft)	20	20	6		20	6		20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94			94			94
Detector 2 Size(ft)			6			6			6			6
Detector 2 Type			Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex
Detector 2 Channel												

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	315
Future Volume (vph)	315
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Storage Length (ft)	275
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	0.98
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1538
Flt Permitted	
Satd. Flow (perm)	1509
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	3
Peak Hour Factor	0.95
Heavy Vehicles (%)	5%
Adj. Flow (vph)	332
Shared Lane Traffic (%)	
Lane Group Flow (vph)	332
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Detector 2 Extend (s)			0.0			0.0			0.0			0.0
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA
Protected Phases	7!	7	4		3	8		5	2	3	1	6
Permitted Phases										2		
Detector Phase	7	7	4		3	8		5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	15.0		3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	7.5	7.5	21.5		7.5	21.5		7.5	21.5	7.5	7.5	21.5
Total Split (s)	24.0	24.0	60.0		24.0	60.0		17.0	39.0	24.0	17.0	39.0
Total Split (%)	17.1%	17.1%	42.9%		17.1%	42.9%		12.1%	27.9%	17.1%	12.1%	27.9%
Maximum Green (s)	19.5	19.5	53.5		19.5	53.5		12.5	32.5	19.5	12.5	32.5
Yellow Time (s)	3.5	3.5	4.5		3.5	4.5		3.5	4.5	3.5	3.5	4.5
All-Red Time (s)	1.0	1.0	2.0		1.0	2.0		1.0	2.0	1.0	1.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5		4.5	6.5		4.5	6.5	4.5	4.5	6.5
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	7.0		4.0	7.0	4.0	4.0	7.0
Recall Mode	None	None	None		None	None		None	C-Min	None	None	C-Min
Walk Time (s)									7.0			7.0
Flash Dont Walk (s)									11.0			11.0
Pedestrian Calls (#/hr)									0			0
Act Effct Green (s)		19.1	54.2		18.8	53.9		12.5	37.3	62.5	10.0	32.5
Actuated g/C Ratio		0.14	0.39		0.13	0.38		0.09	0.27	0.45	0.07	0.23
v/c Ratio		0.89	0.92		0.85	0.59		1.04	0.76	0.25	0.39	0.94
Control Delay		95.3	50.3		87.9	36.0		144.4	54.2	26.4	71.0	71.7
Queue Delay		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		95.3	50.3		87.9	36.0		144.4	54.2	26.4	71.0	71.7
LOS		F	D		F	D		F	D	C	E	E
Approach Delay			55.0			44.0			63.3			61.4
Approach LOS			E			D			E			E
Queue Length 50th (ft)		186	553		184	294		~160	332	103	42	376
Queue Length 95th (ft)		#330	#637		#313	343		#310	#439	165	84	#500
Internal Link Dist (ft)			521			480			560			420
Turn Bay Length (ft)		415			215			140		220	155	
Base Capacity (vph)		237	1883		252	1877		156	963	715	150	848
Starvation Cap Reductn		0	0		0	0		0	0	0	0	0
Spillback Cap Reductn		0	0		0	0		0	0	0	0	0
Storage Cap Reductn		0	0		0	0		0	0	0	0	0
Reduced v/c Ratio		0.87	0.92		0.81	0.59		1.04	0.76	0.25	0.31	0.94

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 57.4 (41%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04

Lane Group	SBR
Detector 2 Extend (s)	
Turn Type	pm+ov
Protected Phases	7!
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	7.5
Total Split (s)	24.0
Total Split (%)	17.1%
Maximum Green (s)	19.5
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	4.5
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	4.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	53.6
Actuated g/C Ratio	0.38
v/c Ratio	0.57
Control Delay	35.4
Queue Delay	0.0
Total Delay	35.4
LOS	D
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	222
Queue Length 95th (ft)	319
Internal Link Dist (ft)	
Turn Bay Length (ft)	275
Base Capacity (vph)	586
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.57

Intersection Summary

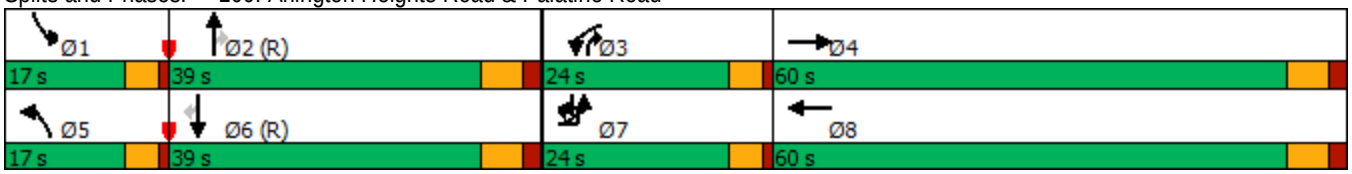
Intersection Signal Delay: 55.4	Intersection LOS: E
Intersection Capacity Utilization 89.9%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

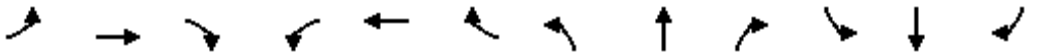
! Phase conflict between lane groups.

Splits and Phases: 100: Arlington Heights Road & Palatine Road

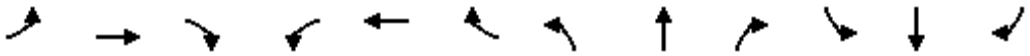


HCM 6th Edition methodology cannot be performed with phasing conflicts.

HCM 6th Edition methodology cannot be performed with phasing conflicts.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	10	20	20	5	65	20	920	20	30	1055	30
Future Volume (vph)	35	10	20	20	5	65	20	920	20	30	1055	30
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		1.00			1.00	1.00		1.00	1.00	
Frt		0.902				0.850		0.997			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1671	1606	0	1641	1961	1524	1770	3488	0	1656	3452	0
Flt Permitted	0.976						0.221			0.247		
Satd. Flow (perm)	1717	1606	0	1725	1961	1524	411	3488	0	430	3452	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			1	1			2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	13%	2%	10%	2%	6%	2%	3%	10%	9%	4%	7%
Adj. Flow (vph)	37	11	21	21	5	68	21	968	21	32	1111	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	32	0	21	5	68	21	989	0	32	1143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

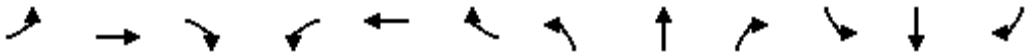


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	11.0	18.0		7.0	14.0	8.0	10.0	57.0		8.0	55.0	
Total Split (%)	12.2%	20.0%		7.8%	15.6%	8.9%	11.1%	63.3%		8.9%	61.1%	
Maximum Green (s)	7.5	12.0		3.5	8.0	4.5	6.5	51.0		4.5	49.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	10.9	9.8		5.3	8.8	6.9	52.0	46.2		52.3	53.0	
Actuated g/C Ratio	0.17	0.15		0.08	0.14	0.11	0.80	0.72		0.81	0.82	
v/c Ratio	0.13	0.13		0.15	0.02	0.42	0.05	0.40		0.07	0.40	
Control Delay	26.6	32.7		33.4	35.2	40.1	3.9	7.5		4.0	7.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	26.6	32.7		33.4	35.2	40.1	3.9	7.5		4.0	7.5	
LOS	C	C		C	D	D	A	A		A	A	
Approach Delay		29.4			38.4			7.4			7.4	
Approach LOS		C			D			A			A	
Queue Length 50th (ft)	11	9		6	1	21	1	40		1	0	
Queue Length 95th (ft)	41	43		28	13	70	10	216		13	281	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	313	326		137	265	163	484	2866		441	2780	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.12	0.10		0.15	0.02	0.42	0.04	0.35		0.07	0.41	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 64.6			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 9.3		Intersection LOS: A	
Intersection Capacity Utilization 48.9%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	10	20	20	5	65	20	920	20	30	1055	30
Future Volume (veh/h)	35	10	20	20	5	65	20	920	20	30	1055	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1707	1870	1752	1969	1811	1870	1856	1752	1767	1841	1796
Adj Flow Rate, veh/h	37	11	21	21	5	68	21	968	21	32	1111	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	13	2	10	2	6	2	3	10	9	4	7
Cap, veh/h	277	61	116	254	208	193	318	2023	44	360	2010	58
Arrive On Green	0.02	0.12	0.12	0.01	0.11	0.11	0.01	0.57	0.57	0.02	0.58	0.58
Sat Flow, veh/h	1697	524	1000	1668	1969	1531	1781	3528	77	1682	3471	100
Grp Volume(v), veh/h	37	0	32	21	5	68	21	484	505	32	560	583
Grp Sat Flow(s),veh/h/ln	1697	0	1524	1668	1969	1531	1781	1763	1842	1682	1749	1823
Q Serve(g_s), s	1.3	0.0	1.3	0.8	0.2	2.8	0.3	11.1	11.1	0.5	13.6	13.6
Cycle Q Clear(g_c), s	1.3	0.0	1.3	0.8	0.2	2.8	0.3	11.1	11.1	0.5	13.6	13.6
Prop In Lane	1.00		0.66	1.00		1.00	1.00		0.04	1.00		0.05
Lane Grp Cap(c), veh/h	277	0	177	254	208	193	318	1011	1056	360	1012	1055
V/C Ratio(X)	0.13	0.00	0.18	0.08	0.02	0.35	0.07	0.48	0.48	0.09	0.55	0.55
Avail Cap(c_a), veh/h	420	0	266	314	229	209	460	1307	1365	436	1245	1298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	0.0	27.5	27.0	27.6	27.5	7.2	8.6	8.6	6.8	9.0	9.0
Incr Delay (d2), s/veh	0.2	0.0	1.0	0.1	0.1	2.3	0.1	1.6	1.6	0.1	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	0.0	0.9	0.6	0.1	2.0	0.2	6.9	7.1	0.3	8.2	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	0.0	28.5	27.1	27.7	29.9	7.3	10.2	10.2	6.9	11.1	11.1
LnGrp LOS	C	A	C	C	C	C	A	B	B	A	B	B
Approach Vol, veh/h		69			94			1010			1175	
Approach Delay, s/veh		27.6			29.1			10.2			11.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	45.5	4.5	14.0	4.5	45.8	5.2	13.3
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	4.5	51.0	3.5	12.0	6.5	49.0	7.5	8.0
Max Q Clear Time (g_c+I1), s	2.5	13.1	2.8	3.3	2.3	15.6	3.3	4.8
Green Ext Time (p_c), s	0.0	23.0	0.0	0.1	0.0	24.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	10	20	20	5	65	20	920	20	30	1055	30
Future Volume (veh/h)	35	10	20	20	5	65	20	920	20	30	1055	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1781	1707	1870	1752	1969	1811	1870	1856	1752	1767	1841	1796
Adj Flow Rate, veh/h	37	11	21	21	5	68	21	968	21	32	1111	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	13	2	10	2	6	2	3	10	9	4	7
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	277	61	116	254	208	193	318	2023	44	360	2010	58
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.12	0.12	0.01	0.11	0.11	0.01	0.57	0.57	0.02	0.58	0.58
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.8	0.0	28.5	27.1	27.7	29.9	7.3	10.2	10.2	6.9	11.1	11.1
Ln Grp LOS	C	A	C	C	C	C	A	B	B	A	B	B
Approach Vol, veh/h		69			94			1010			1175	
Approach Delay, s/veh		27.6			29.1			10.2			11.0	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	4.9	45.5	4.5	14.0	4.5	45.8	5.2	13.3
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green (Gmax), s	4.5	51.0	3.5	12.0	6.5	49.0	7.5	8.0
Max Allow Headway (MAH), s	3.8	9.1	3.9	7.7	3.8	9.1	3.9	6.2
Max Q Clear (g_c+I1), s	2.5	13.1	2.8	3.3	2.3	15.6	3.3	4.8
Green Ext Time (g_e), s	0.0	23.0	0.0	0.1	0.0	24.2	0.0	0.1
Prob of Phs Call (p_c)	0.46	1.00	0.33	0.94	0.33	1.00	0.51	0.91
Prob of Max Out (p_x)	1.00	0.51	1.00	0.50	0.51	0.69	0.66	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1682		1668		1781		1697	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3528		524		3471		1969

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		77		1000		100		1531

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	32	0	21	0	21	0	37	0
Grp Sat Flow (s), veh/h/ln	1682	0	1668	0	1781	0	1697	0
Q Serve Time (g_s), s	0.5	0.0	0.8	0.0	0.3	0.0	1.3	0.0
Cycle Q Clear Time (g_c), s	0.5	0.0	0.8	0.0	0.3	0.0	1.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	538	0	1286	0	492	0	1261	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.5	0.0	7.3	0.0	39.5	0.0	7.3	0.0
Perm LT Serve Time (g_u), s	28.4	0.0	6.7	0.0	26.2	0.0	7.1	0.0
Perm LT Q Serve Time (g_ps), s	0.7	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	360	0	254	0	318	0	277	0
V/C Ratio (X)	0.09	0.00	0.08	0.00	0.07	0.00	0.13	0.00
Avail Cap (c_a), veh/h	436	0	314	0	460	0	420	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	6.8	0.0	27.0	0.0	7.2	0.0	26.6	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.1	0.0	0.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.9	0.0	27.1	0.0	7.3	0.0	26.8	0.0
1st-Term Q (Q1), veh/ln	0.2	0.0	0.3	0.0	0.1	0.0	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.3	0.0	0.6	0.0	0.2	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.10	0.00	0.10	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	484	0	0	0	560	0	5
Grp Sat Flow (s), veh/h/ln	0	1763	0	0	0	1749	0	1969
Q Serve Time (g_s), s	0.0	11.1	0.0	0.0	0.0	13.6	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	11.1	0.0	0.0	0.0	13.6	0.0	0.2
Lane Grp Cap (c), veh/h	0	1011	0	0	0	1012	0	208
V/C Ratio (X)	0.00	0.48	0.00	0.00	0.00	0.55	0.00	0.02
Avail Cap (c_a), veh/h	0	1307	0	0	0	1245	0	229
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	0.0	0.0	9.0	0.0	27.6
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	2.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.2	0.0	0.0	0.0	11.1	0.0	27.7
1st-Term Q (Q1), veh/ln	0.0	3.4	0.0	0.0	0.0	4.1	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.76	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	6.9	0.0	0.0	0.0	8.2	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	0.00	0.00	0.41	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	505	0	32	0	583	0	68
Grp Sat Flow (s), veh/h/ln	0	1842	0	1524	0	1823	0	1531
Q Serve Time (g_s), s	0.0	11.1	0.0	1.3	0.0	13.6	0.0	2.8
Cycle Q Clear Time (g_c), s	0.0	11.1	0.0	1.3	0.0	13.6	0.0	2.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1534.8
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Prop RT Outside Lane (P_R)	0.00	0.04	0.00	0.66	0.00	0.05	0.00	1.00
Lane Grp Cap (c), veh/h	0	1056	0	177	0	1055	0	193
V/C Ratio (X)	0.00	0.48	0.00	0.18	0.00	0.55	0.00	0.35
Avail Cap (c_a), veh/h	0	1365	0	266	0	1298	0	209
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	27.5	0.0	9.0	0.0	27.5
Incr Delay (d2), s/veh	0.0	1.6	0.0	1.0	0.0	2.1	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.2	0.0	28.5	0.0	11.1	0.0	29.9
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	0.5	0.0	4.2	0.0	1.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.75	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.1	0.0	0.9	0.0	8.5	0.0	2.0
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.10	0.00	0.42	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	5	955	10	5	1090
Future Volume (vph)	5	5	955	10	5	1090
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.850	0.998			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1357	1583	3495	0	1770	3689
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1357	1583	3495	0	1770	3689
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Confl. Peds. (#/hr)				3	3	
Confl. Bikes (#/hr)		1		1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	33%	2%	3%	10%	2%	3%
Adj. Flow (vph)	5	5	1005	11	5	1147
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	5	1016	0	5	1147
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	5	955	10	5	1090
Future Vol, veh/h	5	5	955	10	5	1090
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	33	2	3	10	2	3
Mvmt Flow	5	5	1005	11	5	1147

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1598	511	0	0	1019	0
Stage 1	1014	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	7.46	6.94	-	-	4.14	-
Critical Hdwy Stg 1	6.46	-	-	-	-	-
Critical Hdwy Stg 2	6.46	-	-	-	-	-
Follow-up Hdwy	3.83	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	71	508	-	-	677	-
Stage 1	249	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	70	507	-	-	675	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	248	-	-	-	-	-
Stage 2	440	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	36.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	70	507	675	-
HCM Lane V/C Ratio	-	-	0.075	0.01	0.008	-
HCM Control Delay (s)	-	-	60.6	12.2	10.4	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1655	45	0	1245	0	25
Future Volume (vph)	1655	45	0	1245	0	25
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996					0.865
Flt Protected						
Satd. Flow (prot)	4924	0	0	5103	0	1611
Flt Permitted						
Satd. Flow (perm)	4924	0	0	5103	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	2%	2%	7%	2%	2%
Adj. Flow (vph)	1742	47	0	1311	0	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1789	0	0	1311	0	26
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.0%		ICU Level of Service A	
Analysis Period (min) 15			

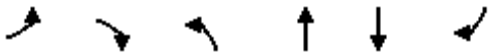
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1655	45	0	1245	0	25
Future Vol, veh/h	1655	45	0	1245	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	2	7	2	2
Mvmt Flow	1742	47	0	1311	0	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	895
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	244
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	244
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	244	-	-	-
HCM Lane V/C Ratio	0.108	-	-	-
HCM Control Delay (s)	21.5	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	20	0	845	1305	40
Future Volume (vph)	0	20	0	845	1305	40
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor						
Frt		0.865			0.996	
Flt Protected						
Satd. Flow (prot)	0	1741	0	5200	5017	0
Flt Permitted						
Satd. Flow (perm)	0	1741	0	5200	5017	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Confl. Peds. (#/hr)						3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	7%	2%	5%	3%	2%
Adj. Flow (vph)	0	21	0	889	1374	42
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	21	0	889	1416	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	36.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.2

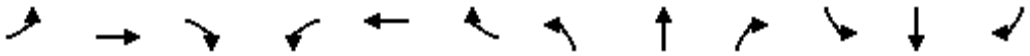
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	0	845	1305	40
Future Vol, veh/h	0	20	0	845	1305	40
Conflicting Peds, #/hr	0	0	0	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	7	2	5	3	2
Mvmt Flow	0	21	0	889	1374	42

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	711	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.24	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.97	-	-	-	-
Pot Cap-1 Maneuver	0	313	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	312	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	312	-	-
HCM Lane V/C Ratio	-	0.067	-	-
HCM Control Delay (s)	-	17.4	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

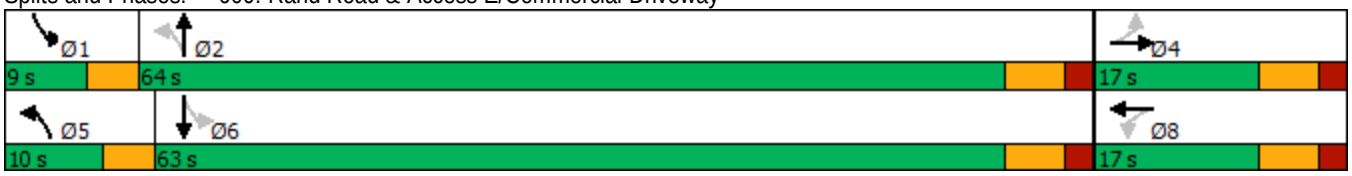
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1	15	15	1	25	40	815	15	20	1295	10
Future Volume (vph)	5	1	15	15	1	25	40	815	15	20	1295	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor							1.00				1.00	
Frt		0.859			0.856			0.997			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1399	1600	0	1770	1539	0	1770	3430	0	1719	5079	0
Flt Permitted	0.769			0.769			0.170			0.323		
Satd. Flow (perm)	1133	1600	0	1432	1539	0	317	3430	0	584	5079	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)							4					4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	29%	2%	2%	2%	50%	4%	2%	5%	2%	5%	2%	2%
Adj. Flow (vph)	5	1	16	16	1	26	42	858	16	21	1363	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	17	0	16	27	0	42	874	0	21	1374	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

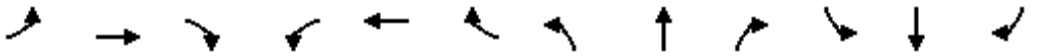


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	17.0	17.0		17.0	17.0		10.0	64.0		9.0	63.0	
Total Split (%)	18.9%	18.9%		18.9%	18.9%		11.1%	71.1%		10.0%	70.0%	
Maximum Green (s)	11.0	11.0		11.0	11.0		6.5	58.0		5.5	57.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	9.3	9.3		9.3	9.3		65.2	63.4		63.7	61.3	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.83	0.81		0.82	0.78	
v/c Ratio	0.04	0.09		0.09	0.15		0.11	0.31		0.04	0.34	
Control Delay	36.0	36.6		36.9	37.5		2.7	4.8		2.4	5.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.0	36.6		36.9	37.5		2.7	4.8		2.4	5.8	
LOS	D	D		D	D		A	A		A	A	
Approach Delay		36.5			37.2			4.7			5.7	
Approach LOS		D			D			A			A	
Queue Length 50th (ft)	3	9		8	14		4	64		2	119	
Queue Length 95th (ft)	13	28		27	39		11	146		6	158	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	165	234		209	225		390	2785		559	3985	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.07		0.08	0.12		0.11	0.31		0.04	0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 78.1			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.2		Intersection LOS: A	
Intersection Capacity Utilization 49.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway

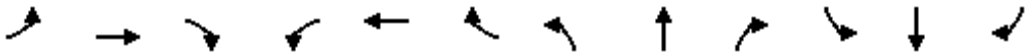




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	15	15	1	25	40	815	15	20	1295	10
Future Volume (veh/h)	5	1	15	15	1	25	40	815	15	20	1295	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1470	1870	1870	1870	1159	1841	1870	1826	1870	1826	1870	1870
Adj Flow Rate, veh/h	5	1	16	16	1	26	42	858	16	21	1363	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	29	2	2	2	50	4	2	5	2	5	2	2
Cap, veh/h	167	8	125	207	3	79	365	2355	44	483	3482	28
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.68	0.68	0.01	0.67	0.67
Sat Flow, veh/h	1087	94	1505	1396	37	951	1781	3484	65	1739	5225	42
Grp Volume(v), veh/h	5	0	17	16	0	27	42	427	447	21	888	486
Grp Sat Flow(s),veh/h/ln	1087	0	1599	1396	0	988	1781	1735	1814	1739	1702	1863
Q Serve(g_s), s	0.3	0.0	0.7	0.7	0.0	1.8	0.5	7.2	7.2	0.3	8.1	8.1
Cycle Q Clear(g_c), s	2.1	0.0	0.7	1.4	0.0	1.8	0.5	7.2	7.2	0.3	8.1	8.1
Prop In Lane	1.00		0.94	1.00		0.96	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	167	0	133	207	0	82	365	1173	1226	483	2269	1241
V/C Ratio(X)	0.03	0.00	0.13	0.08	0.00	0.33	0.12	0.36	0.36	0.04	0.39	0.39
Avail Cap(c_a), veh/h	252	0	257	316	0	159	491	1470	1538	598	2836	1552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	29.1	29.7	0.0	29.6	3.9	4.8	4.8	3.9	5.2	5.2
Incr Delay (d2), s/veh	0.2	0.0	0.9	0.3	0.0	4.9	0.1	0.9	0.8	0.0	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.5	0.5	0.0	0.9	0.2	3.6	3.8	0.1	3.8	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	0.0	30.0	30.1	0.0	34.5	4.0	5.6	5.6	3.9	5.7	6.1
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		22			43			916			1395	
Approach Delay, s/veh		30.2			32.9			5.5			5.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.5	52.3		11.7	5.1	51.6		11.7				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	5.5	58.0		11.0	6.5	57.0		11.0				
Max Q Clear Time (g_c+I1), s	2.3	9.2		4.1	2.5	10.1		3.8				
Green Ext Time (p_c), s	0.0	22.9		0.0	0.0	35.5		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	15	15	1	25	40	815	15	20	1295	10
Future Volume (veh/h)	5	1	15	15	1	25	40	815	15	20	1295	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1470	1870	1870	1870	1159	1841	1870	1826	1870	1826	1870	1870
Adj Flow Rate, veh/h	5	1	16	16	1	26	42	858	16	21	1363	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	29	2	2	2	50	4	2	5	2	5	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	167	8	125	207	3	79	365	2355	44	483	3482	28
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.68	0.68	0.01	0.67	0.67
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.7	0.0	30.0	30.1	0.0	34.5	4.0	5.6	5.6	3.9	5.7	6.1
Ln Grp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		22			43			916			1395	
Approach Delay, s/veh		30.2			32.9			5.5			5.8	
Approach LOS		C			C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	4.0		6.0	1.1	4.0		6.0
Phs Duration (G+Y+Rc), s	4.5	52.3		11.7	5.1	51.6		11.7
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0
Max Green (Gmax), s	5.5	58.0		11.0	6.5	57.0		11.0
Max Allow Headway (MAH), s	3.8	9.1		7.5	3.8	9.1		7.1
Max Q Clear (g_c+I1), s	2.3	9.2		4.1	2.5	10.1		3.8
Green Ext Time (g_e), s	0.0	22.9		0.0	0.0	35.5		0.1
Prob of Phs Call (p_c)	0.33	1.00		0.71	0.55	1.00		0.71
Prob of Max Out (p_x)	1.00	0.29		1.00	0.73	0.67		0.94

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1739			1087	1781			1396

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3484		94		5225		37

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		65		1505		42		951

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

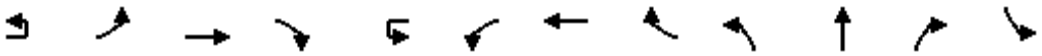
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	21	0	0	5	42	0	0	16
Grp Sat Flow (s), veh/h/ln	1739	0	0	1087	1781	0	0	1396
Q Serve Time (g_s), s	0.3	0.0	0.0	0.3	0.5	0.0	0.0	0.7
Cycle Q Clear Time (g_c), s	0.3	0.0	0.0	2.1	0.5	0.0	0.0	1.4
Perm LT Sat Flow (s_l), veh/h/ln	619	0	0	1087	395	0	0	1396
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	45.6	0.0	0.0	5.7	45.6	0.0	0.0	5.7
Perm LT Serve Time (g_u), s	39.0	0.0	0.0	3.9	37.5	0.0	0.0	5.0
Perm LT Q Serve Time (g_ps), s	0.2	0.0	0.0	0.3	1.0	0.0	0.0	0.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	483	0	0	167	365	0	0	207
V/C Ratio (X)	0.04	0.00	0.00	0.03	0.12	0.00	0.00	0.08
Avail Cap (c_a), veh/h	598	0	0	252	491	0	0	316
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	3.9	0.0	0.0	30.6	3.9	0.0	0.0	29.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	3.9	0.0	0.0	30.7	4.0	0.0	0.0	30.1
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.1	0.0	0.0	0.2	0.2	0.0	0.0	0.5
%ile Storage Ratio (RQ%)	0.02	0.00	0.00	0.03	0.03	0.00	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	427	0	0	0	888	0	0
Grp Sat Flow (s), veh/h/ln	0	1735	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	7.2	0.0	0.0	0.0	8.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.2	0.0	0.0	0.0	8.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	1173	0	0	0	2269	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1470	0	0	0	2836	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.8	0.0	0.0	0.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.6	0.0	0.0	0.0	5.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	1.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	3.6	0.0	0.0	0.0	3.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	0.26	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

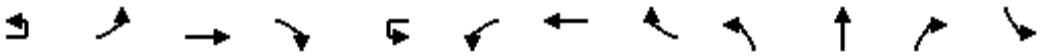
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	447	0	17	0	486	0	27
Grp Sat Flow (s), veh/h/ln	0	1814	0	1599	0	1863	0	988
Q Serve Time (g_s), s	0.0	7.2	0.0	0.7	0.0	8.1	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	7.2	0.0	0.7	0.0	8.1	0.0	1.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.04	0.00	0.94	0.00	0.02	0.00	0.96
Lane Grp Cap (c), veh/h	0	1226	0	133	0	1241	0	82
V/C Ratio (X)	0.00	0.36	0.00	0.13	0.00	0.39	0.00	0.33
Avail Cap (c_a), veh/h	0	1538	0	257	0	1552	0	159
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.8	0.0	29.1	0.0	5.2	0.0	29.6
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.9	0.0	0.9	0.0	4.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.6	0.0	30.0	0.0	6.1	0.0	34.5
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	0.3	0.0	2.1	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.8	0.0	0.5	0.0	4.4	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.07	0.00	0.31	0.00	0.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A



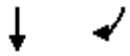
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	25	285	1290	130	15	210	1480	25	195	960	175	80
Future Volume (vph)	25	285	1290	130	15	210	1480	25	195	960	175	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	13	12	12	12	13	12	12	12	12	12	12
Storage Length (ft)		415		0		215		0	140		220	155
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		110				165			170			230
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00							1.00		0.98	1.00
Frt			0.986				0.998				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1829	4970	0	0	1829	5075	0	1770	3725	1583	1770
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1827	4970	0	0	1829	5075	0	1763	3725	1557	1767
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			35		
Link Distance (ft)			601				560			640		
Travel Time (s)			11.7				10.9			12.5		
Confl. Peds. (#/hr)	5								5		2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	26	300	1358	137	16	221	1558	26	205	1011	184	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	326	1495	0	0	237	1584	0	205	1011	184	84
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			52				52			17		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	855	430
Future Volume (vph)	855	430
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Storage Length (ft)		275
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		0.98
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3725	1583
Flt Permitted		
Satd. Flow (perm)	3725	1545
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	500	
Travel Time (s)	9.7	
Confl. Peds. (#/hr)		5
Peak Hour Factor	0.95	0.95
Heavy Vehicles (%)	2%	2%
Adj. Flow (vph)	900	453
Shared Lane Traffic (%)		
Lane Group Flow (vph)	900	453
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	17	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	0.94	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector 2 Extend (s)			0.0				0.0			0.0		
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4		3!	3	8		5	2	3!	1
Permitted Phases											2	
Detector Phase	7	7	4		3	3	8		5	2	3	1
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	3.0	15.0		3.0	15.0	3.0	3.0
Minimum Split (s)	7.5	7.5	21.5		7.5	7.5	21.5		7.5	21.5	7.5	7.5
Total Split (s)	28.0	28.0	57.0		28.0	28.0	57.0		21.0	50.0	28.0	15.0
Total Split (%)	18.7%	18.7%	38.0%		18.7%	18.7%	38.0%		14.0%	33.3%	18.7%	10.0%
Maximum Green (s)	23.5	23.5	50.5		23.5	23.5	50.5		16.5	43.5	23.5	10.5
Yellow Time (s)	3.5	3.5	4.5		3.5	3.5	4.5		3.5	4.5	3.5	3.5
All-Red Time (s)	1.0	1.0	2.0		1.0	1.0	2.0		1.0	2.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5			4.5	6.5		4.5	6.5	4.5	4.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	4.0	7.0		4.0	7.0	4.0	4.0
Recall Mode	None	None	None		None	None	None		None	C-Min	None	None
Walk Time (s)										7.0		
Flash Dont Walk (s)										11.0		
Pedestrian Calls (#/hr)										0		
Act Effct Green (s)		23.5	51.5			22.5	50.5		16.5	43.8	68.3	10.2
Actuated g/C Ratio		0.16	0.34			0.15	0.34		0.11	0.29	0.46	0.07
v/c Ratio		1.14	0.88			0.86	0.93		1.06	0.93	0.26	0.70
Control Delay		151.0	53.3			90.5	58.3		142.0	66.5	23.6	97.4
Queue Delay		0.0	0.0			0.0	0.0		0.0	1.2	0.0	0.0
Total Delay		151.0	53.3			90.5	58.3		142.0	67.7	23.6	97.4
LOS		F	D			F	E		F	E	C	F
Approach Delay			70.8				62.5			72.8		
Approach LOS			E				E			E		
Queue Length 50th (ft)		~371	509			228	547		~218	510	102	82
Queue Length 95th (ft)		#572	574			#369	#619		#387	#640	155	#162
Internal Link Dist (ft)			521				480			560		
Turn Bay Length (ft)		415				215			140		220	155
Base Capacity (vph)		286	1706			286	1708		194	1087	723	123
Starvation Cap Reductn		0	0			0	0		0	17	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		1.14	0.88			0.83	0.93		1.06	0.94	0.25	0.68

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 61.5 (41%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.14	



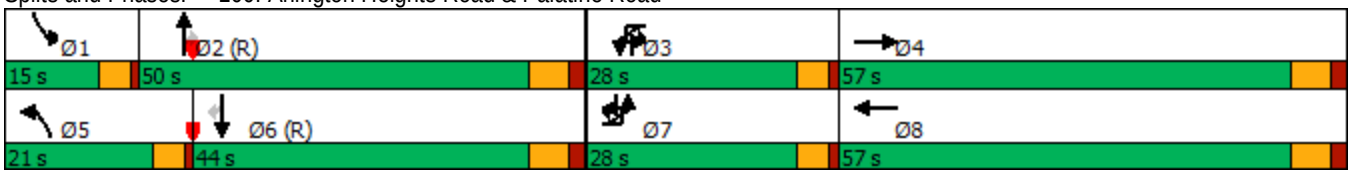
Lane Group	SBT	SBR
Detector 2 Extend (s)	0.0	
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	21.5	7.5
Total Split (s)	44.0	28.0
Total Split (%)	29.3%	18.7%
Maximum Green (s)	37.5	23.5
Yellow Time (s)	4.5	3.5
All-Red Time (s)	2.0	1.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.5	4.5
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	7.0	4.0
Recall Mode	C-Min	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	37.5	63.0
Actuated g/C Ratio	0.25	0.42
v/c Ratio	0.97	0.69
Control Delay	77.7	39.2
Queue Delay	0.0	0.0
Total Delay	77.7	39.2
LOS	E	D
Approach Delay	66.7	
Approach LOS	E	
Queue Length 50th (ft)	462	337
Queue Length 95th (ft)	#600	464
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		275
Base Capacity (vph)	931	654
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.97	0.69

Intersection Summary

Intersection Signal Delay: 68.0	Intersection LOS: E
Intersection Capacity Utilization 101.0%	ICU Level of Service G
Analysis Period (min) 15	

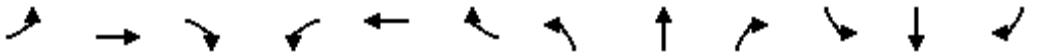
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 100: Arlington Heights Road & Palatine Road

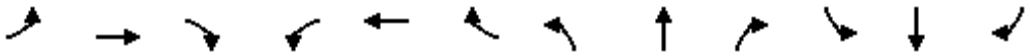


HCM 6th Edition methodology cannot be performed with phasing conflicts.

HCM 6th Edition methodology cannot be performed with phasing conflicts.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	15	20	70	25	160	30	1095	65	100	1035	60
Future Volume (vph)	75	15	20	70	25	160	30	1095	65	100	1035	60
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		0.99			1.00				1.00	
Frt		0.915				0.850		0.992			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1654	0	1770	1961	1583	1770	3511	0	1770	3504	0
Flt Permitted	0.769						0.230			0.148		
Satd. Flow (perm)	1432	1654	0	1847	1961	1583	428	3511	0	276	3504	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			6	6			3					3
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	6%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%
Adj. Flow (vph)	79	16	21	74	26	168	32	1153	68	105	1089	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	37	0	74	26	168	32	1221	0	105	1152	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	10.0	14.0		10.0	14.0	12.0	7.0	54.0		12.0	59.0	
Total Split (%)	11.1%	15.6%		11.1%	15.6%	13.3%	7.8%	60.0%		13.3%	65.6%	
Maximum Green (s)	6.5	8.0		6.5	8.0	8.5	3.5	48.0		8.5	53.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	12.7	8.3		10.2	8.3	13.5	52.5	46.3		61.1	56.5	
Actuated g/C Ratio	0.16	0.10		0.13	0.10	0.17	0.66	0.58		0.77	0.71	
v/c Ratio	0.30	0.21		0.32	0.13	0.63	0.09	0.60		0.28	0.46	
Control Delay	32.0	41.0		35.2	39.2	43.2	5.1	14.0		6.0	9.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	32.0	41.0		35.2	39.2	43.2	5.1	14.0		6.0	9.3	
LOS	C	D		D	D	D	A	B		A	A	
Approach Delay		34.8			40.6			13.7			9.0	
Approach LOS		C			D			B			A	
Queue Length 50th (ft)	36	20		42	14	~111	5	246		17	194	
Queue Length 95th (ft)	75	50		71	39	141	13	316		32	250	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	272	173		236	205	274	343	2208		377	2471	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.29	0.21		0.31	0.13	0.61	0.09	0.55		0.28	0.47	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 79.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 15.0	Intersection LOS: B

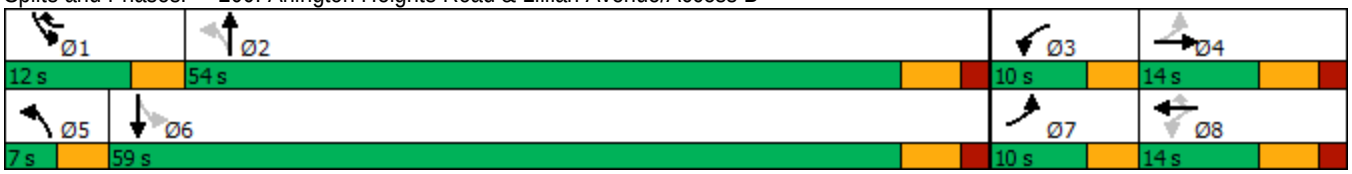
Intersection Capacity Utilization 62.8% ICU Level of Service B

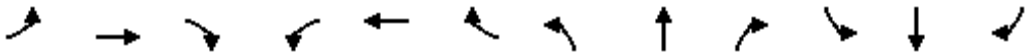
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B





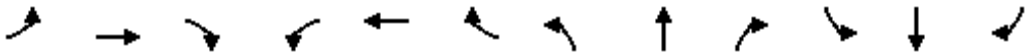
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	15	20	70	25	160	30	1095	65	100	1035	60
Future Volume (veh/h)	75	15	20	70	25	160	30	1095	65	100	1035	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1811	1870	1870	1969	1870	1870	1870	1870	1870	1870	1856
Adj Flow Rate, veh/h	79	16	21	74	26	168	32	1153	68	105	1089	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	6	2	2	2	2	2	2	2	2	2	3
Cap, veh/h	297	75	98	300	205	236	312	1870	110	322	1965	114
Arrive On Green	0.05	0.11	0.11	0.05	0.10	0.10	0.02	0.55	0.55	0.05	0.58	0.58
Sat Flow, veh/h	1781	697	915	1781	1969	1558	1781	3409	201	1781	3414	197
Grp Volume(v), veh/h	79	0	37	74	26	168	32	601	620	105	567	585
Grp Sat Flow(s),veh/h/ln	1781	0	1612	1781	1969	1558	1781	1777	1834	1781	1777	1834
Q Serve(g_s), s	3.0	0.0	1.6	2.8	0.9	7.9	0.6	17.7	17.7	1.9	15.3	15.3
Cycle Q Clear(g_c), s	3.0	0.0	1.6	2.8	0.9	7.9	0.6	17.7	17.7	1.9	15.3	15.3
Prop In Lane	1.00		0.57	1.00		1.00	1.00		0.11	1.00		0.11
Lane Grp Cap(c), veh/h	297	0	173	300	205	236	312	975	1006	322	1023	1056
V/C Ratio(X)	0.27	0.00	0.21	0.25	0.13	0.71	0.10	0.62	0.62	0.33	0.55	0.55
Avail Cap(c_a), veh/h	353	0	173	362	205	236	359	1111	1147	436	1227	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	0.0	31.3	28.7	31.2	31.0	8.5	11.8	11.8	9.3	10.1	10.2
Incr Delay (d2), s/veh	0.5	0.0	1.3	0.4	0.6	11.9	0.1	2.9	2.8	0.6	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.0	1.2	2.2	0.8	6.6	0.4	10.9	11.2	1.2	9.4	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	0.0	32.6	29.1	31.8	42.9	8.7	14.7	14.7	9.9	12.3	12.3
LnGrp LOS	C	A	C	C	C	D	A	B	B	A	B	B
Approach Vol, veh/h		116			268			1253			1257	
Approach Delay, s/veh		30.1			38.0			14.5			12.1	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	48.1	7.3	14.3	5.0	50.2	7.6	14.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	48.0	6.5	8.0	3.5	53.0	6.5	8.0
Max Q Clear Time (g_c+I1), s	3.9	19.7	4.8	3.6	2.6	17.3	5.0	9.9
Green Ext Time (p_c), s	0.1	22.4	0.0	0.1	0.0	25.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	15	20	70	25	160	30	1095	65	100	1035	60
Future Volume (veh/h)	75	15	20	70	25	160	30	1095	65	100	1035	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.97	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1811	1870	1870	1969	1870	1870	1870	1870	1870	1870	1856
Adj Flow Rate, veh/h	79	16	21	74	26	168	32	1153	68	105	1089	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	6	2	2	2	2	2	2	2	2	2	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	297	75	98	300	205	236	312	1870	110	322	1965	114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.11	0.11	0.05	0.10	0.10	0.02	0.55	0.55	0.05	0.58	0.58
Unsig. Movement Delay												
Ln Grp Delay, s/veh	29.0	0.0	32.6	29.1	31.8	42.9	8.7	14.7	14.7	9.9	12.3	12.3
Ln Grp LOS	C	A	C	C	C	D	A	B	B	A	B	B
Approach Vol, veh/h		116			268			1253			1257	
Approach Delay, s/veh		30.1			38.0			14.5			12.1	
Approach LOS		C			D			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	7.1	48.1	7.3	14.3	5.0	50.2	7.6	14.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green (Gmax), s	8.5	48.0	6.5	8.0	3.5	53.0	6.5	8.0
Max Allow Headway (MAH), s	3.8	9.1	3.9	7.6	3.8	9.1	3.9	6.3
Max Q Clear (g_c+I1), s	3.9	19.7	4.8	3.6	2.6	17.3	5.0	9.9
Green Ext Time (g_e), s	0.1	22.4	0.0	0.1	0.0	25.7	0.0	0.0
Prob of Phs Call (p_c)	0.89	1.00	0.79	1.00	0.49	1.00	0.81	1.00
Prob of Max Out (p_x)	0.42	0.79	1.00	1.00	1.00	0.67	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3409		697		3414		1969

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		201		915		197		1558

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	105	0	74	0	32	0	79	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	1.9	0.0	2.8	0.0	0.6	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	1.9	0.0	2.8	0.0	0.6	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	457	0	1350	0	488	0	1174	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	42.7	0.0	8.0	0.0	42.1	0.0	8.0	0.0
Perm LT Serve Time (g_u), s	24.4	0.0	6.6	0.0	28.9	0.0	7.1	0.0
Perm LT Q Serve Time (g_ps), s	5.5	0.0	0.1	0.0	0.9	0.0	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	322	0	300	0	312	0	297	0
V/C Ratio (X)	0.33	0.00	0.25	0.00	0.10	0.00	0.27	0.00
Avail Cap (c_a), veh/h	436	0	362	0	359	0	353	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	9.3	0.0	28.7	0.0	8.5	0.0	28.5	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.4	0.0	0.1	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.9	0.0	29.1	0.0	8.7	0.0	29.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	1.2	0.0	0.2	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.2	0.0	2.2	0.0	0.4	0.0	2.3	0.0
%ile Storage Ratio (RQ%)	0.16	0.00	0.36	0.00	0.19	0.00	0.50	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	601	0	0	0	567	0	26
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1969
Q Serve Time (g_s), s	0.0	17.7	0.0	0.0	0.0	15.3	0.0	0.9
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	0.0	0.0	15.3	0.0	0.9
Lane Grp Cap (c), veh/h	0	975	0	0	0	1023	0	205
V/C Ratio (X)	0.00	0.62	0.00	0.00	0.00	0.55	0.00	0.13
Avail Cap (c_a), veh/h	0	1111	0	0	0	1227	0	205
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	0.0	0.0	10.1	0.0	31.2
Incr Delay (d2), s/veh	0.0	2.9	0.0	0.0	0.0	2.2	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.7	0.0	0.0	0.0	12.3	0.0	31.8
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	0.0	0.0	4.9	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.63	0.00	1.00	0.00	1.70	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.9	0.0	0.0	0.0	9.4	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	1.23	0.00	0.00	0.00	0.47	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	620	0	37	0	585	0	168
Grp Sat Flow (s), veh/h/ln	0	1834	0	1612	0	1834	0	1558
Q Serve Time (g_s), s	0.0	17.7	0.0	1.6	0.0	15.3	0.0	7.9
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	1.6	0.0	15.3	0.0	7.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	0.57	0.00	0.11	0.00	1.00
Lane Grp Cap (c), veh/h	0	1006	0	173	0	1056	0	236
V/C Ratio (X)	0.00	0.62	0.00	0.21	0.00	0.55	0.00	0.71
Avail Cap (c_a), veh/h	0	1147	0	173	0	1267	0	236
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	31.3	0.0	10.2	0.0	31.0
Incr Delay (d2), s/veh	0.0	2.8	0.0	1.3	0.0	2.1	0.0	11.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.7	0.0	32.6	0.0	12.3	0.0	42.9
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	0.6	0.0	5.1	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.6	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.62	0.00	1.80	0.00	1.69	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.2	0.0	1.2	0.0	9.6	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	1.27	0.00	0.12	0.00	0.48	0.00	1.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	15	1175	25	1	1125
Future Volume (vph)	5	15	1175	25	1	1125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3527	0	1770	3725
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	3527	0	1770	3725
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%
Adj. Flow (vph)	5	16	1237	26	1	1184
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	16	1263	0	1	1184
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	15	1175	25	1	1125
Future Vol, veh/h	5	15	1175	25	1	1125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	4	2	2
Mvmt Flow	5	16	1237	26	1	1184

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1844	632	0	0	1263	0
Stage 1	1250	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	66	423	-	-	546	-
Stage 1	233	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	66	423	-	-	546	-
Mov Cap-2 Maneuver	66	-	-	-	-	-
Stage 1	233	-	-	-	-	-
Stage 2	513	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	66	423	546	-
HCM Lane V/C Ratio	-	-	0.08	0.037	0.002	-
HCM Control Delay (s)	-	-	64.2	13.8	11.6	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1410	150	0	1715	0	90
Future Volume (vph)	1410	150	0	1715	0	90
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Ped Bike Factor						
Frt	0.986					0.865
Flt Protected						
Satd. Flow (prot)	4970	0	0	5353	0	1611
Flt Permitted						
Satd. Flow (perm)	4970	0	0	5353	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Confl. Peds. (#/hr)		1				
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1484	158	0	1805	0	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1642	0	0	1805	0	95
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.8%		ICU Level of Service A	
Analysis Period (min) 15			

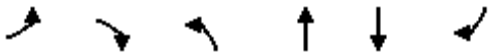
Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1410	150	0	1715	0	90
Future Vol, veh/h	1410	150	0	1715	0	90
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	2	2	2
Mvmt Flow	1484	158	0	1805	0	95

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	822
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	272
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	272
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	25.1
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	272	-	-	-
HCM Lane V/C Ratio	0.348	-	-	-
HCM Control Delay (s)	25.1	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	1.5	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	70	0	1445	1255	120
Future Volume (vph)	0	70	0	1445	1255	120
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.865			0.987	
Flt Protected						
Satd. Flow (prot)	0	1826	0	5353	5019	0
Flt Permitted						
Satd. Flow (perm)	0	1826	0	5353	5019	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	74	0	1521	1321	126
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	74	0	1521	1447	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.5

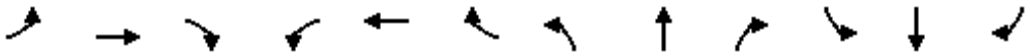
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	70	0	1445	1255	120
Future Vol, veh/h	0	70	0	1445	1255	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	74	0	1521	1321	126

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	724	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	316	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	316	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	316	-	-
HCM Lane V/C Ratio	-	0.233	-	-
HCM Control Delay (s)	-	19.8	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.9	-	-

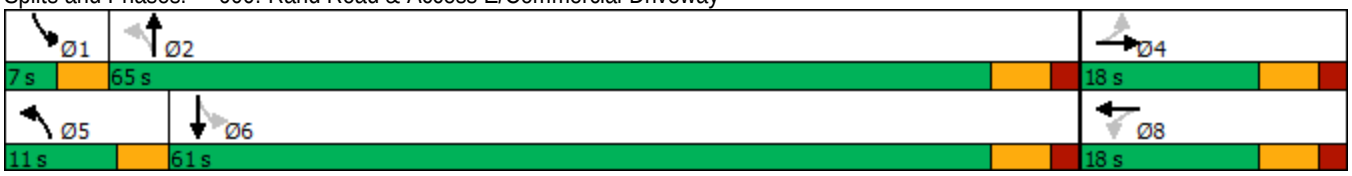
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	5	55	30	20	50	95	1335	35	35	1250	40
Future Volume (vph)	60	5	55	30	20	50	95	1335	35	35	1250	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor		0.99		1.00				1.00		1.00		
Frt		0.862			0.893			0.996			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1585	0	1752	1663	0	1770	3523	0	1770	5060	0
Flt Permitted	0.709			0.716			0.162			0.153		
Satd. Flow (perm)	1321	1585	0	1318	1663	0	302	3523	0	285	5060	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)			1	1					3	3		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	63	5	58	32	21	53	100	1405	37	37	1316	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	63	0	32	74	0	100	1442	0	37	1358	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

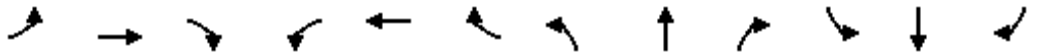


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	18.0	18.0		18.0	18.0		11.0	65.0		7.0	61.0	
Total Split (%)	20.0%	20.0%		20.0%	20.0%		12.2%	72.2%		7.8%	67.8%	
Maximum Green (s)	12.0	12.0		12.0	12.0		7.5	59.0		3.5	55.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	10.7	10.7		10.7	10.7		66.3	61.6		61.2	57.7	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.80	0.74		0.74	0.70	
v/c Ratio	0.37	0.31		0.19	0.35		0.28	0.55		0.14	0.39	
Control Delay	42.5	39.8		37.8	40.5		4.6	8.1		4.0	8.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	42.5	39.8		37.8	40.5		4.6	8.1		4.0	8.1	
LOS	D	D		D	D		A	A		A	A	
Approach Delay		41.2			39.7			7.9			8.0	
Approach LOS		D			D			A			A	
Queue Length 50th (ft)	33	33		16	39		11	218		4	130	
Queue Length 95th (ft)	73	71		44	81		22	285		10	168	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	196	235		195	246		378	2606		274	3453	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.32	0.27		0.16	0.30		0.26	0.55		0.14	0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 82.9			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 10.3		Intersection LOS: B	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway

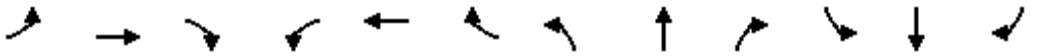




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	5	55	30	20	50	95	1335	35	35	1250	40
Future Volume (veh/h)	60	5	55	30	20	50	95	1335	35	35	1250	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	5	58	32	21	53	100	1405	37	37	1316	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	2	2	2	2	2	2	2	2
Cap, veh/h	189	15	170	196	54	136	373	2362	62	294	3299	105
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.04	0.67	0.67	0.02	0.65	0.65
Sat Flow, veh/h	1323	127	1474	1326	469	1184	1781	3537	93	1781	5083	162
Grp Volume(v), veh/h	63	0	63	32	0	74	100	705	737	37	881	477
Grp Sat Flow(s),veh/h/ln	1323	0	1601	1326	0	1654	1781	1777	1853	1781	1702	1841
Q Serve(g_s), s	3.7	0.0	2.9	1.8	0.0	3.3	1.5	17.3	17.3	0.6	9.7	9.7
Cycle Q Clear(g_c), s	6.9	0.0	2.9	4.7	0.0	3.3	1.5	17.3	17.3	0.6	9.7	9.7
Prop In Lane	1.00		0.92	1.00		0.72	1.00		0.05	1.00		0.09
Lane Grp Cap(c), veh/h	189	0	184	196	0	190	373	1186	1238	294	2210	1195
V/C Ratio(X)	0.33	0.00	0.34	0.16	0.00	0.39	0.27	0.59	0.60	0.13	0.40	0.40
Avail Cap(c_a), veh/h	237	0	243	244	0	251	471	1326	1383	336	2368	1280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	0.0	32.2	34.4	0.0	32.4	4.8	7.2	7.2	6.2	6.6	6.6
Incr Delay (d2), s/veh	2.2	0.0	2.3	0.8	0.0	2.8	0.4	2.2	2.1	0.2	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.0	2.2	1.1	0.0	2.6	0.8	9.5	9.8	0.3	5.2	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	0.0	34.6	35.2	0.0	35.2	5.2	9.4	9.4	6.4	7.1	7.6
LnGrp LOS	D	A	C	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		126			106			1542			1395	
Approach Delay, s/veh		36.2			35.2			9.1			7.2	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	58.8		15.1	6.6	57.3		15.1				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	3.5	59.0		12.0	7.5	55.0		12.0				
Max Q Clear Time (g_c+I1), s	2.6	19.3		8.9	3.5	11.7		6.7				
Green Ext Time (p_c), s	0.0	33.5		0.2	0.1	33.1		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		10.2	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	5	55	30	20	50	95	1335	35	35	1250	40
Future Volume (veh/h)	60	5	55	30	20	50	95	1335	35	35	1250	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	5	58	32	21	53	100	1405	37	37	1316	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	189	15	170	196	54	136	373	2362	62	294	3299	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.04	0.67	0.67	0.02	0.65	0.65
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.8	0.0	34.6	35.2	0.0	35.2	5.2	9.4	9.4	6.4	7.1	7.6
Ln Grp LOS	D	A	C	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		126			106			1542			1395	
Approach Delay, s/veh		36.2			35.2			9.1			7.2	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	4.0		6.0	1.1	4.0		6.0
Phs Duration (G+Y+Rc), s	5.2	58.8		15.1	6.6	57.3		15.1
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0
Max Green (Gmax), s	3.5	59.0		12.0	7.5	55.0		12.0
Max Allow Headway (MAH), s	3.8	9.1		6.8	3.8	9.1		7.1
Max Q Clear (g_c+I1), s	2.6	19.3		8.9	3.5	11.7		6.7
Green Ext Time (g_e), s	0.0	33.5		0.2	0.1	33.1		0.3
Prob of Phs Call (p_c)	0.56	1.00		0.99	0.89	1.00		0.99
Prob of Max Out (p_x)	1.00	0.82		1.00	0.75	0.69		1.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1323	1781			1326

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3537		127		5083		469

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		93		1474		162		1184

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

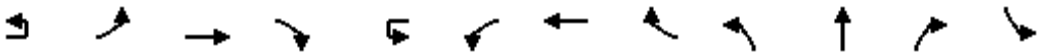
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	37	0	0	63	100	0	0	32
Grp Sat Flow (s), veh/h/ln	1781	0	0	1323	1781	0	0	1326
Q Serve Time (g_s), s	0.6	0.0	0.0	3.7	1.5	0.0	0.0	1.8
Cycle Q Clear Time (g_c), s	0.6	0.0	0.0	6.9	1.5	0.0	0.0	4.7
Perm LT Sat Flow (s_l), veh/h/ln	370	0	0	1323	401	0	0	1326
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	51.3	0.0	0.0	9.1	51.3	0.0	0.0	9.1
Perm LT Serve Time (g_u), s	35.5	0.0	0.0	5.8	41.6	0.0	0.0	6.2
Perm LT Q Serve Time (g_ps), s	1.8	0.0	0.0	3.7	3.2	0.0	0.0	1.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	294	0	0	189	373	0	0	196
V/C Ratio (X)	0.13	0.00	0.00	0.33	0.27	0.00	0.00	0.16
Avail Cap (c_a), veh/h	336	0	0	237	471	0	0	244
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	6.2	0.0	0.0	35.6	4.8	0.0	0.0	34.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	2.2	0.4	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.4	0.0	0.0	37.8	5.2	0.0	0.0	35.2
1st-Term Q (Q1), veh/ln	0.2	0.0	0.0	1.2	0.4	0.0	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.3	0.0	0.0	2.3	0.8	0.0	0.0	1.1
%ile Storage Ratio (RQ%)	0.05	0.00	0.00	0.37	0.10	0.00	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	705	0	0	0	881	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	17.3	0.0	0.0	0.0	9.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.3	0.0	0.0	0.0	9.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1186	0	0	0	2210	0	0
V/C Ratio (X)	0.00	0.59	0.00	0.00	0.00	0.40	0.00	0.00
Avail Cap (c_a), veh/h	0	1326	0	0	0	2368	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.2	0.0	0.0	0.0	6.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.2	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.4	0.0	0.0	0.0	7.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.9	0.0	0.0	0.0	2.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.69	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	9.5	0.0	0.0	0.0	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.36	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

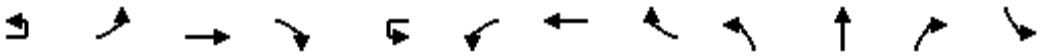
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	737	0	63	0	477	0	74
Grp Sat Flow (s), veh/h/ln	0	1853	0	1601	0	1841	0	1654
Q Serve Time (g_s), s	0.0	17.3	0.0	2.9	0.0	9.7	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	17.3	0.0	2.9	0.0	9.7	0.0	3.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.05	0.00	0.92	0.00	0.09	0.00	0.72
Lane Grp Cap (c), veh/h	0	1238	0	184	0	1195	0	190
V/C Ratio (X)	0.00	0.60	0.00	0.34	0.00	0.40	0.00	0.39
Avail Cap (c_a), veh/h	0	1383	0	243	0	1280	0	251
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.2	0.0	32.2	0.0	6.6	0.0	32.4
Incr Delay (d2), s/veh	0.0	2.1	0.0	2.3	0.0	1.0	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.4	0.0	34.6	0.0	7.6	0.0	35.2
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	1.1	0.0	3.0	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.1	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.68	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.8	0.0	2.2	0.0	5.9	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	0.29	0.00	0.41	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	20	250	1050	140	5	180	1030	30	180	770	175	85
Future Volume (vph)	20	250	1050	140	5	180	1030	30	180	770	175	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	13	12	12	12	13	12	12	12	12	12	12
Storage Length (ft)		415		0		215		0	140		220	155
Storage Lanes		1		0		1		0	1		1	1
Taper Length (ft)		110				165			170			230
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	1.00	0.91	0.91	1.00	0.95	1.00	1.00
Ped Bike Factor		1.00	1.00			1.00	1.00		0.99		0.98	1.00
Frt			0.982				0.996				0.850	
Flt Protected		0.950				0.950			0.950			0.950
Satd. Flow (prot)	0	1829	4986	0	0	1829	5063	0	1770	3725	1583	1770
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1824	4986	0	0	1827	5063	0	1760	3725	1558	1767
Right Turn on Red				No				No			No	
Satd. Flow (RTOR)												
Link Speed (mph)			35				35			35		
Link Distance (ft)			601				560			640		
Travel Time (s)			11.7				10.9			12.5		
Confl. Peds. (#/hr)	8	1		1	2	1		1	8		2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	263	1105	147	5	189	1084	32	189	811	184	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	1252	0	0	194	1116	0	189	811	184	89
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			52				52			17		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	0.96	1.00	1.00	1.00	0.96	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1	2	1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left	Thru	Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20	100	20	20
Trailing Detector (ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0	0	0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20	6	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94		
Detector 2 Size(ft)			6				6			6		
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0			0.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	765	355
Future Volume (vph)	765	355
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Storage Length (ft)		275
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		0.97
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3725	1583
Flt Permitted		
Satd. Flow (perm)	3725	1540
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	500	
Travel Time (s)	9.7	
Confl. Peds. (#/hr)		8
Peak Hour Factor	0.95	0.95
Adj. Flow (vph)	805	374
Shared Lane Traffic (%)		
Lane Group Flow (vph)	805	374
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	17	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	0.94	1.00
Turning Speed (mph)		9
Number of Detectors	2	1
Detector Template	Thru	Right
Leading Detector (ft)	100	20
Trailing Detector (ft)	0	0
Detector 1 Position(ft)	0	0
Detector 1 Size(ft)	6	20
Detector 1 Type	Cl+Ex	Cl+Ex
Detector 1 Channel		
Detector 1 Extend (s)	0.0	0.0
Detector 1 Queue (s)	0.0	0.0
Detector 1 Delay (s)	0.0	0.0
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Prot	NA	pm+ov	Prot
Protected Phases	7!	7	4		3!	3	8		5	2	3!	1
Permitted Phases											2	
Detector Phase	7	7	4		3	3	8		5	2	3	1
Switch Phase												
Minimum Initial (s)	3.0	3.0	15.0		3.0	3.0	15.0		3.0	15.0	3.0	3.0
Minimum Split (s)	7.5	7.5	21.5		7.5	7.5	21.5		7.5	21.5	7.5	7.5
Total Split (s)	34.0	34.0	44.0		22.0	22.0	32.0		19.0	38.0	22.0	16.0
Total Split (%)	28.3%	28.3%	36.7%		18.3%	18.3%	26.7%		15.8%	31.7%	18.3%	13.3%
Maximum Green (s)	29.5	29.5	37.5		17.5	17.5	25.5		14.5	31.5	17.5	11.5
Yellow Time (s)	3.5	3.5	4.5		3.5	3.5	4.5		3.5	4.5	3.5	3.5
All-Red Time (s)	1.0	1.0	2.0		1.0	1.0	2.0		1.0	2.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	6.5			4.5	6.5		4.5	6.5	4.5	4.5
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	7.0		4.0	4.0	7.0		4.0	7.0	4.0	4.0
Recall Mode	None	None	None		None	None	None		None	C-Min	None	None
Walk Time (s)										7.0		
Flash Dont Walk (s)										11.0		
Pedestrian Calls (#/hr)										0		
Act Effct Green (s)		24.4	38.6			16.4	30.6		14.5	32.4	50.8	10.6
Actuated g/C Ratio		0.20	0.32			0.14	0.26		0.12	0.27	0.42	0.09
v/c Ratio		0.76	0.78			0.78	0.87		0.89	0.81	0.28	0.57
Control Delay		58.4	41.3			70.9	51.6		90.6	48.4	21.2	67.0
Queue Delay		0.0	0.0			0.0	0.0		0.0	0.0	0.0	0.0
Total Delay		58.4	41.3			70.9	51.6		90.6	48.4	21.2	67.0
LOS		E	D			E	D		F	D	C	E
Approach Delay			44.5				54.5			50.9		
Approach LOS			D				D			D		
Queue Length 50th (ft)		207	325			145	307		146	312	85	67
Queue Length 95th (ft)		293	383			#248	#435		#282	390	135	123
Internal Link Dist (ft)			521				480			560		
Turn Bay Length (ft)		415				215			140		220	155
Base Capacity (vph)		449	1602			266	1290		213	1005	677	169
Starvation Cap Reductn		0	0			0	0		0	0	0	0
Spillback Cap Reductn		0	0			0	0		0	0	0	0
Storage Cap Reductn		0	0			0	0		0	0	0	0
Reduced v/c Ratio		0.63	0.78			0.73	0.87		0.89	0.81	0.27	0.53

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 21.6 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 49.6		Intersection LOS: D	

Lane Group	SBT	SBR
Turn Type	NA	pm+ov
Protected Phases	6	7!
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	21.5	7.5
Total Split (s)	35.0	34.0
Total Split (%)	29.2%	28.3%
Maximum Green (s)	28.5	29.5
Yellow Time (s)	4.5	3.5
All-Red Time (s)	2.0	1.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.5	4.5
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	7.0	4.0
Recall Mode	C-Min	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	28.5	54.9
Actuated g/C Ratio	0.24	0.46
v/c Ratio	0.91	0.52
Control Delay	59.9	22.7
Queue Delay	0.0	0.0
Total Delay	59.9	22.7
LOS	E	C
Approach Delay	49.5	
Approach LOS	D	
Queue Length 50th (ft)	321	182
Queue Length 95th (ft)	#434	246
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		275
Base Capacity (vph)	884	780
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.91	0.48

Intersection Summary

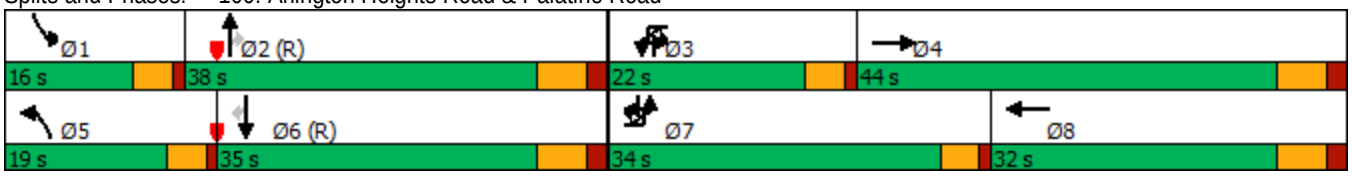
Intersection Capacity Utilization 85.0% ICU Level of Service E

Analysis Period (min) 15

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

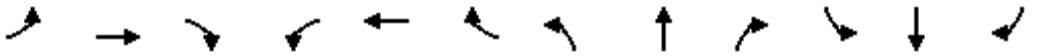
! Phase conflict between lane groups.

Splits and Phases: 100: Arlington Heights Road & Palatine Road

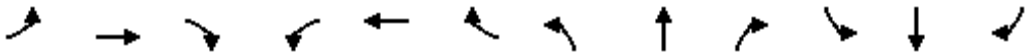


HCM 6th Edition methodology cannot be performed with phasing conflicts.

HCM 6th Edition methodology cannot be performed with phasing conflicts.



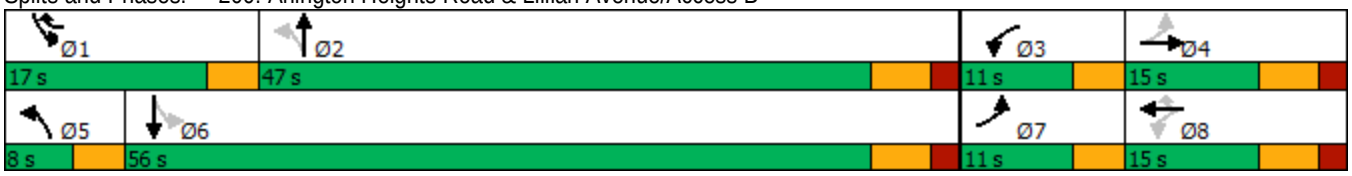
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	15	20	70	20	165	30	880	75	90	935	60
Future Volume (vph)	80	15	20	70	20	165	30	880	75	90	935	60
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	155		155	50		0	185		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	90			50			90			170		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99		0.99			1.00				1.00	
Frt		0.915				0.850		0.988			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1686	0	1770	1961	1583	1770	3497	0	1770	3502	0
Flt Permitted	0.714						0.272			0.194		
Satd. Flow (perm)	1330	1686	0	1849	1961	1583	506	3497	0	361	3502	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		319			399			294			640	
Travel Time (s)		8.7			10.9			5.7			12.5	
Confl. Peds. (#/hr)			5	5			2					2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	16	21	74	21	174	32	926	79	95	984	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	37	0	74	21	174	32	1005	0	95	1047	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			15			16			16	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	

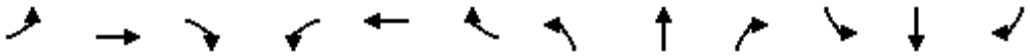


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	6.5	6.5	21.0		6.5	21.0	
Total Split (s)	11.0	15.0		11.0	15.0	17.0	8.0	47.0		17.0	56.0	
Total Split (%)	12.2%	16.7%		12.2%	16.7%	18.9%	8.9%	52.2%		18.9%	62.2%	
Maximum Green (s)	7.5	9.0		7.5	9.0	13.5	4.5	41.0		13.5	50.0	
Yellow Time (s)	3.5	4.0		3.5	4.0	3.5	3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0	0.0	0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	3.5	3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	3.0	3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0						7.0			7.0	
Flash Dont Walk (s)		11.0						11.0			11.0	
Pedestrian Calls (#/hr)		0						0			0	
Act Effct Green (s)	13.9	9.2		11.3	9.0	15.4	47.0	39.4		56.3	51.6	
Actuated g/C Ratio	0.18	0.12		0.15	0.12	0.20	0.62	0.52		0.74	0.68	
v/c Ratio	0.28	0.18		0.28	0.09	0.54	0.08	0.55		0.21	0.44	
Control Delay	29.4	39.0		32.2	37.8	35.8	5.7	15.4		5.8	10.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	29.4	39.0		32.2	37.8	35.8	5.7	15.4		5.8	10.4	
LOS	C	D		C	D	D	A	B		A	B	
Approach Delay		32.4			35.0			15.1			10.0	
Approach LOS		C			C			B			A	
Queue Length 50th (ft)	38	20		41	11	96	5	221		16	185	
Queue Length 95th (ft)	76	50		68	33	140	14	262		32	240	
Internal Link Dist (ft)		239			319			214			560	
Turn Bay Length (ft)	120			155		155	50			185		
Base Capacity (vph)	316	215		283	251	409	394	2117		539	2414	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.27	0.17		0.26	0.08	0.43	0.08	0.47		0.18	0.43	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 75.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 200: Arlington Heights Road & Lillian Avenue/Access B





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	15	20	70	20	165	30	880	75	90	935	60
Future Volume (veh/h)	80	15	20	70	20	165	30	880	75	90	935	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	16	21	74	21	174	32	926	79	95	984	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	96	126	340	246	269	321	1684	144	361	1814	116
Arrive On Green	0.06	0.13	0.13	0.05	0.13	0.13	0.02	0.51	0.51	0.05	0.53	0.53
Sat Flow, veh/h	1781	729	956	1781	1969	1566	1781	3313	283	1781	3391	217
Grp Volume(v), veh/h	84	0	37	74	21	174	32	497	508	95	516	531
Grp Sat Flow(s),veh/h/ln	1781	0	1685	1781	1969	1566	1781	1777	1819	1781	1777	1831
Q Serve(g_s), s	2.9	0.0	1.4	2.6	0.7	7.4	0.6	13.7	13.7	1.8	13.7	13.7
Cycle Q Clear(g_c), s	2.9	0.0	1.4	2.6	0.7	7.4	0.6	13.7	13.7	1.8	13.7	13.7
Prop In Lane	1.00		0.57	1.00		1.00	1.00		0.16	1.00		0.12
Lane Grp Cap(c), veh/h	336	0	222	340	246	269	321	903	925	361	950	979
V/C Ratio(X)	0.25	0.00	0.17	0.22	0.09	0.65	0.10	0.55	0.55	0.26	0.54	0.54
Avail Cap(c_a), veh/h	422	0	222	438	246	269	397	1013	1037	613	1235	1273
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	0.0	27.7	25.6	27.8	27.8	9.2	12.1	12.1	9.0	11.0	11.0
Incr Delay (d2), s/veh	0.4	0.0	0.7	0.3	0.3	7.2	0.1	2.4	2.3	0.4	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.0	1.1	2.0	0.6	5.9	0.4	9.0	9.1	1.1	8.8	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	28.5	25.9	28.1	35.0	9.3	14.5	14.4	9.4	13.2	13.1
LnGrp LOS	C	A	C	C	C	D	A	B	B	A	B	B
Approach Vol, veh/h		121			269			1037			1142	
Approach Delay, s/veh		26.5			32.0			14.3			12.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	42.6	7.1	15.5	4.9	44.5	7.5	15.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	13.5	41.0	7.5	9.0	4.5	50.0	7.5	9.0
Max Q Clear Time (g_c+I1), s	3.8	15.7	4.6	3.4	2.6	15.7	4.9	9.4
Green Ext Time (p_c), s	0.1	17.6	0.0	0.1	0.0	22.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	15	20	70	20	165	30	880	75	90	935	60
Future Volume (veh/h)	80	15	20	70	20	165	30	880	75	90	935	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	16	21	74	21	174	32	926	79	95	984	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	336	96	126	340	246	269	321	1684	144	361	1814	116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.13	0.13	0.05	0.13	0.13	0.02	0.51	0.51	0.05	0.53	0.53
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.7	0.0	28.5	25.9	28.1	35.0	9.3	14.5	14.4	9.4	13.2	13.1
Ln Grp LOS	C	A	C	C	C	D	A	B	B	A	B	B
Approach Vol, veh/h		121			269			1037			1142	
Approach Delay, s/veh		26.5			32.0			14.3			12.8	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	6.8	42.6	7.1	15.5	4.9	44.5	7.5	15.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green (Gmax), s	13.5	41.0	7.5	9.0	4.5	50.0	7.5	9.0
Max Allow Headway (MAH), s	3.8	9.1	3.9	7.6	3.8	9.1	3.9	6.3
Max Q Clear (g_c+I1), s	3.8	15.7	4.6	3.4	2.6	15.7	4.9	9.4
Green Ext Time (g_e), s	0.1	17.6	0.0	0.1	0.0	22.8	0.0	0.0
Prob of Phs Call (p_c)	0.85	1.00	0.77	1.00	0.47	1.00	0.81	1.00
Prob of Max Out (p_x)	0.00	0.70	1.00	1.00	1.00	0.60	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3313		729		3391		1969

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		283		956		217		1566

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	95	0	74	0	32	0	84	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	1.8	0.0	2.6	0.0	0.6	0.0	2.9	0.0
Cycle Q Clear Time (g_c), s	1.8	0.0	2.6	0.0	0.6	0.0	2.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	561	0	1356	0	539	0	1177	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	37.0	0.0	9.0	0.0	36.6	0.0	9.0	0.0
Perm LT Serve Time (g_u), s	22.8	0.0	8.1	0.0	24.8	0.0	8.3	0.0
Perm LT Q Serve Time (g_ps), s	2.9	0.0	0.1	0.0	0.7	0.0	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	361	0	340	0	321	0	336	0
V/C Ratio (X)	0.26	0.00	0.22	0.00	0.10	0.00	0.25	0.00
Avail Cap (c_a), veh/h	613	0	438	0	397	0	422	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	9.0	0.0	25.6	0.0	9.2	0.0	25.3	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.3	0.0	0.1	0.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.4	0.0	25.9	0.0	9.3	0.0	25.7	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	1.1	0.0	0.2	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.1	0.0	2.0	0.0	0.4	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	0.15	0.00	0.32	0.00	0.20	0.00	0.47	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	497	0	0	0	516	0	21
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1969
Q Serve Time (g_s), s	0.0	13.7	0.0	0.0	0.0	13.7	0.0	0.7
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	0.0	0.0	13.7	0.0	0.7
Lane Grp Cap (c), veh/h	0	903	0	0	0	950	0	246
V/C Ratio (X)	0.00	0.55	0.00	0.00	0.00	0.54	0.00	0.09
Avail Cap (c_a), veh/h	0	1013	0	0	0	1235	0	246
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.1	0.0	0.0	0.0	11.0	0.0	27.8
Incr Delay (d2), s/veh	0.0	2.4	0.0	0.0	0.0	2.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.5	0.0	0.0	0.0	13.2	0.0	28.1
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	0.0	0.0	4.5	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.00	0.00	1.73	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.0	0.0	0.0	0.0	8.8	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	1.01	0.00	0.00	0.00	0.43	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	508	0	37	0	531	0	174
Grp Sat Flow (s), veh/h/ln	0	1819	0	1685	0	1831	0	1566
Q Serve Time (g_s), s	0.0	13.7	0.0	1.4	0.0	13.7	0.0	7.4
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	1.4	0.0	13.7	0.0	7.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Prop RT Outside Lane (P_R)	0.00	0.16	0.00	0.57	0.00	0.12	0.00	1.00
Lane Grp Cap (c), veh/h	0	925	0	222	0	979	0	269
V/C Ratio (X)	0.00	0.55	0.00	0.17	0.00	0.54	0.00	0.65
Avail Cap (c_a), veh/h	0	1037	0	222	0	1273	0	269
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.1	0.0	27.7	0.0	11.0	0.0	27.8
Incr Delay (d2), s/veh	0.0	2.3	0.0	0.7	0.0	2.2	0.0	7.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.4	0.0	28.5	0.0	13.1	0.0	35.0
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	0.6	0.0	4.6	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.80	0.00	1.72	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.1	0.0	1.1	0.0	9.0	0.0	5.9
%ile Storage Ratio (RQ%)	0.00	1.03	0.00	0.10	0.00	0.44	0.00	0.96
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	15	970	15	5	1020
Future Volume (vph)	5	15	970	15	5	1020
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	2000
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				90	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor						
Frt		0.850	0.998			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	3532	0	1770	3725
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	3532	0	1770	3725
Link Speed (mph)	25		35			35
Link Distance (ft)	234		305			294
Travel Time (s)	6.4		5.9			5.7
Confl. Peds. (#/hr)				4	4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	16	1021	16	5	1074
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	16	1037	0	5	1074
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		16			16
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	0.94
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	15	970	15	5	1020
Future Vol, veh/h	5	15	970	15	5	1020
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	16	1021	16	5	1074

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1580	523	0	0	1041	0
Stage 1	1033	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	100	499	-	-	664	-
Stage 1	304	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	99	497	-	-	661	-
Mov Cap-2 Maneuver	99	-	-	-	-	-
Stage 1	303	-	-	-	-	-
Stage 2	540	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.2	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	99	497	661	-
HCM Lane V/C Ratio	-	-	0.053	0.032	0.008	-
HCM Control Delay (s)	-	-	43.4	12.5	10.5	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1180	135	0	1240	0	85
Future Volume (vph)	1180	135	0	1240	0	85
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.985					0.865
Flt Protected						
Satd. Flow (prot)	5009	0	0	5353	0	1611
Flt Permitted						
Satd. Flow (perm)	5009	0	0	5353	0	1611
Link Speed (mph)	35			35	35	
Link Distance (ft)	560			345	267	
Travel Time (s)	10.9			6.7	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1242	142	0	1305	0	89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1384	0	0	1305	0	89
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	52			52	35	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.94	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

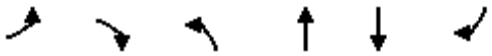
Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1180	135	0	1240	0	85
Future Vol, veh/h	1180	135	0	1240	0	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1242	142	0	1305	0	89

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	692
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	331
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	331
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	331	-	-	-
HCM Lane V/C Ratio	0.27	-	-	-
HCM Control Delay (s)	19.9	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	65	0	1295	1305	150
Future Volume (vph)	0	65	0	1295	1305	150
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	16	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.865			0.985	
Flt Protected						
Satd. Flow (prot)	0	1826	0	5353	5009	0
Flt Permitted						
Satd. Flow (perm)	0	1826	0	5353	5009	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	156			454	266	
Travel Time (s)	4.3			8.8	5.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	68	0	1363	1374	158
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	68	0	1363	1532	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	60			6	6	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.85	0.85	1.00	0.94	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.5

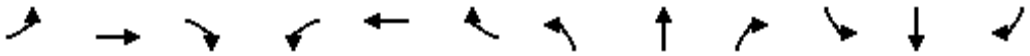
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	65	0	1295	1305	150
Future Vol, veh/h	0	65	0	1295	1305	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	68	0	1363	1374	158

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	766	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	296	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	296	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	296	-	-
HCM Lane V/C Ratio	-	0.231	-	-
HCM Control Delay (s)	-	20.8	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.9	-	-

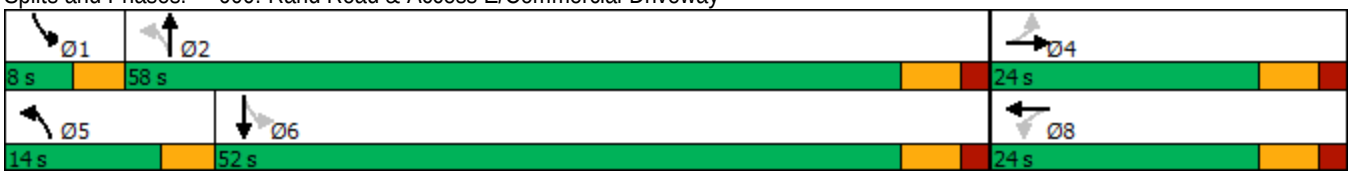
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	10	70	25	10	65	110	1160	35	50	1285	35
Future Volume (vph)	70	10	70	25	10	65	110	1160	35	50	1285	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	120		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	0			0			130			115		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor							1.00	1.00		1.00	1.00	
Frt		0.869			0.871			0.996			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1619	0	1736	1622	0	1770	3523	0	1770	5062	0
Flt Permitted	0.706			0.702			0.151			0.191		
Satd. Flow (perm)	1315	1619	0	1282	1622	0	281	3523	0	356	5062	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		256			169			655			454	
Travel Time (s)		7.0			4.6			12.8			8.8	
Confl. Peds. (#/hr)							2		1	1		2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	74	11	74	26	11	68	116	1221	37	53	1353	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	74	85	0	26	79	0	116	1258	0	53	1390	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

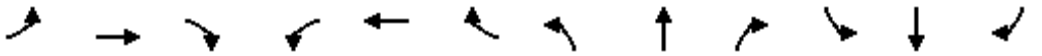


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		6.5	21.0		6.5	21.0	
Total Split (s)	24.0	24.0		24.0	24.0		14.0	58.0		8.0	52.0	
Total Split (%)	26.7%	26.7%		26.7%	26.7%		15.6%	64.4%		8.9%	57.8%	
Maximum Green (s)	18.0	18.0		18.0	18.0		10.5	52.0		4.5	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		3.5	6.0		3.5	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	7.0		3.0	7.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)	12.0	12.0		12.0	12.0		60.3	55.4		55.7	51.5	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.77	0.71		0.71	0.66	
v/c Ratio	0.37	0.34		0.13	0.32		0.33	0.51		0.16	0.42	
Control Delay	37.7	36.0		32.4	35.5		6.0	9.3		4.8	10.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	37.7	36.0		32.4	35.5		6.0	9.3		4.8	10.0	
LOS	D	D		C	D		A	A		A	A	
Approach Delay		36.8			34.7			9.0			9.8	
Approach LOS		D			C			A			A	
Queue Length 50th (ft)	36	41		12	38		13	185		6	138	
Queue Length 95th (ft)	76	84		35	79		33	281		17	208	
Internal Link Dist (ft)		176			89			575			374	
Turn Bay Length (ft)	160			120			200			150		
Base Capacity (vph)	311	383		303	383		422	2448		336	3325	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.22		0.09	0.21		0.27	0.51		0.16	0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 78.4			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 11.7		Intersection LOS: B	
Intersection Capacity Utilization 60.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 600: Rand Road & Access E/Commercial Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	10	70	25	10	65	110	1160	35	50	1285	35
Future Volume (veh/h)	70	10	70	25	10	65	110	1160	35	50	1285	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	11	74	26	11	68	116	1221	37	53	1353	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	4	2	2	2	2	2	2	2	2
Cap, veh/h	223	29	192	216	31	190	364	2177	66	333	3049	83
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.05	0.62	0.62	0.03	0.60	0.60
Sat Flow, veh/h	1320	209	1408	1292	225	1394	1781	3521	107	1781	5109	140
Grp Volume(v), veh/h	74	0	85	26	0	79	116	616	642	53	901	489
Grp Sat Flow(s),veh/h/ln	1320	0	1617	1292	0	1619	1781	1777	1851	1781	1702	1845
Q Serve(g_s), s	3.8	0.0	3.4	1.3	0.0	3.2	1.8	14.4	14.4	0.8	10.3	10.3
Cycle Q Clear(g_c), s	7.0	0.0	3.4	4.7	0.0	3.2	1.8	14.4	14.4	0.8	10.3	10.3
Prop In Lane	1.00		0.87	1.00		0.86	1.00		0.06	1.00		0.08
Lane Grp Cap(c), veh/h	223	0	221	216	0	221	364	1099	1145	333	2031	1101
V/C Ratio(X)	0.33	0.00	0.39	0.12	0.00	0.36	0.32	0.56	0.56	0.16	0.44	0.44
Avail Cap(c_a), veh/h	377	0	409	366	0	410	540	1298	1352	397	2200	1193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	0.0	28.0	30.2	0.0	27.9	5.8	7.9	7.9	6.5	7.9	7.9
Incr Delay (d2), s/veh	1.8	0.0	2.3	0.5	0.0	2.1	0.5	2.1	2.0	0.2	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	0.0	2.6	0.8	0.0	2.4	0.9	8.4	8.6	0.5	5.7	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	30.4	30.7	0.0	30.0	6.3	10.0	9.9	6.7	8.6	9.2
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		159			105			1374			1443	
Approach Delay, s/veh		31.5			30.2			9.7			8.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	50.0		15.7	7.0	48.5		15.7				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	4.5	52.0		18.0	10.5	46.0		18.0				
Max Q Clear Time (g_c+I1), s	2.8	16.4		9.0	3.8	12.3		6.7				
Green Ext Time (p_c), s	0.0	27.6		0.8	0.1	27.4		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		11.0	
HCM 6th LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	10	70	25	10	65	110	1160	35	50	1285	35
Future Volume (veh/h)	70	10	70	25	10	65	110	1160	35	50	1285	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	11	74	26	11	68	116	1221	37	53	1353	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	4	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	223	29	192	216	31	190	364	2177	66	333	3049	83
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.05	0.62	0.62	0.03	0.60	0.60
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.9	0.0	30.4	30.7	0.0	30.0	6.3	10.0	9.9	6.7	8.6	9.2
Ln Grp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		159			105			1374			1443	
Approach Delay, s/veh		31.5			30.2			9.7			8.7	
Approach LOS		C			C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	4.0		6.0	1.1	4.0		6.0
Phs Duration (G+Y+Rc), s	5.4	50.0		15.7	7.0	48.5		15.7
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0
Max Green (Gmax), s	4.5	52.0		18.0	10.5	46.0		18.0
Max Allow Headway (MAH), s	3.8	9.1		6.9	3.8	9.1		7.3
Max Q Clear (g_c+I1), s	2.8	16.4		9.0	3.8	12.3		6.7
Green Ext Time (g_e), s	0.0	27.6		0.8	0.1	27.4		0.6
Prob of Phs Call (p_c)	0.65	1.00		0.99	0.90	1.00		0.99
Prob of Max Out (p_x)	1.00	0.74		0.44	0.05	0.78		0.17

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1320	1781			1292

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3521		209		5109		225

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		107		1408		140		1394

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	53	0	0	74	116	0	0	26
Grp Sat Flow (s), veh/h/ln	1781	0	0	1320	1781	0	0	1292
Q Serve Time (g_s), s	0.8	0.0	0.0	3.8	1.8	0.0	0.0	1.3
Cycle Q Clear Time (g_c), s	0.8	0.0	0.0	7.0	1.8	0.0	0.0	4.7
Perm LT Sat Flow (s_l), veh/h/ln	441	0	0	1320	389	0	0	1292
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	42.5	0.0	0.0	9.7	42.5	0.0	0.0	9.7
Perm LT Serve Time (g_u), s	29.6	0.0	0.0	6.6	32.1	0.0	0.0	6.3
Perm LT Q Serve Time (g_ps), s	1.8	0.0	0.0	3.8	4.4	0.0	0.0	1.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	333	0	0	223	364	0	0	216
V/C Ratio (X)	0.16	0.00	0.00	0.33	0.32	0.00	0.00	0.12
Avail Cap (c_a), veh/h	397	0	0	377	540	0	0	366
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	6.5	0.0	0.0	31.1	5.8	0.0	0.0	30.2
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.8	0.5	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.7	0.0	0.0	32.9	6.3	0.0	0.0	30.7
1st-Term Q (Q1), veh/ln	0.2	0.0	0.0	1.2	0.5	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.5	0.0	0.0	2.4	0.9	0.0	0.0	0.8
%ile Storage Ratio (RQ%)	0.08	0.00	0.00	0.38	0.12	0.00	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	616	0	0	0	901	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	14.4	0.0	0.0	0.0	10.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.4	0.0	0.0	0.0	10.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1099	0	0	0	2031	0	0
V/C Ratio (X)	0.00	0.56	0.00	0.00	0.00	0.44	0.00	0.00
Avail Cap (c_a), veh/h	0	1298	0	0	0	2200	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	0.0	0.0	7.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.0	0.0	0.0	0.0	8.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	0.0	0.0	3.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.4	0.0	0.0	0.0	5.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.00	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	642	0	85	0	489	0	79
Grp Sat Flow (s), veh/h/ln	0	1851	0	1617	0	1845	0	1619
Q Serve Time (g_s), s	0.0	14.4	0.0	3.4	0.0	10.3	0.0	3.2
Cycle Q Clear Time (g_c), s	0.0	14.4	0.0	3.4	0.0	10.3	0.0	3.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.06	0.00	0.87	0.00	0.08	0.00	0.86
Lane Grp Cap (c), veh/h	0	1145	0	221	0	1101	0	221
V/C Ratio (X)	0.00	0.56	0.00	0.39	0.00	0.44	0.00	0.36
Avail Cap (c_a), veh/h	0	1352	0	409	0	1193	0	410
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	28.0	0.0	7.9	0.0	27.9
Incr Delay (d2), s/veh	0.0	2.0	0.0	2.3	0.0	1.3	0.0	2.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.9	0.0	30.4	0.0	9.2	0.0	30.0
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	1.3	0.0	3.2	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.73	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.6	0.0	2.6	0.0	6.6	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	0.34	0.00	0.45	0.00	0.56
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Kimley»Horn

4201 Winfield Road | Suite 600 | Warrenville, IL 60555
630-487-5550

MEMORANDUM

To: Terron Wright – The Architects Partnership, Ltd

From: Rory Fancler, AICP, PTP – Kimley-Horn
Tom Szafranski, P.E. – Kimley-Horn

Date: November 2, 2023

RE: Town & Country Center Outlot Redevelopment – Parking Review
Arlington Heights, Illinois

Kimley-Horn and Associates, Inc. (Kimley-Horn) was retained by The Architects Partnership, Ltd to perform a parking review for the proposed outlot redevelopment at Town & Country Center, located on the southwest quadrant of the intersection of Rand Road/Palatine Road in Arlington Heights, Illinois. This review was completed in order to assess future parking conditions with redevelopment of the outlot located at the northeast quadrant of Town & Country Center.

Executive Summary

The existing outlot is occupied by an approximately 11,051 square-foot AT&T retail store. The retail outlot currently provides a total of 29 parking spaces. With the proposed redevelopment, the existing retail store would be demolished to accommodate a 5,941 square-foot bank with two ATM drive-through lanes. A total of 29 parking spaces (27 standard spaces, 2 accessible spaces) would be provided for the bank. The proposed parking supply exceeds the Village of Arlington Heights Municipal Code requirements. Furthermore, the proposed parking supply is expected to accommodate average peak parking demand for the proposed bank. Spillover demand is not anticipated; and therefore, the proposed bank is not expected to materially impact parking for the overall Town & Country Center.

Existing and Proposed Site Development

Town & Country Center is a multi-tenant shopping center with both inline and outlot uses. The subject outlot is located at the northeast quadrant of the shopping center. The outlot is currently developed with an approximately 11,051 square-foot AT&T retail store with 29 onsite parking spaces. Access to the overall Town & Country Center is provided via driveways to Arlington Heights Road, Palatine Road, and Rand Road. Access to the subject outlot is provided via three internal driveways. An aerial of the existing shopping center, including the proposed outlot redevelopment site is shown in **Exhibit 1**.

To accommodate the proposed redevelopment, the existing retail store would be demolished. A 5,941 square-foot bank with two ATM drive-through lanes and 29 parking spaces would be developed. Access to the overall Town & Country Center would be maintained. Internal to Town & Country Center, access to the proposed bank would be provided via two full-access driveways and one outbound-only driveway. The proposed site plan is provided as **Attachment 1**.

Kimley»Horn

EXHIBIT 1

SITE LOCATION MAP

Village Code Review

Table 1 summarizes the parking required for the existing retail store and proposed outlot redevelopment per Section 28.10.4-2 (Off Street Parking and Loading) of the Village of Arlington Heights Municipal Code. As shown in the table, the existing retail store is required to provide a total of 37 parking spaces. A total of 29 parking spaces are currently provided on the outlot.

For the proposed bank, a total of 20 parking spaces would be required by the Village of Arlington Heights Municipal Code. A total of 29 parking spaces is proposed, which exceeds the minimum requirement.

Table 1. Village of Arlington Heights Required Parking

Land Use	Floor Area (sq. ft.)		Land Use	Parking Ratio	Required Spaces	Existing / Proposed Spaces	Surplus (+) / Deficit (-)
	Total	Parking Calculation[1]					
Existing AT&T Store	11,051	11,051	Retail	1 / 300 sq. ft.	37	29	-8
Proposed Bank	5,941	5,941	Bank	1 / 300 sq. ft.	20	29	+9

[1]Per Section 28-3(47) (Definitions) of the Village of Arlington Heights Municipal Code, for determining off-street parking requirements, floor area is calculated as the "sum of the gross horizontal areas of several floors of the building, or portion thereof, devoted to such use, measured from the exterior faces of the exterior walls or from the center line of walls separating two buildings."

Existing Parking Demand

To evaluate parking demand for the existing retail store and potential spillover parking demand for the overall Town & Country Center, Kimley-Horn conducted hourly parking occupancy counts during one typical weekday and one typical Saturday as summarized below. The count periods capture peak periods for the proposed bank and were identified in coordination with Village of Arlington Heights staff.

- Saturday, May 13, 2023, from 11:00AM to 1:00PM
- Thursday, May 18, 2023, from 11:00AM to 5:00PM

The parking occupancy counts were conducted for two areas: 1) the outlot parking lot; and 2) the parking spaces within Town & Country Center immediately surrounding the outlot. The area immediately surrounding the outlot was included in the occupancy count to capture any potential spillover demand from the existing shopping center or the existing outlot. A map depicting the count area is shown in **Exhibit 2**. **Table 2** summarizes the observed parking occupancy for the existing outlot. During the weekday, the peak occurred at 4:00PM with approximately ten occupied spaces (eight percent). On Saturday, the peak occurred at 11:00AM with approximately six occupied spaces (five percent).

During the observation periods, the outlot was generally used for employee or customer parking. Two (2) vehicles were not associated with employees or customers. These vehicles were parked continuously from 11:00AM to 5:00PM on Thursday and from 11:00AM to 1:00PM on Saturday suggesting use for long-term storage rather than active employee or customer parking.

Kimley»Horn

EXHIBIT 2

PARKING COUNT LOCATION MAP

Table 2. Observed Parking Occupancy

Time of Day	Saturday, May 13, 2023		Thursday, May 18, 2023	
	Occupied Spaces[1]	Percent Occupied	Occupied Spaces[1]	Percent Occupied
11:00AM	6	5%	8	6%
12:00PM	5	4%	8	6%
1:00PM	1	1%	8	6%
2:00PM	-	-	8	6%
3:00PM	-	-	6	5%
4:00PM	-	-	10	8%
5:00PM	-	-	5	4%
Average	4	3%	8	6%

[1]Includes two (2) vehicles parked continuously from 11:00AM to 5:00PM on Thursday and from 11:00AM to 1:00PM on Saturday suggesting use for long-term storage rather than active employee or customer parking.

As shown in Table 3, parking demand for the existing retail store is lower than the existing parking supply (29 spaces). Note that all occupied spaces were in the outlot parking lot. Parking demand for the existing retail store did not spillover to the overall Town & Country Center. Similarly, parking demand for the overall Town & Country Center did not spillover to the outlot.

Future Parking Demand

Parking demand for the proposed bank was estimated using empirical data provided in the Institute of Transportation Engineers (ITE) Parking Generation Manual, 5th Edition. Data provided for Drive-In Bank (Land Use Code 912) was selected as most closely representative of the proposed redevelopment. A summary of the ITE data is provided in **Table 3**.

Table 3. ITE Peak Parking Demand – Drive-In Bank (LUC 912)

Period	Peak Period Parking Demand per 1,000 SF GFA	
	Average Rate	85th Percentile
Weekday	3.72	6.00
Saturday	3.05	4.77

Based on ITE data, the average peak parking demand for the proposed 5,941 square-foot bank is 22 spaces on a weekday and 18 spaces on a Saturday. According to the 85th percentile data, peak parking demand for the 5,941 square-foot bank is 36 spaces on a weekday and 28 spaces on a Saturday. Generally, parking demand would be accommodated within the 29 parking spaces proposed for the outlot redevelopment. In the limited instances where parking demand may exceed the proposed supply, additional spaces would be available immediately adjacent to the outlot within the overall Town & Counter Center parking lot.

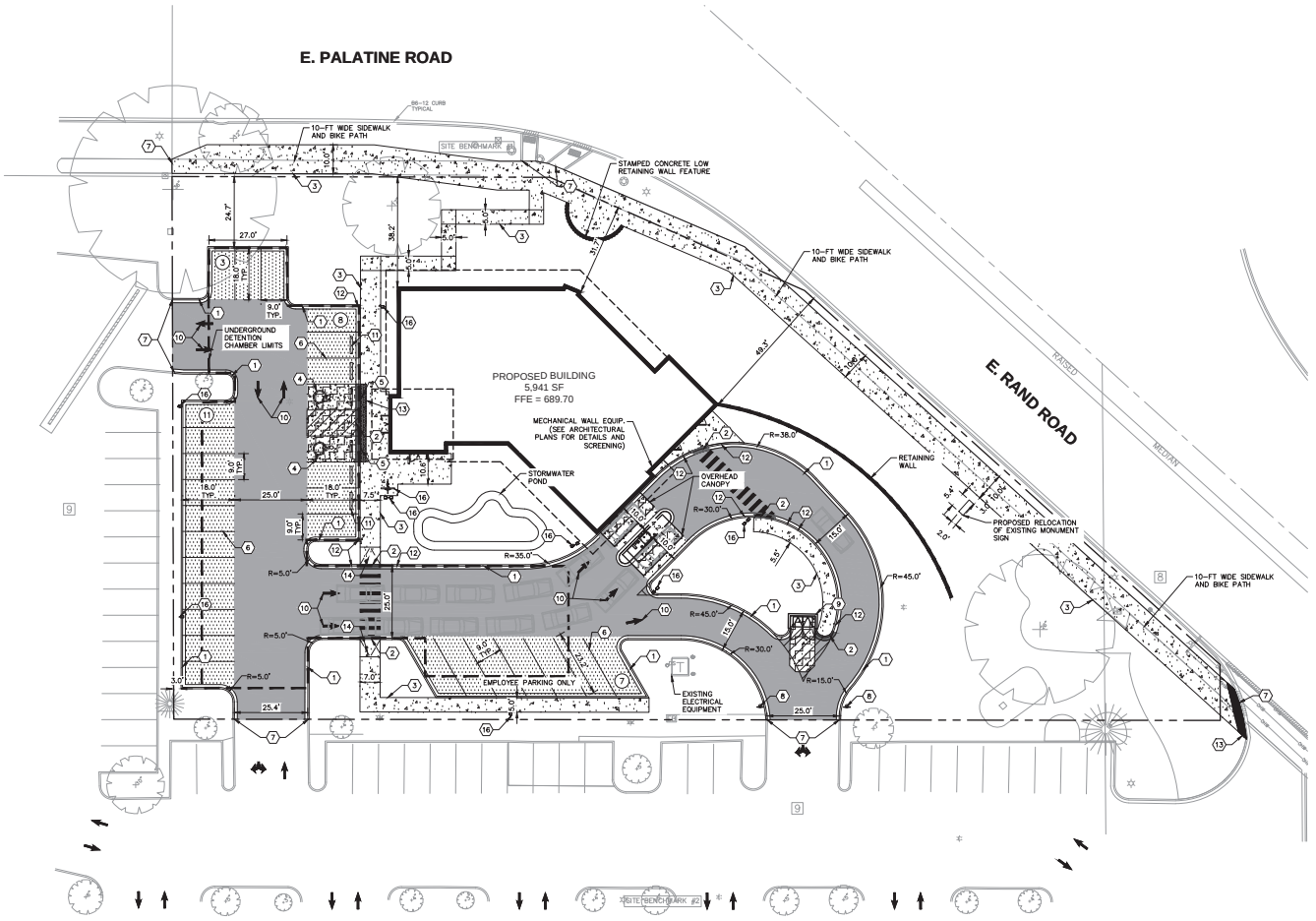
As spillover parking demand for Town & Country Center was not observed, and peak parking demand for the proposed bank is expected to be generally accommodated onsite, the proposed outlot redevelopment is not expected to materially change parking conditions for the overall shopping center.

Conclusion

The proposed bank redevelopment would provide 29 parking spaces, which exceeds Village requirements. The proposed parking supply is expected to accommodate average peak parking demand for the 5,941 square-foot bank. Spillover parking demand is generally not anticipated; and therefore, the proposed bank redevelopment is not expected to materially impact parking for the overall Town & Country Center.

The existing cross-access and shared parking between Town & Country Center and the outlot should be maintained in order to facilitate access and circulation, as well as to provide for efficient use of the proposed parking supply.

Please do not hesitate to contact us with any questions related to the information in this memorandum.



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

GENERAL NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.
5. REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

KEY NOTES

1. B6.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
2. DEPRESSED CURB AND GUTTER
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
5. ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8, SEE DETAILS)
6. 4" WIDE PAINTED SOLID LINE, TYP.
7. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
8. DO NOT ENTER SIGN, TYP.
9. TRASH ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
10. SITE DIRECTIONAL MARKINGS
11. WHEEL STOP (SEE DETAILS)
12. TRANSITION FROM DEPRESSED CURB TO B6.12 OVER TWO PARKING STALLS
13. 2' WIDE DETECTIBLE WARNING TRUNCATED DOME STRIP (SEE DETAILS)
14. ACCESSIBLE RAMP (SEE DETAILS)
15. 12" WHITE PAINTED SOLID LINE, TYP. (3' C-C)
16. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE PHOTOMETRIC PLANS)
17. BIKE RACK (SEE ARCHITECTURAL PLANS FOR DETAILS)

PAVING AND CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STANDARD PITCH CONCRETE CURB AND GUTTER
- REVERSE PITCH CONCRETE CURB AND GUTTER
- CONCRETE DEPRESSED CURB AND GUTTER

PARKING SUMMARY

PARKING SPACES REQUIRED (VILLAGE STANDARD)	=	20 SPACES
STANDARD PARKING SPACES PROVIDED	=	27 SPACES
ACCESSIBLE PARKING SPACES REQUIRED	=	2 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	=	2 SPACES
TOTAL PARKING SPACES PROVIDED	=	29 SPACES
BICYCLE PARKING SPACES REQUIRED (VILLAGE STANDARD)	=	2 SPACES
TOTAL BICYCLE PARKING SPACES PROVIDED	=	5 SPACES

Call Before You Dig JULIE 1-800-892-0123

No.	REVISIONS	DATE	BY
1	VILLAGE COMMENTS	11/02/23	JW

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601
PHONE: (919) 677-2000
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: RKG
DRAWN BY: RKG
CHECKED BY: TJS

CHASE

SITE PLAN

CHASE BANK
585 E. PALATINE RD
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE: 06/12/23
KHA PROJECT NO. 168558032
SHEET NUMBER
C2.0

Drawing name: K:\CHI_LIEB\168558032_Chase_Arlingtonheights_IL\2 Design\CAD\PlanSheets\C1.0 - SITE PLAN.dwg C1.0 Oct 25, 2023 - 4:59pm by AlexuFabio
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

ATTACHMENT 1

Village of Arlington Heights
Building & Life Safety Department

Interoffice Memorandum

To: **Jorge Torres, Director of Building & Life Safety**

From: **Elliot Eldridge, Assistant Building Official, Building & Life Safety Department**

Subject: **SDC: PC 23-014 Chase Bank Redevelopment**

Date: **October 19, 2023**

General Comments:

The information provided is conceptual only and subject to a formal plan review.

1. The following adopted codes shall apply:
    a) 2018 International Building Code with amendments
    b) 2018 International Fire Code with amendments
    c) 2018 International Fuel Gas Code with amendments
    d) 2018 International Mechanical Code with amendments
    e) 2018 International Swimming Pool and Spa Code with amendments
    f) 2018 Illinois Energy Conservation Code with state amendments
    g) 2018 Illinois Accessibility Code
    h) 2014 Illinois Plumbing Code with amendments
    i) 2017 National Electrical Code with amendments

2. Drawings stamped / seal, produced by an Illinois licensed architect are required for permit submittal. The plans do not appear to conform to this requirement.

3. Provide the proposed construction type of the building. Section: 2018 IBC Tables 601 and 602. The plans do not appear to conform to this requirement.

4. Provide the fire-resistance rating of the exterior walls shall comply with the requirements of 2018 IBC Table 601/602 based on the fire separation distance. The plans do not appear to conform to this requirement.

5. Verify an approved water supply capable of supplying the required fire flow for fire protection shall be provided. The plans do not appear to conform to this requirement.

6. Provide an approved radio coverage for emergency responders within the building based on the existing coverage levels utilized measured at the exterior of the building shall be provided. The plans do not appear to conform to this requirement.

7. Verify, an approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the building as measured by an approved route around the exterior of the building or facility, 2018 IFC 503.1.1. The plans do not appear to conform to this requirement.

8. Fire department connections (FDC) shall be located on the street side of building, fully visible and located at the main front entrance of the building and within a maximum travel distance of 100 feet to the nearest fire hydrant and in accordance with the NFPA standard applicable to the system design. The location of fire department connections shall be approved. In order to verify compliance, please provide the proposed location of the FDC and the location of a fire hydrant within 100 feet of the FDC. 2018 IFC 912.2.1 as amended. The plans do not appear to conform to this requirement.

9. Provide a complete NFPA compliant fire suppression system is required. 2018 IFC 903.4.3. The plans do not appear to conform to this requirement.

10. Provide a fully functional fire alarm shall be installed per NFPA 72. The alarm annunciator panel shall be located at the front entrance. The plans do not appear to conform to this requirement.

11. Visible alarm notification appliances shall be provided in public areas and common areas. A visible exterior weatherproof alarm notification device shall be located within closest proximity to the front main entrance of the building or tenant space. 2018 IFC 907.5.2.3.1 as amended. The plans do not appear to conform to this requirement.

12. A zoning indicator panel and the associated controls, or, fire alarm control panel shall be located within the closest proximity to the front main entrance. Verify with the Fire Code Official and Fire Department if they should be included at the main entrance if they will be in the fire command center. The plans do not appear to conform to this requirement.

13. A key box (Knox Box) shall be provided and contain keys to gain necessary access as required by the fire code official. (More than one may be required based on the size of the project/building). The plans do not appear to conform to this requirement.

14. Provide documentation that the Interior wall and ceiling finish including sound panels shall have a flame spread index not greater than that specified in Table 803.3 for the group and location designated. Interior wall and ceiling finish materials tested in accordance with NFPA 28. The plans do not appear to conform to this requirement.

15. Provide isometric plumbing drawing shows plumbing drain, waste, and vent lines, how they interconnect, and include the actual pipe sizes. Required info not provided.

16. Panic hardware shall be provided on required exit doors leading to the exterior of the building. The plans do not appear to conform to this requirement.

17. Since table and chairs are provided a portion must be accessible. There should be a clear floor area of 30 inches by 48 inches provided at each accessible seating location. The plans do not appear to conform to this requirement.

18. Provide locations of exit signs and emergency lighting. The bottom of new egress markings shall be located at a vertical distance of not more than 6 ft 8 in. (2030 mm) above the top edge of the egress opening intended for designation by that marking. The plans do not appear to conform to this requirement.

19. Emergency illumination shall be provided for a minimum of 1 1/2 hours in the event of failure of normal lighting. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 ft-candle (10.8 lux) and, at any point, not less than 0.1 ft-candle (1.1 lux), measured along the path of egress at floor level. The plans do not appear to conform to this requirement.

20. Provide a COMCheck Exterior Lighting Compliance Certificate Indicating the light fixtures selected, the wattage used in connected load and labeled to match the light fixture schedule indicated on the plans. Section: 2018 indicated on the plans. Section: 2018 IECC C405.4.1. Required info not provided.

21. Provide a COMCheck Interior Lighting Compliance Certificate indicating the light fixtures selected, the wattage used in connected load and labeled to match the light fixture schedule indicated on the plans. Emergency lights or lights required for egress illumination are exempt from the total watts used. Required info not provided.

22. Provide a COMCheck Mechanical Compliance Certificate indicating the new equipment meets or exceeds the requirements of the 2018 Illinois Energy Conservation Code. Section: IECC C407.4.1. Required info not provided.

23. Provide details indicating how the bathroom walls within two feet (2) of the water closets up to a height of four feet (4) to have a smooth, hard, non-absorbent surface. Also indicate the bathroom floor to have a smooth, hard, nonabsorbent surface that extends upward onto the walls at least four inches (4). Section: 2018 IBC 1209.2.1 and 1209.2.2. Required info not provided.

24. Note: “A transmittal letter detailing all the changes from the initial review will be required for any additional reviews”

25. A preliminary construction staging plan and development schedule shall be provided for review by the Building & Life Safety Department prior to permit issuance for each phase of the project.

26. Separate permits are required for the following systems for each building:
    1. Fire Alarm;
    2. Fire Suppression;
    3. Each sign.

ENGINEERING DEPARTMENT

3

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 23-014
Petitioner: JPMorgan Chase Bank NA
Columbus, OH 43240
Owner: GW Rand Palatine AH LLC
Contact Person: Mitch Goltz
Address: 2211 N. Elston Ave, Suite 400
Chicago, IL 60614
Phone #: (773) 382-0590
Fax #: N/A
Email: mitch@gwproperties.com

P.I.N.# 03-20-101-002
Location: 585 E Palatine Road
Rezoning: N/A Current: B-2 Proposed: B-2
Subdivision: N/A
# of Lots: ____ Current: ____ Proposed: ____
PUD: N/A For: ____
Special Use: Yes For: Drive through
Land Use Variation: N/A For: ____
Land Use: N/A Current: Retail
Proposed: Bank
Site Gross Area: 1.12 AC
# of Units Total: N/A
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

1. PUBLIC IMPROVEMENTS REQUIRED: .....

	YES	NO	COMMENTS
a. **Underground Utilities**			
Water	____	X	____
Sanitary Sewer	____	X	____
Storm Sewer	____	X	____
b. **Surface Improvement**			
Pavement	____	X	____
Curb & Gutter	____	X	____
Sidewalks	X	____	____
Street Lighting	____	X	____
c. **Easements**			
Utility & Drainage	____	____	____
Access ..... SIDEWALK	X	____	____

2. PERMITS REQUIRED OTHER THAN VILLAGE:
   a. MWRDGC X ____ b. IDOT X ____
   c. ARMY CORP ____ d. IEPA ____
   e. CCHD ____

	YES	NO	COMMENTS
3. R.O.W. DEDICATIONS?	____	X	____
4. SITE PLAN ACCEPTABLE?	____	X	____
5. PRELIMINARY PLAT ACCEPTABLE?	____	N/A	____
6. TRAFFIC STUDY ACCEPTABLE?	X	____	____
7. STORM WATER DETENTION REQUIRED?	X	____	____
8. CONTRIBUTION ORDINANCE EXISTING?	X	____	79-114 $14,435 DUE
9. FLOOD PLAIN OR FLOODWAY EXISTING? ...	____	X	____
10. WETLAND EXISTING?	____	X	____

GENERAL COMMENTS ATTACHED

PLANS PREPARED BY: KIMLEY HORN
DATE OF PLANS: 6/12/23

~~Director~~ 10/16/23 Date

PLAN COMMISSION PC #23-014
Chase Bank
585 E Palatine Road
Round 1

11. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.

12. Final engineering plans shall be georeferenced by using State Plane Coordinate System – Illinois East. Below are details about projection:

Projected Coordinate System:	NAD_1983_StatePlane_Illinois_East_FIPS_1201_Feet
Projection:	Transverse_Mercator
False_Easting:	984250.00000000
False_Northing:	0.00000000
Central_Meridian:	-88.33333333
Scale_Factor:	0.99997500
Latitude_Of_Origin:	36.66666667
Linear Unit:	Foot_US
Geographic Coordinate System:	GCS_North_American_1983
Datum:	D_North_American_1983
Prime Meridian:	Greenwich
Angular Unit:	Degree

13. The proposed detention/retention facilities will be a private system and as such will not be the Village's responsibility to maintain.
    a) Provide calculations for sizing the weir.
    b) Provide a stormwater report.
    c) Detention shall meet MWRD and Village requirements. The preliminary stormwater notes provided on the Grading and Drainage Plan are acceptable.
    d) A portion of the proposed site will drain unrestricted to the north and east. Provide information in the stormwater report on how this area will be compensated for.
    e) An MWRD permit is required.

14. Plan Commission approval will require preliminary engineering plans including detention calculations showing HWL, storage required, storage provided, and restrictor sizing calculations. Any detention storage system located under pavement must be designed to AASHTO HS-25 loading standard. The Village's allowable release rate is 0.18 cfs/Ac. Use C=0.50 for pervious areas, C=0.95 for impervious areas. Use updated Bulletin 70 rainfall data. Clearly show the overflow route for the site. Minimum restrictor size allowed, for maintenance reasons, is 2". Restrictors between 2" and 4" must be in a trap in a catch basin. Show the location and size of the restrictor. Provide a detail showing the restrictor catch basin. If the restrictor required to meet the allowable release rate is less than 2", calculate the amount of detention storage provided with a 2" restrictor. Subtract this amount from the required storage based on the allowable release rate to show the storage deficiency. This deficiency can be paid as money in lieu of detention at the rate of $1.00 per cubic foot.

15. The limits of the underground detention facility are approximately 2 ft from the south property line and 3.5 ft from the west property line. Installation of the underground detention facility will result in encroachment

onto the adjacent property. Permission must be granted by the adjacent property owner for the required repairs to the parking lot.

16. Regarding the site plan, the drive aisles are shown to be 25 ft, however, the aisle widths measure less than 24 ft. Verify the aisle widths.

17. Regarding the utility plan:
    a) The bypass lane for the exit is pitched towards the garbage corral, preventing this area from draining to structure D3.
    b) Provide information on all utility crossings.
    c) The proposed storm sewer connection is located on the Towne and Country site and will require the removal of a tree. Written permission must be obtained for the storm sewer connection, show the removal and replacement of the tree.

18. Provide an inspection manhole for the sanitary sewer approximately 5 feet from the buildings.

19. The proposed detention/retention facilities, onsite water main, sanitary sewer and storm sewer are private and as such will not be the Village's responsibility to maintain. An Onsite Utility Maintenance Agreement must be executed prior to final engineering approval. Please contact the Village Engineer for an editable version of the OUMA.

20. The photometric plan is acceptable. The wall pack light fixture has the sharp cut-off; however, it is unclear if the wall pack fixture can be rotated or will be fixed to direct the light down. Rotating of the wall pack fixture is not acceptable.

21. Fire lanes, where required adjacent to buildings, must meet the pavement dimensions as directed by the Fire Department. Fire lanes require a heavy-duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-50 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron to be 8" thick. Provide the pavement cross section.

22. For the fire truck exhibit:
    a) Provide dimensions from the fire lane to the building.
    b) Provide an additional exhibit showing the fire truck entering the drive aisle south of the building and exiting at the exit.
    c) Provide an additional exhibit showing the fire truck entering the site through the northerly cross access to the west.

23. A public sidewalk easement will be required for the proposed 10 ft wide sidewalk.

24. Provide additional spot elevations in the parking lot for the accessible parking stalls. The parking stalls shall meet Illinois Accessibility Code requirements.

25. The grading plan shows the existing layout of the sidewalk. Revise the grading plan to include the 10 ft wide sidewalk.

26. The proposed private sidewalk from the building to Palatine Road shall have 5 ft by 5 ft transition areas with a maximum cross slope of 2%, 1.5% recommended. Revise the plan to show the transition areas.

27. East Palatine Road and East Rand Road are under the jurisdiction of the Illinois Department of Transportation (IDOT). All work within IDOT right-of-way will require an IDOT permit.

28. Provide the drainage certificate.

29. Contribution Ordinance 79-114 for the installation of the water main at the SW corner of Palatine Road and Rand Road has not been paid. The amount of $14,455.00 ($33.04 per LF, frontage length of 437.50 ft) is due.

30. Provide a demolition plan:
    a) The existing site is tied into the storm sewer system on the Towne & Country site in two locations. Provide information on the plan on how the onsite system will be disconnected.
    b) Show the location of the existing sanitary sewer service and water service. The existing services shall be abandoned at the main.

10-6-23

Michael L. Pagones, P.E. Date
Village Engineer

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

DEPARTMENT PLAN REVIEW SUMMARY

Chase Bank
585 E Palatine Rd

Round 1 Review Comments **10/09/2023**

1. **Character of use:**
   The character of use is consistent with the area and is not a concern.

2. **Are lighting requirements adequate?**
   Lighting should be up to Village of Arlington Heights code. The exterior of the building should be illuminated especially during nighttime hours for safety, to deter criminal activity and increase surveillance/visibility- potentially reducing theft, trespassing, vandalism, underage drinking, and other criminal activity.

3. **Present traffic problems?**
   There are no traffic problems at this location.

4. **Traffic accidents at particular location?**
   This is not a problem area in relation to traffic accidents.

5. **Traffic problems that may be created by the development.**
   This development should not create any additional traffic problems.

6. **General comments:**

   - Please ensure that there is an emergency information/contact card on file with the Arlington Heights Police Department and that it is up-to-date. Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. The form is attached. Please complete and return. This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.

   - Landscaping should provide open sightlines to increase natural surveillance and avoid creating ambush locations and havens for illegal activities- theft, trespassing, vandalism, underage drinking, drug use, etc.

   - Consider posting no trespassing / loitering/ no un-authorized use signage. The Arlington Heights Police Dept. has and utilizes trespass warning forms under qualifying circumstances when requested by property management.

A-O #330

Alexandra Ovington, Crime Prevention Officer
Community Services Bureau

Approved by:

583

Supervisor's Signature

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. **23-014**
Petitioner: JPMorgan Chase Bank NA
1111 Polaris Parkway
Columbus, OH 43240
Owner: GW Rand Palatine AH LLC

Contact Person: Mitch Goltz
Address: 2211 N. Elston Ave, Suite 400
Chicago, IL 60614
Phone #: (773) 382-0590
Fax #: N/A
Email: mitch@gwproperties.com

P.I.N.# 03-20-101-002
Location: 585 E Palatine Road
Rezoning: N/A Current: B-2 Proposed: B-2
Subdivision: N/A
# of Lots: _____ Current: _____ Proposed: _____
PUD: N/A For: _____
Special Use: Yes For: Drive through
Land Use Variation: N/A For: _____

Land Use: N/A Current: Retail
Proposed: Bank
Site Gross Area: 1.12 AC
# of Units Total: N/A
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

	YES	NO	
1.	X		COMPLIES WITH COMPREHENSIVE PLAN?
2.	X		COMPLIES WITH THOROUGHFARE PLAN?
3.			VARIATIONS NEEDED FROM ZONING REGULATIONS? (See below.)
4.		X	VARIATIONS NEEDED FROM SUBDIVISION REGULATIONS? (See below.)
5.		X	SUBDIVISION REQUIRED?
6.		X	SCHOOL/PARK DISTRICT CONTRIBUTIONS REQUIRED? (See below.)

Comments:

Please see attached comments #7 - #27

Sam Hubbard
Coordinator

10-19-23
Date

Planning & Community Development Dept. Review

October 19, 2023

REVIEW ROUND 1

Project: Chase Bank
585 E. Palatine Rd.

Case Number: PC 23-014

General:

7. Based on a review of the Round 1 submittal, the Plan Commission must review the following zoning actions:
   a) Amendment to Rezoning Ordinance #84-10 to eliminate Section Two in its entirety.
   b) Special Use Permit approval for a bank with a drive-through.
   c) Additional zoning actions may be required based upon your response to these comments and the submittal of revised plans.

8. The Special Use Permit must be justified per the three criteria necessary for Special Use approval, as summarized below. Please provide a separate document addressing each standard and outlying how the proposed drive-thru complies with each standard:
   - That said special use is deemed necessary for the public convenience at this location.
   - That such case will not, under the circumstances of the particular case, be detrimental to the health, safety, morals or general welfare of persons residing or working in the vicinity.
   - That the proposed use will comply with the regulations and conditions specified in this ordinance for such use, and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.

9. All plans/studies/documents that are revised as a result of these comments must include a revision date.

Site/Landscaping/Photometrics:

10. The Rand Road/Palatine Road corner provides an excellent opportunity for a focal point feature. Please explore the addition of a focal point feature in this location. Please coordinate with Derek Mach regarding this area.

11. Please explore incorporation of the dumpster into a storage room within the building. If this is not feasible, the exterior dumpster location should be relocated so that it is further away from the street and can be screened by landscaping on three sides.

12. Please provide details on the materials, finish, and color of the proposed retaining wall.

13. Please update the ALTA Plat of Survey to show the easement as recorded in document #27159212 or provide an explanation as to why this easement is not shown on the Plat of Survey. Additionally, please show the boundaries of the easement on the proposed site plan. If there are areas where the proposed multi-use pathway falls outside of the easement area and within private property, a modified easement (or new easement) shall be required as part of the development process.

14. Please revise the plans so that the 10' multi-use pathway tapers down at the northwest corner of the site to align with the existing sidewalk to the west. Additionally, the truncated domes at the southeast terminus must be the full width of the pathway.

15. Other than the existing transformer located on the site, which is proposed to remain, are any other ground mounted mechanical equipment (generators, switchgear, utility pedestals etc.) proposed? If so, please show these elements on the site plans, which must be appropriately sited and screened.

16. Per Code, all rows of parking must terminate with a landscape island containing a shade tree. The two parking parking rows along the western side of the site terminate at the south with the Code required landscape island located on the property to the south. This site cannot rely on another property to fulfill its' landscape requirements. Please either revise the plan or clarify if a variation is requested. Staff encourages compliance with Code.

17. Per Section 10.2-12.3.b, footcandle levels at the property lines cannot exceed 2.0. Proposed footcandle levels along the western and southern side of the site do not conform to this requirement and must be revised.

18. Per Section 10.2-12.c.3, all light poles that are between 20'-40' in height shall be separated by 3' for every 1' of fixture mounting height. Please provide the proposed mounting heights for fixtures SL1 and SL2 and revise the pole locations accordingly. Additionally, please confirm that the pole locations, as shown on sheet C.1, are accurate and not approximate.

Building/Architectural:

19. Please provide a full color rendering of the building as seen from Rand Road, Palatine Road, and from the southwest.

20. The dumpster enclosure shall be reduced in height to 6' in order to comply with Code. Please revise the elevations to indicate the materials of the dumpster enclosure.

21. Additional details are needed on the two proposed drive-thru canopies. Will the canopy closer to the building be the same style as the freestanding canopy? Will it be attached to the building? Please provide a detail. The canopy elevations shall be revised to indicate materials, overall height, and size of each canopy structure. Free-standing canopy structures that are not attached to the building would require a variation.

22. Provide the total building square footage on the floor plan.

Traffic/Parking/Circulation:

23. Please provide document #25981904. Additionally, please provide any additional easements or agreements that benefit or burden this property relative to shared parking or shared access.

24. Two bike parking stalls are required. Please show the proposed bike parking location on the plans.

25. The Kimley Horn traffic study recommends one inbound lane and one outbound lane for the full access driveways accessing the site. Additionally, it recommended that the double lane egress be revised to a single lane. Why have these recommendations not been implemented?

26. The Kimley Horn study should include an analysis of the drive-thru stacking and whether there is sufficient queuing space. Have you considered restricting the 7 angled parking stalls adjacent to the drive-thru queue to employees only? This would prohibit usage by high-turnover visitor vehicles, which could have difficulty backing out of the spaces if there is a queue of cars for the drive-thru.

27. No parking analysis was included in the Kimley Horn study. Analysis of the adequacy of the parking supply must be provided. Additionally, justification should be provided to outline why 32 parking stalls are proposed where a minimum of 20 are required by Code (60% overage above Code minimums).

Prepared by:

Chase Bank Redevelopment

585 E. Palatine Road

PC 23-014

October 11, 2023

Landscape Comments

1. Please explore options for preserving the following trees 9, 11, 12, 16, 17, 19, 24. As proposed, additional shade trees will be required along Palatine Road and Rand Road.

2. Provide a four-inch caliper shade trees at the end of each parking row (Chapter 28, Section 6.15). Please provide a four-inch caliper shade tree at the end of the parking row along the west property line.

3. Provide two additional shade trees for a total of five along Rand Road and evaluate the spacing.

4. At the corner of Rand and Palatine Road incorporate an expanded pedestrian area within the parkway as part of the pedestrian crossing. The area should provide pedestrians a generous area of relief at the corner, and shall be designed as a focal point for this prominent intersection including decorative features (landscaping, specialty pavements, etc.).

5. Landscape screening must be provided for any utility/mechanical areas. Any new utility/mechanical boxes must be placed where they are not visible and screened. Please evaluate options for screening the mechanicals located on the wall on the southeast elevation.

6. A tree fee of $4 per lineal foot for frontage must be provided as part of the building permit process and a landscape compliance bond of 30% of the estimated landscape cost.

The Architects Partnership, Ltd. 200 South Michigan Avenue, Suite 1020, Chicago, IL 60604

Sam Hubbard
Development Planner
Department of Planning and Community Development
Village of Arlington Heights
33 S Arlington Heights Road
Arlington Heights, IL 60005

November 03, 2023

Re: Comments Response letter for property 585 E Palatine Road

Dear Mr. Hubbard,

We are in response of your review comments dated October 19th, 2023, for the proposed Chase Bank located at 585 E. Palatine Rd in Arlington Heights, IL. Below is a summary of the actions taken in response to these comments.

Building & Life Safety Department:

1. The following adopted codes shall apply:

a. 2018 International Building Code with amendments
b. 2018 International Fire Code with amendments
c. 2018 International Fuel Gas Code with amendments
d. 2018 International Mechanical Code with amendments
e. 2018 International Swimming Pool and Spa Code with amendments
f. 2018 Illinois Energy Conservation Code with state amendments
g. 2018 Illinois Accessibility Code
h. 2014 Illinois Plumbing Code with amendments
i. 2017 National Electrical Code with amendments
Response: Acknowledge.

2. Drawings stamped / seal, produced by an Illinois licensed architect are required for permit submittal. The plans do not appear to conform to this requirement.
Response: Acknowledge.

3. Provide the proposed construction type of the building. Section: 2018 IBC Tables 601 and 602. The plans do not appear to conform to this requirement.
Response: Acknowledge, will be provided during building permit submittal.

4. Provide the fire-resistance rating of the exterior walls shall comply with the requirements of 2018 IBC Table 601/602 based on the fire separation distance. The plans do not appear to conform to this requirement.
Response: Acknowledge, will be provided during building permit submittal.

5. Verify an approved water supply capable of supplying the required fire flow for fire protection shall be provided. The plans do not appear to conform to this requirement.
   Response: Acknowledge.

6. Provide an approved radio coverage for emergency responders within the building based on the existing coverage levels utilized measured at the exterior of the building shall be provided. The plans do not appear to conform to this requirement.
   Response: Acknowledge, will be provided during building permit submittal.

7. Verify, an approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the mbuilding as measured by an approved route around the exterior of the building or facility, 2018 IFC 503.1.1. The plans do not appear to conform to this requirement.
   Response: The fire truck has access from E Palatine Road, E Rand Road, South and West of the proposed building's fire apparatus access roads. Please see exhibit C2.1 for additional dimensions to the access roads.

8. Fire department connections (FDC) shall be located on the street side of building, fully visible and located at the main front entrance of the building and within a maximum travel distance of 100 feet to the nearest fire hydrant and in accordance with the NFPA standard applicable to the system design. The location of fire department connections shall be approved. In order to verify compliance, please provide the proposed location of the FDC and the location of a fire hydrant within 100 feet of the FDC. 2018 IFC 912.2.1 as amended. The plans do not appear to conform to this requirement.
   Response: The FDC has been placed facing E Palatine Road. Please see sheet C2.1 and C4.0 for the FDC location and proximity to the existing fire hydrant.

9. Provide a complete NFPA compliant fire suppression system is required. 2018 IFC 903.4.3. The plans do not appear to conform to this requirement.
   Response: Acknowledge, will be provided during building permit submittal.

10. Provide a fully functional fire alarm shall be installed per NFPA 72. The alarm annunciator panel shall be located at the front entrance. The plans do not appear to conform to this requirement.
    Response: Acknowledge, will be provided during building permit submittal.

11. Visible alarm notification appliances shall be provided in public areas and common areas. A visible exterior weatherproof alarm notification device shall be located within closest proximity to the front main entrance of the building or tenant space. 2018 IFC 907.5.2.3.1 as amended. The plans do not appear to conform to this requirement.
    Response: Acknowledge.

12. A zoning indicator panel and the associated controls, or, fire alarm control panel shall be located within the closest proximity to the front main entrance. Verify with the Fire Code Official and Fire Department if they should be included at the main entrance if they will be in the fire command center. The plans do not appear to conform to this requirement.
    Response: Acknowledge.

13. A key box (Knox Box) shall be provided and contain keys to gain necessary access as required by the fire code official. (More than one may be required based on the size of the project/building). The plans do not appear to conform to this requirement.
    Response: Acknowledge.

14. Provide documentation that the Interior wall and ceiling finish including sound panels shall have a flame spread index not greater than that specified in Table 803.3 for the group and location designated. Interior wall and ceiling finish materials tested in accordance with NFPA 28. The plans do not appear to conform to this requirement.
    Response: Acknowledge, will be provided during building permit submittal.

15. Provide isometric plumbing drawing shows plumbing drain, waste, and vent lines, how they interconnect, and include the actual pipe sizes. Required info not provided.
    Response: Acknowledge, will be provided during building permit submittal.

16. Panic hardware shall be provided on required exit doors leading to the exterior of the building. The plans do not appear to conform to this requirement.
    Response: Acknowledge.

17. Since table and chairs are provided a portion must be accessible. There should be a clear floor area of 30 inches by 48 inches provided at each accessible seating location. The plans do not appear to conform to this requirement.

18. Provide locations of exit signs and emergency lighting. The bottom of new egress markings shall be located at a vertical distance of not more than 6 ft 8 in. (2030 mm) above the top edge of the egress opening intended for designation by that marking. The plans do not appear to conform to this requirement.
    Response: Acknowledge.

19. Emergency illumination shall be provided for a minimum of 1 1/2 hours in the event of failure of normal lighting. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 ft-candle (10.8 lux) and, at any point, not less than 0.1 ft-candle (1.1 lux), measured along the path of egress at floor level. The plans do not appear to conform to this requirement.
    Response: Acknowledge.

20. Provide a COMCheck Exterior Lighting Compliance Certificate Indicating the light fixtures selected, the wattage used in connected load and labeled to match the light fixture schedule indicated on the plans. Section: 2018 indicated on the plans. Section: 2018 IECC C405.4.1. Required info not provided.
    Response: Acknowledge, will be provided during building permit submittal.

21. Provide a COMCheck Interior Lighting Compliance Certificate indicating the light fixtures selected, the wattage used in connected load and labeled to match the light fixture schedule indicated on the plans. Emergency lights or lights required for egress illumination are exempt from the total watts used. Required info not provided.
    Response: Acknowledge, will be provided during building permit submittal.

22. Provide a COMCheck Mechanical Compliance Certificate indicating the new equipment meets or exceeds the requirements of the 2018 Illinois Energy Conservation Code. Section: IECC C407.4.1. Required info not provided.
    Response: Acknowledge, will be provided during building permit submittal.

23. Provide details indicating how the bathroom walls within two feet (2) of the water closets up to a height of four feet (4) to have a smooth, hard, non-absorbent surface. Also indicate the bathroom floor to have a smooth, hard, nonabsorbent surface that extends upward onto the walls at least four inches (4). Section: 2018 IBC 1209.2.1 and 1209.2.2. Required info not provided.
    Response: Acknowledge, will be provided during building permit submittal.

24. Note: “A transmittal letter detailing all the changes from the initial review will be required for any additional reviews”.
    Response: Acknowledge.

25. A preliminary construction staging plan and development schedule shall be provided for review by the Building & Life Safety Department prior to permit issuance for each phase of the project.
    Response: Acknowledge.

26. Separate permits are required for the following systems for each building:
1. Fire Alarm;
2. Fire Suppression;
3. Each sign.

    Response: Acknowledge.

Engineering Department:

1. Public Improvements Required.
   Response: Acknowledge.

2. Permits required other than village.
   Response: Acknowledge.

3. R.O.W. Dedications.
   Response: Acknowledge.

4. Site Plan acceptable.
   Response: Acknowledge.

5. Preliminary plat acceptable.
   Response: Acknowledge.

6. Traffic study acceptable.
   Response: Acknowledge.

7. Storm water detention required.
   Response: Acknowledge.

8. Contribution Ordinance existing.
   Response: Acknowledge.

9. Flood plain or floodway existing.
   Response: Acknowledge.

10. Wetland existing.
    Response: Acknowledge.

11. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.

Response: Comments acknowledged. The petitioner understands that further review and permit approvals will be required prior to construction.

12. Final engineering plans shall be georeferenced by using State Plane Coordinate System – Illinois East. Below are details about projection:

    Projected Coordinate System: NAD_1983_StatePlane_Illinois_East_FIPS_1201_Feet

    Projection: Transverse_Mercator

    False_Easting: 984250.00000000

    False_Northing: 0.00000000

    Central_Meridian: -88.33333333

    Scale_Factor: 0.99997500

    Latitude_Of_Origin: 36.66666667

    Linear Unit: Foot_US

    Geographic Coordinate System: GCS_North_American_1983

    Datum: D_North_American_1983

    Prime Meridian: Greenwich

    Angular Unit: Degree

    Response: Comment acknowledged. Final engineering plans will comply with the State Plane Coordinate system.

13. The proposed detention/retention facilities will be a private system and as such will not be the Village's responsibility to maintain.

    a) Provide calculations for sizing the weir.

    Response: Weir calculations have been provided in the stormwater report.

    b) Provide a stormwater report.

    Response: A stormwater report has been included with this submittal.

    c) Detention shall meet MWRD and Village requirements. The preliminary stormwater notes provided on the Grading and Drainage Plan are acceptable.

    Response: Comment acknowledged.

d) A portion of the proposed site will drain unrestricted to the north and east. Provide information in the stormwater report on how this area will be compensated for.

Response: Please reference the stormwater report for the unrestricted flow to the North and East.

e) An MWRD permit is required.

Response: Comment acknowledged. An MWRD permit will be applied for in Final Engineering.

14. Plan Commission approval will require preliminary engineering plans including detention calculations showing HWL, storage required, storage provided, and restrictor sizing calculations. Any detention storage system located under pavement must be designed to AASHTO HS-25 loading standard. The Village's allowable release rate is 0.18 cfs/Ac. Use C=0.50 for pervious areas, C=0.95 for impervious areas. Use updated Bulletin 70 rainfall data. Clearly show the overflow route for the site. Minimum restrictor size allowed, for maintenance reasons, is 2". Restrictors between 2" and 4" must be in a trap in a catch basin. Show the location and size of the restrictor. Provide a detail showing the restrictor catch basin. If the restrictor required to meet the allowable release rate is less than 2", calculate the amount of detention storage provided with a 2" restrictor. Subtract this amount from the required storage based on the allowable release rate to show the storage deficiency. This deficiency can be paid as money in lieu of detention at the rate of $1.00 per cubic foot.

Response: The Preliminary engineering plans have been revised to include detention calculations showing the HWL, storage required/provided, and restrictor sizing. Please see sheet C3.0.

15. The limits of the underground detention facility are approximately 2 ft from the south property line and 3.5 ft from the west property line. Installation of the underground detention facility will result in encroachment onto the adjacent property. Permission must be granted by the adjacent property owner for the required repairs to the parking lot.

Response: Comment acknowledged. The underground detention facility limits have been reduced to ensure there will not be an encroachment onto the adjacent property.

16. Regarding the site plan, the drive aisles are shown to be 25 ft, however, the aisle widths measure less than 24 ft. Verify the aisle widths.

Response: The aisle widths are confirmed to be 25-ft from face of curb to face of curb or from the end of parking stalls. Please see sheet C2.0 for revised pavement hatching.

17. Regarding the utility plan:

    a) The bypass lane for the exit is pitched towards the garbage corral, preventing this area from draining to structure D3.

    Response: The garbage corral is pitched up to force the drainage around and to structure D3.

    b) Provide information on all utility crossings.

    Response: Utility crossings have been provided on sheet C4.0.

    c) The proposed storm sewer connection is located on the Towne and Country site and will require the removal of a tree. Written permission must be obtained for the storm sewer connection, show the removal and replacement of the tree.

    Response: Comment acknowledged. Please see sheet C1.0 for notes added.

18. Provide an inspection manhole for the sanitary sewer approximately 5 feet from the buildings.

    Response: An inspection MH has been provided. Please see sheet C4.0.

19. The proposed detention/retention facilities, onsite water main, sanitary sewer and storm sewer are private and as such will not be the Village's responsibility to maintain. An Onsite Utility Maintenance Agreement must be executed prior to final engineering approval. Please contact the Village Engineer for an editable version of the OUMA.

    Response: Comment acknowledged.

20. The photometric plan is acceptable. The wall pack light fixture has the sharp cut-off; however, it is unclear if the wall pack fixture can be rotated or will be fixed to direct the light down. Rotating of the wall pack fixture is not acceptable.

    Response: Wall packs are not rotated-able, cylinders can be mounted in the up or down positions and can not be rotated once mounted. However, wall pack will be fixed to direct light down.

21. Fire lanes, where required adjacent to buildings, must meet the pavement dimensions as directed by the Fire Department. Fire lanes require a heavy-duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-50 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron to be 8" thick. Provide the pavement cross section.

    Response: Comment acknowledged. Pavement sections have been provided on sheet C2.0.

22. For the fire truck exhibit:

    a) Provide dimensions from the fire lane to the building.

    b) Provide an additional exhibit showing the fire truck entering the drive aisle south of the building and exiting at the exit.

    c) Provide an additional exhibit showing the fire truck entering the site through the northerly cross access to the west.

    Response: Fire dimensions and additional truck movements as requested have been added to sheet C2.1.

23. A public sidewalk easement will be required for the proposed 10 ft wide sidewalk.

    Response: Comment acknowledged. We are showing an amended sidewalk easement for the proposed 10-ft wide sidewalk along Rand Road. Please see sheet C2.0.

24. Provide additional spot elevations in the parking lot for the accessible parking stalls. The parking stalls shall meet Illinois Accessibility Code requirements.

    Response: Additional spot elevations for the accessible parking stalls have been provided on sheet C3.0.

25. The grading plan shows the existing layout of the sidewalk. Revise the grading plan to include the 10 ft wide sidewalk.

    Response: The grading plan (sheet C3.0) has included the proposed grading for the 10-ft sidewalk.

26. The proposed private sidewalk from the building to Palatine Road shall have 5 ft by 5 ft transition areas with a maximum cross slope of 2%, 1.5% recommended. Revise the plan to show the transition areas.

    Response: The grading plan has been revised to provide 5'x5' transition areas in the allowable cross slopes. See sheet C3.0.

27. East Palatine Road and East Rand Road are under the jurisdiction of the Illinois Department of Transportation (IDOT). All work within IDOT right-of-way will require an IDOT permit.

    Response: Comment acknowledged. We will apply for IDOT permit upon receiving Village Board approval.

28. Provide the drainage certificate.

    Response: The drainage certificate will be provided after permitting.

29. Contribution Ordinance 79-114 for the installation of the water main at the SW corner of Palatine Road and Rand Road has not been paid. The amount of $14,455.00 ($33.04 per LF, frontage length of 437.50 ft) is due.

    Response: Can you please provide a bill for this? We will coordinate with the owner to get this paid.

30. Provide a demolition plan:

    a) The existing site is tied into the storm sewer system on the Towne & Country site in two locations. Provide information on the plan on how the onsite system will be disconnected.

    b) Show the location of the existing sanitary sewer service and water service. The existing services shall be abandoned at the main.

    Response: A demolition plan has been provided on sheet C1.0. The location and information on the existing sewer and water service has been provided.

Police Department:

1. **Character of use:**

   The Character of use is consistent with the area and is not a concern.

   Response: Comment Acknowledged.

2. **Are lighting requirements adequate?**

   Lighting should be up to Village of Arlington Heights code. The exterior of the building should be illuminated especially during the nighttime hours for safety, to deter criminal activity and increase surveillance/visibility – potentially reducing theft, trespassing, vandalism, underage drinking, and other criminal activity.

   Response: Comment Acknowledged.

3. **Present traffic problems?**

   There are no traffic problems at this location.

   Response: Comment Acknowledged.

4. **Traffic accidents at particular location?**

   This is not a problem area in relation to traffic accidents.

   Response: Comment Acknowledged.

5. **Traffic problems that may be created by the development.**

   This development should not create any additional traffic problems.

   Response: Comment Acknowledged.

6. **General Comments:**

   -Please ensure that there is an emergency information/contact card on file with the Arlington Heights Police Department and that it is up-to-date. Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. The form is attached. Please complete and return. This allows police

department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.

-Landscaping should provide open sightlines to increase natural surveillance and avoid creating ambush locations and havens for illegal activities- theft, trespassing, vandalism, underage drinking, drug use, etc.

Response: Open sight lines provided except where screening of the trash enclosure is required by Village.

-Consider posting no trespassing / loitering / no un-authorized use signage. The Arlington Heights Police Dept. has and utilizes trespass warning forms under qualifying circumstances when requested by property management.

Response: Comment Acknowledged.

Planning & Community Development Review

General:

7. Based on a review of the Round 1 submittal, the Plan Commission must review the following zoning actions:

   a) Amendment to Rezoning Ordinance #84-10 to eliminate Section Two in its entirety.

   b) Special Use Permit approval for a bank with a drive-through.

   c) Additional zoning actions may be required based upon your response to these comments and the submittal of revised plans.

   Response: Comment acknowledged.

8. The Special Use Permit must be justified per the three criteria necessary for Special Use approval, as summarized below. Please provide a separate document addressing each standard and outlying how the proposed drivethru complies with each standard:

- That said special use is deemed necessary for the public convenience at this location.
- That such case will not, under the circumstances of the particular case, be detrimental to the health, safety,morals or general welfare of persons residing or working in the vicinity.
- That the proposed use will comply with the regulations and conditions specified in this ordinance for such use,and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.

Response: Comment acknowledged. See revised project narrative attached.

9. All plans/studies/documents that are revised as a result of these comments must include a revision date.

Response: Comment acknowledged. A revision date has been added to the plans.

Site/Landscaping/Photometrics:

10. The Rand Road/Palatine Road corner provides an excellent opportunity for a focal point feature. Please explore the addition of a focal point feature in this location. Please coordinate with Derek Mach regarding this area.

    Response: A 2-ft retaining wall has been added to intersection to provide bench seating for pedestrians. Please see the image below for the design intent. The materials for the retaining wall will be an Allan Block's AB collection in Granite.

11. Please explore incorporation of the dumpster into a storage room within the building. If this is not feasible, the exterior dumpster location should be relocated so that it is further away from the street and can be screened by landscaping on three sides.

Response: The dumpster into a storage room in the building is not feasible. The dumpster location is as far away from the street and from the main building entrance as possible. Please see the landscape plan for proposed screening.

12. Please provide details on the materials, finish, and color of the proposed retaining wall.

    Response: The retaining wall will be an Allan block's AB Collection in Granite. A physical sample will be provided.

13. Please update the ALTA Plat of Survey to show the easement as recorded in document #27159212 or provide an explanation as to why this easement is not shown on the Plat of Survey. Additionally, please show the boundaries of the easement on the proposed site plan. If there are areas where the proposed multi-use pathway falls outside of the easement area and within private property, a modified easement (or new easement) shall be required as part of the development process.

    Response: The ALTA Plat of Survey has been revised to include document #27159212.

14. Please revise the plans so that the 10' multi-use pathway tapers down at the northwest corner of the site to align with the existing sidewalk to the west. Additionally, the truncated domes at the southeast terminus must be the full width of the pathway.

    Response: The 10' multi-use pathway has been tapered down at the NW corner. Truncated domes at the SE terminus have been included. Please see site plan sheet C2.0.

15. ***Other than the existing transformer located on the site, which is proposed to remain, are any other ground mounted mechanical equipment (generators, switchgear, utility pedestals etc.) proposed? If so, please show these elements on the site plans, which must be appropriately sited and screened.***

    Response: There are additional ground mounted mechanical equipment by the drive through canopy as noted on site plan sheet C2.0. An architectural louvre system will screen all equipment. For more details see exterior elevations.

16. Per Code, all rows of parking must terminate with a landscape island containing a shade tree. The two parking rows along the western side of the site terminate at the south

with the Code required landscape island located on the property to the south. This site cannot rely on another property to fulfill its' landscape requirements. Please either revise the plan or clarify if a variation is requested. Staff encourages compliance with Code.

Response: The parking and landscape islands as mentioned in the comment have been revised to comply with the code. Please see sheet C2.0. Site layout revised in landscape plans to include parking islands with tree at SE corner. The two parking stalls just east of this were removed to eliminate this tree requirement.

17. Per Section 10.2-12.3.b, footcandle levels at the property lines cannot exceed 2.0. Proposed footcandle levels along the western and southern side of the site do not conform to this requirement and must be revised.
    Response: Photometric proposed plan has been revised.

18. Per Section 10.2-12.c.3, all light poles that are between 20'-40' in height shall be separated by 3' for every 1' of fixture mounting height. Please provide the proposed mounting heights for fixtures SL1 and SL2 and revise the pole locations accordingly. Additionally, please confirm that the pole locations, as shown on sheet C.1, are accurate and not approximate.
    Response: Photometric proposed plan has been revised.

Building/Architectural:

19. Please provide a full color rendering of the building as seen from Rand Road, Palatine Road, and from the southwest.
    Response: Acknowledge. 3D Renders will be provided to Sam Hubbard for review.

20. The dumpster enclosure shall be reduced in height to 6' in order to comply with Code. Please revise the elevations to indicate the materials of the dumpster enclosure.
    Response: Acknowledge. Revised exterior elevations are attached for review.

21. Additional details are needed on the two proposed drive-thru canopies. Will the canopy closer to the building be the same style as the freestanding canopy? Will it be attached to the building? Please provide a detail. The canopy elevations shall be revised to indicate materials, overall height, and size of each canopy structure. Freestanding canopy structures that are not attached to the building would require a variation.
    Response: Acknowledge. Revised exterior elevations are attached for review.

22. Provide the total building square footage on the floor plan
    Response: Acknowledge.

Traffic/Parking/Circulation:

23. Please provide document #25981904. Additionally, please provide any additional easements or agreements that benefit or burden this property relative to shared parking or shared access.

    Response: The document has been provided with our submittal package.

24. Two bike parking stalls are required. Please show the proposed bike parking location on the plans.

    Response: The proposed bike parking stalls have been added. Please reference sheet C2.0 for location.

25. The Kimley Horn traffic study recommends one inbound lane and one outbound lane for the full access driveways accessing the site. Additionally, it recommended that the double lane egress be revised to a single lane. Why have these recommendations not been implemented?

    Response: Consistent with the traffic study, the site plan reflects a single inbound lane and single outbound lane at the two internal full-access driveways. The outbound-only lane is striped as a single lane. The traffic study has been updated to include the latest site plan.

26. The Kimley Horn study should include an analysis of the drive-thru stacking and whether there is sufficient queuing space. Have you considered restricting the 7 angled parking stalls adjacent to the drive-thru queue to employees only? This would prohibit usage by high-turnover visitor vehicles, which could have difficulty backing out of the spaces if there is a queue of cars for the drive-thru.

    Response: As shown on the site plan, the angled parking spaces will be limited to employee parking only in order to minimize turnover and limit conflicts with vehicles entering the drive-through lane.

27. No parking analysis was included in the Kimley Horn study. Analysis of the adequacy of the parking supply must be provided. Additionally, justification should be provided to

outline why 32 parking stalls are proposed where a minimum of 20 are required by Code (60% overage above Code minimums).

Response: A parking analysis was prepared separate from the traffic study and is enclosed for Village review.

Landscape:

1. Please explore options for preserving the following trees 9, 11, 12, 16, 17, 19, 24. As proposed additional shade trees will be required along Palatine Road and Rand Road.

TERRA Response: Due to site grading requirements and other site improvements, noted trees cannot be saved. Trees 9, 11 and 12 are in direct conflict with building and drive-thru lane. Trees 16 and 17 are invasive species, in fair conditions and within required site grading area. Tree 19 is within the major disturbance area for sidewalk access ramp to ROW. Tree 24 is in direct conflict with proposed building.

2. Provide a four-inch caliper shade trees at the end of each parking row {Chapter 28, Section 6.15). Please provide a four-inch caliper shade tree at the end of the parking row along the west property line.

TERRA Response: 4" caliper trees to be provided at the ends of each parking rows.

3. Provide two additional shade trees for a total of five along Rand Road and evaluate the spacing.

TERRA Response: Two (2) additional trees added to Rand frontage spaced at 30' o.c.

4. At the corner of Rand and Palatine Road incorporate an expanded pedestrian area within the parkway as part of the pedestrian crossing. The area should provide pedestrians a generous area of relief at the corner, and shall be designed as a focal point for this prominent intersection including decorative features (landscaping, specialty pavements, etc.).

TERRA Response: A focal point seat wall area provided near the intersection.

5. Landscape screening must be provided for any utility/mechanical areas. Any new utility/mechanical boxes must be placed where they are not visible and screened. Please evaluate options for screening the mechanicals located on the wall on the southeast elevation.

TERRA Response: Due to location of required equipment near required drive-thru lane, providing landscape screening is not possible.

6. A tree fee of $4 per lineal foot for frontage must be provided as part of the building permit process and a landscape compliance band of 30% of the estimated landscape cost.

TERRA Response: Noted.

We trust these responses and the description of changes above adequately address your comments. If you have any questions or require any additional information, please contact me at (469) 601-0316.
Sincerely,

Gabriela Prewitt
The Architects Partnership, LTD.

Village of Arlington Heights
Building & Life Safety Department

Interoffice Memorandum

To: **Jorge Torres, Director of Building & Life Safety**

From: **Elliot Eldridge, Assistant Building Official, Building & Life Safety Department**

Subject: **SDC: PC 23-014 Chase Bank Redevelopment**

Date: **November 9, 2023**

General Comments:

The Building & Life Safety Department has reviewed the SDC: PC 23-014 Chase Bank Redevelopment request for 585 E. Palatine Road. Because the applicant responded, "Acknowledge and will provided required info during the building permit submittal process, in their November 03, 2023 correspondences, B&LS Department offer no comments during the "Round 2 Dept Reviews".

PLAN COMMISSION PC #23-014
Chase Bank
585 E Palatine Road
Round 2

31. The petitioner's response to comment nos. 11, 12, 15-20, and 24-28 are acceptable.

32. The petitioner's response to comment no. 13 is noted. Due to the existing site constraints, the proposed methodology for the unrestricted flow is acceptable.

33. The petitioner's response to comment no. 14 is noted.
    a. The detention storage system located under the pavement must be designed to AASHTO HS-25 loading.
    b. Provide the calculations for the restrictor.

34. The petitioner's response to comment no. 21 is noted. The heavy-duty pavement section must be revised to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-50 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron to be 8" thick.

35. The petitioner's response to comment no. 22 is noted.
    a. Two of the fire exhibits indicate that the fire truck would have to turn around. This must be approved by the Fire Official.
    b. Provide dimensions from the onsite south drive aisle to the building.

36. The petitioner's response to comment no. 23 is noted. A plat of easement shall be provided.

37. The petitioner's response to comment no. 29 is noted. Payment due of the Contribution Ordinance will be included in the permit fees for the building permit.

38. The petitioner's response to comment no. 30 is noted.
    a) The water service must be abandoned at the main.
    b) The sanitary sewer service shall be plugged at the manhole.
    c) The existing public sidewalk must remain in place as long as feasibly possible. The sidewalk must not be removed until a replacement has been scheduled. Provide a note on the plans.

Michael L. Pagones, P.E. 11/22/23
Village Engineer Date

Planning & Community Development Dept. Review

November 28, 2023

REVIEW ROUND 2

Project: Chase Bank
585 E. Palatine Rd.

Case Number: PC 23-014

General:

28. The responses to the following comments are acceptable: #7-12, #14, #16, #19, #20, #23, #25, and #26.

29. The response to comment #11 is noted. If a location within the building is not feasible, at a minimum, please relocate the dumpster enclosure to the west side of the proposed servicewalk and provide additional screening around the enclosure for better buffering adjacent to Rand Rd.

30. The response to comment #13 is noted. Prior to building permit issuance, the revised sidewalk easement must be executed and provided to the Village.

31. The response to comment #15 is noted. The Design Commission will review the screening adjacent to the drive-through canopy.

32. The response to comment #17 is noted however, the footcandle levels along the western property line exceed code requirements. You're encouraged to re-evaluate the lighting along the western property line for compliance with code. Alternatively, a variation must be requested, and any such request shall be made in writing and include a response justifying compliance with the four criteria for approval.

33. The response to comment #18 is not sufficient. No info was provided relative to the overall mounting height of the light fixtures to verify whether compliance can be achieved. Provide the overall mounting height as originally requested, and you're encouraged to propose mounting heights/separations that comply with code requirements. Alternatively, a variation must be requested, and any such request shall be made in writing and include a response justifying compliance with the four criteria for approval.

34. The response to comment #21 is not sufficient. The details on the architectural elevation sheet does not match the canopy size outlines on the site plan (sheet C2.0). It is unclear what is being proposed in this location. Please provide details necessary to understand what is being proposed. Will the canopy adjacent to the building be free-standing or attached to the building? Provide an accurate detail for the proposed canopies, or reduce the size of the canopies shown on C2.0 to match was is shown on the elevation page. The Village needs to understand whether a variation is required.

35. The response to comment #22 is noted. However, no revised floor plan was provided within your resubmission.

36. The response to comment #24 is noted. Please be aware that the label on sheet C2.0 that points to the bike rack has been mis-numbered and should be labeled 17, not 16.

Prepared by: Sam Hubbard

Chase Bank Redevelopment

585 E. Palatine Road

PC 23-014

November 28, 2023

Landscape Comments

1. Please explore options for preserving the following trees 9, 11, 12, 16, 17, 19, 24. As proposed, additional shade trees will be required along Palatine Road and Rand Road.
   Response noted.

2. Provide a four-inch caliper shade trees at the end of each parking row (Chapter 28, Section 6.15). Please provide a four-inch caliper shade tree at the end of the parking row along the west property line.
   Please provide a tree in the island along the west parking row adjacent to the north drive aisle.

3. Provide two additional shade trees for a total of five along Rand Road and evaluate the spacing.
   Please evaluate the spacing so that the trees have consistent spacing along the entire Rand Road frontage.

4. At the corner of Rand and Palatine Road incorporate an expanded pedestrian area within the parkway as part of the pedestrian crossing. The area should provide pedestrians a generous area of relief at the corner.
   Response and revision noted. Please evaluate shifting the pedestrian area to align with the servicewalk as it leads down from the Chase site and connects with the public way. Final design of this area can be coordinated at time of permit. Minor adjustments may be needed to the crosswalk locations/ADA ramps to align with decorative crosswalks that the Village is installing in this area.

5. Landscape screening must be provided for any utility/mechanical areas. Any new utility/mechanical boxes must be placed where they are not visible and screened. Please evaluate options for screening the mechanicals located on the wall on the southeast elevation.
   Please evaluate the location of the trash enclosure.

6. A tree fee of $4 per lineal foot for frontage must be provided as part of the building permit process and a landscape compliance bond of 30% of the estimated landscape cost.
   Response noted.

The Architects Partnership, Ltd. 200 South Michigan Avenue, Suite 1020, Chicago, IL 60604

Sam Hubbard
Development Planner
Department of Planning and Community Development
Village of Arlington Heights
33 S Arlington Heights Road
Arlington Heights, IL 60005

December 09th, 2023

Re: Comments Response letter for property 585 E Palatine Road

Dear Mr. Hubbard,

We are in response of your review comments dated November 20th, 2023, for the proposed Chase Bank located at 585 E. Palatine Rd in Arlington Heights, IL. Below is a summary of the actions taken in response to these comments.

Building & Life Safety Department:

General Comments:
The Building & Life Safety Department has reviewed the SDC: PC 23-014 Chase Bank Redevelopment request for 585 E. Palatine Road. Because the applicant responded, "Acknowledge and will provided required info during the building permit submittal process, in their November 03, 2023 correspondences, B&LS Department offer no comments during the "Round 2 Dept Reviews".

Plan Commission:

31. The petitioner's response to comment nos. 11, 12, 15-20, and 24-28 are acceptable.
    Response: Acknowledge.

32. The petitioner's response to comment no. 13 is noted. Due to the existing site constraints, the proposed methodology to the unrestricted flow is acceptable.
    Response: Acknowledge.

33. The petitioner's response to comment no. 14 is noted
    a. The detention storage system located under the pavement must be designed to AASHTO HS-25 loading.
    Response: Acknowledge.

    b. Provide the calculations for the restrictor.
    Response: Calculations have been provided in site plan drawings package.

34. The petitioner's response to comment no. 21 is noted. The heavy duty pavement section must be revised to consist of: 2" surface, 1 ¼" N-50 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron to be 8" thick.
    Response: Revised detail has been attached to revised drawings.

35. The petitioner's response to comment no. 22 is noted.
    a. Two of the fire exhibits indicate that the fire truck would have to turn around. This must be approved by the Fire Official.
    Response: Acknowledge.

    b. Provide dimensions from the onsite south drive aisle to the building.
    Response: Acknowledge. Revised drawings have been provided in submittal package.

36. The petitioner's response to comment no. 23 is noted. A plat of easement shall be provided.
    Response: Acknowledge.

37. The petitioner's response to comment no. 29 is noted. Payment due of the Contribution Ordinance will be included in the permit fees for the building permit.
    Response: Acknowledge. Payment will be submitted during building permit, and payment will be covered by current owner or buyer.

38. The petitioner's response to comment no. 30 is noted.
    a. The water service must be abandoned at the main.
    Response: Acknowledge.

    b. The sanitary sewer service shall be plugged at the manhole
    Response: Acknowledge.

    c. The existing public sidewalk must remain in place as long as feasibly possible. The sidewalk must not be removed until a replacement has been scheduled. Provide a note on the plans.
    Response: Acknowledge. Revised drawings have been provided in submittal package.

Planning & Community Development Department:

28. The response to the following comments are acceptable: #7-12, #14, #16, #19, #20, #23, #25, and #26.
    Response: Acknowledge.

29. The response to comment #11 is noted. If a location within the building is not feasible, at a minimum, please relocate the dumpster enclosure to the west side of the proposed

servicewalk and provide additional screening around the enclosure for better buffering adjacent to Rand Rd.
Response: Acknowledge. Site section has been provided showing the planting heights of trash enclosure screening.

30. The response to comment #13 is noted. Prior to building permit issuance, the revised sidewalk easement must be executed and provided to the Village.

31. The response to comment #15 is noted. The Design Commission will review the screening adjacent to the drivethrough canopy.
Response: Project has been approved by Design Commission on 11/28.

32. The response to comment #17 is noted however, the footcandle levels along the western property line exceed code requirements. You're encouraged to re-evaluate the lighting along the western property line for compliance with code. Alternatively, a variation must be requested, and any such request shall be made in writing and include a response justifying compliance with the four criteria for approval.
Response: Revised photometrics plans can be found in submittal package.

33. The response to comment #18 is not sufficient. No info was provided relative to the overall mounting height of the light fixtures to verify whether compliance can be achieved. Provide the overall mounting height as originally requested, and you're encouraged to propose mounting heights/separations that comply with code requirements. Alternatively, a variation must be requested, and any such request shall be made in writing and include a response justifying compliance with the four criteria for approval.
Response: Revised photometrics plans can be found in submittal package.

34. The response to comment #21 is not sufficient. The details on the architectural elevation sheet does not match the canopy size outlines on the site plan (sheet C2.0). It is unclear what is being proposed in this location. Please provide details necessary to understand what is being proposed. Will the canopy adjacent to the building be free-standing or attached to the building? Provide an accurate detail for the proposed canopies, or reduce the size of the canopies shown on C2.0 to match was is shown on the elevation page. The Village needs to understand whether a variation is required.
Response: Acknowledge. Revised drawings have been provided in submittal package.

35. The response to comment #22 is noted. However, no revised floor plan was provided within your resubmission.
Response: Acknowledge. Floor plan has been provided in submittal package.

36. The response to comment #24 is noted. Please be aware that the label on sheet C2.0 that points to the bike rack has been mis-numbered and should be labeled 17, not 16.
Response: Acknowledge. Revised drawings have been provided in submittal package.

Landscape:

1. Please explore options for preserving the following trees 9, 11, 12, 16, 17, 19, 24. As proposed, additional shade trees will be required along Palatine Road and Rand Road. **Response noted.**
   Response: Acknowledge.

2. Provide a four-inch caliper shade trees at the end of each parking row (Chapter 28, Section 6.15). Please provide a four-inch caliper shade tree at the end of the parking row along the west property line. **Please provide a tree in the island along the west parking row adjacent to the north drive aisle.**
   Response: Acknowledge.

3. Provide two additional shade trees for a total of five along Rand Road and evaluate the spacing. **Please evaluate the spacing so that the trees have consistent spacing along the entire Rand Road frontage.**
   Response: Acknowledge.

4. At the corner of Rand and Palatine Road incorporate an expanded pedestrian area within the parkway as part of the pedestrian crossing. The area should provide pedestrians a generous area of relief at the corner. **Response and revision noted. Please evaluate shifting the pedestrian area to align with the servicewalk as it leads down from the Chase site and connects with the public way. Final design of this area can be coordinated at time of permit. Minor adjustments may be needed to the crosswalk locations/ADA ramps to align with decorative crosswalks that the Village is installing in this area.**
   Response: Acknowledge.

5. Landscape screening must be provided for any utility/mechanical areas. Any new utility/mechanical boxes must be placed where they are not visible and screened. Please evaluate options for screening the mechanicals located on the wall on the southeast elevation. **Please evaluate the location of the trash enclosure.**
   Response: Acknowledge. Site section has been provided showing the planting heights of trash enclosure screening.

6. A tree fee of $4 per lineal foot for frontage must be provided as part of the building permit process and a landscape compliance bond of 30% of the estimated landscape cost. **Response noted.**
   Response: Acknowledge.

We trust these responses and the description of changes above adequately address your comments. If you have any questions or require any additional information, please contact me at (469) 601-0316.
Sincerely,

Gabriela Prewitt
The Architects Partnership, LTD.

Plan Commission
12/20/2023

Item: Christian Pre-K Daycare - 308 N. Evergreen Ave - PC#23-015

Department: Planning & Community Development Department

Requested Action

1. Land Use Variation to allow a Day Care Center in the R-7 Zoning District.

2. Special Use Permit for a Day Care Center in the B-2 Zoning District.

Variations Required

1. A variation from Chapter 28, Section 6.12-1(3), to waive the requirement for a traffic and parking study from a qualified professional engineer.

2. A variation from Chapter 28, Section 10.4, to reduce the required parking from 137 to 50 spaces.

RECOMMENDATION

The Staff Development Committee (SDC) reviewed the request for a Special Use Permit for a Day Care Center, a Land Use Variation to allow a Day Care Center, and the following variations from Chapter 28 of the Municipal Code:

1. Chapter 28, Section 6.12-1(3), to waive the requirement for a traffic and parking study from a qualified professional engineer.

2. Chapter 28, Section 10.4, to reduce the required parking from 137 to 50 spaces.

The Staff Development Committee recommends APPROVAL of the application subject to the following conditions:

1. The daycare shall not exceed a capacity of 25 students at one time.

2. The daycare shall conform to all applicable DCFS regulations.

3. The petitioner shall comply with all Federal, State, and Village Codes, Regulations, and Policies.

ATTACHMENTS:

Description	Type
Staff Report	Board or Commission Report
Legal Notice	Exhibits
Aerial	Exhibits
Project Narrative	Correspondence
Plat of Survey	Exhibits
Floor Plan	Exhibits
Parking Analysis	Exhibits
Department Comments - Round 1	Correspondence
Department Comments - Round 2	Exhibits

VILLAGE OF ARLINGTON HEIGHTS

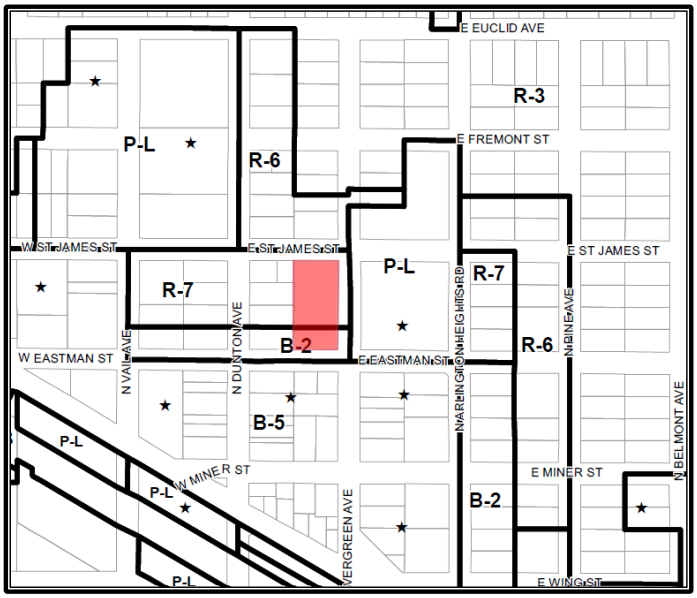
STAFF DEVELOPMENT COMMITTEE REPORT

PC File Number: *PC 23-015*
Project Title*: Christian Pre-K Prep Day Care*
Location*: 308 N Evergreen Ave*
PIN*: 03-20-200-008*

To*: Plan Commission*
Prepared By*: Hailey Nicholas, Assistant Planner*
Meeting Date*: December 20, 2023*
Date Prepared*: December 13, 2023*

Petitioner*: Rob & Melissa Gilland*
Address*: 729 S. Highland Avenue*
Arlington Heights, IL 60005

Existing Zoning*: B-2: General Business District & R-7: Multiple-family Dwelling District*
Comprehensive Plan*: Institutional*



Surrounding Land Uses

Direction	Existing Zoning	Existing Use	Comprehensive Plan
North	R-6, Multiple-Family Dwelling District	Single-Family Home	Moderate Density Multi-Family
South	B-2, General Business District	Mixed-use Development	Mixed-Use
East	P-L, Public Lands District	North School Park	Parks
West	R-7, Multiple-Family Dwelling District, B-2, General Business District	First Presbyterian Church parking lot	Institutional

Requested Action:

1. Land Use Variation to allow a Day Care Center in the R-7 Zoning District.
2. Special Use Permit for a Day Care Center in the B-2 Zoning District.

Variations Required:

1. A variation from Chapter 28, Section 6.12-1(3), to waive the requirement for a traffic and parking study from a qualified professional engineer.
2. A variation from Chapter 28, Section 10.4, to reduce the required parking from 137 to 50 spaces.

Project Background:

The subject property is occupied by the St. John's United Church of Christ and is located on a portion of land that consists of the eastern half of the block bounded by Evergreen Avenue to the east, St. James Street to the north, Dunton Avenue to the west, and Eastman Street to the south. Rob and Melissa Gilland, the petitioners, have leased space within the basement of the church property and have begun day care operations within the building. The petitioners have worked with staff to secure a temporary business license while they go through the zoning entitlement process. The daycare has passed all Health Department and DCFS inspections.

The daycare consists of three classrooms, one office, and has a total of five employees (four teachers and one administrator) with a maximum capacity for 25 children between the ages of 3-6 years old. This site had previously been used as a day care ("The Village") for many years, however, sometime during the last several years the owner retired and the daycare closed. Staff has found no record of any zoning approval for the previous daycare that occupied the site. Hours of operation for Christian Pre-K Prep would be 9:15am to 3:30pm, Monday through Friday during the academic school year. Over the summer they offer a summer camp for four weeks in June, and they are closed in July and August.

Access to the site comes from one curb cut on Eastman Street and one on Evergreen Avenue, both of which lead to a southern parking lot containing 25 parking stalls. Additionally, on the northern side of the site, one curb cut on St. James Street leads to a second 25-stall parking lot, for a total of 50 off-street parking stalls. The western side of the site contains a drive aisle that connects both parking lots. Two-hour street parking is available on both sides of Eastman and along the eastern side of Evergreen abutting the subject property.

Zoning and Comprehensive Plan

The northern ¾ of the subject property falls within the R-7, Multiple Family Dwelling District, and the southern ¼ of the site falls within the B-2, General Business District. Accordingly, a Land Use Variation is required to allow the proposed Day Care Center within the R-7 District and a Special Use Permit is required to allow a Day Care Center on the portion of land within the B-2 District. As part of their application, the petitioners have provided a written response to each of the four hardship criteria necessary for land use variation approval, as well as the three criterial necessary for Special Use Permit approval, which are found below:

The petitioner has provided a written response, explaining how they will conform to the Land Use Variation and Special Use Permit approval criteria, which approval criteria is included below for reference:

Land Use Variation Standards

- ***The proposed variation will not alter the essential character of the locality and will be compatible with existing uses and zoning of nearby property.***
- ***The plight of the owner is due to unique circumstances, which may include the length of time the subject property has been vacant as zoned.***

- ***The proposed variation is in harmony with the spirit and intent of this Chapter.***
- ***The variance requested is the minimum variance necessary to allow reasonable use of the property.***

Special Use Permit Standards

- ***That said special use is deemed necessary for the public convenience at this location.***
- ***That such case will not, under any circumstances of the particular case, be detrimental to the health, safety, morals or general welfare of persons residing or working in the vicinity.***
- ***That the proposed use will comply with the regulations and conditions specified in this ordinance for such use, and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.***

The Staff Development Committee concurs with the petitioner that the necessary standards for approval have been met. The Comprehensive Plan classifies this property as appropriate for "Institutional" land uses, and as a faith-based pre-school that is part of a church, the proposed use is compatible with the Comprehensive Plan.

Building, Site and Landscaping

No changes have been proposed to the exterior of the building or site. As such, no Design Commission review is required. The petitioner has clarified that outdoor recreational activities take place at North School Park, across the street. Therefore, an outdoor play area is not needed.

The existing onsite parking lots are non-conforming with regards to current landscape requirements, and the petitioner has expressed that a comprehensive upgrade to conform to code requirements would be a financial hardship for the church. Staff does not recommend that the church be required to update to current code requirements as part of this process. However, it should be noted that the existing parking lot landscaping along the southern property line has not been maintained and is no longer present. Staff will work with the property owner to re-install the code-required landscaping. The petitioner has confirmed that the church will look into landscaping upgrades and screening for the dumpster during their next substantial capital improvement to the site, although the missing landscape screen along the southern parking lot should be installed next spring.

Parking and Traffic:

Per Code, a traffic and parking study by a certified traffic engineer is required for Land Use Variations and Special Use Permits on properties that do not abut a major arterial. Given that the site is not adjacent to a major arterial, the study is required. The Staff Development Committee is supportive of a variation to waive this requirement given that peak usage times for the daycare and church will not coincide. Furthermore, the previous daycare that operated on this site had a larger number of children than the proposed daycare and staff is not aware of any issues

regarding parking or traffic that were attributed to the previous daycare. The petitioner has requested the following variations:

- Chapter 28, Section 6.12-1(3), to waive the requirement for a traffic and parking study from a qualified professional engineer.

For the reasons outlined above, the SDC is supportive of this variation.

With regards to parking, the petitioner has provided a detailed parking analysis. This analysis includes a breakdown of all uses within the church during the hours of operation for the preschool with details on numbers of employees and hours of usage. The petitioner has also provided a two-day parking survey at half hour intervals during the hours of operation for the daycare. Staff has evaluated the uses and number of employees on site, and is satisfied with the analysis provided by the petitioner.

Per Code, the site functions at a parking deficit, shown in the parking calculations table below. As such, the following variation is required:

- Chapter 28, Section 10.4, to reduce the required parking from 137 to 50 spaces.

This is not uncommon amongst religious institutions as Village Code calculates parking based on the peak usage of each space within a church facility at one time. In this case, 137 parking spaces are required for all uses within the church, while the daycare only requires 8. Detailed parking calculations are shown below.

Use	Parking requirement	Number of Seats	Number of Employees	Number of Classrooms	Size of Space	Required parking spaces
Sanctuary	One space per five seats	219.00	N/A	N/A	3,050	44
Multi-purpose and meeting rooms	Per Table 1004.1.1 for assembly areas w/o fixed seats and unconcentrated (tables and chairs) occupancy ratio is 1/15 sf. Community centers requires parking spaces equal to 30% of capacity	N/A	N/A	N/A	3,626	73
Daycare/Preschool	Three spaces for each two employees	N/A	5	5		8
Office-Administrative	One space per 300 sq. ft.	N/A	N/A	N/A	4,060	14
						TOTAL
					Total Parking Required	**137**
					TOTAL PARKING PROVIDED	**50**
					Surplus/(Deficit)	**-87**

Staff is supportive of this variation. The parking requirements for churches are based on the capacity of the space, which can be excessive in comparison to the actual parking demand. The

site would be at a parking deficit whether or not the daycare was there, as 73 spaces are required for the church assembly area alone. The daycare itself only requires 8 parking spaces. Based on this and the parking analysis provided by the daycare, staff is not concerned that the daycare will create a substantial increase in parking demand.

RECOMMENDATION

The Staff Development Committee (SDC) reviewed the request for a Special Use Permit for a Day Care Center, a Land Use Variation to allow a Day Care Center, and the following variations from Chapter 28 of the Municipal Code:

1. Chapter 28, Section 6.12-1(3), to waive the requirement for a traffic and parking study from a qualified professional engineer.
2. Chapter 28, Section 10.4, to reduce the required parking from 137 to 50 spaces.

The Staff Development Committee recommends **APPROVAL** of the application subject to the following conditions:

1. The daycare shall not exceed a capacity of 25 students at one time.
2. The daycare shall conform to all applicable DCFS regulations.
3. The petitioner shall comply with all Federal, State, and Village Codes, Regulations, and Policies.

_____ December 13, 2023.
Michael Lysicatos, Assistant Director of Planning & Community Development

Cc: Randy Recklaus, Village Manager
All Department Heads

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN THAT THE PLAN COMMISSION OF THE VILLAGE OF ARLINGTON HEIGHTS WILL CONDUCT A PUBLIC HEARING ON DECEMBER 20, 2023, AT 7:30 P.M. in the Municipal Building, 33 South Arlington Heights Road, Arlington Heights, Illinois to consider Petition No. 23-015, a request for a Land Use Variation to allow a Day Care Center in the R-7 District and a Special Use Permit to allow a Day Care Center in the B-2 District. The subject property is located at 308 N Evergreen Ave in Arlington Heights, Illinois. The PIN for the subject property is 03-29-318-005 and the subject property is legally described as follows:

LOT 1, 2, 3, AND 4 IN BLOCK 11 IN THE TOWN OF DUNTON, BEING A SUBDIVISION OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

As part of said petition the applicant is requesting the following variations from the Municipal Code:

- Variation to Chapter 28, Section 6.12-1(3), to waive the requirement for a traffic and parking study from a qualified professional engineer.
- Variation to Chapter 28, Section 10.4, to reduce the required parking from 137 to 50 spaces.

The Plan Commission will consider any zoning and Subdivision actions or relief from Chapter 28 and 29 that may be necessary or convenient to allow development of the type described in this notice, or development that is less dense than the type described in this notice, including, without limitation, special use permits, variations, map or text amendments, or other special approvals. Complete list of all final zoning actions and staff report may be viewed at www.vah.com.

At the public hearing, the Plan Commission will accept and consider all testimony and evidence pertaining to the application.

All persons desiring to be heard shall be given the opportunity to be heard. Should any individual need auxiliary aid or service, such as a sign language interpreter or materials in alternative formats, please contact the Health Department at 33 South Arlington Heights Road, Arlington Heights, Illinois 60005, (847) 368-5760, TDD# (847) 368-5794.

Susan Dawson, Chair
ARLINGTON HEIGHTS PLAN COMMISSION
Published in Daily Herald December 5, 2023 (4608997)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Northwest Suburbs
Daily Herald

Corporation organized and existing under and by virtue of the laws of the State of Illinois, DOES HEREBY CERTIFY that it is the publisher of the **Northwest Suburbs DAILY HERALD**. That said **Northwest Suburbs DAILY HERALD** is a secular newspaper, published in Arlington Heights, Cook County, State of Illinois, and has been in general circulation daily throughout Cook County, continuously for more than 50 weeks prior to the first Publication of the attached notice, and a newspaper as defined by 715 ILCS 5/5.

I further certify that the **Northwest Suburbs DAILY HERALD** is a newspaper as defined in "an Act to revise the law in relation to notices" as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a true copy, was published 12/05/2023 in said **Northwest Suburbs DAILY HERALD**. This notice was also placed on a statewide public notice website as required by 5 ILCS 5/2.1.

BY _____
Designee of the Publisher of the Daily Herald

Control # 4608997

PADDOCK PUBLICATIONS, INC. Corporate SEAL ILLINOIS

Land Use Variation Request - Summary
Business Name: Christian Pre-K Prep
Location: 308 N. Evergreen (St. John's Church)

Business Summary

Christian Pre-K Prep is a Not-for-Profit organization that operates as licensed preschool in Arlington Heights. We provide preschool, pre-k and kindergarten extension classes to three- to six-year-old children that includes both academic enrichment and Chrisitan education. We operate our school from 9:15am to 3:30pm, Monday through Friday during the school year. We follow the Arlington Heights School District 25 calendar so our students attend preschool on the same days as their siblings attend elementary school. We also offer a summer camp for four weeks in June. The summer camp also operates from 9:15am to 3:30pm, Monday through Friday. We are closed in July and August. We do not offer day care services at any time during the year.

Christian Pre-K Prep has a maximum of 25 children attend our school daily. The proposed use is a class E use per 2018 IBC section 305. We have four teachers and one School Director. Of our employees, only one teacher and the School Director are full-time. Our classes are offered in half day and full day options and parents can enroll their child for 1, 2, 3, 4, or 5 days a week.

Our programs deliver project-based learning in a highly individualized setting. The curriculum is designed to stimulate excitement for learning, problem solving and develop deep thinking. Through academic enriched-play based activities, we are also able to engage students in activities that promote an enjoyment of school and lifelong learning. Students are encouraged to embrace their individual curiosity and acquire deeper knowledge through exploration.

Our curriculum is designed around a "Letter of the Week" theme. For each week during the year we focus on one letter and its sound, reinforcing it in all of our activities. For example, during "Letter V week", students learn about vegetables and graph all of their favorites during snack time. A student favorite is making and then watching a volcano erupt. Another example is going on a field trip to ride a carousel during letter "C" week. At the end of the week, each student goes home with a "letter of the week bag" with fun things like kazoos for letter "K", lollipops for letter "L" and bubbles for letter "B". Children are encouraged to bring an item from home to participate in the letter of the week. Children have a lot of fun and truly learn the letter shape and sound by the end of the week. The curriculum is specifically designed to exceed the District 25 kindergarten readiness standards. It uses nationally recognized programs such as Jolly Phonics, IcanReadSongs, Handwriting Without Tears (kindergarten readiness), and One in Christ.

Our school is the work of Melissa Gilland. Melissa has a Masters in Education from DePaul and has been a teacher for 20 years. She and her husband have lived in Arlington Heights for over 20 years and have two sons, 26 and 14 years old.

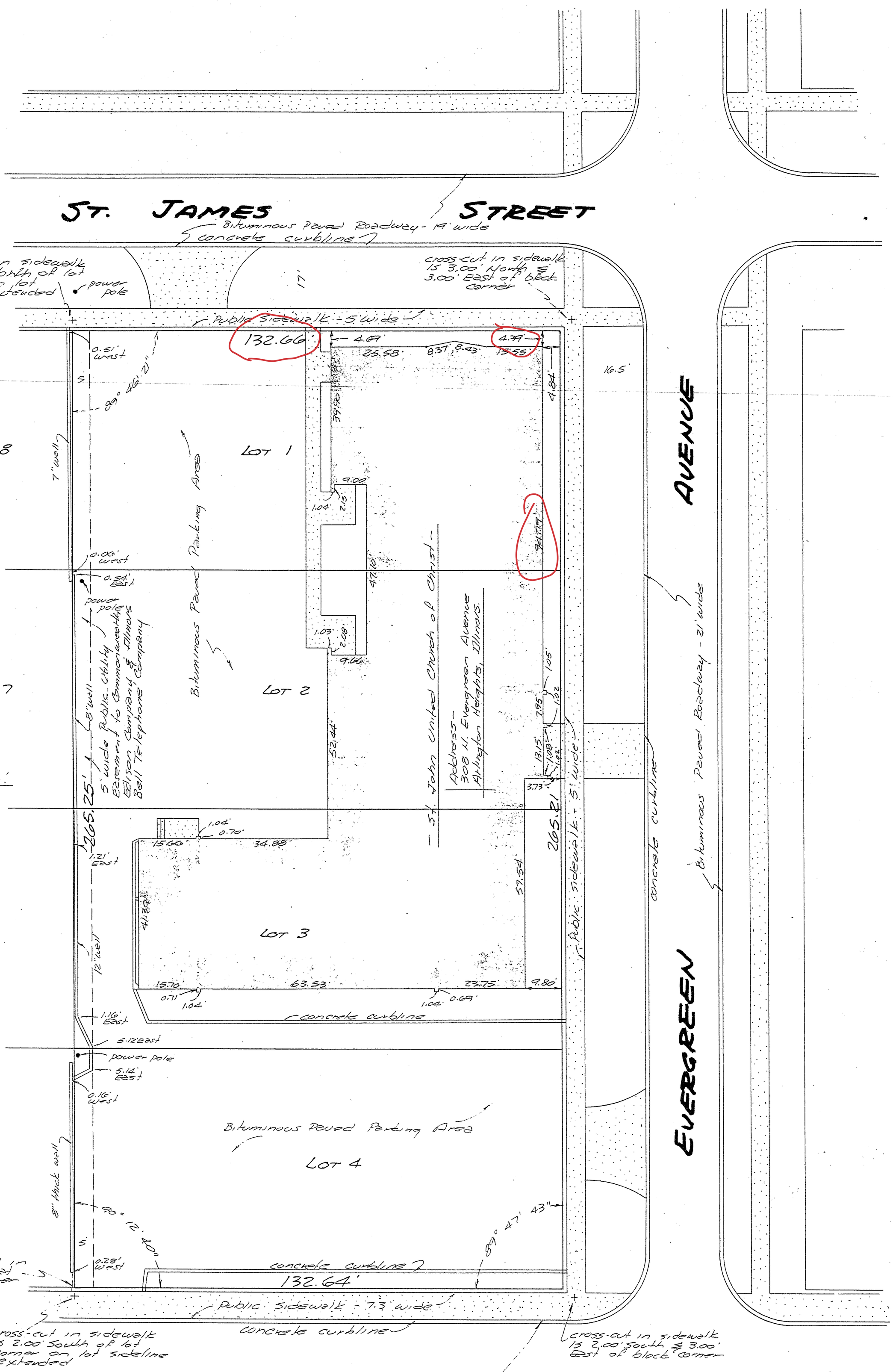
Notes:

- The Village of Arlington Heights has granted us a six-month, temporary approval to operate from 308 N Evergreen. We are applying for a Land Use Variation so we may operate from this location permanently.
- Chrisitan Pre-K Prep only operates out of four rooms in the church. They are all in the basement and are numbered 109, 112, 114, 115, 119B on the floor plans attached to the application.

- A previous preschool, The Village, operated in this same location for 40 years. It had 80 students and recently closed when the owner retired. We are operating out of this exact same location and classrooms.
- Arlington Heights Health Services Department, Arlington Heights Building & Life Safety Department, and the Illinois State Fire Marshall all inspected and approved our school in summer 2023.
- The Illinois Department and Family Services has inspected and approved our school for operation through 2026.

PLAT OF SURVEY

Lots 1, 2, 3 and 4 in Block 11 in the Town of Dunton, being a Subdivision of the West half of the Southwest quarter of Section 29, Township 42 North, Range 11 East of the Third Principal Meridian, in Cook County, Illinois.



Scale: 1" = 16'

State of Illinois)
) SS
County of Cook)

I, Robert E. Frederick, an Illinois Registered Land Surveyor, do hereby certify that the above described property has been surveyed, under my supervision, in the manner represented on the plat hereon drawn.
Dimensions are shown in feet and decimal parts thereof.

Palatine, Illinois - July 27, 1987

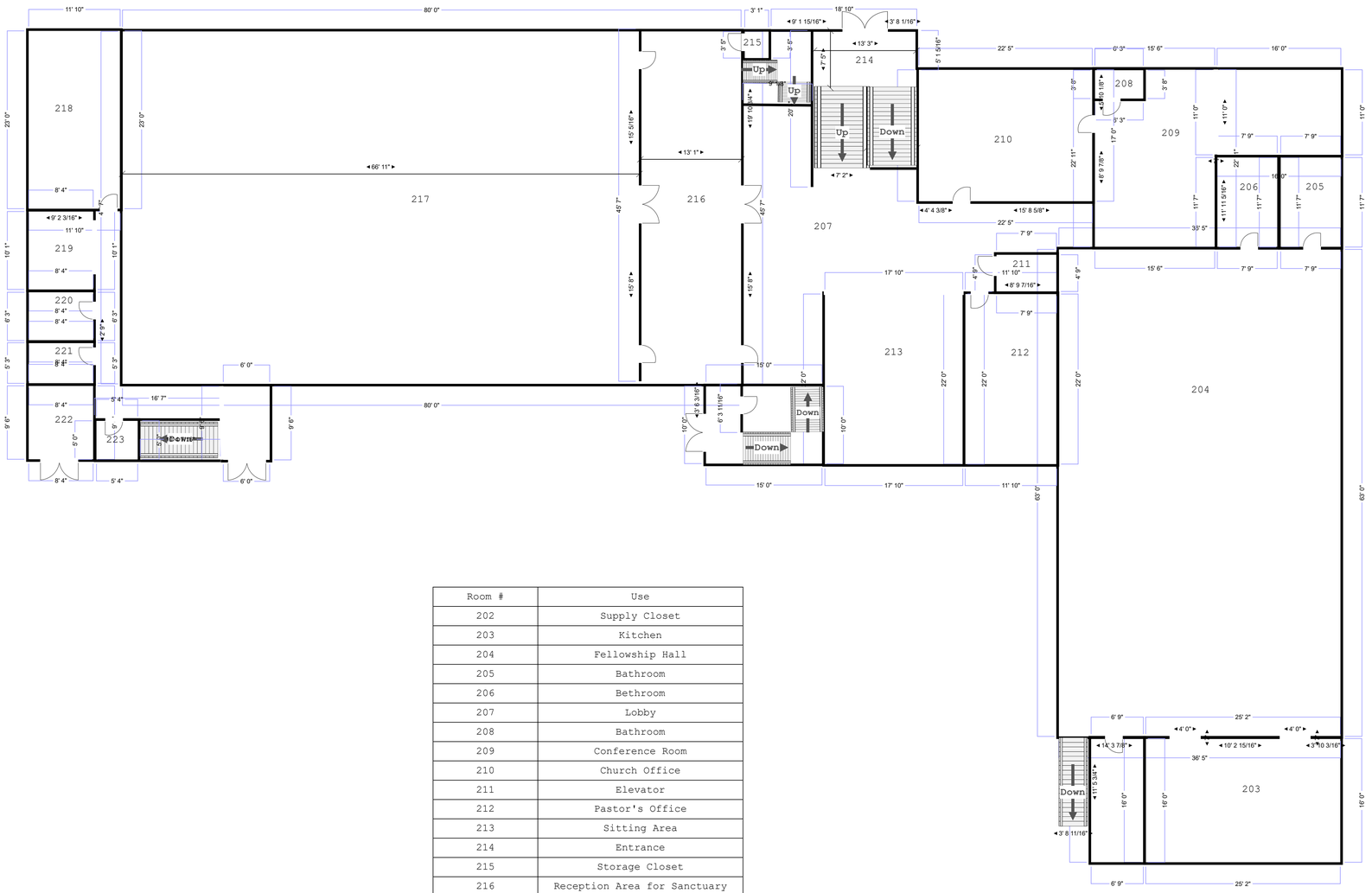
Robert E. Frederick

Illinois Registered Land Surveyor -- No. 35-1461

Survey Prepared For :
St. John United Church of Christ
308 N. Evergreen Avenue
Arlington Heights, Illinois

Survey and Plat By :
R. E. Frederick & Associates, Inc.
Land Surveyors & Planners
21 North Greeley Street
Palatine, Illinois 60067

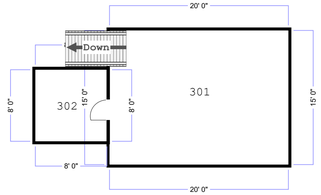
First Floor



Room #	Use
202	Supply Closet
203	Kitchen
204	Fellowship Hall
205	Bathroom
206	Bethroom
207	Lobby
208	Bathroom
209	Conference Room
210	Church Office
211	Elevator
212	Pastor's Office
213	Sitting Area
214	Entrance
215	Storage Closet
216	Reception Area for Sanctuary
217	Sanctuary
218	Choir Room
219	Kitchen
220	Bathroom
221	Storage Closet
222	Garage
223	Storage Closet

Note: Sanctuary has individual chairs for seating (not pews)

Second Floor

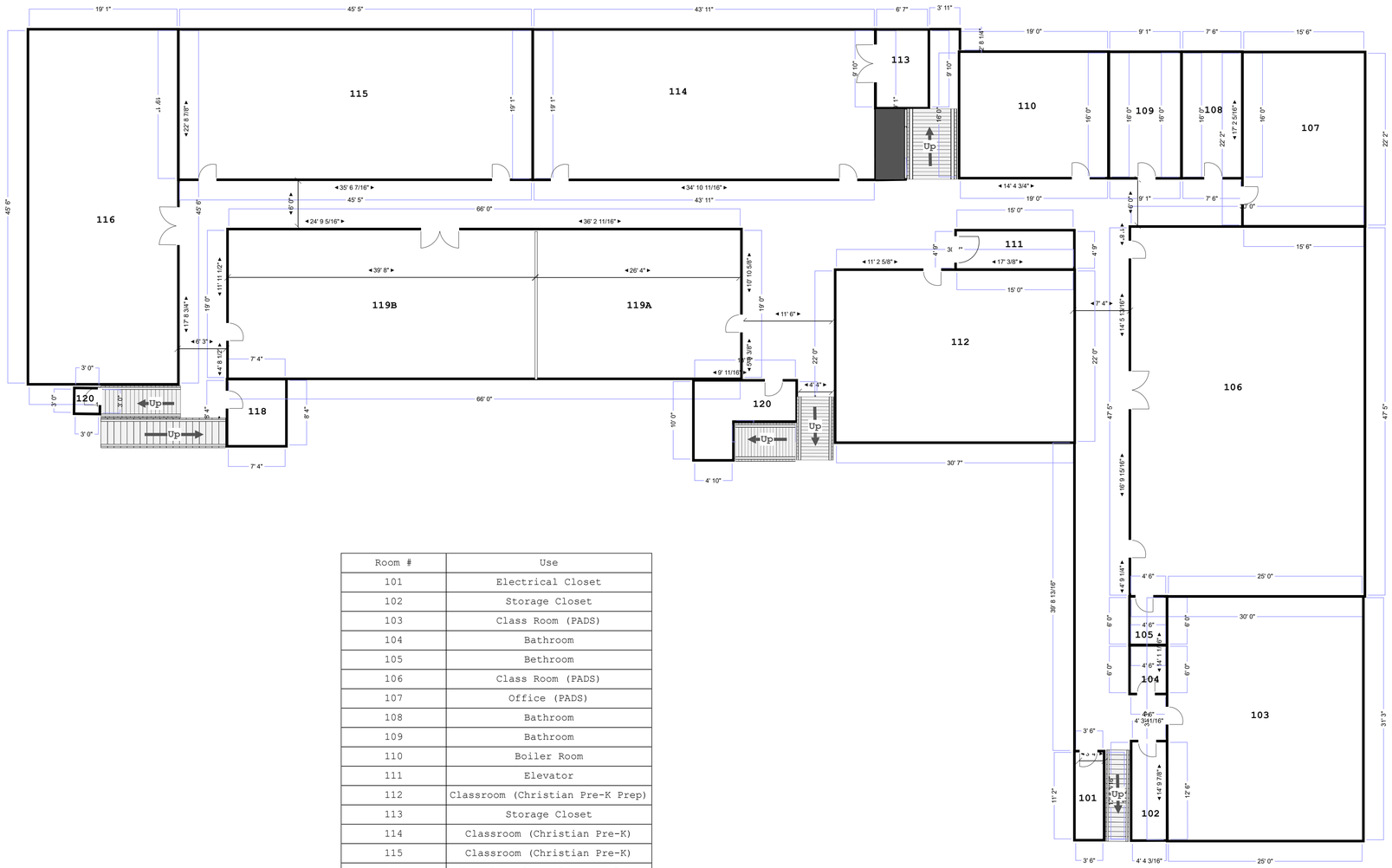


Room #	Use
301	Balcony and Audio/Visual Desk
302	Storage Closet

Note: Balcony has individual chairs for seating (not pews)

Site: **308 N. Evergreen**	Drawing: **First and Second Floors**	Project: **Floor Plan**	Drawn:	Notes: Interior closets and windows not shown.	**Christian Pre-K Prep** **308 N. Evergreen** **Arlington Heights, IL 60004**
Title: **To Scale Floor Plan**	Scale: **1/8":1'0"**	Date: **10/01/2023**	Rev: **1**		

Basement



Room #	Use
101	Electrical Closet
102	Storage Closet
103	Class Room (PADS)
104	Bathroom
105	Bethroom
106	Class Room (PADS)
107	Office (PADS)
108	Bathroom
109	Bathroom
110	Boiler Room
111	Elevator
112	Classroom (Christian Pre-K Prep)
113	Storage Closet
114	Classroom (Christian Pre-K)
115	Classroom (Christian Pre-K)
116	Hand Bell Choir Practice Room
117	Storage Closet
118	Storage Closet
119A	Office (Christian Pre-K)
119B	Office (Tenant Church)
120	Utility Closet

Site:	**308 N. Evergreen, Arlington Heights, IL, 60004**	Drawing: **Basement Level**	Project: **Floor Plan**	Drawn:	Notes: Interior closets and windows not shown	**Christian Pre-K Prep** **308 N. Evergreen** **Arlington Heights, IL, 60004**
Title:	**To Scale Floor Plan**	Scale: **1/8":1'0"**	Date: **10/01/2023**	Rev: **A**		

PARKING SURVEY

PETITIONER: Christian Pre K Prep Day Care

ADDRESS: 308 N Evergreen Ave PROJECT: PC 23-015

DATE	TIME	NUMBER OF CARS PARKED IN LOT	NUMBER OF PARKING SPACES (TOTAL)	NUMBER OF CARS IN PICK-UP/DROP-OFF LINE (ALONG EVERGREEN AVE)
11/1/2023	9am	13	51	0
	9:15am	16	51	4
	12:15pm	8	51	0
	12:30pm	9	51	3
	3:15pm	10	51	0
	3:30pm	13	51	3
11/6/2023	9am	10	51	0
	9:15am	15	51	2
	12:15pm	9	51	1
	12:30pm	10	51	0
	3:15pm	10	51	2
	3:30pm	12	51	4

Activity	Days of Week	Hours	# of Participants (approx.)	Rooms Used	Total Room Sq. Ft.
Preschool	M - F	8am-3pm	25	112,. 114, 115, 119B	3121
St. John Sunday Worship	Su	10am-12pm	75	203, 204, 217	5750
PADS	W, F	6pm-7am	25	103, 106, 107	2517
Church Office	M-F	8am-12pm	2	210, 212	858
Love of Jesus Mission Church	Th - June, July & August	6:30pm-9pm	20	204, 203	2700
Love of Jesus Mission Church	Th - Spring & Fall	9:30am-12pm	20	204, 203	2700
Love of Jesus Mission Church	F	8pm-10pm	20	217	3050
Love of Jesus Mission Church	Sa	5:30am-7:30am	20	217	3050
Love of Jesus Mission Church	Su	12pm-4pm	20	203, 204, 215, 217, 106	7161
Love of Jesus Mission Church	Daily	6am-11am	20	119A	494
Tai Chi	M, Th	7pm-9pm	5	106	1401
Girl Scouts Brownie Troop 47274	W, 1X/month during school year	4pm-5:30pm	20	204	2300
Girl Scouts Daisy Troop 47417	Th, 2X/month during school year	4pm-5pm	25	204	2300
Girl Scouts Daisy Troop 47845	Tu, 1X month during school year	4:15pm-5:30pm	18-20	204	2300
Bible Study	Tu	10am-11:15am	10	209	524
Spiritual Life Committee Meetings	1st Tu of month	7pm-8pm	7	209	524
Council Meetings	2nd Tu of month	7pm-8pm	12	209	524
Stewardship Committee Meetings	3th Tu of month	7pm-8pm	8	209	524
Bell Rehearsal	Tu, part of year	6pm-7pm	10	217	2300
Choir Rehearsal	W, part of year	6:45pm-7:45pm	10	217	2300
Worship Band Rehearsal	Tu, part of tear	6:30pm-7:30pm	6	217	2300
St. John Social	Sa, 1X/month	6pm-8pm	12	203	400

Village of Arlington Heights
Building & Life Safety Department

Interoffice Memorandum

To: **Jorge Torres, Director of Building & Life Safety**

From: **Elliot Eldridge, Assistant Building Official, Building & Life Safety Department**

Subject: **308 N. Evergreen Ave. Arlington Heights, IL 60004**

PC#: **PC 23-015 (Christian Pre-K Prep)**

Date: **October 10, 2023**

General Comments:

The information provided is conceptual only and subject to a formal plan review.

1. The following adopted codes with the Village amendments shall apply:
   a. 2018 International Building Code with amendments
   b. 2018 International Fire Code with amendments
   c. 2018 International Fuel Gas Code with amendments
   d. 2018 International Mechanical Code with amendments
   e. 2018 Illinois Energy Conservation Code with state amendments
   f. 2018 Illinois Accessibility Code
   g. 2014 Illinois Plumbing Code with amendments
   h. 2017 National Electrical Code with amendments

2. Drawings produced by an Illinois licensed architect are required for permit submittal. The plans do not appear to conform to this requirement.

3. Provide the building's occupant load. Provide an estimated occupant load calculation for each Class room. Submittal is missing this information.

4. Per the Illinois accessibility Code (IAC), addresses how compliance to the referenced code is achieved or how the school is exempted from the IAC. Submittal is missing this information.

5. The proposed use is a change of use and is classified as an E use group, with classes for 25 children of ages 3 to 6 years old, per the 2018 IBC section 305. Submittal is missing this information.

6. Per the IBC, addresses all portions of the egress system (exit access, exits and exit discharge) and include the design requirements per the use group and occupancy load. Submittal is missing this information.

7. If required, separate permits are required for the following:
   Fire Alarm alteration
   Fire Suppression alteration
   Signage

8. Note: “A transmittal letter detailing all the changes from the initial review will be required for any additional reviews”.

PLAN COMMISSION PC #23-015
St John's Church Christian Pre-K
308 N Evergreen Ave
Round 1

11. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.

12. The Public Works Department and Engineering Division have no further comments.

10-17-23

Michael L. Pagones, P.E. Date
Village Engineer

Nicholas, Hailey

From: Roberts, David
Sent: Monday, October 30, 2023 10:51 AM
To: Hubbard, Sam
Cc: Nicholas, Hailey; Lysicatos, Michael
Subject: RE: New Plan Commission Application: PC 23-015 (Christian Pre-K Prep)

Follow Up Flag: Follow up
Flag Status: Flagged

Sam/Hailey,

The Fire Department has no comments on the Round 1 submittal.

Thanks,

David Roberts
Division Chief
Community Risk Reduction
Arlington Heights Fire Department
1150 North Arlington Heights Rd.
Arlington Heights, IL 60004
847-368-5450

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

DEPARTMENT PLAN REVIEW SUMMARY

Christian Pre-K Prep
308 N Evergreen Ave

Round 1 Review Comments **10/23/2023**

1. **Character of use:**
   The character of use is consistent with the area and is not a concern.

2. **Are lighting requirements adequate?**
   Lighting should be up to Village of Arlington Heights code. The exterior of the building should be illuminated especially during nighttime hours for safety, to deter criminal activity and increase surveillance/visibility- potentially reducing theft, trespassing, vandalism, underage drinking, and other criminal activity.

3. **Present traffic problems?**
   There are no traffic problems at this location.

4. **Traffic accidents at particular location?**
   This is not a problem area in relation to traffic accidents.

5. **Traffic problems that may be created by the development.**
   This development should not create any additional traffic problems.

6. **General comments:**

   - Please ensure that there is an emergency information/contact card on file with the Arlington Heights Police Department and that it is up-to-date. Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. The form is attached. Please complete and return. This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.

Natural Surveillance and Access Management – Natural surveillance refers to the placement of physical features that improve visibility. Access control refers to interventions that improve the perimeter security of locations. This includes using signs, well-marked entrances and exits, and landscaping to improve or limit access to certain areas.

- Landscaping should provide open sightlines to increase natural surveillance and avoid creating ambush locations and havens for illegal activities- theft, trespassing, vandalism, underage drinking, drug use, etc.

– The properties perimeter fence to enclose outside space and playground areas is a great example of access control for this space. Perimeter definition and access control are essential to deter unwanted access to the facility. Utilize signage to clearly distinguish public access from private access around perimeter fencing.

- Pedestrian pathways on the property should be separated from vehicular routes by use of curbing, color markings, landscaping and/or other types of barriers.

- Plantings higher than 3 feet should not be placed within 10 to 15 feet of entrances to prevent hiding spots, and mature trees should be pruned to 8 feet. Landscaping elements should not allow for easy access to roofs, windows, or other upper-level areas.

- Lighting is an important aspect of CPTED. Lighting increases the amount and quality of natural surveillance. If people cannot see the activity, they cannot report the activity. Lighting can also deter those intending to conduct criminal/nuisance activity. Exterior lighting should be activated by sensor, timer or motion depending on the need and location.

- CCTV is an essential part of CPTED and is highly recommended for daycare and school facilities. Signage indicating the use of video surveillance and monitoring is also recommended in conjunction with CCTV.

Address visibility:

- Directional signage located at the entry to the complex should be utilized, clearly indicating location of staff parking, parent drop-off and pick-up areas and the front entrance.

- Signage should also be used to delineate school and church property boundaries from adjacent properties.

- Include signage for "No Trespassing," "No Loitering" and/or "No Solicitation."

- Interior and exterior of preschool facility should prominently display door numbers in the event an emergency occurs. Interior hallways and doorways should prominently/adequately display floor plans. This is essential for first responders as well as persons unfamiliar with the complex layout that may need emergency services.

Parent drop-off/pick-ups:

- One designated drop-off/pick-up area should be utilized. Drop off locations should be clearly marked by signage, pavement and/or curb treatments

- There should be sufficient space and capacity for vehicles in the drop-off/pick-up area (especially during peak traffic times) to allow for the orderly movement of vehicles.

Territoriality and Maintenance – Territoriality involved creating a welcoming environment. This involves creating a strong sense of ownership and community through artwork, color, pavement treatments, landscaping design and maintenance of the property. Maintenance includes making timely repairs and the general upkeep of interior and exterior spaces.

- Create clear separation between public, semi-private and private zones through landscaping and attractive, well-maintained fencing and/or other types of natural barriers.

- In the basement are where preschool is held, student artwork prominently displayed is a great way to create a welcoming environment with distinct territoriality. This also helps to delineate this area from the church common areas.

- The use of bushes or plants with thorns or sharp foliage is not recommended for this facility as children are frequently present on the property for both preschool and church services.

- Parking lots and pedestrian pathways should be well maintained and in good condition.

Additional Security Survey recommendations:

- An Arlington Heights Police Department Security Survey was completed for this space in 2021 while it was operating as a daycare. The following safety recommendations for the daycare specific areas were made (these security recommendations would be applicable for this space operating as a preschool as well):

- Update keyed door access to keyless door access by use of key cards/fobs/or similar. This is especially important for the exterior access doors to the preschool in order to monitor the doors activity and have the ability to deactivate a person's access key card immediately in the event of an emergency (i.e staff termination, an order of protection served on a parent which prevents them from access to their child(ren))
- Windows upgraded to reinforced, shatterproof windows
- Exterior doors upgraded to windowless, solid core doors
- Floor level windows with basement access are a safety concern. Consider low-cost electric box fans for ventilation or install ceiling fans instead of opening floor level windows
- Alarm systems and panic buttons are recommended especially for use in the preschool designated areas/classrooms
- Interior intercom system recommended for communication between Preschool staff and front office as opposed a walkie talkie or cell phone system.
    - Use for communicating a lock down
    - Use for communicating an emergency with a child
    - Use for contacting parents attending service while children are in Sunday School
-

A. O. #330

Alexandra Ovington, Crime Prevention Officer
Community Services Bureau

Approved by: 583

Supervisor's Signature

HEALTH SERVICES DEPARTMENT

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 23-015
Petitioner: Rob and Melissa Gilland
729 S. Highland Ave
847.606.2265 or 847.293.1976
Owner: St. John United Church of Christ

Contact Person:
Address:

Phone #:
Fax #:
Email:

P.I.N.# 03-29-318-005
Location: 308 N. Evergreen
Rezoning: ____ Current: R-7 Proposed: ____
Subdivision:
# of Lots: ____ Current: ____ Proposed: ____
PUD: ____ For: ____
Special Use: ____ For: ____
Land Use Variation: yes For: Operation of a Preschool within a church
Land Use: church Current: church
Proposed: church and preschool
Site Gross Area: 35,183 sq ft
# of Units Total:
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

1. GENERAL COMMENTS:

This Department has no comments

Jeff Bohner 10/10/23
Environmental Health Officer Date

Director 10/10/23
Date

Planning & Community Development Department Review

October 16, 2023

REVIEW ROUND 1

Project: Christian Pre-K Day Care
308 N Evergreen Ave

Case Number: PC 23-015

General:

7) The following approvals are required:
    a. Land Use Variation for a Day Care Center in the R-7 District.
    b. Special Use Permit for a Day Care Center in the B-2 District.
    c. Variation from the requirement to submit a Traffic and Parking Study.
8) Provide the total number of seats/capacity in the church assembly/main sanctuary area.
9) Provide a 6-day parking survey taken over the period of two weeks (3 days each week) during preschool pick-up and drop-off times must be provided to determine the parking demand.
10) Provide a breakdown of all uses within the church during the hours of operation for the preschool (i.e. PADS, church events, bible studies, ministry meetings, church office usage, etc.), with details on the number of employees, hours of usage, and the size of rooms used for each activity/event.
11) Evaluate the feasibility of constructing a dumpster enclosure to screen the existing dumpster on the site.
12) Please provide justification for the Special Use criteria (found within the Plan Commission application).
13) Please provide a formal response to all Round 1 Department Review Comments in electronic format, either via a USB/flash drive or via email (if the files are small enough to email).

Prepared by: Hailey Nicholas

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 23-015
Petitioner: Rob and Melissa Gilland
729 S. Highland Ave
847.606.2265 or 847.293.1976
Owner: St. John United Church of Christ

Contact Person:
Address:

Phone #:
Fax #:
Email:

P.I.N.# 03-29-318-005
Location: 308 N. Evergreen
Rezoning: ____ Current: R-7 Proposed: ____
Subdivision:
# of Lots: ____ Current: ____ Proposed: ____
PUD: ____ For: ____
Special Use: ____ For: ____
Land Use Variation: yes For: Operation of a Preschool within a church
Land Use: church Current: church
Proposed: church and preschool
Site Gross Area: 35,183 sq ft
# of Units Total:
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

LANDSCAPE & TREE PRESERVATION:

	YES	NO
1. Complies with Tree Preservation Ordinance	N/A	
2. Complies with Landscape Plan Ordinance		X
3. Parkway Tree Fee Required (See below.)		X

Comments:

Landscape Comment

1) Per Chapter 28, Section 6.15 a three-foot-high landscape screen is required between the public right of way and the parking area. Please provide the code required landscape screen for the parking area along Eastman Street.

Coordinator

10/24/23
Date

Village of Arlington Heights
Building & Life Safety Department

Interoffice Memorandum

To: **Jorge Torres, Director of Building & Life Safety**

From: **Elliot Eldridge, Assistant Building Official, Building & Life Safety Department**

Subject: **308 N. Evergreen Ave. Arlington Heights, IL 60004**

PC#: **PC 23-015 (Christian Pre-K Prep)**

Date: **November 13, 2023**

General Comments:

The Building & Life Safety Department has reviewed the PC 23-015 (Christian Pre-K Prep) request for a land use variation at 308 N. Evergreen Ave. Due to the applicant's satisfactory responses, presented in their November 8, 2023 correspondences, B&LS Department offer no comments during the "Round 2 Dept Reviews".

PLAN COMMISSION PC #23-015
St John's Church Christian Pre-K
308 N Evergreen Ave
Round 2

13. The petitioner's response to comment nos. 11 and 12 are acceptable. The Public Works Department and Engineering Division have no further comments.

11-08-23

Michael L. Pagones, P.E. Date
Village Engineer

Nicholas, Hailey

From: Roberts, David
Sent: Wednesday, November 29, 2023 1:28 PM
To: Nicholas, Hailey
Subject: RE: Plan Commission Round 2 Submission: PC 23-015 (Christian Pre-K Day Care)

No further comments.

David Roberts
Division Chief
Community Risk Reduction
Arlington Heights Fire Department
1150 North Arlington Heights Rd.
Arlington Heights, IL 60004
847-368-5450

Nicholas, Hailey

From: Murphy, Joseph
Sent: Monday, November 20, 2023 12:57 PM
To: Nicholas, Hailey
Subject: Re: Plan Commission Round 2 Submission: PC 23-015 (Christian Pre-K Day Care)

Hello Hailey,
Sorry for the delay. The Police Department has no additional comments.
Thank you,
Sgt. Joe Murphy

Nicholas, Hailey

From: Bohner, Jeff
Sent: Wednesday, November 8, 2023 1:34 PM
To: Nicholas, Hailey
Cc: McCalister, James
Subject: RE: Plan Commission Round 2 Submission: PC 23-015 (Christian Pre-K Day Care)

Hailey-
The Health and Human Services Department has no further comments on this proposal.

Jeff Bohner, Health Officer
Village of Arlington Heights
jbohner@vah.com
847-368-5784

Planning & Community Development Department Review

November 17, 2023

REVIEW ROUND 2

Project: Christian Pre-K Day Care
308 Evergreen Ave

Case Number: PC 23-015

General:

14) Your responses to #7, #9-13 are sufficient.

15) Per your response to #8, parking was calculated by staff to determine an 87-space parking deficit. This is not uncommon, but an additional request for a parking variation will need to be added to your proposal. You will need to request a variation from Chapter 28, Section 10.4 to reduce the required parking from 137 to 50 spaces. The parking survey, list of church activities, and responses to the land use variation criteria you have provided can serve as justification for this request.

Prepared by: Hailey Nicholas

Christian Pre-K Prep
308 N. Evergreen Avenue
PC #23-015
November 22, 2023

Landscape Issues

1) Per Chapter 28, Section 6.15 a three foot high screen is required between the public right of way and the parking area.

   The code required screen along Eastman Street was present in the past. The Village will work with the church outside of the Plan Commission process in order to address the code required screening.