



Village of Arlington Heights
Plan Commission
Board Room
Arlington Heights Village Hall
33 S. Arlington Heights Road
Arlington Heights, IL 60005
December 13, 2017
7:30 PM

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF MINUTES

- A. Hey Nonny - 11/8/17

IV. PUBLIC HEARINGS

- A. St. James Parish - 831 N. Arlington Heights Rd. - PC#17-012
Planned Unit Development, Amendment to Special use Ordinances
#63-078, #97-078, #07-012, Amendment to the Comprehensive Plan,
Plat of Subdivision, Variations

V. OTHER BUSINESS

VI. ADJOURNMENT

Persons with disabilities requiring auxiliary aids or services, such as an American Sign Language interpreter or written materials in accessible formats, should contact David Robb, Disability Services Coordinator, at 33 S. Arlington Heights Road, Arlington Heights, Illinois 60005, (847)368-5793 (Voice), (847)368-5980 (Fax) or drobb@vah.com.



Item: Hey Nonny - 11/8/17

Department: Planning & Community Development

ATTACHMENTS:

Description

Hey Nonny - 11/8/17

Type

Minutes

PLAN

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

COMMISSION

RE: HEY NONNY - 10 SOUTH VAIL AVENUE - PC#17-011
PUD AMENDMENT, SPECIAL USE FOR RESTAURANT/AUDITORIUM
(MUSIC VENUE), VARIATION TO WAIVE TRAFFIC STUDY

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 8th day of November, 2017 at the hour of 7:30 p.m.

MEMBERS PRESENT:

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

ALSO PRESENT:

SAM HUBBARD, Development Planner

CHAIRMAN ENNES: This meeting of the Plan Commission of Arlington Heights is called to order. Would you all please stand and join us for the pledge of allegiance?

(Pledge of allegiance recited.)

CHAIRMAN ENNES: Thank you. Sam, would you take the roll?

MR. HUBBARD: Commissioner Cherwin.

COMMISSIONER CHERWIN: Here.

MR. HUBBARD: Commissioner Dawson.

(No response.)

MR. HUBBARD: Commissioner Drost.

(No response.)

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: Commissioner Warskow.

COMMISSIONER WARSKOW: Here.

MR. HUBBARD: Chairman Ennes.

CHAIRMAN ENNES: Here. We have minutes for approval. Do I have a motion?

COMMISSIONER LORENZINI: I'll make that motion.

CHAIRMAN ENNES: Is there a second?

COMMISSIONER JENSEN: Second.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: I abstain, I wasn't at the meeting.

COMMISSIONER GREEN: I also have to abstain, I was not there.

COMMISSIONER WARSKOW: Same for me.

CHAIRMAN ENNES: Okay, our first petition is PC#17-011. Can I ask the Petitioner to please come forward to the podium? Would you and anybody else who is going to speak, please come forward? I will swear you in. Would you each please state your name for the court reporter just so we have that?

MR. DUNGAN: Sure. My name is Chris Dungan.

MR. DUNN: I'm Cory Dunn.

(Witnesses sworn.)

CHAIRMAN ENNES: Would you like to -- have all notices been sent out, Sam?

MR. HUBBARD: They have, yes.

CHAIRMAN ENNES: They have. Okay, would you give us a presentation for your project?

MR. DUNGAN: Sure. So, good evening, everybody. First of all, I'd like to thank the Commission and the Staff of the Village of Arlington Heights Planning Development just

to get us here to this point today. Today, I'll talk a little bit about what Hey Nonny is and then why we're here.

So, Hey Nonny, what is it? So, it is a casually sophisticated music venue and gastropub located in the heart of Arlington Heights Downtown dining and entertainment district. What we're about is local food, local drinks, and live music played locally. On our menu, we'll feature familiar new items, lots of very sharable plates made from ingredients that are fresh from local farms and suppliers. Our local drinks will also feature unique craft cocktails, with liquor from Midwest distilleries and also from craft breweries located in Northern Illinois. Then from a live music perspective, we are really going to bring a special live venue, very intimate venue where we will present a wide variety of music, different genres, and hopefully we'll create best listening room in the Chicago land area.

So, who is, or what does Hey Nonny mean? Did I advance? There you go. What does Hey Nonny mean? A lot of people have asked me, hey, what is this Hey Nonny? Basically, it's a nonsensical expression that's been used in hundreds of songs for probably 400 years. But really what it means is to be carefree. That's really the feeling we want when people come to Hey Nonny, it's a place where they can come and enjoy a great meal, see some live entertainment and sort of leave their cares at the door.

Some best known examples of how Hey Nonny has been used, in Shakespeare's Sigh No More song and Much To Do About Nothing. Also, there's this little band called the Violent Femmes that's Milwaukee-based at 1991 released a song Hey Nonny Nonny.

So, Hey Nonny is basically myself and Chip Brooks. Chip is off in Hawaii with his family tonight, so I'm here representing both of us. But both of us are Arlington Heights residents. I have lived here since 1997. My wife here actually grew up right on Dryden Avenue. Chip Brooks has been here since 1987. Chip was a partner at Holland & Knight, he was an attorney. Also, I'd like to note that he was also an intern at SPACE which is another music venue at Evanston, and he did that for about five or six months. Also, Chip is a board member of the Northwest Suburban Community Concert Association which he's done for a number of years as well. Myself, my background has all been in generic pharmaceuticals. I co-founded a company called PACK Pharmaceuticals in 2005 which was sold in 2014. I am currently a board member of the Metropolis Performing Arts Theater and been on the board for a number of years.

So, why are we doing Hey Nonny? What is this about? One of the things is we love to hear great music. We love live music, that's really our inspiration, and all kinds of music, whether it's folk or jazz, classical, rock, country, you know, we want to see great entertainers come to Downtown Arlington Heights. We believe that this type of offering and this kind of music and in a venue like we are proposing is very limited in Arlington Heights. So, the other reason is, you know, us and a lot of our colleagues and friends, we get tired of driving into the city of Chicago or driving out into Evanston and other places to see live music. We really think along with our friends and associates that having that right here in Arlington Heights is a great idea.

So, where will we put this Hey Nonny? So, the location is 10 South Vail. It's across from the beautiful Harmony Park. It's right under the Metropolis Ballroom. I love this location; I think it's a great location. You know, again, we have the beautiful park across the street. Plus, we're in an entertainment and dining complex. In our building right above us, we have the ballroom, we've got the piano bar downstairs, Armand's restaurant, Metropolis Performing Arts Center, Mago's, and the Ale House, all within the same, sort of connected through

the building complex. The other great thing about our location is we're right in the center part of the dining and entertainment district.

From a design perspective, and Cory Dunn is here from D+K Architects, one of the things that Cory and his team has done and they've done a great job in it, too, is they took our vision between Chip and I and actually made it kind of happen. Chip and I really wanted to have a space for people to come and listen to music, and a place where people can also dine and enjoy a meal and be able to converse, and not have those two competing aspects of our venue kind of butting heads. You know, you might notice sometimes you're in a live music venue that combines dining or you're in a restaurant that has dining and a band, it's just too loud and you can't hear each other talk. So, one of the things that we said was let's design a space where we can have a music room for people to actually sit, listen to music, enjoy music, appreciate the music, and then for people who want to dine, we'll have a separate space where they could enjoy a meal, a great meal, have a conversation and not compete with the sound and not have to yell to the other person to have a conversation.

So, we did just that. One of the key aspects of the space is that there's really two separate rooms built in, on the venue side and then the other gastropub side. What separates the two spaces is going to be actually a vertical wall that's about 24 feet wide; it will be about 5.5 feet high. It will start at bar height and go up. What it will do is actually open the two rooms when we want it open where we can play sort of background music, we can have an acoustic set or something very easy going, and that can just sort of fill the space in the two areas. Or if we're having a concert where the music is a little bit louder, we can close that wall, it will be an acoustic wall, and then people on the dining side can enjoy a meal and the people who are listening to music can enjoy and listen to music.

So, in the venue, what you expect is probably about 110 seats under normal standard seating, but it will be versatile where we can mix it up and change it to whatever accommodates the type of band or the type of audience that we'll have. Then in the gastropub, our standard seating is about 60. It might be a little difficult, I don't know how well everybody can see this, I know you guys can see it on your computer, but the top of the screen which is the north wall, that's our gastropub. It's a combination of banquette seating along the north wall with some highboy tables and seats at the bar, and then standard table's height seats at the window. There will be about 16 seats there. Then there's an additional 16 seats in the music venue as well.

Again, you'll notice the music venue is open, and that's really on purpose because when you have a concert, depending on the type of music, if it's a jazz concert, you might have 60-75 people in there, you might have your tables, little cocktail tables, people sitting around and listening to music. If it's country, you might organize seats around and have a little dance floor in the middle. Or if it's more of a rock upscale, it might be mostly standing and then you just have your VIP seat and tables along the window. So, it's really created to be very versatile.

The interior is what we would call a lively mid century studio. Really we want to stick with that sort of music theme. We don't want it to be over, you know, hit you with, you know, symbols everywhere and whatever. But it will give the feeling of sort of being in a music studio. That design concept is functional as well as aesthetic.

So, if you look at, you know, where the walls are in the music venue as well into the gastropub. There's going to be vertical wood trim and wood trim on the side, but then the walls will be made of fabric with sound absorbing materials behind that fabric to really

absorb sound so sound doesn't sort of bounce all over the place. The venue will have a stage that is 18 feet wide, 15 feet deep. Our windows, we plan to have open air windows to the street, very similar, like you have at Shakou.

This is just sort of a look at what that north wall banquettes would look like with the art features above the seating and some of the design elements as well. Then this would be kind of a vision of what it would look like to sit in a gastropub and sort of look through that open, you know, where the wall is up and you can look through the opening, what I would call presidium, you can kind of look right through there to the music venue. Then this would be what it might look like if you were sitting in the music venue and you're, for example, here maybe listening to some jazz or maybe a little cabaret type of performance.

Sound is important to us. You know, we recognize there's a big difference between sound and noise. You know, we plan to have great sound in this venue and not to produce noise. So, what we've done is we have retained an engineer that has come through and has helped us figure out all the sound attenuation. You know, it's very important to us that we be good neighbors and sound doesn't flow out of our space up to our neighbors to the ballroom or the other spaces or out to the street. But it's also very important to us, it kind of goes both ways, we don't want sound from the ballroom and from the street and everything to come into our small intimate listening room.

So, the main thing really about this space is, again the acoustics and the sound have to really be perfect. That's why people are going to come and are going to see great shows and they're going to say the sound is fantastic. So, we've actually put a lot of effort, a lot of design effort through our engineers and spending a few bucks to make sure that our sound attenuation and acoustics will be very good in our space. We also hired a guy named T.C. Furlong who will do our sound equipment. T.C., if you mention his name to pretty much most of the venues and to any musician in the area, they know who he is. So, we've got him designing our sound system, they go, oh, you're good. So, we have a great designer there.

Then we'll also provide back lighting for artists as they come in. Providing the right equipment is key when we want to attract top artists to our area. We'll have a six-foot grand piano kind of tucked away, so then when we have a band, we can pull the piano out if we need a piano to accompany. If we have a bigger band, we actually can leave the piano sort of offstage a little bit and have the piano player barely onstage and just make it up.

Operation's schedule. So, we'll be open six days a week. On Monday we'll be closed. Then Tuesday through Thursday, we plan to be open between 5:00 and 12:00. We'll have a variety of types of music presented during the week. For example, upcoming talents, songwriter circle, might have some cabaret and jazz, and then like a residency night where you might have a local artist who basically is almost your host every week for a number of months, you keep them under contract, and they do different themes each week and play different music.

Then Friday and Saturday, Friday afternoon we'll open at 3:00 o'clock to kind of catch the people coming home from work and getting off the train early after a long week at work, who want to come in and just kind of relax and listen to an acoustic set. We'll have sort of the whole place open and have sort of free music in the afternoon on Fridays. Then in the evenings on Friday night and Saturday night we'll have concerts.

Then Saturday morning and Sunday morning, we plan to have a jazz brunch between 10:00 o'clock and 2:00 p.m. It seems to me that today a lot of young people

really love going out to brunch, probably just because they don't wake up until 9:00 o'clock, I don't know. But any little jazz brunch I think will attract young and old people to come and enjoy that on the weekends. Then we thought we'd wrap up the week with a little chamber music in the afternoon on Sundays.

In terms of the menu, you know, I think I touched a little bit on this already. Again, it's a farm-to-table gastropub type food. All of our ingredients would be sourced from top Midwest farms and providers. The idea is small plates, it's sharables, it's pub food but it's maybe a couple of steps up from your typical pub food. It's sophisticated, not pretentious. It will be priced competitively and really fresh, interesting, and very good.

From an operations standpoint, myself and Chip, we plan to be involved on a daily basis. We want to make sure we're there so that everybody is having a great time enjoying our establishment and satisfied with the service that we are providing in each and every day. We hired a chef, Dave Perlick who is the owner of the M Supper Club in Crystal Lake. He's also a consultant to the Montarra restaurant in Algonquin. Chef Dave is basically designing our menus, our cocktails, helping us with our kitchen design and layout. He is really going to be there with us through the whole process of getting us opened and training and ongoing operations for our business. He'll help us also hire an experienced general manager, our kitchen manager/sous chef, bar manager, as well as our venue managers.

Some of the market considerations for us actually why we think this is a great idea is, you know, one, Arlington Heights we see is sort of an epicenter of the northwest suburbs. Around the Arlington Heights area, there's a half a million people within a 12-minute drive from Downtown Arlington Heights. We also are the only listening room/ restaurant concept combination that would be unique in the northwest suburbs. However, there's a number of successful venues and combinations that already exist; they're just far away. As I mentioned, SPACE in Evanston is very successful. Then you've got Andy's Jazz Club and Talia Hull and Promontory all in Chicago which are very good.

We are going to offer a wide range of music genres. One of the things I've noticed in the numbers on music is that Chicago actually consumes more different types of genres of music than any other city in America. We like everything from Latin to jazz to R&B to rock and roll to everything. I mean we just consume it all, and so we plan to tap into that.

Then in our area, there are very few locally-sourced farm-to-table kitchens. Then again, just with talking to our residents and neighbors, people really would love to see something here in Arlington Heights.

So, why we're here is there's three issues presented tonight. One is we are asking for an amendment to our planned unit development to approve a floor plan for our use at the Metropolis mixed use development. We're asking for a special use permit for a restaurant and auditorium space, and a waiver for the requirement for a traffic and parking study.

From the PUD amendments, our space was originally a bank, and then in 2013, basically there was a permit for a restaurant which was to be there. Now we're asking for an amendment for the Hey Nonny this evening.

A special use permit is required for all restaurants in Arlington Heights. The criteria for that is that the special use is necessary for the public convenience, that the use is not detrimental, and that it will comply with all regs and conditions. In terms of our necessity for convenience, public convenience, as I stated earlier, there is no music venue/listening room combination restaurant within 20 miles of Arlington Heights. Presently, our

local residents are traveling 20 to 27 miles to experience these types of venues where they can see live music in Evanston and Chicago. So, we think that the local venue serves a public convenience. Also, the fact that our venue will be located in the Metropolis Performing Arts complex is a key part, and there's the access to Harmony Park, and we're at the center of the dining and entertainment district.

We really think that great food and great music is not detrimental to anybody's health. Actually we think it will improve your health. So, we actually think that what we'll be putting there will be a cultural asset to our community and highly beneficial to the welfare of the residents. Of course we will comply with all regulations and conditions.

One thing we kind of ran across when we were putting all of this together, we put our project really on par with some of the Village objectives for 2017. In the budget, there is a Village Board priority for 2017 which set out to strengthen the downtown area to enable continued success in the future. I won't read through all that, but I thought the interesting part was the budget notes where it says Downtown Arlington Heights is a suburban hotspot for dining and entertainment. By emphasizing these aspects further, we can further enhance the downtown. Planning and Community Development Staff will make concentrated efforts to recruit restaurants and entertainment businesses. Like I said, we thank the Planning Staff and the Commission today because I feel like definitely there's been a great cooperation working together so far.

In terms of the study variation, there's three criteria for the variation to the traffic and parking requirement. One is that the parking cannot yield a reasonable return if permitted to use under conditions allowed by the regulations; the plight of the owner is unique; and the variation will not alter the essential character of the locality. In terms of the bailout, as I kind of stated there, we're investing a significant amount of money into this venue. It's one thing to put a restaurant in and to put a lot of money into a kitchen, but it's amazing when you want to put a listening room in, the money you're spending on sound attenuation and the equipment and the lighting and all those things that kind of go along with it. It sort of brings it to a whole another level. So, it's a pretty significant investment and we really believe that if we had to do a parking and traffic study, really our return on investment will not be reasonable.

Also, the plight of the owner is under unique circumstances. The location is unique. It's part of the packed dining and entertainment complex. We're across from the Village's largest parking garage, and we're also across from Arlington Heights's summer music home, the park. So, our location is unique. I think it's also unique that we have a couple of Arlington Heights residents saying, hey, we want to put a cultural asset right in Downtown Arlington Heights and that no one has really attempted to do this yet. The third variation would be not to alter the character of the location. Because we're putting a dining and entertainment venue in the dining and entertainment district, we're really just going to enhance that location.

So, finally, my last slide is, are you sure there's no applause for that? So, you know, what are the community benefits of a small music venue? One of the things that I really feel is a small venue with big ties to the community. You know, when I read about a lot of other venues, I see what's done in other small venues in this country and other countries, you know, these are venues that host a lot of charity and special events. They put on a lot of youth programs. Kids that might be enrolled in the school at the performing arts center would have a place to play in a different setting. Kids that are in different, other music schools in Arlington Heights and the surrounding communities would have a place that perhaps they could play or

even learn about some of the technical things about sound mixing and lighting and all these other types of things. So, there's a lot of youth programs that can go into a venue like this.

Local businesses, it's a unique space, it's a space that could be used for training and other types of seminars. It's a very versatile space. We will have a projector screen, so we think it will also be helpful for local businesses. Then I think most importantly, well, maybe not most importantly but not to be forgotten is that small music venues are really incubators for local artists. This is where all artists start. Musicians, they start in small music venues, even the famous ones before they make it to the bigger arenas, they spend a lot of time in small music venues and clubs. Without small music venues, it's just such an integral part of sort of the, you know, the whole chain of how musicians sort of work through the system. So, I think they are very critical, and also they attract a lot of cultural diversity and acceptance like so many other arts and entertainment venues do. I think by doing that, it also helps to attract more skilled workers, and then more employers would also increase property values.

So, I'm losing my voice a little bit, probably because I practiced this too many times. But I appreciate you guys listening tonight and I'm open for any questions.

CHAIRMAN ENNES: Well, Mr. Dungan, thank you for your very detailed presentation. Does your architect have any comments to go along with your --

MR. DUNN: Right now I probably would just field questions.

MR. DUNGAN: I brought him just in case there's something I couldn't handle.

CHAIRMAN ENNES: Well, then I apologize for having you stand up for all this time.

MR. DUNN: No problem.

CHAIRMAN ENNES: We will be asking, the Commissioners will be asking questions after we get the Staff report. So, feel free to have a seat. Sam, can we have the Staff report?

MR. HUBBARD: Yes. Good evening, Chairman Ennes and members of the Plan Commission. So, the property is in the B-5 Downtown Zoning District. In the B-5 District, restaurants and auditoriums which is what we classified the venue portion of this business are special uses. So, the Petitioner is required to seek a special use permit approval. The restaurant, if it was a restaurant only, could technically have met our criteria for a special use permit waiver. But because the auditorium/music venue portion is included in the proposal which requires its own special use permit, it's exempt from the waiver process and it has to go through the special use permit process as well, so it's just consolidated all into this process.

Additionally, the subject unit is a part of a PUD which was originally approved in 1998, it was the Metropolis PUD which includes the Metropolis Place Condominium building, the Metropolis Theater, Mago's, and then the subject property which includes Armand's, Big Shot's Piano Lounge, the Metropolis Ballroom on the second floor, and then of course the subject unit as well. Because this use in this space wasn't originally contemplated in the original PUD, an amendment to the PUD is required. There have been two amendments to this PUD since it was approved in 1998. The most recent was in 2013, and that allowed Circa 57 Restaurant to occupy what is now occupied by Armand's, and also to occupy this space as well. They were also, in 2013, I would mention that Circa 57 was also approved for the same variation that the Petitioner is requesting tonight which is a variation to waive the traffic and parking study. While Circa 57 was approved to occupy the space, they never built it out. So, the Petitioner is

proposing to build it out as the restaurant and music venue.

Actions to date, the Petitioner appeared before the Conceptual Plan Review Committee on October 11th, about one month ago. Discussions centered around the uniqueness of the use, the farm-to-table concept, and the music venue portion, and also about sound and music overflow, the demand for restaurants in Downtown Arlington Heights. Overall, I would characterize the Conceptual Plan Review Committee as generally favorable to this use. By code, as the Plan Commission is well aware, all special uses have to provide justification for approval to the special use criteria. You've heard the Petitioner's presentation tonight and their justification.

Staff has reviewed the criteria as well and concurs with the Petitioner and believes that the necessary criteria for special use permit approval have been met. We note that the farm-to-table use is unique. There aren't many restaurants that specialize in that in Downtown Arlington Heights, as well as incorporating the music venue in there. It is certainly a unique use, and we believe that it's been proven to be necessary for public convenience.

So, here is an aerial of the property. The subject property is outlined in red. The subject unit is located on the south side of the property, approximately in this location. You can see it's directly across the street from the Harmony Park, and then it abuts the Vail Avenue Garage to the south.

When Staff was analyzing this, the Staff Development Committee, you know, really focused on two primary issues, and that was the potential for noise overflow and then the parking impact of this use. Relative to noise, we were primarily concerned with overflow within the building to other tenants, and then potentially outside the building as the Petitioner has said that they want windows that open. You know, it is noted it's right across the street from Harmony Park which of course has the Sounds of Summer, so we didn't want to see two music activities competing with each other.

So, we did add some conditions of approval to address this. One was that the windows be closed during paid events that would have loud music. Again, one of the conditions was to add sound buffering material to the unit which would prevent potential disturbance to the ballroom located directly above. I would note at this time that there are slight tweaks to the conditions as written in the Staff report, so I'll go over those and we'll get to that at the end of the presentation.

Here is the floor plan again for reference. You can see the restaurant side here and then the venue side here with the stage and then the back of house operations towards the rear.

Relative to parking, well, first of all, relative to traffic, the Staff Development Community wasn't overly concerned with traffic generation from this use. We believe that the downtown transportation network has capacity to handle any traffic that would be generated by this use. But we were concerned about parking. The property has no onsite parking, so parking is going to have to be accommodated in the Village system, and most of that is going to go to the Vail Avenue Garage. So, we wanted to make sure that the garage had enough capacity to accommodate the expected parking demand for this use. But first, we needed to try and nail down what we thought the expected parking demand would be.

So, we did three things to do that. First, on the top here, you'll see what Village code requires for parking for this use, based on the different parts of the restaurant and the auditorium/music venue. The code requirements would require 31 parking spaces for

downtown uses. We do allow those code required parking spaces to be met within Village facilities as long as it's within a certain distance. The Vail Avenue Garage meets that criteria, so the required parking can be accommodated in the Vail Avenue Garage by code to meet the onsite parking requirements.

Secondly, we looked at the Rich & Associates study. Back in 2002, the Village hired Rich & Associates to analyze parking in downtown and develop estimates for projected parking demand based on the uses in our downtown. So, they went out and they surveyed the uses, they surveyed the parking, and they came up with their projections for what they thought each use was generating parking-wise. We took those formulas and we applied it to the Hey Nonny space. Based on the Rich & Associates data, they would assign or estimate about 89 parking spaces during the weekday, and a demand for 91 parking spaces during the weekend.

The third method we used was HNTB study which the Village had, for back when the original Metropolis Theater development was proposed in 1998. HNTB is a nationally recognized engineering firm and they came up with projections and formulas for what the expected parking demand would be based on uses. So, we applied that in this case, and based on their formulas, they estimated, you know, this type of use could generate peak parking demand of about 98 spaces.

So, given the Rich & Associates data and the HNTB data, we think that peak parking demand would be probably between 89 and 98 parking spaces. So, next we wanted to determine if the Vail Avenue Garage had capacity for that many parking spaces. For those of you who don't know how the Vail Avenue Garage works, the first floor is for daily pay and shopper parking. Second floor and third floor is reserved for permanent holders only. The fourth floor has permit parking during the day and then it opens up to free parking after noon. Then on level five, it's all free parking. I'm sorry, all free parking after noon.

So, we're going to be focused in on the fourth and fifth levels. I think we are all well aware that the first level is pretty packed during peak times. So, we wanted to know if the upper levels had capacity to accommodate for the expected parking demand. We sent our Police Department out for three evenings during October, one Friday and two Saturdays and have them survey the number of available spaces in the Vail Avenue Garage. The table here represents the average number of vacant spaces that they found on the fourth and fifth floor and what time those spaces were identified. Then most importantly, it shows the lowest amount of vacant spaces that they found.

So, on level four, the lowest amount of vacant spaces was 39 spaces, at that time it corresponded with 183 spaces -- oh, I'm sorry, at that time it corresponded with 121 spaces open on level five. Then again on level five, the lowest amount of open spaces was 36 spaces, and that corresponded with 99 open spaces on level four at that time. So, given the expected demand of 89 to 98 spaces, and given the data that we have, you know, we believe that there is capacity within the Vail Avenue Garage on levels four and five to accommodate for the expected parking demand by this use. We know that sometimes people don't like to drive all the way up to the fourth and fifth levels, but based on the data we have we are seeing available spaces there, granted this is just a snapshot of three days in October and we don't have data for 365 days of the year. There are probably days when parking on the fourth and fifth floor is really tight, but typically we don't think that that's the case and we think there is capacity.

We also had a number of other surveys we've had the police do over the years between 2014 all the way up to March of this year. We analyzed that data as well and

the lowest number of vacant spaces found on level five at any time was 60 spaces, and the lowest number of vacant spaces found on level four at any time was 86 spaces. These levels didn't occur on the same day, so again we believe this illustrates capacity to accommodate for this use.

So, we did recommend some conditions of approval, and there were some last minute tweaks to the conditions as they were written in the Staff report so I'll just go over them here. If you can see on your screen, the green text represents added language. The red strikethrough represents language that would be deleted. The motion sheet that you have in front of you is the final version, so that incorporates these changes that are shown on the slide.

Basically, the first condition is that all full-time employees would be required to purchase employee parking tickets for parking within the Village garage system. This is typical for any use that's going to go through the zoning approval process, we'll incorporate a condition like this. I think it makes sense for the business and it gives their employees a dedicated place to park so then, you know, they're not racking up parking tickets or running out every couple of hours to move their car if they have a meter.

We also have a condition that loud music shall not be permitted to spill out onto the street and the neighborhood, and music within the venue side, sorry, windows within the venue side would need to remain closed at all times during any paid admission show or any event that had loud music. Additionally, we are asking that additional restrictions be placed to close the windows on the restaurant side as well if it's determined that loud music could overflow outside of the restaurant side as well. We also put in a condition that requires the Petitioner to install sound buffering material on the top of their space to prevent sound overflow to the Metropolis Ballroom space, and then again our boilerplate condition that the Petitioner comply with all applicable federal, state and Village codes, regulations and policies.

So, we are recommending approval of the application subject to these conditions, and I'd be happy to answer any questions.

CHAIRMAN ENNES: Thank you for your report. Can I have a motion to approve the submission of the report to the public record?

COMMISSIONER JENSEN: So moved.

CHAIRMAN ENNES: Is there a second?

COMMISSIONER CHERWIN: Second.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Any opposed?

(No response.)

CHAIRMAN ENNES: Okay. Well, I'd like to move on to the questions from the Commissioners. Commissioner Jensen, would you like to begin?

COMMISSIONER JENSEN: Actually I don't really have any questions. I was in the Conceptual Review and I thought the presentation was quite thorough. So, I will pass at this point and allow some of the others who weren't in the various meetings to --

CHAIRMAN ENNES: Commissioner Warskow?

COMMISSIONER WARSKOW: Yes, I just have one question before we hear from anyone who would like to speak from the public. The hours of operation, are they pretty consistent with the other businesses, entertainment and restaurant businesses in downtown, Sam?

MR. HUBBARD: I believe so. I don't know specifically, but I would generally

say yes, they're generally consistent. I mean the hours of operation are also being limited by the liquor license. So, that's going to be across the board for any business.

COMMISSIONER WARSKOW: Okay, so like Big Shots is probably the same closing time because of that?

MR. HUBBARD: Could be if they have the same liquor license. I think you guys are going for the most permissive?

MR. DUNGAN: Yes, with the AA license primarily so we can serve mimosas at 10:00 o'clock on Saturday and Sunday versus 11:00. So, yes.

COMMISSIONER WARSKOW: Okay, I'll hold all other questions until I hear from the public.

CHAIRMAN ENNES: Commissioner Lorenzini?

COMMISSIONER LORENZINI: Thank you. Mr. Dungan, could you put up that slide again that shows when you're going to be playing music and show your schedule, when you're going to be open and --

MR. DUNGAN: Oh, yes. I'm sorry, got it. Here you go.

COMMISSIONER LORENZINI: There you go. So, just for clarification, so Friday and Saturday you're doing concerts from 8:00 to 10:00. There's no music after that?

MR. DUNGAN: Actually, no, the concert is at 8:00 and 10:00 which would be wrapped up by midnight.

COMMISSIONER LORENZINI: So, what do you mean at 8:00 and at 10:00, two different bands?

MR. DUNGAN: Yes, so they could be two different concerts or it could be two different bands.

COMMISSIONER LORENZINI: Okay, or you may just have one at 8:00 or maybe just one at --

MR. DUNGAN: Yes, I mean it's going to vary. I mean we might have one band that plays until 10:00, and then maybe we just have some acoustic or something afterwards. Or it could be two bands.

COMMISSIONER LORENZINI: Okay, and then what if you just, so there will be a cover charge I assume?

MR. DUNGAN: We'll sell tickets in advance, and so basically we'll have a ticketing system where we will pre-sell tickets.

COMMISSIONER LORENZINI: So, if you're just coming there to eat, you don't have to pay a cover charge.

MR. DUNGAN: That's correct.

COMMISSIONER LORENZINI: Is there, Sam, this is more for you, I assume there's a maximum occupancy they can have in the music venue?

MR. HUBBARD: Correct.

COMMISSIONER LORENZINI: But you will have standing room at times, standing room only generally?

MR. DUNGAN: That's correct.

COMMISSIONER LORENZINI: What's the maximum occupancy?

MR. DUNGAN: Except for the seats along the window.

COMMISSIONER LORENZINI: Right. What's the maximum occupancy?

MR. HUBBARD: Based on the Building Department review, I believe it's

somewhere around 200, between 200 and 300 people.

COMMISSIONER LORENZINI: How would that be policed, that you're not exceeding that?

MR. HUBBARD: You know, likely they would have a plaque posted on the wall that would identify what the maximum is.

COMMISSIONER LORENZINI: I'm already thinking positive for you. Will there be eating in the music area?

MR. DUNGAN: There will be. Certainly on Saturday and Sunday when we have our brunch because we'll open up the whole side. Then we have those 16 seats along the window which is really there for overflow dining from the restaurant, or it could be VIP tables where we'd serve food during a concert.

COMMISSIONER LORENZINI: Sam, if I remember right, this whole area of the building always had an issue with ventilation for a restaurant. How is that going to be handled?

MR. HUBBARD: The Petitioner is aware that that could be an issue. I think they're still working through that with their mechanical consultant. I don't know if you've reached a conclusion, but that can be resolved during the building permit review process.

COMMISSIONER LORENZINI: All right. Okay, that's all I have for now. Thank you.

CHAIRMAN ENNES: Commissioner Green?

COMMISSIONER GREEN: I, too, was in the Conceptual Plan Review and I was excited about the concept then and I think you had a great presentation here tonight and I'm still very much excited about your project.

MR. DUNGAN: Thank you.

CHAIRMAN ENNES: Moving right through this, Commissioner Sigalos?

COMMISSIONER SIGALOS: I think it's an exciting project. Again, I was at the Conceptual Plan Review Committee meeting so I'm familiar with what you're doing. One of the conditions here is, condition two, that no loud music will be permitted to spill out onto the street, and windows are going to remain closed. Now, you were saying you're going to provide open windows like Shakou Restaurant just recently. How is that going to work then?

MR. DUNGAN: Yes, so, well, I think the objective there is that we are not going to have our windows open and loud music blasting out into the street. So, you know, our thought is there will be times, like say Friday afternoon, there could be something that's very sort of unplugged, quiet, there could be a little acoustic set or something that is no louder than any other type of piped in music in the venue. So, the idea is that we still want to have dining on the sidewalk, kind of sort of that open air concept. But when we have a concert and we have loud music, we will close that up. I mean our vertical wall that separates the two spaces would also be down so the diners can eat in peace as well.

I don't know if that answers your question or not. But the idea is that we'll make sure that nothing loud goes out onto the street.

COMMISSIONER SIGALOS: Again, I guess I don't understand how you're going to monitor that. In other words, if you have a live music venue at 8:00 p.m. or whatever on a Saturday night, how is that not going to go out onto the street?

MR. DUNGAN: Well, I mean if we have, again if we have a concert on a Saturday night, then that will be closed.

COMMISSIONER SIGALOS: That's all I have at this time.

CHAIRMAN ENNES: I have a number of questions since I wasn't at Conceptual Review. One, there's a number of conditions that were listed in the Staff report. Are you aware of all of those and do you agree to those?

MR. DUNGAN: We do.

CHAIRMAN ENNES: The rest of the questions I have are to you also. What do you mean by an intimate venue?

MR. DUNGAN: So, when we say intimate venue, you're really up close and personal with the artist. I mean when you're sitting there listening to a band, you know, you could be right here as close as I am to Sam. So, you know, an intimate venue is that, again a listening room is kind of a place where people sit and enjoy and listen to music and it's very up close and personal type of experience. It's not the kind of thing where it's loud music in the middle of a busy bar and you hear all this noise type of thing. Generally, when you're listening to music, you'll be sitting there and just appreciating the artist. You know, if you want to talk and dine and make a lot of noise, that's usually you sit in a restaurant and talk and converse. But in a listening room, people typically come and listen to the music. Intimate meaning, you know, basic setup is going to be typically 75 to 100 people in there.

CHAIRMAN ENNES: So, you're talking really about the proximity of the audience to, not the fact that it would be more low key.

MR. DUNGAN: Yes, and the experience, I think and the experience. I mean I think the versatility of the room really allows us to design the configuration of the seating so that based on the type of music and the audience that's there and the size of the audience, we can reshape that because we have such a flexible space to make it more intimate.

CHAIRMAN ENNES: I was just made aware of the fact that I missed one of our Commissioners at the end. It's definitely not intentional. Commissioner Cherwin, would you go on?

COMMISSIONER CHERWIN: I'm so slender and quiet -- no, that's all right. Do you want to continue?

CHAIRMAN ENNES: No, go ahead.

COMMISSIONER CHERWIN: All right, I don't have any questions. I was at Conceptual Review, too. No, it's a nice project. John actually hit on the one issue I was going to raise which was this condition number two. You know, I'm thinking to myself, there's probably going to be some spillage of noise or whatever. I mean are you comfortable with that guideline and I don't know that we want to be any more precise, but I guess I just figured that, you know, you don't want it to be obnoxious to the point where it's creating a problem but there will probably be some level, maybe this is good enough where it's talking about the paid admission show where you close it up. But I mean I'm just a little concerned about that first one being too restrictive, you know, you're not going to conflict with another show in Harmony Park, I know you don't want to do that. But you know, if you've got windows open and you've got some guy there with a, you know, harp or something like that, you don't --

MR. DUNGAN: Right, right.

COMMISSIONER CHERWIN: You'll hear it but it's like what's loud?

MR. DUNGAN: Yes, I mean for us, you know, it's important to be good neighbors to the people that live in Arlington Heights as well as the other businesses in the area. I think that's good for business for us. So, you know, our intention is not to put any loud obnoxious

sound out onto the street. So, you know, we're okay with the restrictions as they're written up, but yes.

COMMISSIONER CHERWIN: Then are you comfortable from your market studies and everything on the parking situation? That's something you can live with, you know, the garage and the, Sam had mentioned some people don't like to go up on the upper level.

MR. DUNGAN: Yes, you know, I think, you know, some of the things on the parking, we're right next to the garage.

COMMISSIONER CHERWIN: Right.

MR. DUNGAN: When we sell tickets on our website, you know, the great thing about our business is that they're probably going to come to our website to buy tickets to see shows. So, when we do that, we can educate them about parking in Arlington Heights. We can tell them, hey, there's public parking up on four and five, and guide them to the parking garage versus having them trying to figure out to drive around Arlington Heights for surface parking. So, yes.

COMMISSIONER CHERWIN: I didn't hear, is valet going to be an option with you guys or not?

MR. DUNGAN: You know, valet is an option. We're talking about it, we don't have a plan for it yet. But you know, one of the other things we've done, we've already reached out to a number of the other sort of restaurateurs and Tom Manetti of the Ballroom through an e-mail, and I think together we can talk about a number of topics where we can collaborate together and sort of enhance sort of the experience for our customers in Downtown Arlington Heights. There are some things I think that we can do together that, things like valet and other ideas, that are possible.

COMMISSIONER CHERWIN: Great, thanks. Nice job.

CHAIRMAN ENNES: Thanks. Okay, just to go back to this. Just for clarification, you mentioned in your opening comments that your partner Mr. Brooks was an attorney? I trust he still is an attorney?

MR. DUNGAN: He's an attorney, right. Sorry, he's a retired attorney, so yes.

CHAIRMAN ENNES: You also mentioned that you bought the property?

MR. DUNGAN: We did.

CHAIRMAN ENNES: Is that subject to approval of your plan?

MR. DUNGAN: No, we own the property.

CHAIRMAN ENNES: Gutsy guy. Okay, when you have venues that are standing room only, where will you be storing the tables and chairs that would otherwise be in the music venue?

MR. DUNGAN: Yes, we'll have some storage, we have some storage in the basement, and then we'll have some storage that will be built into our space, sort of in that back area, the green room type area back there as well. We're going to have to get very creative on that, and we may have to look at potentially even some offsite type of storage as well.

CHAIRMAN ENNES: You spoke at length about your investment and all the different high quality sound and wanting that experience. I noticed the audiences that you're trying to attract are 30's-40's, and then some older?

MR. DUNGAN: Yes, I mean I think we're designing it for really just about all ages, you know, but I think the target audience is going to be really age group of sort of 40's and

up. It's sort of, you know, as I said, it's the people who can go out again, you know. But certainly we'll design it for, you know, where it's a cool enough place that somebody in their late 20's or 30's will love to come to as well. But I think our audience is still going to be sort of in the 40 age group and up.

CHAIRMAN ENNES: Along those lines, I noticed the Metropolis added telecoil for some of the --

MR. DUNGAN: Added what?

CHAIRMAN ENNES: Telecoil for some of the patrons that are a little hard of hearing and have hearing aids.

MR. DUNGAN: Oh, yes.

CHAIRMAN ENNES: Will you have that?

MR. DUNGAN: I don't know, that's a good question. So, we did not think of that yet, but I'll definitely take it under advisement.

CHAIRMAN ENNES: Okay, that's all I have for the time being. You can have a seat and we're going to move into the public comment portion of the meeting. Can I see a show of hands of how many people in the audience would like to make a comment? One, two, and that's it. Let's start on the left side in the back row please, Joe, if you want to come forward and make your statement?

QUESTIONS FROM AUDIENCE

MR. KEEFE: Thank you, Mr. Chairman, Commissioners. I'm Joe Keefe, I'm the executive director for Metropolis Performing Arts Center where Christmas Carol will be opening in two weeks. It will be a great show.

I'm here to provide our enthusiastic support for this project. Some of you may have the question or concern that would this pose a conflict with Metropolis. Generally speaking, entertainment venues like ours actually look for what we would call cabaret partners. Many venues in Chicago have already incorporated this type of thing into their own venue. Steppenwolf, Second City, Milwaukee Brat has a great cabaret space. Doral has a very small space as well. So, generally speaking, if a space like this didn't exist, we would try to build one if we could. We don't have the space to do that, so to find a partner like this we think is complementary. We do think it's going to add value to our entertainment venue.

We see a lot of growth in the area. Many of you know that in the past two years or so, we've added, this will be, with this addition it will be 600 new seats within a block, restaurant seats within a block of Metropolis Performing Arts Center. We see that as a positive. We think that the audiences that Hey Nonny will bring in will be very interested in what we're doing and vice versa.

I would also share that the types of acts that typically a venue like this brings in are distinct from ours. Their ceiling, what the most they can offer is about where we begin with offers for various acts, the lowest acts we have, because we have 329 seats and we can expand to 377. Our offers have to be slightly higher, I mean considerably higher than this type of venue. So, we do see it as complementary, we don't see it as competitive. Our board I think would support that as well, especially the board members who are here tonight.

So, I'd be happy to answer any questions if there's any questions that are relevant to Metropolis Performing Arts Center, if you think there's anything in that. I would

note parking, by the way, we recognize parking issues in downtown. I will say again from our perspective, challenges with parking, in the theater world, the two biggest complaints you have are parking and bathrooms, that's it. Every theater it's the same thing. We recognize that issue, but generally speaking, for our theater, that's a sign of popularity. When people have trouble parking, they like to complain about it but in fact it's saying we're busy. You know, we try to educate our customers, we try to bring in our treasured patrons, we try to get them to understand that, and we do condition them, you know, with as much communication as we can both through our materials and also, you know, when they call in, we give them warnings on that as well.

I will say we use the Vail Street parking lot as well. We find it very convenient. In fact, it's a treasure for us, it's a real treasure. Most theaters of our size, people are parking a block, two blocks, three blocks away or even farther, and for us it's a treasure. So, I'd be happy to answer questions if there's any.

CHAIRMAN ENNES: Are there any questions for Joe?

MR. KEEFE: Again, thank you for the time. Our Christmas Carol is opening in two weeks.

CHAIRMAN ENNES: Thank you. There was one other lady? Would you please move forward and give us your name and would you please spell it for the court reporter?

MS. GUYER: My name is Pat Geyer, P-a-t G-u-y-e-r.

CHAIRMAN ENNES: Thank you.

MS. GUYER: I like the name of the company because my grandchildren call me Nonny, and so that's cool. It sounds like a very enjoyable place, but I'm looking at it from the perspective of a downtown resident. I live in the condos in Downtown Arlington Heights and I've been there for 17 years since the beginning. When I moved in, it was supposed to be a mixed use area with residential and business and entertainment and restaurants and a really overall family atmosphere. I understand that there is a lot of noise in the downtown area, that doesn't bother me, and I've happily and successfully lived there for all these years. I understand density, I understand noise, and I understand the 5:00 a.m. street sweepers and the train whistles and Peggy Kinnane's beer kegs being slammed down onto the concrete under my window, and nighttime entertainment.

But unfortunately, it just seems to me recently that atmosphere has changed and I've noticed it a lot with the opening of the Ale House Bar. Lately, I have noticed people on the street with open beer bottles. I have noticed empty beer bottles left on our condominium property. We caught, speaking of parking, we caught someone trying to come into our residential garage when he knew it was a residential garage to go over to the Metropolis. I've seen a restaurant person urinating in our parking lot in the broad daylight.

The Ale House Bar has been allowed to blast loud live music from open windows which is preposterous. There was of course the stabbing on Campbell Street which concerned me a lot. It was my understanding that it was two acquaintances, so it could happen anywhere. But I'm still concerned at the direction of all of these Village projects, that the direction they're going can become dense and can add to these types of incidents. It seems like the downtown area is moving away from a mixed use benefit on businesses and residents alike to more of just a Rosemont entertainment type district. I'm becoming concerned that the area is becoming too dense with establishments serving alcohol and noise pollution from live bands.

I'm very happy to see that the developers are really working and saying they're committing to keeping the noise down. But living there, especially across from the

Ale House, I've learned in reality this doesn't always happen even though intentions are good. So, I would just like to ask the Village to take the concerns of the downtown residents into account and to protect our rights when they work with developers and this developer for the music venue, because I believe that this is an area, and I don't think the area would be as nice or as successful if it didn't have a mix of residents. So, I think that the residents' rights should be taken into account as well. So, that's all I have to say.

CHAIRMAN ENNES: Thank you very much. Anyone? Yes, would you like to come up here? Again, would you state your name and please spell it for the court reporter?

MS. SIDOR: My name is Monica Sidor, S-i-d-o-r. I'm a resident of the Metro Lofts Condominiums. I'm an owner and I also sit on the board of directors. I don't want to be redundant, I just want to concur with everything that the previous resident stated. I have experienced a lot of noise pollution from the Ale House as well as Peggy Kinnane's and the piano bar. I can actually tell you what song they're playing from the seventh floor of Metro Lofts.

I also unfortunately do park in the Vail Street Garage. So, I will say that even though the parking studies that you guys are referencing from several decades ago are very probably relevant still today, there is a concern that I have from parking in there daily, not just because of the density of parking. I know that they double book the spots for commuters as well as residents, and so I'm not sure if the numbers stated do put into account the commuters that come and are able to park on two and three, not on four and five, because they're using their commuter parking permits to go on two and three, not just the upper levels.

Also, there is already a lot of traffic. I'll say that my neighbors have said to me as a board member that they don't let their kids walk around in that garage because they're afraid of people whipping around the corners and them getting hit. So, they actually bring their car down to the parking lot to make sure that their kids are safe. So, this is a resident issue, a resident concern that we already have with the existing businesses in the Village. So, I just want to reiterate that even though there might be spaces available for the business, that it's already a little bit of a hostile parking garage situation.

CHAIRMAN ENNES: Thank you for your comment.

MS. SIDOR: Thank you.

CHAIRMAN ENNES: Is there anyone else?

MR. MALTER: Hi, I'm Mark Malter. I've been a resident of Arlington Heights since about '93 and lived in the Heritage Park area since about '99. One of the really great things about --

CHAIRMAN ENNES: Mark, I'm sorry, can I ask you to spell your name for the reporter?

MR. MALTER: Malter, M-a-l-t-e-r. One of the great things about this area and being in Heritage Park has been really the bond with a lot of the neighbors that we have. We have a wonderful neighborhood out here, and one of the things that we really bond on with a lot of the group here, a few of us sitting here, has been music and food of course. So, in hearing about this and learning all about this venue and talking to Chris and everything on there, we're really excited as residents to come, because we do travel. We go to see music all the time exactly as Chris said. We drive to different places. To have it locally, to be able to, we're part of the groups and when you said the target is 40's, a lot of us are in the 50's and we're really excited about this. With kids in college or out of college and being able to go out again, being able to go down and close is just a wonderful thing, being able to see live music and have some good food and have

the farm-to-table with good food in there is really a benefit that we see out here.

I've talked to a number of people in other parts of Arlington Heights, and every single person I've talked to has been positive about this and says let me know when it's open and we're going to meet there. So, it's really a concept that seems to resonate and I want to make sure that we're heard and that you hear what we're saying as residents of Arlington Heights.

CHAIRMAN ENNES: Thank you very much. Is there anyone else? Yes, sir, would you come forward? Again, please state your name and spell it.

MR. REBODOS: Good evening. It's Larry Rebodos, I'm the owner of Big Shot Piano Lounge and Restaurant. I just wanted to take a couple of minutes and express my support for this, this great concept. I've known Chip now for about two years, met Chris, great guys, very solid individuals when it comes to business and the concept that they're bringing.

I look at it as a great opportunity for the entire downtown area. I never really look at it as competition. I mean they are going to be playing the same space we're playing, similar type of customers. But I always believe that with all the new restaurants that come in and other establishments, we're creating really a great destination spot for people to come. You know, when I talked to Derrick at Peggy's and Brian at Courtland's, our goal is always just to bring people to the downtown area and where we all can share in that. I might not get that customer, you know, that night or the following night, might not get it the following weekend, but as long as they're coming here to Arlington Heights versus Rosemont, versus Palatine, Barrington is starting to come on, Libertyville, they're creating such a big entertainment type district. You know, that's the way I would see our competition, you know. So, anything that can help build the downtown area and bring more people here, it is always a benefit to all the businesses.

As far as the noise, I do apologize to the residents. You know, we're doing the best we can, we're down in the basement. So, we have to be more cognizant at Big Shot to make sure that it doesn't, you know, affect the neighborhood. But being in the basement, we still have people who live in Arlington Heights who don't even know that we're there. So, our only ability to possibly attract people because all we have is a black awning is a speaker that we do pipe out some of that music from the piano player to say, hey, you know, Big Shot is down below. But we absolutely want to make sure that we're responsible and cognizant of that. So, you know, if there are issues, bring it to our attention.

But as far as the concept is concerned regarding Hey Nonny, once again we think it's great, and they're great individuals and they're really bringing something unique to the downtown area.

CHAIRMAN ENNES: Okay, thank you. Anyone else? Okay, I'm going to close the public portion of the comments and go back to the Commissioners for any further questions or discussion or a motion.

COMMISSIONER JENSEN: I just want to make one comment. I think the points raised by the residents are well taken. However, I do believe there's a fundamental difference between an ale house and the concept that this group is bringing to Arlington Heights. I think they probably would have a positive effect, not a negative effect on the environment. So, I hope you would keep that in mind.

COMMISSIONER LORENZINI: Just to add to what Lynn said, I think this is, personally I think this is a pretty classy operation it sounds like. But whenever you mix, bring a lot of people and have a lot of alcohol, something is going to happen. So, I would just recommend to the Village, I've been downtown many times to most of the restaurants, and I've never seen foot

patrol. You know, it might be worth recommending a foot patrol on Friday or Saturday nights. That's the only thing I have to say about it.

COMMISSIONER WARSKOW: I do have two quick questions if you could come back for a moment?

MR. DUNGAN: Sure.

COMMISSIONER WARSKOW: First, will there be any difficulty attracting artist performers?

MR. DUNGAN: You know, it's an interesting, we don't believe so. I mean today, you know, it's interesting, the concert business is exploding in the industry. Today, artists don't make any money on their albums, there's barely any money from recordings. So, it's forced artists to really have to perform live and go on tour. So, I saw a statistic between 2015 and 2016 that globally concert tickets sales, audience ticket sales as well as revenue is up 30 percent. I saw a statistic that in the United States, it's up almost 40 percent year over year. So, what that's done is it's really created sort of a shortage in small music venues because more artists are needing to tour and perform live more because they're making more money as a revenue source for the artist to make money. That's kind of pushing down to smaller and smaller venues and really a big shortage or at least kind of a shortage.

I was at a talent buyers association meeting in Nashville earlier last month, and I met a number of talent agents that deal with a lot of emerging artists and young artists, and they were excited about it. They just think there's just not enough small venues today for these young artists.

COMMISSIONER WARSKOW: Okay, I just wanted to make sure you were already reaching out to the artists to make sure because if you're going to have music everyday, that is a lot of people to line up.

MR. DUNGAN: Right, that's a lot of programming. A lot of programming for sure.

COMMISSIONER WARSKOW: You're marketing this as music everyday.

MR. DUNGAN: Right, right. The residency program also would help as well, because you know who your resident artist is basically for that night of the week.

COMMISSIONER WARSKOW: My other question is you did mention there will be two concerts on Friday and Saturday nights, 8:00 and 10:00 p.m.?

MR. DUNGAN: Yes, and sometimes that could be two separate events or it could be one event that just sort of carries through the evening. It might be multiple artists.

COMMISSIONER WARSKOW: If there's two separate events, is there enough time allowed in between? Because now you're talking potentially double parking.

MR. DUNGAN: Yes, typically with the events, when you have two events like that, we would have to create enough space in between the concerts so that people can leave and so we can do the sound checking and turning over.

COMMISSIONER WARSKOW: Okay. I think it's a great project. I would love to see it come to Arlington Heights and I hope it all works out.

MR. DUNGAN: Thank you very much.

CHAIRMAN ENNES: Thank you, Mary Jo.

COMMISSIONER SIGALOS: I just had a couple of questions, just minor. But on the music venue, you mentioned there would be a cover charge, do you have any idea what that would be?

MR. DUNGAN: It very much will depend on the artist. You know, a cover, a ticket, not necessarily a cover charge but a ticket event could be anywhere from \$10 and \$15, it could be up to \$65, depending on the type of artist we're bringing in to our house.

COMMISSIONER SIGALOS: On the restaurant side, is that more of just light food or dinners, or what do you anticipate?

MR. DUNGAN: It will be a fairly compact menu but it will be dinner as well, so we'll have a combination of light plates but also the ability to have some sandwiches and dinner plates as well.

COMMISSIONER SIGALOS: All right, thank you.

CHAIRMAN ENNES: Anything else?

COMMISSIONER CHERWIN: Terry, do you mind if I spoke?

CHAIRMAN ENNES: I wouldn't mind. You're not that far down there.

COMMISSIONER CHERWIN: I know. I don't have any questions, Chris, but I do, you know, just I think the residents brought up good points. I think my reaction is, you know, when we talk about noise and parking, I think that's a sign that you've got a vibrant downtown, so I think that's, you know, that's inherent in any sort of viable downtown area. I think I'd echo what Joe and Lynn said on the, you know, problems that were maybe as a result of getting a little bit more dense and some more venues, those are legit concerns. I don't think that's something that, you know, from our perspective here, we can address and we have to continue with the property and the development. But I do agree that it is something we need to think about in terms of how we police it and enforce it. With the, you know, with the downtown growth comes problems that are just, you know, natural when you talk about numbers and density.

So, I would agree, I think we have to look at, you know, having a standard on there that's a little higher than maybe we've done in the past. That's all I have to say.

CHAIRMAN ENNES: I agree with the other Commissioners. We appreciate your comments, the neighbor comments about some of the disruption. We sure don't expect you to go out to confront people that are doing some of this, the driving in the parking garage. We attempt to take this into consideration when we consider plans like addressing the fact that we want windows closed, we don't want this competition. When there has been some reference to the brew pub, or it's not a brew up, the Ale House and we heard supportive comments from the condo associations at that time which I think surprised some of the Commissioners, but if you see this type or you are experiencing this type of activity, I would suggest that you contact the Village, you talk to the Trustees. The Trustees are very, very receptive to hearing this stuff, and they are in a position that they can get departments to take action and do something. I don't know, it might be something like having foot patrols down there.

But some of the things that the lady in the second to last row mentioned, I'm sorry, I forgot your name, but some of the things you mentioned are totally unacceptable and should not be going on and something can be done about that. That needs to be kept under control or our downtown won't be what we're trying to develop. But unfortunately, that's not in our area here. But we hear you and we will try to do what we can in approving developments like this.

COMMISSIONER CHERWIN: I would just add it sounds like a lot of that, I mean that's illegal activity, you know, we --

CHAIRMAN ENNES: Yes, that should not go on.

COMMISSIONER CHERWIN: -- need to address that; so it's just a matter of

enforcement at that point and communication to the appropriate people.

CHAIRMAN ENNES: Right. Okay, would anybody like to make a motion?

COMMISSIONER GREEN: Well, my comment would be that I would like to make a motion for approval.

A motion to recommend to the Village Board of Trustees approval of PC#17-011, Amendment to PUD Ordinances #98-061, 99-028, and 13-032 to allow certain changes to the approved floor plan for the Metropolis mixed use development, a Special Use permit to allow a 3,974 square-foot restaurant and auditorium space (music venue), and the following variation:

- 1. Chapter 28, Section 6.12-1, to waive the requirement for a traffic and parking study prepared by a qualified professional engineer.**

This approval shall be subject to the following conditions:

- 1. All full-time employees shall be required to purchase employee parking permits for parking within the Village-owned garage system.**
- 2. No loud music shall be permitted to spill out into the street and neighborhood. Windows within the "venue" side of the establishment shall remain closed at all times during any paid admission show or any event with loud music. Additional windows within the establishment shall be closed as necessary to prevent loud music from overflowing outside of the subject unit.**
- 3. The Petitioner shall install sound buffering material to reduce noise bleed into the Metropolis Ballroom space.**
- 4. The Petitioner shall comply with all applicable federal, state, and Village codes, regulations, and policies.**

COMMISSIONER CHERWIN: I second.

CHAIRMAN ENNES: All in favor? Sam, would you do the roll call?

MR. HUBBARD: Commissioner Cherwin.

COMMISSIONER CHERWIN: Yes.

MR. HUBBARD: Commissioner Green.

COMMISSIONER GREEN: Yes.

MR. HUBBARD: Commissioner Jensen.

COMMISSIONER JENSEN: Yes.

MR. HUBBARD: Commissioner Lorenzini.

COMMISSIONER LORENZINI: Yes.

MR. HUBBARD: Commissioner Sigalos.

COMMISSIONER SIGALOS: Yes.

MR. HUBBARD: Commissioner Warskow.

COMMISSIONER WARSKOW: Yes.

MR. HUBBARD: Chairman Ennes.

CHAIRMAN ENNES: Yes. So, you have a unanimous recommendation from the Plan Commission. This is advisory and you can move on to the Village Board for their

final approval.

MR. DUNGAN: Thank you very much.

CHAIRMAN ENNES: For consideration I should say. We do not have any other business? We approved the minutes already.

COMMISSIONER WARSKOW: Can I make a motion to adjourn?

MR. HUBBARD: I do have something.

COMMISSIONER WARSKOW: Oh, we have something.

MR. HUBBARD: Yes. Two things. First of all, a quick update on the November 29th Plan Commission meeting. We do have a project for St. James Parish. They want to tear down the old school building and do an expansion on their church and an expansion to the parking lot on the site. We also have a tentative Conceptual Plan Review Committee meeting for that evening. The project is escaping me right now.

But the one thing that I did want to discuss is we have a, I don't know if we have a dedicated person to fill in if our Chairman isn't here. Is that something that, I think it's something that the Plan Commission should probably decide. I think we've kind of been defaulting to Commissioner Green. I don't know if he's --

CHAIRMAN ENNES: We do have a Vice Chair.

MR. HUBBARD: We do?

CHAIRMAN ENNES: Yes.

MR. HUBBARD: And that would be?

CHAIRMAN ENNES: Commissioner Jensen.

MR. HUBBARD: Oh, okay.

COMMISSIONER JENSEN: I was very happy when Commissioner Green handled me the meetings.

CHAIRMAN ENNES: The last? But he wasn't here last time.

COMMISSIONER GREEN: Yes, I fell apart at the last moment.

MR. HUBBARD: Do we have a dedicated secretary?

COMMISSIONER WARSKOW: I am the secretary.

COMMISSIONER GREEN: It's Mary Jo.

CHAIRMAN ENNES: We did vote on this.

MR. HUBBARD: Excellent. Well, thanks for letting me know. That's all I have, thank you.

CHAIRMAN ENNES: That's all you have? Okay, so we have a motion?

COMMISSIONER WARSKOW: Now I make a motion to adjourn.

COMMISSIONER JENSEN: I'll second.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: No voice vote on that. Okay, the meeting is adjourned. Thank you all for coming. Thank you for your comments, and good luck with your project.

(Whereupon, the meeting was adjourned
at 8:55 p.m.)

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

I, ROBERT LUTZOW, depose and say
that I am a digital court reporter doing business in the State of Illinois;

LeGRAND REPORTING & VIDEO SERVICES
Chicago & Roselle, Illinois - Miami & Orlando, Florida
(630) 894-9389 - (800) 219-1212

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.

ROBERT LUTZOW

UBSCRIBED AND SWORN TO
BEFORE ME THIS _____ DAY OF
_____, A.D. 2017.

NOTARY PUBLIC



Item: St. James Parish - 831 N. Arlington Heights Rd. - PC#17-012

Department: Planning & Community Development

Requested Action

1. Amendment to Special Use Ordinances #63-078, #97-078, and #07-012 to allow to allow an addition to the Church building and modifications to the east campus parking lot.
2. Amendment to the Comprehensive Plan to change the land use classification from Single-Family Detached to Institutional for the properties located at 811 N. Arlington Heights Road and 810 N. Pine Avenue.
3. Planned Unit Development encompassing both the east and west campuses to allow multiple buildings on one zoning lot.
4. Preliminary Plat of Subdivision to consolidate all of the east campus into one lot.

Variations Identified

1. A variation from Chapter 29, Section 29-307(f), to allow a double frontage lot with vehicular access from an abutting arterial street.
2. A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 974 to 337.
3. A variation from Chapter 28, Section 11.2-8, to allow a reduction in the required width of a parking row from 24' to 22'.
4. A variation from Chapter 28, Section 6.15-1.2(b) to waive the requirement for one landscape island with a shade tree at the end of a row of twenty parking stalls.

Recommendation

The Staff Development Committee is supportive of the proposed addition to the Church, but in light of the unresolved issue of the alignment of the drive aisle with the existing signal on Arlington Heights Road, staff is unable to support the project as

proposed. Therefore, staff recommends a continuance of PC 17-012, an application for an amendment to Special Use Ordinances #63-078, #97-078, and #07-012 to allow the proposed changes to the east campus, Planned Unit Development encompassing both the east and west campuses, amendment to the Comprehensive Plan, Preliminary Plat of Subdivision, and the proposed variations as identified below:

- A variation from Chapter 29, Section 29-307(f), to allow a double frontage lot with vehicular access from an abutting arterial street.
- A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 974 to 337.
- A variation from Chapter 28, Section 11.2-8, to allow a reduction in the required width of a parking row from 24' to 22'.
- A variation from Chapter 28, Section 6.15-1.2(b) to waive the requirement for one landscape island with a shade tree at the end of a row of twenty parking stalls.

This continuance will allow the petitioner additional time to address the aforementioned issue of the alignment of the proposed ingress/egress to and from the site with the existing traffic signal on Arlington Heights Road.

Should the Plan Commission determine that approval of this application is warranted, staff recommends the following conditions:

Prior to Village Board Consideration

1. The petitioner shall provide a written narrative of the various design options that were considered relative to aligning the ingress/egress to and from the site with the existing traffic signal on Arlington Heights Road, and the reasons for not pursuing those options. This narrative must include details on the geometric, traffic operation, and traffic signal considerations relative to this alignment. Upon receipt of this information, the Village, the petitioner, and IDOT shall meet to discuss the proposed access on Arlington Heights Road.
2. The petitioner shall revise the site plan to relocate the middle parking lot landscape island in the northeast parking row to the northeast terminus of that parking row in the northeast most corner of the site.
3. The petitioner shall revise the site plan to change the two 22-foot wide drive aisles to 24' wide drive aisles as indicated in Exhibit II.
4. The petitioner shall substitute the three crabapple trees in the southwest portion of the detention area with evergreen trees for review and approval by the Village.
5. The petitioner shall provide a new fire truck turning radius exhibit, for review and approval by the Village.

General Conditions

6. Final Plat of Subdivision approval shall be required.

7. The allowance for Sunday parking along both the east and west sides of Arlington Heights Road adjacent to St. James Parish shall be eliminated.
8. The Parish will continually encourage parishioners to utilize both the east and west parking lots prior to parking along the street for typical Sunday and Saturday services.
9. The Village and St. James Parish shall continue to monitor parking to determine if parking overflow onto neighboring residential streets is problematic. If parking overflow is determined to be problematic, the Parish shall develop and implement a plan, for Village review and approval, that would provide additional parking either on the subject property or at alternative off-site location(s).
10. If parishioner parking during the course of construction overflows and becomes a problem in the surrounding residential neighborhood, St. James Parish shall provide, to the satisfaction of the Village, a plan for satellite parking at other agreeable locations.
11. Any future costs associated with the operation, maintenance, modification, relocation, replacement, removal or restoration of the traffic signal along Arlington Heights Road at the exit to the west campus will be borne by St. James Catholic Church. The electrical energy and maintenance costs that are currently paid by the Village will be billed by the Village to the church.
12. IDOT review and approval of the proposed curb cut onto Arlington Heights Road and the Final Plat of Subdivision shall be required.
13. Compliance with the Design Commission motion from October 24, 2017, shall be required.
14. The Parish shall install timers on all site lighting within the east campus so that they automatically turn off no later than 12:00am, with the exception of Christmas Eve and Christmas services
15. The Petitioner shall comply with all applicable Federal, State, and Village codes, regulations, and policies.

ATTACHMENTS:

Description	Type
Staff Report	Board or Commission Report
Legal Notice	Exhibits
Aerial	Exhibits
Conceptual Plan Review Minutes 8-23-17	Minutes
DC Staff Report	Board or Commission Report
DC Minutes 10/24/17	Minutes
Project Narrative	Correspondence
Justification for Special use Permit	

Amendment	Correspondence
Plat of Survey	Exhibits
Neighborhood Meeting Summary	Correspondence
Architectural Plans	Exhibits
Construction Staging Plan & Schedule	Exhibits
Engineering Plans	Exhibits
Fire Truck Exhibit	Exhibits
Landscape & Tree Preservation Plan	Exhibits
Parking Lot Light Cut Sheet	Exhibits
Photometric Plan	Exhibits
Preliminary Plat of Subdivision	Exhibits
Traffic Study	Exhibits
Department Comments - Round 1	Correspondence
Petitioner Response to Dept. Comments - Round 1	Correspondence
Department Comments - Round 2	Correspondence
Petitioner Response to Dept. Comments - Round 2	Correspondence
Department Comments - Round 3	Correspondence



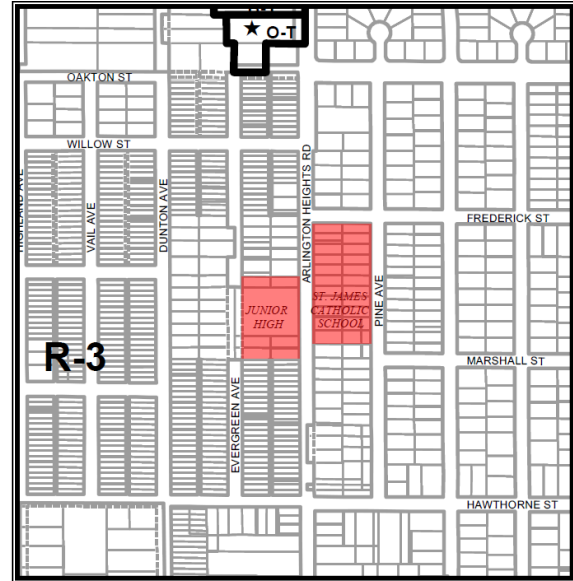
VILLAGE OF ARLINGTON HEIGHTS STAFF DEVELOPMENT COMMITTEE REPORT

Project Number: PC 17-012
Project Title: St. James Parish Church Addition
Address: 831 N. Arlington Heights Rd.
PIN: Multiple PIN's

To: Plan Commission
Prepared By: Sam Hubbard, Development Planner
Meeting Date: December 13, 2017
Date Prepared: December 8, 2017

Petitioner: Matt Hichens
Address: Principle, Newman Architecture
 1730 Park Street – Suite 115
 Naperville, IL 60563

Existing Zoning: R-3, One Family Dwelling District



SURROUNDING LAND USES

Direction	Existing Zoning	Existing Use	Comprehensive Plan
North	R-3: One Family Dwelling District	Single-Family Homes	Single-Family Detached
South	R-3: One Family Dwelling District	Single-Family Homes	Single-Family Detached
East	R-3: One Family Dwelling District	Single-Family Homes	Single-Family Detached
West	R-3: One Family Dwelling District	Single-Family Homes	Single-Family Detached

Requested Action:

1. Amendment to Special Use Ordinances #63-078, #97-078, and #07-012 to allow to allow an addition to the Church building and modifications to the east campus parking lot.
2. Amendment to the Comprehensive Plan to change the land use classification from Single-Family Detached to Institutional for the properties located at 811 N. Arlington Heights Road and 810 N. Pine Avenue.
3. Planned Unit Development encompassing both the east and west campuses to allow multiple buildings on one zoning lot.
4. Preliminary Plat of Subdivision to consolidate all of the east campus into one lot.

Variations Identified:

1. A variation from Chapter 29, Section 29-307(f), to allow a double frontage lot with vehicular access from an abutting arterial street.
2. A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 974 to 337.
3. A variation from Chapter 28, Section 11.2-8, to allow a reduction in the required width of a parking row from 24' to 22'.
4. A variation from Chapter 28, Section 6.15-1.2(b) to waive the requirement for one landscape island with a shade tree at the end of a row of twenty parking stalls.

Project Background:

The St. James Parish property (subject property), which is currently zoned R-3, One Family Dwelling District, is approximately 7.47 acres and is bisected by Arlington Heights Road. The east side of the campus, which is approximately 3.39 acres, includes the existing church building, a three-story former Elementary School building (currently vacant), and a single-family home that is used as a rectory and located at the southeast corner of Arlington Heights Road and Frederick Street. The east campus also contains a parking lot with approximately 138 off-street parking spaces that are accessible via one entrance on Frederick Street, two entrances along Pine Avenue, and a one-way drive aisle off of Arlington Heights Road. The rectory on site contains an additional three off-street parking spaces within an attached garage.

The west side of the campus, which is approximately 4.09 acres, includes the St. James Parish Center, chapel, gymnasium, and the St. James Elementary and Junior High School. There are 149 parking spaces on the west campus, which are accessed by a one-way circular drive system that has a separate entrance and exit off of Arlington Heights Road. The exit is located at a signalized intersection, which contains a pedestrian crosswalk with push-button access to the crossing lights.

St. James Parish has purchased the two single-family homes at 811 S. Arlington Heights Road and 810 S. Pine Avenue, which both abut the eastern campus along the southern side. The petitioner has proposed the demolition of the former school building located on the east campus, as well as the two recently purchased single-family homes, in order to make several improvements to the site. The demolition of the existing 3-story former school building will allow for an addition to the church and an expansion of the existing parking area; the demolition of the two single-family homes will be to accommodate a proposed detention basin that will serve the east campus. The expanded parking lot would add 49 parking spaces for a total of 185 surface parking spaces on the east campus, and an east campus grand total of 188 parking spaces when considering the three existing garage spaces within the rectory.

The proposed actions, if approved, would allow the church to consolidate all of its mass services into the modified east campus church building. Currently, Sunday mass is held at two times within the existing church building, and two times at the Parish Center (located on the western campus). Sunday mass occurs at 7:00am and 8:30am in the existing church building and at 10:00am and 11:30am within the Parish Center on the west campus. Evening mass is offered at 5:00pm on Saturdays and Sundays. The current church building contains a basement floor with two large meetings rooms, a small kitchen, bathrooms, and mechanical/storage rooms. The first floor of the building contains a small lobby and the main worship area. The expansion of this building would add additional areas to the basement, including more multi-purpose/meeting spaces, a larger kitchen, an adoration chapel, a youth room, and additional storage/mechanical spaces. The first floor would have a larger lobby area and an expanded worship area. Finally, an elevator would be added to make the entire building ADA compliant.

Zoning and Comprehensive Plan

In 2007, the Village Board approved Special Use Ordinance 07-012, which allowed St. James to consolidate all school operations into the west campus and to make substantial improvements to that campus. The approvals granted in 2007 also allowed parking to be shared amongst both the east and west campuses. As redevelopment was only proposed for the west campus at that time, only the west campus was brought into compliance with current code standards. It was understood that the east campus would remain as legally non-conforming until redevelopment of the east campus was proposed. Since changes to the east campus are now proposed, an amendment to the Special Use Permit is necessary.

Additionally, Planned Unit Development approval is required to establish a PUD for the entire property, which PUD would encompass both the east and west campuses since the site is under unified control and functions as one overall development with shared parking despite being bisected by Arlington Heights Road. This is consistent with how the Village has proceeded with approvals for similar church/school sites, such as Our Lady of the Wayside, which obtained PUD approval in 2002.

The petitioner has provided a written explanation (attached) that demonstrates the proposed action is consistent with the Special Use criteria as outlined in the Village's Zoning Ordinance, more specifically:

- 1. *That said special use is deemed necessary for the public convenience at this location.***
- 2. *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.***
- 3. *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 majority of the east campus is already designated as "Institutional" within the Comprehensive Plan, however, the two recently acquired single-family homes just south of the church property are still designated as "Single-Family Detached". Because these properties are going to become part of the St. James Parish east campus, the Comprehensive Plan must be amended to change the designation of these properties to "Institutional". Additionally, the petitioner has requested Plat of Subdivision approval to consolidate the entire east campus into one lot of record.

Four variations have been requested by the petitioner. The first variation is from Chapter 29 (Subdivision regulations), and is specifically:

- A variation from Chapter 29, Section 29-307(f), to allow a double frontage lot with vehicular access from an abutting arterial street.

A double frontage lot is defined as a lot that has frontage on two non-intersecting streets. As the proposed lot consolidation will yield one lot that has frontage on both Pine Avenue and Arlington Heights Road (two non-intersecting streets), it is a double frontage lot. The Subdivision Code restricts double frontage lots from having access onto any major arterial street, and the proposed plan includes ingress/egress to Arlington Heights Road, which is classified as a major arterial street. Therefore, the variation is necessary.

Staff is supportive of this variation for the following reasons: 1) Access onto Arlington Heights Road will be a benefit for the subject property as it will help to keep church traffic off of the residential streets to the north, south, and west, 2) The proposed ingress/egress onto Arlington Heights Road must be reviewed and approved by IDOT, which will review the access point relative to their safety standards, and 3) Although Section 29-307(f) is applicable to the subject lot, it is mostly meant to address situations of single-family residential double frontage lots. As the subject property is intended primarily for institutional uses, the standard is less relevant in this situation (although technically applicable).

The remaining variations relate to drive aisle widths, parking, and landscaping, and will be discussed in greater detail throughout this report.

Conceptual Plan Review Committee

The Conceptual Plan Review Committee (CPRC) met on August 23, 2017, to discuss the proposed project. The CPRC was generally supportive of the project and felt that it would be beneficial for St. James Parish to provide additional on-site parking opportunities. They suggested that the petitioner hold a neighborhood meeting prior to appearing before the Plan Commission in order to understand what the nearby residents concerns may be relative to the project, and they also requested the church to analyze if street parking along Arlington Heights Road was still necessary given the proposed increase in parking within the east campus.

Neighborhood Meeting

On September 24, 2017, St. James Parish hosted a neighborhood meeting for residents within 250' of the of the subject property in order to introduce the project to the neighborhood and address any concerns that may be identified by people living within close proximity to the church. A summary of the meeting, as prepared by the petitioner, is included within the packet to the Plan Commission.

Design Commission

The Design Commission met on October 24, 2017, to review the proposed demolition and church addition. The project was approved with several conditions relating to landscape improvements, architectural modifications, and a requirement to construct the dumpster enclosure of masonry material. The required modifications to the landscaping and dumpster enclosure have already been incorporated into the plans. A condition of approval to comply with the October 24th motion from the Design Commission has been included within the SDC recommendation below. The meeting minutes from the Design Commission have been included within the packet to the Plan Commission.

Site Design and Landscaping

With regards to building setbacks, F.A.R., height, and building lot coverage, the subject site conforms to the regulations within the R-3 Zoning District. There is no impervious surface requirement for non-residential uses within the R-3 District.

However, staff has identified the following areas for consideration by the Plan Commission:

Site Circulation

The petitioner has proposed a new right-in/right-out entrance along Arlington Heights Road, which will allow northbound ingress and egress to and from Arlington Heights Road and will require IDOT review and approval. Access to Arlington Heights Road will help to reduce travel on Frederick Street and Pine Avenue as parishioners will no longer need to use these streets to exit the site for northbound travel on Arlington Heights Road or to enter into the site from northbound Arlington Heights Road. Additional details on this access point will be outlined within the Traffic section of this report.

During staffs' analysis of the site access, it has been determined that the existing traffic signal on Arlington Heights Road adjacent to the church and school sites, which provides egress from the school site and safe pedestrian travel across Arlington Heights Road, is a private benefit signal as its only purpose is to serve the church and school. Therefore, staff has proposed that the maintenance costs for this signal be borne by St. James Parish, and if removal of this signal is required at any point in the future, that the costs for this removal be the responsibility of the church. This has been incorporated as a condition of approval, and the church has verbally acknowledged that this condition seems fair.

Relative to site circulation, the petitioner has requested the following variation:

- A variation from Chapter 28, Section 11.2-8, to allow a reduction in the required width of a parking row from 24' to 22'.

Specifically, the variation is needed on a portion of the eastern north/south drive aisle where the drive aisle is adjacent to the church. The petitioner originally proposed this entire drive-aisle to be 22 feet in width, however, they have agreed to increase the drive aisle width to 24 feet on the north and the south ends (see **Exhibit II**) to where the variation will only apply to that portion of the drive aisle adjacent to the church building. Staff is supportive of this variation for the following reasons: 1) the motion by the Design Commission requires the church to add a small bump out to the rear of the church, which means there is less land at the rear to accommodate for the increase in drive aisle width, 2) to extend the drive aisle to the east would reduce the size of the landscape buffer for the parking lot, and 3) to extend the drive aisle to the west would reduce the area for foundation plantings at the rear of the church.

Finally, the Engineering Department has requested an additional fire truck turning exhibit showing the path of travel of a fire truck throughout the site. This exhibit shall be required prior to Village Board consideration of this project, for review and approval by the Engineering Department and Fire Department.

Detention Basin

The existing site accommodates its stormwater detention capacity within an underground storage vault located beneath one of the parking areas, as well as within a small above ground detention area at the south of the site. The proposed improvements will cause the removal of the existing above ground stormwater detention area and will increase the amount of required stormwater capacity. As such, a new above ground stormwater detention area has been proposed along the southern boundary of the site. This new detention basin will be a dry bottom basin and will not include native plantings, but will instead be seeded with a grass turf that can accommodate heavy water levels. At the request of staff, the petitioner has agreed to provide both a 6-foot tall board on board fence and 17 trees along the southern border of the detention area to provide a screen for the existing homes on the south. Staff is recommending that three of the 17 trees, which are currently proposed as crabapple trees and located on the southwestern side of the detention area, be changed to evergreen trees to provide for a better year-round screen, and a condition requiring this has been included.

Landscaping

As is required by code, the petitioner has incorporated the required parking lot perimeter landscaping and landscape islands within both the proposed parking lot and the existing parking lot. This represents an extensive improvement over the existing condition of the site, which currently has no perimeter landscaping and no landscape islands. However, there is one row of parking that does not terminate in a landscape island with a shade tree, which row is located on the eastern side of the site and which landscape island is missing at the northern terminus of this parking row. The petitioner has proposed the relocation of a landscape island within the middle of this parking row to the end of the parking row, which would satisfy the code requirement, but create the need for a variation within the parking row since the parking row would include 29 parking stalls with no landscape island separating the parking stalls (code requires any parking row of greater than 20 spaces to include a landscape island within the parking row). Therefore, the following variation is required:

- A variation from Chapter 28, Section 6.15-1.2(b) to waive the requirement for one landscape island with a shade tree at the end of a row of twenty parking stalls.

Staff is supportive of this variation for the following reasons: 1) Given the desire to keep cars off of residential streets, the elimination of an additional parking space to accommodate for the code required landscape island would be detrimental to the on-site parking, 2) the parkway includes a shade tree in close proximity to where the landscape island would be constructed, and 3) both the northern terminus and southern terminus of this parking row will include a landscape island with a shade tree, which will help to buffer the appearance of the parking row.

Tree Preservation

The petitioner has proposed the removal of 24 trees within the east campus area to accommodate for the proposed building and parking lot addition. Of these 24 trees, seven are in poor condition. There are two mature Black Walnut trees that are rather large and in good condition but proposed for removal, one mature 40-inch caliper Silver Maple in fair condition proposed for removal, and one mature Norway Maple proposed for removal. Staff has reviewed all trees proposed for removal and verified that they are within the path of development and must be removed to accommodate for the proposed parking area and detention area. The preservation of these trees would reduce the ability to provide 49 on-site parking spaces and cause more parking overflow onto the neighboring residential streets. Staff notes that the petitioner has proposed 59 new trees in conjunction with the proposed project.

Site Lighting

Staff has analyzed the site photometric plan and verified that lighting will conform with code requirements. The Staff Development Committee has recommended that the Parish install timers on all site lighting so that they automatically turn off no later than 12:00am, with the exception of Christmas Eve and Christmas services.

Building

The proposed addition received Design Commission approval on October 24, 2017, as outlined above. The architecture and materials of the addition have been designed to blend with the existing building, and the height of the addition will continue the existing roofline of the church. It should be noted that the R-3 regulations allow church buildings to be built up to a height of 45 feet, and the proposed addition is approximately 40.5 feet in height. Compliance with all Design Commission conditions of approval will be required.

Construction and Staging

Per the construction and staging plan submitted by the petitioner, the first phase of construction will involve the demolition of the existing church building, which would occur in February of 2018. However, site work cannot begin until the Final Plat of Subdivision has been approved, which requires sign-off from all applicable Village Departments, utility companies, and IDOT. Final Plat of Subdivision approval will likely occur sometime in April or May of 2018, and construction of the site improvements and building addition will begin shortly thereafter. Final completion of the project is expected to occur in March of 2019. Construction traffic will enter from Arlington Heights Road, Frederick Street, and Pine Avenue, and all construction traffic will be contained within the site.

During construction, all services will occur within the Parish Center on the west side of campus. If parking becomes a problem during construction, the Parish must provide, to the satisfaction of the Village, a parking plan that addresses this issue, which may include alternative off-site parking options provided by the Parish.

Parking

Based on the traffic and parking study, peak attendance occurs at the 10:00am service that currently takes place within the Parish Center located on the west campus, where peak parking demand on a typical Sunday has been estimated at 359 parking spaces. The petitioner has stated that they believe attendance will become more evenly distributed as a result of the proposed addition with less people attending the 10:00am mass due to the upgrades that will make the church building fully accessible for individuals in wheel chairs and individuals who have difficulty using stairs. The church believes that there may be members of their congregation that wish to attend services in the early or late morning, but because of the relative inaccessibility of the existing church building on the east campus, these parishioners opt for the 10:00am service on the west campus since the building there is fully accessible. Finally, it is important to note that the church has agreed to the removal of the parking allowance along the east side of Arlington Heights Road that permits parking along Arlington Heights Road during Sunday service times. The Parish has proposed that parking along the western side of Arlington Heights Road remain as currently allowed, which is permitted during Sunday service times.

Staff has evaluated the proposed parking and determined that the following variation is required:

- A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 974 to 337.

The variation is based on the sum of the overall uses occurring on both the east and west campuses as required by code. A summary of the parking requirements per campus is included below, and the full parking calculations are included at the end of this report in **Exhibit I**:

Summary of Parking Requirements per Campus

Location	Parking Required
East Campus	301
West Campus	673
	TOTAL
Total Parking Required	974
Total Parking Provided (East Campus)*	188
Total Parking Provided (West Campus)	149
TOTAL PARKING PROVIDED	337
Surplus/(Deficit)	-637

*Includes 3 interior garage spaces in the rectory.

As indicated above, the majority of the required parking and extent of the variation is generated by the school uses taking place on the west campus. The parking impacts of the west campus were considered and approved during the 2007 addition to the west campus; there is no proposed change to the west campus other than the discontinuance of mass, which will decrease the parking overflow around the west campus that occurs on Sundays. Therefore, analysis of parking and traffic focused on the east campus, which will experience the most change as a result of the proposed development. When viewed on an individual basis, the east campus is required to provide 301 parking spaces and will provide a total of 188 parking spaces if

the proposed improvements are approved. While the overall parking variations takes into account both the east and west campuses, it is important to note that St. James does not use both of these locations concurrently and they have confirmed that no activities will be held on the west campus when Sunday mass is in session.

As indicated above, peak parking demand on a typical Sunday was estimated at 359 spaces based on two days of survey, which peak occurred during the 10:00am mass. While the increase in seating capacity provided within the expanded church building will allow for additional occupants within the church, overall attendance is expected to remain similar to existing levels. The increase in seating capacity is primarily intended to accommodate the typical attendance observed during the 10:00am worship time (around 750 parishioners) occurring in west campus since the existing church can only accommodate around 550 people. As such, no large increase in overall attendance is expected to occur as a result of the proposed addition, and it is anticipated that the 359-space peak parking demand will remain unchanged despite the increase in capacity of the church.

Total parking provided in both the east and west campus is 334 parking spaces (this total does not include the three attached garage spaces within the rectory). Given that peak parking demand is forecast to remain consistent to levels as observed during the parking survey (359 space demand), a deficit of 25 parking spaces exists. This overflow can be accommodated along the western side of Pine Avenue south of Frederick Street and north of Hawthorne Street (capacity for 40 cars), and along the south side of Frederick Street between Arlington Heights Road and Pine Avenue (capacity for 5 cars). Additional parking overflow may occur on Pine Avenue north of Frederick Street, along Marshall Street, and along the north side of Frederick Street east of Pine Avenue (parking is prohibited along the south side of Frederick Street east of Pine Avenue during Sunday worship times). This information is summarized in the below table:

Sunday Peak Parking Demand	359 Spaces
Total Proposed Parking (east +west campus)	334 Spaces
Surplus/(Deficit)	25 Spaces
Overflow Street Parking	
Parking Along N. Side of Frederick	5 Spaces
Parking Along W. Side of Pine	40 Spaces

Staff notes that the petitioner would like to keep the parking allowance for Sunday parking along the western side of Arlington Heights Road in case anticipated parking demand falls short of actual demand. They have discussed a one year monitoring period with staff to where, if this parking is determined unnecessary after one year of occupancy of the building addition, this parking can be removed. Staff notes that if all street parking along Arlington Heights Road is eliminated, there is the potential for more parking overflow into the surrounding east campus residential neighborhood.

Staff has reached out to the Police Department and found record of several accidents along Arlington Heights Road in proximity to St. James Parish over the last five years, which can be attributed to the allowance for

Sunday parking on Arlington Heights Road. The Staff Development Committee weighed the known safety ramifications of keeping this parking versus the potential inconvenience that the elimination of this parking would have on the surrounding residential community. With consideration to the fact that overflow parking exists along Pine, Frederick, and even Marshall Street, the existing street parking adjacent to the church should be able to accommodate for the potential parking overflow even with the elimination of the street parking along both side of Arlington Heights Road. Therefore, the SDC recommends the elimination of all Arlington Heights Road parking.

Given that every mass is now proposed to occur on the east campus, the amount of cars parked adjacent to the west campus will decrease, and the amount of cars parked adjacent to the east campus will extend for longer throughout Sunday as mass will now be occurring at the east campus from 7:30am to 1:00pm as opposed to from 7:30am to 10:00am. In order to prevent parking overflow from becoming a nuisance to the surrounding residential communities, parking within both the east and west parking lots must be used to capacity prior to parishioners utilizing available on-street parking spaces. If parishioners opt for street parking around the east campus as opposed to parking within the west campus parking lot, additional restrictions on street parking may be needed. The petitioner has stated that they will implement a program to encourage parishioner parking within the east and west parking lots, which program will involve notifications in their weekly printed bulletin, notifications via Facebook, and announcements during services.

In sum, staff has reviewed the expected parking generation and proposed parking variation and found that the additional 49 off-street parking spaces proposed will help to mitigate the parking impact to the neighborhood adjacent to the east campus, and the elimination of street parking along the east side of Arlington Heights Road will improve the safety of travel along this major arterial street. As the expected parking overflow onto the streets is anticipated at 25 cars, street parking along either side of Arlington Heights Road is not warranted. If it is determined that parking overflow outside of the east campus is problematic, additional restrictions for street parking on the surrounding residential streets may be recommended by the Village. St. James Parish shall continue to monitor parking and if parking becomes a problem, the church shall develop and implement a plan for Village review that would provide additional parking either at alternative locations outside of the subject property, or locations within the subject property. One such option within the subject property would be to convert the proposed above-ground stormwater detention area to an underground detention vault, which would allow approximately 40-50 additional onsite parking spaces. The Staff Development Committee is supportive of the proposed parking variation.

Traffic

The petitioner has submitted a traffic analysis in conjunction with their Plan Commission application. This analysis has found that the neighboring roadway network has the capacity to handle the projected increase in traffic associated with the proposed improvements. As previously mentioned, the new right-in/right-out entrance along Arlington Heights Road will help to keep the increase in traffic associated with services being conducted on the east campus from utilizing Frederick Street and Pine Avenue for access to the east campus parking lot. Although traffic on these streets is expected to increase, the extent of this increase will be

reduced due to this new access point on Arlington Heights Road. However, traffic leaving the west campus for southbound Arlington Heights Road will still need to either utilize the Frederick Street intersection, or travel south along Pine Avenue to either Hawthorne Street or Euclid Avenue (which is a signalized intersection) for this southbound movement. The traffic study has found that the non-signalized intersection of Frederick Street with Arlington Heights Road has sufficient gaps during peak conditions to allow for a southbound left turn.

Staff notes that travel along Pine Avenue can become tight when cars are parked along the west side of the street and there are two cars travelling in both directions on the street (parking is prohibited along the east side of Pine Avenue). However, the street is approximately 24 feet in width, which is sufficient to permit two-way travel when there is one parked car.

Finally, in review of the projected traffic and site circulation, the Engineering Department considered the possibility of the entrance/exit to the east campus being aligned with the existing traffic signal at the exit to the west campus, as opposed to the proposed location of the right-in/right-out at the south side of the site. This alignment would potentially allow a full access intersection that would permit southbound ingress/egress to and from the east campus at this signalized intersection, which would further reduce the traffic impact to the residential streets adjacent to the east campus. The petitioner has explained that they considered this approach and determined it to be cost prohibitive as it would require substantial improvements to the signal system in this location (which the Parish does not have funding for), and would cause undesirable alterations to the proposed site layout. The Engineering Department has asked for details on how these cost estimates were generated, but to-date the Village has not received detailed information as to why this alignment is not feasible. In order to evaluate if this alignment is a viable option, the petitioner shall provide a written narrative of the various design options that were considered and the reasons for not pursuing those options. This narrative must include details on the geometric, traffic operation, and traffic signal considerations relative to the proposed alignment. Staff does not believe that this option has been fully vetted and notes that this alignment would help to reduce traffic on the surrounding residential streets as automobiles would be able to exit and potentially enter the site without driving on Frederick Street or Pine Avenue.

RECOMMENDATION

The Staff Development Committee is supportive of the proposed addition to the Church, but in light of the unresolved issue of the alignment of the drive aisle with the existing signal on Arlington Heights Road, staff is unable to support the project as proposed. Therefore, staff recommends a continuance of PC 17-012, an application for an amendment to Special Use Ordinances #63-078, #97-078, and #07-012 to allow the proposed changes to the east campus, Planned Unit Development encompassing both the east and west campuses, amendment to the Comprehensive Plan, Preliminary Plat of Subdivision, and the proposed variations as identified below:

- A variation from Chapter 29, Section 29-307(f), to allow a double frontage lot with vehicular access from an abutting arterial street.
- A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 974 to 337.

- A variation from Chapter 28, Section 11.2-8, to allow a reduction in the required width of a parking row from 24' to 22'.
- A variation from Chapter 28, Section 6.15-1.2(b) to waive the requirement for one landscape island with a shade tree at the end of a row of twenty parking stalls.

This continuance will allow the petitioner additional time to address the aforementioned issue of the alignment of the proposed ingress/egress to and from the site with the existing traffic signal on Arlington Heights Road.

Should the Plan Commission determine that approval of this application is warranted, staff recommends the following conditions:

Prior to Village Board Consideration

1. The petitioner shall provide a written narrative of the various design options that were considered relative to aligning the ingress/egress to and from the site with the existing traffic signal on Arlington Heights Road, and the reasons for not pursuing those options. This narrative must include details on the geometric, traffic operation, and traffic signal considerations relative to this alignment. Upon receipt of this information, the Village, the petitioner, and IDOT shall meet to discuss the proposed access on Arlington Heights Road.
2. The petitioner shall revise the site plan to relocate the middle parking lot landscape island in the northeast parking row to the northeast terminus of that parking row in the northeast most corner of the site.
3. The petitioner shall revise the site plan to change the two 22-foot wide drive aisles to 24' wide drive aisles as indicated in **Exhibit II**.
4. The petitioner shall substitute the three crabapple trees in the southwest portion of the detention area with evergreen trees for review and approval by the Village.
5. The petitioner shall provide a new fire truck turning radius exhibit, for review and approval by the Village.

General Conditions

6. Final Plat of Subdivision approval shall be required.
7. The allowance for Sunday parking along both the east and west sides of Arlington Heights Road adjacent to St. James Parish shall be eliminated.
8. The Parish will continually encourage parishioners to utilize both the east and west parking lots prior to parking along the street for typical Sunday and Saturday services.
9. The Village and St. James Parish shall continue to monitor parking to determine if parking overflow onto neighboring residential streets is problematic. If parking overflow is determined to be problematic, the Parish shall develop and implement a plan, for Village review and approval, that would provide additional parking either on the subject property or at alternative off-site location(s).
10. If parishioner parking during the course of construction overflows and becomes a problem in the surrounding residential neighborhood, St. James Parish shall provide, to the satisfaction of the Village, a plan for satellite parking at other agreeable locations.
11. Any future costs associated with the operation, maintenance, modification, relocation, replacement, removal or restoration of the traffic signal along Arlington Heights Road at the exit to the west campus will be borne by St. James Catholic Church. The electrical energy and maintenance costs that are currently paid by the Village will be billed by the Village to the church.
12. IDOT review and approval of the proposed curb cut onto Arlington Heights Road and the Final Plat of Subdivision shall be required.

13. Compliance with the Design Commission motion from October 24, 2017, shall be required.
14. The Parish shall install timers on all site lighting within the east campus so that they automatically turn off no later than 12:00am, with the exception of Christmas Eve and Christmas services
15. The Petitioner shall comply with all applicable Federal, State, and Village codes, regulations, and policies

December 8, 2017

Bill Enright, Deputy Director of Planning and Community Development

Cc: Randy Recklaus, Village Manager
All Department Heads

EXHIBIT I: PARKING CALCULATIONS

Use	Parking requirement	Number of Dwelling Units	Number of Seats	Number of Employees	Number of Classrooms	Size of Space	Required parking spaces
East Campus							
Sanctuary	One space per five seats	N/A	Sanctuary - 861	N/A	N/A	N/A	183.20
			Mezzanine - 55				
Multi-purpose and meeting rooms	Per Table 1004.1.1 for assembly areas w/o fixed seats and concentrated (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	N/A	5,813	116.26
Rectory	2 spaces per dwelling unit	1	N/A	N/A	N/A	N/A	2.00
West Campus							
School	One space per classroom + two spaces per employee	N/A	N/A	53	33	N/A	139.00
Office-Administrative	One space per 300 sq. ft.	N/A	N/A	N/A	N/A	6,162	20.54
Multi-purpose Rooms	Per Table 1004.1.1 for assembly areas w/o fixed seats and concentrated (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	N/A	25,641	512.82
							TOTAL
Parking	Total Parking Required						974
	Total Parking Provided (East Campus)*						188
	Total Parking Provided (West Campus)						149
	TOTAL PARKING PROVIDED						337
	Surplus/(Deficit)						-637

Multi-purpose and Meeting Rooms on the East Campus include: L02, L14, L15, L16, L27, L28, L32, 102

*Parking provided includes 3 interior garage spaces in the rectory.

EXISTING BUILDING

PROPOSED BUILDING EXPANSION
± 6,395 SF
FFE = 702.00

AREA WHERE DRIVE AISLE
WILL BE WIDENED TO 24'
IN WIDTH

SIDEWALK SECTION TO
BE CARRIED THROUGH
DRIVE. NO CURB TO BE
CONSTRUCTED WHERE
RAMPS MEET DRIVE.

PINE AVE

SIDEWALK SECTION TO
BE CARRIED THROUGH
DRIVE. NO CURB TO BE
CONSTRUCTED WHERE
RAMPS MEET DRIVE.

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 13, 2017, AT 7:30 P.M. in the Municipal Building, 33 South Arlington Heights Road, Arlington Heights, Illinois to consider Petition No. 17-012, an amendment to Special Use Ordinance 07-012 to allow an addition to the Church building and modifications to the east campus parking lot, an amendment to the Comprehensive Plan to change the land use classification from Single-Family Detached to Institutional for the properties at 811 North Arlington Heights Road and 810 North Pine Avenue, a Planned Unit Development for both the east and west campuses to allow multiple buildings on one zoning lot, and Preliminary Plot of Subdivision approval to consolidate multiple lots into one lot, of property having a common address of 821 North Arlington Heights Road, 831 North Arlington Heights Road, 841 North Arlington Heights Road, 811 North Arlington Heights Road, 800-820 North Arlington Heights Road, and 810 North Pine Avenue in Arlington Heights, IL, and legally described as follows:

The north 62 feet of the south 190 feet of the west 165 feet (except a strip along the west side of said tract used for a road) of the Northeast Quarter of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois.

Also,
The north 62 feet of the south 199 feet of the east 88 feet of the west 253 feet of the Northeast Quarter of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian.

Also,
The north 62 feet of Lot 19 in Block 5 in D.W. Miller's Arlington Heights Acre Addition on the east half of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois, according to the Plot thereof recorded December 23, 1901 as document number 3188548.

Also,
The north 64 feet of the south 137 feet of the east 88 feet of the west 253 feet of the Northeast Quarter of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois.

Also,
The south 64 feet of the north 126 feet of Lot 19 in Block 5 in D.W. Miller's Arlington Heights Acre Addition on the east half of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois, according to the Plot thereof recorded December 23, 1901 as document number 3188548.

Also,
Lots 1 through 18, both inclusive, in D.W. Miller's Arlington Heights Acre Addition on the east half of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois, according to the Plot thereof recorded December 23, 1901 as document number 3188548.

Also,
The north 64 feet of the south 137 feet of the west 165 feet (except a strip along the west side of said tract used for a road) of the Northeast Quarter of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois.

Also,
Lots 1 through 11, both inclusive, in A.W. Schaeffer's Subdivision of Lot 3 (except that part conveyed by warranty deed dated October 3, 1902 and recorded on October 9, 1902 as document 3306370) in Dunton and Others Subdivision of the Northwest Quarter of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois.

Also,
That part of vacated Evergreen Avenue lying west of and adjoining Lots 1, 4 and 5 and lying east of and adjoining Lots 6 through 11 in A.W. Schaeffer's Subdivision aforesaid, in Cook County, Illinois.

Also,
Lots 6, 7 and the south 20 feet of Lot 8 in Schroeder's Subdivision of the east 2.5 acres of the north 5 acres of the Southeast Quarter of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, in Cook County, Illinois.

Also,
Lot 2 in Page's Subdivision of the north half of the west half of Lot 3 (excepting therefrom the north 275.31 feet thereof) in the subdivision of the Northwest Quarter of the Northwest Quarter of Section 29, Township 42 North, Range 11, East of the Third Principal Meridian, (and excepting from said tract the east 33.00 feet lying south of the north 275.31 feet of the said tract), according to the plot of said Page's Subdivision registered in the Office of the Registrar of Titles of Cook County, Illinois on February 28, 1969 as document 2437951 in Cook County, Illinois.

Also,
The south 41.33 feet of Evergreen Avenue lying north of and adjoining that part of vacated Evergreen Avenue lying west of and adjoining Lots 1, 4 and 5 and lying east of and adjoining Lots 6 through 11, in A.W. Schaeffer's Subdivision of Lot 3 (except that part conveyed by warranty deed dated October 3, 1902 and recorded on October 9, 1902 as Document 3306370) in Dunton and Others Subdivision of the Northwest Quarter of the Northwest 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:

- A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 974 to 337.
- A variation from Chapter 28, Section 11.2.8, to allow a reduction to the minimum allowable driveway width from 24 feet to 22 feet.
- A variation from Chapter 29, Section 29-307(f), to allow a double frontage lot to have access from an abutting arterial street.

And other variations as determined necessary by the Plan Commission.

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.

Terry Ennes, Chairman
ARLINGTON HEIGHTS PLAN COMMISSION
Published in Daily Herald November 28, 2017 (4487965)

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PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

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 and has been circulated daily in the Village(s) of:

Arlington Heights, Barrington, Barrington Hills, Bartlett, Buffalo Grove, Deer Park, Des Plaines, Elk Grove, Hanover Park, Hoffman Estates, Inverness, Mt Prospect, Palatine, Prospect Heights, Rolling Meadows, Schaumburg, South Barrington, Streamwood, Wheeling

County(ies) of Cook

and State of Illinois, continuously for more than one year prior to the date of the first publication of the notice hereinafter referred to and is of general circulation throughout said Village(s), County(ies) and State.

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 November 28, 2017 in said Northwest Suburbs DAILY HERALD.

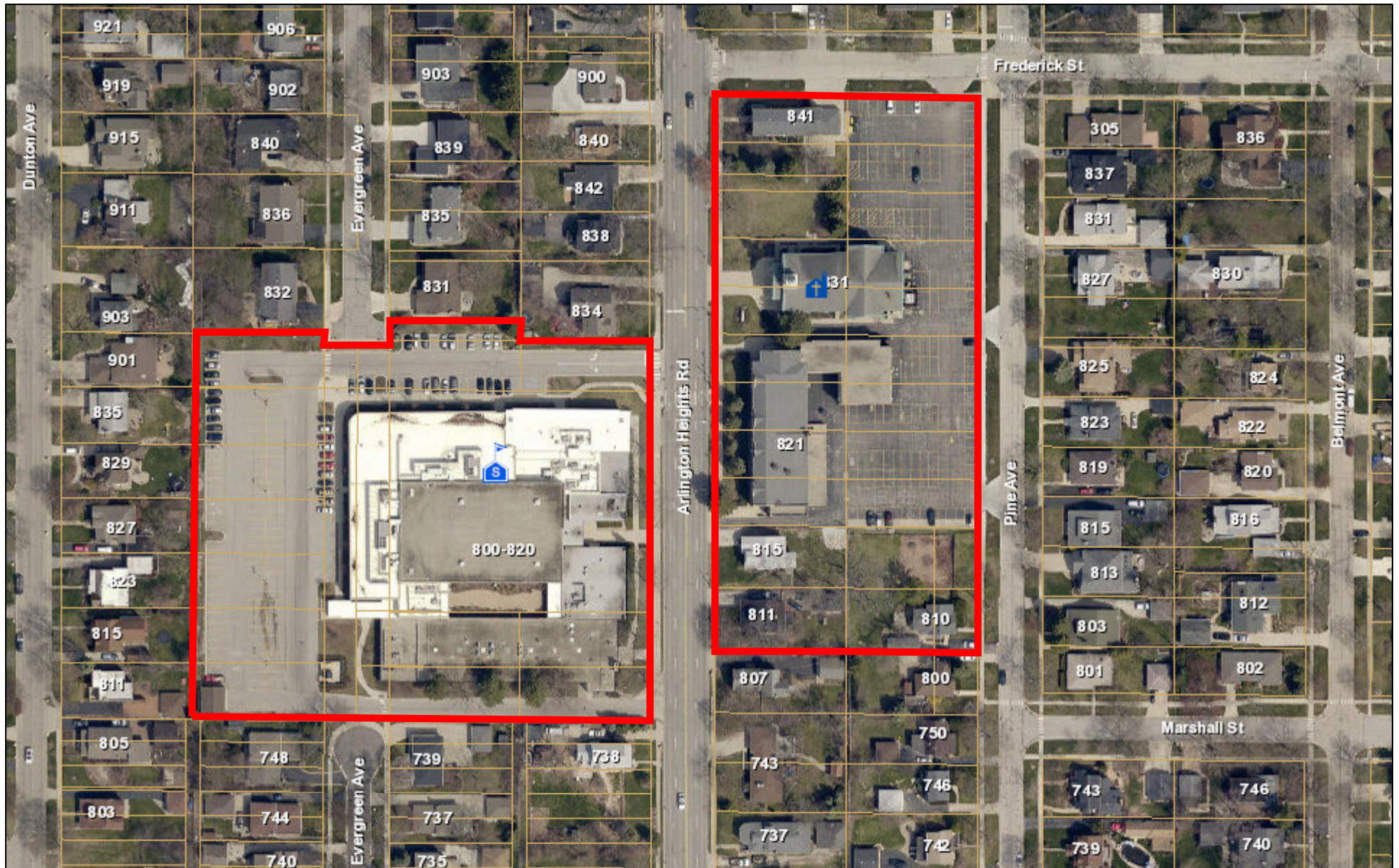
IN WITNESS WHEREOF, the undersigned, the said PADDOCK PUBLICATIONS, Inc., has caused this certificate to be signed by, this authorized agent, at Arlington Heights, Illinois.

PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

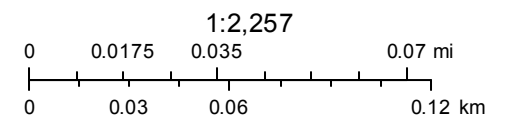
BY Laurel Baltz
Designee of the Publisher and Officer of the Daily Herald

Control # 4487965

Aerial - St. James Parish



August 18, 2017



REPORT OF THE PROCEEDINGS OF
THE CONCEPTUAL PLAN REVIEW COMMITTEE

OF THE VILLAGE OF ARLINGTON HEIGHTS PLAN COMMISSION

HELD AT VILLAGE HALL ON:

August 23, 2017

Project Title: St. James Parish Addition
Address: 831 N. Arlington Heights Rd.
Petitioner: Matt Hichens
Principle, Newman Architecture
1730 Park Street – Suite 115
Naperville, IL 60563

Requested Action:

- Amendment to Special Use Ordinance #07-012 to allow an addition to the Church building on the east campus.
- Amendment to the Comprehensive Plan to change the land use classification from Single-Family Detached to Institutional for the properties located at 811 S. Arlington Heights Road and 810 S. Pine Avenue.
- Planned Unit Development to allow multiple buildings on one zoning lot.
- Plat of Subdivision to consolidate all of the east campus into one lot.

Variations Required:

- Section 11.4, to reduce the required off-street parking for the East Campus.

Attendees:

Karen Kristianson, Newman Architecture
Father Matt Foley, St. James Pastor
Debbie Bolash, St. James Facilities & Construction Manager
Bruce Green, Plan Commissioner
Lynn Jensen, Plan Commissioner
Jay Cherwin, Plan Commissioner
John Sigalos, Plan Commissioner
Sam Hubbard, Development Planner

Project Summary:

The St. James Parish property (subject property), which is currently zoned R-3, One Family Dwelling District, is approximately 7.47 acres and is bisected by Arlington Heights Road. The east side of the campus, which is approximately 3.39 acres, includes the existing church building, a three-story former Elementary School building (currently vacant), and a single-family home that is used as a rectory and located at the southeast corner of Arlington Heights Road and Frederick Street. The east campus also contains a parking lot with approximately 138 off-street parking spaces that are accessible via one entrance on Frederick Street, two entrances along Pine Avenue, and a one-way drive aisle off of Arlington Heights Road.

The proposed actions, if approved, would allow the church to consolidate all of its Sunday services into the modified east campus church building. Currently, Sunday Mass is held at two times at the existing church building, and Sunday Services are also held at two times at the Bowman Center (located on the western campus). Sunday Mass occurs at 7:30am and 9:30am, and Sunday Services occur at 9:00am and 11:00am. The current church building contains a basement floor with two large meetings rooms, a small kitchen, bathrooms, and mechanical/storage rooms. The first floor of the building contains a small lobby and the main worship area. The expansion of this building would add additional areas to the basement, including more multi-purpose/meeting spaces, a larger kitchen, an adoration chapel, a youth room, and additional storage/mechanical spaces. The first floor would have a larger lobby area and an expanded worship area. Finally, an elevator would be added to make the entire building ADA compliant.

Meeting Discussion:

Ms. Kristianson began by stating that the goal of the project is to provide a larger and more accessible church space. The current church does not have enough capacity for the parish to hold all of its services, and the facility does not have accessible bathrooms or seating. The addition would fix the lack of accessibility, and allow for all church services to be held in the church itself, rather than being held in both the church and the parish center across the street. The petitioner is requesting to demolish the old school building south of the church, which would allow for the expansion of the church and the provision of additional parking. The parish has also purchased two parcels to the south of the current church site, which would be used as a green space buffer between the church and the residences to the south. The parish plans to hold a neighborhood meeting prior to any formal Village public hearing. Additionally, a traffic study is currently being conducted for the site. Issues that will still need to be discussed involve the trash enclosure, parking requirements (as there is still a deficit in code-required parking, though more spaces are being added to the site), and landscaping. Regarding landscaping, Ms. Kristianson noted that parking islands and a landscape buffer along Arlington Heights Rd. will be added.

Father Foley added that improving accessibility is of high importance to the Parish, as they have a high number of seniors in the congregation that have been unable to enter the existing church without being carried. The parish community would be grateful for an opportunity to address this issue by improving accessibility.

Mr. Hubbard gave a synopsis of the history of the St. James parish site. In 2007, the Village Board granted St. James a Special Use Permit to consolidate their school operations to the west campus, and to make substantial improvements to the west campus. The Special Use Permit also allowed for parking to be shared between the east and west campus. At the time, it was understood that the east campus would remain non-conforming while the west campus was brought up to current standards, and the east campus would be brought up to code at a later date. As the parking on the east campus is currently being modified, the 2007 Special Use Permit will have to be amended to account for this change. Additionally, in order to bring the east campus up to current code standards, a PUD approval will be required for the site, as it will have two principal buildings (the church and the rectory). A Plat of Consolidation will also be required to combine the east campus into one lot of record, to bring the site up to current one lot standards. The entire east campus is currently zoned Institutional, with the exception of the two recently acquired lots. Those two lots will need to be re-designated on the comprehensive plan as Institutional. As part of the Plan Commission process, more information is still needed regarding how the church uses both campuses, specifically anticipated Sunday worship times, how consolidation of worship services would work, and information on the types of activities that are taking place at both campuses to understand how required parking and traffic will be impacted. Staff also recommends that a neighborhood meeting be held prior to the Plan Commission meeting. Mr. Hubbard also noted that perimeter landscaping of the parking lot is not present in all areas, and reiterated that under the 2007 agreement it was decided that the east campus would be brought up to current standards when new development was proposed, and therefore Staff would like to see the east campus brought up to code with this process. The Village would be open to a phased approach to installation of the required improvements. A Design Commission review will also be required, and a variation for parking is required as well. Mr. Hubbard did note, however, that more parking is being added to the site, and that the majority of existing churches in the Village do not meet parking requirements. The parish is being asked to evaluate Sunday parking on Arlington Heights Road. Since they are adding more parking the Village wants to determine if street parking in that location is still needed. The Village will also be evaluating if the current street parking is causing accidents, per Fire Department records. Staff is generally supportive, subject to the petitioner addressing the mentioned concerns.

Commissioner Jensen asked if, after the project is completed, all church services would be taking place on the east campus, and all school and community functions will be taking place on the west campus.

Father Foley confirmed that, in general, that would be the goal.

Commissioner Jensen asked if the petitioner considered an underground vault for water detention.

Ms. Kristianson stated that there is still a vault under the parking area. When the two additional parcels were added, the dry basin (which the parish does want to use) was added into the detention requirements. However, the majority of water detention would still be in the vault under the parking area. Both sum of both detention areas will accommodate for the code

required storm water detention requirements.

Commissioner Jensen stated that he felt better knowing that, because he is not happy with the appearance of the new dry bottom detention area in the Lexington homes subdivision.

Ms. Kristianson stated that it is the parish's goal that the surface detention area would be a grassy area that could be used as a lawn.

Commissioner Jensen Stated that he had no additional questions and that consolidating the east campus into one lot of record made sense to him.

Commissioner Sigalos stated that he had no questions. He stated that it was a good plan to tear down the old school building if it wasn't being used, and that the space could be put to better use.

Commissioner Cherwin stated that the Village's requirements seemed achievable, and asked if the petitioner would be able to address Staff's comments.

Ms. Kristianson stated that the only comment that may be difficult to address would be the landscape buffer along Pine Ave., as putting in the required landscape buffer would result in the loss of those parking spaces, but that the petitioner is willing to find a solution to this issue with Staff. The parish would like to retain those parking spaces.

Commissioner Green stated that that is an issue the community meeting will help to clear up.

Ms. Kristianson stated that she does not anticipate having any other issues besides the landscape buffer that the petitioner would not be able to address.

Commissioner Cherwin asked Mr. Hubbard if, as part of the traffic and parking study, if the spaces along Arlington Heights Rd. would be incorporated into the study.

Mr. Hubbard confirmed that parking along Arlington Heights Rd. would be included in their parking counts.

Commissioner Cherwin stated that it sounded like a great project.

Commissioner Green asked if the petitioner would consider expanding the proposed detention vault, and using the surface detention area for additional parking.

Ms. Kristianson stated that they could, however that was not being proposed at this time because the parish would like to retain on-site green space that could be utilized and act as a buffer.

Commissioner Green stated he understood there would be a cost implication associated with expanding the detention area, and that as a neighbor to the south he would prefer a dry basin to a parking lot next to his home. He clarified that he was asking if a portion of that space could be used to add some additional parking while still providing a buffer. Added spaces would help alleviate some of the Sunday parking on Arlington Heights Rd., which is a hazard. He believes that the neighborhood meeting would be very useful, and he looks forward to hearing the results of that meeting. He stated it was a good project, just needed some fine tuning.

RECOMMENDATION

The Plat & Subdivision Committee was supportive of the proposal and advised that the petitioner should move forward.

Bruce Green, Chair
PLAT & SUBDIVISION COMMITTEE
Sam Hubbard, Recorder

STAFF DESIGN COMMISSION REPORT

PROJECT INFORMATION:

Project Name: St. James Parish
Project Address: 831 N. Arlington Heights Rd.
Prepared By: Steve Hautzinger

Date Prepared: October 13, 2017

PETITIONER INFORMATION:

DC Number: 17-121
Petitioner Name: Matt Hichens
Petitioner Address: Newman Architecture
1730 Park Street, Suite 115
Naperville, IL 60563
Meeting Date: October 24, 2017

Requested Action(s):

1. Approval of the proposed architectural design for an addition to an existing church building and corresponding site improvements.

ANALYSIS

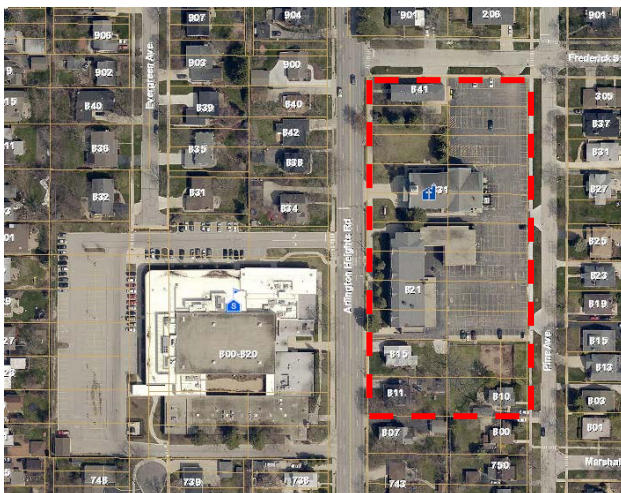
Summary:

The subject design is being forwarded to the Design Commission for review pursuant to Chapter 6 of the Municipal Code, specifically Section 6-501 (e)(1), which states that the Design Commission "shall review all Plan Commission, Zoning Board of Appeals, Building Permit and Sign Permit applications for new construction and those improvements which affect the architectural design of the building, site improvements or signage to determine whether it meets with the standards, requirements and purposes of the Design Guidelines and Chapter 30, Sign Regulations."

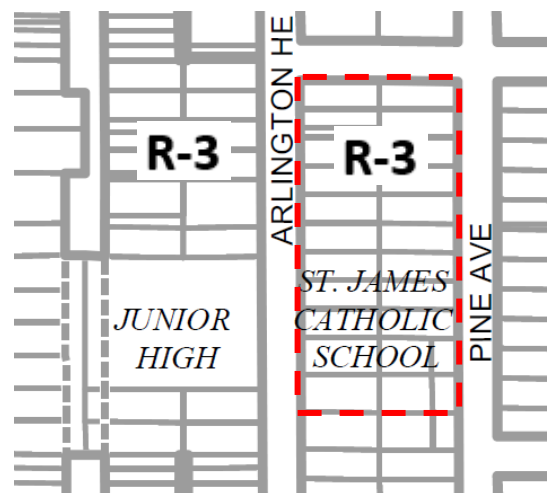
The petitioner is proposing to build a 6,431 sf addition to an existing 7,064 sf church building for a total of 13,495 sf. The proposed addition includes a new accessible building entrance, lobby, and gathering area on the south end of the building, as well as an expanded seating area within a new building addition on the east. The scope of the project also includes extensive site work to create a new parking lot on the south end of the church, adjacent to the new entrance, as well as an expanded parking area on the north side of the building. An existing three-story school building and two single-family houses are proposed to be demolished to create space for the new south parking lot and a storm water detention basin. An existing two-story rectory building at the northwest corner of the site will remain.

This project requires Plan Commission review and Village Board approval for the following: amendment to an existing Special Use, amendment to the Comprehensive Plan, approval as a Planned Unit Development, consolidation of the zoning lots, and a variation for the quantity of off-street parking.

Site:



Aerial View of Subject Site



Zoning Map

Surrounding Land Uses:

<i>Direction</i>	<i>Existing Zoning</i>	<i>Existing Use</i>	<i>Comprehensive Plan</i>
Subject Property	R-3, One Family Dwelling District	St. James Parish	Institutional
North	R-3, One Family Dwelling District	Single Family Residences	Single Family Detached
South	R-3, One Family Dwelling District	Single Family Residences	Single Family Detached
East	R-3, One Family Dwelling District	Single Family Residences	Single Family Detached
West	R-3, One Family Dwelling District	Single Family Residences	Single Family Detached

Historic Preservation:

The church building (831 N. Arlington Heights Road), school building (821 N. Arlington Heights Road), and the single-family house facing Arlington Heights Road (811 N. Arlington Heights Road) were all included in a Community Preservation Report that was prepared for Arlington Heights by the School of the Art Institute of Chicago in 2004. All of the properties in the report are ranked by their historical value as: "Exceptional", "Notable", or "Contributing". The church building is listed as "Exceptional", whereas the school building and single-family home are listed as "Contributing".

The petitioner reported that the existing school building is not being used to its fullest, and it has become a burden to keep viable. Demolition of the school building will not only allow for construction of the new parking area, but it will also create an obstructed view of the beautiful church building from Arlington Heights Road.

Architectural Design:

The existing church building is a great example of classic church architecture. The proposed addition is designed to match the existing building in all respects. Roof lines are being extended, and materials matched as closely as possible. Overall, the proposed building addition is very nicely designed, but Staff offers the following recommendations to further enhance the design:

Limestone Coping. The proposed limestone coping (on the top of the parapet walls at the areas with flat roofs) has a thin, minimal appearance that does not fit well with the ornate detailing on the rest of the building. It is recommended that the coping design be enhanced with additional stone or brick detailing for a more substantial cap on the large walls.

East Elevation. The new east wall is large and flat, and it lacks detail in the center portion of the wall. It is recommended that the wall area under the gable be bumped out slightly to break up the large flat wall. The edges of the bumped out wall should be detailed with limestone quoins to match the existing building.

Limestone Sign. Per Chapter 30, Sign Code, signs containing the names of buildings and/or the date of construction, when cut into any masonry surface, are exempt from permit. Therefore, the proposed "St. James Church" limestone sign is allowed. However, the sign is quite large and simple in design. The sign appears out of scale on the building and it detracts from the building architecture. It is recommended that the sign be omitted, and provide clerestory windows or other architectural detailing to fill the large wall space. The church does have a nicely designed, highly visible ground sign facing Arlington Heights that will remain.

Mechanical Unit Screening:

One new mechanical unit will be located on grade on the north side of the building. The unit will be fully screened from view by masonry walls to match the building.

Trash Dumpster Screening:

A new trash dumpster enclosure is proposed to be located in the parking lot on the north side of the building. The enclosure is proposed to be built with wood fencing material. The enclosure will be highly visible, so it is recommended that it be made of brick to match the building. Additionally, landscaping should be provided around the enclosure.

Landscaping:

As part of the zoning approval process, Staff and the Plan Commission will perform a detailed review of the landscaping. The petitioner is required to comply with code requirements for 4" caliper shade trees in all parking islands, a continuous three-foot high parking lot screening along the roadways, and landscaping around the detention basin.

The existing parking area is a large asphalt surface with no landscaped islands or perimeter landscape screening, so the new trees and shrubs throughout the parking area will be a nice improvement. However, the petitioner has not included any foundation plantings around the perimeter of the building. It is recommended that foundation landscaping be provided. The plantings should be layered and consist of a mix of shrubs and perennials.

RECOMMENDATION:

It is recommended that the Design Commission approve the proposed architectural design for *St. James Parish* located at 831 N. Arlington Heights Road. This recommendation is subject to compliance with the plans received on 9/29/17, 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. It is recommended that the limestone parapet coping design be enhanced with additional stone or brick detailing for a more substantial cap on the large walls.
2. It is recommended that the wall area under the gable on the east elevation be bumped out slightly to break up the large flat wall. The edges of the bumped out wall should be detailed with limestone quoins to match the existing building.
3. It is recommended that the limestone sign on the west elevation be omitted, and provide clerestory windows or other architectural detailing to fill the large wall space.
4. It is recommended that the trash enclosure be made of brick to match the building, and provide landscaping around the enclosure.
5. It is recommended that foundation landscaping be provided around the perimeter of the building. The plantings should be layered and consist of a mix of shrubs and perennials
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 architect/homeowner/builder's responsibility to comply with the Design Commission approval and ensure that building permit plans comply with all zoning code, building permit and signage requirements.
7. The petitioner is required to meet all landscape and parking requirements per Chapter 28.
8. All signage must meet code, Chapter 30.

_____, October 13, 2017

Steve Hautzinger AIA, Design Planner

Cc: Charles Witherington Perkins, Director of Planning and Community Development, Bill Enright, Deputy Director of Planning and Community Development, Sam Hubbard, Development Planner, Petitioner, DC File 17-121

APPROVED

MINUTES OF
THE VILLAGE OF ARLINGTON HEIGHTS
DESIGN COMMISSION MEETING
HELD AT THE ARLINGTON HEIGHTS MUNICIPAL BUILDING
33 S. ARLINGTON HEIGHTS RD.
OCTOBER 24, 2017

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

Members Present: John Fitzgerald, Chair
Jonathan Kubow
Aaron Coon
Kirsten Kingsley

Members Absent: Ted Eckhardt

Also Present: Ross Duncan, BR Design & Architecture for *Pal-Win Shopping Center*
Indre Gliaudelyte, Owner of *918 N. Illinois Ave.*
Thomas Budzik, Thomas Architects for *133 S. Highland Ave.*
Mark & Mary Ericksen, Owners of *133 S. Highland Ave.*
John Haran, E and J Builders for *1625 N. Chestnut Ave.*
Karen Kristianson, Newman Architecture for *St. James Parish*
Fr. Matt Foley for *St. James Parish*
Steve Hautzinger, Staff Liaison

REVIEW OF MEETING MINUTES FROM OCTOBER 10, 2017

A MOTION WAS MADE BY COMMISSIONER KINGSLEY, SECONDED BY COMMISSIONER KUBOW, TO APPROVE THE MEETING MINUTES OF OCTOBER 10, 2017. ALL WERE IN FAVOR. MOTION CARRIED.

ITEM 5. CHURCH REVIEW

DC#17-121 – St. James Parish – 831 N. Arlington Heights Rd.

Karen Kristianson, representing *Newman Architecture*, and Fr. Matt Foley, representing *St. James Parish*, were present on behalf of the project.

Mr. Hautzinger presented Staff comments. The petitioner is proposing to build a 6,431 sf addition to an existing church building. The proposed addition includes a new accessible building entrance, lobby, and gathering area on the south end of the building, as well as an expanded seating area within a new building addition on the east. The scope of the project also includes extensive site work to create a new parking lot on the south end of the church, adjacent to the new entrance, as well as an expanded parking area on the north side of the building. An existing three-story school building and two single-family houses are proposed to be demolished to create space for the new south parking lot and a storm water detention basin. An existing two-story rectory building at the northwest corner of the site will remain. This project requires Plan Commission review and Village Board approval for the following: amendment to an existing Special Use, amendment to the Comprehensive Plan, approval as a Planned Unit Development, consolidation of the zoning lots, and a variation for the quantity of off-street parking.

The church building (831 N. Arlington Heights Road), school building (821 N. Arlington Heights Road), and the single-family house facing Arlington Heights Road (811 N. Arlington Heights Road) were all included in a Community Preservation Report that was prepared for Arlington Heights by the School of the Art Institute of Chicago in 2004. All of the properties in the report are ranked by their historical value as: “Exceptional”, “Notable”, or “Contributing”. The church building is listed as “Exceptional”, whereas the school building and single-family home are listed as “Contributing”. The petitioner reported that the existing school building is not being used to its fullest, and it has become a burden to keep viable. Demolition of the school building will not only allow for construction of the new parking area, but it will also create an obstructed view of the beautiful church building from Arlington Heights Road.

The existing church building is a great example of classic church architecture. The proposed addition is designed to match the existing building in all respects. Roof lines are being extended, and materials matched as closely as possible. Overall, the proposed building addition is very nicely designed, but Staff offers the following recommendations to further enhance the design:

Limestone Coping. The proposed limestone coping (on the top of the parapet walls at the areas with flat roofs) has a thin, minimal appearance that does not fit well with the ornate detailing on the rest of the building. It is recommended that the coping design be enhanced with additional stone or brick detailing for a more substantial cap on the large walls.

East Elevation. The new east wall is large and flat, and it lacks detail in the center portion of the wall. It is recommended that the wall area under the gable be bumped out slightly to break up the large flat wall. The edges of the bumped out wall should be detailed with limestone quoins to match the existing building.

Limestone Sign. Per Chapter 30, Sign Code, signs containing the names of buildings and/or the date of construction, when cut into any masonry surface, are exempt from permit. Therefore, the proposed “St. James Church” limestone sign is allowed. However, the sign is quite large and simple in design. The sign appears out of scale on the building and it detracts from the building architecture. It is recommended that the sign be omitted, and provide clerestory windows or other architectural detailing to fill the large wall space. The church does have a nicely designed, highly visible ground sign facing Arlington Heights that will remain.

One new mechanical unit will be located on grade on the north side of the building. The unit will be fully screened from view by masonry walls to match the building. A new trash dumpster enclosure is proposed to be located in the parking lot on the north side of the building. The enclosure is proposed to be built with wood fencing material. The enclosure

will be highly visible, so it is recommended that it be made of brick to match the building. Additionally, landscaping should be provided around the enclosure.

As part of the zoning approval process, Staff and the Plan Commission will perform a detailed review of the landscaping. The petitioner is required to comply with code requirements for 4" caliper shade trees in all parking islands, a continuous three-foot high parking lot screening along the roadways, and landscaping around the detention basin. The existing parking area is a large asphalt surface with no landscaped islands or perimeter landscape screening, so the new trees and shrubs throughout the parking area will be a nice improvement. However, the petitioner has not included any foundation plantings around the perimeter of the building. It is recommended that foundation landscaping be provided. The plantings should be layered and consist of a mix of shrubs and perennials. Mr. Hautzinger reported that the petitioner submitted a revised landscape plan today, which was not part of the packet provided to the commissioners, that includes additional landscaping added to the site, primarily focused around the entrance and along the building.

Staff recommends approval of the project, with these recommendations listed in the Staff report.

Ms. Kristianson said the primary purpose of this project is provide accessible entry into the church; the existing church is not accessible, and the new grade-level entry with elevator will provide not only access to the church level but also to the lower level meeting rooms, as well as provide handicap accessible bathrooms and parking. Donations are funding this project and they are working the best they can with the funds they have available with the architecturally significant building, and they intend to make the addition blend as seamless as possible.

In response to Staff comments, Ms. Kristianson said they are not opposed to increasing the thickness of the limestone parapet, maybe an 8-inch coping instead of 4 or 5-inch coping with a corbel brick underneath to give more of a crown to those single-story areas. In regards to the east elevation, the existing conditions there are very tight and they would like to keep a small landscape buffer, as well as not lose any of the parking directly behind or to the east of the church. They can look at other options for the limestone sign, although clerestory windows may not work because the bathrooms are located right behind. The trash enclosure will match the wood enclosure across the street at the school and be heavily landscaped, and the intent is to have landscaping at the perimeter of the building foundation.

Commissioner Kubow felt the architecture for the proposed addition was very nice and fit with the classic architecture of the existing church; however, he felt strongly that the wall signage felt out of place and unnecessary, and took away from the overall architecture of the addition. He agreed with Staff's recommendation to enhance the limestone parapet coping, and felt that no more than an 8-inch coping would be appropriate and not take away from the front elevation. He also agreed that the east elevation was very large and flat and he suggested a slight bump out in this area. Overall, he really liked the design of the new addition, as well as the landscaping being presented. He questioned the current use of the school to the south and Fr. Foley replied that the building is currently being used for storage.

Commissioner Kingsley felt the proposed addition was nicely done and she agreed with most of Staff's comments. She really appreciated that the petitioner wanted to replicate the existing church building with the design being proposed that will make the addition as nice as the existing building. The church is a beautiful building that makes a statement because of how it is situated on the property; it is a little gem. However, because of its uniqueness, she wished the existing church could remain as it is and not be wrapped with the addition; how thin it is, how well-proportioned it is, and how it can be seen from both the north and south on Arlington Heights Road. She appreciated all the details being put into the building and that most of the windows are being relocated or built to match. She agreed with the comments about the east elevation, and suggested adding quoins that come down from the gable returns, or adding a limestone column similar to the front elevation. She also agreed with the comments about the sign on the west elevation; it seems to diminish the grandeur of the church, it was unnecessary, and it should be eliminated. She felt that the addition should be pushed back slightly on the south elevation, to give more relief to the elevation as well as add some kind of fenestration there. Ms. Kristianson explained that the addition could only be pushed back another foot, in order to maintain the existing doors that go into the narthex, and that some type of masonry relief could be added to the elevation because of the ductwork going through there for the bathrooms. Commissioner Kingsley said that she was in support of trying to make the addition fit in with the existing building, but felt the cornice being proposed

was a sad compromise. She felt strongly that the detail at the top of the walls should be more grand, even if it is with a flat roof behind, because this will at least look similar to what is on the front elevation, or go less in the areas where there is coping stone. She agreed with Staff that the trash enclosure should be something nicer than wood, and if it is going to be wood, then it should be white instead of natural wood. She also pointed out that the trash enclosure was different on the landscape plan, and Ms. Kristianson replied that the revised landscape plan is probably more accurate than the original plan. Commissioner Kingsley had no further comments.

Commissioner Coon felt it was unfortunate that the existing church gets lost in the addition on the west elevation. He understood that the addition could not be pushed back much further, but he felt there was at least 30-inches to work with there, and pushing it back even 2-feet would be enough of a change in the west elevation to make the addition less continuous with the part of the church that is so special and so historic. He also preferred another plan option for the bathrooms on the west elevation; take some of the windows and put them back over on the side elevation. Fr. Foley explained that the new gathering space would also be used for small funeral wakes prior to the service. Ms. Kristianson reiterated that there are currently no accessible bathrooms on the main level of the church, and they are trying to align the windows to get natural light into the new gathering space with the existing windows on the south elevation.

Commissioner Coon reiterated the suggestion to push the west elevation back as much as possible. He agreed with Commissioner Kubow's comment that the wall sign seems like a guilty response to having too much blank wall, and felt that adequate landscaping will help soften the large wall with the proper placement of trees that will mature over time. He also said that although he liked that the windows were repeated and the quoins on the corners were repeated, he felt that it fell apart at the top. The limestone band with the 3 steps and the small detail at the top works well proportionately with the quoins; however, that detail or a slightly smaller version of it, or an adaption of that frieze detail, would help a lot with pulling the existing vernacular into the new addition. Because of the ceiling height, Commissioner Coon also had concerns about exposed plumbing vents, and Ms. Kristianson explained that no plumbing would be visible. Commissioner Coon also agreed with the comment that some relief is needed on the east side and quoin detailing added at the corners. Overall, he felt the petitioner did a great job with the church addition, with a few minor details to make it even better. He was in support of the project.

Chair Fitzgerald felt the petitioner did a great job with the addition that looks beautiful on the existing beautiful church building, and he agreed with the comments already made. He added a comment that the perimeter shrubs being proposed are too similar in appearance and will appear sloppy; therefore, he suggested plantings that are either purposely different, or just use one type of planting. He also wanted to require evergreens for year round interest, especially along Arlington Height Road.

PUBLIC COMMENT

Tom Walters, 727 N. Arlington Heights Rd. He said that he has full faith in everything the church is proposing to do and he supports the project. His concern is with parking. He stated that there have been six accidents in five years out in front of his home, with parked cars backing up to his driveway. This is a dangerous area and he asked if parking on Arlington Heights Road could be removed. Chair Fitzgerald explained that this issue is not under the purview of this commission; however, these concerns are now part of the record and will be included in the Plan Commission review. Mr. Hautzinger added that parking will be discussed in detail at the Plan Commission hearing for the project, which he encouraged the residents to attend. Mr. Walters asked whether parking on Arlington Heights Road is an IDOT matter or something the Village can make a recommendation on, and Staff directed him to contact the Village for further information or to attend the Plan Commission hearing.

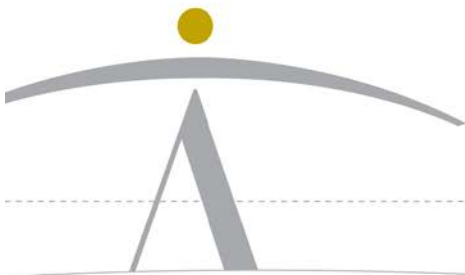
There was no further discussion from the commissioners.

A MOTION WAS MADE BY COMMISSIONER KINGSLEY, SECONDED BY COMMISSIONER KUBOW, TO APPROVE THE PROPOSED ARCHITECTURAL DESIGN FOR *ST. JAMES PARISH* LOCATED AT 831 N. ARLINGTON HEIGHTS ROAD. THIS APPROVAL IS BASED ON THE ARCHITECTURAL PLANS RECEIVED ON 9/29/17, 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. A REQUIREMENT TO STUDY THE CORNICE/COPING STONE DETAIL AT THE FLAT ROOF AREAS, WITH A SUGGESTION TO MIMIC THE STONE ENTABLATURE DETAILING ON THE FRONT OF THE BUILDING.
2. A REQUIREMENT TO OMIT THE STONE SIGN ON THE FRONT WALL OF THE BUILDING, AND WORK WITH STAFF TO STUDY OTHER OPTIONS TO DETAIL THE LARGE WALL.
3. A REQUIREMENT TO CHANGE THE WOOD TRASH ENCLOSURE TO BRICK, TO MATCH THE BUILDING.
4. A REQUIREMENT TO WORK WITH STAFF TO REVIEW THE TYPE OF PLANTINGS SPECIFIED FOR THE PERIMETER SCREENING.
5. A REQUIREMENT TO BUMP OUT THE EAST WALL UNDER THE GABLE WITH QUOIN DETAILING AT THE CORNERS.
6. A REQUIREMENT TO MOVE THE NEW WEST WALL BACK AS FAR AS POSSIBLE WITHOUT IMPACTING THE EXISTING INTERIOR DOORWAY.
7. A RECOMMENDATION TO REVISIT THE LOCATION OF THE NEW BATHROOMS TO ALLOW FOR MORE WINDOWS ON THE WEST WALL OF THE ADDITION.
8. 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 RESPONSIBILITY 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.

Mr. Hautzinger clarified that the requirement for landscaping pertains to Chair Fitzgerald's previous comments that the various specified plants are too similar to one another, and that either one consistent type of shrub be used, or make them distinctly different. Also, provide salt tolerant evergreen shrubs facing Arlington Heights Road for year round screening.

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



newman architecture

1730 Park Street, Suite 115
Naperville, Illinois 60563-2621
T 630.420.1600 F 630.420.1987
newmanarchitecture.com

September 21, 2017

Village of Arlington Heights
33 South Arlington Heights Road
Arlington Heights, Illinois 60005-1499

Attention:

Mr. Sam Hubbard, Development Planner
Department of Planning and Community Development

Re: **St. James Parish – Plan Commission Submittal**
Demolition of Existing School Building and Addition / Renovation at Existing Church
831 North Arlington Heights Road

Mr. Hubbard:

Thanks to you and your staff for reviewing the progress design and documents for the above referenced project to date. On behalf of the Parish, please find our enclosed Plan Commission Application. Our organization, Newman Architecture, Inc. does a great deal of work with the Archdiocese of Chicago and we are pleased to be working with St. James Parish as they plan for their future. We are also pleased to be working in the Village of Arlington Heights and we appreciate your guidance and input.

The following is a brief narrative describing the project.

The St. James Parish campus is bisected by Arlington Heights Road into two distinct areas, and all the work being considered for this project is on the EAST side of Arlington Heights Road.

The first part of the project would see the complete demolition of the existing three-level school along (the east side of) Arlington Heights Road. The building is not being used to its fullest and has become a burden to keep viable.

The demolition of the existing school will allow for the expansion of the existing church and parking areas on this portion of the campus. The expansion (building additions) will primarily be on the south

and east sides of the church and will encompass both existing floor levels; church level and lower level.

The primary goal of the project is to make the entire building handicapped accessible. The new addition to the south will include a new covered entrance at grade-level. Within the new grade-level lobby, there will be an elevator providing vertical access to all levels; the lobby level, the church level, and the lower level. The new addition will also include accessible toilet rooms.

Within the existing structure, interior spaces will be renovated and improved. At the church level, the sanctuary (altar area) will be relocated to the east to allow for more seating. In the lower level, more defined meeting spaces will be created with proper egress corridors for exiting.

From an architectural perspective, the intent is to match the existing building character in all respects. Roof lines will be extended and materials will be matched as closely as possible. The goal is to make it feel like the building was constructed all at one time, in lieu of an old church with a new addition on one side. Internally, the design features of the church will not be removed, they will simply be extended into the new areas available.

With regards to the extended parking area, we are pleased to note the addition of approximately 50 parking spaces on this side of the campus. These additional parking spaces exceed the number necessary for the additional seating being provided in pews.

Once again, thank you for your time and consideration. We look forward to working closely with the Village on this exciting project.

Sincerely,



Matthew E. Hichens, A.I.A.
Principal

Please find the information below **(in bold)** from St. James Parish to address the questions included in the preliminary comments letter received from the Village of Arlington Heights dated July 21, 2017.

Background information on St. James Church:

# of members	2100 families
# of employees	20 in Parish Center 53 School Employees

Average attendance Sat/Sun masses (based on annual count in October)

Sat: 5pm.: 415

Sunday: 7am-158, 8:30am - 388, 10am - 760, 11:30am - 433 & 5pm – 370

Live on campus?	2 Priests reside in the rectory at 841 N Arl Hgts Rd
Hrs of operation	Parish Office Hours: Mon – Thurs 9:00 am – 8:00 pm Friday 9:00 am – 6:00 pm Saturday and Sunday: 9:00 am – 1:00 pm School Hours: 8:45 am – 3:35 pm

Activities/community programming; start/end time, day of week, location in Church, & # attendees for each

Weddings	Fri. and Sat. as needed in Church; varied attendees
Funerals	Mon. thru Sat. as needed 10am in Church; varied attendees
PADS	Wed. 6:30pm-Thurs 6:30am Church basement; average attendees 30
Other	Thursday Adoration in Church 9am –4pm

What will the Parish Center be used for now that Masses will be in Church?

Athletics & Family programs after school and on Saturdays (8:00 – 3:00)
School will use the facility during the school day and for afterschool activities

What is the timing/staggering of all future Sunday Services?

90 Minutes (same as current schedule)

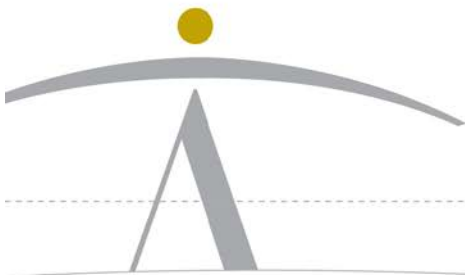
What is the Sanctuary seating comprised of?

Majority of seating will be continuous rows of seating (pews or chairs) with open accessible spaces to accommodate wheelchairs and walkers

Projected growth of the congregation over the next 5-10 yrs: **200 additional**

What activities will take place in the proposed gathering space:

Children Liturgy of the Word during Mass



newman architecture

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newmanarchitecture.com

September 21, 2017

Re: St James Parish - Special Use Criteria Response

Demolition of Existing School Building and Addition / Renovation at Existing Church
831 North Arlington Heights Road

Please accept the following response to the Special Use Criteria questions:

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

The expansion of the existing church will provide accessibility to both the church and lower level meeting rooms in the building. The introduction of an accessible entry, handicap accessible toilet rooms and an elevator will allow all patrons to fully participate in the St. James community. The enlarging of the existing sanctuary will also allow all masses to occur on the east side of the campus. Currently the community is divided into multiple masses on each side of the campus. The enlarged worship area, as well as, the new accessible building components will allow the St. James Community to gather together as one.

2. 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.

This project will not be detrimental to the health, safety, morals or general welfare of persons residing or working in the area. By providing handicapped accessible and additional parking is a benefit to those not only visiting the building, but the neighboring properties as well.

The removal of the unused, existing school as well as the newly acquired homes in disrepair to the south will improve the general welfare of the neighborhood.

The building addition is designed is to match the existing building character in all respects, making it feel like the building was constructed all at one time, helping to preserve the look and feel of the existing neighborhood.

3. **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.**

St. James Parish is an integral part of this community since 1905 and intends to remain a permanent and prominent fixture in the community. The Parish will comply with the codes and ordinances of Arlington Heights as they pertain to the Project.

EDWARD J. MOLLOY & ASSOCIATES

A DIVISION OF THOMAS A. MOLLOY, LTD. - PROFESSIONAL LAND SURVEYING
1236 MARK STREET, BENSENVILLE, ILLINOIS 60106 (630) 595-2600 Fax (630) 595-4700
e-mail: tmolloy@ejmolloy.com

ALTA/NSPS LAND TITLE SURVEY

OF

PARCEL 1:
THE NORTH 62 FEET OF THE SOUTH 190 FEET OF THE WEST 165 FEET (EXCEPT A STRIP ALONG THE WEST OF SAID TRACT USED FOR A ROAD) OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2:
THE NORTH 62 FEET OF THE SOUTH 190 FEET OF THE EAST 88 FEET OF THE WEST 253 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN;

ALSO THE NORTH 62 FEET OF LOT 19 IN BLOCK 5 IN D.W. MILLER'S ARLINGTON HEIGHTS ACRE ADDITION ON THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 23, 1901 AS DOCUMENT NO. 3188548.

PARCEL 3:
THE NORTH 64 FEET OF THE SOUTH 137 FEET OF THE EAST 88 FEET OF THE WEST 253 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 4:
THE SOUTH 64 FEET OF THE NORTH 126 FEET OF LOT 19 IN BLOCK 5 IN D.W. MILLER'S ARLINGTON HEIGHTS ACRE ADDITION IN THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 23, 1901 AS DOCUMENT NO. 3188548.

PARCEL 5:
LOTS 1 THROUGH 18, BOTH INCLUSIVE, IN D.W. MILLER'S ARLINGTON HEIGHTS ACRE ADDITION IN THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 23, 1901 AS DOCUMENT NO. 3188548.

PARCEL 6:
THE NORTH 64 FEET OF THE SOUTH 137 FEET OF THE WEST 165 FEET (EXCEPT A STRIP ALONG THE WEST OF SAID TRACT USED FOR A ROAD) OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

SURVEYOR'S NOTES

TITLE COMMITMENT PERTAINING TO PARCELS 1, 2, 3, 4 AND 5, THIS SURVEY REFLECTS CERTAIN MATTERS OF TITLE PERTAINING TO PARCELS 1, 2, 3, 4 AND 5, AS REFERENCED IN SCHEDULE B OF FIDELITY NATIONAL TITLE INSURANCE COMPANY'S FIDELITY NATIONAL TITLE INSURANCE ORDER NUMBER 2874366 WITH AN EFFECTIVE DATE OF AUGUST 16, 2017.

NO SURVEY RELATED MATTERS

TAX PARCEL PERMANENT INDEX NUMBERS:

03-29-108-004-0000
03-29-108-009-0000
03-29-108-010-0000
03-29-108-011-0000
03-29-108-012-0000
03-29-108-014-0000
03-29-108-015-0000
03-29-108-019-0000
03-29-108-020-0000
03-29-108-021-0000
03-29-108-022-0000

TITLE COMMITMENT PERTAINING TO PARCEL 6, THIS SURVEY REFLECTS CERTAIN MATTERS OF TITLE PERTAINING TO PARCEL 6, AS REFERENCED IN SCHEDULE B OF FIDELITY NATIONAL TITLE INSURANCE COMPANY'S FIDELITY NATIONAL TITLE INSURANCE ORDER NUMBER 2874366 WITH AN EFFECTIVE DATE OF JUNE 15, 2017.

NO SURVEY RELATED MATTERS

TAX PARCEL PERMANENT INDEX NUMBERS:

03-29-108-013-0000

TABLE A - ITEM 1 STATEMENT AS TO MONUMENTS PLACED: SEE DRAWING FOR ALL MONUMENTS PLACED OR FOUND WHILE COMPLETING THE FIELD SURVEY.

TABLE A - ITEM 2 STATEMENT AS TO ADDRESS: THE COMMONLY KNOWN ADDRESS OF THE PROPERTY IS 811-841 N. ARLINGTON HEIGHTS ROAD AND 810-818 N. PINE AVENUE, ARLINGTON HEIGHTS, ILLINOIS.

TABLE A - ITEM 3 STATEMENT AS TO FLOOD ZONE CLASSIFICATION: OUR EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP COMMUNITY-PANES NO. 17031C0200A, WITH A MAP REVISION DATE OF AUGUST 19, 2008, SHOWS THAT THE SOUTHERN PORTION OF THE PROPERTY FALLS WITHIN SHADDED ZONE "X" DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE, AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD AND THAT THE NORTHERLY PORTION OF THE PROPERTY DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AND THAT SAID PORTION OF THE PROPERTY DOES FALL WITHIN ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN. SEE DRAWING FOR APPROXIMATE LIMITS OF ZONE X AND SHADDED ZONE X.

TABLE A - ITEM 4 STATEMENT AS TO GROSS LAND AREA: THE PROPERTY CONTAINS 147,222 SQUARE FEET OR 3.3797 ACRES.

TABLE A - ITEM 6(A) & 6(B) STATEMENT REGARDING ZONING CLASSIFICATION AND RESTRICTIONS: SURVEYOR HAS NOT BEEN PROVIDED WITH ZONING CLASSIFICATION OR RESTRICTIONS BY THE OWNER. OUR EXAMINATION OF THE OFFICIAL VILLAGE OF ARLINGTON HEIGHTS ZONING MAP FINDS THE PROPERTY TO BE ZONED "R-3".

TABLE A - ITEM 7(A) STATEMENT AS TO EXTERIOR DIMENSIONS OF BUILDINGS AT GROUND LEVEL: SEE DRAWING FOR EXTERIOR DIMENSIONS OF BUILDINGS AT GROUND LEVEL.

TABLE A - ITEM 7(B)(1) STATEMENT REGARDING SQUARE FOOTAGE OF BUILDING FOOTPRINT: SEE DRAWING FOR THE APPROXIMATE SQUARE FOOTAGE OF THE EXTERIOR FOOTPRINT OF ALL BUILDINGS AT GROUND LEVEL.

TABLE A - ITEM 7(C) STATEMENT AS TO MEASURED HEIGHT OF ALL BUILDINGS ABOVE GRADE: SEE DRAWING FOR THE MEASURED HEIGHT OF ALL BUILDINGS ABOVE GRADE.

TABLE A - ITEM 8 STATEMENT AS TO SUBSTANTIAL FEATURES OBSERVED: SURVEYOR HAS SHOWN LOCATION OF VISIBLE FEATURES EXISTING ON THE SURVEYED PROPERTY AS DETERMINED BY OBSERVED EVIDENCE.

TABLE A - ITEM 9 STATEMENT AS TO PAINT STRIPPED PARKING SPACES: THE LAND SURVEYED HEREON CONTAINS A TOTAL OF 137 EXISTING PAINT STRIPPED PARKING SPACES INCLUDING 6 DESIGNATED HANDICAP PARKING SPACES.

TABLE A - ITEM 10(A) STATEMENT AS TO DIVISION OR PARTY WALLS: SURVEYOR FINDS NO DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES.

TABLE A - ITEM 11 STATEMENT REGARDING EXISTING UTILITIES: SURVEYOR HAS SHOWN LOCATION OF UTILITIES EXISTING ON OR SERVING THE SURVEYED PROPERTY AS DETERMINED BY OBSERVED EVIDENCE.

TABLE A - ITEM 14 STATEMENT REGARDING DISTANCE TO NEAREST INTERSECTING STREET: SEE DRAWING FOR THE DISTANCE TO THE NEAREST INTERSECTING STREET.

TABLE A - ITEM 16 STATEMENT REGARDING EARTH MOVING AND BUILDING CONSTRUCTION: SURVEYOR FINDS NO OBSERVABLE EVIDENCE OF EARTH MOVING OR BUILDING CONSTRUCTION.

TABLE A - ITEM 17 STATEMENT REGARDING CHANGES IN STREET RIGHT-OF-WAY LINES: SURVEYOR HAS NO KNOWLEDGE OF ANY CHANGES IN STREET RIGHT-OF-WAY LINES CONTEMPLATED OR PROPOSED AND FINDS NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

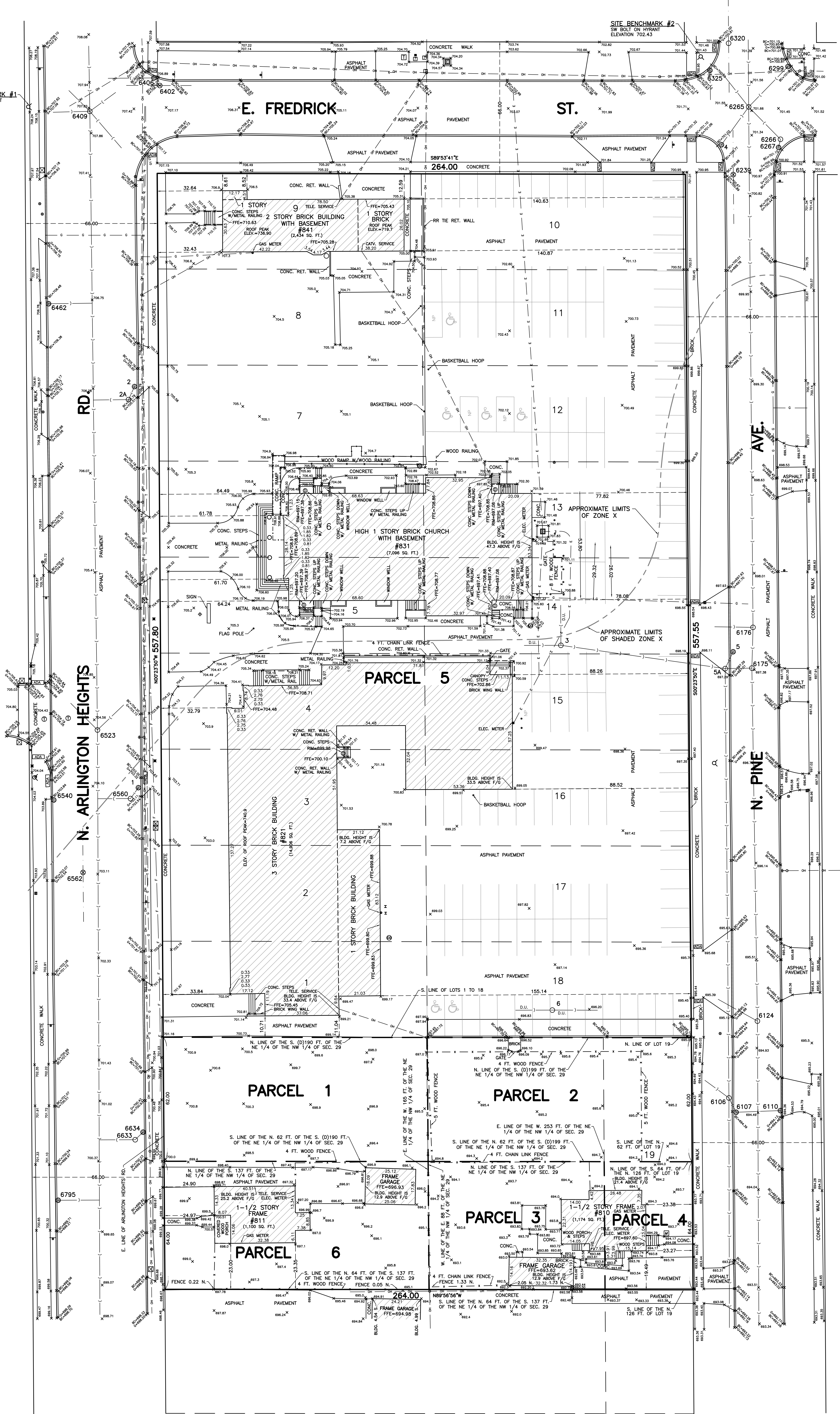
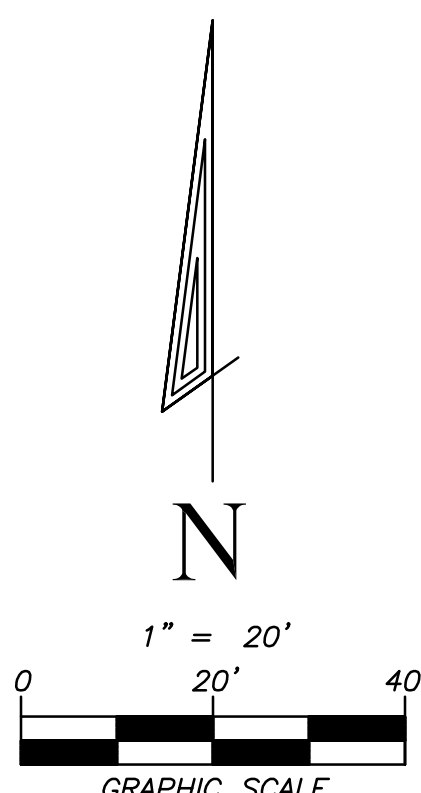
TABLE "A" ITEM 18 STATEMENT OF WETLAND AREAS: SURVEYOR FINDS NO INDICATION OF WETLAND AREAS AS DELINEATED BY APPROPRIATE AUTHORITIES ON THE PROPERTY.

TABLE "A" ITEM 19 STATEMENT OF OFFSITE EASEMENTS: SURVEYOR FINDS NO OFFSITE EASEMENTS OR SERVICES IMPROVING THE SURVEYED PROPERTY THAT ARE DISCLOSED IN THE RECORD DOCUMENTS.

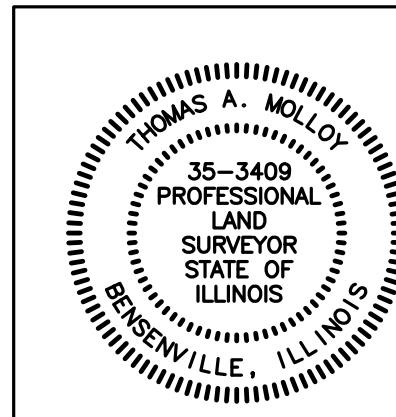
TABLE A - ITEM 20 STATEMENT REGARDING PROFESSIONAL LIABILITY INSURANCE: PROFESSIONAL LIABILITY INSURANCE POLICY OBTAINED BY THE SURVEYOR IN THE MINIMUM AMOUNT OF \$1,000,000 TO BE IN EFFECT THROUGHOUT THE CONTRACT TERM. CERTIFICATE OF INSURANCE TO BE FURNISHED UPON REQUEST.

LEGEND:

- | | |
|---|--|
| <ul style="list-style-type: none"> Manhole Storm Catch Basin/Inlet Fire Hydrant w/B-Box Water Valve Vault Light Pole Traffic Sign Utility Pole w/Overhead Wire Utility Pole w/Light & Overhead Wire Anchor for Power Pole Traffic Signal Pole Electric Vault Concrete Filled Post Clean Out Drain Gas Valve Telephone Manhole Telephone Pedestal/Box | <ul style="list-style-type: none"> Telephone Vault Electric Meter Mailbox I Beam Post Underground Electric Lines Per Point Markings Underground Gas Lines Per Point Markings Underground Telephone Lines Per Point Markings Depressed Curb No Parking Finished Floor Elevation Dead ADA ADA Rumble Strip Back of Curb Elevation Gutter Elevation Hard Surface Elevation Ground Elevation |
|---|--|

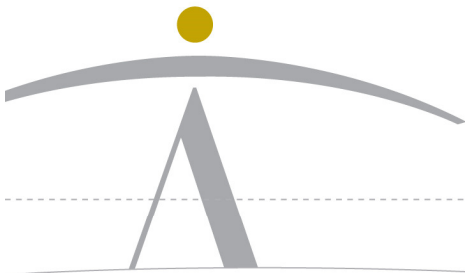


STATE OF ILLINOIS }
COUNTY OF DUPAGE }
I, THOMAS A. MOLLOY, AN ILLINOIS PROFESSIONAL LAND SURVEYOR HEREBY CERTIFY TO:
THE CATHOLIC BISHOP OF CHICAGO, A CORPORATION SOLE OF ILLINOIS;
FIDELITY NATIONAL TITLE INSURANCE COMPANY;
FIRST AMERICAN TITLE INSURANCE COMPANY;



SIGNED AT BENSENVILLE, ILLINOIS THIS 21ST DAY OF SEPTEMBER, A.D. 2017
EDWARD J. MOLLOY AND ASSOCIATES, A DIVISION OF THOMAS A. MOLLOY, LTD.
AN ILLINOIS PROFESSIONAL DESIGN FIRM - LICENSE NO. 184-004840
THOMAS A. MOLLOY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3409

VALID ONLY WITH EMBOSSED SEAL (EXPIRES NOVEMBER 30, 2018 AND IS RENEWABLE)



newman architecture

1730 Park Street, Suite 115
Naperville, Illinois 60563-2621
T 630.420.1600 F 630.420.1987
newmanarchitecture.com

September 27, 2017

Mr. Sam Hubbard, Development Planner
Planning & Community Development
Village of Arlington Heights
33 South Arlington Heights Road
Arlington Heights, IL 60005

Re: St. James Parish
Church Renovation and Addition Project
Neighborhood Meeting

Mr. Hubbard:

On Sunday, September 24, Parish Representatives and members of the Design Team presented the above referenced project to the surrounding neighbors of St. James Parish. In anticipation of the upcoming Plan Commission Meeting, the Parish invited all neighbors within 250 feet of the campus. The goal of the presentation was to inform the neighbors of future on-site development being planned for the east side of the St James campus and to respond to any questions.

In general, the presentation, as well as the question and answer period, was positive and well received. Of the 150 households invited (which is more than the 120 households required), sixteen (16) persons were in attendance, representing ten (10) households. All aspects of the project itself (within the bounds of the property lines) were favorable to the attendees with no exceptions.

However, there were a few concerns voiced about some exiting conditions outside of the church property. There were as follows:

- With parking currently being allowed on both sides of North Pine Avenue (east of the Church), some suggested that Pine Ave. should be converted to a one-way street. As an alternative, some suggested that parking should only be allowed on one side of the street.
- With additional on-site parking being provided as a part of this project, some suggested that the parking along Arlington Heights Road should be discontinued.
- The resident just south of the proposed development (along Arlington Heights Road) was not pleased that the existing house to his north was being demolished as a part of this project. He believes this lowers his property value.

design for the human element

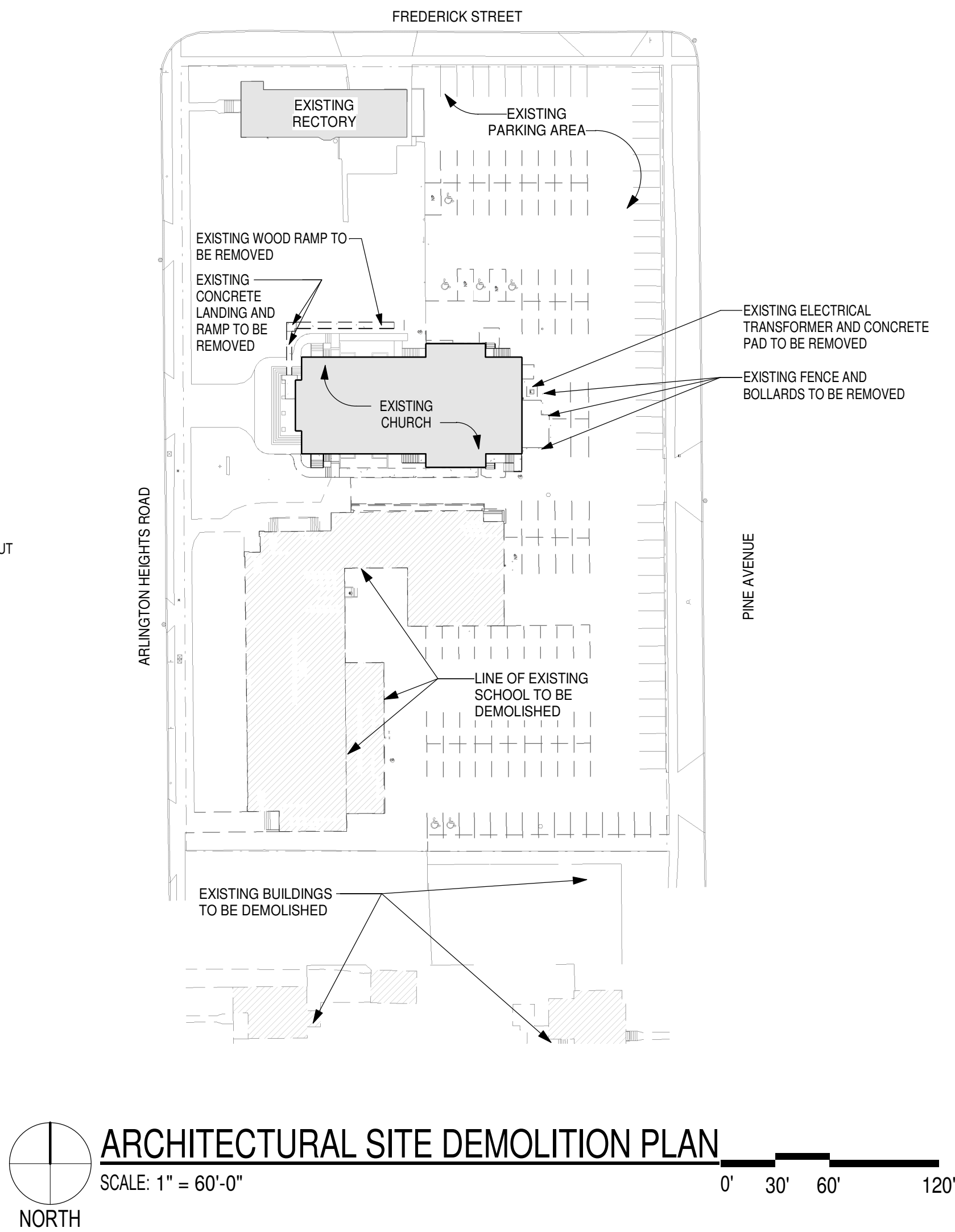
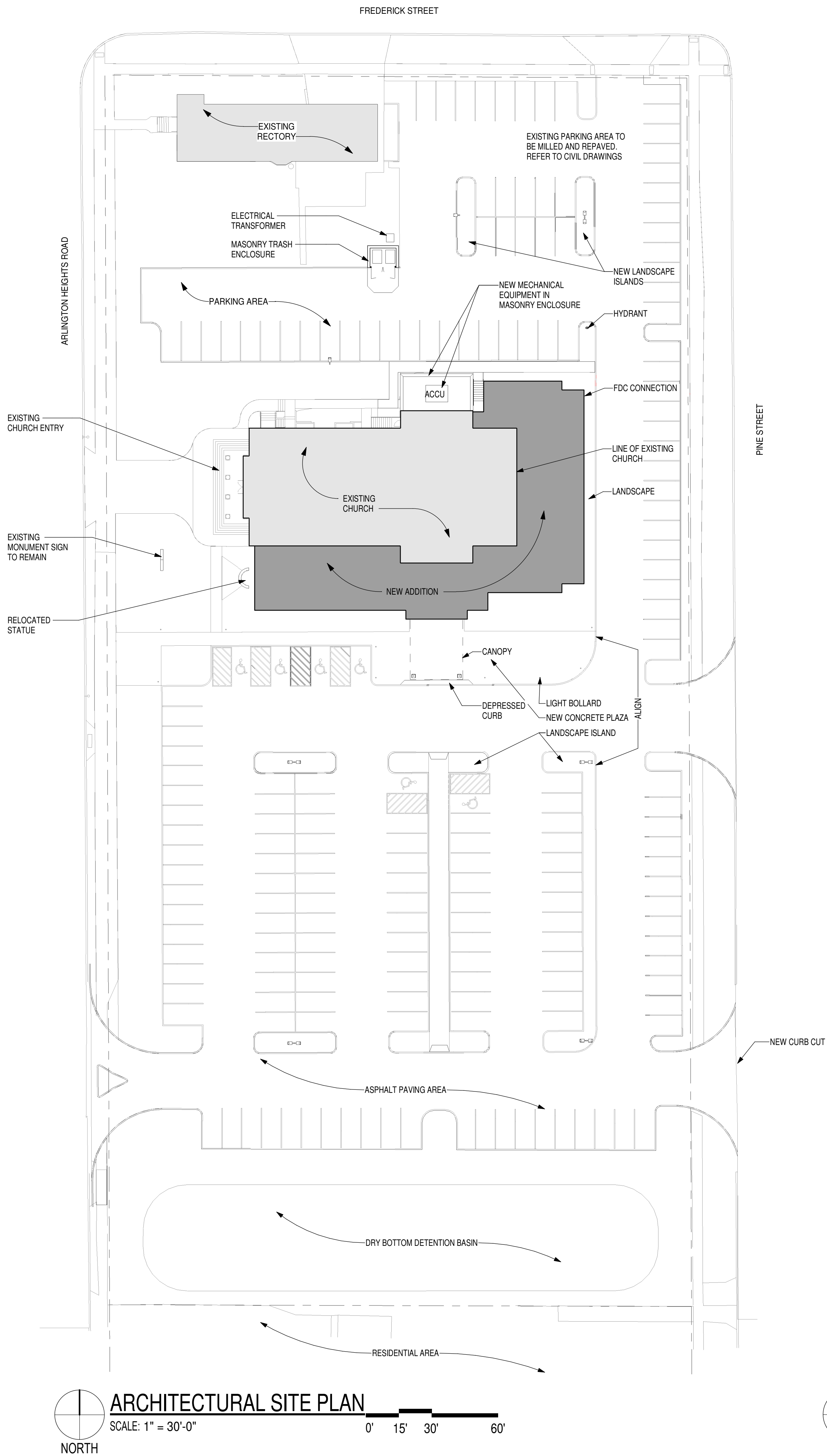
All questions and concerns were responded to in a positive manner and the Parish encouraged further discussion on the items above. Perhaps the Planning and Community Development Team can consider the concerns above in advance of the scheduled Plan Commission Meeting. We would expect these concerns to be raised at that meeting.

If you have any questions or comments, please do not hesitate to contact me or Debbie Bolash with St. James Parish.

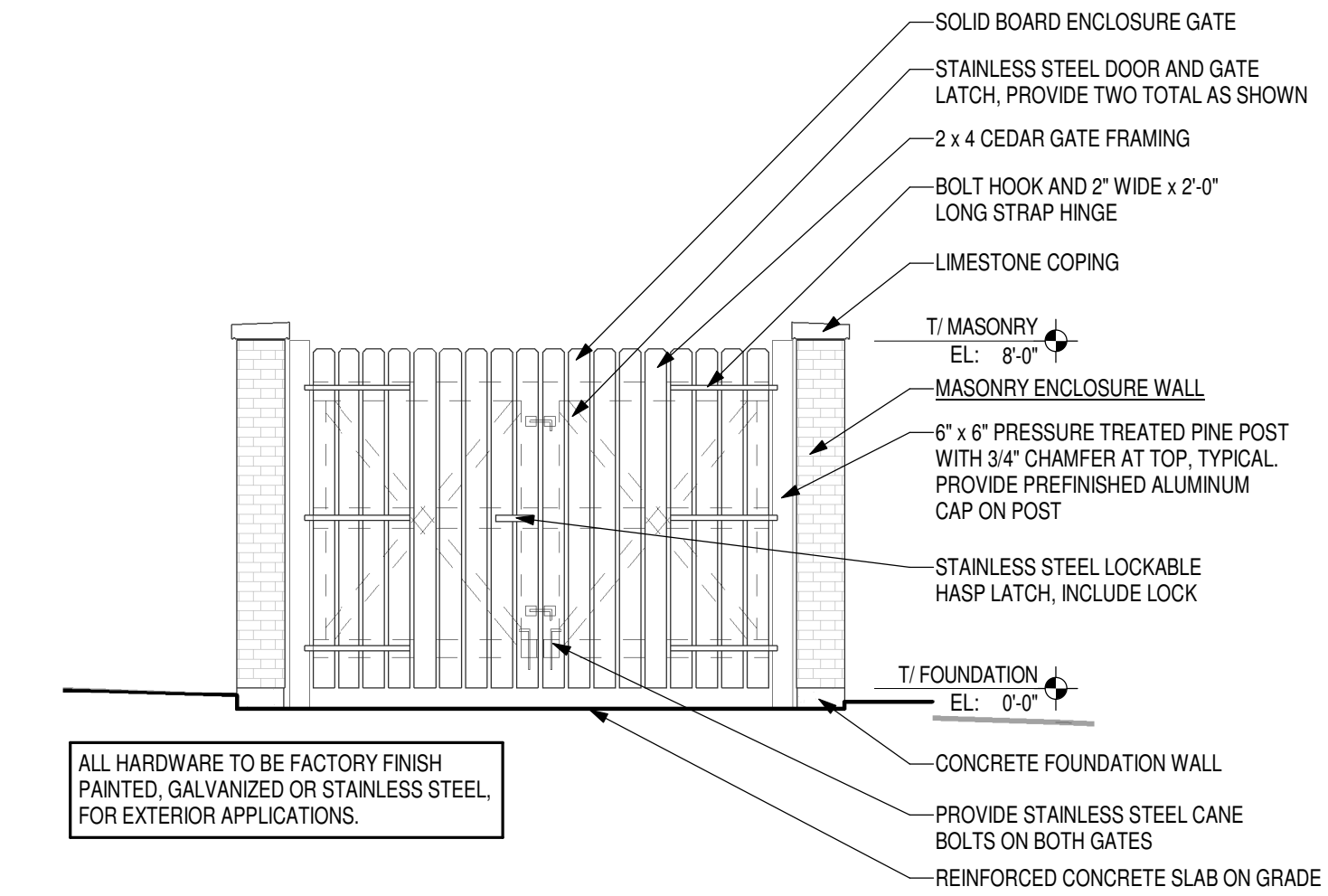
Sincerely,



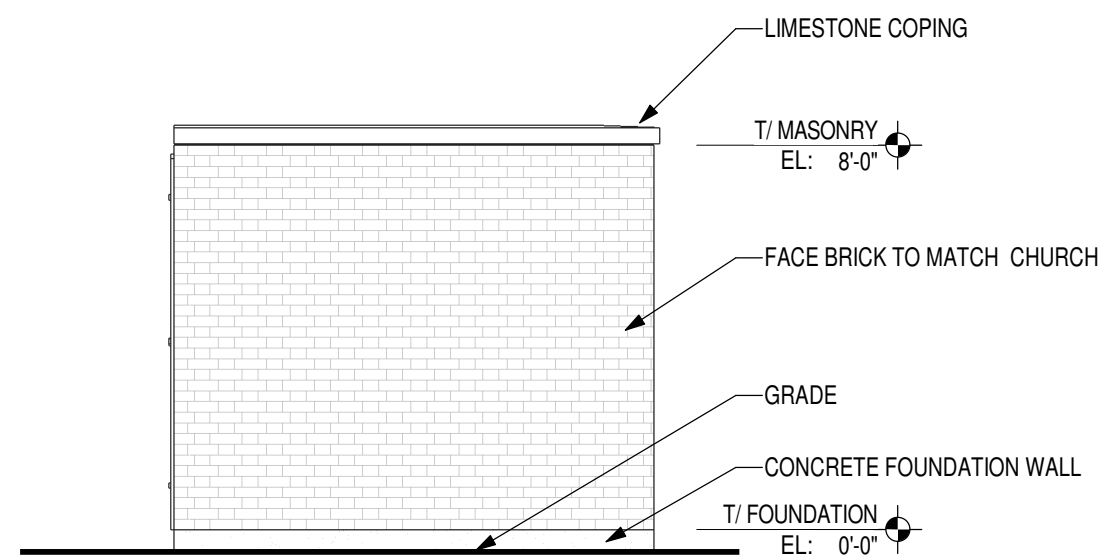
Matthew E. Hichens, AIA
Principal
Newman Architecture



SITE INFORMATION	
EXISTING SITE:	113,959 SQ. FT. (2.62 ACRES)
EXISTING CHURCH FOOTPRINT:	7,064 SQ. FT.
EXISTING RECTORY FOOTPRINT:	2,340 SQ. FT.
EXISTING SCHOOL FOOTPRINT:	14,856 SQ. FT.
EXISTING F.A.R.:	54% (61,341 SQ. FT.)
EXISTING BUILDING LOT COVERAGE:	21% (24,260 SQ. FT.)
EXISTING IMPERVIOUS SURFACE COVERAGE:	70% (80,019 SQ. FT.)
PROPOSED SITE: (INCORPORATION OF 2 SOUTH PARCELS)	147,253 SQ. FT.
NEW CHURCH FOOTPRINT:	13,495 SQ. FT.
EXISTING RECTORY FOOTPRINT:	2,340 SQ. FT.
NEW F.A.R.:	21.5% (31,670 SQ. FT.)
NEW BUILDING LOT COVERAGE:	11% (15,835 SQ. FT.)
NEW IMPERVIOUS SURFACE COVERAGE:	64% (94,560 SQ. FT.)
SETBACKS:	
NORTH:	138'-6"
SOUTH:	311'-8"
EAST:	47'-0"
WEST:	61'-5" (EXISTING CHURCH WALL)
PARKING - EXISTING:	135 SPACES
PARKING - PROPOSED:	179 SPACES
HANDICAP:	6 SPACES
TOTAL PARKING:	185 SPACES



1
A1
ELEVATION - TRASH ENCLOSURE
SCALE: 1/4" = 1'-0"



2
A1
ELEVATION - TRASH ENCLOSURE
SCALE: 1/4" = 1'-0"



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1730 Park Street, Suite 115, Naperville, Illinois 60563-2611
(630) 420-1600 FAX (630) 420-1987 www.newmanarchitecture.com

PROJECT NAME:
VILLAGE SUBMITTAL

**CHURCH ADDITION
AND RENOVATION**
831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH
AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:
**ARCHITECTURAL
DEMOLITION AND NEW
SITE PLANS**

RESUBMITTED 11/1/17
PROJECT NO.: 2017028 DATE: 9/27/17

A1



PROJECT NAME:

VILLAGE SUBMITTAL

CHURCH ADDITION AND RENOVATION

831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:

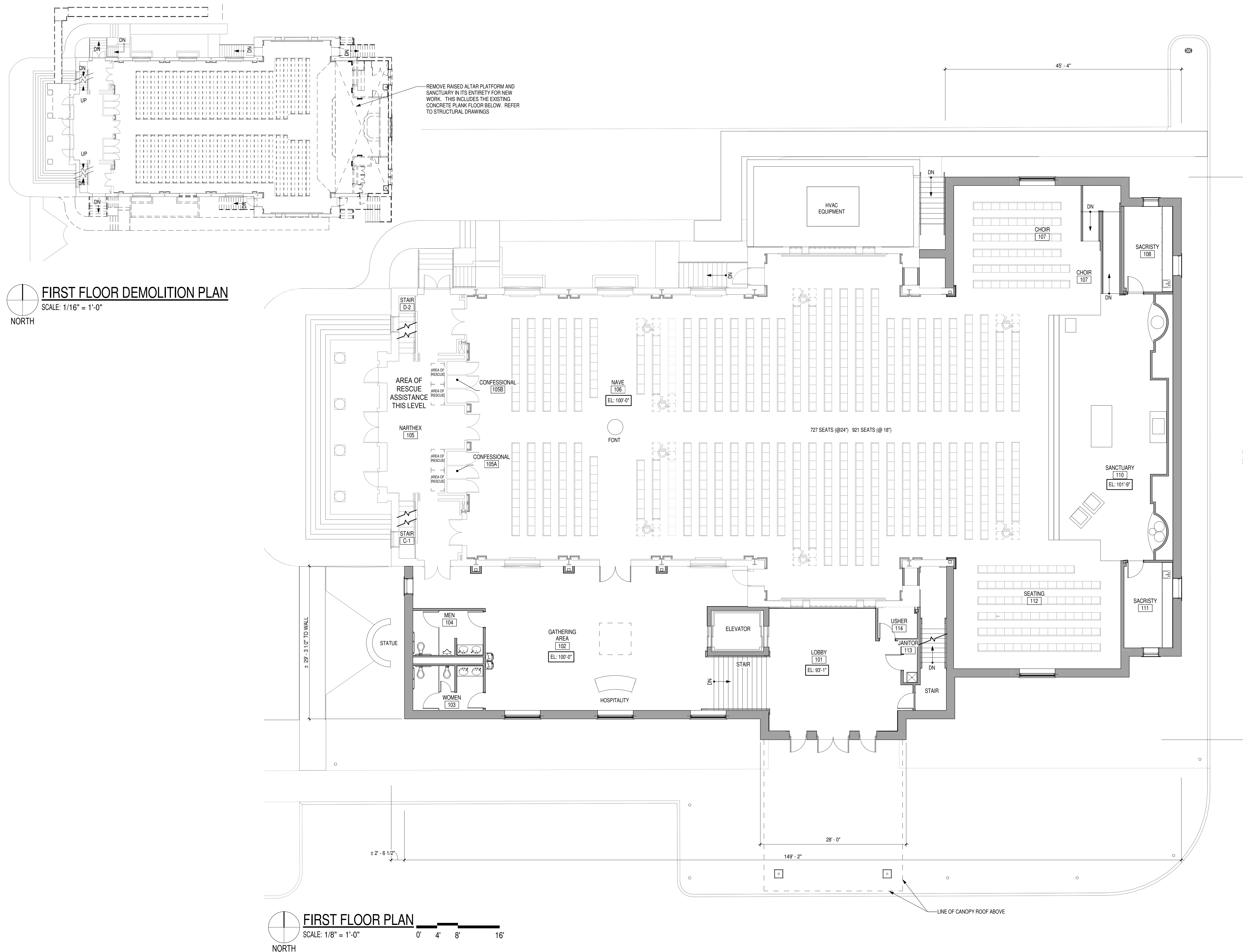
FIRST FLOOR PLAN

RESUBMITTED 11/30/17

PROJECT NO.: 2017028

DATE: 9/27/17

A2



1/30/2017 3:38:51 PM COPYRIGHT 2017 NEWMAN ARCHITECTURE, INC.



PROJECT NAME:

VILLAGE SUBMITTAL

CHURCH ADDITION AND RENOVATION

831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:

LOWER LEVEL FLOOR
PLAN

RESUBMITTED 11/30/17

PROJECT NO.: 2017028

DATE: 9/27/17

A3





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PROJECT NAME:

VILLAGE SUBMITTAL

CHURCH ADDITION AND RENOVATION

831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

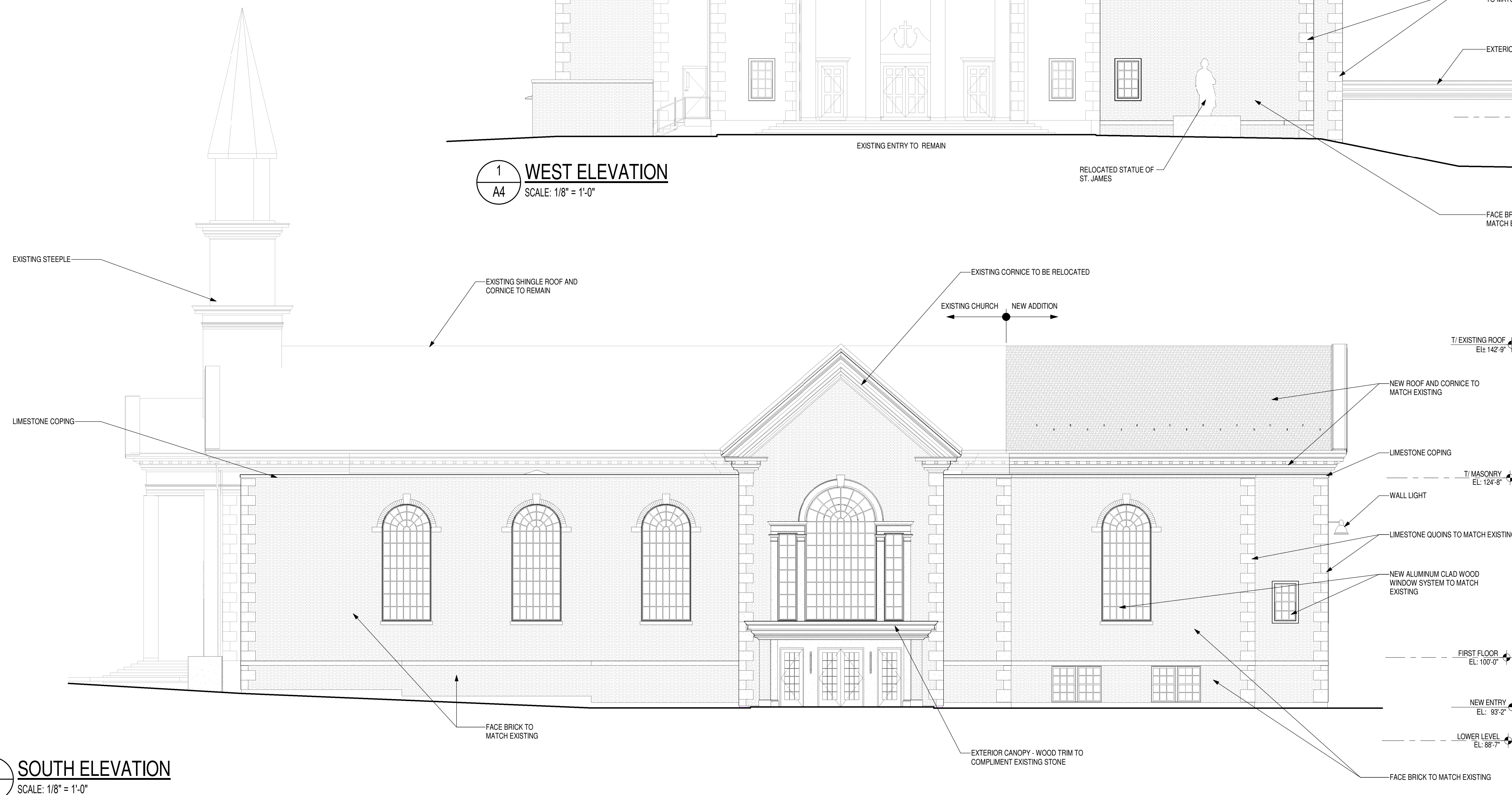
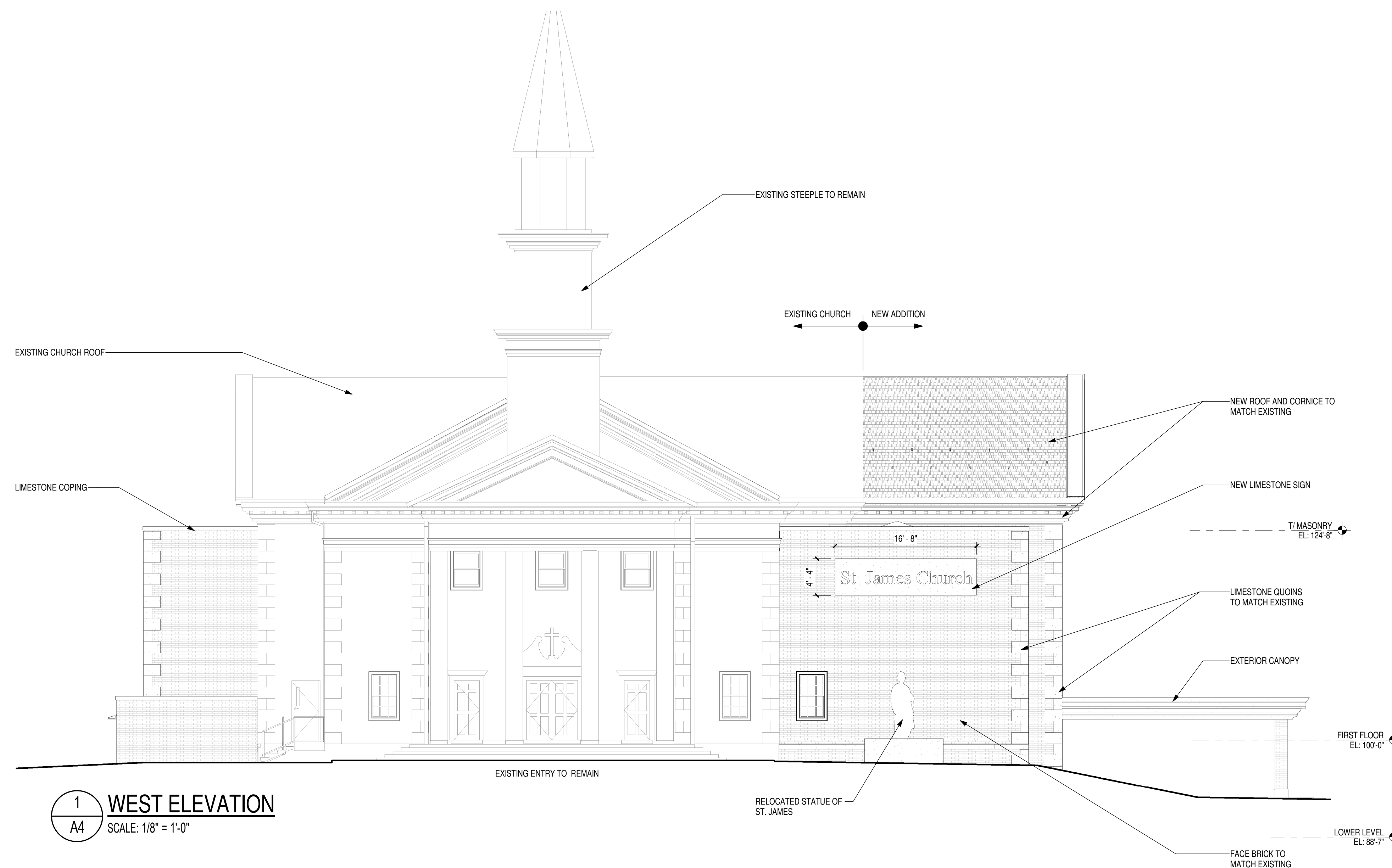
DRAWING TITLE:

EXTERIOR ELEVATIONS

PROJECT NO.: 2017028

DATE: 9/19/17

A4





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PROJECT NAME:
VILLAGE SUBMITTAL

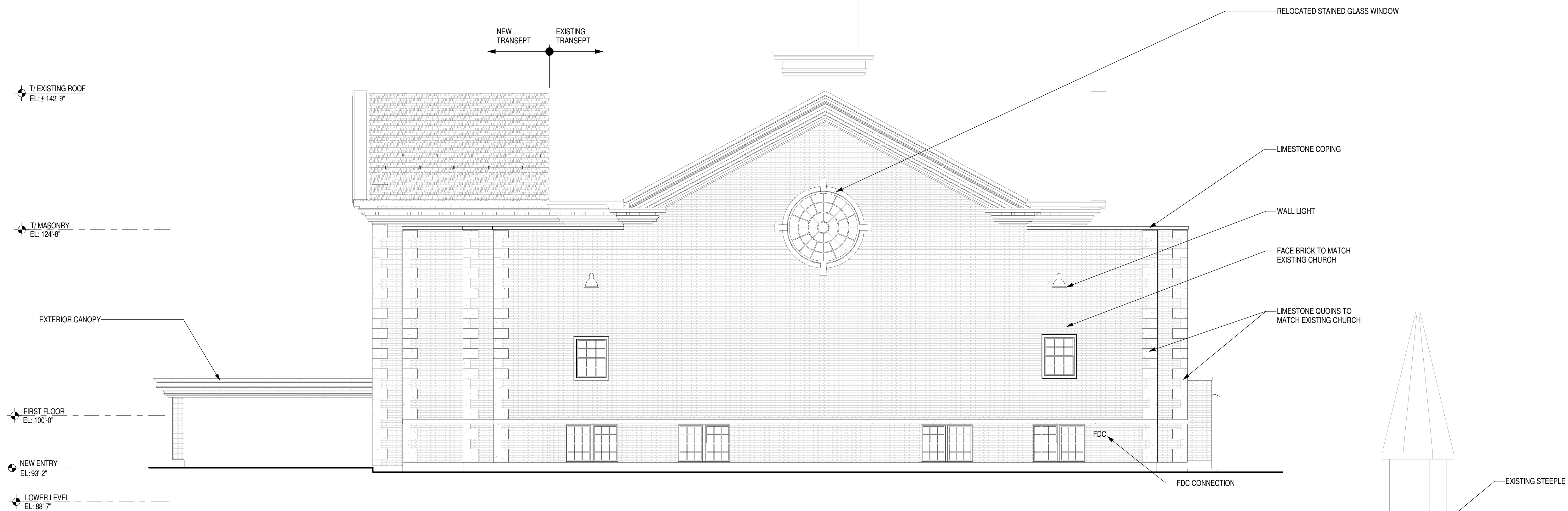
**CHURCH ADDITION
AND RENOVATION**
831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH
AND
THE ARCHDIOCESE OF CHICAGO

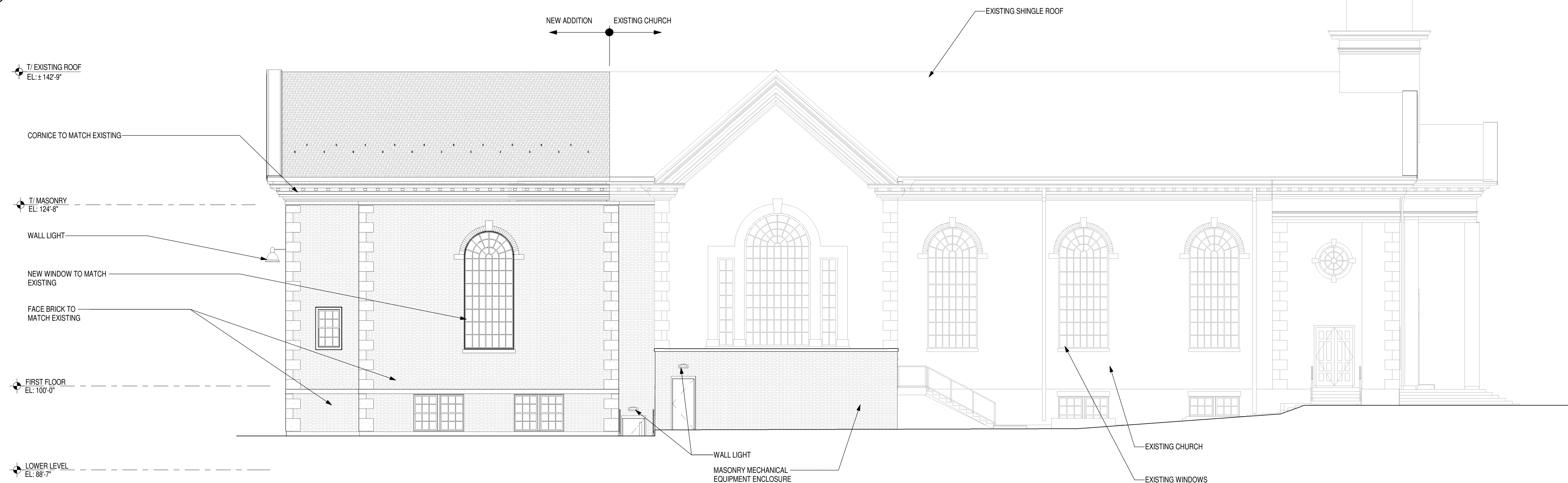
DRAWING TITLE:
EXTERIOR ELEVATIONS

RESUBMITTED 11/1/17
PROJECT NO.: 2017028 DATE: 9/27/17

A5



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



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



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PROJECT NAME:

VILLAGE SUBMITTAL

**CHURCH ADDITION
AND RENOVATION**

831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:

**CONCEPTUAL
RENDERINGS**

PROJECT NO.: 2017028

DATE: 9/19/17

A6



PERSPECTIVE VIEW - LOOKING NORTH



AERIAL VIEW - LOOKING NORTHEAST



AERIAL VIEW - LOOKING NORTHWEST



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PROJECT NAME:

VILLAGE SUBMITTAL

CHURCH ADDITION AND RENOVATION

831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

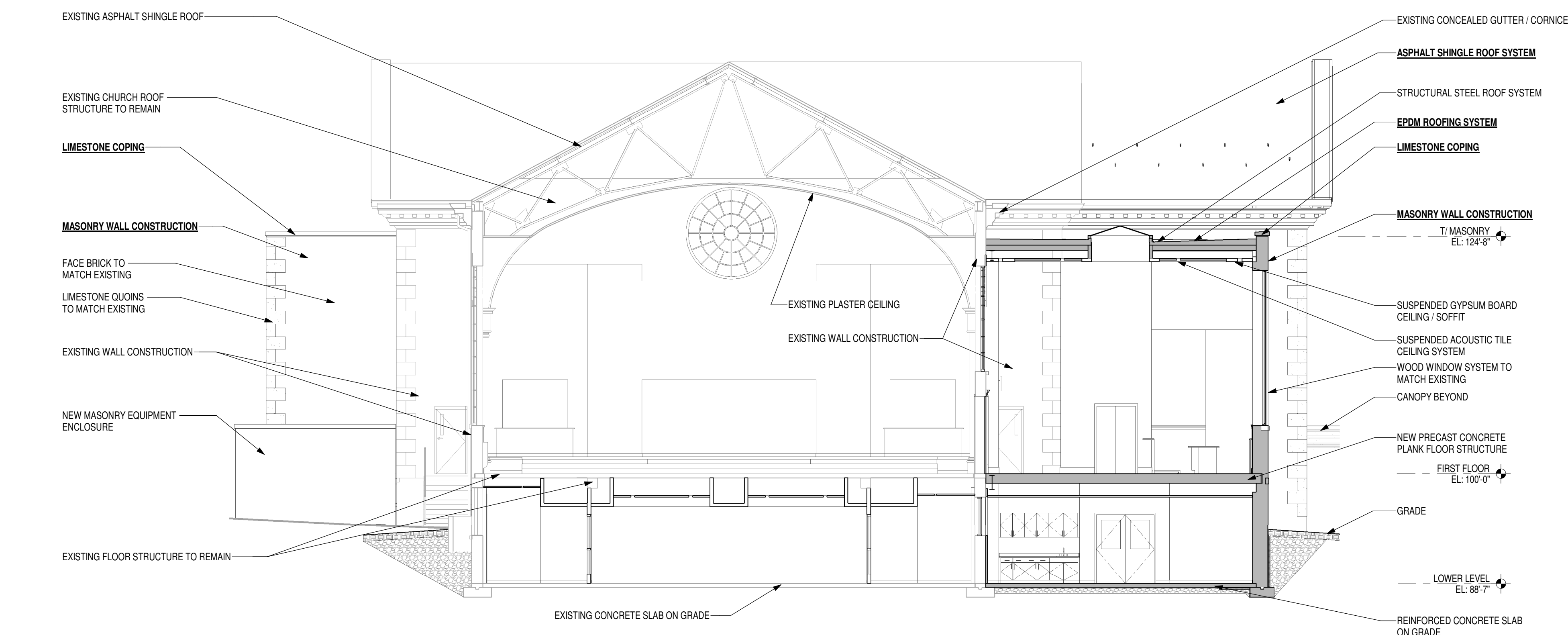
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BUILDING SECTIONS

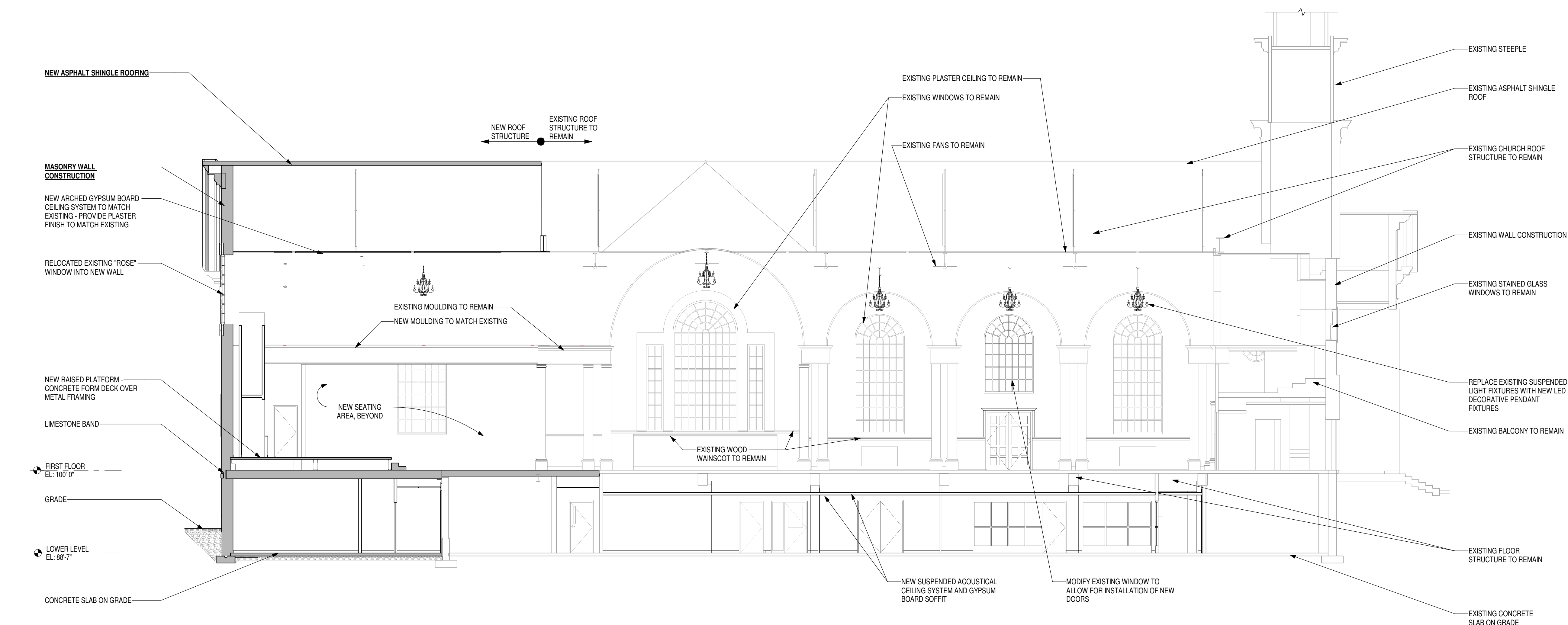
PROJECT NO.: 2017028

DATE: 9/19/17

A7



1
A7 BUILDING SECTION
SCALE: 1/8" = 1'-0"



2
A7 BUILDING SECTION
SCALE: 1/8" = 1'-0"

St. James Parish Logistics Plan



- * Approximate # Workers: 10-35 w/parking within job fence
- * Construction Staging within job fence
- * Material Storage within job fence
- * Arlington Heights Road partial lane closure for curb cut connection approximately 5 days in April 2018 & 3 days in November 2018
- * Construction Vehicles will range from dump trucks for material haul off during excavation, concrete trucks for foundations work, mobile crane for structural steel & precast placement, and material delivery trucks

St. James Parish
Addition and Renovation
Preliminary Schedule

ID		Task Mode	Task Name	Duration	Start	Finish	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
17			PRECONSTRUCTION	123 days	Thu 10/5/17	Fri 3/30/18	PRECONSTRUCTION																							
1			MILESTONES	346 days	Fri 11/3/17	Tue 3/19/19	MILESTONES																							
2			Contractor Selection	0 days	Fri 11/3/17	Fri 11/3/17	11/3 ◆ Contractor Selection																							
3			Commissioning Board Meeting	0 days	Thu 11/30/17	Thu 11/30/17	11/30 ◆ Commissioning Board Meeting																							
4			Village Board Meeting	0 days	Thu 12/14/17	Thu 12/14/17	12/14 ◆ Village Board Meeting																							
5			Issue Construction Set / GMP Documents for Bidding	0 days	Wed 1/17/18	Wed 1/17/18	1/17 ◆ Issue Construction Set / GMP Documents for Bidding																							
6			GMP Approved	0 days	Wed 2/7/18	Wed 2/7/18	2/7 ◆ GMP Approved																							
7			Demolition Permit Approval	0 days	Wed 2/14/18	Wed 2/14/18	2/14 ◆ Demolition Permit Approval																							
8			Abatement Starts	0 days	Thu 2/22/18	Thu 2/22/18	2/22 ◆ Abatement Starts																							
9			Planning Commission Final Meeting	0 days	Mon 3/19/18	Mon 3/19/18	3/19 ◆ Planning Commission Final Meeting																							
10			Village Board Final Meeting	0 days	Mon 3/26/18	Mon 3/26/18	3/26 ◆ Village Board Final Meeting																							
11			Building Permit Approval	0 days	Fri 3/30/18	Fri 3/30/18	3/30 ◆ Building Permit Approval																							
12			Easter Sunday	0 days	Sun 4/1/18	Sun 4/1/18	4/1 ◆ Easter Sunday																							
13			Construction Starts	0 days	Mon 4/2/18	Mon 4/2/18	4/2 ◆ Construction Starts																							
14			Building Enclosure Complete	0 days	Mon 10/29/18	Mon 10/29/18	10/29 ◆ Building Enclosure Complete																							
15			Substantial Completion	0 days	Tue 3/12/19	Tue 3/12/19	3/12 ◆ Substantial Completion																							
16			Owner Move In	5 days	Wed 3/13/19	Tue 3/19/19	5 days ■ Owner Move In																							
46			CONSTRUCTION	341 days	Mon 11/6/17	Tue 3/12/19	CONSTRUCTION																							

Project: Preliminary Schedule -
Date: Thu 11/16/17

Task  Milestone  Summary  Critical 

9/15/2017 9:52:53 AM
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UTILITY AND GOVERNING AGENCY CONTACTS

ENGINEERING DEPARTMENT
VILLAGE OF ARLINGTON HEIGHTS
33 S. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, IL 60005
TEL: (847) 368-5250
CONTACT: MIKE PAGONES

SANITARY SEWER SERVICE
VILLAGE OF ARLINGTON HEIGHTS
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ARLINGTON HEIGHTS, IL 60005
TEL: (847) 368-5832
CONTACT: MIKE NOLAN

STORM SEWER SERVICE
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ARLINGTON HEIGHTS, IL 60005
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WATER SERVICE
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33 S. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, IL 60005
TEL: (847) 368-5806
CONTACT: JEFF MUSINSKI

ROADWAY AUTHORITY
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 CENTER COURT
SCHAUMBURG, IL 60195
TEL: (847) 705-4000

POWER COMPANY
COMED
TEL: (630) 705-7439

NATURAL GAS COMPANY
NICOR
615 EASTERN AVENUE
BELLWOOD, IL 60104
TEL: (708) 544-5707

TELEPHONE
AT&T
TEL: (800) 244-4444

PROJECT TEAM

OWNER
ST. JAMES PARISH
820 N ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, IL 60004
TEL: (224) 345-7200

GEOTECH
GEOCON PROFESSIONAL SERVICES
3000 RESEARCH ROAD, SUITE 1
CHAMPAIGN, IL 61822
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NEWMAN ARCHITECTURE
1730 PARK STREET, SUITE 115
NAPERVILLE, IL 60563-2611
TEL: (630) 420-1600
CONTACT: KAREN M. KRISTIANSON

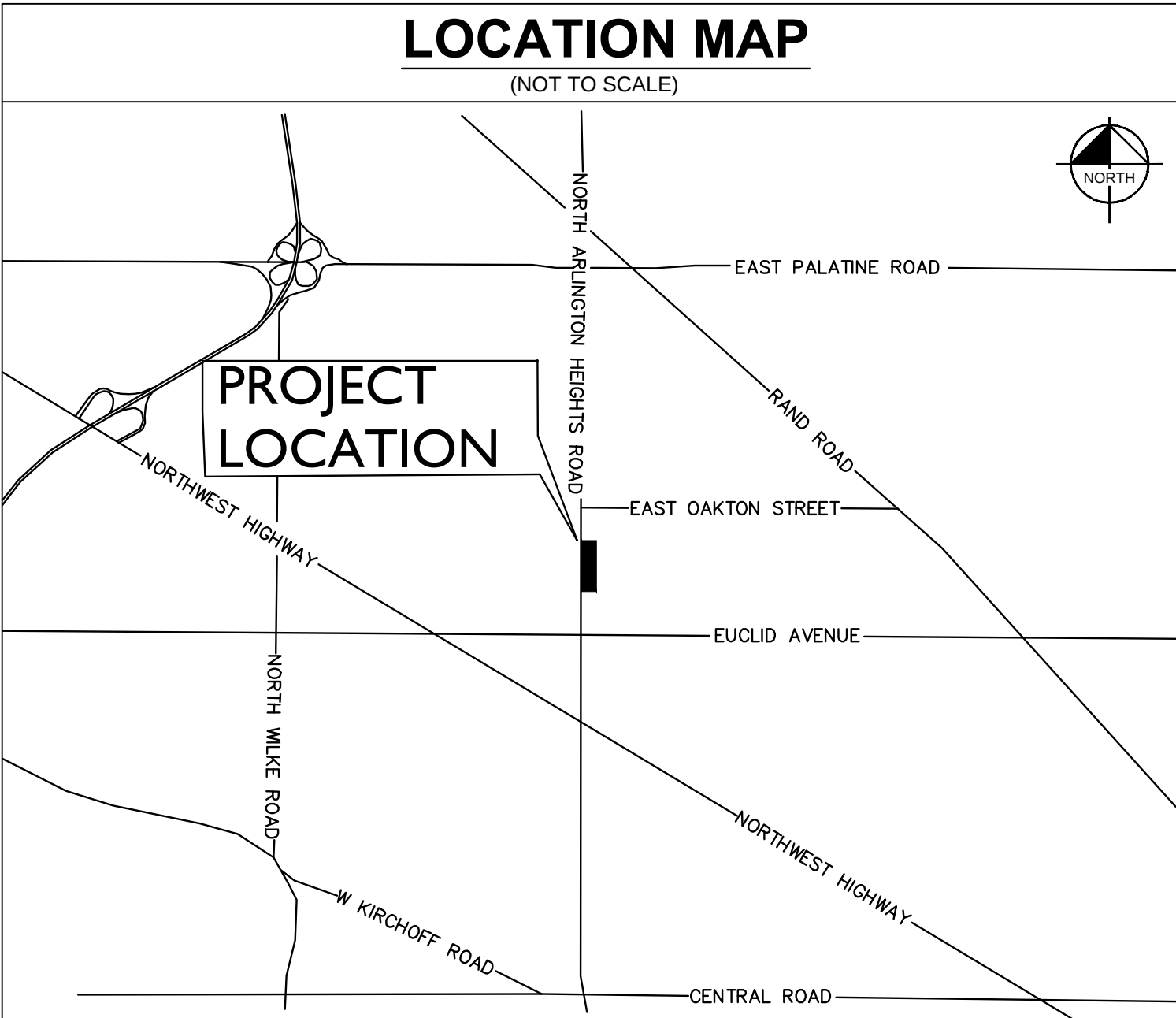
CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE RD, SUITE 350
LISLE, IL 60532
TEL: (630) 487-5550
EMAIL: ERIC.TRACY@KIMLEY-HORN.COM
CONTACT: ERIC TRACY, P.E.
EMAIL: ANDY.HEINEN@KIMLEY-HORN.COM
CONTACT: ANDY HEINEN, P.E.

SURVEYOR
EDWARD J. MOLLOY & ASSOCIATES, LTD.
1236 MARK STREET
BENSENVILLE, IL 60106
TEL: (630) 595-2600
CONTACT: BRIAN EVENSON

LEGAL DESCRIPTION

BEING IN THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

FINAL ENGINEERING PLANS
ST.JAMES
831 N. ARLINGTON HEIGHTS RD.
ARLINGTON HEIGHTS, IL 60004



Sheet List Table

Sheet Number	Sheet Title
C0.0	TITLE SHEET
C1.0	GENERAL NOTES
C1.1	MWRD GENERAL NOTES
V0.0	SURVEY (BY OTHERS)
C2.0	EXISTING CONDITIONS & DEMOLITION PLAN
C3.0	SITE PLAN
C4.0	EROSION CONTROL PLAN
C4.1	EROSION CONTROL DETAILS
C5.0	GRADING PLAN
C6.0	UTILITY PLAN
C7.0	CONSTRUCTION DETAILS
C7.1	CONSTRUCTION DETAILS
C7.2	CONSTRUCTION DETAILS
C7.3	CONSTRUCTION DETAILS
C7.4	CONSTRUCTION DETAILS

IDOT STANDARDS (IN CONSTRUCTION DETAILS)

424026-01
424001-09
606001-05
701901-03
701606-09

BENCHMARKS

SITE BENCHMARKS:
(LOCATIONS SHOWN ON SURVEY)

SBM #1 SE BOLT ON HYDRANT.
ELEVATION=710.78

SBM #2 SW BOLT ON HYDRANT.
ELEVATION=702.43

VILLAGE OF ARLINGTON HEIGHTS BENCHMARKS:

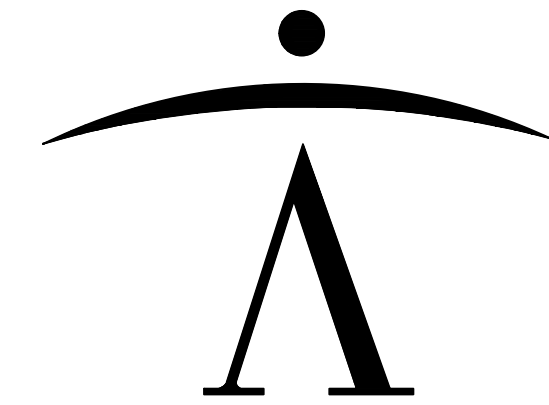
BENCHMARK #42 SQUARE CUT ON THE EAST SIDE OF A FLAG POLE CONCRETE BASE, OPPOSITE TRANS AMERICA INSURANCE BUILDING, 51.9' FROM THE SOUTHEAST CORNER OF BUILDING AND 52.0' FROM NORTHEAST CORNER OF BUILDING, 58 ± WEST OF THE CENTERLINE OF ARLINGTON HEIGHTS ROAD AND 198 ±NORTH OF THE CENTERLINE OF OAKTON STREET.
ELEVATION=698.45 (NAVD 1988)

PROFESSIONAL ENGINEER'S CERTIFICATION

I, ERIC TRACY, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THIS SUBMISSION, PERTAINING ONLY TO THE "C" SERIES CIVIL SHEETS LISTED ABOVE, WAS PREPARED ON BEHALF OF NEWMAN ARCHITECTURE 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 ____ DAY OF _____, A.D., 2017.

ILLINOIS LICENSED PROFESSIONAL ENGINEER 062-067482
MY LICENSE EXPIRES ON NOVEMBER 30, 2017



newman architecture
1730 Park Street, Suite 115, Naperville, Illinois 60563-2611
(630) 420-1600 FAX (630) 420-1987 www.newmanarchitecture.com

Participating Consultants:

Kimley»Horn
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350,
LISLE, IL 60532
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

PROJECT NAME:

VILLAGE SUBMITTAL

CHURCH ADDITION
AND RENOVATION

831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:

TITLE SHEET

RESUBMITTED 11/30/17

PROJECT NO.: 168144008 DATE: 10/5/17

C0.0

GENERAL NOTES

- EXISTING SITE TOPOGRAPHY, UTILITIES, RIGHT-OF-WAY AND HORIZONTAL CONTROL SHOWN ON THE DRAWINGS WERE OBTAINED FROM A SURVEY PREPARED BY:

EDWARD J. MOLLOY & ASSOCIATES, LTD.
1336 MARK STREET
BENSENVILLE, IL 60106
TEL: (630) 595-2600

COPIES OF THE SURVEY ARE AVAILABLE FROM THE ENGINEER. SITE CONDITIONS MAY HAVE CHANGED SINCE THE SURVEY WAS PREPARED. CONTRACTORS TO VISIT SITE TO FAMILIARIZE THEMSELVES WITH THE CURRENT CONDITIONS.
- COPIES OF SOILS INVESTIGATION REPORTS MAY BE OBTAINED FROM THE OWNER, ANY BRAGING, SHEETING OR SPECIAL CONSTRUCTION METHODS DEEMED NECESSARY BY THE CONTRACTOR IN ORDER TO INSTALL THE PROPOSED IMPROVEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT. ANY ADDITIONAL SOILS DATA NEEDED TO CONFIRM THE CONTRACTOR'S OPINIONS OF THE SOIL CONDITIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN AUTHORIZATION TO ACCESS THE SITE TO CONDUCT A SUPPLEMENTAL SOILS INVESTIGATION.
- THE CONTRACTOR SHALL PHOTOGRAPH THE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS.
- EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL PROPOSED WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS WHICH ARE HEREBY MADE A PART HEREOF:
 - "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS," AS PREPARED BY IDOT, LATEST EDITION.
 - "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" AS PUBLISHED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA), LATEST EDITION.
 - "ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WATERS," AS PUBLISHED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA), LATEST EDITION.
 - REGULATIONS, STANDARDS AND GENERAL REQUIREMENTS SET FORTH BY THE VILLAGE OF ARLINGTON HEIGHTS, UNLESS OTHERWISE NOTED ON THE PLANS.
 - THE NATIONAL ELECTRIC CODE.
 - ALL APPLICABLE PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.
- STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND RECURRING SPECIAL PROVISIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INDETERMINATE OR INCONSISTENT SPECIFICATIONS OR CONFLICTING CONDITIONS OF THE WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED A PART OF THE CONTRACTOR'S CONTRACT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL ITEMS REQUIRED FOR CONSTRUCTION OF THE PROJECT, AS SHOWN ON THE PLANS, ARE INCLUDED IN THE CONTRACT. ANY ITEM NOT SPECIFICALLY INCLUDED IN THE CONTRACT, BUT SHOWN ON THE PLANS, SHALL BE CONSIDERED CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IN THE EVENT OF A DISCREPANCY WITH THE PLANS AND QUANTITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF "APPROVED" ENGINEERING PLANS WITH THE LATEST REVISION DATE, ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT THEM TO THE SURVEYOR OR ENGINEER BEFORE DOING ANY WORK. OTHERWISE, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY IN THE EVENT OF DISAGREEMENT BETWEEN THE CONTRACTOR'S PLANS, SPECIFICATIONS, AND/OR SPECIAL DETAILS. THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT THE CONTRACTOR'S OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS PRIOR TO STARTING WORK. THE CONTRACTOR, BY USING THESE PLANS FOR THEIR WORK, AGREE TO HOLD HARMLESS KIMLEY-HORN AND ASSOCIATES, INC. THE VILLAGE OF ARLINGTON HEIGHTS, THEIR EMPLOYEES AND AGENTS AND THE OWNER FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND THE COST OF DEFENSE ARISING OUT OF CONTRACTOR(S) PERFORMANCE OF THE WORK DESCRIBED HEREIN.
- THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- CONSTRUCTION MATERIALS AND/OR EQUIPMENT MAY NOT BE STORED IN THE RIGHT-OF-WAY, AS DIRECTED BY THE OWNER.
- EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAYS ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- OWNER SHALL OBTAIN EASEMENTS AND APPROVAL OF PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS AND EASEMENTS.
- THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- NOTIFICATION OF COMMENCING CONSTRUCTION:
 - THE CONTRACTOR SHALL NOTIFY AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY, AS NECESSARY, ALL TESTING AGENCIES, THE VILLAGE OF ARLINGTON HEIGHTS, AND THE OWNER SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO ALLOW THEM TO INTERFERE.
 - FAILURE OF THE CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN THE TESTING COMPANIES TO BE UNABLE TO VISIT THE SITE AND PERFORM TESTING WILL CAUSE THE CONTRACTOR TO SUSPEND THE OPERATION TO BE TESTED UNTIL THE TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF WORK SHALL BE BORNE BY THE CONTRACTOR.
- ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL EMERGENCY TRAFFIC, AS DIRECTED BY THE VILLAGE OF ARLINGTON HEIGHTS.
- ANY EXISTING SIGNS, LIGHT STANDARDS, AND UTILITY POLES THAT INTERFERE WITH CONSTRUCTION OPERATIONS AND ARE NOT NOTED ON THE PLANS FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. AS PLANS, SPECIFICATIONS, AND/OR SPECIAL DETAILS TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.
- ALL TREES TO BE SAVED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION BY THE LANDSCAPE ARCHITECT AND SHALL BE PROTECTED PER IDOT SECTION 201.05, THE RIGHT-OF-WAY LINE AND LIMITS OF THE CONTRACTOR'S OPERATIONS SHALL BE CLEARLY DEFINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL TREES NOTED TO REMAIN SHALL BE PROTECTED FROM DAMAGE TO TRUNKS, BRANCHES AND ROOTS. NO EXCAVATING, FILLING OR GRADING IS TO BE DONE INSIDE THE DRIP LINE OF TREES UNLESS OTHERWISE INDICATED.
- LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF AN APPROVED LANDSCAPE ARCHITECT, FORESTER, OR ARBORIST AND SHALL BE UNDERTAKEN AS EARLY AS POSSIBLE AND AS NOT TO INTERFERE WITH CONSTRUCTION. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THE CONTRACTOR'S WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. ALL CUTS OVER ONE (1) INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.
- ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT ALONG LIMITS OF PROPOSED REMOVAL BEFORE COMMENCEMENT OF PAVEMENT REMOVAL.
- ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT, AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A PAY ITEM IS LISTED ON THE BID LIST.
- REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC., SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMITS REQUIRED FOR SUCH DISPOSAL.
- THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS, AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE COLLECTION, HAULING AND DISPOSAL REQUIRED FOR CLEANUP, AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.
- NO UNDERGROUND WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE VILLAGE OF ARLINGTON HEIGHTS. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE VILLAGE OF ARLINGTON HEIGHTS PRIOR TO INSTALLING PAVEMENT BASE, BINDER, AND SURFACE, AND PRIOR TO POURING ANY CONCRETE AFTER FORMS HAVE BEEN SET, AS NECESSARY.
- WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND PIPE SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE. THE CONTRACTOR'S WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE MERGED INTO THE CONTRACT UNIT PRICE EACH FOR STRUCTURES AND CONTRACT UNIT PRICE PER LINEAL FOOT FOR STORM SEWERS, WHICH SHALL BE PAYMENT IN FULL FOR CLEANING, PATCHING, REMOVAL, AND DISPOSAL OF DEBRIS AND DIRT, DRAINAGE STRUCTURES AND STORM SEWERS CONSTRUCTED AS PART OF THE CONTRACTOR'S PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. NO EXTRA PAYMENT WILL BE MADE FOR CLEANING STRUCTURES OR STORM SEWERS CONSTRUCTED AS PART OF THE CONTRACTOR'S PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLANS. THE CONTRACTOR SHALL CALL UTILITIES (1-800-892-0123) AND THE VILLAGE OF ARLINGTON HEIGHTS FOR UTILITY LOCATIONS.
- THE GENERAL CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PROVIDE CABLE TV, PHONE, ELECTRIC, GAS AND IRRIGATION SERVICES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SITE ACCESS FOR THESE UTILITIES AND SHALL COORDINATE AND PROVIDE CONDUIT CROSSINGS AS REQUIRED. THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO GENERAL CONTRACTOR AGREEMENT WITH THE OWNER. ANY CONFLICTS IN UTILITIES SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR IS TO VERIFY ALL EXISTING STRUCTURES AND FACILITIES AT ALL PROPOSED UTILITY CONNECTION LOCATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND STARTING WORK.
- ANY FIELD LIES ENCOUNTERED SHALL BE INSPECTED BY THE ENGINEER. THE DRAIN TILE SHALL BE CONNECTED TO THE STORM SEWER SYSTEM AND A RECORD KEPT BY THE CONTRACTOR. THE WORK SHALL BE LOCATIONS AND TURNED OVER TO THE ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- ALL FRAMES AND LIDS FOR STORM AND SANITARY SEWERS, VALVE VAULT COVERS, FIRE HYDRANTS, AND

- B-BOXES ARE TO BE ADJUSTED TO MEET FINISHED GRADE. THE CONTRACTOR'S ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR, AND THE COST IS TO BE CONSIDERED INCIDENTAL TO THESE ADJUSTMENTS TO FINISHED GRADE. WILL NOT ALLEVATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE VILLAGE OF ARLINGTON HEIGHTS UPON FINAL INSPECTION OF THE PROJECT.
- HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ONTO THE ROAD SUBGRADE. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM, IF AVAILABLE. DAMAGE TO THE ROAD SUBGRADE OR LOT GRADING DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE REPAIRED BY THE CONTRACTOR FLUSHING OR USING THE HYDRANT AT THE CONTRACTOR'S OWN EXPENSE. LEAKS IN THE WATER DISTRIBUTION SYSTEM SHALL BE THE RESPONSIBILITY OF THE WATER MAIN CONTRACTOR AND SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 - TRENCH BACKFILL WILL BE REQUIRED TO THE FULL DEPTH ABOVE SEWERS AND WATERMAIN WITHIN TWO (2) FEET HORIZONTAL OF PROPOSED OR EXISTING PAVEMENT.
 - IF SOFT, SPONGY, OR OTHER UNSUITABLE SOILS WITH UNCONFINED COMPRESSIVE STRENGTH LESS THAN 0.5 TSF ARE ENCOUNTERED AT THE BOTTOM OF THE TRENCH, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH WELL-COMPACTED, CRUSHED Limestone BEDDING MATERIAL. IF ROCK IS ENCOUNTERED, IT SHALL BE REMOVED TO AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE TO ALLOW PROPER THICKNESS OF BEDDING. ANY UNDERCUTS OF TWO (2) FEET OR LESS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. DEPTH GREATER THAN TWO (2) FEET SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PROCEEDING.
 - THE TRENCHES FOR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY TRENCH SHALL BE PROVIDED BY THE CONTRACTOR, AND THE COST OF SUCH SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE ITEM. PLANS FOR THE SITE Dewatering, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR Dewatering DURING CONSTRUCTION UNLESS APPROVED IN WRITING BY THE OWNER.
 - AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE PROPER INLET PROTECTION DEVICES FOR PROTECTION OF THE PIPES INDICATED BY THE ENGINEER. THE INLET PROTECTION WILL BE TO MINIMIZE THE AMOUNT OF SILTATION THAT NORMALLY WOULD ENTER THE STORM SEWER SYSTEM FROM ADJACENT AND/OR UPSTREAM DRAINAGE AREAS.
 - AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.
 - EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH IEPA REGULATIONS AND IDOT STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTRACTOR AND REMAIN IN PLACE UNTIL A SUITABLE GROWTH OF GRASS, ACCEPTABLE TO THE ENGINEER, HAS DEVELOPED.
 - THE CONTRACTOR SHALL CONFORM TO ALL EROSION CONTROL REQUIREMENTS AS SET FORTH BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) AND THE VILLAGE OF ARLINGTON HEIGHTS. REQUIREMENTS AND GOVERNING VILLAGE OF ARLINGTON HEIGHTS. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS INDICATED ON THE EROSION CONTROL DRAWINGS AND SPECIFICATIONS AS WELL AS THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC.. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE SWPPP AND FOR MONITORING THE SWPPP. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND INSPECTION FREQUENCY, AS REQUIRED BY THE IEPA NPDES PHASE II PERMIT PROGRAM REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL SWPPP DOCUMENTATION CURRENT AND READILY AVAILABLE ON THE PROJECT SITE AT ALL TIMES FOR REVIEW BY THE OWNER, ENGINEER, AND REGULATORY AGENCIES. KIMLEY-HORN AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR SUPPLIERS, WHICH CONTRIBUTE TO DEFICIENCIES IN THE SWPPP OR ANY VIOLATIONS RESULTING FROM INADEQUATE EROSION CONTROL PROTECTION AND/OR DOCUMENTATION.
 - THE PAVEMENT SHALL BE KEPT FREE OF MUD AND DEBRIS AT ALL TIMES. IT MAY BE NECESSARY TO KEEP A SWEEPER ON-SITE AT ALL TIMES.
 - ALL DISTURBED AREAS OF THE RIGHT-OF-WAY SHALL BE FULLY RESTORED TO PRE-CONSTRUCTION CONDITIONS WITH A MINIMUM OF SIX (6) INCHES OF TOPSOIL, SEEDING, AND MULCH AS PER IDOT STANDARDS.
 - ALL PROPOSED GRADES SHOWN ON PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS NOTED OTHERWISE.
 - ALL TESTING SHALL BE THE RESPONSIBILITY AND EXPENSE OF THE CONTRACTOR, IF REQUESTED BY THE VILLAGE OF ARLINGTON HEIGHTS OR ENGINEER, COPIES OF ALL TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL.
 - PROVIDE SMOOTH VERTICAL CURVES THROUGH HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS. PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES. AVOID RIDGES AND DEPRESSIONS.
 - WHEN REQUIRED, THE CONTRACTOR SHALL NOTIFY THE OWNER WHEN RECORD DRAWINGS CAN BE PREPARED. RECORD DRAWINGS SHALL INDICATE THE FINAL LOCATION AND LAYOUT OF ALL IMPROVEMENTS, INCLUDING VERIFICATION OF ALL CONCRETE PADS, INVERT, RIM, AND SPOT GRADE ELEVATIONS, AND INCORPORATE ALL FIELD DESIGN CHANGES APPROVED BY THE OWNER.
 - BEFORE ACCEPTANCE, ALL WORK SHALL BE INSPECTED BY THE VILLAGE OF ARLINGTON HEIGHTS, AS NECESSARY.
- ### EARTHWORK NOTES
- GENERAL
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.
 - ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND BE KNOWLEDGEABLE OF ALL SITE CONDITIONS.
 - THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC., MUST BE ACCOUNTED FOR.
 - THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC., TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC., SHALL OCCUR BEFORE GRADING BEGINS.
 - PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A CONSTRUCTION FENCE AROUND ANY TREE DESIGNATED TO BE PRESERVED. SAID FENCE SHALL BE PLACED IN A CIRCLE CENTERED AROUND THE TREE. THE RADIUS OF WHICH SHALL BE SUCH THAT THE ENTIRE DRIP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.
 - TOPSOIL EXCAVATION INCLUDES:
 - EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STOPPING TOPSOIL OR FILLING AREAS.
 - PLACEMENT OF EXCAVATED MATERIAL IN OWNER-DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STOCKPILE.
 - TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.
 - TOPSOIL RESPREAD SHALL INCLUDE HAULING AND SPREADING SIX (6) INCHES OF TOPSOIL DIRECTLY OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER.
 - MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.
 - EARTH EXCAVATION INCLUDES:
 - EXCAVATION OF SUBSURFACE MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET FOR PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.
 - PLACEMENT OF SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIALS SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED DENSITY.
 - STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL. WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION, IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.
 - COMPACTION OF SUITABLE MATERIALS SHALL BE TO AT LEAST 93% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS.
 - UNSUITABLE MATERIAL: UNSUITABLE MATERIALS SHALL BE CONSIDERED MATERIAL THAT IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW GRADE. SUCH MATERIALS SHALL BE REMOVED TO AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL AND TO WHAT EXTENT SHALL BE MADE BY THE ENGINEER WITH THE CONCURRENCE OF THE OWNER.
 - MISCELLANEOUS. THE CONTRACTOR SHALL:
 - SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPILL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.
 - SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL. IN ALL AREAS THAT WILL BE SOFT DUE TO EXCESS MOISTURE CONTENT, THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.
 - PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.
 - BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL.
 - TESTING AND FINAL ACCEPTANCE
 - THE CONTRACTOR SHALL PROVIDE AS A MINIMUM A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE COURSE MATERIAL. THIS SHALL BE WITNESSED BY THE ENGINEER AND THE OWNER. (SEE PAVING SPECIFICATIONS.)
 - ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE CORRECTED AND APPROVED BY THE ENGINEER.

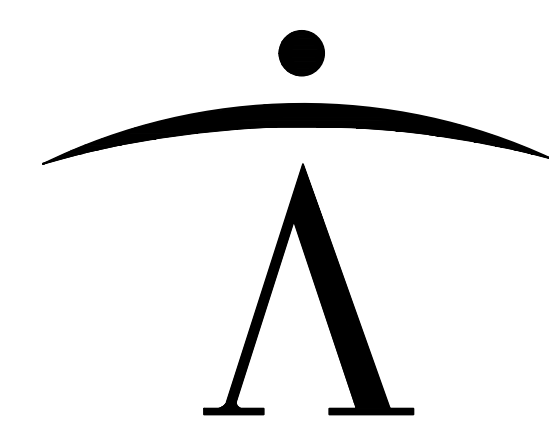
PAVING NOTES

- GENERAL
 - PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION, AND COMPACTION; PLACEMENT OF SUBBASE OR BASE COURSE MATERIALS; BITUMINOUS BINDER AND/OR SURFACE COURSES; FORMING, FINISHING, AND CURING CONCRETE PAVEMENT, CURBS, AND WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.
 - COMPACTION REQUIREMENTS [REFERENCE ASTM D-1557 (MODIFIED PROCTOR)]: SUBGRADE = 93% SUBBASE = 93% AGGREGATE BASE COURSE = 95% BITUMINOUS COURSE = 95% OF MAXIMUM DENSITY, PER ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) HIGHWAY STANDARDS.
 - IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING WARNING AND TRAFFIC MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AND THEIR INSTALLATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, AND IN ACCORDANCE WITH THE VILLAGE OF ARLINGTON HEIGHTS CODE.
 - SUBGRADE PREPARATION
 - EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS ONE (1) INCH OF FINISHED GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPERLY PREPARED AND THAT THE FINISHED TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS, UNLESS THE CONTRACTOR ADVISES THE ENGINEER IN WRITING PRIOR TO THE GRADING FOR BASE COURSE CONSTRUCTION. IT IS UNDERSTOOD THAT THE CONTRACTOR HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.
 - PRIOR TO THE PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE PROOF-ROLLED AND INSPECTED FOR UNSUITABLE MATERIALS AND/OR EXCESSIVE MOVEMENT. IF UNSUITABLE SUBGRADE IS DETECTED, IT SHALL BE CORRECTED. THIS MAY INCLUDE ONE OR MORE OF THE FOLLOWING METHODS:
 - SCARIFY, DISC, AND AERATE.
 - REMOVE AND REPLACE WITH STRUCTURAL CLAY FILL.
 - REMOVE AND REPLACE WITH GRANULAR MATERIAL.
 - USE OF GEOTEXTILE FABRIC.
 - MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE ONE-QUARTER (1/4) INCH TO ONE-HALF (1/2) INCH IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.
 - PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE-GRADED TO WITHIN 0.4 FEET (1/2 INCH) OF FINAL FINISHED GRADE. THE CONTRACTOR SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT FOURTEEN (14) DAYS AND A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT TWENTY-EIGHT (28) DAYS. ALL CURBS SHALL BE BROOM-FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.
 - PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE SHALL BE APPROVED BY THE TESTING ENGINEER.
 - CONCRETE WORK
 - ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT. CONCRETE SHALL BE A MINIMUM OF SIX (6) BAG MIX AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT FOURTEEN (14) DAYS AND A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT TWENTY-EIGHT (28) DAYS. ALL CURBS SHALL BE BROOM-FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.
 - CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION STANDARDS AND FOR THE PAVEMENT CROSS SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. PER-MOLDED FIBER EXPANSION JOINTS, WITH TWO (2) INCH EPOXY-CURED STEEL DOWEL BARS, SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES.
 - CURBS SHALL BE DEPRESSED AND MEET THE SLOPE REQUIREMENTS OF THE ILLINOIS ACCESSIBILITY CODE AT LOCATIONS WHERE PUBLIC WALKS INTERSECT CURB LINES AND OTHER LOCATIONS, AS DIRECTED BY THE VILLAGE OF ARLINGTON HEIGHTS, AND THE OWNER FOR PROVIDING ACCESSIBILITY.
 - THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE.
 - CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT 5-FOOT INTERVALS AND 1/2-INCH PRE-MOLDED FIBER EXPANSION JOINTS AT 20-FOOT INTERVALS AND ADJACENT TO CONCRETE CURBS, DRIVEWAYS, FOUNDATIONS, AND OTHER STRUCTURES.
 - CONCRETE CURING AND PROTECTION SHALL BE PER IDOT STANDARDS. TWO (2) COATS OF IDOT APPROVED CURING AGENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.
 - THE COST OF AGGREGATE BASE OR SUBBASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.
 - FLEXIBLE PAVEMENT
 - THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, AND DRIVE AVES SHALL BE AS DETAILED ON THE PLANS. UNLESS OTHERWISE SHOWN ON THE PLANS, THE FLEXIBLE PAVEMENT SHALL CONSIST OF AGGREGATE BASE COURSE, TYPE B, BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, II-N, 95, AND BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX 95, OF THE THICKNESS SPECIFIED ON THE PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS.
 - ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE BINDER COURSE IS LAID. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.4 TO 0.5 GALLONS PER SQUARE YARD PRIOR TO PLACING THE BINDER COURSE. PRIME COAT MATERIALS SHALL BE IDOT APPROVED.
 - PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE BINDER COURSE SHALL BE CLEANED AND TACK-COATED IF DUSTY OR DIRTY. ALL DAMAGED AREAS IN THE BINDER, BASE, OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE ANY NECESSARY EQUIPMENT AND STAFF NECESSARY. INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE OWNER, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. THE TACK COAT SHALL BE UNIFORMLY APPLIED TO THE BINDER COURSE AT A RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD. TACK COAT SHALL BE AS PER IDOT STANDARDS.
 - SEAMS IN B&M, BINDER, AND SURFACE COURSE SHALL BE STAGGERED A MINIMUM OF 6 INCHES.
 - TESTING AND FINAL ACCEPTANCE.
 - THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE ENGINEER.
 - PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, WHEN DIRECTED BY THE VILLAGE OF ARLINGTON HEIGHTS, SHALL OBTAIN SPECIMENS OF THE BINDER COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.
 - WHEN REQUIRED BY THE VILLAGE OF ARLINGTON HEIGHTS, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH BITUMINOUS CONCRETE PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD REQUIRED BY IDOT STANDARDS.
 - FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.
 - ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE VILLAGE OF ARLINGTON HEIGHTS CODE. WHEN CONFLICTS ARISE BETWEEN MUNICIPAL CODE, GENERAL NOTES AND SPECIFICATIONS, THE MORE STRINGENT SHALL TAKE PRECEDENCE.
- ### SIGNAGE AND PAVEMENT MARKING NOTES
- ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) STANDARDS.
 - SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080-INCH THICK FLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE. LEGEND SHALL BE IN ACCORDANCE WITH THE MUTCD.
 - POSTS: SIGN POSTS SHALL BE A HEAVY-DUTY STEEL "U" SHAPED CHANNEL WEIGHING 3.0 POUNDS/FOOT, SUCH AS A TYPE B METAL POST, AS PER THE IDOT STANDARDS (OR 2-INCH PERFORATED STEEL TUBE). SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH IDOT STANDARDS.
 - PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE PUBLIC RIGHT-OF-WAY, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS, AND DIRECTIONAL ARROWS, SHALL BE REFLECTORIZED THERMOPLASTIC.
 - PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW-WEAR" APPLICATIONS, SHALL BE PAINT IN ACCORDANCE WITH IDOT STANDARDS.
 - COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND LOCAL CODE. STANDARD PARKING SPACES SHALL BE PAINTED WHITE OR YELLOW PER LOCAL CODE.
 - THERMOPLASTIC MARKINGS SHALL BE INSTALLED WHEN THE PAVEMENT TEMPERATURE IS 55 DEGREES FAHRENHEIT AND HIGHER. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 50 DEGREES FAHRENHEIT AND RISING.
- ### SANITARY SEWER NOTES
- SANITARY SEWER PIPE: ALL SANITARY SEWER PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN, UNLESS OTHERWISE NOTED ON THE PLANS. ALL SANITARY SEWER PIPE SHALL BE CONSTRUCTED OF BITUMINOUS CEMENT-UNITED DUCTILE IRON PIPE, CLASS 52, CONFORMING TO ANSI A21.51 (AWWA C151). CEMENT MORTAR LINING SHALL CONFORM TO ANSI A21.11 (AWWA C111). THE JOINTS SHALL BE PUSH-ON COMPRESSION GASKET JOINTS CONFORMING TO ANSI A21.11 (AWWA C111). SIZE AND TYPE MUST BE APPROVED BY THE ENGINEER AND THE VILLAGE OF ARLINGTON HEIGHTS PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL WATERMAIN PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

PIPE SIZE	CODE	PIPE MATERIAL
12" - 60"	RCP	REINFORCED CONCRETE PIPE (ASTM C76); SEE IDOT SPECS FOR PIPE CLASS
3" - 12"	PVC	POLYVINYL CHLORIDE PLASTIC PIPE SDR-26 (ASTM D3034 AND D2241)
12" - 48"	DIP	DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)
 - FITTINGS: ALL FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND MECHANICAL JOINTS CONFORMING TO ANSI A21.10 (AWWA C110).
 - VALVES: GATE VALVES SHALL BE USED ON ALL WATERMANS. ALL VALVES SHALL TURN COUNTER-CLOCKWISE TO OPEN. VALVES SHALL BE IRON BODY RESILIENT WEDGE GATE VALVES WITH HANDWHEELS AND NON-RISING STEMS CONFORMING TO AWWA C-509. THE VALVES SHALL HAVE MECHANICAL JOINTS.
 - THE MECHANICAL JOINTS AND ALL FASTENERS ON THE VALVE BODY SHALL HAVE STAINLESS STEEL NUTS AND BOLTS.
 - VALVE VAULTS: VALVE VAULTS SHALL BE PRECAST CONCRETE STRUCTURES FIVE (5) FEET IN DIAMETER, AS NOTED ON THE PLANS. THE FRAME AND LID SHALL BE ACCORDING TO THE DETAIL ON THE PLANS, WITH "WATER" EMBOSSED ON THE LID.
 - FIRE HYDRANTS: SEE PLANS FOR APPROVED FIRE HYDRANT DETAIL. FIRE HYDRANTS SHALL BE INSTALLED WITH AN AUXILIARY VALVE AND CAST IRON VALVE BOX. FIRE HYDRANTS SHALL HAVE AUXILIARY VALVES WITH A HYDRANT BARREL TO VALVE BOX RESTRAINING DEVICE. THE PUMPER CONNECTION SHALL FACE THE ROADWAY.
 - PROVIDE AND INSTALL FOUR MEGALUG JOINT RESTRAINTS AT EACH JOINT FORM THE MAINLINE TEE TO THE AUXILIARY VALVE AND BETWEEN THE AUXILIARY VALVE AND THE HYDRANT BARREL.
 - THE BREAK FLANGE AND ALL BELOW-GRADE FITTING SHALL HAVE STAINLESS STEEL NUTS AND BOLTS.
 - CORPORATION STOPS: CORPORATION STOPS SHALL BE BRONZE BODY KEY STOPS CONFORMING TO AWWA C-800 AND SHALL INCLUDE "J" BEND, TALPCEP, AND COMPRESSION FITTINGS. SIZE AND LOCATION AS SHOWN ON THE PLANS.
 - SERVICE BOX: PROVIDE CURB VALVE AND CURB BOX AS INDICATED ON THE PLANS. BOX SHALL BE EXTENSION TYPE WITH FOOT PIPE AND STATIONARY RODS FOR SIX (6) FEET OF BURY.
 - MAXIMUM DEFLECTION AT PIPE JOINTS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S CURRENT RECOMMENDATIONS AND AWWA SPECIFICATIONS.
 - BEDDING: ALL WATERMANS SHALL BE BEDDED ON FIRM GROUND, WITH BELLHOLES EXCAVATED SO THAT THE PIPE HAS AN EVEN BEDDING FOR ITS ENTIRE LENGTH.
 - GRANULAR BEDDING MATERIAL OR GRANULAR BACKFILL MATERIAL SHALL BE CAREFULLY PLACED TO WITHIN TWELVE (12) INCHES OVER THE TOP OF THE PIPE BEFORE FINAL BACKFILLING AND COMPACTION.
 - A MINIMUM DEPTH OF COVER OF 5-FEET, 6-INCHES SHALL BE MAINTAINED OVER THE WATER LINES. THE MAXIMUM DEPTH SHALL BE EIGHT (8) FEET, EXCEPT AT SPECIAL CROSSINGS AND ONLY AS DESIGNATED ON THE PLANS.
 - "MEGA-LUG" RETAINER BANDS AND THRUST BLOCKING SHALL BE INSTALLED ON WATERMANS AT ALL BENDS, FITTINGS, TEES, ELBOWS, ETC. "MEGA-LUG" RESTRAINED JOINTS ARE REQUIRED ON ALL VALVES AND ALL FITTINGS. THE COST FOR THIS WORK SHALL BE INCIDENTAL TO THE UNIT PRICE FOR THE PIPE AND FITTINGS.
- HORIZONTAL SEPARATION
 - WATERMANS SHALL BE LAID AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, OR SEWER SERVICES CONNECTION.

- ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.
 - CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED BY THE VILLAGE OF ARLINGTON HEIGHTS.
 - WATERMANS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) REQUIREMENTS, AS SPECIFIED IN THE STANDARDS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.
 - NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE, EXCEPT UNDER SPECIAL CIRCUMSTANCES AND THEN ONLY UNDER THE FOLLOWING RULES:
 - IF NECESSARY PERMISSION SHALL BE OBTAINED FROM THE VILLAGE OF ARLINGTON HEIGHTS IN WRITING PRIOR TO BEGINNING CONSTRUCTION.
 - THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18 INCHES ABOVE THE BOTTOM OF THE SANITARY SEWER.
 - ALL SANITARY MANHOLES (AND STORM MANHOLES IN COMBINED SEWER AREAS) SHALL HAVE A MINIMUM OF 18 INCHES ABOVE THE GROUND SURFACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPERLY PREPARED AND THAT THE FINISHED TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS, UNLESS THE CONTRACTOR ADVISES THE ENGINEER IN WRITING PRIOR TO THE GRADING FOR BASE COURSE CONSTRUCTION. IT IS UNDERSTOOD THAT THE CONTRACTOR HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.
 - FRAME AND LIDS: SEE DETAILS FOR ALL SANITARY SEWER MANHOLE FRAMES AND LIDS. THE LIDS SHALL HAVE RECESSED (CONCEALED) PICK HOLE AND BE SELF-SEALING WITH AN "O" RING GASKET. THE LIDS SHALL HAVE THE WORD "SANITARY" EMBOSSED ON THE SURFACE. THE JOINTS BETWEEN THE FRAME AND CONCRETE SECTION SHALL BE SEALED WITH A BUTYL ROPE.
 - A MAXIMUM OF TWELVE (12) INCHES OF CONCRETE-ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. RINGS SHALL BE SEALED TOGETHER WITH BUTYL ROPE.
 - CLEANING: ALL MANHOLES AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VISIBLE LEAKAGE ELIMINATED. BEFORE FINAL INSPECTION AND ACCEPTANCE.
 - TESTING: DEFLECTION, AIR, AND LEAKAGE TESTING WILL BE REQUIRED. THE PROCEDURE AND ALLOWABLE TESTING LIMITS SHALL BE IN ACCORDANCE WITH THE STANDARDS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS.
 - TESTING THE ALIGNMENT/STRAIGHTNESS SHALL BE IN ACCORDANCE WITH THE VILLAGE OF ARLINGTON HEIGHTS CODE.
 - TELEVISION: IF REQUIRED BY THE VILLAGE OF ARLINGTON HEIGHTS, ALL SANITARY SEWERS SHALL BE TELEVIEWED, AND A COPY OF THE TAPE AND A WRITTEN REPORT SHALL BE SUBMITTED AND REVIEWED BY AN INDEPENDENT LABORATORY BEFORE INSTALLATION OF PVC PLASTIC PIPE. TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD METHOD OF TEST FOR "EXTERNAL LOADING PROPERTIES OF PLASTIC PIPE" (ASTM D2412). PRE-APPROVED BY THE ENGINEER AND THE VILLAGE OF ARLINGTON HEIGHTS. THE USED TESTS SHALL ALSO BE CONDUCTED TO DEMONSTRATE JOINT PERFORMANCE AT FIVE (5) PERCENT MAXIMUM DIAMETRIC DEFLECTION OF THE SPIGOT.
 - CONTRACTOR SHALL VERIFY THAT THE TESTING METHODS DESIGNATED HEREIN ARE ACCEPTABLE TO THE LOCAL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.
- ### STORM SEWER NOTES
- STORM SEWER PIPE: ALL STORM SEWER PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN, UNLESS OTHERWISE NOTED ON THE PLANS. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE PIPE, CONFORMING TO ASTM C76. SIZE AND TYPE MUST BE APPROVED BY THE ENGINEER AND THE VILLAGE OF ARLINGTON HEIGHTS PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL STORM SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

PIPE SIZE	CODE	PIPE MATERIAL
12" - 60"	RCP	REINFORCED CONCRETE PIPE (ASTM C76); SEE IDOT SPECS FOR PIPE CLASS
3" - 12"	PVC	POLYVINYL CHLORIDE PLASTIC PIPE SDR-26 (ASTM D3034 AND D2241)
12" - 48"	DIP	DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)
 - BAND-SEAL OR SIMILAR COUPLING SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS.
 - ALL FOOTING DRAIN DISCHARGE PIPES AND DOWN SPOUTS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
 - CONSTRUCTION: ALL STORM SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.
 - COVER: THE CONTRACTOR SHALL MAINTAIN AT LEAST TWO (2) FEET OF COVER OVER THE TOP OF SHALLOW PIPES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL MOUND OVER ANY PIPES THAT HAVE LESS THAN TWO (2) FEET OF COVER DURING CONSTRUCTION UNTIL THE AREA IS FINAL FINISHED GRADE.
 - STRUCTURES: MANHOLE, CATCH BASIN, AND INLET BOTTOMS SHALL BE PRECAST CONCRETE SECTIONAL UNITS OR MONOLITH CONCRETE. MANHOLES AND CATCH BASINS SHALL BE A MINIMUM OF FOUR (4) FEET IN DIAMETER UNLESS OTHERWISE SPECIFIED ON THE PLANS. STRUCTURE JOINTS SHALL BE SEALED WITH "O" RING OR BUTYL ROPE. A MAXIMUM OF TWELVE (12) INCHES OF ADJUSTING RINGS SHALL BE USED.
 - A CONCRETE BENCH TO DIRECT FLOWS SHALL BE CONSTRUCTED IN THE BOTTOM OF ALL INLETS AND MANHOLES.
 - THE FRAME, GATE, AND/OR CLOSED LID SHALL BE CAST IRON OF THE STYLE SHOWN ON THE PLANS.
 - CLEANING: THE STORM SEWER SYSTEM SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING.
 - THE STORM SEWER SHALL BE TELEVIEWED IF REQUIRED BY THE VILLAGE OF ARLINGTON HEIGHTS.
 - MANHOLES, CATCH BASINS, INLETS, FRAMES, GRATES, AND OTHER STRUCTURES SHALL BE CONSTRUCTED OF THE TYPE, STYLE, AND SIZE AS SET FORTH WITH THE ORDINANCES AND STANDARDS OF THE V



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PROJECT NAME:

VILLAGE SUBMITTAL

CHURCH ADDITION AND RENOVATION

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FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:

MWRD GENERAL NOTES

RESUBMITTED 11/30/17

PROJECT NO.: 168144008 DATE: 10/5/17

C1.1

A. REFERENCED SPECIFICATIONS 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS: * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION; * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION; * VILLAGE OF _____ MUNICIPAL CODE; * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL; * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION. B. NOTIFICATIONS 1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055). 2. THE VILLAGE OF _____ ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE. 3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123. C. GENERAL NOTES 1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS _____ FT. 2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS. 3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT. 4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS. 5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS. 6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR. 7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER. 8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES. 9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION. 10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT. D. SANITARY SEWER 1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS. 2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED. 3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD. 4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION). 5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM. 6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM. 7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:	PIPE MATERIAL VITRIFIED CLAY PIPE ASTM C-700 ASTM C-425 REINFORCED CONCRETE SEWER PIPE ASTM C-76 ASTM C-443 CAST IRON SOIL PIPE ASTM A-74 ASTM C-564 DUCTILE IRON PIPE ANSI A21.51 ANSI A21.11 POLYVINYL CHLORIDE (PVC) PIPE 6-INCH TO 15-INCH DIAMETER SDR 26 ASTM D-3034 ASTM D-3212 18-INCH TO 27-INCH DIAMETER F/DY=46 ASTM F-679 ASTM D-3212 HIGH DENSITY POLYETHYLENE (HDPE) ASTM D-3350 ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3035 ASTM D-3212,F-477 (GASKETED) WATER MAIN QUALITY PVC 4-INCH TO 36-INCH ASTM D-2241 ASTM D-3139 4-INCH TO 12-INCH AWWA C900 ASTM D-3139 14-INCH TO 48-INCH AWWA C905 ASTM D-3139 THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE. PIPE MATERIAL PIPE SPECIFICATIONS JOINT SPECIFICATIONS POLYPROPYLENE (PP) PIPE 12-INCH TO 24-INCH DOUBLE WALL ASTM F-2736 D-3212, F-477 30-INCH TO 60-INCH TRIPLE WALL ASTM F-2764 D3212, F-477 8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼" TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC. 9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS. 10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID. 11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED: a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE. b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION. c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE. 12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED. 13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED. 14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE. 15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. 16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG. 17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS. 18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.	E. EROSION AND SEDIMENT CONTROL 1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN. 2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE. 3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL. 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES. 5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM: a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE. b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION. 6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES. 7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. 8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE. 9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES. 10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS. 12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS. 13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT). 14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED. 15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS. 16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET. 17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES. 18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES. 19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES. 20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM. 21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES. 22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED. 23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION. 24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.
	TECHNICAL GUIDANCE MANUAL MWRD GENERAL NOTES	07/12/2016 STD. DWG. NO.18 PAGE NO. 19



NOT TO SCALE &
FOR REFERENCE ONLY

LEGEND:

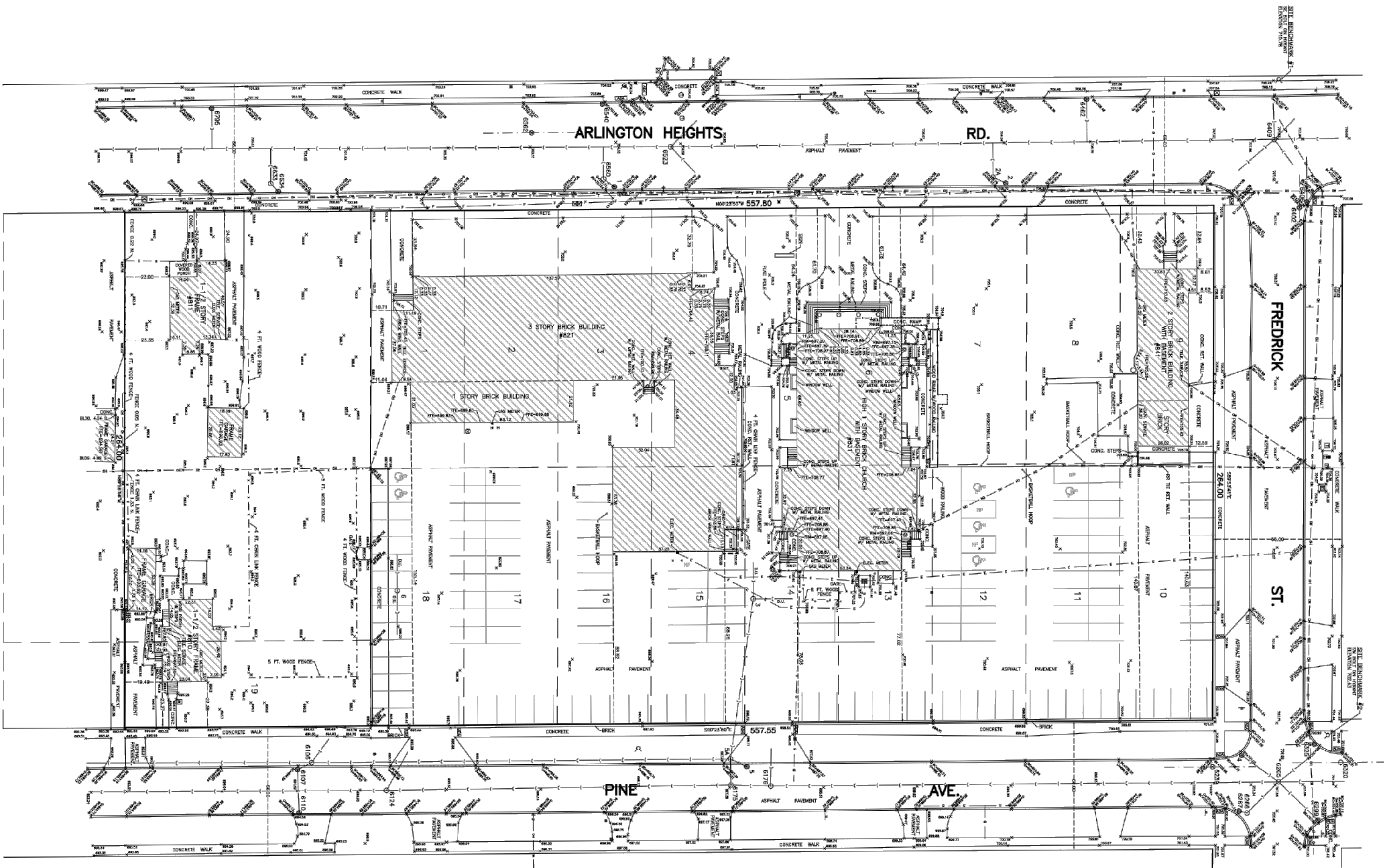
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|---|-----------------------------------|-----------------------------|
| ① | Machine | Telephone Vault |
| ② | Storm Call Break/Pick | Electric Vault |
| ③ | Water Flow Stop | Mobility |
| ④ | Water Valve | Underground |
| ⑤ | Light Pipe | Underground Electric Lines |
| ⑥ | Lamp | Pay Point Readings |
| ⑦ | Traffic Sign | Underground Gas Lines |
| ⑧ | Utility Pole/Wormed Wire | Underground Telephone Lines |
| ⑨ | Utility Pole/Walked Overhead Wire | Pay Point Readings |
| ⑩ | Author for Power Pole | Depressed Curb |
| ⑪ | Traffic Signal Pole | No Parking |
| ⑫ | Electric Vault | Pay Point Readings |
| ⑬ | Concrete Traffic Post | ADA Handle Sign |
| ⑭ | Storm Out | Risk of Curb Elevation |
| ⑮ | Open Valve | Quarter Elevation |
| ⑯ | Gas Valve | Hard Surface Elevation |
| ⑰ | Telephone Machine | Ground Elevation |
| ⑱ | Telephone Paved/Box | |

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SURVEY (BY
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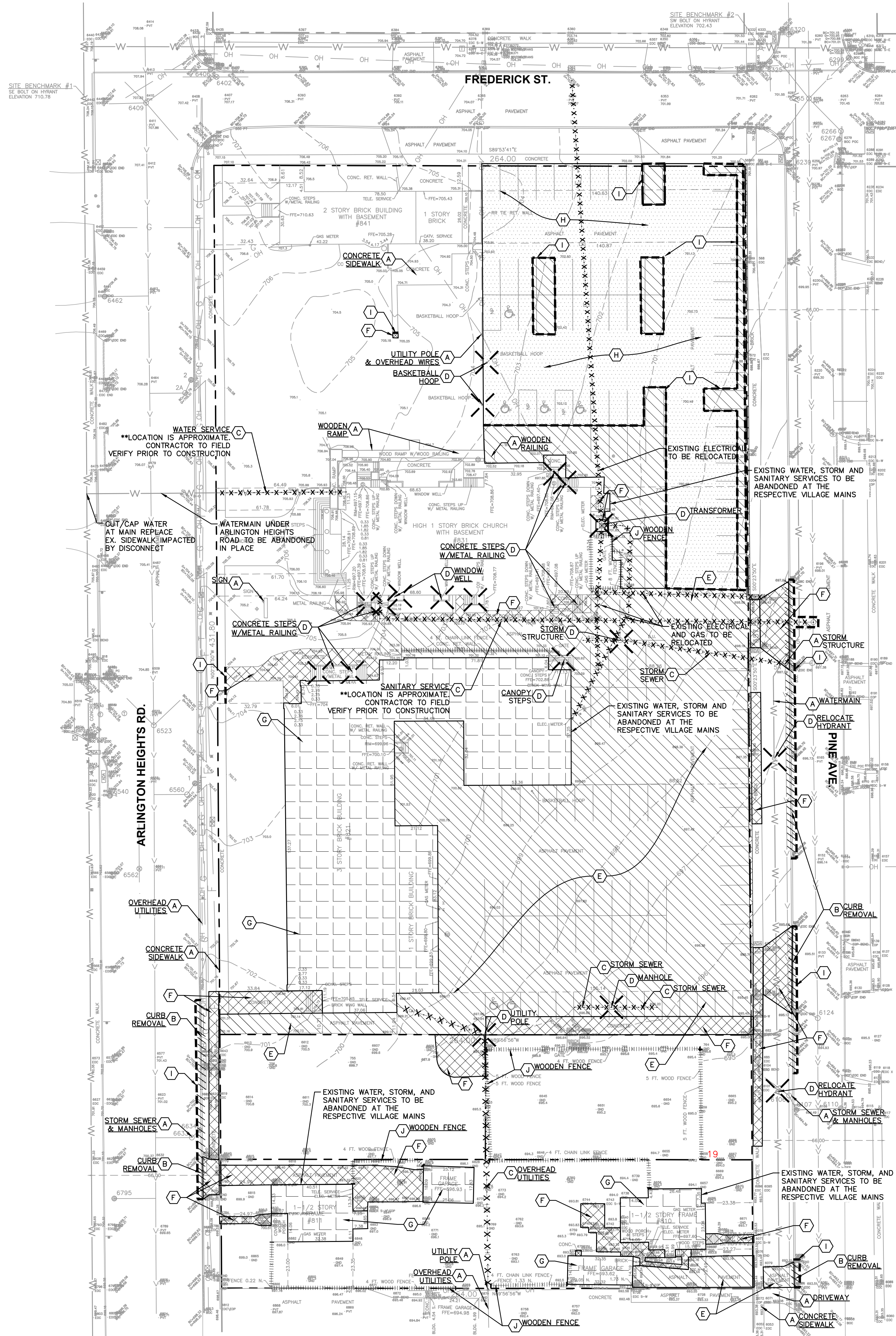
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PAGE: 1 OF 1
ORDER NO.: 170148
FILE: 29-42-11
PROJECT NO.: 2261

REFERENCE BENCHMARK: VILLAGE OF ARLINGTON HEIGHTS BENCHMARK NO. 42, SQUARE CUT ON 7TH EAST SIDE OF A FLAG POLE CONCRETE BASE, OPPOSITE TRANS AMERICA INSURANCE BUILDING, 51.9° FROM THE SOUTHEAST CORNER OF BUILDING AND 32.0° FROM NORTH-EAST CORNER OF BUILDING, 58.8° WEST OF THE CENTRELINE OF ARLINGTON HEIGHTS ROAD AND 196.1° NORTH OF THE CENTRELINE OF OAKTON STREET. ELEVATION = 698.45 (NAD 1983). SEE DRAWING FOR SITE BENCHMARKS.

VALID ONLY WITH EMBOSSED SEAL



DEMOLITION LEGEND	
(A)	ITEM TO REMAIN, PROTECT DURING CONSTRUCTION
(B) ////	CURB REMOVAL
(C) X-X	UTILITY REMOVAL
(D) X	ITEM TO BE REMOVED
(E) [Hatched Box]	FULL-DEPTH ASPHALT PAVEMENT REMOVAL
(F) [Cross-hatched Box]	CONCRETE REMOVAL
(G) [Diagonal Hatched Box]	BUILDING REMOVAL
(H) [Dashed Box]	ASPHALT 1.5" MILL
(I) [Thick Dashed Line]	SAWCUT LINE
(J) [Dotted Line]	FENCE REMOVAL

DEMOLITION NOTES

GENERAL DEMOLITION NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
- 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.
- 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.
- 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.
- 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.
- CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS SHEET.
- QUANTITIES DEPICTED ON THIS SHEET SHALL SERVE AS A GUIDE ONLY. CONTRACTOR TO VERIFY ALL DEMOLITION QUANTITIES.
- PRIOR TO BIDDING AND CONSTRUCTION, CONTRACTOR TO REFER TO OWNER PROVIDED PHASE I ENVIRONMENTAL SITE ASSESSMENT AND ASBESTOS REPORT FOR SITE SPECIFIC CONDITIONS AND CONSIDERATIONS.
- 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
- EROSION CONTROL MUST BE ESTABLISHED PRIOR TO ANY WORK ON SITE INCLUDING DEMOLITION. REFER TO SHEET C4.0
- REFER TO GEOTECHNICAL REPORT PROVIDED BY OTHERS FOR ALL SUBSURFACE INFORMATION.

DEMOLITION NOTES

THE EXTENT OF SITE DEMOLITION WORK IS AS SHOWN ON THE CONTRACT DOCUMENTS AND PROPOS SPECIFICATIONS HEREIN. SEE ARCHITECTURAL DRAWINGS FOR LIMITS AND PROPER DEMOLITION OF EXISTING BUILDING. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICE NECESSARY TO COMPLETE THE WORK. DEMOLITION INCLUDES, BUT IS NOT LIMITED TO, REMOVAL AND DISPOSAL OFFSITE OF THE FOLLOWING ITEMS:

- SIDEWALK AND ON-SITE PAVEMENT
- BUILDINGS, FOUNDATIONS, AND SUPPORTING WALLS AND SLABS
- DEBRIS AND FOUNDATIONS FROM ALL DEMOLISHED STRUCTURES
- ALL PAVEMENT TO BE REMOVED ADJACENT TO PAVEMENT THAT IS TO REMAIN SHALL BE SAWCUT FULL DEPTH AT THE EDGES PRIOR TO REMOVAL TO OBTAIN A "CLEAN" JOINT WHERE IT ABUTS NEW CURB OR PAVEMENT.

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.

DISPOSAL OF DEMOLISHED MATERIALS

REMOVE FROM SITE DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. BURNING OF REMOVED MATERIALS FROM DEMOLISHED STRUCTURES WILL NOT BE PERMITTED ON SITE. TRANSPORT MATERIALS REMOVED FROM DEMOLISHED STRUCTURES AND DISPOSE OF OFF SITE IN A LEGAL MANNER.

LANDSCAPE PROTECTION AND REMOVAL

SEE LANDSCAPE PLANS FOR INFORMATION ON LANDSCAPE AND TREE PROTECTION, PRESERVATION AND REMOVAL.

UTILITY SERVICES

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.

UTILITY PROTECTION

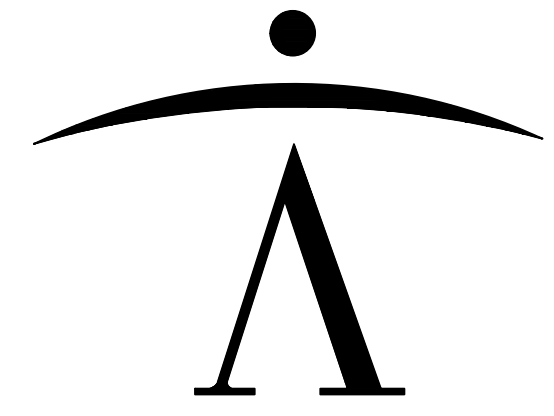
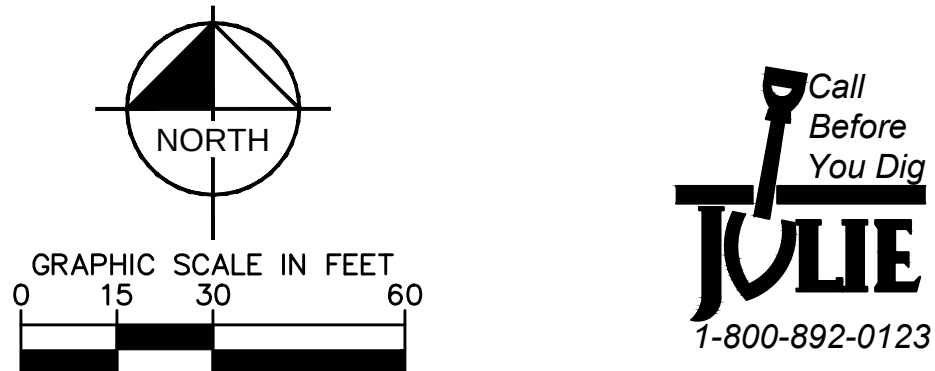
UNDERGROUND UTILITIES SHOWN ARE BASED ON ATLASES AND AVAILABLE INFORMATION PRESENTED AT THE TIME OF SURVEY. CONTRACTOR SHOULD CALL JULIE (1-800-892-0123) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES 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.

POLLUTION CONTROLS

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.

FILLING BASEMENTS AND VOIDS

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.



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PROJECT NAME:
VILLAGE SUBMITTAL
**CHURCH ADDITION
AND RENOVATION**
831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH
AND
THE ARCHDIOCESE OF CHICAGO

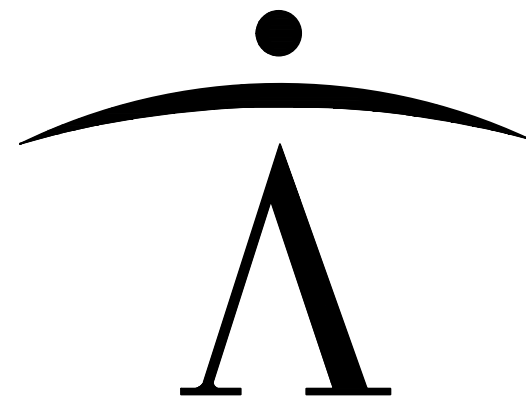
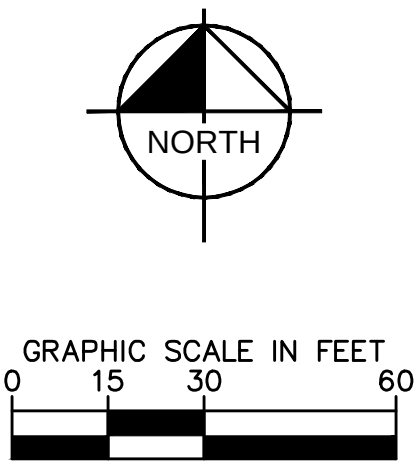
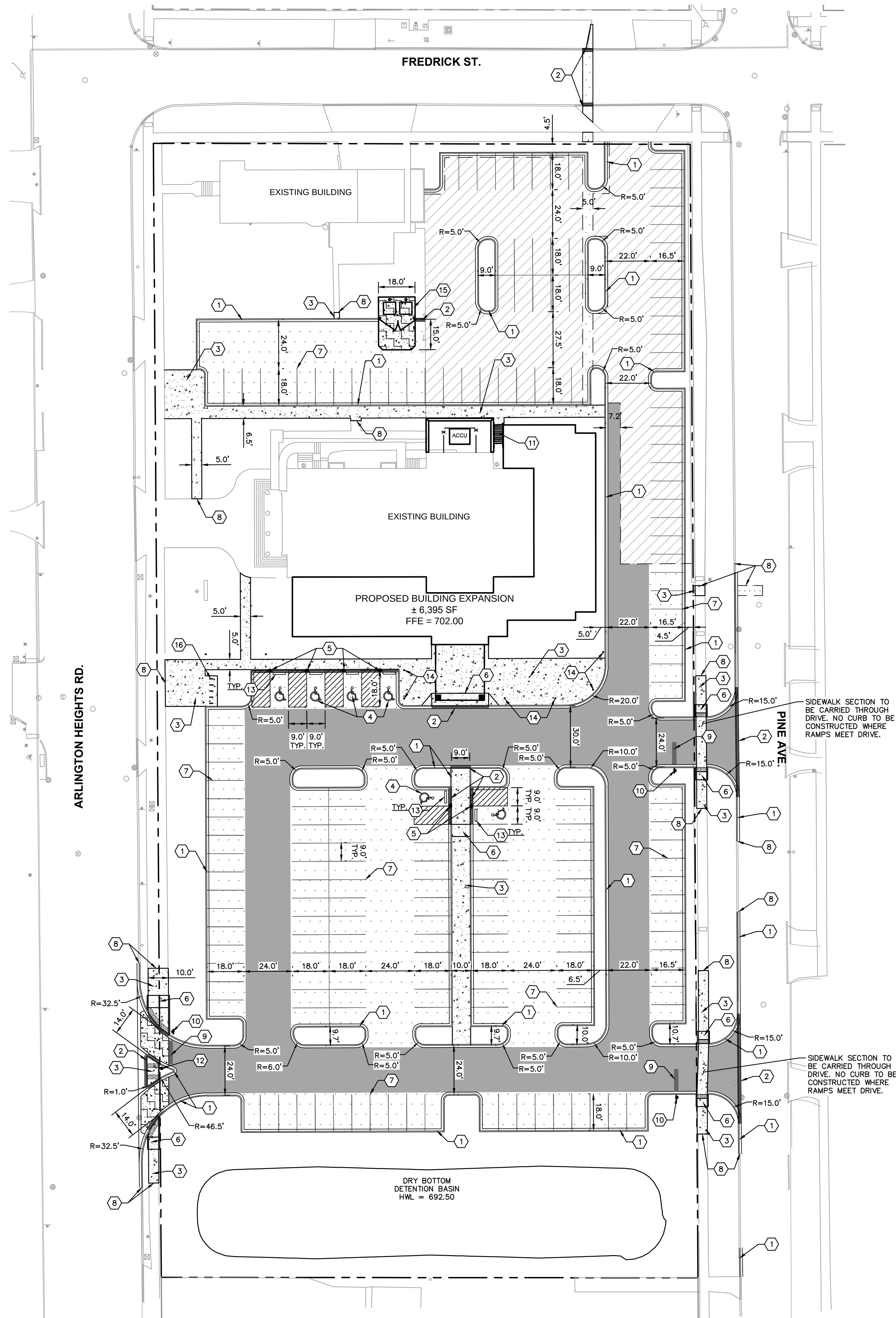
DRAWING TITLE:

**EXISTING
CONDITIONS &
DEMOLITION
PLAN**

RESUBMITTED 11/30/17

PROJECT NO.: 168144008 DATE: 10/5/17

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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) ACCESSIBLE RAMP (SEE DETAILS)
- 7) 4" WIDE PAINTED WHITE SOLID LINE, TYP.
- 8) CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
- 9) 24" WIDE STOP BAR, TYP. (SEE DETAILS)
- 10) STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
- 11) PROPOSED STAIRS (SEE ARCHITECTURAL PLANS)
- 12) NO LEFT TURN SIGN (MUTCD R3-2)
- 13) WHEEL STOP (SEE DETAILS)
- 14) ILLUMINATED LIGHT POST (SEE ARCHITECTURAL PLANS)
- 15) TRASH ENCLOSURE
- 16) BIKE RACKS (SEE ARCHITECTURAL PLANS)

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.

PAVING AND CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT
SEE DETAIL THIS SHEET FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT
SEE DETAIL THIS SHEET FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT
SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
*SEE ARCHITECTURAL PLANS FOR SCOURING PATTERN
- CONCRETE SIDEWALK
SEE DETAIL THIS SHEET FOR PAVEMENT SECTION
*SEE ARCHITECTURAL PLANS FOR SCOURING PATTERN
- 1.5" STANDARD DUTY ASPHALT MILL & OVERLAY
VARIABLE DEPTH, SEE DETAILS
- STANDARD PITCH CONCRETE CURB AND GUTTER
- REVERSE PITCH CONCRETE CURB AND GUTTER
- CONCRETE DEPRESSED CURB AND GUTTER

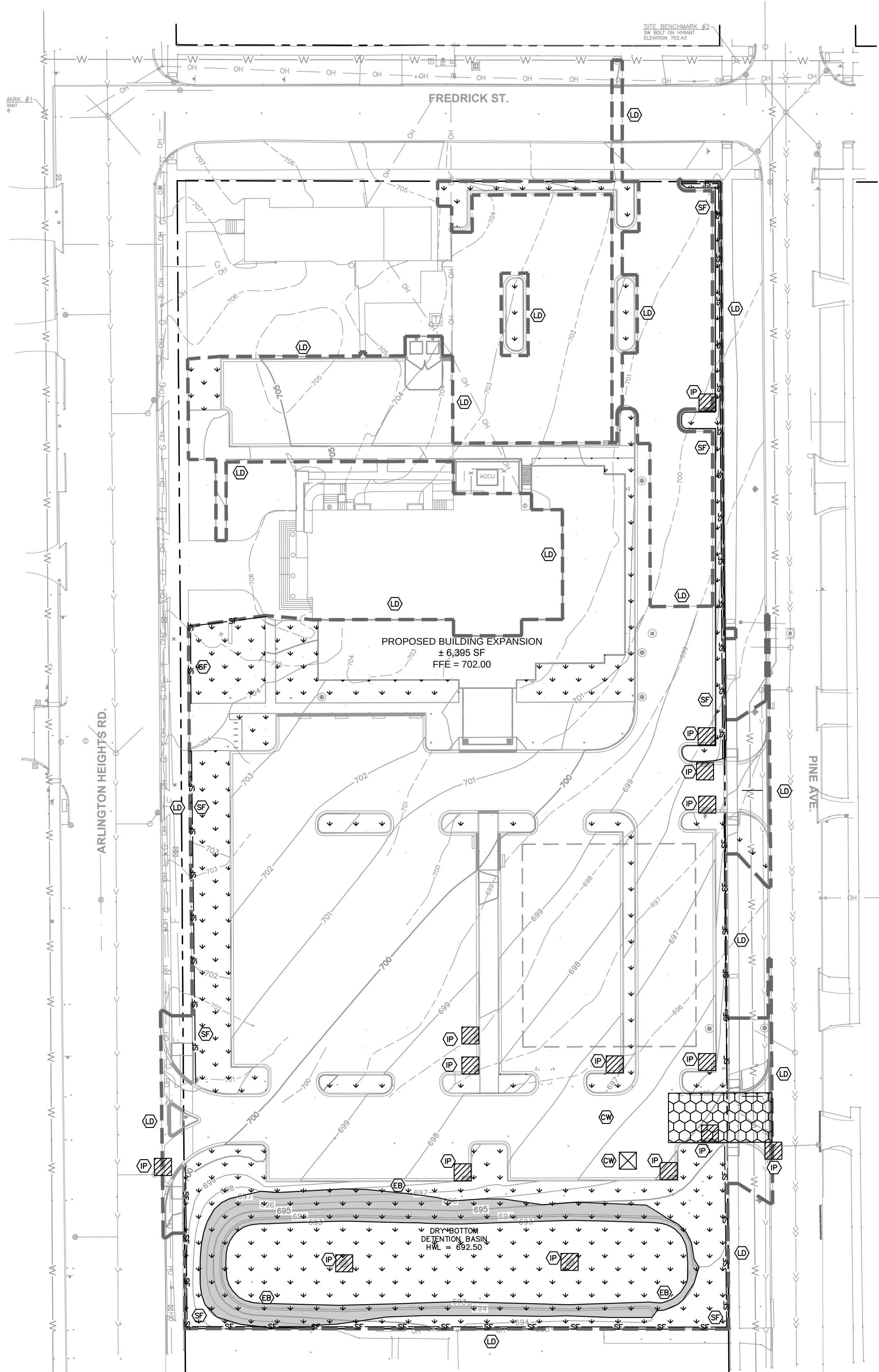
PARKING SUMMARY

STANDARD PARKING SPACES PROVIDED	= 179 SPACES
ACCESSIBLE PARKING SPACES REQUIRED	= 6 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	= 6 SPACES
TOTAL PARKING SPACES PROVIDED	= 185 SPACES

SITE PLAN

RESUBMITTED 11/30/17
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C3.0



EROSION CONTROL SCHEDULE AND SEQUENCING:

I. ROUGH GRADING	CONSTRUCTION ENTRANCE/EXIT, SILT FENCE PROTECTION, CONCRETE WASHOUT AREA AND TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE INITIATION OF ROUGH GRADING, AS NEEDED. TEMPORARY EROSION CONTROL MEASURES TO BE INSTALLED UPON COMPLETION OF ROUGH GRADING AND AS NECESSARY THROUGHOUT CONSTRUCTION.
II. UTILITY INSTALLATION	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING UTILITY INSTALLATION. STORM STRUCTURE INLET PROTECTION SHALL BE INSTALLED AS STORM DRAINAGE SYSTEM IS CONSTRUCTED.
III. PAVING	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING PAVING AND THROUGHOUT THE REMAINDER OF THE PROJECT.
IV. FINAL GRADING/SOIL STABILIZATION/LANDSCAPING	ALL TEMPORARY EROSION CONTROL MEASURES TO BE REMOVED AT THE CONCLUSION OF THE PROJECT AS DIRECTED BY THE LOCAL MUNICIPALITY.

Call Before You Dig
1-800-892-0123

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

EROSION CONTROL NOTES

- CONSTRUCTION ENTRANCE SHALL BE LOCATED SO AS TO PROVIDE THE LEAST AMOUNT OF DISTURBANCE TO THE FLOW OF TRAFFIC IN AND OUT OF THE SITE. ADDITIONALLY, CONSTRUCTION ENTRANCE SHALL BE LOCATED TO CONFORM WITH THE PHASING OF THE PAVEMENT REPLACEMENT.
- POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE STABILIZATION BY PERMANENT PAVING, DRAINAGE SYSTEM STRUCTURE, OR LANDSCAPING.
- TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
- BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE, SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.
- THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
- ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST, OR ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY THE PLANNING AND DEVELOPMENT DEPARTMENT AND THE DRAINAGE UTILITY DEPARTMENT. MINOR CHANGES OR ADDITIONAL CONTROL MEASURES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL PLACE EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL) ON ALL SITE AREAS WITH SLOPES GREATER THAN 4:1, AND IN THE BOTTOM AND SIDE SLOPES OF ALL SWALES.
- PRIOR TO FINAL ACCEPTANCE, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
- PERMANENT, FINAL PLANT COVERING OR STRUCTURES SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE.
- ALL CONTROL DEVICES THAT FUNCTION SIMILARLY TO SILT FENCE OR FIBER ROLLS MUST BE REPAIRED, REPLACED OR SUPPLEMENTED WITH EFFECTIVE CONTROLS WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-THIRD THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE WITHIN 24 HOURS OF THE RAINFALL EVENT OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- ALL SEDIMENT DELTAS AND DEPOSITS MUST BE REMOVED FROM SURFACE WATERS, DRAINAGEWAYS, CATCH BASINS AND OTHER DRAINAGE SYSTEMS. ALL AREAS WHERE SEDIMENT REMOVAL RESULTED IN EXPOSED SOIL MUST BE RESTABILIZED. THE REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS AFTER THE RAINFALL EVENT UNLESS PRECLUDED BY LEGAL, REGULATORY OR PHYSICAL ACCESS CONSTRAINTS. ALL REASONABLE EFFORTS MUST BE USED TO OBTAIN ACCESS. ONCE ACCESS IS OBTAINED, REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS LATER. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AUTHORITIES AND RECEIVING THE APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.
- ACCUMULATIONS OF TRACKED AND DEPOSITED SEDIMENT MUST BE REMOVED FROM OFF-SITE PAVED SURFACES WITHIN 24 HOURS OR SOONER IF REQUIRED. SEDIMENT TRACKING MUST BE MINIMIZED BY THE APPROPRIATE MANAGEMENT PRACTICE, LIKE A DEDICATED SITE EXIT WITH AN AGGREGATE SURFACE OR DESIGNATED OFFSITE PARKING AREA. CONTRACTOR IS RESPONSIBLE FOR STREET SWEEPING AND/OR SCRAPING IF YOUR PRACTICES ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED FROM THE SITE.
- SURFACE WATERS, DRAINAGE DITCHES AND CONVEYANCE SYSTEMS MUST BE INSPECTED FOR SEDIMENT DEPOSITS.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS INDICATED ON THIS SHEET IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPP, INCLUDING EROSION CONTROL MEASURES AND INSPECTION FREQUENCY, AS REQUIRED BY THE IEPA NPDES PHASE II PERMIT PROGRAM REQUIREMENTS.
- PUMPING SEDIMENT LADEN WATER INTO ANY STORMWATER FACILITY THAT IS NOT DESIGNATED TO BE A SEDIMENT TRAP, DRAINAGEWAY, OR OFFSITE AREA EITHER DIRECTLY OR INDIRECTLY WITHOUT FILTRATION IS PROHIBITED.
- SOIL STOCKPILES SHALL NOT BE LOCATED IN A DRAINAGEWAY, FLOOD PLAIN AREA OR A DESIGNATED BUFFER, UNLESS OTHERWISE APPROVED, UNDER SPECIFIC CONDITIONS TO BE ESTABLISHED BY THE DIRECTOR OR ADMINISTRATOR.
- STOCKPILES TO REMAIN IN PLACE FOR MORE THAN THREE DAYS SHALL BE PROVIDED WITH SESC MEASURES. MATERIAL IS TO BE HAULED OFF IMMEDIATELY AND LEGALLY IF NO STOCKPILE IS TO REMAIN IN PLACE.
- ALL TEMPORARY SESC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.
- WATER REMOVED FROM TRAPS, BASINS, AND OTHER WATER HOLDING DEPRESSIONS OR EXCAVATIONS MUST FIRST PASS THROUGH A SEDIMENT CONTROL AND/OR FILTRATION DEVICE. WHEN DEWATERING DEVICES ARE USED, DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION.
- SITE STABILIZATION REQUIREMENTS ARE AS FOLLOWS:
 - WHERE THE INITIATION OF STABILIZATION MEASURE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES ON A PORTION OF THE SITE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE.
 - WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.

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PROJECT NAME:

VILLAGE SUBMITTAL

**CHURCH ADDITION
AND RENOVATION**

831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

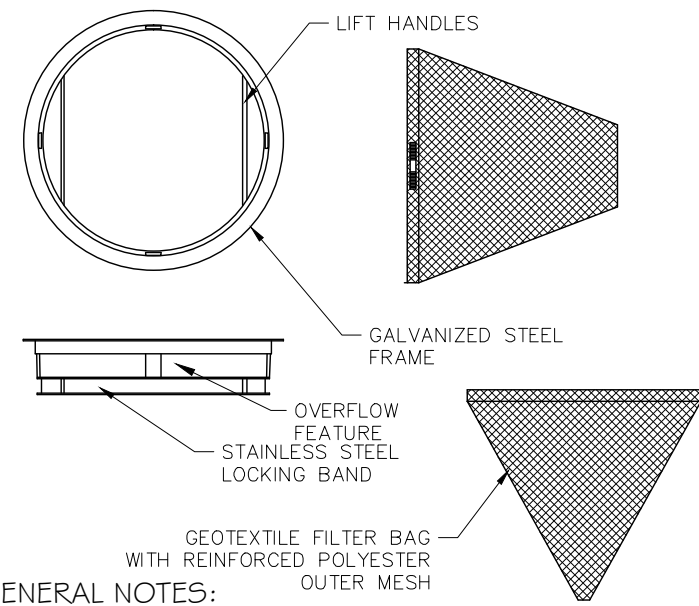
DRAWING TITLE:

EROSION CONTROL PLAN

RESUBMITTED 11/30/17

PROJECT NO.: 168144008 DATE: 10/5/17

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GENERAL NOTES:

ALL PRODUCTS MANUFACTURED BY INLET AND PIPE PROTECTION, INC OR APPROVED EQUAL.

NOTE: INLET FILTERS ARE SLIGHTLY SMALLER THAN THE INLET GRATE SIZES. WHEN IDENTIFYING OR SPECIFYING FILTERS/CASTINGS PLEASE REFER TO THE DIAMETER "D" OR WIDTH "W" AND HEIGHT "H" OF FILTER FRAMES OR CASTING GRATES. YOU MAY ALSO REFER TO OUR CASTING CROSS REFERENCE GUIDE FOR IDOT STANDARDS

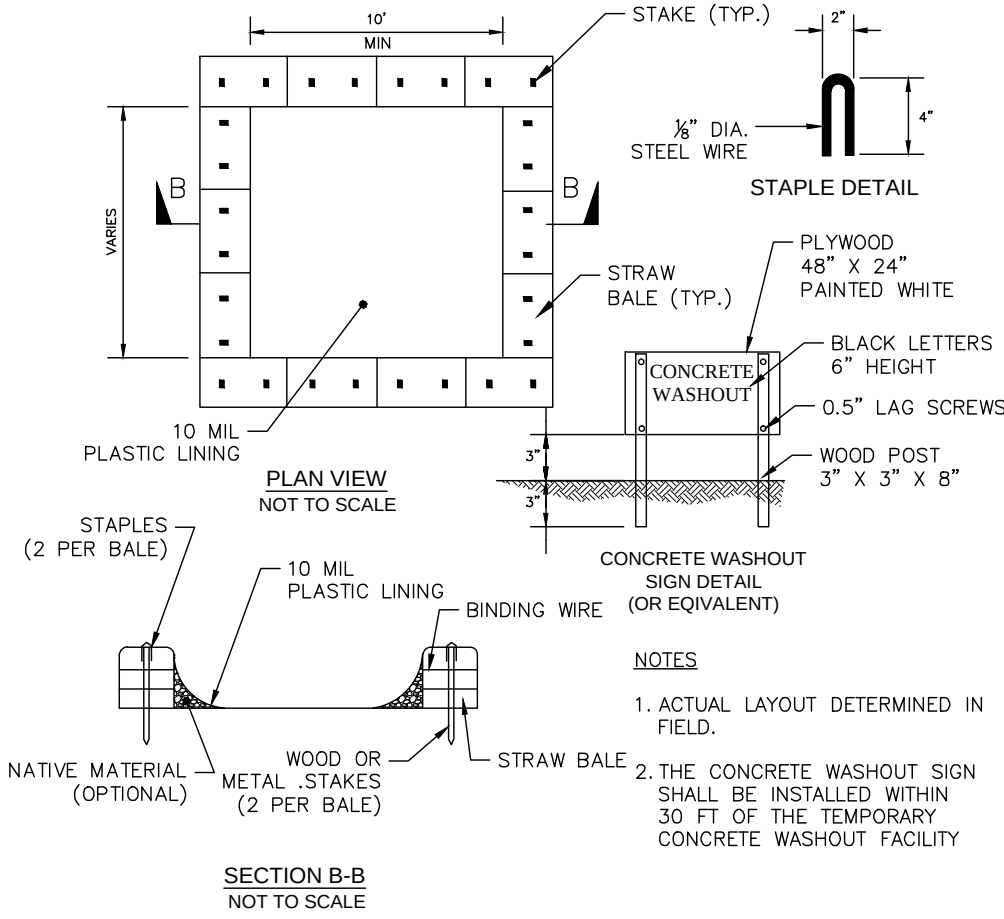
IDOT TYPE 1 ROUND INLET FILTER DEPICTED

NOTE: ROUND AND SQUARE INLET FILTERS AVAILABLE FOR MOST NEENAH AND EAST JORDAN BEEHIVE, ROLL CURB AND CURB BOX FRAME TYPES

ALL IPP INLET FILTERS TO CONFORM TO IDOT SPECIFICATIONS AS OUTLINED IN ARTICLE 1081.15 OF IDOT'S STANDARD SPECIFICATIONS GUIDE.

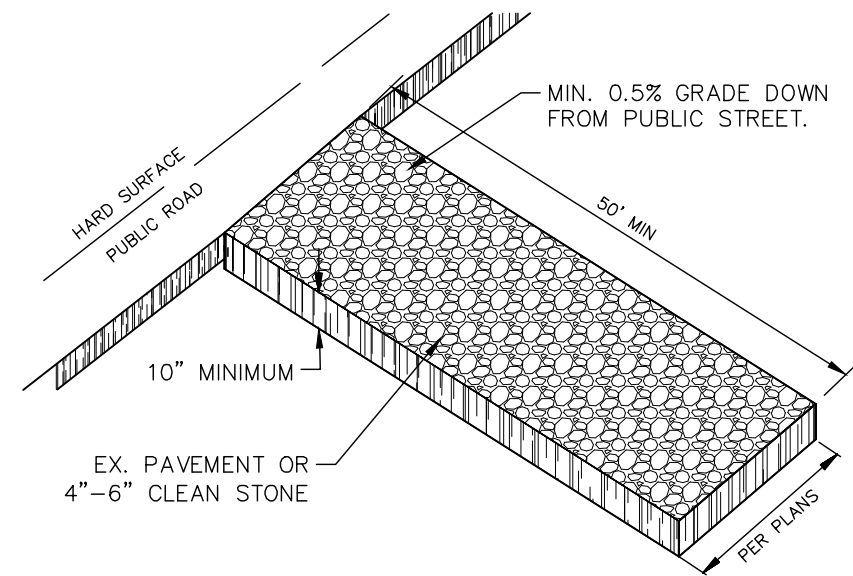
INLET PROTECTION

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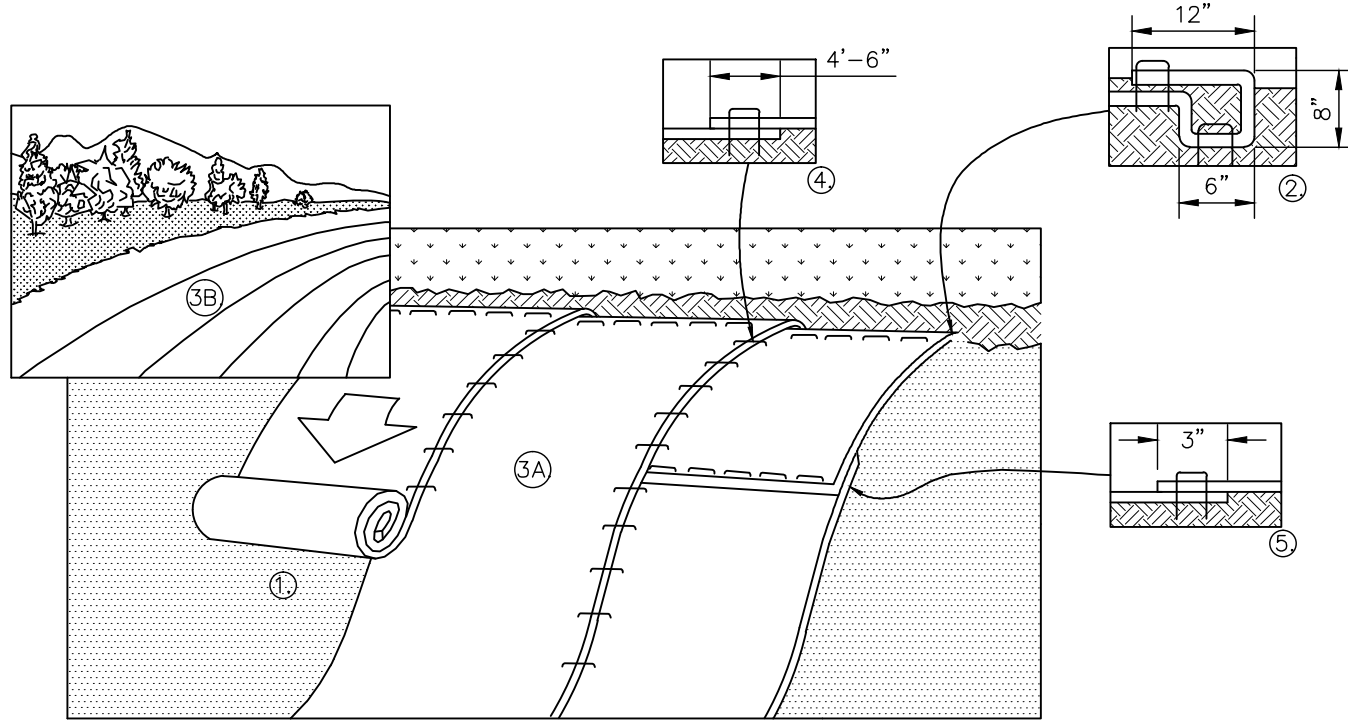
CONCRETE WASHOUT

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CONSTRUCTION ENTRANCE

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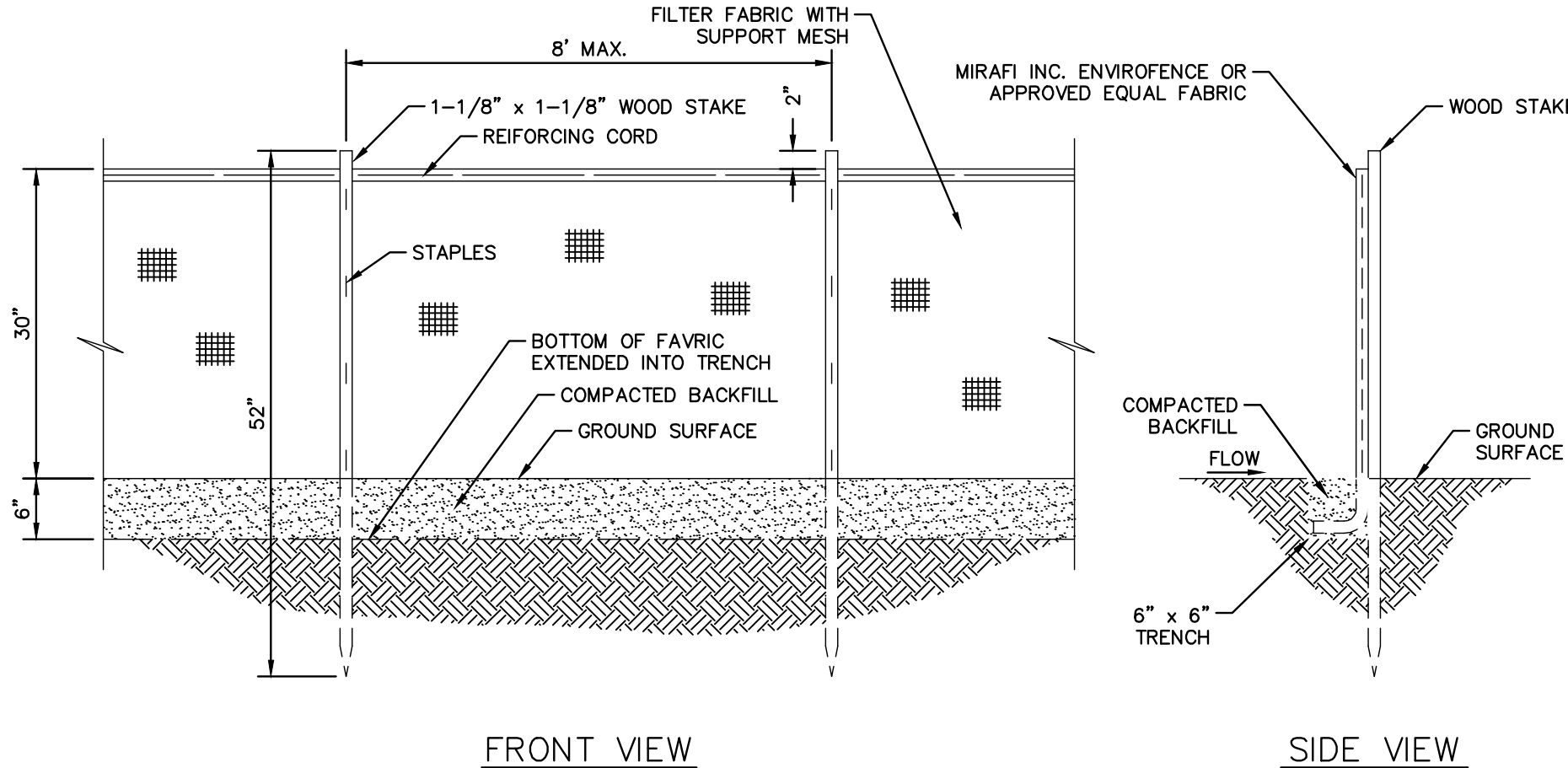


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH AS SHOWN IN DETAIL 2. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
6. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

- NOTES:
1. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
 2. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION.

EROSION CONTROL BLANKET (SLOPE INSTALLATION)

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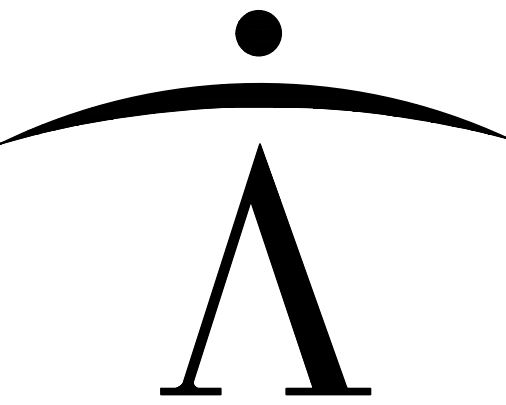


FRONT VIEW

SIDE VIEW

SEDIMENTATION/SILT FENCE

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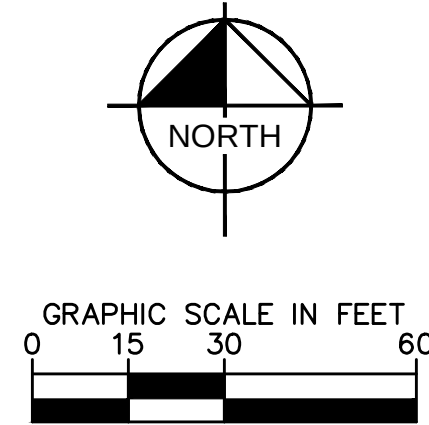
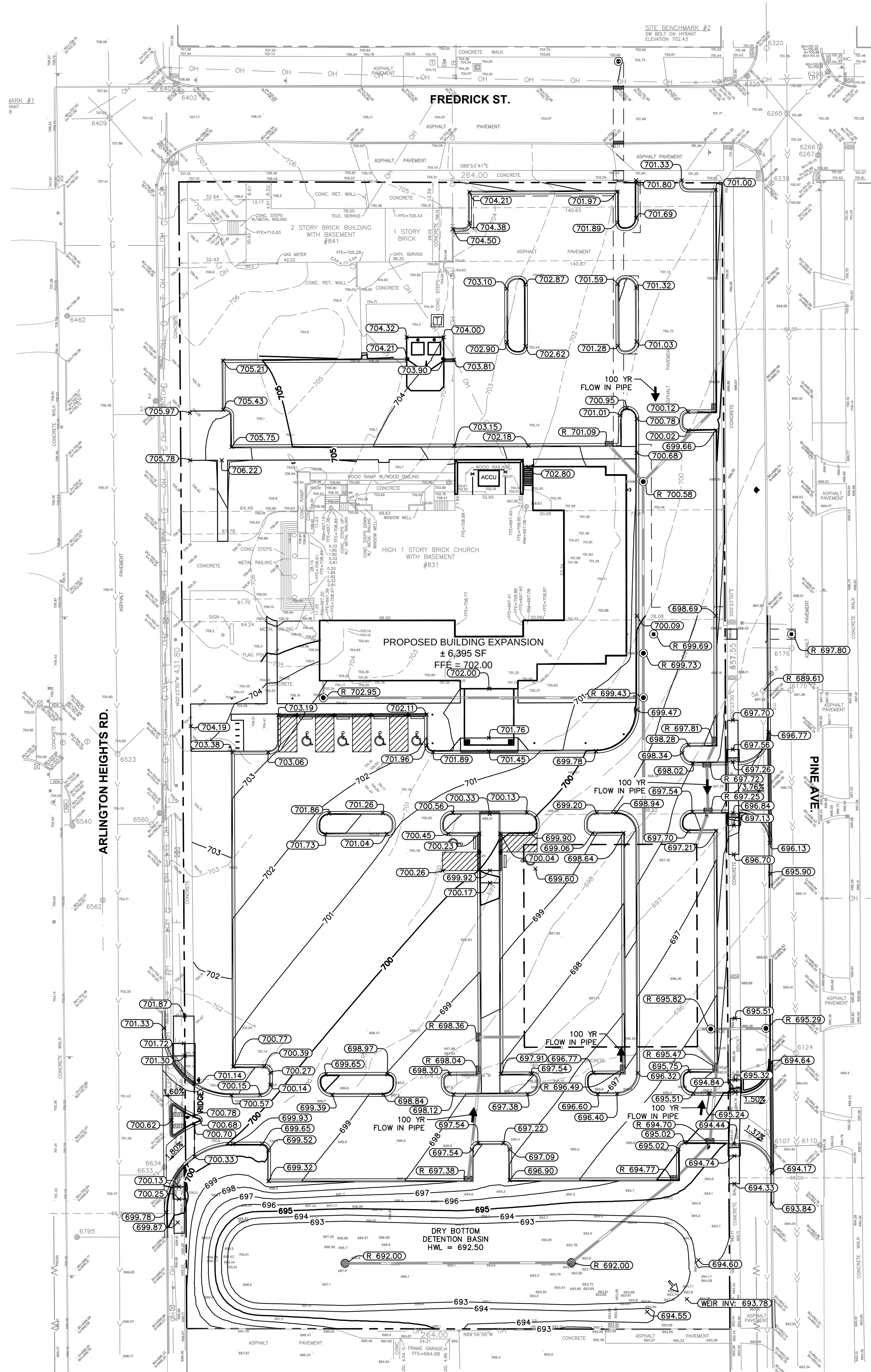
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EROSION
CONTROL
DETAILS

RESUBMITTED 11/30/17

PROJECT NO.: 168144008 DATE: 10/5/17

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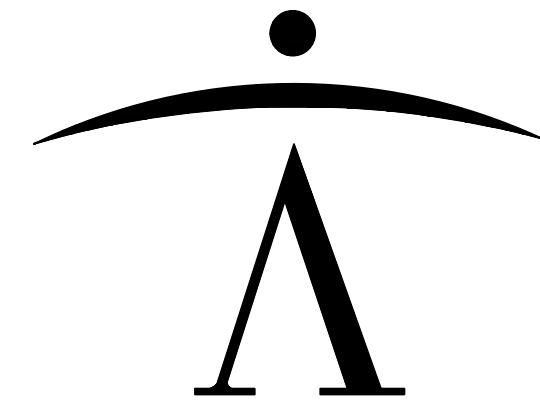


GRADING NOTES

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

- 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
- PROPOSED CONTOUR
- RIDGE LINE
- SLOPE AND FLOW DIRECTION
- 100-YEAR OVERLAND OVERFLOW ROUTE
- DETENTION BASIN 100-YEAR EMERGENCY OVERLAND OVERFLOW ROUTE
- REVERSED PITCH CURB AND GUTTER



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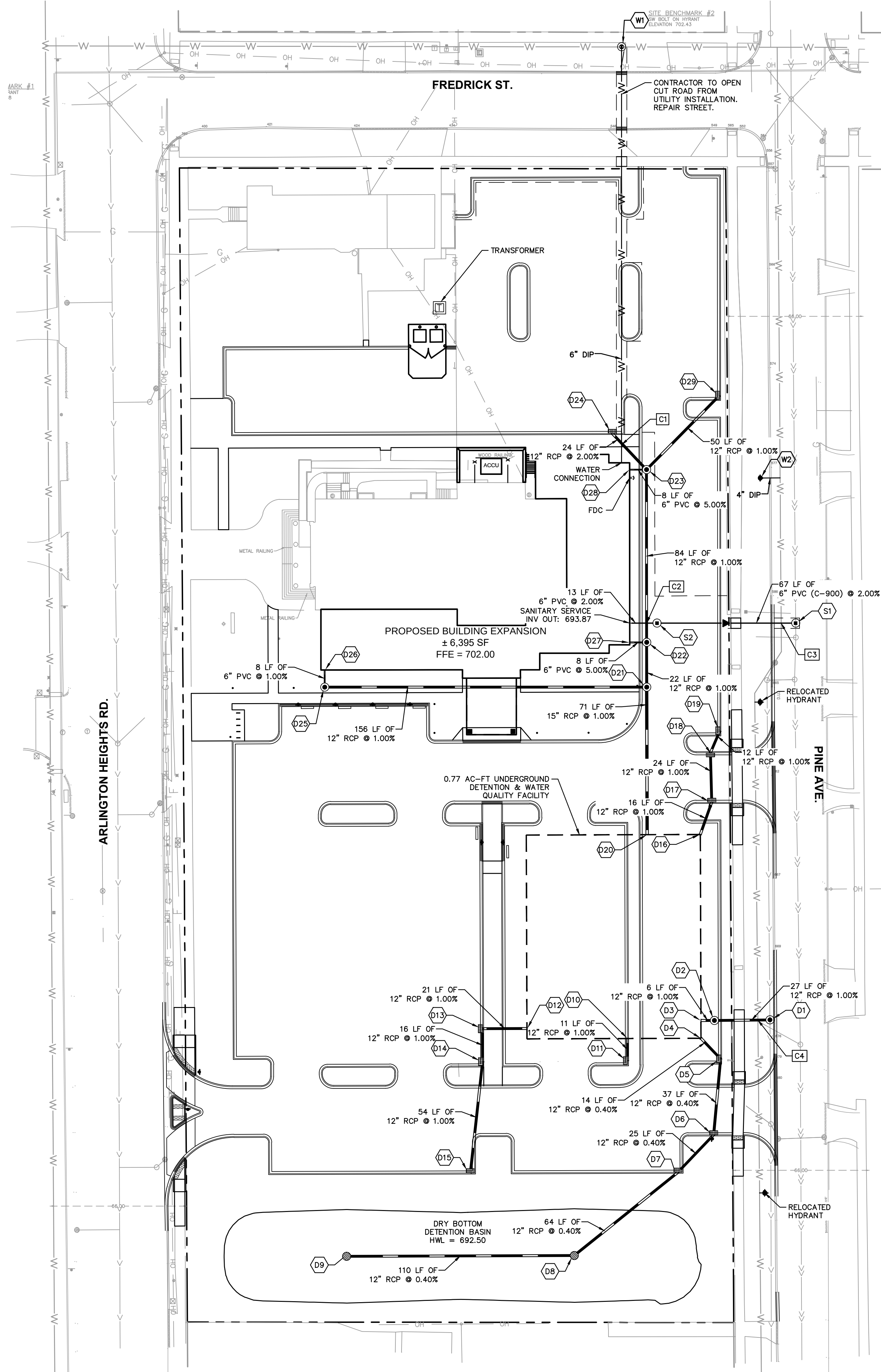
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GRADING PLAN

RESUBMITTED 11/30/17

PROJECT NO.: 168144008 DATE: 10/5/17

C5.0



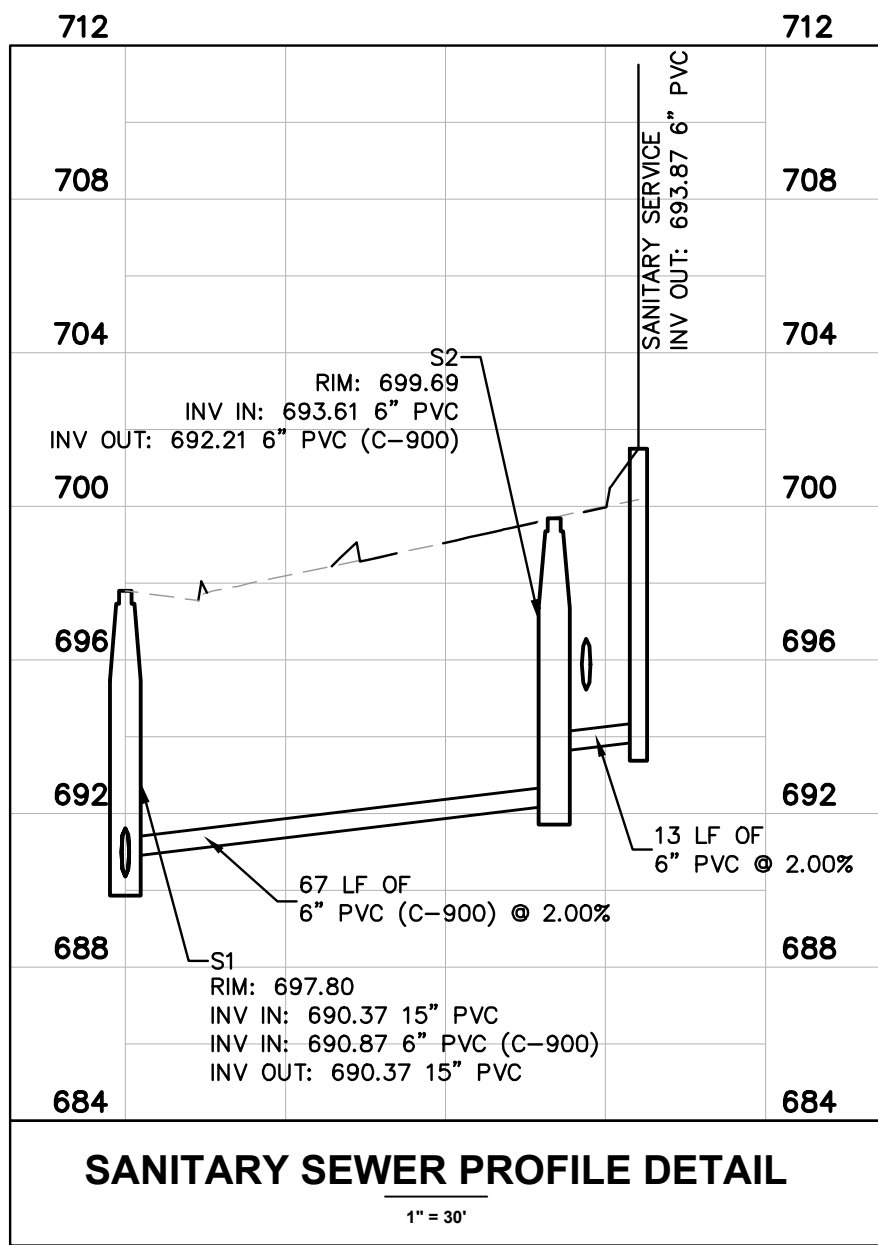
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
D1	5' DIA. STORM MH WITH DOGHOUSE CONNECTION TO EXISTING STORM SEWER. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND SIZE OF EX. SEWER PRIOR TO ORDERING MATERIALS. RIM: 685.29 INV IN: 687.23 (W) INV IN: 686.66 (N) INV OUT: 686.66 (S)
D2	5' DIA. OUTLET CONTROL STRUCTURE (SEE DETAILS) RIM: 692.82 INV IN: 688.69 (W) INV OUT: 687.50 (E)
D5	4' DIA. STORM MH RIM: 688.89 INV IN: 688.89 (S) INV OUT: 688.89 (NW)
D6	4' DIA. STORM MH RIM: 694.70 INV IN: 689.04 (SW) INV IN: 689.04 (N)
D7	4' DIA. STORM MH RIM: 694.77 INV IN: 689.14 (SW) INV OUT: 689.14 (NE)
D8	4' DIA. STORM MH RIM: 692.00 INV IN: 689.39 (W) INV OUT: 689.39 (NE)
D9	2' STORM INLET RIM: 698.84 INV OUT: 689.84 (E)
D11	2' STORM INLET RIM: 691.85 INV OUT: 691.85 (N)
D13	4' DIA. STORM MH RIM: 698.36 INV IN: 693.27 (S) INV OUT: 692.27 (E)
D14	4' DIA. STORM MH RIM: 698.04 INV IN: 693.43 (S) INV OUT: 693.43 (N)
D15	2' STORM INLET RIM: 697.38 INV OUT: 693.97 (N)
D17	4' DIA. STORM MH RIM: 697.25 INV IN: 693.94 (N) INV OUT: 691.94 (S)
D18	4' DIA. STORM MH RIM: 697.72 INV IN: 694.18 (NE) INV OUT: 694.18 (S)
D19	2' STORM INLET RIM: 697.81 INV OUT: 694.30 (SW)
D21	4' DIA. STORM MH RIM: 699.43 INV IN: 695.08 (N) INV IN: 696.85 (W) INV OUT: 693.08 (S)
D22	4' DIA. STORM MH RIM: 699.73 INV IN: 695.29 (N) INV IN: 697.09 (W) INV OUT: 695.29 (S)
D23	4' DIA. STORM MH RIM: 700.58 INV IN: 698.09 (W) INV IN: 697.01 (NW) INV IN: 696.13 (NE) INV OUT: 696.13 (S)
D24	2' STORM INLET RIM: 701.09 INV OUT: 697.49 (SE)
D25	4' DIA. STORM MH RIM: 702.95 INV IN: 698.40 (N) INV OUT: 698.40 (E)
D29	2' STORM INLET RIM: 699.80 INV OUT: 696.63 (SW)

MISC. STORM TABLE	
STRUCTURE NAME:	DETAILS:
D3	CONNECTION TO UNDERGROUND DETENTION INV OUT: 688.75 (E)
D4	CONNECTION TO UNDERGROUND DETENTION INV IN: 688.84 (SE)
D10	CONNECTION TO UNDERGROUND DETENTION INV IN: 691.74 (S)
D12	CONNECTION TO UNDERGROUND DETENTION INV IN: 692.05 (W)
D16	CONNECTION TO UNDERGROUND DETENTION INV IN: 691.78 (N)
D20	CONNECTION TO UNDERGROUND DETENTION INV IN: 692.36 (N)
D26	ROOF DRAIN CONNECTION INV OUT: 698.49 (S)
D27	ROOF DRAIN CONNECTION INV OUT: 697.50 (E)
D28	ROOF DRAIN CONNECTION INV OUT: 698.50 (E)

SANITARY STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
S1	4' DIA. SANITARY DROP MH CONNECTION TO EXISTING 12" COMBINED SEWER. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, AND SIZE OF EX. SEWER PRIOR TO ORDERING MATERIALS. RIM: 697.80 INV IN: 690.37 (N) INV IN: 690.87 (W) INV OUT: 690.37 (S)
S2	4' DIA. SANITARY MH RIM: 699.69 INV IN: 693.61 (W) INV OUT: 692.21 (E)

WATER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
W1	PRESSURE CONNECT TO EXISTING 6" WATERMAIN IN 5' VALVE VAULT. FG ELEV: 702.70
W2	FIRE HYDRANT FG ELEV: 702.00

UTILITY CROSSING LEGEND			
C1	12" STORM WATER	B/P = 697.18 T/P = 695.93	
C2	12" STORM	B/P = 695.22 T/P = 694.22	
C3	4" WATER	B/P = 691.9*	
C4	4" WATER	B/P = 689.5*	
	12" STORM	T/P = 688.39	
* EXISTING WATERMAIN ELEVATIONS ARE ASSUMED TO BE 5.5' BELOW EXISTING GRADES. CONTRACTOR TO FIELD VERIFY LOCATION, SIZE, AND DEPTH OF EXISTING WATERMAIN PRIOR TO ORDERING MATERIAL. NOTIFY ENGINEER OF ANY DISCREPANCIES.			
NOTE: WATER MAIN QUALITY PIPE IS TO BE USED TO CONSTRUCT SEWER MAIN OR WATER MAIN IS TO BE ENCASED FOR 10'-FT ON EACH SIDE OF A CROSSING WHERE THERE IS LESS THAN 18-IN SEPARATION.			



Call Before You Dig
1-800-892-0123

NORTH
GRAPHIC SCALE IN FEET
0 15 30 60

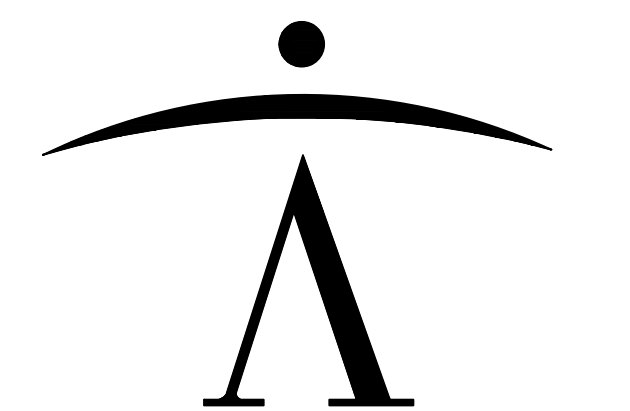
UTILITY NOTES

GENERAL UTILITY NOTES

- ALL WATER LINES $\geq$ 3" SHALL BE DUCTILE IRON PIPE, CLASS 52.
- ALL SANITARY SEWER LINES SHALL BE PVC MEETING ASTM D-3034 SDR 26 EXCEPT FOR SANITARY SEWER THAT CROSSES ABOVE WATER MAIN, THIS PIPE SHALL BE AWWA C900 (UNLESS WATER MAIN CASING IS UTILIZED). PROVIDE 42" MINIMUM COVER.
- CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
- ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
- CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
- CONTRACTOR TO 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.
- PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALLS OUT ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE MUNICIPALITY SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
- CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
- CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS DURING INSTALLATION OF UTILITIES.
- ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
- SEE ARCHITECTURAL AND MEP PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
- LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
- SEE DETAILS FOR LOCATING STORM STRUCTURES WITHIN THE CURB LINE.
- STORMWATER FACILITIES MUST BE FUNCTIONAL BEFORE BUILDING CONSTRUCTION BEGINS.
- CONTACT AND COORDINATE THE RELOCATION OF HYDRANTS WITH PUBLIC WORKS DISTRIBUTION UNIT AT 847-368-5800

UTILITY LEGEND

W	EX. WATER LINE
H	EX. HYDRANT
C	EX. COMBINED SEWER LINE
D	EX. STORM DRAIN LINE
S	EX. STORM STRUCTURE/INLET
G	EX. GAS LINE
M	EX. GAS METER
V	EX. GAS VALVE
E	EX. UNDERGROUND ELECTRIC LINE
T	EX. UNDERGROUND TELEPHONE LINE
F	EX. FIBER OPTICS LINE
L	EX. LIGHT POLE
ES	EX. ELECTRIC STRUCTURE
EL	PROPOSED UNDERGROUND ELECTRIC LINE
GL	GAS LINE (BY GAS COMPANY)
PL	PROPOSED PHONE LINE
SSL	PROPOSED STORM SEWER LINE
OS	PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
CS	PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
OC	PROPOSED OPEN LID CURB STRUCTURE (B6.12 C&G USE NEENAH R-3281-A)
SSL	PROPOSED SANITARY SEWER LINE
SM	PROPOSED SANITARY MANHOLE
SC	PROPOSED STORM/SANITARY CLEANOUT
WL	PROPOSED WATER LINE
WV	PROPOSED VALVE VAULT
WB	PROPOSED VALVE BOX
WH	PROPOSED FIRE HYDRANT
LP	PROPOSED LIGHT POLE
TP	PROPOSED TRANSFORMER PAD (BY OTHERS)



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PROJECT NAME:

VILLAGE SUBMITTAL

**CHURCH ADDITION
AND RENOVATION**

831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH

AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:

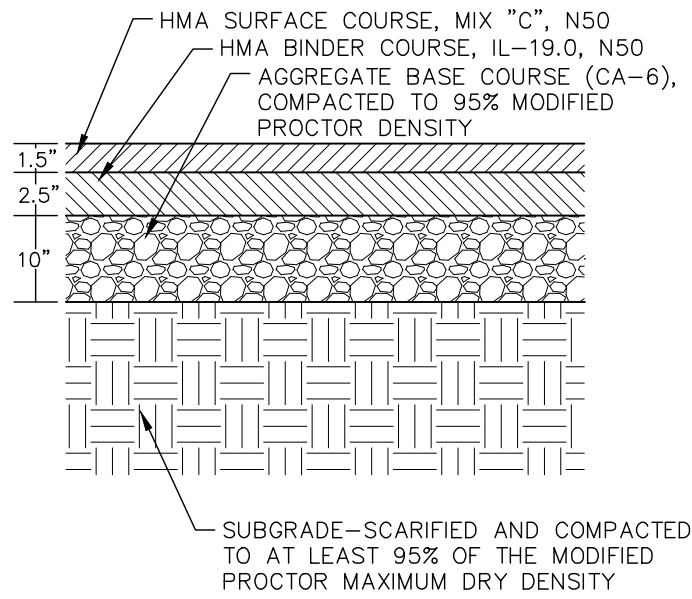
UTILITY PLAN

RESUBMITTED 11/30/17

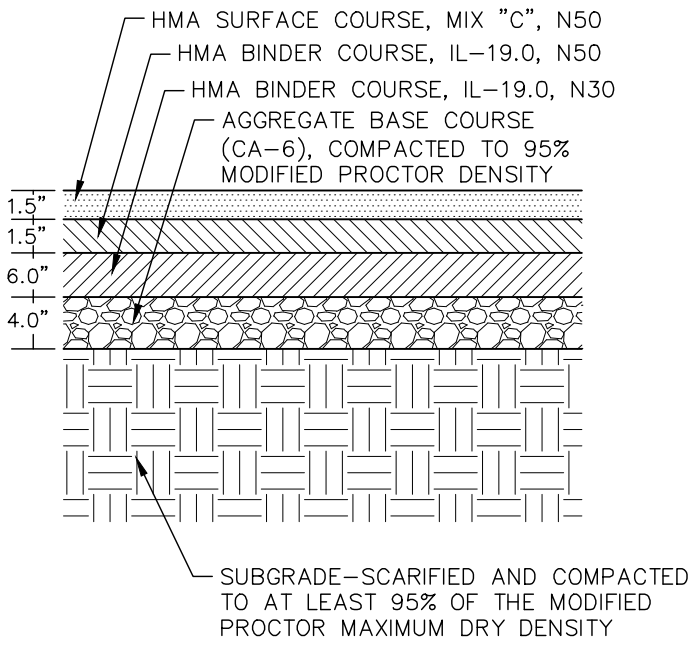
PROJECT NO.: 168144008

DATE: 10/5/17

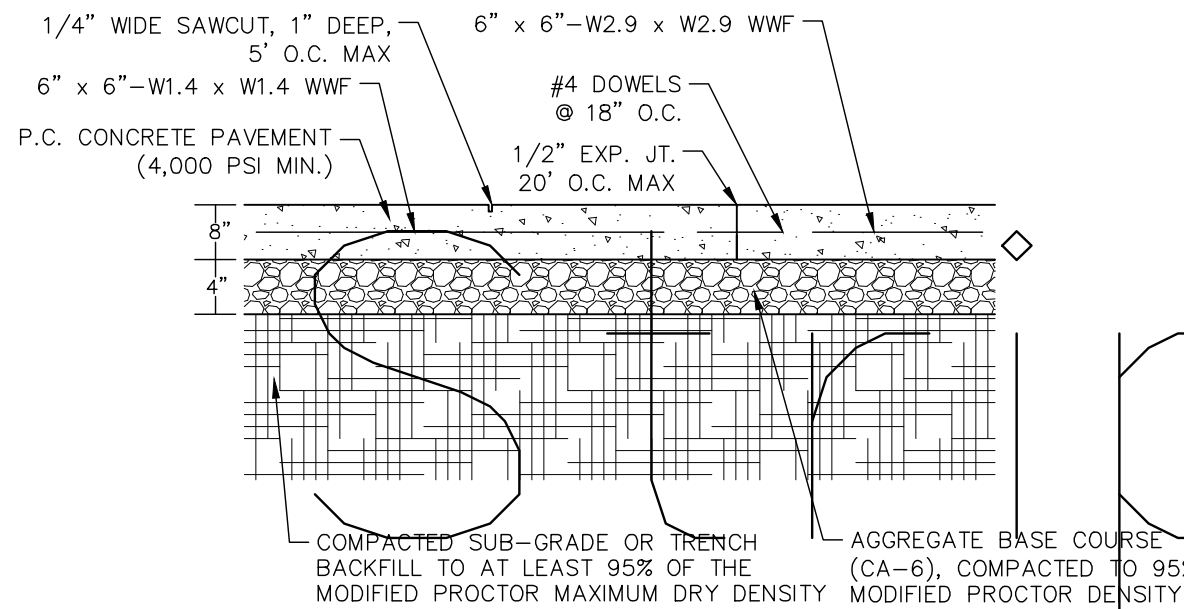
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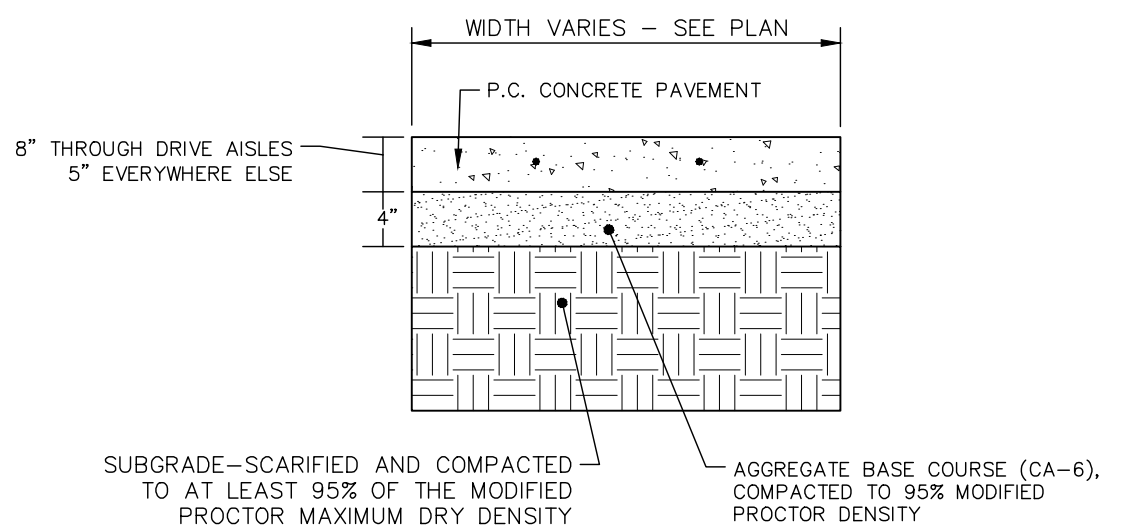
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ASPHALTIC PAVEMENT SECTION**
N.T.S.



**HEAVY DUTY
ASPHALTIC PAVEMENT SECTION**
N.T.S.

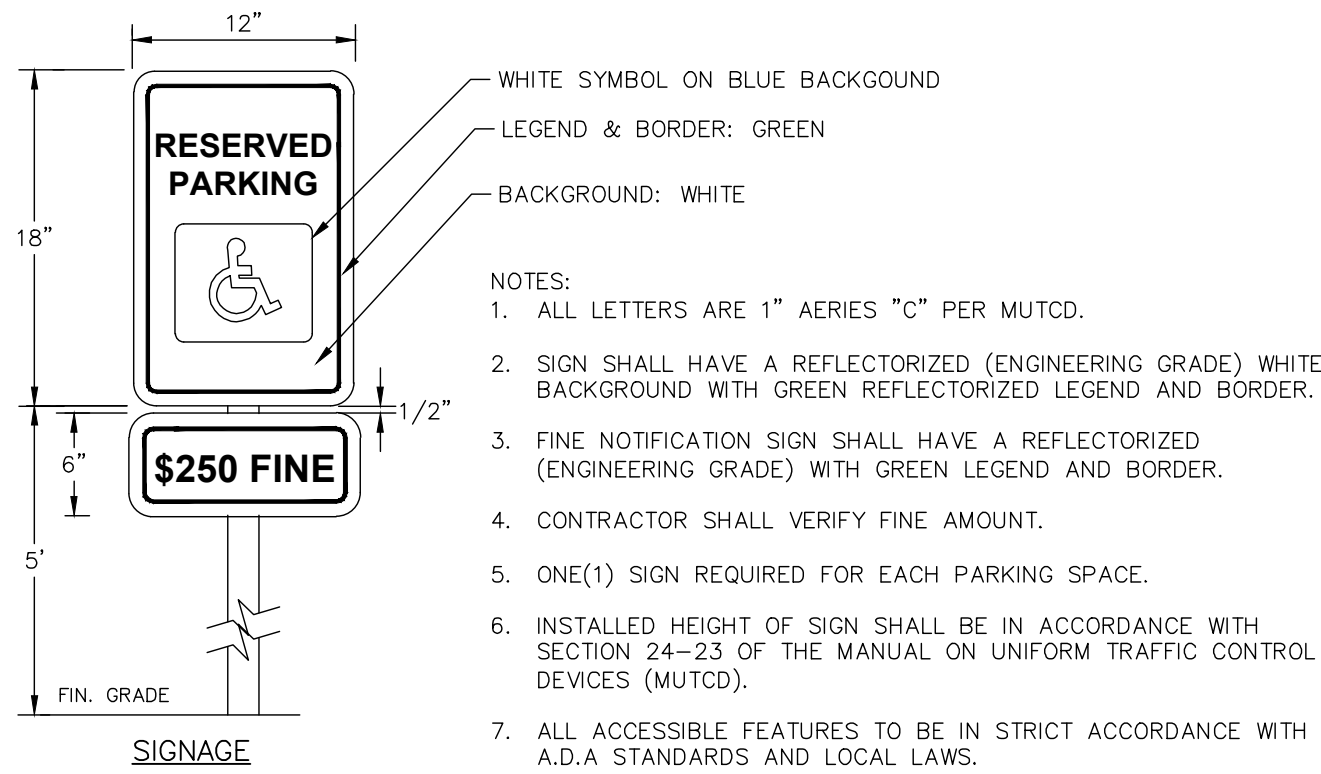


**HEAVY DUTY
CONCRETE PAVEMENT SECTION**
N.T.S.

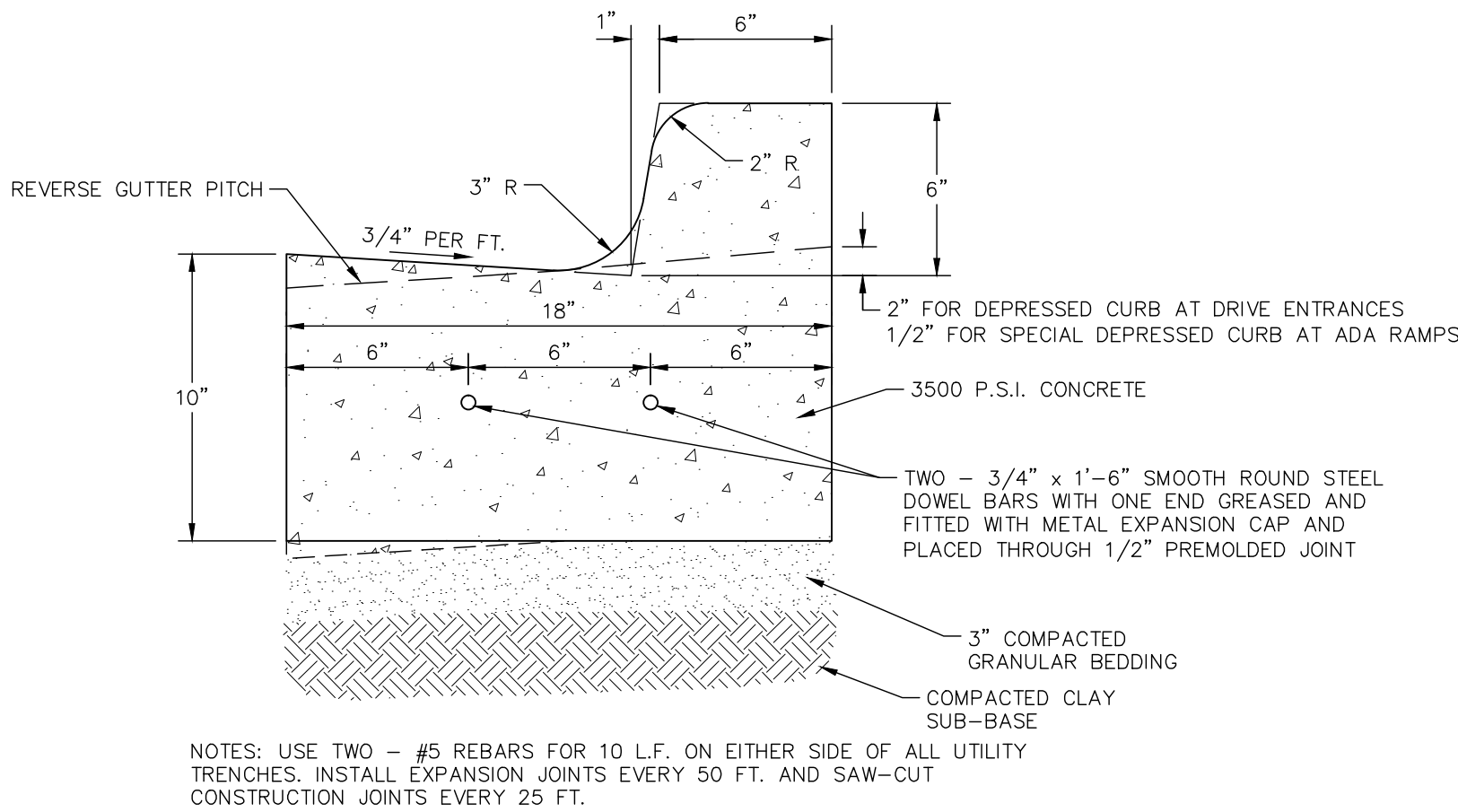


- NOTES:**
1. ALL SIDEWALK SHALL BE CONSTRUCTED WITH CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 14 DAYS.
 2. PROVIDE 1/2" EXPANSION JOINTS AT 20', MAXIMUM, SPACING AND FILLED WITH PREMOLDED BITUMINOUS EXPANSION JOINT FILLER MATERIAL OR REDWOOD. EXPANSION JOINTS SHALL HAVE #4 DOWELS, LUBRICATED, 18" LONG, AT 12" CENTERS, 6" FROM EDGE.
 3. PROVIDE 3/8" GROOVED CONTROL JOINTS AT 5' CENTERS.
 4. WELDED WIRE FABRIC (6X6-6X6) SHALL BE INSTALLED THROUGH DRIVEWAYS AT 2" ABOVE SLAB BOTTOM.
 5. PROVIDE 1/2" BITUMINOUS EXPANSION JOINT FILLER MATERIAL WHERE WALK ABUTS EXISTING IMPROVEMENTS AND AT ALL CHANGES IN GRADE.
 6. USE 2-#4 REINFORCING BARS, 10' LONG OVER ALL UTILITY TRENCHES FOR NEW SIDEWALK AND CONNECTIONS TO EXISTING SIDEWALK.
 7. AT DRIVE APPROACHES, SIDEWALK PCC AND BASE THICKNESS SHALL MATCH THAT OF THE DRIVE.

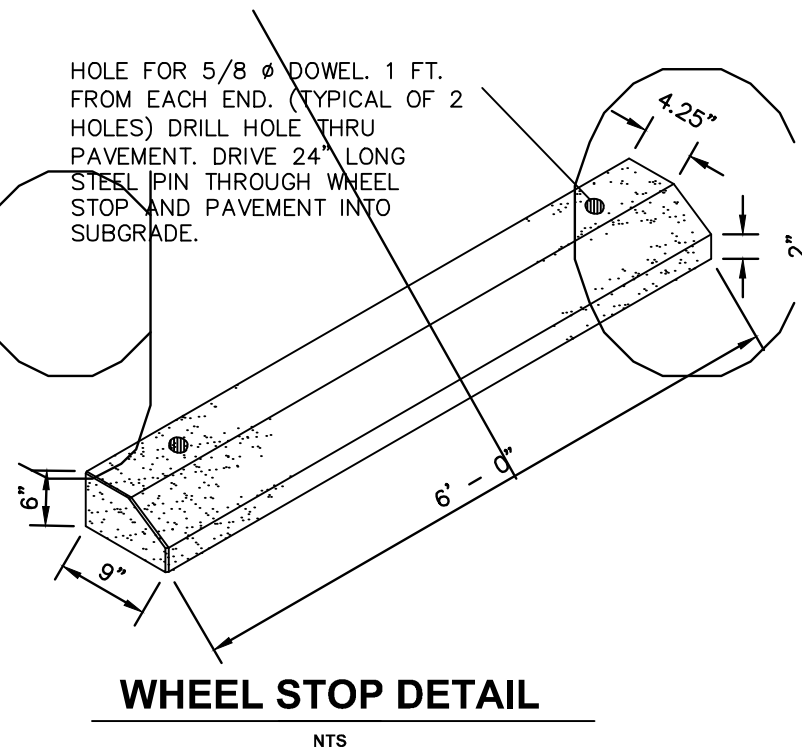
CONCRETE SIDEWALK
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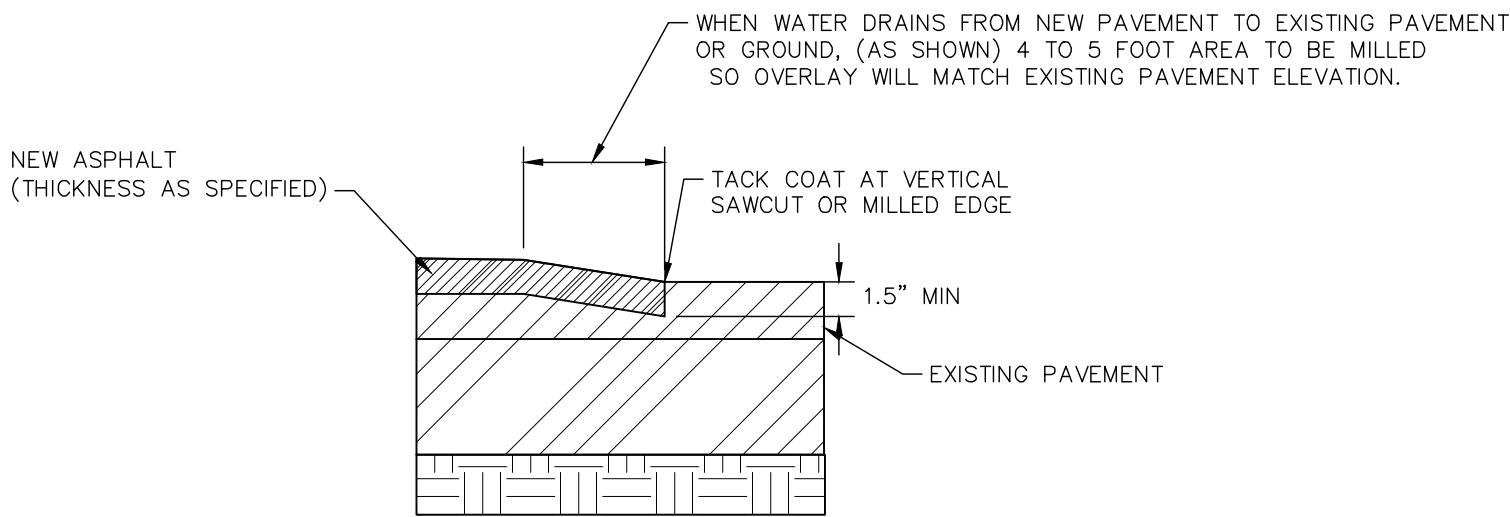
ACCESSIBLE PARKING SIGNAGE
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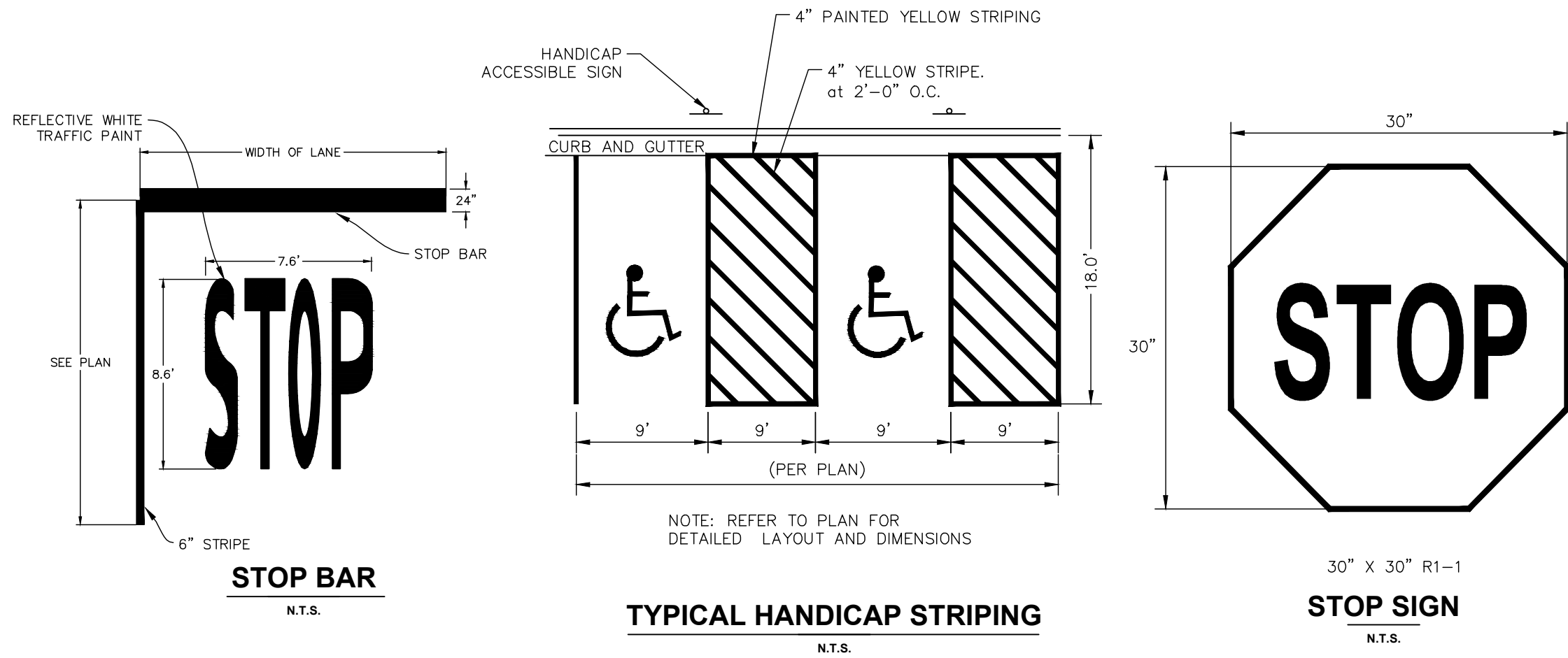
B6.12 CURB & GUTTER
N.T.S.



WHEEL STOP DETAIL
N.T.S.



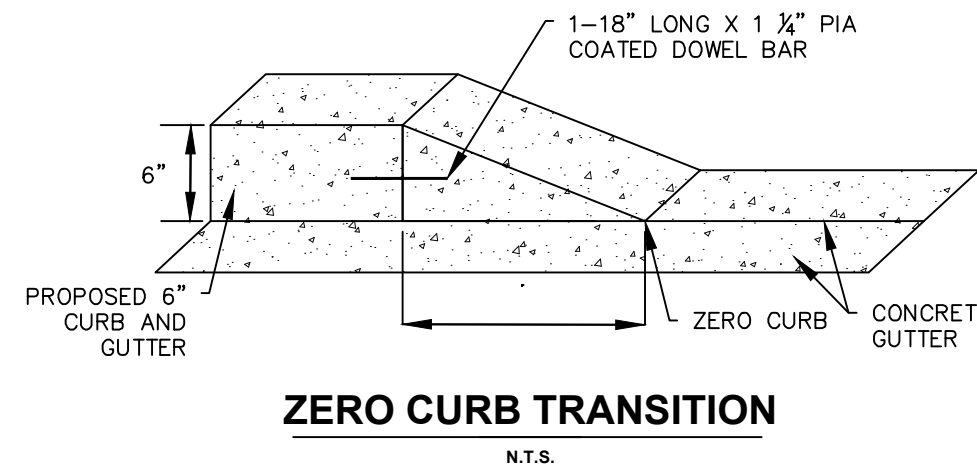
BUTT JOINT
N.T.S.



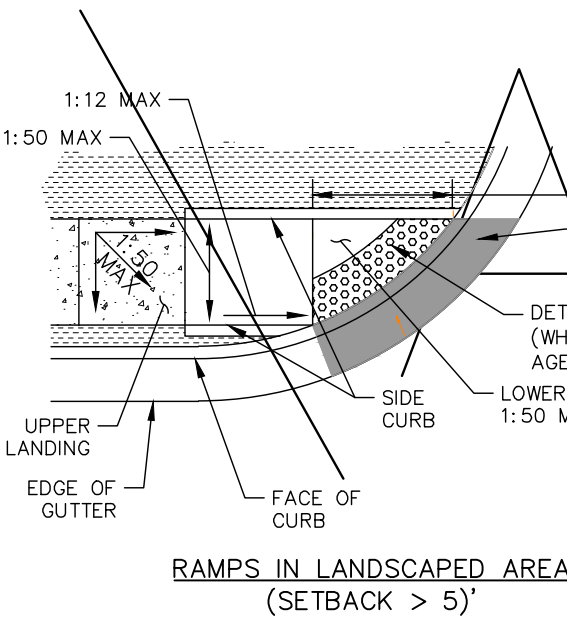
STOP BAR
N.T.S.

TYPICAL HANDICAP STRIPING
N.T.S.

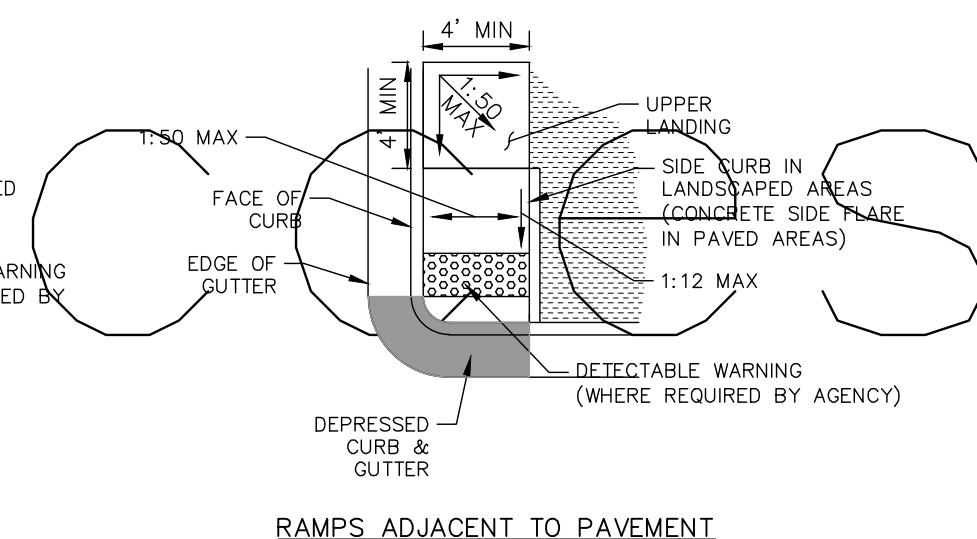
STOP SIGN
N.T.S.



ZERO CURB TRANSITION
N.T.S.

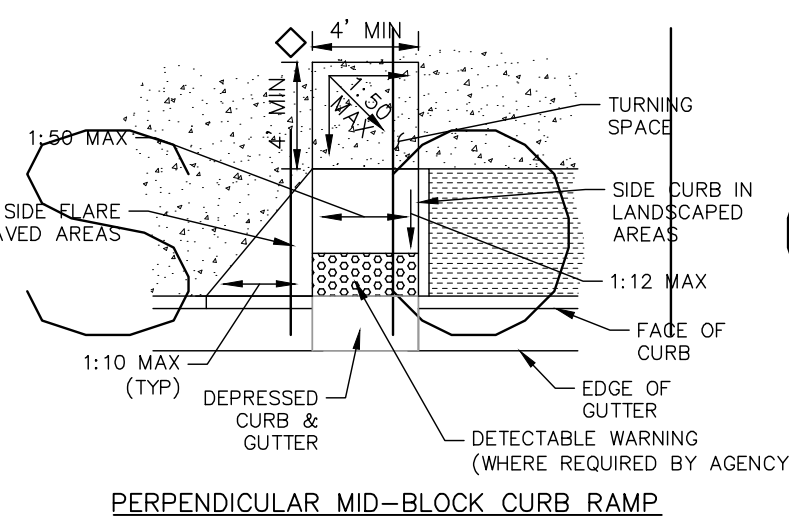


RAMPS IN LANDSCAPED AREA
(SETBACK > 5')

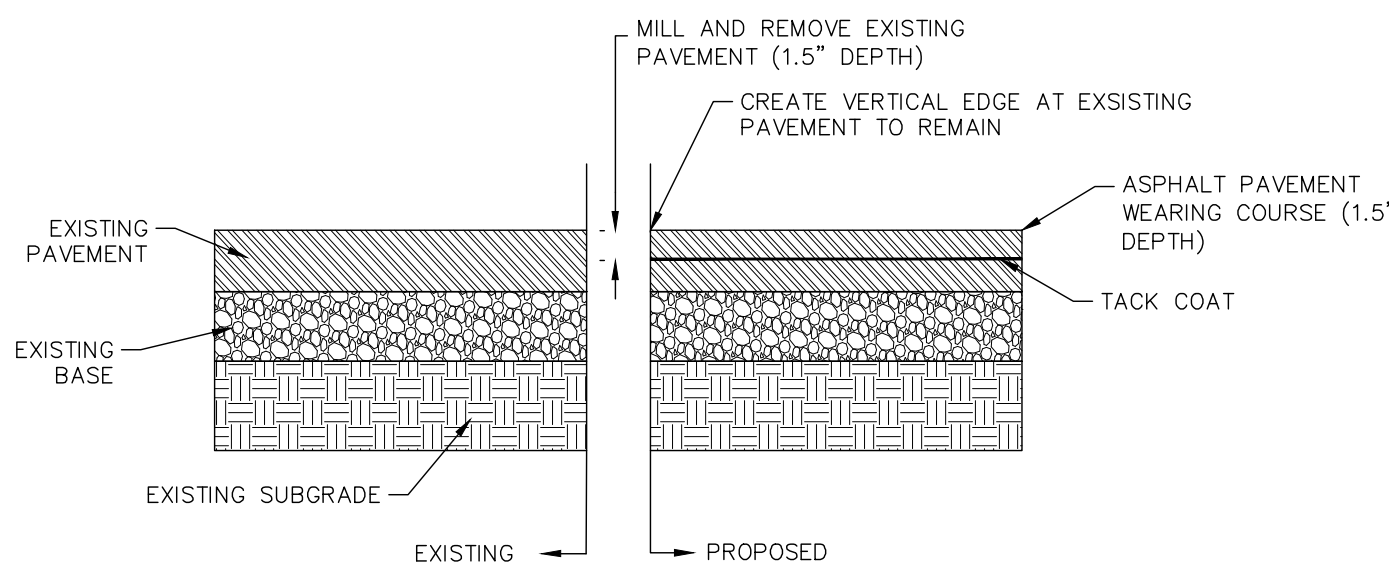


RAMPS ADJACENT TO PAVEMENT

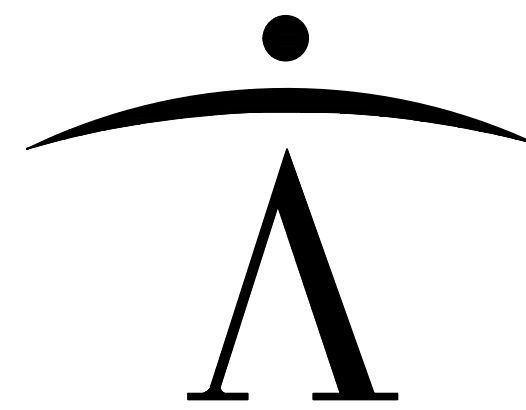
SIDEWALK AND SIDEWALK RAMPS
N.T.S.



PERPENDICULAR MID-BLOCK CURB RAMP



ASPHALT MILLING AND REPLACEMENT (1.5") CROSS SECTION
N.T.S.



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PROJECT NAME:

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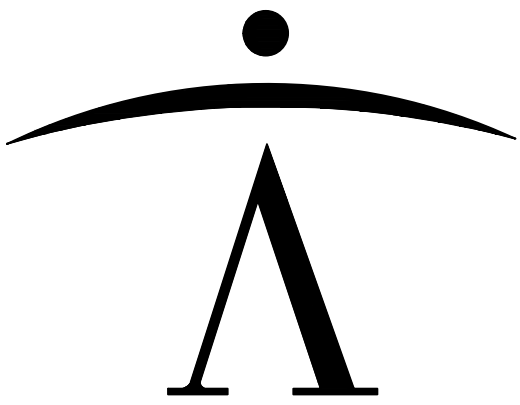
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**CONSTRUCTION
DETAILS**

RESUBMITTED 11/30/17

PROJECT NO.: 168144008 DATE: 10/5/17

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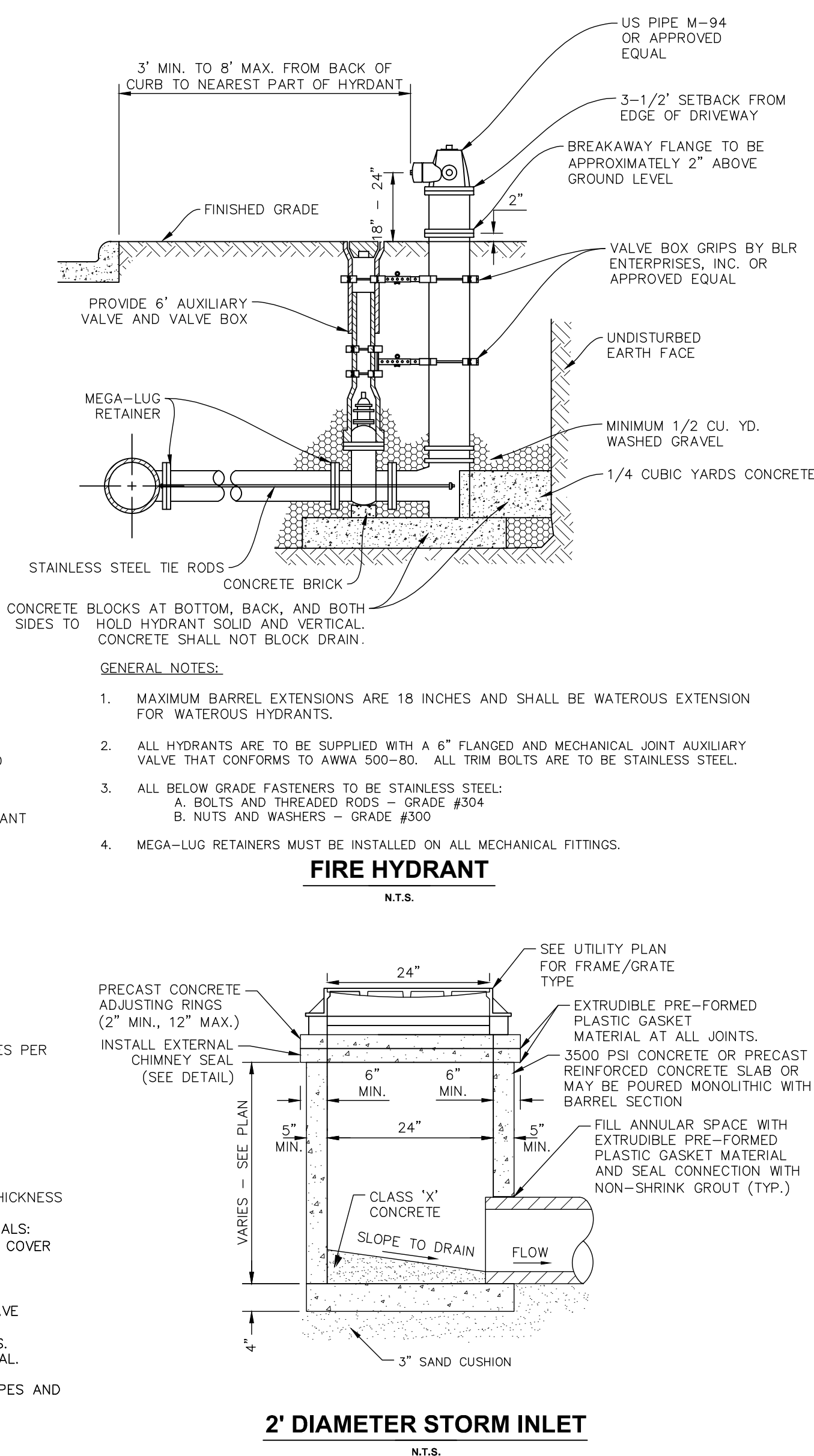
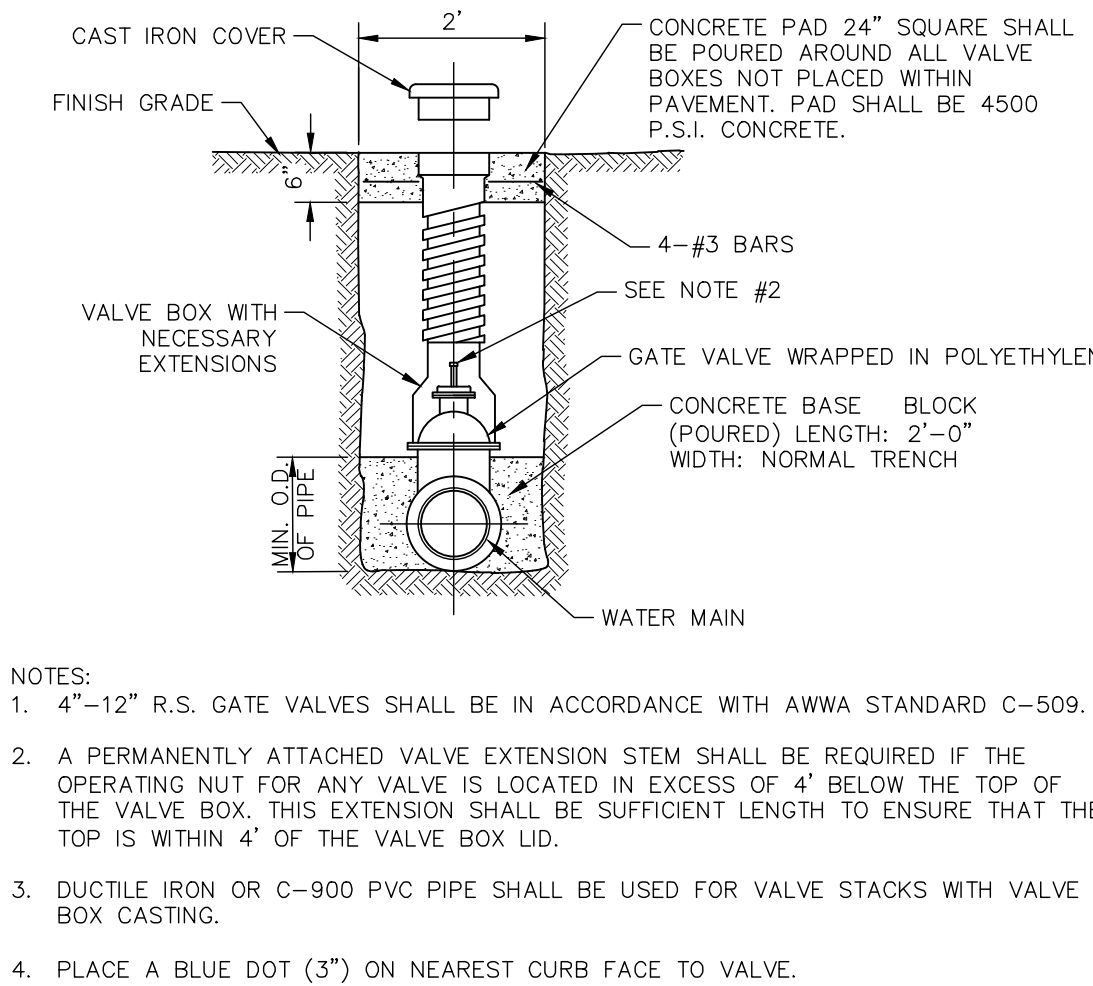
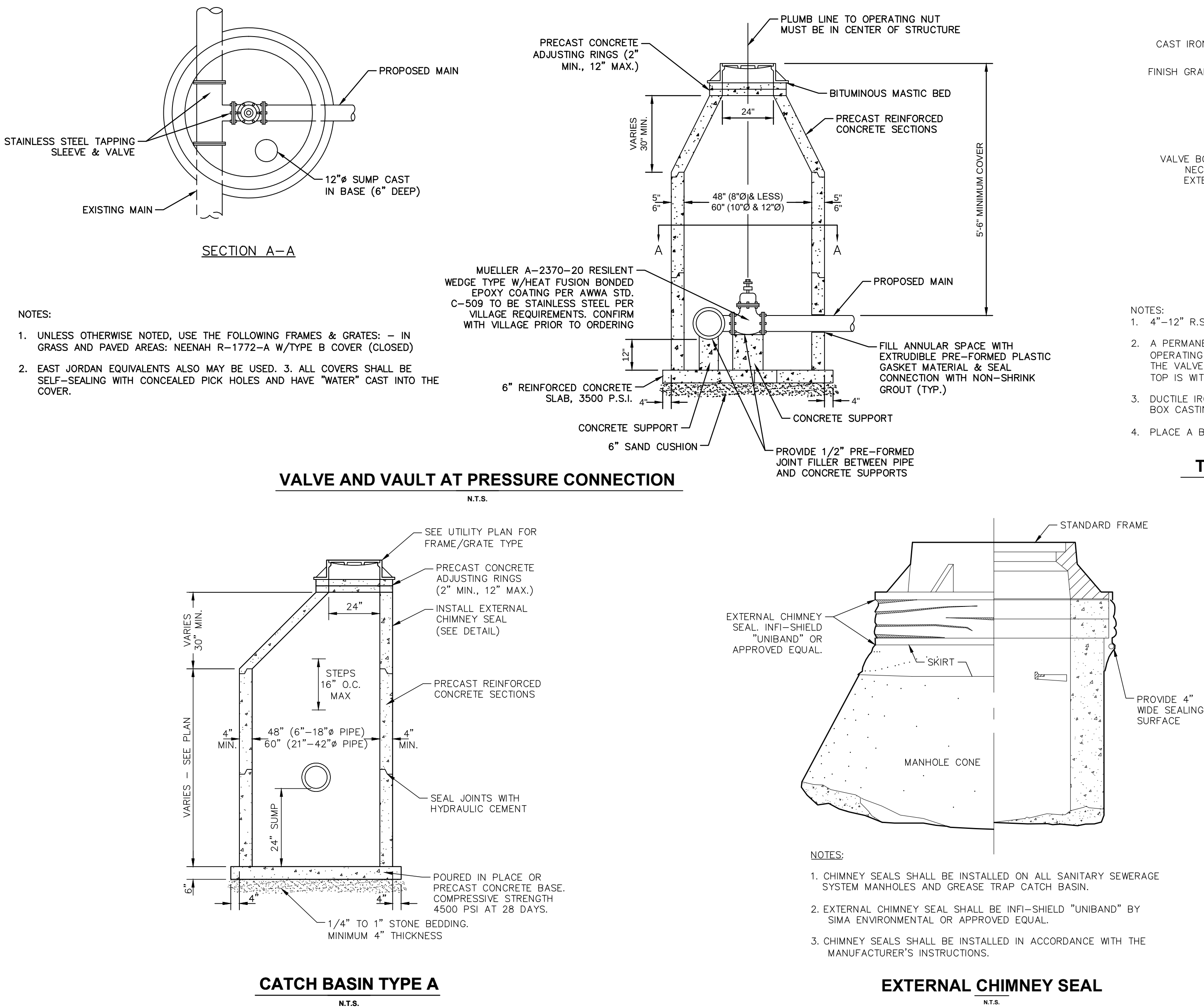
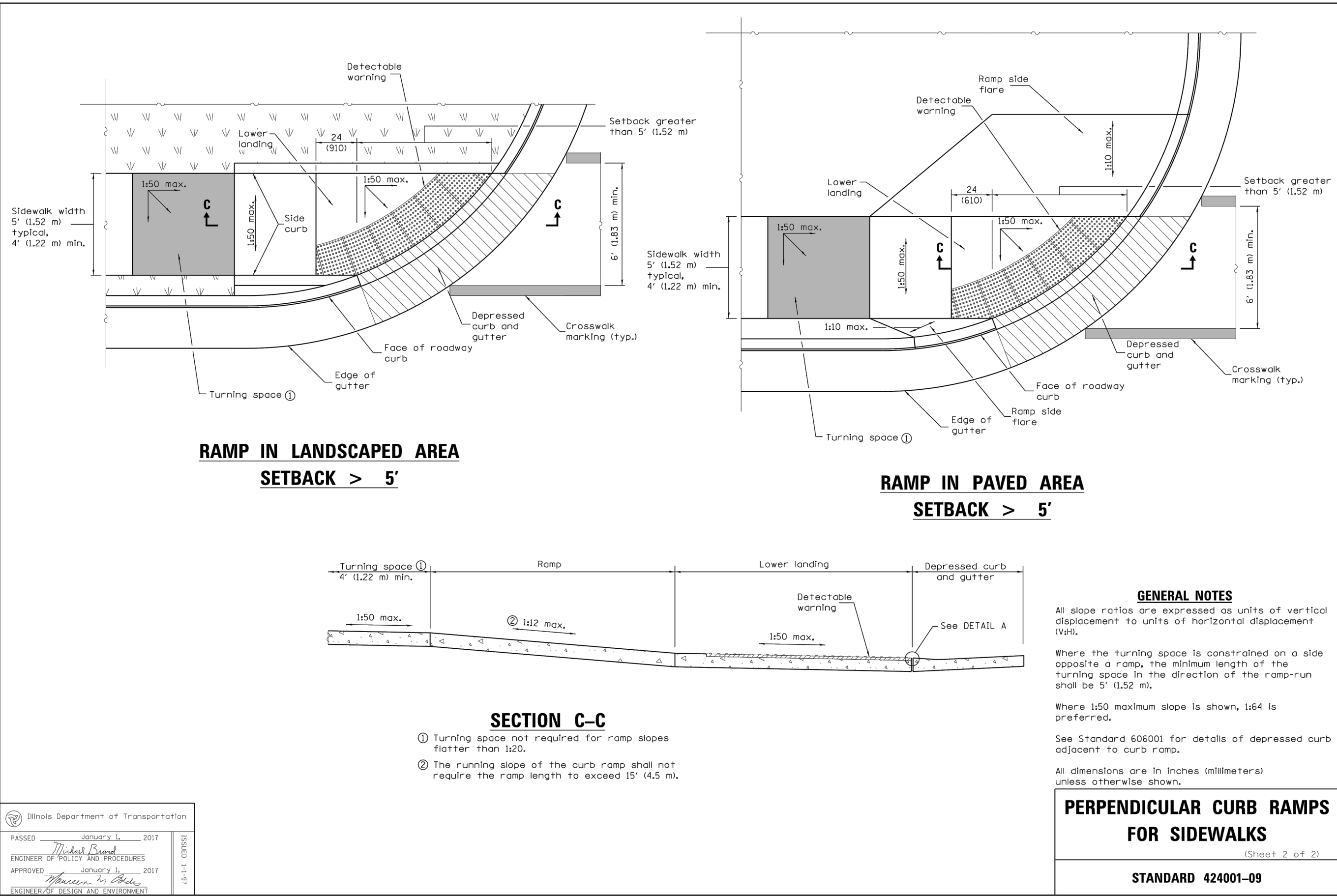
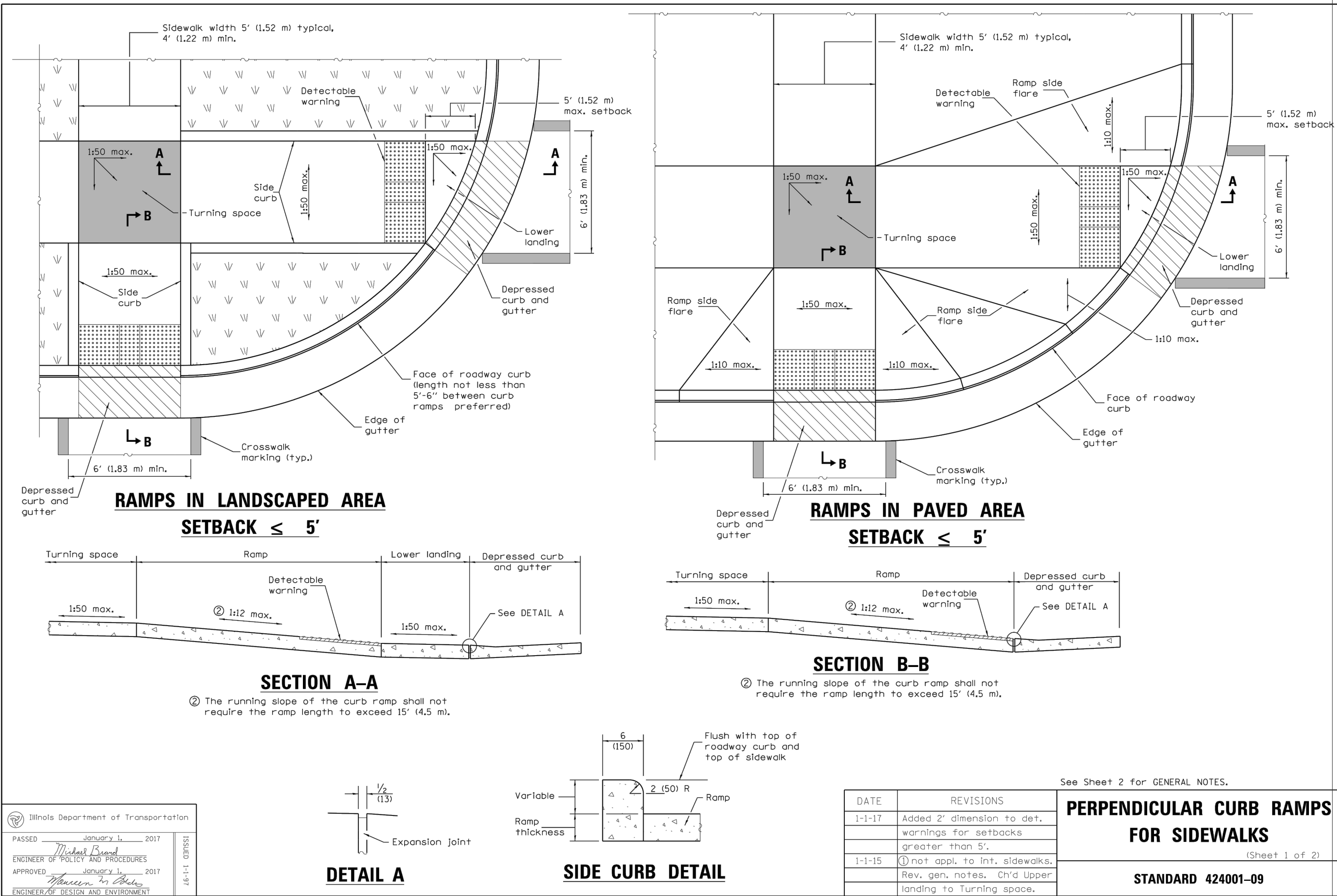
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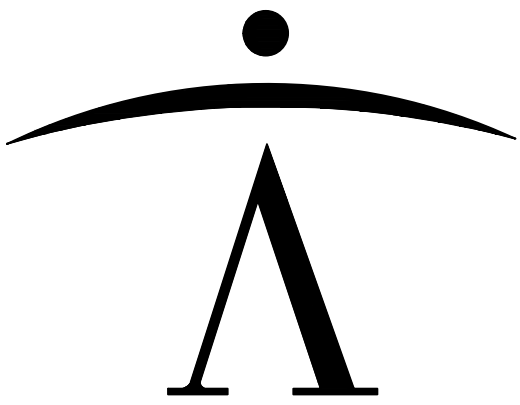
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C7.1





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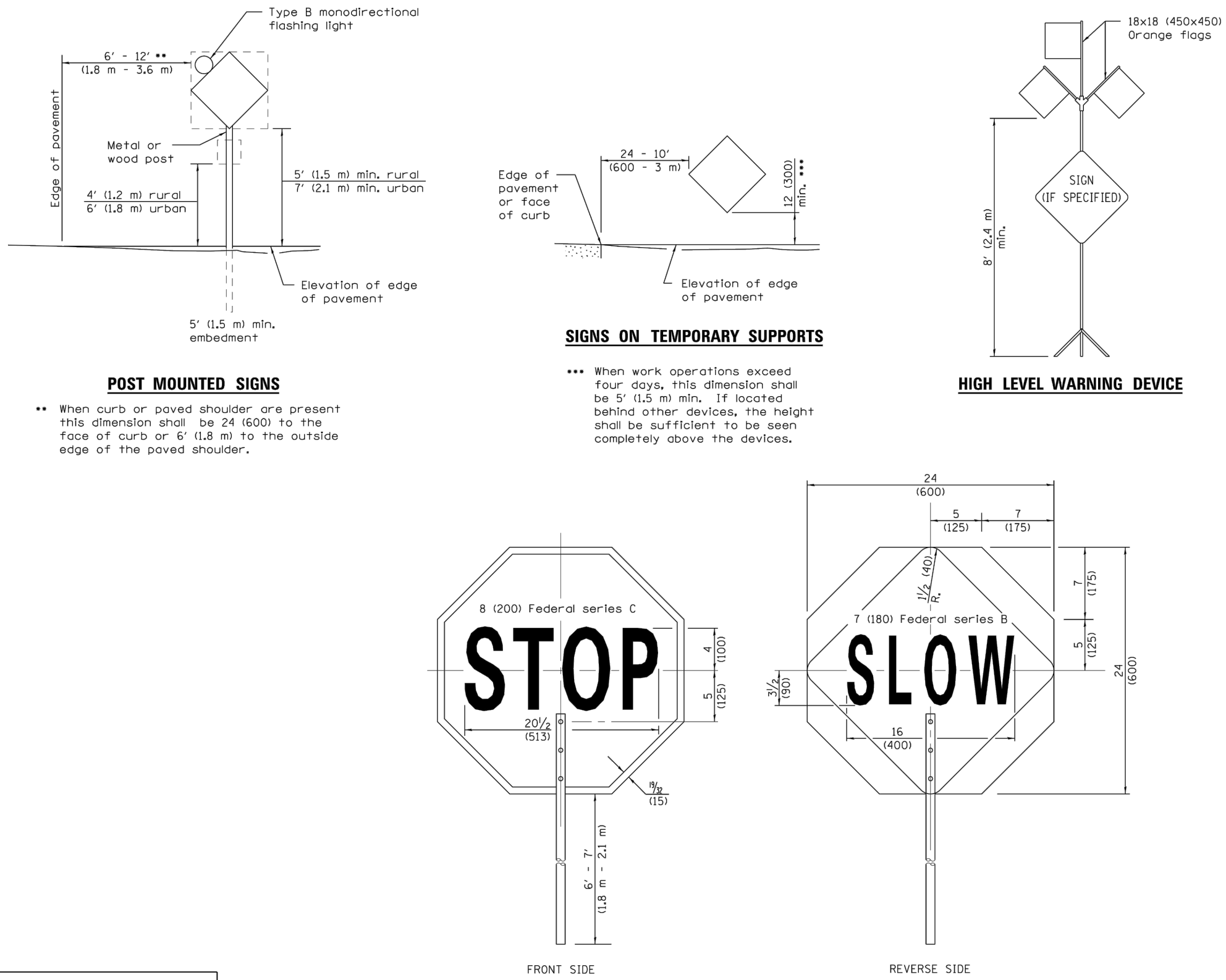
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**CONSTRUCTION
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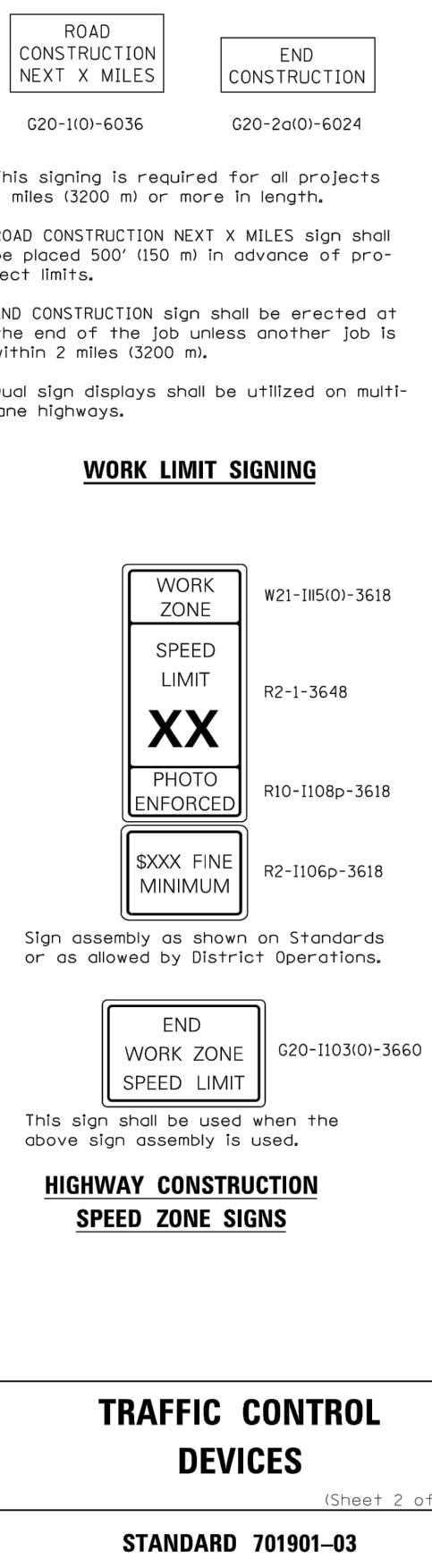
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SIGNS ON TEMPORARY SUPPORTS

HIGH LEVEL WARNING DEVICE

FLAGGER TRAFFIC CONTROL SIGN



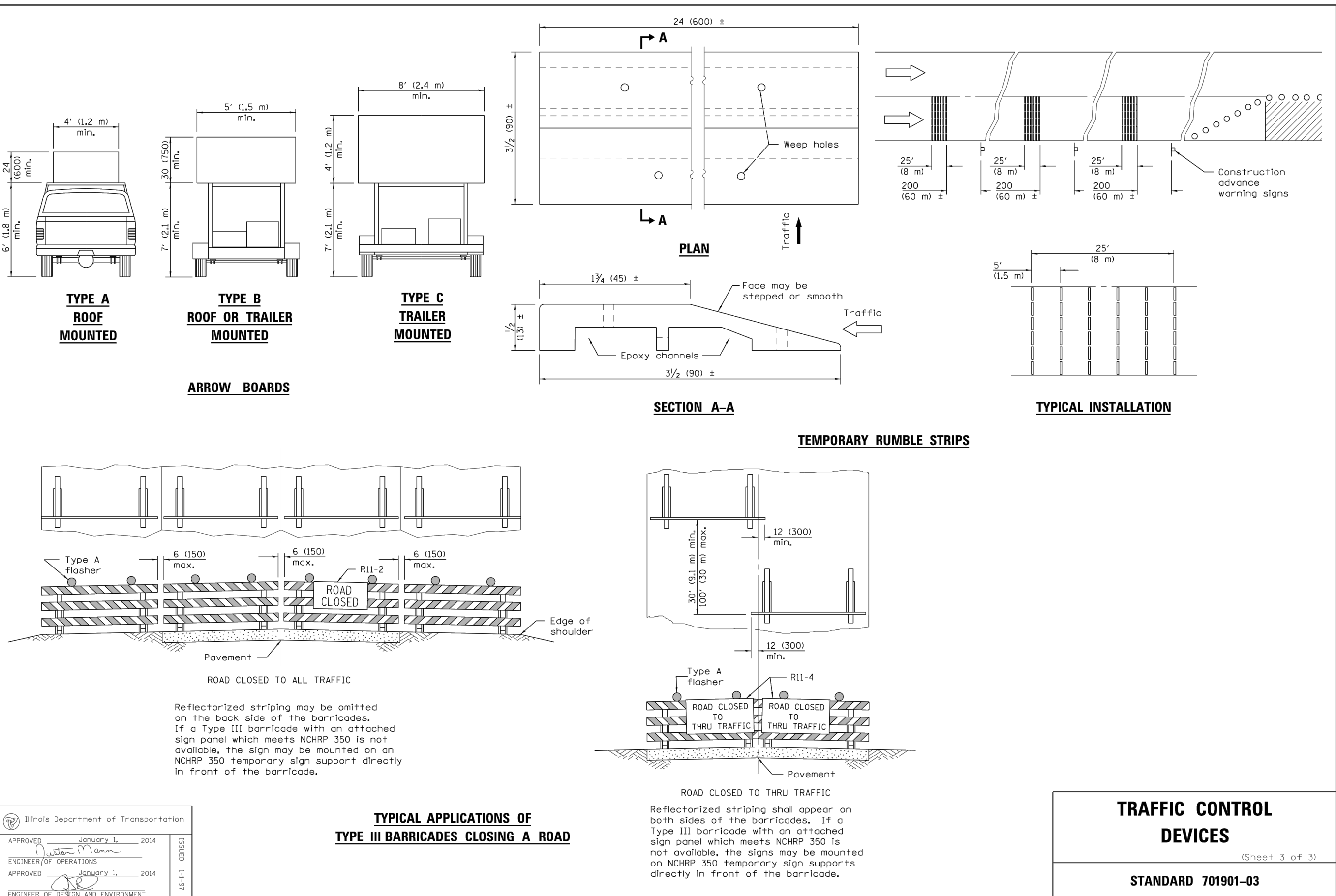
WORK LIMIT SIGNING

**HIGHWAY CONSTRUCTION
SPEED ZONE SIGNS**

**TRAFFIC CONTROL
DEVICES**

(Sheet 2 of 3)

STANDARD 701901-03

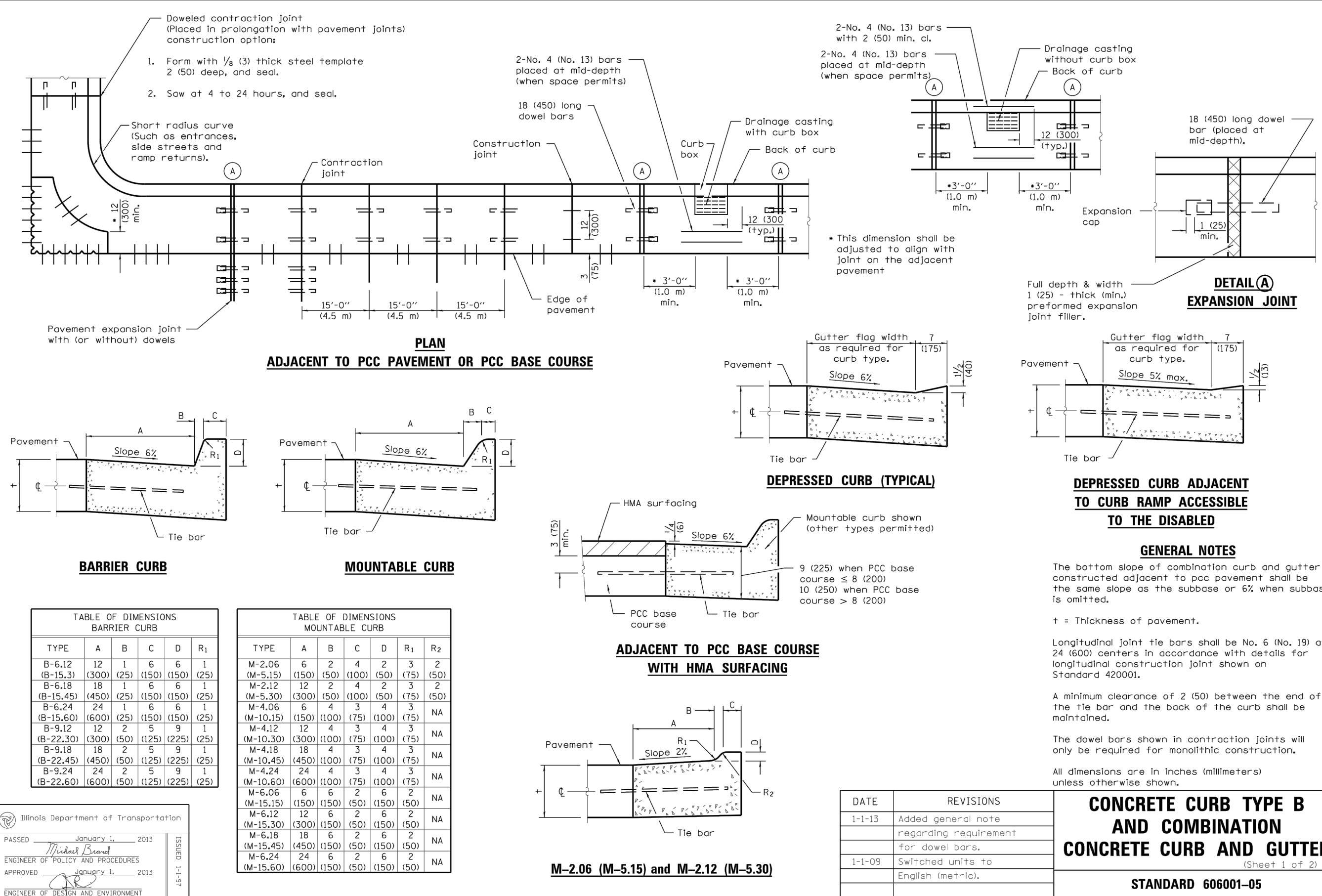


**TYPICAL APPLICATIONS OF
TYPE III BARRICADES CLOSING A ROAD**

**TRAFFIC CONTROL
DEVICES**

(Sheet 3 of 3)

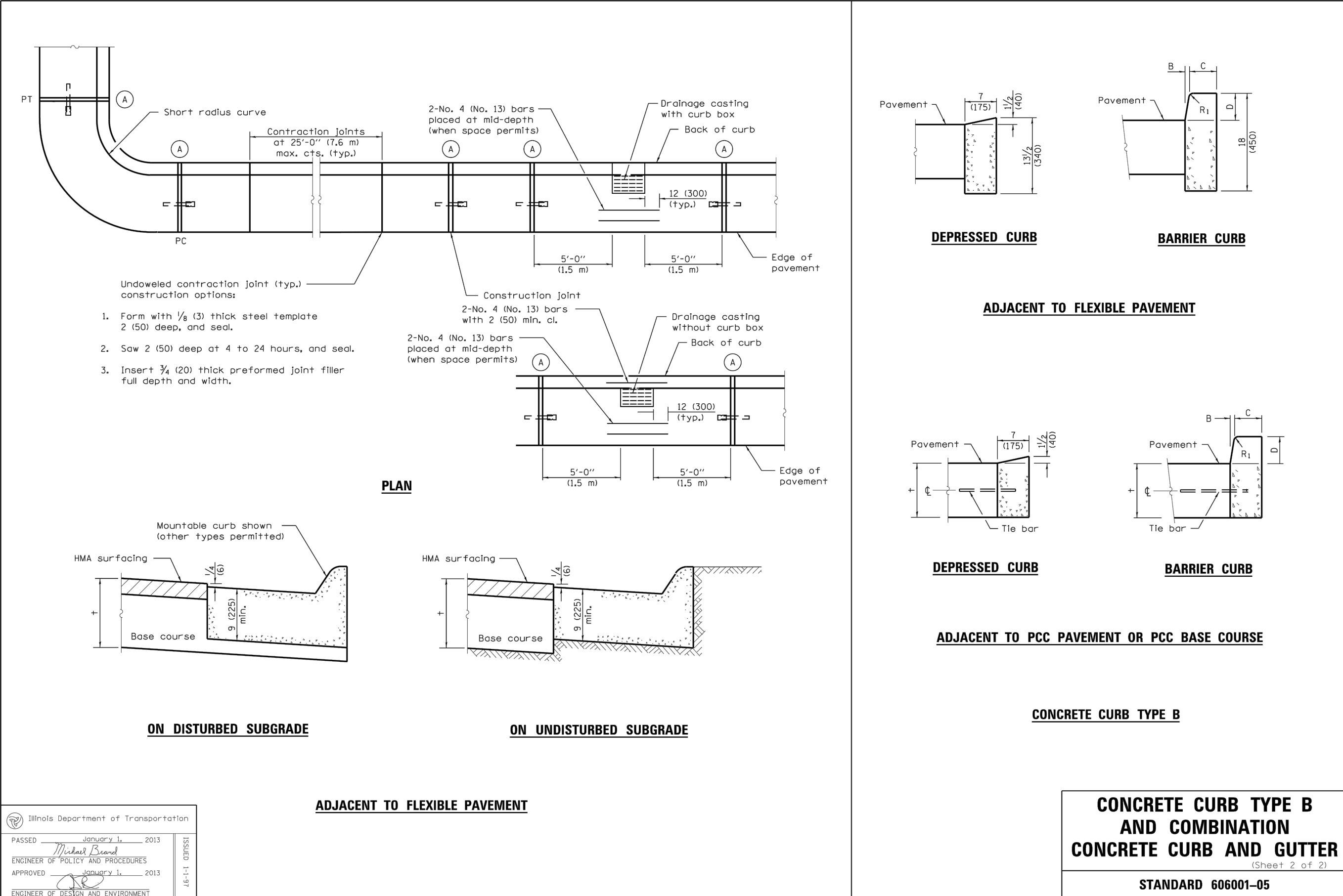
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**ADJACENT TO PCC BASE COURSE
WITH HMA SURFACING**

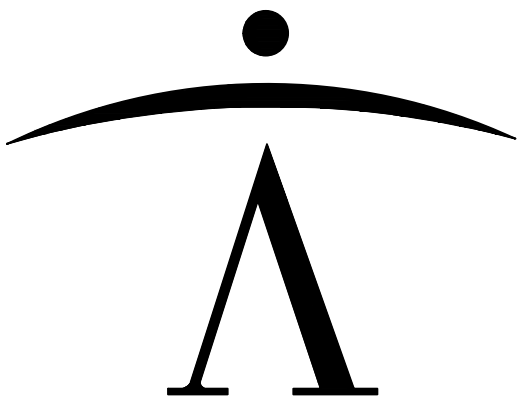
M-2.06 (M-5.15) and M-2.12 (M-5.30)

**CONCRETE CURB TYPE B
AND COMBINATION
CONCRETE CURB AND GUTTER**
(Sheet 1 of 2)
STANDARD 606001-05



CONCRETE CURB TYPE B

**CONCRETE CURB TYPE B
AND COMBINATION
CONCRETE CURB AND GUTTER**
(Sheet 2 of 2)
STANDARD 606001-05



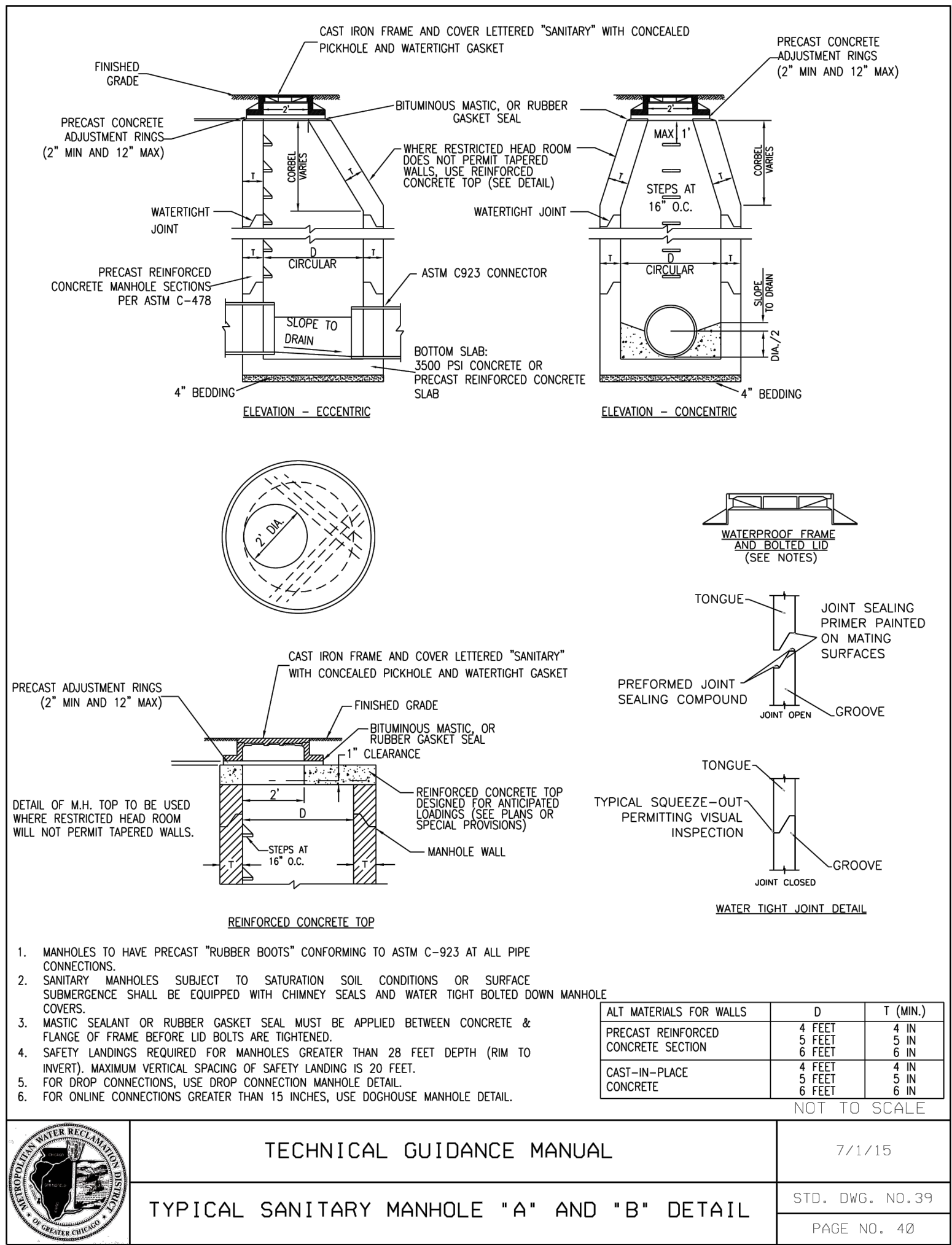
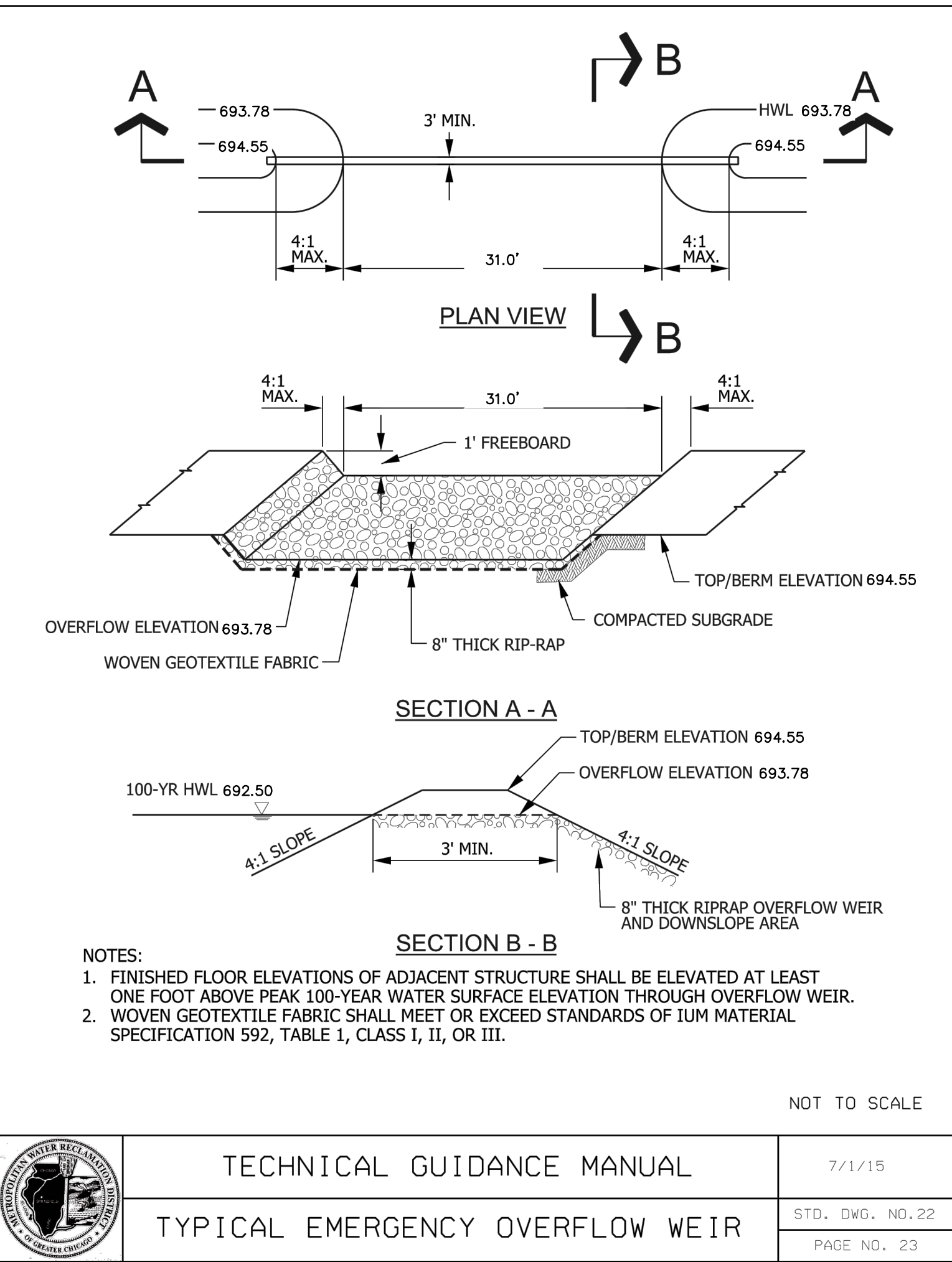
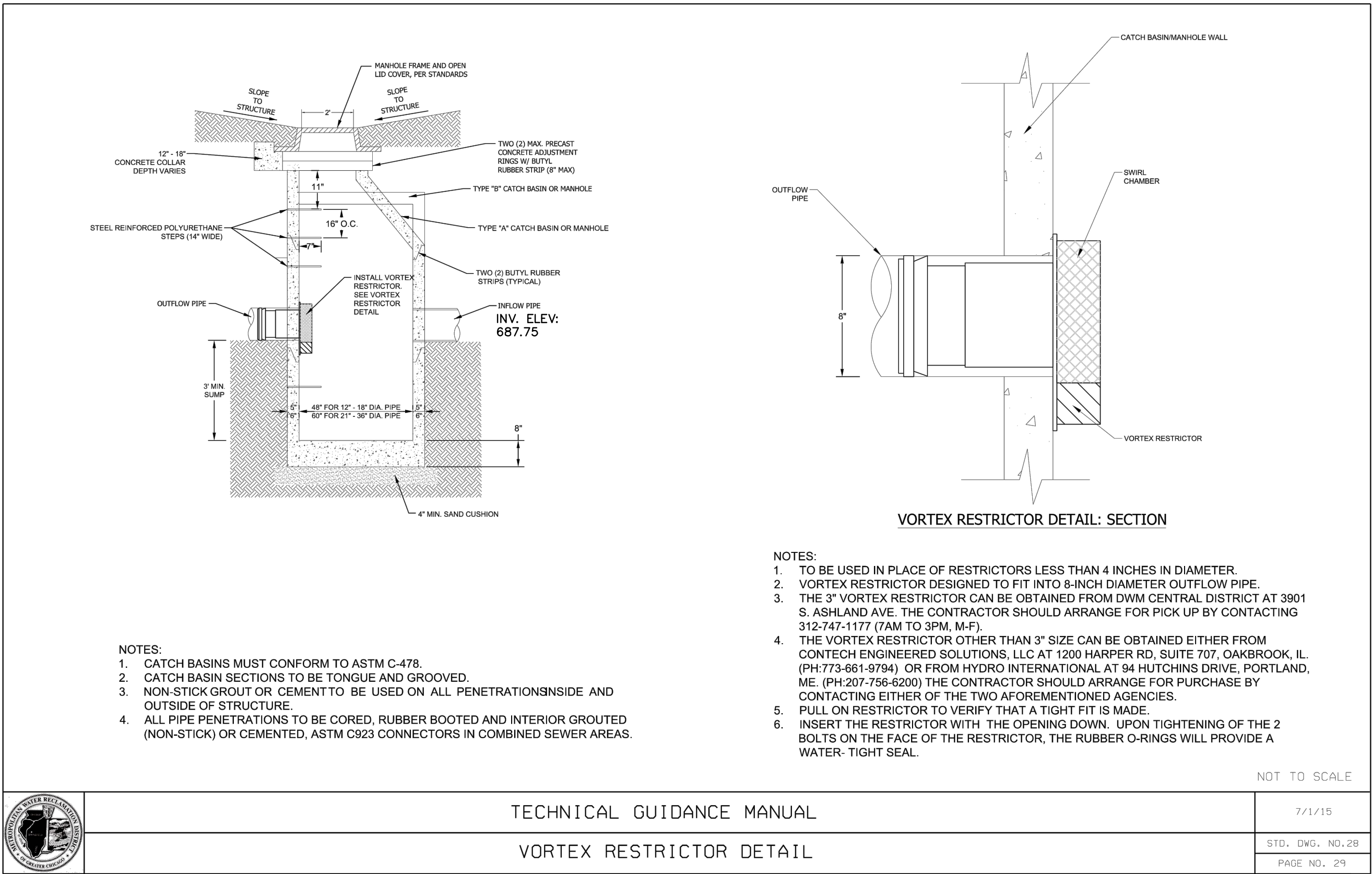
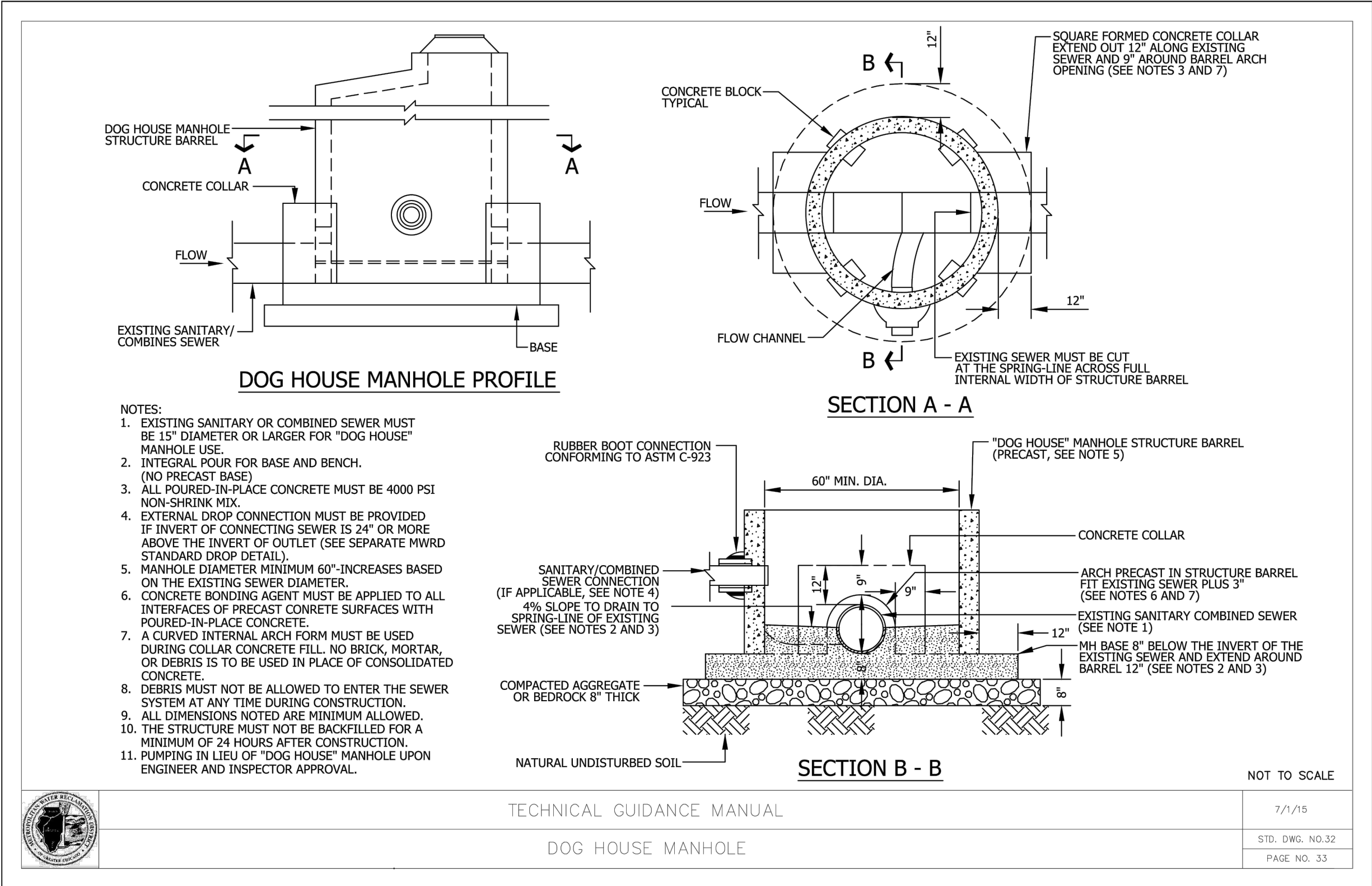
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VILLAGE SUBMITTAL
**CHURCH ADDITION
AND RENOVATION**
831 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH
AND
THE ARCHDIOCESE OF CHICAGO



**CONSTRUCTION
DETAILS**

RESUBMITTED 11/30/17
PROJECT NO.: 168144008 DATE: 10/5/17

C7.4

SITE BENCHMARK #1
EL. BOLT ON IRON
ELEVATION 710.78

FREDRICK ST.

Arlington Heights Firetruck
Column

Arlington Heights Firetruck
Column

Arlington Heights Firetruck
Column

PINE AVE.

Arlington Heights Firetruck
Column

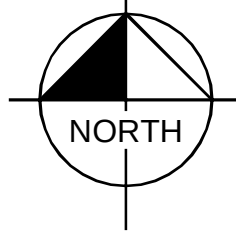
Arlington Heights Firetruck
Column

EXISTING BUILDING

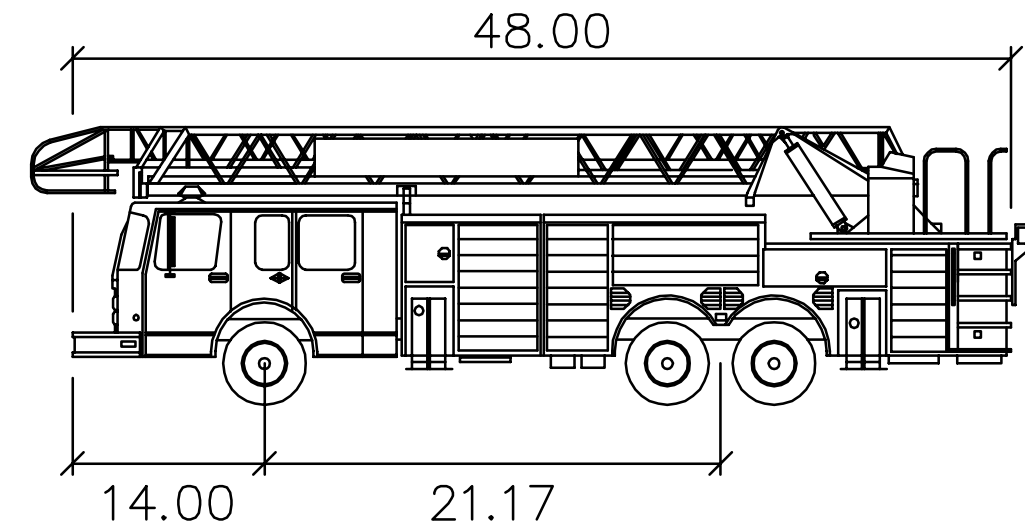
PROPOSED BUILDING EXPANSION
± 6,395 SF
FFE = 702.00

DRY BOTTOM
DETENTION BASIN
HWL = 692.81

ARLINGTON HEIGHTS RD.



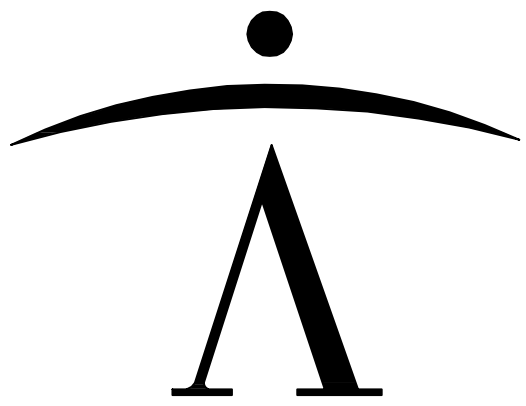
GRAPHIC SCALE IN FEET
0 15 30 60



Arlington Heights Fire Truck

feet

Width : 8.50
Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 40.0



newman architecture
1730 Park Street, Suite 115, Naperville, Illinois 60563-2611
(630) 420-1600 FAX (630) 420-1987 www.newmanarchitecture.com

Participating Consultants:

Kimley»Horn
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350,
LISLE, IL 60532
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

PROJECT NAME:

VILLAGE SUBMITTAL

**CHURCH ADDITION
AND RENOVATION**

831 N. ARLINGTON HEIGHTS ROAD
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DRAWING TITLE:

**FIRE TRUCK
ROUTING EXHIBIT**

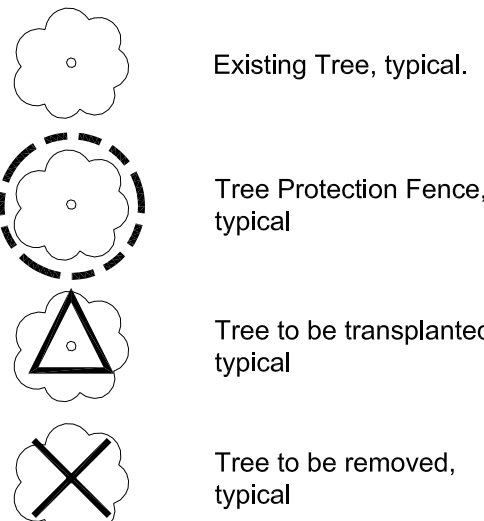
PROJECT NO.: 168144008 DATE: 10/5/17

1 OF 1

TREE PRESERVATION AND REMOVALS LIST

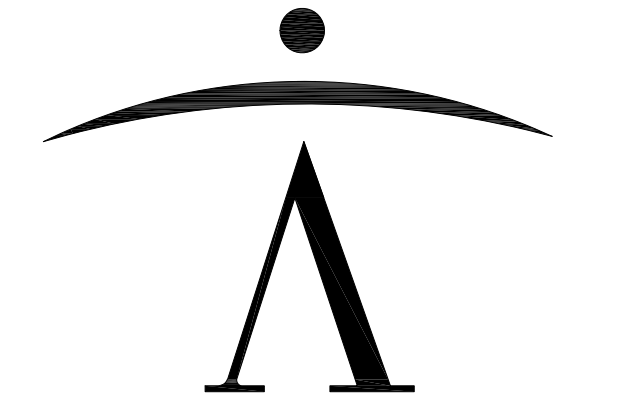
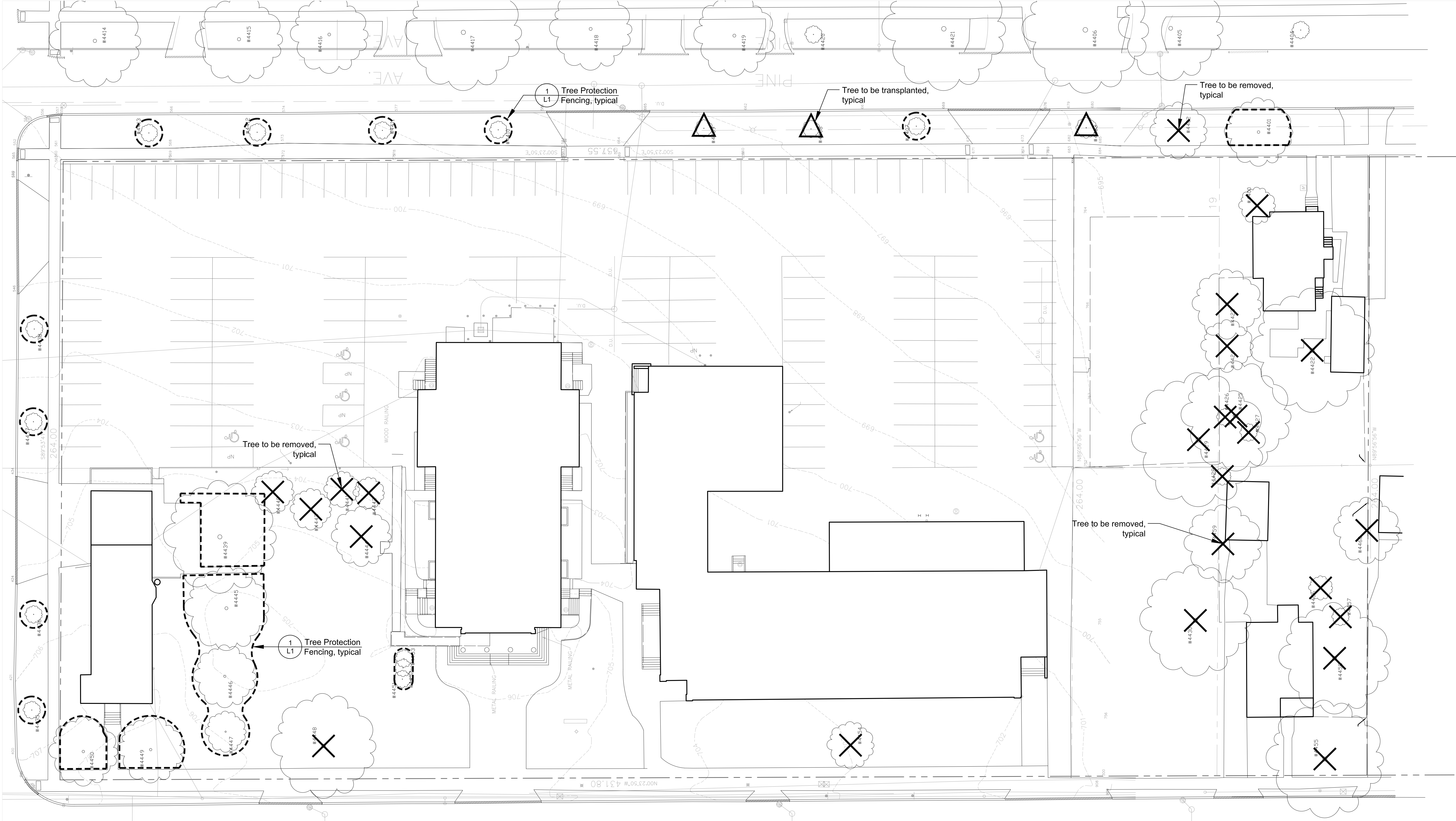
Tag #	Size	Tree Type	Species	Condition	Comments	Status	Tag #	Size	Tree Type	Condition	Comments	Status
4400	14.5"	Deciduous	Yew	Fair	Sheared, Not a tree	Remove	4431	26"	Deciduous			Keep
4401	20"	Deciduous	Silver Maple	Poor	Sparse, leggy	Remove	4432	6"	Deciduous			Keep
4402	12"	Deciduous	Littleleaf Linden	Poor		Remove	4433	16"	Deciduous			Keep
4403	4"	Deciduous	Miyabe Maple	Good	Donor tree	Transplant	4434	16"	Deciduous			Keep
4404	12"	Deciduous					4435	3"	Deciduous	Carpinus caroliniana	Good	Memorial
4405	16"	Deciduous					4436	3"	Deciduous	American Beech	Good	Memorial
4406	28"	Deciduous					4437	3"	Deciduous	Honeylocust	Good	Keep
4407	3"	Deciduous	Kentucky Coffee Tree	Good	Donor tree	Keep	4438	3"	Deciduous	Hybrid Elm	Good	Keep
4408	3"	Deciduous	Kentucky Coffee Tree	Good		Transplant	4439	40"	Deciduous	Silver Maple	Good	Keep
4409	3"	Deciduous	Kentucky Coffee Tree	Good		Transplant	4440	20"	Coniferous	Colorado Spruce	Poor/Fair	Remove
4410	3"	Deciduous	Honeylocust	Good	Memorial tree	Keep	4441	22"	Coniferous	Colorado Spruce	Poor	Remove
4411	3"	Deciduous	Hackberry	Fair	Dead wood, Donor tree	Keep	4442	22"	Coniferous	Colorado Spruce	Poor/Fair	Remove
4412	3"	Deciduous	Honeylocust	Good	Some dead wood, Memorial tree	Keep	4443	8"	Coniferous	Douglas fir	Fair	Shaded
4413	3"	Deciduous	Hackberry	Good		Keep	4444	8"	Deciduous	Crabapple	Poor	Dead wood, suckers, applescab
4414	38"	Deciduous				Keep	4445	24"	Coniferous	Colorado Spruce	Fair	Lost leader
4415	22"	Deciduous				Keep	4446	20"	Coniferous	White Fir	One sided	Keep
4416	28"	Deciduous				Keep	4447	14"	Coniferous	Colorado Spruce	Poor	Double leader, one sided
4417	22"	Deciduous				Keep	4448	20"	Deciduous	Norway Maple	Good	Remove
4418	28"	Deciduous				Keep	4449	18"	Deciduous	Red Maple	Poor	Dead wood, trunk wound
4419	20"	Deciduous				Keep	4450	20"	Deciduous	Purple-leaved Norway Maple	Good	Keep
4420	3"	Deciduous				Keep	4451	NA	Deciduous	Burning Bush	Good	Sheared, not a tree
4421	28"	Deciduous				Keep	4452	NA	Deciduous	Burning Bush	Fair	Sheared, not a tree
4422	38"	Deciduous	Silver Maple	Poor	Topped, dead wood	Remove	4453	NA	Deciduous	Burning Bush	Good	Sheared, not a tree
4423	18"	Deciduous	White Pine	Fair	Leggy, dead wood	Remove	4454	NA	Deciduous	Burning Bush	Fair	Sheared, not a tree
4424	14"	Deciduous	Colorado Spruce	Poor	Leggy, dead wood	Remove	4455	32"	Deciduous	Norway Maple	Good	Remove
4425	22"	Deciduous	Black Walnut	Poor	Leaning, poor form, trunk wound	Remove	4456	15"	Deciduous	Crabapple	Dead	Remove
4426	3"	Deciduous	Hackberry	Poor	Volunteer growing under Walnut	Remove	4457	5"	Coniferous	Asteriaceae	Fair	Remove
4427	18"	Deciduous	Black Walnut	Poor	Leaning, poor form	Remove	4458	40"	Deciduous	Silver Maple	Fair	Trunk rot
4428	32"	Deciduous	Black Walnut	Good		Remove	4459	(2) 11"	Deciduous	Mulberry	Poor	Rubbed/grafted trunks
4429	38"	Deciduous	Black Walnut	Good	Some dead wood	Remove	4460	11", 13"	Deciduous	Mulberry	Fair	Remove
4430	18"	Deciduous	Silver Maple	Good	Some dead wood	Remove						

TREE PRESERVATION LEGEND



TREE PRESERVATION AND REMOVALS NOTES

- Contractor shall install construction fence at the limits of construction prior to beginning work. Maintain and adjust construction fencing as needed during progress of construction. Staging and construction access shall be approved by Owner.
- Contractor shall install tree protection fencing as shown on the plans prior to beginning work. Maintain and adjust tree protection fencing as needed during progress of construction. Storage of materials, vehicular access, and all other construction activities are strictly prohibited within the limits of the tree protection fencing.
- Plans indicate general location and limits of removals. Contractor shall perform removals only as necessary for construction of proposed improvements. No additional payments will be made for removals or restoration not required to construct the improvements as drawn and specified. Refer to Layout Plan for more specific information regarding proposed improvements and verify conditions in the field prior to performing removals.
- Tree stumps shall be ground to a minimum depth of 18" below existing grade or as required to properly perform the work.
- Where turf or plantings are proposed in existing paved areas, remove all base material.
- Remove all utilities designated for removal to extent required for improvements, unless otherwise noted. Cap ends of any remaining underground conduit and piping, and pull all electrical wire out at source.
- Items indicated for Removal shall include complete removal of above grade item and below grade appurtenances (foundations, urban fill, wiring, piping, etc.) including disposal off-site following applicable codes and ordinances, unless otherwise shown on the plans.
- Contractor to protect all existing utilities and all other site features not designated for removal. Contractor is responsible for replacing/repairing any existing utilities or other site features damaged during construction to the original condition at no cost to the Owner.
- Contractor responsible for maintaining existing utility services (electrical, sanitary, storm) during construction unless otherwise indicated in the Contract Documents.
- Contractor shall coordinate all work so public sidewalk remains open throughout construction.
- Refer to civil and electrical plans for additional utility adjustments and removals.
- Refer to specifications for additional conditions, standards and notes.



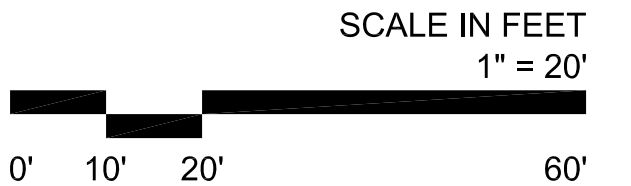
newman architecture
1730 Park Street, Suite 115, Naperville, Illinois 60563-2611
(630) 420-1600 FAX (630) 420-1987 www.newmanarchitecture.com



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820 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH
AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:
TREE PRESERVATION
PLAN

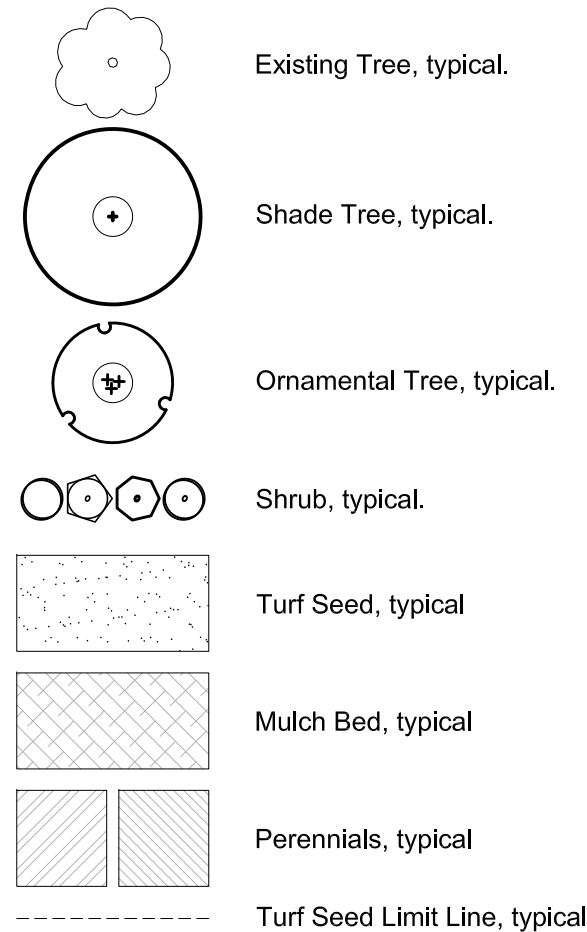


REVISD 11/30/17
PROJECT NO.: 2017028 DATE: 11/30/17

L1

9/15/2017 9:52:53 AM COPYRIGHT 2017 NEWMAN ARCHITECTURE, INC.

PLANTING LEGEND

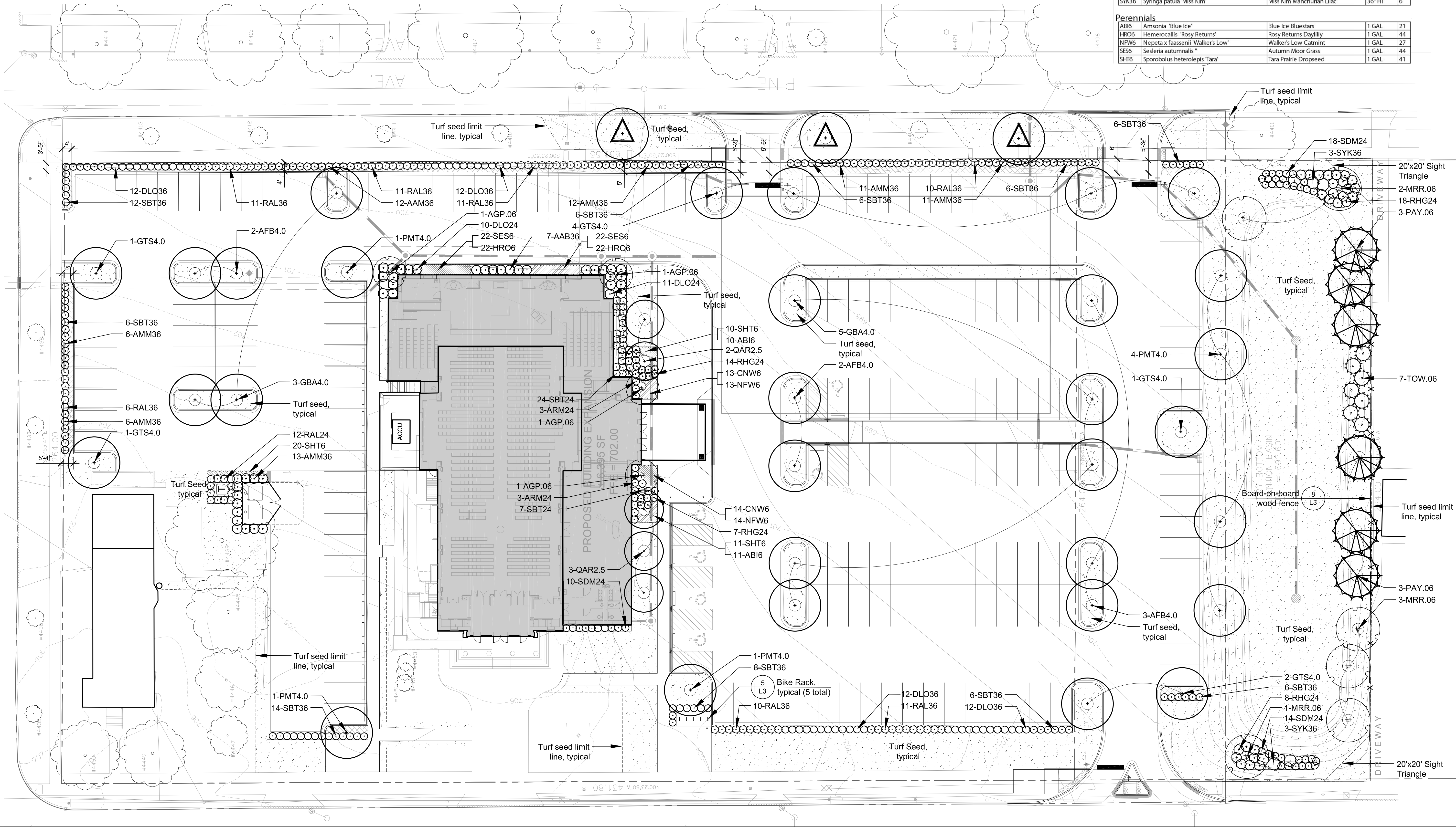


PLANTING NOTES

- Seed limit line is approximate. Seed to limits of grading and disturbance. Contractor responsible for restoration for any unauthorized disruption outside of designated construction area.
- Contractor responsible for erosion control in all seeded areas.
- Tree mulch rings in turf areas are 5 foot diameter, typical. Contractor shall provide a mulch ring around all existing trees within the limit of work. Remove all existing grass from area to be mulched and provide a typical v-trench edge.
- Bedlines are to be spade cut to a minimum depth of 3 inches unless otherwise shown on the plans. Curved bedlines are to be smooth and not segmented.
- Do not locate plants within 10' of utility structures, or within 5' horizontally of underground utility lines unless otherwise shown on the plans. Consult with Landscape Architect if these conditions exist.
- Plants and other materials are quantified and summarized for the convenience of the Owner and jurisdictional agencies only. Confirm and install sufficient quantities to complete the work as drawn and specified. No additional payments will be made for materials required to complete the work as drawn and specified.
- Existing tree locations are based on the latest available aerial photography. Locations will be verified with forthcoming tree survey.
- All turf seed areas to be Conserv FS Sunny Mix Seed or approved equal.
- Refer to specifications for additional conditions, standards and notes.

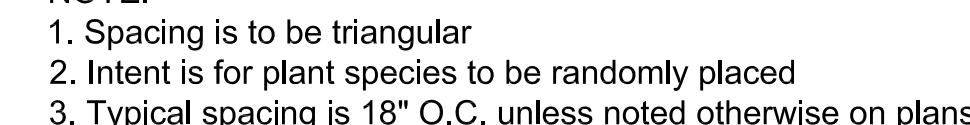
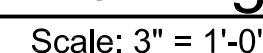
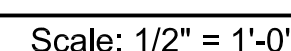
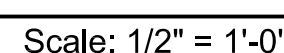
PLANT MATERIAL LIST

Code	Botanical Name	Common Name	Size	Qty
Shade Trees				
AFB4.0	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	4" C	7
GBA4.0	Ginkgo biloba 'Autumn Gold'	Autumn Gold Ginkgo	4" C	8
GTS4.0	Gleditsia triacanthos var. inermis 'Shademaster'	Shademaster Thornless Honeylocust	4" C	9
PMT4.0	Platanus x acerifolia 'Morton Circle'	Exclamation! London Planetree	4" C	7
QAR2.5	Quercus alba x robur 'Crimschmidt'	Crimson Spire Oak	2 1/2" C	5
Intermediate Trees				
AGP.06	Amelanchier x grandiflora 'Princess Diana'	Princess Diana Serviceberry	6' HT	4
MRR.06	Malus 'Royal Raindrops'	Royal Raindrops Crabapple	6' HT	6
Evergreen Trees				
PAY.06	Pinus ayacahuite 'Forest Sky'	Forest Sky Mexican White Pine	6' HT	6
TOW.06	Thuja occidentalis 'Hetz Wintergreen'	Wintergreen Eastern Arborvitae	6' HT	7
Deciduous Shrubs				
AAB36	Aronia arbutifolia 'Brilliantissima'	Brilliant Red Chokeberry	36" HT	7
ARM24	Aronia melanocarpa 'Autumn Magic'	Autumn Magic Black Chokeberry	24" HT	6
AMM36	Aronia melanocarpa 'Morton'	Iroquois Beauty™ Black Chokeberry	36" HT	71
DLO36	Diervilla lonicera "	Dwarf Bush-honeysuckle	36" HT	48
DLO24	Diervilla lonicera "	Dwarf Bush-honeysuckle	24" HT	21
RHG24	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	24" HT	47
RAL24	Ribes alpinum "	Alpine Currant	24" HT	12
RAL36	Ribes alpinum "	Alpine Currant	36" HT	70
SBT24	Spiraea betulifolia 'Tor'	Tor Birchleaf Spirea	24" HT	31
SBT36	Spiraea betulifolia 'Tor'	Tor Birchleaf Spirea	36" HT	75
SDM24	Spiraea x media 'Darsnorm'	Snow Storm Spirea	24" HT	42
SYK36	Syringa patula 'Miss Kim'	Miss Kim Manchurian Lilac	36" HT	6
Perennials				
AB6	Anemone 'Blue Ice'	Blue Ice Bluestars	1 GAL	21
HRO6	Hemerocallis 'Rosy Returns'	Rosy Returns Daylily	1 GAL	44
NFW6	Nepeta x faassenii 'Walker's Low'	Walker's Low Catmint	1 GAL	27
SE56	Sesleria autumnalis "	Autumn Moor Grass	1 GAL	44
SHT6	Sporobolus heterolepis 'Tara'	Tara Prairie Dropseed	1 GAL	41

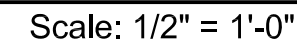
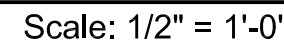
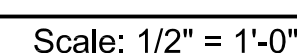
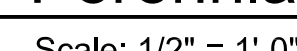




FOR
ST. JAMES PARISH
AND
THE ARCHDIOCESE OF CHICAGO



- Plant species quantities vary per planting bed, see planting plans for individual beds.



SCALE IN FEET
as noted



PROJECT NO.: 2017028 DATE: 11/30/17

L3

URBAN SERIES

DECORATIVE PENDANT LUMINAIRE

Cat.#

Job

Type

Approvals



BEACON
design . performance . technology

SPECIFICATIONS

Intended Use:

The Beacon Urban luminaire is available with a choice of different LED wattage configurations, shapes, sizes and optical distributions designed to replace HID lighting up to 400W MH or HPS.

Construction:

- The drivers shall be located in the top cast housing and shall be accessible by hinging the lower shade assembly. The driver and all electrical components shall be on a tray.
- The lower shade shall be made from a one-piece aluminum spinning.
- The housing is designed for LED thermal management without the use of metallic screens, cages, or fans. The top casting shall be able to be pendant mounted in place with a stainless steel safety pin and then permanently held in place with four stainless steel screws.

Electrical:

- 100V through 277V, 50 Hz to 60 Hz (UNV), or 347V or 480V input.
- Power factor is ≥ 0.90 at full load.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.
- Fixture electrical compartment shall contain all LED driver components.
- Button photocell available.
- Ambient operating temperature -25°C to 40°C
- Surge protection - 20kA.
- Lifeshield™ Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range.

Controls/Options:

- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night visit: www.beaconproducts.com/products/energeni
- Urban can be specified with SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or for more details, visit: www.hubbelllighting.com/products/sitesync/

Finish:

- IFS polyester powder-coat electrostatically applied and thermocured.
- IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Certifications:

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: www.designlights.org/QPL
- NRTL Certified, UL8750, UL 1598 and CSA22.2#250.13-14 for wet locations
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at <http://www.beaconproducts.com/products/urban>

Warranty:

Five year limited warranty for more information visit: www.hubbelllighting.com/resources/warranty

PRODUCT IMAGE(S)



Shown with arm

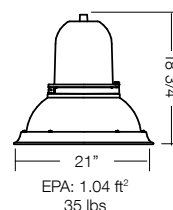


Shown with SiteSync™

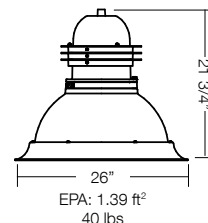
STYLES

CAP - Round Shade

CAP-21

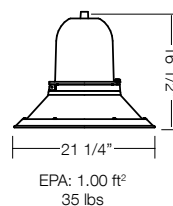


CAP-26/3NRW (optional rings)

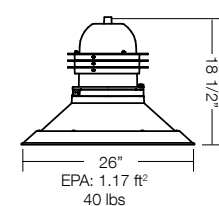


MRSS - Shallow Shade

MRSS-21/NRW

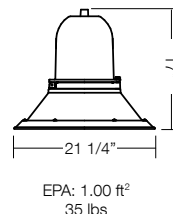


MRSS-26/3NRW (optional rings)

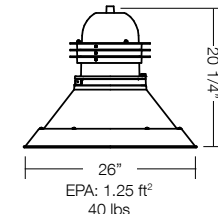


MRDS - Deep Shade

MRDS-21/NRW

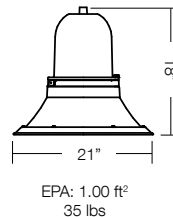


MRDS-26/3NRW (optional rings)

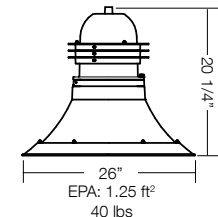


MAR - Curved Shade

MAR-21/NRW



MAR-26/3NRW (optional rings)



CERTIFICATIONS/LISTINGS



*3000K and warmer CCTs only



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design . performance . technology

Beacon Products • 2041 58th Avenue Circle East Bradenton, FL 34203 • Phone: 800-345-4928
Due to our continued efforts to improve our products, product specifications are subject to change without notice.
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HUBBELL
Lighting

ORDERING INFORMATION ORDERING EXAMPLE: URB-21/36L-80/5K7/UNV/4/SWP/NNRW/BBT

MODEL	SERIES	CCT/CRI ¹	VOLTAGE	ELECTRICAL OPTIONS	STYLE	FINISH
URB Urban	CAP-21 21" Capitol	3K7 3000K, 70 CRI	UNV 120-277V	PEC-120 button, 120V	NRNW No rings	DB Dark Bronze Textured
	MRDS-21 21" Miramar deep shade	4K7 4000K, 70 CRI	347 347V	PEC-208 button, 208V	3RNW Three rings	BL Black Matte Textured
	MAR-21 21" Maritas	5K7 5000K, 70 CRI	480 480V	PEC-240 button, 240V		PS Platinum Silver
	CAP-26 26" Capitol			PEC-277 button, 277V		WH White Textured
	MRSS-26 26" Miramar shallow shade					GYS Gray Smooth
	MRDS-26 26" Miramar deep shade					BZT Bronze Textured
	MAR-26 26" Maritas					BBT Basic Black Textured
						RAL _____

- ¹ 26" only
² To rotate optics Left or Right 90 degrees, specify L or R after the optical distribution example:4L
³ Must specify group and zone information at time of order. See <http://www.hubbell-automation.com/products/sitesync/> for further details.
⁴ Not available with other control or sensor options.
⁵ When ordering Energeni, specify the routine setting code (Example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor options.
⁶ Specify time delay; dimming level and mounting height.
⁷ This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at http://cdn.beaconproducts.com/content/products/specs/specs_files/Urban_LED_spec_sheet_turtle.pdf

PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit <http://www.hubbell-automation.com/products/sitesync/>, or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: URB-26/60L-136/3K7/UNV/5QM/SWP/NNRW/BBT SiteSync only
 URB-26/60L-136/3K7/UNV/5QM/SWPM-20F/NNRW/BBT SiteSync with Motion Control



SiteSync Lighting Control is available from our most popular brands in a broad range of award-winning product families.

CONTROL OPTIONS
 GENI-XX⁵ energeni
 SWP^{3,4} SiteSync Wireless Pre-Commission

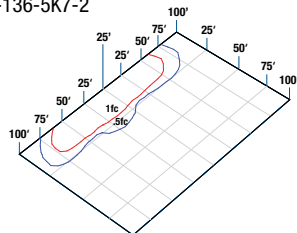
Accessories and Services (Ordered Separately)

Catalog Number	Description
SWUSB*	SiteSync loaded on USB flash drive (Windows® based only)
SWTAB*	SiteSync Windows® Tablet
SWBRG*	SiteSync Wireless Bridge Node

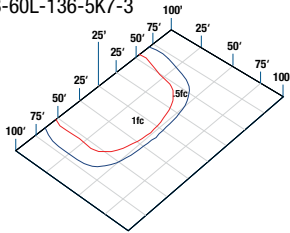
* When ordering with SiteSync, one of the following interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.
 + If needed, an additional Bridge Node can be ordered.

PHOTOMETRICS

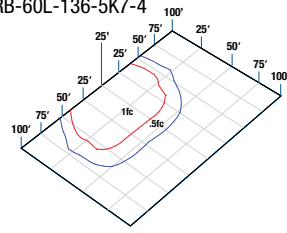
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 URB-60L-136-5K7-2



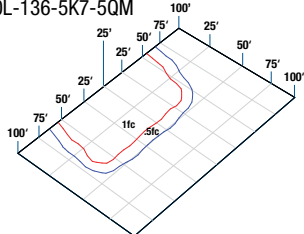
Type III
 URB-60L-136-5K7-3



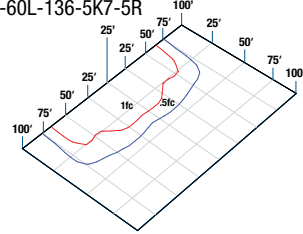
Type IV
 URB-60L-136-5K7-4



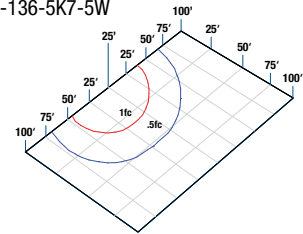
Type V Square Medium
 URB-60L-136-5K7-5QM



Type V Rectangular
 URB-60L-136-5K7-5R



Type V Round Wide
 URB-60L-136-5K7-5W



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PERFORMANCE DATA

# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS (120-277V)	DISTRIBUTION TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
				LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G
24	350mA	27W	FR	3871	138	1	0	0	3990	143	1	0	0	3667	131	0	0	0
			2	3750	134	2	0	0	3838	137	1	0	1	3528	126	1	0	1
			3	3638	130	1	0	1	3750	134	1	0	1	3446	123	1	0	1
			4	3680	131	0	0	1	3794	135	0	0	1	3486	129	0	0	1
			4W	3612	129	1	0	1	3723	133	1	0	1	3422	122	1	0	1
			5QM	3750	134	2	0	0	3866	138	2	0	0	3553	127	2	0	0
			5R	3763	134	2	0	2	3879	139	2	0	2	3565	127	2	0	2
			5W	3556	127	2	0	1	3666	131	3	0	1	3369	120	2	0	1
24	700mA	55W	FR	6451	113	1	0	1	6650	117	1	0	1	6112	107	1	0	1
			2	6251	110	3	0	1	6397	112	1	0	2	5879	103	1	0	1
			3	6063	106	1	0	2	6250	110	1	0	2	5744	101	1	0	2
			4	6133	108	1	0	2	6323	111	1	0	2	5811	102	1	0	2
			4W	6020	106	1	0	2	6206	109	1	0	2	5703	100	1	0	2
			5QM	6251	110	3	0	1	6444	113	3	0	1	5922	104	2	0	1
			5R	6272	110	3	0	3	6466	113	3	0	3	5942	104	3	0	3
			5W	6926	104	3	0	1	6110	107	3	0	1	5615	99	3	0	1
36	700mA	80W	FR	9672	113	1	0	1	9970	117	1	0	1	9173	107	1	0	1
			2	9303	109	1	0	2	9591	112	1	0	2	8823	103	1	0	2
			3	9089	107	1	0	2	9370	110	1	0	2	8621	101	1	0	2
			4	9195	108	1	0	2	9479	111	1	0	2	8721	102	1	0	2
			4W	9025	106	1	0	2	9304	109	1	0	2	8559	100	1	0	2
			5QM	9371	110	3	0	1	9661	113	3	0	1	8888	104	3	0	1
			5R	9403	110	3	0	3	9694	114	3	0	3	8918	105	3	0	3
			5W	8885	105	3	0	2	9160	108	4	0	2	8427	100	3	0	2
48*	700mA	110W*	FR	12895	116	1	0	1	13294	120	1	0	1	12230	110	1	0	1
			2	12404	112	2	0	2	12788	115	2	0	2	11765	106	2	0	2
			3	12119	109	1	0	3	12494	113	1	0	3	11494	104	1	0	2
			4	12260	110	1	0	3	12639	114	1	0	3	11628	105	1	0	3
			4W	12033	108	2	0	3	12405	112	2	0	3	11413	103	2	0	2
			5QM	12494	113	3	0	2	12881	116	3	0	2	11850	107	3	0	2
			5R	12537	113	3	0	3	12925	116	4	0	4	11891	107	3	0	3
			5W	11847	107	4	0	2	12213	110	4	0	2	11236	101	4	0	2
60*	700mA	136W*	FR	16119	117	1	0	2	16618	121	2	0	2	15288	112	1	0	2
			2	15505	113	2	0	2	15985	117	2	0	2	14706	107	2	0	2
			3	15149	111	2	0	3	15617	114	2	0	3	14368	105	2	0	3
			4	15324	112	1	0	3	15798	115	1	0	3	14534	106	1	0	3
			4W	15041	110	2	0	3	15506	113	2	0	3	14266	104	2	0	3
			5QM	15618	114	4	0	2	16101	118	4	0	2	14813	108	3	0	2
			5R	15671	114	4	0	4	16156	118	4	0	4	14864	108	4	0	4
			5W	14809	108	4	0	2	15267	111	4	0	2	14046	103	4	0	2

¹Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

*AVAILABLE IN THE 26" URBAN ONLY



ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
24	1	350mA	120	27	0.27
			277		0.12
			347		0.09
			480		0.07
24	2	700 mA	120	55	0.55
			277		0.24
			347		0.19
			480		0.14
36	1	700 mA	120	80	0.80
			277		0.35
			347		0.28
			480		0.20
48	1	700 mA	120	110	1.1
			277		0.43
			347		0.38
			480		0.28
60	1	700 mA	120	136	1.4
			277		0.59
			347		0.47
			480		0.34

PROJECTED LUMEN MAINTENANCE

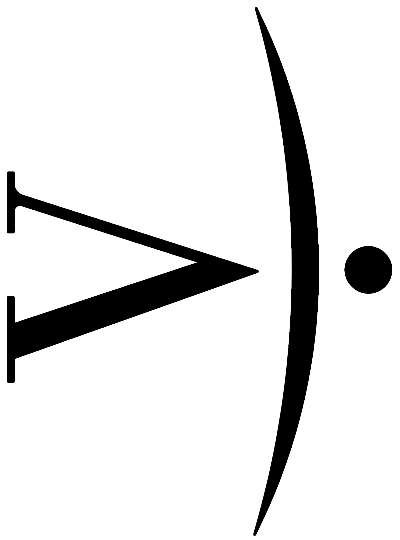
AMBIENT TEMP.	0	25,000	50,000	TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°F	1.00	0.97	0.95	0.95	0.92	>470,000

¹ Projected per IESNA TM-21-11

Data references the extrapolated performance projections for the base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.98
40°C	104°F	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).



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(630) 400-1800 FAX (630) 400-1897 info@newmanarchitecture.com

Participating Consultants:

**AMSCO**
ENGINEERING

PHONE (630) 515-1555
FAX (630) 515-1583
51154 E. MONROE
DOWNERS GROVE, ILLINOIS 60515

PROJECT NAME:
VILLAGE SUBMITTAL
**CHURCH ADDITION
AND RENOVATION**
820 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, ILLINOIS 60004

FOR
ST. JAMES PARISH
AND
THE ARCHDIOCESE OF CHICAGO

DRAWING TITLE:
SITE PHOTOMETRIC PLAN

Project No.: 2017028 **Date:** 9/19/17

E0-2P

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min Max/Min
NORTH PARKING	Illuminance	Fc	2.39	10.4	0.0	N.A. N.A.
SOUTH PARKING	Illuminance	Fc	1.92	6.8	0.0	N.A. N.A.
EAST PARKING	Illuminance	Fc	2.07	9.7	0.1	20.70 97.00
PROPERTY LINE, EAST	Illuminance	Fc	0.06	0.1	0.0	N.A. N.A.
PROPERTY LINE, NORTH	Illuminance	Fc	0.04	0.1	0.0	N.A. N.A.
PROPERTY LINE, SOUTH	Illuminance	Fc	0.00	0.0	0.0	N.A. N.A.
PROPERTY LINE, WEST	Illuminance	Fc	0.03	0.1	0.0	N.A. N.A.
SOUTH CHURCH WALK	Illuminance	Fc	0.96	2.0	0.1	9.60 20.00

Luminaire Schedule				Arrangement		Total Lamp Lumens	LFE	Description
Symbol	Qty	Label				N.A.	0.850	URB-XXXX-26-60J-136-4K7-4-U
	3	URB-XXXX-26-60J-136-4K7-4-UNV		SINGLE		N.A.	0.900	URB-XXXX-26-60J-136-4K7-3-U
	5	URB-XXXX-26-60J-136-4K7-2-UNV		SINGLE		N.A.	0.900	URB-XXXX-26-60J-136-4K7-2-U

Luminaire Location Summary		
Lumino	Label	Z
37	URB-XXXX-26-60J-136-4K7-4-UNV	20
38	URB-XXXX-26-60J-136-4K7-4-UNV	20
54	URB-XXXX-26-60J-136-4K7-3-UNV	20
64	URB-XXXX-26-60J-136-4K7-4-UNV	20
72	URB-XXXX-26-60J-136-4K7-2-UNV	20
73	URB-XXXX-26-60J-136-4K7-2-UNV	20
74	URB-XXXX-26-60J-136-4K7-2-UNV	20
77	URB-XXXX-26-60J-136-4K7-3-UNV	25
78	URB-XXXX-26-60J-136-4K7-3-UNV	25
80	URB-XXXX-26-60J-136-4K7-3-UNV	14
81	URB-XXXX-26-60J-136-4K7-2-UNV	25
82	URB-XXXX-26-60J-136-4K7-2-UNV	25

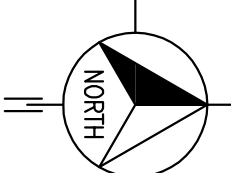
GENERAL NOTES

1. FIXTURE 80 IS INTENDED TO BE WALL-MOUNT AT +14'-0" ABOVE GRADE.
2. FIXTURE MOUNTING HEIGHTS SHOWN INCLUDE CONCRETE BASE HEIGHTS.
3. SOUTH CHURCH WALK CALCULATIONS DO NOT INCLUDE CONTRIBUTIONS FROM PLANNED CANOPY AND BOLLARD LIGHTING, WHICH WILL NOT AFFECT LEVELS AT THE PROPERTY LINE, MEASURED HORIZONTALLY PER SECTION 10.2-7.4 (b) OF THE LIGHTING ORDINANCE.

FREDERICK STREET

ARLINGTON HEIGHTS ROAD

PINE AVENUE



SITE PHOTOMETRIC PLAN

SCALE: 1"=30'-0"

0' 15' 30' 60'

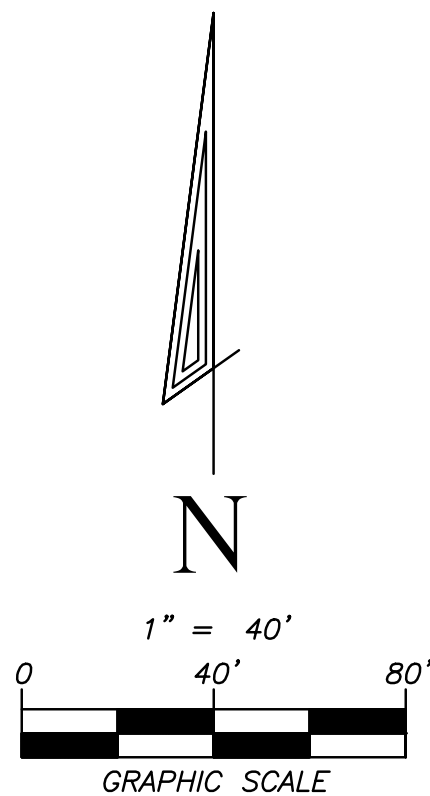
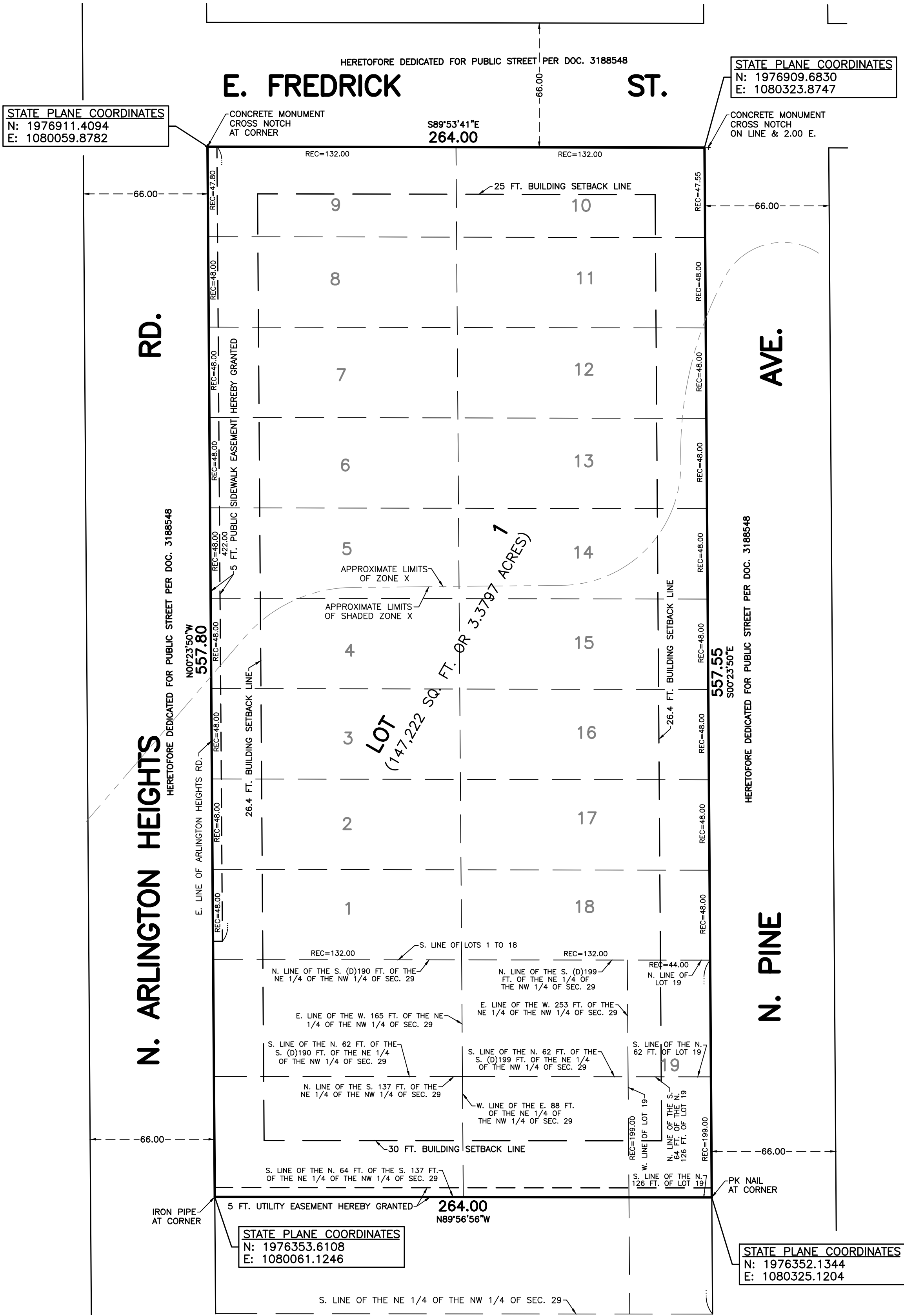
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ST. JAMES EAST RESUBDIVISION

PRELIMINARY PLAT

BEING IN THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.



ILLINOIS DEPARTMENT OF TRANSPORTATION CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS

THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION WITH RESPECT TO ROADWAY ACCESS PURSUANT TO § 2 OF "AN ACT TO REVISE THE LAW IN RELATION TO PLATS," AS AMENDED, A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN THE DEPARTMENT'S "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS" WILL, BE REQUIRED BY THE DEPARTMENT.

ANTHONY QUIGLEY, P.E.
DEPUTY DIRECTOR OF HIGHWAYS
REGION ONE ENGINEER

PROFESSIONAL AUTHORIZATION

STATE OF ILLINOIS)
COUNTY OF DUPAGE) SS

I, THOMAS A. MOLLOY, A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, LICENSE NUMBER 35-3409, DO HEREBY AUTHORIZE THE VILLAGE OF ARLINGTON HEIGHTS, COOK COUNTY, ILLINOIS, ITS STAFF OR AUTHORIZED AGENT, TO PLACE THIS DOCUMENT OF RECORD IN THE COUNTY RECORDERS OFFICE IN MY NAME AND IN COMPLIANCE WITH ILLINOIS STATUTES CHAPTER 109 PARAGRAPH 2, AS AMENDED.

SIGNED AT BENSENVILLE, ILLINOIS, THIS 28TH DAY OF SEPTEMBER, A.D. 2017

EDWARD J. MOLLOY AND ASSOCIATES, LTD.
AN ILLINOIS PROFESSIONAL DESIGN FIRM - LICENSE NO. 184-004840

THOMAS A. MOLLOY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3409
(EXPIRES NOVEMBER 30, 2018 AND IS RENEWABLE)

LAND SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF DUPAGE) SS

I, THOMAS A. MOLLOY, AN ILLINOIS PROFESSIONAL LAND SURVEYOR HEREBY CERTIFY THAT I HAVE SURVEYED AND PLATTED THE FOLLOWING DESCRIBED PROPERTY FOR THE PURPOSE OF CONSOLIDATING SAME INTO A ONE LOT SUBDIVISION:

THE NORTH 62 FEET OF THE SOUTH 190 FEET OF THE WEST 165 FEET (EXCEPT A STRIP ALONG THE WEST OF SAID TRACT USED FOR A ROAD) OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

ALSO

THE NORTH 62 FEET OF THE SOUTH 199 FEET OF THE EAST 88 FEET OF THE WEST 253 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN;

ALSO

THE NORTH 62 FEET OF LOT 19 IN BLOCK 5 IN D.W. MILLER'S ARLINGTON HEIGHTS ACRE ADDITION ON THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 23, 1901 AS DOCUMENT NO. 3188548.

ALSO

THE NORTH 64 FEET OF THE SOUTH 137 FEET OF THE EAST 88 FEET OF THE WEST 253 FEET OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

ALSO

THE SOUTH 64 FEET OF THE NORTH 126 FEET OF LOT 19 IN BLOCK 5 IN D.W. MILLER'S ARLINGTON HEIGHTS ACRE ADDITION IN THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 23, 1901 AS DOCUMENT NO. 3188548.

ALSO

LOTS 1 THROUGH 18, BOTH INCLUSIVE, IN D.W. MILLER'S ARLINGTON HEIGHTS ACRE ADDITION IN THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, ACCORDING TO THE PLAT THEREOF RECORDED DECEMBER 23, 1901 AS DOCUMENT NO. 3188548.

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AND THAT THE PLAT HEREON DRAWN IS A CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION. DIMENSIONS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF. I FURTHER CERTIFY THAT AN EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NO. 17031C0203J WITH AN EFFECTIVE DATE OF AUGUST 19, 2008, SHOWS THAT THE SOUTHERN PORTION OF THE PROPERTY FALLS WITHIN SHADED ZONE "X" DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD AND THAT THE NORTHERLY PORTION OF THE PROPERTY DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AND THAT SAID PORTION OF THE PROPERTY DOES FALL WITHIN ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN. I FURTHER CERTIFY THAT SAID SURVEY IS WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF ARLINGTON HEIGHTS, COOK COUNTY, ILLINOIS WHICH HAS ADOPTED AN OFFICIAL COMPREHENSIVE PLAN. I FURTHER CERTIFY THAT THE MONUMENTS AND SURVEY STAKES NOTED ON THE ANNEXED PLAT HAVE BEEN ESTABLISHED ON THE SITE.

SIGNED AT BENSENVILLE, ILLINOIS, THIS 28TH DAY OF SEPTEMBER, A.D. 2017

EDWARD J. MOLLOY AND ASSOCIATES, LTD.
AN ILLINOIS PROFESSIONAL DESIGN FIRM - LICENSE NO. 184-004840

THOMAS A. MOLLOY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3409
(EXPIRES NOVEMBER 30, 2018 AND IS RENEWABLE)

OWNER'S CERTIFICATE AND SCHOOL DISTRICT STATEMENT

STATE OF ILLINOIS)
COUNTY OF COOK) SS

THE CATHOLIC BISHOP OF CHICAGO, A CORPORATION SOLE OF ILLINOIS, DOES HEREBY CERTIFY THAT IT IS THE OWNER OF THE PROPERTY DESCRIBED HEREON AND THAT IT HAS CAUSED SAID PROPERTY TO BE SURVEYED AND PLATTED FOR THE PURPOSE OF CONSOLIDATING SAME INTO ONE LOT AS SHOWN HEREON FOR THE USES AND PURPOSES THEREIN SET FORTH AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE HEREON SHOWN. IT FURTHER CERTIFIES TO THE BEST OF ITS KNOWLEDGE, THAT THE LAND INCLUDED HEREIN FALLS WITHIN THE FOLLOWING SCHOOL DISTRICTS: ARLINGTON HEIGHTS SCHOOL DISTRICT 25, 1200 S. DUNSTON AVENUE, ARLINGTON HEIGHTS, IL 60005, (847) 758-4900, TOWNSHIP HIGH SCHOOL DISTRICT 214, 2121 S. GOEBBERT ROAD, ARLINGTON HEIGHTS, IL 60005, (847) 718-7645, HARPER COMMUNITY COLLEGE DISTRICT NO. 512.

SIGNED AT _____ THIS _____ DAY OF _____, A.D. 2017

THE CATHOLIC BISHOP OF CHICAGO, A CORPORATION SOLE OF ILLINOIS

BY: _____ TITLE: _____

NOTARY PUBLIC CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS

I, _____, A NOTARY PUBLIC IN AND FOR SAID COUNTY, IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT _____ OF THE CATHOLIC BISHOP OF CHICAGO, A CORPORATION SOLE OF ILLINOIS, PERSONALLY KNOWN TO ME TO BE THE SAME PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT HE/SHE SIGNED AND DELIVERED THE SAID INSTRUMENT AS HIS/HER OWN FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID CORPORATION SOLE FOR THE USES AND PURPOSES THEREIN SET FORTH.

GIVEN UNDER MY HAND AND OFFICIAL SEAL THIS _____ DAY OF _____, A.D. 2017

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

COUNTY CLERK CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF COOK) SS

I, DAVID ORR, COUNTY CLERK OF COOK COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT I FIND NO DELINQUENT GENERAL TAXES, NO UNPAID CURRENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, NO DELINQUENT OR UNPAID CURRENT SPECIAL ASSESSMENTS, NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND SHOWN ON THIS PLAT OF SUBDIVISION AND NO DEFERRED INSTALLMENTS OF ANY OUTSTANDING UNPAID SPECIAL ASSESSMENTS WHICH HAVE NOT BEEN DIVIDED IN ACCORDANCE WITH THE PROPOSED SUBDIVISION AND DULY APPROVED BY THE COURT THAT CONFIRMED THE SPECIAL ASSESSMENT.

GIVEN UNDER MY HAND AND SEAL AT CHICAGO, COOK COUNTY, ILLINOIS, THIS _____ DAY OF _____, A.D. 2017.

COUNTY CLERK

PLAT SUBMITTED BY AND SEND FUTURE TAX BILLS TO:
THE CATHOLIC BISHOP OF CHICAGO

AFTER RECORDING RETURN TO:
VILLAGE OF ARLINGTON HEIGHTS
ATTENTION: VILLAGE CLERK
33 S. ARLINGTON HEIGHTS RD.
ARLINGTON HEIGHTS, IL 60005

TAX PARCEL PERMANENT INDEX NUMBERS:

03-29-108-004-0000
03-29-108-009-0000
03-29-108-010-0000
03-29-108-011-0000
03-29-108-012-0000
03-29-108-014-0000
03-29-108-015-0000
03-29-108-019-0000
03-29-108-020-0000
03-29-108-021-0000
03-29-108-022-0000

DECEMBER 5, 2017: REVISED TO READ PRELIMINARY PLAT.

DRAFTED BY: BJE

PAGE: 1 OF 1
ORDER NO.: 170209
FILE: 29-42-11
PROJECT NO.: 2261

PREPARED BY:

EDWARD J. MOLLOY & ASSOCIATES

A DIVISION OF THOMAS A. MOLLOY, LTD. - PROFESSIONAL LAND SURVEYING
1236 MARK STREET, BENSENVILLE, ILLINOIS 60106 (630) 595-2600 FAX: (630) 595-4700
E-MAIL: TMOLLOY@EJ.MOLLOY.COM

VALID ONLY WITH EMBOSSED SEAL

Traffic and Parking Impact Study St. James Parish Expansion

Arlington Heights, Illinois



Prepared For:



SAINT JAMES PARISH
ARLINGTON HEIGHTS

Prepared By:



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

September 21, 2017

Revised November 30, 2017

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic and parking impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed expansion of the St. James Parish located in Arlington Heights, Illinois. The existing campus is bisected by Arlington Heights Road with the church building located on the east side of Arlington Road south of Frederick Street and the Parish Center and school building is located on the west side of Arlington Heights Road. As proposed, the existing three-level school building located south of the church will be razed and the church will be expanded to increase its capacity from approximately 679 seats to approximately 916 seats. Access to the church will continue to be provided via the existing access system serving the campus and via a proposed a right-in/right-out access drive off Arlington Heights Road.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed expansion and evaluate the adequacy of the parking supply in accommodating the projected parking demand.

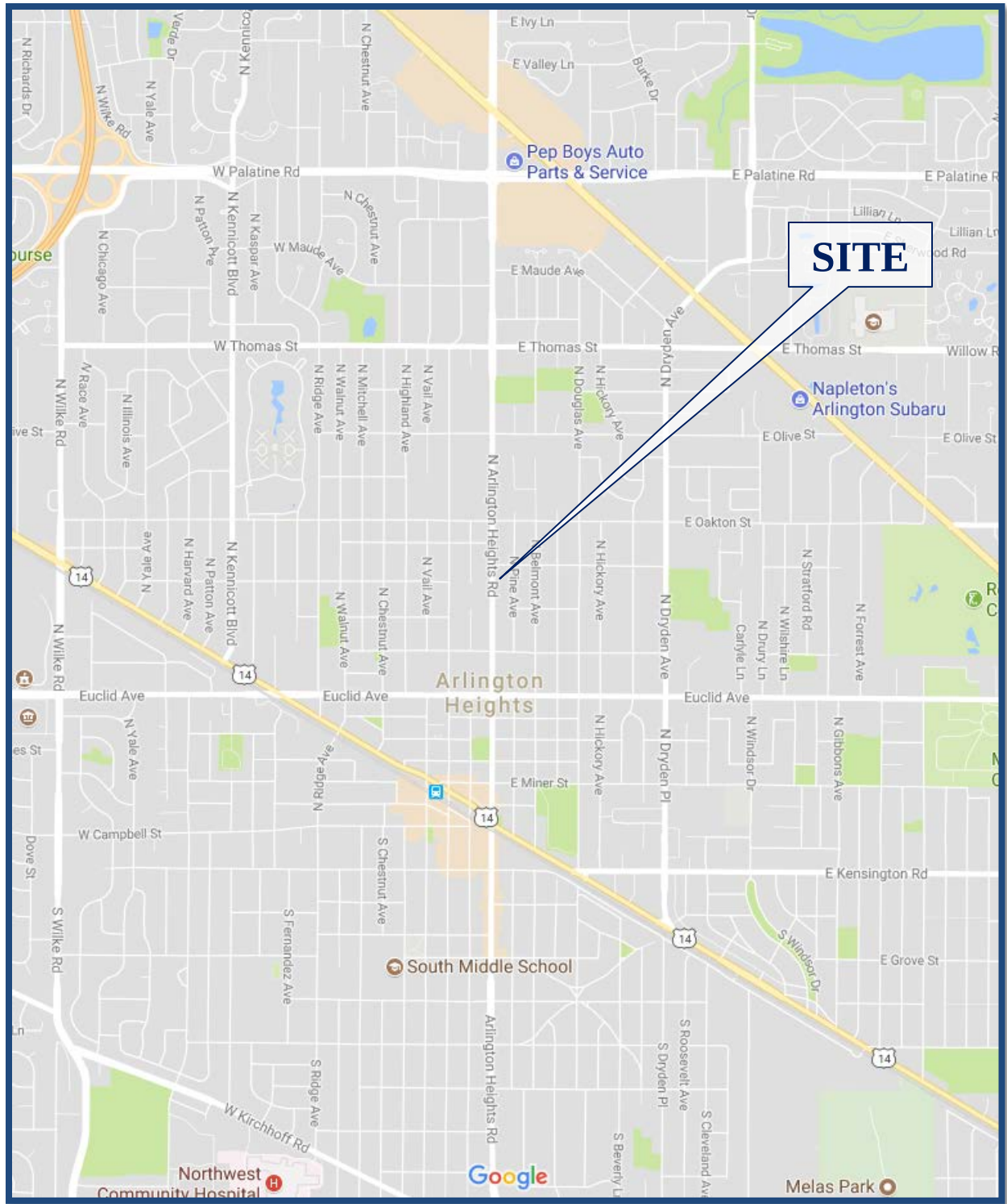
Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site area.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed expansion
- Directional distribution of the expansion generated traffic
- Vehicle trip generation for the expansion
- Future traffic conditions including access to the church
- Traffic analyses for the Sunday morning, weekday morning and weekday afternoon peak hours.
- Recommendations with respect to adequacy of the site access and adjacent roadway system.
- Parking Evaluation

Traffic capacity analyses were conducted for the Sunday morning, weekday morning and weekday afternoon peak hours for the following conditions:

1. Existing Conditions - Analyze the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
2. Projected Conditions – Analyze the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient area growth not attributable to any particular development, and the traffic estimated to be generated by the full buildout of the church expansion.



Site Location

Figure 1



Aerial View of Site Location

Figure 2

2. Existing Conditions

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

Site Location

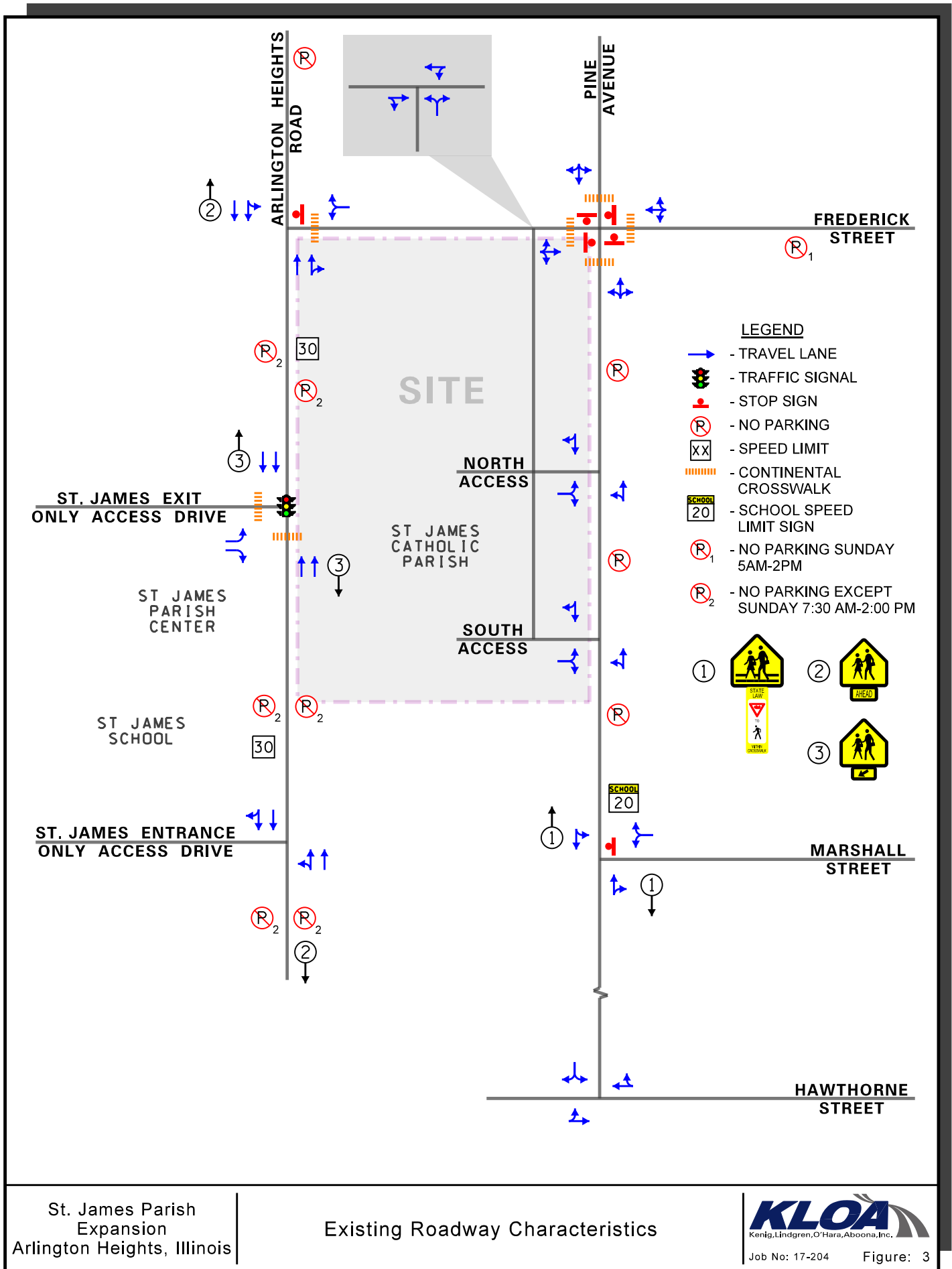
The site, which is currently occupied by an existing church building and three-story school building is located in the southeast quadrant of the intersection of Arlington Heights Road with Frederick Street. The St. James Campus is bisected by Arlington Heights Road with the Church and a seldom used school building located on the east side of Arlington Heights Road and the St. James School and Parish Center are located on the west side of Arlington Heights Road. Land uses in the vicinity of the site are primarily residential in all directions and the St. James Campus is located approximately two-thirds of a mile north of Downtown Arlington Heights.

Existing Roadway System Characteristics

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

Arlington Heights Road is a north-south arterial roadway that in the vicinity of the site provides two through lanes in each direction. At its signalized intersection with the St. James exit only access drive, Arlington Heights Road provides two through lanes and a high visibility crosswalk on the northbound approach and two through lanes on the southbound approach. At its unsignalized intersection with Frederick Street, Arlington Heights Road provides a through lane and a shared through/right-turn lane on the northbound approach and a shared left-turn/through lane and a through lane on the southbound approach. At its unsignalized intersection with the St. James entrance only access drive, Arlington Heights Road provides a shared left-turn/through lane and a through lane on the northbound approach and a through lane and a shared through/right-turn lane on the southbound approach. Arlington Heights Road is under the jurisdiction of the Illinois Department of Transportation, is not classified as a Strategic Regional Arterial, carries an annual average daily traffic (AADT) volume of 22,000 vehicles (IDOT AADT 2014) and has a posted speed limit of 30 miles per hour.

Frederick Street is an east-west local roadway that provides one lane in each direction and extends from Arlington Heights Road east to its terminus at Dryden Avenue. At its unsignalized intersection with Arlington Heights Road, Frederick Street provides a shared left/right-turn lane under stop-sign control and a high visibility crosswalk. At its all-way stop-sign controlled intersection with Pine Avenue, Frederick Street provides a shared left/through/right-turn lane and a high visibility crosswalk on both approaches. Frederick Street is under the jurisdiction of the Village of Arlington Heights.



Pine Avenue is a north-south local roadway that provides one lane in each direction and extends from Hawthorne Avenue north to its terminus 175 feet north of Oakton Street. At its all-way stop-sign controlled intersection with Frederick Street, Pine Avenue provides a shared left/through/right-turn lane and a high visibility crosswalk. At its unsignalized intersection with Marshall Street, Pine Avenue provides a shared through/right-turn lane on the northbound approach and a shared left-turn/through lane and a high visibility crosswalk on the southbound approach. At its unsignalized intersection with Hawthorne Street, Pine Avenue provides a shared left/right-turn lane. Pine Avenue is under the jurisdiction of the Village of Arlington Heights.

Marshall Street is an east-west local roadway that provides one lane in each direction and extends from Pine Avenue east to its terminus at Douglas Avenue. At its unsignalized intersection with Pine Avenue, Marshall Street provides a shared left/right-turn lane under stop-sign control and a high visibility crosswalk. Marshall Street is under the jurisdiction of the Village of Arlington Heights.

Hawthorne Street is an east-west local roadway that provides one lane in each direction and extends from Walnut Avenue (one-half mile west of Arlington Heights Road) east to its terminus at Dryden Avenue (one-half mile east of Arlington Heights Road). At its unsignalized intersection with Pine Avenue, Hawthorne Street provides a shared left-turn/through lane on the eastbound approach and a shared through/right-turn lane on the westbound approach.

Existing St. James Parish Operations

On Sunday morning, St. James offers two services in the church building with the first service at 7:00 A.M. and the second service is at 8:30 A.M. The other two services are held in the parish center with the third service at 10:00 A.M. and the fourth service at 11:30 P.M. An additional service is held at 5:00 P.M. on Saturday and Sunday evenings. For the Sunday services, parishioners park within the off-street parking lots on the east and west side of Arlington Heights Road as well as the on-street parking locations, including Arlington Heights Road, within the vicinity of the St. James Campus.

Existing St. James School Operations

St. James School enrolls approximately 500 students and a typical school day begins at 8:45 A.M. and ends at 3:35 P.M. St. James School also offers before and after school care programs that start at 7:00 A.M. and end at 6:00 P.M. There are two buses that serve the school. Buses loading occurs along the west side of Pine Avenue during morning drop-off morning and stage within the church parking lot during afternoon pick-up. Students that are bused cross Arlington Heights Road at its signalized intersection with the exit only access drive with the assistance of a crossing guard.

During morning drop-off activities, parents begin dropping off students within the school's parking lot at 8:00 A.M. with the majority drop-off activity ending by 8:40 A.M. Field observations conducted during morning drop-off showed that four faculty members advance vehicles to the northeast side of the school building and help unload students from vehicles. The morning drop-off queues were a maximum of eleven vehicles and queues did not extend to Arlington Heights Road.

During afternoon pick-up activity, parents begin arriving at approximately 3:00 PM and stack stadium style in approximately five rows of twelve vehicles with all vehicles located on the west side of the school building facing north. Additionally, similar pick-up stacking occurs on the east side of the church building with all vehicles facing south. All parents are required to park their vehicles and go to the main entrance of the school to pick up their students. Once all students are loaded into their vehicles, each row is released at a time. All pick-up activity ends by 3:45 P.M.

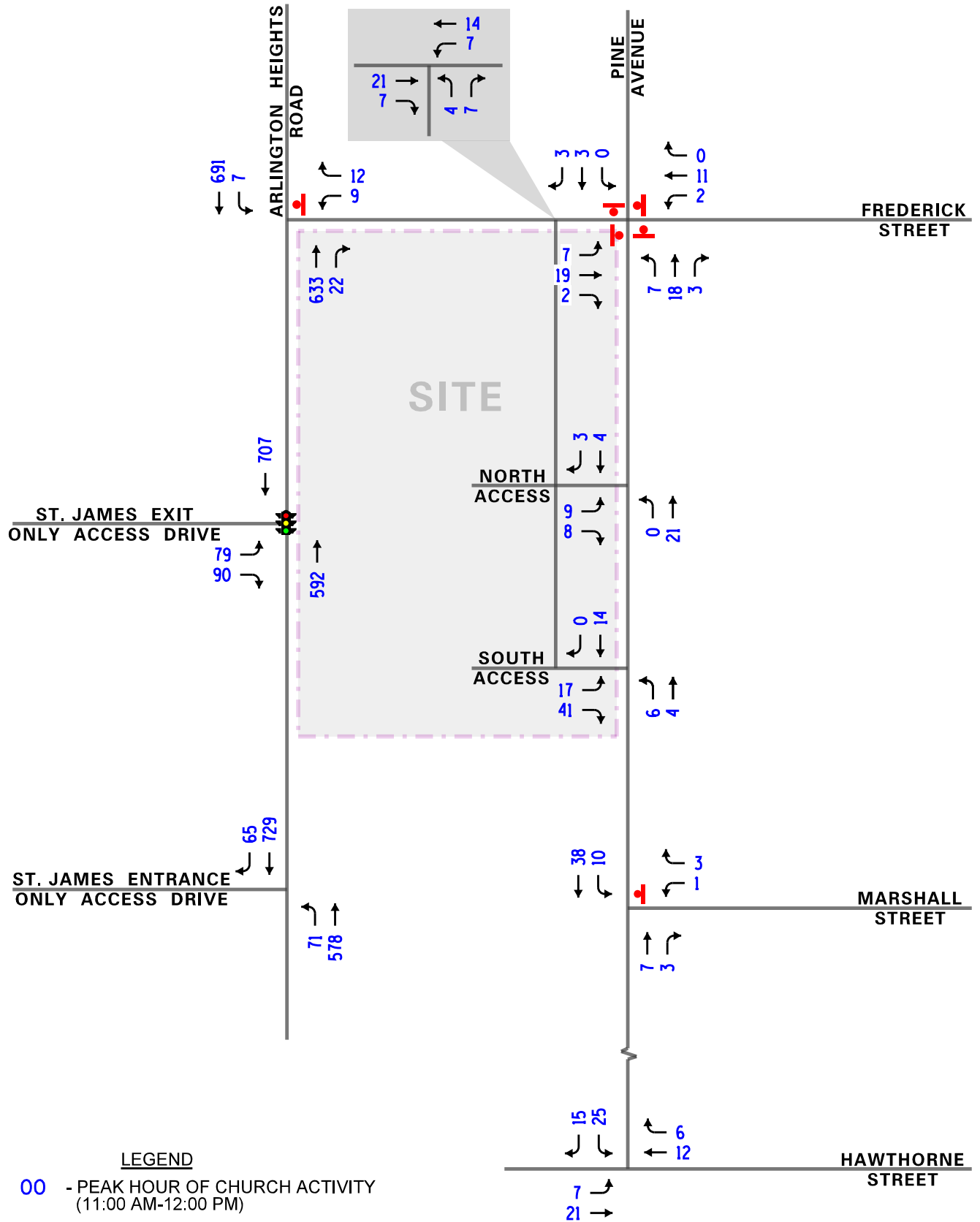
Existing Traffic Volumes

In order to determine current traffic conditions on the existing roads, KLOA, Inc. conducted peak period traffic counts utilizing Miovision Scout Collection Units at the following intersections:

- Arlington Heights Road with Frederick Street
- Arlington Heights Road with the Signalized St. James Exit Only Access Drive
- Arlington Heights Road with the Unsignalized St. James Entrance Only Access Drive
- Frederick Street with Pine Avenue
- Pine Avenue with Marshall Street
- Pine Avenue with Hawthorne Street
- Pine Avenue with the Northerly St. James Access Drive
- Pine Avenue with the Southerly St. James Access Drive
- Frederick Street with the St. James Access Drive

The traffic counts were conducted on Sunday, August 27, 2017 during the Sunday morning (9:00 A.M. to 12:00 Noon) peak period and on Tuesday, August 29, 2017 during the weekday morning (7:30 A.M. to 9:30 A.M.) and weekday afternoon (2:30 P.M. to 4:30 P.M.) peak periods. The results of the traffic counts showed that the Sunday morning peak hour of traffic occurred from 11:00 A.M. to 12:00 Noon, the weekday morning peak hour of traffic occurred from 7:45 A.M. to 8:45 A.M. and the weekday afternoon peak hour of traffic occurs from 3:00 P.M. to 4:00 P.M.

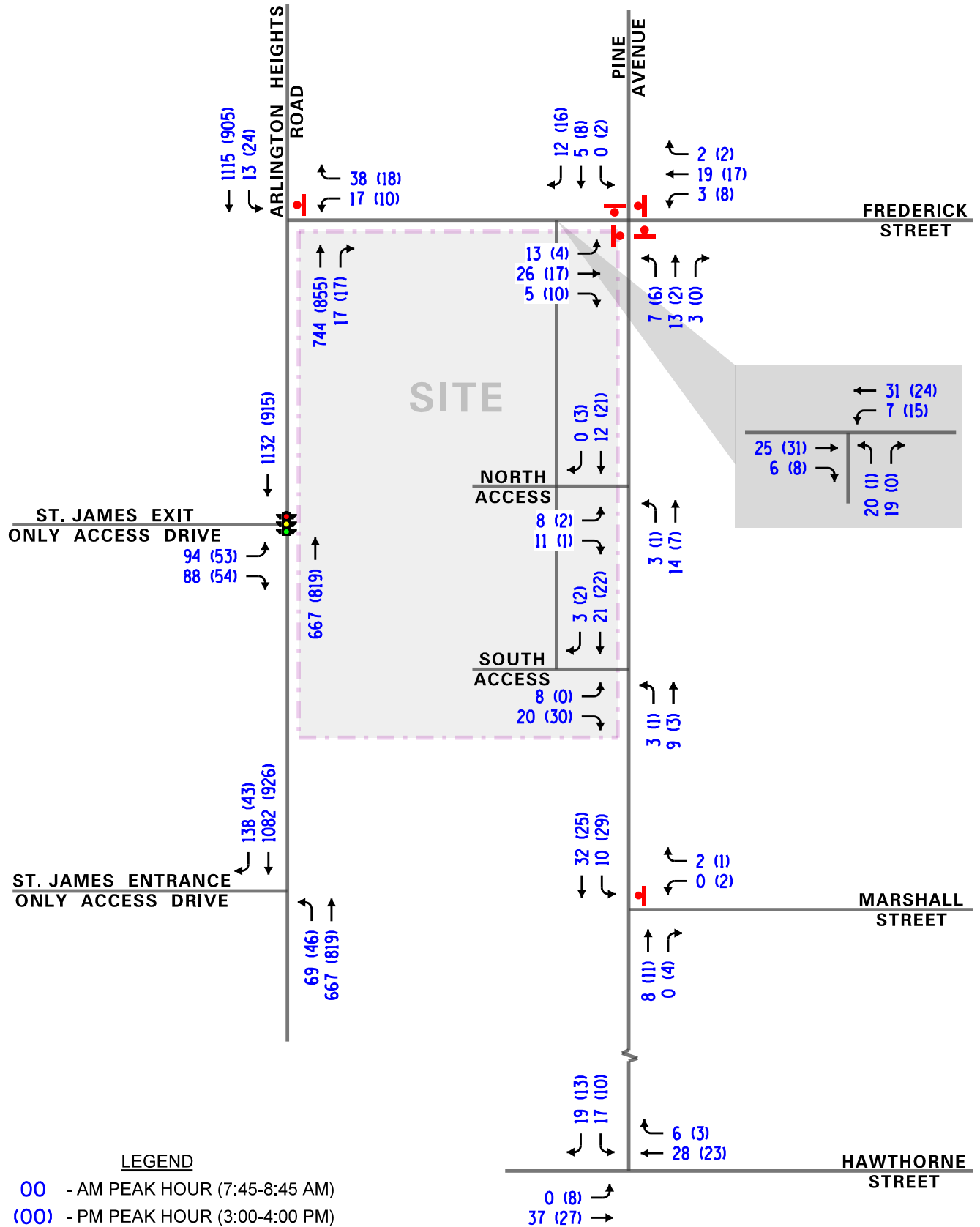
It should be noted that these peak periods and peak hours were chosen to correspond to the peak church and school activity on a Sunday and weekday, respectively. On Sunday, the 11:00 A.M. to 12:00 Noon peak hour captures the overlap of the departing traffic from the 10:00 A.M. service and the arriving traffic for the 11:30 A.M. service. This peak hour also carries the highest volume of traffic along Arlington Heights Road during the period. On a weekday, the 7:45 A.M. to 8:45 A.M. peak hour captures the majority of drop-off traffic and the 3:00 P.M. to 4:00 P.M. peak hour captures the majority of pick-up traffic for St. James School. **Figure 4A** illustrates the existing Sunday morning peak hour traffic volumes and **Figure 4B** illustrates the existing weekday morning and afternoon traffic volumes. **Figure 5A** illustrates the existing Sunday morning pedestrian volumes and **Figure 5B** illustrates the existing weekday morning and evening pedestrian volumes.



St. James Parish
Expansion
Arlington Heights, Illinois

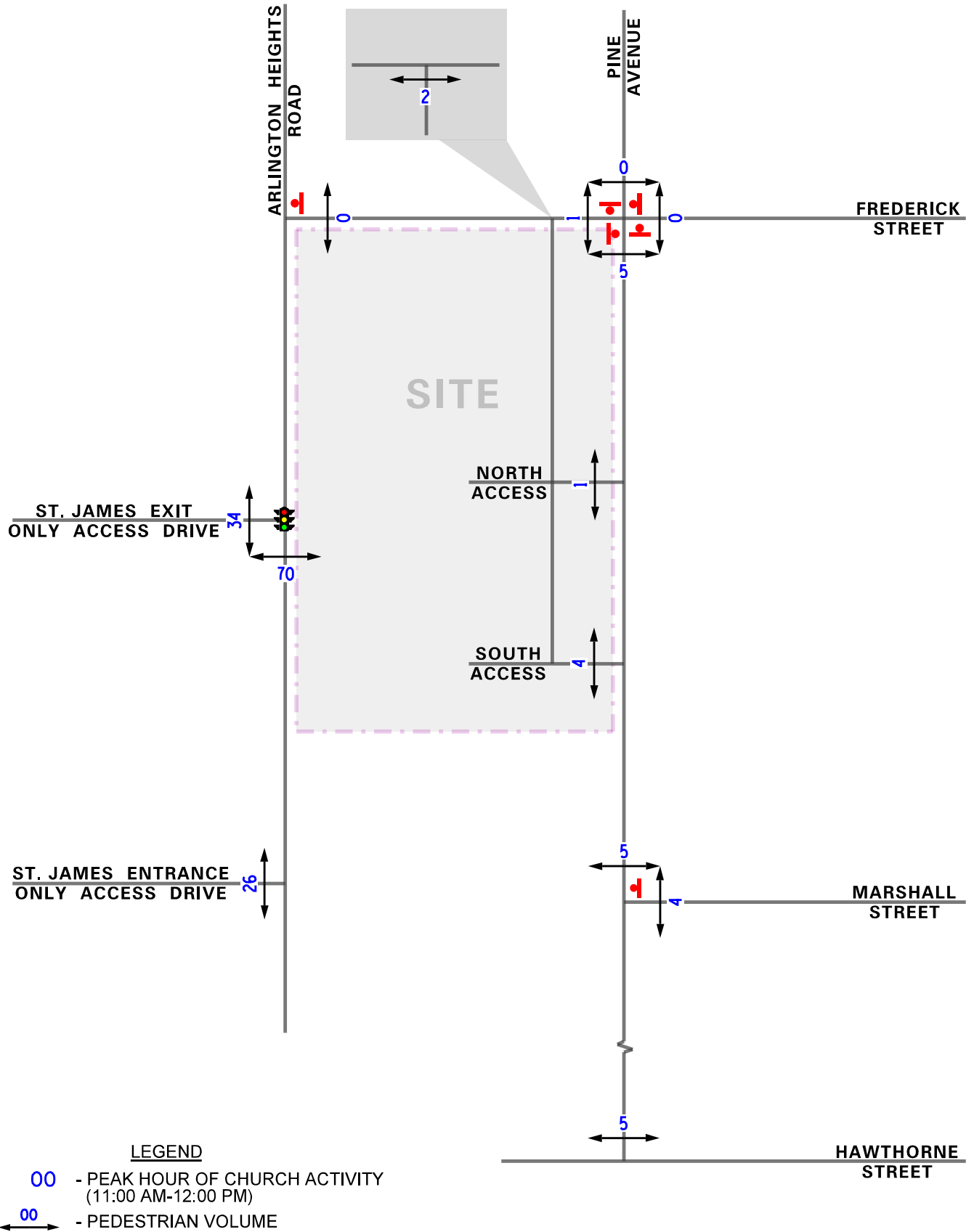
Existing Traffic Volumes
Sunday

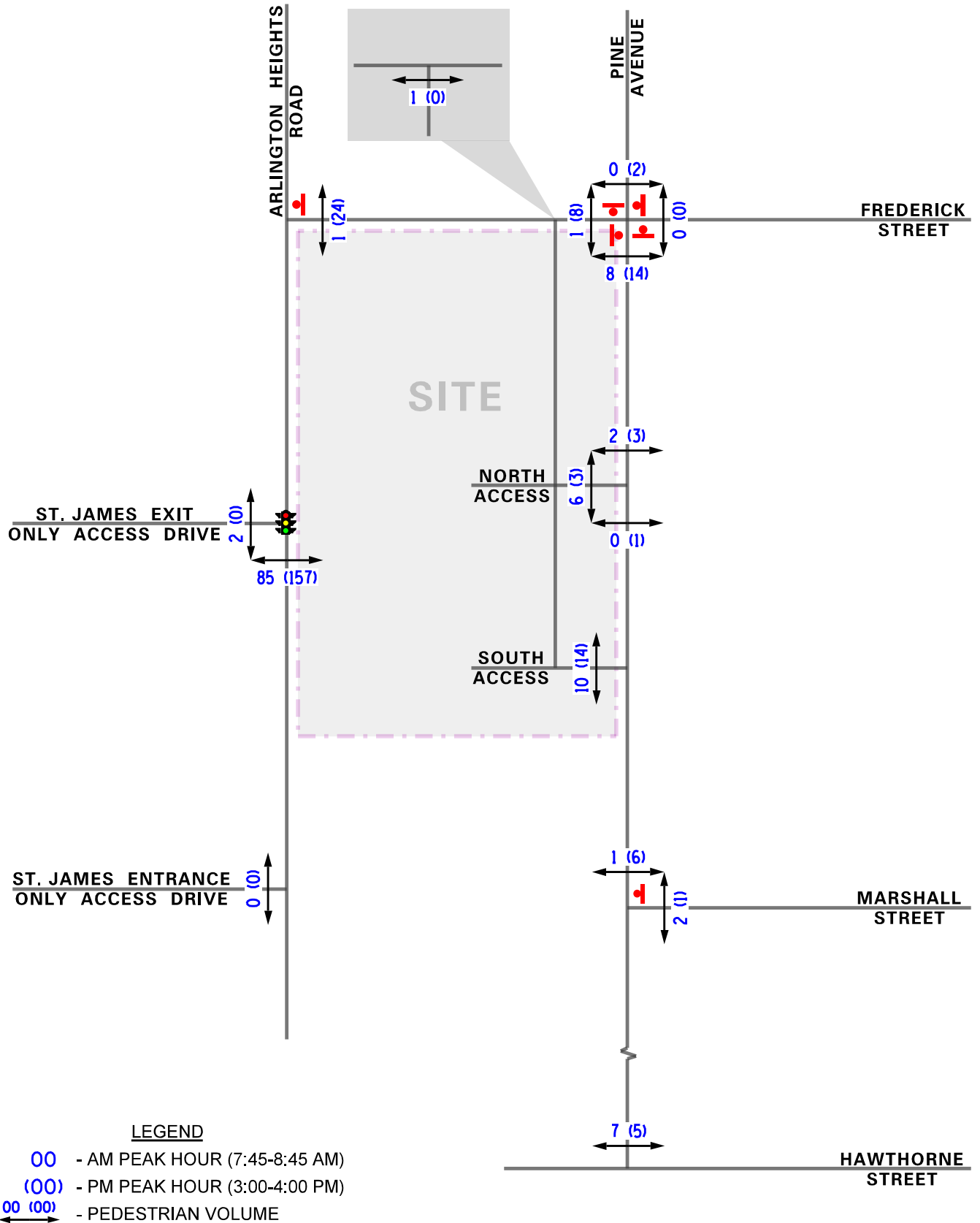
KLOA
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St. James Parish
Expansion
Arlington Heights, Illinois

Existing Traffic Volumes School Day





St. James Parish
Expansion
Arlington Heights, Illinois

Existing Pedestrian Volumes
School Day

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3. Traffic Characteristics of the Proposed Development

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

Proposed Site and Development Plan

As proposed, the existing three-story school building on the east side of Arlington Heights Road will be razed and the existing church building will be expanded by a total of 12,282 square-feet to increase the church capacity from approximately 679 seats to approximately 916 seats. Additionally, the parking lot on the east side of Arlington Heights Road will be expanded by 49 parking spaces increasing the capacity from 136 parking spaces to 185 parking spaces. The purpose of this expansion is to enhance the handicap accessibility of the existing church so that the expanded church can hold all services on Saturday evening and Sunday and to better distribute the attendance among the four Sunday services.

Access to the church will continue to be provided via the full movement access drive off Frederick Street and via the two full movement access drives off Pine Avenue. With the parking lot reconfiguration, the both access drives off Pine Avenue will be relocated approximately 50 feet south of their existing location. Access will also be provided via a proposed right-in/right-out access drive off Arlington Heights Road that will be located approximately 160 feet south of the exit only access drive and 190 feet north of the entrance only access drive. It should be noted that this access drive will replace an existing full movement curb cut provided at this location.

It should be noted that the proposed church expansion will not result in a modification to the operations of St. James School nor will result in an increase/decrease in enrollment. The pick-up/drop-off activity will remain the same for passenger vehicles and school buses, as previously described, and access to the school will continue to be provided via the two access drives off Arlington Heights Road.

Directional Distribution

The directions from which parishioners of the church will approach and depart the site were estimated based on the existing travel patterns, as determined from the traffic counts. **Figure 6** illustrates the directional distribution of traffic.

Peak Hour Traffic Volumes

The volume of traffic generated by a development is based on the type of land use and the size of the development. The number of new peak hour vehicle trips estimated to be generated by the expansion of the church was based on vehicle trip generation rates contained in *Trip Generation*, 9th Edition, published by the Institute of Transportation Engineers (ITE). The “Church” (Land-Use Code 860) rate was used. While the majority of new trips will occur on Sundays, in order to provide conservative analyses, weekday morning and afternoon trips were also estimated based on ITE’s trip rates. **Table 1** shows the estimated number of new peak hour trips to be generated by the proposed development and the existing trip generation based on the results of the turning movement counts. As shown in Table 1, the development is estimated to generate approximately 145 two-way vehicle trips during the Sunday morning peak hour, 11 two-way vehicle trips during the weekday morning peak hour and 12 two-way vehicle trips during the weekday afternoon peak hour.

Table 1
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

ITE Land Use Code	Type/Size	Sunday Morning Peak Hour			Weekday Morning Peak Hour			Weekday Afternoon Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
560	St. James Expansion (12,282 s.f./237 Seats)	73	72	145	6	5	11	6	6	12
	Existing Trip Generation	159	255	414	22	86	108	30	34	64
	Total Trip Generation	232	327	559	28	91	119	36	40	76

4. Projected Traffic Conditions

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

Development Traffic Assignment

The estimated Sunday morning peak hour traffic volumes that will be generated by the proposed church expansion were combined to the existing trip generation for the Church. This total estimated site generated traffic was reassigned to the roadway system in accordance with the previously described directional distribution (Figure 6) and reflected that approximately 60 percent of the on-site parking spaces are provided on the east-campus. **Figure 7A** illustrates the traffic assignment for a typical Sunday morning peak hour.

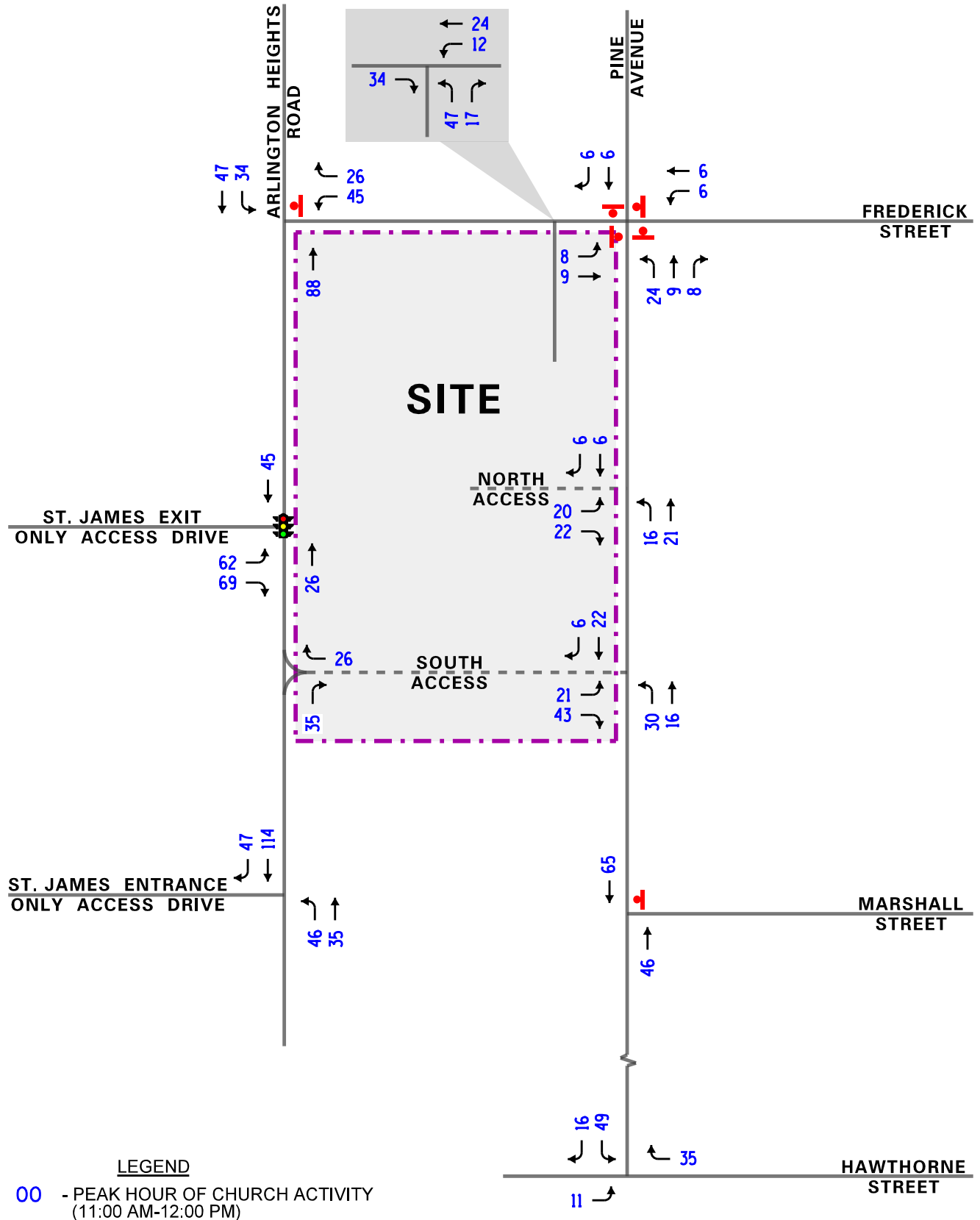
As previously indicated, the proposed church expansion will not result in a modification to the operations of St. James School nor will result in an increase/decrease in enrollment. Therefore, the existing traffic volumes generated by St. James on a typical school day were not reassigned or modified. The estimated weekday morning and weekday afternoon peak hour traffic volumes that will be generated by the church expansion were assigned to the roadway system and to the access drives serving the east campus in accordance with the previously described directional distribution (Figure 6) taking into consideration that all of the expansion generated traffic will be arriving to and departing from the east campus. **Figure 7B** illustrates the traffic assignment for the weekday morning and afternoon peak hours.

Background Traffic Conditions

The existing traffic volumes (Figure 4) that do not turn to/from the St. James Parish access drives were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on the Chicago Metropolitan Agency for Planning (CMAP) Year 2040 population and employment projections, in a letter dated September 20, 2017, the area traffic is projected to increase by approximately one-half percent per year. As such, the existing traffic volumes (that are not generated by St. James Parish) were increased by three percent total to project the Year 2023 background traffic volumes (buildout year plus five-year analysis). This background traffic growth was not applied to the church generated traffic volumes as these values already take into consideration the increased attendance from the expansion and no change in school enrollment or operations is projected to occur. The CMAP 2040 projections letter is included in the Appendix.

Total Projected Traffic Volumes

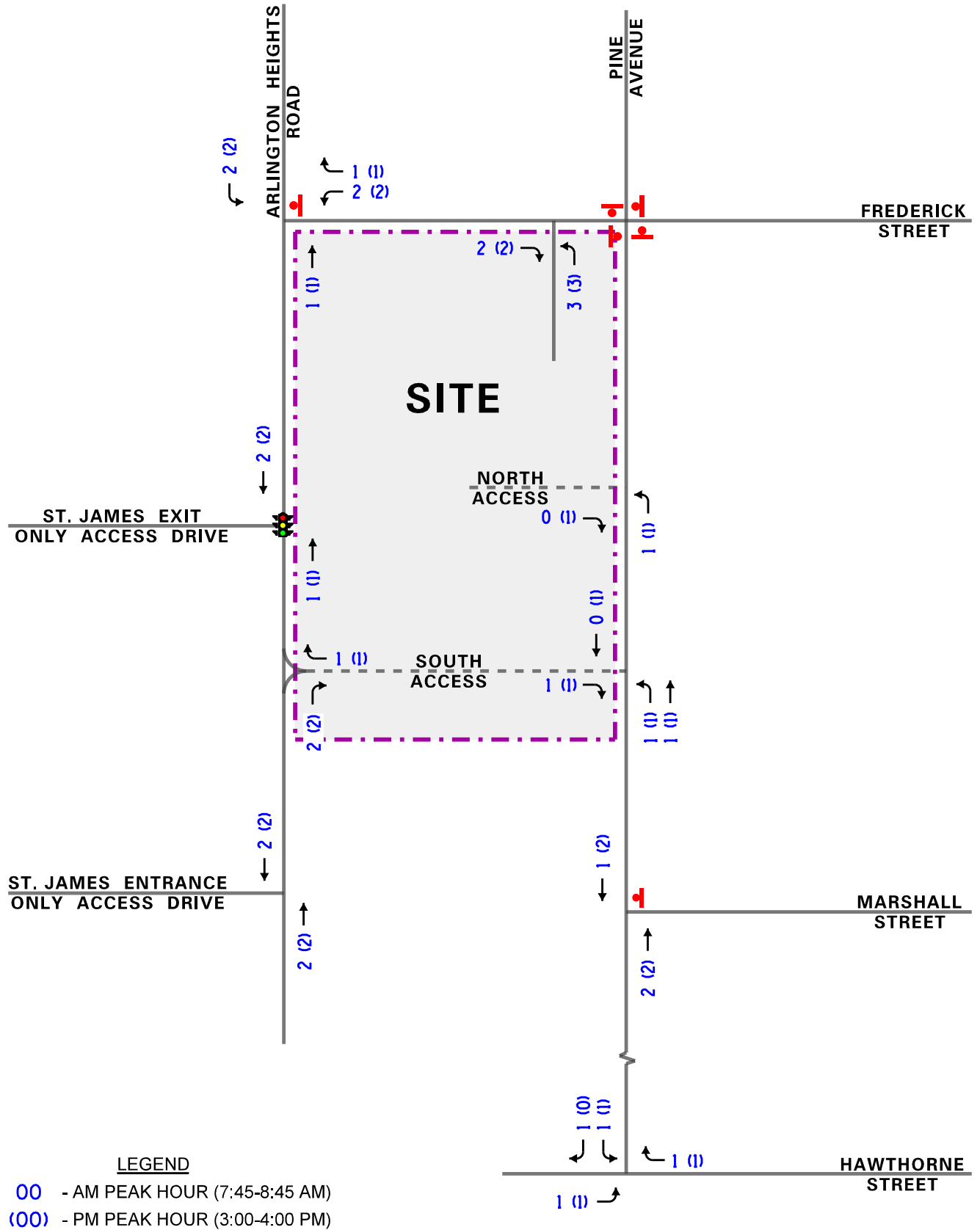
The existing traffic volumes accounting for growth were combined with the peak hour traffic volumes generated by the development (Figure 7A/7B) to determine the Year 2023 total projected traffic volumes. The Year 2023 total projected traffic volumes on Sunday are shown in **Figure 8A** and the Year 2023 total projected traffic volumes on a weekday morning and evening are shown in **Figure 8B**.

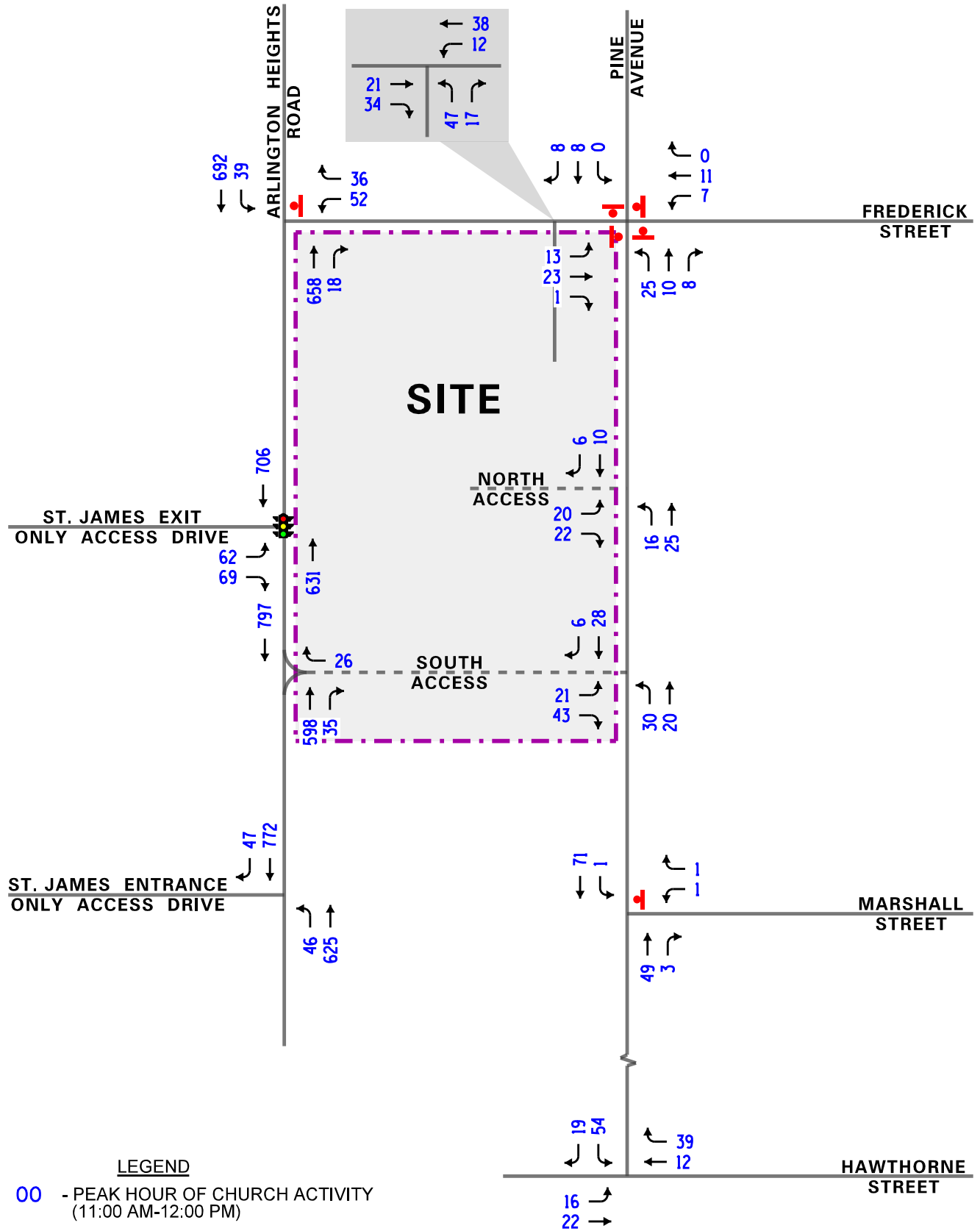


St. James Parish
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Arlington Heights, Illinois

Estimated Site-Generated Traffic Volumes
Sunday

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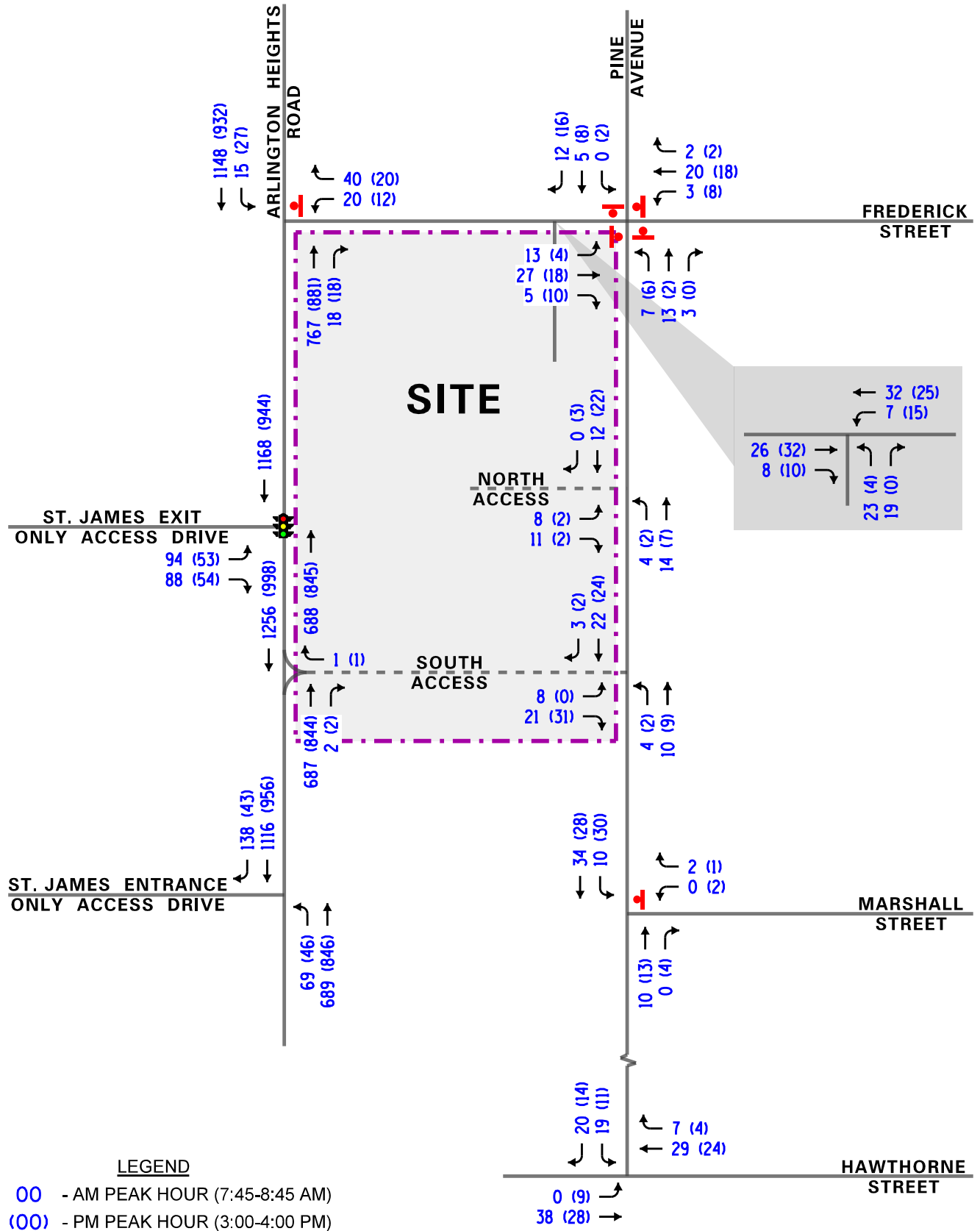




St. James Parish
Expansion
Arlington Heights, Illinois

Year 2023 Total Projected Traffic Volumes
Sunday

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St. James Parish
Expansion
Arlington Heights, Illinois

Year 2023 Total Projected Traffic Volumes
School Day

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5. Traffic Analysis and Recommendations

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

Traffic Analyses

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

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 2010 and analyzed using the Synchro/SimTraffic 9 computer software. The analysis for the traffic-signal controlled intersections were accomplished using field measured cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

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

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

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing and Year 2023 total projected conditions are presented in **Tables 2 through 4**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 2

CAPACITY ANALYSIS RESULTS – SIGNALIZED

ARLINGTON HEIGHTS ROAD WITH ST. JAMES EXIT ONLY ACCESS DRIVE

Intersection	Sunday Morning Peak Hour		Weekday Morning Peak Hour		Weekday Afternoon Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Year 2017 Existing Conditions						
• Overall	C	30.6	B	17.2	B	12.3
• Eastbound Approach	E	57.6	D	50.8	D	53.1
• Northbound Approach	B	14.8	A	8.4	A	7.2
• Southbound Approach	C	21.9	B	11.3	A	7.6
Year 2023 Projected Conditions						
• Overall	C	24.9	B	17.2	B	12.3
• Eastbound Approach	D	48.9	D	50.8	D	53.7
• Northbound Approach	B	14.1	A	8.4	A	7.3
• Southbound Approach	B	19.4	B	11.6	A	7.7
LOS = Level of Service Delay is measured in seconds.						

Table 3

CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS – UNSIGNALIZED

Intersection	Sunday Morning Peak Hour		Weekday Morning Peak Hour		Weekday Afternoon Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Arlington Heights Road with Frederick Street						
• Westbound Approach	C	19.3	C	22.7	C	19.7
• Southbound Left-Turns	A	0.4	A	0.5	A	1.1
Arlington Heights Road with Entrance Only Access Drive						
• Northbound Left-Turns	B	10.5	A	9.0	A	4.2
Frederick Street with Pine Avenue						
• Overall	A	7.4	A	7.2	A	7.0
• Eastbound Approach	A	7.5	A	7.3	A	7.1
• Westbound Approach	A	7.3	A	7.3	A	7.2
• Northbound Approach	A	7.5	A	7.3	A	7.3
• Southbound Approach	A	6.9	A	6.9	A	6.8
Pine Avenue with Marshall Street						
• Westbound Approach	A	8.8	A	8.8	A	9.6
• Southbound Left-Turns	A	1.6	A	1.8	A	4.1
Pine Avenue with Hawthorne Street						
• Southbound Approach	A	9.3	A	9.0	A	8.9
• Eastbound Left-Turns	A	1.9	--	--	A	1.7
Pine Avenue with Northerly St. James Access Drive						
• Eastbound Approach	A	8.9	A	8.7	A	8.7
• Northbound Left-Turns	--	--	A	1.4	A	0.7
Pine Avenue with Southerly St. James Access Drive						
• Eastbound Approach	A	9.6	A	8.8	A	9.1
• Northbound Left-Turns	A	4.5	A	1.8	A	0.9
Frederick Street with St. James Access Drive						
• Northbound Approach	A	8.9	A	9.0	A	9.0
• Westbound Left-Turns	A	2.5	A	1.4	A	2.9
LOS = Level of Service Delay is measured in seconds.						

Table 4

CAPACITY ANALYSIS RESULTS – PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Sunday Morning Peak Hour		Weekday Morning Peak Hour		Weekday Afternoon Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Arlington Heights Road with Frederick Street						
• Westbound Approach	E	48.0	D	25.7	C	21.6
• Southbound Left-Turns	A	2.0	A	0.6	A	1.3
Arlington Heights Road with Entrance Only Access Drive						
• Northbound Left-Turns	A	6.1	A	9.3	A	4.3
Frederick Street with Pine Avenue						
• Overall	A	7.7	A	7.2	A	7.0
• Eastbound Approach	A	7.9	A	7.3	A	7.1
• Westbound Approach	A	7.6	A	7.3	A	7.2
• Northbound Approach	A	7.9	A	7.3	A	7.3
• Southbound Approach	A	7.2	A	6.9	A	6.8
Pine Avenue with Marshall Street						
• Westbound Approach	A	9.9	A	8.9	A	9.7
• Southbound Left-Turns	A	0.1	A	1.7	A	4.0
Pine Avenue with Hawthorne Street						
• Southbound Approach	B	10.5	A	9.1	A	8.9
• Eastbound Left-Turns	A	3.3	--	--	A	1.8
Pine Avenue with Northerly St. James Access Drive						
• Eastbound Approach	A	9.8	A	8.7	A	8.7
• Northbound Left-Turns	A	3.0	A	1.6	A	1.7
Pine Avenue with Southerly St. James Access Drive						
• Eastbound Approach	B	11.2	A	8.9	A	9.2
• Northbound Left-Turns	A	4.8	A	2.1	A	1.4
Frederick Street with St. James Access Drive						
• Northbound Approach	A	10.8	A	9.0	A	9.1
• Westbound Left-Turns	A	1.9	A	1.4	A	2.8
Arlington Heights Road with Proposed Right-In/Right-Out Access Drive						
• Westbound Approach	B	14.7	B	10.8	B	11.6
LOS = Level of Service Delay is measured in seconds.						

Discussion and Recommendations

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

Intersection Operations on a Typical Sunday

The results of the capacity analysis indicate that on Sunday, the signalized intersection of Arlington Heights Road with the exit only access drive overall is projected to continue operating at existing level of service (LOS) C with a decrease in delay of approximately six seconds. Additionally, all of the approaches are projected to operate at LOS D or better with no increase in delay.

The westbound Frederick Street approach at Arlington Heights currently operates at LOS C during and is projected to operate at LOS E with increases in delay of approximately 29 seconds and projected 95th percentile queues of three to four vehicles. Southbound left-turns from Arlington Heights Road onto Frederick Street are projected to continue operating at LOS A with increases in delay of approximately two seconds and 95th percentile queues of one to two vehicles.

Northbound left-turn movements from Arlington Heights Road onto the St. James entrance only access drive are projected to continue operating at LOS A with 95th percentile queues of one to two vehicles.

All of the unsignalized intersections along Frederick Street and Pine Avenue are generally projected to continue operate at LOS B or better with increases in delay of less than two seconds. As such, the proposed church expansion and the relocation of all services to the east campus will have a limited impact on the operations of the study area intersections and no roadway or traffic control improvements will be required.

Intersection Operations on a Typical School Day

As previously indicated, while the majority of new trips will occur on Sundays, in order to provide conservative analyses, weekday morning and afternoon trips were also estimated for the church expansion based on ITE's trip rates. The trips rates resulted projection of 11 total trips during the weekday morning peak hour and 12 total trips during the weekday afternoon peak hour. The results of the capacity analyses indicated that all of the study area intersections are projected to continue operating at existing level of service with increases in delay of less than one second with the exception of the westbound approach of Frederick Street at Arlington Heights Road. This approach is projected to operate at LOS D during the weekday morning peak hour and is projected to continue operating at LOS C during the weekday afternoon peak hour with increases in delay three and two seconds, respectively. It should be noted that this increase in delay is attributed to the three percent background growth as the proposed expansion is projected to only increase the total traffic through this intersection by less than one-half percent. As such, the proposed church expansion will have a limited impact on the operations of the study area intersections on a typical school day and no roadway or traffic control improvements will be required.

Arlington Heights Road with Proposed Right-In/Right-Out Access Drive

The results of the capacity analysis indicate that the proposed right-in/right-out access drive is projected to operate at LOS B during the Sunday morning, weekday morning and weekday afternoon peak hours. The provision of this access drive will allow for vehicles to access the church parking lot without having to utilize the local roadway system. When the projected traffic volumes are compared to the turn lane warrant guidelines published in Chapter 36 of the IDOT Bureau of Design and Environment, an exclusive northbound right-turn lane serving this access drive will not be warranted during either peak hour. This access drive should be monitored in the future to determine if cut-through traffic occurs between Arlington Heights Road and Pine Avenue and if necessary, barricades could be used to block the southernmost access drive on Pine Avenue during the week (Monday through Friday) to prohibit movements to/from this access drive when vehicle traffic utilizing the church is minimal.

6. Parking Evaluation

As part of the proposed church expansion the existing parking lot serving the church building will also be expanded to provide 49 additional parking spaces for a total of 185 parking spaces combined with the 149 parking spaces provided on the school site, the campus will provide a total of 334 parking spaces.

Parking Occupancy Surveys

In order to determine the adequacy of the existing and proposed parking supply, parking occupancy surveys were conducted on Sunday, August 27, 2017 and on Sunday September 3, 2017. These surveys were conducted in half-hour intervals from 8:00 A.M. to 11:30 A.M. to determine the parking demand during each of the Sunday morning services. Additionally, the church parking lot on the east side of Arlington Heights Road and the parish center parking lot on the west side of Arlington Heights Road were counted separately and the surveys included the following on-street parking locations:

- Arlington Heights Road between Frederick Street and Hawthorne Street.
- Frederick Street between Arlington Heights Road and Haddow Avenue.
- Pine Street between Oakton Street and Hawthorne Street.
- Marshall Street between Pine Avenue and Haddow Avenue.
- Evergreen Avenue north of the St. James Parish Center.
- Evergreen Avenue south of the St. James Parish Center.

It should be noted that parking is permitted on Arlington Heights Road between Frederick Street and Hawthorne Avenue during Sunday's services. Furthermore, parking is prohibited at the following locations:

- The east side of Pine Avenue between Marshall Street and Frederick Street at all times.
- The east side of Evergreen Avenue south of the St. James Parish Center.
- The west side of Evergreen Avenue north of the St. James Parish Center.
- The south side of Frederick Street between Pine Avenue and Belmont Avenue on Sunday's between 5:00 A.M. and 2:00 P.M.

Tables 5 and 6 summarize the results of the parking occupancy surveys on August 27th and September 3rd, respectively.

Table 5

PARKING OCCUPANCY SURVEY RESULTS – SUNDAY, AUGUST 27, 2017

Time	St. James Church Parking Lot (East Side)	St. James Parish Center Parking Lot (West Side)	Arlington Heights Road	Frederick Street	Pine Avenue	Marshall Street	Evergreen Avenue	Total Off Street Parking	Total On Street Parking	Grand Total
8:00 AM	42	2	2	2	4	1	1	44	10	54
8:30 AM	133	2	23	14	31	1	1	135	70	205
9:00 AM	106	9	23	14	28	2	1	115	68	183
9:30 AM	14	38	2	1	2	2	5	52	12	64
10:00 AM	82	171	54	2	2	2	34	253	94	347
10:30 AM	92	171	54	2	2	2	36	263	96	359
11:00 AM	18	132	3	2	2	2	27	150	36	186
11:30 AM	26	118	19	2	2	2	12	144	37	181
St. James Parish Center Parking Inventory – 136 spaces (east side), 149 spaces (west side) = 285 Parking Spaces										

Table 6

PARKING OCCUPANCY SURVEY RESULTS – SUNDAY, SEPTEMBER 3, 2017

Time	St. James Church Parking Lot (East Side)	St. James Parish Center Parking Lot (West Side)	Arlington Heights Road	Frederick Street	Pine Avenue	Marshall Street	Evergreen Avenue	Total Off Street Parking	Total On Street Parking	Grand Total
8:00 AM	47	3	4	2	3	0	2	50	11	61
8:30 AM	132	5	21	15	20	0	3	137	59	196
9:00 AM	123	12	24	15	20	0	3	135	62	197
9:30 AM	12	42	4	1	2	0	5	54	12	66
10:00 AM	54	147	42	1	2	0	18	201	63	264
10:30 AM	64	147	45	1	3	0	17	211	66	277
11:00 AM	21	34	2	1	2	0	5	55	10	65
11:30 AM	37	108	10	1	4	0	14	145	29	174
St. James Parish Center Parking Inventory – 136 spaces (east side), 149 spaces (west side) = 285 Parking Spaces										

As shown in Tables 5 and 6, the results of the parking occupancy surveys indicated that the peak parking demand on August 27th occurred at 10:30 A.M. with a parking demand of 359 spaces. At this time, the west parking lot was 115 percent occupied (with cars parked along the south side of the entrance only access drive which is 20-feet wide), the east parking lot was 68 percent occupied and 96 vehicles were parking on-street. Of the vehicle parked on-street, 54 vehicles were parked on Arlington Heights Road and 36 vehicles were parked on Evergreen Avenue.

The peak parking demand on September 3rd occurred at 10:30 A.M. with a parking demand of 277 spaces of which 211 vehicles were parked within the off-street parking lots and 66 were parked on-street. At this time the west parking lot was 98 percent occupied, the east parking lot was 47 percent occupied and 66 vehicles were parked on-street. Of the vehicles parked on-street, 45 vehicles were parked on Arlington Heights Road and 17 vehicles were parked on Evergreen Avenue.

Tables 5 and 6 also indicate that during the Sunday morning services that are held at the church (east side) any overflow parking was accommodated by the on-street parking locations along Arlington Heights Road, Frederick Street and Pine Avenue with few vehicles utilizing the Parish Center parking lot during these services with a range of 59 to 70 vehicles parked on the streets.

Parking Evaluation

As previously indicated, as part of the church expansion, all services will be held in the expanded church building and no services will be held in the parish center/school building. Additionally, the expanded church will be handicap accessible which will result in a more evenly distributed attendance among the four Sunday services. The parking projected to be generated by the proposed church expansion, which will result in an increase of 237 seats (assuming 18-inches per person), was determined based on the following:

- Village of Arlington Heights Code: Parking for churches is required to be provided at one space for every five seats. This results in a projected parking demand of 47 spaces.
- The ITE *Parking Generation Manual* 9th Edition: The average parking demand for churches on a Sunday is 0.2 spaces per seat (one space for every five seats) spaces per seat resulting in a projected average parking demand of 47 spaces.

Combining the existing peak parking demand of 359 parking spaces with the projected parking demand of 47 parking spaces results in a total projected parking demand of 406 parking spaces.

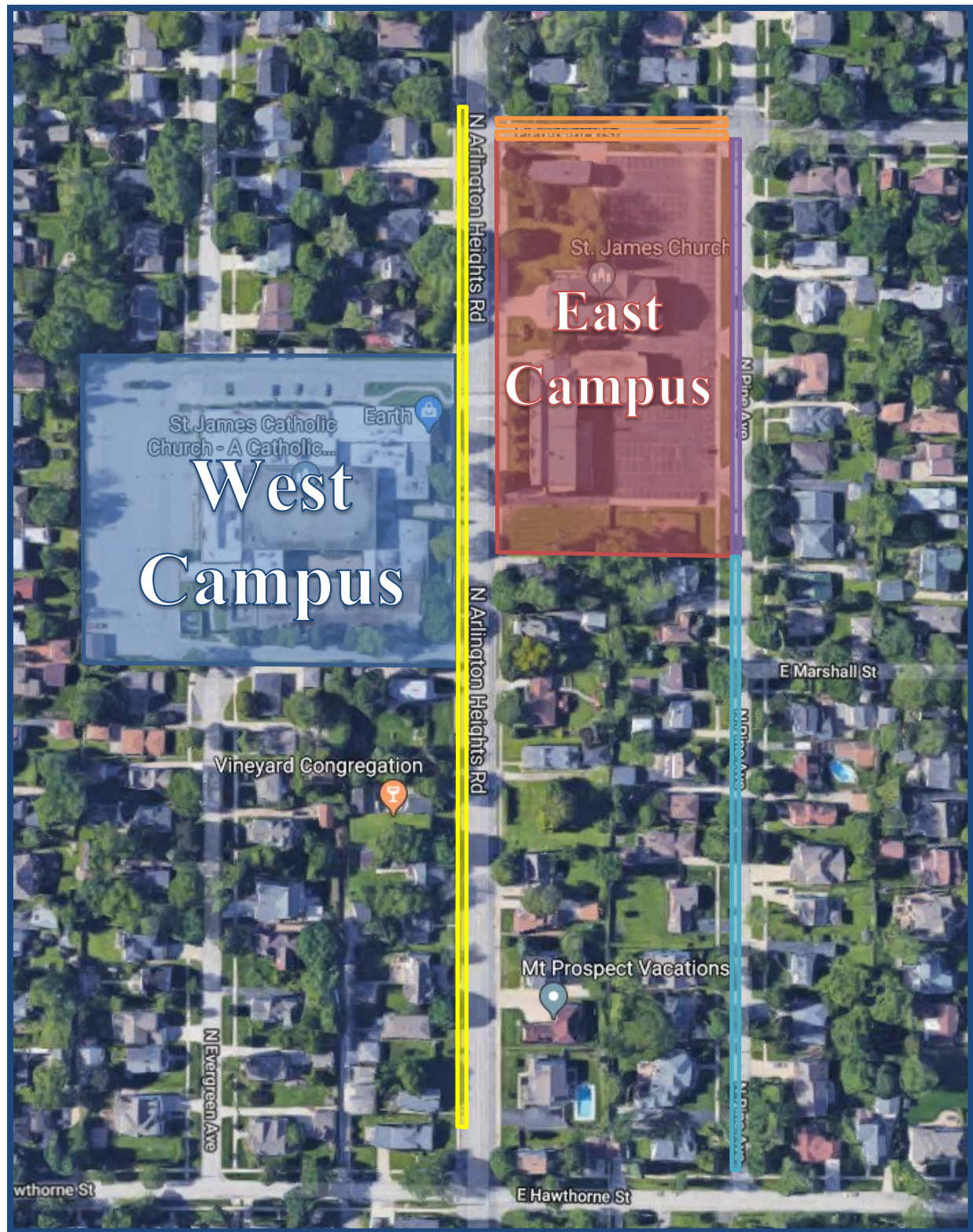
As previously indicated, the proposed church expansion will result in a total of 334 on-site parking spaces. Furthermore, the south side of Frederick Street between Arlington Heights Road and Pine Avenue can accommodate five on-street parking spaces and the west side of Pine Avenue along the St. James frontage can accommodate approximately 20 on-street parking spaces. Additionally, on-street parking on the west side of Arlington Heights Road will be maintained on Sundays providing approximately 35 parking spaces. This results in a total of 394 total parking spaces. With a projected parking demand of 406 parking spaces on a typical Sunday, a deficit of approximately 12 spaces will result which can be accommodated by the available parking spaces on the west side of Pine Avenue south of the church. **Figure 9** illustrates the on-site parking lots and the on-street parking locations which can accommodate the following:

- West Campus: 149 Spaces
- East Campus: 185 Spaces
- Frederick Street (south side along church frontage): 5 Spaces
- Frederick Street (north side): 5 spaces
- Pine Avenue (west side along church frontage): 20 Spaces
- Pine Avenue (west side south of church): 20 Spaces
- Arlington Heights Road (west side): 70 spaces
- **Total: 454 spaces**

However, in conjunction with all the services occurring within the church building, it is recommended that parishioners be encouraged to utilize both parking lots on campus before utilizing on-street parking. As it currently occurs, parishioners that park on the west side of Arlington Heights Road will be able to utilize the signalized intersection at the exit only access drive, which provides pedestrian countdown timers and a 15-foot wide high visibility crosswalk, to safely cross Arlington Heights Road.

Assuming a 15 percent higher parking demand on holidays, the projected parking demand increases to 467 spaces resulting in a parking deficit of 73 parking spaces. However, this parking demand is only projected to occur twice per year and this projected parking demand is conservative as it does not take into consideration the increase in vehicle occupancy that occurs on holidays.

As can be seen from the results of the parking evaluation, the projected off-street parking supply of 334 parking spaces combined with the on-street parking that can be accommodated on Frederick Street, Pine Avenue and Arlington Heights Road will be adequate in accommodating the projected parking demand on a typical Sunday generated by St. James Parish. It should be noted that this projected parking demand is conservative as it does not take into consideration that the proposed expansion will increase accessibility and help distribute service attendance and reduce the peak parking demand experienced at the 10:00 A.M. service.



St. James Parish Parking Locations

Figure 9

7. Conclusion

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

- The proposed expansion generated traffic will have a limited impact on the operations of the study area intersections and no roadway or traffic control improvements will be required.
- The proposed expansion will not impact the existing pick-up/drop-off operations or access for St. James School.
- The existing access system and proposed right-in/right-out access drive serving the church and parish center will be adequate in accommodating the traffic projected to be generated by the buildout of the church expansion and will ensure that efficient and flexible access is provided.
- The proposed right-in/right-out access drive off Arlington Heights Road will replace an existing full movement curb cut at this location.
- If determined in the future that cut-through traffic utilizes the proposed right-in/right-out between Arlington Heights Road and Pine Avenue, consideration should be given to barricading the southernmost access drive off Pine Avenue during the week (Monday through Friday) when vehicle traffic utilizing the church is minimal.
- The provision of 50 additional parking spaces will be adequate in accommodating the projected parking demand generated by the expansion.
- The parking demand will continue to be accommodated by the two off-street parking lots serving the campus with any overflow parking accommodated by the on-street parking locations along Arlington Heights Road (west side only), Frederick Street and Pine Avenue.
- As it currently occurs, parishioners that park on the west side of Arlington Heights Road will be able to utilize the signalized intersection at the exit only access drive, which provides pedestrian countdown timers and a 15-foot wide high visibility crosswalk, to safely cross Arlington Heights Road.

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
CMAP 2040 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets

Traffic Count Summary Sheets



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

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

Count Name: Arlington Heights School with
Signalized Access Drive
Site Code:
Start Date: 08/27/2017
Page No: 1

Turning Movement Data

Start Time	Arlington Heights Road Eastbound					Outbound Access Drive Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
9:00 AM	0	0	0	0	0	0	0	78	1	78	0	90	0	0	90	168
9:15 AM	0	0	2	0	2	0	0	103	3	103	0	136	0	0	136	241
9:30 AM	0	1	0	0	1	0	0	79	11	79	0	132	0	0	132	212
9:45 AM	0	5	7	32	12	0	0	91	52	91	0	168	0	0	168	271
Hourly Total	0	6	9	32	15	0	0	351	67	351	0	526	0	0	526	892
10:00 AM	0	4	5	5	9	0	0	103	14	103	0	152	0	1	152	264
10:15 AM	0	2	1	1	3	0	0	114	4	114	0	115	0	1	115	232
10:30 AM	0	1	0	0	1	0	0	157	0	157	0	130	0	0	130	288
10:45 AM	0	5	12	15	17	0	0	130	29	130	0	151	0	0	151	298
Hourly Total	0	12	18	21	30	0	0	504	47	504	0	548	0	2	548	1082
11:00 AM	0	75	78	19	153	0	0	156	57	156	0	205	0	0	205	514
11:15 AM	0	1	9	6	10	0	0	139	4	139	0	179	0	0	179	328
11:30 AM	0	2	2	9	4	0	0	134	8	134	0	146	0	0	146	284
11:45 AM	0	1	1	0	2	0	0	163	1	163	0	177	0	0	177	342
Hourly Total	0	79	90	34	169	0	0	592	70	592	0	707	0	0	707	1468
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:30 AM	0	0	0	0	0	0	0	179	0	179	0	240	0	0	240	419
7:45 AM	0	0	0	0	0	0	0	162	3	162	1	291	0	0	292	454
Hourly Total	0	0	0	0	0	0	0	341	3	341	1	531	0	0	532	873
8:00 AM	0	5	2	0	7	0	0	139	11	139	0	256	0	0	256	402
8:15 AM	0	52	31	0	83	0	0	169	64	169	0	339	0	0	339	591
8:30 AM	0	37	55	2	92	0	0	180	7	180	0	246	0	0	246	518
8:45 AM	0	0	1	0	1	0	0	167	2	167	0	240	0	0	240	408
Hourly Total	0	94	89	2	183	0	0	655	84	655	0	1081	0	0	1081	1919
9:00 AM	0	2	2	3	4	0	0	154	2	154	0	230	0	0	230	388
9:15 AM	0	2	1	0	3	1	0	157	3	158	0	175	0	0	175	336
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	4	3	3	7	1	0	311	5	312	0	405	0	0	405	724
2:30 PM	0	0	1	0	1	0	0	178	0	178	0	200	0	0	200	379
2:45 PM	0	3	2	0	5	0	0	205	0	205	0	203	0	0	203	413
Hourly Total	0	3	3	0	6	0	0	383	0	383	0	403	0	0	403	792
3:00 PM	0	1	4	0	5	0	0	183	4	183	0	228	0	0	228	416
3:15 PM	0	8	3	0	11	0	0	199	12	199	0	245	0	0	245	455
3:30 PM	0	24	33	0	57	0	0	212	136	212	0	230	0	0	230	499
3:45 PM	0	20	14	0	34	0	0	225	5	225	0	212	0	0	212	471
Hourly Total	0	53	54	0	107	0	0	819	157	819	0	915	0	0	915	1841
4:00 PM	0	3	5	0	8	0	0	225	5	225	0	236	0	0	236	469
4:15 PM	0	1	5	0	6	0	0	218	1	218	0	239	0	0	239	463

Grand Total	0	255	276	92	531	1	0	4399	439	4400	1	5591	0	2	5592	10523
Approach %	0.0	48.0	52.0	-	-	0.0	0.0	100.0	-	-	0.0	100.0	0.0	-	-	-
Total %	0.0	2.4	2.6	-	5.0	0.0	0.0	41.8	-	41.8	0.0	53.1	0.0	-	53.1	-
Lights	0	255	276	-	531	1	0	4270	-	4271	1	5426	0	-	5427	10229
% Lights	-	100.0	100.0	-	100.0	100.0	-	97.1	-	97.1	100.0	97.0	-	-	97.0	97.2
Buses	0	0	0	-	0	0	0	37	-	37	0	38	0	-	38	75
% Buses	-	0.0	0.0	-	0.0	0.0	-	0.8	-	0.8	0.0	0.7	-	-	0.7	0.7
Single-Unit Trucks	0	0	0	-	0	0	0	85	-	85	0	107	0	-	107	192
% Single-Unit Trucks	-	0.0	0.0	-	0.0	0.0	-	1.9	-	1.9	0.0	1.9	-	-	1.9	1.8
Articulated Trucks	0	0	0	-	0	0	0	7	-	7	0	20	0	-	20	27
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	-	0.2	-	0.2	0.0	0.4	-	-	0.4	0.3
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	0.0	0.0	-	-	0.0	0.0
Pedestrians	-	-	-	92	-	-	-	-	439	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: Arlington Heights School with
Signalized Access Drive
Site Code:
Start Date: 08/27/2017
Page No: 3

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Arlington Heights Road Eastbound					Outbound Access Drive Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
11:00 AM	0	75	78	19	153	0	0	156	57	156	0	205	0	0	205	514
11:15 AM	0	1	9	6	10	0	0	139	4	139	0	179	0	0	179	328
11:30 AM	0	2	2	9	4	0	0	134	8	134	0	146	0	0	146	284
11:45 AM	0	1	1	0	2	0	0	163	1	163	0	177	0	0	177	342
Total	0	79	90	34	169	0	0	592	70	592	0	707	0	0	707	1468
Approach %	0.0	46.7	53.3	-	-	0.0	0.0	100.0	-	-	0.0	100.0	0.0	-	-	-
Total %	0.0	5.4	6.1	-	11.5	0.0	0.0	40.3	-	40.3	0.0	48.2	0.0	-	48.2	-
PHF	0.000	0.263	0.288	-	0.276	0.000	0.000	0.908	-	0.908	0.000	0.862	0.000	-	0.862	0.714
Lights	0	79	90	-	169	0	0	590	-	590	0	707	0	-	707	1466
% Lights	-	100.0	100.0	-	100.0	-	-	99.7	-	99.7	-	100.0	-	-	100.0	99.9
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	2	-	2	0	0	0	-	0	2
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	-	0.3	-	0.3	-	0.0	-	-	0.0	0.1
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	-	-	0.0	0.0
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	-	-	0.0	0.0
Pedestrians	-	-	-	34	-	-	-	-	70	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-



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Count Name: Arlington Heights School with
Signalized Access Drive
Site Code:
Start Date: 08/27/2017
Page No: 4

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Arlington Heights Road Eastbound					Outbound Access Drive Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:45 AM	0	0	0	0	0	0	0	162	3	162	1	291	0	0	292	454
8:00 AM	0	5	2	0	7	0	0	139	11	139	0	256	0	0	256	402
8:15 AM	0	52	31	0	83	0	0	169	64	169	0	339	0	0	339	591
8:30 AM	0	37	55	2	92	0	0	180	7	180	0	246	0	0	246	518
Total	0	94	88	2	182	0	0	650	85	650	1	1132	0	0	1133	1965
Approach %	0.0	51.6	48.4	-	-	0.0	0.0	100.0	-	-	0.1	99.9	0.0	-	-	-
Total %	0.0	4.8	4.5	-	9.3	0.0	0.0	33.1	-	33.1	0.1	57.6	0.0	-	57.7	-
PHF	0.000	0.452	0.400	-	0.495	0.000	0.000	0.903	-	0.903	0.250	0.835	0.000	-	0.836	0.831
Lights	0	94	88	-	182	0	0	614	-	614	1	1085	0	-	1086	1882
% Lights	-	100.0	100.0	-	100.0	-	-	94.5	-	94.5	100.0	95.8	-	-	95.9	95.8
Buses	0	0	0	-	0	0	0	8	-	8	0	9	0	-	9	17
% Buses	-	0.0	0.0	-	0.0	-	-	1.2	-	1.2	0.0	0.8	-	-	0.8	0.9
Single-Unit Trucks	0	0	0	-	0	0	0	26	-	26	0	32	0	-	32	58
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	-	4.0	-	4.0	0.0	2.8	-	-	2.8	3.0
Articulated Trucks	0	0	0	-	0	0	0	2	-	2	0	6	0	-	6	8
% Articulated Trucks	-	0.0	0.0	-	0.0	-	-	0.3	-	0.3	0.0	0.5	-	-	0.5	0.4
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	0.0	-	-	0.0	0.0
Pedestrians	-	-	-	2	-	-	-	-	85	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-



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

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Count Name: Arlington Heights School with
Signalized Access Drive
Site Code:
Start Date: 08/27/2017
Page No: 5

Turning Movement Peak Hour Data (3:00 PM)

Start Time	Arlington Heights Road Eastbound					Outbound Access Drive Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
3:00 PM	0	1	4	0	5	0	0	183	4	183	0	228	0	0	228	416
3:15 PM	0	8	3	0	11	0	0	199	12	199	0	245	0	0	245	455
3:30 PM	0	24	33	0	57	0	0	212	136	212	0	230	0	0	230	499
3:45 PM	0	20	14	0	34	0	0	225	5	225	0	212	0	0	212	471
Total	0	53	54	0	107	0	0	819	157	819	0	915	0	0	915	1841
Approach %	0.0	49.5	50.5	-	-	0.0	0.0	100.0	-	-	0.0	100.0	0.0	-	-	-
Total %	0.0	2.9	2.9	-	5.8	0.0	0.0	44.5	-	44.5	0.0	49.7	0.0	-	49.7	-
PHF	0.000	0.552	0.409	-	0.469	0.000	0.000	0.910	-	0.910	0.000	0.934	0.000	-	0.934	0.922
Lights	0	53	54	-	107	0	0	799	-	799	0	876	0	-	876	1782
% Lights	-	100.0	100.0	-	100.0	-	-	97.6	-	97.6	-	95.7	-	-	95.7	96.8
Buses	0	0	0	-	0	0	0	8	-	8	0	13	0	-	13	21
% Buses	-	0.0	0.0	-	0.0	-	-	1.0	-	1.0	-	1.4	-	-	1.4	1.1
Single-Unit Trucks	0	0	0	-	0	0	0	12	-	12	0	20	0	-	20	32
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	-	1.5	-	1.5	-	2.2	-	-	2.2	1.7
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	6	0	-	6	6
% Articulated Trucks	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	-	0.7	-	-	0.7	0.3
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	-	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	157	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: Arlington Heights Road with
Frederick Street
Site Code:
Start Date: 08/27/2017
Page No: 1

Turning Movement Data

Start Time	Frederick Street Westbound					Arlington Heights Road Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
9:00 AM	0	1	0	0	1	0	77	1	0	78	0	0	91	0	91	170
9:15 AM	0	6	23	3	29	0	106	5	2	111	0	1	123	0	124	264
9:30 AM	0	4	10	0	14	0	86	0	0	86	0	3	127	0	130	230
9:45 AM	0	5	3	3	8	0	87	6	0	93	0	9	166	0	175	276
Hourly Total	0	16	36	6	52	0	356	12	2	368	0	13	507	0	520	940
10:00 AM	0	0	4	0	4	0	103	3	0	106	0	5	142	0	147	257
10:15 AM	0	1	1	0	2	0	103	1	0	104	0	6	123	0	129	235
10:30 AM	0	1	1	0	2	0	145	3	0	148	0	2	127	0	129	279
10:45 AM	0	2	5	1	7	0	151	5	0	156	0	2	149	0	151	314
Hourly Total	0	4	11	1	15	0	502	12	0	514	0	15	541	0	556	1085
11:00 AM	0	2	6	0	8	0	215	15	0	230	0	2	196	0	198	436
11:15 AM	0	3	2	0	5	0	126	2	0	128	0	2	176	0	178	311
11:30 AM	0	3	3	0	6	0	133	2	0	135	0	2	149	0	151	292
11:45 AM	0	1	1	0	2	0	159	3	0	162	0	1	170	0	171	335
Hourly Total	0	9	12	0	21	0	633	22	0	655	0	7	691	0	698	1374
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:30 AM	0	1	5	0	6	0	157	2	0	159	0	7	253	0	260	425
7:45 AM	0	3	9	0	12	0	171	2	0	173	0	4	288	0	292	477
Hourly Total	0	4	14	0	18	0	328	4	0	332	0	11	541	0	552	902
8:00 AM	0	2	21	1	23	0	150	0	0	150	0	5	253	0	258	431
8:15 AM	0	7	6	0	13	0	212	9	0	221	0	2	326	0	328	562
8:30 AM	0	5	2	0	7	0	211	6	0	217	0	2	236	0	238	462
8:45 AM	0	3	4	0	7	0	161	0	0	161	0	1	242	0	243	411
Hourly Total	0	17	33	1	50	0	734	15	0	749	0	10	1057	0	1067	1866
9:00 AM	0	4	2	0	6	0	160	0	0	160	0	2	232	0	234	400
9:15 AM	0	1	2	0	3	0	163	3	0	166	0	0	182	0	182	351
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	5	4	0	9	0	323	3	0	326	0	2	414	0	416	751
2:30 PM	0	1	4	0	5	0	180	3	0	183	0	0	182	0	182	370
2:45 PM	0	1	4	0	5	0	195	2	0	197	0	1	205	0	206	408
Hourly Total	0	2	8	0	10	0	375	5	0	380	0	1	387	0	388	778
3:00 PM	0	5	3	0	8	0	185	2	0	187	0	5	218	0	223	418
3:15 PM	0	1	1	0	2	0	189	6	0	195	0	8	237	0	245	442
3:30 PM	0	3	6	23	9	0	228	5	0	233	0	5	224	0	229	471
3:45 PM	0	1	8	1	9	0	237	4	0	241	0	6	222	0	228	478
Hourly Total	0	10	18	24	28	0	839	17	0	856	0	24	901	0	925	1809
4:00 PM	0	0	2	0	2	0	234	3	0	237	0	1	231	0	232	471
4:15 PM	0	1	3	0	4	0	220	0	0	220	0	1	237	0	238	462

Grand Total	0	68	141	32	209	0	4544	93	2	4637	0	85	5507	0	5592	10438
Approach %	0.0	32.5	67.5	-	-	0.0	98.0	2.0	-	-	0.0	1.5	98.5	-	-	-
Total %	0.0	0.7	1.4	-	2.0	0.0	43.5	0.9	-	44.4	0.0	0.8	52.8	-	53.6	-
Lights	0	67	139	-	206	0	4410	93	-	4503	0	83	5344	-	5427	10136
% Lights	-	98.5	98.6	-	98.6	-	97.1	100.0	-	97.1	-	97.6	97.0	-	97.0	97.1
Buses	0	0	1	-	1	0	40	0	-	40	0	2	39	-	41	82
% Buses	-	0.0	0.7	-	0.5	-	0.9	0.0	-	0.9	-	2.4	0.7	-	0.7	0.8
Single-Unit Trucks	0	1	1	-	2	0	86	0	-	86	0	0	102	-	102	190
% Single-Unit Trucks	-	1.5	0.7	-	1.0	-	1.9	0.0	-	1.9	-	0.0	1.9	-	1.8	1.8
Articulated Trucks	0	0	0	-	0	0	8	0	-	8	0	0	21	-	21	29
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.2	0.0	-	0.2	-	0.0	0.4	-	0.4	0.3
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1	1
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	32	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

Start Time	Frederick Street Westbound					Arlington Heights Road Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
11:00 AM	0	2	6	0	8	0	215	15	0	230	0	2	196	0	198	436
11:15 AM	0	3	2	0	5	0	126	2	0	128	0	2	176	0	178	311
11:30 AM	0	3	3	0	6	0	133	2	0	135	0	2	149	0	151	292
11:45 AM	0	1	1	0	2	0	159	3	0	162	0	1	170	0	171	335
Total	0	9	12	0	21	0	633	22	0	655	0	7	691	0	698	1374
Approach %	0.0	42.9	57.1	-	-	0.0	96.6	3.4	-	-	0.0	1.0	99.0	-	-	-
Total %	0.0	0.7	0.9	-	1.5	0.0	46.1	1.6	-	47.7	0.0	0.5	50.3	-	50.8	-
PHF	0.000	0.750	0.500	-	0.656	0.000	0.736	0.367	-	0.712	0.000	0.875	0.881	-	0.881	0.788
Lights	0	9	12	-	21	0	629	22	-	651	0	7	691	-	698	1370
% Lights	-	100.0	100.0	-	100.0	-	99.4	100.0	-	99.4	-	100.0	100.0	-	100.0	99.7
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	4	0	-	4	0	0	0	-	0	4
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.6	0.0	-	0.6	-	0.0	0.0	-	0.0	0.3
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400
Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Arlington Heights Road with
Frederick Street
Site Code:
Start Date: 08/27/2017
Page No: 4

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Frederick Street Westbound					Arlington Heights Road Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
7:45 AM	0	3	9	0	12	0	171	2	0	173	0	4	288	0	292	477
8:00 AM	0	2	21	1	23	0	150	0	0	150	0	5	253	0	258	431
8:15 AM	0	7	6	0	13	0	212	9	0	221	0	2	326	0	328	562
8:30 AM	0	5	2	0	7	0	211	6	0	217	0	2	236	0	238	462
Total	0	17	38	1	55	0	744	17	0	761	0	13	1103	0	1116	1932
Approach %	0.0	30.9	69.1	-	-	0.0	97.8	2.2	-	-	0.0	1.2	98.8	-	-	-
Total %	0.0	0.9	2.0	-	2.8	0.0	38.5	0.9	-	39.4	0.0	0.7	57.1	-	57.8	-
PHF	0.000	0.607	0.452	-	0.598	0.000	0.877	0.472	-	0.861	0.000	0.650	0.846	-	0.851	0.859
Lights	0	17	37	-	54	0	707	17	-	724	0	13	1057	-	1070	1848
% Lights	-	100.0	97.4	-	98.2	-	95.0	100.0	-	95.1	-	100.0	95.8	-	95.9	95.7
Buses	0	0	0	-	0	0	9	0	-	9	0	0	9	-	9	18
% Buses	-	0.0	0.0	-	0.0	-	1.2	0.0	-	1.2	-	0.0	0.8	-	0.8	0.9
Single-Unit Trucks	0	0	1	-	1	0	26	0	-	26	0	0	29	-	29	56
% Single-Unit Trucks	-	0.0	2.6	-	1.8	-	3.5	0.0	-	3.4	-	0.0	2.6	-	2.6	2.9
Articulated Trucks	0	0	0	-	0	0	2	0	-	2	0	0	8	-	8	10
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.3	0.0	-	0.3	-	0.0	0.7	-	0.7	0.5
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	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

Start Time	Frederick Street Westbound					Arlington Heights Road Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
3:00 PM	0	5	3	0	8	0	185	2	0	187	0	5	218	0	223	418
3:15 PM	0	1	1	0	2	0	189	6	0	195	0	8	237	0	245	442
3:30 PM	0	3	6	23	9	0	228	5	0	233	0	5	224	0	229	471
3:45 PM	0	1	8	1	9	0	237	4	0	241	0	6	222	0	228	478
Total	0	10	18	24	28	0	839	17	0	856	0	24	901	0	925	1809
Approach %	0.0	35.7	64.3	-	-	0.0	98.0	2.0	-	-	0.0	2.6	97.4	-	-	-
Total %	0.0	0.6	1.0	-	1.5	0.0	46.4	0.9	-	47.3	0.0	1.3	49.8	-	51.1	-
PHF	0.000	0.500	0.563	-	0.778	0.000	0.885	0.708	-	0.888	0.000	0.750	0.950	-	0.944	0.946
Lights	0	10	18	-	28	0	816	17	-	833	0	22	865	-	887	1748
% Lights	-	100.0	100.0	-	100.0	-	97.3	100.0	-	97.3	-	91.7	96.0	-	95.9	96.6
Buses	0	0	0	-	0	0	10	0	-	10	0	2	9	-	11	21
% Buses	-	0.0	0.0	-	0.0	-	1.2	0.0	-	1.2	-	8.3	1.0	-	1.2	1.2
Single-Unit Trucks	0	0	0	-	0	0	13	0	-	13	0	0	22	-	22	35
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	1.5	0.0	-	1.5	-	0.0	2.4	-	2.4	1.9
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	5	-	5	5
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.6	-	0.5	0.3
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	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	24	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400
Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Arlington Heights Road with
Unsignalized Access
Site Code:
Start Date: 08/27/2017
Page No: 1

Turning Movement Data

Start Time	Inbound Access Drive Eastbound					Arlington Heights Road Northbound					Arlington Heights Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
9:00 AM	0	0	0	2	0	0	6	77	0	83	0	82	9	0	91	174
9:15 AM	0	0	0	0	0	0	6	95	0	101	0	126	10	0	136	237
9:30 AM	0	0	0	1	0	0	29	82	0	111	0	101	34	0	135	246
9:45 AM	0	0	1	10	1	0	34	95	0	129	0	107	48	4	155	285
Hourly Total	0	0	1	13	1	0	75	349	0	424	0	416	101	4	517	942
10:00 AM	0	0	0	20	0	0	6	106	3	112	0	141	7	0	148	260
10:15 AM	0	0	0	1	0	0	0	111	0	111	0	116	4	0	120	231
10:30 AM	0	0	0	1	0	0	1	142	0	143	0	134	0	0	134	277
10:45 AM	0	0	0	11	0	0	1	140	0	141	0	161	4	4	165	306
Hourly Total	0	0	0	33	0	0	8	499	3	507	0	552	15	4	567	1074
11:00 AM	0	0	0	21	0	0	22	155	0	177	0	262	17	0	279	456
11:15 AM	0	0	0	1	0	0	32	135	0	167	0	151	33	0	184	351
11:30 AM	0	0	0	4	0	0	14	131	0	145	0	142	13	0	155	300
11:45 AM	0	0	0	0	0	0	3	157	0	160	0	174	2	0	176	336
Hourly Total	0	0	0	26	0	0	71	578	0	649	0	729	65	0	794	1443
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:30 AM	0	0	0	0	0	0	7	170	0	177	0	248	3	0	251	428
7:45 AM	0	0	0	0	0	0	8	158	0	166	0	283	6	0	289	455
Hourly Total	0	0	0	0	0	0	15	328	0	343	0	531	9	0	540	883
8:00 AM	0	0	0	0	0	0	5	146	0	151	0	245	12	0	257	408
8:15 AM	0	0	0	0	0	0	41	180	0	221	0	283	77	0	360	581
8:30 AM	0	0	0	0	0	0	15	181	0	196	0	261	43	0	304	500
8:45 AM	0	0	0	0	0	0	2	162	0	164	0	238	4	0	242	406
Hourly Total	0	0	0	0	0	0	63	669	0	732	0	1027	136	0	1163	1895
9:00 AM	0	0	0	3	0	0	2	151	0	153	0	240	5	0	245	398
9:15 AM	0	0	0	0	0	0	0	156	0	156	0	182	3	0	185	341
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	3	0	0	2	307	0	309	0	422	8	0	430	739
2:30 PM	0	0	0	0	0	0	0	181	0	181	0	185	0	0	185	366
2:45 PM	0	0	0	0	0	0	5	206	0	211	0	204	6	0	210	421
Hourly Total	0	0	0	0	0	0	5	387	0	392	0	389	6	0	395	787
3:00 PM	0	0	0	0	0	0	16	183	0	199	0	214	12	0	226	425
3:15 PM	0	0	0	0	0	0	26	195	0	221	0	220	19	0	239	460
3:30 PM	0	0	0	0	0	0	3	199	0	202	0	245	11	0	256	458
3:45 PM	0	0	1	0	1	0	1	218	0	219	0	242	1	0	243	463
Hourly Total	0	0	1	0	1	0	46	795	0	841	0	921	43	0	964	1806
4:00 PM	0	0	0	0	0	0	0	225	0	225	0	223	0	0	223	448
4:15 PM	0	0	0	0	0	0	0	219	0	219	0	254	1	0	255	474

Grand Total	0	0	2	75	2	0	285	4356	3	4641	0	5464	384	8	5848	10491
Approach %	0.0	0.0	100.0	-	-	0.0	6.1	93.9	-	-	0.0	93.4	6.6	-	-	-
Total %	0.0	0.0	0.0	-	0.0	0.0	2.7	41.5	-	44.2	0.0	52.1	3.7	-	55.7	-
Lights	0	0	2	-	2	0	285	4232	-	4517	0	5301	384	-	5685	10204
% Lights	-	-	100.0	-	100.0	-	100.0	97.2	-	97.3	-	97.0	100.0	-	97.2	97.3
Buses	0	0	0	-	0	0	0	39	-	39	0	38	0	-	38	77
% Buses	-	-	0.0	-	0.0	-	0.0	0.9	-	0.8	-	0.7	0.0	-	0.6	0.7
Single-Unit Trucks	0	0	0	-	0	0	0	78	-	78	0	106	0	-	106	184
% Single-Unit Trucks	-	-	0.0	-	0.0	-	0.0	1.8	-	1.7	-	1.9	0.0	-	1.8	1.8
Articulated Trucks	0	0	0	-	0	0	0	7	-	7	0	19	0	-	19	26
% Articulated Trucks	-	-	0.0	-	0.0	-	0.0	0.2	-	0.2	-	0.3	0.0	-	0.3	0.2
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	0.0	-	0.0	0.0
Pedestrians	-	-	-	75	-	-	-	-	3	-	-	-	-	8	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

[illegible]

[illegible]

[illegible]

Study Name	Pine Avenue with Frederick Street
Start Date	Sunday, August 27, 2017 9:00 AM
End Date	Tuesday, August 29, 2017 4:30 PM
Site Code	

Report Summary

		Eastbound						Westbound						Northbound						Southbound						Northeastbound						Crosswalk								
Time Period	Class.	U	L	T	R	HR	I	O	U	L	BL	T	R	I	O	U	HL	L	T	R	I	O	U	L	T	BR	R	I	O	U	HL	BL	BR	HR	I	O	Total	Pedestrians		Total
Peak 1	Lights	0	3	16	2	7	28	17	0	2	5	5	0	12	22	0	0	7	18	3	28	7	0	0	3	2	1	6	25	0	4	4	3	0	11	14	85	W	1	1
Specified Period	%	0%	100%	100%	100%	100%	100%	94%	0%	100%	100%	83%	0%	92%	100%	0%	0%	100%	100%	100%	100%	100%	100%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	
11:00 AM - 12:00 PM	Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	E	0	0	
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
11:00 AM - 12:00 PM	Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	5	5	
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	
	Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Bicycles on Road	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	SW	2	2
	%	0%	0%	0%	0%	0%	0%	6%	0%	0%	0%	17%	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	100%	100%
	Total	0	3	16	2	7	28	18	0	2	5	6	0	13	22	0	0	7	18	3	28	7	0	0	3	2	1	6	25	0	4	4	3	0	11	14	86		8	8
	PHF	0	0.25	0.36	0.25	0.58	0.41	0.56	0	0.5	0.42	0.38	0	0.41	0.32	0	0	0.35	0.25	0.25	0.27	0.88	0	0	0.38	0.5	0.25	0.5	0.27	0	0.33	0.5	0.25	0	0.34	0.5	0.41			
	Approach %						33%	21%						15%	26%																									
Time Period	Class.	U	L	T	R	HR	I	O	U	L	BL	T	R	I	O	U	HL	L	T	R	I	O	U	L	T	BR	R	I	O	U	HL	BL	BR	HR	I	O	Total	Pedestrians		Total
Peak 1	Lights	0	3	20	2	6	31	51	0	2	3	16	1	22	29	0	0	7	13	3	23	11	0	0	4	4	8	16	27	0	20	10	6	3	39	13	131	W	1	1
Specified Period	%	0%	100%	100%	100%	100%	100%	100%	0%	67%	100%	100%	50%	92%	100%	0%	0%	100%	100%	100%	100%	85%	0%	0%	80%	100%	100%	94%	96%	0%	100%	100%	100%	100%	100%	100%	98%	100%	100%	
7:45 AM - 8:45 AM	Buses	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	2	0	0	1	0	0	1	1	0	0	0	0	0	0	0	3	E	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	0%	50%	8%	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	20%	0%	0%	6%	4%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	
7:45 AM - 8:45 AM	Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	8	8	
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	
	Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SW	1	1
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
	Total	0	3	20	2	6	31	51	0	3	3	16	2	24	29	0	0	7	13	3	23	13	0	0	5	4	8	17	28	0	20	10	6	3	39	13	134		10	10
	PHF	0	0.38	0.71	0.5	0.75	0.7	0.64	0	0.38	0.38	0.8	0.5	0.67	0.81	0	0	0.58	0.65	0.38	0.72	0.54	0	0	0.62	0.33	0.5	0.85	0.64	0	0.31	0.5	0.38	0.75	0.39	0.65	0.73			
	Approach %						23%	38%						18%	22%							17%	10%					13%	21%					29%	10%					
Peak 2	Lights	1	4	17	9	7	38	26	0	8	2	15	2	27	19	0	2	4	2	0	8	25	0	2	8	11	5	26	8	0	1	0	0	0	1	22	100	W	8	8
Specified Period	%	100%	100%	100%	90%	88%	95%	100%	0%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	0%	100%	96%	0%	100%	100%	100%	100%	100%	100%	100%	0%	100%	0%	0%	0%	100%	96%	98%	100%	100%
3:00 PM - 4:00 PM	Buses	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	E	0	0
One Hour Peak	%	0%	0%	0%	10%	13%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	2%	0%	0%	0%	0%	
3:00 PM - 4:00 PM	Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S	14	14	
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	
	Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	2	2	
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
	Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Total	1	4	17	10	8	40	26	0	8	2	15	2	27	19	0	2	4	2	0	8	26	0	2	8	11	5	26	8	0	1	0	0	0	1	23	102		24	24
	PHF	0.25	0.5	0.53	0.5	0.67	0.83	0.72	0	0.33	0.25	0.62	0.5	0.75	0.59	0	0.5	0.25	0.5	0	0.4	0.46	0	0.5	0.67	0.39	0.42	0.59	0.5	0	0.25	0	0	0	0.25	0.44	0.88			
	Approach %						39%	25%						26%	19%						8%	25%						25%	8%					1%	23%					



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Count Name: Pine Avenue with Marshall Street
Site Code:
Start Date: 08/27/2017
Page No: 1

Turning Movement Data

Start Time	Marshall Street Westbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
9:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	3	0	3	4
9:15 AM	0	0	1	0	1	0	4	0	0	4	0	18	61	0	79	84
9:30 AM	0	0	0	0	0	0	1	1	0	2	0	1	6	0	7	9
9:45 AM	0	0	8	0	8	0	20	0	0	20	0	0	4	2	4	32
Hourly Total	0	0	9	0	9	0	26	1	0	27	0	19	74	2	93	129
10:00 AM	0	0	1	0	1	0	7	0	0	7	0	0	3	0	3	11
10:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	5
10:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	2	1	2	3
10:45 AM	0	0	0	0	0	0	5	1	0	6	0	2	5	5	7	13
Hourly Total	0	0	1	0	1	0	16	1	0	17	0	2	12	6	14	32
11:00 AM	0	0	0	0	0	0	4	0	0	4	0	9	31	5	40	44
11:15 AM	0	0	1	2	1	0	3	0	0	3	0	1	5	0	6	10
11:30 AM	0	1	1	2	2	0	0	2	0	2	0	0	2	0	2	6
11:45 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	2
Hourly Total	0	1	3	4	4	0	7	3	0	10	0	10	38	5	48	62
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:30 AM	0	0	2	0	2	0	6	0	0	6	0	1	7	0	8	16
7:45 AM	0	0	0	0	0	0	3	0	0	3	0	3	11	0	14	17
Hourly Total	0	0	2	0	2	0	9	0	0	9	0	4	18	0	22	33
8:00 AM	0	0	1	1	1	0	0	0	0	0	0	6	10	0	16	17
8:15 AM	0	0	0	0	0	0	5	0	0	5	0	1	5	0	6	11
8:30 AM	0	0	1	1	1	0	0	0	0	0	0	0	6	1	6	7
8:45 AM	0	0	1	0	1	0	1	0	0	1	0	1	1	1	2	4
Hourly Total	0	0	3	2	3	0	6	0	0	6	0	8	22	2	30	39
9:00 AM	0	0	0	1	0	0	1	0	0	1	0	1	1	0	2	3
9:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	2	0	0	1	0	0	1	0	1	2	0	3	4
2:30 PM	0	1	1	0	2	0	3	0	0	3	0	0	0	0	0	5
2:45 PM	0	1	0	0	1	0	2	0	0	2	0	1	1	0	2	5
Hourly Total	0	2	1	0	3	0	5	0	0	5	0	1	1	0	2	10
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
3:15 PM	0	1	0	0	1	0	2	3	0	5	0	1	3	1	4	10
3:30 PM	0	0	0	0	0	0	5	1	0	6	0	26	16	5	42	48
3:45 PM	0	1	1	1	2	0	4	0	0	4	0	2	4	0	6	12
Hourly Total	0	2	1	1	3	0	11	4	0	15	0	29	25	6	54	72
4:00 PM	0	0	1	0	1	0	1	0	0	1	0	0	5	0	5	7
4:15 PM	0	0	0	0	0	0	4	0	0	4	0	1	3	0	4	8

Grand Total	0	5	21	9	26	0	86	9	0	95	0	75	200	21	275	396
Approach %	0.0	19.2	80.8	-	-	0.0	90.5	9.5	-	-	0.0	27.3	72.7	-	-	-
Total %	0.0	1.3	5.3	-	6.6	0.0	21.7	2.3	-	24.0	0.0	18.9	50.5	-	69.4	-
Lights	0	5	20	-	25	0	86	9	-	95	0	75	195	-	270	390
% Lights	-	100.0	95.2	-	96.2	-	100.0	100.0	-	100.0	-	100.0	97.5	-	98.2	98.5
Buses	0	0	0	-	0	0	0	0	-	0	0	0	4	-	4	4
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	2.0	-	1.5	1.0
Single-Unit Trucks	0	0	1	-	1	0	0	0	-	0	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	4.8	-	3.8	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.3
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1	1
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.5	-	0.4	0.3
Pedestrians	-	-	-	9	-	-	-	-	0	-	-	-	-	21	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Pine Avenue with Marshall Street
Site Code:
Start Date: 08/27/2017
Page No: 3

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Marshall Street Westbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
11:00 AM	0	0	0	0	0	0	4	0	0	4	0	9	31	5	40	44
11:15 AM	0	0	1	2	1	0	3	0	0	3	0	1	5	0	6	10
11:30 AM	0	1	1	2	2	0	0	2	0	2	0	0	2	0	2	6
11:45 AM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	2
Total	0	1	3	4	4	0	7	3	0	10	0	10	38	5	48	62
Approach %	0.0	25.0	75.0	-	-	0.0	70.0	30.0	-	-	0.0	20.8	79.2	-	-	-
Total %	0.0	1.6	4.8	-	6.5	0.0	11.3	4.8	-	16.1	0.0	16.1	61.3	-	77.4	-
PHF	0.000	0.250	0.750	-	0.500	0.000	0.438	0.375	-	0.625	0.000	0.278	0.306	-	0.300	0.352
Lights	0	1	3	-	4	0	7	3	-	10	0	10	38	-	48	62
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	4	-	-	-	-	0	-	-	-	-	5	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Pine Avenue with Marshall Street
Site Code:
Start Date: 08/27/2017
Page No: 4

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Marshall Street Westbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
7:45 AM	0	0	0	0	0	0	3	0	0	3	0	3	11	0	14	17
8:00 AM	0	0	1	1	1	0	0	0	0	0	0	6	10	0	16	17
8:15 AM	0	0	0	0	0	0	5	0	0	5	0	1	5	0	6	11
8:30 AM	0	0	1	1	1	0	0	0	0	0	0	0	6	1	6	7
Total	0	0	2	2	2	0	8	0	0	8	0	10	32	1	42	52
Approach %	0.0	0.0	100.0	-	-	0.0	100.0	0.0	-	-	0.0	23.8	76.2	-	-	-
Total %	0.0	0.0	3.8	-	3.8	0.0	15.4	0.0	-	15.4	0.0	19.2	61.5	-	80.8	-
PHF	0.000	0.000	0.500	-	0.500	0.000	0.400	0.000	-	0.400	0.000	0.417	0.727	-	0.656	0.765
Lights	0	0	1	-	1	0	8	0	-	8	0	10	30	-	40	49
% Lights	-	-	50.0	-	50.0	-	100.0	-	-	100.0	-	100.0	93.8	-	95.2	94.2
Buses	0	0	0	-	0	0	0	0	-	0	0	0	2	-	2	2
% Buses	-	-	0.0	-	0.0	-	0.0	-	-	0.0	-	0.0	6.3	-	4.8	3.8
Single-Unit Trucks	0	0	1	-	1	0	0	0	-	0	0	0	0	-	0	1
% Single-Unit Trucks	-	-	50.0	-	50.0	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	1.9
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	-	0.0	-	0.0	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.0
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	-	0.0	0.0
Pedestrians	-	-	-	2	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Pine Avenue with Marshall Street
Site Code:
Start Date: 08/27/2017
Page No: 5

Turning Movement Peak Hour Data (3:00 PM)

Start Time	Marshall Street Westbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
3:15 PM	0	1	0	0	1	0	2	3	0	5	0	1	3	1	4	10
3:30 PM	0	0	0	0	0	0	5	1	0	6	0	26	16	5	42	48
3:45 PM	0	1	1	1	2	0	4	0	0	4	0	2	4	0	6	12
Total	0	2	1	1	3	0	11	4	0	15	0	29	25	6	54	72
Approach %	0.0	66.7	33.3	-	-	0.0	73.3	26.7	-	-	0.0	53.7	46.3	-	-	-
Total %	0.0	2.8	1.4	-	4.2	0.0	15.3	5.6	-	20.8	0.0	40.3	34.7	-	75.0	-
PHF	0.000	0.500	0.250	-	0.375	0.000	0.550	0.333	-	0.625	0.000	0.279	0.391	-	0.321	0.375
Lights	0	2	1	-	3	0	11	4	-	15	0	29	23	-	52	70
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	92.0	-	96.3	97.2
Buses	0	0	0	-	0	0	0	0	-	0	0	0	2	-	2	2
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	8.0	-	3.7	2.8
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	6	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-



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

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(847)518-9990

Count Name: Pine Avenue with Hawthorne Stret
Site Code:
Start Date: 08/27/2017
Page No: 1

Turning Movement Data

Start Time	Hawthorne Street Eastbound					Hawthorne Street Westbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
9:00 AM	0	0	1	0	1	0	3	2	0	5	0	1	2	1	3	9
9:15 AM	0	1	2	0	3	0	1	3	0	4	0	29	32	4	61	68
9:30 AM	0	2	1	0	3	0	2	1	0	3	0	4	3	0	7	13
9:45 AM	0	6	2	0	8	0	4	15	0	19	0	2	2	3	4	31
Hourly Total	0	9	6	0	15	0	10	21	0	31	0	36	39	8	75	121
10:00 AM	0	6	3	0	9	0	3	1	0	4	0	2	3	1	5	18
10:15 AM	0	0	1	0	1	0	3	3	0	6	0	0	2	0	2	9
10:30 AM	0	1	3	0	4	0	2	1	0	3	0	3	0	4	3	10
10:45 AM	0	5	6	0	11	0	4	0	0	4	0	3	3	2	6	21
Hourly Total	0	12	13	0	25	0	12	5	0	17	0	8	8	7	16	58
11:00 AM	0	3	11	0	14	0	2	2	0	4	0	22	9	3	31	49
11:15 AM	0	1	8	0	9	0	5	2	0	7	0	2	2	1	4	20
11:30 AM	0	0	0	0	0	0	3	1	0	4	0	0	3	0	3	7
11:45 AM	0	3	2	0	5	0	2	1	0	3	0	1	1	1	2	10
Hourly Total	0	7	21	0	28	0	12	6	0	18	0	25	15	5	40	86
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:30 AM	0	2	30	0	32	0	10	3	0	13	0	3	4	1	7	52
7:45 AM	0	0	15	0	15	0	8	3	0	11	0	4	7	2	11	37
Hourly Total	0	2	45	0	47	0	18	6	0	24	0	7	11	3	18	89
8:00 AM	0	0	4	0	4	0	5	0	0	5	0	5	7	2	12	21
8:15 AM	0	0	11	0	11	0	10	3	0	13	0	3	4	2	7	31
8:30 AM	0	0	7	0	7	0	5	0	0	5	0	5	1	1	6	18
8:45 AM	0	1	1	0	2	0	0	0	0	0	0	0	1	0	1	3
Hourly Total	0	1	23	0	24	0	20	3	0	23	0	13	13	5	26	73
9:00 AM	0	0	6	0	6	0	5	1	0	6	0	1	0	1	1	13
9:15 AM	0	0	5	0	5	0	2	0	0	2	0	0	1	2	1	8
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	11	0	11	0	7	1	0	8	0	1	1	3	2	21
2:30 PM	0	2	6	0	8	0	2	1	0	3	0	1	0	0	1	12
2:45 PM	0	2	6	0	8	0	2	0	0	2	0	2	1	0	3	13
Hourly Total	0	4	12	0	16	0	4	1	0	5	0	3	1	0	4	25
3:00 PM	0	0	4	0	4	0	5	1	0	6	0	1	0	1	1	11
3:15 PM	0	4	6	0	10	0	12	0	0	12	0	1	2	0	3	25
3:30 PM	0	2	9	0	11	0	1	1	0	2	0	5	8	0	13	26
3:45 PM	0	2	8	0	10	0	5	1	0	6	0	3	3	4	6	22
Hourly Total	0	8	27	0	35	0	23	3	0	26	0	10	13	5	23	84
4:00 PM	0	0	5	0	5	0	4	1	0	5	0	1	1	2	2	12
4:15 PM	0	3	2	0	5	0	0	0	0	0	0	2	2	1	4	9

Grand Total	0	46	165	0	211	0	110	47	0	157	0	106	104	39	210	578
Approach %	0.0	21.8	78.2	-	-	0.0	70.1	29.9	-	-	0.0	50.5	49.5	-	-	-
Total %	0.0	8.0	28.5	-	36.5	0.0	19.0	8.1	-	27.2	0.0	18.3	18.0	-	36.3	-
Lights	0	46	159	-	205	0	106	47	-	153	0	102	102	-	204	562
% Lights	-	100.0	96.4	-	97.2	-	96.4	100.0	-	97.5	-	96.2	98.1	-	97.1	97.2
Buses	0	0	2	-	2	0	0	0	-	0	0	2	2	-	4	6
% Buses	-	0.0	1.2	-	0.9	-	0.0	0.0	-	0.0	-	1.9	1.9	-	1.9	1.0
Single-Unit Trucks	0	0	1	-	1	0	1	0	-	1	0	0	0	-	0	2
% Single-Unit Trucks	-	0.0	0.6	-	0.5	-	0.9	0.0	-	0.6	-	0.0	0.0	-	0.0	0.3
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	3	-	3	0	3	0	-	3	0	2	0	-	2	8
% Bicycles on Road	-	0.0	1.8	-	1.4	-	2.7	0.0	-	1.9	-	1.9	0.0	-	1.0	1.4
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	39	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Pine Avenue with Hawthorne Stret
Site Code:
Start Date: 08/27/2017
Page No: 3

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Hawthorne Street Eastbound					Hawthorne Street Westbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
11:00 AM	0	3	11	0	14	0	2	2	0	4	0	22	9	3	31	49
11:15 AM	0	1	8	0	9	0	5	2	0	7	0	2	2	1	4	20
11:30 AM	0	0	0	0	0	0	3	1	0	4	0	0	3	0	3	7
11:45 AM	0	3	2	0	5	0	2	1	0	3	0	1	1	1	2	10
Total	0	7	21	0	28	0	12	6	0	18	0	25	15	5	40	86
Approach %	0.0	25.0	75.0	-	-	0.0	66.7	33.3	-	-	0.0	62.5	37.5	-	-	-
Total %	0.0	8.1	24.4	-	32.6	0.0	14.0	7.0	-	20.9	0.0	29.1	17.4	-	46.5	-
PHF	0.000	0.583	0.477	-	0.500	0.000	0.600	0.750	-	0.643	0.000	0.284	0.417	-	0.323	0.439
Lights	0	7	21	-	28	0	12	6	-	18	0	25	15	-	40	86
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Pine Avenue with Hawthorne Stret
Site Code:
Start Date: 08/27/2017
Page No: 4

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Hawthorne Street Eastbound					Hawthorne Street Westbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:45 AM	0	0	15	0	15	0	8	3	0	11	0	4	7	2	11	37
8:00 AM	0	0	4	0	4	0	5	0	0	5	0	5	7	2	12	21
8:15 AM	0	0	11	0	11	0	10	3	0	13	0	3	4	2	7	31
8:30 AM	0	0	7	0	7	0	5	0	0	5	0	5	1	1	6	18
Total	0	0	37	0	37	0	28	6	0	34	0	17	19	7	36	107
Approach %	0.0	0.0	100.0	-	-	0.0	82.4	17.6	-	-	0.0	47.2	52.8	-	-	-
Total %	0.0	0.0	34.6	-	34.6	0.0	26.2	5.6	-	31.8	0.0	15.9	17.8	-	33.6	-
PHF	0.000	0.000	0.617	-	0.617	0.000	0.700	0.500	-	0.654	0.000	0.850	0.679	-	0.750	0.723
Lights	0	0	36	-	36	0	28	6	-	34	0	15	19	-	34	104
% Lights	-	-	97.3	-	97.3	-	100.0	100.0	-	100.0	-	88.2	100.0	-	94.4	97.2
Buses	0	0	1	-	1	0	0	0	-	0	0	2	0	-	2	3
% Buses	-	-	2.7	-	2.7	-	0.0	0.0	-	0.0	-	11.8	0.0	-	5.6	2.8
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
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	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Pine Avenue with Hawthorne Stret
Site Code:
Start Date: 08/27/2017
Page No: 5

Turning Movement Peak Hour Data (3:00 PM)

Start Time	Hawthorne Street Eastbound					Hawthorne Street Westbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
3:00 PM	0	0	4	0	4	0	5	1	0	6	0	1	0	1	1	11
3:15 PM	0	4	6	0	10	0	12	0	0	12	0	1	2	0	3	25
3:30 PM	0	2	9	0	11	0	1	1	0	2	0	5	8	0	13	26
3:45 PM	0	2	8	0	10	0	5	1	0	6	0	3	3	4	6	22
Total	0	8	27	0	35	0	23	3	0	26	0	10	13	5	23	84
Approach %	0.0	22.9	77.1	-	-	0.0	88.5	11.5	-	-	0.0	43.5	56.5	-	-	-
Total %	0.0	9.5	32.1	-	41.7	0.0	27.4	3.6	-	31.0	0.0	11.9	15.5	-	27.4	-
PHF	0.000	0.500	0.750	-	0.795	0.000	0.479	0.750	-	0.542	0.000	0.500	0.406	-	0.442	0.808
Lights	0	8	27	-	35	0	23	3	-	26	0	10	11	-	21	82
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	84.6	-	91.3	97.6
Buses	0	0	0	-	0	0	0	0	-	0	0	0	2	-	2	2
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	15.4	-	8.7	2.4
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	5	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: Pine Avenue with Northerly
Access Drive
Site Code:
Start Date: 08/27/2017
Page No: 1

Turning Movement Data

Start Time	Northerly Access Drive Eastbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
9:00 AM	0	0	0	2	0	0	0	0	0	0	0	2	0	0	2	2
9:15 AM	0	12	21	3	33	0	0	10	3	10	0	13	0	0	13	56
9:30 AM	0	1	3	0	4	0	1	0	0	1	0	1	1	0	2	7
9:45 AM	0	0	0	0	0	0	3	2	0	5	0	4	4	0	8	13
Hourly Total	0	13	24	5	37	0	4	12	3	16	0	20	5	0	25	78
10:00 AM	0	0	0	0	0	0	1	1	0	2	0	2	1	0	3	5
10:15 AM	0	0	0	1	0	0	1	1	0	2	0	2	0	0	2	4
10:30 AM	0	1	0	1	1	0	0	1	0	1	0	1	0	0	1	3
10:45 AM	0	0	1	1	1	0	1	2	0	3	0	2	0	0	2	6
Hourly Total	0	1	1	3	2	0	3	5	0	8	0	7	1	0	8	18
11:00 AM	0	9	6	0	15	0	0	18	0	18	0	2	0	0	2	35
11:15 AM	0	0	1	0	1	0	0	1	0	1	0	1	2	0	3	5
11:30 AM	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1	3
11:45 AM	0	0	0	1	0	0	0	1	0	1	0	0	1	0	1	2
Hourly Total	0	9	8	1	17	0	0	21	0	21	0	4	3	0	7	45
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:30 AM	0	1	0	0	1	0	1	4	0	5	0	8	0	0	8	14
7:45 AM	0	4	6	1	10	0	0	5	0	5	0	4	0	0	4	19
Hourly Total	0	5	6	1	11	0	1	9	0	10	0	12	0	0	12	33
8:00 AM	0	2	4	1	6	0	0	3	0	3	0	2	0	1	2	11
8:15 AM	0	2	1	3	3	0	3	4	0	7	0	4	0	0	4	14
8:30 AM	0	0	0	1	0	0	0	2	0	2	0	2	0	1	2	4
8:45 AM	0	0	0	1	0	0	0	3	0	3	0	2	0	0	2	5
Hourly Total	0	4	5	6	9	0	3	12	0	15	0	10	0	2	10	34
9:00 AM	0	1	1	1	2	0	0	1	0	1	0	1	0	0	1	4
9:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	1	1	3	2	0	0	1	0	1	0	1	0	0	1	4
2:30 PM	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	5
2:45 PM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	2	3
Hourly Total	0	0	0	0	0	0	0	6	0	6	0	2	0	0	2	8
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	3
3:15 PM	0	0	1	0	1	0	0	1	1	1	0	8	1	2	9	11
3:30 PM	0	0	0	3	0	0	1	2	0	3	0	9	1	1	10	13
3:45 PM	0	2	0	0	2	0	0	4	0	4	0	2	0	0	2	8
Hourly Total	0	2	1	3	3	0	1	7	1	8	0	21	3	3	24	35
4:00 PM	0	0	0	0	0	0	0	2	0	2	0	6	0	0	6	8
4:15 PM	0	0	0	2	0	0	0	3	0	3	0	0	2	0	2	5

Grand Total	0	35	46	24	81	0	12	78	4	90	0	83	14	5	97	268
Approach %	0.0	43.2	56.8	-	-	0.0	13.3	86.7	-	-	0.0	85.6	14.4	-	-	-
Total %	0.0	13.1	17.2	-	30.2	0.0	4.5	29.1	-	33.6	0.0	31.0	5.2	-	36.2	-
Lights	0	35	46	-	81	0	12	77	-	89	0	80	13	-	93	263
% Lights	-	100.0	100.0	-	100.0	-	100.0	98.7	-	98.9	-	96.4	92.9	-	95.9	98.1
Buses	0	0	0	-	0	0	0	0	-	0	0	2	1	-	3	3
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	2.4	7.1	-	3.1	1.1
Single-Unit Trucks	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	1.3	-	1.1	-	0.0	0.0	-	0.0	0.4
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	1	0	-	1	1
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	1.2	0.0	-	1.0	0.4
Pedestrians	-	-	-	24	-	-	-	-	4	-	-	-	-	5	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Turning Movement Peak Hour Data (11:00 AM)

Start Time	Northerly Access Drive Eastbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
11:00 AM	0	9	6	0	15	0	0	18	0	18	0	2	0	0	2	35
11:15 AM	0	0	1	0	1	0	0	1	0	1	0	1	2	0	3	5
11:30 AM	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1	3
11:45 AM	0	0	0	1	0	0	0	1	0	1	0	0	1	0	1	2
Total	0	9	8	1	17	0	0	21	0	21	0	4	3	0	7	45
Approach %	0.0	52.9	47.1	-	-	0.0	0.0	100.0	-	-	0.0	57.1	42.9	-	-	-
Total %	0.0	20.0	17.8	-	37.8	0.0	0.0	46.7	-	46.7	0.0	8.9	6.7	-	15.6	-
PHF	0.000	0.250	0.333	-	0.283	0.000	0.000	0.292	-	0.292	0.000	0.500	0.375	-	0.583	0.321
Lights	0	9	8	-	17	0	0	21	-	21	0	4	3	-	7	45
% Lights	-	100.0	100.0	-	100.0	-	-	100.0	-	100.0	-	100.0	100.0	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
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	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-



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

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

Count Name: Pine Avenue with Northerly
Access Drive
Site Code:
Start Date: 08/27/2017
Page No: 4

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Northerly Access Drive Eastbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:45 AM	0	4	6	1	10	0	0	5	0	5	0	4	0	0	4	19
8:00 AM	0	2	4	1	6	0	0	3	0	3	0	2	0	1	2	11
8:15 AM	0	2	1	3	3	0	3	4	0	7	0	4	0	0	4	14
8:30 AM	0	0	0	1	0	0	0	2	0	2	0	2	0	1	2	4
Total	0	8	11	6	19	0	3	14	0	17	0	12	0	2	12	48
Approach %	0.0	42.1	57.9	-	-	0.0	17.6	82.4	-	-	0.0	100.0	0.0	-	-	-
Total %	0.0	16.7	22.9	-	39.6	0.0	6.3	29.2	-	35.4	0.0	25.0	0.0	-	25.0	-
PHF	0.000	0.500	0.458	-	0.475	0.000	0.250	0.700	-	0.607	0.000	0.750	0.000	-	0.750	0.632
Lights	0	8	11	-	19	0	3	13	-	16	0	10	0	-	10	45
% Lights	-	100.0	100.0	-	100.0	-	100.0	92.9	-	94.1	-	83.3	-	-	83.3	93.8
Buses	0	0	0	-	0	0	0	0	-	0	0	2	0	-	2	2
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	16.7	-	-	16.7	4.2
Single-Unit Trucks	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	7.1	-	5.9	-	0.0	-	-	0.0	2.1
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	-	-	0.0	0.0
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	-	0.0	-	-	0.0	0.0
Pedestrians	-	-	-	6	-	-	-	-	0	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: Pine Avenue with Northerly
Access Drive
Site Code:
Start Date: 08/27/2017
Page No: 5

Turning Movement Peak Hour Data (3:00 PM)

Start Time	Northerly Access Drive Eastbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	3
3:15 PM	0	0	1	0	1	0	0	1	1	1	0	8	1	2	9	11
3:30 PM	0	0	0	3	0	0	1	2	0	3	0	9	1	1	10	13
3:45 PM	0	2	0	0	2	0	0	4	0	4	0	2	0	0	2	8
Total	0	2	1	3	3	0	1	7	1	8	0	21	3	3	24	35
Approach %	0.0	66.7	33.3	-	-	0.0	12.5	87.5	-	-	0.0	87.5	12.5	-	-	-
Total %	0.0	5.7	2.9	-	8.6	0.0	2.9	20.0	-	22.9	0.0	60.0	8.6	-	68.6	-
PHF	0.000	0.250	0.250	-	0.375	0.000	0.250	0.438	-	0.500	0.000	0.583	0.750	-	0.600	0.673
Lights	0	2	1	-	3	0	1	7	-	8	0	21	2	-	23	34
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	66.7	-	95.8	97.1
Buses	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1	1
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	33.3	-	4.2	2.9
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	3	-	-	-	-	1	-	-	-	-	3	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400
Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Pine Avenue with Southerly
Access Drive
Site Code:
Start Date: 08/27/2017
Page No: 1

Turning Movement Data

Start Time	Southerly Access Drive Eastbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
9:00 AM	0	0	2	2	2	0	1	0	0	1	0	2	0	0	2	5
9:15 AM	0	6	33	10	39	0	1	4	0	5	0	38	0	0	38	82
9:30 AM	0	0	4	1	4	0	0	1	0	1	0	4	0	0	4	9
9:45 AM	0	0	2	1	2	0	23	5	0	28	0	1	2	0	3	33
Hourly Total	0	6	41	14	47	0	25	10	0	35	0	45	2	0	47	129
10:00 AM	0	0	0	0	0	0	5	3	0	8	0	3	0	0	3	11
10:15 AM	0	0	0	1	0	0	1	2	3	3	0	1	0	0	1	4
10:30 AM	0	0	0	1	0	0	0	1	0	1	0	2	0	0	2	3
10:45 AM	0	0	4	6	4	0	2	3	0	5	0	2	0	0	2	11
Hourly Total	0	0	4	8	4	0	8	9	3	17	0	8	0	0	8	29
11:00 AM	0	17	38	2	55	0	3	1	0	4	0	9	0	0	9	68
11:15 AM	0	0	3	1	3	0	3	1	0	4	0	3	0	0	3	10
11:30 AM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	2	3
11:45 AM	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	1
Hourly Total	0	17	41	4	58	0	6	4	0	10	0	14	0	0	14	82
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:30 AM	0	1	1	0	2	1	5	4	0	10	0	5	2	0	7	19
7:45 AM	0	4	11	2	15	0	3	1	0	4	0	7	2	0	9	28
Hourly Total	0	5	12	2	17	1	8	5	0	14	0	12	4	0	16	47
8:00 AM	0	2	4	3	6	0	0	1	0	1	0	7	1	0	8	15
8:15 AM	0	1	3	4	4	0	0	6	0	6	0	5	0	0	5	15
8:30 AM	0	1	2	1	3	0	0	1	0	1	0	2	0	0	2	6
8:45 AM	0	1	0	2	1	0	0	2	0	2	0	2	0	0	2	5
Hourly Total	0	5	9	10	14	0	0	10	0	10	0	16	1	0	17	41
9:00 AM	0	0	1	0	1	0	0	1	0	1	0	2	0	0	2	4
9:15 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	1	1	1	0	0	1	0	1	0	3	0	0	3	5
2:30 PM	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	5
2:45 PM	0	0	0	0	0	0	0	1	0	1	0	2	0	0	2	3
Hourly Total	0	0	0	0	0	0	0	6	0	6	0	2	0	0	2	8
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
3:15 PM	0	0	1	0	1	0	1	1	0	2	0	5	2	0	7	10
3:30 PM	0	0	29	14	29	0	0	3	0	3	0	13	0	0	13	45
3:45 PM	0	0	0	0	0	0	0	4	0	4	0	3	0	0	3	7
Hourly Total	0	0	30	14	30	0	1	8	0	9	0	22	2	0	24	63
4:00 PM	0	0	1	0	1	0	0	1	0	1	0	5	1	0	6	8
4:15 PM	0	2	4	0	6	0	3	1	3	4	0	0	0	0	0	10

Grand Total	0	35	143	53	178	1	51	55	6	107	0	127	10	0	137	422
Approach %	0.0	19.7	80.3	-	-	0.9	47.7	51.4	-	-	0.0	92.7	7.3	-	-	-
Total %	0.0	8.3	33.9	-	42.2	0.2	12.1	13.0	-	25.4	0.0	30.1	2.4	-	32.5	-
Lights	0	35	140	-	175	1	51	54	-	106	0	124	10	-	134	415
% Lights	-	100.0	97.9	-	98.3	100.0	100.0	98.2	-	99.1	-	97.6	100.0	-	97.8	98.3
Buses	0	0	2	-	2	0	0	0	-	0	0	2	0	-	2	4
% Buses	-	0.0	1.4	-	1.1	0.0	0.0	0.0	-	0.0	-	1.6	0.0	-	1.5	0.9
Single-Unit Trucks	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	0.0	-	0.0	0.0	0.0	1.8	-	0.9	-	0.0	0.0	-	0.0	0.2
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	1	-	1	0	0	0	-	0	0	1	0	-	1	2
% Bicycles on Road	-	0.0	0.7	-	0.6	0.0	0.0	0.0	-	0.0	-	0.8	0.0	-	0.7	0.5
Pedestrians	-	-	-	53	-	-	-	-	6	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

Turning Movement Peak Hour Data (11:00 AM)

[illegible]

Start Time	Southerly Access Drive Eastbound					Pine Avenue Northbound					Pine Avenue Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:45 AM	0	4	11	2	15	0	3	1	0	4	0	7	2	0	9	28
8:00 AM	0	2	4	3	6	0	0	1	0	1	0	7	1	0	8	15
8:15 AM	0	1	3	4	4	0	0	6	0	6	0	5	0	0	5	15
8:30 AM	0	1	2	1	3	0	0	1	0	1	0	2	0	0	2	6
Total	0	8	20	10	28	0	3	9	0	12	0	21	3	0	24	64
Approach %	0.0	28.6	71.4	-	-	0.0	25.0	75.0	-	-	0.0	87.5	12.5	-	-	-
Total %	0.0	12.5	31.3	-	43.8	0.0	4.7	14.1	-	18.8	0.0	32.8	4.7	-	37.5	-
PHF	0.000	0.500	0.455	-	0.467	0.000	0.250	0.375	-	0.500	0.000	0.750	0.375	-	0.667	0.571
Lights	0	8	20	-	28	0	3	8	-	11	0	19	3	-	22	61
% Lights	-	100.0	100.0	-	100.0	-	100.0	88.9	-	91.7	-	90.5	100.0	-	91.7	95.3
Buses	0	0	0	-	0	0	0	0	-	0	0	2	0	-	2	2
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	9.5	0.0	-	8.3	3.1
Single-Unit Trucks	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	11.1	-	8.3	-	0.0	0.0	-	0.0	1.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	10	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

[illegible]

Site Plan

CMAP 2040 Projections Letter



Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

September 20, 2017

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

***Subject: Arlington Heights Road @ Frederick Street
IDOT***

Dear Mr. May:

In response to a request made on your behalf and dated September 20, 2017, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2040 ADT
Arlington Heights Rd, @ Frederick St	22,000	24,700

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

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

Sincerely,

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

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\TrafficForecasts_CY2017\ArlingtonHeights\ck-83-17\ck-83-17.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0
Unsignalized Intersections		
Level of Service	Average Total Delay (SEC/VEH)	
A	0 - 10	
B	> 10 - 15	
C	> 15 - 25	
D	> 25 - 35	
E	> 35 - 50	
F	> 50	

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/20/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	79	90	0	592	707	0
Future Volume (vph)	79	90	0	592	707	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.76				
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1805	1615	0	1693	1710	0
Flt Permitted	0.950					
Satd. Flow (perm)	1805	1229	0	1693	1710	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	25			30	30	
Link Distance (ft)	471			160	300	
Travel Time (s)	12.8			3.6	6.8	
Confl. Peds. (#/hr)		70	34			34
Confl. Bikes (#/hr)						
Peak Hour Factor	0.26	0.29	0.91	1.00	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)				0	0	
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	310	0	592	822	0
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	4.0	4.0		15.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0	
Total Split (s)	36.0	36.0		79.0	79.0	
Total Split (%)	31.3%	31.3%		68.7%	68.7%	
Yellow Time (s)	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None		Min	Min	
Act Effect Green (s)	29.6	29.6		65.8	65.8	
Actuated g/C Ratio	0.28	0.28		0.61	0.61	

Sunday Existing Peak Hour
Arlington Heights

Synchro 9 Report

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/20/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.61	0.92		0.57	0.79	
Control Delay	42.0	72.8		14.8	21.9	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	42.0	72.8		14.8	21.9	
LOS	D	E		B	C	
Approach Delay	57.6			14.8	21.9	
Approach LOS	E			B	C	
Queue Length 50th (ft)	201	227		228	396	
Queue Length 95th (ft)	71	85		324	515	
Internal Link Dist (ft)	391			80	220	
Turn Bay Length (ft)						
Base Capacity (vph)	509	347		1163	1175	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.60	0.89		0.51	0.70	

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 107.5

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 30.6

Intersection LOS: C

Intersection Capacity Utilization 61.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Arlington Heights Road & St. James Exit Only Access Drive

Ø2 79 s	Ø4 36 s
Ø6 79 s	

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/21/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	94	88	0	667	1132	0
Future Volume (vph)	94	88	0	667	1132	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		0.83				
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1805	1615	0	3438	3471	0
Flt Permitted	0.950					
Satd. Flow (perm)	1805	1338	0	3438	3471	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	25			30	30	
Link Distance (ft)	471			160	300	
Travel Time (s)	12.8			3.6	6.8	
Confl. Peds. (#/hr)		85	2			2
Confl. Bikes (#/hr)						
Peak Hour Factor	0.45	0.40	0.90	0.90	0.84	0.84
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	5%	4%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	209	220	0	741	1348	0
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	4.0	4.0		15.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0	
Total Split (s)	36.0	36.0		79.0	79.0	
Total Split (%)	31.3%	31.3%		68.7%	68.7%	
Yellow Time (s)	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None		Min	Min	
Act Effect Green (s)	23.2	23.2		73.2	73.2	
Actuated g/C Ratio	0.21	0.21		0.68	0.68	

School Day Existing AM Peak Hour
Arlington Heights

Synchro 9 Report

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/21/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.54	0.77		0.32	0.58	
Control Delay	43.0	58.2		8.4	11.3	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	43.0	58.2		8.4	11.3	
LOS	D	E		A	B	
Approach Delay	50.8			8.4	11.3	
Approach LOS	D			A	B	
Queue Length 50th (ft)	130	144		102	238	
Queue Length 95th (ft)	92	88		158	314	
Internal Link Dist (ft)	391			80	220	
Turn Bay Length (ft)						
Base Capacity (vph)	501	371		2321	2344	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.42	0.59		0.32	0.58	

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 108.4

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 17.2

Intersection LOS: B

Intersection Capacity Utilization 56.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Arlington Heights Road & St. James Exit Only Access Drive

Ø2 79 s	Ø4 36 s
Ø6 79 s	

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/21/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	53	54	0	819	915	0
Future Volume (vph)	53	54	0	819	915	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		0.69				
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1805	1615	0	3539	3471	0
Flt Permitted	0.950					
Satd. Flow (perm)	1805	1108	0	3539	3471	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	25			30	30	
Link Distance (ft)	471			160	300	
Travel Time (s)	12.8			3.6	6.8	
Confl. Peds. (#/hr)		157				
Confl. Bikes (#/hr)						
Peak Hour Factor	0.55	0.41	0.91	0.91	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	2%	4%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	96	132	0	900	984	0
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	4.0	4.0		15.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0	
Total Split (s)	36.0	36.0		94.0	94.0	
Total Split (%)	27.7%	27.7%		72.3%	72.3%	
Yellow Time (s)	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None		Min	Min	
Act Effect Green (s)	19.1	19.1		74.2	74.2	
Actuated g/C Ratio	0.18	0.18		0.70	0.70	

School Day Existing PM Peak Hour
Arlington Heights

Synchro 9 Report

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/21/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.30	0.66		0.36	0.41	
Control Delay	43.3	60.2		7.2	7.6	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	43.3	60.2		7.2	7.6	
LOS	D	E		A	A	
Approach Delay	53.1			7.2	7.6	
Approach LOS	D			A	A	
Queue Length 50th (ft)	66	98		116	131	
Queue Length 95th (ft)	69	68		194	220	
Internal Link Dist (ft)	391			80	220	
Turn Bay Length (ft)						
Base Capacity (vph)	541	332		2913	2857	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.18	0.40		0.31	0.34	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 106.1

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 12.3

Intersection LOS: B

Intersection Capacity Utilization 50.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Arlington Heights Road & St. James Exit Only Access Drive

Ø2 94 s	Ø4 36 s
Ø6 94 s	

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

11/29/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	62	69	0	631	706	0
Future Volume (vph)	62	69	0	631	706	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.76				
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1805	1615	0	1693	1710	0
Flt Permitted	0.950					
Satd. Flow (perm)	1805	1229	0	1693	1710	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	25			30	30	
Link Distance (ft)	471			160	217	
Travel Time (s)	12.8			3.6	4.9	
Confl. Peds. (#/hr)		70	34			34
Confl. Bikes (#/hr)						
Peak Hour Factor	0.26	0.29	0.91	1.00	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)				0	0	
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	238	238	0	631	821	0
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	4.0	4.0		15.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0	
Total Split (s)	36.0	36.0		79.0	79.0	
Total Split (%)	31.3%	31.3%		68.7%	68.7%	
Yellow Time (s)	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None		Min	Min	
Act Effect Green (s)	24.6	24.6		63.5	63.5	
Actuated g/C Ratio	0.24	0.24		0.63	0.63	

Sunday Projected Peak Hour
Arlington Heights

Synchro 9 Report

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

11/29/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.54	0.80		0.59	0.76	
Control Delay	40.0	57.9		14.1	19.4	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	40.0	57.9		14.1	19.4	
LOS	D	E		B	B	
Approach Delay	48.9			14.1	19.4	
Approach LOS	D			B	B	
Queue Length 50th (ft)	150	162		240	377	
Queue Length 95th (ft)	58	66		359	514	
Internal Link Dist (ft)	391			80	137	
Turn Bay Length (ft)						
Base Capacity (vph)	562	383		1251	1264	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.42	0.62		0.50	0.65	

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 100.6

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 24.9

Intersection LOS: C

Intersection Capacity Utilization 61.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Arlington Heights Road & St. James Exit Only Access Drive

Ø2 79 s	Ø4 36 s
Ø6 79 s	

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/21/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	94	88	0	688	1168	0
Future Volume (vph)	94	88	0	688	1168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		0.83				
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1805	1615	0	3438	3471	0
Flt Permitted	0.950					
Satd. Flow (perm)	1805	1338	0	3438	3471	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	25			30	30	
Link Distance (ft)	471			160	300	
Travel Time (s)	12.8			3.6	6.8	
Confl. Peds. (#/hr)		85	2			2
Confl. Bikes (#/hr)						
Peak Hour Factor	0.45	0.40	0.90	0.90	0.84	0.84
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	5%	4%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	209	220	0	764	1390	0
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	4.0	4.0		15.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0	
Total Split (s)	36.0	36.0		79.0	79.0	
Total Split (%)	31.3%	31.3%		68.7%	68.7%	
Yellow Time (s)	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None		Min	Min	
Act Effect Green (s)	23.2	23.2		73.2	73.2	
Actuated g/C Ratio	0.21	0.21		0.68	0.68	

School Day Projected AM Peak Hour
Arlington Heights

Synchro 9 Report

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/21/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.54	0.77		0.33	0.59	
Control Delay	43.0	58.2		8.4	11.6	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	43.0	58.2		8.4	11.6	
LOS	D	E		A	B	
Approach Delay	50.8			8.4	11.6	
Approach LOS	D			A	B	
Queue Length 50th (ft)	130	144		106	251	
Queue Length 95th (ft)	92	88		164	330	
Internal Link Dist (ft)	391			80	220	
Turn Bay Length (ft)						
Base Capacity (vph)	501	371		2321	2344	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.42	0.59		0.33	0.59	

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 108.4

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 17.2

Intersection LOS: B

Intersection Capacity Utilization 57.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Arlington Heights Road & St. James Exit Only Access Drive

Ø2 79 s	Ø4 36 s
Ø6 79 s	

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/21/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	53	54	0	845	944	0
Future Volume (vph)	53	54	0	845	944	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	1	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		0.69				
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1805	1615	0	3539	3471	0
Flt Permitted	0.950					
Satd. Flow (perm)	1805	1108	0	3539	3471	0
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	25			30	30	
Link Distance (ft)	471			160	300	
Travel Time (s)	12.8			3.6	6.8	
Confl. Peds. (#/hr)		157				
Confl. Bikes (#/hr)						
Peak Hour Factor	0.55	0.41	0.91	0.91	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	2%	4%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	96	132	0	929	1015	0
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	4.0	4.0		15.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0	
Total Split (s)	36.0	36.0		94.0	94.0	
Total Split (%)	27.7%	27.7%		72.3%	72.3%	
Yellow Time (s)	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None		Min	Min	
Act Effect Green (s)	19.3	19.3		75.9	75.9	
Actuated g/C Ratio	0.18	0.18		0.70	0.70	

School Day Projected PM Peak Hour
Arlington Heights

Synchro 9 Report

Lanes, Volumes, Timings

1: Arlington Heights Road & St. James Exit Only Access Drive

09/21/2017



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.30	0.67		0.37	0.42	
Control Delay	43.6	61.1		7.3	7.7	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	43.6	61.1		7.3	7.7	
LOS	D	E		A	A	
Approach Delay	53.7			7.3	7.7	
Approach LOS	D			A	A	
Queue Length 50th (ft)	66	98		121	138	
Queue Length 95th (ft)	69	68		202	230	
Internal Link Dist (ft)	391			80	220	
Turn Bay Length (ft)						
Base Capacity (vph)	526	323		2894	2838	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.18	0.41		0.32	0.36	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 107.8

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 12.3

Intersection LOS: B

Intersection Capacity Utilization 51.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Arlington Heights Road & St. James Exit Only Access Drive

Ø2 94 s	Ø4 36 s
Ø6 94 s	

HCM Unsignalized Intersection Capacity Analysis

2: Arlington Heights Road & St. James Entrance Only Access Drive

09/20/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↕	↕	
Traffic Volume (veh/h)	0	0	71	578	729	65
Future Volume (Veh/h)	0	0	71	578	729	65
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.50	0.55	0.92	0.70	0.49
Hourly flow rate (vph)	0	0	129	628	1041	133
Pedestrians	26					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					382	
pX, platoon unblocked	0.57	0.57	0.57			
vC, conflicting volume	2020	1134	1200			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2415	855	972			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	68			
cM capacity (veh/h)	14	205	407			
Direction, Lane #	NB 1	SB 1				
Volume Total	757	1174				
Volume Left	129	0				
Volume Right	0	133				
cSH	407	1700				
Volume to Capacity	0.32	0.69				
Queue Length 95th (ft)	33	0				
Control Delay (s)	10.5	0.0				
Lane LOS	B					
Approach Delay (s)	10.5	0.0				
Approach LOS						
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			83.5%	ICU Level of Service		E
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

3: Arlington Heights Road & Frederick Street

09/20/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	12	633	22	7	691
Future Volume (Veh/h)	9	12	633	22	7	691
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	11	15	801	28	9	875
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			300			
pX, platoon unblocked	0.74	0.74			0.74	
vC, conflicting volume	1270	815			829	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1192	580			599	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	96			99	
cM capacity (veh/h)	135	344			736	
Direction, Lane #	WB 1	NB 1	SB 1	SB 2		
Volume Total	26	829	301	583		
Volume Left	11	0	9	0		
Volume Right	15	28	0	0		
cSH	207	1700	736	1700		
Volume to Capacity	0.13	0.49	0.01	0.34		
Queue Length 95th (ft)	11	0	1	0		
Control Delay (s)	24.8	0.0	0.4	0.0		
Lane LOS	C		A			
Approach Delay (s)	24.8	0.0	0.1			
Approach LOS	C					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			44.6%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Pine Avenue & Frederick Street

09/20/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	7	19	2	2	11	0	7	18	3	0	3	3
Future Volume (vph)	7	19	2	2	11	0	7	18	3	0	3	3
Peak Hour Factor	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Hourly flow rate (vph)	17	46	5	5	27	0	17	44	7	0	7	7
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	68	32	68	14								
Volume Left (vph)	17	5	17	0								
Volume Right (vph)	5	0	7	7								
Hadj (s)	0.01	0.03	-0.01	-0.30								
Departure Headway (s)	4.1	4.2	4.1	3.9								
Degree Utilization, x	0.08	0.04	0.08	0.02								
Capacity (veh/h)	852	839	844	895								
Control Delay (s)	7.5	7.3	7.5	6.9								
Approach Delay (s)	7.5	7.3	7.5	6.9								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.4									
Level of Service			A									
Intersection Capacity Utilization			18.9%	ICU Level of Service		A						
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

5: Pine Avenue & Marshall Street

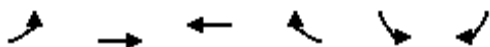
09/20/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	3	7	3	10	38
Future Volume (Veh/h)	1	3	7	3	10	38
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.35	0.35	0.35	0.35	0.35	0.35
Hourly flow rate (vph)	3	9	20	9	29	109
Pedestrians	4					5
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	196	34			33	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	196	34			33	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			98	
cM capacity (veh/h)	780	1037			1586	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	12	29	138			
Volume Left	3	0	29			
Volume Right	9	9	0			
cSH	958	1700	1586			
Volume to Capacity	0.01	0.02	0.02			
Queue Length 95th (ft)	1	0	1			
Control Delay (s)	8.8	0.0	1.6			
Lane LOS	A		A			
Approach Delay (s)	8.8	0.0	1.6			
Approach LOS	A					
Intersection Summary						
Average Delay		1.9				
Intersection Capacity Utilization		20.8%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

6: Hawthorne Street & Pine Avenue

09/20/2017



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	21	12	6	25	15
Future Volume (Veh/h)	7	21	12	6	25	15
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.44	0.44	0.44	0.44	0.44	0.44
Hourly flow rate (vph)	16	48	27	14	57	34
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	46				119	39
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	46				119	39
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				93	97
cM capacity (veh/h)	1567				868	1033
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	64	41	91			
Volume Left	16	0	57			
Volume Right	0	14	34			
cSH	1567	1700	923			
Volume to Capacity	0.01	0.02	0.10			
Queue Length 95th (ft)	1	0	8			
Control Delay (s)	1.9	0.0	9.3			
Lane LOS	A		A			
Approach Delay (s)	1.9	0.0	9.3			
Approach LOS			A			
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			17.2%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

7: Pine Avenue & St. James Northerly Access Drive

09/20/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	9	8	0	21	4	3
Future Volume (Veh/h)	9	8	0	21	4	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.32	0.32	0.32	0.32	0.32	0.32
Hourly flow rate (vph)	28	25	0	66	13	9
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	84	18	23			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	84	18	23			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	98	100			
cM capacity (veh/h)	921	1065	1604			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	53	66	22			
Volume Left	28	0	0			
Volume Right	25	0	9			
cSH	984	1604	1700			
Volume to Capacity	0.05	0.00	0.01			
Queue Length 95th (ft)	4	0	0			
Control Delay (s)	8.9	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.9	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			3.3			
Intersection Capacity Utilization			13.7%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

8: Pine Avenue & St. James Southerly Access Drive

09/20/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	41	6	4	14	0
Future Volume (Veh/h)	17	41	6	4	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.30	0.30	0.30	0.30	0.30	0.30
Hourly flow rate (vph)	57	137	20	13	47	0
Pedestrians	4					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	104	51	51			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	104	51	51			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	87	99			
cM capacity (veh/h)	884	1019	1562			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	194	33	47			
Volume Left	57	20	0			
Volume Right	137	0	0			
cSH	975	1562	1700			
Volume to Capacity	0.20	0.01	0.03			
Queue Length 95th (ft)	18	1	0			
Control Delay (s)	9.6	4.5	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.6	4.5	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			7.3			
Intersection Capacity Utilization			15.7%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

9: St. James Access & Frederick Street

09/20/2017

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	21	7	7	14	4	7
Future Volume (Veh/h)	21	7	7	14	4	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.41	0.41	0.41	0.41	0.41	0.41
Hourly flow rate (vph)	51	17	17	34	10	17
Pedestrians						2
Lane Width (ft)						12.0
Walking Speed (ft/s)						3.5
Percent Blockage						0
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			70	130		62
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			70	130		62
tC, single (s)			4.1	6.4		6.2
tC, 2 stage (s)						
tF (s)			2.2	3.5		3.3
p0 queue free %			99	99		98
cM capacity (veh/h)			1541	858		1007
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	68	51	27			
Volume Left	0	17	10			
Volume Right	17	0	17			
cSH	1700	1541	946			
Volume to Capacity	0.04	0.01	0.03			
Queue Length 95th (ft)	0	1	2			
Control Delay (s)	0.0	2.5	8.9			
Lane LOS			A			
Approach Delay (s)	0.0	2.5	8.9			
Approach LOS			A			
Intersection Summary						
Average Delay			2.5			
Intersection Capacity Utilization			16.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

10: Arlington Heights Road & Proposed Right-In/Right-Out Access Drive

09/20/2017



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	585	0	0	797
Future Volume (Veh/h)	0	0	585	0	0	797
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.30	0.30	0.91	0.91	0.86	0.86
Hourly flow rate (vph)	0	0	643	0	0	927
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						160
pX, platoon unblocked	0.56					
vC, conflicting volume	1570	643			643	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1625	643			643	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	64	477			951	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	643	927			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.38	0.55			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			45.3%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: Arlington Heights Road & St. James Entrance Only Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↕↕	↕↕	
Traffic Volume (veh/h)	0	0	69	667	1082	138
Future Volume (Veh/h)	0	0	69	667	1082	138
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.42	0.92	0.95	0.45
Hourly flow rate (vph)	0	0	164	725	1139	307
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)	382					
pX, platoon unblocked	0.79	0.79	0.79			
vC, conflicting volume	1983	723	1446			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1720	134	1044			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	69			
cM capacity (veh/h)	45	712	535			
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	406	483	759	687		
Volume Left	164	0	0	0		
Volume Right	0	0	0	307		
cSH	535	1700	1700	1700		
Volume to Capacity	0.31	0.28	0.45	0.40		
Queue Length 95th (ft)	32	0	0	0		
Control Delay (s)	9.0	0.0	0.0	0.0		
Lane LOS	A					
Approach Delay (s)	4.1	0.0				
Approach LOS						
Intersection Summary						
Average Delay	1.6					
Intersection Capacity Utilization	61.4%			ICU Level of Service	B	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

3: Arlington Heights Road & Frederick Street

09/21/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Traffic Volume (veh/h)	17	38	744	17	13	1115
Future Volume (Veh/h)	17	38	744	17	13	1115
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	20	44	865	20	15	1297
Pedestrians	11					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			300			
pX, platoon unblocked	0.92	0.92			0.92	
vC, conflicting volume	1564	454			896	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1436	226			708	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	82	94			98	
cM capacity (veh/h)	113	703			818	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	64	577	308	447	865	
Volume Left	20	0	0	15	0	
Volume Right	44	0	20	0	0	
cSH	267	1700	1700	818	1700	
Volume to Capacity	0.24	0.34	0.18	0.02	0.51	
Queue Length 95th (ft)	23	0	0	1	0	
Control Delay (s)	22.7	0.0	0.0	0.5	0.0	
Lane LOS	C			A		
Approach Delay (s)	22.7	0.0		0.2		
Approach LOS	C					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			50.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Pine Avenue & Frederick Street

09/21/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	26	5	3	19	2	7	13	3	0	5	12
Future Volume (vph)	13	26	5	3	19	2	7	13	3	0	5	12
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Hourly flow rate (vph)	18	36	7	4	26	3	10	18	4	0	7	16
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	61	33	32	23								
Volume Left (vph)	18	4	10	0								
Volume Right (vph)	7	3	4	16								
Hadj (s)	-0.01	0.04	-0.01	-0.31								
Departure Headway (s)	4.0	4.1	4.1	3.8								
Degree Utilization, x	0.07	0.04	0.04	0.02								
Capacity (veh/h)	873	857	845	914								
Control Delay (s)	7.3	7.3	7.3	6.9								
Approach Delay (s)	7.3	7.3	7.3	6.9								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.2									
Level of Service			A									
Intersection Capacity Utilization			20.6%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

5: Pine Avenue & Marshall Street

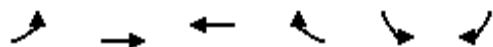
09/21/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	2	8	0	10	32
Future Volume (Veh/h)	0	2	8	0	10	32
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Hourly flow rate (vph)	0	3	10	0	13	42
Pedestrians	2					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	80	13			12	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	80	13			12	
tC, single (s)	6.4	6.7			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.8			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	918	941			1617	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	3	10	55			
Volume Left	0	0	13			
Volume Right	3	0	0			
cSH	941	1700	1617			
Volume to Capacity	0.00	0.01	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	8.8	0.0	1.8			
Lane LOS	A		A			
Approach Delay (s)	8.8	0.0	1.8			
Approach LOS	A					
Intersection Summary						
Average Delay			1.8			
Intersection Capacity Utilization			19.2%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

6: Hawthorne Street & Pine Avenue

09/21/2017



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	37	28	6	17	19
Future Volume (Veh/h)	0	37	28	6	17	19
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	0	51	39	8	24	26
Pedestrians					7	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	54				101	50
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	54				101	50
tC, single (s)	4.1				6.5	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.6	3.3
p0 queue free %	100				97	97
cM capacity (veh/h)	1554				868	1017
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	51	47	50			
Volume Left	0	0	24			
Volume Right	0	8	26			
cSH	1554	1700	940			
Volume to Capacity	0.00	0.03	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.0	9.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	9.0			
Approach LOS			A			
Intersection Summary						
Average Delay		3.1				
Intersection Capacity Utilization		15.4%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

7: Pine Avenue & St. James Northerly Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	11	3	14	12	0
Future Volume (Veh/h)	8	11	3	14	12	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63
Hourly flow rate (vph)	13	17	5	22	19	0
Pedestrians	6				2	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	1				0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	59	25	25			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	59	25	25			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	98	100			
cM capacity (veh/h)	943	1051	1593			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	30	27	19			
Volume Left	13	5	0			
Volume Right	17	0	0			
cSH	1001	1593	1700			
Volume to Capacity	0.03	0.00	0.01			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	8.7	1.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.7	1.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			3.9			
Intersection Capacity Utilization			15.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

8: Pine Avenue & St. James Southerly Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	20	3	9	21	3
Future Volume (Veh/h)	8	20	3	9	21	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.57	0.57	0.57	0.57	0.57	0.57
Hourly flow rate (vph)	14	35	5	16	37	5
Pedestrians	10					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	76	50	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	76	50	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	97	100			
cM capacity (veh/h)	921	1015	1552			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	49	21	42			
Volume Left	14	5	0			
Volume Right	35	0	5			
cSH	986	1552	1700			
Volume to Capacity	0.05	0.00	0.02			
Queue Length 95th (ft)	4	0	0			
Control Delay (s)	8.8	1.8	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.8	1.8	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			4.2			
Intersection Capacity Utilization			16.2%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

9: St. James Access & Frederick Street

09/21/2017

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	25	6	7	31	20	19
Future Volume (Veh/h)	25	6	7	31	20	19
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Hourly flow rate (vph)	34	8	10	42	27	26
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			43		101	39
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			43		101	39
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		97	97
cM capacity (veh/h)			1577		896	1037
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	42	52	53			
Volume Left	0	10	27			
Volume Right	8	0	26			
cSH	1700	1577	960			
Volume to Capacity	0.02	0.01	0.06			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	1.4	9.0			
Lane LOS		A	A			
Approach Delay (s)	0.0	1.4	9.0			
Approach LOS			A			
Intersection Summary						
Average Delay			3.7			
Intersection Capacity Utilization			17.6%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

10: Arlington Heights Road & Proposed Right-In/Right-Out Access Drive

09/21/2017



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	667	0	0	1220
Future Volume (Veh/h)	0	0	667	0	0	1220
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.40	0.40	0.90	0.90	0.84	0.84
Hourly flow rate (vph)	0	0	741	0	0	1452
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						160
pX, platoon unblocked	0.79					
vC, conflicting volume	1467	370			741	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1069	370			741	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	174	632			875	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	0	494	247	726	726	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.00	0.29	0.15	0.43	0.43	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			37.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: Arlington Heights Road & St. James Entrance Only Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↕↕	↕↕	
Traffic Volume (veh/h)	0	0	46	819	926	43
Future Volume (Veh/h)	0	0	46	819	926	43
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.44	0.91	0.94	0.57
Hourly flow rate (vph)	0	0	105	900	985	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)					382	
pX, platoon unblocked	0.89	0.89	0.89			
vC, conflicting volume	1682	530	1060			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1517	220	817			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	86			
cM capacity (veh/h)	85	702	729			
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	405	600	657	403		
Volume Left	105	0	0	0		
Volume Right	0	0	0	75		
cSH	729	1700	1700	1700		
Volume to Capacity	0.14	0.35	0.39	0.24		
Queue Length 95th (ft)	13	0	0	0		
Control Delay (s)	4.2	0.0	0.0	0.0		
Lane LOS	A					
Approach Delay (s)	1.7		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			57.6%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

3: Arlington Heights Road & Frederick Street

09/21/2017



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	18	855	17	24	905
Future Volume (Veh/h)	10	18	855	17	24	905
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	19	900	18	25	953
Pedestrians	24					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	2					
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			300			
pX, platoon unblocked	0.90	0.90			0.90	
vC, conflicting volume	1460	483			942	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1296	216			724	
tC, single (s)	6.8	6.9			4.3	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.3	
p0 queue free %	92	97			97	
cM capacity (veh/h)	133	702			738	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	30	600	318	343	635	
Volume Left	11	0	0	25	0	
Volume Right	19	0	18	0	0	
cSH	274	1700	1700	738	1700	
Volume to Capacity	0.11	0.35	0.19	0.03	0.37	
Queue Length 95th (ft)	9	0	0	3	0	
Control Delay (s)	19.7	0.0	0.0	1.1	0.0	
Lane LOS	C			A		
Approach Delay (s)	19.7	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			52.3%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Pine Avenue & Frederick Street

09/21/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	4	17	10	8	17	2	6	2	0	2	8	16
Future Volume (vph)	4	17	10	8	17	2	6	2	0	2	8	16
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	5	19	11	9	19	2	7	2	0	2	9	18
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	35	30	9	29								
Volume Left (vph)	5	9	7	2								
Volume Right (vph)	11	2	0	18								
Hadj (s)	-0.11	0.02	0.16	-0.36								
Departure Headway (s)	3.9	4.0	4.2	3.7								
Degree Utilization, x	0.04	0.03	0.01	0.03								
Capacity (veh/h)	907	879	828	954								
Control Delay (s)	7.1	7.2	7.3	6.8								
Approach Delay (s)	7.1	7.2	7.3	6.8								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.0									
Level of Service			A									
Intersection Capacity Utilization			19.4%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

5: Pine Avenue & Marshall Street

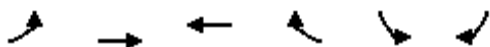
09/21/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	1	11	4	29	25
Future Volume (Veh/h)	2	1	11	4	29	25
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.38	0.38	0.38	0.38	0.38	0.38
Hourly flow rate (vph)	5	3	29	11	76	66
Pedestrians	1					6
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	0					1
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	254	42			41	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	254	42			41	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			95	
cM capacity (veh/h)	703	1028			1580	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	8	40	142			
Volume Left	5	0	76			
Volume Right	3	11	0			
cSH	798	1700	1580			
Volume to Capacity	0.01	0.02	0.05			
Queue Length 95th (ft)	1	0	4			
Control Delay (s)	9.6	0.0	4.1			
Lane LOS	A		A			
Approach Delay (s)	9.6	0.0	4.1			
Approach LOS	A					
Intersection Summary						
Average Delay			3.5			
Intersection Capacity Utilization			21.4%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

6: Hawthorne Street & Pine Avenue

09/21/2017



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	27	23	3	10	13
Future Volume (Veh/h)	8	27	23	3	10	13
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	10	33	28	4	12	16
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	37				88	35
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	37				88	35
tC, single (s)	4.1				6.4	6.4
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.4
p0 queue free %	99				99	98
cM capacity (veh/h)	1579				908	997
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	43	32	28			
Volume Left	10	0	12			
Volume Right	0	4	16			
cSH	1579	1700	957			
Volume to Capacity	0.01	0.02	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	1.7	0.0	8.9			
Lane LOS	A		A			
Approach Delay (s)	1.7	0.0	8.9			
Approach LOS			A			
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			18.4%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

7: Pine Avenue & St. James Northerly Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	1	1	7	21	3
Future Volume (Veh/h)	2	1	1	7	21	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Hourly flow rate (vph)	3	1	1	10	31	4
Pedestrians	3			1	3	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	51	37	38			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	51	37	38			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	957	1037	1581			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	4	11	35			
Volume Left	3	1	0			
Volume Right	1	0	4			
cSH	976	1581	1700			
Volume to Capacity	0.00	0.00	0.02			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	8.7	0.7	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.7	0.7	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			14.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

8: Pine Avenue & St. James Southerly Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	30	1	8	22	2
Future Volume (Veh/h)	0	30	1	8	22	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.35	0.35	0.35	0.35	0.35	0.35
Hourly flow rate (vph)	0	86	3	23	63	6
Pedestrians	14					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	109	80	83			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	109	80	83			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	100	91	100			
cM capacity (veh/h)	879	954	1506			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	86	26	69			
Volume Left	0	3	0			
Volume Right	86	0	6			
cSH	954	1506	1700			
Volume to Capacity	0.09	0.00	0.04			
Queue Length 95th (ft)	7	0	0			
Control Delay (s)	9.1	0.9	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.1	0.9	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			17.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

9: St. James Access & Frederick Street

09/21/2017

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	31	8	15	24	1	0
Future Volume (Veh/h)	31	8	15	24	1	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	35	9	17	27	1	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			44		100	40
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			44		100	40
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	100
cM capacity (veh/h)			1577		893	1038
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	44	44	1			
Volume Left	0	17	1			
Volume Right	9	0	0			
cSH	1700	1577	893			
Volume to Capacity	0.03	0.01	0.00			
Queue Length 95th (ft)	0	1	0			
Control Delay (s)	0.0	2.9	9.0			
Lane LOS		A	A			
Approach Delay (s)	0.0	2.9	9.0			
Approach LOS			A			
Intersection Summary						
Average Delay			1.5			
Intersection Capacity Utilization			18.8%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

10: Arlington Heights Road & Proposed Right-In/Right-Out Access Drive

09/21/2017



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕↗			↕↗
Traffic Volume (veh/h)	0	0	819	0	0	969
Future Volume (Veh/h)	0	0	819	0	0	969
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.91	0.91	0.93	0.93
Hourly flow rate (vph)	0	0	900	0	0	1042
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						160
pX, platoon unblocked	0.89					
vC, conflicting volume	1421	450			900	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1217	450			900	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	156	562			763	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	0	600	300	521	521	
Volume Left	0	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	1700	1700	1700	1700	1700	
Volume to Capacity	0.00	0.35	0.18	0.31	0.31	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	
Lane LOS	A					
Approach Delay (s)	0.0	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			30.1%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: Arlington Heights Road & St. James Entrance Only Access Drive

11/29/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↕	↕	
Traffic Volume (veh/h)	0	0	46	625	772	47
Future Volume (Veh/h)	0	0	46	625	772	47
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.50	0.55	0.92	0.70	0.49
Hourly flow rate (vph)	0	0	84	679	1103	96
Pedestrians	26					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					382	
pX, platoon unblocked	0.66	0.66	0.66			
vC, conflicting volume	2024	1177	1225			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2288	1014	1086			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	81			
cM capacity (veh/h)	24	194	432			
Direction, Lane #	NB 1	SB 1				
Volume Total	763	1199				
Volume Left	84	0				
Volume Right	0	96				
cSH	432	1700				
Volume to Capacity	0.19	0.71				
Queue Length 95th (ft)	18	0				
Control Delay (s)	6.1	0.0				
Lane LOS	A					
Approach Delay (s)	6.1	0.0				
Approach LOS						
Intersection Summary						
Average Delay			2.4			
Intersection Capacity Utilization			74.1%	ICU Level of Service		D
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

3: Arlington Heights Road & Frederick Street

11/29/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Traffic Volume (veh/h)	52	36	658	17	39	692
Future Volume (Veh/h)	52	36	658	17	39	692
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	66	46	833	22	49	876
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			300			
pX, platoon unblocked						
vC, conflicting volume	1380	428			855	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1380	428			855	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	49	92			94	
cM capacity (veh/h)	129	581			793	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	112	555	300	341	584	
Volume Left	66	0	0	49	0	
Volume Right	46	0	22	0	0	
cSH	190	1700	1700	793	1700	
Volume to Capacity	0.59	0.33	0.18	0.06	0.34	
Queue Length 95th (ft)	81	0	0	5	0	
Control Delay (s)	48.0	0.0	0.0	2.0	0.0	
Lane LOS	E			A		
Approach Delay (s)	48.0	0.0		0.8		
Approach LOS	E					
Intersection Summary						
Average Delay			3.2			
Intersection Capacity Utilization			54.1%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Pine Avenue & Frederick Street

11/29/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	23	1	7	11	0	25	10	8	0	8	8
Future Volume (vph)	13	23	1	7	11	0	25	10	8	0	8	8
Peak Hour Factor	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Hourly flow rate (vph)	32	56	2	17	27	0	61	24	20	0	20	20
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	90	44	105	40								
Volume Left (vph)	32	17	61	0								
Volume Right (vph)	2	0	20	20								
Hadj (s)	0.06	0.08	0.00	-0.30								
Departure Headway (s)	4.3	4.4	4.3	4.0								
Degree Utilization, x	0.11	0.05	0.12	0.04								
Capacity (veh/h)	801	785	814	857								
Control Delay (s)	7.9	7.6	7.9	7.2								
Approach Delay (s)	7.9	7.6	7.9	7.2								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.7									
Level of Service			A									
Intersection Capacity Utilization			20.6%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

5: Pine Avenue & Marshall Street

11/29/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	1	49	3	1	71
Future Volume (Veh/h)	1	1	49	3	1	71
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.35	0.35	0.35	0.35	0.35	0.35
Hourly flow rate (vph)	3	3	140	9	3	203
Pedestrians	4					5
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	358	154			153	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	358	154			153	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	641	890			1434	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	6	149	206			
Volume Left	3	0	3			
Volume Right	3	9	0			
cSH	745	1700	1434			
Volume to Capacity	0.01	0.09	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	9.9	0.0	0.1			
Lane LOS	A		A			
Approach Delay (s)	9.9	0.0	0.1			
Approach LOS	A					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			16.1%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

6: Hawthorne Street & Pine Avenue

11/29/2017



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	22	12	39	54	19
Future Volume (Veh/h)	16	22	12	39	54	19
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.44	0.44	0.44	0.44	0.44	0.44
Hourly flow rate (vph)	36	50	27	89	123	43
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	121				198	76
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	121				198	76
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				84	96
cM capacity (veh/h)	1472				772	985
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	86	116	166			
Volume Left	36	0	123			
Volume Right	0	89	43			
cSH	1472	1700	818			
Volume to Capacity	0.02	0.07	0.20			
Queue Length 95th (ft)	2	0	19			
Control Delay (s)	3.3	0.0	10.5			
Lane LOS	A		B			
Approach Delay (s)	3.3	0.0	10.5			
Approach LOS			B			
Intersection Summary						
Average Delay			5.5			
Intersection Capacity Utilization			19.5%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

7: Pine Avenue & St. James Northerly Access Drive

11/29/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	22	16	25	10	6
Future Volume (Veh/h)	20	22	16	25	10	6
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.32	0.32	0.32	0.32	0.32	0.32
Hourly flow rate (vph)	63	69	50	78	31	19
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	220	42	51			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	220	42	51			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	93	97			
cM capacity (veh/h)	748	1034	1567			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	132	128	50			
Volume Left	63	50	0			
Volume Right	69	0	19			
cSH	874	1567	1700			
Volume to Capacity	0.15	0.03	0.03			
Queue Length 95th (ft)	13	2	0			
Control Delay (s)	9.8	3.0	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.8	3.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			5.4			
Intersection Capacity Utilization			18.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

8: Pine Avenue & St. James Southerly Access Drive

11/29/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	43	30	20	28	6
Future Volume (Veh/h)	21	43	30	20	28	6
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.30	0.30	0.30	0.30	0.30	0.30
Hourly flow rate (vph)	70	143	100	67	93	20
Pedestrians	4					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	374	107	117			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	107	117			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	85	93			
cM capacity (veh/h)	586	949	1478			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	213	167	113			
Volume Left	70	100	0			
Volume Right	143	0	20			
cSH	788	1478	1700			
Volume to Capacity	0.27	0.07	0.07			
Queue Length 95th (ft)	27	5	0			
Control Delay (s)	11.2	4.8	0.0			
Lane LOS	B	A				
Approach Delay (s)	11.2	4.8	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			6.5			
Intersection Capacity Utilization			19.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

9: St. James Access & Frederick Street

11/29/2017

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	21	34	12	38	47	17
Future Volume (Veh/h)	21	34	12	38	47	17
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.41	0.41	0.41	0.41	0.41	0.41
Hourly flow rate (vph)	51	83	29	93	115	41
Pedestrians						2
Lane Width (ft)						12.0
Walking Speed (ft/s)						3.5
Percent Blockage						0
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			136			246
vC1, stage 1 conf vol						94
vC2, stage 2 conf vol						
vCu, unblocked vol			136			246
tC, single (s)			4.1			6.4
tC, 2 stage (s)						6.2
tF (s)			2.2			3.5
p0 queue free %			98			84
cM capacity (veh/h)			1458			731
						966
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	134	122	156			
Volume Left	0	29	115			
Volume Right	83	0	41			
cSH	1700	1458	781			
Volume to Capacity	0.08	0.02	0.20			
Queue Length 95th (ft)	0	2	19			
Control Delay (s)	0.0	1.9	10.8			
Lane LOS			A			
Approach Delay (s)	0.0	1.9	10.8			
Approach LOS			B			
Intersection Summary						
Average Delay			4.6			
Intersection Capacity Utilization			19.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

10: Arlington Heights Road & Proposed Right-In/Right-Out Access Drive

11/29/2017



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	26	598	35	0	797
Future Volume (Veh/h)	0	26	598	35	0	797
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.30	0.30	0.91	0.91	0.86	0.86
Hourly flow rate (vph)	0	87	657	38	0	927
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						160
pX, platoon unblocked	0.66					
vC, conflicting volume	1603	676			695	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1655	676			695	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	81			100	
cM capacity (veh/h)	72	457			910	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	87	695	927			
Volume Left	0	0	0			
Volume Right	87	38	0			
cSH	457	1700	1700			
Volume to Capacity	0.19	0.41	0.55			
Queue Length 95th (ft)	17	0	0			
Control Delay (s)	14.7	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	14.7	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			45.3%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: Arlington Heights Road & St. James Entrance Only Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↕↕	↕↕	
Traffic Volume (veh/h)	0	0	69	689	1116	138
Future Volume (Veh/h)	0	0	69	689	1116	138
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.42	0.92	0.95	0.45
Hourly flow rate (vph)	0	0	164	749	1175	307
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)					382	
pX, platoon unblocked	0.78	0.78	0.78			
vC, conflicting volume	2031	741	1482			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1763	116	1062			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	68			
cM capacity (veh/h)	41	721	520			
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	414	499	783	699		
Volume Left	164	0	0	0		
Volume Right	0	0	0	307		
cSH	520	1700	1700	1700		
Volume to Capacity	0.32	0.29	0.46	0.41		
Queue Length 95th (ft)	34	0	0	0		
Control Delay (s)	9.3	0.0	0.0	0.0		
Lane LOS	A					
Approach Delay (s)	4.2		0.0			
Approach LOS						
Intersection Summary						
Average Delay			1.6			
Intersection Capacity Utilization			63.0%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

3: Arlington Heights Road & Frederick Street

09/21/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			 
Traffic Volume (veh/h)	20	40	767	18	15	1148
Future Volume (Veh/h)	20	40	767	18	15	1148
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	23	47	892	21	17	1335
Pedestrians	11					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			300			
pX, platoon unblocked	0.91	0.91			0.91	
vC, conflicting volume	1615	468			924	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1484	228			728	
tC, single (s)	6.8	7.0			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	78	93			98	
cM capacity (veh/h)	104	698			800	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	70	595	318	462	890	
Volume Left	23	0	0	17	0	
Volume Right	47	0	21	0	0	
cSH	243	1700	1700	800	1700	
Volume to Capacity	0.29	0.35	0.19	0.02	0.52	
Queue Length 95th (ft)	29	0	0	2	0	
Control Delay (s)	25.7	0.0	0.0	0.6	0.0	
Lane LOS	D			A		
Approach Delay (s)	25.7	0.0		0.2		
Approach LOS	D					
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization			52.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Pine Avenue & Frederick Street

09/21/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	13	27	5	3	20	2	7	13	3	0	5	12
Future Volume (vph)	13	27	5	3	20	2	7	13	3	0	5	12
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Hourly flow rate (vph)	18	37	7	4	27	3	10	18	4	0	7	16
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	62	34	32	23								
Volume Left (vph)	18	4	10	0								
Volume Right (vph)	7	3	4	16								
Hadj (s)	-0.01	0.04	-0.01	-0.31								
Departure Headway (s)	4.0	4.1	4.1	3.8								
Degree Utilization, x	0.07	0.04	0.04	0.02								
Capacity (veh/h)	873	857	844	913								
Control Delay (s)	7.3	7.3	7.3	6.9								
Approach Delay (s)	7.3	7.3	7.3	6.9								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay				7.2								
Level of Service				A								
Intersection Capacity Utilization				20.7%	ICU Level of Service	A						
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis

5: Pine Avenue & Marshall Street

09/21/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	2	10	0	10	34
Future Volume (Veh/h)	0	2	10	0	10	34
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Hourly flow rate (vph)	0	3	13	0	13	44
Pedestrians	2					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	85	16			15	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	85	16			15	
tC, single (s)	6.4	6.7			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.8			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	912	937			1613	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	3	13	57			
Volume Left	0	0	13			
Volume Right	3	0	0			
cSH	937	1700	1613			
Volume to Capacity	0.00	0.01	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	8.9	0.0	1.7			
Lane LOS	A		A			
Approach Delay (s)	8.9	0.0	1.7			
Approach LOS	A					
Intersection Summary						
Average Delay			1.7			
Intersection Capacity Utilization			19.3%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

6: Hawthorne Street & Pine Avenue

09/21/2017



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	38	29	7	19	20
Future Volume (Veh/h)	0	38	29	7	19	20
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	0	53	40	10	26	28
Pedestrians					7	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	57				105	52
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	57				105	52
tC, single (s)	4.1				6.5	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.6	3.3
p0 queue free %	100				97	97
cM capacity (veh/h)	1550				863	1015
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	53	50	54			
Volume Left	0	0	26			
Volume Right	0	10	28			
cSH	1550	1700	936			
Volume to Capacity	0.00	0.03	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	9.1			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	9.1			
Approach LOS			A			
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			15.4%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

7: Pine Avenue & St. James Northerly Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	11	4	14	12	0
Future Volume (Veh/h)	8	11	4	14	12	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63
Hourly flow rate (vph)	13	17	6	22	19	0
Pedestrians	6				2	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	3.5				3.5	
Percent Blockage	1				0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	61	25	25			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	61	25	25			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	98	100			
cM capacity (veh/h)	940	1051	1593			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	30	28	19			
Volume Left	13	6	0			
Volume Right	17	0	0			
cSH	1000	1593	1700			
Volume to Capacity	0.03	0.00	0.01			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	8.7	1.6	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.7	1.6	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			4.0			
Intersection Capacity Utilization			15.1%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

8: Pine Avenue & St. James Southerly Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	21	4	10	22	3
Future Volume (Veh/h)	8	21	4	10	22	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.57	0.57	0.57	0.57	0.57	0.57
Hourly flow rate (vph)	14	37	7	18	39	5
Pedestrians	10					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	84	52	54			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	84	52	54			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	96	100			
cM capacity (veh/h)	910	1012	1549			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	51	25	44			
Volume Left	14	7	0			
Volume Right	37	0	5			
cSH	982	1549	1700			
Volume to Capacity	0.05	0.00	0.03			
Queue Length 95th (ft)	4	0	0			
Control Delay (s)	8.9	2.1	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.9	2.1	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		4.2				
Intersection Capacity Utilization		16.2%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

9: St. James Access & Frederick Street

09/21/2017

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	26	8	7	32	23	19
Future Volume (Veh/h)	26	8	7	32	23	19
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73
Hourly flow rate (vph)	36	11	10	44	32	26
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			48		106	42
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			48		106	42
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		96	97
cM capacity (veh/h)			1571		889	1033
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	47	54	58			
Volume Left	0	10	32			
Volume Right	11	0	26			
cSH	1700	1571	948			
Volume to Capacity	0.03	0.01	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	1.4	9.0			
Lane LOS		A	A			
Approach Delay (s)	0.0	1.4	9.0			
Approach LOS			A			
Intersection Summary						
Average Delay			3.8			
Intersection Capacity Utilization			17.7%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

10: Arlington Heights Road & Proposed Right-In/Right-Out Access Drive

09/21/2017



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	1	687	2	0	1256
Future Volume (Veh/h)	0	1	687	2	0	1256
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.40	0.40	0.90	0.90	0.84	0.84
Hourly flow rate (vph)	0	3	763	2	0	1495
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						160
pX, platoon unblocked	0.78					
vC, conflicting volume	1512	382			765	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1098	382			765	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	165	621			857	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	3	509	256	748	748	
Volume Left	0	0	0	0	0	
Volume Right	3	0	2	0	0	
cSH	621	1700	1700	1700	1700	
Volume to Capacity	0.00	0.30	0.15	0.44	0.44	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	10.8	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	10.8	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			38.1%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: Arlington Heights Road & St. James Entrance Only Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↕↕	↕↕	
Traffic Volume (veh/h)	0	0	46	846	956	43
Future Volume (Veh/h)	0	0	46	846	956	43
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.44	0.91	0.94	0.57
Hourly flow rate (vph)	0	0	105	930	1017	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)					382	
pX, platoon unblocked	0.88	0.88	0.88			
vC, conflicting volume	1730	546	1092			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1563	224	842			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	85			
cM capacity (veh/h)	79	694	709			
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	415	620	678	414		
Volume Left	105	0	0	0		
Volume Right	0	0	0	75		
cSH	709	1700	1700	1700		
Volume to Capacity	0.15	0.36	0.40	0.24		
Queue Length 95th (ft)	13	0	0	0		
Control Delay (s)	4.3	0.0	0.0	0.0		
Lane LOS	A					
Approach Delay (s)	1.7		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			59.2%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

3: Arlington Heights Road & Frederick Street

09/21/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	20	881	18	27	932
Future Volume (Veh/h)	12	20	881	18	27	932
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	13	21	927	19	28	981
Pedestrians	24					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	2					
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			300			
pX, platoon unblocked	0.90	0.90			0.90	
vC, conflicting volume	1507	497			970	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1342	220			746	
tC, single (s)	6.8	6.9			4.3	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.3	
p0 queue free %	89	97			96	
cM capacity (veh/h)	123	695			721	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	34	618	328	355	654	
Volume Left	13	0	0	28	0	
Volume Right	21	0	19	0	0	
cSH	251	1700	1700	721	1700	
Volume to Capacity	0.14	0.36	0.19	0.04	0.38	
Queue Length 95th (ft)	12	0	0	3	0	
Control Delay (s)	21.6	0.0	0.0	1.3	0.0	
Lane LOS	C			A		
Approach Delay (s)	21.6	0.0		0.4		
Approach LOS	C					
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			55.2%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Pine Avenue & Frederick Street

09/21/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	4	18	10	8	18	2	6	2	0	2	8	16
Future Volume (vph)	4	18	10	8	18	2	6	2	0	2	8	16
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	5	20	11	9	20	2	7	2	0	2	9	18
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	36	31	9	29								
Volume Left (vph)	5	9	7	2								
Volume Right (vph)	11	2	0	18								
Hadj (s)	-0.10	0.02	0.16	-0.36								
Departure Headway (s)	3.9	4.0	4.2	3.7								
Degree Utilization, x	0.04	0.03	0.01	0.03								
Capacity (veh/h)	906	879	827	953								
Control Delay (s)	7.1	7.2	7.3	6.8								
Approach Delay (s)	7.1	7.2	7.3	6.8								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay				7.0								
Level of Service				A								
Intersection Capacity Utilization				19.4%	ICU Level of Service		A					
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis

5: Pine Avenue & Marshall Street

09/21/2017

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	1	13	4	30	28
Future Volume (Veh/h)	2	1	13	4	30	28
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.38	0.38	0.38	0.38	0.38	0.38
Hourly flow rate (vph)	5	3	34	11	79	74
Pedestrians	1					6
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	0					1
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	272	46			46	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272	46			46	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	100			95	
cM capacity (veh/h)	684	1022			1573	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	8	45	153			
Volume Left	5	0	79			
Volume Right	3	11	0			
cSH	781	1700	1573			
Volume to Capacity	0.01	0.03	0.05			
Queue Length 95th (ft)	1	0	4			
Control Delay (s)	9.7	0.0	4.0			
Lane LOS	A		A			
Approach Delay (s)	9.7	0.0	4.0			
Approach LOS	A					
Intersection Summary						
Average Delay			3.4			
Intersection Capacity Utilization			21.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

6: Hawthorne Street & Pine Avenue

09/21/2017



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	9	28	24	4	11	14
Future Volume (Veh/h)	9	28	24	4	11	14
Sign Control		Free	Free		Yield	
Grade		0%	0%		0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	11	35	30	5	14	17
Pedestrians					5	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	40				94	38
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	40				94	38
tC, single (s)	4.1				6.4	6.4
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.4
p0 queue free %	99				98	98
cM capacity (veh/h)	1575				899	994
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	46	35	31			
Volume Left	11	0	14			
Volume Right	0	5	17			
cSH	1575	1700	949			
Volume to Capacity	0.01	0.02	0.03			
Queue Length 95th (ft)	1	0	3			
Control Delay (s)	1.8	0.0	8.9			
Lane LOS	A		A			
Approach Delay (s)	1.8	0.0	8.9			
Approach LOS			A			
Intersection Summary						
Average Delay			3.2			
Intersection Capacity Utilization			18.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

7: Pine Avenue & St. James Northerly Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	2	2	7	22	3
Future Volume (Veh/h)	2	2	2	7	22	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Hourly flow rate (vph)	3	3	3	10	33	4
Pedestrians	3			1	3	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	57	39	40			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	57	39	40			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	948	1034	1578			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	6	13	37			
Volume Left	3	3	0			
Volume Right	3	0	4			
cSH	989	1578	1700			
Volume to Capacity	0.01	0.00	0.02			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	8.7	1.7	0.0			
Lane LOS	A	A				
Approach Delay (s)	8.7	1.7	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			14.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

8: Pine Avenue & St. James Southerly Access Drive

09/21/2017



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	31	2	9	24	2
Future Volume (Veh/h)	0	31	2	9	24	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.35	0.35	0.35	0.35	0.35	0.35
Hourly flow rate (vph)	0	89	6	26	69	6
Pedestrians	14					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	124	86	89			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	124	86	89			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	100	91	100			
cM capacity (veh/h)	861	946	1499			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	89	32	75			
Volume Left	0	6	0			
Volume Right	89	0	6			
cSH	946	1499	1700			
Volume to Capacity	0.09	0.00	0.04			
Queue Length 95th (ft)	8	0	0			
Control Delay (s)	9.2	1.4	0.0			
Lane LOS	A	A				
Approach Delay (s)	9.2	1.4	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			17.1%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

9: St. James Access & Frederick Street

09/21/2017

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	32	10	15	25	4	0
Future Volume (Veh/h)	32	10	15	25	4	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	36	11	17	28	5	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			47		104	42
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			47		104	42
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	100
cM capacity (veh/h)			1573		890	1035
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	47	45	5			
Volume Left	0	17	5			
Volume Right	11	0	0			
cSH	1700	1573	890			
Volume to Capacity	0.03	0.01	0.01			
Queue Length 95th (ft)	0	1	0			
Control Delay (s)	0.0	2.8	9.1			
Lane LOS		A	A			
Approach Delay (s)	0.0	2.8	9.1			
Approach LOS			A			
Intersection Summary						
Average Delay		1.8				
Intersection Capacity Utilization		18.8%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

10: Arlington Heights Road & Proposed Right-In/Right-Out Access Drive

09/21/2017



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	1	844	2	0	998
Future Volume (Veh/h)	0	1	844	2	0	998
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.50	0.50	0.91	0.91	0.93	0.93
Hourly flow rate (vph)	0	2	927	2	0	1073
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	160					
pX, platoon unblocked	0.88					
vC, conflicting volume	1464	464			929	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1258	464			929	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	146	550			744	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	2	618	311	536	536	
Volume Left	0	0	0	0	0	
Volume Right	2	0	2	0	0	
cSH	550	1700	1700	1700	1700	
Volume to Capacity	0.00	0.36	0.18	0.32	0.32	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	11.6	0.0	0.0	0.0	0.0	
Lane LOS	B					
Approach Delay (s)	11.6	0.0			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			33.4%	ICU Level of Service		A
Analysis Period (min)			15			



Village of Arlington Heights Building & Life Safety Department

Interoffice Memorandum

To: Sam Hubbard, Development Planner, Planning and Community Development

From: Deb Pierce, Plan Reviewer, Building & Life Safety Department

Subject: 831 N Arlington Heights Rd – St James Parish – PUD, Special Use Permit Amendment, Preliminary/Final Plat of Subdivision, Comp Plan Amendment, and Parking Variation

PC#: 17-012

Date: October 9, 2017

Sam:

I have reviewed the documents for the project indicated above and have the following comments:

1. Provide the construction type of the existing building and new addition.
2. Provide an occupant load calculation for the rooms on the lower level per 2009 IBC Table 1004.1.1.
3. Provide a calculation based on the total occupant load of the number of required/provided exits, their width and number of occupants per exit.
4. Review 2009 IBC Section 410 for platform construction requirements.
5. All designated switchgear rooms, electrical closets, electrical equipment rooms and/or electrical closets, transformer rooms, vaults, and the like, shall have a minimum fire-rating of one hour construction, or shall be rated equal to the designed structure, but not less than one hour construction, whichever is greater.
6. Where the electrical room contains equipment rated 1,200 amps or more, there shall be two exits on opposite corners of the room. The doors and door hinges shall have a fire-rating equal to the rating of the electrical room. Doors shall swing out and have panic hardware.
7. Storage is not permitted in any mechanical or electrical room.

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Village of Arlington Heights, IL Building & Life Safety Department

Fire Safety Division



Date: 9/26/2017

P.C. Number: 17-012 Round: 1

Project Name: St. James Parish

Project Location: 820 N Arlington Heights Rd.

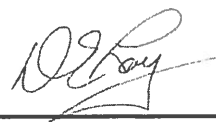
Planning Department Contact: Sam Hubbard, Planning and Community Development

The information provided is conceptual only and subject to a formal plan review.

1. Show the proposed location of the Fire Dept. Connection on the plans.
2. The parking lot pavement shall be capable of accepting the weight of fire apparatus.
3. Fire department connections shall be 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.
4. A complete NFPA compliant fire suppression system is required. Supervised indicating control valves shall be provided.
5. An approved water supply capable of supplying the required fire flow for fire protection shall be provided.
6. Fire protection equipment and service rooms shall be identified in an approved manner.
7. Approved access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment.
8. In buildings and structures where standby power is required or furnished to operate an elevator the operation shall comply with current code requirements.
9. A fully functional fire alarm shall be installed in all areas of the building new and existing per NFPA 72 and the Life Safety Code, NFPA 101. The alarm annunciator panel shall be located at the front entrance.
10. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation.
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.
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.

13. A key box (Know Box) shall be provided and contain keys to gain necessary access as required by the fire code official.
14. Fire pumps, if provided, shall be installed in accordance with the Fire Code and NFPA 20 and shall comply with all current code requirements including a minimum of two water mains located in different streets.
15. Exit signs shall be illuminated at all times and have emergency power backup.
16. In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements.
17. Indicate the maneuvering capability of the Fire Department Tower Truck to confirm that the truck can negotiate the turns on pavement avoiding any dead-ends and identify any overhead wires that may be within the airspace of the truck set-up.
18. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet in height.
19. Buildings shall have approved address numbers.
20. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design. The location of fire department connections shall be approved.
21. Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved a visible Location.
22. Signs shall be posted on both sides of an approach of any fire lane stating NO PARKING – FIRE LANE". Signs shall have arrows indicating the area of parking restriction.
23. Fire lane signs shall be white with red three-inch letters. The dimensions of the sign shall be 12 inches horizontally and 18 inches vertically. These signs shall be installed so that the top of the sign is no less than 6 feet nor more than 6 feet above grade.

Date 09-26-17

Reviewed By: 
Fire Safety Supervisor

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DEVELOPMENT DEPARTMENT

Memorandum

To: Sam Hubbard, Planning and Community Development
From: Cris Papierniak, Assistant Director of Public Works
Date: October 10, 2017
Subject: 831 N Arlington Heights Road – PC #17-012 Round 1

With regard to the proposed utility installation at 831 N Arlington Heights Road, I have the following comments:

- 1) Verify the condition of the sidewalk fronting the property after the construction. If damage has occurred as a result of the construction, or drainage is not adequate (ponding), permittee must replace the affected squares.
- 2) The proposed 6" pressure connection must be enclosed within a vault with a minimum diameter of 60".
- 3) The existing services (water/sanitary/storm) that are going to be abandoned must be abandoned at the respective Village mains.
- 4) The existing 1" domestic service that serves the address must be abandoned at the respective main. The building must be served by one source.
- 5) Provide a detail of the proposed underground detention facility with a proposed maintenance plan.
- 6) Provide a detail of the storm water control structure #D13 for review and approval.
- 7) Install chimney seals on all proposed storm and sanitary structures.
- 8) There must be proper separation between the water service and the existing sewer line. Refer to the standard specifications of water and sewer installation for the State of Illinois 6th edition or newer.
- 9) All methods of construction and materials must conform to the most recent version of "A Manual of Practice for the Design of Public & Private Improvements" as published by the Village of Arlington Heights Engineering Department.
- 10) A compound meter within the building will be required:
 - a. The compound meter will require a 3: bypass meter configuration.
 - b. The compound meter will be a 6" x 2" fire meter.
- 11) Required backflow devices (RPZ) are as listed:
 - a. 1-6" RPZ for fire protection
 - b. 1-2" RPZ for domestic purposes

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DEVELOPMENT DEPARTMENT

12) A separate RPZ will be required in an irrigation system will be installed.

13) Any roadway utility patch shall have surface only patch at minimum of 2' beyond excavation on all sides.

C. file



Arlington Heights Fire Department Plan Review Sheet

P. C. Number PC#17-012

Project Name

St. James Parish

Project Location

820 N. Arlington Heights Road

Planning Department Contact Sam Hubbard

General Comments

Round 1 Comments:

1. The Fire Department requires that the Fire Department connection, Knox Box, and a fully operational annunciator panel or alarm panel be located at the main front entrance. The Fire Department would like more clarification if the lobby entrance on the south side of the building will be used as the "main entrance". The Fire Department would like to explore the feasibility of considering this the main entrance for these items. We have in the past and will likely respond to calls in a manner that avoids the need to park on Arlington Heights Road.
2. Building to be sprinkled in accordance with building code.
3. The fire hydrant must be located with 100' of the sprinkler connection.

**NOTE: PLAN IS CONCEPTUAL ONLY
SUBJECT TO DETAILED PLAN REVIEW**

Date October 5, 2017

Reviewed By: LT. Mark Aleckson

Arlington Heights Fire Department

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

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DEPARTMENT PLAN REVIEW SUMMARY

St. James' Church – 831 N. Arlington Heights Road

PUD, Parking Variation

PC#17-012

PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Round 1 Review Comments

09/29/2017

1. Character of use:

The character of use should not be problematic.

2. Are lighting requirements adequate?

Lighting should be up to Village of Arlington Heights code. Special attention should be given to illuminating parking lot areas, and any secluded areas on the property. These areas should be illuminated especially during nighttime hours for safety, to deter criminal activity and increase surveillance/visibility- potentially reducing theft, trespassing, vandalism, underage drinking, drug use and other criminal activity.

3. Present traffic problems?

There is parking allowed on Arlington Heights Road on Sundays. With the addition of the larger parking lot, this authorization should be reviewed and possibly changed to be uniform with the rest of Arlington Heights Road with no parking allowed.

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.

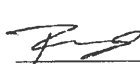
See above #3.

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.

 #272

Brandi Romag, Crime Prevention Officer
Community Services Bureau

 #537
Supervisor's Signature

Arlington Heights Police Department

Emergency Information Card

1. Fill in all information by tabbing to each field.
2. When completed, save the form and send as an attachment to: policemail@vah.com.

Arlington Heights Police Department
200 E. Sigwalt Street
Arlington Heights, IL 60005-1499
Phone: 847/368-5300

Completed forms may also be printed and submitted in the following manner:

By Mail: Arlington Heights Police Department
200 E. Sigwalt Street, Arlington Heights, IL. 60005
Attention: Police Administration

Print Form (To Mail)

By Fax: (847) 368-5970 - Attention: Police Administration

In Person: Dropped off at the Arlington Heights Police Department's front desk for forwarding to Police Administration.

Name (Firm or Residence)

Address/City

Telephone Number

Date Information Obtained

IN CASE OF EMERGENCY PLEASE CALL:

Contact #1

Name

Address/City

Telephone Number

Cell Number

Contact #2

Name

Address/City

Telephone Number

Cell Number

Alarm System

☐ No

☐ Yes

Phone number:

Alarm Company Name

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. <u>17-012</u>	P.I.N.# <u>Multiple - See Attached</u>
Petitioner: <u>St. James Parish</u>	Location: <u>820 N. Arlington Hts. Rd.</u>
<u>820 N. Arlington Heights Road</u>	Rezoning: <u> </u> Current: <u>R-3</u> Proposed: <u>R-3</u>
<u>224.345.7200</u>	Subdivision: <u> </u>
Owner: <u>Archdiocese of Chicago, A Corporation Sole</u>	# of Lots: <u> </u> Current: <u> </u> Proposed: <u> </u>
<u>835 N. Rush Street</u>	PUD: <u> </u> For: <u> </u>
<u>Chicago, IL 60611-2030 312 534 5309</u>	Special Use: <u>✓</u> For: <u>Church</u>
Contact Person: <u>Matt Hichens</u>	Land Use Variation: <u> </u> For: <u> </u>
Address: <u>Newman Architecture, 1730 Park St</u>	Land Use: <u> </u> Current: <u>Church/Resident.</u>
<u>Ste. 115, Naperville, IL 60563</u>	Proposed: <u>Church</u>
Phone #: <u>630 420 1600</u>	Site Gross Area: <u>3.39 Acres</u>
Fax #: <u>630 420 1987</u>	# of Units Total: <u>0</u>
E-Mail: <u>matt@newmanarchitecture.com</u>	1BR: <u> </u> 2BR: <u> </u> 3BR: <u> </u> 4BR: <u> </u>

(Petitioner: Please do not write below this line.)

1. GENERAL COMMENTS:

See the attached accessibility comments.

Sean Freres, LEHP 

10/5/17

Environmental Health Officer

Date

James McCalister 

10/5/17

tor

Dir
Date

Plan Review

Address: St. James Parish
831 N. Arlington Heights Road
PUD, Special Use Permit Amendment, Preliminary/Final Plat
of Subdivision, Comp Plan Amendment, Parking Variation

PC # 17-0012 Round 1

Submitted to: Sam Hubbard, Planning & Community Development

Submitted by: David Robb, Disability Services Coordinator
Health & Human Services
(847) 368-5793



Date: October 4, 2017

Re: Illinois Accessibility Code (IAC), Effective April 1997
<https://www.illinois.gov/cdb/business/codes/Pages/IllinoisAccessibilityCode.aspx>

Sheet A1 and A6:

1. At the front end of the four (4) Accessible Reserved Parking Spaces adjoining the sidewalk remove the curb stops from the access aisle portion of the Accessible Parking Space. IAC Section 400.310(c)(3) specifies that "...all access aisles shall blend to a common level with an accessible route."
2. Show "Depressed Curbs" curb ramps at all locations where a sidewalk crosses a curb per IAC Section 400.310(d)(1).
3. Show "Depressed Curbs" on the both ends of the "Landscape Island" where the accessible route crosses a curb per IAC Section 400.310(d)(1). IAC Section 400.310(c)(3) specifies that "...all access aisles shall blend to a common level with an accessible route."

Sheet A2: First floor plan

4. On the Main Level Identify the Areas of Rescue Assistance per IAC Section 400.310(b)(4).

Sheet A3: Lower Level

5. Identify the Areas of Rescue Assistance per IAC Section 400.310(b)(4).
6. Shower Rooms L35 and L03 are required to be wheelchair accessible per IAC Section 400.310(o)(8)(B)(i-vii) and 400.Illustration B. Figures 35(a) or (b).

PC # 17-0012

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. <u>17-012</u>	P.I.N.# <u>Multiple - See Attached</u>
Petitioner: <u>St. James Parish</u>	Location: <u>820 N. Arlington Hts. Rd.</u>
<u>820 N. Arlington Heights Road</u>	Rezoning: <u> </u> Current: <u>R-3</u> Proposed: <u>R-3</u>
<u>224.345.7200</u>	Subdivision: <u> </u>
Owner: <u>Archdiocese of Chicago, A Corporation Sole</u>	# of Lots: <u> </u> Current: <u> </u> Proposed: <u> </u>
<u>835 N. Rush Street</u>	PUD: <u> </u> For: <u> </u>
<u>Chicago, IL 60611-2030 312 534 5309</u>	Special Use: <u>✓</u> For: <u>Church</u>
Contact Person: <u>Matt Hichens</u>	Land Use Variation: <u> </u> For: <u> </u>
Address: <u>Newman Architecture, 1730 Park St</u>	Land Use: <u> </u> Current: <u>Church/Resident</u>
<u>Ste. 115, Naperville, IL 60563</u>	Proposed: <u>Church</u>
Phone #: <u>630.420.1600</u>	Site Gross Area: <u>3.39 Acres</u>
Fax #: <u>630.420.1987</u>	# of Units Total: <u>0</u>
E-Mail: <u>matt@newmanarchitecture.com</u>	1BR: <u> </u> 2BR: <u> </u> 3BR: <u> </u> 4BR: <u> </u>

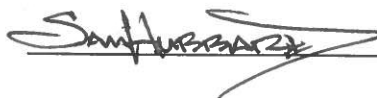
(Petitioner: Please do not write below this line.)

YES NO

1. X COMPLIES WITH COMPREHENSIVE PLAN?
2. X COMPLIES WITH THOROUGHFARE PLAN?
3. X 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:

SEE ATTACHED COMMENTS



Date

Planning & Community Development Dept. Review

October 12, 2017



REVIEW ROUND 1

Project: 2525 N. Arlington Heights Rd.
St. Edna's PUD Amendment

Case Number: PC 17-010

General:

7. The Plan Commission must review and approve the following action:
 - a) Amendment to Special Use Ordinance #07-012 to allow an addition to the Church building on the east campus.
 - b) Amendment to the Comprehensive Plan to change the land use classification from Single-Family Detached to Institutional for the properties located at 811 S. Arlington Heights Road and 810 S. Pine Avenue.
 - c) Planned Unit Development to allow multiple buildings on one zoning lot.
 - d) Plat of Subdivision to consolidate all of the east campus into one lot.
 - e) A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 301 to 186.
8. The Plat of Subdivision to consolidate the lots into one lot of record was not provided until 10/11/17, and therefore review of this document did not occurring during the first round review period. The Plat will be reviewed separately and comments on the Plat will be provided to you when completed. Relative to the Plat, please note that the Final Plat, as approved by the Engineering Dept., must be printed on mylar and submitted to the Village, with signatures obtained from all parties except those to be coordinated by the Village, no less than one week prior to the Plan Commission hearing date. If this requirement cannot be met, you can proceed with Preliminary Plat approval on Nov. 29th with Final Plat approval obtained at a future date (i.e. a separate Plan Commission meeting would be needed). No public notice is required for Final Plat of Subdivision approval.
9. Please note that final engineering must be approved by the Engineering Dept. no less than one week prior to appearance before the Plan Commission, which will include the payment of all engineering fees and the provision of all surety bonds, public improvement deposits, and engineering fee's. If this requirement cannot be met, you can proceed with Preliminary Plat approval on Nov. 29th with Final Plat approval obtained at a future date (i.e. a separate Plan Commission meeting would be needed). No public notice is required for Final Plat of Subdivision approval.
10. Section 9.8(i) of the Zoning Code requires that all PUD's include a construction schedule and phasing plan. Please provide the required construction schedule and phasing plan, which includes information on the approximate date of construction type, the number of construction phases and the starting and completion date for each phase, and a construction staging plan. The construction phasing plan shall include the anticipated number of construction workers and where they will park during each phase of construction, the type and amount of construction vehicles per phase and where they will be staged, the location of material storage, and information on anticipated lane closures, including info on where the closures will take place and the timeframe for each closure.
11. Please ensure that all plans and/or studies to be resubmitted as a result of the Round 1 Department review comments include a revision date.
12. Will the building addition or site feature any sustainable/green design elements?

Site Plan:

13. The engineering plans, architectural site plans, and landscape plans do not appear to be consistent. Please revise the plans so that they reflect the same information. Specifically, the following areas are different:
 - a) The trash enclosure area to the south of the rectory is shown different on all of the plans.
 - b) There is a transformer shown on the south side of the rectory, which is not shown on the landscape plans or architectural site plans.
 - c) There is a transformer proposed at the northeast corner of the church addition, which is not shown on the engineering plans or landscape plans.
14. Please add a chart to the architectural site plan that outlines the existing and proposed building setbacks for the church building to all four property lines (north, south, east, west) at it's closest point.
15. Please provide additional details on the trash enclosure, including information on the height, style, and materials of the fence.
16. Please provide additional information on the proposed mechanical units at the north of the building. How tall are the units? What will be within the enclosure area? The enclosure walls appear to be masonry and 11' tall in height. Please confirm material and height of walls.
17. The northern parking row does not include curbing or the necessary greenspace buffer. The drive aisle abutting this row is shown at 28.9' in width where code allows a minimum width of 24'. It is recommended that this lane be reduced to 24' in width to allow space for the curbing and greenspaces at the perimeter of these parking stalls, which is required by Code.
18. The eastern most north/south drive aisle is shown at 22' in width. Code requires a minimum drive aisle width of 24' where two-way traffic is permitted. Please revise the drive aisle width or clarify if a Variation is requested.
19. Please show the width of the perimeter landscape island along the eastern property boundary, specifically in the northeast corner of the site (the landscape island appears to shorten in width as it extends to the north).

Building:

20. Please label room L16 on the floor plans.
21. Please provide the square footage of Room L27A.
22. Design Commission approval is required for the proposed building addition. Design Commission hearing is scheduled for Oct. 24th.

Parking and Traffic:

23. The Village has recently adopted a bicycle parking space requirement, which applies to existing developments when they add floor area. Therefore, the proposed church addition triggers compliance with the bicycle parking regulations, which require one bicycle parking space per 100 seats. As the proposed church will contain 916 seats, 9 bicycle parking spaces are required. Please include these within the development.
24. Please note that the "Gathering Space" (room 102) was included in the parking calculation as that space is used for "Children's Liturgy of the World" during Mass.
25. Please confirm that no activities will be taking place within the West Campus on Sundays while mass is taking place on the East Campus.

26. How does the church manage traffic/parking for weddings or funerals that take place at the times when the West Campus is in use by the school (or other activities)?
27. The parking analysis concludes that "parking that currently occurs on Evergreen Avenue during the 10:00am and 11:30am services will shift to the east side of Arlington Heights Road and that this parking demand can be accommodated within the off-street parking lots or by the on-street parking locations along Frederick Street and Pine Avenue". Does the east side of Arlington Heights Road, as well as Frederick Street and Pine Avenue, have capacity to accommodate for the additional demand that they will experience when all services are moved to the East Campus?
28. How will the church ensure that parishioners utilize both the east and west parking lots before utilizing on-street parking, especially if on-street parking spaces would be located closer to the church than the west parking lot?

Prepared by: 

Planning & Community Development Dept. Review

October 18, 2017



ADDENDUM TO REVIEW ROUND 1 COMMENTS

Project: 831 N. Arlington Heights Rd.
St. James PUD

Case Number: PC 17-012

Parking and Traffic:

29. In our July 21st letter we asked St. James Parish evaluate the need for parking along Arlington Heights Road and that the parking provided there presented safety issues. Please provide a response addressing the need for parking along Arlington Heights Road. Staff's position is that this parking should be eliminated if viable, and notes that the parking study indicates a peak parking demand to be 359, and a total of 355 parking spaces are to be provided between the East and West campuses. Based on this analysis, it appears that parking along Arlington Heights Road is not necessary.
30. The location of the right-in/right-out along Arlington Heights Rd. will need to be further evaluated. When the addition was constructed and traffic signal placed at the exit drive to the West campus during the 2007 building addition, it was discussed that any future improvements to the East Campus would utilize/incorporate the traffic signal on Arlington Heights Rd. for ingress and egress. The proposed plan does not incorporate use of this traffic signal, and this will need further analysis based on discussions with IDOT. Please provide an update on all communications with IDOT, and continue to keep us apprised on future communications with IDOT. Additional consideration will need to be given to the most appropriate place for ingress/egress onto Arlington Heights Road.
31. Further analysis is needed on the traffic impact to Pine Ave. Cars exiting the site and needing to go southbound on Arlington Heights Rd (in the absence of utilizing the traffic signal on Arlington Heights Rd. to provide southbound access) will cause an increase in traffic along Pine Avenue. Please address this situation within the traffic study.

Prepared by:

SAM JUBARI

Planning & Community Development Dept. Review

October 17, 2017



REVIEW ROUND 1

Project: 831 N. Arlington Heights Rd.
St. James Parish PUD – Subdivision Plat Review

Case Number: PC 17-012

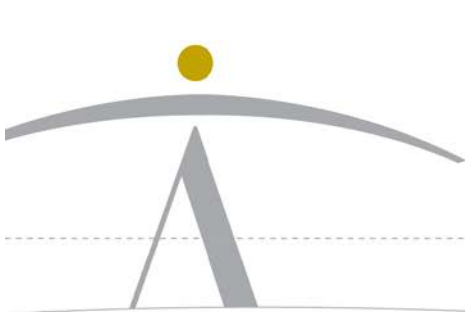
General:

7. The newly created lot is a “double frontage” lot, and Per Section 29-307(f) of Chapter 29, double frontage lots “shall not have vehicular access from an abutting arterial street”. Since access is proposed onto Arlington Heights Rd., a variation is required. Staff is supportive of this variation provided that all IDOT standards are met and approvals are obtained.
8. Section 29-308 of Chapter 29 requires that all building setback lines be shown on the Plat of Survey. Please add the following building setback lines:
 - a) Front Yard Setback Line (north): 25'
 - b) Rear Yard Setback Line (south): 30'
 - c) Exterior Side Yard Setback Line (both east and west): 26.4'
9. Section 29-309 of Chapter 29 requires that all rear lot lines include a 5' easement for utilities. Please provide the code required easement along the rear property line (south).
10. The Plat of Subdivision does not include any signature blocks of any of the public utility companies. Please confirm with the Eng. Dept. as to whether these signature blocks are required.

Prepared by: SAM/ABE

Saint James Parish
PC 17-012
831 N. Arlington Heights Road
October 10, 2017

- 1) Per Chapter 28, Section 6.15-1.2a, a three foot high screen must be provided in order to screen the parking/paved areas that are adjacent to the public way. Provide a three foot high screen along Frederick where the code required screen is absent. In addition, the code required shrubs along the right of way must be three feet high at time of installation. Please increase the size of the shrubs.
- 2) The ends of all parking rows and every twenty spaces must include a landscape island equal in area to one parking space, protected by durable materials, which contains a 4" caliper shade tree. (Chapter 28, section 6.15-1.2b). Incorporate the code required shade trees and an island at the ends of the parking rows where the trees are absent and where there are more than twenty spaces.
- 3) Per Chapter 28, landscaping must be provided at the perimeter of the detention basin. Include a mix of trees, shrubs and perennials. Please identify the proposed seed mix for at the base of the detention basin.
- 4) Provide foundation plantings adjacent to the church. The plantings should be layered and consist of a mix of shrubs and perennials.
- 5) Any utility meters or mechanical units must be screened with landscaping or another appropriate method of screening. There is a transformer in the northeast corner of the church. Please provide landscaping in order to screen the mechanical unit.
- 6) Provide landscaping adjacent to the trash enclosure.



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October 31, 2017
Updated November 2, 2017
UPDATED November 7, 2017 – Plat of Subdivision Comments

Mr. Sam Hubbard
Village of Arlington Heights
Building and Life Safety Department
33 S. Arlington Heights Road
Arlington Heights, IL 60005

Re: St. James Catholic Church
831 N. Arlington Heights Road
Arlington Heights, IL 60004
PC#: 17-012

Response to PLAN REVIEW COMMENTS dated October 9, 2017

GENERAL BUILDING COMMENTS

Reviewed By: Deb Pierce

1. Provide the construction type of the existing building and new addition.
Response: The existing church building was constructed close to 65 years ago. Based on the structural components being non-combustible and typically protected behind or above plaster, it is assumed to have been constructed similar to the requirements of Type II-A Construction. It is anticipated that the new construction will be constructed to comply with Type II-A.
2. Provide an occupant load calculation for the rooms on the lower level per 2009 IBC Table 1004.1.1.
Response: Final Occupant Loads will be provided with final Construction Documents Building Permit Submittal. A preliminary calculation is attached.
3. Provide a calculation based on the total occupant load of the number of required/provided exits, their width and number of occupants per exit.
Response: Final Egress Calculations will be included with Final Construction Documents / Building Permit Submittal. A preliminary calculation is attached.
4. Review 2009 IBC Section 410 for platform construction requirements.
Response: Understood.

5. All designated switchgear rooms, electrical closets, electrical equipment rooms and/or electrical closets, transformer rooms, vaults and the like, shall have a minimum fire-rating of one-hour construction, or shall be rated equal to the designed structure, but not less than one-hour construction, whichever is greater.

Response: Understood. A 1-hour fire-rated enclosure is anticipated.

6. Where the electrical room contains equipment rated 1,200 amps or more, there shall be two exits on opposite corners of the room. The doors and door hinges shall have a fire-rating equal to the rating of the electrical room. Doors shall swing out and have panic hardware.

Response: Understood, two doors are currently shown the plan.

7. Storage is not permitted in any mechanical or electrical room

Response: Understood.

FIRE SAFETY DIVISION

1. Show the proposed location of the Fire Department Connection on the plans.

Response: The location of the FDC is shown on the Civil Drawings and has been added to the Architectural Plans. It is located on the east elevation near the northeast corner of the building. This will allow truck access adjacent to the FDC connection and adjacent to the fire hydrant.

2. The parking lot pavement shall be capable of accepting the weight of fire apparatus.

Response: Understood.

3. Fire department connections shall be 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.

Response: Since the watermain is on the far side of Arlington Heights Road, accessing the existing water line on Frederick Street is more convenient. This also allows for direct fire truck access to the FDC as compared to the west elevation. A hydrant is within 100' of this connection.

4. A complete NFPA compliant fire suppression system is required. Supervised indicating control valves shall be provided.

Response: As discussed at our preliminary meeting in July with planning, fire department and building department representatives, the new additions will include a fire suppression system. The existing church space will remain as is, with no sprinkler system. A supervised indicating valves will be provided.

5. An approved water supply capable of supplying the required fire flow for fire protection shall be provided.

Response: Understood.

6. Fire protection equipment and service rooms shall be identified in an approved manner.

Response: Understood.

7. Approved access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment.

Response: Understood.

8. In buildings and structures, where standby power is required or furnished to operate an elevator, the operation shall comply with current code requirements.

Response: A generator is not currently planned for this building. Standby power for the elevator will comply with code.

9. A fully functional fire alarm shall be installed in all areas of the building, new and existing, per NFPA 72 and the Life Safety Code, NFPA 101. The alarm annunciator panel shall be located at the front entrance.
Response: Understood.
10. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation.
Response: Understood. Required shop drawings will be submitted for review prior to construction.
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.
Response: Understood.
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.
Response: Understood.
13. A key box (Know Box) shall be provided and contain keys to gain necessary access as required by the fire code official.
Response: Understood.
14. Fire pumps, if provided, shall be installed in accordance with the Fire Code and NFPA 20 and shall comply with all current code requirements including a minimum of two water mains located in different streets.
Response: Understood. A fire pump is not anticipated.
15. Exit signs shall be illuminated at all times and have emergency power backup.
Response: Understood. These will be included with battery backup.
16. In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements.
Response: Understood.
17. Indicate the maneuvering capability of the Fire Department Tower Truck to confirm that the truck can negotiate the turns on pavement avoiding any dead-ends and identify any overhead wires that may be within the airspace of the truck set-up.
Response: A diagram was included with Plan Commission submittal packet showing maneuvering through the parking area. No overhead cables are anticipated on the site once the project is complete.
18. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet in height.
Response: The existing streets to the north and west have curb widths exceeding 26'. The proposed building is matching the existing elevations / heights of the existing church building. Nothing is exceeding the heights of the existing structure.
19. Buildings shall have approved address numbers.
Response: Understood.
20. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design. The location of fire department connections shall be approved.
Response: Understood. Proposed location included on civil utility plan in Plan Commission Submittal and added to the Architectural Site Plan.

21. Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved a visible location.

Response: Understood. Based on the location of the water service entering the building, the proposed location is on the northeast corner of the building. We believe this location provides direct fire department access to the FDC and adjacent fire hydrant. Please confirm this is acceptable.

22. Signs shall be posted on both sides of an approach of any fire lane stating, "NO PARKING - FIRE LANE." Signs shall have arrows indicating the area of parking restriction.

Response: Understood. These will be included on final permit drawings.

23. Fire lane signs shall be white with red three-inch letters. The dimensions of the sign shall be 12 inches horizontally and 18 inches vertically. These signs shall be installed so that the top of the sign is not less than 6 feet nor more than 6 feet above grade.

Response: Understood. These will be included on final permit drawings.

UTILITY INSTALLATION COMMENTS

Reviewed by Chris Papierniak

Please note, additional engineering comments have been issued based on final engineering drawings submitted by the Village and will be responded to under separate cover.

1. Verify the condition of the sidewalk fronting the property after the construction. If damage has occurred as a result of the construction, or drainage is not adequate (ponding), permittee must replace the affected squares.

Response: Understood. This will be reviewed prior to construction.

2. The proposed 6" pressure connection must be enclosed within a vault with a minimum diameter of 60".

Response: Understood.

3. The existing services (water/sanitary/storm) that are going to be abandoned must be abandoned at the respective Village mains.

Response: Understood.

4. The existing 1" domestic service that serves the address must be abandoned at the respective main. The building must be served by one source.

Response: Understood. This will be abandoned.

5. Provide a detail of the proposed underground detention facility with a proposed maintenance plan.

Response: This information will be included on forthcoming submittals.

6. Provide a detail of the storm water control structure #D13 for review and approval.

Response: This has been included with formal engineering submittal.

7. Install chimney seals on all proposed underground detention facility with a proposed maintenance plan.

Response: Understood.

8. There must be proper separation between the water service and the existing sewer line. Refer to the standard specifications of water and sewer installation for the State of Illinois 6th edition or newer.
Response: Understood. This will be indicated on final permit drawings.
9. All methods of construction and materials must conform to the most recent version of "A Manual of Practice for the Design of Public & Private Improvements" as published by the Village of Arlington Heights Engineering Department.
Response: Understood.
10. A compound meter within the building will be required:
a. The compound meter will require a 3: bypass meter configuration.
b. The compound meter will be a 6" x 2" fire meter.
Response: Understood.
11. Require backflow devices (RPZ) are as listed:
a. 1-6" RPZ for fire protection.
b. 1-2" RPZ for domestic purposes.
Response: Understood. We anticipate is a 3" domestic water service. RPZ will be provided.
12. A separate RPZ will be required in an irrigation system will be installed.
Response: Understood. At this time an irrigation system is not currently planned.
13. Any roadway utility patch shall have surface only patch at minimum of 2' beyond excavation on all sides.
Response: Understood.

FIRE DEPARTMENT REVIEW

Reviewed By: Lt. Mark Aleckson

1. The Fire Department requires that the Fire Department connection, Knox Box, and fully operational annunciator panel or alarm panel be located at the main front entrance. The Fire Department would like more clarification if the lobby entrance on the south side of the building will be used as the "main entrance." The Fire Department would like to explore the feasibility of considering this the main entrance for these items. We have in the past and will likely respond to calls in a manner that avoids the need to park on Arlington Heights Road.
Response: Understood. A fire truck maneuvering plan was included in the Plan Commission Submittal showing full access to the site in the parking areas. The new south entrance can be treated as the "main entrance".
2. Building to be sprinkled in accordance with building code.
Response: As discussed at our preliminary meeting in July with planning, fire department and building department representatives, the new additions will include a fire suppression system. The existing church space will remain as is, with no sprinkler system.
3. The fire hydrant must be located with 100' of the sprinkler connection.
Response: Understood. This is shown on the civil plan included with the Plan Commission submittal.

COMMUNITY SERVICE REVIEW

Reviewed By: Brandi Romag

1. **Character of use:** The character of use should not be problematic.
Response: Thank you.
2. **Are lighting requirements adequate?** Lighting should be up to Village of Arlington Heights code. Special attention should be given to illuminating parking lot areas, and any secluded areas on the property. These areas should be illuminated especially during nighttime hours for safety, to deter criminal activity and increase surveillance/visibility - potentially reducing theft, trespassing, vandalism, underage drinking, drug use and other criminal activity.
Response: Understood. A photometric plan was included with the plan commission submittal which includes illumination of the parking area and areas adjacent to the building.
3. **Present traffic problem?** There is parking allowed on Arlington Heights Road on Sundays. With the addition of the larger parking lot, this authorization should be reviewed and possibly changed to be uniform with the rest of Arlington Heights Road with no parking allowed.
Response: We have reviewed this with the Parish, they would also prefer no parking on Arlington Heights Road. They agree this parking can be eliminated since both parking lots are being utilized for Sunday services.
4. **Traffic accidents at particular location?** This is not a problem area in relation to traffic accidents.
Response: Acknowledged.
5. **Traffic problems that may be created by the development?** See above #3.
Response: 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 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 unauthorized use signage. The Arlington Heights Police Department has and utilizes trespass warning forms under qualifying circumstances when requested by property management.

Response: Thank you for your comments. This will be reviewed with the Parish.

ACCESSIBILITY REVIEW

Reviewed By: David Robb

Sheet A1 and A6:

1. At the front end of the four (4) Accessible Reserved Parking Spaces adjoining the sidewalk, remove the curb stops from the access aisle portion of the Accessible Parking Space.
IAC Section 400.310(c)(3) specifies that "...all access aisles shall blend to a common level with an accessible route."
Response: Understood.

2. Show “Depressed Curbs” curb ramps at all locations where a sidewalk crosses a curb per IAC Section 400.310(d)(1).

Response: Depressed curbs area located at new walks and curb crossings.

3. Show “Depressed Curbs” on the both ends of the “Landscape Island” where the accessible route crosses a curb per IAC Section 400.310(d)(1). IAC Section 400.310(c)(3) specifies that “...all access aisles shall blend to a common level with an accessible route.”

Response: Understood. Additional curb ramps will be included on the final drawings.

Sheet A2: First floor Plan

4. On the Main Level, identify the Areas of Rescue Assistance per IAC Section 400.310(b)(4).

Response: Since the building addition is fully sprinklered, an area of rescue assistance is not required per the reference section.

Sheet A3: Lower Level

5. Identify the Areas of Rescue Assistance per IAC Section 400.310(b)(4).

Response: Since the building addition is fully sprinklered, an area of rescue assistance is not required per the reference section.

6. Shower Rooms L35 and L03 are required to be wheelchair accessible per IAC Section 400.310(o)(8)(B)(i-vii) and 400. Illustration B. figures 35(a) or (b).

Response: Understood. It is the intent that these spaces are fully accessible. These will meet the accessible requirements outlined in the referenced section.

PLANNING AND COMMUNITY DEVELOPMENT REVIEW

Reviewed by: Sam Hubbard

7. The Plan Commission must review and approve the following action:

- a. Amendment to Special Use Ordinance #07-012 to allow an addition to the Church building on the east campus.
- b. Amendment to the Comprehensive Plan to change the land use classification from Single-Family Detached to Institutional for the properties located at 811 S. Arlington Heights Road and 810 S. Pine Avenue.
- c. Planned Unit Development to allow multiple buildings on one zoning lot.
- d. Plat of Subdivision to consolidate all of the east campus into one lot.
- e. A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 301 to 186.

Response: Understood.

8. The Plat of Subdivision to consolidate the lots into one lot of record was not provided until 10/11/17, and therefore review of this document did not occurring during the first-round review period. The Plat will be reviewed separately and comments on the Plat will be provided to you when completed. Relative to the Plat, please note that the Final Plat, as approved by the Engineering Dept., must be printed on Mylar and submitted to the Village, with signatures obtained from all parties except those to be coordinated by the Village, no less than one week prior to the Plan Commission hearing date. If this requirement cannot be met, you can proceed with Preliminary Plat approval on Nov. 29th with Final Plat approval obtained at a future

date (i.e. a separate Plan Commission meeting would be needed). No public notice is required for Final Plat of Subdivision approval.

Response: Understood.

9. Please note that final engineering must be approved by the Engineering Dept. no less than one week prior to appearance before the Plan Commission, which will include the payment of all engineering fees and the provision of all surety bonds, public improvement deposits, and engineering fee's. If this requirement cannot be met, you can proceed with Preliminary Plat approval on Nov. 29th with Final Plat approval obtained at a future date (i.e. a separate Plan Commission meeting would be needed). No public notice is required for Final Plat of Subdivision approval.

Response: Final Engineering Drawings were submitted to the Village on October 6, 2017.

10. Section 9.8(i) of the Zoning Code requires that all PUD's include a construction schedule and phasing plan. Please provide the required construction schedule and phasing plan, which includes information on the approximate date of construction type, the number of construction phases and the starting and completion date for each phase, and a construction staging plan. The construction phasing plan shall include the anticipated number of construction workers and where they will park during each phase of construction, the type and amount of construction vehicles per phase and where they will be staged, the location of material storage, and information on anticipated lane closures, including info on where the closures will take place and the timeframe for each closure.

Response: The construction is to be completed in one phase starting in the Spring of 2018 with completion in 10-12 months, or Spring of 2019. Once a General Contractor has been selected by the Parish, they will begin a staging plan including the items noted in your comment above.

11. Please ensure that all plans and / or studies to be resubmitted as a result of the Round 1 Department review comments include a revision date.

Response: Understood.

12. Will the building addition or site feature any sustainable / green design elements?

Response: Not at this time.

13. The engineering plans, architectural site plans, and landscape plans do not appear to be consistent. Please revise the plans so that they reflect the same information. Specifically, the following areas are different:

- a. The trash enclosure area to the south of the rectory is shown different on all of the plans. Trash enclosure has been updated to match civil drawings.
- b. There is a transformer shown on the south side of the rectory, which is not shown on the landscape plans or architectural site plans. The transformer has been relocated to adjacent to the trash enclosure to match the civil drawings.
- c. There is a transformer proposed at the northeast corner of the church addition, which is not shown on the engineering plans or landscape plans. This transformer has been relocated

Response: The drawings have been updated to match.

14. Please add a chart to the architectural site plan that outlines the existing and proposed building setbacks for the church building to all four property lines (north, south, east, west) at its closest point.

Response: This has been added.

15. Please provide additional details on the trash enclosure, including information on the height, style and materials of the fence.
Response: Based on recent Design Commission Meeting, this is being required to be modified to a masonry enclosure. Information is shown on the revised architectural site plan.
16. Please provide additional information on the proposed mechanical units at the north of the building. How tall are the units? What will be within the enclosure area? The enclosure walls appear to be masonry and 11' tall in height. Please confirm material and height of walls.
Response: The enclosure walls are masonry (face brick with CMU back up). These walls conceal a grade mounted ACCU. This unit is approximately 7'-6" by 9'-0" by 6'-6" tall. The enclosure will fully conceal the unit and maintains the required clearances required by the unit.
17. The northern parking row does not include curbing or the necessary greenspace buffer. The drive aisle abutting this row is shown at 28.9' in width to allow space for the curbing and greenspaces at the perimeter of these parking stalls, which is required by Code.
Response: This will be adjusted accordingly.
18. The eastern-most north/south drive aisle is shown at 22' in width. Code requires a minimum drive aisle width of 24' where two-way traffic is permitted. Please revise the drive aisle width or clarify if a Variation is requested.
Response: In order to provide the required landscape buffer this aisle way was reduced. If the landscape buffer is required, we will need to reduce the aisle width as shown.
19. Please show the width of the perimeter landscape island along the eastern property boundary, specifically in the northeast corner of the site (the landscape island appears to shorten in width as it extends to the north).
Response: These dimensions are shown on the revised landscape plans.

PLANNING & COMMUNITY DEVELOPMENT DEPT. REVIEW – Round 1 Additional Comments 10/17

20. The newly created lot is a "double frontage" lot, and Per Section 29-307(f) of Chapter 29, double frontage lots "shall not have vehicular access from an abutting arterial street". Since access is proposed onto Arlington Heights Rd., a variation is required. Staff is supportive of this variation provided that all IDOT standards are met and approvals are obtained.
Response: Comment noted.
21. Section 29-308 of Chapter 29 requires that all building setback lines be shown on the Plat of Survey. Please add the following building setback lines:
a) Front Yard Setback Line (north): 25'
b) Rear Yard Setback Line (south): 30'
c) Exterior Side Yard Setback Line (both east and west): 26.4'
Response: The set back lines have been added to the Plat.
22. Section 29-309 of Chapter 29 requires that all rear lot lines include a 5' easement for utilities. Please provide the code required easement along the rear property line (south).
Response: The easement has been added to the drawing. Please provide any necessary easement provisions.

23. The Plat of Subdivision does not include any signature blocks of any of the public utility companies. Please confirm with the Eng. Dept. as to whether these signature blocks are required.

Response: A general signature block for public utility companies has been added.

BUILDING

24. Please label room L16 on the floor plans.

Response: There is no L16. Room L15 has been enlarged to the entire area (a second operable wall was originally planned, but no longer part of the project scope).

25. Please provide the square footage of Room L27A.

Response: This room is 609 square feet.

26. Design Commission approval is required for the proposed building addition. Design Commission hearing is scheduled for Oct. 24th.

Response: This has been completed.

PARKING AND TRAFFIC

27. The Village has recently adopted a bicycle parking space requirement, which applies to existing developments when they add floor area. Therefore, the proposed church addition triggers compliance with the bicycle parking regulations, which require one bicycle parking space per 100 seats. As the proposed church will contain 916 seats, 9 bicycle spaces are required. Please include these within the development.

Response: This has been included in the new landscape plan.

28. Please note that the "Gathering Space" (room 102) was included in the parking calculation as that space is used for "Children's Liturgy of the Word" during Mass.

Response: This is correct.

29. Please confirm that no activities will be taking place within the West Campus on Sundays while mass is taking place on the East Campus.

Response: This is correct. All masses will be held on the east campus after Project completion.

30. How does the church manage traffic/parking for weddings or funerals that take place at the times when the West Campus is in use by the school (or other activities)?

Response: Weddings do not take place during the hours of school activities. Funerals do take place during school hours, but not during drop-off / pick-up times nor during other high-volume activities at the school. This has not been a problem previously and the Parish does not believe there will be any changes once the proposed work is complete.

31. The parking analysis concludes that "parking that currently occurs on Evergreen Avenue during the 10:00 a.m. and 11:30 a.m. services will shift to the east side of Arlington Heights Road and that this parking demand can be accommodated within the off-street parking lots or by the on-street parking locations along Frederick Street and Pine Avenue." Does the east side of Arlington Heights Road, as well as Frederick Street and Pine Avenue, have capacity to accommodate for the additional demand that they will experience when all services are moved to the East Campus?

Response: See response below from KLOA.

Frederick Street and Pine Avenue do have sufficient capacity to accommodate the projected parking demand the 10:00 A.M. and 11:30 A.M. services. During these services, Frederick Street and Pine Avenue have an existing parking demand of 4 vehicles. With the relocation of the Evergreen Avenue traffic, Frederick Street and Pine Avenue will have a projected parking demand of 38-40 vehicles. This parking demand is consistent with the parking demand currently observed along these two roadways during the 8:30 A.M. service.

32. How will the church ensure that parishioners utilize both the east and west parking lots before utilizing on-street parking, especially if on-street parking spaces would be located closer to the church than the west parking lot?

Response: If on-street parking spaces are available, we are sure they will be utilized. We are not sure how this could be controlled. Currently both lots are used for masses and this will continue.

ADDENDUM TO REVIEW ROUND 1 COMMENTS

33. In our July 21st letter we asked St. James Parish evaluate the need for parking along Arlington Heights Road and that parking provided there presented safety issues. Please provide a response addressing the need for parking along Arlington heights Road. Staff's position is that this parking should be eliminated if viable, and notes that the parking study indicates a peak demand to be 359, and a total of 355 parking spaces are to be provided between the East and West campuses. Based on this analysis, it appears that parking along Arlington Heights Road is not necessary.

Response: The Parish would also like to eliminate the parking along Arlington Heights Road, and as noted in your comment above, they also believe it is viable.

34. The location of the right-in/right-out along Arlington Heights Rd. will need to be further evaluated. When the addition was constructed and traffic signal placed at the exit drive to the West campus during the 2007 building addition, it was discussed that any future improvements to the East Campus would utilize/incorporate the traffic signal on Arlington Heights Rd. for ingress and egress. The proposed plan does not incorporate use of this traffic signal, and this will need further analysis based on discussions with IDOT. Please provide an update on all communications with IDOT, and continue to keep us apprised on future communications with IDOT. Additional consideration will need to be given to the most appropriate place for ingress/egress onto Arlington heights Road.

Response: Early in the design process, the utilization / modification of the existing traffic signal was considered. However, based on past experiences with similar situations, our Civil Engineer believed the necessary modifications would be a significant expense to the Parish. As an example, we believe just the reconstruction of the signal poles and signal heads to meet current IDOT standards is a minimum of \$250,000. In recent days, the Parish has had conversations with IDOT representatives, and in concept, they are favorable with the right-in / right-out access.

35. Further analysis is needed on the traffic impact to Pine Ave. Cars exiting the site and needing to go southbound on Arlington Heights Rd. (in the absence of utilizing the traffic signal on Arlington Heights Rd. to provide southbound access) will cause an increase in traffic along Pine Avenue. Please address this situation within the traffic study.

Response: KLOA has been asked to provide further analysis, in accordance with your request.

LANDSCAPING REVIEW

1. Per Chapter 28, Section 6.15-1.2a, a three-foot-high screen must be provided in order to screen the parking/paved areas that are adjacent to the public way. Provide a three-foot-high screen along Frederick

where the code-required screen is absent. In addition, the code-required shrubs along the right-of-way must be three feet high at time of installation. Please increase the size of the shrubs.

Response: Shrubs have been increased to 36" in height on the updated plan.

2. The ends of all parking rows and every twenty spaces must include a landscape island equal in area to one parking space, protected by durable materials, which contains a 4' caliper shade tree. (Chapter 28, section 6.15-1.2b). Incorporate the code-required shade trees and an island at the ends of the parking rows where the trees are absent and where there are more than twenty spaces.

Response: 4" caliper trees have been included in all parking lot landscape islands and end of parking rows.

3. Per Chapter 28, landscaping must be provided at the perimeter of the detention basin. Include a mix of trees, shrubs and perennials. Please identify the proposed seed mix at the base of the detention basin.

Response: Perimeter landscaping has been added to the detention basin. The seed mix is noted in note #8.

4. Provide foundation plantings adjacent to the church. The plantings should be layered and consist of a mix of shrubs and perennials.

Response: Foundation plantings have been included around the building.

5. Any utility meters or mechanical units must be screened with landscaping or another appropriate method of screening. There is a transformer in the northeast corner of the church. Please provide landscaping in order to screen the mechanical unit.

Response: Utilities and mechanical units have been screened with landscape material.

6. Provide landscaping adjacent to the trash enclosure.

Response: Landscaping has been added around the perimeter of the trash enclosure on the updated landscape plan.

Respectfully Submitted,



Karen M. Kristianson, AIA, LEED AP
Licensed Architect

Cc: File



MEMORANDUM TO: Debra Bolash
St. James Parish

FROM: Brendan May
Consultant

Luay R. Aboona, PE
Principal

DATE: November 8, 2017

SUBJECT: Disposition of Comments
St. James Parish Expansion
Arlington Heights, Illinois

Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) is in receipt of the comments prepared by the Village of Arlington Heights regarding the proposed St. James Parish Expansion and offers the following responses.

PLAN COMMISSION PC #17-012

St. James Parish Subdivision

820 N. Arlington Heights Road

PUD, SU Amnd, Pre/Final Plat of Subdivision, Parking Variation Round 1

- 28. It is our understanding that when the west campus was redeveloped and the traffic signal on Arlington Heights Road relocated, part of the justification for retaining the signal was a future driveway connection to the east campus when that side got redeveloped. The proposed driveway serving the east campus does not connect to the traffic signal. Have there been discussions with IDOT regarding the proposed driveway? Please provide copies of correspondence with IDOT for our records. Will the traffic signal still be warranted under the proposed configuration?**

The provision of the proposed driveway aligned opposite of the existing traffic signal is prohibitive for St. James due to the cost and due to the limitation of land available for St. James to provide a right lane turn and that the configuration would not have worked with the buildings themselves.

- 29. Show the current limits of allowed parking on the east side of Arlington Heights Road. The installation of the right in/out driveway will require additional parking restrictions to allow for proper sight distance, etc. at the new driveway.**

Per request from the Village of Arlington Heights, on-street parking on the east and west sides of Arlington Heights Road will be eliminated.

- 30. The north-south orientation of the parking lot south of the proposed building addition is not as efficient as if it were laid out on an east and west orientation. An additional 2-3 stalls per row could be gained with a revised layout.**

Noted.

- 31. There is some discrepancy in the traffic report about the true number of total site parking stalls available. Report mentions 335, verses lot totals, (186+ 136=322).**

The discrepancy is a typing error within the traffic report. The existing 136-stall parking lot on the east side of the campus will be expanded by 50 spaces to provide 186 parking stalls. This combined with the 149-stall parking lot on the west side of the campus yields a total of 335 total off-site parking spaces.

- 32. Based upon the observed parking and the number of parishioners in attendance at each service please provide an occupancy per vehicle rate to be utilized for passenger car density.**

Based on information provided by St. James, the 10:30 AM services on both days surveyed were the services with the highest attendance. When the results of the parking occupancy services were compared to the attendance at these services, the average occupancy per vehicle rate is 2.4 parishioners per vehicle.

- 33. Provide a proposed tally of parking utilization by location per lot on the east and west side of Arlington Heights Road. If a shortfall, where is overflow parking to be placed? Sensitivity to on street parking is being expressed to the Village so dependence upon using on street parking may not be assured.**

The existing peak parking demand of the church is 347 parking spaces. As stated in the traffic impact study, the projected parking demand for the proposed expansion based on the Village of Arlington Heights Code is 47 parking spaces. This results in a total projected parking demand of 394 parking spaces. As proposed the church will provide a total of 335 off-street parking spaces resulting in a deficit of 59 parking spaces. This overflow parking will be accommodated by the on-street parking available along Frederick Street and Pine Avenue which experiences 35 to 45 on-street parked vehicles under existing conditions. It should be noted that the main purpose of the church expansion is to enhance the handicap accessibility of the existing church so that all services can be held in the expanded church building. This will help distribute the number of attendees per service and limit the high attendance of a single church service.

34. **The values provided for existing traffic volumes in figures 4A & 4B are confusing when compared with the 2023 projected volumes in figures 8A & 8B. No changes are shown for Sunday even though the services have shifted to the west side of the street, and all the numbers for the School day are the same into and out of the site. Projected through street volume growth as well as site growth need to be properly reflected.**

All of the proposed expansion generated traffic was assigned to the east parking lot as shown in Figures 7A and 7B. The existing church generated traffic was not reassigned as vehicles will continue to use the parking lot on the west side of the campus during church services. The existing traffic volumes during School days are the same as the proposed church expansion will not impact the operations of a typical school day. As indicated in the traffic impact study, the existing traffic volumes were increased by a regional growth factor of three percent based on information provided by the Chicago Metropolitan Agency for Planning (CMAP) and this growth factor was applied to all movements except for the turning movement to/from the church campus access drives.

Planning & Community Development Department Review – Addendum to Review Round 1 Comments

29. **In our July 21st letter, we asked St. James Parish to evaluate the need for parking along Arlington Heights Road and that the parking provided there presented safety issues. Please provide a response addressing the need for parking along Arlington Heights Road. Staff's position is that this parking should be eliminated if viable, and notes that the parking study indicates a peak parking demand to be 359, and a total of 355 parking spaces are to be provided between the East and West campuses. Based on this analysis, it appears that parking along Arlington Heights Road is not necessary.**

Per request from the Village of Arlington Heights, on-street parking on the east and west sides of Arlington Heights Road will be eliminated.

30. **The location of the right-in/right-out along Arlington Heights Rd. will need to be further evaluated. When the addition was constructed and traffic signal placed at the exit drive to the West campus during the 2007 building addition, it was discussed that any future improvements to the East Campus would utilize/incorporate the traffic signal on Arlington Heights Rd. for ingress and egress. The proposed plan does not incorporate use of this traffic signal, and this will need further analysis based on discussions with IDOT. Please provide an update on all communications with IDOT, and continue to keep us apprised on future communications with IDOT. Additional consideration will need to be given to the most appropriate place for ingress/egress onto Arlington Heights Road.**

The provision of the proposed driveway aligned opposite of the existing traffic signal is prohibitive for St. James due to the cost, due to the limitation of land available for St. James to provide a right lane turn and that the configuration would not have worked with the buildings themselves.

31. **Further analysis is needed on the traffic impact to Pine Ave. Cars exiting the site and needing to go southbound on Arlington Heights Rd (in the absence of utilizing the traffic signal on Arlington Heights Rd. to provide southbound access) will cause an increase in traffic along Pine Avenue. Please address this situation within the traffic study.**

The traffic impact study evaluates the adequacy of the intersections of Pine Avenue between Frederick Street and Hawthorne Street. The analysis took into consideration the existing traffic volumes increased by the regional growth factor and the addition of the expansion generated traffic assigned based on the directional distribution.

October 31, 2017

City of Arlington Heights
Attn: Sam Hubbard
33 S. Arlington Heights Road
Arlington Heights, IL 60005

RECEIVED
NOV 06 2017
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Re: St. James PUD
831 N. Arlington Heights Road
Arlington Heights, Illinois

Mr. Hubbard:

We have received your review comments dated October 19, 2017 for the St. James PUD located at 433 S. Arlington Heights Road in Arlington Heights, Illinois. Below is a summary of the actions taken in response to these comments.

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: Noted.

12. Since a subdivision is being proposed the plans must meet all subdivision requirements. An Engineers estimate of construction cost for full site improvements is required to complete the calculation for plan review, inspection, and other fees. There are no required public improvements to this site. The estimate should be submitted at least three weeks prior to the final Plan Commission meeting to allow us time to generate the fee letter and for the petitioner to assemble the proper documents.

Response: An Engineers Estimate of Construction Costs will be provided under a separate cover at a separate date.

13. 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 Basting: 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 noted. The coordinate system will be discussed with the surveyor.

14. The Final Plat of Subdivision must be reviewed and approved by the Engineering Department prior to final Plan Commission approval. The original signed mylar Final Plat of Subdivision, containing all non-Village signatures, shall be submitted one week before the scheduled date of the final Plan Commission meeting. Village Code Section 29-209 also requires a digital copy of the plat to be provided on disk to the Village. The petitioner shall acknowledge that they accept this understanding.

Response: Noted.

15. The proposed detention facilities will be a private system 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.

Response: An Onsite Utility Maintenance Agreement will be discussed with the property owner.

16. The Village requires stormwater detention based on the entire subdivision area. Provide calculations for the entire subdivision area. Show areas of un-detained offsite flow. The proposed basin includes the required 1- foot freeboard with an overflow weir at the 6" line. Provide calculations showing the volume of the surface basin. Show the volume to the HWL=692.60 and also show the volume to the weir elevation of 693.10.

Response: Stormwater detention has been provided for the entire subdivision area. See the attached MWRD Watershed Management Report for all calculations. The proposed dry-bottom detention basin provides 2.05' of freeboard with an overflow weir at the 1.28' line which provides more freeboard than required. Stage storage calculations are included in the attached report.

17. Show that the detention storage system located under pavement is designed to AASHTO HS-25 loading standard.

Response: Final plans for the underground detention system will be provided under a separate cover.

18. When on-site lighting is proposed, provide a site photometric lighting diagram indicating lighting intensities. Also provide the associated catalog cuts for all roadway, parking lot, and building mounted luminaires. All fixtures must be flat bottom, sharp cut-off, and no wall pack style fixtures will be permitted. Please provide the light fixture catalog cuts for lights over building entrance service doors

Response: Site lighting plans will be submitted under a separate cover.

19. The exhibit showing the turning path of the Fire Department's responding vehicle appears acceptable. However, provide additional exhibits showing the vehicle entering the RIRO drive from the south, then turning toward the new building entrance and also looping through the parking area north of the church. Exhibits must show front and rear wheel paths and the extent of the front and rear overhangs, as provided in an "Autoturn" exhibit. The vehicle shall be shown maneuvering through the site in all possible directions of travel.

Response: The updated Fire Truck Routing Exhibit includes the requested movements. The front and rear wheel paths are shown (dotted and dashed lines) as well as the truck overhangs (solid lines). The fire truck can access and circulate the site in the event of a fire.

20. Fire lanes adjacent to buildings must have a minimum pavement width as directed by the Fire Department to accommodate the tower truck's outriggers. Fire lanes require a heavy duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-114" N-50 Binder, 5" N-30 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron and/or public sidewalk to be 8" thick unreinforced concrete. Heavy duty pavement required only where parking lot is being constructed/reconstructed. Does not apply to areas where parking lot is being milled and resurfaced. The reconstructed sections of the north-south drive aisle east of the church must be heavy duty pavement.

Response: The heavy duty asphalt pavement section has been revised to meet the required materials and thicknesses. The concrete sidewalk detail has been revised to specify an 8" thickness in the driveway aprons and public sidewalks. See Sheet 7.0.

21. Public sidewalks to run through the driveways. Curb shall not run through the sidewalk. ADA panels required at all driveways with stop control.

Response: The plans have been revised to show the public sidewalk sections being carried through the driveways. Curbs will not be constructed through the public sidewalks. ADA panels will be installed at all drives with stop control. See Sheet C3.0.

22. Curb along west side of Pine Street shall be depressed running through the driveways. The curb returns for the Pine Avenue driveways should be reduced from 30' radii to 15' radii

Response: Depressed curb and gutters have been added along the Pine Street drives. The curb returns have been reduced to 15'. See Sheet C3.0.

23. The parking aisle along the north property line should be pulled back to allow a planting area and eliminate vehicles overhanging the public sidewalk. There appears to be extra width to the east-west drive aisles that can be reduced to accommodate this requirement.

Response: The parking aisle along the northern property line has been reduced in width to provide a 4' landscape strip. See Sheet 3.0.

24. Parking aisles adjacent to curbs can be 16.5' deep to the face of curb, but must be 18' deep with wheel stops if there is sidewalk adjacent to the curb.

Response: All sidewalks adjacent to parking stalls have been widened to 6.5' width. This allows a 5' wide sidewalk width if a parked car has a 1.5' overhang. See sheet C3.0.

25. The north-south drive aisle east of the building should be 24' wide per Code.

Response: The north-south drive aisle width has not been increased to 24' as a variance is being requested for the reduced width.

26. Is the proposed water service replacing the existing water service line? Only one service line is allowed. Show the existing water service line being retired at the main.

Response: Water services to the church will be replaced as part of the site improvements. Notes have been added to Sheet C2.0 for the contractor to abandon the existing service lines at the Village main.

27. Is the proposed sanitary sewer service replacing the existing sanitary service line? Only one service line is allowed. Show the existing sanitary sewer service line being retired at the main.

Response: Sanitary services to the church will be replaced as part of the site improvements. Notes have been added to Sheet C2.0 for the contractor to abandon the existing service lines at the Village main.



We have revised the plans per your comments. Please find enclosed the following for your review.

1. Final Engineering Plans
2. Watershed Management Report
3. Fire Truck Routing Exhibit

Should you have any questions concerning the submittal or draft documents, please do not hesitate to contact me at 630-487-5560. Please provide comments at your earliest convenience.

Regards,

A handwritten signature in blue ink that reads "Eric Tracy".

Eric Tracy
Kimley-Horn and Associates, Inc.
Ph: (630) 487-5560
eric.tracy@kimley-horn.com



November 7, 2017

City of Arlington Heights
Attn: Sam Hubbard
33 S. Arlington Heights Road
Arlington Heights, IL 60005

Re: St. James PUD
831 N. Arlington Heights Road
Arlington Heights, Illinois

Mr. Hubbard:

We have received your review comments dated October 19, 2017 for the St. James PUD located at 433 S. Arlington Heights Road in Arlington Heights, Illinois. Below is a summary of the actions taken in response to these comments.

7. The newly created lot is a "double frontage" lot, and Per Section 29-307(f) of Chapter 29, double frontage lots "shall not have vehicular access from an abutting arterial street". Since access is proposed onto Arlington Heights Rd., a variation is required. Staff is supportive of this variation provided that all IDOT standards are met and approvals are obtained.

Response: Comment noted.

8. Section 29-308 of Chapter 29 requires that all building setback lines be shown on the Plat of Survey. Please add the following building setback lines:

- a) Front Yard Setback Line (north): 25'
- b) Rear Yard Setback Line (south): 30'
- c) Exterior Side Yard Setback Line (both east and west): 26.4'

Response: The setback lines have been added to the Plat.

9. Section 29-309 of Chapter 29 requires that all rear lot lines include a 5' easement for utilities. Please provide the code required easement along the rear property line (south).

Response: The easement has been added to the drawing. Please provide any necessary easement provisions.

10. The Plat of Subdivision does not include any signature blocks of any of the public utility companies. Please confirm with the Eng. Dept. as to whether these signature blocks are required.

Response: A general signature block for public utility companies has been added.

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: Noted.

12. Since a subdivision is being proposed the plans must meet all subdivision requirements. An Engineers estimate of construction cost for full site improvements is required to complete the calculation for plan review, inspection, and other fees. There are no required public improvements to this site. The estimate should be submitted at least three weeks prior to the final Plan Commission meeting to allow us time to generate the fee letter and for the petitioner to assemble the proper documents.

Response: An Engineers Estimate of Construction Costs will be provided under a separate cover at a separate date.

13. 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 Basting: 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 noted. The coordinate system will be discussed with the surveyor.

14. The Final Plat of Subdivision must be reviewed and approved by the Engineering Department prior to final Plan Commission approval. The original signed mylar Final Plat of Subdivision, containing all non-Village signatures, shall be submitted one week before the scheduled date of the final Plan Commission meeting. Village Code Section 29-209 also requires a digital copy of the plat to be provided on disk to the Village. The petitioner shall acknowledge that they accept this understanding.

Response: Noted.

15. The proposed detention facilities will be a private system 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.

Response: An Onsite Utility Maintenance Agreement will be discussed with the property owner.

16. The Village requires stormwater detention based on the entire subdivision area. Provide calculations for the entire subdivision area. Show areas of un-detained offsite flow. The proposed basin includes the required 1- foot freeboard with an overflow weir at the 6" line. Provide calculations showing the volume of the surface basin. Show the volume to the HWL=692.60 and also show the volume to the weir elevation of 693.10.

Response: Stormwater detention has been provided for the entire subdivision area. See the attached MWRD Watershed Management Report for all calculations. The proposed dry-bottom

detention basin provides 2.05' of freeboard with an overflow weir at the 1.28' line which provides more freeboard than required. Stage storage calculations are included in the attached report.

17. Show that the detention storage system located under pavement is designed to AASHTO HS-25 loading standard.

Response: Final plans for the underground detention system will be provided under a separate cover.

18. When on-site lighting is proposed, provide a site photometric lighting diagram indicating lighting intensities. Also provide the associated catalog cuts for all roadway, parking lot, and building mounted luminaires. All fixtures must be flat bottom, sharp cut-off, and no wall pack style fixtures will be permitted. Please provide the light fixture catalog cuts for lights over building entrance service doors

Response: Site lighting plans will be submitted under a separate cover.

19. The exhibit showing the turning path of the Fire Department's responding vehicle appears acceptable. However, provide additional exhibits showing the vehicle entering the RIRO drive from the south, then turning toward the new building entrance and also looping through the parking area north of the church. Exhibits must show front and rear wheel paths and the extent of the front and rear overhangs, as provided in an "Autoturn" exhibit. The vehicle shall be shown maneuvering through the site in all possible directions of travel.

Response: The updated Fire Truck Routing Exhibit includes the requested movements. The front and rear wheel paths are shown (dotted and dashed lines) as well as the truck overhangs (solid lines). The fire truck can access and circulate the site in the event of a fire.

20. Fire lanes adjacent to buildings must have a minimum pavement width as directed by the Fire Department to accommodate the tower truck's outriggers. Fire lanes require a heavy duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-114" N-50 Binder, 5" N-30 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron and/or public sidewalk to be 8" thick unreinforced concrete. Heavy duty pavement required only where parking lot is being constructed/reconstructed. Does not apply to areas where parking lot is being milled and resurfaced. The reconstructed sections of the north-south drive aisle east of the church must be heavy duty pavement.

Response: The heavy duty asphalt pavement section has been revised to meet the required materials and thicknesses. The concrete sidewalk detail has been revised to specify an 8" thickness in the driveway aprons and public sidewalks. See Sheet 7.0.

21. Public sidewalks to run through the driveways. Curb shall not run through the sidewalk. ADA panels required at all driveways with stop control.

Response: The plans have been revised to show the public sidewalk sections being carried through the driveways. Curbs will not be constructed through the public sidewalks. ADA panels will be installed at all drives with stop control. See Sheet C3.0.

22. Curb along west side of Pine Street shall be depressed running through the driveways. The curb returns for the Pine Avenue driveways should be reduced from 30' radii to 15' radii

Response: Depressed curb and gutters have been added along the Pine Street drives. The curb returns have been reduced to 15'. See Sheet C3.0.

23. The parking aisle along the north property line should be pulled back to allow a planting area and eliminate vehicles overhanging the public sidewalk. There appears to be extra width to the east-west drive aisles that can be reduced to accommodate this requirement.

Response: The parking aisle along the northern property line has been reduced in width to provide a 4' landscape strip. See Sheet 3.0.

24. Parking aisles adjacent to curbs can be 16.5' deep to the face of curb, but must be 18' deep with wheel stops if there is sidewalk adjacent to the curb.

Response: All sidewalks adjacent to parking stalls have been widened to 6.5' width. This allows a 5' wide sidewalk width if a parked car has a 1.5' overhang. See sheet C3.0.

25. The north-south drive aisle east of the building should be 24' wide per Code.

Response: The north-south drive aisle width has not been increased to 24' as a variance is being requested for the reduced width.

26. Is the proposed water service replacing the existing water service line? Only one service line is allowed. Show the existing water service line being retired at the main.

Response: Water services to the church will be replaced as part of the site improvements. Notes have been added to Sheet C2.0 for the contractor to abandon the existing service lines at the Village main.

27. Is the proposed sanitary sewer service replacing the existing sanitary service line? Only one service line is allowed. Show the existing sanitary sewer service line being retired at the main.

Response: Sanitary services to the church will be replaced as part of the site improvements. Notes have been added to Sheet C2.0 for the contractor to abandon the existing service lines at the Village main.

35. There was no preliminary plat provided, only a Final Plat of Subdivision. The plat was reviewed against the attached Final Plat of Subdivision Checklist. Items a, b, d, e, f, g, i, j, k, l, o, p, q, r, s, t, & u are complete. Include utility signature blocks. Leave room for the ComEd easement provisions

c. Show all survey monuments, markers and bench marks.

Response: We add the monuments that will be set in the field.

h. The public sidewalk along Arlington Heights Road encroaches over the private property line. Provide a public sidewalk easement and include easement provisions.

Response: A 5 ft. sidewalk easement was added over the areas with the encroachment. Please provide easement provisions if necessary.

m. Show the building setback lines.

Response: The building setback lines have been added.

n. Provide the deed of dedication substantially as shown on the checklist.

Response: The deed of dedication seems to be mostly applicable to multi lot subdivisions where there are road dedications and open space. It does not seem to be applicable to a one lot subdivision with no road dedications.



We have revised the plans per your comments. Please find enclosed the following for your review.

1. Final Engineering Plans
2. Watershed Management Report
3. Fire Truck Routing Exhibit
4. Plat of Subdivision

Should you have any questions concerning the submittal or draft documents, please do not hesitate to contact me at 630-487-5560. Please provide comments at your earliest convenience.

Regards,

A handwritten signature in blue ink that reads "Eric Tracy".

Eric Tracy
Kimley-Horn and Associates, Inc.
Ph: (630) 487-5560
eric.tracy@kimley-horn.com



Village of Arlington Heights Building & Life Safety Department

Interoffice Memorandum

To: Sam Hubbard, Development Planner, Planning and Community Development

From: Deb Pierce, Plan Reviewer, Building & Life Safety Department

Subject: 831 N Arlington Heights Rd – St James Parish – PUD, Special Use Permit Amendment, Preliminary/Final Plat of Subdivision, Comp Plan Amendment, and Parking Variation

PC#: 17-012 - Round 2

Date: November 13, 2017

Sam:

I have reviewed the documents for the project indicated above and have no additional comments.

RECEIVED
NOV 14 2017
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT



**Village of Arlington Heights, IL
Building & Life Safety Department**

Fire Safety Division



Date: 11/7/2017

P.C. Number: 17-012 Round: 2

Project Name: St. James Parish

Project Location: 820 N Arlington Heights Rd.

Planning Department Contact: Sam Hubbard, Planning and Community Development

The information provided is conceptual only and subject to a formal plan review.

1. No additional comments.

Date 11-7-17

Reviewed By: 

Fire Safety Supervisor

RECEIVED

NOV 08 2017

**PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT**

Memorandum

To: Sam Hubbard, Planning and Community Development
From: Cris Papierniak, Assistant Director of Public Works
Date: November 10, 2017
Subject: 831 N Arlington Heights Road – PC #17-012 Round 2



With regard to the proposed utility installation at 831 N Arlington Heights Road, I have the following comments:

1. Contact and coordinate the relocations of both hydrants with the public Works Distribution Unit at 847-368-5800.
2. If a private hydrant is going to be installed (W2), a master meter vault with meter must be installed after (W1).

C. file

RECEIVED
NOV 13 2017
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

PLAN COMMISSION PC #17-012
St. James Parish Subdivision
820 N. Arlington Heights Road
PUD, SU Amnd, Pre/Final Plat of Subdivision, Parking Variation
Round 2

36. The response by the petitioner to comments #11, 13-16, 18, 20-25 & 35 are acceptable.
37. The response made by the petitioner to comments #12 & #17 must be addressed prior to final approval of the subdivision.
38. The response made by the petitioner to comments #19 & #25 may need to be modified if an aisle width variance is granted due to the potential conflict with the fire truck turning "Autoturn" exhibit.
39. The response made by the petitioner to comments #26 & #27 should be shown on the demolition plan.
40. The response provided by the petitioner to Comment #28 is not acceptable. Please provide preliminary cost estimates and alignment that were utilized by KLOA to determine prohibitive costs and limitation of land available to St. James.
41. The response provided by the petitioner to Comment #29 is acceptable.
42. The response provided by the petitioner to Comment #30 is not acceptable. No formal feedback about how feasible parking lot reconfiguration could achieve more on-site parking has been provided.
43. The response provided by the petitioner to Comment #31 is acceptable.
44. The response provided by the petitioner to Comment #32 is acceptable.
45. The response provided by the petitioner to Comment #33 is not acceptable. While the existing parking demand of 394 stalls was identified, there currently is significant violation of parking randomly on the properties, (especially at the parish center, of cars parked along drive aisles, blocking other cars in), and also no discussion for the peak holiday periods was provided. When the last analysis of the parking lot was provided the escalation of parking for holiday services was stated to be 15% higher. The presumption of diluting the parking shortfall onto the adjacent neighborhood streets is not a condition to be counted upon since neighbors are currently complaining to the Village about this situation. Identify an exhibit showing potential parking areas, (curb space adjacent to the actual church property along the west side of Pine between Fredrick and Marshall, and south side of Fredrick between Arlington Heights Road and Pine Street). Alternatives for parking overflow has to be provided that do not impinge upon neighborhood streets. Please clearly identify the precise variation being requested based upon the calculation of parking required by code, versus the actual provided.

46. The response provided by the petitioner to Comment #34 is not acceptable. Based upon the proposed parking for peak services, the east lot has a capacity of 186 parking stalls, the west lot has a parking capacity of 149. Based upon this distribution, and trip generation values, please properly identify in/out traffic generated to and from the site. To not reassign the existing church traffic, stating that these vehicles will continue to park on the west side of the street is not understood, when all church services are going to be on the east side of the street. The statement that the existing school day projections are the same discounts the 3% trip generation of traffic you stated for the design year, and the projections for School enrollment increases/decreases which may be able to be cited. So the basis of the church driveway access drives projections will include increases based upon additional congregation seating area, but the regional growth factor is being omitted is not clear.
47. The 22 foot drive aisle asked for along the east side of the church should be widened to the code required 24 foot north of the N.E. corner of the new church building.
48. The cost for any modification, relocation, or removal of the existing traffic signal along Arlington Heights Road is the responsibility of the parish to manage. Since this is a private benefit signal all electrical energy and maintenance costs should be billed to the church.

 11/20/17

James J. Massarelli, P.E.
Director of Engineering

Date



Arlington Heights Fire Department Plan Review Sheet

P. C. Number PC#17-012

Project Name

St. James Parish

Project Location

820 N. Arlington Heights Road

Planning Department Contact Sam Hubbard

General Comments

Round 2 Comments:

The Fire Department has no additional comments at this time.

**NOTE: PLAN IS CONCEPTUAL ONLY
SUBJECT TO DETAILED PLAN REVIEW**

Date November 14, 2017

Reviewed By: _____

LT. Mark Aleckson

Arlington Heights Fire Department

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

DEPARTMENT PLAN REVIEW SUMMARY

St. James' Church – 831 N. Arlington Heights Road

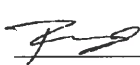
PUD, Parking Variation

PC#17-012

Round 2 Review Comments

11/13/2017

1. **Character of use:**
Nothing Further.
2. **Are lighting requirements adequate?**
Nothing Further.
3. **Present traffic problems?**
Nothing Further.
4. **Traffic accidents at particular location?**
Nothing Further.
5. **Traffic problems that may be created by the development.**
Nothing Further.
6. **General comments:**
Nothing Further.

 #272

Brandi Romag, Crime Prevention Officer
Community Services Bureau

RECEIVED
NOV 14 2017
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT



**Village of Arlington Heights
Health & Human Services Department**

Memorandum

To: Sam Hubbard, Development Planner

From: Sean Freres, Environmental Health Officer

Date: November 13, 2017

Re: PC# 17-0012. St. James Parish SUP Amendment, Round 2

-
- See the attached accessibility comments.

RECEIVED
NOV 14 2017
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Plan Review

Address: St. James Parish
831 N. Arlington Heights Road
PUD, Special Use Permit Amendment, Preliminary/Final Plat
of Subdivision, Comp Plan Amendment, Parking Variation

PC # 17-0012 Round 2

Submitted to: Sam Hubbard, Planning & Community Development

Submitted by: David Robb, Disability Services Coordinator
Health & Human Services
(847) 368-5793



Date: November 13, 2017

Re: Illinois Accessibility Code (IAC), Effective April 1997
<https://www.illinois.gov/cdb/business/codes/Pages/IllinoisAccessibilityCode.aspx>

1. On each level without an exit discharge at grade identify the required Areas of Rescue Assistance per IAC Section 400.310(b)(5).

RECEIVED
NOV 14 2017
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Planning & Community Development Dept. Review

November 16, 2017



REVIEW ROUND 2

Project: 2525 N. Arlington Heights Rd.
St. James Parish

Case Number: PC 17-010

Previous Comments:

32. The responses to comments #11-24, #26, #27, #29, and #31 are acceptable.
33. The response to #7 is noted. Based on a re-evaluation of the approvals, which will incorporate both the East and West campuses, the required zoning actions have been adjusted as follows:
 - a) Amendment to Special Use Ordinance #07-012 to allow an addition to the Church building and modifications to the parking area on the east campus.
 - b) Amendment to the Comprehensive Plan to change the land use classification from Single-Family Detached to Institutional for the properties located at 811 N. Arlington Heights Road and 810 N. Pine Avenue.
 - c) Planned Unit Development encompassing both the east and west campuses to allow multiple buildings on one zoning lot.
 - d) Preliminary Plat of Subdivision to consolidate all of the east campus into one lot.
 - e) A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 974 to 337.
 - f) A variation from Chapter 29, Section 29-307(f), to allow a double frontage lot with vehicular access from an abutting arterial street.
 - g) A variation from Chapter 28, Section 11.2-8, to allow a reduction in the required width of a parking row from 24' to 22'.
34. The responses to #8 and #9 are noted. Since Final Plat of Subdivision approval will be sought at a future date, the items as outlined in #8 and #9 will not be required at this time.
35. The response to #10 is not acceptable and additional details are needed on the construction activities. Please outline what construction activities will take place and when these activities will start and finish (e.g. demolition of school building, parking lot work, construction of church addition, etc.). Additionally, preliminary construction staging information is required as part of the PUD process. Provide a preliminary outline of parishioner parking will take place during construction including what parking spaces will be lost during construction activities. Additionally, please provide preliminary information on the location of construction personnel parking, location of construction access/entrances, and information on street/lane closures.
36. The response to #25 is noted. No activities will take place in the West Campus during mass.
37. The response to #28 is noted. While it is understood that ultimately parishioners will park where they choose, the Church should develop and implement a strategy that encourages parishioners to utilize the parking area first before looking for parking on the street. Please propose how the church will do this. Additionally, please note that if the west campus parking lot is underutilized during mass and worship times, and if parking on adjacent residential streets is over utilized, additional restrictions on residential street parking may be imposed by the Village.

38. The response to #30 is noted. Has the church and/or traffic consultant reached out to IDOT to gauge their preliminary opinion as to whether the alignment of the east campus driveway with the signal on Arlington Heights Road will be necessary for the signal to remain? Please verify this with IDOT and copy the Village on all correspondence.

Additional Comments:

39. Please verify the accuracy of all information in the attached parking table. Additionally, please verify the following information:

- a) The school has 53 employees.
- b) The school has 33 classrooms.
- c) The size of all office areas in the school is 6,162 sq. ft.
- d) The size of all multi-purpose rooms in the school is 25,641 sq. ft.
- e) The rectory includes a 3-car garage.
- f) The east campus includes 185 exterior parking spaces (the KLOA study lists 186 parking spaces on the east campus).

Subdivision Comments:

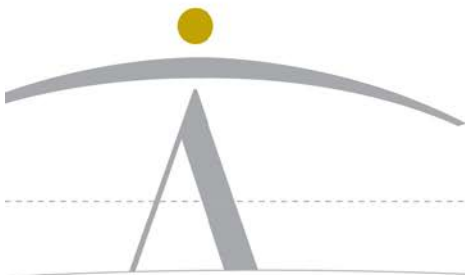
40. The responses to subdivision comments #7-10 are acceptable.

41. Please revise the subdivision plat to read "Preliminary" and not "Final".

Prepared by: 

Saint James Parish
PC 17-012
831 N. Arlington Heights Road
November 16, 2017

- 1) Per Chapter 28, Section 6.15-1.2a, a three foot high screen must be provided in order to screen the parking/paved areas that are adjacent to the public way. In the northwest corner of the parking area, please extend the screen to the north along Arlington Heights road in order to screen the parking /drive aisle.
- 2) The ends of all parking rows must include a landscape island equal in area to one parking space, protected by durable materials, which contains a 4" caliper shade tree. (Chapter 28, section 6.15-1.2b). Provide an island and incorporate the code required shade tree at the ends of the parking row in the northeast corner or request a variation.
- 3) Code requires a six foot tall screen along the entire length of the southern property line. In order to meet this requirement, please provide a six foot high solid fence along the southern property boundary. However, in the areas where this fence would be adjacent to the front yard of the residential homes to the south, please install a landscape screen instead of the fence in order to complete the code required screen for the entire length of the southern property line. In addition, please substitute the proposed Chokeberry around the detention area with Arborvitae, and the proposed Serviceberry with evergreen trees.



newman architecture

1730 Park Street, Suite 115
Naperville, Illinois 60563-2621
T 630.420.1600 F 630.420.1987
newmanarchitecture.com

November 30, 2017

Mr. Sam Hubbard
Village of Arlington Heights
Building and Life Safety Department
33 S. Arlington Heights Road
Arlington Heights, IL 60005

Re: St. James Catholic Church
831 N. Arlington Heights Road
Arlington Heights, IL 60004
PC#: 17-012 - ROUND 2

Response to ROUND 2 PLAN REVIEW COMMENTS received November 21, 2017.

GENERAL BUILDING AND LIFE SAFETY COMMENTS - ROUND 2

Reviewed By: Deb Pierce on 11/13/2017

1. Per Reviewer - No additional comments required.
Response: Thank you.

FIRE SAFETY DIVISION - ROUND 2

Reviewed On 11/7/2017

1. Per Fire Safety Supervisor, no additional comments required.
Response: Thank you.

UTILITY INSTALLATION COMMENTS - ROUND 2

Comments by Cris Papierniak on 11/10/2017

1. Contact and coordinate the relocations of both hydrants with the Public Works Distribution Unit at 847-368-5800.
Response: A note has been added to Drawing C6.0 to contact Public Works for hydrant relocation.
2. If a private hydrant is going to be installed (W2), a master meter vault with meter must be installed after (W1).
Response: After discussion with Public Works, the fire hydrant will be relocated to the Pine Avenue Right of Way. It was noted that Public Works would maintain this hydrant. This has been revised on Drawing C6.0.

PUD, SU AMEND, PRE/FINAL PLAT OF SUBDIVISION, PARKING VARIATION - ROUND 2

Reviewed By James Massarelli, P.E. On 11/20/2017

36. The responses by the petitioner to comments #11, 13-16, 18, 20-25 and 35 are acceptable.

Response: Thank you.

37. The response made by the petitioner to comments #12 and #17 must be addressed prior to final approval of subdivision.

Response: Understood.

38. The response made by the petitioner to comments #19 & #25 may need to be modified if an aisle width variance is granted due to the potential conflict with the fire truck turning "Autoturn" exhibit.

Response: The updated "Autoturn" exhibit submitted with Engineering Review Comments November 1, was modeled with the 22' wide drive aisle.

39. The response made by the petitioner to comments #26 & #27 should be shown on the demolition plan.

Response: We have added notes to the Demolition Plan indicating that the sewer and water connections are to be abandoned at the main. The approximate locations of the sanitary and water services are also shown.

40. The response provided by the petitioner to comment #28 is not acceptable. Please provide preliminary cost estimates and alignment that were utilized by KLOA to determine prohibitive costs and limitation of land available to St. James.

Response: The Newman Architecture response is similar; see the following: Early in the design process, the utilization / modification of the existing traffic signal was considered. However, based on past experiences with similar situations, our Civil Engineer believed the necessary modifications would be a significant expense to the Parish. As an example, we believe just the reconstruction of the signal poles and signal heads to meet current IDOT standards is a minimum of \$250,000. In recent days, the Parish has had conversations with IDOT representatives, and in concept, they are favorable with the right-in / right-out access. At the time, a detailed estimate was not pursued; the values were based on recent, past experiences. Alignment is NOT desired by the Parish due to the probable impact of excessive costs, and as noted previously, IDOT has had no objections to the proposed right-in/right-out.

41. The response provided by petitioner to comment #29 is acceptable.

Response: Thank you.

42. The response provided by the petitioner to Comment #30 is not acceptable. No formal feedback about how feasible parking lot reconfiguration could achieve more on-site parking has been provided.

Response: Please refer to the attached alternate layout sketch for the south parking lot. This east / west parking orientation does not yield additional parking spaces. In our opinion this design / configuration is not as desirable, since pedestrians would be crossing "through" the parking rows.

43. The response provided by the petitioner to comment #31 is acceptable.

Response: Thank you.

44. The response provided by the petitioner to comment #32 is acceptable.

Response: Thank you.

45. The response provided by the petitioner to comment #33 is not acceptable. While the existing parking demand of 394 stalls was identified, there currently is significant violation of parking randomly on the properties, (especially at the parish center, or cars parked along drive aisles, blocking other cars in) and also no discussion for the peak holiday periods was provided. When the last analysis of the parking lot was provided the escalation of parking for holiday services was stated to be 15% higher. The presumption of diluting the parking shortfall onto the adjacent neighborhood streets is not a condition to be counted upon since neighbors are currently complaining to the Village about this situation. Identify an exhibit showing potential parking areas, (curb space adjacent to the actual church property along the west side of Pine between Fredrick and Marshall, and south side of Fredrick between Arlington Heights Road and Pine Street). Alternatives for parking overflow has to be provided that do not impinge upon neighborhood streets. Please clearly identify the precise variation being requested based upon the calculation of parking required by code, versus the actual provided.

Response: As shown in the revised traffic impact study, the projected parking demand of 406 vehicles includes those vehicles parked within drive aisles and other unmarked parking stalls. As proposed there will be a total of 334 on-site parking spaces. Furthermore, the south side of Frederick Street between Arlington Heights Road and Pine Avenue can accommodate five on-street parking spaces and the west side of Pine Avenue along the St. James frontage can accommodate approximately 20 on-street parking spaces. Additionally, on-street parking on the west side of Arlington Heights Road will be maintained on Sundays providing approximately 35 parking spaces. This results in a total of 394 total parking spaces. With a projected parking demand of 406 parking spaces on a typical Sunday, a deficit of approximately 12 spaces will result which can be accommodated by the available parking spaces on the west side of Pine Avenue south of the church.

Assuming a 15 percent higher parking demand on holidays, the projected parking demand increases to 467 spaces resulting in a parking deficit of 73 parking spaces. However, this parking demand is only projected to occur twice per year and this projected parking demand is conservative as it does not take into consideration the increase in vehicle occupancy that occurs on holidays.

46. The response provided by the petitioner to Comment #34 is not acceptable. Based upon the proposed parking for peak services, the east lot has a capacity of 186 parking stalls, the west lot has a parking capacity of 149. Based upon this distribution, and trip generation values, please properly identify in/out traffic generated to and from the site. To not reassign the existing church traffic, stating that these vehicles will continue to park on the west side of the street is not understood, when all church services are going to be on the east side of the street. The statement that the existing school day projections are the same discounts the 3% trip generation of traffic you stated for the design year, and the projections for School enrollment increases/decreases which may be able to be cited. So the basis of the church driveway access drives projections will include increases based upon additional congregation seating area, but the regional growth factor is being omitted is not clear.

Response: The traffic impact study has been revised to account for the reassignment of traffic from the west campus to the east campus. The existing site generated traffic volumes on a typical Sunday were combined with the traffic projected to be generated by the proposed expansion and the total church generated traffic was reassigned to the roadway network. As proposed, the expansion to the parish will not result in changes in school enrollment or pick-up/drop-off operations. The three percent background growth assumed in the study is an ambient growth factor that was applied to the non-school/non-parish traffic volumes.

47. The 22-foot drive aisle asked for along the east side of the church should be widened to the code required 24-foot north of the N.E. corner of the new church building.

Response: The variations included in the Round 2 Planning Comments, it notes the reduction in the aisleway. To maintain a minimal landscape area adjacent to the building, we would request that the variation of the reduction in the lane width to remain. As noted, the fire truck turning radius submitted was based on the 22' roadway width.

48. The cost for any modification, relocation, or removal of the existing traffic signal along Arlington Heights Road is the responsibility of the Parish to manage. Since this is a private benefit signal all electrical energy and maintenance costs should be billed to the church.

Response: It is not intended that any modifications will be made to the existing traffic signal as part of this Project. Included is a copy of the original IDOT Permit from 2006 where it is noted that this light is the responsibility of the Village to maintain.

FIRE DEPARTMENT REVIEW - ROUND 2

Reviewed By: Lt. Mark Aleckson on 11/14/2017

1. PER REVIEWER, NO ADDITIONAL COMMENTS REQUIRED.

Response: Thank you.

COMMUNITY SERVICE REVIEW - ROUND 2

Reviewed By: Brandi Romag on 11/13/2017

1. Per reviewer, no additional comments required.

Response: Thank you.

ACCESSIBILITY REVIEW - ROUND 2

Reviewed By: David Robb ON 11/13/2017

1. On each level without an exit discharge at grade, identify the required Areas of Rescue Assistance per IAC Section 400.310(b)(5).

Response: Please refer to the updated floor plans identifying the areas of rescue assistance.

PLANNING AND COMMUNITY DEVELOPMENT REVIEW - ROUND 2

Reviewed by: Sam Hubbard on 11/16/2017

32. The responses to comments #11-24, #26, #27, #29 and #31 are acceptable.

Response: Thank you.

33. The response to #7 is noted. Based on a re-evaluation of the approvals, which will incorporate both the East and West campuses, the required zoning actions have been adjusted as follows:

- a) Amendment to Special Use Ordinance #07-012 to allow an addition to the Church building and modifications to the parking area on the east campus.
- b) Amendment to the Comprehensive Plan to change the land use classification from Single-Family Detached to Institutional for the properties located at 811 N. Arlington Heights Road and 810 N. Pine Avenue.
- c) Planned Unit Development encompassing both the east and west campuses to allow multiple buildings on one zoning lot.
- d) Preliminary Plat of Subdivision to consolidate all of the east campus into one lot.

- e) A variation from Chapter 28, Section 11.4, Schedule of Required Parking, to allow a reduction to the minimum number of required parking stalls from 974 to 337.
- f) A variation from Chapter 29, Section 29-307(f), to allow a double frontage lot with vehicular access from an abutting arterial street.
- g) A variation from Chapter 28, Section 11.2-8, to allow a reduction in the required width of a parking row from 24' to 22'.

Response: We would like to discuss Item "e" further regarding the total parking spots required for the project. As noted in our letter dated August 23, 2017, the number of additional parking spaces being provided on the east side of the campus is commensurate with the number of additional occupants being proposed at the Church. Also, as noted by the Parish, when the Church is being occupied for Saturday evening and Sunday masses, there will NOT be simultaneous occupancy at their other buildings. Therefore, with respect to the variance request, the idea of needing 900 parking spaces seems unreasonable.

34. The responses to #8 and #9 are noted. Since Final Plat of Subdivision approval will be sought at a future date, the items as outlined in #8 and #9 will not be required at this time.

Response: Understood.

35. The response to #10 is not acceptable and additional details are needed on the construction activities. Please outline what construction activities will take place and when these activities will start and finish (e.g. demolition of school building, parking lot work, construction of church addition, etc.). Additionally, preliminary construction staging information is required as part of the PUD process. Provide a preliminary outline of parishioner parking will take place during construction including what parking spaces will be lost during construction activities. Additionally, please provide preliminary information on the location of construction personnel parking, location of construction access/entrances and information on street/lane closures.

Response: The Parish has selected Bulley and Andrews as their General Contractor. Enclosed are their proposed construction schedule and site logistics plan.

36. The response to #25 is noted. No activities will take place in the West Campus during mass.

Response: Thank you.

37. The response to #28 is noted. While it is understood that ultimately parishioners will park where they choose, the Church should develop and implement a strategy that encourages parishioners to utilize the parking area first before looking for parking on the street. Please propose how the church will do this. Additionally, please note: if the west campus parking lot is underutilized during mass and worship times, and if parking on the adjacent residential streets is over utilized, additional restrictions on residential street parking may be imposed by the Village.

Response: To the extent possible, the Parish will encourage its parishioners to park in off-street parking lots before parking on the street. This preference will be communicated via the weekly bulletin and parish mailings. If parking on the adjacent streets is over utilized, the Parish fully supports the additional restrictions that may be imposed by the Village. Please refer to the attached letter from the Parish.

38. The response to #30 is noted. Has the church and/or traffic consultant reached out to IDOT to gauge their preliminary opinion as to whether the alignment of the east campus driveway with the signal on Arlington Heights Road will be necessary for the signal to remain? Please verify this with IDOT and copy the Village on all correspondence.

Response: As noted in IDOT's response letter dated November 13, 2017, the Department "has no objection to the proposed right-in/right-out access driveway," and in turn, understand that the driveway will not align with the existing traffic signal. Also, the Parish has had multiple phone conversations with Mr. Tom

Gallenbach, and at no time has he expressed concern about the driveway alignment OR the presence of the traffic signal itself. (We are not sure where the idea of removing the traffic signal has come from, but it is certainly not from IDOT or the Parish. The Parish expects the traffic signal to remain in place to promote safe access from one side of their campus to the other.)

Additional Comments:

39. Please verify the accuracy of all information in the attached parking table. Additionally, please verify the following information:
- a) The school has 53 employees.
Response: Yes
 - b) The school has 33 classrooms.
Response: Yes
 - c) The size of all office areas in the school is 6,162 sq. ft.
Response: This is based on existing drawings.
 - d) The size of all multi-purpose rooms in the school is 25,641 sq. ft.
Response: This based on existing drawings.
 - e) The rectory includes a 3-car garage.
Response: Yes
 - f) The east campus includes 185 exterior parking spaces (the KLOA study lists 186 parking spaces on the east campus).
Response: 185 is correct, a space was lost from the original design.

Subdivision Comments:

40. The responses to subdivision comments #7-10 are acceptable.
Response: Thank you.
41. Please revise the subdivision plat to read "Preliminary" and not "Final".
Response: Thank you.

Landscaping Review - ROUND 2

Dated November 16, 2017

- 1) Per Chapter 28, Section 6.15-1.2a, a three-foot high screen must be provided in order to screen the parking/paved areas that are adjacent to the public way. In the northwest corner of the parking area, please extend the screen to the north along Arlington Heights Road in order to screen the parking/drive aisle.
Response: This has been added to the updated Landscape Plans.
- 2) The ends of all parking rows must include a landscape island equal in area to one parking space, protected by durable materials, which contains a 4" caliper shade tree. (Chapter 28, section 6.15-1.2b). Provide an island and incorporate the code required shade tree at the ends of the parking row in the northeast corner or request a variation.
Response: Since parking on the campus is a premium, we would request a variance to maintain the parking stall. An alternate option could be to relocate the intermediate island and tree in that parking row to the northeast corner of the parking lot if that would be preferred.
- 3) Code requires a six-foot tall screen along the entire length of the southern property line. In order to meet this requirement, please provide a six-foot high solid fence along the southern property boundary. However, in the areas where this fence would be adjacent to the front yard of the residential homes to the south, please

install a landscape screen instead of the fence in order to complete the code-required screen for the entire length of the southern property line. In addition, please substitute the proposed Chokeberry around the detention area with Arborvitae, and the proposed Serviceberry with evergreen trees.

Response: This has been added / revised to the Landscape Plans. Please note, the landscape located in the 20' sight triangles have been reduced / shortened to ensure the cars or vehicles leaving the driveways have good visibility for pedestrian and vehicular traffic.

Respectfully Submitted,



Karen M. Kristianson, AIA, LEED AP
Licensed Architect

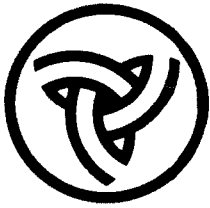
Cc: File



- The one-way design of the two access drives off Arlington Heights Road will ensure efficient and adequate on-site circulation with traffic entering only at the south drive and circulating clockwise around the school building to drop off/pick up and then proceeding to the signalized access at the north drive. Making one or both drives two-way will create confusion and internal conflicts and will require additional circulation of traffic within the parking lot.
- Making the northern proposed driveway two-way will result in inbound left turns occurring at a signalized intersection without channelization. It is IDOT's preference based on our discussions to permit the inbound left turns to occur at the southern unsignalized intersection.

In addition, allowing inbound traffic to occur at two driveways will result in internal conflicts by forcing traffic entering at the northern drive to circulate within the parking lot in order to drop and/or pick up the children on the passenger side. This additional circulation will conflict with traffic entering at the southern driveway creating internal congestion and unsafe conditions.

- The current proposal calls for making the northern intersection as a three-legged ("T") intersection since there are no plans to redevelop the east campus to introduce a fourth (east) leg to this intersection. Furthermore, any such plans, if and when proposed, will have to be reviewed and approved by both the Village and IDOT.
- The southern drive as designed to allow outbound traffic is not appropriate. Making it two-way is not feasible due to its narrow width and physical constraints relative to the existing building. Furthermore, with the designation of a lane (via cones) during drop-off and pick-up time periods, the narrow width of the driveway will allow for only one additional lane that would be needed as a by-pass lane to allow access to the parking lot.
- Parking surveys conducted during current overlapping Sunday services indicated that up to 195 vehicles parked in the lot on the west side which currently has a capacity of 168 spaces. With the proposed staggering of service times, with 30 minutes between services, overlap will not occur and parking demand is expected, per Village ordinance when services will be held in the Parish Center, to be 242 spaces. With 149 spaces to be provided on the west side and 141 parking spaces available on the east side for a total of 290 spaces combined with the available on-street parking on Arlington Heights Road (up to 45 spaces), adequate parking supply will be provided to meet the parking needs of the Parish Center.



Illinois Department of Transportation

Division of Highways/Region One / District One
201 West Center Court/Schaumburg, Illinois 60196-1096

PERMITS

Location: Arlington Heights Road south of Fredrick Street
Reference No: 016-37025

September 15, 2006

Mr. Luay R. Aboona, P.E.
Kenig, Lindgren, O'Hara, Aboona, Inc.
9575 W. Higgins Road, Suite 400
Rosemont, IL 60018

Dear Mr. Aboona:

We have completed our review of your request for the subject location. The relocation of the existing mid-block pedestrian traffic signal to the new exit only driveway is acceptable in conjunction with the review and approval of the following items:

1. Provide Intersection Design Study (IDS) for Arlington Heights Road and proposed north Access Drive.
2. The permit applicant must be the Village of Arlington Heights.
3. The Village of Arlington Heights will be maintaining the relocated signal (the existing pedestrian traffic signal is currently maintained by the Village of Arlington Heights).
4. The proposed signal must be interconnected to the existing traffic signal system.
5. Provide two (2) outbound lanes striped as a separate left-turn and separate right turn lane at the proposed north exit only driveway.
6. The existing crosswalk must be removed and relocated to the proposed north access driveway.
7. The applicant may need to dedicate a right of way on the west side of Arlington Heights to locate the proposed signal equipment.

Upon approval to the above items; a submittal of traffic signal engineering plans will be required.

If you have any questions regarding this matter, please contact Mr. Sudud Mahmoud at (847) 705-4145.

Very truly yours,

Diane M. O'Keefe, P.E.
Deputy Director of Highways,
Region One Engineer

A handwritten signature in cursive script, reading "Stephen M. Travia".

By:
Stephen M. Travia, P.E.
Bureau Chief of Traffic



SAINT JAMES PARISH
A CATHOLIC CHRISTIAN COMMUNITY

820 N Arlington Heights Road
Arlington Heights, Illinois 60004
Office 224-345-7200
Fax 224-345-7220
www.stjamesah.org

November 30, 2017

Project: 831 N Arlington Heights Rd.
St. James Parish

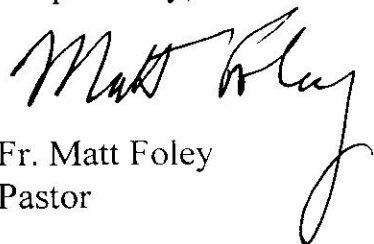
Case Number: PC17-010

Response to item #37

The goal for St. James is to eliminate parking on both residential streets as well as Arlington Heights Rd. We feel that we can accomplish this by utilizing the two parking lots as there will be no activities in the School or Parish Center during services. We will notify our parishioners in print media (through our weekly bulletin), social media (FaceBook) and finally by verbal announcements at our weekend services.

St. James would fully support any additional restrictions on residential street parking by the Village should our efforts prove ineffective.

Respectfully,



Fr. Matt Foley
Pastor



Illinois Department of Transportation

Office of Highways Project Implementation / Region 1 / District 1
201 West Center Court / Schaumburg, Illinois 60196-1096

PERMITS

Location: Arlington Heights Rd. at Frederick Street (SEC)
Municipality: Village of Arlington Heights, Cook County
Re: St. James Parish Expansion
Reference No.: 016-78472

November 13, 2017

Mr. Luay Aboona, P.E.
KLOA
9575 W. Higgins Rd.
Suite 400
Rosemont, IL 60018

Dear Mr. Aboona:

We have completed our review of your engineering plans for the subject location. Our comments are marked in red on the enclosed plan set, which must be returned with your next submittal, and are detailed below:

1. The Department, in concept, has no objection to the proposed right-in/right-out access driveway; however, school children were observed to utilize the currently closed access as the pathway to the "playground" (existing parking lot) during school hours. Opening the access to live traffic, while the school children are still using the same access, is of concern. The Traffic Impact Study (TIS) must address the Department's aforementioned concern.
2. Dimension the SF/LF of all items to be removed and/or replaced on your Site Demolition Plan sheet.
3. Please provide separate ADA ramp details for roadway crossings along Arlington Heights Road. Please see attached template for reference.
4. All ADA related items shall be designed and installed in accordance with the "ADA Standard for Accessible Design" guidebook. Provide the information and signature required on the enclosed Municipality Sidewalk and ADA Acceptance Letter form.
5. In order to comply with ADA/PROWAG requirements, continue the sidewalk through all proposed driveways, and provide spot grades where necessary.
6. Include at least 24" of pavement patching adjacent to all areas of curb & gutter removal and replacement per the enclosed Pavement Patching at Curb and Gutter Removal detail; additionally, include this detail in your plans.
7. Show the 4' separation between the sidewalk and proposed 24" stop bar at the access driveway along Arlington Heights Road.
8. Please reference the enclosed right-in/right-out access template for geometric design and signing.
9. Provide local approval from all applicable agencies in acceptance of the drainage improvements for your site.

Location: Arlington Hts. Rd. at Frederick St.

November 13, 2017

Page 2

10. Per Public Act 86-616, "It is unlawful for any person to construct or cause to be constructed any drainage facility for the purpose of the detention or retention of water within a distance of 10 feet plus one and one-half times the depth of any drainage facility adjacent to the right-of-way of any public highway without the written permission of the highway authority having jurisdiction over the public highway." Provide evidence of compliance with Public Act 86-616 including a cross-section of the proposed drainage facility continuing through the right of way line.
11. Provide P.E. stamped drainage calculations showing that the proposed flow to the State Highway is not increased.
12. Update IDOT Highway Standard 701606 to its most recent version. Only a one lane closure of Arlington Heights Road will be allowed at this location.
13. Include IDOT Highway Standard 701801 in your plans.

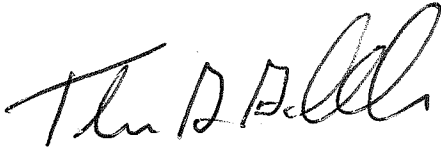
Please revise your plans in accordance with the above comments and resubmit two (2) revised to scale quarter size engineering plan copies along with a written disposition to all comments to continue the review process.

If you have any questions regarding this matter, please contact Abigail Robinson at (847) 705-4541.

Very truly yours,

Anthony J. Quigley, P.E.
Region One Engineer

By:



Thomas G. Gallenbach, P.E.
Traffic Permit Engineer

cc: Village of Arlington Heights

ADA DETAILS FOR PHASE 1 PROJECTS

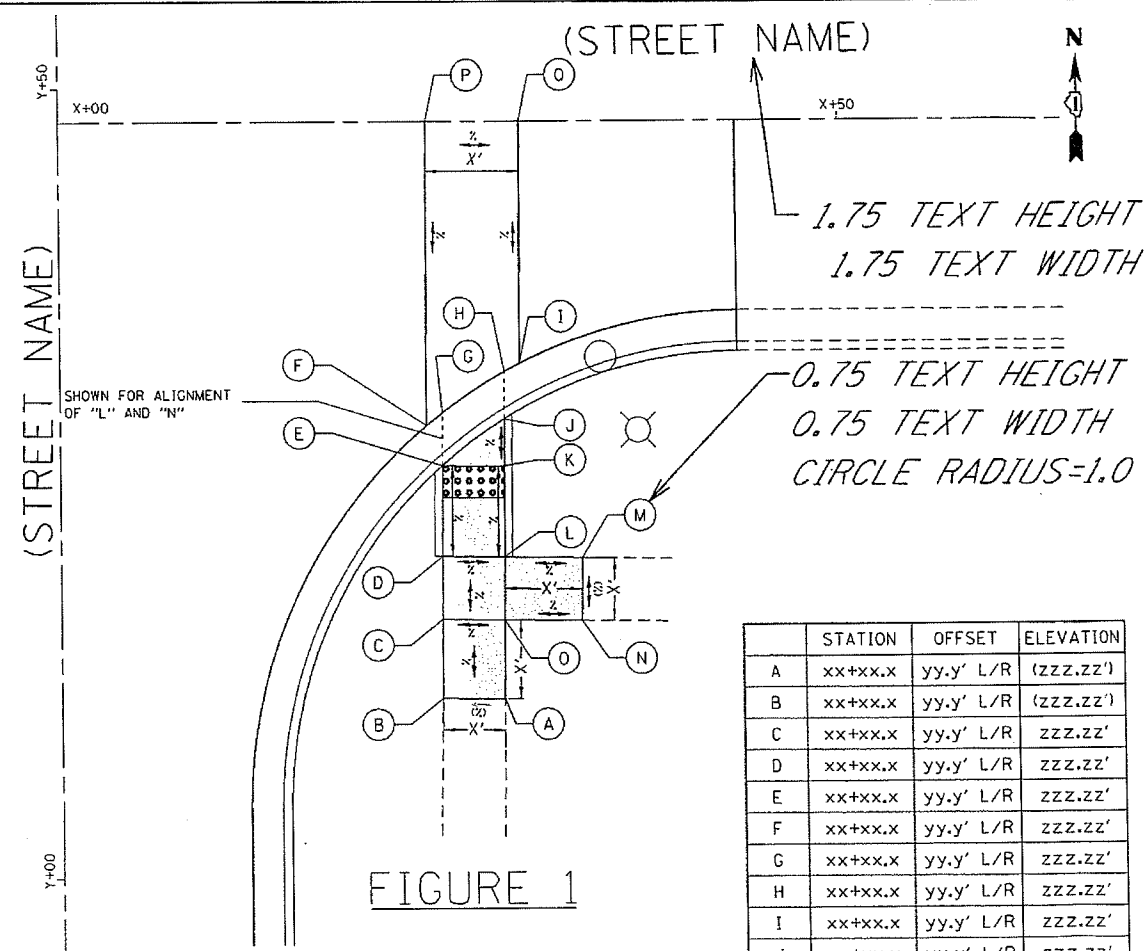


FIGURE 1

NOTES:

- 1.) THESE ADA DETAILS ARE FOR PRESENTATION PURPOSES. REFER TO THE CURRENT BDE MANUAL AND ADA/PROWAG GUIDELINES FOR DESIGN REQUIREMENTS.
- 2.) FOLLOW LEGEND FOR LABELING EXISTING ELEVATIONS, SLOPES, AND LENGTHS.
- 3.) ESTABLISH STATIONS/OFFSETS BASED ON 1 CENTERLINE FOR EACH CORNER.
- 4.) SHOW EXISTING (PROPOSED) ABOVE GROUND UTILITIES AND SIGNS.
- 5.) ELEVATIONS FOR POINTS (P), (Q), (R), AND (S) SHOULD MATCH WITH THEIR ASSOCIATED PROFILE.
- 6.) IN ORDER TO ALLOW FOR CONSTRUCTION TOLERANCES THE CROSS SLOPES AND RAMP RUNNING SLOPES SHOULD NOT BE DESIGNED TO THEIR MAXIMUM ALLOWABLE UNLESS NECESSARY. INSTEAD ALL CROSS SLOPES SHOULD BE DESIGNED AT 1.5% OR FLATTER WHEREAS RAMP RUNNING SLOPES SHOULD BE DESIGNED AT 1:4 (7.14%) OR FLATTER.
- 7.) SUBMIT DETAILS ON 11"x17" SIZED PLAN SHEETS AND AT A SCALE OF 1"=10'. ONLY 1 OR 2 RADII OF RETURN SHOULD BE PROVIDED PER SHEET.
- 8.) IF PARALLEL SIDEWALK SLOPES DO NOT MATCH, LABEL BOTH SLOPES. FOR EXAMPLE, IN FIGURE 1, IF M-L DOES NOT MATCH N-O BOTH SLOPES SHOULD BE LABELED.

	STATION	OFFSET	ELEVATION
A	xx+xx.x	yy.y' L/R	(zzz.zz')
B	xx+xx.x	yy.y' L/R	(zzz.zz')
C	xx+xx.x	yy.y' L/R	zzz.zz'
D	xx+xx.x	yy.y' L/R	zzz.zz'
E	xx+xx.x	yy.y' L/R	zzz.zz'
F	xx+xx.x	yy.y' L/R	zzz.zz'
G	xx+xx.x	yy.y' L/R	zzz.zz'
H	xx+xx.x	yy.y' L/R	zzz.zz'
I	xx+xx.x	yy.y' L/R	zzz.zz'
J	xx+xx.x	yy.y' L/R	zzz.zz'
K	xx+xx.x	yy.y' L/R	zzz.zz'
L	xx+xx.x	yy.y' L/R	zzz.zz'
M	xx+xx.x	yy.y' L/R	zzz.zz'
N	xx+xx.x	yy.y' L/R	zzz.zz'
O	xx+xx.x	yy.y' L/R	zzz.zz'
P	xx+xx.x	yy.y' L/R	(zzz.zz')
Q	xx+xx.x	yy.y' L/R	(zzz.zz')

LEGEND

- (xx.xx') EXISTING LENGTH/ELEVATION
- PROPOSED SIDE CURB
- EXISTING SLOPE

- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL
REPLACE W/TOPSOIL & SOD

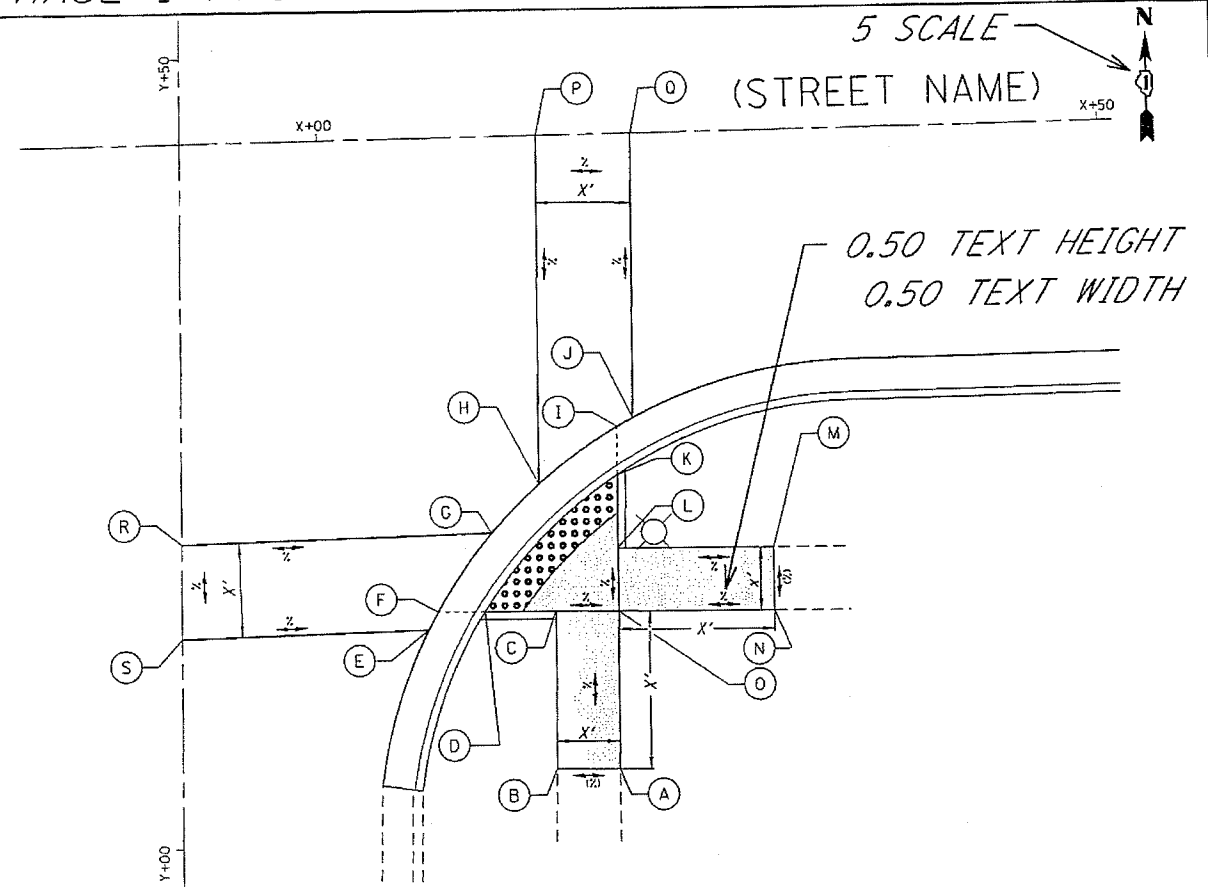
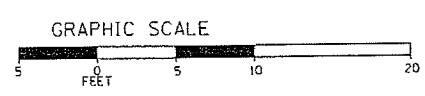


FIGURE 2

	STATION	OFFSET	ELEVATION		STATION	OFFSET	ELEVATION
A	xx+xx.x	yy.y' L/R	(zzz.zz')	L	xx+xx.x	yy.y' L/R	zzz.zz'
B	xx+xx.x	yy.y' L/R	(zzz.zz')	M	xx+xx.x	yy.y' L/R	zzz.zz'
C	xx+xx.x	yy.y' L/R	zzz.zz'	N	xx+xx.x	yy.y' L/R	zzz.zz'
D	xx+xx.x	yy.y' L/R	zzz.zz'	O	xx+xx.x	yy.y' L/R	zzz.zz'
E	xx+xx.x	yy.y' L/R	zzz.zz'	P	xx+xx.x	yy.y' L/R	(zzz.zz')
F	xx+xx.x	yy.y' L/R	zzz.zz'	Q	xx+xx.x	yy.y' L/R	(zzz.zz')
G	xx+xx.x	yy.y' L/R	zzz.zz'	R	xx+xx.x	yy.y' L/R	zzz.zz'
H	xx+xx.x	yy.y' L/R	zzz.zz'	S	xx+xx.x	yy.y' L/R	zzz.zz'
I	xx+xx.x	yy.y' L/R	zzz.zz'				
J	xx+xx.x	yy.y' L/R	zzz.zz'				
K	xx+xx.x	yy.y' L/R	zzz.zz'				



BORDER = 5 SCALE
CELLS = 20 SCALE

FILE NAME : S:\WP\pds\GEO\Osborne\CAD Projects\	USER NAME : osbornep	DESIGNED - PLP 10/04/2016	REVISED - NO 10/07/2016
DA Files\ADA Template\Design\PHASE 1-1g\	DA Files\ADA Template\Design\PHASE 1-1g\	CHECKED -	REVISED - NO 10/13/2016
PLOT SCALE = 10.0000' / 1" in.	PLOT DATE = 10/14/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

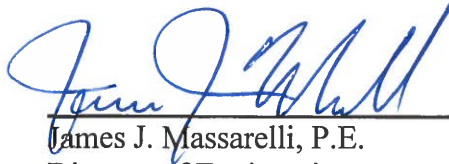


**PLAN COMMISSION PC #17-012
St. James Parish Subdivision
820 N. Arlington Heights Road
PUD, SU Amnd, Pre/Final Plat of Subdivision, Parking Variation
Round 3**

RECEIVED
DEC 08 2017
**PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT**

49. The response by the petitioner to comments #37-39, 41-44, & 46 are acceptable.
50. The response provided by the petitioner to Comment #40 is not acceptable. As per discussion at the December 7, 2017 meeting, provide a written narrative of the various design options that were considered for a possible driveway connection to the existing traffic signal at Arlington Heights Road and the reasons for not pursuing those options. Include discussion about geometric, traffic operations, and traffic signal considerations.
51. The response provided by the petitioner to Comment #45 is not acceptable. The response states parking along the west side of Arlington Heights Road will be maintained on Sundays. It is our understanding that all parking on Arlington Heights Road will be prohibited.
52. The response provided by the petitioner to Comment #47 is noted. As per discussion at the December 7, 2017 meeting, the variation for a 22' wide drive aisle should only apply to the drive aisle directly adjacent to the east side of the church building. The drive aisle north and south of the building shall be designed to the code required 24' width.
53. The response provided by the petitioner to Comment #48 is noted. As this traffic signal is solely for the benefit of the St. James campus, the Village will require an Agreement with the church that any future costs associated with the operation, maintenance, modification, relocation, replacement, removal or restoration of the traffic signal will be borne by St. James Catholic Church. The electrical energy and maintenance costs that are currently paid by the Village will be billed by the Village to the church.
54. Sheet C3.0: At the RIRO driveway on Arlington Heights Road, the public sidewalk shall take precedence over the curb and shall be continuous through the driveway with the curbs stopping on either side of the sidewalk. This comment can be addressed at final engineering.
55. Sheet C3.0: All utility open cuts on Village streets will require heavy duty pavement as replacement. This comment can be addressed at final engineering.
56. Sheet C3.0: It is suggested additional private driveway and public sidewalk removal and replacement be shown on the north side of Frederick Street to account for the impact associated with the installation of the 5' diameter valve vault. This comment can be addressed at final engineering.
57. Sheet C7.0: The pavement thicknesses for the heavy duty pavement section must conform to the following: 2" Surface, 2-1/4" N-50 Binder, 5" N-30 Binder, and 4" CA-6 Stone Subbase. This comment can be addressed at final engineering.

58. Provide an additional Fire Truck routing exhibit showing the vehicle entering the RIRO driveway from the south, immediately turning north, then east toward the new front entrance. Adjust curbs at islands as necessary to allow movements.

 12/8/17
James J. Massarelli, P.E. Date
Director of Engineering

Additional Items for Final Engineering:

Estimates of Cost
Underground storage HS-25 loading
OUMA
Site lighting
Traffic Signal Agreement



Village of Arlington Heights
Health & Human Services Department

Memorandum

To: Sam Hubbard, Development Planner

From: Sean Freres, Environmental Health Officer

Date: December 4, 2017

Re: PC# 17-012. St. James Parish SUP Amendment – 831 N. Arlington Heights Rd. Round 3

-
- All previous comment have been addressed. No comments at this time.

Saint James Parish
PC 17-012
831 N. Arlington Heights Road
December 6, 2017

- 1) Please substitute the proposed Crabapple trees in the southwest corner with evergreen trees.