MEMORANDUM

TO: Zoning Board of Appeals

FROM: Chris Cheng, City Planner

DATE: July 28, 2021

SUBJECT: St. Francis of Assisi (2150 Frieze Avenue)

A variance request to reduce required EV (Electric Vehicle) parking spaces at St. Francis of Assisi was tabled at the May 26, 2021 ZBA Meeting to allow the petitioner time to submit additional background information and staff time to coordinate with the Office of Sustainability and Innovation (OSI).

The petitioner has responded to ZBA inquiries (see attached letter) with a proposal based on a maximum of 50 school employees and installed at a requested 20% for EV-I (installed – 6 spaces) and EV-R (Ready – 4 spaces) for an overall total of 10 EV spaces. The previous EV parking calculations required a combination of 91 EV parking spaces based on church uses and required 10%-EV-I, 10% EV-R, and 15% EV-C (capable).

The OSI reviewed the petitioner's proposal and supports the calculations based on 50 school employees at the school, subject to the following conditions: 1) the EV parking is recalculated as a private school use; and 2) the required Capable and Ready school spaces also be installed to meet future demand for charging stations. This revision increases the number of Capable spaces from 15% to 25%, Ready spaces from 10% to 15%, and the Installed spaces remaining the same at 10%. Based on 50 employees, the OSI supports 6 EV-I, 12 EV-C, and 7 EV-R for a revised overall total of 25 spaces.

Prepared by Chris Cheng

Attachments: 5/26/21 ZBA Staff Report

7/9/21 St. Francis Letter OSI Response Letter

c: St. Francis of Assisi



MEMORANDUM

TO: Zoning Board of Appeals

FROM: Simi Barr, Energy Coordinator, Office of Sustainability and Innovations

DATE: 7/22/2021

SUBJECT: St. Francis of Assisi EV Readiness Ordinance

Adherence to this the EV Readiness Ordinance, as written, would require 26 EV-installed parking spaces, 26 EV-ready parking spaces, and 39 EV-capable parking spaces at St. Francis of Assisi. The team at St. Francis has claimed that adherence to this would require over \$230,000 and an additional \$62,000 annually to maintain and operate the stations. City staff have become familiar with procuring EVSE quotes from major network providers, and offered to look at the quotes received by St. Francis to understand whether all line items included are necessary. In the process of procuring ChargePoint units previously for the City, an optional line item was included in a quote that increased the price by 35%, and would have made the project infeasible entirely. As the average annual contract with a network like ChargePoint costs less than \$250/charger/year (Nelder & Rogers, 2019), the \$2400/charger/year cost cited in the St. Francis report likely includes unnecessary services.

There are also hardware and ownership alternatives that can be employed to reduce upfront and/or or ongoing costs of station operation. One such method is Charging-as-a-service, where St. Francis would allow a network like ChargePoint to install and operate charging stations in the St. Francis lot. The parties would come to an agreement around leasing of the parking spaces, and the Charging Network would cover all upfront costs for the hardware and installation. Additional to avoiding the upfront costs, any similar model, where the stations are not directly owned by the religious institution, would be eligible for a 30% federal tax credit, and therefore reduce the upfront costs significantly.

Drawing revenues from the charging stations may not be of interest to St. Francis. The drawing of revenue is enabled by paying a network fee to a platform such as ChargePoint, as well as back-end station analytics, and automatic placement on EV charging maps (PlugShare, Googlemaps, etc.). As St. Francis is not interested in drawing revenues off these stations, City Staff recommended looking into non-networked charging stations. Non-networked stations are less expensive to purchase, and they have no recurring annual fee for operation, other than the expense of the electricity used.

Finally, the purpose of the EV readiness ordinance is to prepare our community for what is expected to be very significant growth in EV ownership and usage in the region. We are already seeing strong trends in this direction, with multiple OEMs making commitments to significantly electrifying their vehicle lines, with some committing to 100% electrification. Because of this further expected growth, the EVSE

requirements require more EV-C and EV-R spots than EV-I spots. St. Francis asks for an exception, where they'd like the overall requirements reduced from 35% of the total lot, to 20% of the total lot. It's proposed that of the 10 spots in that 20%, 6 will be EV-I and 4 will be EV-R. Having only 4 potential future EV spaces to grow in future years could leave St. Francis in a worse position than if they have more capability to allow for future charging. The purpose of more heavily weighting the requirements toward future charging stations (EV-C and EV-R) are because we know it's much cheaper to prepare for this infrastructure once and fully, rather than piecemeal. Therefore, OSI does not support the second request of reducing total EV spaces to 20%.

Nelder, C., & Rogers, E. (2019). *Reducing EV Charging Infrastructure Costs*. Rocky Mountain Institute. https://rmi.org/insight/reducing-ev-charging-infrastructure-costs/.

Saint Francis of Assisi Parish Ann Arbor

2150 Frieze Avenue Ann Arbor, MI 48104 734-821-2100

July 9, 2021

City of Ann Arbor Zoning Board of Appeals 301 E. Huron Street Ann Arbor, MI 48104

Subject: Revision to ZBA 21-016 (2150 Frieze Avenue)

Dear Board Members:

Our Parish Ministry Center building project was approved by the City Council in February 2021, a month after the ordinance requiring electric vehicle (EV) charging stations was approved. Saint Francis Parish knew that the two approvals would be on parallel tracks and we required our potential contractors to submit bid alternates for the EV portion in the event that the ordinance was approved prior to our project. The ordinance specified that 35% of our 260 parking spaces needed to be outfitted with EV charging capability as follows: 10% EV-I (or 26 spaces), 10% EV-R (or 26 spaces), and 15% EV-C (or 39 spaces). Although we were not opposed to electric vehicles or renewable energy in general, we had several significant obstacles in complying with the requirement to equip our property with up to 91 EV charging stations. Therefore, in May we made a request to the ZBA to relieve us from compliance with the ordinance.

Specific challenges include:

1. We operate a K-8 school with over 400 students where the parking lot on the northeast corner is used for recreation in addition to drop off and pick up. This lot is a high traffic area and we had genuine safety concerns with EV charging there during the week.

- 2. Our parking lot is full on the weekends for Mass but parishioners park for an average of only 1.25 hours. Furthermore, our lot does not allow for overnight parking. Therefore, it is unlikely that this would be a highly used or particularly practical option for our parishioners, guests, or the general public.
- 3. Initial estimates of operating costs show that it would be difficult for us to operate a financially sustainable system. As a religious nonprofit, we are unable to compete in the market to generate the revenue necessary to offset the costs of providing a system of that scale as a convenience to our parishioners, staff, and short-stay visitors.
- 4. We are making significant investments to enhance and modernize other aspects of our property to comply with other city ordinances. Specifically, these include an upgraded water main, additional storm water management, landscaping, and trash enclosures which add approximately \$200,000 to the total cost. We feel that with this level of investment, the additional \$238,000 of direct costs for compliance with the new EV ordinance would overtax our limited budget.

Thus, given the relative newness of the EV ordinance we sincerely hoped that the ZBA would fully relieve our project of these requirements.

After our presentation to the ZBA in May, we've had the opportunity to reflect on a number of items and do more research. While we were focused on the magnitude of a building project that has been in the works for more than five years, the constraints of our non-profit economic model, and the challenges emerging from the pandemic, we do recognize the benefit of EV charging to the staff members and teachers that work here, our parishioners, and the Ann Arbor community. We join you in promoting the spirit of the ordinance, which is to support Ann Arbor's objectives for carbon neutrality by 2030. We appreciate having had the opportunity to present our request in May and are grateful for the board's willingness to continue this discussion at the July meeting. Since our last presentation, we evaluated more deeply the costs to implement and operate these charging stations and, as a result, we have revised our variance request in two ways to better reflect the opinions that were expressed by the board members, our realistic capabilities, and the needs of those who drive EV's.

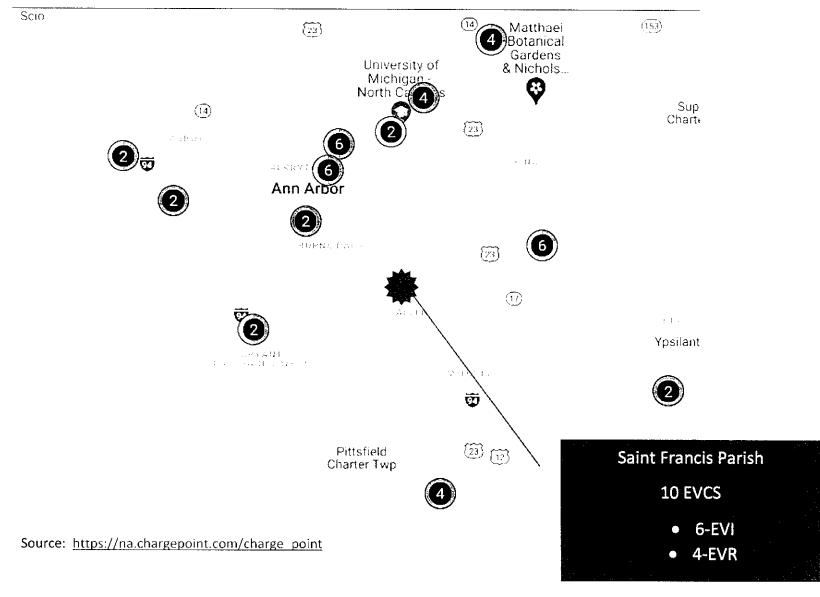
First, we conducted a more thorough study of the average usage of our parking lot throughout the year. When our parking lot is full on the weekends for Mass, there can be as many as 260 cars parked in the lot for a little more than one hour. However, during the week we expect to have between 12 and 50 staff member vehicles parked depending on whether or not school is in session and teachers are working. Therefore, the highest volume of long-term parking needed and used regularly at Saint Francis is 50

vehicles. The total capacity of 260 spaces exists mainly as short-term parking for high volume weekend services and certain recreational uses by the students. **Therefore, we are respectfully asking the ZBA to consider 50 parking places as the basis for applying the ordinance to Saint Francis Parish, rather than 260.**

Second, we investigated the operating costs a little further with Chargepoint, an industry-leading company that sells or leases the actual charging equipment. The software and maintenance expenses are done on a subscription basis at a rate of \$2,400 per year. So, it would cost \$62,400 per year to operate 26 EV-I's in order to charge vehicles and collect fees to recover costs. Energy costs are estimated to exceed \$1.50 per charging hour based on charging system capacity and our current electric rates. A rule of thumb that another vendor gave us for setting our sales price was to triple the energy cost in order to recover the fixed costs associated with the system. One concern is that this source of unrelated income is inconsistent with our non-profit mission. In addition, we would be relying on a recovery price subject to fluctuations on the open market. Unlike a university that can incorporate EV charging structures into a fee structure for students or a store that can roll EV charging costs into their sales price or a restaurant that can offer EV charging as an incentive for diners, we have very limited ability to compete with or adjust to market forces. Washtenaw Community College, for example, uses Chargepoint stations but does not require a fee for using their stations. We have no ability to compete with models like this. We would be left with a large fixed cost, depreciating equipment, and little to no relief from sales revenue if the 26 stations are substantially underutilized. Therefore, we are respectfully asking the ZBA to reduce the total proportion of EV parking spaces for this project from the 35% required by the ordinance to 20%.

If the ZBA approves these two requests, Saint Francis Parish would be able to install five dual-port stations serving ten spaces. This means that 20% of our 50 typically used long-term parking spaces would have capability to charge ten electric vehicles simultaneously and would make us the largest place in Ann Arbor to provide Chargepoint stations. According to the illustration below from their website, the Chargepoint stations at Saint Francis would also fill a geographic gap in southeast Ann Arbor where there seem to be few of these EV charging stations.

Chargepoint Charging Locations Near Ann Arbor



If our requests are approved by the ZBA, we would propose having the charging stations set up as follows:

- EV-I (installed and ready to operate): three dual-port stations on the north side of the new building to provide six spots (including one barrier-free parking space with EV charging).
- EV-R (wired and capped for installation): two dual-port stations on the south side of the new building to provide four spots in the near future.

Please reference the sketch provided by Hobbs and Black included with this letter.

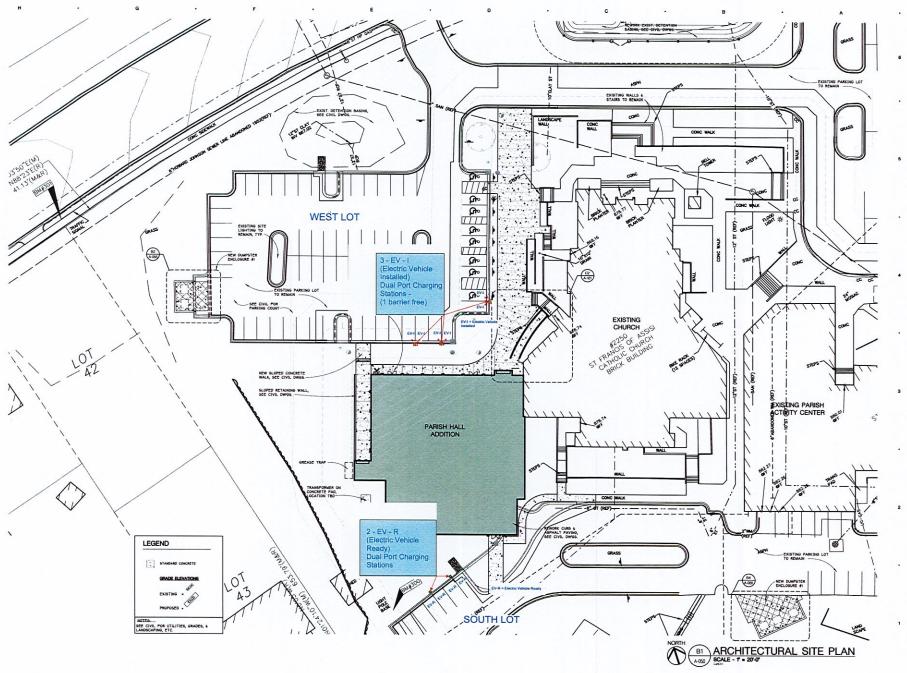
These accommodations would allow us to take advantage of the timing of our construction project to install the infrastructure that provides EV charging to our parishioners, our staff, and the public in a way that is sustainable, substantially exceeds present peer sites, and provides good geographic coverage within the City. Our intent is to carefully monitor the usage of the installed equipment and, as demand increases and there is clarity in the economic model of sustainability for these types of systems, to consider expansion to other areas of our property. Undoubtedly, we will be working with the City Planners on future projects (e.g. an expansion for our school or improvements to our parking facilities) and during those review and approval processes, we would incorporate that experience in considering an expansion of our EV charging system.

Sincerely,

Robert Kehn, CMA Parish Business Manager

CC: Rev. Fr. J. Conlon, Rev. Mr. T. Arehart, B. Bagnick (H&B), C. Cheng (Ann Arbor)

Encl: Hobbs and Black site plan sketch (A-050)



EV STATIONS 7/12/2011
BIDS 02/03/21/1
FPIAL CO REVIEW SET 11/24/20
SCHEMATIC DESIGN REVIEW 9/26/9
DATE SSUED

DATE SSUED

CHECKED BY

OHECKE

S+BLACK

OF ASSISI 2250 E STADIUM BLY ANN ARBOR, MI 4810

PROJECT

CONSULTANT

SITE PLAN

SHEET TITLE

16905 PROJECT NUMBER

A-050

SHEET NUMBER

Zoning Board of Appeals May 26, 2021 Regular Meeting

STAFF REPORT

Subject: ZBA 21-016; 2150 Frieze Road

Summary:

St. Francis of Assisi Parish, property owners, are requesting a variance from installing the required EV (Electric Vehicle) parking spaces in existing parking lots fronting E. Stadium Blvd. and Frieze Ave. Section 5.19.1 requires a total of 91 EV parking spaces (EV-Installed – 26 spaces, EV-Ready – 26 spaces, and EV-Capable – 39 spaces). The property is zoned R1B, Single Family Residential District.

EV-I Parking Spaces shall have an installed electrical panel capacity with a dedicated branch circuit(s) including conductor in a raceway or direct buried, and an Electric Vehicle Charging Station (EVCS) capable of providing charge energy to an EV Parking Space(s) (See Figure 3). EV-I Parking Spaces shall include signage indicating the space is to be exclusively used for EV's.

EV-R Parking Spaces shall have an installed electrical panel capacity with a dedicated branch circuit(s) including conductor in a raceway or direct buried, terminated in an approved method in a junction box, for an EV Parking Space(s).

EV-C Parking Spaces shall have an installed electrical panel capacity with a dedicated branch circuits(s) and cable/raceway that is capped for future EV Parking Space(s) (See Figure 1). The dedicated branch circuit panel space shall be stenciled or marked legibly with the following text: Future Electric Vehicle Charging Circuit.

EV Parking Ordinance

Background:

The subject property is located on the south side of East Stadium Boulevard, west of St. Francis Drive. The church was built in the early 1960's with subsequent additions since then. A site plan, special exception use and variance from planting street trees were approved in 2021.

Description:

The applicant is proposing to construct a two-story, 14,570-sq foot parish structure on this 10.62-acre parcel for a new overall total floor area of 71,259-sq feet.

Site plans for City Council approval trigger the need for the entire site be brought into code compliance and the EV Parking was approved on January 19, 2021 and the site plan was approved on February 16, 2021. The applicant was aware the EV Ordinance was on a parallel approval track with their site plan.

Standards for Approval- Variance

The Zoning Board of Appeals has all the power granted by State law and by Section 5.29.12, Application of the Variance Power from the UDC. The following criteria shall apply:

- (a). That the practical difficulties are exceptional and peculiar to the property of the person requesting the variance and result from conditions which do not exist generally throughout the City.
 - The property is unique in that it is zoned R1B, even though the Church has been there since 1968. The Special Exception Use due to the zoning requires City Council approval; hence compliance with the EV Ordinance. The addition of the dedicated Parish hall does not change any of the parking requirements.

Staff Response: The SEU requires City Planning Commission approval. The size of the parish addition, 14,570-sq ft, triggers City Council approval due to the size. Staff agrees no new additional parking spaces are required as the number of students and parishioners are not increasing.

- (b). That the practical difficulties will result from a failure to grant the variance, include substantially more than mere inconvenience, inability to attain a higher financial return, or both.
 - Proximity to Stadium Blvd and the addition of the EV charging stations may encourage vehicle parking on private parking. The church and school have limited hours and cannot monitor use of the parking facilities during off hours.
- (c). That allowing the variance will result in substantial justice being done, considering the public benefits intended to be secured by this Chapter, the Practical difficulties that will be suffered by a failure of the Board to grant a variance, and the rights of others whose property would be affected by the allowance of the variance.
 - The project was initially submitted for Site Plan approval January 2020 and the EV
 Ordinance wasn't adopted until February 2021. Watermain, storm management,
 trash enclosures and landscaping have all been brought up to new requirements.

Staff Response: The site plan was formally submitted to the City on 7/30/20 and routed for city staff review on 8/3/20. Staff agrees all city site plan codes have been approved by staff.

- (d). That the conditions and circumstances on which the variance request is based shall not be a self- imposed practical difficulty.
 - The proposed Parish Hall is intended to enhance use of the existing facility; not change any current use. The current zoning is a product of the history of the site prior to 1968; and does not reflect current use. Zoning districts east of the site include commercial uses; which permit religious facilities by right, not SEU.

Staff Response: This site is surrounded by single-family, multiple-family, office and public land zoning. These zonings require SEU approvals for private schools and religious assembly. Commercial zoning is located northeast of this site.

Zoning Map

(e). A variance approved shall be the minimum variance that will make possible a reasonable use of the land or structure.

A variance approval will allow the Church and School to continue to use the property as it is currently being used. Current faculty and administrative staff with EV's charge their vehicles at their homes. Average time for parishioners is 1.3 hours and the K-8 School parents are only pick-up and drop-off.

Supplemental Application Information

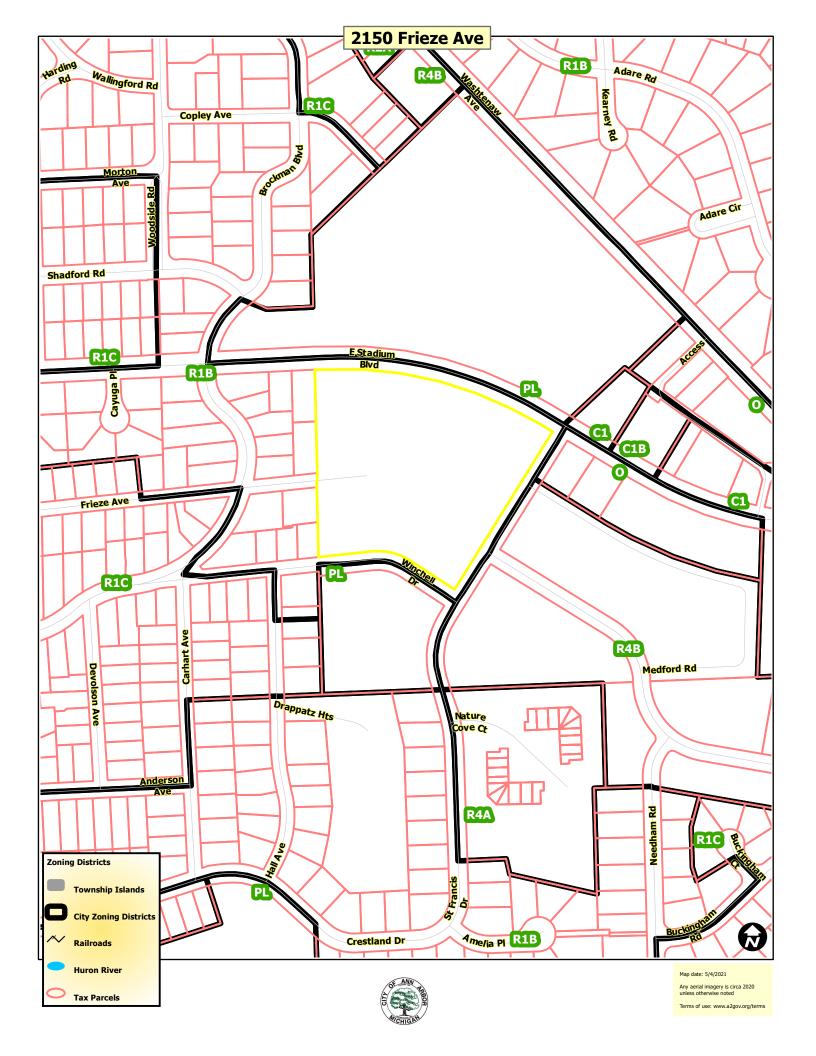
Staff Response: This proposal is unique in that most site plans approved by City Council requires additional parking spaces be constructed or parking lot improvements. This is not the case with this proposal as the existing parking on site sufficiently supports the church and school uses. EV parking spaces are typically installed when parking lots are proposed or under construction.

City Staff approved the petitioner's request for a landscape modification as part of the recently approved site plan to not install depressed bioretention islands as the existing parking lots are outside the limits of grading disturbance and the existing parking lots were part of previously approved site plans. The petitioner confirmed and noted on the landscape and grading plans there will be no ground disturbance to the existing parking lot.

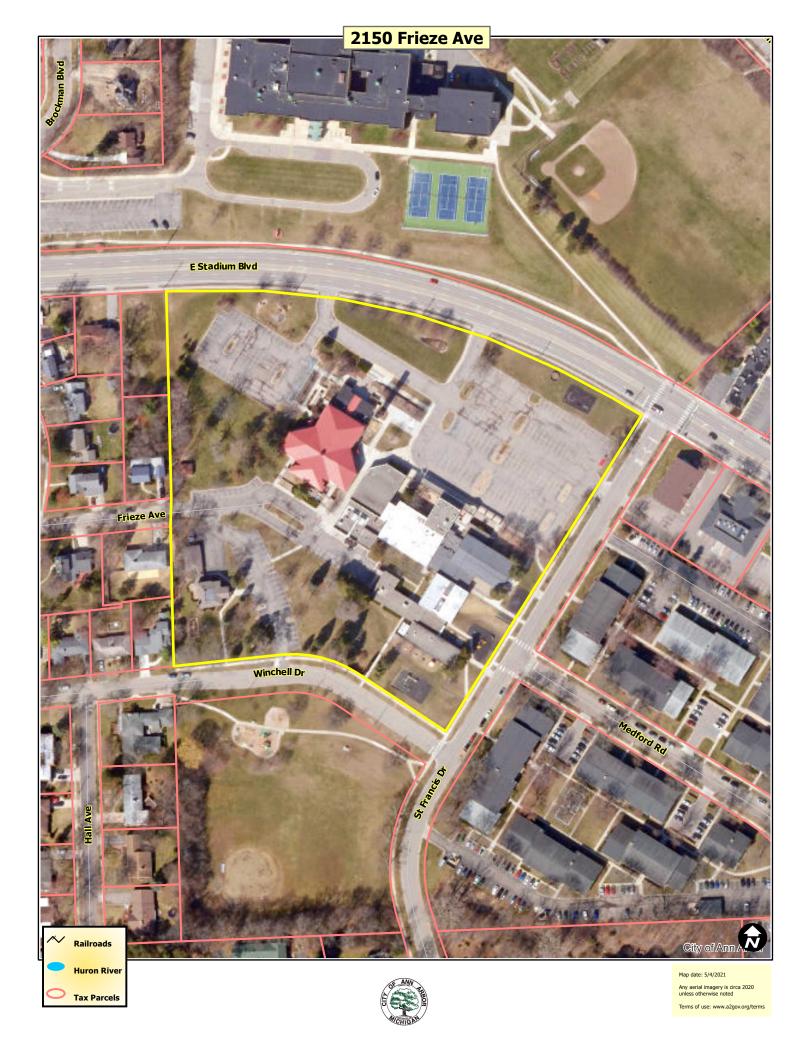
Respectfully submitted,

Chris Cheng City Planner

Chris Cheng









ZONING BOARD OF APPEALS APPLICATION

City of Ann Arbor Planning Services

City Hall: 301 E Huron Street Ann Arbor, MI 48107-8647

Phone: 734-794-6265 Fax: 734-794-8460 Email: planning@a2gov.org

PROPERTY INFORMATION							
ADDRESS OF PROPERTY 2150 Frieze Avenue					ZIP CODE 48104		
				an applicant, a letter of authorization from the property			
R1C Single Family Residential	owner must be provided St. Francis of Assisi						
				MAIL ADDRESS tfransisa2.org			
				a2.org			
NAME							
Robert Kehn, CMA							
ADDRESS 2150 Frieze Avenue			CITY Ann Arbor		STATE	ZIP CODE 48104	
EMAIL			74117410	PHONE			
rkehn@stfrancisa2.org				734-821-2111			
APPLICANT'S RELATIONSHIP TO PROPERTY Parish Business Manager							
REQUEST INFORMATION							
				REQUEST TO ALTER A NONCONFORMING STRUCTURE nplete Section 2 of this application			
REQUIRED MATERIALS				OFFICE USE ONLY			
One hard copy application complete will all required attachments must be submitted. Digital copies of supportive materials included in the submitted hard copy will only be accepted in PDF format by email or			Fee Pa	Fee Paid: ZBA:			
				DATE STAMP			
accompanying the hard copy application on a USB flash drive. Required Attachments:							
☐ Boundary Survey of the property including all existing and proposed							
structures, dimensions of property, and area of property. Building floor plans showing interior rooms, including dimensions.							
☐ Photographs of the property and any existing buildings involved in the request.			ne				
ACKNOWLEDGEMENT							
All information and materials submitted with this application are true and correct.							
Permission is granted to City of Ann Arbor Planning Services and members of the Zoning Board of Appeals to access the subject property for the purpose of reviewing the variance request.							
Property Owner Signature: Date: 4/12/2021							
Property Owner Signature :							

Page 1 V5 1-8-2020

Section 1 City of Ann Arbor Planning Services – Zoning Board of Appeals Application **VARIANCE REQUEST** ARTICLE(S) AND SECTION(S) FROM WHICH A VARIANCE IS REQUESTED: (Example: Article 3, Section 5.26) Chapter 55: Section 5.19.1; Table 5.19.1 REQUIRED DIMENSION: (Example: 40' front setback) PROPOSED DIMENSION: (Example: 32 foot 8 inch front setback) Inches: Feet: DESCRIPTION OF PROPOSED WORK AND REASON FOR VARIANCE: Add a Parish Hall to the existing Church; so that the existing dining area can become dedicated for school cafeteria use. Requesting a variance for a total of 91 EV Parking stations; including 26 EV-I, 26 EV-R and 39 EV-C The City of Ann Arbor Zoning Board of Appeals has the powers granted by State law and City Code Chapter 55, Section 5:29. A variance may be granted by the Zoning Board of Appeals only in cases involving practical difficulties or unnecessary hardships when all of the following statements are found to be true. Please provide a complete response to each of the statements below. The alleged practical difficulties are exceptional and peculiar to the property of the Person requesting the variance, and result from conditions that do not exist generally throughout the City. The property is unique in that it is zoned R1C, even though the Church has been there since 1968. The Special Exception Use due to the zoning requires City Council Approval; hence compliance with the EV Ordinance. The addition of the dedicated Parish hall does not change any of the parking requirements for the site. The alleged practical difficulties that will result from a failure to grant the variance, include substantially more than mere inconvenience, inability to attain a higher financial return, or both. Proximity to Stadium Blvd, and the addition of EV charging stations may encourage vehicle parking on private property. The Church and School have limited hours and cannot monitor use of the parking facilities during off hours. Annual maintenance of the equipment (\$2,400 /Station) may be compromised by off nours usage of the charging stations.

Allowing the variance will result in substantial justice being done, considering the public benefits intended to be secured by this chapter, the practical difficulties that will be suffered by a failure of the Board to grant a variance, and the rights of others whose property would be affected by the allowance of the variance.

The project was initially submitted for Site Plan Approval Jan 2020 and the EV Ordinance wasn't adopted until Feb 2021.

Watermain, storm management, trash enclosures and landscaping have all been brought up to new requirements.

The additional costs of the EV stations, and annual maintenance are unanticipated burdens on non-profit financing.

The conditions and circumstances on which the variance request is based shall not be a self-imposed practical difficulty.

The proposed Parish Hall is intended to enhance use of the existing facility; not to change any current use.

The current zoning is a product of the history of the site prior to 1968; and does not reflect current use.

Zoning districts east of the site include commercial uses; which permit religious facilities by right; not SEU.

A variance approved shall be the minimum variance that will make possible a reasonable use of the land or structure.

A variance approval will allow the Church and School to continue to use the property as it is currently being used.

Current faculty and administrative staff with EV's charge their vehicles at their homes.

Average time for parishioners is 1.3 hours; and the K-8 School parents are only pick-up and drop-off.

SUPPLEMENTAL NARRATIVE TO: ST FRANCIS OF ASSISI EV ZONING VARIANCE REQUEST

Detailed Response to Zoning Variance Appeal application - tca April 12, 2021

Addition of a parish hall, kitchen office space to accommodate the increasing demand for School cafeterias and multi-purpose space, while continuing community support services and meeting rooms. Parking lot configuration has not increased, and usage is expected to remain the same with short-term parking during the weekend services and primary playground space during the school weekdays. Requirement for Electrical Vehicle Charging Stations will not deliver the anticipated results and be both non-effective and cost-prohibitive for a not-for-profit organization. Financial recovery of the EVC investment is not feasible given the current use of the property.

- 1) The property is unique in that it is zoned R1C, even though the Church facilities have been operated on-site since 1968. This zoning required City Council approval under the Special Use Exception, triggering the requirement to comply with the newly enacted EV Ordinance. This project does not increase site parking, does not change the mission or activities of the parish, and only allows greater flexibility to better serve the community.
- 2) The dedicated private site parking lots and drives are used for short-term parking for worship services, k-8 school playground activities, preschool activities, student drop-off pickup traffic, and limited staff parking. These private lots do not accommodate overnight or extended parking. The average period a vehicle is on campus is approximately 1.3 hours/per vehicle/ per week. The substantial expense to install the projected EV Charging Station and supporting infrastructure will be increased by annual maintenance fees of \$2,400/per station. The Church as a not-for-profit organization has no way of recouping these expenses over time, and the maintenance fees will negatively impact the annual budget resulting in reduced resources available to serve the community.
- 3) We believe that allowing this variance will result in substantial justice being done; for the following reasons:
 - a) The project was initially submitted for Site Plan Approval in January 2020 and was revised to accommodate substantial city infrastructure improvements of the water main loop extension, stormwater management, trash enclosures, and landscaping all being brought up to new requirements. These modifications extended the formal review process - prior to presentation to the City Council.
 - b) The Electronic Vehicle Charging Station Ordinance was only adopted by the City Council in February 2021, without consideration of a grandfather exemption for projects currently submitted for Planning Commission review.

- c) The substantial costs being added to the project without a means to recover these ongoing expenses places a hardship on our faith community and places the project funding in question.
- d) Allowing the requested variance should not negatively impact the neighboring properties in that residential properties would acquire charging units to maintain and charge their personal vehicles. Not having the charging stations on the church property would avoid a possible attractive nuisance for people attempting to charge vehicles overnight or increased traffic at other inconvenient times.
- 4) The circumstances and conditions associated with the variance request is not self-Imposed in that this proposed parish hall addition is intended to enhance the facilities to accommodate the growing needs of the community and reduce conflicting demands for existing space and resources.
 - The current zoning is a product of the history of the site prior to 1968 and does not reflect the current zoning for east of the site that includes commercial uses (which permit religious facilities by right vs SEU review).
- 5) The variance approval will allow St Francis Assisi Parish to continue to operate in a way that is consistent with the mission to serve and educate the community in an efficient and effective manner. Staff and visitors to the campus will be able to recharge their Electric Vehicles at their residence prior to attending services and events that average 1.3 hours per visit. Current usage requirements preclude the effective use of charging stations on this site.

