



ARMENIAN CHURCH AND CULTURAL CENTER JSP17-37

ARMENIAN CHURCH AND CULTURAL CENTER JSP 17-37

Public hearing at the request of Armenian Cultural Center for Special Land Use, Preliminary Site Plan with Land bank Parking, Phasing Plan, Shared Parking Agreement, Wetland Permit, Woodland Permit, and Storm water Management plan approval. The subject property is located in section 12, on the north side of Twelve Mile Road and east of Meadowbrook Road, in residential acreage (RA) zoning district. The applicant is proposing a church and a cultural center with accessory uses such as day care center, multipurpose hall, café, religious educational rooms, Armenian genocide memorial and recreational facility. The applicant is proposing to construct in three phases. The project area comprises of four parcels is approximately 19.30 acres. A Special Land Use Permit is required to permit Places of Worship and a daycare in residential districts.

Required Action

Approve/Deny the Special Land Use, Preliminary Site Plan with Land bank Parking, Phasing plan, Shared Parking Agreement, Wetland Permit, Woodland Permit, and Storm water Management plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	09-25-17	<ul style="list-style-type: none"> • Special Land Use for proposing a church and daycare establishment in Residential Acreage (RA) • Approval of up to 43 landbank parking spaces • Approval of shared parking agreement to establish a minimum of 262 parking spaces (including landbank parking) for the proposed uses. • Approval of development to be completed in three phases. • Planning Commission waiver to allow all required 10 bike racks in one location • A Zoning Board of Appeals variance for proposing dumpster in the side yard. • Items to be addressed by the applicant prior to Final Site Plan approval
Engineering	Approval recommended	09-21-17	<ul style="list-style-type: none"> • City Council Design And Construction Standards variance for undetained run-off directed to Twelve Mile Road. • Items to be addressed by the applicant prior to Final Site Plan approval

Landscaping	Approval recommended	09-05-17	<ul style="list-style-type: none"> • Waiver for absence of required street trees along Twelve Mile frontage • Waiver for absence of required berm between the subject property and adjacent residential properties • Waiver for absence of berm along Twelve Mile frontage • Waiver for absence of access drive plantings within existing gas line easement • Waiver for exceeding the maximum 15 bay parking requirement. • Items to be addressed by the applicant prior to Final Site Plan approval
Woodlands	Not Applicable	09-13-17	<ul style="list-style-type: none"> • A City of Novi Woodland Permit is required for the proposed impacts • Items to be addressed by the applicant prior to Final Site Plan approval
Wetlands	Approval recommended	09-13-17	<ul style="list-style-type: none"> • Administrative approval of Non-Minor wetland permit • Letter of authorization for encroaching into 25 foot wetland buffers • Applicant to contact MDEQ for any additional permits • Items to be addressed by the applicant prior to Final Site Plan approval
Traffic	Approval recommended	09-25-17	<ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval
Shared Parking Study	Approval recommended	07-17-17	<ul style="list-style-type: none"> • Approval of shared parking agreement to establish a minimum of 262 parking spaces (including landbank parking) for the proposed uses. • Items to be addressed by the applicant prior to Final Site Plan approval
Façade	Approval recommended	09-14-17	<ul style="list-style-type: none"> • Approval of Phase I elevations • Genocide Memorial to be redesigned in conformance with façade standards and maximum allowable building height
Fire	Approval recommended	09-01-17	<ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval

MOTION SHEET

Approval – Special Land Use Permit

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **approve** the Special Land Use Permit to allow a Place of Worship and daycare based on and subject to the following:

- a. The proposed use will not cause any detrimental impact on existing thoroughfares *(based on review of the Traffic study)*;
- b. The proposed use will not cause any detrimental impact on the capabilities of public services and facilities *(based on Engineering review)*;
- c. The proposed use is compatible with the natural features and characteristics of the land *(because the plan has made an attempt to minimize impacts on existing natural features)*;
- d. The proposed use is compatible with adjacent uses of land *(because the proposed use conforms to the standards of the district and the requirements of Places of Worship and a daycare)*;
- e. The proposed use is consistent with the goals, objectives, and recommendations of the City's Master Plan for Land Use *(the project creates an aesthetically pleasing development, especially in residential areas)*;
- f. The proposed use will promote the use of land in a socially and economically desirable manner *(as the proposed use will provide a service needed in the community)*;
- g. The proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located; and
- h. *(additional comments here if any)*

(This motion is made because the plan is otherwise in compliance with Article 3, Article 4, Article 5, and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

- AND -

Approval – Preliminary Site Plan

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. The primary use of 'Church' will be established prior to any other accessory uses proposed.
- b. Approval of up to 43 landbank parking (262 required, 219 provided, 43 land banked), based on the revised site plan submitted via e-mail on September 26, 2017, due to Planning Commissions finding below, which is hereby granted:
 - i. The applicant has demonstrated through substantial evidence that the specified occupant and building use will require less parking than what is required by the Zoning Ordinance;
 - ii. Parking will not occur on any street or driveway;
 - iii. Parking will not occur on any area not approved and developed for parking;
 - iv. Parking will not occur on that area where parking construction has been landbanked until such time as that area is constructed for such parking;
 - v. The requested parking landbanking will not create traffic or circulation problems on or off site; and

- vi. The requested parking lankbanking will be consistent with the public health, safety and welfare of the City and the purposes of the Zoning Ordinance;
- c. Approval of Shared Parking agreement for the proposed church and other accessory uses proposed for all phases. It has determined that a minimum requirement of 262 spaces are required for the proposed uses, of which 20% of spaces can be land banked;
- d. Planning Commission waiver from Section 5.16 for proposing all required 10 spaces in one location, which is hereby granted;
- e. A Zoning Board of Appeals variance from Section 4.19.2.F for allowing the dumpster in the sideyard instead of the required rear yard;
- f. Landscape waiver from Section 5.5.3.B.ii for absence of required street trees along Twelve Mile frontage due to the presence of a gas line and gas line easement along the entire right-of-way frontage , which is hereby granted;
- g. Landscape waiver from Zoning Sec. 5.5.3.B.ii and iii for absence of required berm between the subject property and adjacent residential properties, if the applicant provides sufficient justification that the existing vegetation will provide sufficient screening, or addition of more screening vegetation is provided to form a dense screen in areas where the existing vegetation does not provide a sufficiently dense screen, which is hereby granted;
- h. Landscape waiver from Zoning Sec. 5.5.3.B.ii and iii for absence of berm along Twelve Mile frontage for portions of frontage with wetland, the natural hill or dense vegetation to be preserved between the road and the site, not for the 120 feet of frontage just west of the entry drive where none of those natural features exist, which is hereby granted;
- i. Landscape waiver from Section 5.5.3.C.iii footnote (5) for absence of access drives plantings within existing gas line easement, which is hereby granted;
- j. Landscape waiver from Section 5.5.3.C. (3) for exceeding the maximum 15 bay parking requirement, which is hereby granted;
- k. City Council Variance from Design and Construction Standards Manual for undetained run-off directed to Twelve Mile Road.
- l. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan; and
- m. *(additional conditions here if any)*

(This motion is made because the plan is otherwise in compliance with Article 3, Article 4, and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

- AND -

Approval – Phasing Plan

In the matter of Armenian Church and Cultural Center JSP17-37 motion to **approve** the Phasing Plan based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

(This motion is made because the plan is otherwise in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

-AND-

Approval – Wetland Permit

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **approve** the Wetland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

(This motion is made because the plan is otherwise in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)

-AND-

Approval – Woodland Permit

In the matter of Armenian Church and Cultural Center JSP17-37 motion to **approve** the Woodland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

(This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

-AND-

Approval – Stormwater Management Plan

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **approve** the Stormwater Management Plan based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

(This motion is made because the plan is otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

- OR -

Denial – Special Land Use Permit

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **deny** the Special Land Use Permit... *(because the plan is not in compliance with Article 4, Article 5, and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

- AND -

Denial – Preliminary Site Plan

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **deny** the Preliminary Site Plan... *(because the plan is not in compliance with Article 3, Article 4, and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

-AND-

Denial –Phasing Plan

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **deny** the Phasing Plan... *(because the plan is not in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

-AND-

Denial- Wetland Permit

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **deny** the Wetland Permit... *(because the plan is not in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

-AND-

Denial- Woodland Permit

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **deny** the Woodland Permit... *(because the plan is not in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

-AND-

Denial – Stormwater Management Plan

In the matter of Armenian Church and Cultural Center JSP17-37, motion to **deny** the Stormwater Management Plan... *(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

MAPS

Location

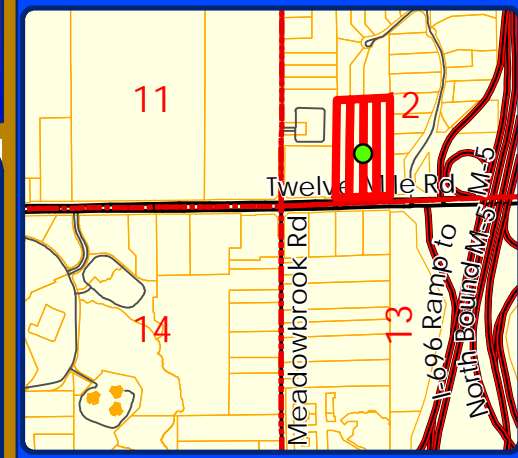
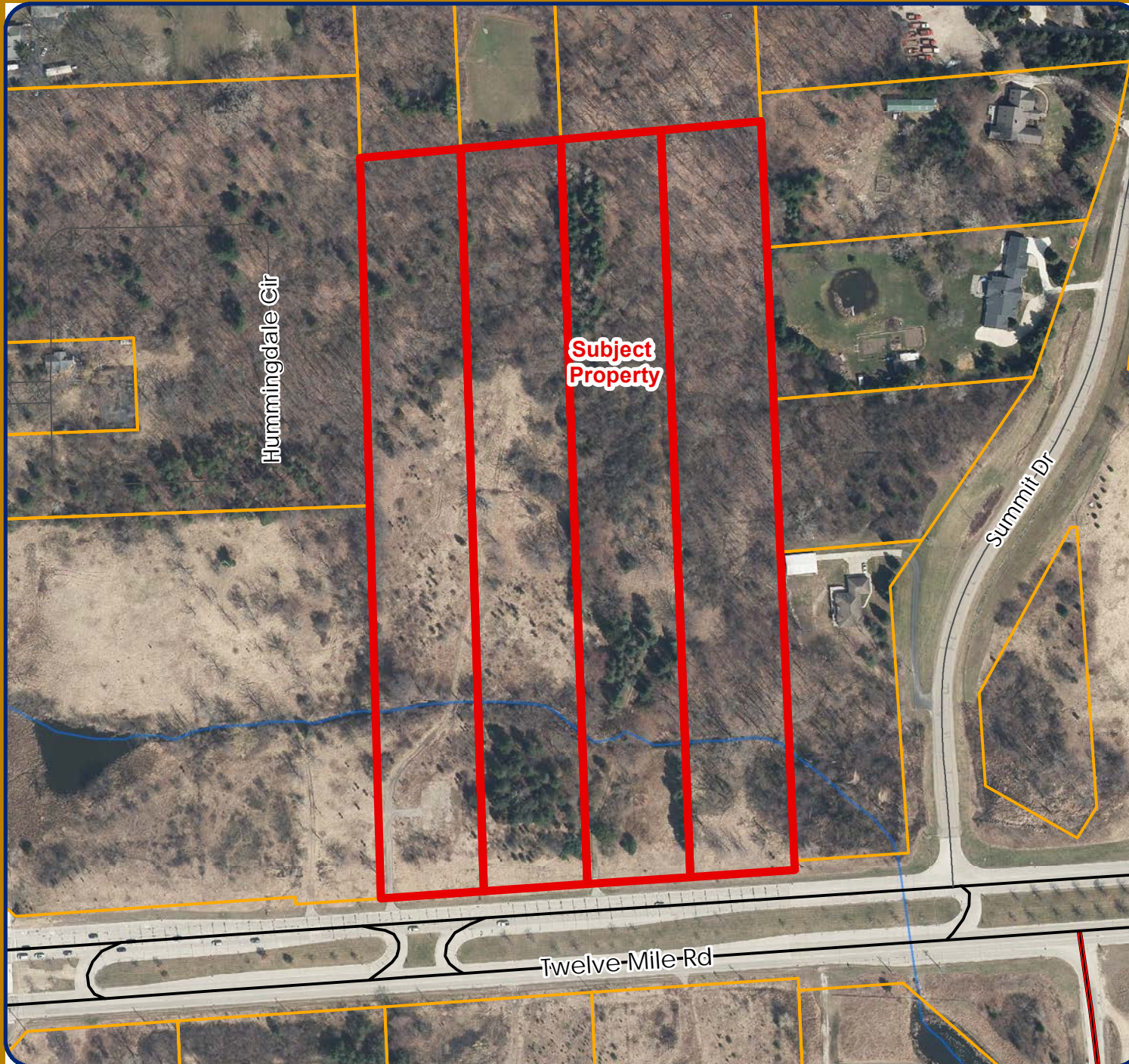
Zoning

Future Land Use

Natural Features

17-37 Armenian Church and Cultural Center

Location



LEGEND
 Sections

 **City of Novi**
Dept. of Community Development
City Hall / Civic Center
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

Map Author: Sri Komaragiri
Date: 10/06/17
Project: 17-37 Armenian Church and Cultural Center
Version #: 1

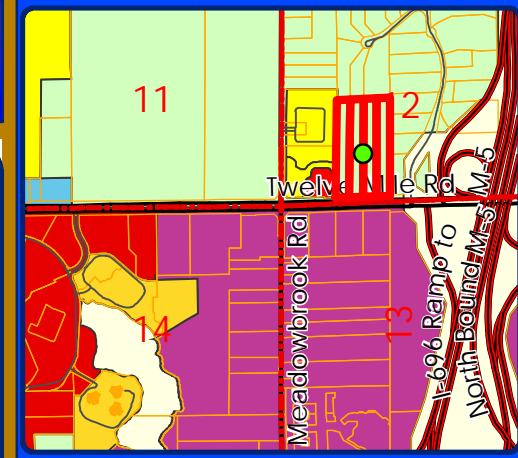
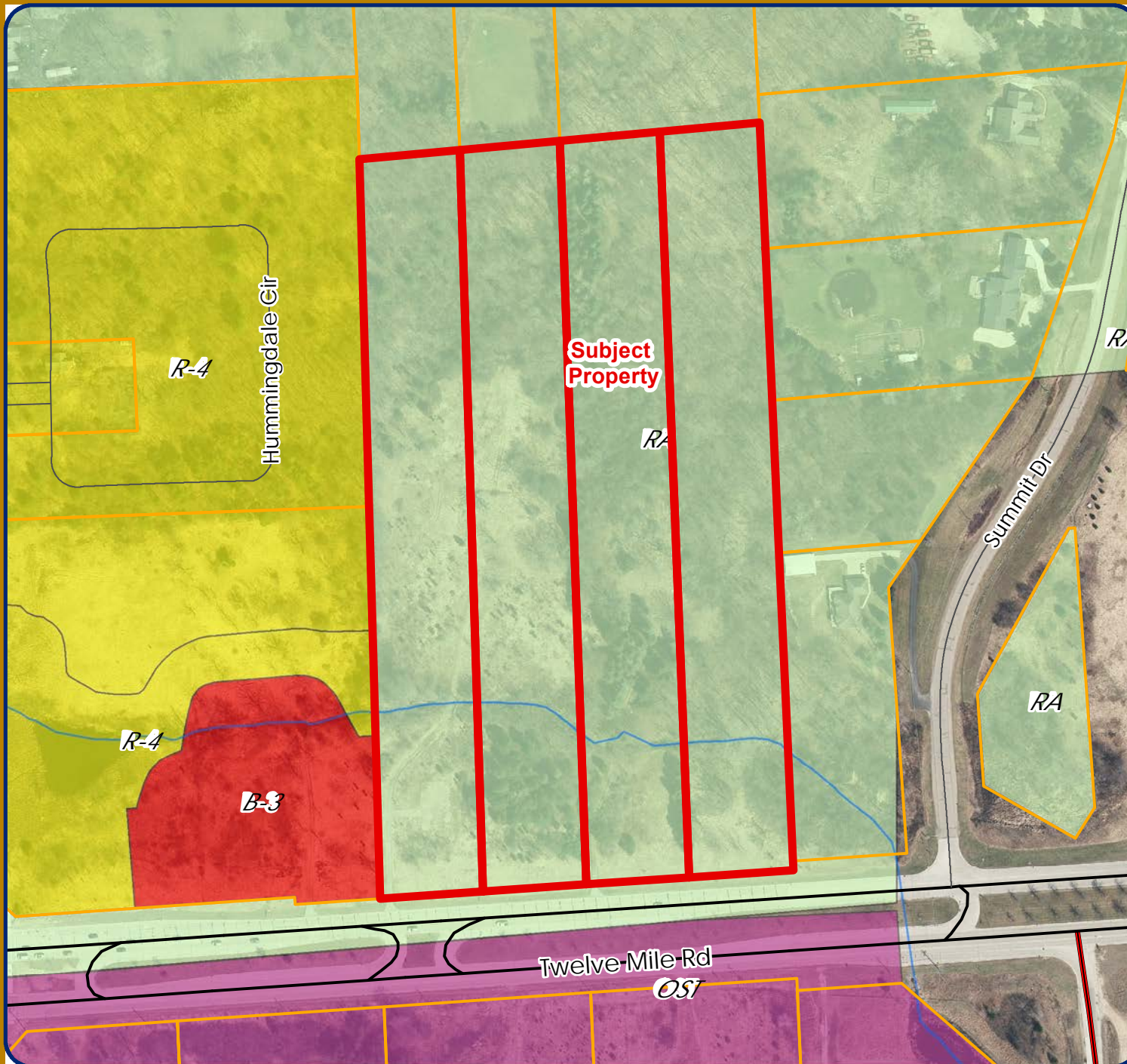


MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

17-37 Armenian Church and Cultural Center

Zoning



LEGEND

- Sections
- R-A: Residential Acreage
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- B-3: General Business District
- OS-1: Office Service District
- OST: Office Service Technology
- RC: Regional Center District



City of Novi

Dept. of Community Development
City Hall / Civic Center
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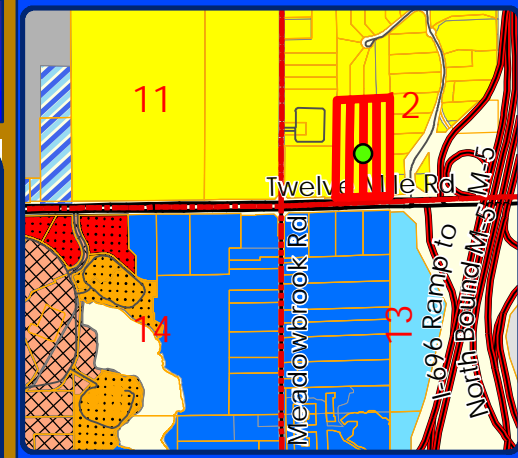
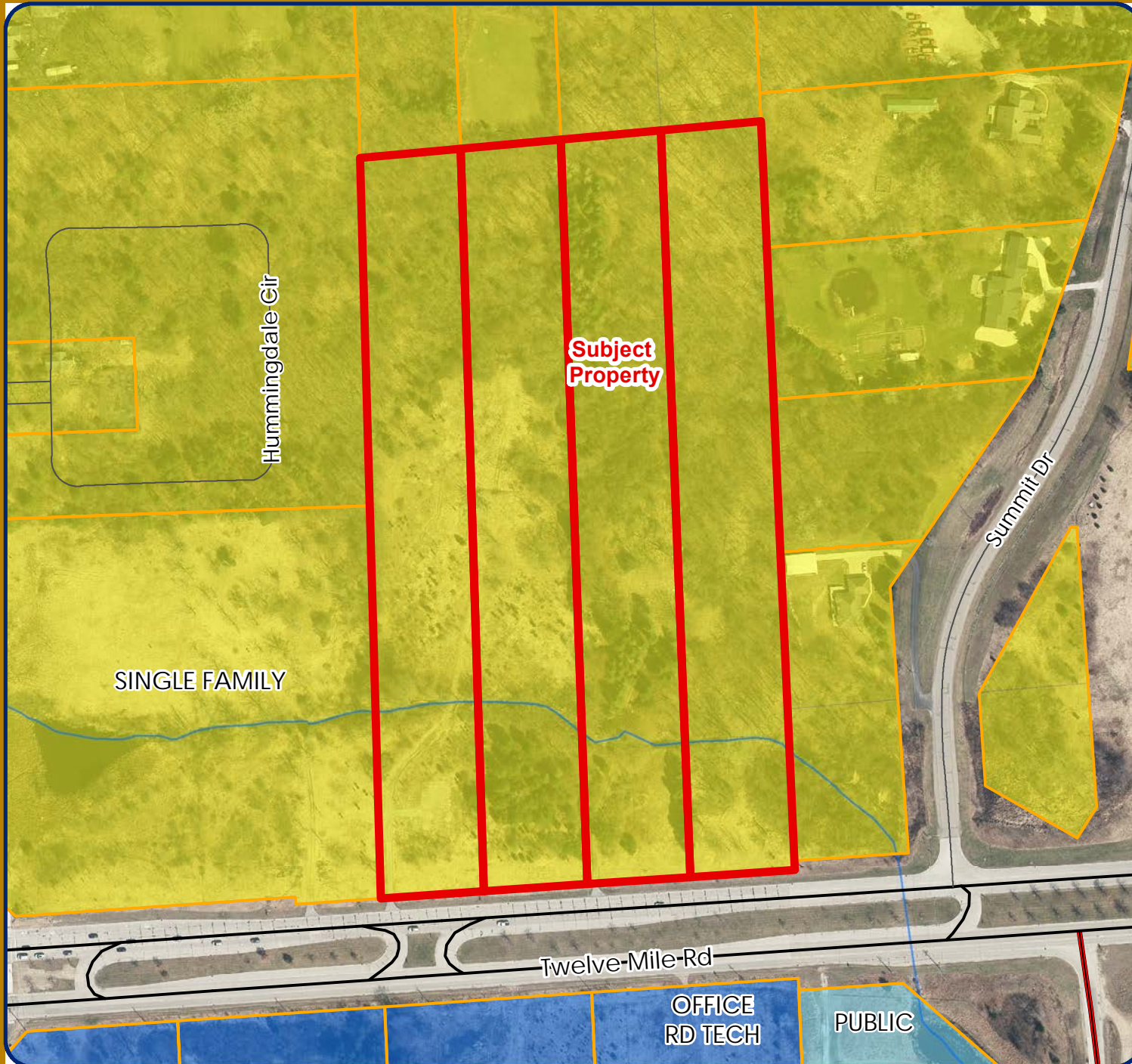


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17-37 Armenian Church and Cultural Center

Future Land Use



LEGEND

- Sections
- FUTURE LAND USE**
- Single Family
- PD1
- Community Office
- Office RD Tech
- Regional Commercial
- PD2
- Public
- Cemetery
- Utility

CITY OF NOVI
 City of Novi
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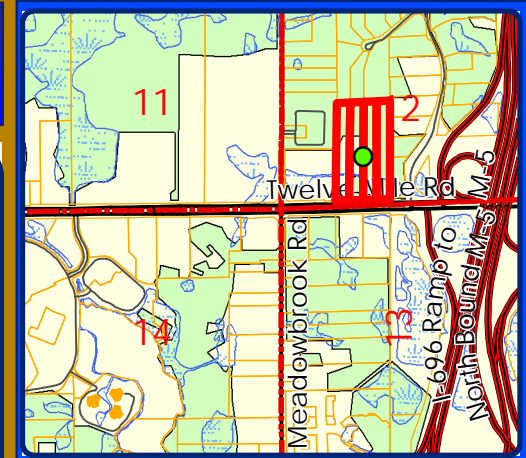
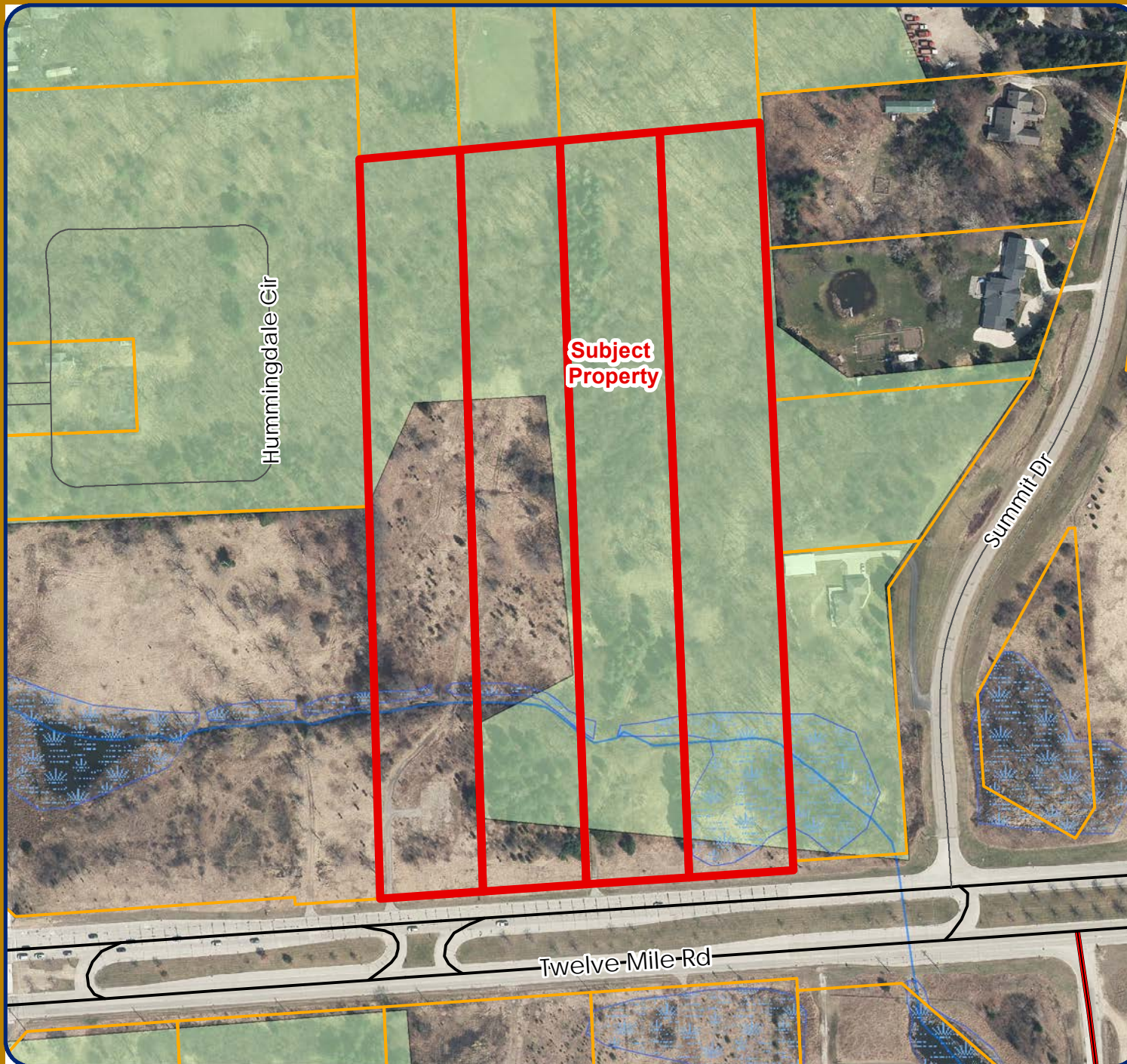
0 50 100 200 300 Feet
 1 inch = 241 feet

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17-37 Armenian Church and Cultural Center

Natural Features



LEGEND

- Sections
- WETLANDS
- WOODLANDS



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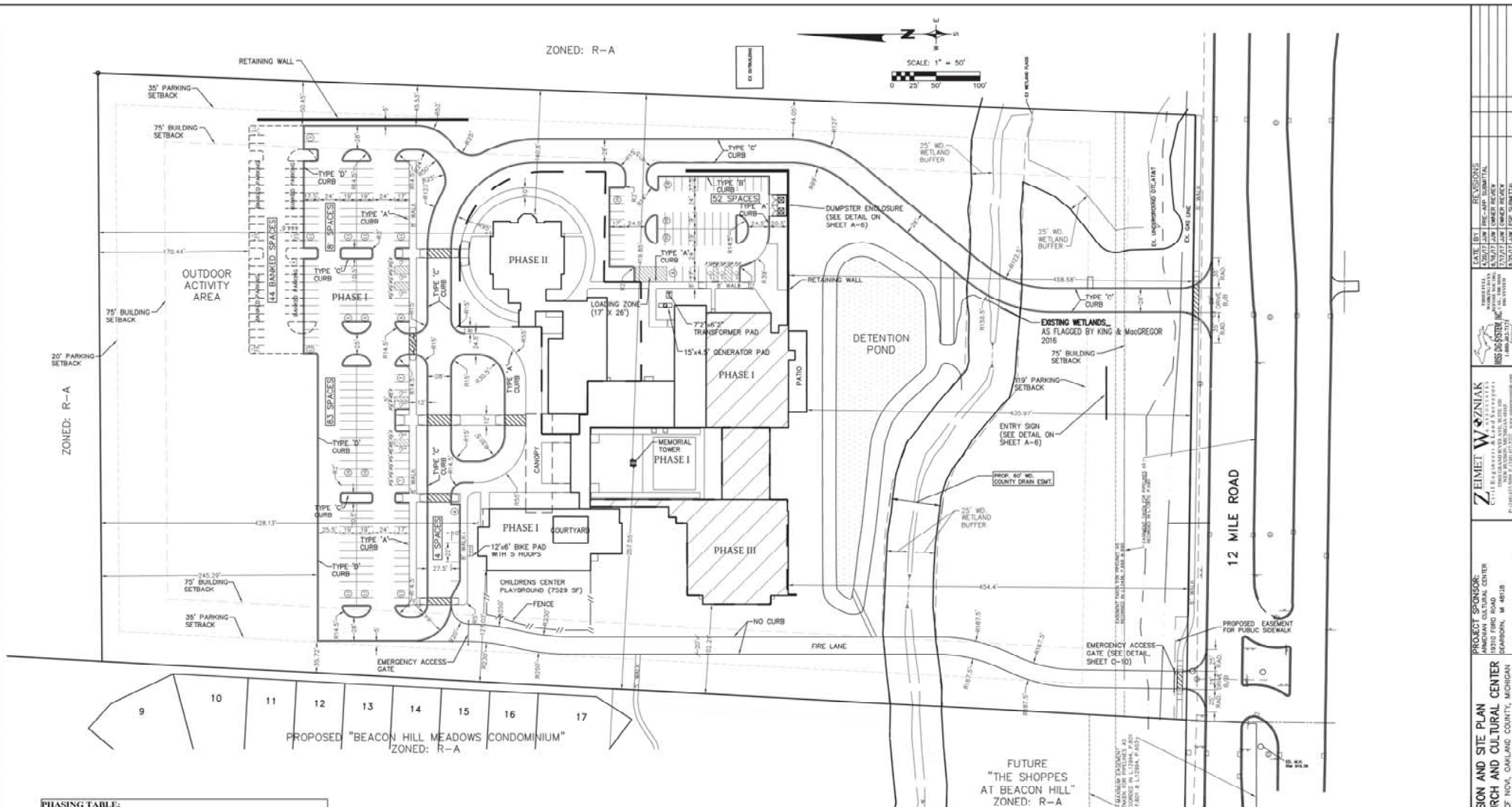
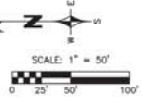
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SITE PLAN

(Full plan set available for viewing at the Community Development Department.)

ZONED: R-A



PHASING TABLE:

<p>PHASE I - TEMPORARY CHURCH, CULTURAL CENTER, MEMORIAL TOWER, AND CHILDREN'S CENTERS</p> <ul style="list-style-type: none"> • CLEARING AND MASS GRADING, INCLUDING PREPARING PADS FOR FUTURE PHASES OF BUILDING • CONSTRUCTION OF DETENTION POND AND OUTLET TO TOWNLINE DRAIN • DRIVE APPROACHES TO TWELVE MILE ROAD AND DRAIN CROSSINGS • INSTALLATION OF ALL UNDERGROUND UTILITIES (STORM SEWER, SANITARY SEWER, AND WATER MAIN) AND FRANCHISED UTILITIES (GAS, CITY FIBER, AND ELECTRICITY) • INSTALLATION OF PARKING LOTS, DRIVES, CURBS, AND WALKS • WETLAND RESTORATION AND MAINTENANCE • LANDSCAPING AROUND BUILDING 	<p>PHASE II - PERMANENT CHURCH AND ADMINISTRATIVE OFFICES</p> <ul style="list-style-type: none"> • INSTALLATION OF WALKS • LANDSCAPING AROUND BUILDING
<p>PHASE III - GYMNASIUM AND YOUTH CENTER</p> <ul style="list-style-type: none"> • LANDSCAPING AROUND BUILDING 	

TOPOGRAPHIC AND BOUNDARY DATA, INCLUDING PROPERTY LINES, LEGAL DESCRIPTIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED FROM SURVEY FOR THIS SITE PREPARED BY:

SILAM ENGINEERING, P.C.
4031 KODOLGE HIGHWAY
TROY, MI 48068
JOB NO. 14-078 DATED 3/06/2017

ZEMMET-WODZNAK & ASSOCIATES, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OMISSIONS RESULTING FROM SURVEY INACCURACIES.

NOTE: ALL DIMENSIONS ARE TO BACK OF CURB OR FACE OF WALK OR FACE OF BUILDING AS SHOWN.



NOT FOR CONSTRUCTION
SIDWELL #22-12-351-028, -030, -034, -036

PROJECT SPONSORS:
ARMENIAN CULTURAL CENTER
18101 FORD ROAD
DARBY, MI 48128

SECTION 12, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

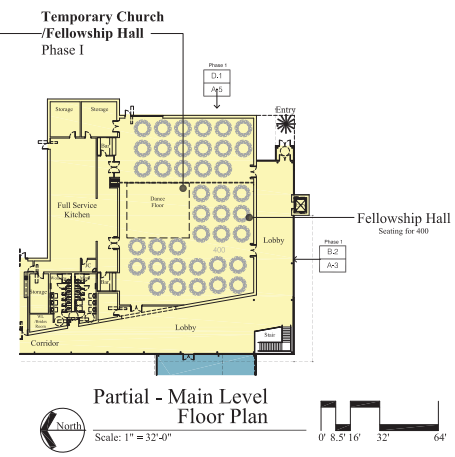
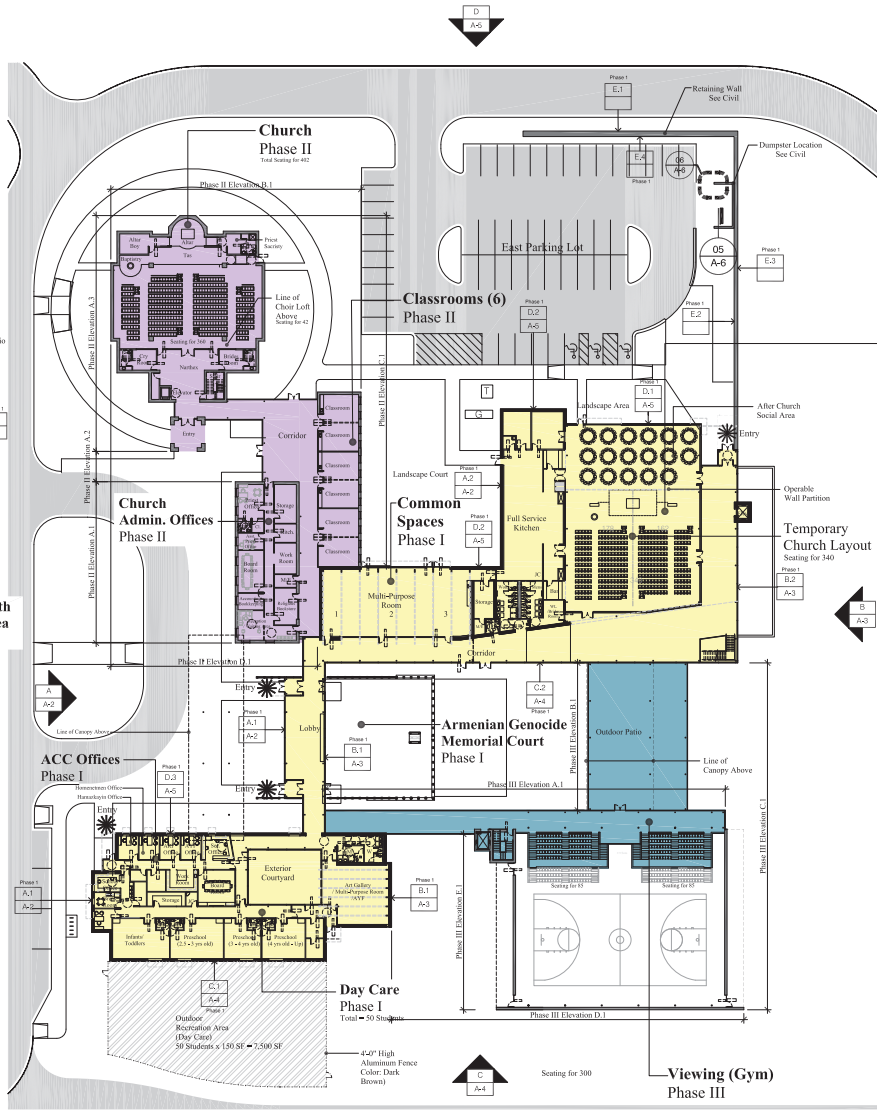
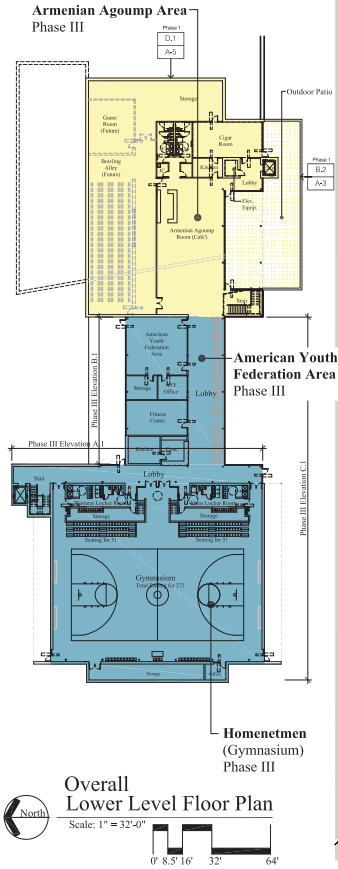
DIMENSION AND SITE PLAN
ARMENIAN CHURCH AND CULTURAL CENTER

ZEMMET WODZNAK
Civil Engineers & Land Surveyors
12000 WOODLAND DRIVE
TROY, MI 48068
TEL: 313.781.1100 FAX: 313.781.1101
WWW.ZEMMETWODZNAK.COM

DATE BY: BRUNSONS
12/07/17 LAM PREP-APP SUBMITTAL
12/07/17 LAM OWNER REVIEW
12/07/17 LAM OWNER REVIEW
12/07/17 LAM OWNER REVIEW
12/07/17 LAM OWNER REVIEW

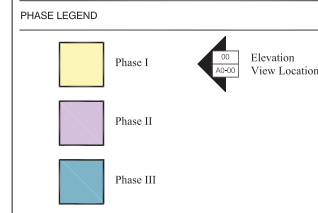
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DATE: 12/07/17
JOB NO: 14109
SHEET NO: C-1

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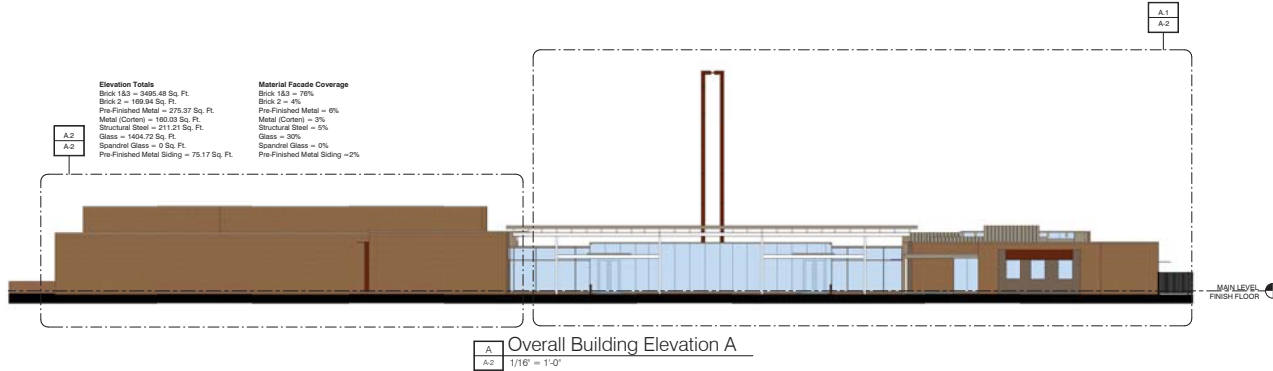
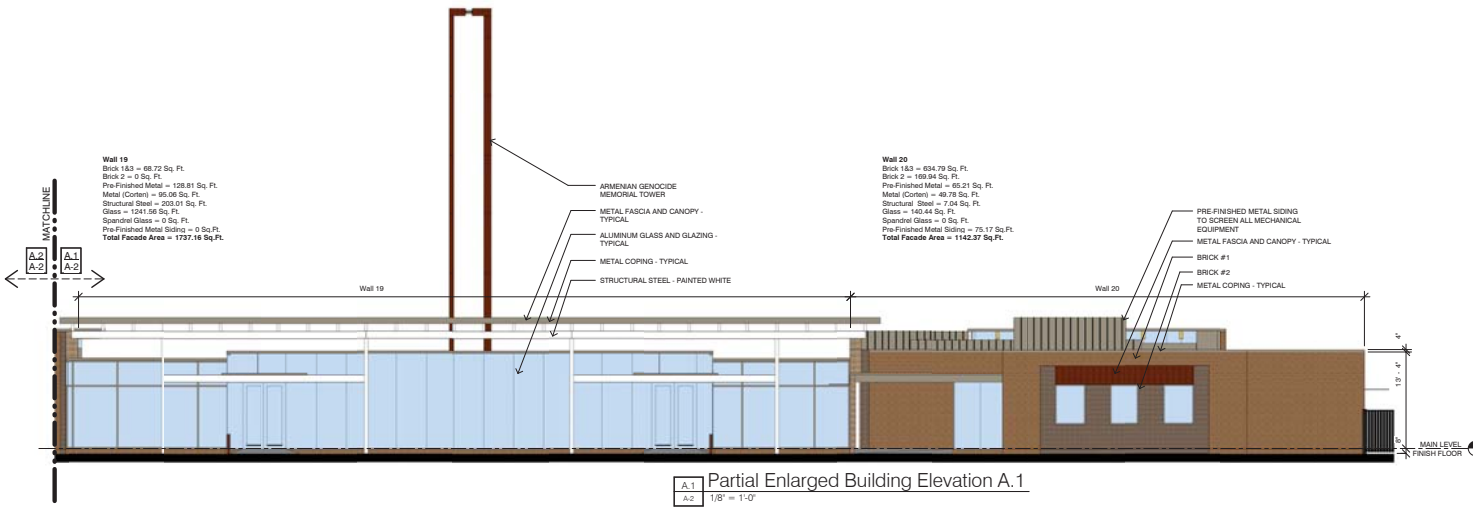
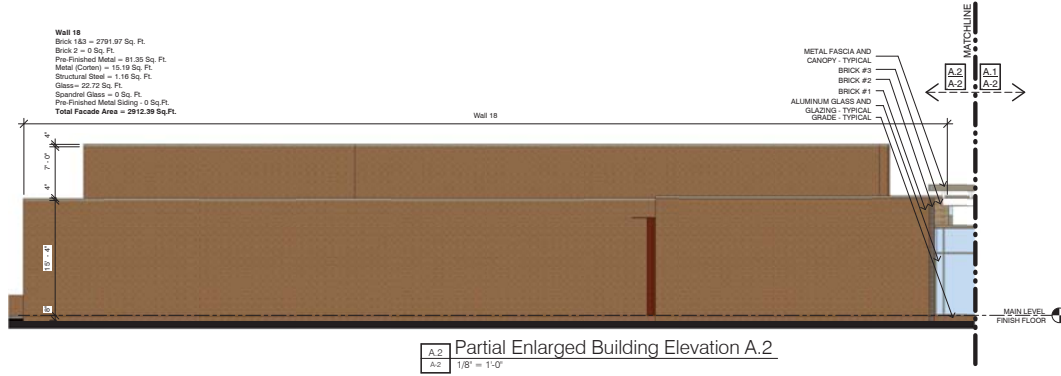


AREA CALCULATIONS - PHASE I

Phase I (Yellow)	
Main Level Area	= 33,912 sf.
Lower Level Area	= + 11,110 sf.
Total Phase I Area	= 44,022 sf.

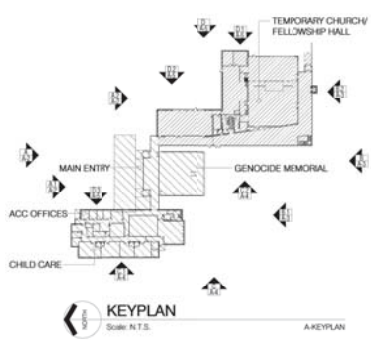


Sheet Title	Overall Plans	Project	Armenian Church and Cultural Center Section 12, City of Novi Oakland County, Michigan
Revisions	Preliminary Site Plan (PSP) Submittal City of Novi August 25, 2017		
Architect's Seal	THIS REGISTRATION SEAL IS FOR THE DRAWINGS ONLY AND DOES NOT INDICATE ANY INDIVIDUAL REQUIREMENTS OF AN ENGINEER OR ARCHITECT.		
Architect	Sustainable George Popper AIA Architecture & Planning, PLLC 1025 S. W. 14th Street, Suite 200 P. 248.029.8998 F. 248.298.3192 www.cgp-architecture.com		
Sheet No.	A-1		
Project No.	201528		
Date:	August 25, 2017		
Drawn/Checked:	JMF / EFC		
Approved:	GCP		
Date:	August 25, 2017		
By:	Novi Staff Plan - Use Figure Dimensions		



FACADE MATERIAL LEGEND

	BRICK 1		STRUCTURAL STEEL
	BRICK 2		GLASS
	BRICK 3		SPANDREL GLASS
	PRE-FINISHED METAL		PRE-FINISHED METAL SIDING
	METAL CORTEN		



Sheet Title
 Elevation A
 A-2

Project
 Armenian Church and Cultural Center
 Section 12, City of Novi,
 Oakland County, Michigan

Architect's Seal
 THE REGISTRATION
 ARCHITECTURAL
 AND
 ENGINEERING
 BOARD
 OF
 MICHIGAN
 ARCHITECT
 AND
 ENGINEER
 DISCIPLINE

Revisions
 Preliminary Site Plan (RSP) Submittal
 August 25, 2017

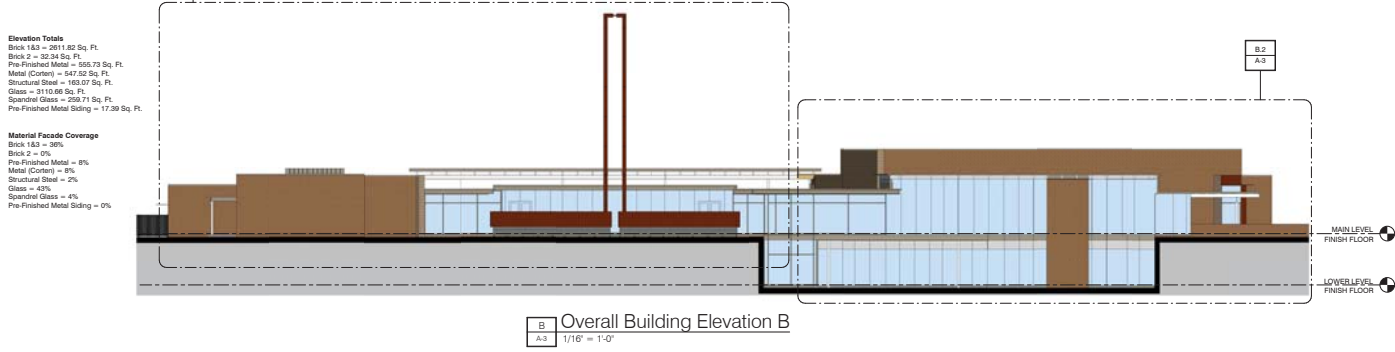
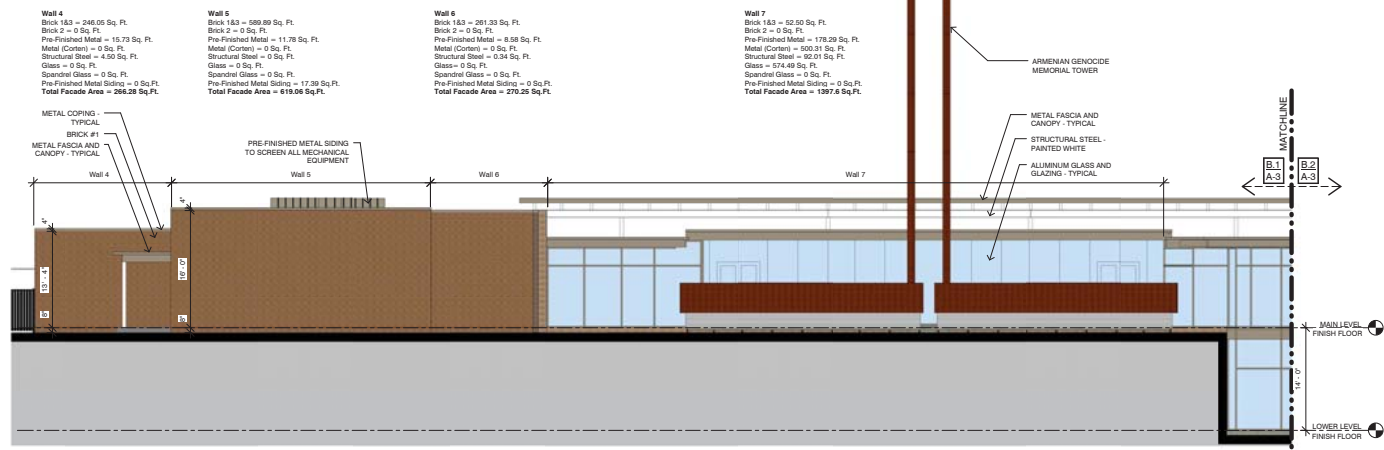
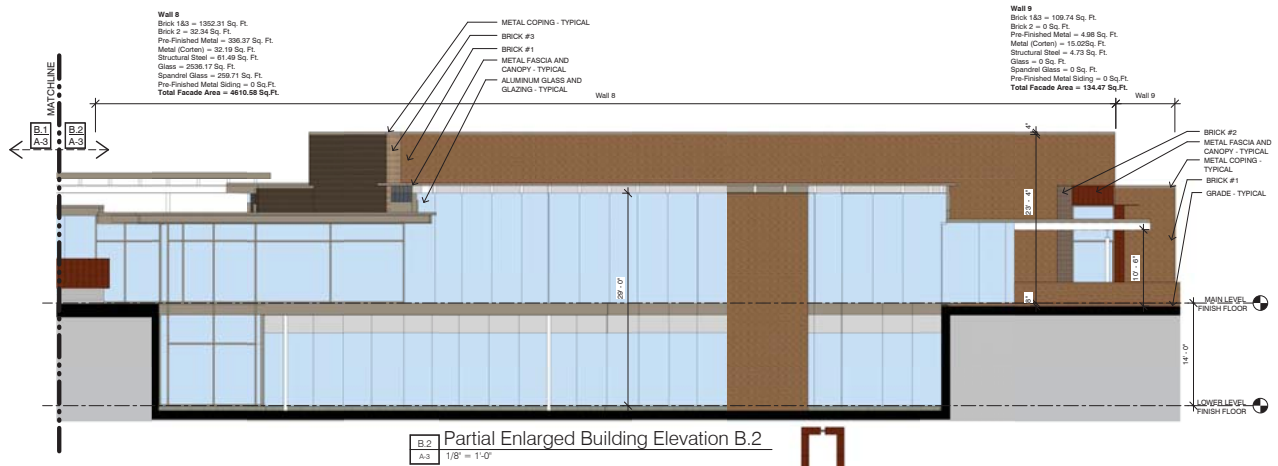
Drawn / Checked
 JMR/ EFC

Approved
 CGP

Date: August 25, 2017
Submittal
 Preliminary Site Plan

Project No. 201528

Copyright 2017
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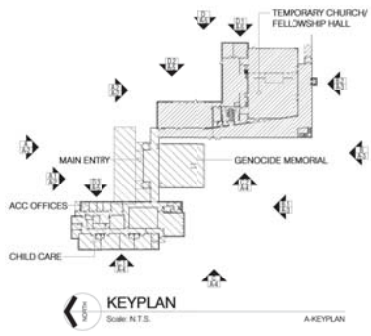


LIGHTING AT ARMENIAN GENOCIDE MEMORIAL TOWER

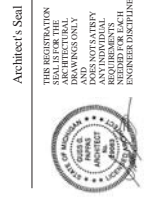


FACADE MATERIAL LEGEND

	BRICK 1		STRUCTURAL STEEL
	BRICK 2		GLASS
	BRICK 3		SPANDREL GLASS
	PRE-FINISHED METAL		PRE-FINISHED METAL SIDING
	METAL CORTEN		



Revisions
 Preliminary Site Plan (PSF) Submission
 10/1/2017
 August 25, 2017

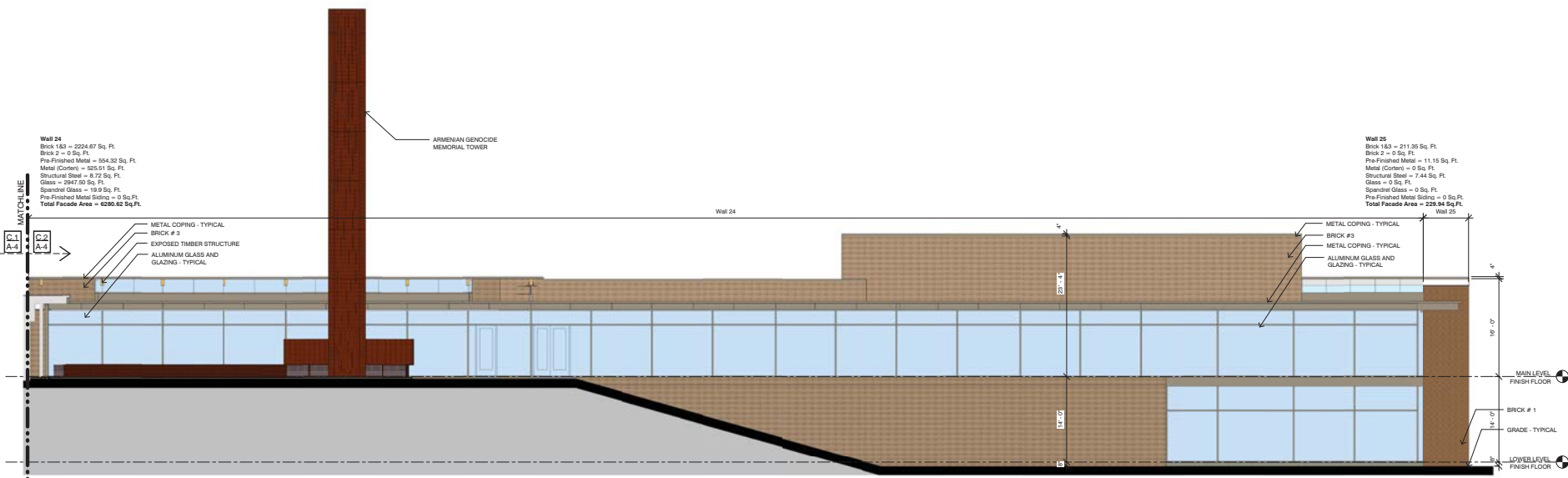


Project
 Armenian Church and Cultural Center
 Section 12, City of Novi,
 Oakland County, Michigan
 Project No. 201528

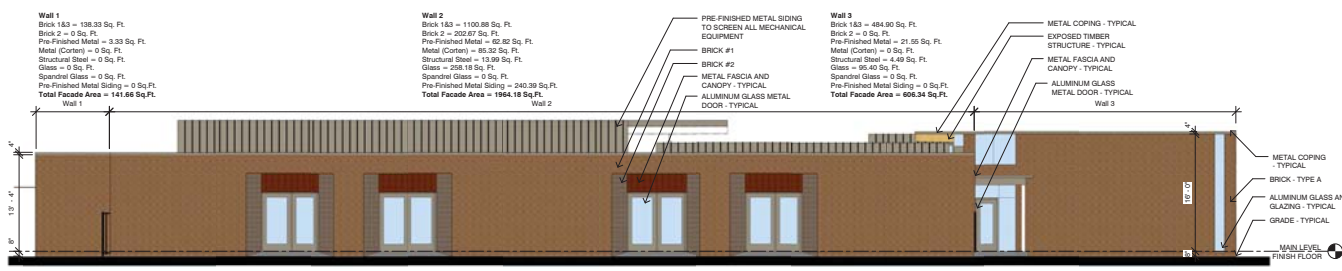
Architecture / Planning
 1025 S. Washington Ave. Royal Oak, MI 48067
 P. 248.629.8998 F. 248.298.3192
 www.cgp-architecture.com

Drawn / Checked
 JHR / EFC
 Approved
 CGP
 Date: August 25, 2017
 Preliminary Site Plan
 Submission

Sheet Title
 Elevation B
 Sheet No.
 A-3



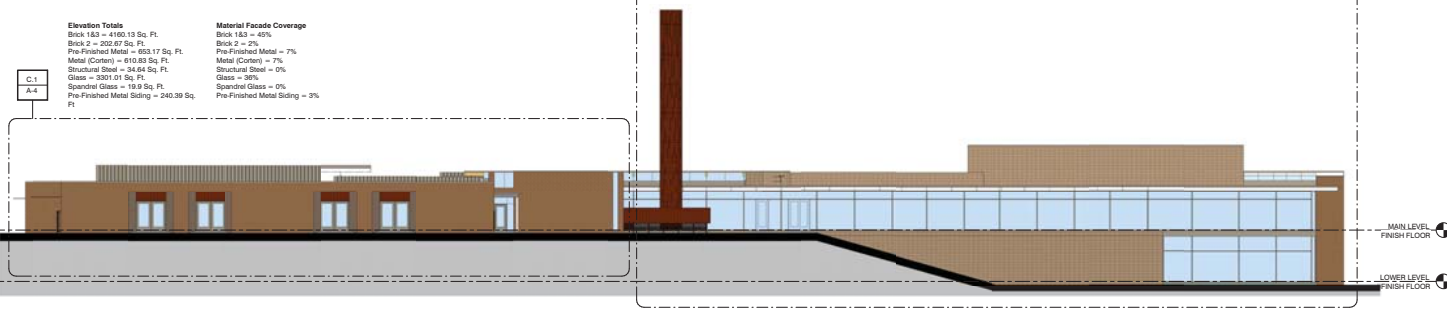
C.2 Partial Enlarged Building Elevation C.2
 1/8" = 1'-0"



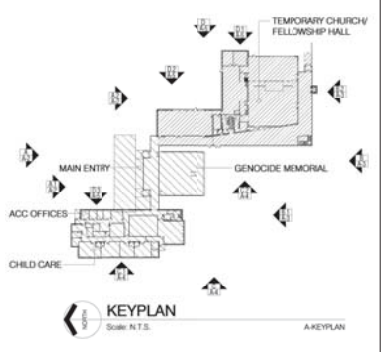
C.1 Partial Enlarged Building Elevation C.1
 1/8" = 1'-0"

FACADE MATERIAL LEGEND

	BRICK 1		STRUCTURAL STEEL
	BRICK 2		GLASS
	BRICK 3		SPANDELR GLASS
	PRE-FINISHED METAL		PRE-FINISHED METAL SIDING
	METAL CORTEN		



C Overall Building Elevation C
 1/16" = 1'-0"



Revisions

Architect's Seal

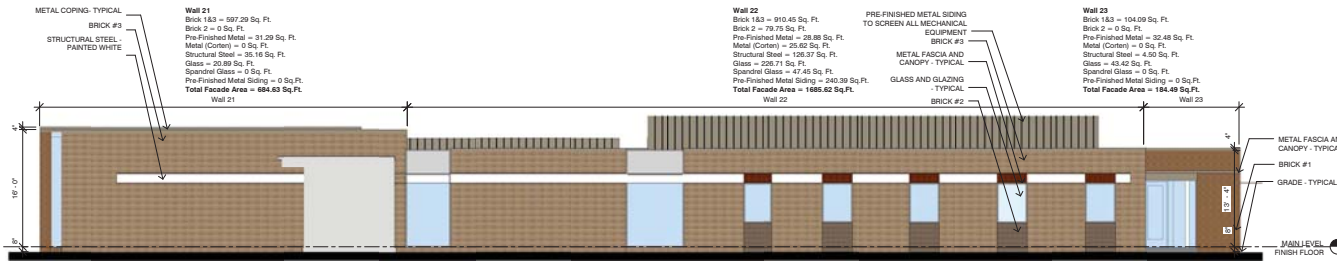
THE REGISTRATION ARCHITECTURAL ARCHITECTS AND ENGINEERS ASSOCIATION OF MICHIGAN

Project: Armenian Church and Cultural Center Section 12, City of Novi, Oakland County, Michigan

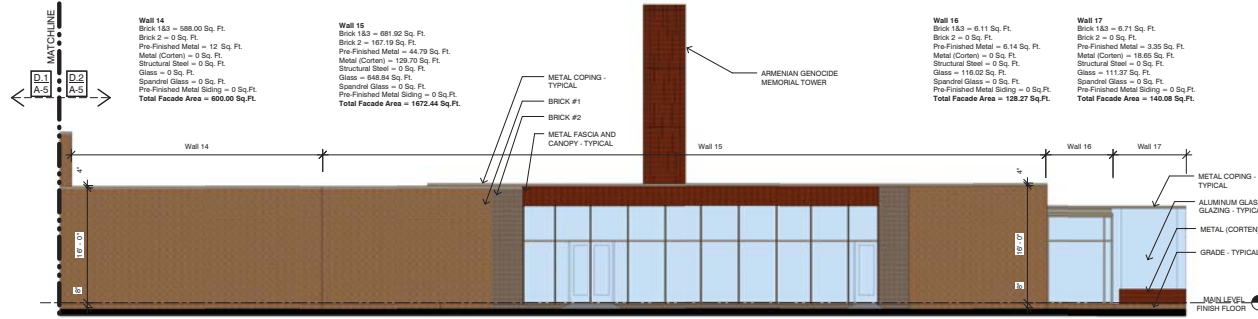
Project No. 201528

Drawn / Checked: JHR/ EFC
 Approved: CGP
 Date: August 25, 2017
 Preliminary Site Plan
 Submittal

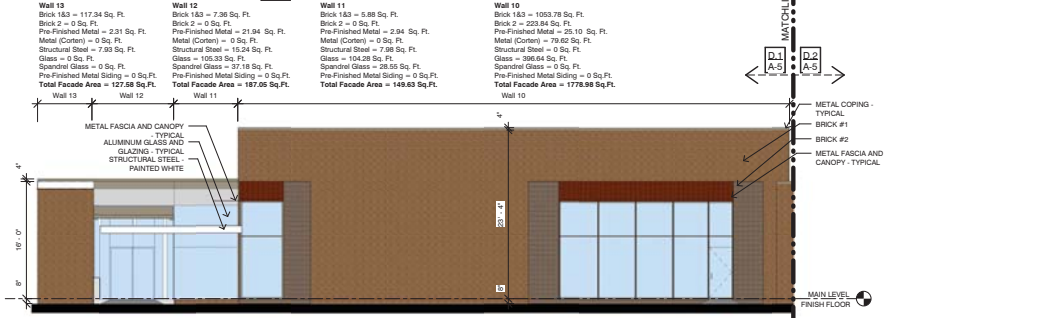
Sheet No. A-4



D.3 Partial Enlarged Building Elevation D.3
 A.S. 1/8" = 1'-0"



D.2 Partial Enlarged Building Elevation D.2
 A.S. 1/8" = 1'-0"



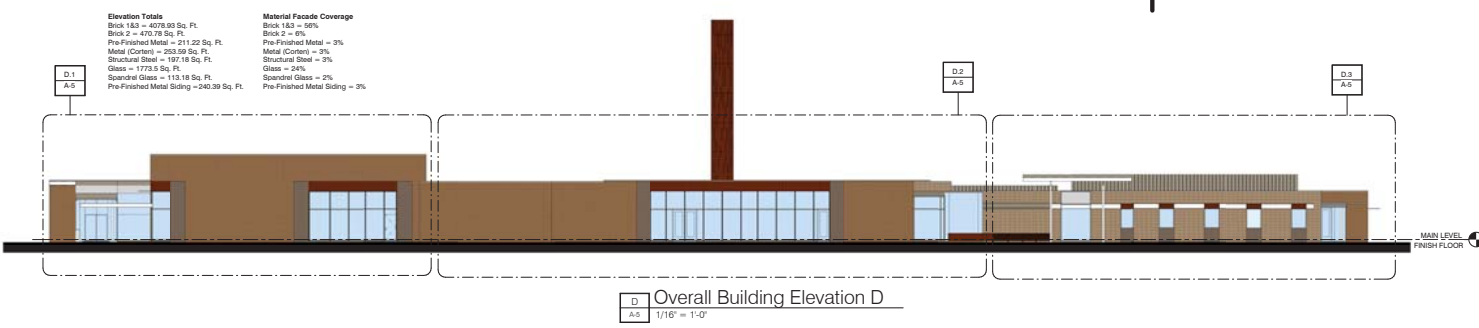
D.1 Partial Enlarged Building Elevation D.1
 A.S. 1/8" = 1'-0"

Elevation Totals

Brick 183	= 4078.93 Sq. Ft.
Brick 2	= 470.78 Sq. Ft.
Pre-Finished Metal	= 211.22 Sq. Ft.
Metal (Corten)	= 253.39 Sq. Ft.
Structural Steel	= 197.18 Sq. Ft.
Glass	= 1773.5 Sq. Ft.
Spandrel Glass	= 113.18 Sq. Ft.
Pre-Finished Metal Sliding	= 240.39 Sq. Ft.

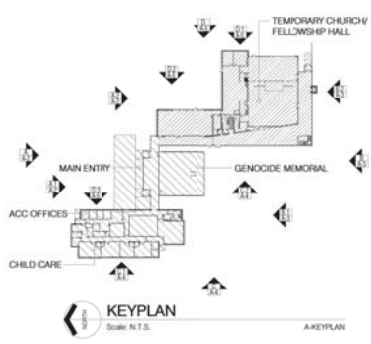
Material Facade Coverage

Brick 183	= 56%
Brick 2	= 6%
Pre-Finished Metal	= 3%
Metal (Corten)	= 3%
Structural Steel	= 3%
Glass	= 24%
Spandrel Glass	= 2%
Pre-Finished Metal Sliding	= 3%



FACADE MATERIAL LEGEND

	BRICK 1		STRUCTURAL STEEL
	BRICK 2		GLASS
	BRICK 3		SPANDREL GLASS
	PRE-FINISHED METAL		PRE-FINISHED METAL SLIDING
	METAL CORTEN		



Revisions
 Designer: Site Plan (RSP) Submittal
 City of Novi
 August 25, 2017

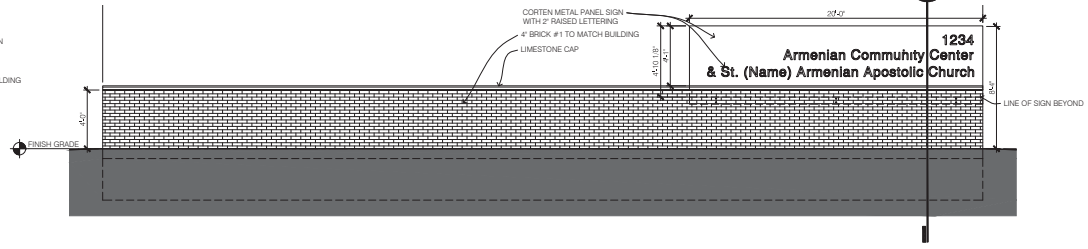
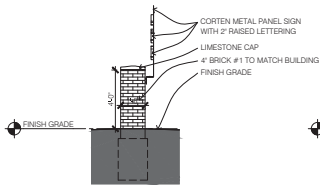
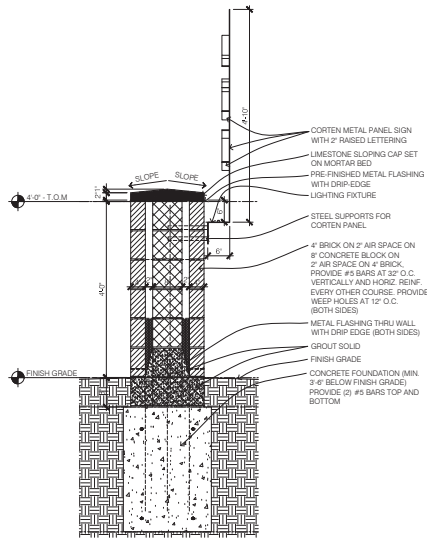
Architect's Seal
 THE REGISTRATION
 ARCHITECTURAL
 ARCHITECTS
 AND
 ENGINEERS
 BOARD
 OF MICHIGAN
 STATE BOARD OF
 ARCHITECTURE
 AND
 ENGINEERING
 DISCIPLINE

Project
 Armenian Church and Cultural Center
 Section 12, City of Novi,
 Oakland County, Michigan
 Project No. 201528

Drawn/Checked
 JMR/EFC
 Approved
 CGP
 Date: August 25, 2017
 Preliminary Site Plan
 Submittal

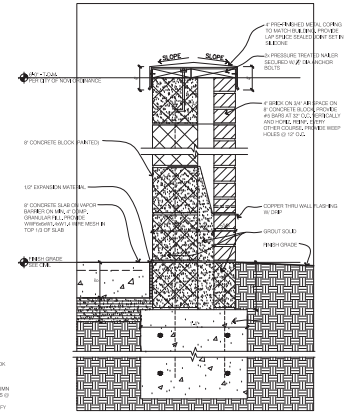
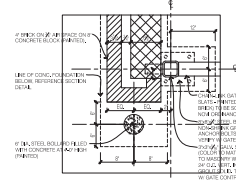
Sheet Title
 Elevation D
 Sheet No.
 A-5

P:\5250\PTL\03\1234 - ARMENIAN - SECTION - MODEL\A-ELEVATIONS\SECTION\SECTION AUG 22 2017



06
A-6
TYPICAL PLAN DETAIL @
DUMPSTER SCREEN WALL LOCATION
Scale: NOT TO SCALE

05
A-6
TYPICAL SECTION DETAIL @
DUMPSTER SCREEN WALL LOCATION
Scale: NOT TO SCALE



Sheet Title
Sign Elevations,
Section, and Garbage
Screening Details

Project
Armenian Church and Cultural Center
Section 12, City of Novi,
Oakland County, Michigan

Architect's Seal
Dovontsine George Pyggs, AIA
Architecture / Planning
1025 S. Westborough Rd., #148067
P. 248.293.9988 E. 248.293.1992
www.cgp-architecture.com

Revisions
Revisions: Site Plan (RSP) Submitted
City of Novi
August 25, 2017



Project No. 201528

Drawn / Checked
JMF / EFC
Approved:
CJP
Date: August 25, 2017
Armenian Church and Cultural Center
Section 12, City of Novi, Michigan
Oakland County, Michigan

Sheet No.
A-6

Facade Materials



Brick #1
 Manufacturer: Cloud Ceramics
 Color: Kansa Gold Velour



Brick #2
 Manufacturer: Cloud Ceramics
 Color: Kansa Gold Shadowtex



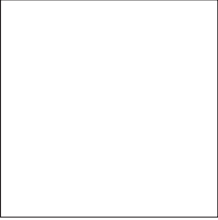
Brick #3
 Manufacturer: Yankee
 Color: Beige Smooth



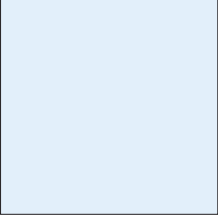
Pre-Finished Metal
 Color: Champagne



Metal - Corten



Structural Steel
 Color: Painted (Color Selected By Architect)




Glass
 Color: Clear or Slightly Tinted



Spandrel Glass
 Color: White



Pre-Finished Metal Siding
 Color: Champagne

Sheet Title	Facade Materials	Project	Armenian Church and Cultural Center Section 12, City of Novi, Oakland County, Michigan	Architect's Seal	Revisions
Sheet No.	A-7	Down/Checked JMF/EPC	1035 S. Washington Ave. Royal Oak, MI 48067 P. 248.629.8998 F. 248.298.3192 www.cgp-architecture.com	THIS REGISTRATION SEAL IS FOR THE ARCHITECT'S USE ONLY AND DOES NOT CONSTITUTE ANY ENDORSEMENT OR GUARANTEE OF THE QUALITY OF THE ARCHITECT'S WORK OR THE QUALITY OF THE ENGINEER'S WORK UNDER THE PROFESSIONAL ENGINEER ACT	Preliminary Site Plan (PSP) Submitted City of Novi August 25, 2017
Copyright © 2017 D:\Net\Shop\Plan - Use Pinned Dimensions	Date: August 25, 2017 Approved: [Signature] City of Novi Submitted	Project No. 201528	Constantine George Pappas AIA Architect/Planner 1035 S. Washington Ave. Royal Oak, MI 48067 P. 248.629.8998 F. 248.298.3192 www.cgp-architecture.com		

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

September 25, 2017

Planning Review

JSP 17-37 ARMENIAN CHURCH AND CULTURAL CENTER

PETITIONER

Armenian Cultural Center

REVIEW TYPE

Preliminary Site Plan and Special Land Use

PROPERTY CHARACTERISTICS

Section	12	
Site Location	North side of Twelve Mile Road, east of Meadowbrook Road	
Tax Map Parcel	50-22-12-351-034, 50-22-12-351-036, 50-22-12-351-028 and 50-22-12-351-030	
Site School District	Walled Lake Consolidated School District	
Site Zoning	RA: One Family Residential	
Adjoining Zoning	North	RA: One Family Residential
	East	RA: One Family Residential
	West	R-4: One Family Residential & B-3 General Business
	South	OST Office Service and Technology
Current Site Use	Vacant	
Adjoining Uses	North	Single family residential
	East	Single family residential
	West	Single family residential/future commercial
	South	Vacant
Site Size	19.30 acres (combination of four parcels)	
Plan Date	August 25, 2017	

PROJECT SUMMARY

The applicant is proposing a church and a cultural center with accessory uses such as day care center, multipurpose hall, café, religious educational rooms, Armenian genocide memorial and recreational facility. The applicant is proposing to construct in three phase. The project area comprising of four parcels is approximately 19.30 acres. The applicant is also proposing to landbank upto 45 spaces of the total 264 spaces proposed. A Special Land Use Permit is required to permit Places of Worship and a day care in residential districts. The applicant provided a Community Impact Statement, Trip Generation study, shared parking study as part of the Preliminary Site Plan submittal.

The applicant also hosted three community meetings to meet with the neighbors and explain the project. It is staffs understanding that about 20-25 people in total attended all three meetings.

RECOMMENDATION

Approval of the ***Preliminary Site Plan and Special Land Use is recommended.*** The plan mostly conforms to the requirements of the Zoning Ordinance, with a few deviations listed in this and other review letters. **Planning Commission's approval for Special Land Use, Preliminary Site Plan, Shared parking agreement, Landbank Parking, and Storm Water Management Plan is required.**

Special Land Use Considerations

The applicant is proposing a place of worship (Sec 4.10) and a day care (Section 4.12.1) in RA: One Family Residential zoning, which requires special land use approval and must meet use standards

outlined in Section 6.12.C. **Section 6.1.2.C of the Zoning Ordinance outlines specific factors the Planning Commission shall consider in the review of any Special Land Use:**

- i. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service.
- ii. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area.
- iii. Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats.
- iv. Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood.
- v. Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use.
- vi. Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner.
- vii. Whether, relative to other feasible uses of the site, the proposed use is
 - a. Listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and
 - b. Is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located.

ORDINANCE DEVIATIONS

1. **Planning Commission waivers/approval/Consideration**
 - I. Approval of **Special land use** request for proposing a place of worship (Sec 4.10) and a day care (Section 4.12.1) in RA: One Family Residential zoning
 - II. Approval of **shared parking study** per section 5.2.7 as the applicant is requesting reduction of parking space due to multiple uses on
 - III. Approve the request for **Landbank parking** per section 5.2.14, up to 45 spaces of the required 262 spaces
 - IV. Planning Commission's approval of **Phasing plan**. The applicant is proposing to build the Church and accessory uses in three phases.
 - V. Planning deviations from Bicycle Parking and General Requirements per section 5.16 as the applicant is proposing all required 10 spaces in one location as opposed to multiple locations.
2. **DCS Variances (Admin/City Council)**
 - I. A DCS variance is required for not detaining on-site run off on-site.
 - II. A DCS variance is required for not providing a minimum of 3 feet cover for storm sewers.
3. **Zoning Board of Appeals Variances:** Please submit the ZBA application by **October 4, 2017** to get on agenda for November 13 meeting. The application can be found [here](#).
 - I. A ZBA variance from section 3.1.1.E to increase the maximum allowed height for genocide memorial (35 feet allowed, 65 feet proposed).
 - II. A ZBA variance from section 5.7.3.H for proposing decorative lighting that transmits into the sky for Genocide memorial.
 - III. A ZBA variance from section 4.19.2.F for proposing dumpster in the sideyard.

ORDINANCE REQUIREMENTS

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 3 (Zoning Districts), Article 4 (Use Standards), Article 5 (Site Standards), and any other applicable provisions of the Zoning Ordinance. Comments in **bold** should be addressed with next submittal. Comments in **bold and underline** should be addressed prior to Planning Commission meeting:

1. **Use:** The applicant is proposing a 'Church' as a primary use of the subject property with secondary supporting uses such as daycare, gymnasium, multipurpose halls etc as listed in the narrative to support the member community. A special land use approval is required to permit church and a daycare in a residential district. A temporary church with 340 seats is proposed to be built as part of Phase 1 and a permanent church structure is proposed to be built in Phase 2. The temporary church will be converted into a fellowship hall in Phase 2.
2. **Phasing Approval:** The subject property is proposed to be developed in three phases. The applicant has provided details about phasing in the current submittal. Information about Engineering, landscape, Traffic, wetlands and woodlands is provided for the final development including three phases; building elevations are only provided for Phase 1. Staff has reviewed the conceptual elevations for all phases at the time of Pre-application site plan and is in general agreement with the design. Please refer to Plan review chart for more comments.
3. **Final site plan approval for other phases:** Once Planning Commission approves the phasing plan, applicant can submit final site plans for individual phases. They will be reviewed administratively, as long as they do not deviate from the approved preliminary phasing plan or the Zoning Ordinance. Typically, once phasing is approved, final site plans can be reviewed administratively. The applicant is requesting an increase of maximum of building height for proposed church in phase 2. **Staff recommends reviewing the building elevations or any other site changes if proposed as revised preliminary at the time of Phase 2 submittal. Depending on whether the plans conform to the code, staff will make a determination whether a Planning Commission's approval is needed at that time.**
4. **Outdoor Activities:** The applicant requested a variance for outdoor activities/events in their community impact statement. Temporary permits for outdoor events should be applied with the City prior to those events. They cannot be approved as part of the Planning Commission's approval. **Please provide a conceptual layout where the events will be tentatively held so that staff can assess the impacts to neighbors and provide related input. Especially, where the music stage will be located.**
5. **Community Impact Statement:** It addresses all the factors as required per our site development manual. Values related to existing woodlands on site have been left blank on page 3. **Please provide them with the revised narrative prior to Planning Commission meeting.**
6. **Noise Impact Statement:** One is provided as part of the Community Impact Statement. There will be six picnics and festival at this location per year. Bands will be performing at these events. **Staff is unable to determine the noise levels, but the applicant agreed to keep the levels under the maximum allowed for the subject property. Provide more information such as estimated attendance, if it is open to public or just the members of the church, location of music bands etc. prior to Planning Commission meeting.**
7. **Building height:** Information is not clearly listed on the site plans. Narrative refers to 35 to 65 feet for church, 60 feet for the Genocide memorial. Please provide the heights under site data. Based on conversation with the applicant, staff has determined the following. Please verify the same before the Planning Commission meeting so that we can identify the exact deviations sought.
 - a. Maximum height of the church in phase 2: 65 feet
 - b. Maximum height of Genocide memorial: 60 feet

- c. Maximum height of all other accessory uses: 35 feet

Staff recommends deferring the ZBA variance request for Church height at the time of phase 2 site plan submittal. Staff reviewed conceptual elevations at the time of Pre-application meeting and are in general agreement, but are unable to make a final determination at this time.

8. **Number of Parking Spaces:** A shared parking study has been submitted by the applicant to propose shared parking between proposed uses. Staff has determined that a minimum of 262 spaces are sufficient to serve the needs of the proposed Church and cultural center. **Parking calculations are incorrect under site data. Please correct. The plan proposes to remove about 7 spaces to build future landbank parking. This would reduce the number of total parking to 258. It would then not meet the minimum required total of 262.**
9. **Landbank Parking (Sec. 5.2.14):** Landbanking may be permitted on the request of the applicant if the applicant can demonstrate that the number of parking spaces required under this section are in excess of the actual requirements for the functional use of the building for up to 25% of the required number of parking spaces. The applicant has provided a shared parking study justifying the land bank request. The applicant is requesting to land bank upto 45 spaces.
 - a. **Provide a dimensioned layout plan for landbank parking layout as well**
 - b. **Provide revised landscape calculations for land bank parking area to identify any required deviations.**
 - c. **Update the woodland replacement counts on sheet WP-1 to reflect landbank parking construction**
10. **Pedestrian Connectivity:** The current plan does not provide pedestrian connectivity to proposed public sidewalk along Twelve mile. Staff agrees that it would impact natural features if one is proposed along the proposed drive into the development. Applicant should work with staff to identify alternate options to provide pedestrian connection along proposed secondary emergency access.
11. **Lighting and Photometric Plan (Sec. 5.7):** All proposed developments abutting residential districts require a photometric plan and exterior lighting details at time of Preliminary Site Plan. **Refer to Planning chart for comments.**
12. **Armenian Genocide Memorial:** **Provide more information on the lighting proposed for the memorial such as type of light bulb, color of light, whether it is single stream of light or flashing, hours of operation etc.**
13. **Plan Review Chart:** Please see the attached chart for information pertaining to ordinance requirements.
14. **Site Addressing: A new address is required for this project.** The applicant should contact the Building Division for an address prior to applying for a building permit. Building permit applications cannot be processed without a correct address. The address application can be found by clicking on this [link](#). Please contact Brian Riley at [248.347.0438] in the Community Development Department with any specific questions regarding addressing of sites.
15. **Signage:** A ZBA variance from sign ordinance as the proposed sign exceeds the maximum allowed square footage off 70 sq. ft. (80 sf proposed) and maximum allowed height of 6 feet (8'-4" proposed). **Staff recommends revising the sign design to meet the Ordinance requirements.** If the plan is revised to meet the requirements, a sign permit can be applied at a later time. Exterior Signage is not regulated by the Planning Division or Planning Commission. Please contact Ordinance at (248.735.5678) for information regarding sign permits.

16. **Parcel Split/Combination:** The proposed project proposes to combine four parcels into one. At this time, no property split has been submitted to the Assessing Department. The applicant must create this parcel prior to Stamping Set approval and/or applying for new site address. Plans will not be stamped until the parcel is created.

17. Other Reviews

- a. Engineering Review: Engineering review has identified some DCS variance that may be required. Additional comments to be addressed with Final Site Plan. Engineering recommends approval.
- b. Landscape Review: Landscape review has identified waivers that may be required. Refer to review letter for more comments. Landscape recommends approval.
- c. Wetlands Review: A City of Novi Wetland Minor Permit and Buffer Authorization are required for the proposed impacts to wetlands and regulated wetland setbacks. Additional comments to be addressed with Final Site Plan. Wetlands recommend approval. Staff recommends providing a conservation easement for the remaining wetlands on property.
- d. Woodlands Review: A City of Novi Woodland Permit is required for the proposed impacts to woodlands. Woodland recommends approval. Staff recommends providing a conservation easement for the remaining woodlands on property.
- e. Traffic Review: Additional information to be provided with Final site plan submittal. Traffic recommends approval.
- f. Trip Generation Review: Traffic recommends approval.
- g. Shared Parking Study Review: Traffic recommends approval.
- h. Facade Review: Façade recommends approval. Additional phases will be reviewed at the time of respective submittals.
- i. Fire Review: Additional comments to be addressed with Final Site Plan. Fire recommends approval.

NEXT STEP: PLANNING COMMISSION MEETING

This Site Plan is scheduled to go before Planning Commission for **public hearing** on October 11 2017. Please provide the following **no later than October 5, 2017** if you wish to keep the schedule.

1. Original Site plan submittal in PDF format. **NO CHANGES MADE. Provided with the initial submittal.**
2. A response letter addressing ALL the comments from ALL the review letters.
3. A color rendering of the Site Plan, if any. **OPTIONAL**
4. Revised community impact statement
5. Revised noise impact statement
6. Other items identified in Planning Review chart as required prior to Planning Commission meeting.
7. Elevation renderings that were provided at the time of Pre-application meeting in PDF format. If they have been revised since then, please provide the revised building renderings in PDDF format.
8. A sample board of building materials if requested by our Façade Consultant.

FINAL SITE PLAN SUBMITTAL

After receiving the Preliminary Site Plan approval, please submit the following for Final site plan review and approval. **Some of these documents are provided as part of the Preliminary site plan submittal. Please resubmit them at the time of Final site plan. Underlined text below is hyperlinked.**

1. Seven copies of Final Site Plan addressing all comments from Preliminary review
2. Response letter **addressing all comments and refer to sheet numbers where the change is reflected.**
3. Narrative
4. Color Renderings provided at the time of Pre-application meeting
5. [Final Site Plan Application](#)
6. [Final Site Plan Checklist](#)

7. Engineering Estimate
8. Landscape Estimate
9. [Other Agency Checklist](#)
10. [Hazardous Materials Packet](#) (Non-residential developments)
11. [Non-Domestic User Survey](#) (Non-residential developments)
12. [No Revision Façade Affidavit](#) (if no changes are proposed for Façade)
13. Legal Documents (If required per the attached Planning and Engineering Legal Transmittals)

ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER

After receiving Final Site Plan approval, please submit the following for Electronic stamping set approval:

1. Plans addressing the comments in all of the staff and consultant review letters in PDF format.
2. Response letter addressing all comments in ALL letters and ALL charts and **refer to sheet numbers where the change is reflected.**

STAMPING SET APPROVAL

Stamping sets are still required for this project. After having received all of the review letters from City staff the applicant should make the appropriate changes on the plans and submit **10 size 24" x 36" copies with original signature and original seals**, to the Community Development Department for final Stamping Set approval. Plans addressing the comments in all of the staff and consultant review letters should be submitted electronically for informal review and approval prior to printing Stamping Sets.

PRE-CONSTRUCTION MEETING

A Pre-Construction meeting is required for this project. Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled. If you have questions regarding the checklist or the Pre-Con itself, please contact Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] in the Community Development Department.

Chapter 26.5

Chapter 26.5 of the City of Novi Code of Ordinances generally requires all projects be completed within two years of the issuance of any starting permit. Please contact Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] for additional information on starting permits. The applicant should review and be aware of the requirements of Chapter 26.5 before starting construction.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5607 or skomaragiri@cityofnovi.org.



Sri Ravali Komaragiri – Planner



PLANNING REVIEW CHART: RA-One Family Residential & Special Land Use

Review Date: September 24, 2017
Review Type: Preliminary Site Plan
Project Name: JSP 17-37 ARMENIAN CHURCH AND CULTURAL CENTER
Plan Date: August 25, 2017
Prepared by: Sri Komaragiri, Planner
Contact: E-mail: skomaragiri@cityofnovi.org; Phone: (248) 735-5607

Bold	To be addressed with the next submittal
<u>Bold and Underline</u>	If plans are not revised, it would require Planning Commission and / or City Council approval
<u>Bold and Underline</u>	If plans are not revised, it would require Zoning Board of Appeals Variance
<i>Italics</i>	Notes to be noted

The review is based on standards listed in City of Novi Zoning Ordinance. City of Novi Zoning Ordinance and recent text amendments (they are not updated in Clearzoning Ordinance yet) can be found in this webpage: <http://www.cityofnovi.org/Reference/Code-of-Ordinances-and-City-Charter.aspx#ZoningOrdinance>

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan <i>(adopted August 25, 2010)</i>	Single Family	Church and Cultural Center	Yes	
Area Study	The site does not fall under any special category	NA	Yes	
Zoning <i>(Effective December 25, 2013)</i>	Residential Acreage (RA) Article 3	RA	Yes	
Uses Permitted (Sec 3.1.1.B & C)	Sec 3.1.1.B Principal Uses Permitted. Sec 3.1.1.C Special Land Uses	Church and Cultural Center, Daycare, Adin Offices, Auditorium, fellowship hall, café, meeting rooms, gymnasium and other uses	Yes	<u>Planning Commission approval for Special Land Use for Church and daycare is required</u> <u>Church is considered a Primary use and all others are considered accessory use. Church should be established prior to all other uses.</u>
Phasing	Phasing requires Planning Commission Approval	The site plan proposes 4 phases Phase 1: <ul style="list-style-type: none"> • Temporary Church (340 seats)/Cultural center with full 		The applicant provided a narrative that lists all uses at the time of Pre-application plan. At that time, four phases were proposed. Please revise

Item	Required Code	Proposed	Meets Code	Comments
		<ul style="list-style-type: none"> • service kitchen • Multipurpose halls • Café/Storage areas • Daycare • Armenian Genocide Memorial • All parking except 44 proposed landbank parking Phase 2: <ul style="list-style-type: none"> • Permanent Church 400 seats • Church Admin offices • Religious Educational/Meeting Rooms Phase 3: <ul style="list-style-type: none"> • Spaces for youth activities • Recreational Facility/gym to hold 272 seats 		<p>the same to correspond to three phases and submit the narrative prior to Planning Commission meeting. <u>Planning commission's approval for phasing is required.</u></p> <p>Site phasing notes on sheet C-1 refer to installation of walks in Phase II. Please clarify as what is this note referring to?</p> <p>Armenian Agoump Area in sheet A-1 is listed as Phase III, but color coded as Phase I. Please clarify which phase it belongs to.</p>
Required Conditions: Places of Worship(Section 4.10)				
Minimum Site Size (Sec 4.10.1)	- 3 Acres - 30 Acres for additional height	19.30 Acres The site plan proposes additional height up to 64 feet	No	
Minimum Site Width (Sec 4.10.2)	- (200) feet along front yard	Approximately 515 feet	Yes	
Site Access (Sec 4.10.3)	- All access to the site shall be onto a Major Arterial, Arterial or Minor Arterial road as shown on the City's Thoroughfare Plan	Site access is off of 12 Mile Road	Yes	
Minimum Building Setbacks (Sec 4.10.4)	- Seventy-five (75) feet from all property lines.	All setbacks are over 75 feet	Yes	
Parking in Front yard (Sec 4.10.5)	- There shall be no parking in front yard, - nor closer than twenty (20) feet from any side or rear lot line, except in those instances, where the lot abuts a residential lot and in those instances, no closer than thirty-five (35) feet on any side or	-No parking is proposed in the front yard	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	rear yard			
Parking Lot Screening (Sec 4.10.6)	- Screening of vehicular parking areas shall be in conformity with requirements at Sec 5.5.3	Perimeter parking lot screening does not meet the minimum requirements	No	<u>If the plans are not revised, it may require a PC waiver. Please refer to landscape review for more details.</u>
Noise Impact Statement (Sec 4.10.7)	- A noise impact statement is required subject to the standards of Section 5.14.10.B	One is provided as part of the Community Impact Statement	Yes	<i>There will be six picnics and festival at this location per year. Bands will be performing at these events. Staff is unable to determine the noise levels, but the applicant agreed to keep the levels under the maximum allowed for the subject property.</i>
Required Conditions: Places of Worship for additional height up to 65 feet (Section 4.10)				
Site Acreage	- 30 Acres for building height upto 65 feet	19 Acres	No	<u>The site does not have the minimum acreage, and thus it does not qualify for additional height that can be approved by Planning Commission</u>
Site Location	- Abuts a limited access freeway or a Major Arterial road	Abuts Twelve Mile Road	Yes	
Planning Commission Finding	- The proposed development is compatible with and does not have negative impact on surroundings.			
Building Setbacks	- the minimum front, side, and rear yard building setbacks are increased by one and one-half (1.5) feet for every one (1) foot of building height in excess of thirty-five (35) feet;	Narrative indicated 54 feet for the church and 64 feet for the memorial	No	<u>Additional building height proposed would require a ZBA variance. Staff suggests to provide additional setbacks as listed here as a supplement to the request for ZBA consideration</u>
Required Conditions: Day Care Centers (Sec. 4.12) For kids up to 50				
Outdoor Recreation Areas (Sec. 4.12.2.a)	150 square feet for each person care for, with a minimum of 3,500 square feet. For 50 children, 7,500 required	7,529 square feet of outdoor play area is proposed	Yes	<u>Please clarify that maximum number of kids does not exceed 50.</u>
Outdoor recreation areas enclosure (Sec. 4.12.2.a)	Fenced with self-closing gates	A fence is shown on the plans.	Yes	Sheet A.1 indicates two gates, but the sheet C-1 does not. Landscape plan LP-3 does not indicate gates as well. Please correct the inconsistency

Item	Required Code	Proposed	Meets Code	Comments
				and revise the site layout to provide sidewalk connection from the gates to the site sidewalk system. Provide more details on screening and enclosure
Outdoor Recreation Areas Location (Sec. 4.12.2.a)	May extend into an exterior side yard up to twenty five (25) percent of the distance between the building facade and the property line.	No exterior side yard	NA	
Hours of Operation (Sec. 4.12.2.d)	6 a.m. and 7 p.m. for those facilities abutting residential zoning districts	Not indicated	No	Provide hours of operation
Facilities Location (Sec. 4.12.2.c)	within a permitted office, or commercial structure, or in a freestanding building on a site	It is part of Church and Community Center	Yes	
Outdoor Recreation Screening and Landscape (Sec. 4.12.2.i.d)	Shall comply with Section 5.5.	Additional landscape is proposed in addition to the fence	Yes?	Provide the fence material and height
Off-Street Parking (Sec. 4.12.2.i.e)	Shall comply with Section 5.2.12. and Section 5.3.	Complies	Yes	
Parking in Front Yard or Exterior Side Yard (Sec. 4.12.2.ii.a)	Not more than fifty (50) percent of front yard or exterior side yard setback between the minimum required parking setbacks (35') and building facade line may be used for parking. The balance of this area shall be maintained in lawn and landscaping.	No parking is proposed in front yard, as required for Places of worship	NA	
Vehicular Access (Sec. 4.12.2.ii.b)	Shall not be directly to or from a major arterial or arterial.	Access is provided through an internal private drive leading to Twelve Mile Road	Yes	
Façade Standard (Sec. 4.12.2.ii.c)	Facilities abutting residential zoning districts shall be reviewed under the facade standards provided in Section 4.12.1.B.vii.	Abutting residential district	Yes	Façade recommends approval. A façade board or samples are required prior to the Planning Commission meeting
Height, bulk, density and area limitations (Sec 3.1.1.E)				

Item	Required Code	Proposed	Meets Code	Comments
Maximum % of Lot Area Covered (By All Buildings)	25%	Phase 1: 3.91% Phase 2: 1.84% Phase 3: 2.19% Total: 7.94%	Yes	
Building Height (Sec. 3.1.1.E)	35 feet or 2 ½ stories	Provide the maximum height of the building and the memorial under site data	No	A Zoning board of appeals variance is required for the maximum height proposed. Refer to Planning Review for more details.
Building Setbacks (Sec 3.1.1.E)				
Front @ Twelve Mile Road (Sec. 3.6.2.B)	For all non-residential uses: 75 ft.	435 ft.	Yes	Additional setbacks are not required for additional height as the site does not have the minimum site acreage required
Side (east and west)		137 ft. east 91 ft. west	Yes	
Rear (north)		427 ft.	Yes	
Parking Setback (Sec 3.1.1.E) Refer to applicable notes in Sec 3.6.2				
Front @ Twelve Mile Road (Sec. 3.6.2.B)	119 ft. (Same as front) NO parking in front yard for churches	No parking in front yard proposed	Yes	
Side (east and west)	20 ft. 35ft. (lot abuts a residential district)	Abuts residential district to east and west	Yes	
Rear (north)	20 ft. 35ft. (lot abuts a residential district)		Yes	
Note To District Standards (Sec 3.6.2)				
Area Requirements (Sec 3.6.2.A)	NA	Non-residential use	NA	
Parking Setbacks (Sec 3.6.2.B)	Refer to Sec 3.6.2 for more details	Meets the minimum	Yes	
Building Setbacks (Sec 3.6.2.C)	Refer to Sec 3.6.2 for more details	Meets the minimum	Yes	
Wetland/Watercourse Setback (Sec 3.6.2.M)	Refer to Sec 3.6.2 for more details	Wetland setbacks are shown	Yes	
Parking, Loading and Dumpster Requirements (Sec. 5.2)				
Number of Parking Spaces (Sec. 5.2)	AECOM's proposed requirement, based on review of shared parking study, includes a 20% contingency, lists a minimum of 262 spaces for a weekday and 233 spaces for the weekend.	220 regular parking 45 land bank parking Total: 264 spaces	Yes	<u>Parking calculations are incorrect under site data. Please correct.</u> <u>The plan proposes to remove about 7 spaces to build future landbank parking. This would reduce the number of</u>

Item	Required Code	Proposed	Meets Code	Comments
Offices (Sec. 5.2.12.D)	1 for each 222 square feet GLA	A shared parking study has been submitted by the applicant to propose shared parking between proposed uses. Staff has determined that a minimum of 262 spaces are sufficient to serve the needs of the proposed Church and cultural center.	Yes	total parking to 258. It would then not meet the minimum required total of 262. Please revise the plans to meet the minimum required and provide the actual number of land bank parking requested to avoid seeking a possible ZBA Variance
Theaters and auditoriums (Sec. 5.2.12.B)	1 for 3.4 seats plus one 1 for each 2 employees			
Daycare (Sec. 5.2.12.B)	1 for 350 square feet of usable floor area plus 1 for each employee			
Places of worship (Sec. 5.2.12.B)	1 for each 3 seats or persons permitted to capacity as regulated by local, county or state fire or building codes or 1 for 6 feet of pews in the main unit of worship, whichever is the greater, plus parking for accessory uses, if determined necessary by the City			
Shared Parking Study (Sec. 5.2.7)	One is required if the applicant is requesting reduction of parking space due to multiple uses on Site. This would require Planning Commission's approval	See comments above	Yes	<u>Shared Parking study requires Planning Commission's approval</u>
Landbank Parking (Sec.5. 2.14) Land banking may be permitted on the request of the applicant if an applicant can demonstrate that the number of parking spaces required under this Section are in excess of the actual requirements for	Maximum number of Land bank spaces: 25% of required parking: Up to 65 spaces	Proposed land banking = 45 spaces	Yes	
	Minimum number of spaces required prior to request for land banking:	262 spaces	Yes	
	Alternative layout plan showing land bank parking	An alternate plan is overlaid onto existing plan	Yes?	Provide additional information that relates to construction of landbank parking Would the landbank parking require additional grading or a retaining wall is proposed? Because that determined whether additional woodland removals or replacements would be required. If yes,

Item	Required Code	Proposed	Meets Code	Comments
<p>the functional use of the building, for up to twenty five (25) percent of the required number of parking spaces on the site, subject to the following conditions:</p>				<p>please update the removal and replacement counts.</p> <p>Update the woodland replacement counts on sheet WP-1 to reflect landbank parking construction</p>
	<p>All areas designated for land banking shall be landscaped open space and may not be used for any other purposes</p>	<p>Proposed landbank area is open lawn</p>	<p>Yes</p>	<p>The landscape plan indicates grading to accommodate the current proposed parking.</p>
	<p>Planning Commission grants the request based on certain conditions</p>	<p>To be determined</p>	<p>Yes?</p>	<p>Refer to Section 5.2.14 for the conditions</p>
	<p>The owner of the property shall report any proposed change in use or occupancy for further evaluation</p>	<p>To be determined</p>	<p>Yes?</p>	<p>Add a note to the site plan</p>
	<p>Land bank spaces may be installed prior to change in use or occupancy, if determined</p>	<p>To be determined. A note is added under site data</p>	<p>Yes?</p>	
<p>Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2)</p>	<ul style="list-style-type: none"> - 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping 	<ul style="list-style-type: none"> - 90° Parking: - 9 ft. x 17 ft. with 8 ft. sidewalk - 9 ft. x 19 ft. - 24 ft., driveway 	<p>Yes?</p>	<p>Provide dimensions of the landbank parking layout to verify conformance.</p> <p>Refer to Traffic for more comments</p>
<p>Parking stall located adjacent to a parking lot entrance(public or private) (Sec. 5.3.13)</p>	<p>Shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer</p>	<p>NA</p>	<p>Yes</p>	
<p>End Islands (Sec. 5.3.12)</p>	<ul style="list-style-type: none"> - End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. - The end islands shall generally be at least 8 feet wide, have an 	<p>End Islands are proposed</p>	<p>Yes</p>	

Item	Required Code	Proposed	Meets Code	Comments
	outside radius of 15 feet, and be constructed 3' shorter than the adjacent parking stall as illustrated in the Zoning Ordinance			
Barrier Free Spaces <i>Barrier Free Code</i>	For a total of 263, xx spaces are required including xx van accessible	10 spaces are proposed at the time	Yes	
Barrier Free Space Dimensions <i>Barrier Free Code</i>	- 8' wide with an 8' wide access aisle for van accessible spaces - 5' wide with a 5' wide access aisle for regular accessible spaces	Two types of accessible spaces are provided	Yes	Correct the barrier free aisle widths near Phase 2 Church location
Barrier Free Signs <i>Barrier Free Code</i>	One sign for each accessible parking space.	Signage not indicated	Yes?	Provide details as required
Minimum number of Bicycle Parking <i>Sec. 5.16.1</i>	Five (5) percent of required automobile spaces, minimum eight (8) spaces	12 ft. x 6 ft. lot with 5 hoops proposed. A total of 10 spaces	Yes	
Bicycle Parking General requirements <i>Sec. 5.16</i>	- No farther than 120 ft. from the entrance being served - When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations - Spaces to be paved and the bike rack shall be inverted "U" design - Shall be accessible via 6 ft. paved sidewalk	All proposed in one location near daycare center Accessible by 8 feet sidewalks	No	<u>Provide bike racks at multiple locations as suggested. Given the use, the applicant should consider proposing more bike racks than the minimum required or seek a Planning Commission waiver</u>
Bicycle Parking Lot layout <i>Sec 5.16.6</i>	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double	Outer dimensions proposed seem to be in conformance. A detail plan layout is not shown	Yes?	Provide required bike parking as illustrated in Sec. 5.16.6
Loading Spaces <i>Sec. 5.4.1</i>	Required on all premises where receipt or distribution of materials or merchandise occurs and shall be separate from parking areas	One 17 feet x 26 feet loading space is proposed	Yes?	Is the size enough? Is the location good for maneuvering, adjacent to parking spaces?

Item	Required Code	Proposed	Meets Code	Comments
Dumpster Sec. 4.19.2.F	<ul style="list-style-type: none"> - Located in rear yard - Attached to the building or - No closer than 10 ft. from building if not attached - Not located in parking setback - If no setback, then it cannot be any closer than 10 ft. from property line. - Away from Barrier free Spaces 	<p>Located in side yard Away from building</p> <p>Not in the setback</p> <p>Away from barrier free</p>	No?	
Dumpster Enclosure Sec. 21-145. (c)	<ul style="list-style-type: none"> - Screened from public view - A wall or fence 1 ft. higher than height of refuse bin - And no less than 5 ft. on three sides - Posts or bumpers to protect the screening - Hard surface pad. - Screening Materials: Masonry, wood or evergreen shrubbery 	Details not provided at this time	Yes?	Provide an enclosure layout plan and elevation of the enclosure and the gates
Lighting and Other Equipment Requirements				
Exterior lighting Sec. 5.7	Photometric plan and exterior lighting details needed at time of Final Site Plan submittal	A lighting plan is provided at this time	No	
Roof top equipment and wall mounted utility equipment Sec. 4.19.2.E.ii	All roof top equipment must be screened and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	Roof top equipment is not indicated	Yes/No	Provide a note on the site plan that no rooftop equipment is proposed.
Roof top appurtenances screening	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.	Roof top equipment is not indicated	Yes/No	
Sidewalk Requirements				
Article XI. Off-Road Non-Motorized	6 foot concrete sidewalk is required along Twelve Mile	6 foot concrete sidewalk is proposed along Twelve Mile	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Facilities				
Pedestrian Connectivity	Assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets	A pedestrian connection to Twelve mile road is not proposed	Yes?	The applicant should work with staff to find other means of providing pedestrian connections from the interior of site to public sidewalks.
Building Code	Building exits must be connected to sidewalk system or parking lot.	All exist are connected to the parking lot	Yes	Building code may require accessible sidewalk connection to public sidewalk
Other Permit and Legal Requirements				
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Legal descriptions for all parcels are provided	Yes	
General layout and dimension of proposed physical improvements	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Most of them are provided.	Yes?	Refer to all review letters for additional information requested
Community Impact Statement	<ul style="list-style-type: none"> - All non-residential projects over 30 acres for permitted use - All non-residential over 10 acres for special land use - All residential over 150 units 	A Community impact statement is provided and meets the minimum requirements as listed in the site plan manual	Yes	Information is missing on page 3. Please update as applicable
Economic Impact	<ul style="list-style-type: none"> - Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known) 	Information on cost of construction is not provided. The development anticipates 12 full time jobs with an approximate employment of over 100 during construction.	Yes	Information is provided on Page 3 of Community Impact Statement.

Item	Required Code	Proposed	Meets Code	Comments
Traffic Studies	- One is not required for the proposed use	The applicant provided Trip generation figures to support the Special land use request	Yes	Traffic agrees with the findings
Development/ Business Sign & Street addressing	- Signage if proposed requires a permit. - The applicant should contact the Building Division for an address prior to applying for a building permit.	A monument signage is being proposed. The proposed sign exceeds the maximum allowed square footage off 70 sq. ft. (80 sf proposed) and maximum allowed height of 6 feet (8'-4" proposed)	Yes	<u>The applicant can either revise the standards to meet the code or apply for a Zoning Boards of Appeals variance</u>
Project and Street naming	Some projects may need approval from the Street and Project Naming Committee.	This project does not need approval of the Project Name	NA	
Property Split	All property splits and combination must be submitted to the Assessing Department for approval.	The site plan proposes to combine three properties;	Yes?	<u>Property combination is required to be recorded prior to stamping set approval</u>
Lighting and Photometric Plan (Sec. 5.7)				
Intent (Sec. 5.7.1)	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	A lighting and photometric plan is provided	Yes?	<i>A lighting an photometric plan is required at the time of Preliminary Site Plan if the property abuts residential</i>
Lighting Plan (Sec. 5.7.A.i)	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	All required information is provided except for some notes	Yes?	
Building Lighting (Sec. 5.7.2.A.iii)	Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures.			Provide one at the time of final site plan submittal
Lighting Plan (Sec.5.7.2.A.ii)	Specifications for all proposed & existing lighting fixtures			Provide the missing information
	Photometric data	Provided partly	Yes	
	Fixture height	Not indicated	No	

Item	Required Code	Proposed	Meets Code	Comments
	Mounting & design	Provided	Yes	
	Glare control devices	Provided	Yes	
	Type & color rendition of lamps	LED		
	Hours of operation	Not provided	No	
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties			
Maximum Height (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses	Not provided 25 ft. maximum required	Yes?	
Standard Notes (Sec. 5.7.3.B)	<ul style="list-style-type: none"> - Electrical service to light fixtures shall be placed underground - Flashing light shall not be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation 	Unable to determine	No	Add these notes to the plans
Security Lighting (Sec. 5.7.3.H) Lighting for security purposes shall be directed only onto the area to be secured.	<ul style="list-style-type: none"> - All fixtures shall be located, shielded and aimed so that light is not cast toward adjacent properties or streets or unnecessarily transmitted into the night sky - Fixtures mounted on the building and designed to illuminate the facade are preferred 	Plan proposes a Armenian Genocide memorial which shoots lights up into the sky. The applicant has provided pictures of similar memorial	Yes?	Indicate the hours of Operation for the Memorial lighting. <ul style="list-style-type: none"> - Will it be turned on during special events - Will it be turned off for a certain period during the day or night - How many days during the year will it be turned on? - A Zoning Board of Appeals Variance is required for the proposed deviation to use of lighting that transmits into the sky.
Average Light Levels (Sec.5.7.3.E)	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1	Does not exceed 4:1	Yes	
Type of Lamps (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred	LED lamps	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	over high & low pressure sodium lamps			
Min. Illumination (Sec. 5.7.3.k)	Parking areas: 0.2 min	0.2 min		
	Loading & unloading areas: 0.4 min	0.4 min		
	Walkways: 0.2 min	0.2 min	Yes	
	Building entrances, frequent use: 1.0 min	Not indicated	No	
	Building entrances, infrequent use: 0.2 min	Not indicated	No	
Max. Illumination adjacent to Non-Residential (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle			
Max. Illumination adjacent to Residential (Sec. 5.7.3.L)	When adjacent to residential districts - All cut off angles of fixtures must be 90° - maximum illumination at the property line shall not exceed 0.5 foot candle	Does not exceed 0.5	Yes	
Decorative Up lighting (Sec. 5.7.3.M)	- use of decorative uplighting to illuminate the underside of a canopy or columns on a facade, where a canopy or roof projection restricts the projection of the light into the night sky	Plan proposes a Armenian Genocide memorial which shoots lights up into the sky. The applicant has provided pictures of similar memorial	No	

NOTES:

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. Please refer to those sections in Article 3, 4 and 5 of the zoning ordinance for further details
3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

09/21/2017

Engineering Review

Armenian Cultural Center Preliminary Site Plan
JSP17-0037

Applicant

Armenian Cultural Center

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: North of Twelve Mile Road, east of Meadowbrook Road
- Site Size: 19.30 acres
- Plan Date: 8/25/2017
- Design Engineer: Ziemet Wozniak, Julian Wargo, P.E.

Project Summary

- Construction of an approximately 84,242 square-foot multi-use worship, community and childcare building with associated parking. Site access would be provided by a new driveway entrance off of Twelve Mile Road with secondary emergency only access also off of Twelve Mile Road.
- Water service would be provided by an 8-inch loop from the existing 12-inch water main in Twelve Mile Road. A 2-inch domestic lead and a 4-inch fire lead would be provided to serve the building, along with additional hydrants on the site.
- Sanitary sewer service would be provided by an 8-inch extension from the 12-inch sanitary sewer in Twelve Mile.
- Storm water would be collected by a single storm sewer collection system and detained in a new on-site detention pond.

Recommendation

Approval of the Preliminary Site Plan and Preliminary Storm Water Management Plan is recommended.

Comments:

The Preliminary Site Plan meets the general requirements of the Design and Construction Standards as set forth in Chapter 11 of the City of Novi Codified Ordinance, the Storm Water Management Ordinance and the Engineering Design Manual with the following items to be addressed at the time of Final Site Plan submittal (further engineering detail will be required at the time of the final site plan submittal):

Additional Comments (to be addressed with Final Site Plan submittal):

General

1. A right-of-way permit will be required from the City of Novi and the Road Commission for Oakland County for work in the Twelve Mile Road right-of-way.
2. Provide location dimensions for all proposed water main, sanitary sewer, and storm sewer from a proposed fixed point.
3. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal. They can be found on the City website (www.cityofnovi.org/DesignManual).

Water Main

4. Provide a tapping sleeve, valve and well at the connection to the existing water main.
5. Use two 45-degree bends in lieu of any 90-degree water main bends proposed.
6. Provide a profile for all proposed water main 8-inch and larger.
7. Provide three (3) signed and sealed sets of revised utility plans along with the MDEQ permit application (6/12 rev.) for water main construction. The Streamlined Water Main Permit Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and standard detail sheets.

Sanitary Sewer

8. Provide a sanitary sewer basis of design using the City's standard Sewer Unit Factor chart (attached) for each applicable building use for each phase of development. The basis of design should show the current and ultimate average and peak flows for the development.
9. The basis of design implies that all buildings will discharge to the 8-inch sanitary sewer main proposed along the east driveway, connecting to the existing 12-inch main in Twelve Mile Road. Provide information on the utility plan showing on-site sewer main and/or building leads for future buildings.
10. Provide a sanitary sewer monitoring manhole for each building on the site. If a monitoring manhole is placed outside public sanitary sewer easement, show a 20-foot wide Sanitary Sewer Manhole Access Easement. A template

- of the current standard easement can be found on the City's website and shall be provided for review and approval.
11. Provide a note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
 12. Provide a note on the Utility Plan and sanitary sewer profile sheets stating that sanitary leads shall be buried at least 5 feet deep where under the influence of pavement.
 13. Provide seven (7) signed sealed sets of revised utility plans along with the MDEQ permit application (04/14 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and standard detail sheets. Also, the MDEQ can be contacted for an expedited review by their office.

Paving & Grading

14. Provide dimensions from back of curb to face of retaining wall. Ensure that 2-foot clear overhang area is provided in the southeast parking lot area adjacent to 17 foot parking spaces.
15. Retaining walls exceeding 4 feet in height require separate permit from the Building Division of the Community Development department.
16. Clarify the parking dimensions on the Land Banked parking site plan sheet C1.1. Standard parking space dimensions are 19 feet in length, or 17 feet in length with a 4-inch curb height and 2-foot overhang area.
17. The grade of the drive approach shall not exceed 2-percent within the first 25 feet of the intersection, as described in Section 11-216 (d). Revise grades where possible to meet this requirement.
18. Provide a high point at the right-of-way to capture all on-site runoff and route through the on-site detention basin, in accordance with the requirements of the Engineering Design Manual. Undetained on-site runoff cannot be directed to the Twelve Mile Road right-of-way without approval from the RCOC, and a request for variance from the City's Design and Construction Standards.

Storm Sewer

19. A minimum cover depth of 3 feet shall be maintained over all storm sewers. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. A Design and Construction standards variance application must be submitted under a separate cover where 3-feet of cover cannot be provided.
20. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
21. Match the 0.80 diameter depth above invert for pipe size increases.

22. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot deep plunge pool.
23. Provide a four-foot deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin.
24. Provide profiles for all storm sewer 12 inch and larger.
25. Label the 10-year HGL on the storm sewer profiles, and ensure the HGL remains at least 1-foot below the rim of each structure.
26. Illustrate all pipes intersecting storm structures on the storm profiles.
27. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.

Storm Water Management Plan

28. The Storm Water Management Plan for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual.
29. The SWMP must detail the storm water system design, calculations, details, and maintenance as stated in the ordinance. The SWMP must address the discharge of storm water off-site, and evidence of its adequacy must be provided. This should be done by comparing pre- and post-development discharge rates.
30. The provided Storm Water Management Plan addresses the 5.05 acre and 6.60 acre drainage areas routed to the Townline Drain at a controlled discharge rate of 0.15 cfs/acre. Provide calculations and information about the on-site, post-development runoff from the east and west driveway areas shown to discharge at an uncontrolled rate to the Twelve Mile Road right-of-way, which is in the jurisdiction of the Road Commission for Oakland County (RCOC). The City's storm water ordinance requires all on-site runoff to be captured and detained on-site. Runoff cannot be routed to the Twelve Mile Road right-of-way without approval from the RCOC and a request for variance from the City's Design and Construction Standards.
31. Provide a 5-foot wide stone bridge allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high water elevation). Provide a detail and/or note as necessary.
32. Provide a draft Storm Drainage Facility Maintenance Agreement. A template of the current standard agreement can be found on the City's website and shall be provided for review and approval.
 - a. Include the Exhibit B as required in the agreement that provides site specific maintenance activities for the storm water management system. Include language specifying that the Vortechs structures shall be inspected quarterly and cleaned in accordance with the manufacturer's recommendations, but at a minimum frequency of once annually. Removal of floatables shall also be addressed in addition to removal of sediments.

- b. Exhibit C, the ingress/egress easement permitting required maintenance activities to the storm water detention and pretreatment facilities,
- c. Exhibit D, the easement over the detention and pretreatment facilities, shall be provided.

Soil Erosion and Sediment Control

33. A SESC permit is required. A full review has not been done at this time. The review checklist detailing all SESC requirements is attached to this letter. An informal review will be complete with the Final Site Plan if SESC plans are included in the submittal.

Off-Site Easements

34. Any off-site utility easements anticipated must be executed **prior to final approval of the plans**. No off-site easements or agreements are anticipated for the site at this time.

The following must be submitted at the time of Final Site Plan submittal:

35. An itemized construction cost estimate must be submitted to the Community Development Department at the time of Final Site Plan submittal for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. **The cost estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving, right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pretreatment structure and restoration).
36. Draft copies of any applicable off-site easements or agreements, with a recent title search, and legal escrow funds must be submitted to the Community Development Department for review and approved by the Engineering Division and the City Attorney prior to being executed.
37. Provide copies of OCWRC review and/or approval and a draft copy of the drainage easements associated with the Townline Drain.

The following must be submitted at the time of Stamping Set submittal:

1. A complete submittal of all draft copies of easement language and exhibits, with a recent title search, and legal escrow funds must be submitted to the Community Development Department for review and approved by the Engineering Division and the City Attorney prior to being executed. A copy of the City's Legal Review Transmittal Form will be provided at the time of Final Site Plan review.
2. A draft copy of the maintenance agreement for the storm water facilities, as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department with the Final Site Plan. Once the form of the agreement is approved, this agreement must be approved by

- City Council and shall be recorded in the office of the Oakland County Register of Deeds.
3. A draft copy of the 20-foot wide easement for the public water main to be constructed on the site must be submitted to the Community Development Department.
 4. A draft copy of the 20-foot wide easement for the public sanitary sewer to be constructed on the site must be submitted to the Community Development Department.
 5. If applicable, a draft copy of the 20-foot wide easement for the sanitary sewer manhole access must be submitted to the Community Development Department.
 6. A draft copy of public pathway easement for public sidewalk to be constructed on the site must be submitted to the Community Development Department.
 7. Provide copies of OCWRC approval and permit for discharge to the Townline Drain, and a copy of the final, executed drainage easement associated with the Townline Drain.

The following must be addressed prior to construction:

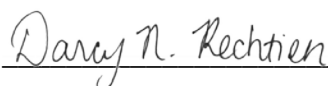
8. A pre-construction meeting shall be required prior to the commencement of any site work. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
9. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting. There is no fee for this permit.
10. An NPDES permit must be obtained from the MDEQ since the site is over 5 acres in size. The MDEQ requires an approved plan to be submitted with the Notice of Coverage.
11. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department (248-347-0430) for forms and information.
12. A permit for work within the right-of-way of Twelve Mile Road must be obtained from the City of Novi. The application is available from the City Engineering Division and should be filed at the time of Final Site Plan submittal. Please contact the Engineering Division at 248-347-0454 for further information. Approval from RCOC is a prerequisite of the City's ROW permit.
13. A permit for work within the right-of-way of Twelve Mile must be obtained from the Road Commission for Oakland County. Please contact the RCOC (248-858-4835) directly with any questions. The applicant must forward a copy of this permit to the City. Provide a note on the plans indicating all work

within the right-of-way will be constructed in accordance with the Road Commission for Oakland County standards.

14. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the Water and Sewer Senior Manager after the water main plans have been approved.
15. A permit for sanitary sewer construction must be obtained from the MDEQ. This permit application must be submitted through the Water and Sewer Senior Manager after the sanitary sewer plans have been approved.
16. Construction Inspection Fees, to be determined once the construction cost estimate is submitted, must be paid prior to the pre-construction meeting.
17. A storm water performance guarantee, equal to 1.2 times the amount required to complete storm water management and facilities as specified in the Storm Water Management Ordinance, must be posted at the Treasurer's Office.
18. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted at the Treasurer's Office.
19. Permits for the construction of each retaining wall must be obtained from the Community Development Department (248-347-0415).

To the extent this review letter addresses items and requirements that require the approval of or a permit from an agency or entity other than the City, this review shall not be considered an indication or statement that such approvals or permits will be issued.

Please contact Darcy Rechten at (248) 735-5695 with any questions.



cc: Theresa Bridges, Engineering
George Melistas, Engineering
Sri Komaragiri, Community Development

CITY OF NOVI

Sewer Unit Factor Chart (See Notes Following Table)

Usage Type	Unit Factor	Information Source
Auto Dealers	0.300 per 1000 sq. ft.	D
Barber Shops	1.000 per 1000 sq. ft.	A - C
Bars	0.044 per seat	D
Beauty Shops	0.223 per booth	D
Boarding Houses	0.160 per person	A - C
Boarding Schools	0.270 per person	A - C
Bowling Alleys (no bar, or lunch facilities)	0.160 per alley	D
Car Wash:		
a) Manual, Do-It-Yourself	2.500 per stall	D
b) Semi-Automatic (mechanical without conveyor)	12.500 per lane	D
c) Automatic (with conveyor)	33.000 per lane	D
d) Automatic (with recycling water)	8.400 per lane	D
Churches	0.008 per seat	D
Cleaners:		
a) Pick-up Only	0.048 per employee	D
b) With Pressing Facilities	1.250 per press	D
Clinics:		
a) Medical	1.000 per doctor	D
b) Dental	1.400 per dentist	D
Community Buildings	2.000 per building	D
Convalescent and/or Nursing Homes	0.300 per bed	D
Convents	0.200 per person	D
Country Clubs	0.080 per member	A - C
Day Care	0.012 per student	CITY
Drug Stores:		
a) With Fountain Service	0.080 per seat, plus 0.140 per 1000 sq. ft.	D
b) Without Fountain Service	0.140 per 1000 sq. ft.	D

CITY OF NOVI

Sewer Unit Factor Chart (See Notes Following Table)

Factories (exclusive of excessive industrial use)	0.500 per 1000 sq. ft.	D
Fraternal Organizations (members only)	1.000 per hall	D
Fraternal Organizations (members and rentals)	2.000 per hall	D
Funeral Home (including one residence)	2.200 per funeral home	D
Grocery Stores & Super Markets	1.100 per 1000 sq. ft.	D
Grocery Stores & Super Markets	0.310 per 1000 sq. ft.	D
Health Clubs:		
a) With Showers and/or Pool	2.300 per 1000 sq. ft.	D
b) Without Showers and/or Pool	0.260 per 1000 sq. ft.	D
Hospitals	1.220 per bed	A - C
Hotels and/or Motels (exclusive of swimming, pools, bars, restaurants, etc.)	0.380 per room	A - C
Laundry (self-serve)	0.540 per washer	D
Office Building	0.400 per 1000 sq. ft.	D
Public Institutes (other than hospitals)	0.320 per employee	A - C
Racquet Clubs	0.820 per court	D
Residences:		
Mobile Home Parks & Multiple Family Residences:		
a) One Bedroom	0.600 per dwelling unit	CITY
b) Two Bedroom	0.750 per dwelling unit	CITY
c) Three or more Bedrooms	1.000 per dwelling unit	CITY
Single Family Residential	1.000 per dwelling	CITY
Restaurants:		
a) Conventional Type (with or without drinks)	0.130 per seat	A - B
1. Seasonal Out-door Eating	0.130 per seat x 5/12	CITY
2. Banquet Section	0.130 per seat x 25%	CITY
b) Quick Service Franchise Type (without dishes, dealing mainly in hamburgers, with or without eating in building. Includes, but not necessarily limited to McDonald's, Burger Chef, Burger King, Red Barn, and Hardees.)	5.600 per restaurant	D
c) All Other Restaurants (Includes, but not limited to, drive-ins, snack bars, carryouts, such as fried chicken, pizzas; could have some eating in building, all without dishes.)	1.800 per restaurant	D

CITY OF NOVI

Sewer Unit Factor Chart

(See Notes Following Table)

Rooming Houses (No Meals)	0.130 per person	A - C
Schools:		
a) Elementary	0.012 per student	D
b) Junior or Middle School	0.020 per student	D
c) High School	0.038 per student	D
d) Bus Maintenance Facility	0.165 per 1000 sq. ft.	D
Service Station	0.240 per pump	C - D
Store (other than specifically listed)	0.340 per 1000 sq. ft.	CITY
Summer Camps	0.140 per housing unit	D
Swimming Pool (residential excluded)	3.000 per 1000 sq. ft.	D
Theaters (drive-in)	0.012 per car space	D
Theaters (indoor)	0.008 per seat	D
Warehouses	0.100 per 1000 sq. ft.	D

Notes Pursuant to Resolutions Dated April 10, 1991 and June 7, 1999:

- 1) In the computing of unit factors to be charged to industrial and commercial users, each separately operated business entity in a common building shall have a unit factor as set forth above (unless modified by agreement) but in no instance less than 1.00 tap unit for each separately operated business entity.
- 2) When the usage requested is not specifically identified under the "Usage Type" column, an estimated temporary tap unit assignment will be initially assigned by the City, and the USER will enter into a monitoring agreement (Exhibit A) to determine the actual tap unit assignment.

INFORMATION SOURCE:

- A - Cincinnati Report
- B - Gordon McDougall Report to Wayne County
- C - Manual of Septic Tank Practice Publication No. 526, U.S. Department of Health
- D - Oakland County Department of Public Works Studies



CITY OF NOVI ENGINEERING DIVISION SOIL EROSION AND SEDIMENTATION CONTROL PLAN CHECKLIST

PROJECT: SESC Application #: SE -
 Contact Name: DATE COMPLETED:
 Phone Number: DATE OF PLAN:
 Fax Number: **STATUS:**

General Requirements – Following the initial Soil Erosion and Sedimentation Control permit application to the Community Development Department, all SESC plan revisions shall be submitted directly to the Engineering Department for further review and/or permit approval. One (1) copy of revised soil erosion plans, including response letter addressing the comments below, shall be submitted for each subsequent review until the plan has been given approval by the Engineering Department, at which point five (5) copies will be required for permit approval. Plans shall be signed and sealed, and the bond must be submitted to the Treasurer’s Office prior to permit issuance.

ITEM NO.	ITEM	Provided on Plans	COMMENTS
1.	Plan shall be at scale of not more than 1" = 200', include legal description, location, proximity to lakes, streams or wetlands, slopes, etc.	<input type="checkbox"/>	
2.	Plan shall include a soil survey or a written description of soil types of the exposed land area.	<input type="checkbox"/>	
3.	Plan shall show the limits of earth disruption.	<input type="checkbox"/>	
4.	Plan shall show tree protection fencing and location of trees to be protected.	<input type="checkbox"/>	
5.	Plan shall show all existing and proposed on-site drainage and dewatering facilities (i.e. structure details, rim elev., etc.)	<input type="checkbox"/>	
6.	Detailed sequence of construction shall be provided on plans structured similar to the following, supplemented with site specific items: 1) Install tracking mat, 2) Install temp. SESC measures, 3) Construct storm water basins and install treatment structures, if applicable, 4) Install storm sewer, with inlet protection to follow immediately, 5) Remove all temp. SESC measures once site is stabilized.	<input type="checkbox"/>	
7.	Plan must address maintenance of soil erosion and sedimentation control measures (temporary and permanent)	<input type="checkbox"/>	

8.	Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Division for review.	<input type="checkbox"/>	
9.	A grading plan shall be provided, or grade information shown on plan.	<input type="checkbox"/>	
10.	Note that it is the developer's responsibility to grade and stabilize disturbances due to the installation of public utilities.	<input type="checkbox"/>	
11.	The CSWO shall be listed on permit application.	<input type="checkbox"/>	
12.	Plan sealed by registered civil engineer with original signature.	<input type="checkbox"/>	
13.	An itemized cost estimate (Silt Fence, Inlet Filters, Topsoil/Seed/Mulch, Const. Access, etc.) shall be provided.	<input type="checkbox"/>	The SESC financial guarantee will be \$. The SESC inspection fees will be \$.
14.	Potential stockpile areas shall be shown on the plan, with note stating a ring of silt fence will be installed surrounding any stockpiled material.	<input type="checkbox"/>	
15.	Sediment basin: Provide filter on standpipe outlet structure until site is stabilized, then removed. Noted on plan and standpipe detail(s).	<input type="checkbox"/>	
16.	Provide a note on the plan stating the storm water basin will be stabilized prior to directing flow to the basin.	<input type="checkbox"/>	
17.	Pretreatment Structures: Noted to inspect weekly for sediment accumulation until site is stabilized, and will clean as required.	<input type="checkbox"/>	
18.	Attach the Oakland County standard detail sheet.	<input type="checkbox"/>	
19.	Construction mud tracking entrance: 75'x20', 6" of 1" to 3" stone, on geotextile fabric.	<input type="checkbox"/>	
20.	Silt fence: 6" anchor trench, stakes 6' on center. Prominent line type on plan, with legend.	<input type="checkbox"/>	
21.	Provide Silt Sack with overflow capability as the inlet protection, and provide detail on plans.	<input type="checkbox"/>	
22.	Catch basin inlet filters shall be provided on existing roadways along construction route for reasonable distance from site.	<input type="checkbox"/>	
23.	Street sweeping and dust control shall be noted on plan as responsibility of contractor.	<input type="checkbox"/>	
24.	Vegetation shall be established within 5 days of final grade, or whenever disturbed areas will remain unchanged for 30 days or greater. 3-4" of topsoil will be used where vegetation is required.	<input type="checkbox"/>	
25.	Vegetated buffer strips (25' wide wherever possible) shall be created or retained along the	<input type="checkbox"/>	

	edges of all water bodies, water courses or wetlands.		
26.	Diversion berms or terracing shall be implemented where necessary.	<input type="checkbox"/>	
27.	All drainage ditches shall be stabilized with erosion control blanket and shall utilize check dams as necessary. Drainage ditches steeper than 3% shall be sodded.	<input type="checkbox"/>	
28.	Slopes steeper than 1V:6H (16%) shall be stabilized with erosion control blanket. Add this note as a general note, and also in a prominent location near any berm, etc. where a significant slope is proposed.	<input type="checkbox"/>	
29.	All culvert end sections must contain grouted rip-rap in accordance with ordinance specifications.	<input type="checkbox"/>	

ADDITIONAL COMMENTS:

1. Please note that installation of silt fencing or tree protection fencing shall not occur prior to the initial City pre-construction meeting. When natural features exist on the site, inspection of staking may be required prior to installation of the fencing.
2. **Provide an estimated time of earth disruption at the next submittal. At that time, an inspection fee will be provided.**

Reviewed By: Lindon Ivezaj (248) 735-5694

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT

September 5, 2017

Preliminary Site Plan - Landscaping

Armenian Cultural Center

Review Type

Preliminary Landscape Review

Property Characteristics

- Site Location: North side of 12 Mile Road, east of Meadowbrook
- Site Acreage: 19.3 acres
- Site Zoning: RA
- Adjacent Zoning: North, East, West: RA; South: OST
- Plan Date: 8/25/2017

Ordinance Considerations

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the revised Preliminary Site Plan submittal and underlined items should be addressed on the Final Site Plans. The items outlined on the accompanying landscape chart should be addressed similarly. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review and the accompanying Landscape Chart is a summary and not intended to substitute for any Ordinance.

Recommendation

The project is **recommended for approval**. There are several waivers that are required in order for the project to be completed as proposed, and a number of shortages that need to be addressed. If the Planning Commission approves the required waivers, then the project can meet the remaining shortages without too much difficulty.

Landscape Waivers required:

1. No street trees are proposed due to the presence of a gas line and gas line easement along the entire right-of-way frontage. 17 trees not planted. Supported by staff.
2. No required berms are provided between the project and adjacent residential properties. As currently proposed, staff would not support this waiver request. Proof that existing vegetation will provide sufficient screening, or addition of more screening vegetation to form a dense screen in areas where the existing vegetation does not provide a sufficiently dense screen would help staff support these waiver requests.
3. No required berm is provided along the Twelve Mile Road frontage. Supported by staff for portions of frontage with wetland, the natural hill or dense vegetation to be preserved between the road and the site, not for the 120 feet of frontage just west of the entry drive where none of those natural features exist.
4. A landscape waiver may be required for some of the access drive plantings that would be in the gas line easement. This would be supported by staff.
5. If the parking lot perimeter trees are not provided across the entire northern parking lot edge, a landscape waiver would be required for the area where trees are not planted. This waiver request would not be supported by staff.

6. A landscape waiver is required for the 16 space bay in the north parking lot. This waiver request would be supported by staff as it makes more visual sense given the site pedestrian access point, and because it is only 1 space larger than the requirement.

Ordinance Considerations

Existing Soils (Preliminary Site Plan checklist #10, #17)

Provided.

Existing and proposed overhead and underground utilities, including hydrants.(LDM 2.e.(4))

1. Provided.
2. **Please clearly note all overhead utility lines.**

Existing Trees (Sec 37 Woodland Protection, Preliminary Site Plan checklist #17 and LDM 2.3 (2))

1. Existing tree survey provided.
2. Woodland replacement calculations provided.
3. Tree fencing detail is provided per ordinance.
4. **Please copy the woodland protection fencing shown on Sheets WP-1 and WP-2 to Sheet C-3.**
5. **Trees in poor health due to disease should be removed so the disease is not transmitted to nearby healthy trees. This is particularly tree with the Scotch pines at the front of the site and Blue Spruces with needlecast. Please add a note to this effect to the plans.**
6. **The area north of the landbanked parking is labeled as both Outdoor Activity Area and Undisturbed area on different sheets. Organized activities such as picnics or sporting events should not occur there as they would harm the natural condition of the woods. Please note this on the plans.**

Adjacent to Residential - Buffer (Zoning Sec. 5.5.3.B.ii and iii)

1. For a special land use involving a church, a landscaped berm 4.5-6 feet tall is required between the site and adjacent residential properties and no berms are provided. A fairly dense mix of shrubs and trees is provided in addition to preserved vegetation along the property lines to screen the parking lot, but it is not clear if that landscaping provides sufficient screening to replace the required berms. **Please provide the required berms along the west, north and east boundaries.**
2. If the berms are not provided, a landscape waiver is required. If the applicant does not wish to install one or more of the required berms, Justification for that waiver request must be provided. This justification can be in the form or visual proof that the existing vegetation in conjunction with the proposed landscaping will provide sufficient screening. Or the applicant may propose adding extra screening vegetation between the parking lot and the adjoining residential properties. Either of these could help gain staff support for the waiver request. Replacement trees could be used as additional screening vegetation.
3. At least 140 feet of either woodland or open space is to remain in the north section of the property. Heavy woodland replacement plantings are provided on the western part of the site where the existing vegetation is light to screen the parking lot from the north. If any later development, including play fields, is proposed such that the currently existing or proposed screening does not provide a sufficient buffer, additional buffering landscaping will need to be installed.

Adjacent to Public Rights-of-Way – Berm (Wall) & Buffer (Zoning Sec. 5.5.3.B.ii and iii)

1. No berm is proposed along the Twelve Mile Road frontage. A 4 foot tall undulating berm with a 4-foot wide crest is required. A landscape waiver for this is required.
2. **Please provide justification for the berm not being provided.** Staff can support the waiver for areas where natural features are being preserved that fulfill the function of the berm requirement, but the berm will need to be provided for areas where such existing

buffering does not already exist.

3. **If no satisfactory justification can be provided for an area, the berm must be provided for those areas.**

Street Tree Requirements (Zoning Sec. 5.5.3.E.i.c and LDM 1.d.)

1. A gas line and easement extend across the entire site frontage, making planting of street trees impossible.
2. **A landscape waiver for these trees should be requested. It would be supported by staff.**

Parking Lot Landscaping (Zoning Sec. 5.5.3.C.)

1. Based on the vehicular use areas, 4065 sf of islands and 20 trees are required. 5273 sf of islands and 21 trees are provided.
2. **Per the new rules, each tree is to have at least 200sf of unpaved area in the island. A number of islands are overcrowded.**
3. **Please enlarge islands and/or move trees to conform to the new ordinance requirements.**
4. **Please add trees to islands used to break up parking bays into bays of no more than 15 spaces.**
5. **Please shorten any parking lot bays greater than 15 spaces to 15 spaces or fewer. A landscape waiver is required to maintain the 16 space bay in the north lot, but it would be supported by staff as the extent of the waiver is only 1 space and the location of the island makes more visual sense than to move it one space to the east.**

Parking Lot Perimeter Canopy Trees (Zoning Sec. 5.5.3.C.(3) Chart footnote)

1. The parking lot perimeters appear to be calculated correctly, and the correct number of trees is provided for the parking lots.
2. **Please place parking lot perimeter trees along the northern edge of the parking lot where the land banked parking is.** As noted on the chart, if the land-banked spaces are built with a retaining wall, it appears that there are a number of existing trees that would remain within 15 feet of the back of curb. If that is the case, then few if any new trees would need to be planted along the new perimeter. A landscape waiver would be required to not plant trees along the
3. Perimeter trees are also required along each side of the main driveway and the fire access lane.
4. **Please calculate the trees required for the access ways and provide the required trees.**
5. **Woodland replacement trees cannot be used to meet this requirement.**

Loading Zone screening (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)

The loading zone is in the interior of the site, well screened by parking lot and buffer trees.

Building Foundation Landscape (Zoning Sec 5.5.3.D.)

1. **Please recalculate the required landscaping, using a line around all of the building edges.**
2. **Please provide the required amount of foundation landscaping.**
3. **The ordinance calls for 60% of the building frontage visible from the road to be landscaped. Only 95 of 325 lf (29%) of the front of the building is landscaped. Please add additional landscaping along the front of the building to achieve 60%.**

Plant List (LDM 2.h. and t.)

1. Please include the detention pond landscaping and all foundation landscaping in the Final Site Plan plant list.
2. ***Picea pungens* cannot be used as a woodland replacement tree. Please select a different species from the Woodland Replacement Chart (Section 37).**

Planting Notations and Details (LDM)

Please revise the details provided per the instructions on the landscape chart.

Storm Basin Landscape (Zoning Sec 5.5.3.E.iv and LDM 1.d.(3))

1. Only about 41% of the basin has planted or naturally occurring landscaping along it. **Please add sufficient large native shrubs along the high water line of the pond to bring the coverage to 70-75%.**
2. **Per the revised ordinance, please identify all of the populations of *Phragmites australis* on the site and remove it. This should be done in late summer/early fall by a licensed pesticide applicator and may take more than 1 year to accomplish. Add notes to the plans that this is to be done.**

Irrigation (LDM 1.a.(1)(e) and 2.s)

The proposed landscaping must be provided with sufficient water to become established and survive over the long term. Please note how this will be accomplished if an irrigation plan is not provided.

Proposed topography. 2' contour minimum (LDM 2.e.(1))

Provided.

Snow Deposit (LDM.2.q.)

Provided.

Proposed trees to be saved (Sec 37 Woodland Protection 37-9, LDM 2.e.(1))

1. Shown on Sheets WP-1 and WP-2.
2. Please freeze all labels of trees to be removed on LP-2 and LP-3 but keep the trees to remain.

Corner Clearance (Zoning Sec 5.9)

Provided, but please show the required site vision zones per the Road Commission for Oakland County's regulations at Twelve Mile Road.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5621 or rmeader rmeader@cityofnovi.org.



Rick Meader – Landscape Architect

WOODLANDS REVIEW



September 26, 2017
ECT No. 170587-0200

Ms. Barbara McBeth
City Planner
Community Development Department
City of Novi
45175 West Ten Mile Road
Novi, MI 48375

Re: Armenian Cultural Center (JSP17-0037)
Woodland Review of the Preliminary Site Plan (PSP17-0096)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan (Plan) for the proposed Armenian Cultural Center project prepared by Zeimet Wozniak & Associates dated August 25, 2017 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37. ECT conducted a woodland evaluation for the property on September 5, 2017.

ECT recommends approval of the Preliminary Site Plan for Woodlands; however, the Applicant should address the items noted below in the *Woodland Comments* Section of this letter prior to receiving Woodland approval of the Final Site Plan.

The following woodland related items are required for this project:

Item	Required/Not Required/Not Applicable
Woodland Permit	Required
Woodland Fence	Required
Woodland Conservation Easement	Required

The proposed development is located north of Twelve Mile Road and east of Meadowbrook Road in Section 12. The project is to be located directly east of the future Shoppes at Beacon Hill and Beacon Hill Meadows Condominium residential development. The project includes the development of a church and cultural center, associated parking, utilities and a stormwater detention basin.

Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1), it appears as if this proposed project site contains Regulated Wetlands as well as Regulated Woodlands. The site appears to contain disturbed open space, a section of stream (i.e., the Townline Drain) which is tributary to the Walled Lake Branch of the Rouge River and associated wetland, and a significant amount of area that is mapped as City of Novi Regulated Woodland. The Townline Drain is a County Drain. The site is bounded by single-family residential development to the north and east, the future Beacon Hill development to the west, and Twelve Mile Road to the south. A tree survey and inventory has been completed for the site.

The purpose of the Woodlands Protection Ordinance is to:

2200 Commonwealth
Blvd., Suite 300
Ann Arbor, MI
48105

(734)
769-3004

FAX (734)
769-3164

- 1) *Provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the city in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the intent of this chapter to protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives;*
- 2) *Protect the woodlands, including trees and other forms of vegetation, of the city for their economic support of local property values when allowed to remain uncleared and/or unharvested and for their natural beauty, wilderness character of geological, ecological, or historical significance; and*
- 3) *Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.*

What follows is a summary of our findings regarding on-site woodlands associated with the proposed project.

On-Site Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on September 5, 2017. ECT's in-office review of available materials included the City of Novi Regulated Woodland map and other available mapping. The subject property includes area that is indicated as City-regulated woodland on the official City of Novi Regulated Wetland and Watercourse Map (see Figure 1). These areas are generally located in the northern and eastern sections of the site. Some of the project site contains shrubby, somewhat-disturbed, open field character as well as some trees and understory (shrubs). This area is located in the southwestern portion of the property.

An existing tree survey has been completed for the site and is included as Sheet CS1.0 (*Topographic & Tree Survey Plan*). The Plan also includes a *Tree Inventory* (Sheets CS2.0 through CS2.3) that identifies tree tag numbers, diameter-at-breast-height (DBH), common/botanical name, and condition of all surveyed trees. This *Tree Inventory* shall be updated as the "Save/Remove" column has not been completed. The "Required Replacements" on these sheets also needs to be completed. The Plan also includes a *Woodland Impact Plan* (Sheet WP-1) that lists woodland data for the project site including the total woodland replacements credits that are required for the proposed tree removals.

The surveyed trees have been marked with white spray paint allowing ECT to compare the tree diameters reported on the *Tree Inventory* to the existing tree diameters in the field. ECT found that the Plan appears to accurately depict the location, species composition, size, and condition of the existing trees. ECT took a sample of diameter-at-breast-height (DBH) measurements and found that the data provided on the Plan was consistent with the field measurements.

The highest quality woodlands on site are found along the northern and eastern sections of the project site. In general, the on-site trees consist of basswood (*Tilia Americana*), American elm (*Ulmus Americana*), white ash (*Franxinus americana*), Colorado blue spruce (*Picea pungens*), black cherry (*Prunus serotina*), Scotch pine (*Pinus sylvestris*), apple (*Malus spp.*), and several other species.

In terms of habitat quality and diversity of tree species, the overall subject site consists of fair to good quality trees. It should be noted that the applicant has noted on the *Tree Inventory* that a number of existing trees are either dead

or in very poor condition. The majority of the dead trees are elm, ash, black cherry and Scotch pine. The elm and ash trees that have been indicated as dead or very poor condition appear to have Dutch elm diseases or have been infested with the Emerald Ash borer, respectively. The trees listed as dead or very poor appear to be accurate.

In terms of a scenic asset, wildlife habitat, windblock, noise buffer or other environmental asset, the forested area located on the subject site is considered to be of fair to good quality. As noted above, the northern and eastern sections of the site are mapped as Regulated Woodland on the City of Novi's Regulated Woodland Map. There are a number of trees to be removed for the proposed development however the proposed site plan will preserve a wooded buffer of variable width along the northern, western and eastern sides of the property.

Proposed Woodland Impacts

The Applicant has noted the following woodland impacts associated with the Plan:

- Total Trees Surveyed: 980
- Total Trees Preserved: 519 (53% of total surveyed)
- Total Trees Removed: 461 (47% of total surveyed)
 - Dead Trees Removed: 46
 - Poor Condition Trees Removed: 87
 - Very Poor Condition Trees Removed: 74
- Trees Requiring Replacement Removed: 221
- Multi-stem Trees Requiring Replacement Removed: 33

- Stems to be Removed 8" to 11": 81 x 1 replacement (Requiring 81 Replacements)
- Stems to be Removed 11" to 20": 117 x 2 replacements (Requiring 234 Replacements)
- Stems to be Removed 20" to 30": 18 x 3 replacements (Requiring 54 Replacements)
- Stems to be Removed 30"+: 5 x 4 replacements (Requiring 20 Replacements)
- Multi-stem Replacements Required: (Requires 139)

- **Total Woodland Replacements Required: 528**

Sheet WP-1 (*Woodland Impact Plan*) notes that a total of **146** Woodland Replacement Credits will be replaced on-site through the planting of the following Woodland Replacement materials:

- 150 deciduous trees (2.5" caliper) at a 1:1 replacement ratio: 150 credits
- 24 evergreen trees (6' height min.) at a 1.5:1 replacement ratio: 16 credits
- 8,075 square yards of native seed area at a 70 SY:1 replacement ratio: 115 credits
- **Total Proposed Credits: 281 credits**

It should be noted that the *Woodland Impact Plan* notes that **146** Woodland Replacement Credits are to be provided on-site and **382** credits will be paid to the City of Novi Tree Fund for a total of **528** Woodland Replacement Credits. The applicant shall review and revise the Plan as necessary as there appear to be some errors in the *Woodland Data* section on this sheet (i.e., Sheet WP-1). Specifically, the proposed replacement credits for the deciduous trees, evergreen trees, and native woodland seed mix area as shown do not appear to sum to **146** credits.

It should be noted that the applicant is proposing land bank parking for this development in the northeast section of the development. Per conversations with City of Novi Community Development Department Staff, the applicant

is now providing 219 spaces for the proposed construction and 262 after the land banked parking is constructed. Therefore, the Plan is proposing 43 landbank parking spaces. The plan shall accurately indicate the trees to be removed within this area. The Plan must also accurately provide the calculations for Woodland Replacement credits required for the removal of trees within the land bank parking area as well as information detailing any proposed on-site replacement trees (i.e., location, species, size, etc.).

City of Novi Woodland Review Standards, Woodland Permit Requirements & Proposed Impacts

Based on Section 37-29 (*Application Review Standards*) of the City of Novi Woodland Ordinance, the following standards shall govern the grant or denial of an application for a use permit required by this article:

No application shall be denied solely on the basis that some trees are growing on the property under consideration. However, the protection and conservation of irreplaceable natural resources from pollution, impairment, or destruction is of paramount concern. Therefore, the preservation of woodlands, trees, similar woody vegetation, and related natural resources shall have priority over development when there are location alternatives.

In addition,

"The removal or relocation of trees shall be limited to those instances when necessary for the location of a structure or site improvements and when no feasible and prudent alternative location for the structure or improvements can be had without causing undue hardship".

The City of Novi regulates all trees 8-inches diameter-at-breast-height (DBH) and greater that are located within the areas delineated as regulated woodlands on the City-Regulated Woodlands Map. The City also regulates any individual tree greater than or equal to 36-inches DBH, irrespective of whether such tree is within a regulated woodland. Proposed woodland impacts will require a Woodland Permit and the regulated trees shall be relocated or replaced by the permit grantee.

It should be noted that the Plan proposes to removal a total of 461 of the 980 surveyed trees (i.e., removal of 47% of the trees surveyed). Of these, the applicant notes that 46 trees to be removed are dead, 74 are in very poor condition, and 87 are in poor condition.

While ECT is in agreement that the trees listed as dead and very poor should not require Woodland Replacement Credits, the 87 trees in "poor" condition did not appear to be exempt from replacement. In previous woodland assessments for other sites, the ISA (International Society of Arboriculture) rating has been used that evaluates whether a tree is 50% healthy. The trees that are currently listed as being in "poor" condition may have some dead smaller/lower branches however the overall tree health does not appear to warrant exemption from replacement. The applicant should review and revise the Plan and woodland sheets to reflect this change.

Proposed Woodland Replacements

The *Landscape Detail Plans* (Sheet LP-4) states that the following Woodland Replacement material is proposed on-site:

- 38 – 2.5" caliper northern hackberry trees @ 1:1 replacement ratio for 38 credits;
- 30 – 2.5" caliper bur oak trees @ 1:1 replacement ratio for 30 credits;
- 52 – 2.5" caliper tulip trees @ 1:1 replacement ratio for 52 credits;
- 29 – 2.5" caliper swamp white oak trees @ 1:1 replacement ratio for 29 credits;

5 – 7' height green spruce trees @ 1.5:1 replacement ratio for 3.3 credits;
19 – 7' height white pine trees @ 1.5:1 replacement ratio for 12.6 credits.

It should be noted that green spruce (*Picea pungens*) is not a City of Novi approved Woodland Replacement species. Please see the Woodland Tree Replacement Chart of an acceptable substitution and revise the Plan as necessary.

This plan also notes the use of a 'Woodland Naturalized Seed Mix'. The seed mix details are included on Sheet LP-5. This proposed seed mix includes both white prairie (*Dalea candida*) and purple prairie clover (*Dalea purpurea*), both of which are thought to be extirpated from the wild in Michigan (per the Michigan Department of Environmental Quality, MDNR). ECT recommends that the applicant select a woodland seed mix from a more-local source/distributor such as Michigan Wildflower Farm (Portland, MI), Wildtype Native Plant Nursery (Mason, MI), Nativescape (Manchester, MI) or Cardno.

Woodland Comments

Please consider the following comments when submitting future site development plan submittals:

1. The *Tree Inventory* (Sheets CS2.0 through CS2.3) shall be updated as the "Save/Remove" column has not been completed. The "*Required Replacements*" on these sheets also needs to be completed.
2. The *Woodland Impact Plan* notes that **146** Woodland Replacement Credits are to be provided on-site and **382** credits will be paid to the City of Novi Tree Fund for a total of **528** Woodland Replacement Credits. The applicant shall review and revise the Plan as necessary as there appear to be some errors in the *Woodland Data* section on this sheet (i.e., Sheet WP-1). Specifically, the proposed replacement credits for the deciduous trees, evergreen trees, and native woodland seed mix area as shown do not appear to sum to **146** credits.
3. The applicant is proposing land bank parking for this development in the northeast section of the development. Per conversations with City of Novi Community Development Department Staff, the applicant is now providing 219 spaces for the proposed construction and 262 after the land banked parking is constructed. Therefore, the Plan is proposing 43 landbank parking spaces. As such, the plan shall accurately indicate the trees to be removed within this area. The Plan must accurately provide the calculations for Woodland Replacement credits required for the removal of trees within the land bank parking area as well as information detailing any proposed on-site replacement trees (i.e., location, species, size, etc.).
4. While ECT is in agreement that the trees listed as dead and very poor should not require Woodland Replacement Credits, the 87 trees in "poor" condition did not appear to be exempt from replacement. In previous woodland assessments for other sites, the ISA (International Society of Arboriculture) rating has been used that evaluates whether a tree is 50% healthy. The trees that are currently listed as being in "poor" condition may have some dead smaller/lower branches however the overall tree health does not appear to warrant exemption from replacement. The applicant should review and revise the Plan and woodland sheets to reflect this change.
5. It should be noted that green spruce (*Picea pungens*) is not a City of Novi approved Woodland Replacement species. Please see the Woodland Tree Replacement Chart of an acceptable substitution and revise the Plan as necessary.

6. The proposed woodland seed mix includes both white prairie (*Dalea candida*) and purple prairie clover (*Dalea purpurea*), both of which are thought to be extirpated from the wild in Michigan (per the Michigan Department of Environmental Quality, MDNR). ECT recommends that the applicant select a woodland seed mix from a more-local source/distributor such as Michigan Wildflower Farm (Portland, MI), Wildtype Native Plant Nursery (Mason, MI), Nativescape (Manchester, MI) or Cardno.
7. Please clarify the quantity of woodland seed mix to be installed in the *Plant List – Woodland* on Sheet LP-4 (i.e., provide the proposed square yards).
8. A Woodland Replacement Performance financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400.
9. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on site.
10. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement Performance Guarantee shall be returned to the Applicant. A Woodland Maintenance and Guarantee bond equal to twenty-five percent (25%) of the value of the original Woodland Replacement material will then be kept for a period of 2-years after the successful inspection of the tree replacement installation.
11. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of remaining woodland and woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit.
12. Replacement material should not be located 1) within 10' of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the *Plant Material Spacing Relationship Chart for Landscape Purposes* found in the City of Novi *Landscape Design Manual*.

Armenian Cultural Center (JSP17-0037)
Woodland Review of the Preliminary Site Plan (PSP17-0096)
September 26, 2017 (Revision 1)
Page 7 of 11

Recommendation

ECT recommends approval of the Preliminary Site Plan for Woodlands; however, the Applicant should address the items noted in the *Woodland Comments* Section of this letter prior to receiving Woodland approval of the Final Site Plan.

If you have any questions regarding the contents of this letter, please contact us.

Respectfully submitted,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Pete Hill, P.E.
Senior Associate Engineer

cc: Sri Komaragiri, City of Novi Planner
Rick Meader, City of Novi Landscape Architect

Attachments: Figure 1 – City of Novi Regulated Wetland & Woodland Map
Site Photos
Woodland Tree Replacement Chart



Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue.

Site Photos



Photo 1. Looking northeast at the relatively open area of the site from the area located in the southwest portion of the site, north of the Townline Drain. Shrubby, somewhat-disturbed, open-field character (ECT 9/5/2017).



Photo 2. Looking north near the northern property boundary near central portion of subject site. This area is within the area mapped as City-regulated woodlands (ECT 9/5/2017).



Photo 3. Area of scotch pine located in the northern/central portion of the subject site. Several of these trees are either in poor condition or are dead (ECT 9/5/2017).



Photo 4. Looking southwest at area of forested wetland in the southeast section of the subject site (ECT 9/5/2017).

Woodland Tree Replacement Chart

(from Chapter 37 Woodlands Protection)

(All canopy trees to be 2.5" cal or larger, evergreens as listed)

Common Name	Botanical Name
Black Maple	Acer nigrum
Striped Maple	Acer pennsylvanicum
Red Maple	Acer rubrum
Sugar Maple	Acer saccharum
Mountain Maple	Acer spicatum
Ohio Buckeye	Aesculus glabra
Downy Serviceberry	Amelanchier arborea
Yellow Birch	Betula alleghaniensis
Paper Birch	Betula papyrifera
American Hornbeam	Carpinus caroliniana
Bitternut Hickory	Carya cordiformis
Pignut Hickory	Carya glabra
Shagbark Hickory	Carya ovata
Northern Hackberry	Celtis occidentalis
Eastern Redbud	Cercis canadensis
Yellowwood	Cladrastis lutea
Beech	Fagus sp.
Thornless Honeylocust	Gleditsia triacanthos inermis
Kentucky Coffeetree	Gymnocladus dioica
Walnut	Juglans sp.
Eastern Larch	Larix laricina
Sweetgum	Liquidambar styraciflua
Tuliptree	Liriodendron tulipifera
Tupelo	Nyssa sylvatica
American Hophornbeam	Ostrya virginiana
White Spruce_(1.5:1 ratio) (6' ht.)	Picea glauca
Black Spruce_(1.5:1 ratio) (6' ht.)	Picea mariana
Red Pine	Pinus resinosa
White Pine_(1.5:1 ratio) (6' ht.)	Pinus strobus
American Sycamore	Platanus occidentalis
Black Cherry	Prunus serotina
White Oak	Quercus alba
Swamp White Oak	Quercus bicolor
Scarlet Oak	Quercus coccinea
Shingle Oak	Quercus imbricaria
Burr Oak	Quercus macrocarpa
Chinkapin Oak	Quercus muehlenbergii
Red Oak	Quercus rubra
Black Oak	Quercus velutina
American Bladdernut	Staphylea trifolia
Bald Cypress	Taxodium distichum
American Basswood	Tilia americana
Hemlock (1.5:1 ratio) (6' ht.)	Tsuga canadensis

WETLANDS REVIEW



September 13, 2017
ECT No. 170587-0100

Ms. Barbara McBeth
City Planner
Community Development Department
City of Novi
45175 W. Ten Mile Road
Novi, Michigan 48375

Re: Armenian Cultural Center (JSP17-0037)
Wetland Review of the Preliminary Site Plan (PSP17-0096)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan (Plan) for the proposed Armenian Cultural Center project prepared by Zeimet Wozniak & Associates dated August 25, 2017 (Plan). The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance. ECT also visited the site on September 5, 2017 in order to verify wetland boundaries.

ECT currently recommends approval of the Preliminary Site Plan for Wetlands. ECT recommends that the Applicant address the items noted in the *Wetland/Watercourse Comments* section of this letter prior to approval of the Final Site Plan.

The following wetland related items are required for this project:

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Not Required
Wetland Buffer Authorization	Required
MDEQ Permit	Likely required. To Be Determined - It is the applicant's responsibility to contact the MDEQ in order to determine the need for a wetland use permit.
Wetland Conservation Easement	Required (for any areas of wetland located outside of the proposed drain easement to OCWRC).

The proposed development is located north of Twelve Mile Road and east of Meadowbrook Road in Section 12. The project is to be located directly east of the future Shoppes at Beacon Hill and Beacon Hill Meadows Condominium residential development. The project includes the development of a church and cultural center, associated parking, utilities and a stormwater detention basin.

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Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1), it appears as if this proposed project site contains Regulated Wetlands as well as Regulated Woodlands. The site appears to contain disturbed open space, a section of stream (i.e., the Townline Drain) which is tributary to the Walled Lake Branch of the Rouge River, wetland associated with the Drain, and a significant amount of area that is mapped as City of Novi Regulated Woodland. It should be noted that the Townline Drain is a County Drain under the jurisdiction of the Oakland County Water Resources Commissioner (OCWRC). The site is bounded by single-family residential development to the north and east, the future Beacon Hill development to the west, and Twelve Mile Road to the south.

The site was reviewed for the presence of regulated wetlands as defined in the City of Novi Wetland and Watercourse Protection Ordinance. ECT suggests that the City of Novi Engineering Department review this plan in order to verify that the site's stormwater will be adequately managed and meet the City's stormwater storage requirements.

Onsite Wetland Evaluation

ECT has reviewed the City of Novi Official Wetland and Woodlands Map and completed an onsite wetland verification on September 5, 2017. As noted above, the Townline Drain is located along the southern section of the project site and flows from west to east. There are surveyed wetlands along either side of the existing drain totaling approximately 0.66-acre in size (see Figure 2, Wetland Delineation Map, attached). The wetland areas contain emergent, scrub-shrub, and forested type wetland vegetation. The areas of emergent wetlands are most commonly characterized by dense stands of reed canary grass with smaller areas of cattail and rush species. The areas of forested wetland include some small areas of open water containing silver maple (*Acer saccharinum*), American elm (*Ulmus americana*), ash (*Fraxinus spp.*), and several other tree species. The wetland boundaries appear to be accurately flagged in the field and displayed on the Plan.

It should be noted that in addition to wetlands, the City of Novi also regulates the 25-foot wetland setback (i.e., wetland buffer). In addition to the surveyed wetland boundaries (i.e., wetland flag numbers Z1 to Z57) the 25-foot wetland buffers appear to be accurately indicated on the Plan. What follows is a summary of the wetland impacts associated with the proposed site design.

Wetland Impact Review

As noted above, one (1) area of wetland has been confirmed on the subject property by the applicant's wetland consultant, King & MacGregor Environmental, Inc. (KME). Currently, the Plan indicates several direct impacts to on-site wetlands. The wetland/drain will be crossed in two (2) locations for site access (i.e., west and east access) and the bottom of the Drain will be cleaned/restored in order to facilitate improved storm water flow. Tables included on the Plan note that the overall impacts to wetlands will be approximately 0.09-acre.

The *Grading and Drainage Detail Plan* (Sheet C-4.1) notes that the following activities will be associated with the drain improvement/clean-out:

1. Improve plant species diversity within the drain channel through mechanical and chemical treatment of common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*), and buckthorn (*Rhamnus cathartica*);
2. All work within the drain shall be performed during dry periods or periods of low flow to prevent erosion. Any dewatering shall be considered to be incidental to the work;
3. All brush and trees and stumps shall be removed from within the bottom of the drain by cutting and pulling and disposed of. Burning and/or burying of material on-site is not permitted;
4. Due care shall be exercised to avoid placing any fill within the drain. No spoils shall be deposited within 25-feet of the top edges of the drain;
5. No change in grade or cross-section of the drain shall be made without the approval of the drain commissioner's office (i.e., OCWRC);
6. Replant all raw and disturbed areas within the drain and wetland buffer zone as follows:
 - a. Clear area of large clods and stones. The soil shall be brought to a friable condition by loosening the ground to a depth of 4-inches;
 - b. Spread wetland seed mixture;
 - c. Mulch all seeded areas with small grain straw spread at a rate of one (1) ton per acre. Use revegetation mats anchored in place where slopes exceed 3-on-1;
7. Water and maintain all restored areas until vegetation is firmly re-established.

The following table summarizes the proposed wetland impacts as listed on the *Grading and Drainage Detail Plan* (Sheet C-4.1):

Table 1. Proposed Wetland Impacts

Wetland Impact Area	City Regulated?	MDEQ Regulated?	Impact Area	Impact Area	Estimated Cut Volume	Estimated Fill Volume	Net Impact
			Square Feet	Acre	Cubic Yards	Cubic Yards	Cubic Yards
1 (West Entrance Drive)	Yes City Regulated /Essential	Likely	1,092	0.025	31	201	170 (fill)
2 (East Entrance Drive)	Yes City Regulated /Essential	Likely	1,381	0.032	24	276	252 (fill)
3 (Drain Clean-Out)	Yes City Regulated /Essential	Likely	1,556	0.036	None Indicated	None Indicated	None Indicated
TOTAL	--	--	4,029	0.09	55	477	422 (fill)

The Plan also includes the construction of a storm water management basin located adjacent to (i.e., north of) the existing wetland/drain. There will be a storm water outlet to the wetland/drain on the eastern side of the development.

The currently proposed wetland impacts will not likely require wetland mitigation as the City's threshold for wetland mitigation is 0.25-acre of wetland impact and the MDEQ's threshold is 0.30-acre. The current proposed wetland total impact is 0.09-acre.

In addition to the proposed wetland impacts, the Plan proposes disturbance to 0.35-acre of on-site 25-foot wetland/watercourse buffer area. The wetland buffer impacts are for the purpose of constructing the proposed site access (i.e., ingress/egress driveways).

The following table summarizes the proposed wetland/watercourse setback impacts as listed on the Plan:

Table 2. Proposed 25-Foot Wetland/Watercourse Buffer Impacts

Wetland/Watercourse Buffer Impact Area	Impact Area	Impact Area	Estimated Cut Volume	Estimated Fill Volume	Net Impact
	Square Feet	Acre	Cubic Yards	Cubic Yards	Cubic Yards
1 (West Entrance Drive)	6,979	0.160	134	730	596 (fill)
2 (East Entrance Drive)	8,458	0.194	131	1,007	876 (fill)
TOTAL	15,437	0.354	265	1,737	1,472 (fill)

Permits & Regulatory Status

The purpose of the City of Novi Wetland and Watercourse Protection Ordinance is described in the City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 1. This section states that:

- (a) The wetlands and watercourses of the city are indispensable and fragile natural resources subject to floodwater capacity limitations, erosion, soil bearing capacity limitations and other hazards. In their natural state, wetlands and watercourses provide many public benefits, such as the maintenance of water quality through nutrient cycling and sediment trapping, and flood and stormwater runoff control through temporary water storage, slow release and groundwater recharge. In addition, wetlands provide open space, passive recreation, fish and wildlife habitat, including migratory waterfowl and rare, threatened or endangered animal and plant species. The continued destruction and loss of wetlands and watercourses constitutes a distinct and immediate danger to the public health, safety and general welfare.
- (b) Throughout the state, considerable acreage of these important natural resources has been lost or impaired by draining, dredging, filling, excavating, building, pollution and other acts inconsistent with the natural uses of such areas. Remaining wetlands and watercourses are in jeopardy of being despoiled or impaired. Consequently, it is the policy of the city to prevent a further net loss of those wetlands that are: (1) contiguous to a lake, pond, river or stream, as defined in Administrative Rule 281.921; (2) two (2) acres in size or greater; or (3) less than two (2) acres in size, but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b).

- (c) Pursuant to Mich. Const. 1963, Art. IV, § 52, the conservation and development of natural resources of the state is a matter of paramount public concern in the interest of the health, safety and general welfare of the people. Pursuant to the Michigan Environmental Protection Act, MCL 324.1701, et seq., it is the responsibility of public and private entities to prevent the pollution, impairment or destruction of the air, water or other natural resources by their conduct. It is, therefore, the policy of the city to protect wetlands and watercourses while taking into account varying ecological, hydrologic, economic, recreational and aesthetic values. Activities which may damage wetlands and watercourses shall be located on upland sites outside of upland woodland areas, unless there are no less harmful, feasible and prudent alternatives to the proposed activity. When an activity will result in the impairment or destruction of a wetland, mitigation shall be required in accordance with section 12-173(e)1.b.
- (d) It is the purpose of this article to protect the public health, safety and welfare through the protection of wetlands and watercourses. To meet these purposes, this article establishes standards and procedures for the review of proposed activities in wetlands and watercourses, provides for the issuance of use permits for approved activities, requires coordination with other applicable ordinances, statutes and regulations and establishes penalties for the violation of this article.

Any proposed impacts to the on-site wetlands would require a City of Novi *Wetland Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback* for any proposed impacts to the 25-foot wetland buffers. The on-site wetlands are considered essential by the City as they appear to meet one or more of the essentiality criteria set forth in the City's Wetland and Watercourse Protection Ordinance (i.e., storm water storage/flood control, wildlife habitat, etc.).

The Michigan Department of Environmental Quality (MDEQ) generally regulates wetlands that are within 500 feet of a waterbody, regulated stream or are part of wetland system greater than 5 acres in size. It is the applicant's responsibility to contact MDEQ in order to confirm the regulatory authority with respect to the on-site wetland areas. The MDEQ does not regulate the 25-foot wetland buffer as does the City of Novi.

Wetland/Watercourse Comments

The following are repeat comments from our *Pre-Application Review for Wetlands & Woodlands* letter dated May 10, 2017. The current status of each comment follows in ***bold italics***:

1. The Plan should differentiate the proposed impacts to wetlands from those to the 25-foot wetland buffers. Subsequent site plans should indicate the area (square feet or acres) and volume of all proposed wetland impacts. The area (square feet or acres) of all proposed impacts to the 25-foot wetland/watercourse buffers should be indicated on the Plan.

This comment has been satisfactorily addressed. The impact information is shown on Plan Sheets C-4.1 (Grading and Drainage Detail Plan) and C-5.1 (Townline Drain and Wetland Details Plan).

2. It should be noted that a portion of this stream running through the future Beacon Hill development to the west of the subject property will be relocated. The Beacon Hill development will relocate approximately 480 lineal feet of the stream channel and reconstruct using natural stream channel design. The applicant for Beacon Hill has proposed to improve plant species diversity within the existing channel through mechanical and chemical treatment of common reed and reed canary grass. These areas will be replanted with native species. Have any overall drain improvements been considered by this applicant?

This comment has been satisfactorily addressed. The Grading and Drainage Detail Plan outlines the proposed drain improvement activities. In addition, the applicant has stated that the proposed seed mix to be employed for restoration is specified on Sheet C-5.1. This mix is the same mix that will be used to revegetate the drain relocation project at the Beacon Hill development directly west of the subject site. This seed mix appears to be acceptable.

3. The applicant shall provide information for any proposed seed mixes that will be used to restore the areas of temporary disturbance along the existing wetland/stream and the 25-foot setback. ECT would like to ensure that the proposed plant/seed material contains native plants as opposed to invasive or threatened plant types. In addition, sod or common grass seed will not be acceptable in these areas.

This comment has been satisfactorily addressed (see Item No. 2, above).

4. The Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of remaining wetland as well as for any proposed wetland mitigation areas (if necessary). A Conservation Easement shall be executed covering all remaining wetland areas on site as shown on the approved plans. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Wetland and Watercourse permit.

This comment is still applicable. The applicant has stated that it is not practical to grant a conservation easement to the City when a drain easement is being granted to the County. Any areas delineated as wetland that are not included within the drain easement that is being granted to the County shall be placed into a conservation easement.

5. The preservation of 25-foot wetland/watercourse buffer areas is important to the overall health of existing wetlands and watercourses as the existing buffers serve to filter pollutants and nutrients from storm water before entering the wetlands, as well as provide additional wildlife habitat. ECT recommends that the applicant provide assurance that the 25-foot watercourse setback be maintained through a conservation easement or deed restriction, etc. Any proposed conservation easement areas should be demarcated on-site through the use of proposed easement signage and potentially other means such as boulders or decorative fencing along the setback boundaries. These buffers should be left unmowed as a filter strip.

This comment has been partially addressed. The applicant has noted that signage will be installed to demark the buffer zone and inform visitors of the need to preserve the buffer zone as an unmowed filter strip. Subsequent site plan submittals shall include details with regard to the proposed signage such as proposed language/content, sign size, and proposed spacing along the buffer.

6. As long linear ecosystems, rivers and streams are particularly vulnerable to fragmentation. A number of human activities can disrupt the continuity of river and stream ecosystems. There is growing concern about the role of road crossings, and especially culverts, in altering habitats and disrupting river and stream continuity. It is generally believed that culverts are more detrimental to creeks and streams than are bridges. Consequently, wildlife regulatory agency biologists routinely recommend installation of a bridge instead of a culvert. Culvert crossings tend to provide very little or no habitat within the culvert. Some habitat can be provided if the culvert is sufficiently embedded such that the substrate in the culvert resembles the natural streambed. Open-bottom or arch culverts and bridge crossings often maintain natural streambeds, although some habitat may be lost to footings, piers, and abutments. ECT recommends that the applicant provide additional culvert details with the next plan submittal. A proposed bridge or open-bottom, arch, or otherwise embedded culvert crossing would help in preserving the continuity of the stream.

This comment has been addressed. The applicant has noted that a buried concrete arch pipe shall be installed at the proposed crossings. It has been noted that this is the same method that was approved for installation at the adjacent Beacon Hill development.

7. It appears as though a MDEQ Wetland Permit, City of Novi Wetland Non-Minor Use Permit and Authorization to Encroach the 25-Foot Natural Features Setback would be required for the proposed impacts. It is the Applicant's responsibility to contact MDEQ in order to determine if the proposed development would require a wetland use permit from the MDEQ. The on-site wetlands could be regulated by the Michigan Department of Environmental Quality (MDEQ) as they are located within 500-feet of a pond, stream, drain or lake. Final determination of regulatory status should be made by the MDEQ. A permit from this agency may be required for any direct impacts, or potentially for storm water discharge from the proposed detention basin to existing wetlands.

This comment still applies. The applicant notes that a permit request shall be filed with the MDEQ shortly. When the application is completed, a copy shall be provided. Correspondence from the MDEQ should be provided as a City of Novi Wetland Permit cannot be issued prior to receiving this information.

Recommendation

ECT currently recommends approval of the Preliminary Site Plan for Wetlands. ECT recommends that the Applicant address the items noted in the *Wetland/Watercourse Comments* section of this letter prior to approval of the Final Site Plan.

Armenian Cultural Center (JP17-0037)
Wetland Review of the Preliminary Site Plan (PSP17-0096)
September 13, 2017
Page 8 of 11

If you have any questions regarding the contents of this letter, please contact us.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

A handwritten signature in blue ink that reads "Peter Hill". The signature is written in a cursive style with a large initial "P".

Peter Hill, P.E.
Senior Associate Engineer

cc: Sri Komaragiri, City of Novi Planner
Rick Meader, City of Novi Landscape Architect

Attachments: Figure 1. City of Novi Regulated Wetland & Woodland Map
Figure 2. Wetland Delineation Map
Site Photos

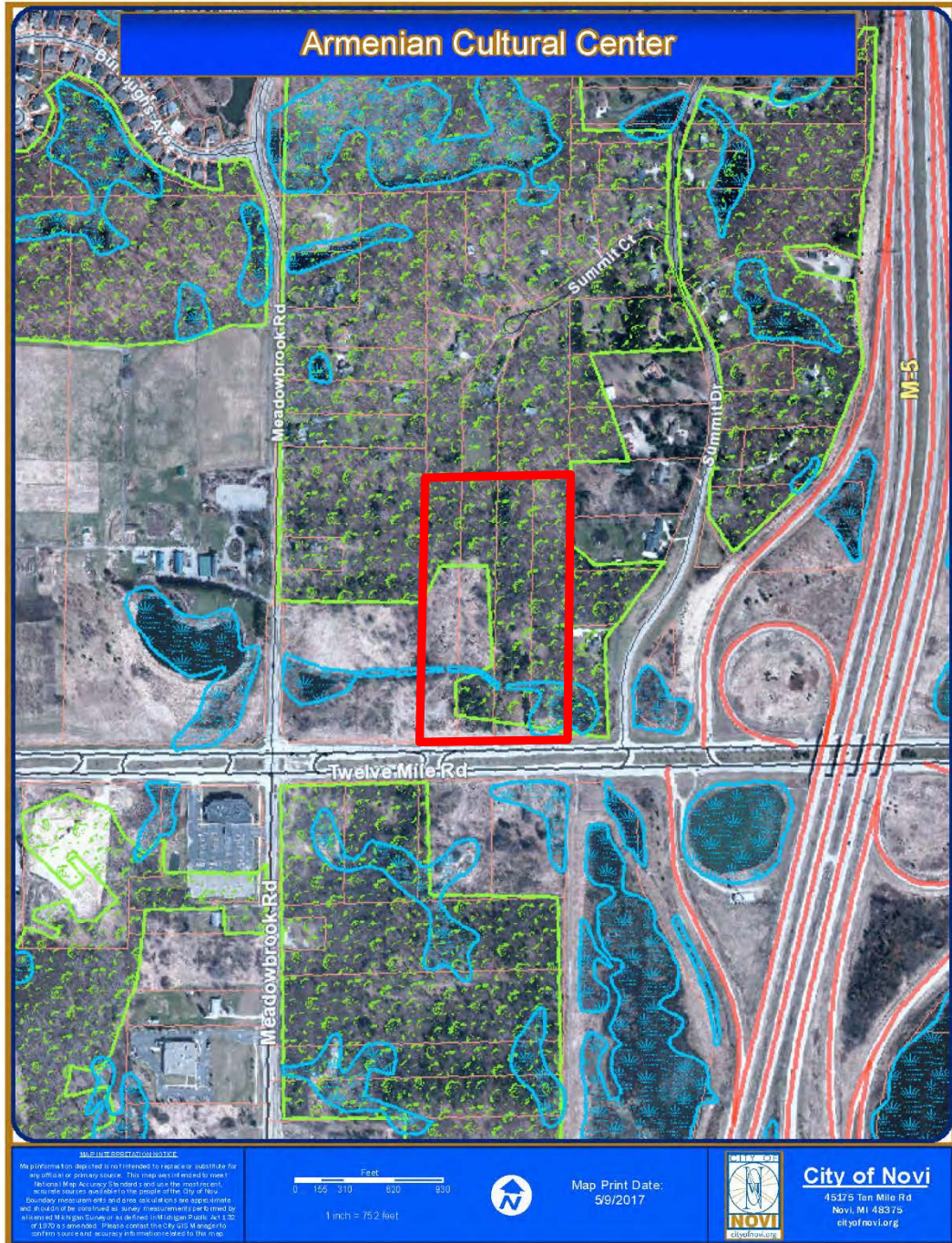


Figure 1. City of Novi Regulated Wetland & Woodland GIS Coverage Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue.

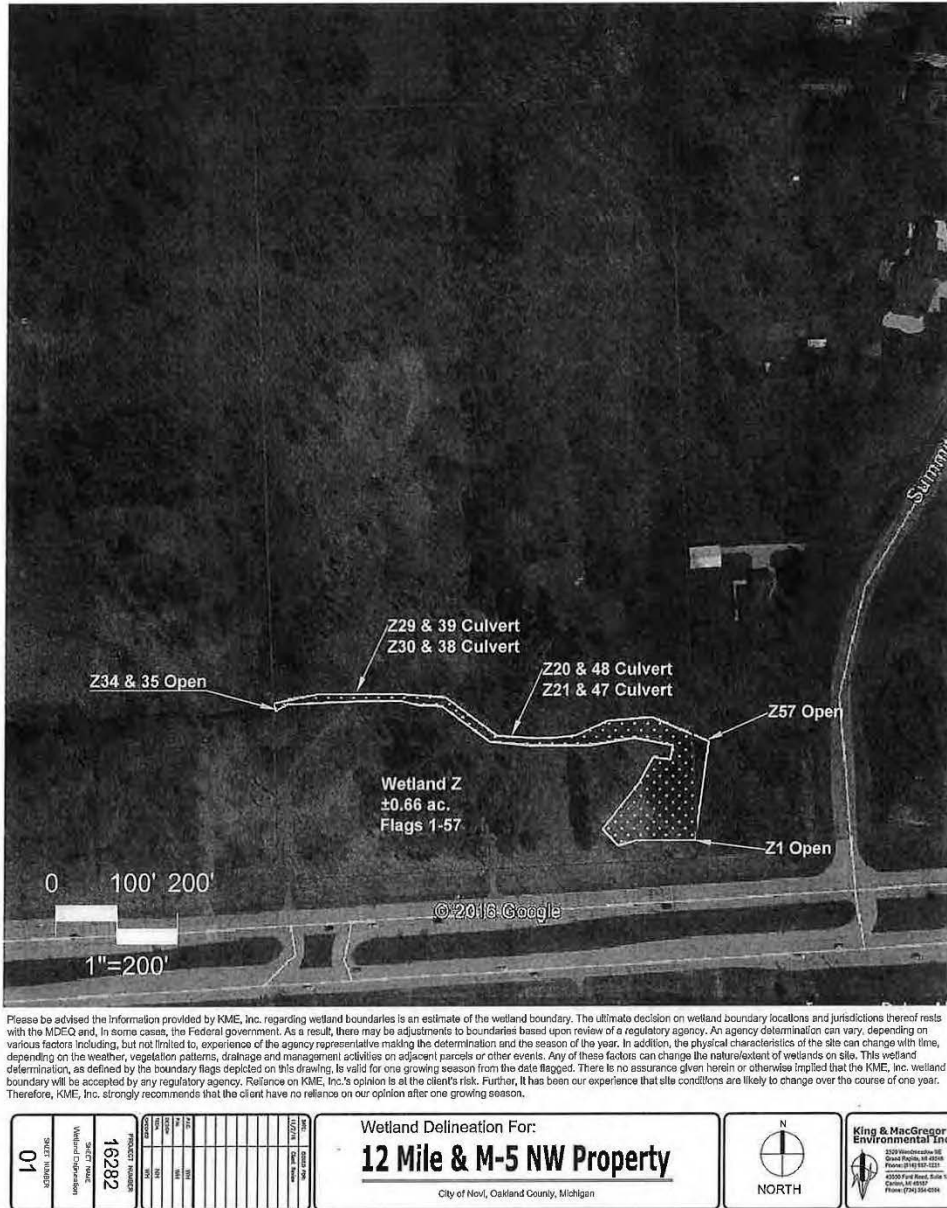


Figure 2. Wetland Delineation Map (map source: King & MacGregor Environmental, Inc.)

Site Photos

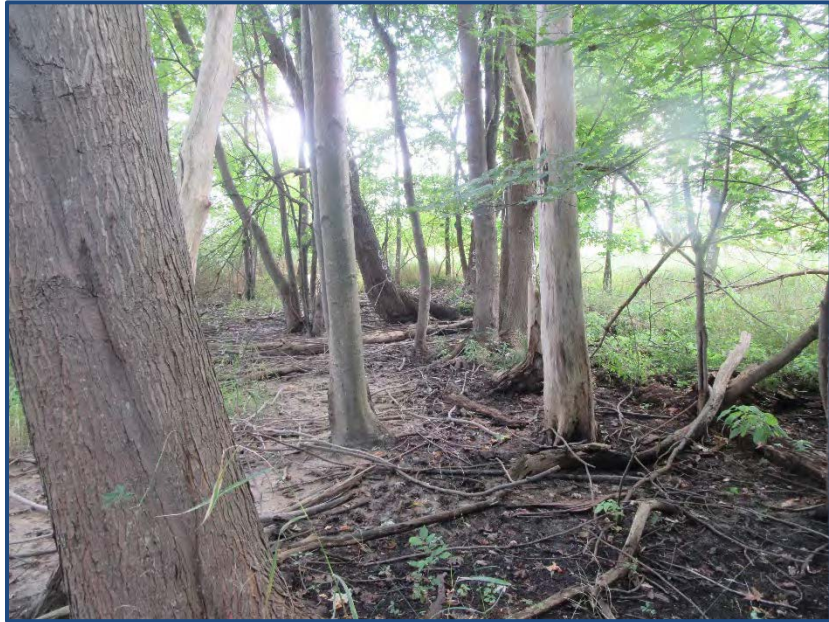


Photo 1. Looking southwest at existing forested wetland near the eastern edge of the project site (ECT, September 5, 2017).



Photo 2. Looking southwest at existing forested wetland near the eastern edge of the project site (ECT, September 5, 2017).

TRAFFIC REVIEW



AECOM
 27777 Franklin Road
 Southfield
 MI, 48034
 USA
 aecom.com

Project name:
 JSP17-0037 Armenian Community Center
 Preliminary Traffic Review

From:
 AECOM

Date:
 September 25, 2017

To:
 Barbara McBeth, AICP
 City of Novi
 45175 10 Mile Road
 Novi, Michigan 48375

CC:
 Sri Komaragiri, George Melistas, Theresa Bridges,
 Darcy Rechten

Memo

Subject: Armenian Community Center Preliminary Traffic Review

The preliminary site plan was reviewed to the level of detail provided and AECOM **recommends approval** for the applicant to move forward with the condition that the comments provided below are adequately addressed to the satisfaction of the City.

GENERAL COMMENTS

1. The applicant, Armenian Cultural Center, is proposing an Armenian Church and Cultural Center with a gross building area of 66,793 square feet. The site is located on the north side of Twelve Mile Road, east of Meadowbrook Road.
2. Twelve Mile Road is under the jurisdiction of the Road Commission for Oakland County (RCOC).
3. The site is currently zoned R-A (Residential Acreage). Places of worship are allowed as a special land use under R-A zoning.
4. The applicant has previously submitted a parking study in addition to a trip generation estimate. Both documents have been recommended for approval.

TRAFFIC IMPACTS

1. The applicant submitted a trip generation estimate with the preliminary site plan. The results of the estimate are summarized below.

ITE Code: 565 (Daycare Center), 931 (Quality Restaurant), 715 (Single Tenant Office Building)
 Development-specific Quantity: 12 employees (Daycare Center), 2,728 sq. ft. GFA (Quality Restaurant), 1,361 sq. ft. (Office Building)
 Zoning Change: N/A

Trip Generation Summary				
	City of Novi Threshold	Estimated Trips	Method	Above Threshold?
AM Peak-Hour, Peak-Direction Trips	100	46	Study	No

PM Peak-Hour, Peak-Direction Trips	100	45	Study	No
Daily (One-Directional) Trips	750	582	Study	No

- The number of trips does not exceed the City’s threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour. AECOM recommends performing the following traffic impact study in accordance with the City’s requirements:

Traffic Impact Study Recommendation	
Type of Study	Justification
None	Based on the trip generation estimate performed in a separate letter dated 8/17/2017, the trip generation estimates do not exceed the City’s thresholds.

EXTERNAL SITE ACCESS AND OPERATIONS

The following comments relate to the external interface between the proposed development and the surrounding roadway(s).

- The applicant has proposed the entrance to be located on Twelve Mile Road. While the driveway is located in the middle of a left turn lane taper for the median crossover, the driveway cannot be relocated due to the existing wetland and wetland buffer requirement.
- The driveway dimension for width is below the City standard of 30 feet; however, the proposed width of 28 feet is within an allowable range. Because the standard dimension for driveway width was not used, the applicant should indicate a cause for using 28 feet as opposed to 30 feet or update the plans to include a 30 foot wide driveway. Please reference Figure IX.1 in the City’s Code of Ordinances for further clarification.
- The driveway turning radii are above the City standard of 20 feet for a driveway; however, the proposed turning radii are within an allowable range. Because the standard dimension for driveway turning radii was not used, the applicant should indicate a cause for using 35 feet as opposed to 20 feet or update the plans to include 20 foot turning radii at the driveway. Please reference Figure IX.1 in the City’s Code of Ordinances for further clarification.
- The proposed grade of the driveway is 3.2% within the first 25 feet. The maximum driveway grade should not exceed 2% within the first 25 feet. Revise the driveway grade to meet City standards. Please reference Sec. 11-216.d.10 for more information.
- Per SEMCOG traffic count data, the Average Annual Daily Traffic (AADT) of Twelve Mile Road east of Meadowbrook Road is 15,140 vehicles. Based on the trip generation estimate letter, the peak hour right turn volume in to the development is 46 vehicles. Therefore, a right turn taper is required at the driveway on Twelve Mile Road per Figure IX.10 of the City’s Code of Ordinances. Please reference Figure IX.11 for right turn taper standards.
- The applicant should indicate on the plans the proposed sight distance at the 12 Mile Road driveway. Please reference Figure XIII-E in the City’s Code of Ordinances for more information.
- The applicant should dimension the plans to show spacing between driveways. Please reference Figure IX.12 and Sec. 11-216.d.1.d for more information.
- The applicant has proposed an emergency access driveway on the west side of the development on 12 Mile Road.
- The emergency access driveway dimensions for width and turning radii exceed City standards.
- The applicant should provide sight distance in both directions at the emergency access driveway. Please reference Figure XIII-E in the City’s Code of Ordinances for more information.
- The applicant should consider aligning the emergency access driveway with the eastbound 12 Mile Road crossover in order to increase accessibility to the emergency access gate.

12. The applicant should provide width dimensions for the emergency access gate detail. Please reference Figure VIII-K within the City's Code of Ordinances for additional guidance. Sheet C-1 references sheet C-10 for the emergency access gate detail, revise to reference sheet C-11.
13. The grade of the proposed emergency access driveway is 2.3% and exceeds the City's maximum of 2.0% within the first 25 feet of a driveway. Revise the driveway grade to meet City standards. Please reference Sec. 11-216.d.10 for more information.

INTERNAL SITE OPERATIONS

The following comments relate to the on-site design and traffic flow operations.

1. General Traffic Flow
 - a. The applicant should consider making the drop-off area operate as a one-way drive and add the appropriate signing. Also, the fire Marshal should confirm the maneuverability throughout the circle drop-off area as necessary.
 - b. The applicant has provided a 442 sq. ft. loading zone. The applicant should indicate the largest vehicle that is expected to access the loading zone so that accessibility may be determined.
 - c. The proposed location of the trash enclosure may interfere with parking operations.
2. Parking Facilities
 - a. The applicant submitted a parking study that was previously approved. The parking study detailed the number of required parking spaces based on the proposed land-uses. Based on the parking study the development is required to provide a total of 262 parking spaces.
 - b. The development has proposed a total of 293 spaces, which includes 75 landbanked spaces. However, as indicated on the site plan, there are only 220 parking spaces and 45 landbanked parking spaces, totaling 265 spaces. Since the proposed amount of parking exceeds the required amount, the applicant should adjust the parking calculations to reflect the conditions of the site plan. It should also be noted that the construction of landbanked parking indicates a reduction of seven parking spaces and the development would fall below the required amount of parking spaces.
 - c. The applicant has proposed 75 landbanked parking spaces; however, only 45 are indicated on the plans. It should be noted that landbanked parking spaces cannot exceed 25% of the required parking or 66 parking spaces.
 - d. Should the landbanked parking spaces be developed, the proposed regular parking row in the northwest corner will no longer be in compliance with city standards. The applicant should increase the parking space length of the parking row adjacent to the landbanked parking to 19 feet in length with a six inch curb while preserving the 24 foot aide access aisle behind the parking row.
 - e. The developer should provide dimensions for the proposed landbanked spaces.
 - f. Parking space dimensions are generally in compliance with City standards. However, the four parallel parking spaces are not in compliance with the City standards for length of parallel parking spaces adjacent to two-way traffic. Please reference Section 5.3 of the City's Zoning Ordinance for more information.
 - g. The applicant should provide end island dimensions in future submittals. Several end island turning radii and other turning radii throughout the site are not in compliance with City standards. Please reference Section 5.3.12 in the City's Zoning Ordinance for more information.
 - h. The applicant has proposed 10 barrier free parking spaces, six of which are designed for van accessibility. The proposed number of barrier free spaces exceeds the standards warranted in the 2010 ADA Standards for Accessible Design.
 - i. Barrier free space and aisle width dimensions are not in compliance with the 2010 Standards for Accessible Design. Please reference Section 502.2 of the 2010 Standards for Accessible Design.
 - j. The applicant should provide information related to the total proposed bicycle parking. Reference Section 5.16.1 and Section 5.16.3 of the City's Zoning Ordinance for clarification.

- k. The applicant should provide a bicycle parking layout detail in future submittals. Please reference Section 5.16.6 of the City's Zoning Ordinance for additional information.
- 3. Sidewalk Requirements
 - a. Sidewalk widths and ramp details are in compliance with City and MDOT standards.
- 4. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices. The following is a discussion of the proposed signing and pavement markings.
 - a. The applicant should include a signing layout and sign quantities in the final site plan.
 - i. The proposed R1-1 (stop) sign on the detail sheet should be increased to 30" in size.
 - ii. The proposed R1-1 (stop) sign at the northern emergency access gate is not necessary.
 - iii. The sign quantity table on sheet C-2 should be updated to show a total of one R3-31 sign and not four.
 - iv. The W11a-2 (pedestrian crossing) sign should be W11-2.
 - v. The City requires 3# U-channel sign posts. Please revise the sign details to reflect the required sign post sizing.
 - b. The applicant should provide details regarding color and size of all proposed pavement markings in the final site plan.

Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

AECOM



Sterling J. Frazier, E.I.T.
Reviewer, Traffic/ITS Engineer



Maureen N. Peters, PE
Senior Traffic/ITS Engineer

SHARED PARKING STUDY REVIEW



AECOM
27777 Franklin Road
Southfield
MI, 48034
USA
aecom.com

Project name:
JSP17-0037 Armenian Community Center
Shared Parking Study Review

From:
AECOM

Date:
July 17, 2017

To:
Barbara McBeth, AICP
City of Novi
45175 10 Mile Road
Novi, Michigan 48375

CC:
Sri Komaragiri, Kirsten Mellem, George Melistas,
Theresa Bridges, Richelle Leskun, Darcy Rechten

Memo

Subject: Armenian Community Center Shared Parking Study Review

The parking study was reviewed to the level of detail provided and AECOM approves the applicant to proceed based on the fact that the number of proposed parking spaces exceeds the minimum required as calculated through the shared use parking analysis.

GENERAL COMMENTS

1. The developer has provided a detailed parking analysis that includes information related to the number of parking spaces required for each land use of the Armenian Cultural Center (ACC).
2. The analysis states that a minimum of 20% of the total parking spaces could potentially be land banked. The 44 potential land banked parking spaces are under the City's maximum allowable threshold of 25% of the total parking spaces.
3. The analysis uses the two largest functional areas (church and fellowship hall) of the ACC in order to establish a total number of parking spaces. However, the two areas will not be used at the same time based on information provided by the applicant.
4. There are discrepancies between the parking requirements text and the table for each land use provided by the applicant. The applicant should update the outlined text to reflect the values in the tables.
5. The study includes a breakdown of the number of the expected parking requirements for each land use.
6. The applicant may revise the plan to meet the minimum requirement of 262 spaces, of which 20% of spaces are proposed to be land banked.

Armenian Cultural Center Required Parking					
A strikethrough indicates that there is a different non-concurrent land use with a greater parking demand and is not used in the total parking calculation.					
	Weekday			Weekend	
	Land Use:	Parking Spaces		Land Use:	Parking Spaces
	ACC Offices	6		Fellowship Hall	163
	Childcare Center	19		Church	134
	Multi-purpose	67		Art Gallery	31
	Fellowship Hall	162		Recreational Facility	91
	Recreational Facility	91		Auditorium	100
	Auditorium	100			
	Art Gallery	31			
	Total	218		Total	194
	Total + Additional 20% Contingency	262		Total + Additional 20% Contingency	233

Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

AECOM



Sterling Frazier, EIT
Reviewer, Traffic/ITS Engineer



Maureen N. Peters, PE
Senior Traffic/ITS Engineer

FAÇADE REVIEW



September 14, 2017

Façade Review Status Summary:
Full Compliance, Section 9 Waiver Not Required

City of Novi Planning Department
 45175 W. 10 Mile Rd.
 Novi, MI 48375-3024

Re: **FACADE ORDINANCE - Façade Review (for PSP)**
Armenian Cultural Center, PSP17-0096
 Façade Region: **1**, Zoning District: **R-A**, Building Size: **67,000 S.F.**

Dear Ms. McBeth;

The following is the Façade Review for Preliminary Site Plan Approval of the above referenced project based on the drawings prepared by Constantine George Pappas Architects, dated 8/25/17. The percentages of materials proposed for each façade are as shown on the table below. The maximum percentages allowed by the Schedule Regulating Façade Materials (AKA Façade Chart) of Ordinance Section 5.15 are shown in the right hand column. Materials in non-compliance with the Façade Chart, if any, are highlighted in bold.

Phase I	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Ordinance Maximum (Minimum)
Brick	84%	64%	73%	82%	100%	100% (30% Minimum)
Flat Metal Panels	8%	13%	15%	8%	0%	50%
Flat Metal (Corten)	3%	13%	10%	5%	0%	50%
Painted Steel (Trim)	5%	4%	1%	3%	0%	15%
Spanderl Glass	0%	6%	1%	2%	0%	50%

Phase II	Elev. A	Elev. B	Elev. C	Elev. D		Ordinance Maximum (Minimum)
Brick	73%	64%	73%	70%		100% (30% Minimum)
Flat Metal Panels	27%	13%	27%	30%		50%
Flat Metal (Corten)	0%	13%	0%	5%		50%
Painted Steel (Trim)	0%	4%	0%	3%		15%
Spanderl Glass	0%	6%	0%	2%		50%

Phase III	Elev. A (Int. Ct.)	Elev. B (Int. Ct.)	Elev. C	Elev. D	Elev. E	Ordinance Maximum (Minimum)
Brick	77%	28%	90%	96%	95%	100% (30% Minimum)
Flat Metal Panels	23%	20%	7%	4%	5%	50%
Flat Metal (Corten)	0%	0%	0%	0%	0%	50%
Painted Steel (Trim)	0%	52%	3%	0%	0%	15%
Spandrel Glass	0%	0%	0%	2%	0%	50%

Monument Sign	North	South	East	West		Ordinance Maximum (Minimum)
Brick	70%	70%	95%	95%		100% (30% Minimum)
Limestone	5%	5%	5%	5%		50%
Flat Metal (Corten)	25%	25%	0%	0%		50%

Dumpster Enclosure	North	South	East	West		Ordinance Maximum (Minimum)
Brick	95%	95%	95%	95%		100% (30% Minimum)
Flat Metal	5%	5%	5%	5%		50%

As shown above, all façade materials are in full compliance with the Façade Ordinance, with the exception of the percentage of Painted Steel Trim on Phase III, Elevation B (52%). This elevation occurs at an interior courtyard (Int. Ct.) and will not be visible to the public. A Section 9 Waiver is therefore not required for this project. The overall project exhibits excellent siting and relationship between the proposed phases. A photographic sample board has been provided on Sheet A-7 which shows high quality materials and carefully coordinated colors. The 60' tall tower that is part of the Genocide Memorial will be visible from a great distance and will serve as a landmark in the vicinity of the project. The applicant should clarify that the tower will in fact be part of Phase I, as shown on the drawings. The precise profile of metal panels to be used on the roof screens is not specified. The applicant should note that corrugated metal is not allowed and that said panels should be substantially flat. The dumpster enclosure and monument sign are constructed primarily of brick to match the building.

Phases - Although detailed drawings for Phases II and III have not been provided at this time, the applicant has provided excel sheets showing the proposed percentage of materials on these elevations. The drawings for Phases II and III should be administratively reviewed for consistency with the excel sheets and consistency with the overall design at the time of submittal. Of particular concern will be Phase II, the Church, which occupies a prominent location on the overall site plan.

Renderings - The renderings that were provided at the time of the Pre-Application Meeting have not been included in this submittal. It is recommended that these be included in the formal submittal so as to become part of the record and be displayed to the Planning Commission and/or City Council during the Public Hearings.

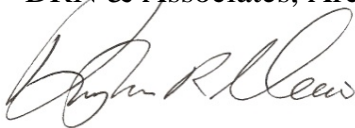
Notes to the Applicant:

1. The façade Ordinance requires that roof top equipment be screened from view from all vantage points both on and off site using approved materials. Although roof screens are indicated additional screens may be required depending on locations of roof top equipment.
2. Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board will be compared to materials delivered to the site. It is the applicant's responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department's Online Inspection Portal with the following link. Please click on "Click here to Request an Inspection" under "Contractors", then click "Façade".

<http://www.cityofnovi.org/Services/CommDev/OnlineInspectionPortal.asp>.

If you have any questions regarding this project please do not hesitate to call.

Sincerely,
DRN & Associates, Architects PC



Douglas R. Necci, AIA

FIRE REVIEW



September 1, 2017

TO: Barbara McBeth- City Planner
Sri Ravali Komaragiri- Plan Review Center
Kirsten Mellem- Plan Review Center

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Gwen Markham

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**Director of Public Safety
Chief of Police**
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Director of EMS/Fire Operations
Jeffery R. Johnson

Assistant Chief of Police
Erick W. Zinser

Assistant Chief of Police
Jerrold S. Hart

RE: Armenian Community Center

PSP# 17-0096

Project Description:

Build a Cultural Center

Comments:

- 1) Fire Hydrant spacing is NO more than 300' from fire hydrant to fire hydrant. Novi City Ordinance Sec 11-68.F.1.C.

Recommendation:

Not APPROVED

Sincerely,

Kevin S. Pierce-Fire Marshal
City of Novi – Fire Dept.

cc: file

Novi Public Safety Administration
45125 W. Ten Mile Road
Novi, Michigan 48375
248.348.7100
248.347.0590 fax

cityofnovi.org

SPECIAL LAND USE NARRATIVE

August 25, 2017

Ms. Sri Ravali Komaragiri, Planner
City of Novi
45175 Ten Mile Rd.
Novi, Michigan 48375

Ref: Statement for Special Land Use Approval
Armenian Community Center
Novi, Michigan

Dear Sri,

Please find this response letter as outlined in the City of Novi Ordinance. It becomes part of our submittal for the Special Use Approval Rezoning in regards to the Armenian Community Center Project. Specifically, the letter explains those items shown on page 6-7 Item C - I, II, III, IV, V, VI, VII.

We have additionally had Community meetings with adjoining residents on both July 26,2017 and August 3,2017. At these meetings we outlined our proposal to the Community and heard comments from them. We have also have offered to meet with Community members once again to review the entire Preliminary Site Plan and Special Use Approval documents submitted to the City of Novi. A copy of the Community members that signed the attendance sheet is attached.

Our responses to then Ordinance requirements are as follows:

- Item I See attached letter submitted by our hired Traffic Consultant
(Hubbell, Roth, & Clark.- Ms. Lia Michaels, P.E. PTOE)
- Item II See attached letter submitted by our hired Civil Engineer
(Ziemet Wozniak – Mr. Julian Wargo)

- Item III The site design concept maintains and restores all existing wetlands that have been identified by our Wetlands Consultant (Mr. Woody Held). Additionally, we have made all efforts to keep as many woodlands as possible by proposing building locations on the site's open area. Any removed woodlands will be replaced with landscape materials as required by the Zoning Ordinance. Storm water management is designed with a retention pond immediately next to the existing drain and is used to filter any storm water prior to entering the natural drainage of the site. Large woodlands remain on the north end of the site as well as existing plant material at the south end of the site and are used to support wildlife habitats.
- Item IV The City of Novi Ordinance outlines that the use of a Church and Community Center is feasible to existing residential surrounding areas based on Special Use Approval. The Community Center shall be open to adjoining residences for child care services, Community meeting uses, religious purposes, and future recreational and cultural activities.
- Item V The site is zoned Residential. Our submittal of the proposed USE (Church and Community Center) will require a Special Use Approval that is consistent with the City of Novi's Masterplan and Zoning Ordinance.
- Item VI The new Armenian Community Center will promote a number of religious, social, and cultural activities while providing an economical boost to the local community by way of additional construction jobs and a small amount of new full time positions.
- Item VII The proposed Land Use is listed as a provision of the Special Land Use provisions of the Ordinance and is in harmony with the purposes of site design regulations.

Response to Section C-ii.

The existing site is 19.3 acres in size. Other feasible uses of the site would be residential under the current RA zoning or residential under a PUD similar to "Beacon Hill Meadows".

The proposed church and cultural center will disturb approximately 12 acres.

Under the current RA zoning, which allows for 1-acre lots, a total of 19 lots could be developed.

Under the PUD zoning, if a density of 2.86 lots per acre could be realized, a total of 55 lots could be developed.

A table can be assembled to compare the storm water management systems for the proposed use as a church and cultural center to these residential uses. The C-factor is also called the runoff coefficient.

<u>USE</u>	<u>C-FACTOR</u>	<u>STORMWATER</u>	<u>STORMWATER</u>
	<u>STORAGE</u>	<u>DISCHARGE</u>	
ACC	0.60	114,192 cf	2.25 cfs
RA	0.35	78,411 cf	2.90 cfs
PUD	0.55	132,987 cf	2.90 cfs

All storm water shall be discharged to the Townline Drain: it is thought that the proposed use as a church and cultural center will not have any detrimental impacts on its capacity. No objections to outletting to the drain have been raised by the Oakland County Water Resources Commissioner, who has jurisdiction over the drain.

A table can be assembled to compare the demands on the sanitary sewer systems for the proposed use as a church and cultural center to the residential uses. It should be noted that the demands on the water main system are assumed to be similar (since one's utility bill for sewer usage is based on water usage). 1 REU is equivalent to 3.5 people per lot for single family residential development.

<u>USE</u>	<u>REU</u>	<u>PEAK FLOW(GPD)</u>	<u>PEAK FLOW (CFS)</u>
ACC	69.3	27,720	0.044
RA	66.5	26,600	0.041
PUD	192.5	77,000	0.119

All new sanitary sewer and water seems shall connect to existing systems in the Twelve Mile Road right-of-way: it is thought that the proposed use as a church and cultural center will not have any detrimental impacts on their capacities. There are no known problems with the existing sanitary sewers and water mains, which are operated and maintained by the City of Novi.

J:14109.UTILITYIMPACTS

Constantine George Pappas AIA

Architecture / Planning

1025 S. Washington Ave. Royal Oak, MI 48067

P. 248.629.8998 F. 248.298.3192

We trust these answers to the Special Use Approval meet your approval and look forward to the Armenian Community Center being part of the City of Novi Community.

Sincerely,



Constantine George Pappas FAIA
Architect

Raffi Ourlian
Armenian Community Center
President

List of attendees from Community Meeting July 26,2017 – about 12 attended, these are the ones that signed in

Community Meeting Date: July 26,2017

**Project: Armenian Community Center
Novi, Michigan**

1- Ed Guttman
248-444-3063
Guttman.ed@gmail.com <<mailto:Guttman.ed@gmail.com>>

2- Ken Schmid
248-321-3959
Ken.Schmid@gmail.com <<mailto:Ken.Schmid@gmail.com>>

3- SDM
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Brenda.Strauch@comcast.com <<mailto:Brenda.Strauch@comcast.com>>

4- Nancy Spence
248-349-4968
spencenr@gmail.com <<mailto:spencenr@gmail.com>>

5- Nick Valenti
248-701-6425
Nickvalenti@mac.com <<mailto:Nickvalenti@mac.com>>

List of attendees from Community Meeting August 3, 2017 – About 12 attended, these are the ones that signed in

Community Meeting Date: August 3, 2017

**Project: Armenian Community Center
Novi, Michigan**

1- Martin Strauch (SDM LLC.)

Brenda.strauch@comcast.net

248-685-2973

2- Justin Nazaroff

justin@fenixammo.com

248-390-4676

3- Deanna Nazaroff

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248-390-8997

4- Ryan Fecho

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248-836-8984

5- Kendra Fecho

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586-557-2263

6- Tom O'Neil

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586-764-8633

7- Ed Fran Guttman

fguttman@mi.rr.com

248-444-3063

8- Casimir Cook

ccnovi@yahoo.com

248-349-8547

COMMUNITY IMPACT STATEMENT

August 25, 2017

**ARMENIAN COMMUNITY CENTER
NOVI, MICHIGAN**

COMMUNITY IMPACT STATEMENT

General Items

The property is located on the north side of Twelve Mile Rd. between Meadowbrook Rd and M-5. The property consists of four parcels which contain approximately 20 acres of land. It is currently zoned RA One Family Residential. The Armenian Community Center is seeking a Special Land Use Approval to allow for the construction of a new Church and Cultural Community Center. The description of the Community, Environmental, Noise, and Economic Impact Statements are as follows.

- Expected annual number of police responses for the proposed development (can be based on statistics from similar developments)**

The number of police responses to the subject property should be minimal.

- Expected annual number of fire responses for the proposed development (can be based on statistics from similar developments)**

The number of fire responses to the subject property should be minimal.

- Anticipated number of employees (include both permanent and construction jobs on site)**

The Armenian Community Center will have a total count of permanent employees as follows:

Church	2 (Priest and Secretary)
Community Center	2 (Secretaries)
Day Care Center	<u>8 (teachers)</u>
Total	12 employees

Temporary Construction Jobs on the site could total approximately 100 persons during the time of construction.

- Statement regarding compliance with City Performance Standards (Section 2519 of the Zoning Ordinance)**

The Proposed Project complies to the City Performance Standards (Section 2519 of the Zoning Ordinance. This includes all items listed in Section 5.14 (pages 5.44, 5.45,5.46)

Estimated number of sewer and water taps and information on peak hour demand and min/max operating pressures for water system

The peak sanitary sewer flow is anticipated to be 31,080 gpd (0.004 cfs).

The total number of sewer taps for the proposed development is one. The sanitary sewer is proposed to connect to the existing 12 -inch sanitary sewer located on the north side of 12 Mile Rd.

The total number of water taps for the proposed development is two from the existing 12-inch watermain on the south side of 12 Mile Rd.

An 8-inch watermain is proposed to be extended and looped through the site to ensure adequate water to the project.

Relationship of the proposed development with surrounding uses

The neighboring parcels are zoned as follows:

R-4 and B-3 to the east (also known as "Beacon Hill Park").

RA to the north.

RA to the west.

OST to the south.

Description of proposed land use

The Armenian Community Center conducted a master plan to include:

A. All associated site work / utilities / parking / landscaping .

B. Creation of a new natural private park along the Twelve Mile Rd. frontage. This continues the already established park concept created as part of the "Beacon Hill" development.

C. Temporary Church / Cultural Center (Hall) and full service Kitchen – Phase I

D. Multipurpose Halls - Phase I

E. Café/ Storage Areas - Phase I

F. Day Care Center – Phase I

G. Armenian Genocide Memorial (outside) – Phase I

H. New Church (400 seats) – Phase II

I. Church Administrative Offices – Phase II

J. Religious Educational/ Meeting Rooms – Phase II

K. Spaces for Youth Activities – Phase III

L. Recreational Facility – Phase III

Description of the environmental factors and impacts addressing the following:

Natural features on the site (e.g., unusual topography, habitat areas, Wetlands, woodlands, historic trees, etc.)

The site is characterized by sloping terrain from the highpoint on the north side of the property, to a low point of the existing Townline County Drain on the south side of the parcel immediately adjacent and parallel to Twelve Mile Rd. The existing drain is regulated by the Oakland County Water Resources Commissioner and the State of Michigan DEQ.

There are surveyed tagged wetlands along either side the existing drain. The wetlands total approximately 0.66 acres in size. The wetlands are populated with emergent, scrub and forested type plantings. Emergent wetlands are most commonly characterized by dense stands or reed canary grass with smaller areas of cattail and/or rush species. Forested wetland includes several smaller areas of permanent water ringed by silver maples, American elms and red ash. The wetland drain will be crossed in two locations with minimal impact to the vegetation. The bottom of the wetland drain will be cleaned only as part of the development. The total area of regulated wetland disturbance is approximately 0.13 acres.

Majority of the property is covered with woods and shrub. Regulated woodland areas comprise --- acres of land based on the City of Novi Woodlands map. Of the approximately ---- regulated trees and have been surveyed, approximately ---- percent are comprised of silver maple, cottonwood, American elm, ashes and willows. Approximately ----- percent are sugar maples, oaks, beech, and walnut. The remaining trees are primarily cherries, aspen and basswood. Approximately --- percent of the trees surveyed are 12 inches or greater in diameter, with less than ----percent greater than 18 inches in diameter, including the woods are a relatively young age. The perimeter of the property is heavily vegetated with both regulated and non- regulated trees and brush. This vegetation provides a natural buffer to the adjacent properties. Pictures of the property line vegetation are attached.

**Temporary and permanent impacts to natural features on the site;
Natural Feature Modifications**

Any natural feature modification in the proposed development will reinforce the existing woodland and wetland features. Part of the projects permanent impacts are a creation of a new private park at the existing wetland's drain along Twelve Mile Rd. The concept expands what was created for the "Beacon Hill" development at the corner of Twelve Mile Rd. and Meadowbrook Rd. Minor impacts will occur to the existing wetland drain for two drive crossings and cleaning the bottom for improved storm water flow.

To access the proposed development, two permanent crossways will be created, one for ingress and egress of the public to the project and the other for a dedicated fire access.

Wildlife Impacts

Valuable habitats including all wetlands will be preserved and enhanced. All of the wetland/ upland habitat will be maintained and will continue to function as a wildlife corridor that connects to the large natural area to the east.

Natural Features Impacted by the Storm Water Plan

The quality of the storm water can impact the natural features of a site. Storm water runoff from this site will require pretreatment for water quality : it will be stored in a storm water detention pond with permanent water (at least 3-feet deep) before it is routed to the existing drain.

- **Manufacture, use or storage of any hazardous or toxic materials on the site including Environmental Protection Agency requirements and the need for a Pollution Incidence Prevention Plan (PIPP)**

No manufacturing, storage of hazardous materials or toxic materials will be on the site.

- **Location, type, depth and contents of any existing or proposed underground storage tanks**

No underground storage tanks will be on site with the exception of a gravity/ grit interceptor tank off the kitchen.

- **Environmental use and/or contamination history of the site (i.e., groundwater contamination, landfill, chemical spills, etc.)**

A Level One Environmental Report was performed on Parcel No. 3: no environmental use or contamination history was identified on the site.

- **Potential impacts to existing wildlife on site**

Existing wildlife will be displaced as a result of this development. It is expected to rehabilitate on adjoining wooded properties.

- **Description of the social impacts addressing the following:**

Replacement or relocation of any existing uses or occupants on the site;

The existing site is vacant with no occupants or uses presently on the site.

Traffic impacts (information can come from any required Traffic Impact Study or statistics from other similar developments when a study is not required);

Traffic information and proposed Development Phasing and Program Uses has been shared with the City of Novi Traffic Consultant (AECOM). The Traffic Consultant has provided a separate analysis to the City of Novi justifying parking for 262 cars. AECOM has determined that a traffic impact study is not warranted for this development.

□ **Proposed site amenities (i.e., sidewalks, public parks, bicycle paths, etc.)**

Site amenities will include interior sidewalks, a new private park along Twelve Mile Road (which expands upon the concept originally created by the site development of "Beacon Hill"), a safety path along Twelve Mile Road and bicycle parking stalls.

□ **Increases in the permanent population of the City as a result of the proposed development (specific number should be identified and statistics from similar developments can be used)**

No new permanent population changes will occur as part of this project, although 30% to 35% of our Armenian Community actually live in the City of Novi now.

VARIANCES REQUIRED

There will be four variances required as part of the Special Land Use Approval for this project as follows:

1. Height variance for the Church, from 35'-0" to 64'-0"
(average height of the central roof cupola)
2. Height variance for the Armenian Genocide Memorial to allow for a 60'-0" central spire.
3. Light variance for the Armenian Genocide Memorial.
4. Variance or Planning Commission approval for parking and drive screening along all required areas. The existing grade provides a natural screening buffer as well as allowing the existing mature vegetation along these property lines to remain.
5. Building Setbacks along each side of the property meet ordinance requirements, see drawings.
6. Variance or Planning Commission approval to allow for two exterior activities. These include:

A. Community Picnic

Six picnics from May to October months.

Most Picnics will have music. We anticipate the Picnics will take place between the hours of 1:00 p.m. to 7:00 p.m.

B. Armenian Cultural Festival

The Armenian Community Center would like to have a three day festival on the proposed grounds that celebrates it's culture, foods, and dance. There will be a band playing music at the festival for the three days. Hours of operation are anticipated as follows:

Friday	12:00 noon to 11:00 p.m.
Saturday	12:00 noon to 11:00 p.m.
Sunday	12:00 noon to 9:00 p.m.

7. Variance to allow a larger brick entry sign integrated with the landscaping. The actual signage text will be approximately 90 sq. ft. See proposed sign design.

COMMUNITY ECONOMIC DEVELOPMENT STATEMENT

The total Phase I Project Size and Cost for the development will be as follows:

Size	Cost	
Phase I	44,022 sq.ft.	TBD
Phase II	16,979 sq.ft.	TBD
Phase III	23,241 sq.ft.	TBD

The Armenian Community Center anticipate a total of 12 full time jobs with an approximate Construction Job Employment of over 100 jobs during the time of construction.

NOISE IMPACT STATEMENT

Minimal noise will be generated in the proposed development throughout the year. It is anticipated that six Picnics will take place between May and October. The Picnics will take place between 1:00 p.m. to 7:00 p.m. on a given Saturday or Sunday. There may also be a band playing at the Picnic from 1:00 to 6:00 pm. Additionally, the Armenian Community Center would like to have a three day festival on the proposed grounds that celebrates its religion, culture, foods, and dance. There will be a band playing music at the festival for the three days. Hours of operation are anticipated as follows:

Friday	12:00 noon to 11:00 p.m.
Saturday	11:00 a.m. to 11:00 p.m.
Sunday	12:00 noon to 10:00 p.m.

Any sound generated by the six Picnics and festival shall not exceed those decibel levels indicated in Section 5.14.10.A.ii "Weighted Sound Level Limit Decibels" for Zoning Districts abutting the subject property. To control any sound generated from these proposed activities, any performing band shall be positioned to direct sound toward Twelve Mile Road, away from any adjoining residence. For everyone's clarification, no bell is proposed for the Church.



AECOM
27777 Franklin Road
Southfield
MI, 48034
USA
aecom.com

Project name:
JSP17-0037 Armenian Community Center
Shared Parking Study Review

From:
AECOM

Date:
July 17, 2017

To:
Barbara McBeth, AICP
City of Novi
45175 10 Mile Road
Novi, Michigan 48375

CC:
Sri Komaragiri, Kirsten Mellem, George Melistas,
Theresa Bridges, Richelle Leskun, Darcy Rechten

Memo

Subject: Armenian Community Center Shared Parking Study Review

The parking study was reviewed to the level of detail provided and AECOM approves the applicant to proceed based on the fact that the number of proposed parking spaces exceeds the minimum required as calculated through the shared use parking analysis.

GENERAL COMMENTS

1. The developer has provided a detailed parking analysis that includes information related to the number of parking spaces required for each land use of the Armenian Cultural Center (ACC).
2. The analysis states that a minimum of 20% of the total parking spaces could potentially be land banked. The 44 potential land banked parking spaces are under the City's maximum allowable threshold of 25% of the total parking spaces.
3. The analysis uses the two largest functional areas (church and fellowship hall) of the ACC in order to establish a total number of parking spaces. However, the two areas will not be used at the same time based on information provided by the applicant.
4. There are discrepancies between the parking requirements text and the table for each land use provided by the applicant. The applicant should update the outlined text to reflect the values in the tables.
5. The study includes a breakdown of the number of the expected parking requirements for each land use.
6. The applicant may revise the plan to meet the minimum requirement of 262 spaces, of which 20% of spaces are proposed to be land banked.

Armenian Cultural Center Required Parking					
<i>A strikethrough indicates that there is a different non-concurrent land use with a greater parking demand and is not used in the total parking calculation.</i>					
	Weekday			Weekend	
	Land Use:	Parking Spaces		Land Use:	Parking Spaces
	ACC Offices	6		Fellowship Hall	163
	Childcare Center	19		Church	134
	Multi-purpose	67		Art Gallery	31
	Fellowship Hall	162		Recreational Facility	94
	Recreational Facility	94		Auditorium	100
	Auditorium	100			
	Art Gallery	31			
	Total	218		Total	194
	Total + Additional 20% Contingency	262		Total + Additional 20% Contingency	233

Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

AECOM



Sterling Frazier, EIT
Reviewer, Traffic/ITS Engineer



Maureen N. Peters, PE
Senior Traffic/ITS Engineer

SHARED PARKING STUDY

June 29, 2017

Sri Komaragiri
City of Novi - Planner
45175 Ten Mile
Novi, Michigan 48375

Project: Armenian Community Center – Novi, MI
Shared Parking Study Review Package

Dear Ms. Sri Komaragiri,
Per your request, please find enclosed a copy of the Shared Parking Study Review Package.

Based on the review of our previous submitted information and meeting with the traffic consultant AECOM (Maureen Peters and Sterling Frazier) the proposed center requires at least 218 physical parking spaces. This is the required amount based on calculations of land use, building code square foot requirements, and persons per vehicle; then a minimum of 20% contingency (44 spaces) could potentially be accommodated for with land banked spaces, pending approval from the City. The 20% contingency falls within the 25% allowable land banked spaces, per the Zoning Ordinance. We hope this package meets your requirements and if you need any other information please contact our office.

Sincerely,
Evans P Caruso

March 29,2017

**Armenian Community Center
Novi, Michigan**

Project Description/ Program Analysis

The Armenian Community Center (ACC) owns approximate 20 acres of vacant property on 12 Mile Rd, just east of Meadowbrook Rd. in the City of Novi. The ACC is moving their facilities from Dearborn to a central location of their members to this new facility.

In an effort to define the “ big picture” the ACC and architects conducted a Masterplan that indicates all the program areas that the ACC might need now and in the future. It is the intent of the ACC to invite the local community into the ACC Community Center facility.

The proposed programs and phases are as follows:

Phase I

Phase I will include the complete infrastructure of the site (roads, storm water management, utilities, sidewalks, and landscaping. Building Areas will also include:

- A.** ACC Administration Offices.
- B.** Meeting Rooms (for ongoing ACC programs , weekly Religious Education and Child Care Center of no more than 50 children, primarily for the ACC Members).
- C.** Multi-Purpose Halls (for Religious Education activities and Dance Group rehearsals).
- D.** Temporary Church / Fellowship Hall seating (400 persons) which will be used for the Religious Facility until the Church is constructed in Phase II. The space will also be used for annual ACC Community events, large group educational sessions, wedding receptions and local community events.
- E.** Full service Kitchen facility and support areas for the Fellowship Hall.
- F.** Art Gallery/ Multipurpose space for various activities.
- G.** Armenian Genocide Memorial. (outside at main entry).
- H.** Entry Canopy of the entire complex. (outside)
- I.** Armenian Community Café, Youth areas, outdoor plaza area, in the lower level of the Fellowship Hall.

Phase II

- J. Church (402 seats)
- K. Narthex
- L. Church Administrative Offices
- M. Religious Education Classrooms.

Phase III

- N. Recreational Facility for youth programs.
- O. Youth offices, Youth program areas.

Phase IV

- P. Auditorium (300 seats)

Parking Analysis

The following is a breakdown of the overall parking required for the complex. The amount of parking is proposed to be established by the two largest functional areas in the Armenian Community Center, the Temporary Church / Fellowship Hall in Phase I and the Church in Phase II . Additionally, parking for these two program areas will not be used at the same time. Parking for 254 cars will be constructed in Phase I. Parking for future needs has been “ banked ”. When the banked parking is constructed, a grand total of 301 spaces will be available. The amount of parking for the other functional areas will be minimal and used at different days and times such that their parking requirements will be interfere with the larger program parking needs. The parking requirements and the times that they will be used are as follows:

Church (seating for 402 persons)

Time of occupancy : Sunday and Holy Holidays
 402 seats / 3 = 134 cars

Church Office (3 to 5 persons)

Time of occupancy: Weekdays

Religious Education Meeting Rooms (50 to 100 children Adults will be at Church during Religious Education)

Time of Occupancy : Sundays

Constantine George Pappas AIA

Architecture / Planning

1025 S. Washington Ave. Royal Oak, MI 48067

P. 248.629.8998 F. 248.298.3192

Multi-purpose Rooms (200 persons)

Time of occupancy: Weekdays/ Sunday after Church
Will not be in operation as a large seating event
while the Fellowship Hall is in use.

Café (lower level of Fellowship Hall – 200 persons)

Time of occupancy: Weekdays/ Weekends

Fellowship Hall (seating for 400 persons with dance floor, 489 with no dance floor)

Time of occupancy: Weekdays for small meetings of 100 to 150 people.
Weekends after Church for coffee social.
Weekends for ACC member wedding, baptism,
ACC Social Event.
Weekdays: Funeral luncheon
489 seats / 3 = 163 cars

ACC Offices (5 to 7 persons)

Time of occupancy: Weekdays/ Weeknights/ Weekends

Child Care Center (50 Children plus 12 teachers)

Time of occupancy: Weekdays M-F

**Art Gallery/ Multi-Purpose Space
(for Child Care Activities, weekends for Art Gallery Showings)**

Time of occupancy: Weekdays/ Weekends

Recreational Facility/ Youth Offices

Time of occupancy: Weeknights/ Weekends
Will not be in operation while Church or Fellowship Hall is in session.
272 bleacher seating / 3 = 91 cars

Auditorium (300 persons)

Time of occupancy: Weeknights/ Weekends
Will not be in operation while Church or Fellowship Hall is in session.
300/3 = 100 cars

Constantine George Pappas AIA

Architecture / Planning

1025 S. Washington Ave. Royal Oak, MI 48067

P. 248.629.8998 F. 248.298.3192

Proposed Building Heights

Majority of the Community Center

Majority of the facility will have roof heights of no more than 22 feet from finish grade. The only exception will be those areas in which walk-outs occur on the south side of the building. The height on the south wall will be approximately 36 ft. from finish grade.

One side of the lower level of the Community Center will house the Armenian Café and Youth Support Areas (under the Fellowship Hall) and the other side will be designed for the Gymnasium. We chose to sink or recess the size of the gymnasium to minimize the impact on the abutting residential area.

The two tallest heights of the entire complex are proposed to be:

Church

The proposed height of Church will be 54 ft. to the center of the main cupola or roof from finish grade. This area is over the main body of the church and is not habitable. See attached Masterplan Renderings.

Armenian Memorial

The main feature element in the Armenian Memorial is proposed to be 64 ft. from finish grade. See attached Masterplan Renderings.

P:\SDSK\PROJ\201528 - ARMENIAN\02 - MP\01 - MODEL\A0-SITE-N\M.P - PARKING-201528.DWG May 26 2017



Overall - Lower Level Floor Plan
Showing Proposed Uses
Scale: 1" = 32'-0"

Overall - Main Level Floor Plan
Showing Proposed Uses
Scale: 1" = 32'-0"

Revisions

Date: April 20, 2017
Pre-Application Submittal

Architect's Seal

THIS REGISTRATION SEAL IS FOR THE DRAWINGS ONLY AND DOES NOT SATISFY ANY INDIVIDUAL REQUIREMENTS NEEDED FOR EACH ENGINEER DISCIPLINE



Constantinine George Pogras AIA
Architecture / Planning

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www.cgp-architecture.com

Project
Armenian Community Center
Novi, Michigan

Project No. 201528

Sheet Title
Overall Plans
Showing Proposed Uses

Drawn / Checked
EPC / EPC

Approved:
CGP

Date: May 25, 2017
Meeting

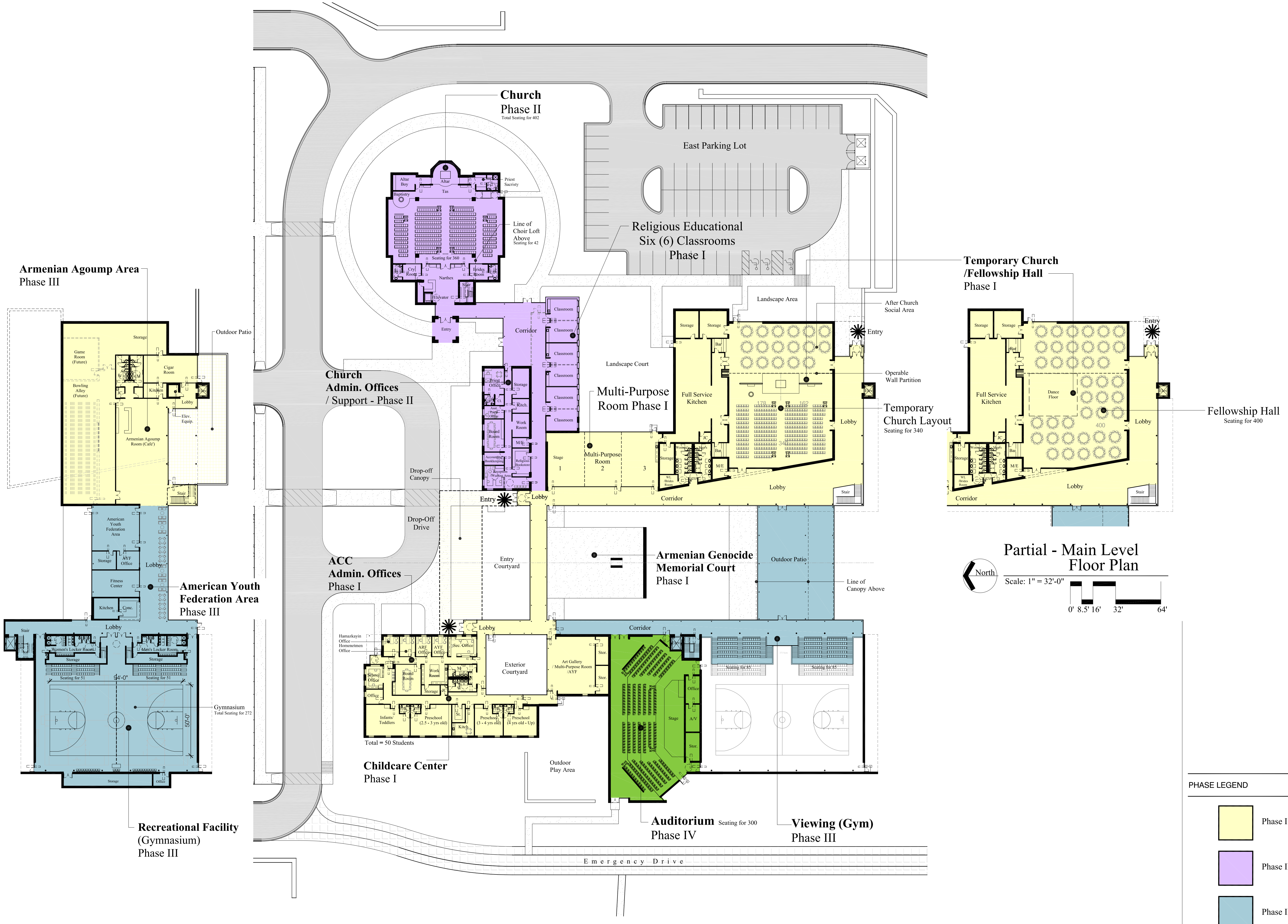
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Sheet No.
A1-02

Armenian Cultural Center Required Parking					
<i>A strikethrough indicates that there is a different non-concurrent land use with a greater parking demand and is not used in the total parking calculation.</i>					
	Weekday			Weekend	
	Land Use:	Parking Spaces		Land Use:	Parking Spaces
	ACC Offices	6		Fellowship Hall	162
	Childcare Center	19		Church	134
	Multi-purpose	67		Art Gallery	31
	Fellowship Hall	162		Recreational Facility	80
	Recreational Facility	80		Auditorium	88
	Auditorium	88			
	Art Gallery	31			
	Total	218		Total	193
	Total + Additional 20% Contingency	262		Total + Additional 20% Contingency	232

Armenian Community Center						
Master Plan Area and Use Designation						
Novi, Michigan						
May 26, 2017						
Designated Area (See Floor Plan)	Proposed Use	Time of Use	Gross Square Footage	Net Square Footage	Occupant Load (Based on Net Sq. Ft.)	Parking Spaces
Phase I:			44,233			
	ACC Administrative Offices (7 staff members)	Weekdays / Weeknights / Weekends - Time of Operations Varies		1,361	1,361 / 100 = 14	1,361 / 222 = 6
	Childcare Center	Weekdays (50 children + 12 staff) - Time of Operation 7am - 6pm		2,386	2,386 / 35 = 68	2,386 / 350 = 7 + staff = 12 Total = 19
	Multipurpose Rooms - 200 persons	Weekdays / Sundays after Church *Will NOT be used for a large seating event simultaneously w/ Fellowship Hall.		3,009	3,009 / 15 = 201	201 / 3 = 67
	Temporary Church / Fellowship Hall	Two Analysis:				
		1) Temporary Church Area(Chairs Only) and after Church Social Area (Coffee Gathering - Tables and Chairs). *These two areas will NOT be used simultaneously during Sunday Services.		3,411	3,411 / 7 = 487	487 / 3 = 162
		2) Entire Area of Fellowship (Tables and Chairs - with Dance Floor)		6,158	6,158 / 15 = 411	411 / 3 = 137
		3) Entire Area of Fellowship (Tables and Chairs - without Dance Floor)		7,298	7,298 / 15 = 486	486 / 3 = 162
		Weekdays / Weekends				
		Weekends after Church for coffee social				
		Weekends for ACC wedding, baptism, ACC Social Event				
		Weekdays for funeral luncheons				
	Full Service Kitchen and Support Area	Used when needed for Fellowship activities.		2,473	2,473 / 200 = 12	
	Art Gallery / Multipurpose Space	Weekdays / Weeknights / Weekends		1,390	1,390 / 5 = 278	
	Armenian Genocide Memorial Court	Open Outdoor Space		3,400	3,400 / 5 = 680	
	Armenian Community Café - 200 persons	Weekdays / Weeknights / Weekends		2,728	2,728 / 15 = 182	
	-Café Patio			2,849	2,849 / 15 = 190	
	-Cigar Room			730	730 / 15 = 49	
	-Kitchen			169	169 / 200 = 1	
Phase II:			16,979			
	Church - 402 fixed seats	Sundays and Holy Holidays			402	402 / 3 = 134
	Church Administrative Offices	Weekdays (5 staff members)		1,504	1,604 / 100 = 15	1,604 / 222 = 7
	Religious Education Classrooms	Sundays		1,852	1,852 / 20 = 93	
Phase III:			25,532			
	Recreational Facility for Youth Programs	Weekdays / Weeknights / Weekends *Will NOT be in operation while Church or Fellowship Hall is in session				
	-Bleacher Seating (272 fixed seats)				272	272/3.4 = 80
	-Locker Rooms			618	618 / 50 = 12	
	-Gymnasium			7,800	7,800 / 50 = 156	
	Youth Offices & Youth Program Areas					
	-Gathering			1,051	1,051 / 15 = 70	
	-Concession & Kitchen			400	400 / 200 = 2	
	-Office			206	206 / 100 = 2	
	-Exercise Room			634	634 / 50 = 13	
Phase IV:			6,827			
	Auditorium (300 fixed seats)	Weeknights / Weekends *Will NOT be in operation while Church or Fellowship Hall is in session			300	300/3.4 = 88
Total			93,571			

Armenian Community Center						
Master Plan Area and Use Designation						
Novi, Michigan						
May 26, 2017						
Designated Area (See Floor Plan)	Proposed Use	Time of Use	Gross Square Footage	Net Square Footage	Occupant Load (Based on Net Sq. Ft.)	Parking Spaces
Phase I:			44,233			
	ACC Administrative Offices (7 staff members)	Weekdays / Weeknights / Weekends - Time of Operations Varies		1,361	1,361 / 100 = 14	1,361 / 222 = 6
	Childcare Center	Weekdays (50 children + 12 staff) - Time of Operation 7am - 6pm		2,386	2,386 / 35 = 68	2,386 / 350 = 7 + staff = 12 Total = 19
	Multipurpose Rooms - 200 persons	Weekdays / Sundays after Church *Will NOT be used for a large seating event simultaneously w/ Fellowship Hall.		3,009	3,009 / 15 = 201	201 / 3 = 67
	Temporary Church / Fellowship Hall	Two Analysis:				
		1) Temporary Church Area(Chairs Only) and after Church Social Area (Coffee Gathering - Tables and Chairs). *These two areas will NOT be used simultaneously during Sunday Services.		3,411	3,411 / 7 = 487	487 / 3 = 162
		2) Entire Area of Fellowship (Tables and Chairs - with Dance Floor)		6,158	6,158 / 15 = 411	411 / 3 = 137
		3) Entire Area of Fellowship (Tables and Chairs - without Dance Floor)		7,298	7,298 / 15 = 486	486 / 3 = 162
		Weekdays / Weekends				
		Weekends after Church for coffee social				
		Weekends for ACC wedding, baptism, ACC Social Event				
		Weekdays for funeral luncheons				
	Full Service Kitchen and Support Area	Used when needed for Fellowship activities.		2,473	2,473 / 200 = 12	
	Art Gallery / Multipurpose Space	Weekdays / Weeknights / Weekends		1,390	1,390 / 5 = 278	
	Armenian Genocide Memorial Court	Open Outdoor Space		3,400	3,400 / 5 = 680	
	Armenian Community Café - 200 persons	Weekdays / Weeknights / Weekends		2,728	2,728 / 15 = 182	
	-Café Patio			2,849	2,849 / 15 = 190	
	-Cigar Room			730	730 / 15 = 49	
	-Kitchen			169	169 / 200 = 1	
Phase II:			16,979			
	Church - 402 fixed seats	Sundays and Holy Holidays			402	402 / 3 = 134
	Church Administrative Offices	Weekdays (5 staff members)		1,504	1,604 / 100 = 15	1,604 / 222 = 7
	Religious Education Classrooms	Sundays		1,852	1,852 / 20 = 93	
Phase III:			25,532			
	Recreational Facility for Youth Programs	Weekdays / Weeknights / Weekends *Will NOT be in operation while Church or Fellowship Hall is in session				
	-Bleacher Seating (272 fixed seats)				272	272/3.4 = 80
	-Locker Rooms			618	618 / 50 = 12	
	-Gymnasium			7,800	7,800 / 50 = 156	
	Youth Offices & Youth Program Areas					
	-Gathering			1,051	1,051 / 15 = 70	
	-Concession & Kitchen			400	400 / 200 = 2	
	-Office			206	206 / 100 = 2	
	-Exercise Room			634	634 / 50 = 13	
Phase IV:			6,827			
	Auditorium (300 fixed seats)	Weeknights / Weekends *Will NOT be in operation while Church or Fellowship Hall is in session			300	300/3.4 = 88
Total			93,571			



Partial - Main Level Floor Plan
 Scale: 1" = 32'-0"
 0' 8.5' 16' 32' 64'

Overall - Lower Level Floor Plan Showing Phasing
 Scale: 1" = 32'-0"
 0' 8.5' 16' 32' 64'

Overall - Main Level Floor Plan Showing Phasing
 Scale: 1" = 32'-0"
 0' 8.5' 16' 32' 64'

PHASE LEGEND

	Phase I
	Phase II
	Phase III
	Phase IV

P:\SDSK\PROJ\201528 - ARMENIAN - MP\01 - MODEL\AO-SITE-N\M.P - PARKING-201528.DWG May 26 2017

Revisions

Date: April 20, 2017
 Pre-Application Submittal

Architect's Seal

THIS REGISTRATION SEAL IS FOR THE DRAWINGS ONLY AND DOES NOT SATISFY ANY INDIVIDUAL REQUIREMENTS NEEDED FOR EACH ENGINEER DISCIPLINE



Constantinine George Pappas AIA
 Architecture / Planning

1025 S. Washington Ave. Royal Oak, MI 48067
 P. 248.629.8998 F. 248.298.3192
 www.cgp-architecture.com

Project

Armenian Community Center
 Novi, Michigan

Project No. 201528

Sheet Title

Overall Plans
 Showing Phasing

Drawn / Checked
 EPC / EPC

Approved:
 CGP

Date: May 25, 2017
 Meeting

TRIP GENERATION



HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915

HUBBELL, ROTH & CLARK, INC.
OFFICE: 555 Hulet Drive | Bloomfield Hills, MI 48302-0360
MAILING: PO Box 824 | Bloomfield Hills, MI 48303-0824
PHONE: 248.454.6300 | FAX: 248.454.6312
WEBSITE: hrcenr.com | EMAIL: info@hrcenr.com

August 17, 2017

Armenian Community Center
19310 Ford Road
Dearborn, MI 48128

Attn: Raffi Ourlian, Chairman

Re: Proposed Armenian Community Center in Novi, MI
Trip Generation

HRC Job No. 20170130

Dear Mr. Ourlian:

At your request, Hubbell, Roth & Clark, Inc. (HRC) has prepared a trip generation analysis for the proposed development on 12 Mile Road in Novi, Michigan. The reason for this analysis is that the City of Novi's Traffic Impact Study policy requires that a Traffic Impact Study be conducted if a proposed development will generate:

- 1) over 100 or more directional trips during the peak hour of the traffic generator or the peak hour of the adjacent streets or
- 2) over 750 trips in an average day. Based on this policy, the proposed development does not meet the threshold requiring a Traffic Impact Study. Our analysis and results are provided herein.

Trip Generation

One of the most critical elements of a traffic study is estimating the amount of traffic to be generated by a proposed development. Trips are defined as a single or one directional movement with either the origin or destination of the trip inside the study site. Thus, a car entering and leaving a site would be recorded as generating two trips.

Trip generation is usually done by using trip generation rates or equations to provide an estimate of all future trips generated by a proposed development. Rates are commonly expressed in trips per unit of development. For example, trips for a church can be based on per 1,000 square feet of gross floor area or number of seats for a service in the fellowship hall. Trips for a day care can be based on number of employees, number of students, or on per 1,000 square feet of gross floor area. Where there is sufficient data from engineering studies, equations provide a direct estimate of trips based upon development units being multiplied in a mathematical relationship.

There are several sources for trip generation rates and equations, which are based on data collected from locations in the United States and Canada. These are compilations of data that have been gathered over many years for various land uses. National data sources are starting points in estimating the amount of traffic that may be generated by a specific building or land use. The most widely used source of national trip generation data is the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE). The information in this report is almost solely derived from suburban and urban sites. Data included in trip generation was obtained from actual driveway counts of vehicular traffic entering and exiting the

PRINCIPALS

Daniel W. Mitchell | Nancy M.D. Faight
Keith D. McCormack | Jesse B. VanDeCreek
Roland N. Alix | Michael C. MacDonald
James F. Burton | Charles E. Hart

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William R. Davis | Dennis J. Benoit
Robert F. DeFrain | Thomas D. LaCross
Albert P. Mickalich | Timothy H. Sullivan
Thomas G. Maxwell

ASSOCIATES

Marvin A. Olane | Marshall J. Grazioli
Donna M. Martin | Colleen L. Hill-Stramsak
Bradley W. Shepler | Karyn M. Stickle
Jane M. Graham | Todd J. Sneathen
Aaron A. Uranga | Salvatore Conigliaro

site. The Ninth Edition of the Trip Generation Manual contains more than 4,800 data sets from individual trip generation studies. The report also includes discussions on the application and use of trip generation rates and equations; descriptions of the characteristics of each land use; maximum/minimum average rates for weekdays, weekends and peak hours of the generator and adjacent street traffic; and additional statistical data regarding data variability.

Since the Novi policy examines both peak hour of the road and peak hour of the generator, HRC included both in the trip generation analysis. Since the proposed specific land uses can be generated using different units, HRC included all the options in the trip generation analysis. The attached Table 1 provides all the possible options.

Then HRC proposed two methodologies to determine the final number of trips. The methodologies were:

1. Combination of land uses – day care center, office, and restaurant – that would operate weekdays on the site.
2. Single land use – church – that is defined as a place of worship that may also include dining, meeting rooms, and a day care program.

CONCLUSION

The highest number of trips were generated during the peak hour of the generators and not the traditional peak hours of the road. If the site is analyzed using different land uses active during weekdays, we project the site may generate up to 582 trips on a typical weekday with 78 trips in the AM and 88 in the PM. If the site is analyzed as a single land use, church, we project that the site may generate up to 403 trips on a typical weekday with 38 trips in the AM and 42 trips in the PM. In summary, neither methodology meets the threshold for a Traffic Impact Study which requires a minimum of 750 trips daily or more than 100 directional trips during the peak hour.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Lia Michaels, P.E., PTOE
Project Engineer

LM/bjl
Attachment

pc: CGP Architecture; C.G. Pappas, E. Caruso
Zeimet Wozniak; J. Wargo
HRC; File

TABLE 1.
Trip Generation Options for Armenian Community Center Development
Novi, MI

Proposed Land Use														
ITE Code	Land Use	Unit	Daily Trip Rate	AM Peak Hour Trip Rate		PM Peak Hour Trip Rate		Unit	Weekday Daily Trips	AM Peak Hour Trips		PM Peak Hour Trips		
				In	Out	In	Out			In	Out	In	Out	
1	565	Day Care Center	Employees	Rate	Rate		Rate		12	321	58		57	
	Peak Hour of Street	53%			47%	47%	53%	31			27	27	30	
2	565	Day Care Center	Employees	Rate	Rate		Rate		12	321	61		61	
	Peak Hour of the Generator	53%			47%	47%	53%	32			29	29	32	
3	565	Day Care Center	1000 SFT	Rate	Rate		Rate		2.386	177	29		29	
	Peak Hour of Street	GFA	53%		47%	47%	53%	15			14	14	15	
4	565	Day Care Center	1000 SFT	Rate	Rate		Rate		2.388	177	32		33	
	Peak Hour of the Generator	GFA	53%		47%	47%	53%	17			15	16	17	
5	565	Day Care Center	Students	Rate	Rate		Rate		50	219	40		41	
	Peak Hour of Street	53%			47%	47%	53%	21			19	19	22	
6	565	Day Care Center	Students	Rate	Rate		Rate		50	219	41		42	
	Peak Hour of the Generator	53%			47%	47%	53%	22			19	20	22	
7	931	Quality Restaurant	1,000 SFT	Rate	Rate		Rate		2.728	245	2		20	
	Peak Hour of Street	GFA	n/a		n/a	67%	33%	2			0	13	7	
8	931	Quality Restaurant	1,000 SFT	Rate	Rate		Rate		2.728	245	15		25	
	Peak Hour of the Generator	GFA	82%		18%	62%	38%	12			3	16	9	
9	715	Single Tenant Office Building	1,000 SFT	Rate	Rate		Rate		1.361	16	2		2	
	Peak Hour of the Generator	GFA	89%		11%	15%	85%	2			0	0	2	
10	560	Church	1,000 SFT	Rate	Rate		Rate		44.233	403	25		24	
	Peak Hour of Street	GFA	62%		38%	48%	52%	16			9	12	12	
11	560	Church			Rate		Rate		44.233	403	38		42	
	Peak Hour of the Generator	55%			45%	54%	46%	21			17	23	19	
12	560	Church	Seats	Rate	n/a		n/a		340	207	n/a		n/a	
Methodology #1: Sum of lines 2, 8, & 9									582	78		88		
										46	32	45	43	
Methodology #2: equals line 11									403	38		42		
										21	17	23	19	

APPLICANT RESPONSE LETTER

ZEIMET WOZNIAK & ASSOCIATES

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100
New Hudson, Michigan 48165-9318
248.437.5099 · 248.437.5222 fax
www.zeimetwozniak.com

October 5, 2017

Ms. Sri Komaragiri, Planner
City of Novi
Community Development Department
45175 Ten Mile Road
Novi, MI 48375

Re: Preliminary Site Plan for
Proposed Armenian Church and Cultural Center located on
North side of Twelve Mile Road, east of Meadowbrook Road
City File No. JSP #17-0037, PSP #17-0096

Dear Ms. Komaragiri:

Staff has recommended approval of the Preliminary Site Plan for this project (with the exception of the Fire Department, with whom we are working to address his concerns over the spacing of the proposed onsite fire hydrants).

As the project is scheduled to go before the City's Planning Commission for public hearing on October 11, 2017, we are pleased to provide you with the following:

1. As no changes have been made to the original site plan, please continue to use those drawings.
2. Response letters to all reviewing agencies:
 - To Sri Komaragiri from Evans Caruso regarding planning review.
 - To Sterling Frazier from Julian Wargo regarding shared parking study review.
 - To Sterling Frazier from Julian Wargo regarding traffic review.
 - To Kevin Pierce from Julian Wargo regarding fire hydrant review.
 - To Peter Hill from Julian Wargo regarding wetland review.
 - To Sri Komaragiri from Steven Deak regarding landscaping review by Rick Meader and woodland review by Peter Hill.
 - To Darcy Rechten from Julian Wargo regarding engineering review.
 - To Douglas Necci from Evans Caruso regarding facade review.
3. A color rendering of the site plan is not available at this time.
4. Revisions to the "Community Impact Statement" are contained within the above response to the Planner from Evans Caruso.
5. Revisions to the "Noise Impact Statement" are contained within the above response to the Planner from Evans Caruso.
6. Elevation renderings as originally submitted (please note that the Memorial Tower will no longer be more than 35-feet high).
7. A sample materials board was provided to you on September 29, 2017.

A ZBA Variance request is being provided under separate cover from the Project Architect.

Thank you for your assistance. We look forward to working with you as the design of this project moves ahead.

Very truly yours,



Julian J. Wargo, Jr., PE
Senior Project Engineer

Encl.

PC: Mr. Evans Caruso, CGP Architecture; Mr. Raffi Ourlian, ACC; Mr. Steve Deak, RLA

J:14109.Letter15

October 5, 2017

Ms. Sri Komaragiri, Planner
City of Novi
Community Development Department
45175 Ten Mile Road
Novi, Michigan 48375

Ref: Armenian Church and Cultural Center located on
North side of Twelve Mile Road, East of Meadowbrook Road
City File No. JSP 17-0037

Subject: Plan Review Response Letter

Dear Ms. Komaragiri,

We received the Preliminary Site Plan Review regarding the Armenian Church and Cultural Center dated September 25, 2017. Please find enclosed (below) the response to your Planning Review comments.

Preliminary Site Plan Review: Response to Planning Review

Ordinance Deviations (Page 2 of 6)

1. Planning Commission wavers / approvals Consideration
 - I. **Noted.**
 - II. **Noted.**
 - III. **Noted.**
 - IV. **Noted.**
 - V. **Noted.**

2. DCS Variances (Admin / City Council)
 - I. **See Civil.**
 - II. **See Civil.**

3. Zoning Board of Appeals Variances: **We will submit ZBA application by October 4, 2017 regarding Items No. III and the other items will be withdrawn.**
 - I. **We will not be seeking a variance to increase the height of Genocide Memorial.**
 - II. **We will not be seeking a variance for decorative lighting that transmits in the sky for the Genocide Memorial.**
 - III. **We will be submitting for a variance regarding the Dumpster located in the side yard setback.**

Ordinance Requirements (Page 3-5 of 6)

1. Use: **Noted.**
2. Phasing Approval: **Noted.**
3. Final Site Plan approval for other Phases: **Noted.**
4. Outdoor Activities: **The applicate will apply for temporary permit for the outdoor events with the City of Novi. See the attached drawing which shows a conceptual layout of where the events will take place, which includes the music stage location. The front of stage is oriented to project and face back towards the ACC building and not towards the residence.**
5. Community Impact Statement: **Revisions have been made to the existing narrative regarding the Woodlands Values. See attached page 3.**
6. Noise Impact State: **Any sound generated by the six Picnics and festival shall not exceed those decibel levels indicated in Section 5.14.10.A.ii "Weighted Sound Level Limit Decibels" for Zoning Districts abutting the subject property. To control any sound generated from these proposed activities, any performing band shall be positioned to direct sound toward Twelve Mile Road, away from any adjoining residence.**

A. Community Picnic

Six picnics from May to October months.

Most Picnics will have music. We anticipate the Picnics will take place between the hours of 1:00 p.m. to 7:00 p.m.

The Community Picnic will be open only to the members of the community and will have an estimated attendance of 200 to 400 people.

B. Armenian Cultural Festival

The Armenian Community Center would like to have a three day festival on the proposed grounds that celebrates it's culture, foods, and dance. There will be a band playing music at the festival for the three days

Hours of operation are anticipated as follows:

Friday	12:00 noon to 11:00 p.m.
Saturday	12:00 noon to 11:00 p.m.
Sunday	12:00 noon to 9:00 p.m.

The Festival will be open to the public and will have an estimated attendance of 1,000 to 1,500 people per day.


This Festival will occur once a year.

7. Building Height: **Noted.**
Clarification: The Genocide Memorial will not exceed 35'-0" in height.

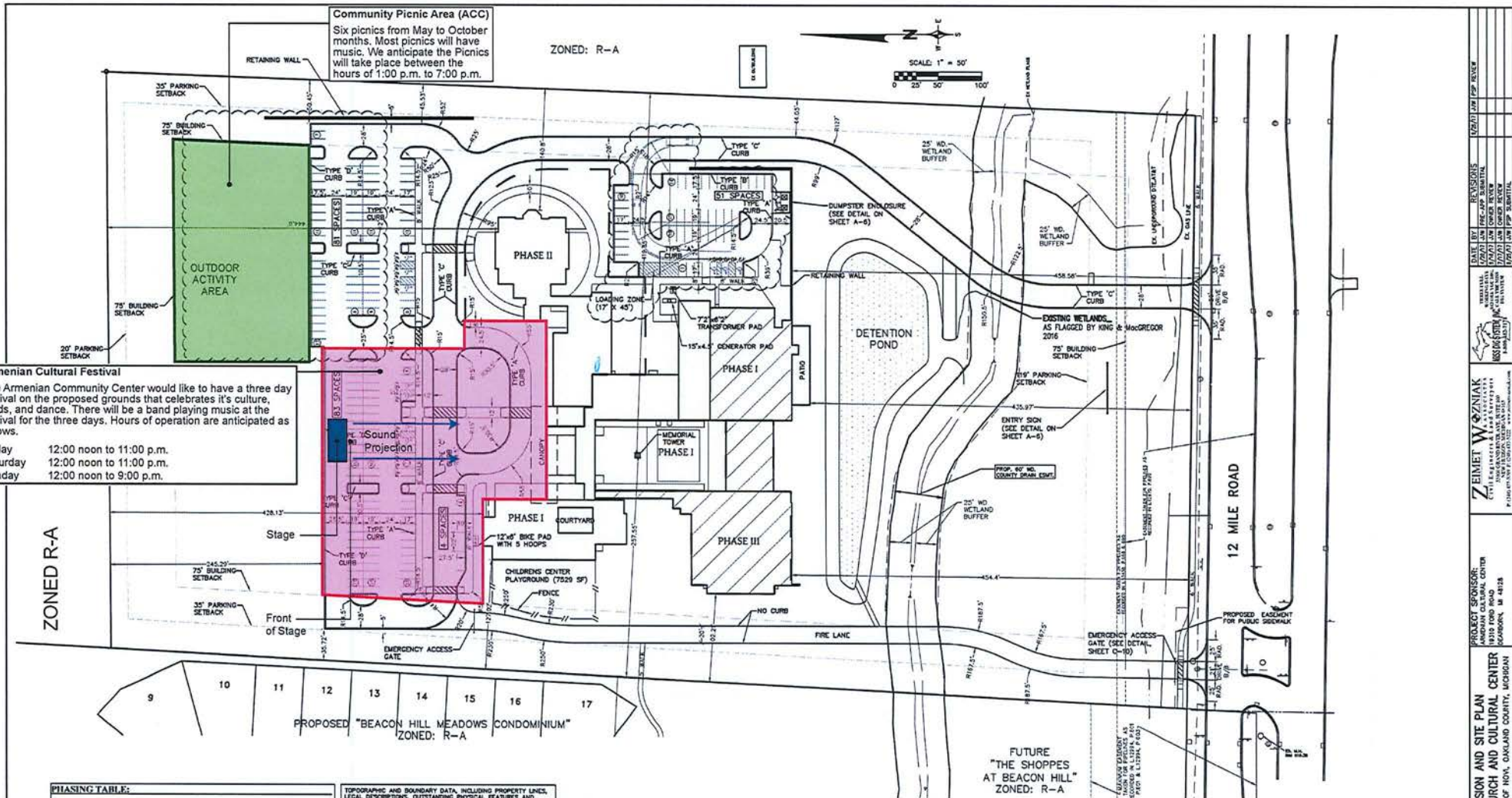
8. Number of Parking Spaces: **Noted.
See Civil Drawing.**
9. Landbank Parking (Sec. 5.2.14): **Noted.
See Civil Drawings.**
10. Pedestrian Connectivity: **Noted.**
11. Lighting and Photometric Plan (Sec. 5.7): **Noted. See Sheet PE0-10 & PE0-11**
12. Armenian Genocide Memorial: **The Beam of Light regarding the Memorial has been removed from the project.**
13. Plan Review Chart: **Noted. We will work with the City of Novi staff.**
14. Site Addressing: **Noted**
15. Signage: **Noted. We will revise the sign design to meet the Ordinance requirements. We will adjust drawings per Sri's discussion of lowering the 8'-4" proposed height to 6'-0" and reducing the proposed 80 sq. ft. to the maximum allowable of 70 sq. ft.**
16. Parcel Split / Combination: **Noted.**
17. Other Reviews: **Noted.**

We trust that this letter addresses the items related to your review. If you have any questions or require further clarification, please feel free to contact our office.

Sincerely,



Evans P. Caruso
Constantine George Pappas Architecture / Planning



Armenian Cultural Festival
 The Armenian Community Center would like to have a three day festival on the proposed grounds that celebrates it's culture, foods, and dance. There will be a band playing music at the festival for the three days. Hours of operation are anticipated as follows.

Friday	12:00 noon to 11:00 p.m.
Saturday	12:00 noon to 11:00 p.m.
Sunday	12:00 noon to 9:00 p.m.

Community Picnic Area (ACC)
 Six picnics from May to October months. Most picnics will have music. We anticipate the Picnics will take place between the hours of 1:00 p.m. to 7:00 p.m.

PHASING TABLE:

PHASE I - TEMPORARY CHURCH, CULTURAL CENTER, MEMORIAL TOWER, AND CHILDREN'S CENTER
<ul style="list-style-type: none"> CLEARING AND MASS GRADING, INCLUDING PREPARING PADS FOR FUTURE PHASES OF BUILDING CONSTRUCTION OF DETENTION POND AND OUTLET TO TOWNLINE DRAIN DRIVE APPROACHES TO TWELVE MILE ROAD AND DRAIN CROSSINGS INSTALLATION OF ALL UNDERGROUND UTILITIES (STORM SEWER, SANITARY SEWER, AND WATER MAIN) AND FRANCHISED UTILITIES (GAS, CTV, FIBER, AND ELECTRICITY) INSTALLATION OF PARKING LOTS, DRIVES, CURBS, AND WALKS WETLAND RESTORATION AND MAINTENANCE LANDSCAPING AROUND BUILDING
PHASE II - PERMANENT CHURCH AND ADMINISTRATIVE OFFICES
<ul style="list-style-type: none"> INSTALLATION OF WALKS LANDSCAPING AROUND BUILDING
PHASE III - GYMNASIUM AND YOUTH CENTER
<ul style="list-style-type: none"> LANDSCAPING AROUND BUILDING

TOPOGRAPHIC AND BOUNDARY DATA, INCLUDING PROPERTY LINES, LEGAL DESCRIPTIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED FROM SURVEY FOR THIS SITE PREPARED BY:

SLIAK ENGINEERING, P.L.C.
 4431 COOLIDGE HIGHWAY
 TROY, MI 48068
 JOB NO. 16-078 DATED 3/06/2017

ZEMET-WOZNAK & ASSOCIATES, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OVERSIGHT RESULTING FROM SURVEY INACCURACIES.

NOTE: ALL DIMENSIONS ARE TO BACK OF CURB OR FACE OF WALK OR FACE OF BUILDING AS SHOWN.

TOTAL NUMBER OF PARKING SPACES: 218

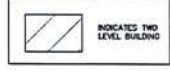
Conceptual Layout Plan Showing Where Events Will be Tentatively Held

Legend

- Community Picnic Area (ACC)
- Armenian Cultural Festival
- Stage

* Any performing band shall be positioned to direct sound toward Twelve Mile Road, away from any adjoining residence.

Plan Review Response Letter
 Item No.4 & 6



NOT FOR CONSTRUCTION
 SIDWELL #22-12-351-028, -030, -034, -036

DATE BY	REVISIONS
10/20/17	1
JANIS W. WAZNAK	REVISED FOR PER REVIEW
ZEMET-WOZNAK & ASSOCIATES, INC.	
PROJECT ENGINEER:	
JANIS W. WAZNAK	
CITY OF NOVI, MI	
SECTION 12, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN	
DIMENSION AND SITE PLAN	
ARMEANIAN CHURCH AND CULTURAL CENTER	
1800 FORD ROAD	
WARREN, MI 48090	
SCALE: 1" = 50'	
DATE: 10/20/17	
SHEET NO. C-1	

The site is characterized by sloping terrain from the highpoint on the north side of the property, to a low point of the existing Townline County Drain on the south side of the parcel immediately adjacent and parallel to Twelve Mile Rd. The existing drain is regulated by the Oakland County Water Resources Commissioner and the State of Michigan DEQ.

There are surveyed tagged wetlands along either side the existing drain. The wetlands total approximately 0.66 acres in size. The wetlands are populated with emergent, scrub and forested type plantings. Emergent wetlands are most commonly characterized by dense stands or reed canary grass with smaller areas of cattail and/or rush species. Forested wetland includes several smaller areas of permanent water ringed by silver maples, American elms and red ash. The wetland drain will be crossed in two locations with minimal impact to the vegetation. The bottom of the wetland drain will be cleaned only as part of the development. The total area of regulated wetland disturbance is approximately 0.13 acres.

Majority of the property is covered with woods and shrub. Of the 980 regulated trees surveyed, the survey/site is comprised of silver maple, cottonwood, American elm, ashes, willows, sugar maples, oaks, beech, and walnut. The remaining trees are primarily cherries, aspen and basswood. See the Existing Survey and Landscape drawings submitted for sizes of trees. The perimeter of the property is heavily vegetated with both regulated and non- regulated trees and brush. This vegetation provides a natural buffer to the adjacent properties.

**Temporary and permanent impacts to natural features on the site;
Natural Feature Modifications**

Any natural feature modification in the proposed development will reinforce the existing woodland and wetland features. Part of the projects permanent impacts are a creation of a new private park at the existing wetland's drain along Twelve Mile Rd. The concept expands what was created for the "Beacon Hill" development at the corner of Twelve Mile Rd. and Meadowbrook Rd. Minor impacts will occur to the existing wetland drain for two drive crossings and cleaning the bottom for improved storm water flow.

To access the proposed development, two permanent crossways will be created, one for ingress and egress of the public to the project and the other for a dedicated fire access.

7. Variance to allow a larger brick entry sign integrated with the landscaping. The actual signage text will be approximately 90 sq. ft. See proposed sign design.

COMMUNITY ECONOMIC DEVELOPMENT STATEMENT

The total Phase I Project Size and Cost for the development will be as follows:

Size	Cost	
Phase I	44,022 sq.ft.	TBD
Phase II	16,979 sq.ft.	TBD
Phase III	23,241 sq.ft.	TBD

The Armenian Community Center anticipate a total of 12 full time jobs with an approximate Construction Job Employment of over 100 jobs during the time of construction.

NOISE IMPACT STATEMENT

Minimal noise will be generated in the proposed development throughout the year. It is anticipated that six Picnics will take place between May and October. The Picnics will take place between 1:00 p.m. to 7:00 p.m. on a given Saturday or Sunday. There may also be a band playing at the Picnic from 1:00 to 6:00 pm. Additionally, the Armenian Community Center would like to have a three day festival on the proposed grounds that celebrates its religion, culture, foods, and dance. There will be a band playing music at the festival for the three days. Hours of operation are anticipated as follows:

Friday	12:00 noon to 11:00 p.m.
Saturday	11:00 a.m. to 11:00 p.m.
Sunday	12:00 noon to 10:00 p.m.

Any sound generated by the six Picnics and festival shall not exceed those decibel levels indicated in Section 5.14.10.A.ii "Weighted Sound Level Limit Decibels" for Zoning Districts abutting the subject property. To control any sound generated from these proposed activities, any performing band shall be positioned to direct sound toward Twelve Mile Road, away from any adjoining residence. For everyone's clarification, no bell is proposed for the Church.

The Community Picnic will be open only to the members of the community and will have an estimated attendance of 200 to 400 people.

The Festival will be open to the public and will have an estimated attendance of 1,000 to 1,500 people per day. This Festival will occur once a year.

Z EIMET W OZNAK
& ASSOCIATES

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100
New Hudson, Michigan 48165-9318
248.437.5099 · 248.437.5222 fax
www.zeimetwozniak.com

October 5, 2017

Mr. Sterling Frazier, Engineer
AECOM
27777 Franklin Road
Southfield MI, 48034

Re: Shared Parking Review for Preliminary Site Plan for
Proposed Armenian Church and Cultural Center located on
North side of Twelve Mile Road, east of Meadowbrook Road
City File No. JSP #17-0037, PSP #17-0096

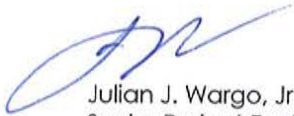
Dear Mr. Frazier:

Thank you for recommending approval of the Preliminary Site Plan for this project as outlined in your letter dated July 17, 2017.

We concur with all of your general comments about the site with one clarification to Item 4. The parking discrepancies between the parking requirements text and the table for each land use have been adjusted. Please see the revised Cover Sheet for updated values.

Thank you for your review comments and we look forward to further communications and comments regarding the final site plan.

Very truly yours,



Julian J. Wargo, Jr., PE
Senior Project Engineer

Encl.

PC: Mr. Evans Caruso, CGP Architecture
Mr. Raffi Ourlian, ACC
Mr. Steve Deak, RLA

J:14109.Letter14

October 5, 2017

Mr. Sterling Frazier, Engineer
AECOM
27777 Franklin Road
Southfield MI, 48034

Re: Traffic Review for Preliminary Site Plan for
Proposed Armenian Church and Cultural Center located on
North side of Twelve Mile Road, east of Meadowbrook Road
City File No. JSP #17-0037, PSP #17-0096

Dear Mr. Frazier:

Thank you for recommending approval of the Preliminary Site Plan for this project as outlined in your letter dated September 25, 2017.

In response to the corrective items listed in your letter to be addressed prior to approval of the Final Site Plan, we offer the following.

EXTERNAL SITE ACCESS AND OPERATIONS

1. We concur with the general comment that the site driveway entrance cannot be moved due to existing wetland and wetland buffer requirements.
2. The east driveway width dimension has been increased on the plans from the previously proposed 28' to 30' at the 12 Mile Road entrance. This width will be tapered down to 28' wide prior to the drain crossing to minimize impacts to the wetlands. See Sheets C-1.0, C-1.1, and C-4.2 for updated dimensions.
3. The east driveway at 12 Mile Road is under the jurisdiction of the Road Commission for Oakland County (RCOC) which uses a standard turning radius of 35' for commercial drives. The driveway radii were increased from the City's 20' radii to the OCRC 35' radii standard because this radius is still in the allowable range of the City of Novi yet is the stricter policy of the two governing entities.
4. The proposed grade of the driveway has been reduced from 3.2% to 2.0% within the first 25' of the drive. If the slope of the drive approach is held to a maximum of 2% slope, then the resultant slopes around the radius will be less than 1%. Please see Sheet C-4.2 for updated spot grades and slopes.
5. A right turn taper has been added to the east driveway entrance layout following the RCOC "Standard Approach to Paved Roads with Warranted Passing Lane" typical. The taper follows the RCOC standards as the RCOC has jurisdiction of the 12 Mile Road R.O.W. and it is the stricter policy of the two governing entities. See Sheets C-1.0, C-1.1, and C-4.2 for updated dimensions.
6. Sight distance triangles for both the City of Novi and RCOC are indicated on the plans. See Sheet C-4.2 for updated information.
7. The distance between centerlines of drives is dimensioned on Sheets C-1.0, C-1.1, and C-4.2.
8. The emergency access driveway is located on 12 Mile Road on the west side of development.
9. The emergency access driveway width of 20' has conforms with the fire marshal's requirements and the turning radii of 25' provide adequate turning movements for the City's typical emergency response vehicle. See Sheets C-1.0 and C-1.1 for more information.

10. Sight distance is not required in both directions for the emergency access drive at 12 Mile Road as 12 Mile Road is a divided road adjacent to the development.
11. The emergency access driveway cannot be realigned with the 12 Mile Road crossover due to site boundary limitations and the undesirable alignment per conversations with the RCOC.
12. Width dimensions are updated on the existing emergency access gate detail. The sheet reference has been updated from C-10 to C-11.
13. The emergency access driveway grades have been reduced from 2.3% to 2.0% within the first 25' of the drive. If the slope of the drive approach is held to a maximum of 2% slope, then the resultant slopes around the radius will be less than 1%.

INTERNAL SITE OPERATIONS

1. General Traffic Flow

- a. The drop-off area is now designated as a one way drive. See sheet C-2 for signage and pavement markings. A fire truck tuning template was used to verify maneuverability of the drop off for emergency vehicles and can be seen on Sheets C-1.0 and C-1.1.
- b. The largest vehicle for the loading zone is defined as a single unit truck A single unit tuning template has been overlaid on the proposed parking layout verify maneuverability of the design vehicle and can be seen on Sheets C-1.0 and C-1.1.
- c. The proposed location of the trash enclosure is not anticipated to interfere with parking operations as the trash pick up times would occur outside of business hours.

2. Parking Facilities

- a. We agree that the parking lot layout design is based off of the parking study that allocated 262 required parking spaces for the site.
- b. The total number of parking spaces and landbanked spaces has been adjusted since the previous submittal. The adjusted site layout calls for a total of 262 spaces including 43 landbanked spaces. This adjustment to landbanked parking remains below the 25% requirement of required parking. These changes can be seen on Sheets C-1.0 and C-1.1.
- c. The net number of landbanked spaces has been corrected to 43 spaces, which is below the 25% of the required 262 parking spaces. The tabulation of required and landbanked can be viewed on the cover sheet. See Sheets C-1.0 and C-1.1 for plan view and dimensions of parking layout.
- d. The northwest proposed parking row length has been increased to 19' on Sheet C-1.1 to comply with City Standards upon the construction of the banked parking spaces.
- e. Additional dimensions have been added to the landbanked parking spaces on Sheet C-1.1 for further clarification.
- f. The layout of the four parallel parking spaces has been updated to meet City standards. See Sheets C-1.0 and C-1.1 for updated dimensions and layout.
- g. Additional end island dimensions have been added to Sheets C-1.0 and C-1.1. We believe that the island parking dimensions are in compliance with the City of Standards of 15' / 2' Radii and 3' inset from the parking stalls. City standard details are denoted from face of curb to face of curb and the plan dimensions are from back of curb to back of curb which may have lead to a miscommunication of desired dimensions (i.e. 1.5'R back of curb compares equally to the 2'R face of curb).
- h. The site meets the number of minimum ADA parking spaces of ten barrier free spaces, three of which are van accessible. See Sheet C-2 for dimensions, signing, and ADA parking locations.
- i. In order to maintain the symmetry of the parking lot islands some of the ADA parking spaces exceed the minimum dimension. Only three of the ten ADA spaces on site will be signed as van accessible. Since there is no maximum width outlined in the ADA standards, we believe that the enlarged ADA parking spaces and aisles are still compliant with the standards.

- j. The number of proposed bicycle parking spots has been added to Sheets C-1.0 and C-1.1.
- k. A bicycle parking layout detail has been added to Sheet C-11 in accordance with City of Novi standards 5.16.6

3. Sidewalk Requirements

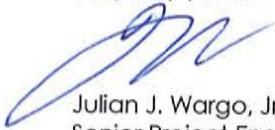
- a. We agree that the sidewalk ramps and widths are in accordance with City and MDOT standards.

4. Onsite Pavement Markings

- a. The following changes have been made to the signing layout, quantities, and details on Sheets C-2 and C-11.
 - i. The proposed Stop Sign (R1-1) has been increased to 30" by 30".
 - ii. The proposed Stop Sign (R1-1) has been removed from the northern emergency access gate.
 - iii. The sign quantity table has been adjusted to show a total of 1 sign for the R3-31 sign.
 - iv. The W11a-2 sign has been adjusted to a W11-2 sign.
 - v. Sign posts have been updated to reflect a 3 lb U-channel post.
- b. The designation of size and color of the parking markings is denoted on Sheet C-2.

Thank you for your review comments and we look forward to further communications and comments regarding the final site plan.

Very truly yours,



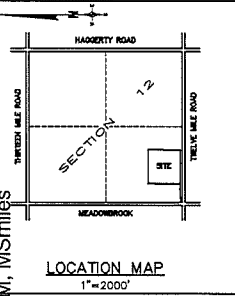
Julian J. Wargo, Jr., PE
Senior Project Engineer

Encl.

PC: Mr. Evans Caruso, CGP Architecture
Mr. Raffi Ourlian, ACC
Mr. Steve Deak, RLA

J:14109.Letter13

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PRELIMINARY SITE PLAN

FOR

ARMENIAN CHURCH AND CULTURAL CENTER

SECTION 12, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

CITY FILE NO. JSP17-0037

OWNER:

ARMENIAN CULTURAL CENTER
19310 FORD RD.
DEARBORN, MI 48128
(313) 336-6200
RAFFI OURLIAN

ARCHITECT:

CONSTANTINE GEORGE PAPPAS, AIA
ARCHITECTURE/PLANNING
1025 S. WASHINGTON AVE.
ROYAL OAK, MI 48067
(248) 629-8998
GUSS G. PAPPAS

CIVIL ENGINEER:

ZEIMET WOZNAK AND ASSOCIATES
55800 GRAND RIVER AVE, SUITE 100
NEW HUDSON, MICHIGAN 48165
(248) 437-5099
JULIAN J. WARGO, P.E.

LANDSCAPE ARCHITECT:

DEAK PLANNING + DESIGN
143 CADYCENTER # 79
NORTHVILLE, MI 48167
(248) 444-7892
STEVE DEAK, RLA

SURVEYOR:

SUJAK ENGINEERING
4031 COOLINGE HIGHWAY
TROY, MI 48098
(248) 885-8431
TEON C. SUJAK, PE

WETLANDS CONSULTANT:

KING & MacGREGOR ENVIRONMENTAL, INC.
43050 FORD ROAD, SUITE 130
CANTON, MI 48187
(734) 354-0594
WOODY HELD

SHEET INDEX:

SURVEYING	STANDARD DETAILS:	LANDSCAPING
CS 1.0 TOPOGRAPHIC AND TREE SURVEY	C-14 CITY OF NOVI SANITARY SEWER DETAILS (1/3)	LP-1 LANDSCAPE PLAN
CS 2.0 TREE INVENTORY	C-15 CITY OF NOVI SANITARY SEWER DETAILS (2/3)	LP-2 LANDSCAPE PLAN
CS 2.1 TREE INVENTORY	C-16 CITY OF NOVI SANITARY SEWER DETAILS (3/3)	LP-3 LANDSCAPE PLAN
CS 2.2 TREE INVENTORY	C-17 CITY OF NOVI WATERMAIN DETAILS (1/5)	LP-4 LANDSCAPE DETAIL PLANS
CS 2.3 TREE INVENTORY	C-18 CITY OF NOVI WATERMAIN DETAILS (2/5)	LP-5 LANDSCAPE DETAIL PLANS
	C-19 CITY OF NOVI WATERMAIN DETAILS (3/5)	WP-1 WOODLAND IMPACT PLAN
	C-20 CITY OF NOVI WATERMAIN DETAILS (4/5)	WP-2 WOODLAND IMPACT PLAN
	C-21 CITY OF NOVI WATERMAIN DETAILS (5/5)	WP-3 WOODLAND INVENTORY LIST
	C-22 CITY OF NOVI STORM SEWER DETAILS (1/2)	WP-4 WOODLAND INVENTORY LIST
	C-23 CITY OF NOVI STORM SEWER DETAILS (2/2)	
	C-24 OCWRC STORM DRAIN NOTES AND DETAILS (1/1)	
CIVIL ENGINEERING	ARCHITECTURE	SITE LIGHTING
SITE IMPROVEMENTS:	A-1 OVERALL PLANS	PE0-10 ELECTRICAL SITE PLAN
C-1 DIMENSION SITE PLAN	A-2 ELEVATION A	PE0-11 ELECTRICAL PHOTOMETRIC SITE PLAN
C-1.1 LAND BANKED DIMENSION SITE PLAN	A-3 ELEVATION B	
C-2 PAVING PLAN	A-4 ELEVATION C	
C-3 SITE PREPARATION PLAN	A-5 ELEVATION D	
C-4 GRADING AND DRAINAGE PLAN	A-6 SIGN ELEVATIONS, SECTION, AND GARBAGE	
C-4.0.1 LAND BANKED GRADING AND DRAINAGE PLAN	A-7 SCREENING DETAILS	
C-4.1 GRADING AND DRAINAGE DETAIL	A-8 FACADE MATERIALS	
C-4.2 12 MILE ROAD ENTRANCE DETAILS	A-8 OVERALL PLANS SHOWING AREA	
C-4.3 12 MILE ROAD PATHWAY DETAILS		
C-5 STORM SEWER PLAN		
C-5.1 TOWNLINE DRAIN AND WETLAND DETAILS		
C-6 STORMWATER MANAGEMENT PLAN		
C-6.1 STORM AREA PLAN		
C-7 SANITARY SEWER AND WATER MAIN PLAN		
C-8 EROSION CONTROL PLAN		
C-9 EROSION CONTROL DETAILS & MAINTENANCE SCHEDULES		
C-10 CONSTRUCTION NOTES		
C-11 CONSTRUCTION DETAILS		
C-11 CONSTRUCTION DETAILS		
C-12 SIDEWALK RAMP DETAILS		
C-13 TRAFFIC CONTROL DETAILS		

SITE DATA:																														
PROPOSED USE:	CHURCH AND CULTURAL CENTER WITH CHILDRENS CENTER																													
ZONE:	R-A (RESIDENTIAL ACREAGE) - SPECIAL LAND USE IS REQUIRED																													
GROSS SITE AREA:	846,736 SF (19.30 ACRES)																													
DENSITY / AREA CALCULATIONS:																														
PHASE I	GROSS BUILDING AREA	LOT COVERAGE																												
PHASE II	32,812 SF	3.81%																												
TOTAL	15,442 SF	1.84%																												
	15,410 SF	2.19%																												
	80,793 SF	7.84%																												
BUILDING SETBACKS:	REQUIRED	PROPOSED																												
FRONT (SOUTH)	75 FT*	435.97 FT																												
SIDE (EAST)	75 FT*	140.80 FT																												
SIDE (WEST)	75 FT*	102.31 FT																												
75 FT WHEN ABUTTING RESIDENTIAL DISTRICTS																														
35'-0" MAX.																														
PARKING SETBACKS:	REQUIRED	PROPOSED																												
FRONT (SOUTH)	75 FT**	NONE																												
SIDE (EAST)	35 FT	44.05 FT																												
SIDE (WEST)	35 FT	35.72 FT																												
REAR (NORTH)	20 FT	170.44 FT																												
** SAME AS BUILDING FRONT YARD SETBACK - CAN NOT PARK IN FRONT OF BUILDING																														
PARKING SCHEDULE:																														
REQUIRED:																														
<table border="1"> <thead> <tr> <th>Vehicle</th> <th>Capacity</th> <th>Required</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>14</td> <td>14</td> <td>14</td> </tr> <tr> <td>Barrier-Free</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>Motorcycle</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>Handicapped</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>Other</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>Total</td> <td>18</td> <td>18</td> <td>18</td> </tr> </tbody> </table>			Vehicle	Capacity	Required	Proposed	Standard	14	14	14	Barrier-Free	1	1	1	Motorcycle	1	1	1	Handicapped	1	1	1	Other	1	1	1	Total	18	18	18
Vehicle	Capacity	Required	Proposed																											
Standard	14	14	14																											
Barrier-Free	1	1	1																											
Motorcycle	1	1	1																											
Handicapped	1	1	1																											
Other	1	1	1																											
Total	18	18	18																											

PROPOSED:	STANDARD:	BARRIER FREE (INCL. 6 VAN ACCESSIBLE):	TOTAL:
209	10	10	219 SPACES (TO BE CONSTRUCTED WITH PHASE 1)
43	282	282	282 SPACES (TO BE CONSTRUCTED IF DEDICATED NECESSARY)
LAND BANKED (NET GAIN)			
43			
282 SPACES (TO BE CONSTRUCTED IF DEDICATED NECESSARY)			
PARKING NOTES:			
THE OWNER OF THE PROPERTY SHALL PROVIDE ANY PROPOSED CHANGE IN USE OCCUPANCY FOR FURTHER EVALUATION OF LAND BANK PARKING. LAND BANK SPACES MAY BE INSTALLED PRIOR TO CHANGE IN USE OR OCCUPANCY IF DETERMINED NECESSARY.			

APPROVAL REQUIRED:

PLANNING COMMISSION:

- SITE PLAN
- SPECIAL LAND USE (DAY CARE AND CHURCH)
- STORM WATER MANAGEMENT PLAN
- SECTION 9 WAIVERS
- LANDSCAPE WAIVERS
- WOODLAND AND WETLAND PERMIT

ZONING BOARD OF APPEALS:

- ADDITIONAL BUILDING HEIGHT
- OTHERS IF ANY WILL BE DETERMINED AFTER PRELIMINARY SITE PLAN REVIEW

PERMITS REQUIRED:

- WOODLANDS PERMIT (CITY)
- WETLANDS PERMIT (CITY AND STATE)
- DRAIN PERMIT (COUNTY)
- RIGHT-OF-WAY PERMIT (CITY AND COUNTY)
- PUBLIC SANITARY SEWER PERMIT (STATE)
- PUBLIC WATER MAIN PERMIT (STATE)
- EROSION CONTROL PERMIT (CITY)

GENERAL NOTE:
ALL WORK SHALL CONFORM TO THE CURRENT CITY OF NOVI STANDARDS AND SPECIFICATIONS.


REVISIONS
 DATE BY
 10/27/17 LJM PSE REVIEW
 10/27/17 LJM PSE REVIEW
 10/27/17 LJM PSE REVIEW
 10/27/17 LJM PSE REVIEW
 10/27/17 LJM PSE REVIEW
 10/27/17 LJM PSE REVIEW

PROJECT SPONSOR:
 ARMENIAN CULTURAL CENTER
 19310 FORD ROAD
 DEARBORN, MI 48128

COVER SHEET
 ARMENIAN CHURCH AND CULTURAL CENTER
 SECTION 12, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

FIELD BOOK
 NO. 1
 DATE
 10/27/17
 TIME
 1:00 PM
 DRAWN BY
 J.W.M.
 CHECKED BY
 J.W.M.
 SCALE
 AS SHOWN
 SHEET NO.
 1 OF 1

NOT FOR CONSTRUCTION
SIDWELL #22-12-351-028, -030, -034, -036


 Teon C. Sujak, P.E.

PHASING TABLE:

- PHASE I - TEMPORARY CHURCH, CULTURAL CENTER, MEMORIAL TOWER, AND CHILD CARE CENTER:**
- CLEARING AND MASS GRADING, INCLUDING PREPARING PADS FOR FUTURE PHASES OF BUILDING
 - CONSTRUCTION OF DETENTION POND AND OUTLET TO TOWNLINE DRAIN
 - DRIVE APPROACHES TO TWELVE HILL ROAD AND DRAIN CROSSINGS
 - INSTALLATION OF ALL UNDERGROUND UTILITIES (STORM SEWER, SANITARY SEWER, AND WATER MAIN) AND FRANCHISED UTILITIES (GAS, CTV, FIBER, AND ELECTRICITY)
 - INSTALLATION OF PARKING LOTS, DRIVES, CURBS, AND WALKS
 - WETLAND RESTORATION AND MAINTENANCE
 - LANDSCAPING AROUND BUILDING
- PHASE II - PERMANENT CHURCH AND ADMINISTRATIVE OFFICES:**
- INSTALLATION OF WALKS
 - LANDSCAPING AROUND BUILDING
- PHASE III - GYMNASIUM AND YOUTH CENTER:**
- LANDSCAPING AROUND BUILDING

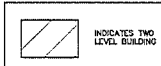
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SJIAK ENGINEERING, P.L.C.
4531 COOLIDGE HIGHWAY
TROY, MI 48068
JOB NO. 18-078 DATED 3/06/2017

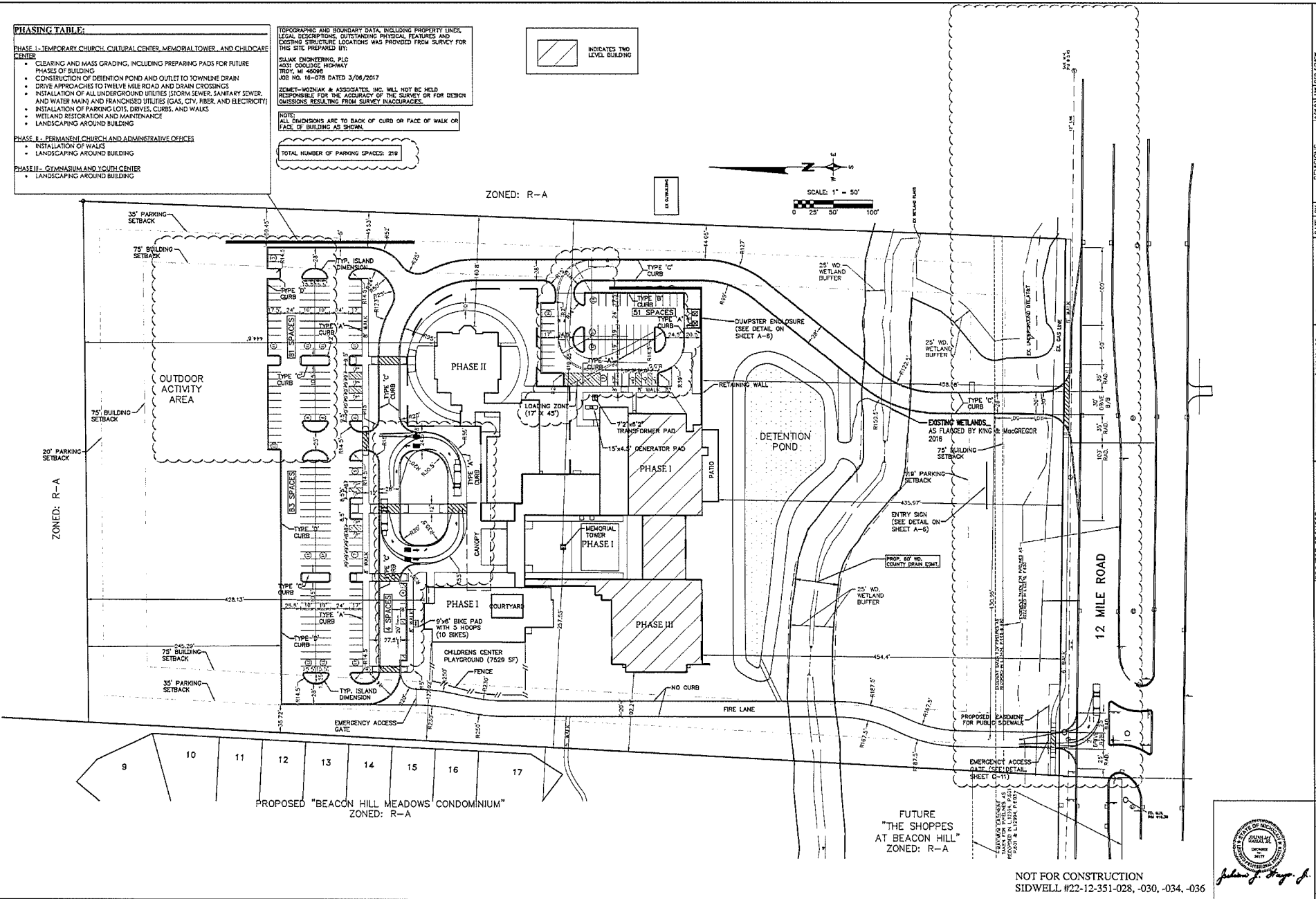
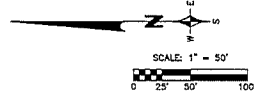
ZEMET-WOZNIAK & ASSOCIATES, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OMISSIONS RESULTING FROM SURVEY INACCURACIES.

NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB OR FACE OF WALK OR FACE OF BUILDING AS SHOWN.

TOTAL NUMBER OF PARKING SPACES: 218



ZONED: R-A

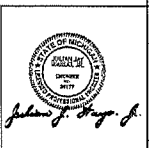


DATE	BY	REVISIONS
12/27/17	JAM	12/27/17 JAM PDP REVIEW
12/27/17	JAM	12/27/17 JAM PRE-CAP SUBMITTAL
12/27/17	JAM	12/27/17 JAM PERM REVIEW
12/27/17	JAM	12/27/17 JAM PERM SUBMITTAL

PROJECT SPONSOR:	ZEMET WOZNIAK & ASSOCIATES, INC.
PROJECT SPONSOR:	ARMENIAN CULTURAL CENTER
PROJECT SPONSOR:	SECTION 12, CITY OF HOV, OAKLAND COUNTY, MICHIGAN

DATE	BY	REVISIONS
12/27/17	JAM	12/27/17 JAM PDP REVIEW
12/27/17	JAM	12/27/17 JAM PRE-CAP SUBMITTAL
12/27/17	JAM	12/27/17 JAM PERM REVIEW
12/27/17	JAM	12/27/17 JAM PERM SUBMITTAL

NOT FOR CONSTRUCTION
SIDWELL #22-12-351-028, -030, -034, -036



PHASING TABLE:

PHASE I - TEMPORARY CHURCH CULTURAL CENTER, MEMORIAL TOWER, AND CHILD CARE CENTER

- CLEARING AND MASS GRADING, INCLUDING PREPARING PADS FOR FUTURE PHASES OF BUILDING
- CONSTRUCTION OF DETENTION POND AND OUTLET TO TOWNLINE DRAIN
- DRIVE APPROACHES TO TWELVE MILE ROAD AND DRAIN CROSSINGS
- INSTALLATION OF ALL UNDERGROUND UTILITIES (STORM SEWER, SANITARY SEWER, AND WATER MAIN) AND FRANCHISED UTILITIES (GAS, CITY, FIBER, AND ELECTRICITY)
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- LANDSCAPING AROUND BUILDING

PHASE II - PERMANENT CHURCH AND ADMINISTRATIVE OFFICES

- INSTALLATION OF WALKS
- LANDSCAPING AROUND BUILDING

PHASE III - GYMNASIUM AND YOUTH CENTER

- LANDSCAPING AROUND BUILDING

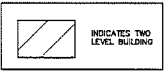
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SULAK ENGINEERING, PLC
4531 GARDNER HIGHWAY
TROY, MI 48068
JOB NO. 16-076 DATED 3/06/2017

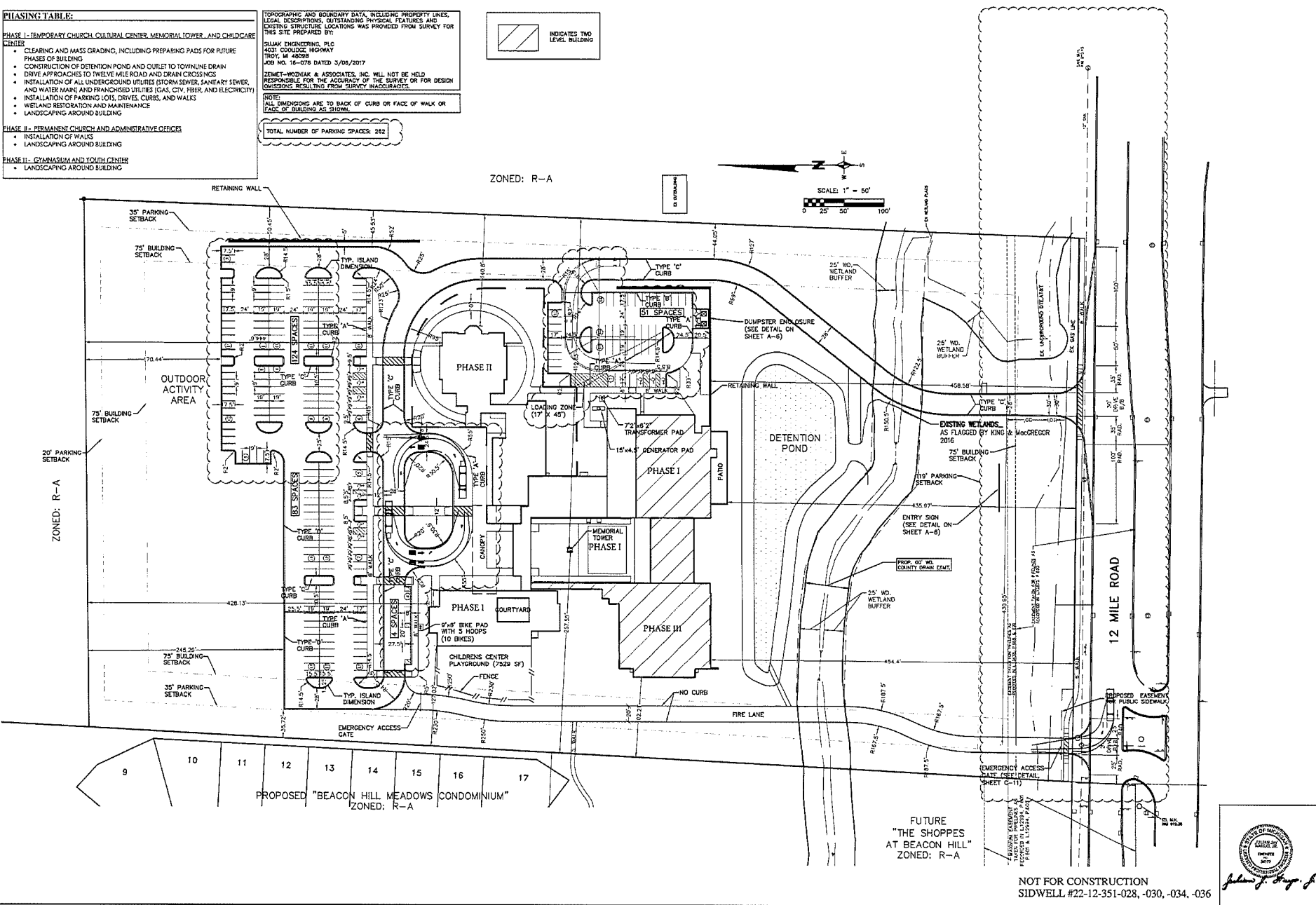
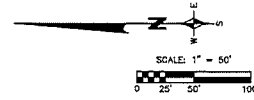
ZEMET-WOZNAK & ASSOCIATES, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OMISSIONS RESULTING FROM SURVEY INACCURACIES.

NOTE:
ALL DIMENSIONS ARE TO BACK OF CURB OR FACE OF WALK OR FACE OF BUILDING AS SHOWN.

TOTAL NUMBER OF PARKING SPACES: 282



ZONED: R-A



DATE	BY	REVISIONS
12/20/17	JAW	1. PIP REVIEW
12/20/17	JAW	2. PRE-APP SUBMITTAL
12/20/17	JAW	3. PIP REVIEW
12/20/17	JAW	4. PRELIMINARY PERMITS REVIEW
12/20/17	JAW	5. PRELIMINARY PERMITS REVIEW
12/20/17	JAW	6. PRELIMINARY PERMITS REVIEW

PROJECT SPONSORS:
ARIZONA CULTURAL CENTER
1830 FORD ROAD
GRAND RAPIDS, MI 49503

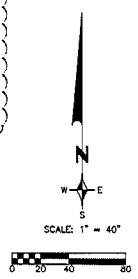
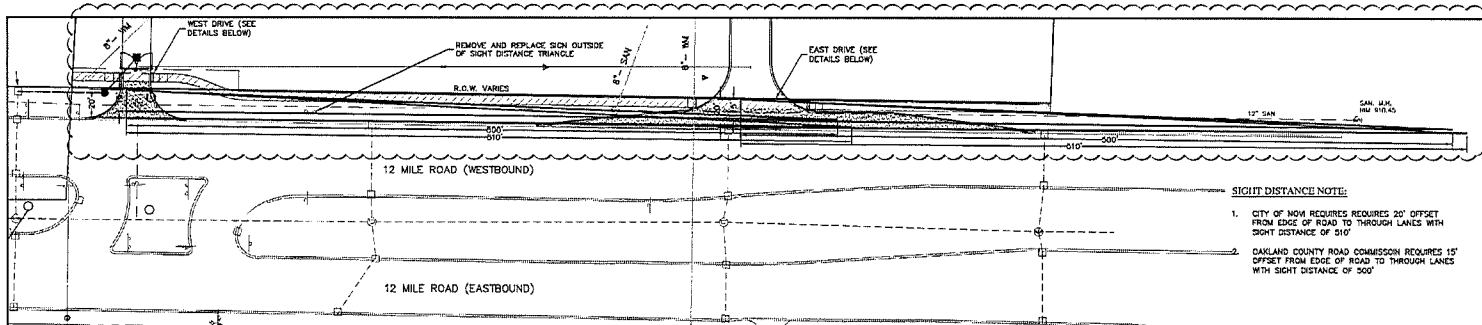
LAND BANKED DIMENSION SITE PLAN
ARMENIAN CHURCH AND CULTURAL CENTER
SECTION 12, CITY OF HOWLAND, OHIO COUNTY, MICHIGAN

REVISIONS:
DATE: 12/20/17
BY: JAW
NO. 14109
SHEET NO. C-1.1

Zemet-Woznak & Associates, Inc.

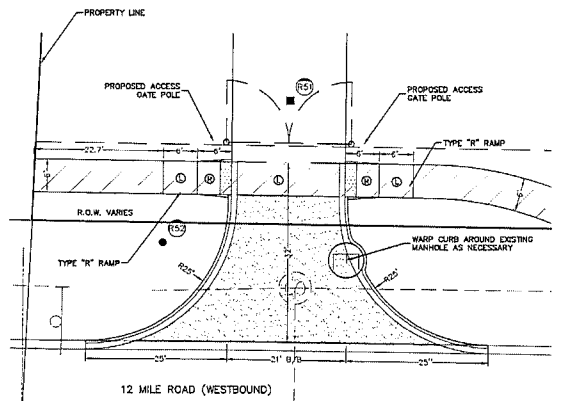
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SIDWELL #22-12-351-028, -030, -034, -036

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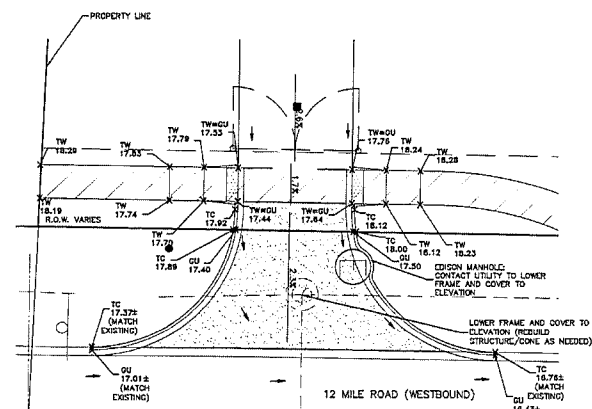


- NOTES:**
1. FOR DRIVEWAY CROSS SECTION SEE SHEET C-10
 2. FOR MOST DETAILS AND TRAFFIC CONTROL DETAILS SEE SHEET C-13.

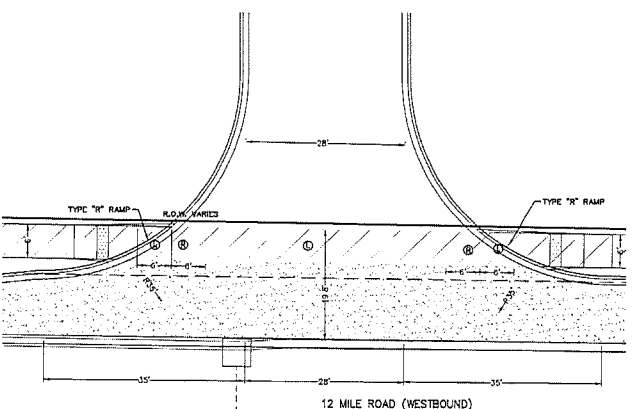
DRIVEWAY SIGHT DISTANCE TRIANGLES
SCALE: 1" = 40'



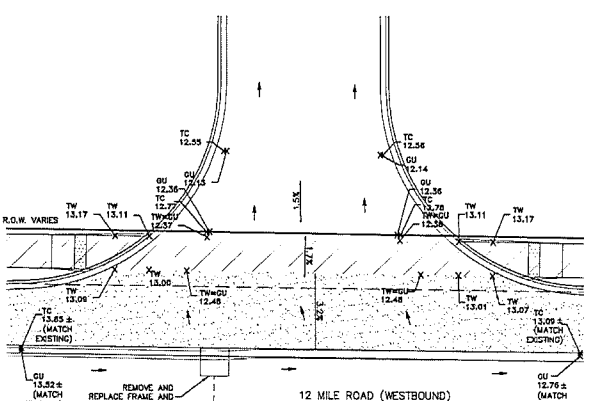
WEST DRIVEWAY DIMENSION PLAN
SCALE: 1" = 10'



WEST DRIVEWAY GRADING PLAN
SCALE: 1" = 10'



EAST DRIVEWAY DIMENSION PLAN
SCALE: 1" = 10'



EAST DRIVEWAY GRADING PLAN
SCALE: 1" = 10'

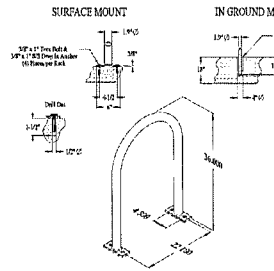
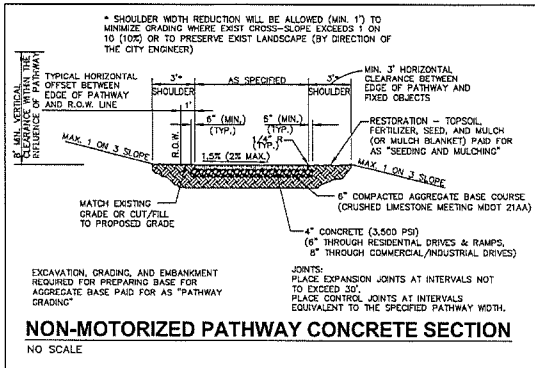
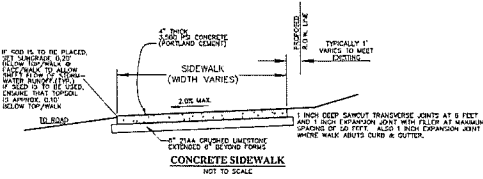
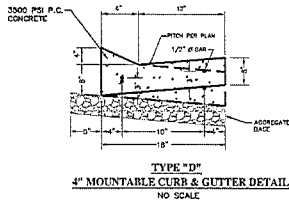
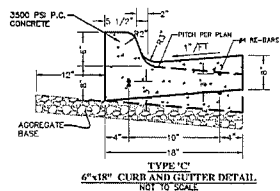
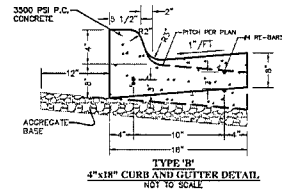
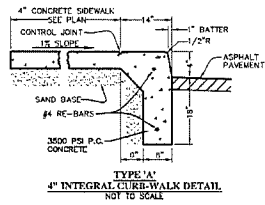
LEGEND

	EXISTING MANHOLE
	EXISTING CATCH BASIN
	EXISTING INLET
	EXISTING CLEANOUT
	EXISTING END SECTION
	EXISTING ROOF DRAIN
	EXISTING GATE VALVE
	EXISTING HYDRANT
	EXISTING WATER SHUT-OFF
	EXISTING UTILITY POLE
	EXISTING GUY ANCHOR
	EXISTING LIGHT POLE
	EXISTING SIGN
	EXISTING TREE
	EXISTING TREE LINE
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATER MAIN
	EXISTING GAS MAIN
	EXISTING ELECTRIC CABLE
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	EXISTING SPOT ELEVATION
	PROPOSED MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED INLET
	PROPOSED CLEANOUT
	PROPOSED END SECTION
	PROPOSED ROOF DRAIN
	PROPOSED GATE VALVE
	PROPOSED HYDRANT
	PROPOSED WATER SHUT-OFF
	PROPOSED TREE REMOVAL
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED WATER MAIN
	PROPOSED DITCH
	PROPOSED CONTOUR MAJOR
	PROPOSED CONTOUR MINOR
	PROPOSED GRADE
	TOP OF CURB
	TOP OF WALK
	TOP OF PAVEMENT
	TOP OF BANK
	GROUND
	DITCH
	CUTTER
	FINISH GRADE
	BASEMENT FLOOR
	BRICK LEDGE
	RAMP
	LEVEL LANDING

SCALE: 1" = 40'	DATE: 11/13/2023	PROJECT: 22-12-351-028, -030, -034, -036
SCALE: 1" = 10'	DRAWN BY: J. W. ...	PROJECT: 12 MILE ROAD ENTRANCE DETAILS
SCALE: 1" = 10'	CHECKED BY: ...	PROJECT: ARMENIAN CHURCH AND CULTURAL CENTER
SCALE: 1" = 10'	APPROVED BY: ...	PROJECT: SECTION 12, CITY OF NUOVA, OKLAHOMA COUNTY, MICHIGAN
SCALE: 1" = 10'	DATE: 11/13/2023	PROJECT: SHEET NO. C-4.2

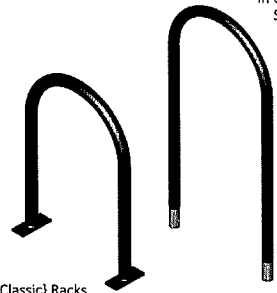
NOT FOR CONSTRUCTION
SIDWELL #22-12-351-028, -030, -034, -036





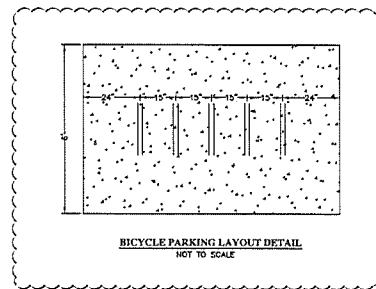
Plastisol (Classic) Racks
Surface Mount / In Ground Mount {Dims}

In Ground #12707
Surface #12700

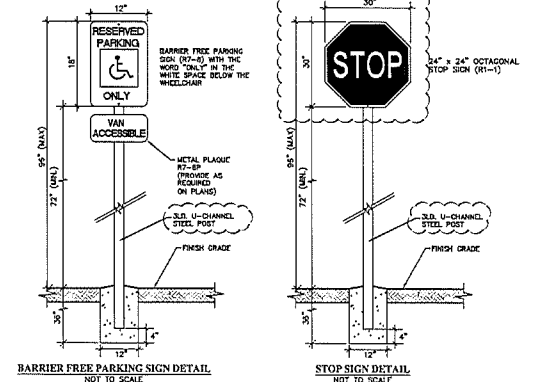


Plastisol (Classic) Racks
Surface Mount / In Ground Mount

In Ground #12707
Surface #12700

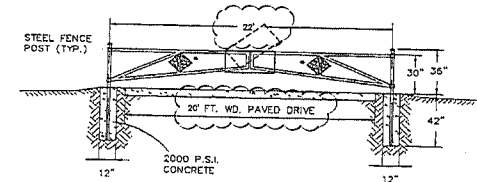


BICYCLE PARKING LAYOUT DETAIL
NOT TO SCALE

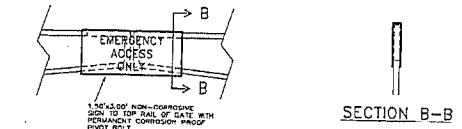


BARRIER FREE PARKING SIGN DETAIL
NOT TO SCALE

STOP SIGN DETAIL
NOT TO SCALE



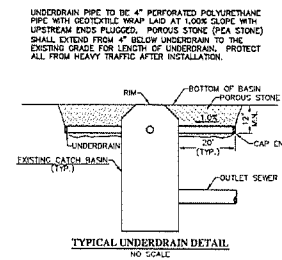
* AT EACH LOCATION, 2-12"x12" RED REFLECTORIZED DIAMOND PANELS, PLACED BACK TO BACK.



SECTION B-B

NOTE: IF LOCKING GATE IS REQUIRED, CONTACT NDM FIRE DEPARTMENT FOR KNOX BOX INFORMATION.

EMERGENCY ACCESS GATE DETAIL
NOT TO SCALE



TYPICAL UNDERDRAIN DETAIL
NO SCALE

NOT FOR CONSTRUCTION
SIDWELL #22-12-351-028, -030, -034, -036

PROJECT SPONSOR:
CITY OF INDIANAPOLIS, INDIANAPOLIS, INDIANA
ARMENIAN CHURCH AND CULTURAL CENTER
SECTION 12, CITY OF UOPL, OUNDAW COUNTY, MICHIGAN

REVISIONS:

DATE	BY	DESCRIPTION
12/27/22	JW	ISSUE FOR PERMITS
12/27/22	JW	ISSUE FOR BIDDING
12/27/22	JW	ISSUE FOR REVIEW

SCALE: 1" = 10'-0"
DATE: 12/27/22
DRAWN BY: JAW
CHECKED BY: JAW
PROJECT NO.: C-11

John J. Hayes, Jr.

PROJECT SPONSOR:
 CITY OF INDIANAPOLIS, INDIANAPOLIS, INDIANA
 ARMENIAN CHURCH AND CULTURAL CENTER
 SECTION 12, CITY OF UOPL, OUNDAW COUNTY, MICHIGAN

Z EIMET W OZNIAK & ASSOCIATES

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100
New Hudson, Michigan 48165-9318
248.437.5099 · 248.437.5222 fax
www.zeimetwozniak.com

October 5, 2017

Mr. Kevin Pierce, Fire Marshal
City of Novi
Fire Department
45175 Ten Mile Road
Novi, MI 48375

Re: Fire Hydrant Review for Preliminary Site Plan for
Proposed Armenian Church and Cultural Center located on
North side of Twelve Mile Road, east of Meadowbrook Road
City File No. JSP #17-0037, PSP #17-0096

Dear Mr. Pierce:

In response to your correspondence dated September 1, 2017, we offer the following:

1. The Ordinance reads "Hydrants shall be spaced approximately three hundred (300) feet apart on line in commercial, industrial, and multiple-residential areas. In cases where the buildings within developments are fully fire suppressed, hydrants shall be no more than five hundred (500) feet apart." In as much as the building will be fully sprinklered, will you allow us to follow the 500-foot standard?

Thank you for your consideration.

Very truly yours,



Julian J. Wargo, Jr., PE
Senior Project Engineer

Encl.

PC: Mr. Evans Caruso, CGP Architecture
Mr. Raffi Ourlian, ACC
Mr. Steve Deak, RLA

J:14109.Letter11

Z EIMET W OZNIAK & ASSOCIATES

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100
New Hudson, Michigan 48165-9318
248.437.5099 · 248.437.5222 fax
www.zeimetwozniak.com

October 5, 2017

Mr. Peter Hill, PE
ECT, Inc.
2200 Commonwealth Blvd., Suite 300
Ann Arbor, MI 48105

Re: Wetlands Review for Preliminary Site Plan
Proposed Armenian Church and Cultural Center located on
North side of Twelve Mile Road, east of Meadowbrook Road
City File No. JSP #17-0037, PSP #17-0096

Dear Mr. Hill:

Thank you recommending approval of the Preliminary Site Plan for Wetlands in your correspondence dated September 13, 2107.

In response to those items to be addressed prior to the approval of the Final Site Plan shall be, we offer the following:

1. The plans will differentiate the proposed impacts to the wetlands from those to the 25-foot wetland buffer.
2. The diversity of the plant species within the existing channel of the Townline Drain will be improved in a manner that is consistent with the future Beacon Hill development.
3. The proposed seed mixes will contain native plants.
4. A wetland conservation easement shall be granted over those wetlands and wetland buffer areas that are not included within the drain easement that is being granted to the Oakland County Water Resources Commissioner.
5. The proposed wetland conservation easement areas shall be demarcated onsite through the use of signage or other acceptable decorative means.
6. A buried concrete arch pipe shall be installed at the proposed crossings to provide continuity of the drain's ecosystem.
7. A permit request shall be filed with the MDEQ shortly; a copy of the application and the permit once it is received shall be copied to your office.

We look forward to working with you as the project moves into the next stages of design.

Very truly yours,



Julian J. Wargo, Jr., PE
Senior Project Engineer

Encl.

PC: Mr. Evans Caruso, CGP Architecture
Mr. Raffi Ourlian, ACC
Mr. Steve Deak, RLA

J:14109.Letter10



October 5, 2017

Ms. Sri Komaragiri, Planner
City of Novi Planning Department
45175 W. Ten Mile Road
Novi, Michigan 48375

Re: **JSP17-37 Armenian Church & Cultural Center – Landscape & Woodlands**

Dear Ms. Komaragiri:

We have received the Preliminary Site Plan Review for the Armenian Church and Cultural Center per the review packet dated September 25, 2017. Our responses to the Landscape Plan and Woodland Replacement Plan review comments are listed below:

LANDSCAPE ITEMS:

A. Landscape Waivers

1. No Street Trees - Noted.
2. No Berms adjacent to Residential Property - Will work with staff to revise and provide information as necessary to gain staff support for waiver.
3. No Twelve Mile Berm - Will work with staff to gain support due to existing conditions and limiting further natural features impact.
4. No access drive trees in gas line easement. - Noted.
5. Parking Lot Perimeter Trees. Noted. Plans to be revised at Final Site Plan.
6. 16 space parking bay - Noted.

B. Existing Soils

1. Noted.

C. Existing and Proposed Utility Locations

1. Noted.
2. No overhead utilities.

D. Existing Trees

1. Noted.
2. Noted.
3. Noted.
4. Noted. Fencing to be revised on C-3 on Final Site Plan sheets.
5. Noted. Notes and revisions to be revised on Final Site Plan sheets.
6. Noted.

E. Adjacent to Residential - Buffer

1. Noted. Will work with staff to ensure proper plantings are provided and sufficient validations are shown to allow granting of the berm waiver.
2. Noted.
3. Noted.

I. Adjacent to Public R.O.W. - Berm

1. Wavier requested. No berm is provided due to preservation of both existing natural features, including regulated trees and understory, large variations of grade between Twelve Mile Road and the proposed building, as well as significant actual distance between the road and proposed parking and buildings. Nearest point of building to R.O.W. is 432 feet and nearest point of parking lot is 482 feet.
2. As described above the berm will further impact natural feature and is not needed due to topography and large separation distances.
3. Noted.

J. Street Trees

1. Noted.
2. Noted.

K. Parking Lot Trees

1. Noted.
2. Noted. Tree locations to be revised on Final Site Plan sheets.
3. Noted. Tree locations to be revised on Final Site Plan sheets.
4. Wavier requested for one 16 space parking bay. See previous response above.
5. Wavier requested for one 16 space parking bay. See previous response above.

L. Parking Lot Perimeter Trees

1. Noted.
2. Noted. Tree locations to be revised on Final Site Plan sheets.
3. Trees to be provided for the east access drive on Final Site Plan sheets subject to working with staff to resolve conflicts with required utilities and limiting further natural features impacts. Will work with staff to address concern of providing trees along the west emergency fire lane conflicting with intended use.
4. Noted. See comments above as described.
5. Noted.

M. Loading Zone Screening

1. Noted.

N. Building Foundation Landscaping

1. Noted. To be revised on Final Site Plan sheets.
2. Noted. To be revised on Final Site Plan sheets.
3. Will work with staff to resolve location of building foundation plantings on south side of building. No portions of the building "facing" Twelve Mile Road will have any foundations plantings visible from the street due to topographic changes and existing natural features including the drainage ditch and associated wooded wetlands as well as other preserved regulated trees.

O. Plant List

1. Noted. See sheet LP-4 for Foundation Plant List as provided.
2. Noted. To be revised on Final Site Plan sheets.

P. Planting Notations and Details

1. Noted. To be revised on Final Site Plan sheets.

Q. Storm Basin Landscape

1. Planting design provided to allow views from both interior spaces and the terrace of the new building. Other portions of the basin are over planted to compensate for design deviation and have a net result of the typical amount of plantings. Will work with staff to address this concern and find proper design solution.
2. Noted. To be revised on Final Site Plan sheets.

R. Irrigation Plan

1. Noted.

S. Proposed Topography

1. Noted.

T. Snow Deposit

1. Noted.

U. Preserved Trees

1. Noted.
2. Noted. To be revised on Final Site Plan sheets.

V. Corner Clearance

1. Noted. To be revised on Final Site Plan sheets.

WOODLAND ITEMS:

A. Tree Inventory

1. Sheets CS2.0 - CS2.3 will not be included in future submittals. Required information is provided on Sheets WP-3 and WP-4.

B. Woodland Impacts

1. Noted. To be revised on Final Site Plan sheets.

C. Land Bank Parking

1. Noted. To be revised on Final Site Plan sheets.

D. Tree Condition and Replacement

1. Noted. To be revised on Final Site Plan sheets.

E. Replacement Tree Species

1. Noted. To be revised on Final Site Plan sheets.

F. Woodland Seed Mix

1. Noted. To be revised on Final Site Plan sheets.

G. Woodland Seed Mix Quantity

1. Noted. To be revised on Final Site Plan sheets.

H. Financial Guarantee

1. Noted.

I. Tree Fund

1. Noted.

J. Performance Guarantee

1. Noted.

K. Woodland Easement

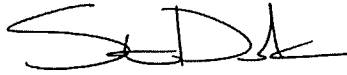
1. Noted.

L. Replacement Tree Locations

1. Noted

If you have any questions, please feel free to contact me at your convenience. Thank you for your assistance with the Armenian Church and Cultural Center Preliminary Site Plan approval.

Sincerely,



Steve Deak, RLA, LEED AP
Deak Planning + Design, LLC

Z EIMET W OZNIAK & ASSOCIATES

Civil Engineers & Land Surveyors

55800 Grand River Avenue, Suite 100
New Hudson, Michigan 48165-9318
248.437.5099 · 248.437.5222 fax
www.zeimetwozniak.com

October 5, 2017

Ms. Darcy Rechten, Engineer
City of Novi
Engineering Department
45175 Ten Mile Road
Novi, MI 48375

Re: Engineering Review for Preliminary Site Plan for
Proposed Armenian Church and Cultural Center located on
North side of Twelve Mile Road, east of Meadowbrook Road
City File No. JSP #17-0037, PSP #17-0096

Dear Ms. Rechten:

Thank you for recommending approval of the Preliminary Site Plan and Preliminary Storm Water Management Plan for this project as outlined in your correspondence dated September 21, 2017.

In response to those items listed in your correspondence to be addressed prior to approval of the Final Site Plan, further engineering details will be provided to satisfactorily address your comments at the time of the FSP submittal. In particular, we offer the following.

GENERAL

1. A right-of-way permit has been filed with the Road Commission for Oakland County for the proposed work within the Twelve Mile Road right-of-way. It is understood that an additional permit will be needed from the City of Novi.
2. Location dimensions for all proposed water main, sanitary sewers, and storm sewers shall appear on the final engineering plans.
3. The latest versions of the City's standard construction details shall be included with the Final Stamping sets.

WATER MAIN

4. The connection to the existing 12-inch water main on the south side of Twelve Mile Road shall be made with a tapping sleeve, valve and well.
5. Two 45-degree bends shall be used in lieu of any 90-degree bends on the water main.
6. All water mains 8-inches and larger shall be profiled.
7. It is understood that an Act 399 Permit is required from the MDEQ for any new water main construction.

SANITARY SEWER

8. The sanitary sewer basis of design shall be updated using the City of Novi's Unit Factors as opposed to OCWRC's Unit Factors.
9. All of the building shall discharge to the 8-inch sanitary sewer on the east side of the site. No additional leads or mains are anticipated.
10. A monitoring manhole is provided: see Sanitary Structure S4. An access easement shall be provided.

11. It shall be noted on the plans that the 6-inch leads shall be PVC SDR 23.5 pipe and that mains shall be PVC SDR 26 pipe.
12. It shall be noted on the plans and profiles that the leads shall be at least 5-feet deep under or within the influence of pavement.
13. It is understood that a Part 41 Permit is required from the MDEQ for any new sanitary sewer construction.

PAVING & GRADING

14. Dimensions shall be provided on the plans ensuring that the retaining wall set far enough away from the parking to provide the 2-foot clear overhang area.
15. It is understood that since the proposed retaining walls exceed 4-feet in height, a separate permit from the City's Building Division is needed.
16. Parking dimension for the land banked parking shall be clarified.
17. If the slope of the drive approach is held to a maximum of 2% slope, then the resultant slopes around the radius will be less than 1%. A DCS variance will be requested.
18. Runoff from the east drive is not directed to the Twelve Mile Road right-of-way. It is directed to an existing onsite wetland.

Designing the runoff from the west emergency access lane faces several site constraints: 1) The natural grade rises at a slope in excess of 6% from the right-of-way line; 2) There are two gas main that would have to be crossed if runoff were to be captured and piped north towards the drain; 3) Grading the west drive to drain to a second onsite detention basin would result in the loss of several more trees as a result of the expanded grading operations.

The plans have been submitted to the Road Commission for Oakland County for approval. If the RCOG does not approve the undetained runoff directed to Twelve Mile Road, then a DCS variance shall be requested.

STORM SEWER

19. It is not anticipated that 3-feet of cover cannot be achieved over the proposed storm sewers. As such, a variance from the City's standards is not anticipated and need not be sought at this time.
20. A 0.1-foot drop in the structures where a change in direction of 30-degrees or more will be accommodated.
21. The storm sewers shall be designed to match the 0.8 diameter depth when pipe sizes increase.
22. Storm manholes shall have a 2-foot deep plunge pool (sump) when the difference in invert elevations exceeds two feet.
23. The ultimate storm water outlet is the Townline Drain, a county drain. A forebay is not being provided as part of the storm water basin. As such, a manufactured treatment system is being provided on the last structure prior to discharging to the detention pond to meet current OCWRC's requirements (instead of a trap and catch basin with a four foot deep sump).
24. Profiles shall be provided for all storm sewers that are 12-inches and larger.
25. The 10-year HGL shall be labeled on the above profiles.
26. All pipe crossings shall be labeled on the above profiles.
27. A schedule listing the casting type and other relevant information shall appear on the plans.

STORM WATER MANAGEMENT PLAN

28. The SWMP shall be prepared in conformance with the City's standards to the extent feasible.

29. The SWMP shall include the storm water design, calculations, details, and maintenance schedules as stated in the ordinance. The analysis shall include a comparison of pre-development and post-development discharge rates.
30. There is an area approximately 3.66 acres south of the Townline Drain that shall remain undisturbed except of the construction of the east and west drives and associated underground utilities (which have been placed as close as practical to the pavement to reduce impacts to the existing open space).

Pre-development: 1.02 acres presently drains to Twelve Mile Road, 1.11 presently drains overland to the Drain, and 1.53 acres drains to the existing wetland. Post-development: 0.86 acres will drain to Twelve Mile Road (largely naturalized area), 1.26 acres will drain overland or be piped back to the Drain, and 1.53 acres will drain to the existing wetland.

As this area will not be detained onsite, a DCS variance will need to be applied for if this is not approved by the RCOC.
31. A 5-foot wide stone bridge shall be provided to allow access to the proposed standpipe from the bank of the detention pond.
32. A Storm Drainage Facility Maintenance Agreement shall be furnished.

SOIL EROSION AND SEDIMENT CONTROL

33. A SESC Permit shall be secured from the City.

OFF-SITE EASEMENTS

34. No off-site easements or agreements are anticipated at this time.

ITEMS TO BE SUBMITTED WITH THE FINAL SITE PLAN SUBMITTAL

35. An itemized construction cost opinion shall be furnished.
36. Draft copies of any on-site and off-site easement agreements shall be furnished. At this time, we anticipate the following: Public Sanitary Sewer Easement; Easement for Access to Sanitary Sewer Monitoring Manhole; Public Water Main Easement; Public Pathway Easement; Wetland Conservation Easement; and Woodland Conservation Easement. A recent title search and legal escrow funds shall be included with the submittal.
37. Copies of the OCWRC review and approval and a copy of the Towline Drain easement shall be furnished.

ITEMS TO BE SUBMITTED WITH THE STAMPING SET SUBMITTAL

1. Draft copies of any on-site and off-site easement agreements shall be furnished. A recent title search and legal escrow funds shall be included.
2. A Storm Drainage Facility Maintenance Agreement shall be furnished.
3. A Public Water Main Easement shall be furnished.
4. A Public Sanitary Sewer Easement shall be furnished.
5. An Easement for Access to the Sanitary Sewer Monitoring Manhole shall be furnished.
6. A Public Pathway Easement shall be furnished.
7. Copies of the OCWRC review and approval and a copy of the Towline Drain easement shall be furnished.

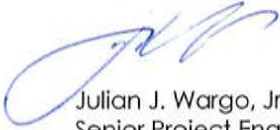
ITEMS TO BE ADDRESSED PRIOR TO CONSTRUCTION

8. A pre-construction meeting shall be requested prior to the start of any on-site activities.
9. A City of Novi Grading Permit shall be secured.

10. An NPDES Permit shall be secured from the MDEQ.
11. A SESC Permit shall be secured from the City.
12. A Right-of-Way Permit shall be secured from the City.
13. Copies of the RCOC review and approval for the work within Twelve Mile Road shall be furnished.
14. An Act 399 Permit from the MDEQ for the new water main construction shall be secured.
15. A Part 41 Permit from the MDEQ for the new sanitary sewer construction shall be secured.
16. All construction inspection fees shall be paid for by the Owner.
17. A storm water performance guarantee shall be posted by the Owner.
18. A street sign financial guarantee shall be posted by the Owner.
19. Permits for the construction of each proposed retaining wall shall be secured.

We look forward to working with you as the design of this project moves ahead.

Very truly yours,



Julian J. Wargo, Jr., PE
Senior Project Engineer

Encl.

PC: Mr. Evans Caruso, CGP Architecture
Mr. Raffi Ourlian, ACC
Mr. Steve Deak, RLA

J:14109.Letter12

Constantine George Pappas AIA

Architecture / Planning

1025 S. Washington Ave. Royal Oak, MI 48067

P. 248.629.8998 F. 248.298.3192

October 5, 2017

Mr. Douglas R. Necci, AIA
DRN & Associates, Architects PC
50850 Applebrooke Dr.
Northville, Michigan 48167

Ref: Armenian Church and Cultural Center located on
North side of Twelve Mile Road, East of Meadowbrook Road
City File No. JSP 17-0037

Subject: Façade Review Response Letter

Dear Mr. Necci,

We received the Preliminary Site Plan Review regarding the Armenian Church and Cultural Center dated September 25, 2017. Please find enclosed (below) the response to your Planning Review comments.

Preliminary Site Plan Review: Response to Planning Review

We will work with staff and façade consultant to provide final validation of the Façade Ordinance requirements.

Notes to Applicate

1. **All Roof Top Equipment will be screened as noted. We will not use corrugated metal as note.**
2. **Noted.**

We trust that this letter addresses the items related to your review. If you have any questions or require further clarification, please feel free to contact our office.

Sincerely,



Evans P. Caruso
Constantine George Pappas Architecture / Planning













Dedicated to the people
who lost their lives
in the Armenian Genocide
1915 - 1923

Armenian Genocide Memorial

