



OAK POINTE CHURCH ADDITION JSP19-44

OAK POINTE CHURCH ADDITION JSP19-44

Consideration at the request of Oak Pointe Church, for Preliminary Site Plan, Phasing Plan and Stormwater Management Plan approval. The subject property is located in Section 19 north of Ten Mile Road and west of Wixom Road, and is zoned RA, Residential Acreage. The applicant is seeking approval to construct a 16,596 square foot addition (Phase 4A) on the east side of the existing church building, as well as an additional 11,512 square foot (Phase 4B) future expansion. Modifications of the previous Phasing Plan are also proposed.

Required Action

Approval/denial of the Preliminary Site Plan, Phasing Plan and Stormwater Management Plan

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	12-20-19	<p>Special Land Use approval was previously granted by the Planning Commission on 4/25/2001, and amended on 2/9/2005</p> <ul style="list-style-type: none"> • Bicycle parking previously proposed has not been installed per plans and should be installed with Phase 4A • Items to be addressed on the Final Site Plan submittal
Engineering	Approval recommended	12-20-19	<ul style="list-style-type: none"> • Items to be addressed on the Final Site Plan submittal
Landscaping	Approval recommended	12-5-19	<ul style="list-style-type: none"> • Waiver for location of building foundation landscaping away from building. <i>Supported by staff.</i> • Items to be addressed on the Final Site Plan submittal
Façade	Approval recommended	12-19-19	<ul style="list-style-type: none"> • Section 9 waiver recommended for overage of Perforated Corrugated Metal • Full compliance with Façade Ordinance
Fire	Approval recommended	12-16-19	<ul style="list-style-type: none"> • Meets Fire Department standards

MOTION SHEET

Approval – Preliminary Site Plan

In the matter of Oak Pointe Church Addition, JSP19-44, motion to **approve** the Preliminary Site Plan and revised Phasing Plan based on and subject to the following:

- a. Fourteen previously approved bicycle parking spaces shall be included on the Final Site Plan submittal;
- b. Landscape waiver for location of building foundation landscaping away from building, *as it will be located nearby, and total required area shall be provided, which is hereby granted;*
- c. A Section 9 façade waiver for an overage of Perforated Corrugated Metal Panels on the south, east and north facades of the addition, *because the design is consistent with the intent and purpose of the ordinance, which is hereby granted;*
- d. 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
- e. *(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 – Stormwater Management Plan

In the matter of Oak Pointe Church Addition, JSP19-44, motion to **approve** the Stormwater Management Plan, subject to:

- 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 – Preliminary Site Plan

In the matter of Oak Pointe Church Addition, JSP19-44, 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 -

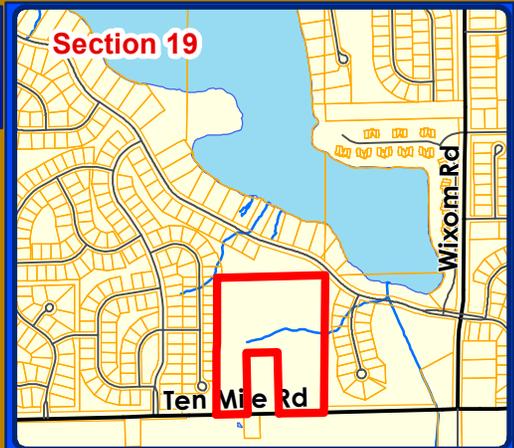
Denial – Stormwater Management Plan

In the matter of Oak Pointe Church Addition, JSP19-44, 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

JSP19-44 OAK POINTE CHURCH ADDITION

LOCATION



LEGEND

 Subject Property



City of Novi

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

Map Author: Lindsay Bell
Date: 1/10/2020
Project: OAK POINTE CHURCH
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.

JSP19-44 OAK POINTE CHURCH ADDITION ZONING



- LEGEND**
- R-A: Residential Acreage
 - R-1: One-Family Residential District
 - Subject Property



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

Map Author: Lindsay Bell
 Date: 1/10/2020
 Project: OAK POINTE CHURCH
 Version #: 1

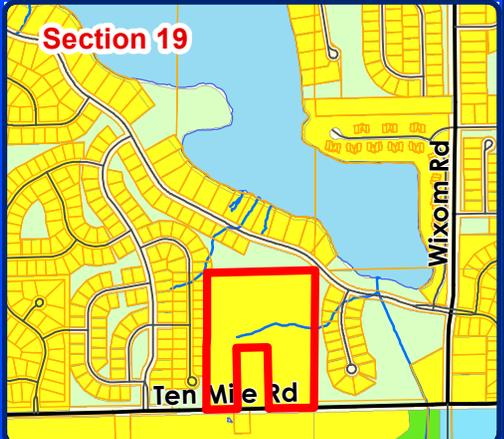


MAP INTERPRETATION NOTICE

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.

JSP19-44 OAK POINTE CHURCH ADDITION

FUTURE LAND USE



LEGEND

- Single Family
- Public
- Public Park
- Private Park
- Subject Property

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

Map Author: Lindsay Bell
Date: 1/10/2020
Project: OAK POINTE CHURCH
Version #: 1

0 55 110 220 330 Feet
1 inch = 250 feet

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.

JSP19-44 OAK POINTE CHURCH ADDITION

NATURAL FEATURES



LEGEND

-  WETLANDS
-  WOODLANDS
-  Subject Property

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

Map Author: Lindsay Bell
 Date: 1/10/2020
 Project: OAK POINTE CHURCH
 Version #: 1

Feet
 0 55 110 220 330

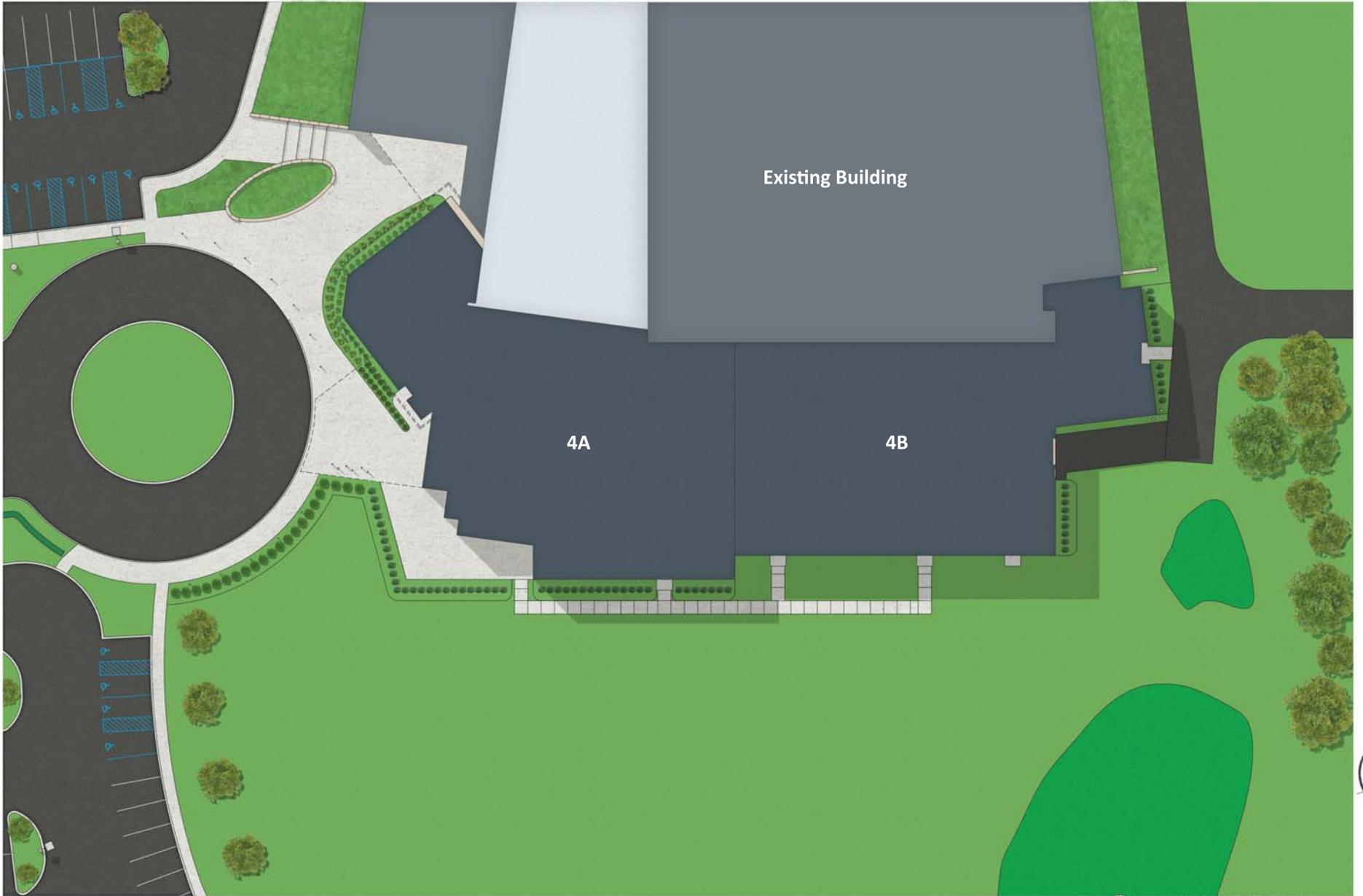
1 inch = 250 feet



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.

SITE PLAN





RENDERED SITE PLAN
 1/8" = 1'-0"

ISSUED	DATE
SPA	10.04.19
PRELIMINARY SPA	11.27.19


 33810 grand ave
 Farmington, MI 48335
 k@schmidtmann.com
 tel 248.427.3907

OAK POINTE CHURCH NOVI - ADDITION
 50200 W. TEN MILE ROAD, NOVI, MI 48374



Date 07.12.19
 Scale AS NOTED
 Drawn by KT
 Approved by SS
 Job 1820
 Sheet Name
 PROPOSED SITE PLAN
 Sheet No.

SPA-5



3880 grand ave
Farmington, MI 48335
313.767.0000
info@s3arch.com

OAK POINTE CHURCH NOVI - ADDITION
50200 W. TEN MILE ROAD, NOVI, MI 48374



Date 9.21.18

Scale AS NOTED

Drawn by KT

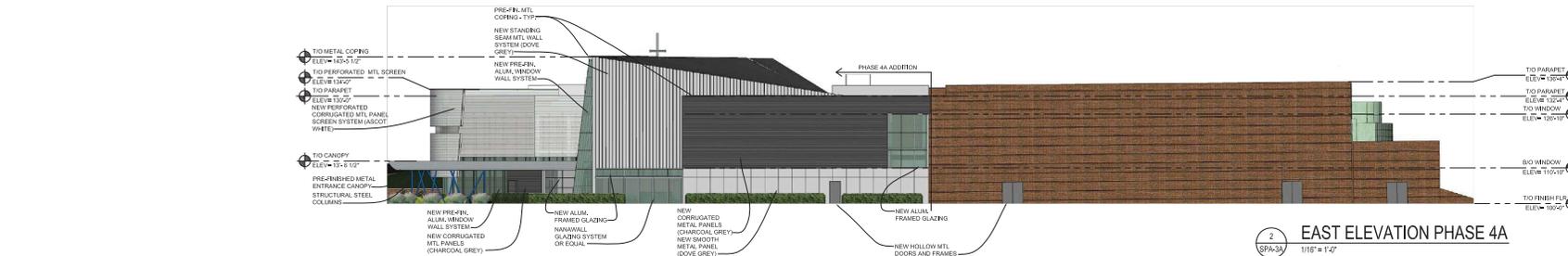
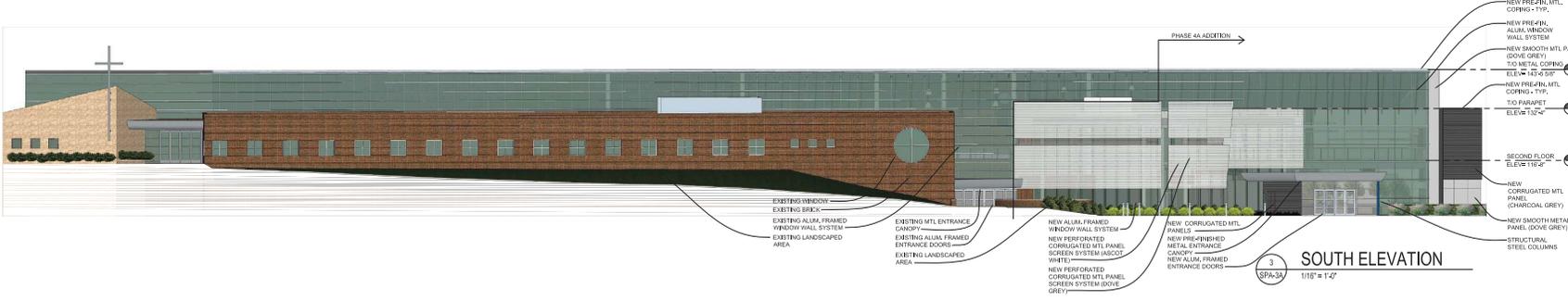
Approved by SS

Job 1820

Sheet Name BUILDING ELEVATIONS PHASE 4A

Sheet No.

SPA-3A



EAST ELEVATION MATERIAL CALCULATIONS - SECTION 5.15 OF CITY OF NOVI CODE OF ORDINANCES

MATERIAL	PERCENT (%) PROPOSED	PERCENT (%) ALLOWED	CONFORMS?	REMARKS
BRICK	4,860 SF # 53%	100%	YES	-
CMU	27 SF # 0.3%	10%	YES	-
SMOOTH METAL PANEL	800 SF # 8%	50%	YES	-
STANDING SEAM METAL PANEL	1,060 SF # 11.5%	25%	YES	-
GLAZING	810 SF	-	-	SO FT EXCLUDED FROM TOTAL SQ FT
PERFORATED CORRUGATED MTL PANEL	848 SF # 9%	-	-	MAT. USE BASED ON CITY PLANNING APPROVAL
CORRUGATED MTL PANEL	1443 SF # 15.6%	0%	-	MAT. USE BASED ON CITY PLANNING APPROVAL
SMOOTH MTL PANEL	122 SF # 1.2%	50%	YES	-

NOTES: EAST ELEVATION TOTAL FACADE AREA: 9,250 SF

SOUTH ELEVATION MATERIAL CALCULATIONS - SECTION 5.15 OF CITY OF NOVI CODE OF ORDINANCES

MATERIAL	PERCENT (%) PROPOSED	PERCENT (%) ALLOWED	CONFORMS?	REMARKS
BRICK	5,235 SF # 56%	100%	YES	-
CMU	120 SF # 1%	10%	YES	-
SMOOTH METAL PANEL	384 SF # 4%	50%	YES	-
STANDING SEAM METAL PANEL	-	25%	YES	-
GLAZING	6,115 SF	-	-	SO FT EXCLUDED FROM TOTAL SQ FT
PERFORATED CORRUGATED MTL PANEL	2,166 SF # 23%	-	-	MAT. USE BASED ON CITY PLANNING APPROVAL
CORRUGATED MTL PANEL	283 SF # 3%	0%	-	MAT. USE BASED ON CITY PLANNING APPROVAL

NOTES: SOUTH ELEVATION TOTAL FACADE AREA: 9,341 SF

NORTH ELEVATION MATERIAL CALCULATIONS - SECTION 5.15 OF CITY OF NOVI CODE OF ORDINANCES

MATERIAL	PERCENT (%) PROPOSED	PERCENT (%) ALLOWED	CONFORMS?	REMARKS
BRICK	9,281 # 81%	100%	YES	-
STONE	150 SF # 0.9%	50%	YES	-
SMOOTH METAL PANEL	627.5 SF # 5.5%	50%	YES	-
GLAZING	1,083 SF	-	-	SO FT EXCLUDED FROM TOTAL SQ FT
EPF	2,684 SF # 11.5%	25%	YES	-
CORRUGATED MTL PANEL	47 SF # 0.3%	0%	-	MAT. USE BASED ON CITY PLANNING APPROVAL
SMOOTH MTL PANEL	1,099 SF # 6.3%	50%	YES	-

NOTES: NORTH ELEVATION TOTAL FACADE AREA: 15,090 SF

ISSUED	DATE
SPA	10.04.19
PRELIMINARY SPA	11.27.19



3883 grand ave
farmington, mi 48335
s3architecture.com
484.454.0007

OAK POINTE CHURCH NOVI - ADDITION
50200 W. TEN MILE ROAD, NOVI, MI 48374



Date: 9.21.18

Scale: AS NOTED

Drawn by: KT

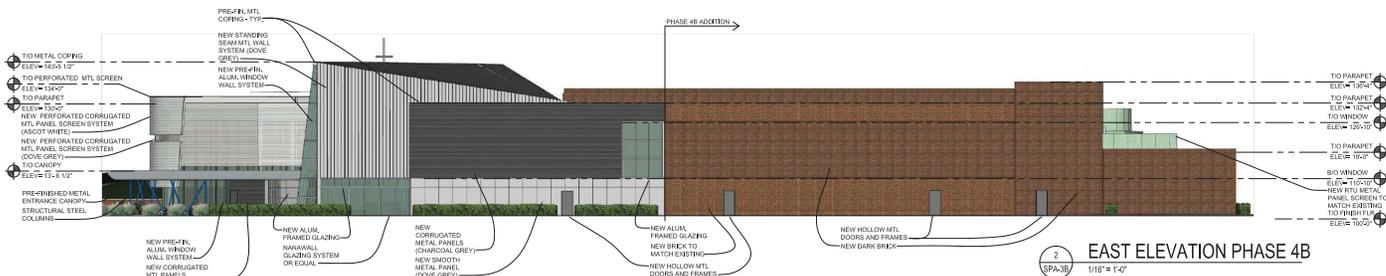
Approved by: SS

Job: 1820

Sheet Name:
BUILDING
ELEVATIONS
PHASE 4B

Sheet No.:

SPA-3B



2 EAST ELEVATION PHASE 4B
1/16" = 1'-0"



1 NORTH ELEVATION PHASE 4B
1/16" = 1'-0"

NOTE: NO CHANGES TO SOUTH ELEVATION IN PHASE B

EAST ELEVATION MATERIAL CALCULATIONS - SECTION 5,15 OF CITY OF NOVI CODE OF ORDINANCES					
MATERIAL	PERCENT (%) PROPOSED	PERCENT (%) ALLOWED	CONFORMS?	REMARKS	
BRICK	5,360 SF = 63%	100%	YES	-	
CONC.	27 SF = 0.2%	10%	YES	-	
SMOOTH METAL PANEL	800 SF = 9%	50%	YES	-	
STANDING SEAM METAL PANEL	1,060 SF = 10.6%	25%	YES	-	
GLAZING	870 SF	-	YES	-	SO FT EXCLUDED FROM TOTAL SQ FT
PERFORATED CORRUGATED MTL PANEL	848 SF = 8.4%	-	-	-	MAT. USE BASED ON CITY PLANNING APPROVAL
CORRUGATED MTL PANEL	1443 SF = 14.3%	0%	-	-	MAT. USE BASED ON CITY PLANNING APPROVAL
SMOOTH MTL PANEL	148 SF = 0.1%	50%	YES	-	

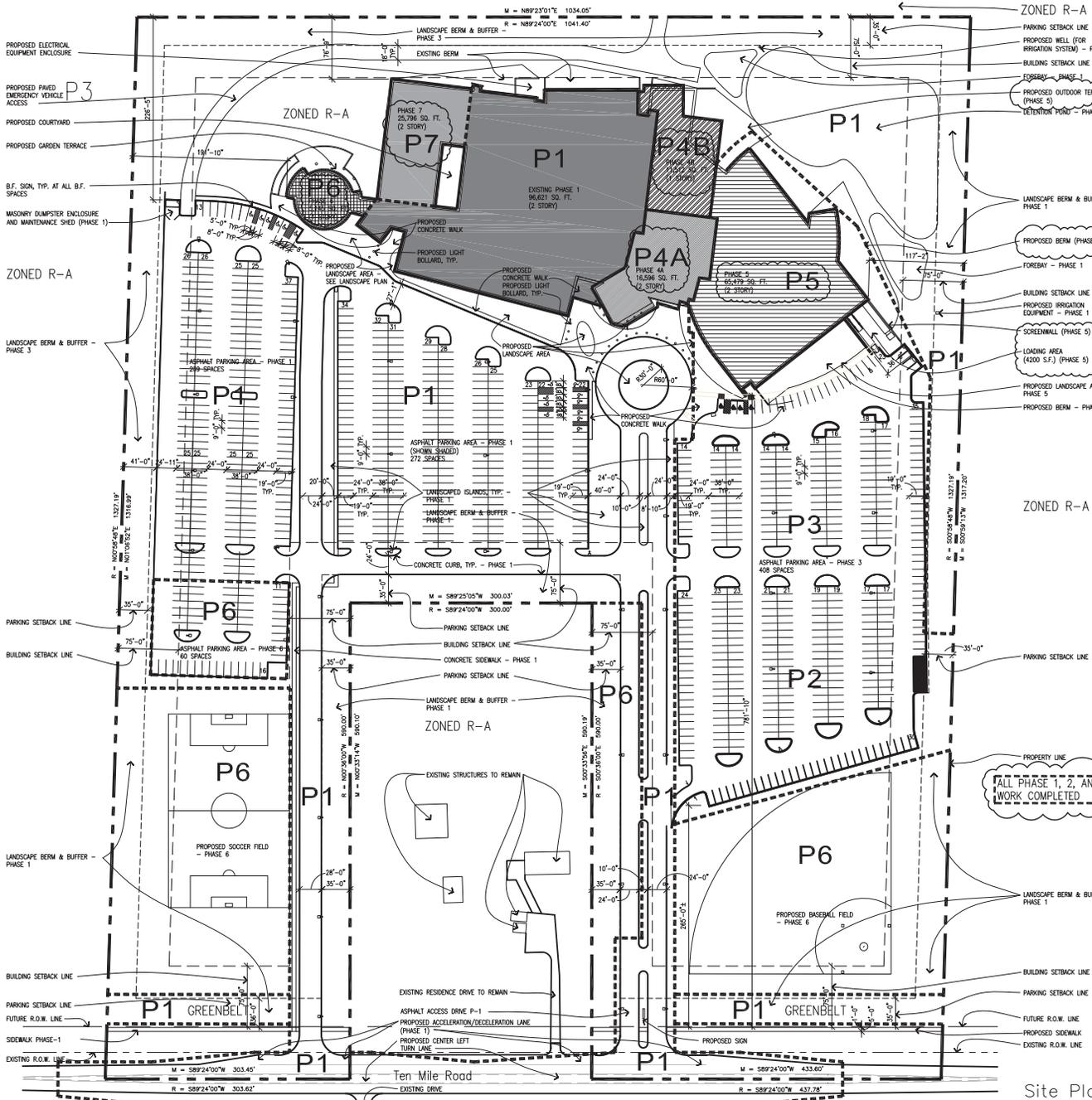
NOTES: EAST ELEVATION FACADE AREA: 10,028 SF

NORTH ELEVATION MATERIAL CALCULATIONS - SECTION 5,15 OF CITY OF NOVI CODE OF ORDINANCES					
MATERIAL	PERCENT (%) PROPOSED	PERCENT (%) ALLOWED	CONFORMS?	REMARKS	
BRICK	12,276 SF = 78.9%	100%	YES	-	
STONE	150 SF = 0.9%	10%	YES	-	
SMOOTH METAL PANEL	827.5 SF = 5.3%	-	-	-	MAT. USE BASED ON CITY PLANNING APPROVAL
GLAZING	1,080 SF	-	YES	-	SO FT EXCLUDED FROM TOTAL SQ FT
CORRUGATED MTL PANEL	47 SF = 0.3%	0%	-	-	MAT. USE BASED ON CITY PLANNING APPROVAL
SMOOTH MTL PANEL	1,178 SF = 7.6%	50%	YES	-	

NORTH ELEVATION TEMPORARY WALL MATERIAL CALCULATION

EFS	2,848 SF = 17.5%	25%	YES	-
-----	------------------	-----	-----	---

NOTES: NORTH ELEVATION TOTAL FACADE AREA: 15,560 SF



ZONING ORDINANCE COMPARISON CHART:

ZONING ORDINANCE COMPARISON CHART:

ZONING: OAK POINTE CHURCH
50000 W 10 MILE RD
NOVI, MI 48374
EXISTING ZONING CLASSIFICATION: R-4

PROPOSED LAND USE: CHURCH (SPECIAL LAND USE)

SITE AREA: 1,186,139 S.F. (27.23 ACRES)

BUILDING SQUARE FOOTAGE:

PHASE 1:	96,821 SQ.FT.
PHASE 2:	0 SQ.FT.
PHASE 3:	0 SQ.FT.
PHASE 4:	28,100 SQ.FT.
PHASE 5:	65,479 SQ.FT.
PHASE 6:	5,145 SQ.FT.
PHASE 7:	25,796 SQ.FT.
TOTAL:	206,362 SQ.FT.

MAXIMUM LOT AREA COVERED BY ALL BUILDINGS:
ALLOWABLE: 25%
PROPOSED: 143,702 = 1,186,139 = 12.1%

SETBACKS:
REQUIRED FRONT (MINIMUM): 75'-0" BUILDING (35'-0" PARKING)
PROPOSED FRONT: 781'-10" BUILDING (285'-0" PARKING)
REQUIRED SIDE (MINIMUM): 75'-0" BUILDING (25'-0" PARKING)
PROPOSED SIDE: 117'-2" BUILDING (35'-0" PARKING)
REQUIRED REAR (MINIMUM): 75'-0" BUILDING (35'-0" PARKING)
PROPOSED REAR: 76'-9" BUILDING (226'-5" PARKING)

BUILDING HEIGHT (MAXIMUM ALLOWABLE): 35'-0" ABOVE ESTABLISHED GRADE
ALL BUILDING HEIGHTS ARE FROM ESTABLISHED GRADE AND DO NOT INCLUDE AUDITORIUM UNLESS NOTED OTHERWISE

BUILDING HEIGHT NORTH (PROPOSED): 35'-0"
BUILDING HEIGHT SOUTH (PROPOSED): 34'-4"
BUILDING HEIGHT WEST (PROPOSED): 27'-5"
BUILDING HEIGHT EAST (PROPOSED): 39'-1" (AUDITORIUM W/O FLYLOFT)
47'-5" (AUDITORIUM WITH FLYLOFT)

LOT SIZE (MINIMUM): 43,560 S.F.
LOT SIZE (EXISTING): 1,186,139 S.F.

LOT WIDTH (MINIMUM): 200'
LOT WIDTH (EXISTING): 737'

REQUIRED PARKING (CARS) PER ZONING (COMPLETE BUILDING - ALL PHASES):
CHURCH: 1/3 SEATS x 2850 = 950 CAR SPACES
TOTAL REQUIRED PARKING: 950 CAR SPACES

TOTAL PROPOSED PARKING (CARS) (COMPLETE BUILDING - ALL PHASES):
969 (OF WHICH 20 ARE BARRIER FREE)

PARKING CALCULATION - EACH PHASE:

PHASE 1:
REQUIRED: CHURCH - 1/3 SEATS x 1200 SEATS = 400 CAR SPACES
PROPOSED: 480 (OF WHICH 16 ARE BARRIER FREE)

PHASE 2:
REQUIRED: CHURCH - 1/3 SEATS x 1200 SEATS = 400 CAR SPACES
PROPOSED: 552 (OF WHICH 16 ARE BARRIER FREE)

PHASE 3:
REQUIRED: CHURCH - 1/3 SEATS x 2850 SEATS = 950 CAR SPACES
PROPOSED: 888 (OF WHICH 20 ARE BARRIER FREE)

PHASE 4:
REQUIRED: CHURCH - 1/3 SEATS x 2850 SEATS = 400 CAR SPACES
PROPOSED: 888 (OF WHICH 20 ARE BARRIER FREE)

PHASE 5:
REQUIRED: CHURCH - 1/3 SEATS x 1200 SEATS = 400 CAR SPACES
PROPOSED: 888 (OF WHICH 20 ARE BARRIER FREE)

PHASE 6:
REQUIRED: CHURCH - 1/3 SEATS x 2850 SEATS = 950 CAR SPACES
PROPOSED: 888 (OF WHICH 20 ARE BARRIER FREE)

PARKING LOT DIMENSIONS:
PARKING SPACE SIZE (FOR 90 DEGREE PARKING): 9' x 19'-0"
PARKING AISLE WIDTH: 24'

NETLANDS: NONE PRESENT ON SITE
WOODLANDS: NONE PRESENT ON SITE
FIRE SUPPRESSION: BUILDING TO BE FULLY SUPPRESSED USING PUBLIC WATER SUPPLY.

VARANCERS:
BUILDING HEIGHT EXCEEDS 35'-0" ABOVE GRADE AT FLYLOFT AND AUDITORIUM AT NORTH, SOUTH AND EAST ELEVATIONS
MAXIMUM DISTANCE ABOVE 35'-0" IS: 4'-1" AT AUDITORIUM
12'-9" AT FLYLOFT

ALL PARKING HAS BEEN PROVIDED IN THE FRONT YARD DUE TO SITE RESTRICTIONS.



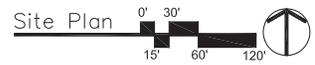
ISSUED	DATE
PRELIMINARY SPA	11.27.19



OAK POINTE CHURCH NOVI - ADDITION
50200 W. TEN MILE ROAD, NOVI, MI 48374



Date: 11.01.19
Scale: AS NOTED
Drawn by: KT
Approved by: SS
Job: 1820
Sheet Name: PHASING PLAN - 2019 UPDATE
Sheet No.: SPA - 5



PLANNING REVIEW



PLAN REVIEW CENTER REPORT

December 20, 2019

Planning Review

Oak Pointe Church – Phase 4 Addition

JSP19-44

PETITIONER

Oak Pointe Church

REVIEW TYPE

Preliminary Site Plan for Phase 4/Re-numbering of Phasing Plan

PROPERTY CHARACTERISTICS

- Site Location: 50200 West 10 Mile Rd, Novi, MI 48374
- Site Zoning: RA (Residential Acreage)
- Adjoining Zoning: North, East and West: RA, Residential Acreage, South: R-1, One Family Residential)
- Adjoining Uses: North, East and West: Island Lake Orchards (Residential subdivision), South: Links of Novi (Recreational)
- School District: Novi Community School District
- Site Size: 27.23 Acres
- Plan Date: November 27, 2019

PROJECT SUMMARY

The applicant is proposing to construct a 16,596 square foot 2-story addition (Phase 4A) and a future 11,512 square foot, 1-story expansion (Phase 4B) on the east side of the existing Oak Pointe Church, as well as modifications to the Phasing Plan. The previously approved Master Plan for the church included this area with a larger addition identified as Phase 6. The parking to accommodate this expansion was already constructed with Phase 3. The new phase 5 now consists of a 65,479 square foot building expansion. On the west side of the building, Phase 6 consists of a 5,145 square foot building expansion along with more parking and recreation fields and Phase 7 would be a 2-story, 25,796 square foot addition. All of these building additions were previously identified in the original phasing master plan, however the order of construction has shifted and only a portion of the previous phase 6 is proposed at this time. No other significant changes from the approved plan are proposed.

The Double gym which was constructed in Phase 1 is currently being used as the prayer hall with 1200 seating capacity. Once the auditorium is built in Phase 5, it will be the active chapel with 2800 seating capacity and the double gym will be serving its original purpose.

The Future Land Use map indicates single family uses for the subject property surrounded by private parks and single family uses. There is a small area of wetland at the Northeast corner of the site with a stream running through the middle. There are no regulated woodlands on the property.

RECOMMENDATION

Staff recommends approval of the Preliminary Site Plan for Phase 4, as the plans mostly conform to the requirements of the Zoning Ordinance. There are minor planning related items to be addressed on Final Site Plan submittal. **Planning Commission approval of the Preliminary Site Plan and Storm Water Management Plan is required.**

ORDINANCE REQUIREMENTS

This project was reviewed for compliance with the City of Novi Zoning Ordinance, Article 3 (Residential Acreage), Article 24 (Schedule of Regulations), Article 25 (General Provisions), and any other areas of the ordinance, as noted. The plans show general compliance with ordinance requirements.

1. Bicycle Parking (Section 5.16): For Places of Worship the ordinance requires bicycle parking be provided in the amount of 5% of the required automobile spaces. The previous site plan for the parking lot addition in 2014 showed 14 bicycle parking spaces to be installed, however it appears they never were. **Those 14 bicycle parking spaces must be shown on the site plan at this time. A bike rack detail and the bike parking layout detail meeting the ordinance requirements should be shown on the site plan. The absence of the bicycle spaces would require a Zoning Board of Appeals variance. Modifications of the layout, location, or design requirements may be approved by the Planning Commission with written request of the applicant.**
2. Lighting Plan (Section 5.7): The lighting and photometric plan should be updated to include all existing light fixtures on the area of the site to be impacted and the data charts updated accordingly. **Additional comments to be addressed on the lighting plan included in the Plan Review Chart (page 8-9).**

NEXT STEP: PLANNING COMMISSION MEETING

This site plan will be scheduled for consideration before the Planning Commission on January 15, 2020. **Please submit the following no later than noon on January 9, 2020:**

1. Original Site Plan submittal in PDF format (maximum of 10MB). **NO CHANGES MADE.**
2. A response letter addressing ALL the comments from ALL the review letters and **a request for waivers and variances as you see fit.**
3. A color rendering of the Site Plan, if any.
4. A sample board of building materials as requested by our Façade Consultant. The applicant can bring the material samples to the Planning Commission meeting. ***This has been received.***

FINAL SITE PLAN SUBMITTAL

After receiving the Preliminary Site Plan approval from the Planning Commission, please submit the following for Final Site Plan review and approval:

1. Five 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. [Final Site Plan Application](#)
4. [Final Site Plan Checklist](#)
5. Engineering Cost Estimate
6. Landscape Cost Estimate
7. [Other Agency Checklist](#)
8. [Hazardous Materials Packet](#) (Non-residential developments)
9. [Non-Domestic User Survey](#) (Non-residential developments)
10. [No Revision Façade Affidavit](#) (if no changes are proposed for Façade)
11. Legal Documents as required

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.**
3. Drafts of any legal documents (note that any on-site easements need to be submitted in draft form before stamping sets will be stamped).

STAMPING SET APPROVAL

Stamping sets are still required for this project. After receiving approval of the Electronic Stamping Set from City staff, the applicant should submit **8 size 24" x 36" copies, folded, with original signature and original seals,** to the Community Development Department for final Stamping Set approval.

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, so it is suggested you contact Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] once the Final Site Plan has been approved to begin the Pre-Con checklist. If you have questions regarding the checklist or the Pre-Con itself, please contact Sarah.

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 at 248-347-0430 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 248.347.0484 or lbell@cityofnovi.org.



Lindsay Bell, Planner



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

Review Date: December 20, 2019
Review Type: Preliminary Site Plan
Project Name: JSP 19-44 OAK POINTE CHURCH ADDITION
Plan Date: November 27, 2019
Prepared by: Lindsay Bell, Planner
Contact: E-mail: lbell@cityofnovi.org; Phone: (248) 347-0484

Bold	To be addressed with the next submittal
<u>Underline</u>	To be addressed with final site plan submittal
<u>Bold and Underline</u>	Requires Planning Commission and / or City Council Approval
<i>Italics</i>	Notes to be noted

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan <i>(adopted July 26, 2017)</i>	Single Family	Church	Yes	
Area Study	The site does not fall under any special category	NA	Yes	
Zoning <i>(Effective January 8, 2015)</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	Places of Worship	Yes	<p><i>Planning Commission approval for Special Land Use for a Place of Worship was received 4/25/2001 and amended on 2/9/2005</i></p> <p><i>The original master plan for the property was approved in 2001. A smaller addition in the area identified as the approved Phase 5 are now proposed, but do not impact the approved SLU.</i></p>
Phasing	Phasing requires Planning Commission Approval	<ul style="list-style-type: none"> Revision of phase lines and numbers are proposed 	Yes	<p><i>On August 13, 2014 – PC approved parking lot expansion and indicated minor changes to phases or reordering of phases may be handled administratively.</i></p>

Item	Required Code	Proposed	Meets Code	Comments
Required Conditions: Places of Worship(Section 4.10)				
Minimum Site Size (Sec 4.10.1)	- 3 Acres	27.21 Acres	Yes	
Minimum Site Width (Sec 4.10.2)	- (200) feet along front yard	737 ft.	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 is accessed off Ten Mile Road by 2 driveways	Yes	
Minimum Building Setbacks (Sec 4.10.4)	- Seventy-five (75) feet from all property lines.	All setbacks are min. 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 rear yard	No additional parking is proposed	Yes	
Parking Lot Screening (Sec 4.10.6)	- Screening of vehicular parking areas shall be in conformity with requirements atSec5.5.3	Landscape plan previously approved and parking already installed	Yes	Landscaping around the building is proposed – see Landscape review for comments
Noise Impact Statement (Sec 4.10.7)	- A noise impact statement is required subject to the standards of Section 5.14.10.B	ZBA variance received previously 6/5/2001	NA	
Height, bulk, density and area limitations (Sec 3.1.1.E)				
Maximum % of Lot Area Covered (By All Buildings)	25%	Approx. 9%	Yes	Provide the maximum % of lot area covered for all phases proposed
Building Height (Sec. 3.1.1.E)	35 feet or 2 ½ stories	43.5 feet	No?	ZBA variance received previously 6/5/2001
Building Setbacks (Sec 3.1.1.E)				
Front @ 10 Mile Road (Sec. 3.6.2.B)	For all non-residential uses:	> 75 ft	Yes	
Side (east)	75 ft.	>300 ft	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Rear (north)		Approx. 82 ft (phase 4B)	Yes	
Parking Setback (Sec 3.1.1.E) Refer to applicable notes in Sec 3.6.2				
Front @ Taft Road (Sec. 3.6.2.B)	NO parking in front yard for churches	ZBA variance received previously 6/5/2001	NA	
Side (north and south)	20 ft. 35ft. (lot abuts a residential district)	No new parking proposed	NA	
Rear (west)	20 ft. 35ft. (lot abuts a residential district)	No new parking proposed	NA	
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	Minimum required setbacks are modified accordingly	Yes	
Building Setbacks (Sec 3.6.2.C)	Refer to Sec 3.6.2 for more details	Minimum required setbacks are modified accordingly	Yes	
Wetland/Watercourse Setback (Sec 3.6.2.M)	Refer to Sec 3.6.2 for more details	No wetlands	NA	
Parking, Loading and Dumpster Requirements (Sec. 5.2)				
Number of Parking Spaces (Sec. 5.2) 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	Approved site plan from 2014 shows a total of 950 parking spaces required for all phases – 889 have been built	Yes	Some phase 6 parking spaces remaining to be built at a later time
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		NA	
Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2)	- 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	- All parking existing	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	detail indicates a 4" curb at these locations and along landscaping			
Parking stall located adjacent to a parking lot entrance (public or private) <i>(Sec. 5.3.13)</i>	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	NA	Yes	
End Islands <i>(Sec. 5.3.12)</i>	<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 outside radius of 15 feet, and be constructed 3' shorter than the adjacent parking stall as illustrated in the Zoning Ordinance 	End Islands are existing – waiver granted by Planning Commission in 2014	Yes	
Barrier Free Spaces <i>Barrier Free Code</i>	Based on Total Parking required	20 spaces are existing	Yes	
Barrier Free Space Dimensions <i>Barrier Free Code</i>	<ul style="list-style-type: none"> - 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	
Barrier Free Signs <i>Barrier Free Code</i>	One sign for each accessible parking space.	One sign is proposed for each space	Yes	
Minimum number of Bicycle Parking <i>Sec. 5.16.1</i>	Five (5) percent of required automobile spaces, minimum eight (8) spaces	14 spaces previously approved	No	The previously approved site plan had 14 bicycle parking spaces, which appear were never installed. The plan should reflect those spaces and ensure they are installed at this time
Bicycle Parking General requirements <i>Sec. 5.16</i>	<ul style="list-style-type: none"> - No farther than 120 ft. from the entrance being served - When 4 or more spaces are required for a building with multiple 	Not proposed at this time	No	Provide bike parking meeting requirements described; Include bike rack detail

Item	Required Code	Proposed	Meets Code	Comments
	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			
Bicycle Parking Lot layout Sec 5.16.6	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	Not proposed at this time	No	Provide bike parking layout that meets ordinance standards
Loading Spaces Sec. 5.4.1	Required on all premises where receipt or distribution of materials or merchandise occurs and shall be separate from parking areas	New loading area behind Phase 4B; Screened by existing berm/evergreen plantings	Yes	
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 	Existing	NA	
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 	Existing dumpster enclosure located on the west side of the parking lot.	NA	
Lighting and Other Equipment Requirements				
Exterior lighting Sec. 5.7	Photometric plan and exterior lighting details	A lighting plan is provided	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	needed at time of Preliminary Site Plan submittal			
Roof top equipment and wall mounted utility equipment <i>Sec. 4.19.2.E.ii</i>	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 screened by perforated corrugated screen wall	Yes	
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 screened by perforated corrugated screen wall	Yes	
Sidewalk Requirements				
Article XI. Off-Road Non-Motorized Facilities	8 foot concrete path is required along 10 Mile Road	Has been constructed	Yes	
Pedestrian Connectivity	Assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets	Sidewalks are proposed at all building exits and a connection to 10 Mile Road is provided	Yes	
Building Code	Building exits must be connected to sidewalk system or parking lot.	Building exists connected to sidewalk system	Yes	
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	

Item	Required Code	Proposed	Meets Code	Comments
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).	Mostly 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 		NA	
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) 	Approximately \$6mil for construction	Yes	
Development/ Business Sign & Street addressing	<ul style="list-style-type: none"> - Signage if proposed requires a permit. - The applicant should contact the Building Division for an address prior to applying for a building permit. 	Signage is not proposed at the moment	Yes	<u>If additional signage is proposed contact Ordinance at 248-735-5678 for sign permit applications</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	For approval of project and street naming contact Madeleine Kopko at 248-735-0579
Property Split	All property splits and combination must be submitted to the Assessing Department for approval.		NA	
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		Yes	

Item	Required Code	Proposed	Meets Code	Comments
	transmission of light into the night sky			
Lighting Plan (Sec. 5.7.A.i)	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	Provided for area of addition	Yes	Include existing light fixtures on photometric plan in area where changes proposed
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.	Not shown	No	Provide lighting on elevations of addition
Lighting Plan (Sec.5.7.2.A.ii)	Specifications for all proposed & existing lighting fixtures	Provided	Yes	
	Photometric data	Provided	Yes	
	Fixture height	Not provided	No	
	Mounting & design	Provided	Yes	
	Glare control devices	Provided	Yes	
	Type & color rendition of lamps	LED	Yes	
	Hours of operation	Not provided	No	
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	Yes?	Provide height of fixtures
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 	Not shown	No	Provide standard notes
Security Lighting (Sec. 5.7.3.H)	<ul style="list-style-type: none"> - All fixtures shall be located, shielded, and aimed at the areas to be secured. - Fixtures mounted on the building and designed to illuminate the facade are preferred 	Provided	Yes	
Average Light	Average light level of the	Not provided	No?	Provide necessary

Item	Required Code	Proposed	Meets Code	Comments
Levels (Sec.5.7.3.E)	surface being lit to the lowest light of the surface being lit shall not exceed 4:1			calculation to verify conformance
Type of Lamps (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps	LED	Yes	
Min. Illumination (Sec. 5.7.3.K)	Parking areas: 0.2 min	No changes	NA	Adjust lighting as necessary to achieve 0.2 min along walkways
	Loading & unloading areas: 0.4 min	No changes	NA	
	Walkways: 0.2 min	0.1 min	No	
	Building entrances, frequent use: 1.0 min	10 min	Yes	
	Building entrances, infrequent use: 0.2 min	11 min	Yes	
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	Added lighting does not reach property lines	Yes	
Cut off Angles (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	Yes	Yes	
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

December 20, 2019

Engineering Review

Oak Pointe Church Addition
JSP19-0044

Applicant

Oak Pointe Church

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: North side of Ten Mile Road, between Napier Road and Wixom Road
- Site Size: 27.21 acres
- Plan Date: November 27, 2019
- Design Engineer: Fleis & Vandenbrink

Project Summary

- Construction of an approximately 23,984 square-foot building addition and no additional parking. Site access would continue to be provided via two entrances on Ten Mile Road.
- No alterations to existing water or sanitary sewer service are proposed.
- Storm water is presently collected by a storm sewer collection system and detained on-site with a detention basin. Additional storm sewer and catch basins are proposed.

Recommendation

Approval of the Preliminary Site Plan is recommended, with items to be addressed at Final Site Plan submittal.

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 that must 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):

General

1. The dedication of the planned 60-foot half right-of-way for Ten Mile Road is requested from the applicant for both Parcels #50-22-19-400-007 and #50-22-

- 19-400-008 for proposed sidewalk and water main construction along Ten Mile Road. Show the proposed right-of-way on the plans and label accordingly as "proposed" right-of-way.
2. Clearly label and distinguish all existing utilities on the plans.

Water Main

3. No alterations to existing on-site water main or water service are proposed.

Sanitary Sewer

4. No alterations to existing on-site sanitary sewer or sanitary service are proposed.

Storm Sewer

5. Provide storm sewer profiles and illustrate all pipes intersecting storm structures.
6. The proposed rim elevation for MH#3 is higher than the existing contours show. If grading is proposed, show proposed grades/contours on the plans.

Storm Water Management Plan

7. As acknowledged on the plans, the proposed building additions and sidewalk increase impervious surface area and therefore increase the required stormwater detention volume. However, the resulting increase in required volume beyond the detention basin's existing capacity is negligible. Thus, the basin's existing capacity can be considered adequate for the increased stormwater runoff caused by the improvements.
8. The existing stormwater detention basin was designed for the 10-year storm event, including pretreatment/sedimentation, under previous stormwater rules and is considered adequate for these improvements.
9. Note that any increase of impervious surface area proposed in the future, beyond that approved here, will require additional detention volume to be provided at the current 100-year storm rate.

Paving & Grading

10. To indicate height of curb, provide top of pavement grades to the top of curb grades already shown along the cul-de-sac in front of the building expansion entrance.
11. To indicate height of curb and to verify ADA compliance, provide both top of pavement and top of curb grades along the east side of the cul-de-sac, including at "match existing" spots.
12. The proposed sidewalk corner grades and inlet rim elevation nearest the building expansion entrance (to the east/southeast of the doors) appear to cause grading issues. For example, grades are far below 1.0% between the doors and the inlet rim, and yet ~2.6% between the inlet rim and the 972.77 corner grade. For ADA compliance and drainage, adjust these elevations.

Flood Plain

13. The 100-year floodplain does not encompass any portion of the subject property.

Soil Erosion and Sediment Control

14. A SESC permit is required. A full review has not been completed at this time but will be completed with the Final Site Plan. The review checklist detailing all SESC requirements is attached to this letter. Please submit a SESC permit application under separate cover. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>.

Off-Site Easements

15. No off-site easements are anticipated for the proposed improvements. If any are proposed, they must be executed prior to final approval of the plans.

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

16. A letter from either the applicant or the applicant's engineer must be submitted with the Final Site Plan highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved.
17. 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 shall not include any costs associated with construction of the building or any demolition work. **The cost estimate must be itemized** for storm sewer, on-site paving, and grading.
18. Draft copies of any off-site utility easements, 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 getting executed.

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

19. A draft copy of the warranty deed for the proposed 60-foot half right-of-way along Ten Mile Road must be submitted for review and acceptance by the City. Please note this document must be submitted with the Stamping Set submittal with a legal review transmittal form that can be found on the City's website.

The following must be addressed prior to construction:

20. 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).
21. 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 (no application fee).

22. Legal escrow fees in an amount to be determined must be deposited with the Community Development Department. All unused escrow will be returned to the payee at the end of the project. This amount includes engineering legal fees only. There may be additional legal fees for planning legal documents.
23. 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.

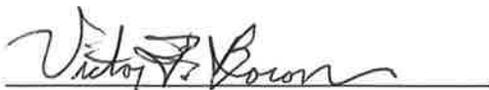
The following must be addressed prior to issuance of a Temporary Certificate of Occupancy (TCO) approval for the development:

24. Submit an up-to-date Title Policy (dated within 90 days of City Council consideration of acceptance) for the purpose of verifying that the parties signing the warranty deed documents have the legal authority to do so. Please be sure that all parties of interest shown on the title policy (including mortgage holders) either sign the easement documents themselves or provide a Subordination Agreement. Please be aware that the title policy may indicate that additional documentation is necessary to complete the acceptance process.
25. Provide a warranty deed for the additional proposed road right-of-way along Ten Mile Road for acceptance by the City.

Prior to preparing stamping sets, the Applicant is advised to provide any revised sheets directly to the Engineering Division for an informal review and approval.

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 Victor Boron at (248) 735-5695 with any questions.



Victor Boron
Civil Engineer

cc: Lindsay Bell, Community Development
Ben Croy, PE, Engineering
Kate Richardson, Engineering



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 edges of all water bodies, water courses or wetlands.	<input type="checkbox"/>	
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	<input type="checkbox"/>	

	dams as necessary. Drainage ditches steeper than 3% shall be sodded.		
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.

Reviewed By: Rebecca Runkel, SE/C 02456

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT

December 5, 2019

Preliminary Site Plan - Landscaping

Oakpointe Church Addition

Review Type

Preliminary Landscape Review

Job

JSP19-0044

Property Characteristics

- Site Location: 50200 West Ten Mile Road
- Site Acreage: 27.21 ac.
- Site Zoning: R-A
- Adjacent Zoning: North, East, South, West: R-A
- Plan Date: 8/19/2019

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 and on the Landscape Chart must be addressed and incorporated as part of the Final Site Plan submittal. Please follow guidelines of the Zoning Ordinance and Landscape Design Manual. This review and the accompanying Landscape Chart are summaries and are not intended to substitute for any Ordinance.

Recommendation

This project is **recommended for approval for Preliminary Site Plan**. There is one waiver required, but it is supported by staff. The changes noted must be addressed on Final Site Plans.

LANDSCAPE WAIVER REQUIRED:

Location of some of the foundation landscaping away from the building foundation – *supported by staff*

Ordinance Considerations

Existing and proposed overhead and underground utilities, including hydrants (LDM 8)
Provided

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

1. All existing vegetation is provided on the Soil Erosion Control Plan. Only some existing vegetation is shown on the Demolition Plan and Landscape Plan.
2. **Please provide an existing conditions plan that includes all existing vegetation in the vicinity of the project, including the trees along the parking lot perimeter, without any proposed removals.**
3. **Please clearly label trees to be removed on the Demolition Plan, including the 2 river birches where the construction entrance is proposed.**
4. **Please indicate that the river birches will be replaced at the conclusion of construction.**
5. **Please add tree protection fencing for all trees to remain within and adjacent to the work area on the Demolition Plan, as well as a tree protection fence detail.**

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

The project is adjacent to residentially-zoned property but no new screening vegetation or

berms are required for this project.

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

1. The project does not require any additional right-of-way berms or landscaping.
2. **Any dead, missing or weak plantings on the site that are part of the original site plan must be replaced at this time.**

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

1. No changes to the parking lot are proposed so no new parking lot landscaping is required.
2. **The two perimeter trees that are being removed for this project's construction must be replaced.**

Building Foundation Landscaping (Zoning Sec 5.5.3.D)

1. Based on the Phase A building perimeter, 2336 SF of landscape area is required and for Phase A, 2,144 SF is required. According to the calculations, 2,419sf is provided for Phase A and 3,320 SF is required. As none of the areas' square footage is labeled, it's impossible to verify this. It does not appear that there is anywhere near the stated amount for Phase B.
2. **Please label all areas provided with their area in SF.**
3. **Please provide all required landscaping for both phases. Landscaping must be provided along the east side of the building of Phase B.**
4. **A landscape waiver to provide some of the Phase A landscaping across the plaza from the building is supported by staff, but a waiver to not provide all of the required area for each phase would not be supported by staff. Lawn area and expansive areas of mulch cannot count toward the required landscaping.**

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

1. Provided
2. None of the 4 species used are native to Michigan. **Please either add species or change two or more of the proposed species such that at least 50% are native to Michigan.**
3. **Please add 2 river birches to the plant list.**

Planting Notations and Details (LDM)

1. Provided
2. **Please add the required details for canopy trees to assist with the replacement of the river birches.**
3. **Please make the other note revisions per the landscape chart.**

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

1. If the site's storm water detention system does not need to be modified for this project, then no additional detention basin landscaping is required. If it does, please add the required shrubs for the modified portions of the pond.
2. A number of *Phragmites* populations are noted on the plan, and a plan for its removal is provided. **Please revise the plan as described on the Landscape Chart.**

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

1. **The proposed landscaping must be provided with sufficient water to become established and survive over the long term.**
2. **Please provide an irrigation plan or note how this will be accomplished if an irrigation plan is not provided on Final Site Plans. An actual irrigation plan could be provided in the electronic stamping set if desired.**

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.

A handwritten signature in black ink, appearing to read "Rick Meader". The signature is written in a cursive, flowing style.

Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – PRELIMINARY SITE PLAN

Review Date: December 5, 2019
Project Name: Oak Pointe Church Addition
Plan Date: November 27, 2019
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org;
 Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant on the Final Site Plan.

LANDSCAPE WAIVER REQUIRED:

Landscape waiver to locate some of the foundation landscaping away from the building foundation. This is supported by staff.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (LDM (2))				
Landscape Plan (Zoning Sec 5.5.2, LDM 2.e.)	<ul style="list-style-type: none"> ▪ New commercial or residential developments ▪ Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. ▪ 1"=20' minimum with proper North. Variations from this scale can be approved by LA ▪ Consistent with plans throughout set 	Scale: 1" = 20'	Yes	
Project Information (LDM 2.d.)	Name and Address	Yes	Yes	
Owner/Developer Contact Information (LDM 2.a.)	Name, address and telephone number of the owner and developer or association	Address and business name on cover sheet and title block of all sheets	Yes	Please add phone number of church on plans
Landscape Architect contact information (LDM 2.b.)	Name, Address and telephone number of RLA/PLA/LLA who created the plan	Rick Stout, RLA	Yes	
Sealed by LA. (LDM 2.g.)	Requires original signature	Yes	Yes	<u>A live signature by the landscape architect who designs the plans is required on stamping sets.</u>
Miss Dig Note (800) 482-7171 (LDM.3.a.(8))	Show on all plan sheets	Yes	Yes	
Zoning (LDM 2.f.)	Include all adjacent zoning	On Sheet C1 Site: RA East, West, North:	Yes	

Item	Required	Proposed	Meets Code	Comments
Survey information <i>(LDM 2.c.)</i>	<ul style="list-style-type: none"> ▪ Legal description or boundary line survey ▪ Existing topography 	RA South: RA, R-1 <ul style="list-style-type: none"> ▪ Existing conditions shown on Sheet C1 ▪ Legal description on Sheet SPA-2. SPA-4 	No	Add an existing conditions sheet without proposed removals.
Existing plant material Existing woodlands or wetlands <i>(LDM 2.e.(2))</i>	<ul style="list-style-type: none"> ▪ Show location type and size. Label to be saved or removed. ▪ Plan shall state if none exists. 	<ul style="list-style-type: none"> ▪ Existing hedge and parking lot trees are shown on Demolition Plan ▪ Notes indicate an existing hedge will be removed. ▪ 2 existing river birches abutting the parking lot will have to be removed for construction entrance per the Soil Erosion & Sediment Control Plan but are not shown as being removed on that plan or the Demolition Plan. ▪ No tree fencing is proposed for trees to remain in area of work 	No	<ol style="list-style-type: none"> 1. Please show river birches and all other existing vegetation on the Existing Conditions plan required above and Demolition Plan. 2. Please show the river birches as being removed on the Demolition Plan 3. Please add tree fencing around river birches to remain on the Demolition Plan 4. Please add a tree protection fence detail 5. Please show all existing vegetation to remain on the landscape plan. 6. Please add a note to the Demolition stating that the 2 birches to be removed for the construction entrance must be replaced. 7. Please show the 2 river birches as being replaced on the Landscape Plan.
Soil types <i>(LDM.2.r.)</i>	<ul style="list-style-type: none"> ▪ As determined by Soils survey of Oakland county ▪ Show types, boundaries 	Sheet C4	Yes	
Existing and proposed improvements <i>(LDM 2.e.(4))</i>	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and	Provided	Yes	

Item	Required	Proposed	Meets Code	Comments
	R.O.W			
Existing and proposed utilities (LDM 2.e.(4))	<ul style="list-style-type: none"> Overhead and underground utilities, including hydrants Proposed light posts 	Provided	Yes	
Proposed grading. 2' contour minimum (LDM 2.e.(1))	Provide proposed contours at 2' interval	Sheet C-2	Yes	
Snow deposit (LDM.2.g.)	Show snow deposit areas on plan	NA		
LANDSCAPING REQUIREMENTS				
Berms, Walls and ROW Planting Requirements				
Berms				
<ul style="list-style-type: none"> All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours Berm should be located on lot line except in conflict with utilities. Berms should be constructed of loam with 6" top layer of top soil. 				
Residential Adjacent to Non-residential (Sec 5.5.3.A) & (LDM 1.a)				
Berm requirements (Zoning Sec 5.5.A)	No new berm is required for this project	No new berm is proposed	Yes	
Planting requirements (LDM 1.a.)	LDM Novi Street Tree List	NA		
Walls (LDM 2.k & Zoning Sec 5.5.3.vi)				
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	No new walls are proposed.		
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer		None		
ROW Landscape Screening Requirements (Sec 5.5.3.B. ii) and (LDM 1.b)				
Greenbelt width (2)(3) (5)	34 ft	Approx 430 feet	Yes	The addition does not lessen the existing greenbelt
Berm requirements (Zoning Sec 5.5.3.A.(5))				
Min. berm crest width	<ul style="list-style-type: none"> 4 ft 	No change to existing greenbelt	Yes	The addition does not require any new berm
Minimum berm height (9)	<ul style="list-style-type: none"> 4 ft 	No change to existing greenbelt	Yes	The addition does not require any new berm
3' wall	<ul style="list-style-type: none"> (4)(7) 	None		
Canopy deciduous or large evergreen trees Notes (1) (10)	1 tree per 40 lf	No new trees are proposed	Yes	<ol style="list-style-type: none"> The addition does not require any new greenbelt landscaping. If any trees are

Item	Required	Proposed	Meets Code	Comments
				missing from the original landscape plan, they must be replaced as part of this project.
Sub-canopy deciduous trees Notes (2)(10)	1 tree per 25 lf	No new trees are proposed	Yes	See above
Canopy deciduous trees in area between sidewalk and curb (Novi Street Tree List)	1 tree per 35lf frontage	No new trees are proposed	Yes	See above
Cross-Section of Berms (LDM 2.j)				
Slope, height and width	<ul style="list-style-type: none"> ▪ Label contour lines ▪ Maximum 33% ▪ Constructed of loam ▪ 6" top layer of topsoil 	No berms are proposed		
Type of Ground Cover		None	No	Please indicate that disturbed areas will be seeded (or sodded, whichever is the case).
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	No overhead utilities are in the vicinity of the site.	Yes	
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements (LDM 1.c)	<ul style="list-style-type: none"> ▪ Clear sight distance within parking islands ▪ No evergreen trees 	No changes are proposed to the parking lot.		
Name, type and number of ground cover (LDM 1.c.(5))	As proposed on planting islands	No changes are proposed to the parking lot.		
General (Zoning Sec 5.5.3.C.ii)				
Parking lot Islands (a, b. i)	<ul style="list-style-type: none"> ▪ A minimum of 200 SF to qualify ▪ Minimum 200 SF per tree planted in island ▪ 6" curbs ▪ Islands minimum width 10' BOC to BOC 	No changes are proposed to the parking lot.		
Curbs and Parking stall reduction (c)	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	No changes are proposed to the parking lot.		
Contiguous space limit (j)	<ul style="list-style-type: none"> • Maximum of 15 contiguous spaces 	No changes are proposed to the		

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> All endcap islands should also be at least 200sf with 1 tree planted in it. 	parking lot.		
Plantings around Fire Hydrant (d)	No plantings with matured height greater than 12' within 10 ft. of fire hydrants of utility structures (manholes, catch basins)	No new or existing hydrants are shown in the vicinity of the work	Yes	
Landscaped area (g)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	None	TBD	Please indicate landscaping and/or ground covers for all areas on the site
Clear Zones (LDM 2.3.(5))	25 ft corner clearance required. Refer to Zoning Section 5.9	No new landscaping is proposed along 10 Mile Road	NA	
Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, C, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district (Zoning Sec 5.5.3.C.iii)				
A = Total square footage of vehicular use area up to 50,000 sf x 7.5%	$A = x \text{ SF} \times 7.5\% = A \text{ sf}$	No changes are proposed to the parking lot	NA	
B = Total square footage of additional paved vehicular use areas over 50,000 SF) x 1 %	$B = x \text{ SF} \times 1\% = B \text{ sf}$	No changes are proposed to the parking lot	NA	
Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C.iii)				
A = Total square footage of vehicular use area up to 50,000 sf x 5%	$A = x \text{ SF} \times 5\% = A \text{ sf}$	NA		
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5 %	$B = (x \text{ SF} - 50000) \times 0.5\% = B \text{ SF}$	NA		
All Categories				
C = A+B Total square footage of landscaped islands required	$A + B = C \text{ SF}$	No changes are proposed to the parking lot	NA	
D = D/200 Number of canopy trees required	$D/200 = xx \text{ Trees}$	No changes are proposed to the parking lot	NA	
Parking Lot Perimeter Trees (Sec 5.5.3.C.iv)	1 Canopy tree per 35 lf	No changes are proposed to the parking lot	NA	

Item	Required	Proposed	Meets Code	Comments
Parking land banked	NA	No		
Other Landscaping				
Other Screening				
Screening of outdoor storage, loading/unloading (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)		Existing berms appear to provide sufficient screening to the north and east.	Yes	
Transformers/Utility boxes (LDM 1.e from 1 through 5)	<ul style="list-style-type: none"> ▪ A minimum of 2ft. separation between box and the plants ▪ Ground cover below 4" is allowed up to pad. ▪ No plant materials within 8 ft. from the doors 	No utility boxes shown	TBD	<ol style="list-style-type: none"> 1. Provide proper screening for any transformers. 2. Include the attached city standard screening detail with the other landscape details.
Building Foundation Landscape Requirements (Sec 5.5.3.D)				
Interior site landscaping SF	<ul style="list-style-type: none"> ▪ Equal to entire perimeter of the building addition (less paved vehicular access areas or man doors) x 8 with a minimum width of 4 ft. ▪ Phase A: 292 lf x 8ft = 2336 SF ▪ Phase B: 268 lf x 8ft = 2144 SF 	<p>Phase A: 2419 SF Grasses are provided as temporary landscaping along the north wall of Phase A</p> <p>Phase B: It doesn't seem that 2144sf of landscape area is proposed around the Phase B foundation</p>	TBD	<ol style="list-style-type: none"> 1. Please add foundation landscaping area labels showing SF of each foundation landscape area. 2. Lawn area cannot count toward the landscape requirement. 3. A landscape waiver is required to locate some of the landscaping away from the building foundation. <i>If the landscaping provided is sufficient in area and height to provide a visual presence for the foundation, it could be supported by staff.</i> 4. Please add the required landscaping along the east wall of Phase B to meet the required area and label that area in SF as well.

Item	Required	Proposed	Meets Code	Comments
<i>Zoning Sec 5.5.3.D.ii. All items from (b) to (e)</i>	If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space	70% of the building addition facing 10 Mile Road is proposed to be landscaped.	Yes	
Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)				
Planting requirements (Sec. 5.5.3.E.iv)	<ul style="list-style-type: none"> ▪ Clusters of large native shrubs shall cover 70-75% of the basin rim area ▪ 10" to 14" tall grass along sides of basin ▪ Refer to wetland for basin mix 	None proposed – the pond is not being enlarged	Yes	<ol style="list-style-type: none"> 1. If the pond needs to be enlarged, please provide the required detention basin landscaping for the added area. 2. If it does not need to be enlarged, then only shrubs missing from the original project need to be planted.
Phragmites Control (Sec 5.5.6.C)	<ul style="list-style-type: none"> ▪ Any and all populations of <i>Phragmites australis</i> on site shall be included on tree survey. ▪ Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site. 	<ul style="list-style-type: none"> ▪ A number of <i>Phragmites</i> populations are shown. ▪ Notes regarding removal are provided. 	TBD	Please add a note with the <i>Phragmites</i> control plan stating that additional treatments will probably be required in subsequent years to achieve complete eradication.
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date (LDM 2.i. & Zoning Sec 5.5.5.B)	<ul style="list-style-type: none"> • Provide intended dates • Should be between March 15 and November 15. 	April 1 – Nov 15	Yes	
Maintenance & Statement of intent (LDM 2.m & Zoning Sec 5.5.6)	<ul style="list-style-type: none"> • Include statement of intent to install and guarantee all materials for 2 years. • Include a minimum one cultivation in June, July and August for the 2-year warranty period. 	The 2-year guarantee note is provided, but not the cultivation note.	No	Please add the note regarding the cultivation.
Plant source (LDM 2.n & LDM 3.a.(2))	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
Irrigation plan (LDM 2.s.)	A fully automatic irrigation system and a method of draining or	No	No	<u>Need for final site plan</u>

Item	Required	Proposed	Meets Code	Comments
	alternate means of providing water for establishment and long-term survival is required with Final Site Plan			
Other information (LDM 2.u)	Required by Planning Commission	NA		
Establishment period (Zoning Sec 5.5.6.B)	2 yr. Guarantee	Yes	Yes	
Approval of substitutions. (Zoning Sec 5.5.5.E)	City must approve any substitutions <u>in writing</u> prior to installation.	Yes	No	Please add "in writing" to note on plan
Plant List (LDM 2.h.) - Include all cost estimates				
Quantities and sizes	Refer to LDM suggested plant list	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names		<ul style="list-style-type: none"> ▪ No trees are proposed. ▪ None of the species proposed are native to Michigan 	No	<ol style="list-style-type: none"> 1. At least 50% of the species used must be native to Michigan (by species count, not plant count). 2. Please add (2) 2.5" cal. river birches to the list. It is not native to Michigan but doesn't have to count toward the total number of species proposed since they are replacements.
Type and amount of lawn		None shown	TBD	Include the quantity of seed or sod on plant list if any is used for site restoration
Cost estimate (LDM 2.t)		For all new plantings, mulch and sod as listed on the plan	Provided	Yes
Planting Details/Info (LDM 2.i) - Utilize City of Novi Standard Details				
Canopy Deciduous Tree	Refer to LDM for detail drawings	No	No	The river birches will need to be restored so the planting detail should be included on the plan.
Evergreen Tree		No - no trees proposed		
Multi-stem Tree		No - no trees proposed		
Shrub		Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		No	No	The river birches will need to be restored so the planting detail should be included on the plan.
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	No	No	Please add a tree protection detail on the Demolition Plan for the fencing to protect the remaining river birches to remain.
Other Plant Material Requirements (LDM 3)				
General Conditions (LDM 3.a)	Plant materials shall not be planted within 4 ft. of property line	NA		
Landscape tree credit (LDM3.b.(d))	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	No		
Plant Sizes for ROW, Woodland replacement and others (LDM 3.c)	Refer to Landscape Design Manual for requirements	Yes	Yes	
Plant size credit (LDM3.c.(2))	NA	No		
Prohibited Plants (LDM 3.d)	No plants on City Invasive Species List	None proposed	Yes	
Recommended trees for planting under overhead utilities (LDM 3.e)	Label the distance from the overhead utilities	NA		
Collected or Transplanted trees (LDM 3.f)		None		
Nonliving Durable Material: Mulch (LDM 4)	<ul style="list-style-type: none"> ▪ Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth ▪ Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate. ▪ Refer to section for additional information 	No	No	Include this information in planting details.

Item	Required	Proposed	Meets Code	Comments
<p>NOTES:</p> <ol style="list-style-type: none">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. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 and the Landscape Design Manual for the appropriate items under the applicable zoning classification.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.				

FAÇADE REVIEW



December 19, 2019

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

Façade Review Status Summary:
Approved, Section 9 Waiver Recommended.

Re: **FACADE ORDINANCE REVIEW**
Oak Pointe Church Addition, JSP19-44
 Façade Region: 1, Zoning District: RA

Dear Ms. McBeth;

The following is the Façade Review for the above referenced project based on the drawings and sample board prepared by S3 Architecture, dated 11/27/19. The proposed percentages of materials on each elevation are shown in the table below. The maximum percentage allowed by the Ordinance is shown in the right hand column.

	South (Front)	East	North	West	Façade Ordinance Section 5.15 Maximum
Brick (existing)	56%	53%	66%	UN	100% (30% Minimum)
CMU	1%	1%	0%	UN	10%
Flat Metal Panel	4%	9%	13%	UN	50%
Standing Seam Metal	0%	12%	0%	UN	25%
Perforated Corrugated Metal Panel	26%	25%	1%	UN	0%
Stone	0%	0%	1%	UN	50%
EIFS (temporary)	26%	25%	19%	UN	25%
UN = Unaltered					

This project is considered an addition as described in Section 5.15.7 of the Façade Ordinance. As shown above the all façade materials are in full compliance with the Ordinance with the exception of the Perforated Corrugated Metal Panels. In this case the Perforated Corrugated Metal Panels are a continuation of an existing material. This design meets the requirements of Section 5.15.17 which allows a continuation of existing materials on an addition providing the addition does not exceed 100% of the existing floor area and that the visual effect is to make the addition appear as part of the original building.

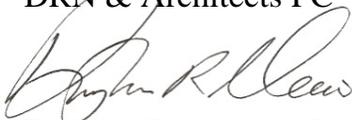
Recommendation – For the reasons stated above it is our recommendation that the design is consistent with the intent and purpose of the Façade ordinance and that t Section 9 Waiver be granted for the overage of Perforated Corrugated Metal Panels.

Notes to the Applicant:

1. Façade Ordinance requires façade inspection(s) for all projects. Materials and colors must be consistent with those displayed on the approved sample board or otherwise approved. It is the applicant’s responsibility to request the inspection of each façade material at the appropriate time, prior to installation. 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>.
2. All roof top equipment must be concealed from view from all vantage points both on-site and off-site using extended parapets or roof screens constructed of materials in compliance with the Façade Chart and harmonious with other façade materials.
3. Changes in façade materials and/or colors from what was submitted and approved will require reapplication. It is the applicant’s responsibility to submit such changes prior to the aforementioned façade inspection request.

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

Sincerely,
DRN & Architects PC



Douglas R. Necci, AIA

FIRE REVIEW



December 16, 2019

TO: Barbara McBeth- City Planner
Sri Ravali Komaragiri- Plan Review Center
Lindsay Bell-Plan Review Center
Madeleine Kopko-Planning Assistant

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Andrew Mutch

Laura Marie Casey

Kelly Breen

Hugh Crawford

Justin Fischer

City Manager
Peter E. Auger

**Director of Public Safety
Chief of Police**
David E. Molloy

Fire Chief
Jeffery R. Johnson

Assistant Chief of Police
Erick W. Zinser

Assistant Chief of Police
Scott R. Baetens

Assistant Fire Chief
John B. Martin

RE: Oak Pointe Church Addition

PSP# 19-0167
PSP# 19-0154 (Pre-App)

Project Description:

Build a 14,920 S.Q.F.T. addition to an existing structure.

Comments:

- **All** fire hydrants **MUST** be installed and operational prior to any combustible material is brought on site. **IFC 2015 3312.1**
- **NO** loose furniture will be brought into the new addition until the fire suppression system and fire alarm systems have been tested.

Recommendation:

Meets Fire Department Standards

Sincerely,

A handwritten signature in black ink, appearing to read 'KSP', written over a horizontal line.

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

cc: file

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

cityofnovi.org

APPLICANT RESPONSE LETTER

January 6, 2020

Mr. Victor Boron
Civil Engineer
Department of Public Works,
26300 Lee Begole Drive
Novi, MI 48375

RE: Engineering Review of Pre-Application Submittal
JSP 19-0044 Oak Pointe Church Addition

Dear Mr. Boron:

In response to your engineering review letter regarding Engineering Review of Pre-Application Submittal dated October 30, 2019 for JSP 19-0044 Oak Pointe Church Addition, we respectfully offer the following comments:

General

1. Noted. We have provided information related to the utilities, easement, etc. in our Preliminary Site Plan submission.
2. We acknowledge the site plan shall be designed in accordance with the Design and Construction Standards (Chapter 11).
3. We have submitted a complete set of Preliminary Site Plan.
4. Noted.
5. Noted. We have addressed all comments with the Preliminary Site Plan submittal.

Utilities

6. We have clearly labeled existing utilities, such as water main and sanitary sewer on our Preliminary Site Plan.

Storm Water Management Plan

7. Noted.
8. Noted.

Flood Plain

9. Noted.

Off-Site Easements

10. Noted.

Please review these changes and advise if you need additional modifications.

Sincerely,

FLEIS & VANDENBRINK

A handwritten signature in black ink, appearing to read 'Yadong Dong', written in a cursive style.

Yadong Dong, PhD, PE, LEED AP
Project Manager



33610 grand river ave.
farmington, mi 48335
248.427.0007

Pre-application Response Letter for Preliminary Site Plan Approval

Oak Pointe Church Novi - Addition

Zoning and Use Requirements

Phasing

Updated phasing plan is provided (SPA-5). Architectural/Landscape plans use consistent numbering with phasing master plan.

Bicycle Parking General Requirements

No new bicycle parking will be provided.

Sidewalk requirements

Building Code

Egress Exits that are labeled as exits have connecting sidewalks to public right of way (SPA-2).

Other Permit and Legal Requirements

Economic impact

Total cost of proposed building and site improvements is provided on site plan (Sheet SPA-2).

Lighting and Other Equipment Requirements

Exterior lighting

Photometric plan is provided.

Roof top appurtenances screening

Roof top equipment screened with perforated corrugated screen wall.

Landscape Plan

Scale

The landscape plan is revised to be at an engineering scale (SPA-4).

Project information

Project name and Address are located on landscape plan (SPA-4).

Owner/developer contact info

Address and number of owner are included on landscape plans (SPA-4).

Sealed by L.A.

A live signature of the landscape architect is included on landscape plan (SPA-4).

Miss Dig Note

Miss Dig note is included on landscape plan (SPA-4).

Zoning

Zoning of adjacent properties is provided on landscape plan (SPA-4).

Existing plant material existing woodlands or wetlands

No existing plants exist within 50' of disturbance, except for one River Birch tree included on landscape plan. No trees are planned to be added or removed.

Soil Types

Soil information is not provided on landscape plan and the location of the soil data (C4) is indicated with a note on the landscape plan.

Existing and Proposed Utilities

Utility lines are shown on landscape plan with reference to civil sheet C2 for more information.

Existing and proposed lighting is shown on landscape plan.

Plantings around fire hydrants

No new fire hydrants shown on the landscape plan. At least 10' are provided between manholes and catch basins and plantings (no new trees are proposed).

Landscape area

All areas of site are indicated with landscaping.

Screening of outdoor storage, loading/unloading

Proper screening is provided by existing berm and landscaping. The location of the berm is indicated on landscape plan.

Transformer/Utility Boxes

No new transformers/utility boxes in area of work.

Interior site landscaping SF

Foundation landscaping area is shown. 4' wide foundation landscaping of redhead fountain grasses is provided along north wall of addition.

Phragmites control

Populations of Phragmites Australis were found on the site. These are to be removed, as noted on Landscape Plan (SPA-4).

Landscaping notes

Installation date - End planting date is revised to Nov. 15.

Maintenance and Statement of intent - Statement of intent to install and guarantee all materials for 2 years is included (SPA-4).

Irrigation Plan - Irrigation plan will be provided for final site plan submission.

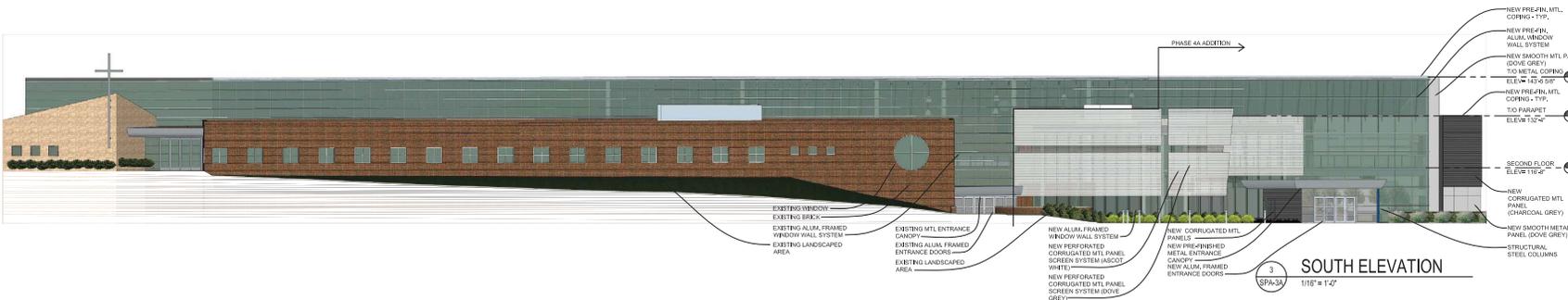
Establishment period – 2 year guarantee note is provided as note on plan.

Plant list

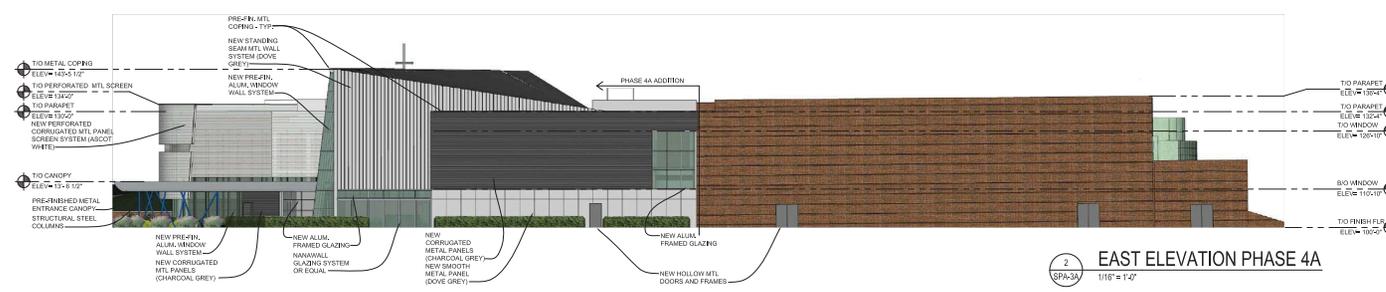
At least 50% of species are native to Michigan. No plants from the prohibited species list are used. No seed or lawn is used, existing is to remain.

Nonliving Durable Material: Mulch

2" depth, natural color, finely shredded, hardwood bark mulch for shrubs is included on planting details (SPA-4).



3 SOUTH ELEVATION
 1/16" = 1'-0"



2 EAST ELEVATION PHASE 4A
 1/16" = 1'-0"



1 NORTH ELEVATION PHASE 4A
 1/16" = 1'-0"

EAST ELEVATION MATERIAL CALCULATIONS - SECTION 5.15 OF CITY OF NOVI CODE OF ORDINANCES

MATERIAL	PERCENT (%) PROPOSED	PERCENT (%) ALLOWED	CONFORMS?	REMARKS
BRICK	4,890 SF # 53%	100%	YES	-
CMU	27 SF # 0.3%	10%	YES	-
SMOOTH METAL PANEL	800 SF # 8%	50%	YES	-
STANDING SEAM METAL PANEL	1,060 SF # 11.5%	25%	YES	-
GLAZING	810 SF	-	-	SO FT EXCLUDED FROM TOTAL SQ FT
PERFORATED CORRUGATED MTL PANEL	848 SF # 9%	-	-	MAT. USE BASED ON CITY PLANNING APPROVAL
CORRUGATED MTL PANEL	1443 SF # 15.8%	0%	-	MAT. USE BASED ON CITY PLANNING APPROVAL
SMOOTH MTL PANEL	122 SF # 1.2%	50%	YES	-

NOTES: EAST ELEVATION TOTAL FACADE AREA: 9,250 SF

SOUTH ELEVATION MATERIAL CALCULATIONS - SECTION 5.15 OF CITY OF NOVI CODE OF ORDINANCES

MATERIAL	PERCENT (%) PROPOSED	PERCENT (%) ALLOWED	CONFORMS?	REMARKS
BRICK	5,235 SF # 56%	100%	YES	-
CMU	120 SF # 1%	10%	YES	-
SMOOTH METAL PANEL	384 SF # 4%	50%	YES	-
STANDING SEAM METAL PANEL	-	25%	YES	-
GLAZING	6,115 SF	-	-	SO FT EXCLUDED FROM TOTAL SQ FT
PERFORATED CORRUGATED MTL PANEL	2,166 SF # 23%	-	-	MAT. USE BASED ON CITY PLANNING APPROVAL
CORRUGATED MTL PANEL	283 SF # 3%	0%	-	MAT. USE BASED ON CITY PLANNING APPROVAL

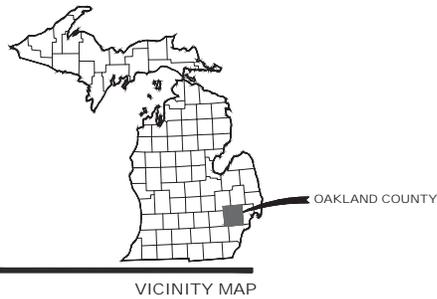
NOTES: SOUTH ELEVATION TOTAL FACADE AREA: 9,341 SF

NORTH ELEVATION MATERIAL CALCULATIONS - SECTION 5.15 OF CITY OF NOVI CODE OF ORDINANCES

MATERIAL	PERCENT (%) PROPOSED	PERCENT (%) ALLOWED	CONFORMS?	REMARKS
BRICK	9,291 # 81%	100%	YES	-
STONE	150 SF # 0.9%	50%	YES	-
SMOOTH METAL PANEL	627.5 SF # 5.5%	50%	YES	-
GLAZING	1,083 SF	-	-	SO FT EXCLUDED FROM TOTAL SQ FT
EPDM	2,668 SF # 11.5%	25%	YES	-
CORRUGATED MTL PANEL	47 SF # 0.3%	0%	-	MAT. USE BASED ON CITY PLANNING APPROVAL
SMOOTH MTL PANEL	1,099 SF # 6.3%	50%	YES	-

NOTES: NORTH ELEVATION TOTAL FACADE AREA: 15,090 SF





CITY OF NOVI OAKLAND COUNTY, MICHIGAN

OAK POINTE CHURCH ADDITION NOVEMBER, 2019



LOCATION MAP

INDEX OF DRAWINGS

DESCRIPTION	SHEET NUMBER
COVER SHEET	CS
DEMOLITION PLAN	C1
SITE LAYOUT, GRADING & UTILITY PLAN	C2
STORM WATER MANAGEMENT CALCULATIONS	C3
SOIL EROSION & SEDIMENT CONTROL PLAN	C4
CITY PAVING & STORM SEWER DETAILS	DT1-DT4
OAKLAND COUNTY SESC DETAILS	DT5

ENGINEER:
FLEIS & VÄNDENBRINK ENGINEERING
27725 STANSBURY BLVD., SUITE 195
FARMINGTON HILLS, MICHIGAN 48334

ARCHITECT:
S3 ARCHITECTURE
33610 GRAND RIVER
FARMINGTON, MICHIGAN 48335

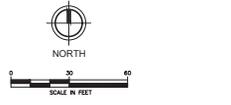
ISSUED	DATE
APP SUBMIT	10.04.19
PRELIMINARY	11.27.19

S³
architecture
33610 grand river
farmington, mi 48335
313architect.com
tel 248.427.0007

OAK POINTE CHURCH NOVI - ADDITION
50200 W. TEN MILE ROAD, NOVI, MI 48374

27725 Stansbury Blvd, Suite #195
Farmington Hills, MI 48334
Date 09.27.2019
Scale NONE
Drawn by AWC
Approved by YD
Job 841340
Sheet Name
COVER SHEET
Sheet No.
CS





NOTE: THE VERTICAL DATUM USED ON THESE PLANS WAS PROVIDED BY ARCHITECT.

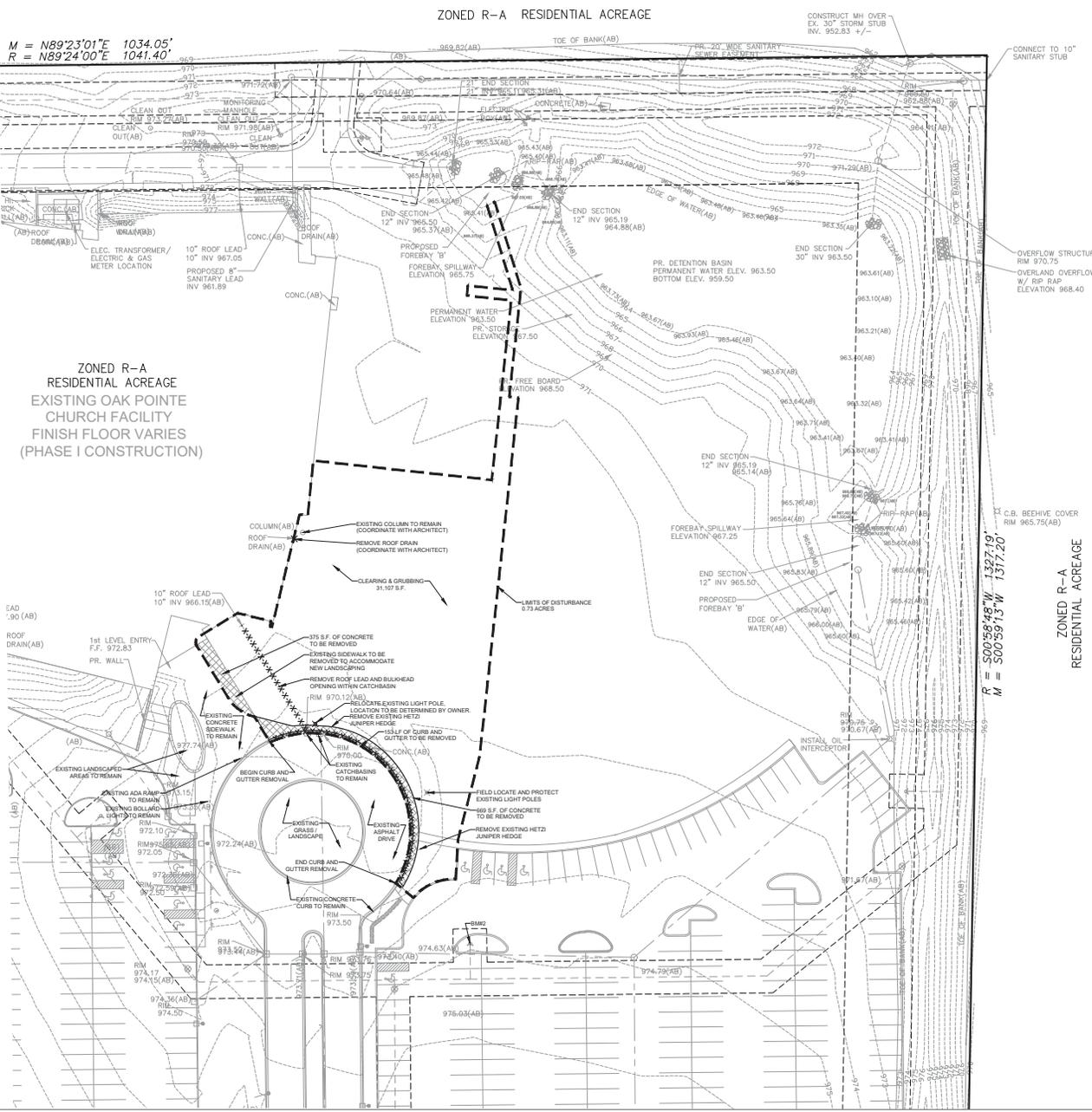
FLOODPLAIN NOTE:
ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP (PANEL #26125C0608F - DATED SEPT 29, 2006), ZONE X - AREA OF MINIMAL FLOOD HAZARD.

REMOVAL LEGEND

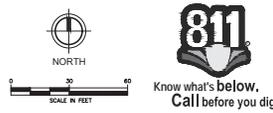
SYMBOL	DESCRIPTION
XXXXX	CURB OR UTILITY TO BE REMOVED
[Cross-hatched box]	PAVEMENT TO BE REMOVED

- GENERAL NOTES:**
- THE LOCATION OF UTILITIES DEPICTED ON THIS DRAWING WERE DETERMINED FROM ON-SITE OBSERVATION AND AVAILABLE RECORDS AS PROVIDED BY THE UTILITY OWNERS. FLEIS & VANDENBRINK ENGINEERING, INC. IS NOT RESPONSIBLE FOR THE ACCURACY OF THE LOCATIONS AS SHOWN AND DOES NOT MAKE ANY ASSURANCES THAT THE UTILITY OWNERS HAVE PROVIDED US ALL RELEVANT INFORMATION PERTAINING TO THIS SITE.
 - FLEIS & VANDENBRINK ENGINEERING, INC. WAS NOT ASKED TO REVIEW THIS PROJECT FOR ENVIRONMENTAL CONCERNS.
 - FLEIS & VANDENBRINK ENGINEERING, INC. HAS NOT REVIEWED THIS PROJECT FOR SOIL CONTENT. WE SUGGEST THAT THE OWNER CONTACT A SOIL ENGINEER WITH REGARD TO THE SOIL CONDITIONS. SOIL BEARING SUPPORT FOR THE FOUNDATION AND SLAB WORK SHALL BE TESTED BY AN INDEPENDENT TESTING SERVICE. LICENSED TO PROVIDE SUCH SERVICE PRIOR TO BEGINNING SUCH FOUNDATION AND SLAB WORK. TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURES LOCATIONS WAS PROVIDED BY OTHERS TO THE DESIGNER. FLEIS & VANDENBRINK ENGINEERING, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OMISSIONS RESULTING FROM SURVEY INACCURACIES.
 - THE PROPERTY DESCRIPTION AND EASEMENTS DEPICTED ON THIS SITE PLAN WERE PROVIDED BY THE OWNER AND AVAILABLE RECORDS.

- DEMOLITION NOTES:**
- REMOVE CONCRETE PAVEMENT AND CONCRETE CURB AND GUTTER TO FULL DEPTH. SAWCUT FULL DEPTH WHERE NEW PAVEMENT WILL BE PLACED ADJACENT TO EXISTING CONCRETE. SAWCUT FULL DEPTH TO NEAREST JOINT WHERE SHOWN. REMOVAL LIMITS TO BE FIELD VERIFIED BY ENGINEER.
 - CLEAR AND GRUB TO THE LIMITS SHOWN, INCLUDING REMOVAL OF SIGNS, POST, FOOTINGS, GRAVEL, BRUSH, SHRUBS, GRASS, AND TREES NOT INDICATED FOR PROTECTION, INCLUDING ROOTS, STRIP TOPSOIL AND STOOPPILE ON SITE IN DESIGNATED LOCATION.
 - PRIOR TO BEGINNING ANY OF THIS WORK THE CONTRACTOR SHALL NOTIFY THE CITY OF NOVI DPW DEPARTMENT AND FILL OUT THE NECESSARY FORMS OR PERMITS.
 - THE CONTRACTOR SHALL FIELD LOCATE AND VERIFY ALL EXISTING UTILITIES AND OTHER SITE FEATURES PRIOR TO DEMOLITION, AND REPORT ANY DISCREPANCIES. BEFORE CONSTRUCTION OF ANY SUBSURFACE WORK CONTACT MISS DIG FOR CORROBORATION OF UTILITY LOCATIONS AND EXERCISE CAUTION. TELECOMMUNICATIONS, ELECTRIC, SECURITY, IRRIGATION AND OTHER UNDERGROUND UTILITIES ARE SHOWN BASED ON OBSERVABLE EVIDENCE AND RECORDS PROVIDED BY ARCHITECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR OR REPLACE ANY DAMAGE TO EXISTING UTILITIES.
 - ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES. ALL DEMOLITION OPERATIONS SHALL COMPLY WITH MISHA REGULATIONS INsofar AS THEY APPLY TO THE REQUIRED WORK. A SOIL REMEDIATION CONTROL PERMIT WILL BE REQUIRED PRIOR TO DEMOLITION.
 - ALL DEMOLITION MATERIAL SHALL BE PROPERLY REMOVED FROM THE SITE AND DISPOSED OF IN A LEGALLY DESIGNATED DISPOSAL AREA. NO ON-SITE BURNING WILL BE ALLOWED WITHOUT PROPER PERMISSION. PERMITS AND FEES FOR DISPOSAL OF DEMOLITION MATERIAL SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL DEMOLISH AND REMOVE ANY ITEMS REMAINING FROM THE EXISTING BUILDING IN ITS ENTIRETY INCLUDING WALLS, FOUNDATIONS AND FOOTINGS. ALL BUILDING DRAINS AND UTILITY LEADS SHALL BE LOCATED AND PROPERLY PLUGGED. UTILITY LEAD WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES.
 - BACKFILL EXCAVATED AREAS WITH CLEAN GRANULAR FILL COMPACTED TO NINETY-FIVE PERCENT (95%) OF THE MATERIAL UNIT WEIGHT BY MODIFIED PROCTOR.
 - AT THE CONCLUSION OF THE DEMOLITION OPERATIONS, THE ENTIRE WORK AREA SHALL BE LEFT IN A CLEAN CONDITION WITH ANY PROTECTIVE DEVICES AND BARRIERS REMOVED. ALL EXPOSED AREAS SHALL BE SUITABLY TOPSOILED, SEEDED AND MULCHED.



ISSUED	DATE
APP SUBMIT	10.04.19
PRELIMINARY	11.27.19
S3 architecture	
<small>32630 grand river farmington, mi 48335 313.486.6666 s3architect.com tel 248.427.0007</small>	
OAK POINTE CHURCH NOVI - ADDITION 50200 W. TEN MILE ROAD, NOVI, MI 48374	
F&V	
<small>27725 Stony Brook, Suite 100 Farmington Hills, MI 48334</small>	
Date	09.27.2019
Scale	AS SHOWN
Drawn by	AWC
Approved by	YD
Job	841340
Sheet Name	DEMOLITION PLAN
Sheet No.	C1



GENERAL PAVING NOTES
 FINISH GRADE SHALL BE THE THIRTIETH AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:
 CONCRETE: PORTLAND CEMENT TYPE IA (AS-BRAND) WITH A MINIMUM COMPRESSION STRENGTH OF 4000 PSI AND A SLUMP OF 3 TO 4 INCHES.
 PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MOISTURE PROOFING) PRIOR TO PLACEMENT OF PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
 ALL CONCRETE PAVEMENT, DRIVEWAYS, CURBS & GUTTERS, ETC., SHALL BE SPRAY COURED WITH BRUSH APPLIED CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.
 ALL CONCRETE JOINTS SHALL BE FILLED WITH HOT POURED POLYURETHANE ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT CREATION. FEDERAL SPECIFICATION SS-554.
 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE COUNTY OF WAYNE, MICHIGAN.
 ALL TOP OF CURB ELEVATIONS AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 4" CONCRETE CURB UNLESS OTHERWISE NOTED.
 ALL SIDEWALK RAMPS CONFORMING TO PUBLIC ACT NO. 8, 1963, SHALL BE INSTALLED AS INDICATED ON THE PLANS.
 EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.
 FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 6 INCHES THICK TO 95% OF THE MAXIMUM DENSITY (MOISTURE PROOFING) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.

LEGEND

	PROPOSED CONCRETE PAVEMENT
	EXISTING SANITARY SEWER
	SAN. CLEAN
	EXISTING WATERMAIN
	EXISTING STORM SEWER
	E. & Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	EXISTING GAS MAIN
	EXISTING SANITARY SEWER
	PR. WATER MAIN
	PR. STORM SEWER
	PR. & Y. CATCH BASIN
	PR. TOP OF CURB ELEVATION
	PR. OUTER ELEVATION
	PR. TOP OF WALK ELEVATION
	PR. TOP OF PAVT. ELEVATION
	FINISH GRADE ELEVATION

STORM SEWER NOTES
 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY. THE MUNICIPALITY STANDARDS NOTES, DETAILS AND SPECIFICATIONS SHALL BE CHECKED WITH THE FIELD ENGINEER PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY PLAN INCONSISTENCY AND/OR UTILITY CONFLICTS.
 ALL STORM SEWER TRENCHES UNDER OR WITHIN FIVE (5) FEET OF EXISTING OR PROPOSED PAVEMENT SHOULD BE BACKFILLED WITH MOST CLASS 1 MATERIAL (SAND) AND BE MACHINE COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S MAXIMUM DENSITY. PAVEMENT SHALL INCLUDE PARKING LOTS, DRIVE APPROACHES, CURBS & GUTTER AND ADJACENT WALLS.
 ALL STORM SEWER PIPE SHALL BE INSTALLED ON CLASS "D" BEDDING OR BETTER UNLESS OTHERWISE INDICATED ON THE PLANS.
 STORM SEWER SHALL BE OF THE TYPE, SIZE & CLASS DESIGNATION INDICATED ON THE PLANS AND SHALL BE INSTALLED AT THE PROPOSED LINE AND GRADE INDICATED.
 ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM SPECIFICATION C-76, CL. V.
 ALL MANHOLE CATCH BASIN INLET, RIM AND DRAIN FRAMES AND COVERS SHALL BE AS INDICATED ON THE PLANS IN ACCORDANCE WITH MUNICIPALITY STANDARDS.
 THE CONTRACTOR SHALL NOTIFY MISS DIO (1-800-462-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
 EXACT GRADES AND INVERTS OF PROPOSED STORM SEWER ARE TO BE CHECKED WITH THE FIELD ENGINEER PRIOR TO AND DURING INSTALLATION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY PLAN INCONSISTENCY AND/OR UTILITY CONFLICTS.
 ALL STORM SEWER PIPE JOINTS SHALL BE "PREMIUM JOINT" MOISTURE PROOFED TORQUE (MPT) WITH SYNTHETIC RUBBER GASKETS CONFORMING TO ASTM SPECIFICATION C-443 & C-361 UNLESS OTHERWISE INDICATED ON THE PLANS. ALUMINUM JOINT CONNECTIONS MUST BE STANDARD GROOVED TORQUE WITH GASKET (DENTIT #10 JOINT COMPOUND OR EQUAL).
 FACTORY MANUFACTURED PRECAST THE SECTIONS SHALL BE USED FOR ROOF DRAINS AND/OR SWAMP PUMP LOADS AND LATERALS WHERE INDICATED ON THE PLANS. BLIND TOP CONNECTIONS INTO STORM SEWER WILL NOT BE PERMITTED BY BREAKING PIPE WALL.
 THE UNDERGROUND SITE CONTRACTOR SHALL INSTALL ALL STORM SEWER BUILDING LEADS TO WITHIN FIVE (5) FEET OF PROPOSED BUILDING.
 GROUDED RIP RAP SHALL BE INSTALLED AT THE ENDS OF ALL CURBS AND END SECTIONS. GROUDED RIP RAP SHALL, HOWEVER, BE INSTALLED AT OUTLET PORTS IN DETENTION AND SEDIMENTATION FACILITY. THE MINIMUM WIDTH OF THE RIP RAP SHALL BE TWICE THE OUTSIDE DIAMETER OF THE PIPE. THE RIP RAP SHALL EXTEND FROM THE BOTTOM OF THE SLOPE TO THE PIPE INLET.
 THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND INSURANCE ARRANGING FOR ALL SITE INSPECTION.

STORM STRUCTURE SCHEDULE

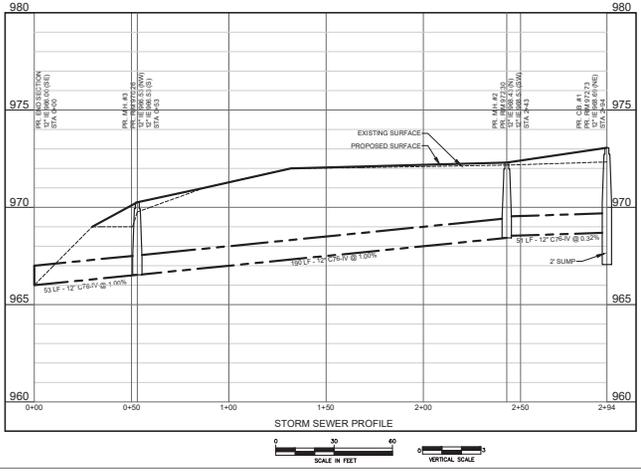
DESCRIPTION	QUANTITY	UNITS
2" DIA. INLET	2	EA.
RM 972.30		
RM 972.75		
12" NE INV. 968.69		
12" N INV. 968.43		
4" DIA. MANHOLE	2	EA.
2" DIA. INLET	1	EA.

ESTIMATED QUANTITIES

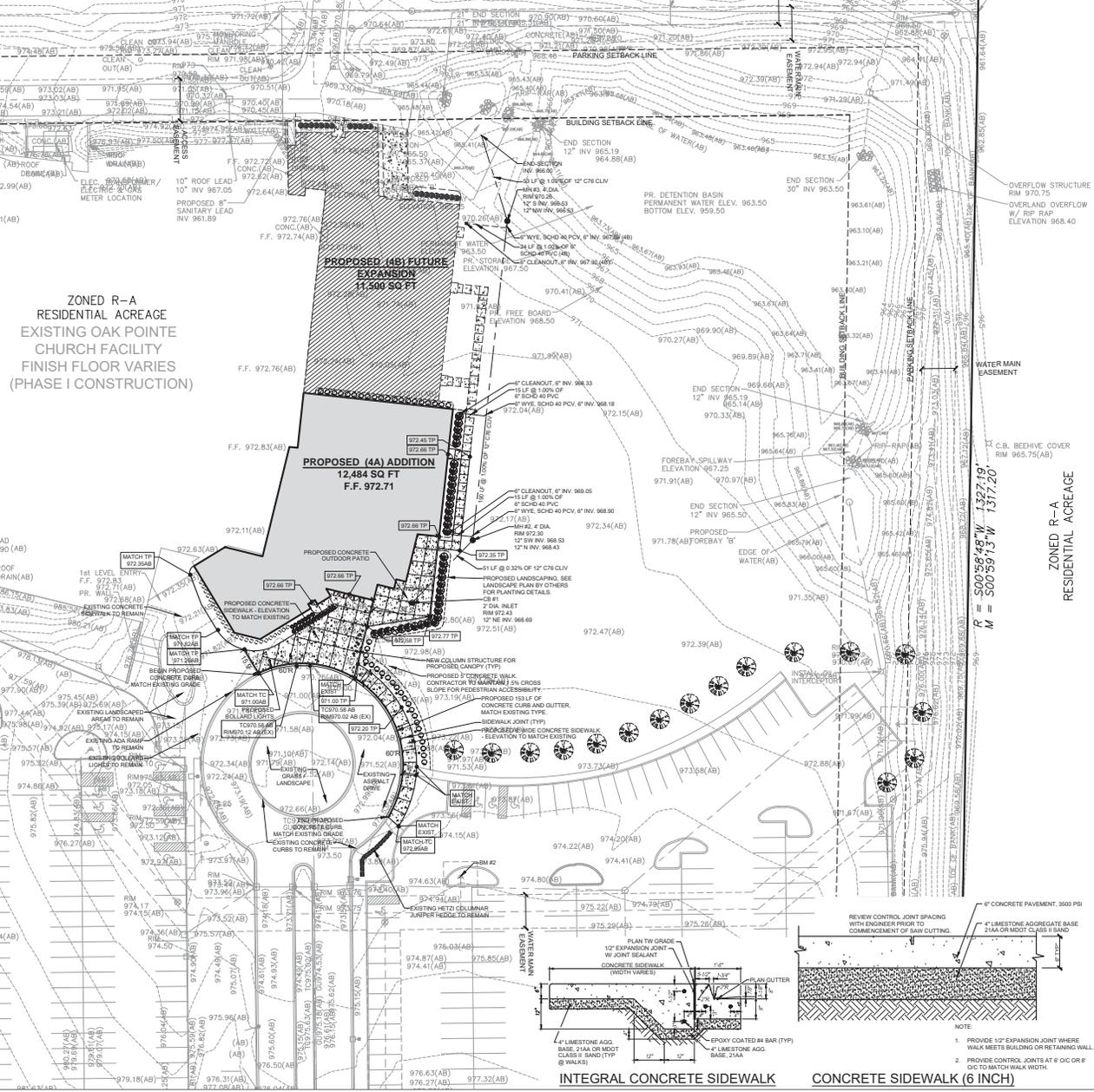
DESCRIPTION	QUANTITY	UNITS
6" CONCRETE PAVEMENT & SIDEWALK	3,000	S.F.
4" CONCRETE CURB & GUTTER	153	L.F.

NOTE
 ALL WORK SHALL CONFORM TO THE CITY OF NEW STANDARDS AND SPECIFICATIONS.
 ALL SITE GRADING SHALL BE A MAXIMUM OF 1:4 OR 2% PER CITY OF NEW REQUIREMENTS.

BUILDING DEPT. NOTE
 ALL ACCESSIBLE ROUTES INCLUDING RAMPS, SLOPES, COUNTER SLOPES ETC. FOR THE PARKING LOT IN ADDITION THE RAMP SLOPES IN THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH CODE SECTION 401.02(AND) A117.3.
 MAX RAMP SLOPE SHALL NOT EXCEED 1:12 OR 8.33%
 MAX RUNNING SLOPE WALK SURFACE SHALL NOT EXCEED 1:20 OR 5%
 MAX CROSS SLOPE WALK SURFACE SHALL NOT EXCEED 1:48 OR 2.08%
 THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND INSURANCE ARRANGING FOR ALL SITE INSPECTION.



$M = N89^{\circ}23'01''E \ 1034.05'$
 $R = N89^{\circ}24'00''E \ 1041.40'$



ISSUED DATE
 APP SUBMIT 10.04.19
 PRELIMINARY 11.27.19

S3
 architecture

13261 grand river terrington, MI 48335
 313.486.6600
 info@s3arch.com

OAK POINTE CHURCH NOVI - ADDITION
 50200 W. TEN MILE ROAD, NOVI, MI 48374

ZONED R-A RESIDENTIAL ACREAGE

F&V
 2725 Stanley Rd., Suite 100
 Farmington Hills, MI 48334
 Date: 09.27.2019
 Scale: AS SHOWN
 Drawn by: AWC
 Approved by: YD
 Job: 841340
 Sheet Name: SITE LAYOUT, GRADING & UTILITY PLAN
 Sheet No.: C2

EXISTING - ASBUILT

As-built Detention Basin Volume Calculation		
Formula: Conical Frustum		
Formula: $V = 1/3 \times h \times (A1 + (A1 \times A2) \wedge 0.50 + A2)$		
Area, A1:	32,495.00	Square Feet
Area, A2:	15,956.00	Square Feet
Storage Elevation:	967.50	Feet
Outlet Elevation:	963.50	Feet
Depth of Storage, h:	4.00	Feet
Volume Provided:	94,961.84	Cubic Feet
Job No:	3 - B814	

EXISTING - ASBUILT

Detention Calculations - Oakland County Method		
(10) Year Storm Event - With Outlet (Orifice)		
Overall Development:		
Contributing Area:	26.210	Acres
Allowable Outflow, Qa :	0.200	CFS / Acre
Runoff Coefficient, C :	0.515	Imperviousness
Maximum Allowable Outflow, Qo :	0.388	CFS / Acre * Imper
Ts Storage Time (10 Yr):	104.994	Minutes
Vs Storage Time (10 Yr):	6,849.701	CF / Acre * Imperv.
Vt Total Volume (10 Yr):	92,458.295	Cubic Feet
Volume Required :	92,458.295	Cubic Feet

PROPOSED

Detention Basin			
(OAKLAND COUNTY FORMULA - 10-YEAR STORM)			
Job Name: Oak Pointe Church			
Job No.: 841340			
		Designed by: YD	
		Checked by: YD	
Total Area Tributary (At) =	0.64 ac		
Area Label	A (sf)	C	A*C
Lawn Area	28,082	0.20	5,616
Hard Surface	0.80	0	0
Roof Area	0.80	0	0
Sum	28,082	1.80	5,616
Overall site average C factor :	0.20		
Enter Standard Allowable Discharge (q):	<input type="text" value="0.15"/>		
Overall site C factor :	<input type="text" value="0.20"/>		
Overall site acreage contributing to the basin (A):	<input type="text" value="0.64"/> Ac.		
Maximum allowable outflow, Qa (q * A):	<input type="text" value="0.10"/> CFS		
VOLUME CALCULATIONS			
Qo = [(allowable outflow, Qa) / (acreage)(runoff coefficient)]			
= 0.781 CFS/(acre*imperviousness)			
Storage time calculation:			
T = -25 + sqrt(6562.5 / Qo) (10 year storm)			
T = 66.65 min.			
Maximum volume of storage per acre imperviousness:			
Vs = (10,500 (T) / (T + 25)) - 40(Qo)(T) (10 year storm)			
Vs = 5553.03 CF/(acre*imperviousness)			
Total volume of storage REQUIRED for the entire site:			
Vt = (Vs)(site acreage)(runoff coefficient)			
Vt = 710.79 CF (VOLUME REQUIRED)			

PROPOSED

Detention Basin Calc			
(OAKLAND COUNTY FORMULA - 100-YEAR STORM)			
Job Name: Oak Pointe Church			
Job No.: 841340			
		Designed by: YD	
		Checked by: YD	
Total Area Tributary (At) =	0.64		
Area Label	A	C	A*C
Lawn Area	0	0.20	0
Hard Surface	4,062	0.80	3,250
Roof Area	24,020	0.80	19,216
Sum	28,082	1.80	22,466
Overall site average C factor :	0.80		
Enter Standard Allowable Discharge (q):	<input type="text" value="0.15"/>		
Overall site C factor :	<input type="text" value="0.80"/>		
Overall site acreage contributing to the basin (A):	<input type="text" value="0.64"/> Ac.		
Maximum allowable outflow, Qa (q * A):	<input type="text" value="0.10"/> CFS		
VOLUME CALCULATIONS			
Qo = [(allowable outflow, Qa) / (acreage)(runoff coefficient)]			
= 0.195 CFS/(acre*imperviousness)			
Storage time calculation:			
T = -25 + sqrt(10312.5 / Qo) (100 year storm)			
T = 204.78 min.			
Maximum volume of storage per acre imperviousness:			
Vs = (16,500 (T) / (T + 25)) - 40(Qo)(T) (100 year storm)			
Vs = 13104.96 CF/(acre*imperviousness)			
Total volume of storage REQUIRED for the entire site:			
Vt = (Vs)(site acreage)(runoff coefficient)			
Vt = 6,709.74 CF (VOLUME REQUIRED)			

NOTE

THE TOTAL TRIBUTARY AREA (0.64 ACRES) INCLUDES THE PROPOSED BUILDING ADDITION WITH SIDEWALKS AND A POSSIBLE FUTURE BUILDING EXPANSION. FROM AS BUILT INFORMATION, THE VOLUME PROVIDED FROM EXISTING POND IS 94,941.84 CUBIC FEET (10-YR STORM); THE VOLUME REQUIRED FROM EXISTING SITE IS 92,458.295 CUBIC FEET (10-YR STORM) WHICH ALREADY COVERED THE FOOTPRINT WHERE THE NEW ADDITION AND PAVEMENT WILL BE CONSTRUCTED. TO AVOID DOUBLE CALCULATION, THE VOLUME OF THE AREA (0.64 ACRES) BASED ON 10-YR STORM NEEDS TO BE SUBTRACTED BEFORE ADDING THE VOLUME OF THE AREA (0.64 ACRES) BASED ON 100-YR STORM TO THE VOLUME REQUIRED FROM EXISTING SITE.

THUSLY, THE NET VOLUME INCREASE IS CALCULATED BELOW:

$$92,458.295 \text{ CFT} - 710.79 \text{ CFT} + 6,709.74 \text{ CFT} - 94,961.84 \text{ CFT} = 3,494.405 \text{ CFT} = 129.5 \text{ CYD}$$

PER DISCUSSION WITH CITY ENGINEER, THE VOLUME INCREASE IS MINIMAL. THE EXISTING DETENTION POND THEREFORE MAY BE ADEQUATE PENDING NOV ENGINEERING REVIEW.

S3
architecture

3300 Grand Ave
Farmington, MI 48335
313.487.0000
MI 248.427.0007

OAK POINTE CHURCH NOVI - ADDITION
50200 W. TEN MILE ROAD, NOVI, MI 48374



2775 Stanbury Blvd, Suite #100
Farmington Hills, MI 48334

Date: 09.27.2019
Scale: AS SHOWN

Drawn by: AWC
Approved by: YD

Job: 841340

Sheet Name: STORM WATER MANAGEMENT CALCULATIONS

Sheet No.: C3



Know what's below.
Call before you dig.



SCALE IN FEET
0 30 60

SOIL EROSION & SEDIMENTATION CONTROL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING SOIL EROSION CONTROL PERMIT FROM THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER. CONTRACTOR SHALL REPORT TO THE CITY WITH ANY AND ALL REQUIRED MODIFICATIONS MADE TO THIS PLAN. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN TEMPORARY SOIL EROSION CONTROL MEASURES AND SHALL MAINTAIN PERMANENT SOIL EROSION MEASURES FOR ONE YEAR AFTER COMPLETION OF CONSTRUCTION. BEFORE FIRST YEAR OF OCCUPANCY, OWNER WILL BE RESPONSIBLE FOR MAINTAINING SOIL EROSION MEASURES.
- PLAN REVIEW AND PERMIT SHALL BE POSTED IN A CONSPICUOUS LOCATION.
- PLACE EROSION CONTROL MEASURES AS INDICATED ON DRAWING PRIOR TO EARTH MOVING AND GRADING ACTIVITIES.
- INSPECT AND MAINTAIN CHECK DAMS, SEDIMENT TRAPS, RPP (RAP), SILT FENCING AND OTHER MEASURES AFTER STORM EVENTS AND AS NECESSARY TO ASSURE PROPER FUNCTION. DEBRIS BAGS SHALL BE ON ALL CATCH BASINS ON THE SITE AND ADJACENT TO THE SITE. DEBRIS BAGS SHALL BE MAINTAINED WEEKLY, OR MORE OFTEN IF NECESSARY.
- TEMPORARY SEEDING FOR EROSION CONTROL CONSISTS OF THE FOLLOWING SEED MIX PLACED AT 4 LBS PER 1,000 SQUARE FOOT:
50% PERENNIAL RYEGRASS
25% CREEPING RED FESCUE
25% BENTONIC BLUEGRASS
- EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL VEGETATION IS WELL ESTABLISHED. REMOVE PLACE, ADDITIONAL TOPSOIL, AND RESEED ERODED AREAS AS NECESSARY UNTIL FINAL LANDSCAPING IS INSTALLED.
- ALL SWALES AND DRENCHES 1' OR GREATER AREA SHALL BE SEEDED AND MULCHED WITH NORTH AMERICAN GREEN B150 EROSION CONTROL BLANKET, OR EQUIVALENT, PLACED IN PLACE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SWEEPING CONSTRUCTION DEBRIS AND SEDIMENT FROM PUBLIC STREETS DURING CONSTRUCTION, STREETS AND ADJACENT PARKING LOTS SHALL BE SWEEPED WEEKLY OR MORE OFTEN AS NEEDED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE GEOTECHNICAL REPORTS PRIOR TO CONSTRUCTION.
- ADJUST MEASURES TO CONSTRUCTION PHASE OR ACTIVITY.
- ADDITIONAL MEASURES NOT SHOWN MAY BE REQUIRED DURING CONSTRUCTION. CONSULT WITH LOCAL AGENCY.
- NO ENCROACHMENT SHALL BE ALLOWED WITHIN PUBLIC DRAIN OR ROAD RIGHT OF WAY UNLESS PERMITTED.

LOCATION MAP

NOT TO SCALE

LEGEND



SILT FENCE
SILT SACKS
CONSTRUCTION ENTRANCE

SOIL NOTE

SOIL TYPE FOR THIS SITE ACCORDING TO THE OAKLAND COUNTY SOIL SURVEY MAP IS MARLETTE SANDY LOAM, 1 TO 6 PERCENT SLOPES.

NOTE

ALL WORK SHALL CONFORM TO THE CITY OF NOVI STANDARDS AND SPECIFICATIONS.

CONSTRUCTION MUD TRACKING ENTRANCE WILL BE REQUIRED IF MATERIAL IS TO BE TRANSPORTED OFF SITE PER DETAIL.

STREET SWEEPING AND DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

VEGETATION SHALL BE ESTABLISHED WITHIN 5 DAYS OF FINAL GRADE, OR WHENEVER DISTURBED AREAS WILL REMAIN UNCHANGED FOR 30 DAYS OR GREATER. 1/4" OF TOPSOIL WILL BE USED WHERE VEGETATION IS REQUIRED.

NOTE

A SOIL EROSION PERMIT IS REQUIRED BY THE CITY OF NOVI BUILDING DEPARTMENT PRIOR TO INSTALLATION OF SOIL EROSION CONTROL AND SEDIMENTATION CONTROL MEASURES.

SIDWELL #19-22-400-007

THE CONTRACTOR SHALL DISTRIBUTE PLACE THE SURPLUS SITE EXCAVATION MATERIALS IN THE FUTURE PARKING AND RECREATION AREAS NOTED BELOW (APPROXIMATELY 1:1). THE SURPLUS MATERIAL SHALL BE SPREAD CONSISTENTLY ACROSS THE ENTIRE AREA IN A MANNER THAT DOES NOT CREATE A DRAINAGE PROBLEM.

SOIL EROSION & SEDIMENTATION CONTROL PLAN:

- ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF EXCAVATION AND SHALL REMAIN IN EFFECT UNTIL AREAS ARE STABILIZED.
- THE CONTRACTOR SHALL PLAN ALL EARTH MOVING ACTIVITIES IN A MANNER AS TO MINIMIZE THE EXTENT OF THE DISTURBED AREAS.
- ALL EARTH CHANGES SHALL BE CONSTRUCTED AND COMPLETED IN SUCH A MANNER WHICH SHALL LIMIT THE EXPOSED AREA OF ANY DISTURBED LAND FOR THE SHORTEST POSSIBLE PERIOD OF TIME.
- THE CONTRACTOR SHALL MAKE DAILY INSPECTIONS OF THE SITE TO INSURE EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND SHALL IMMEDIATELY MAKE NECESSARY REPAIRS.
- ALL CONSTRUCTION TRAFFIC SHALL ENTER AND LEAVE BY THE DESIGNATED ENTRANCE. THIS ENTRANCE SHALL BE CONSTRUCTED OF CRUSHED STONE TO HELP FREE TREES OF SOILS WHEN LEAVING SITE. THE CONTRACTOR SHALL INSTRUCT ALL VEHICLES TO CLEAN ALL SOIL MATERIALS SHIPPED, CARRIED OR OTHERWISE DEPOSITED ON PUBLIC STREETS, HIGHWAYS, SIDEWALKS, OR OTHER PUBLIC THOROUGHFARES DURING TRAVEL TO OR FROM THE EARTH CHANGE SITE SHALL BE REMOVED PROMPTLY.
- CATCH BASINS LOCATED ON OR NEAR THE SITE SHALL BE PROTECTED TO PREVENT SEDIMENTATION FROM ENTERING THE FACILITY. THE COVERS SHALL BE CHECKED PERIODICALLY AND CLEANED WHENEVER THEY FAIL TO FILTER RAIN PAVEMENT. SOIL EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN CALENDAR DAYS AFTER THE FINAL GRADING OR EARTH MOVING ACTIVITY. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA OR WHEN GRADING ACTIVITY HAS TEMPORARILY CEASED, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT CONTROL MEASURES ARE IMPLEMENTED.
- ALL DISTURBED AREAS IN THE EXISTING OR PROPOSED RIGHT-OF-WAY SHALL BE SEEDDED, FERTILIZED, AND MULCHED ACCORDING TO M10.1'S SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ON THIS SITE. FAILURE TO MAINTAIN THESE DEVICES COULD RESULT IN FINES OR SUSPENSION.
- ALL DISTURBED AREAS AND GREENBELT AREAS ON SITE SHALL HAVE 4" OF ACCEPTABLE TOPSOIL PLACED, SEEDDED, MULCHED AND FERTILIZED BY HYDRO-SEEDING IN ACCORDANCE WITH MOST SPECIFICATIONS. CLASS A BEDD SHALL BE USED UNLESS OTHERWISE NOTED. M101 B1.09. CHEMICAL FERTILIZER M101 B2.1.10. MULCH M101 B2.1.11. CONSTRUCTION METHOD M101 B3.3.3.2. TOPSOIL M101 B3.3.3.3. FERTILIZER PER 1,000 SF. SEED FERTILIZER PER 1,000 SF. MULCH 150 POUNDS PER 1,000 SF.
- ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE CONTINUOUSLY MAINTAINED UNTIL THE PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
- ALL SOIL TRACKED ONTO PAVEMENT SURFACES AND OFF SITE SHALL BE REMOVED DAILY BY THE CONTRACTOR.
- ALL SURPLUS MATERIAL STOCKPILED ON SITE FOR MORE THAN THIRTY DAYS SHALL BE SEEDDED AND MULCHED.
- THE SOIL EROSION CONTROLS SHALL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR.

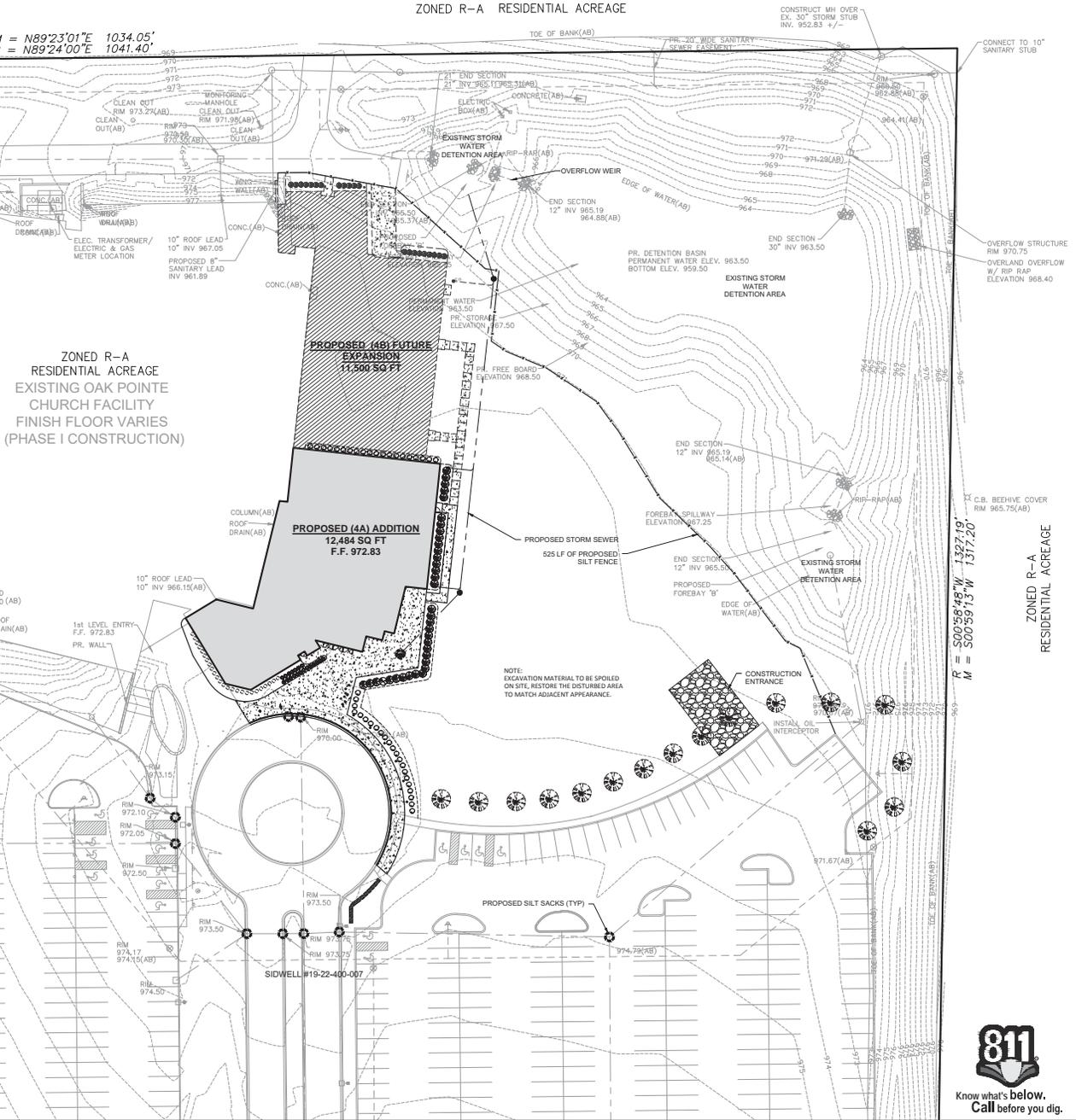
CONSTRUCTION SEQUENCE:

- INSTALL ALL TEMPORARY SOIL EROSION CONTROL MEASURES INCLUDING FILTERS AT ALL CATCH BASINS.
- CONTACT OAKLAND COUNTY OFFICE OF SOIL EROSION AT (248) 854-0389 TO SCHEDULE INSPECTION OF SOIL EROSION CONTROL MEASURES.
- SITE DEMOLITION, PAVEMENT AND WATER MAIN REMEDIATION ITEMS AS NOTED ON PLANS.
- EROSION CONSTRUCTION AND INSTALL UNDERGROUND UTILITIES.
- MAINTAIN SOIL EROSION AND SEDIMENTATION MEASURES THROUGHOUT CONSTRUCTION.
- INSTALL SWALES, CURBS AND OUTLET PAVEMENTS.
- FINISH GRADE NON-PAVED AREAS.
- RESTORE ALL DISTURBED AREAS BACK TO ORIGINAL CONDITION OR BETTER.
- REMOVE ALL TEMPORARY EROSION MEASURES.

SOIL EROSION/SEDIMENTATION CONTROL 2018-2020 OPERATION SEQUENCE/TIME SCHEDULE

CONSTRUCTION SEQUENCE	STATE IMPROVEMENTS AND INSTALL TEMP. CONTROL MEASURES	DEMOLITION	MAINTAIN TEMP. CONTROL MEASURES (DAILY)	STORM FACILITIES	FOUNDATION/BLDG. CONSTRUCTION	EROSION CONSTRUCTION / PAVING	PERM. CONTROL MEASURES	FINISH GRADING	LANDSCAPING	REMOVE TEMPORARY CONTROL MEASURES
1	█									
2	█	█								
3	█	█	█							
4	█	█	█	█						
5	█	█	█	█	█					
6	█	█	█	█	█	█				
7	█	█	█	█	█	█	█			
8	█	█	█	█	█	█	█	█		
9	█	█	█	█	█	█	█	█	█	
10										█

INLET PROTECTION FABRIC DROPP (SILT SACK)
USE AT STORM WATER INLETS



ISSUED	DATE
APP SUBMIT	10.04.19
PRELIMINARY	11.27.19

S3
architecture

3360 grand ave
Farmington, MI 48335
313.481.6000
313.481.0007

OAK POINTE CHURCH NOVI - ADDITION
50200 W. TEN MILE ROAD, NOVI, MI 48374



27725 Stanley Ave, Suite #100
Farmington Hills, MI 48334
Date: 09.27.2019
Scale: AS SHOWN

Drawn by: AWC
Approved by: YD

Job: 841340

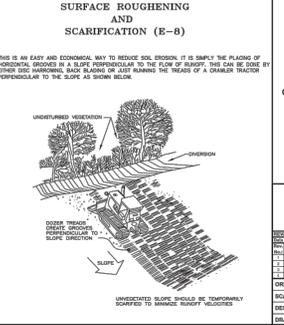
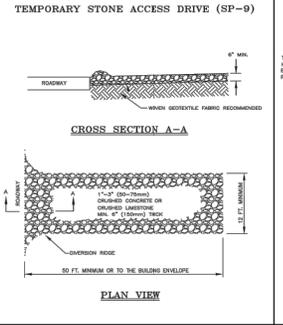
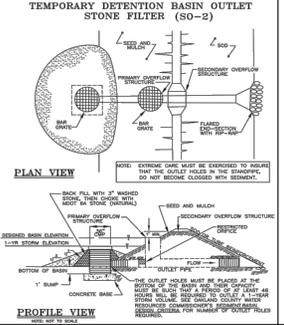
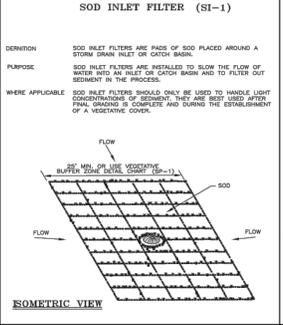
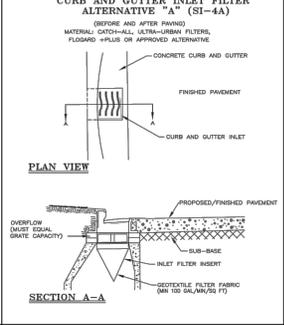
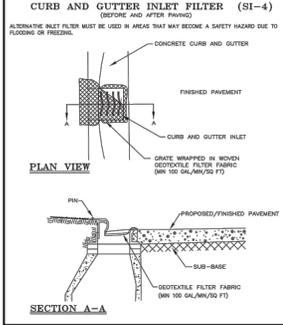
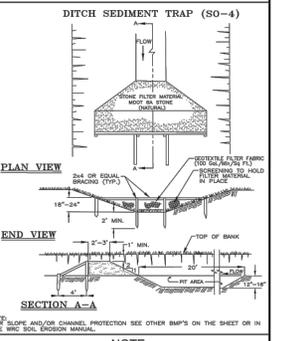
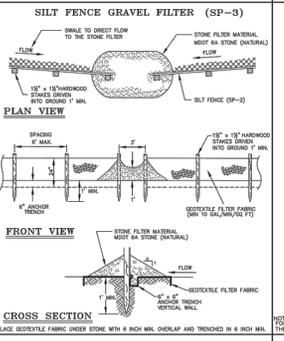
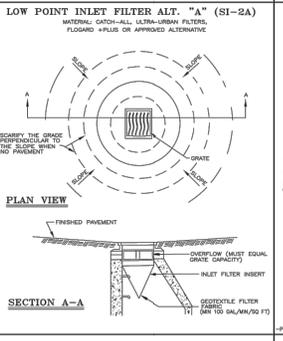
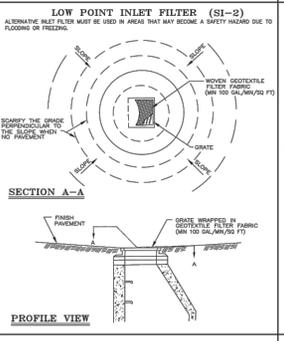
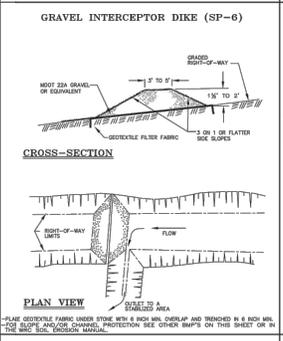
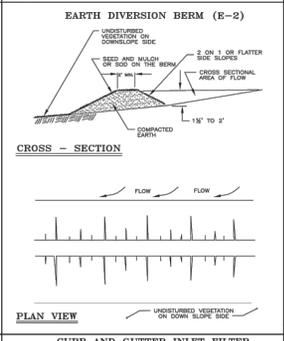
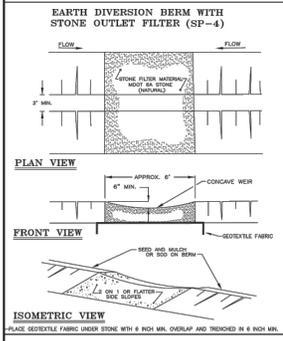
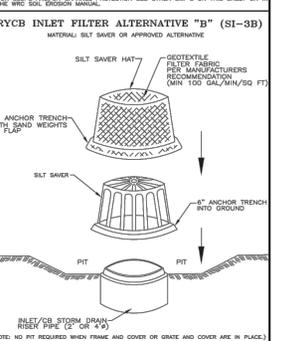
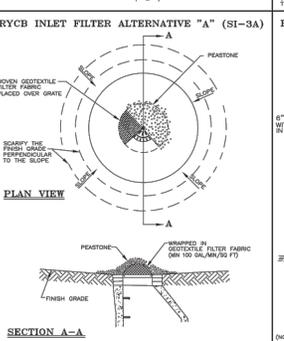
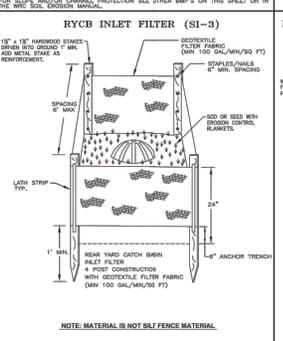
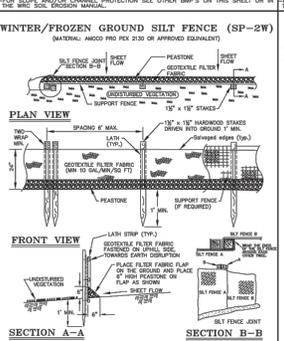
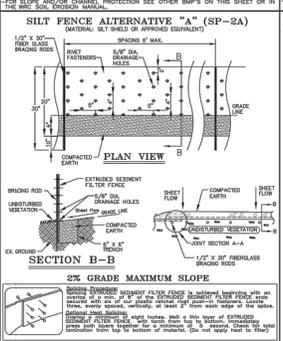
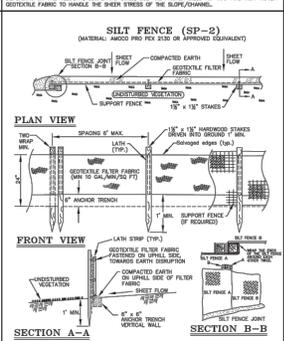
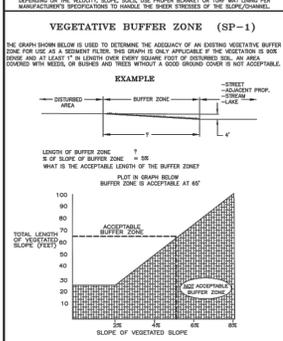
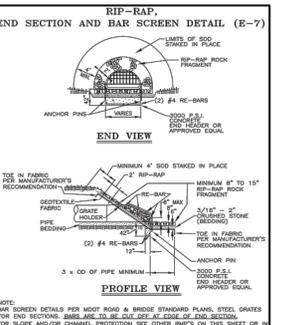
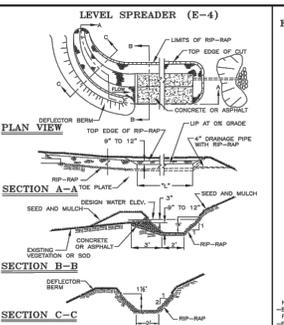
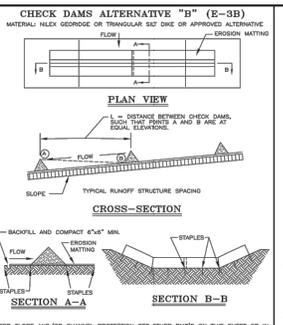
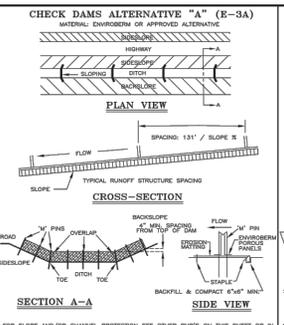
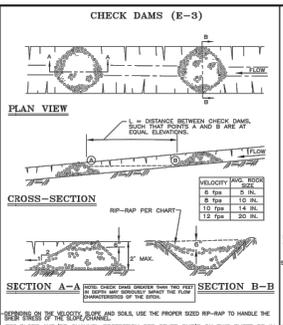
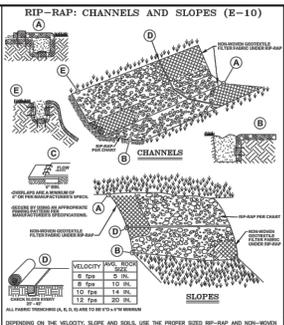
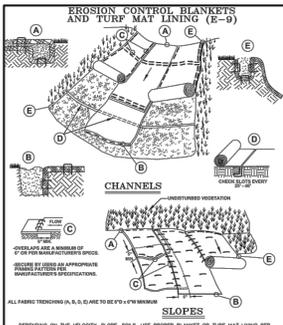
Sheet Name:
SOIL EROSION & SEDIMENTATION CONTROL PLAN

Sheet No.:



Know what's Below.
Call before you dig.

C4



NOTE:

ALL OF THE DETAILS SHOWN ON THIS SHEET, ALONG WITH INFORMATION PERTAINING TO PLAN PREPARATION, DESIGN CRITERIA AND GENERAL NOTES, ETC., ARE INCLUDED IN THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER'S EROSION CONTROL MANUAL. PLEASE CONTACT THE EROSION CONTROL UNIT AT (248) 858-5389 TO OBTAIN A COPY OF THE MANUAL. OR GO ONLINE AT WWW.OAKGOV.COM/WATER

SOIL EROSION SEDIMENTATION CONTROL DETAILS

DATE: 11/15/2011

SCALE: 1/4" = 1'-0"

DESIGNED BY: WRC

DRAWN BY: WRC

ONE FULL-SCALE DRAWING, 1/4" = 1'-0" SCALE

SHEET NO. DT5 OF 1 OF 1



WST LED
Architectural Wall Scape

Specifications
Continuity
 Height: 3.12"
 Width: 1.57"
 Depth: 0.63"
 Weight: 0.05 lbs

Optional Back Box (PBBW)
 Height: 3.12"
 Width: 1.57"
 Depth: 1.57"
 Weight: 0.10 lbs

Optional Back Box (BBW)
 Height: 3.12"
 Width: 1.57"
 Depth: 1.57"
 Weight: 0.10 lbs

Capable Luminaire
 This item is an capable luminaire, which has been designed and tested to provide continuous, long-life operation in applications where continuous operation is required.



KBR6 LED
LED Specimen Bolt

Specifications
 Height: 3.12"
 Width: 1.57"
 Depth: 1.57"
 Weight: 0.10 lbs

Ordering Information

Part No.	Part Name	Part Description	Part Quantity	Part Unit	Part Price	Part Total
WST-100	WST LED 100	WST LED 100 4K 5M VWSLT DOB	100	EA	1.50	150.00
KBR6-100	KBR6 LED 100	KBR6 LED 100 4K 5M VWSLT DOB	100	EA	1.50	150.00

Accessories
 PBBW, BBW, etc.



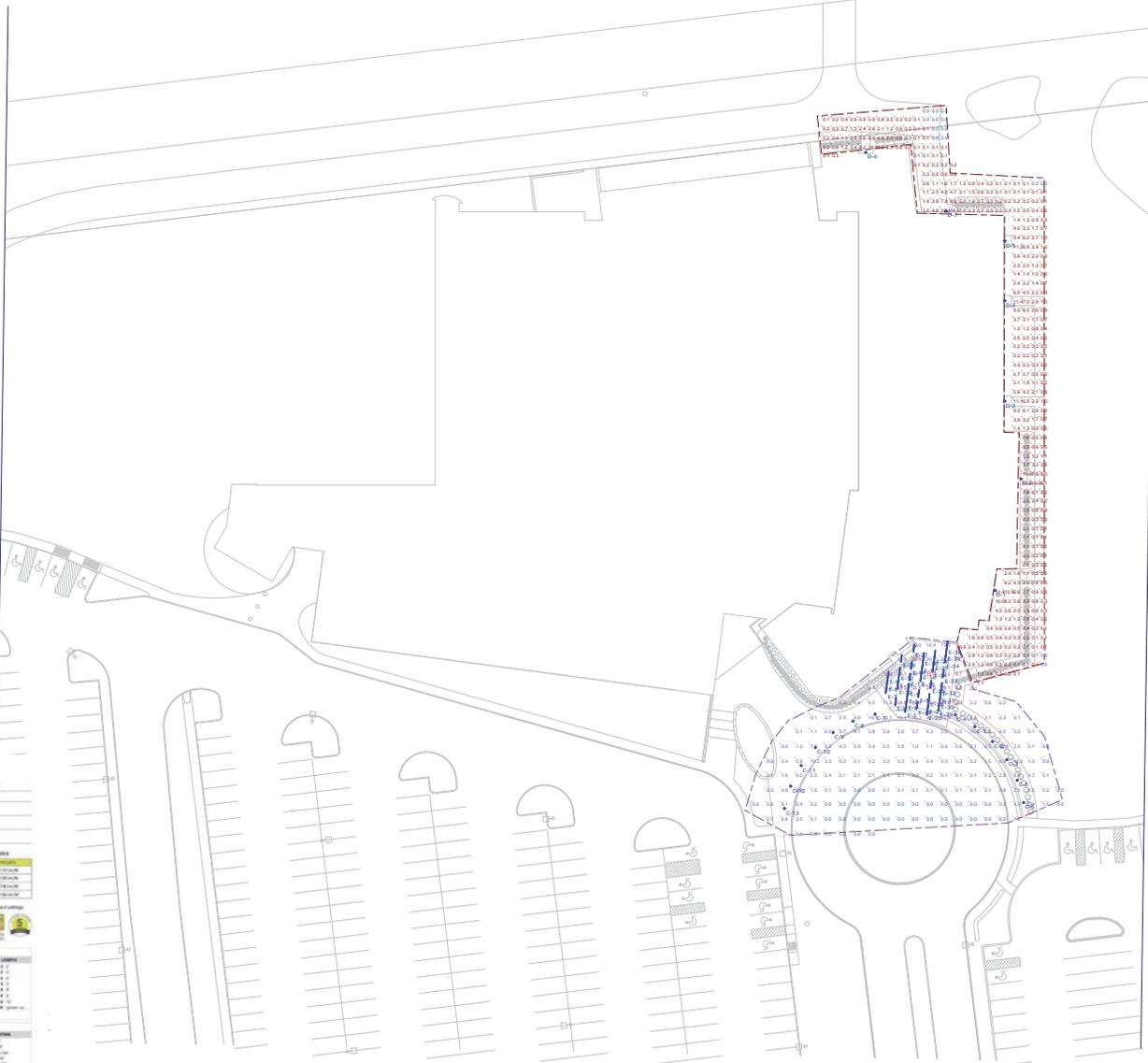
BEAM4 LED RECESSED MOUNT With Step-Lens Option and 3-3/4" Downlight Insert Option



Ordering Guide

Part No.	Part Name	Part Description	Part Quantity	Part Unit	Part Price	Part Total
BEAM4-100	BEAM4 LED 100	BEAM4 LED 100 4K 5M VWSLT DOB	100	EA	1.50	150.00

Accessories
 Downlight Insert, etc.



Statistics

Statistic	Max	Symbol	Avg	Min	Max/Min	Avg/Min
Drop Off Cuts & Front Canopy	35.9 fc	+	5.1 fc	0.0 fc	N/A	N/A
Non-Addition Perimeter	75.0 fc	+	1.8 fc	0.0 fc	N/A	N/A

Schedule

Symbol	Label	Manufacturer	Catalog Number	Description	Lumens Per Foot	Light Loss Factor	Wattage
○	C	Lithonia Lighting	KBR6 LED 100 4K 5M VWSLT	KBR6 WITH 4 LIGHT BOARDS (16 LED), 300MA DRIVER, 4000K COLOR TEMP, AND SYMMETRIC OPTIC	1640	0.85	20
□	D	Lithonia Lighting	WST LED P2 40K 5M VWSLT	WST LED, Performance package 2, 4000K, 300MA DRIVER, 4000K COLOR TEMP, AND SYMMETRIC OPTIC	3469	0.85	25
⊥	E	AXIS LIGHTING INC. LASKLE, QUEBEC	BBRLED-400-80-35-50-FL-4-W	AXIS LIGHTING LED RECESSED DOWNLIGHT WITH WHITE REFLECTOR AND FLUSH SO LENS	1600	0.85	18.1

Designer
 WZ
 Date
 11/26/2019
 Scale
 1"=20'-0"
 Drawing No.
 Summary