



CATHOLIC CENTRAL FRONTAGE JSP19-48

CATHOLIC CENTRAL FRONTAGE IMPROVEMENTS JSP 19-48

Public hearing at the request of Catholic Central High School for Planning Commission's approval of Preliminary Site Plan, Wetland Permit, Woodland Permit and Stormwater Management Plan. The subject property is currently zoned R-1 One Family Residential, B-1 Local Business, and I-1, Light Industrial and is located in Section 18, west of Wixom Road and south of Grand River Avenue. The applicant is proposing to enhance the property's Wixom Road frontage, including the two entrances of the property.

Required Action

Approval/Denial of the Preliminary Site Plan, Wetland Permit, Woodland Permit and Stormwater Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Conditional Approval recommended	2-18-20	<ul style="list-style-type: none"> • Corner clearance at south entrance shall be maintained for sidewalk safety • Items to be addressed in revised Final Site Plan
Engineering	Approval recommended	2-14-20	<ul style="list-style-type: none"> • Items to be addressed in the electronic stamping submittal
Landscaping	Approval not recommended	2-3-20	<ul style="list-style-type: none"> • Waiver for street tree location behind the sidewalk (<u>Not supported by staff</u>) • Waiver for use of narrower tree that does not meet the canopy tree definition (<u>Not supported by staff</u>) • Waiver for berm slope of 1:2 (Supported) • Waiver to substitute narrow evergreen trees for subcanopy tree requirement (Supported) • Items to be addressed in revised Final Site Plan
Wetland	Approval recommended	2-14-20	<ul style="list-style-type: none"> • Wetland permit, mitigation, conservation easement required • Items to be addressed in the electronic stamping submittal
Woodland	Approval recommended	2-14-20	<ul style="list-style-type: none"> • Woodland permit, conservation easement required • Items to be addressed in the electronic stamping submittal
Traffic	Approval recommended	2-18-20	<ul style="list-style-type: none"> • Corner clearance at south entrance should be maintained for sidewalk safety • Items to be addressed in revised Final Site Plan
Fire	Approval recommended	1-30-20	<ul style="list-style-type: none"> • Meets Fire Dept. standards

Motion sheet

Approval – Preliminary Site Plan

In the matter of Catholic Central Frontage Improvements, JSP 19-48, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. The applicant shall redesign the southern entrance at the time of Final Site Plan to show and observe the requirements of Section 5.9 for a 25 foot Corner Clearance;
- b. A variance from the Engineering Design Manual, to be approved administratively by the City Engineer, for the meandering sidewalk design;
- c. Planning Commission waiver from Section 5.5.3.B for proposed berm slopes of 1:2, which is steeper than the maximum 1:3 slope, *because the applicant proposes no-mow seed on the berms so the steep slopes will not impact maintenance operations*, which is hereby granted;
- d. Planning Commission waiver from Section 5.5.3.B to use narrow evergreen trees in place of the required subcanopy trees, *because the substitution creates consistency with the overall design theme of the project*, which is hereby granted;
- e. 1. Planning Commission waiver for the use of 9 trees that do not meet the Ordinance definition of a canopy tree due to their mature width, which is hereby granted; **(Applicant Requested)**

OR

2. The applicant shall comply with the Ordinance requirement and choose canopy trees that meet the Ordinance definition; **(Staff Preferred)**
- f. 1. Planning Commission waiver for the location of the street trees west of the sidewalk, rather than between the sidewalk and street as required by the Ordinance, which is hereby granted; **(Applicant Requested)**

OR

2. The applicant shall comply with the Ordinance requirement for the placement of the street trees between the sidewalk and curb; **(Staff Preferred)**
- g. 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
- h. *(additional conditions here if any)*.

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

-AND-

Approval – Wetland Permit

In the matter of Catholic Central Frontage Improvements, JSP 19-48, motion to **approve** the Wetland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and

b. (additional conditions here if any)

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

-AND-

Approval – Woodland Permit

In the matter of Catholic Central Frontage Improvements, JSP 19-48, motion to **approve** the Woodland Permit based on and subject to the following:

a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and

b. (additional conditions here if any)

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

- AND -

Approval – Stormwater Management Plan

In the matter of Catholic Central Frontage Improvements, JSP 19-48, motion to **approve** the Stormwater Management Plan, based on and 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 it 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 Catholic Central Frontage Improvements, JSP 19-48, 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- Wetland Permit

In the matter of Catholic Central Frontage Improvements, JSP 19-48, motion to **deny** the Wetland Permit... (because the plan is not in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)

-AND-

Denial- Woodland Permit

In the matter of Catholic Central Frontage Improvements, JSP 19-48, motion to **deny** the Woodland Permit... (because the plan is not in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

-AND-

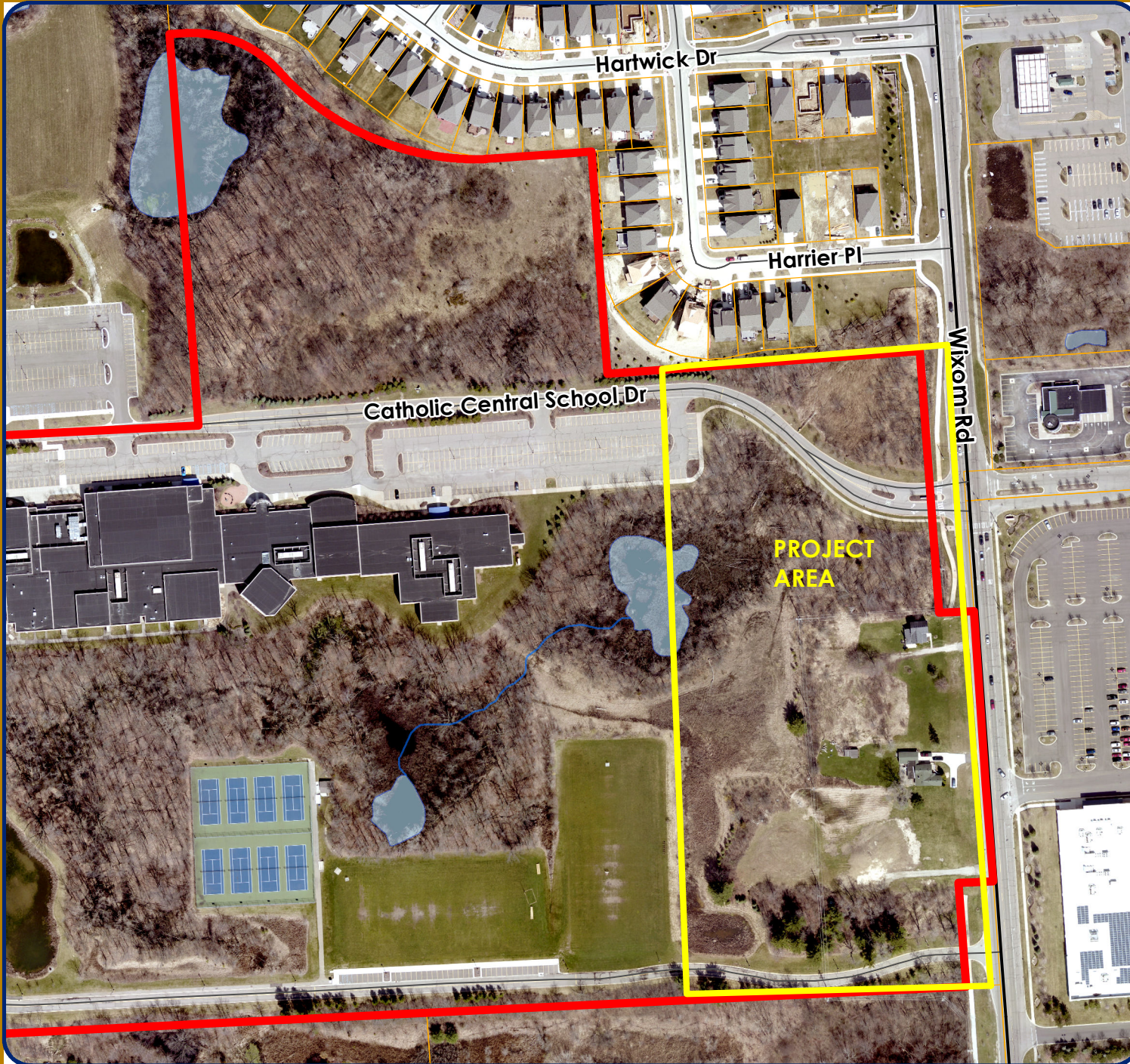
Denial – Stormwater Management Plan

In the matter of Catholic Central Frontage Improvements, JSP 19-48, 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.)*

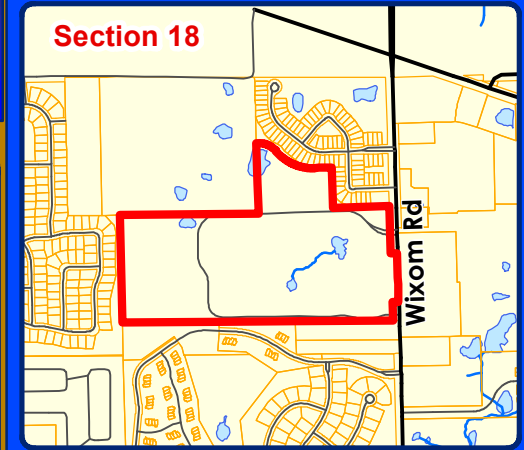
MAPS
Location
Zoning
Future Land Use
Natural Features

JSP19-48 CATHOLIC CENTRAL FRONTAGE


LOCATION



Section 18



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: 2/20/2020
Project: CATHOLIC CENTRAL HS
Version #: 1

0 55 110 220 330 Feet

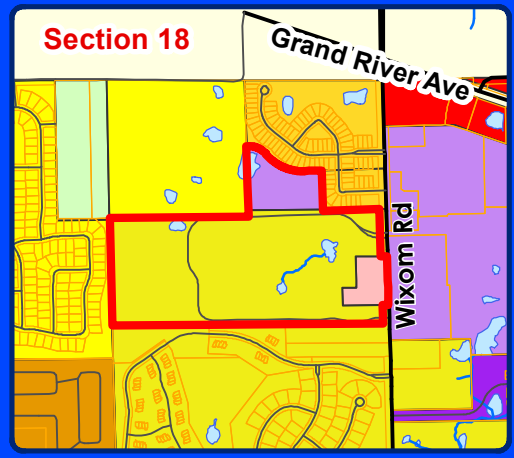
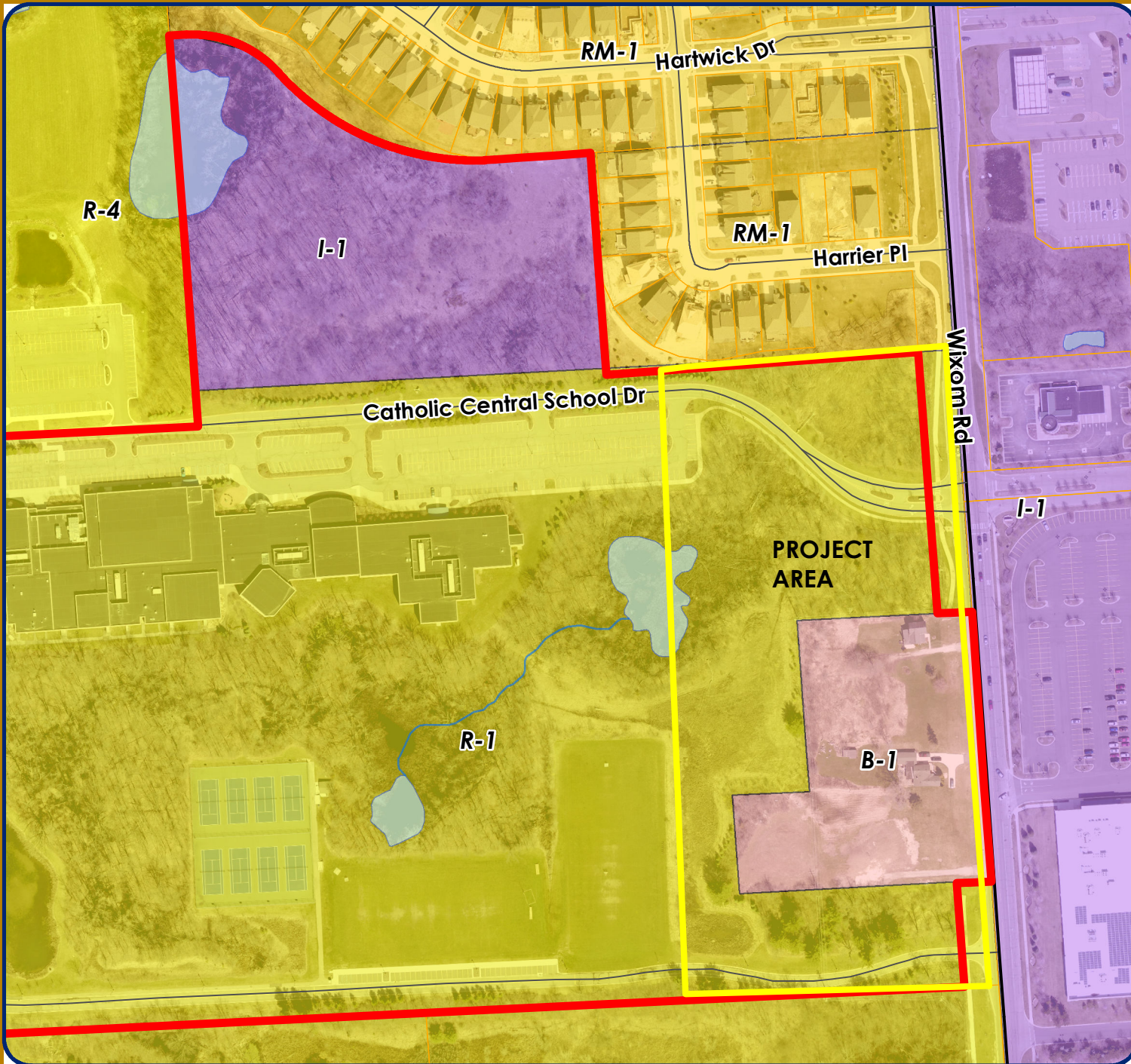
1 inch = 250 feet



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.

JSP19-48 CATHOLIC CENTRAL FRONTAGE ZONING



LEGEND

- R-A: Residential Acreage
- R-1: One-Family Residential District
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- MH: Mobile Home District
- B-1: Local Business District
- B-3: General Business District
- I-1: Light Industrial District
- I-2: General Industrial 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: 2/20/2020
 Project: CATHOLIC CENTRAL HS
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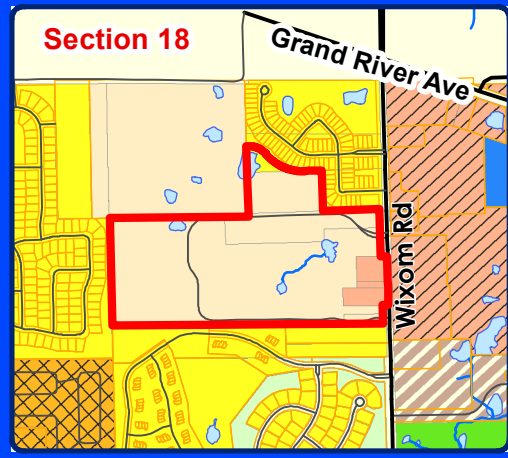
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JSP19-48 CATHOLIC CENTRAL FRONTAGE

FUTURE LAND USE



LEGEND

- Single Family
- Mobile Home Park
- Suburban Low-Rise
- Office Research Development Technology
- Local Commercial
- Community Commercial
- Educational Facility
- Public Park
- Private Park
- Subject Property

CITY OF NOVI
City of Novi logo
City of Novi logo

City of Novi
Dept. of Community Development
City Hall / Civic Center
45175 W Ten Mile Rd
Novi, MI 48375
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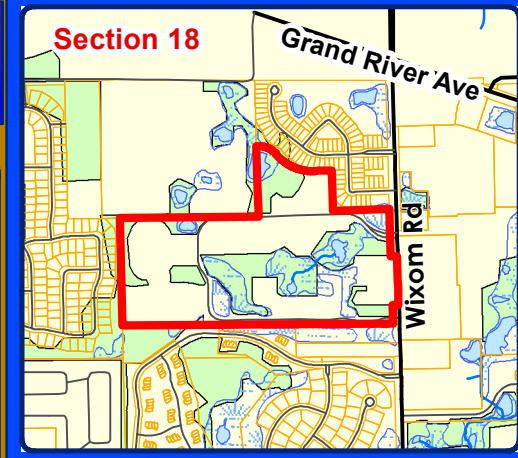
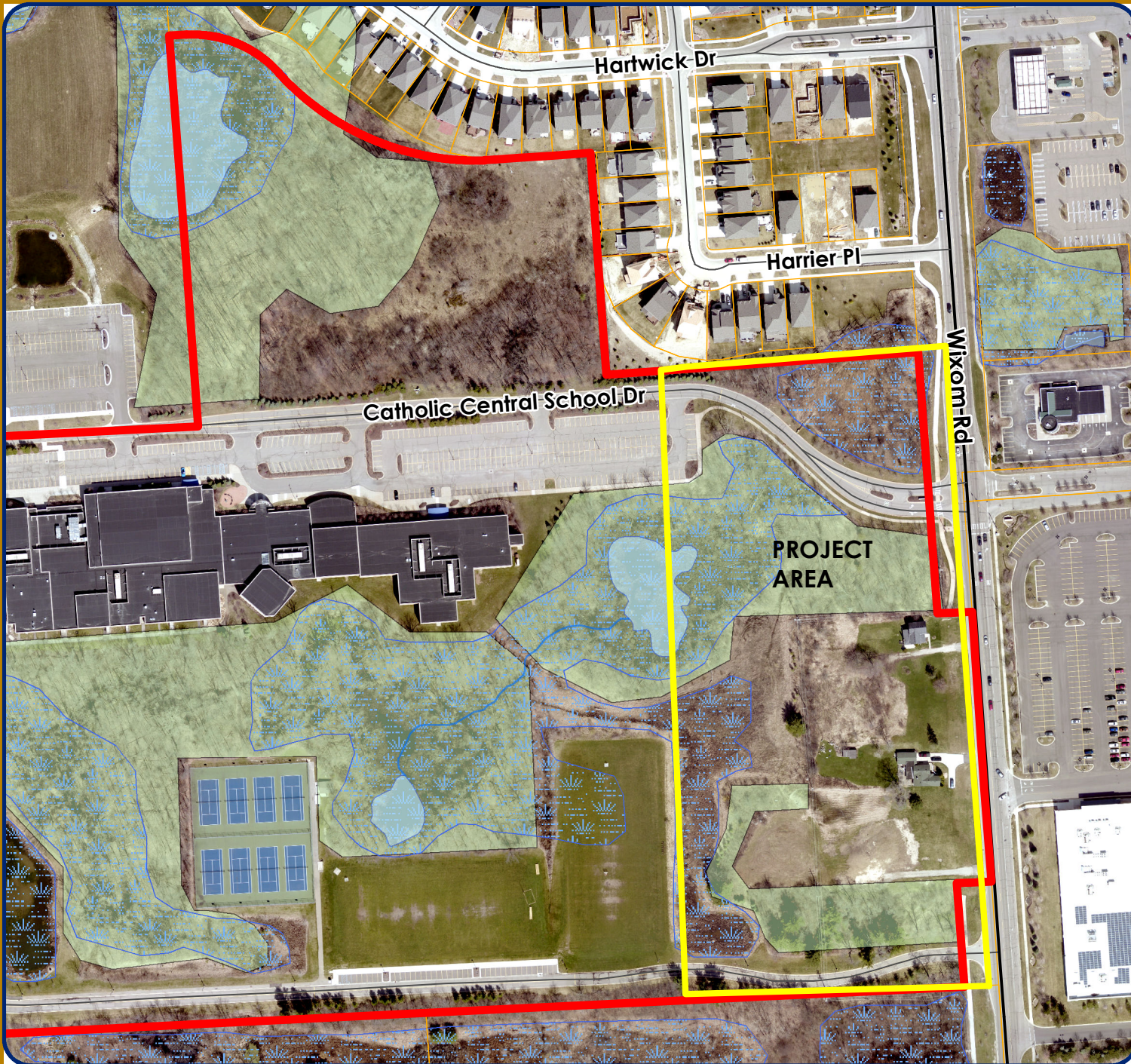
North arrow icon

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JSP19-48 CATHOLIC CENTRAL FRONTAGE

NATURAL FEATURES



LEGEND


- WETLANDS
- WOODLANDS
- Subject Property



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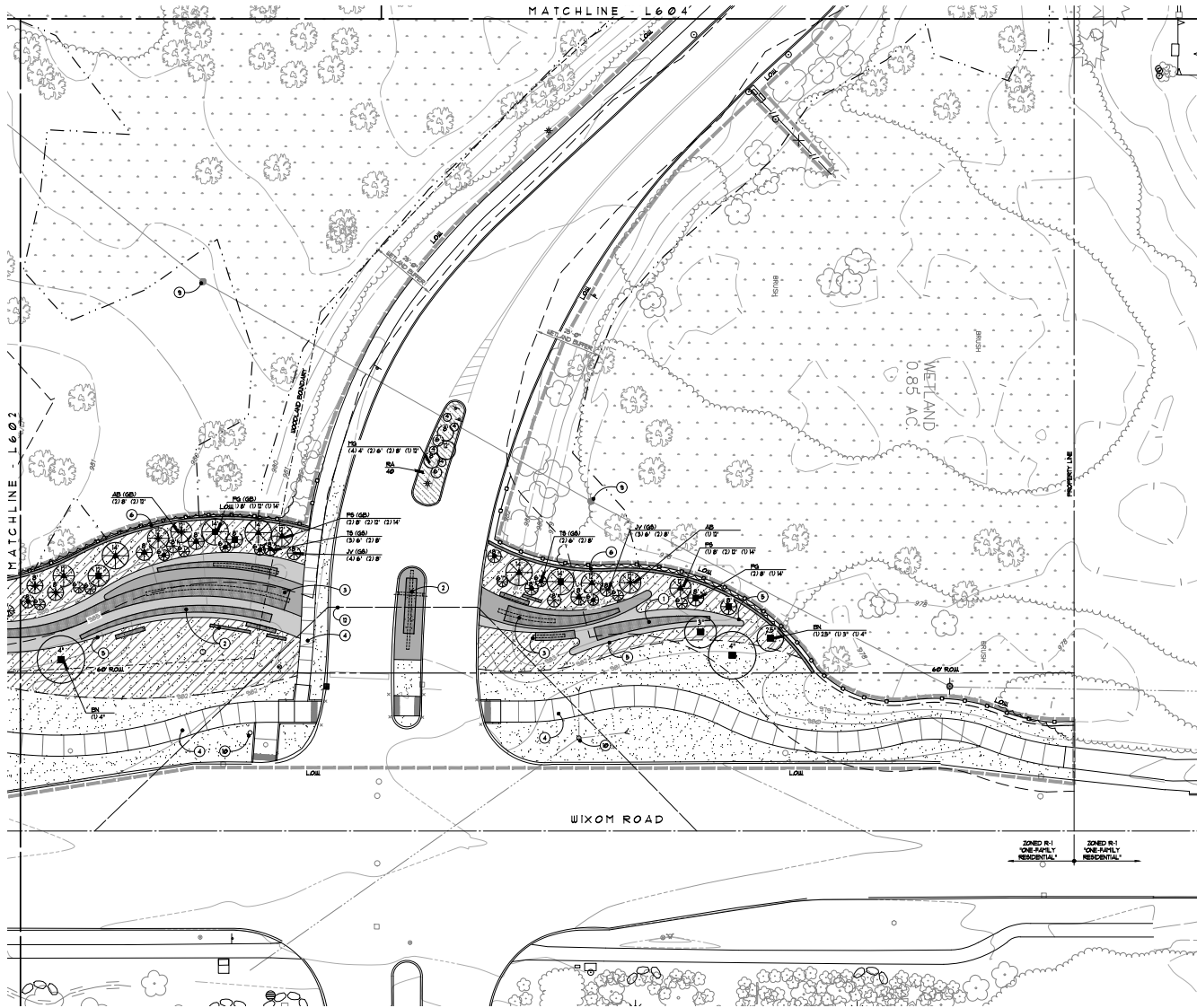
SITE PLAN

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

Note Key

1. Existing State Regulated Wetlands - Mitigation Required
2. Main Entry Drive
3. Proposed Grindstone Main Entry Gateway Feature with LED Display Panel Sign and Steel Archway
4. Proposed Grindstone and Steel Identity Wall with CC Logo
5. Proposed Grindstone Walls
6. Proposed Artful Fencing
7. Proposed Sculptural Earth Mounding (Lawn)
8. Proposed Trees (Mix of Evergreen and Deciduous)
9. Proposed City Sidewalk
10. Existing or Relocated Utility Poles
11. Existing Secondary Entry Drive
12. Secondary Site Entrance with CC Logo Identity
13. Basilian Fathers, Patrick M. Nesbitt Campus, and Address Signage
14. Steel I-Beam Cross Location
15. Existing Vehicular Gate to be Painted
16. Proposed Stone Maintenance Bed with Metal Edging, 2 Colors
17. Proposed Vehicular Swing Gates





- ### Landscape Plan Legend:
- LIST OF WORK: EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
 - EXISTING WETLAND
 - EXISTING EDGE OF VEGETATION
 - NEW EDGE OF VEGETATION
 - SODELAND PROTECTION FENCE - REFER TO EROSION CONTROL PLANS
 - SEEDING LAWN ON 6" TOPSOIL
 - SEEDED MEADOW LAWN - TYPE 'A' ON 6" TOPSOIL
 - EMERGENT WETLAND SEED MIXTURE - REFER TO WETLAND MITIGATION DRAWINGS
 - 4" DEPTH DECORATIVE STONE MULCH TYPE 'A' OVER NON-SOVEN FILTER FABRIC
 - 4" DEPTH DECORATIVE STONE MULCH TYPE 'B' OVER NON-SOVEN FILTER FABRIC
 - ADDITIONAL TRANSPLANTED TREES
 - PLANT CALL OUT - STREET TREE CANOPY REQUIREMENT
 - PLANT CALL OUT - GREEN BELT (SUB-CANOPY) REQUIREMENT
 - PLANT CALL OUT - GREEN BELT (OVER-CANOPY) REQUIREMENT
 - PLANT CALL OUT - TRANSPLANTED EVERGREEN OR DECIDUOUS CANOPY TREE

Note Key: (APPLIES TO SHEETS L601 - L607, NOT ALL APPLICABLE)

- ① NATURAL STONE WALLS
- ② CROSS BOLUME WITH STONE BASE ON STRUCTURAL FOOTING
- ③ IDENTITY SIGNAGE ELEMENT WITH STRUCTURAL FOOTING
- ④ CONCRETE SIDEWALK / SAFETY PATH
- ⑤ STEEL EDGING - REFER TO SPECS
- ⑥ SHEET PILE WALL
- ⑦ 4" HI. CUSTOM DECORATIVE METAL FENCE
- ⑧ SCULPTED EARTH FEATURES
- ⑨ FUTURE RELOCATED OVERHEAD UTILITY POLES
- ⑩ EXISTING TRAFFIC LIGHT UTILITY POLES
- ⑪ UTILITY POLES TO BE RELOCATED BY DTE
- ⑫ 30' CORNER CLEARANCE ZONE
- ⑬ CITY OF NOVA CLEAR VISION ZONE (PG. VII-E DESIGN & CONSTRUCTION REQUIREMENTS)
- ⑭ MANUAL GLOW CONTROL GATES WITH LOCKING BOLLARDS

- ### General Notes:
1. LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING ANY EXCAVATION WORK.
 2. PROTECT ALL NEW AND EXISTING UTILITIES, LIGHTS, PAVEMENT, POLES, ETC. DURING CONSTRUCTION.
 3. REPAIR ANY DAMAGED LANDSCAPE OR INFRASTRUCTURE TO PRE-CONSTRUCTION CONDITIONS PER SPECIFICATIONS.
 4. CONTRACTOR SHALL VERIFY ALL EXISTING CONSTRUCTION INFORMATION AGAIN PRIOR TO CONSTRUCTION. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONCERNS PRIOR TO PROCEEDING.
 5. PROPOSED UTILITIES SHOWN FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS.
 6. REFER TO SHEETS EDG-100 FOR SOIL TYPE DESIGNATIONS.
 7. DECORATIVE STONE MULCH SHALL BE SUPPLIED BY CAPITAL STONEMARK, KENOSHA HARBOR, INDIANAPOLIS 46201 OR APPROVED EQUAL.
 8. REFER TO SHEET L604 FOR PLANT LIST AND ADDITIONAL INFORMATION.
 9. ALL RED LINES / POW EDGES BETWEEN 800 TYPES AND TREE LOCATIONS SHALL BE PRINTED OUT BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
 10. ALL LAWN AREAS TO BE IRRIGATED. REFER TO THE IRRIGATION DRAWINGS.

Ordinance Requirements:

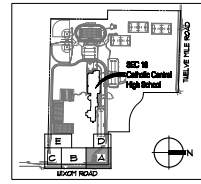
WORKING TREE REQUIREMENTS:

1. Applicant is proposing to remove 11 trees which are over 8" DBH and located within a city-regulated sidewalk area as part of the construction for the Catholic Central Wixom Road Frontage Improvements project. Total replacement trees required = 58 (30 canopy trees, 8 overgreen trees). See sheet L604. Refer to sheets L601-L607 for all additional requirements.
2. Applicant is proposing to provide seedling replacement trees. See schedule below.

Landscape Ordinance Requirements

June 8th 2019 (4 of 6 items) / June 8th 2019 (3 of 6 items)

Item	Date	Description	Business Reference	Year Required	Item Provided
10	01	Seedling Tree	17500 B * 10" F	10	10
11	01	Seedling Tree	17500 B * 10" F	10	10
			(6 total)	10	10
12	01	Seedling Tree	17500 B * 10" F	10	10
13	01	Seedling Tree	17500 B * 10" F	10	10
			(5 total)	10	10
14	01	Street Tree - Canopy	17500 B * 10" F	15	2
15	01	Street Tree - Canopy	17500 B * 10" F	15	52
			(2 total)	15	54
16	01	Wooded Center	see sheet L10 & W100-110	10	10
17	01	Wooded Center	see sheet L10 & W100-110	10	10
			Wooded Center	10	10
			total	10	100
			Additional Trees Provided	10	10



Key Map
Date: 10/20/2019



Detroit
Catholic Central
High School

**GRISSIM
METZ
ANDRIESE**
ASSOCIATES

Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project:
Catholic Central High School
Wixom Road Frontage Improvements
New, Michigan, Section 16

Sheet:
Area A - Landscape Plan

Job Number: C22-191
Drawn: SAE
Checked: RBH
Title: As Noted

Date: 12.20.2019
12.20.2019 Pre-Application Review
01.22.2020 PS / ISF Submitted



L601



- ### Landscape Plan Legend:
- LINE OF WORK
 - EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
 - EXISTING WETLAND
 - EXISTING EDGE OF VEGETATION
 - NEW EDGE OF VEGETATION
 - SOIL/LAND PROTECTION FENCE - REFER TO EROSION CONTROL PLANS
 - SEEDDED MEADOW LAID - TYPE 'A' ON 6" TOPSOIL
 - SEEDDED MEADOW LAID - TYPE 'B' ON 6" TOPSOIL
 - EMERGENT WETLAND REED THicket - REFER TO WETLAND MITIGATION DRAWINGS
 - 4" DEPTH DECORATIVE STONE MULCH TYPE 'A' OVER NON-SOVEN FILTER FABRIC
 - 4" DEPTH DECORATIVE STONE MULCH TYPE 'B' OVER NON-SOVEN FILTER FABRIC
 - ADDITIONAL TRANSPLANTED TREES
 - PLANT CALL OUT - STREET TREE CANOPY REQUIREMENT
 - PLANT CALL OUT - GREEN BELT (SUB-CANOPY) REQUIREMENT
 - PLANT CALL OUT - GREEN BELT EVERGREEN REQUIREMENT
 - PLANT CALL OUT - TRANSPLANTED EVERGREEN OR DECIDUOUS CANOPY TREE

- ### Note Key:
- (APPLIES TO SHEETS L601 - L609, NOT ALL APPLICABLE SHEETS)
- 1 NATURAL STONE WALLS
 - 2 CROSS SCULPTURE WITH STONE BASE ON STRUCTURAL FOOTING
 - 3 IDENTITY SIGNAGE ELEMENT WITH STRUCTURAL FOOTING
 - 4 CONCRETE SIDEWALK / SAFETY PATH
 - 5 STEEL EDGING - REFER TO SPECS
 - 6 SHEET PILE WALL
 - 7 4 FT. CUSTOM DECORATIVE METAL FENCE
 - 8 SCULPTED BENCH FEATURES
 - 9 FUTURE RELOCATED OVERHEAD UTILITY POLES
 - 10 EXISTING TRAFFIC LIGHT UTILITY POLES
 - 11 UTILITY POLES TO BE RELOCATED BY DTE
 - 12 20' CORNER CLEARANCE ZONE
 - 13 CITY OF HOV CLEAR VISION ZONE (PER VII-B DESIGN + CONSTRUCTION STANDARDS)
 - 14 MANUAL GLOVE CONTROL GATES WITH LOCKING BOLLARDS

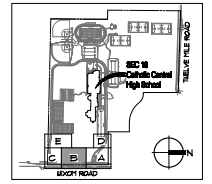
- ### General Notes:
1. LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING ANY EXCAVATION WORK.
 2. PROTECT ALL NEW AND EXISTING UTILITIES, LIGHTS, PAVEMENT, POLES, ETC. DURING CONSTRUCTION.
 3. REPAIR ANY DAMAGED LANDSCAPE OR INFRASTRUCTURE TO PRE-CONSTRUCTION CONDITIONS PER SPECIFICATIONS.
 4. CONTRACTOR SHALL VERIFY ALL EXISTING CONSTRUCTION INFORMATION AGAIN PRIOR TO CONSTRUCTION NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONCERN PRIOR TO PROCEEDING.
 5. PROPOSED UTILITIES SHOWN FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS.
 6. REFER TO SHEETS E008-E009 FOR SOIL TYPE DESIGNATIONS.
 7. DECORATIVE STONE MULCH SHALL BE SUPPLIED BY CAPITAL STONEMAN, KENOSHA WISCONSIN, THOMSON 48339 OR APPROVED EQUAL.
 8. REFER TO SHEET L605 FOR PLANT LIST AND ADDITIONAL INFORMATION.
 9. ALL BIRD LINES / HIGH EDGES BETWEEN BOD TYPES AND TREE LOCATIONS SHALL BE PAINTED OUT BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
 10. ALL LAWN AREAS TO BE IRRIGATED. REFER TO THE IRRIGATION DRAWINGS.

Ordinance Requirements:

REMOVING TREE SPECIFICATIONS:
 Applicant is proposing to remove 11 trees which are over 8" DBH and located within the registered soccer area as part of the construction for the Catholic Central Wixom Road Frontage Improvements project. Total replacement trees required is 56 (30 canopy trees & 26 evergreen trees). See sheet L606. Refer to areas 1008-1009 for all additional replacements.

2. Applicant is proposing to provide additional replacement trees, see schedule below.

Code	Area	Quantity	Reference	Tree Species	Tree Diameter
W	B1	Small Tree	(1) 20' B' T10' N'	11	15
W	B1	Small Tree	(1) 20' B' T10' N'	8	22
			(2) 20' B' T10' N'	22	22
B1	B1	Small - 20' Canopy	(1) 20' B' T10' N'	11	15
B1	B1	Small - 20' Canopy	(1) 20' B' T10' N'	12	15
			(2) 20' B' T10' N'	22	22
E	B1	Small Tree - Canopy	(1) 20' B' T10' N'	11	15
E	B1	Small Tree - Canopy	(1) 20' B' T10' N'	12	15
			(2) 20' B' T10' N'	22	22
W	B1	Medium - Group	see sheet L606 & W002(10)	30	30
W	B1	Medium - Group	see sheet L606 & W002(10)	8	15
			Medium - Canopy	10	15
			Small	10	15
			Additional Tree Provided	22	22



Key Map
 Date: 10/20/2019



Detroit
 Catholic Central
 High School

**GRISSIM
 METZ
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 ASSOCIATES

Landscape Architecture
 311 East Cady Street
 Northville, MI 48167
 Ph: 248-347-7101

Project:
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 Wixom Road Frontage Improvements
 Wixom, Michigan, Section 16

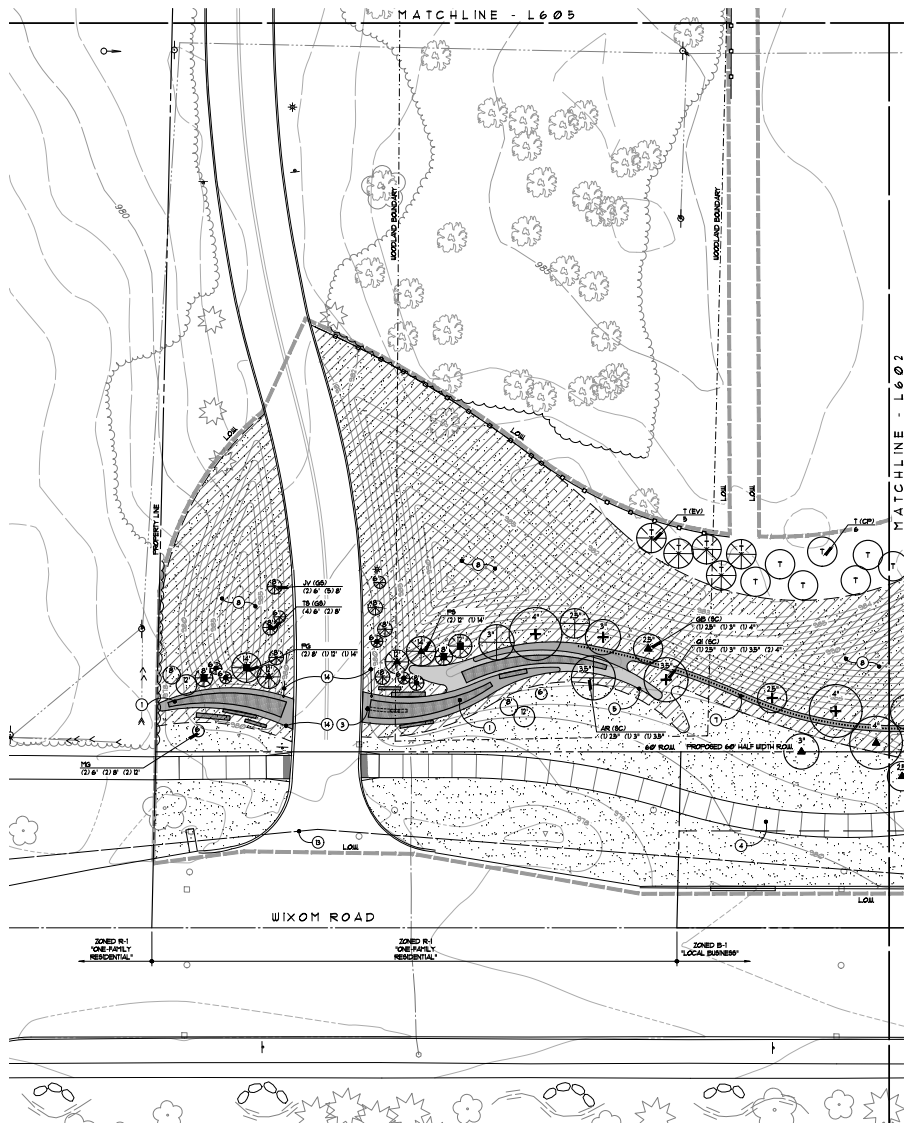
Sheet:
 Area B - Landscape Plan

Job Number: C22-191
 Owner: SAC
 Checker: RWH
 Scale: As Noted

Date:
 12.20.2019
 01.22.2020

Revised for:
 Pre-Application Review
 PG/JSF Submittal





- ### Landscape Plan Legend:
- LIFT OF WORK
 - EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
 - EXISTING WETLAND
 - EXISTING EDGE OF VEGETATION
 - NEW EDGE OF VEGETATION
 - WETLAND PROTECTION FENCE - REFER TO EROSION CONTROL PLANS
 - SODDED LAWN ON 6" TOPSOIL
 - SEEDED MEADOW LAWN - TYPE 'A' ON 6" TOPSOIL
 - EVERGREEN WETLAND REED FEATURE - REFER TO WETLAND MITIGATION DRAWINGS
 - 4' DEPTH DECORATIVE STONE MULCH TYPE 'A' OVER NON-SOVEN FILTER FABRIC
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- ### Note Key:
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- 1 NATURAL STONE WALLS
 - 2 CROSS SCULPTURE WITH STONE BASE ON STRUCTURAL FOOTING
 - 3 IDENTITY SIGNAGE ELEMENT WITH STRUCTURAL FOOTING
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 - 6 SHEET PILE WALL
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 - 13 CITY OF HOV CLEAR VISION ZONE (FSL VII-E DESIGN)
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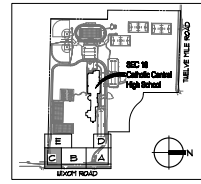
- ### General Notes:
- LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING ANY EXCAVATION WORK.
 - PROTECT ALL NEW AND EXISTING UTILITIES, LIGHTS, PAVEMENT, POLES, ETC. DURING CONSTRUCTION.
 - RESTORE ANY DAMAGED LANDSCAPE OR INFRASTRUCTURE TO PRE-CONSTRUCTION CONDITIONS PER SPECIFICATIONS.
 - CONTRACTOR SHALL VERIFY ALL EXISTING CONDITION INFORMATION BEFORE CONSTRUCTION. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONCERN PRIOR TO PROCEEDING.
 - PROPOSED UTILITIES SHOWN FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS.
 - REFER TO SHEETS EDGE EGDS FOR SOIL TYPE DESIGNATION.
 - DECORATIVE STONE MULCH SHALL BE SUPPLIED BY CAPITAL STONEWORKS, KESAD HARBOR, MICHIGAN 48069 OR APPROVED EQUAL.
 - REFER TO SHEET L601 FOR PLANT LIST AND ADDITIONAL INFORMATION.
 - ALL BED LINES / HOW EDGES BETWEEN SOO TYPES AND TREE LOCATIONS SHALL BE PAINTED OUT BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
 - ALL LAWN AREAS TO BE IRRIGATED. REFER TO THE IRRIGATION DRAWINGS.

Ordinance Requirements:

WOODLAND TREE REPLACEMENT:

- Applicant is proposing to remove 11 trees which are over 8" DBH and located within a city-regulated woodland as part of the construction for the Catholic Central Wixom Road Frontage Improvements project. Total replacement trees required: 58 (20 canopy trees, 8 evergreen trees). (See sheet L601). Refer to sheet L601 for list of all scheduled replacements.
- Applicant is proposing to provide associated replacement trees, see schedule below.

Landscape Ordinance Requirements					
See 811 (2017) & (2018) / Zone B1 (1617) & (2018)					
Date	Type	Quantity	Minimum Requirement	Year Required	Year Provided
08	B1	Small Tree	17,000 B' - 140 F'	10	15
08	B1	Small Tree	17,000 B' - 140 F'	8	12
			66 (64)A	12	12
01	B1	Small - Medium	17,000 B' - 140 F'	10	14
01	B1	Small - Medium	17,000 B' - 140 F'	10	10
			03 (3)A	10	10
X	B1	Small Tree - Group	17,000 B' - 140 F'	14	1
01	B1	Small Tree - Group	17,000 B' - 140 F'	10	12
			66 (64)A	10	10
01	B3	Medium - Large	see sheet L601 & (2018) (10)	10	10
01	B3	Medium - Large	see sheet L601 & (2018) (10)	8	8
			Woods/Forest	10	10
			Additional Trees Provided	12	12



Key Map
Date: 10/20/2019



Robert Houldie

DETROIT CATHOLIC CENTRAL HIGH SCHOOL

Detroit Catholic Central High School

GRISSIM METZ ASSOCIATES ANDRIESE

Landscape Architecture

311 East Cady Street
Northville, MI 48167
Ph: 248-347-0110

Project: Catholic Central High School
Wixom Road Frontage Improvements
Site: Wixom, Section 16

Sheet: Area C - Landscape Plan

Job Number: C27-191
Drawn: SAE
Checked: RBH
Scale: As Noted

Date: 12.20.2019
12.20.2019 Pre-Application Review
01.22.2020 P2/P3P Submittal

Sheet Number: **L603**



P:\2020\2019 Catholic Central High School\Wixom Road Frontage Improvements - 10/20/2019\12.20.2019

WETLAND INFORMATION:





EXISTING WETLAND AREA			
	ACRES		
G1	11.36		
G2	0.95		
	0.17		
	TOTAL 12.48 AC.		

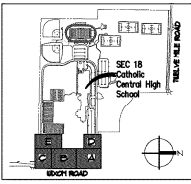
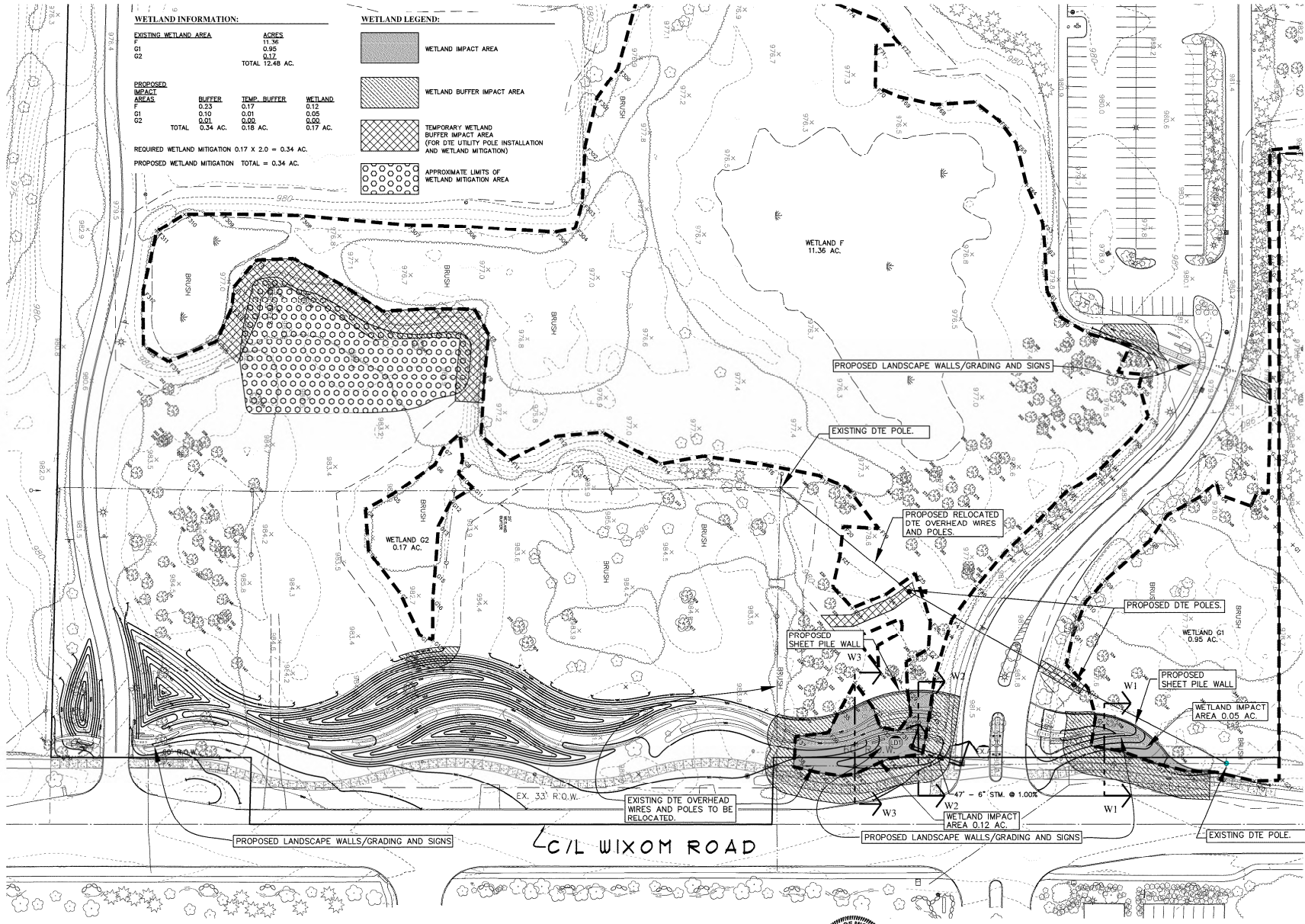
PROPOSED WETLAND BUFFER AREAS			
	BUFFER	TEMP. BUFFER	WETLAND
G1	0.23	0.17	0.12
G2	0.10	0.01	0.05
	0.01	0.00	0.03
	0.01	0.00	0.17 AC.
	TOTAL 0.34 AC.	0.18 AC.	

REQUIRED WETLAND MITIGATION 0.17 X 2.0 = 0.34 AC.

PROPOSED WETLAND MITIGATION TOTAL = 0.34 AC.

WETLAND LEGEND:

-  WETLAND IMPACT AREA
-  WETLAND BUFFER IMPACT AREA
-  TEMPORARY WETLAND BUFFER IMPACT AREA (FOR DTE UTILITY POLE INSTALLATION AND WETLAND MITIGATION)
-  APPROXIMATE LIMITS OF WETLAND MITIGATION AREA



Key Map
Scale: Not to Scale

King & MacGregor Environmental, Inc.
 2550 Woodmeadow SE
 Grand Rapids, MI 49548
 Phone: (616) 957-1251
 43000 Ford Road, Suite 100
 Canton, MI 48107
 Phone: (734) 354-5504

ZEIMET WOZNIAK
 Civil Engineers & Land Surveyors
 1500 WOODLAND AVE., SUITE 100
 NEW HULON, MICHIGAN 48165
 P: (248) 477-9099 F: (248) 437-0222 www.zaimetwoznia.com



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Project: Catholic Central High School
 Wixom Road Frontage Improvements
 Sec. 18, Michigan, Section 18

Sheet: WETLAND IMPACT AND MITIGATION PLAN

Job Number:	C22191
Drawn:	SRE
Checked:	REH
Title:	As Noted

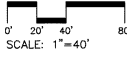
Date:	Revised:	
PRE-APPLICATION REVIEW	12-20-19	
REVISE IMPACT AREA	1-2-20	
PSP / FSP SUBMITTAL	1-22-20	

Sheet Number: **W101**
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William J. Kruger, Jr.

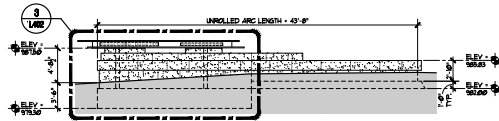
SEE SHEET W102 FOR CROSS SECTIONS



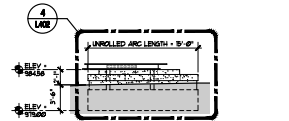
E:\Projects\192020C22191\COMPOSITE AND GRADING PLAN\Wetland.mxd, 01/13/2020 7:40:33 AM, davegray

Note Key:

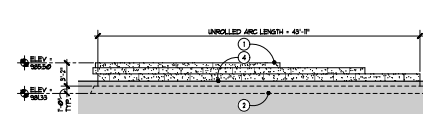
- ① STACKED STONE WALLS - REFER TO TYPICAL DETAILS
- ② 1" DEPTH COMPACTED AGGREGATE BASE
- ③ CONCRETE FOUNDATION BELOW
- ④ LINE OF FINISH GRADE
- ⑤ SIGNAGE - REFER TO DETAIL ENLARGEMENTS



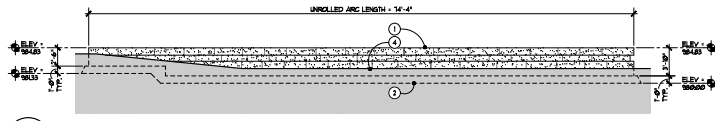
9 W9 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



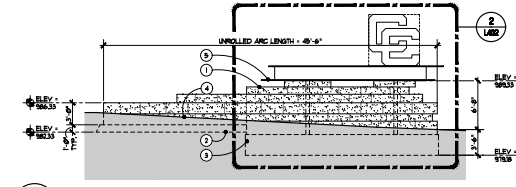
10 W10 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



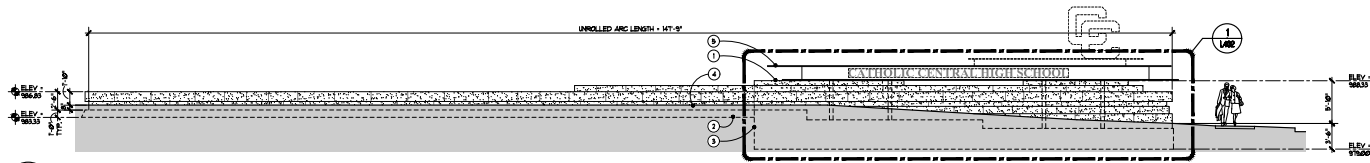
11 W11 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



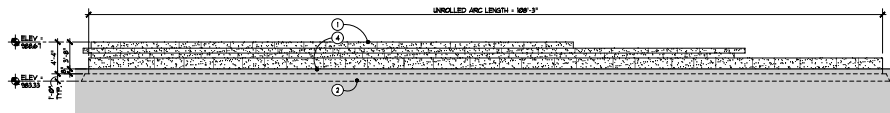
7 W7 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



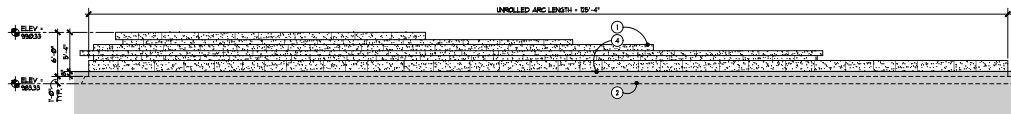
8 W8 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



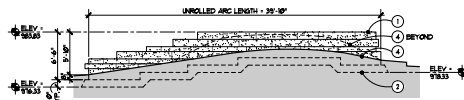
6 W6 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



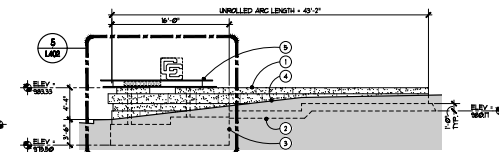
5 W5 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



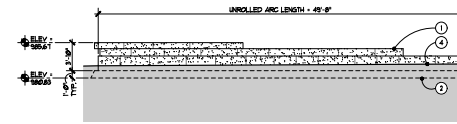
4 W4 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



1 W1 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



2 W2 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



3 W3 - Wall Elevation (Unrolled)
SCALE: 1/8" = 1'-0"



Richard Houldie



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Project: Catholic Central High School
Wisnom Road Frontage Improvements
New, Michigan, Section 18

Sheet: Wall Elevations

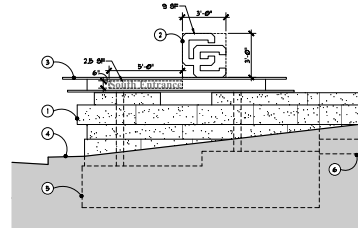
Job Number: C22-191
Drawn: SAE
Checked: RBH
Scale: As Noted

Date: 01.22.2020
Revised For: PSF/PSF Submittal

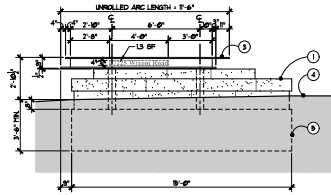
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Note Key:

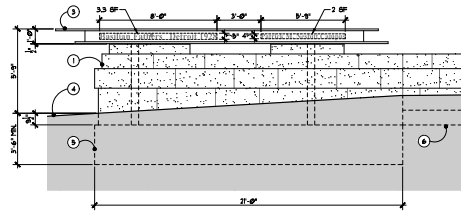
- ① LAKE SUPERIOR Limestone 18"-24" TH X 24"-48" L X 24"-36" W
- ② DECORATIVE METAL 'CC' MOUNTED TO METAL I-BEAM ILLUMINATED BY LED UP-LIGHTS
- ③ DECORATIVE METAL I-BEAM WITH PIN MOUNTED LETTERS, MOUNT TO INTERNALLY HIDDEN SUPPORTS ANCHORED TO FOUNDATION
- ④ FINISH GRADE
- ⑤ CONCRETE FOUNDATION BELOW
- ⑥ COMPACTED STONE BASE



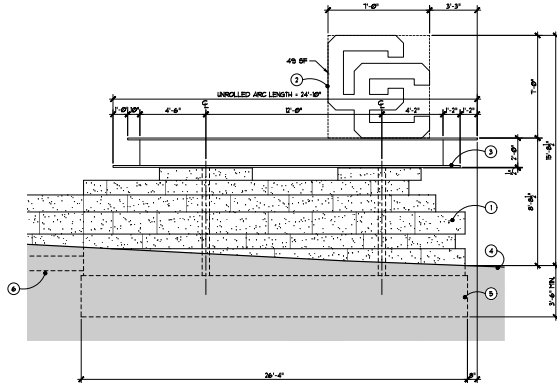
5 South Entrance Signage - Enlarged Elevation (Unrolled)
L402 SCALE: 1/4" = 1'-0"



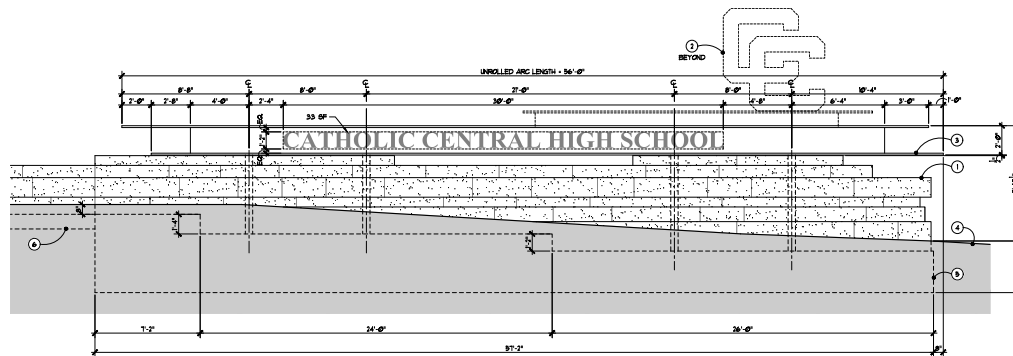
4 North Entrance Address Signage - Enlarged Elevation (Unrolled)
L402 SCALE: 1/4" = 1'-0"



3 North Entrance Historical & Donor Signage - Enlarged Elevation (Unrolled)
L402 SCALE: 1/4" = 1'-0"



2 North Entrance Signage Enlarged Elevation (Unrolled)
L402 SCALE: 1/4" = 1'-0"



1 North Entrance Signage - Enlarged Elevation (Unrolled)
L402 SCALE: 1/4" = 1'-0"



Richard Goudek



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Project:
 Catholic Central High School
 Wisnom Road Frontage Improvements
 New, Michigan, Section 18

Sheet:
 Sign Elevations

Job Number: C22-191
 Drawn: SAE
 Checked: RBH
 Title: As Noted

Date: 12.20.2019
 01.22.2020
 Issued for:
 Pre-Application Review
 PS/ISS Submittal

- Note Key:**
- ① LAKE SUPERIOR LIFESTONE ISLAND
 - ② DECORATIVE METAL CROSS WITH UPLIGHTING
 - ③ FINISH GRADE
 - ④ CONCRETE FOUNDATION BELOW
 - ⑤ EXISTING CONCRETE CROSSWALK THROUGH CURBED ISLAND



Richard Houdisek



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Project:
Catholic Central High School
Wiscom Road Frontage Improvements
New, Michigan, Section 16

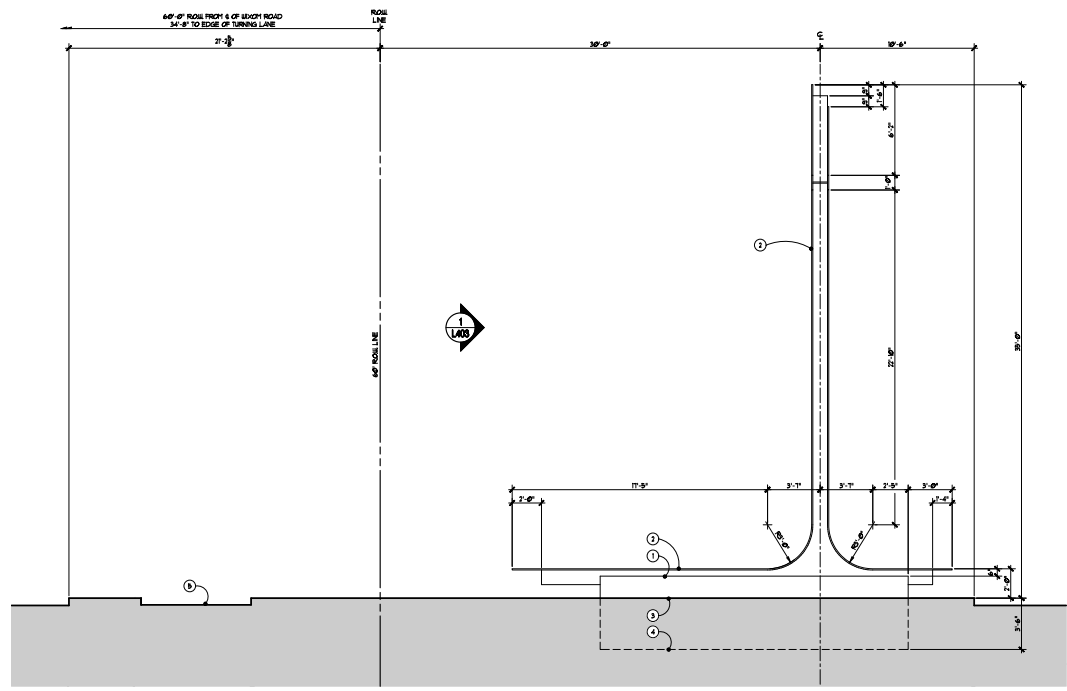
Sheet:
Cross Elevations

Job Number: C22-191
Drawn: SAE
Checked: RBH
Title: As Noted

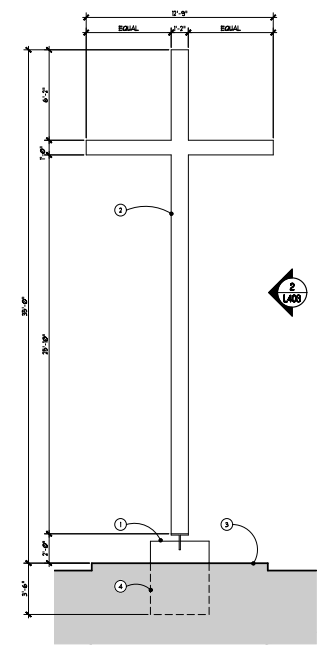
Date: 01.22.2020
Issued for: PSF/ISSP Submittal

Sheet Number:
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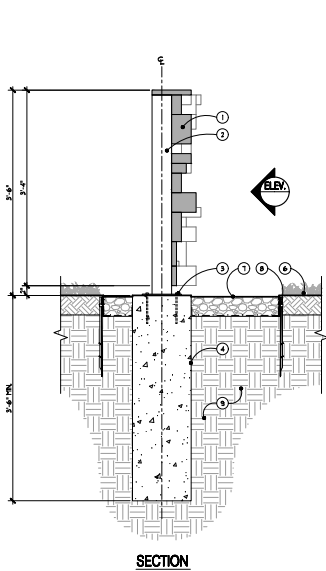
L403



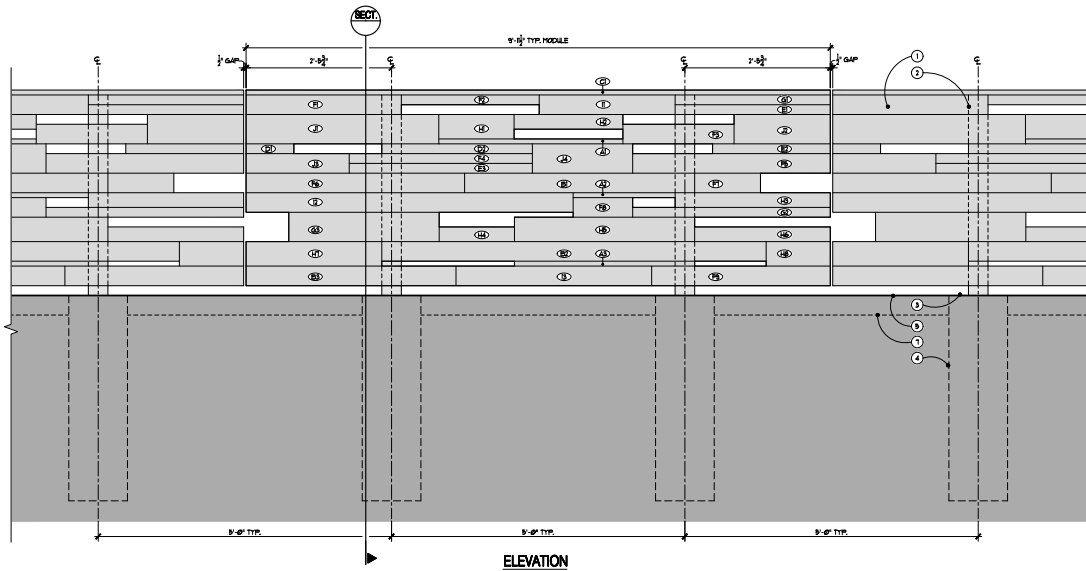
2 North Entrance - Cross Elevation (South)
SCALE: 1/4" = 1'-0"



1 North Entrance - Cross Elevation (West)
SCALE: 1/4" = 1'-0"



SECTION



ELEVATION

Note Key:

- ① ALUMINUM TUBE RAILS REFER TO SCHEDULE FOR SIZES, SPOT WELD ALONG BACK FACE, CAP ENDS, TYP.
- ② 4"x4" ALUMINUM TUBE POSTS WELD TO BASE POINTING PLATE
- ③ 8"x8"x1/4" BASE POINTING PLATE, BOLT TO CONCRETE FOOTING
- ④ CONCRETE FOOTING
- ⑤ LINE OF FINISH GRADE
- ⑥ LANK ON 4" TOPSOIL
- ⑦ BRUSH MAINTENANCE USED ON FILTER FABRIC, REFER TO TYPICAL DETAIL.
- ⑧ METAL EDGING
- ⑨ EXISTING SUBGRADE COMPACTED TO 95% MODIFIED PROCTOR AT FOOTING, 90% MODIFIED PROCTOR BELOW LANDSCAPE AREAS

General Notes:

1. ALL ALUMINUM COMPONENTS TO BE PRIME AND PAINTED, COLOR TBD.
2. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS AND MOCK UP OF CUSTOM DECORATIVE METAL FINISH. DRAWINGS TO CONSIST OF DETAILED LAYOUT, FABRICATION AND INSTALLATION.
3. THE CONTRACTOR SHALL PROVIDE A MOCK UP CONSISTING OF ONE (1) FULL SCALE MODULE OF THE CUSTOM DECORATIVE METAL FINISH FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO COMMENCING WITH FABRICATION OF THE REMAINING SCOPE. ACCEPTED MOCKUP MAY BE USED IN THE FINAL INSTALLATION.

Fence Rail Schedule:

File No.	HT.	W.	L.	ROTATE W/ VERTICAL
A1	1"	1 1/2"	3'-4 1/2"	
A2	1"	1 1/2"	1'-8 3/4"	
A3	1"	1 1/2"	2'-8 3/4"	
B1	1"	4"	3'-4 1/2"	X
B2	1"	4"	8'-6 1/2"	X
B3	1"	4"	3'-0"	X
C1	1"	8"	8'-11 1/2"	
D1	2"	2"	9'-3/4"	
D2	2"	2"	2'-8 3/4"	
E1	2"	3"	2'-7 3/4"	
E2	2"	3"	2'-0"	
E3	2"	3"	3'-1 1/2"	
F1	2"	4"	2'-7 3/4"	X
F2	2"	4"	2'-4 1/4"	
F3	2"	4"	1'-10 3/4"	X
F4	2"	4"	3'-1 1/2"	
F5	2"	4"	3'-4 1/2"	X
F6	2"	4"	2'-8 3/4"	X
F7	2"	4"	1'-1 1/2"	X
F8	2"	4"	1'-8 3/4"	X
F9	2"	4"	3'-8 1/2"	X
G1	2"	6"	2'-7 3/4"	
G2	2"	6"	3'-4 1/2"	
G3	2"	6"	2'-8 3/4"	X
H1	3"	5"	1'-10 1/2"	X
H2	3"	5"	1'-10 1/4"	
H3	3"	5"	2'-7 3/4"	
H4	3"	5"	1'-3 1/2"	X
H5	3"	5"	2'-8 3/4"	X
H6	3"	5"	2'-3 3/4"	
H7	3"	5"	2'-3 3/4"	X
H8	3"	5"	1'-1 1/4"	X
I1	4	5	2'-8 3/4"	
I2	4	5	5'-0"	
I3	4	5	3'-4"	
J1	4	6	3'-3 1/2"	X
J2	4	6	1'-7 3/4"	X
J3	4	6	1'-0"	
J4	4	6	1'-8 1/2"	X

1 Custom Decorative Metal Fence Details
SCALE: 1" = 1'-0"



Richard S. Houlston



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Catholic Central
High School

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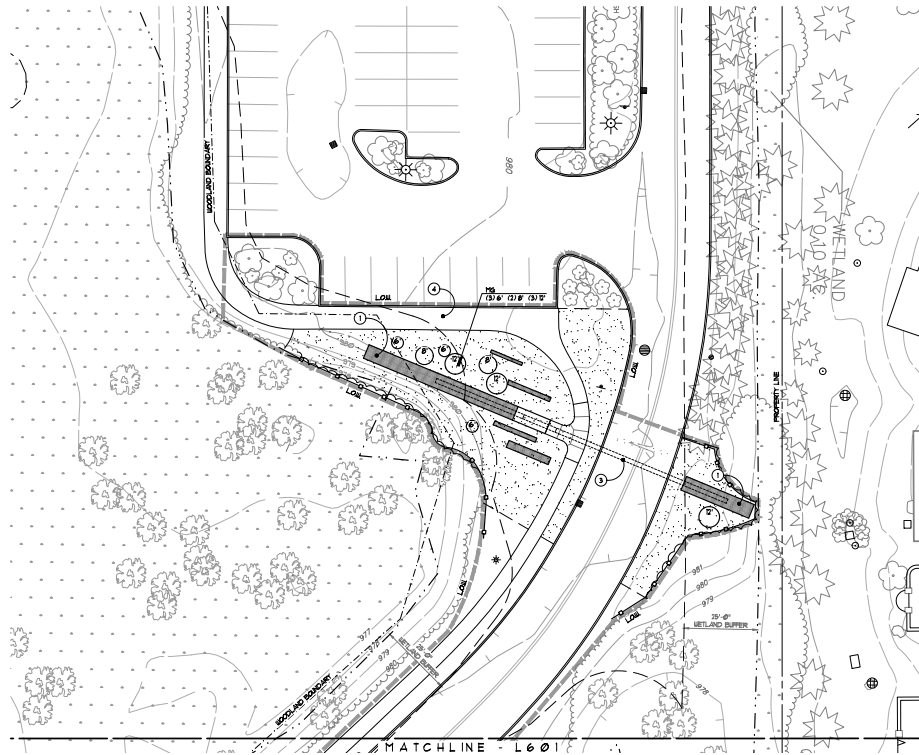
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-010

Project:
Catholic Central High School
Wiscom Road Frontage Improvements
New, Michigan, Section 18

Drawn:
Site Details

Job Number: C22-191
Drawn: SAE
Checked: RBH
Scale: As Noted

Date: Issued for:
01.22.2020 PSF/ISS/Submit



- Landscape Plan Legend:**
- LIST OF ITEMS
 - EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
 - EXISTING WETLAND
 - EXISTING EDGE OF VEGETATION
 - NEW EDGE OF VEGETATION
 - EROSION PROTECTION FENCE - REFER TO EROSION CONTROL PLANS
 - SEEDDED LAWN ON 6" TOPSOIL
 - SEEDDED MEADOW LAWN - TYPE 'M' ON 6" TOPSOIL
 - EMERGENT WETLAND SEED MIXTURE - REFER TO WETLAND MITIGATION DRAWINGS
 - 4" DEPTH DECORATIVE STONE MULCH TYPE 'M' OVER NON-SOIL FILTER FABRIC
 - 4" DEPTH DECORATIVE STONE MULCH TYPE 'B' OVER NON-SOIL FILTER FABRIC
 - ADDITIONAL TRANSPLANTED TREES
 - PLANT CALL OUT - STREET TREE CANOPY REQUIREMENT
 - PLANT CALL OUT - GREEN BELT (SUB-CANOPY) REQUIREMENT
 - PLANT CALL OUT - GREEN BELT (EVERGREEN) REQUIREMENT
 - PLANT CALL OUT - TRANSPLANTED EVERGREEN OR DECIDUOUS CANOPY TREE

- Note Key:** (APPLIES TO SHEETS L600 - L609, NOT ALL APPLY TO EVERY SHEET)
- 1 NATURAL STONE WALLS
 - 2 CROSS SCULPTURE WITH STONE BASE ON STRUCTURAL FOOTING
 - 3 IDENTITY SIGNAGE ELEMENT WITH STRUCTURAL FOOTING
 - 4 CONCRETE SIDEWALK / SAFETY PATH
 - 5 STEEL EDGING - REFER TO SPECS
 - 6 SHEET PILE WALL
 - 7 4" FT. CUSTOM DECORATIVE METAL FENCE
 - 8 SCULPTED BENCH FEATURES
 - 9 FUTURE RELOCATED OVERHEAD UTILITY POLES
 - 10 EXISTING TRAFFIC LIGHT UTILITY POLES
 - 11 UTILITY POLES TO BE RELOCATED BY DTE
 - 12 20' CORNER CLEARANCE ZONE
 - 13 CITY OF NOVA CLEAR VISION ZONE (PER VII-B DESIGN & CONSTRUCTION SPECIFICATIONS)
 - 14 MANUAL CLOSE CONTROL GATES WITH LOOKING BOLLARDS

- General Notes:**
1. LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGGING ANY EXCAVATION WORK.
 2. PROTECT ALL NEW AND EXISTING UTILITIES, LIGHTS, PAVEMENT, POLES, ETC. DURING CONSTRUCTION.
 3. RESTORE ANY DAMAGED LANDSCAPE OR INFRASTRUCTURE TO PRE-CONSTRUCTION CONDITIONS PER SPECIFICATIONS.
 4. CONTRACTOR SHALL VERIFY ALL EXISTING CONSTRUCTION INFORMATION AGAIN PRIOR TO CONSTRUCTION. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONCERNS PRIOR TO PROCEEDING.
 5. PREPROPOSED UTILITIES SHOWN FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS.
 6. REFER TO SHEETS EDCR-EDCR FOR SOIL TYPE DESIGNATIONS.
 7. DECORATIVE STONE MULCH SHALL BE SUPPLIED BY CAPITAL STONEMARKETS, KESKO HARBOR, MICHIGAN 48039 OR APPROVED EQUAL.
 8. REFER TO SHEET L600 FOR PLANT LIST AND ADDITIONAL INFORMATION.
 9. ALL BIRD LINES / HIGH EDGES BETWEEN ROD TYPES AND TREE LOCATIONS SHALL BE PAINTED OUT BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
 10. ALL LAWN AREAS TO BE IRRIGATED. REFER TO THE IRRIGATION DRAWINGS.

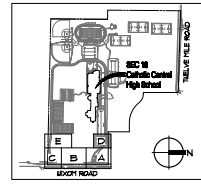
Ordinance Requirements:

REMOVAL OF TREE SPECIES:
 Applicant is proposing to remove 11 trees which are over 8" DBH and located within a registered wooded area of the construction for the Catholic Central Wooded Road Frontage Improvement project. Total replacement trees required is 56 (20 canopy trees & 36 evergreen trees). See sheet L606. Refer to areas SHP-1209 for all additional replacements.

2. Applicant is proposing to provide additional replacement trees, see schedule below.

Landscape Ordinance Requirements
See 811 (2017) & (2018) / Zone B1 (167-3-1) (Amended) / Zone B1 (167-3-1) (Amended)

Tree ID	Date	Tree Species	Minimum Replacement	Tree Replaced	Tree Provided
W1	B1	Small Tree - Group	1 (2.0" B" - 1.0" H)	10	10
	B1	Small Tree	1 (2.0" B" - 1.0" H)	4	4
B1	B1	Small Tree - Group	1 (2.0" B" - 1.0" H)	10	10
	B1	Small Tree - Group	1 (2.0" B" - 1.0" H)	10	10
V1	B1	Small Tree - Group	1 (2.0" B" - 1.0" H)	10	10
	B1	Small Tree - Group	1 (2.0" B" - 1.0" H)	10	10
W1	B1	Medium Tree - Group	see sheet L606 & W100-010	10	10
	B1	Medium Tree - Group	see sheet L606 & W100-010	8	8
Wooded Area					20
Total					100
Additional Trees Provided					12



Key Map
 Site Location



Detroit
 Catholic Central
 High School

**GRISSIM
 METZ
 ANDRIESE**
 ASSOCIATES

Landscape Architecture
 311 East Cady Street
 Northville, MI 48167
 Ph: 248-347-7010

Project:
 Catholic Central High School
 Wooded Road Frontage Improvements
 West, Michigan, Section 16

Sheet:
 Area D - Landscape Plan

Job Number: C22-191
 Drawn: SAE
 Checked: RBH
 Scale: As Noted

Date: 12.20.2019
 01.22.2020
 Based for: Pre-Application Review
 PS-1/SP Submittal

PLANNING REVIEW



PLAN REVIEW CENTER REPORT
Planning Review
CATHOLIC CENTRAL LANDSCAPE/ENTRY
 JSP 19-48
 February 18, 2020

PETITIONER

Catholic Central High School

REVIEW TYPE

Preliminary/Final Site Plan

PROPERTY CHARACTERISTICS

Section	18	
Site Location	West of Wixom Road, South of Grand River; Catholic Central HS Campus; 22-18-200-027	
Site School District	Novi Community School District	
Site Zoning	R-1 One Family Residential	
Adjoining Zoning	North	R-4 on western side, RM-1 Low Density Multiple Family on eastern side
	East	I-1 (Developed as B-3 General Business under consent judgement)
	West	R-4 One-Family Residential
	South	R-1 One-Family Residential
Current Site Use	Detroit Catholic Central High School	
Adjoining Uses	North	Western side – Catholic Central recreational fields; Eastern side – Berkshire Pointe single family residential
	East	Novi Promenade Shopping Center
	West	Andelina Ridge single family residential community
	South	Island Lake residential community
Site Size	70.88 acres	
Plan Date	January 22, 2020	

PROJECT SUMMARY

The applicant is proposing new berms, landscaping treatments, and sidewalks along the property's Wixom Road frontage. The two entrances to the property would be updated with new signage, and interior to the property a new gateway with signage would be constructed. No new buildings or parking is proposed at this time.

RECOMMENDATION

Staff recommends conditional approval of the Preliminary Site Plan if the corner clearance at the south entrance can be addressed to meet the Ordinance standards. **Planning Commission approval of the Preliminary Site Plan, Wetland Permit, Woodland Permit and Storm Water Management Plan is required. Approval of the Final Site Plan is not recommended by Planning and Traffic at this time.**

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. Lighting Plan (Section 5.7): At the time of Preapplication review, the applicant indicated there would not be new lighting proposed except for the illumination of signage. The applicant will need to provide specification details including the brightness of the lighting proposed and demonstrate the lighting will meet the intent of the zoning ordinance, including preventing unnecessary glare and avoid transmission of light into the night sky.
2. Corner Clearance (Section 5.9): The ordinance states: *"Except as otherwise permitted in this Code of Ordinances, no fence, wall, plant material, sign or other obstruction to vision above a height of two (2) feet from the established street grades shall be permitted within the clear view zone which is the triangular area formed at the intersection of any existing public street right-of-way lines by a straight line drawn between said right-of-way lines at a distance along each line of twenty-five (25) feet from their point of intersection."* **The applicant shall show the 25' clear vision triangle on the south entrance, and ensure any objects within the triangle do not exceed the height of 2 feet. With the sidewalk location just beyond the right-of-way line, in the interest of protecting pedestrians and bicyclists utilizing the sidewalk, staff believes the 25' corner clearance should be kept clear as required by the Ordinance. The applicant should redesign or relocate the stone walls to be less than 2 feet within the clear vision triangle.**
3. Street Trees (Section 5.5.3.B.ii): The applicant requests a waiver to allow canopy street trees to be located to the west of the sidewalk, rather than between the sidewalk and the street as required by the ordinance. **Staff does not support this waiver, as the purpose of street trees is to provide shade and buffer between the street and the sidewalk.**
4. Other Reviews: All reviewers except Landscaping are recommending approval of the Preliminary Site Plan, however Planning and Traffic do not recommend approval of the Final Site Plan at this time. Remaining comments in these reviews should be addressed with a revised Final Site Plan if the Planning Commission grants approval.

NEXT STEP: PLANNING COMMISSION MEETING

This site plan is scheduled for public hearing before the Planning Commission on February 26, 2020. **Please submit the following no later than noon on February 20, 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.

REVISED FINAL SITE PLAN SUBMITTAL

Traffic and Planning reviewers are not recommending approval of the Final Site Plan due to the Corner Clearance issue. Refer to letter for more details. Please submit the following for reconsideration:

1. A [site plan revision application](#)
 2. Two printed copies of revised site plans addressing all unresolved comments from the review letters.
 3. Response letter **addressing all comments and refer to sheet numbers where the change is reflected.**
-

ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER

After receiving Planning Commission and Zoning Board of Appeals 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 **9 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, AICP, Senior Planner

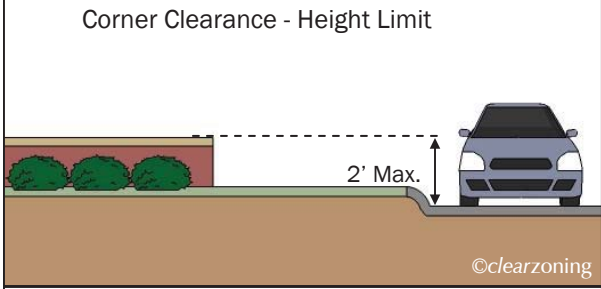
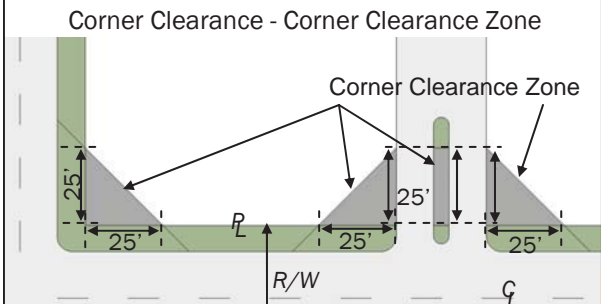
5.8 RESIDENTIAL ENTRANCEWAY

In all Residential districts, so called entranceway structures including but not limited to walls, columns and gates marking entrances to single-family subdivisions or multiple housing projects may be permitted and may be located in a required yard, except as provided in Section 5.9 Corner Clearance, provided that such entranceway structures shall comply to all codes of the Municipality, and shall be approved by the Building Department [Department of Building and Safety] and a permit issued.

5.9 CORNER CLEARANCE

Except as otherwise permitted in this Code of Ordinances, no fence, wall, plant material, sign or other obstruction to vision above a height of two (2) feet from the established street grades shall be permitted within the clear view zone which is the triangular area formed at the intersection of any existing public street right-of-way lines by a straight line drawn between said right-of-way lines at a distance along each line of twenty-five (25) feet from their point of intersection. Medians shall be included in this measurement. Height of shrubs, perennials or ornamental grasses is the mature height for the species of plant material. Canopy and sub-canopy trees can be located at the outside edge of the triangle. No evergreen trees are allowed within or at the edge of the clear view zone. Driveways shall have a ten (10) foot clear view zone as measured from the back of curb and edge of drive. Private roads shall meet the same twenty-five (25) foot clear view zone. 🏠

5.9 Corner Clearance



No visual obstructions within the corner clearance zone. Obstructions to vision above a height of 2', measured from established street grade, are not allowed. Plant materials are measured at mature height.

5.10 ADDITIONAL ROAD DESIGN, BUILDING SETBACK, AND PARKING SETBACK REQUIREMENTS FOR ONE-FAMILY CLUSTERING OPTION, TWO-FAMILY USES, MULTIPLE-FAMILY USES, AND CERTAIN NON-RESIDENTIAL USES AND DEVELOPMENTS

1. The following apply to uses and developments (other than subdivision plats and site condominiums) constructed according to the requirements and standards for the one-family clustering option, two-family uses, multiple-family uses, and non-residential districts meeting the standards in subsection 2 below. Conventional general and site condominium residential developments located in one-family districts shall be designed to meet Ordinance standards as if they were conventional residential platted subdivisions. For general condominiums, theoretical "lot" lines shall be shown on the review plans for the purpose of determining compliance with ordinances, but shall not be shown on the final recorded condominium plans.



PLANNING REVIEW CHART: R-1 One Family Residential

Review Date: February 18, 2020
Review Type: Preliminary/Final Site Plan
Project Name: JSP 19-48 CATHOLIC CENTRAL FRONTAGE
Plan Date: January 22, 2020
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	Existing parochial school	Yes	
Area Study	The site does not fall under any special category	NA	Yes	
Zoning <i>(Effective January 8, 2015)</i>	One-family Residential (R-1) Article 3	R-1	Yes	
Uses Permitted <i>(Sec 3.1.1.B & C)</i>	Sec 3.1.1.B Principal Uses Permitted. Sec 3.1.1.C Special Land Uses	No change of use proposed	NA	
Phasing	Phasing requires Planning Commission Approval	Phasing not proposed	NA	
Required Conditions: Schools (Section 4.3)				
Site Access <i>(Sec 5.13)</i>	- Vehicular access shall be provided to existing or planned major thoroughfare or freeway service drive	Two existing access roads on Wixom Road	Yes	
Noise Impact Statement <i>(Sec 5.14.10.B)</i>	- A noise impact statement is required subject to the standards of Section 5.14.10.B	Changes proposed will not influence noise emissions of site	NA	
Height, bulk, density and area limitations (Sec 3.1.1.E)				
Maximum % of Lot Area Covered <i>(By All Buildings)</i>	25%	No changes to buildings proposed	NA	

Item	Required Code	Proposed	Meets Code	Comments
Building Height (Sec. 3.1.1.E)	35 feet or 2 ½ stories		NA	
Building Setbacks (Sec 3.1.1.E)				
Front @ Wixom Road (Sec. 3.6.2.B)	75 feet	No changes to buildings proposed	NA	
Side (east)	75 feet		NA	
Rear (north)	75 feet		NA	
Parking Setback (Sec 3.1.1.E) Refer to applicable notes in Sec 3.6.2				
Front @ Taft Road (Sec. 3.6.2.B)	75 feet for non-residential uses	No new parking proposed	NA	
Side (north and south)	20 ft. 35ft. (lot abuts a residential district)		NA	
Rear (west)	20 ft. 35ft. (lot abuts a residential district)		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			
Parking, Loading and Dumpster Requirements (Sec. 5.2)				
Number of Parking Spaces (Sec. 5.2) Senior High Schools (Sec. 5.2.12.B)	1 for each teacher, administrator, and other day employee, and 1 for each 4 students over driving age, or the requirements of the auditorium, whichever is the greater	No changes to parking or buildings proposed	NA	
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	- 90° Parking; 9 ft. x 19 ft. - 24 ft. two way drives	- All parking existing	NA	

Item	Required Code	Proposed	Meets Code	Comments
Maneuvering Lanes (Sec. 5.3.2)	- 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping			
Parking stall located adjacent to a parking lot entrance (public or private) (Sec. 5.3.13)	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	
End Islands (Sec. 5.3.12)	<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 		NA	
Barrier Free Spaces <i>Barrier Free Code</i>	Based on Total Parking required		NA	
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 		NA	
Barrier Free Signs <i>Barrier Free Code</i>	One sign for each accessible parking space.		NA	
Minimum number of Bicycle Parking Sec. 5.16.1	Five (5) percent of required automobile spaces, minimum eight (8) spaces		NA	
Bicycle Parking General requirements Sec. 5.16	<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 		NA	

Item	Required Code	Proposed	Meets Code	Comments
	<p>entrances, the spaces shall be provided in multiple locations</p> <ul style="list-style-type: none"> - 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	<p>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</p>		NA	
Loading Spaces Sec. 5.4.1	<p>Required on all premises where receipt or distribution of materials or merchandise occurs and shall be separate from parking areas</p>		NA	
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	No new lighting proposed	NA	

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		NA	
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.		NA	
Sidewalk Requirements				
Article XI. Off-Road Non-Motorized Facilities	8 foot concrete path is required along Wixom Road	Partially existing – plan would connect 8' concrete path	Yes	See Engineering Comments regarding undulating path
Pedestrian Connectivity	Assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets	Existing sidewalk at north entrance into the school site	Yes	
Building Code	Building exits must be connected to sidewalk system or parking lot.		NA	
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) 	Not provided	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 proposed – will likely require variances from ZBA for number of signs, height of signs and area	Yes	<u>Complete sign permit applications for each sign proposed; contact Maureen Underhill at 248-735-5602 for any questions</u>
Project and Street naming	Some projects may need approval from the Street and Project Naming Committee.	This project does not need approval of the Project Name	NA	
Property Split	All property splits and combination must be submitted to the Assessing Department for approval.		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			<u>Ensure any lighting of the signs does not transmit light into the night sky</u>

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			
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.			
Lighting Plan (Sec.5.7.2.A.ii)	Specifications for all proposed & existing lighting fixtures			
	Photometric data			
	Fixture height			
	Mounting & design			
	Glare control devices			
	Type & color rendition of lamps			
	Hours of operation			
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			
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 			
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 			
Lighting for security purposes shall be directed only onto the area to be secured.				
Average Light	Average light level of the			

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			
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			
Min. Illumination (Sec. 5.7.3.k)	Parking areas: 0.2 min			
	Loading & unloading areas: 0.4 min			
	Walkways: 0.2 min			
	Building entrances, frequent use: 1.0 min			
	Building entrances, infrequent use: 0.2 min			
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			
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			
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

February 14, 2020

Engineering Review Catholic Central Landscape

Applicant

Catholic Central High School

Review Type

Combined Preliminary/Final Site Plan

Property Characteristics

- Site Location: South of Grand River Avenue, West of Wixom Road
- Site Size: ~3 acres of entrance improvements
- Plan Date: 12/19/2020
- Design Engineer: Zeimet Wozniak and Associates

Project Summary

- Redesign of the northern and southern Catholic Central entrances off of Wixom Road would include decorative walls and berms, a 35-foot tall metal cross, and a sidewalk along the site's Wixom Road frontage.
- No changes to public utilities are proposed.

Recommendation

Approval of the Combined Preliminary/Final Site Plan and the Preliminary Storm Water Management Plan is recommended, with items to be addressed at Stamping Set submittal.

Comments:

General

1. A right-of-way permit will be required from the City of Novi and Oakland County.
2. Show all existing utilities on the plans.
3. Show the landscape drain on sheet L201.
 - a. If the proposed inlet is receiving significant surface runoff than it should be upsized to 12-inch storm sewer with a 4-foot catch basin.

Paving & Grading

4. Specify the height of curbs to be replaced along Wixom Road on sheet L202.
5. Label the width of the sidewalk along the Catholic Central School Drive.
6. The meandering sidewalk along Wixom Road is not consistently within one (1) foot of the future right-of-way as it is required in section 7.4.2 (c)(1) of the Engineering Design Manual. The Engineering Division is supportive of this variance and if the Planning Commission approves the Preliminary Site Plan then it will be administratively approved.

Storm Water Management Plan

7. The proposed increase in impervious cover is minimal. Thus, no changes to the existing storm water management plan are required.

Soil Erosion and Sediment Control

8. A SESC permit is required. A full review has not been completed at this time. Please address the comments below and **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>.

The following must be submitted with the Stamping Set:

9. A draft copy of the warranty deed for the additional proposed 60-foot half-width right-of-way along Wixom Road must be submitted for review and acceptance by the City.
10. A letter from either the applicant or the applicant's engineer must be submitted with the Stamping Set highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved. **Additionally, a statement must be provided stating that all changes to the plan have been discussed in the applicant's response letter.**

The following must be addressed prior to construction:

11. A pre-construction meeting shall be required prior to any site work being started. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
12. 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 required). No fee is required for this permit.

13. Material certifications must be submitted to Spalding DeDecker for review prior to the construction of any onsite utilities. Contact Ted Meadows at 248-844-5400 for more information.
14. Construction inspection fees in an amount that is to be determined must be paid to the Community Development Department.
15. Legal escrow fees in an amount that is 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.
16. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department, Building Division (248-347-0430) for forms and information. The financial guarantee and inspection fees will be determined during the SESC review.
17. A permit for all proposed work activities within the road right-of-way must be obtained from the City of Novi. This application is available from the City Engineering Division or on the City website and can be filed once the Final Site Plan has been submitted. Please contact the Engineering Division at 248-347-0454 for further information. Please submit the cover sheet, standard details and plan sheets applicable to the permit only.
18. A permit for work within the road right-of-way of Wixom Road must be obtained from the Road Commission for Oakland County (RCOC). Please contact the RCOC (248-858-4835) directly with any questions. The applicant must forward a copy of this permit to the City. Provide a note on the plans indicating all work within the road right-of-way will be constructed in accordance with the RCOC standards.

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

19. The amount of the incomplete site work performance guarantee for any outstanding site improvement items (limited to top course of pavement and other minor items), is calculated at 1.2 times the amount required to complete the site improvements (as specified in the Performance Guarantee Ordinance).
20. The warranty deed referenced above must be executed, notarized and approved by the City Attorney and Engineering Division.
21. The City's consultant Engineer Spalding DeDecker will prepare the record drawings for this development. The record drawings will be prepared in accordance with Article XII, Design and Construction Standards, Chapter 11 of the Novi Code of Ordinances.

22. 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 Easement and Bill of Sale 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.

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 Kate Richardson at (248) 347-0586 with any questions.



Kate Richardson, EIT
Plan Review Engineer

cc: Lindsay Bell, Community Development
Angela Sosnowski, Community Development
Tina Glenn, Treasurers
Kristin Pace, Treasurers
Ben Croy, PE; Engineering
Victor Boron, Engineering
T. Meadows, T. Reynolds,; Spalding DeDecker

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT

February 3, 2020

Preliminary/Final Site Plan - Landscaping

Catholic Central Entry Landscaping Revision

Review Type

Combined Preliminary/Final Landscape Review

Job

JSP19-0048

Property Characteristics

- Site Location: 27225 Wixom Road
- Site Acreage: 70.88 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 must be addressed and incorporated as part of the revised Final Site Plan submittal. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review is a summary and is not intended to substitute for any Ordinance.

Recommendation

This project is **not recommended for approval for Preliminary Site Plan**. The lack of street trees between the sidewalk and curb is a significant waiver that I do not agree with for the reasons listed in this letter.

LANDSCAPE WAIVERS REQUIRED:

1. No street trees are located between the sidewalk and curb. *Not supported by staff.*
2. Access way perimeter canopy trees missing along south access drive. *Not supported by staff.*
3. Berm slope is 1:2 versus the maximum 1:3. *Supported by staff.*

Please work to eliminate these waivers and add a list of any remaining on Sheet L601 or Sheet L001.

Ordinance Considerations

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

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

1. All existing trees in the vicinity of the project are shown, as are trees to be removed.
2. **Please revise the layout of the wetland mitigation area to preserve the large swamp white oak (#199).**
3. **Please see the Landscape Chart and ECT review for comments regarding woodland replacements.**

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 proposes berms and the correct numbers of greenbelt trees.
2. The berms proposed have slopes of 1:2, which is steeper than the maximum 1:3 slope. **This discrepancy requires a landscape waiver** but *it is supported by staff because the applicant proposes no-mow seed on the berms so the steep slopes are not a problem.*
3. The applicant is proposing the use of narrow evergreen trees in place of the required subcanopy trees. *This requires a landscape waiver that is supported by staff in order to be consistent with the overall theme.*
4. The applicant is proposing to use some cultivars that have narrower mature canopies than is required by the ordinance for greenbelt and street trees. *This difference is not supported by staff.*
5. Street trees:
 - a. The applicant is proposing to locate the required street trees along and in front of the berms, not between the sidewalk and curb in order to leave an open look to the berms. **This requires a landscape waiver that is not supported by staff.**
 - b. The required location of the street trees is to provide a buffer between the sidewalk and road for pedestrians, to help shade the road and even provide some traffic calming effect. Locating them behind the sidewalk, sometimes as much as 60 feet away from the curb, achieves none of these desired effects.
 - c. The width of the clear vision zone as measured midway between the curb and sidewalk can be deducted from the frontage serving as the basis for the requirement to reduce the number of trees required in the right-of-way.
 - d. The street trees do not have to be placed in a rigid 1 per 35lf formation – they can be clustered somewhat to work with the curves in the sidewalk and be spaced further apart in other areas to provide more open views toward the berms and signs, to accentuate their design.
 - e. **Please locate street trees between the sidewalk and the curb, outside of the required clear vision zones.**

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

No changes to the parking lot are proposed so no new parking lot landscaping is required.

Access way perimeter (Zoning Sec. 5.5.3.C.iii Footnote (5))

1. **The existing trees that are proposed to be removed are now shown as being located behind the berm, and would be replaced with evergreen trees, mostly small, or nothing along the south access way.**
2. **This lack of access way perimeter trees requires a waiver.** *It is not supported by staff.*
3. **Please plant the number of canopy trees shown on the Landscape Chart along the south access way within 15 feet of the curb to meet the ordinance requirement.**

Building foundation Landscaping (Zoning Sec 5.5.3.D)

This project does not impact the building so no foundation landscaping is required.

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

1. Provided
2. 8 of 12 non-replacement or mitigation species used (67%) are native to Michigan.
3. The tree diversity standards of LDM Section 4 are met for all but Dawn Redwoods, which account for 23.6% of the trees planted.
4. **Please reduce the count of Dawn Redwoods to meet the maximum 15% for a species.**
5. **Please use species/cultivars with a minimum 20 foot wide mature canopy width and 30 foot minimum mature height for greenbelt canopy and street trees.**

Planting Notations and Details (LDM)

1. Provided
2. **Please see the Landscape Chart for detailed comments related to notes and details.**

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

1. This project does not impact the storm water detention basin so no additional detention basin landscaping is required.
2. Phragmites is indicated on the plans. **Please change the standard for elimination to 100% elimination because any remaining plants could spread and repopulate the area.**

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

Irrigation plans are provided.

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@cityofnovi.org.



Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – Preliminary/Final Site Plan

Review Date: February 3, 2020
Project Name: JSP19 – 0048: Catholic Central Entry Landscaping
Plan Date: January 22, 2020
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 before approval of the Preliminary Site Plan.
Underlined items need to be addressed for Final Site Plan.

LANDSCAPE WAIVERS REQUIRED:

1. No street trees are located between the sidewalk and curb. *Not supported by staff.*
2. Lack of trees along south access drive. *Not supported by staff.*
3. Berm slope is 1:2 versus the maximum 1:3. *Supported by staff.*

Please work to eliminate these waivers and add a list of any remaining on Sheet L601 or Sheet L001.

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 	Overall plan: 1"=40' Detail plans: 1"=20'	Yes	
Project Information (LDM 2.d.)	Name and Address	Location map on all sheets	Yes	
Owner/Developer Contact Information (LDM 2.a.)	Name, address and telephone number of the owner and developer or association	Location map on all sheets	Yes	
Landscape Architect contact information (LDM 2.b.)	Name, Address and telephone number of RLA/PLA/LLA who created the plan	Yes	Yes	
Sealed by LA. (LDM 2.g.)	Requires original signature	Yes	Yes	<u>Live signature required on printed stamping sets</u>
Miss Dig Note (800) 482-7171 (LDM.3.a.(8))	Show on all plan sheets	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
Zoning (LDM 2.f.)	Include all adjacent zoning	Shown on L001 Parcel: R-1 and B-1 North: RM-1 PRO East: I-1, South: R-1 West: NA	Yes	
Survey information (LDM 2.c.)	<ul style="list-style-type: none"> ▪ Legal description or boundary line survey ▪ Existing topography 	Sheet S101	Yes	
Existing plant material Existing woodlands or wetlands (LDM 2.e.(2))	<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"> ▪ Wetlands on S101 ▪ Woodlands, trees on W101 ▪ Tree Chart on L106 ▪ Replacement calculations on L106 ▪ Tree removals on Demolition Plans 	Yes	<ol style="list-style-type: none"> 1. See ECT review for complete discussion of woodland replacements and wetland mitigation requirements 2. For wetland mitigation, see if a different layout could save the existing swamp white oak that is shown as being removed (#199). It appears that there is no reason why the wetland mitigation area couldn't extend more to the east to save the tree. 3. Please show tree fencing around vegetation to remain and add tree protection fencing detail to the plans. 4. Make sure to count evergreens for no more than 10% of the woodland replacement credits provided. 5. Hemlock is no longer on the woodland replacement chart due to the concerns over the hemlock wooly adelgid. Please use a different species.
Soil types (LDM.2.r.)	<ul style="list-style-type: none"> ▪ As determined by Soils survey of Oakland county 	Provided on EC101-105	Yes	

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> Show types, boundaries 			
Existing and proposed improvements <i>(LDM 2.e.(4))</i>	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
Existing and proposed utilities <i>(LDM 2.e.(4))</i>	Overhead and underground utilities, including hydrants	Overhead lines are shown traveling along Wixom in north section of property and being relocated on W101.	Yes	
Proposed grading. 2' contour minimum <i>(LDM 2.e.(1))</i>	Provide proposed contours at 2' interval	Detailed grading is proposed on Sheets L301-305	Yes	
Snow deposit <i>(LDM.2.q.)</i>	Show snow deposit areas on plan	NA		
LANDSCAPING REQUIREMENTS				
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements <i>(LDM 1.c)</i>	<ul style="list-style-type: none"> Clear sight distance within parking islands No evergreen trees 	No new parking areas are associated with this project	NA	
Name, type and number of ground cover <i>(LDM 1.c.(5))</i>	As proposed on planting islands	NA		
General (Zoning Sec 5.5.3.C.ii)				
Parking lot Islands <i>(a, b. i)</i>	<ul style="list-style-type: none"> A minimum of 200 SF to qualify A minimum of 200sf unpaved area per tree planted in an island 6" curbs Islands minimum width 10' BOC to BOC 	No new parking areas are associated with this project		
Curbs and Parking stall reduction <i>(c)</i>	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	NA		
Contiguous space limit <i>(i)</i>	Maximum of 15 contiguous spaces	NA		
Plantings around Fire Hydrant <i>(d)</i>	No plantings with matured height greater than 12' within 10 ft. of fire hydrants	No hydrants appear to exist or are proposed along the frontage.		
Landscaped area <i>(g)</i>	Areas not dedicated to	NA		

Item	Required	Proposed	Meets Code	Comments
	parking use or driveways exceeding 100 sq. ft. shall be landscaped			
Clear Zones (LDM 2.3.(5))	25 ft corner clearance required. Refer to Zoning Section 5.9	The clear zones for the Road Commission for Oakland County are shown.	No	Please show the clear vision zone per Novi rules for both entries as Wixom Road is a City of Novi road.
Access way perimeter (Zoning Section 5.5.3.C.iii Footnote 5)	1 canopy tree per 35 lf on each side of road, less widths of access drives, within 15 feet of the curb.	The trees transplanted from the drives are now shown as being located behind the berm, not along the drive, so the drives now have no canopy trees where there had been some	No	<ol style="list-style-type: none"> Please add at least 3 deciduous canopy trees along the south side of the south entry and 4 along the north side of the south entry, within 15 feet of the drive to help shade the drive. The current situation requires a waiver that is not supported by staff.
Parking land banked	NA	No		
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 with 6" of top soil. 				
Residential Adjacent to Non-residential (Sec 5.5.3.A) & (LDM 1.a)				
Berm requirements (Zoning Sec 5.5.A)	None required	None proposed along either border		
Planting requirements (LDM 1.a.)	LDM Novi Street Tree List	NA		
Adjacent to Public Rights-of-Way (Sec 5.5.B) and (LDM 1.b)				
Berm requirements (Zoning Sec 5.5.3.A.(5))	No berm is required along Wixom Road due to existing preserved vegetation	A large berm of varying heights is proposed along entire frontage	Yes	
Cross-Section of Berms (LDM 2.j)				
Slope, height and width	<ul style="list-style-type: none"> Label contour lines Maximum 33% Min. 3 feet flat horizontal area Minimum 3 feet high Constructed of loam with 6' top layer of topsoil. 	Maximum slope is 1:2	No	<ol style="list-style-type: none"> Please provide typical berm cross section showing slopes, crest width and construction of loam with minimum 6" top layer of topsoil. A landscape waiver would be required for

Item	Required	Proposed	Meets Code	Comments
				<i>the 1:2 slope, but it would be supported by staff as it doesn't end at bodies of water and it will be no mow grass so it won't need to be mowed frequently.</i>
Type of Ground Cover		NA		
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	Overhead lines are shown as being relocated away from the frontage.	Yes	
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	<ul style="list-style-type: none"> ▪ Decorative walls/signs are proposed. ▪ 4 foot tall decorative metal screen is proposed along the top of the berm where there are no walls. 	TBD	Please provide an image of the proposed berm/walls/metal screen and the screen materials.
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer		No details provided		
ROW Landscape Screening Requirements(Sec 5.5.3.B. ii)				
Greenbelt width (2)(3) (5)	R-1 34 ft B-1 Adj to pkg: 20 ft Not adj to pkg: 25 ft	Minimum 394 ft	Yes	
Min. berm crest width	R-1 4 ft B-1 Adj to pkg: 3 ft Not adj to pkg: 0 ft	Berm crest 3-10 ft	Yes	
Minimum berm height (9)	R-1 4 ft B-1 Adj to pkg: 3 ft Not adj to pkg: 0 ft	Berm ht 3-10 ft	Yes	
3' wall	(4)(7)	Multiple decorative signs/walls	TBD	
Canopy deciduous or large evergreen trees	R-1 ▪ 1 tree per 40 lf	R-1: 15 trees B-1: 7 trees	Yes/No	Please use species/cultivars that

Item	Required	Proposed	Meets Code	Comments
Notes (1) (10)	<ul style="list-style-type: none"> ▪ 549lf/40 = 14 trees B-1 <ul style="list-style-type: none"> ▪ <u>Not adj to pkg</u>: 1 tree per 60 lf ▪ 467lf/60 = 8 trees TOTAL: 22 trees	TOTAL: 22 trees		meet the minimum size requirements for deciduous canopy greenbelt trees (30 foot min mature height and 20 foot min mature canopy width). Armstrong Maple and Princeton Sentry do not meet these size requirements.
Sub-canopy deciduous trees Notes (2)(10)	R-1 <ul style="list-style-type: none"> ▪ 1 tree per 25 lf ▪ 549lf/25 = 22 trees B-1 <ul style="list-style-type: none"> ▪ <u>Not adj to pkg</u>: 1 tree per 40 lf ▪ 467lf/40 = 12 trees TOTAL: 34 trees	R-1: 34 trees B-1: 0 trees TOTAL: 34 trees	Yes/No	A landscape waiver is required to use evergreens in place of some of the required sub-canopy trees. It is supported by staff to support the proposed design.
Canopy deciduous trees in area between sidewalk and curb <i>(Novi Street Tree List)</i>	R-1 1 tree per 35 lf (631-145-117)lf/35 = 10 trees B-1 <ul style="list-style-type: none"> ▪ 1 tree per 35 lf ▪ 467/35 = 13 trees TOTAL: 23 trees	R-1: 7 trees B-1: 22 trees TOTAL: 29 trees All required street trees are proposed within the greenbelt	No	<ol style="list-style-type: none"> 1. This requirement was primarily created to provide a buffer between pedestrians and the road, and to provide an attractive edge and cover for the road. The current design does not provide those benefits. 2. Please locate all required street trees between the sidewalk and the street, preferably within 15 feet of the street curb. They can be clustered somewhat to work with the wavy sidewalk and overall design, but not too tightly. As proposed, a landscape waiver is required and is not supported by staff. 3. The species/cultivar used must have a

Item	Required	Proposed	Meets Code	Comments
				minimum mature canopy width of 20 feet and height of 30 feet. Princeton Sentry and Armstrong Maple do not qualify as their mature canopy widths are not 20 feet or more. Please use different trees to meet the requirements.
Non-Residential Zoning Sec 5.5.3.E.iii & LDM 1.d (2)				
Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM				
Screening of outdoor storage, loading/unloading (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)			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 transformer boxes are proposed.	TBD	If any transformer or irrigation boxes are proposed, screening shrubs per standard detail are required.
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 shall cover 70-75% of the basin rim area ▪ 10" to 14" tall grass along sides of basin ▪ Refer to wetland for basin mix 	No changes to the detention system or landscaping are required.		
Phragmites Control (Sec 5.5.6.C)	<ul style="list-style-type: none"> ▪ Any and all populations of Phragmites australis on site shall be included on tree survey. ▪ Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site. 	Phragmites is indicated and a plan for its removal is provided.	Yes/No	Please change the standard for removal as 100% eradication because if any is left it can easily re-spread.
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date (LDM 2.I. & Zoning)	Provide intended date	Between Mar 15 and Nov 15.	Yes	

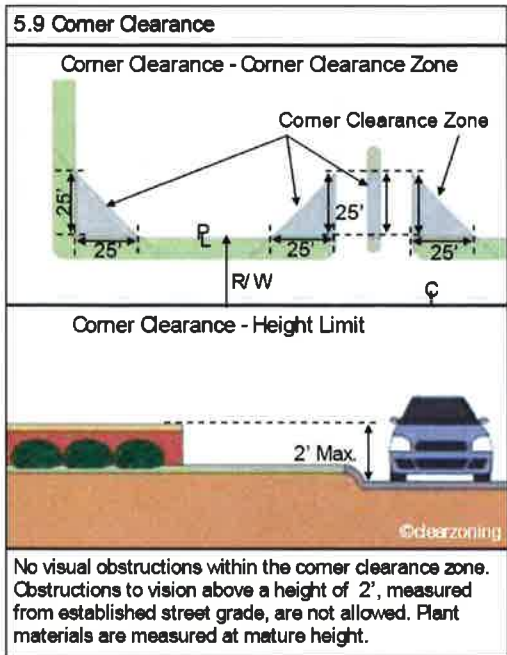
Item	Required	Proposed	Meets Code	Comments
Sec 5.5.5.B)				
Maintenance & Statement of intent (LDM 2.m & Zoning Sec 5.5.6)	<ul style="list-style-type: none"> Include statement of intent to install and guarantee all materials for 2 years. Include a minimum one cultivation in June, July and August for the 2-year warranty period. 	Satisfactory notes regarding maintenance are provided.	Yes	
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 or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans.	Irrigation system plans are provided.	Yes	
Other information (LDM 2.u)	Required by Planning Commission			Please revise Installation Spec #3 to show April 15 as the first date of inspection, not March 15.
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 in writing prior to installation.	Yes	Yes	
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"> Plant list is provided on Sheet L702 8 of 12 species (67%) used, not including woodland replacement and wetland mitigation, are native to Michigan. The tree diversity guidelines are met for all but Dawn Redwood, 	<ul style="list-style-type: none"> Yes Yes No 	Please reduce the percentage of Dawn Redwoods to no more than 15% of the trees proposed.

Item	Required	Proposed	Meets Code	Comments
		which accounts for 23.6% of the trees proposed.		
Type and amount of lawn		<ul style="list-style-type: none"> ▪ No Mow grass is proposed on most of the bermed area, sodded lawn in others. ▪ Installation and maintenance instructions are provided. 	Yes	
Cost estimate (LDM 2.f)	For all new plantings, mulch, seed 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	Yes	Yes	
Evergreen Tree		Yes	Yes	
Multi-stem Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	No	No	Please add a tree protection fencing detail to the plans.
Other Plant Material Requirements (LDM 3)				
General Conditions (LDM 3.a)	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
Plant Materials & Existing Plant Material (LDM 3.b)	Clearly show trees to be removed and trees to be saved.	Yes	Yes	
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)	Replacements: 2.5" canopy trees 6' evergreen trees Others: See Landscape Design			

Item	Required	Proposed	Meets Code	Comments
	Manual Section 9b.			
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			
Collected or Transplanted trees (LDM 3.f)		Notes included on Sheet L701	Yes	
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. 	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. 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.



WETLAND REVIEW



ECT Project No. 200101-0100

February 14, 2020

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

Re: Catholic Central Frontage Improvements (JSP19-0048)
Wetland Review of the Combined Preliminary & Final Site Plan (PSP20-0008)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Combined Preliminary & Final Site Plan (PSP20-0008) for the proposed Catholic Central Frontage Improvements project prepared by Zeimet Wozniak & Associates and Grissim Metz Andriese dated January 22, 2020 and stamped "Received" by the City of Novi on January 24, 2020 (Plan).

The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance. ECT previously conducted a wetland evaluation for the overall Catholic Central property on October 22, 2019.

ECT currently recommends approval of the Combined Preliminary & Final Site Plan for Wetlands. The Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving Wetland approval of the Final Stamping Set Plan.

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Required
Wetland Buffer Authorization	Required
EGLE Permit	Required
Wetland Conservation Easement	Required (for wetland mitigation area)

The proposed project is located west of Wixom Road and south of Grand River Ave in Section 18. The proposed work includes a redesign of the Catholic Central entrance drive from Wixom Road. Included in the project are proposed concrete sidewalks, sheet pile retaining walls, steel cross and stone base, stone wall, decorative metal screen, and manual entry gates. The Plan also includes the relocation of DTE utility poles near the main entrance drive. Due to the proposed impacts to on-site wetland areas, the project will require compensatory wetland mitigation. The Plan proposes to meet this requirement through the creation of a 0.33-acre area of constructed wetland mitigation. The City of Novi's Regulated Wetland & Woodland Map indicates areas of both Regulated Wetland and Regulated Woodland within the project area (see Figure 1).

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Wetland Evaluation

ECT's in-office review of available materials included the City of Novi Regulated Wetland/Watercourse and Regulated Woodlands maps (see Figure 1, attached), USGS topographic quadrangle map, NRCS soils map, USFWS National Wetland Inventory map, and historical aerial photographs. The City of Novi Regulated Wetlands Map indicates existing wetland area north of the main/northern entrance drive to the campus, south of the southern entrance drive and near the area of proposed wetland mitigation.

The Plan indicates the presence of several existing wetland areas (Wetlands F, G1 and G2) within and adjacent to the proposed limits of disturbance area. The sections of the wetlands proposed to be impacted by the proposed project are scrub-shrub and forested wetlands that contain the following types of vegetation: silver maple (*Acer saccharinum*), swamp white oak (*Quercus bicolor*) saplings, green ash (*Fraxinus pennsylvanica*), common buckthorn (*Rhamnus cathartica*), and several other species.

Based on the on-site wetland flagging, the existing vegetation and topography, it is ECT's assessment that the on-site wetlands were accurately delineated. The wetland boundaries appear to be accurately indicated on the Plan. In addition, ECT completed a wetland boundary verification on the overall Catholic Central Campus in October 2019.

Wetland Impact Review

The *Wetland Impact and Mitigation Plan* (Sheet W101) indicates the proposed impacts to on-site wetlands and 25-foot wetland setbacks. The proposed development appears to require the filling of some areas of existing wetland and 25-foot wetland setback. The current Plan indicates the following proposed impacts for the construction of the proposed landscape walls and associated grading:

- 0.17-acre of permanent wetland impact (0.05-acre impact to Wetland G1 and 0.12-acre impact to Wetland F);
- 0.34-acre of permanent wetland buffer impact;
- 0.18-acre of temporary wetland buffer impact.

It can be noted that the temporary wetland buffer impact is for the relocation of DTE utility poles near the main project entrance drive as well as for the construction of the proposed wetland mitigation area.

The following table summarizes the proposed wetland impacts as listed on the *Wetland Impact and Mitigation Plan*:

Table 1. Proposed Wetland Impacts

Wetland	City Reg?	MDEQ Reg?	Wetland Area (On-Site)	Impact Area		Impact Volume
			Acre	Square Feet	Acre	Cubic Yards
F	Yes, City Regulated /Essential	Likely	11.36	Not Provided	0.12	Not Provided
G1	Yes, City Regulated /Essential	Likely	0.95	Not Provided	0.05	Not Provided

<i>Wetland</i>	<i>City Reg?</i>	<i>MDEQ Reg?</i>	<i>Wetland Area (On-Site)</i>	<i>Impact Area</i>		<i>Impact Volume</i>
			<i>Acre</i>	<i>Square Feet</i>	<i>Acre</i>	<i>Cubic Yards</i>
G2	Yes, City Regulated /Essential	To be Determined	0.17	Not Provided	0.00	Not Provided
TOTAL	--	--		Not Provided	0.17	Not Provided

With regard to the 25-foot wetland setbacks, the Plan appears to propose encroachment into several of the wetland setback areas for the purpose of grading, retaining wall construction, and construction of the proposed wetland mitigation area. It should be noted that areas of temporary wetland buffer impact are proposed for the purpose of DTE utility pole installation and wetland mitigation area construction. Subsequent plan submittals shall clearly indicate how these impact areas will be restored. Specifically, the landscape plan shall indicate what seed mix will be used to restore the areas of temporary wetland buffer impact.

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

Table 2. Proposed 25-Foot Wetland Buffer Impacts

<i>Wetland Buffer</i>	<i>Existing Wetland Buffer Area</i>		<i>Permanent Buffer Impact Area</i>		<i>Temporary Buffer Impact Area</i>		<i>Purpose of Impact</i>
	<i>Square Feet</i>	<i>Acre</i>	<i>Square Feet</i>	<i>Acre</i>	<i>Square Feet</i>	<i>Acre</i>	
F	Not Provided	Not Provided	Not Provided	0.23	Not Provided	0.17	Grading, retaining walls, DTE pole replacement & mitigation
G1	Not Provided	Not Provided	Not Provided	0.10	Not Provided	0.01	Grading & retaining walls
G2	Not Provided	Not Provided	Not Provided	0.01	Not Provided	0.00	Grading
TOTAL	Not Provided	Not Provided	Not Provided	0.34	Not Provided	0.18	--

The existing area (square feet or acres) of the on-site 25-foot wetland buffers do not appear to have been provided on the Plan. In addition, the impact volume (cubic yards) for each wetland impacts shall be consistently shown on the Plan.

Wetland Mitigation Review

In general, it can be noted that in those cases where an activity results in the impact to wetland areas of 0.25-acre or greater that are deemed essential under City of Novi Ordinance subsection 12-174(b) mitigation shall be required. The applicant shall submit a mitigation plan which provides for the establishment of replacement wetlands at a ratio of 1:1 through 2:1 times the area of the natural wetland impaired or destroyed, if impacts meet or exceed the 0.25-acre threshold (emergent and scrub-shrub wetlands are generally mitigated at a 1.5-to-1 ratio, forested wetlands are mitigated for at a 2.0-to-1 ratio, and open water areas are mitigated for at a 1.0-to-1 ratio). The MDEQ's threshold for the requirement of wetland mitigation is 0.3-acre of wetland impacts.

Because the Catholic Central development is viewed as one (1) cohesive project, the currently proposed wetland impacts will require compensatory wetland mitigation. Wetland mitigation areas have previously been developed on the project site as previous phases of the site development have included impacts to on-site wetlands that have exceeded the City and the MDEQ thresholds for compensatory wetland mitigation. As such, the impacts to existing wetlands associated with the current Wixom Road Frontage Improvements project will require wetland mitigation.

Sheet W101 (*Wetland Impact and Mitigation Plan*) outlines the currently proposed wetland mitigation area. The Plan proposes one (1) area of wetland mitigation totaling 0.34-acre (0.17-acre impact x 2.0). The proposed area of wetland mitigation is located just north of the south entrance drive and is proposed adjacent to a previously constructed area of mitigated wetland. The Plan is proposing to meet the City's (and EGLE's) mitigation ratio of 2.0-to-1 for impacts to forested wetland areas.

The applicant has provided a wetland mitigation plan on Sheets WM101 through WM105. These plans provide detailed information regarding the proposed wetland mitigation area and appear to contain most of the requirements listed in Section 12-176 (Mitigation) of the City of Novi Wetland Ordinance. The mitigation plans include grading, planting, and seed mix detail. The mitigation area plan also proposes an acceptable number of wildlife habitat structures. In addition, the plan includes proposed invasive species treatment specifications. The mitigation plan should specifically provide the proposed performance standards to be met and a description of the proposed annual monitoring methodology.

Regulatory Status - EGLE

ECT has evaluated the on-site wetland areas and believes that the wetlands are considered to be essential/regulated by the City of Novi as Wetlands F, G1, and G2 are either larger than 2 acres in size (Wetland F) or meet the essentiality criteria listed in the City's Wetland Ordinance (namely stormwater storage and wildlife habitat).

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) generally regulates wetlands that are within 500 feet of an inland lake, pond, or stream, or within 1,000 feet of a Great Lake, Lake St. Clair, the St. Clair River, or the Detroit River. Isolated wetlands five (5) acres in size or greater are also regulated. EGLE may also exert regulatory control over isolated wetlands less than five acres in size "...if the department determines that protection of the area is essential to the preservation of the natural resources of the state from pollution, impairment, or destruction and the department has notified the owner".

Wetland F is likely regulated by EGLE by its size as it exceeds five (5) acres in area. Wetland G1 is likely regulated by EGLE as it appears to be hydrologically connected to Wetland F or was before the construction of the Catholic Central entrance drive.

It is the applicant's responsibility to contact EGLE in order to confirm the regulatory authority with respect to the on-site wetland areas.

Regulatory Status – City of Novi

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 2.) describes the regulatory criteria for wetlands and review standards for wetland permit applications. The City of Novi regulates wetlands that are: (1) contiguous to a lake, pond, river or stream, as defined in Administrative Rule 281.921; (2) two (2) acres in size or greater; or (3) less than two (2) acres in size but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b). Wetlands deemed regulated by the City of Novi require the approval of a use permit for any proposed impacts to the wetland.

As noted above, ECT has evaluated the on-site wetlands (Wetlands F, G1, and G2) and believes that the wetlands are regulated by the City's Wetland and Watercourse Protection Ordinance as these wetland areas are either larger than 2 acres in size (Wetland F) or meet the essentiality criteria listed in the City's Wetland Ordinance (namely stormwater storage and wildlife habitat).

The applicant shall provide information on subsequent plans that clearly indicates the areas of all of the existing on-site 25-foot setbacks/buffers (i.e., provide sizes in square feet or acres). The Plan shall also provide the volume of proposed wetland impacts (cubic yards).

As noted above, any proposed use of the wetlands will require a City of Novi *Wetland Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback* for any proposed impacts to the 25-foot wetland buffers. The applicant is urged to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable. The City regulates wetland buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states that:

“There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses”.

Wetland and Watercourse Comments

ECT recommends that the Applicant address the items noted below in subsequent site plan submittals:

1. It appears as though an EGLE Wetland Permit and a City of Novi *Wetland Use Permit* would be required for any proposed impacts to on-site wetlands. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland buffers.
2. ECT encourages the Applicant to minimize impacts to on-site wetlands, wetland setbacks, and watercourses to the greatest extent practicable.
3. The on-site acreages for all associated on-site 25-foot wetland setback areas should be indicated on the Plan.

4. The applicant shall provide information on subsequent plans that clearly indicates the volumes (cubic yards) of the proposed wetland impacts.
5. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from EGLE for any proposed wetland impacts. Final determination as to the regulatory status of any on-site wetlands (if applicable) shall be made by EGLE. The Applicant should provide a copy of EGLE Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.
6. The Plan should address how any temporary impacts to wetland or watercourse buffers shall be restored, if applicable. Specifically, the Plan should indicate what seed mix will be used to restore the areas of temporary wetland buffer impact. This shall be incorporated into the Landscape Plans.
7. The mitigation plans include grading, planting, and seed mix detail. The mitigation area plan also proposes an acceptable number of wildlife habitat structures. In addition, the plan includes proposed invasive species treatment specifications. The mitigation plan should specifically provide the proposed performance standards to be met and a description of the proposed annual monitoring methodology.
8. The Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of proposed wetland mitigation. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Wetland and Watercourse permit. The current Plan does propose an area of on-site wetland mitigation.

Wetland Conclusion

The project site appears to contain wetlands that are regulated by the City of Novi, and potentially by EGLE. Any proposed impacts to on-site wetlands will require a City of Novi *Wetland and Watercourse Use Permit*, and an *Authorization to Encroach the 25-Foot Natural Features Setback* for any proposed impacts to the 25-foot wetland buffers. The project may require a Wetland Use Permit from EGLE. Subsequent site plan submittals shall clearly indicate all proposed impacts (permanent or temporary) to the existing wetlands and the associated 25-foot wetland setbacks, including the fill quantities (cubic yards) for all wetland impacts. The applicant shall provide a detailed wetland mitigation plan prior to approval of the Final Stamping Set.

Recommendation

ECT currently recommends approval of the Combined Preliminary & Final Site Plan for Wetlands. The Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving Wetland approval of the Final Stamping Set Plan.

Catholic Central Frontage Improvements (JSP19-0048)
Wetland Review of the Combined Preliminary & Final Site Plan (PSP20-0008)
February 14, 2020
Page 7 of 11

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

Respectfully submitted,
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Pete Hill, P.E.
Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner
Sri Komaragiri, City of Novi Planner
Madeleine Kopko, City of Novi Planning Assistant
Rick Meader, City of Novi Landscape Architect

Attachments: Figure 1 – City of Novi Regulated Wetland and Woodland Map
Site Photos

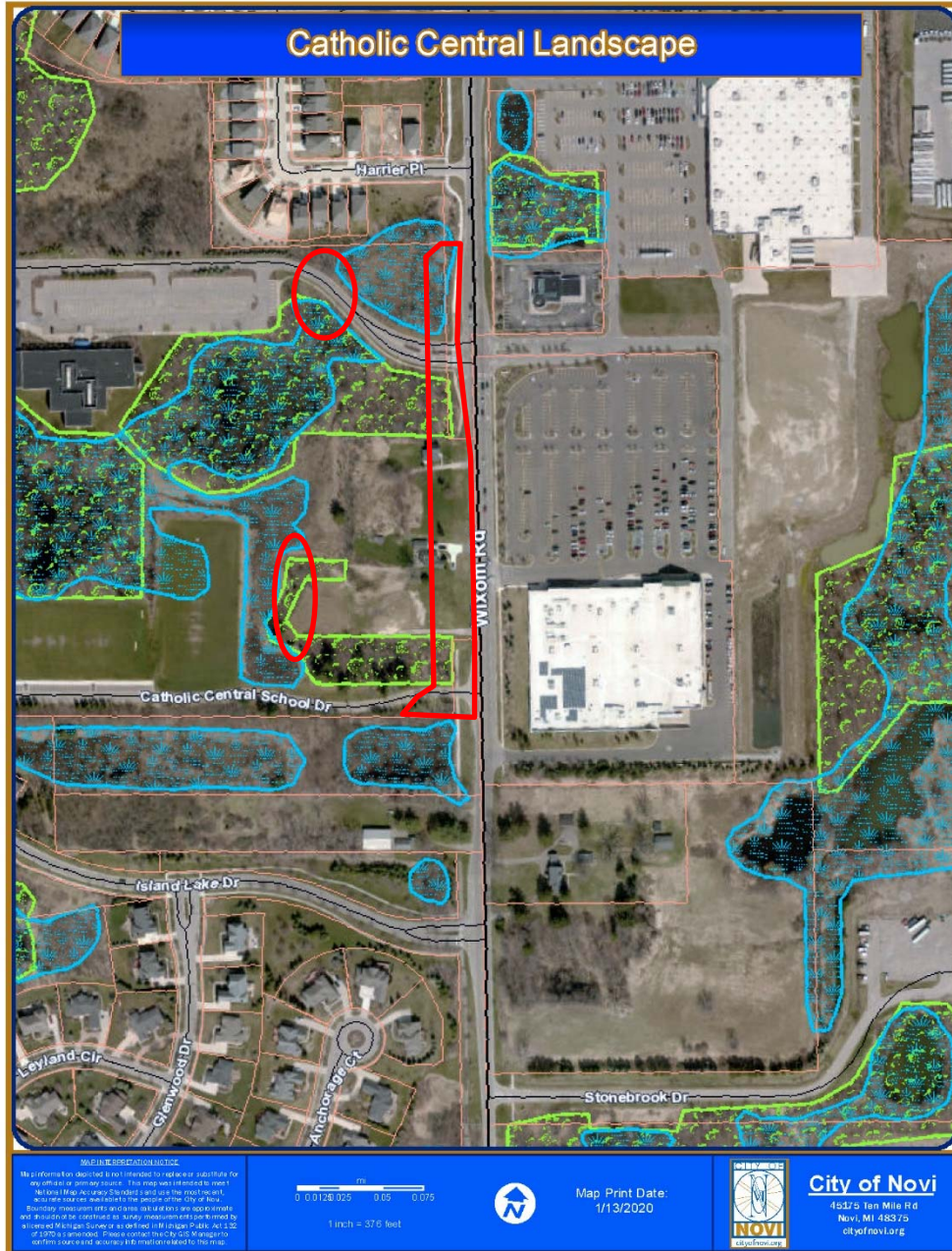


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project areas are shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.

Site Photos



Photo 1. Looking south at the northern extents of the proposed project (view of the main/northern entrance drive). Wetland Area G1 is to the right (ECT, January 31, 2020).



Photo 2. Looking north at the northern extents of the proposed project (ECT, January 31, 2020). Proposed area of impact to Wetland Area G1 just north of the main/northern entrance drive is pictured here.



Photo 3. Looking north at the area of proposed impact to Wetland F just south of the main/northern entrance drive (ECT, January 31, 2020).



Photo 4. Looking north from the central portion of the proposed project (ECT, January 31, 2020). Proposed area of impact to the Wetland Area G2 25-foot buffer is pictured here.



Photo 5. Looking south at general area of proposed wetland mitigation development (ECT, January 31, 2020). Existing wetland (mitigation) area is located to the right.



Photo 6. Looking south at the southern extents of the proposed project (view of the southern entrance drive, ECT, January 31, 2020).

WOODLAND REVIEW



ECT Project No. 200101-0200

February 14, 2020

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

Re: Catholic Central Frontage Improvements (JSP19-0048)
Woodland Review of the Combined Preliminary & Final Site Plan (PSP20-0008)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Combined Preliminary & Final Site Plan (PSP20-0008) for the proposed Catholic Central Frontage Improvements project prepared by Zeimet Wozniak & Associates and Grissim Metz Andriese dated January 22, 2020 and stamped "Received" by the City of Novi on January 24, 2020 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37.

ECT currently recommends approval of the Combined Preliminary & Final Site Plan (PSP20-0008) for Woodlands. The Applicant shall address the items noted in the Woodland Comments Section of this letter prior to receiving Woodland approval of the Final Stamping Set Plan.

The following woodland related items are required for this project:

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

The proposed project is located west of Wixom Road and south of Grand River Ave in Section 18. The proposed work includes a redesign of the Catholic Central entrance drive from Wixom Road. Included in the project are proposed concrete sidewalks, sheet pile retaining walls, steel cross and stone base, stone wall, decorative metal screen, and manual entry gates. The Plan also includes the relocation of DTE utility poles near the main entrance drive. The City of Novi's Regulated Wetland & Woodland Map indicates areas of both Regulated Wetland and Regulated Woodland within the project area (see Figure 1). Specifically, the area located south of the northern entrance drive and the area north of the southern entrance drive are designated as City of Novi Regulated Woodland.

It should be noted that the purpose of the City of Novi Woodland Protection Ordinance (Chapter 37) is to:

- *Provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the city in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the intent of this chapter to protect the integrity of*

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woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives;

- *Protect the woodlands, including trees and other forms of vegetation, of the city for their economic support of local property values when allowed to remain uncleared and/or unharvested and for their natural beauty, wilderness character of geological, ecological, or historical significance; and*
- *Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.*

City of Novi Woodland Review Standards & Woodland Permit Requirements

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

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

In addition,

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

A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch diameter-at-breast-height (DBH) or greater and located within an area designated as City Regulated Woodland, or any tree 36-inches DBH regardless of location on the site. Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio and all coniferous replacement trees shall be six (6) feet in height (minimum) and count at a 1.5-to-1 replacement ratio. All Woodland Replacement trees shall be species that are listed on the City’s Woodland Tree Replacement Chart (attached).

Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on January 31, 2020 in order to verify existing woodland information (tree sizes, species, conditions, etc.) shown on the Plan. It should be noted that a large portion of the proposed project’s limits of disturbance contains previously disturbed areas that do not contain existing trees.

The surveyed trees have been marked with metal tree tags allowing ECT to compare the tree diameters reported on the *Woodland Tree Removals List* (Sheet L106) to the existing tree diameters in the field. ECT found that the Plan appears to accurately depict the location, species composition, size, and condition of the existing trees. ECT took a sample of diameter-at-breast-height (DBH) measurements and found that the data provided on the Plan was consistent with the field measurements.

The current Plan includes a *Demolition Plans* (Sheets L101 to L105) that indicate the locations of the surveyed trees as well as the proposed tree removals. The *Woodland Tree Removals List* provides tree tag number, species, diameter, condition of the surveyed trees on the site, save/remove status and number of Woodland Replacement Credits required for each tree proposed for removal. In general, the on-site trees consist of

silver maple (*Acer saccharinum*), swamp white oak (*Quercus bicolor*), cottonwood (*Populus deltoides*), white pine (*Pinus strobus*), American elm (*Ulmus americana*), Siberian elm (*Ulmus pumila*), and several other species.

In terms of habitat quality and diversity of tree species, the overall subject site consists of trees in fair condition. In terms of a scenic asset, wildlife habitat, windblock, noise buffer or other environmental asset, the forested areas located on the subject site appear to be considered to be of fair quality. It should be noted that some sections of the forested portion of the site are dominated by invasive species of vegetation such as common buckthorn (*Rhamnus cathartica*).

The proposed Plan includes the removal of City-regulated trees as indicated below.

Proposed Woodland Impacts and Woodland Replacements

Based on a review of the *Woodland Tree Removals List* and *Demolition* plans, a total of seventeen (17) regulated trees are proposed for removal requiring thirty-five (35) Woodland Replacement Credits.

The following tree removals by diameter are indicated on Sheet L106:

- | | |
|-----------------------------------|--|
| • Stems to be Removed 8” to 11”: | 5 x 1 replacement (Requiring 5 Replacements) |
| • Stems to be Removed 11” to 20”: | 6 x 2 replacements (Requiring 12 Replacements) |
| • Stems to be Removed 20” to 30”: | 6 x 3 replacements (Requiring 18 Replacements) |
| • Stems to be Removed 30”+: | 0 x 4 replacements (Requiring 0 Replacements) |
| • Total Stems Removed: | 17 |

Total Woodland Replacement Credits Required: 35 Replacements

The Plan notes that the following Woodland Replacement tree material is proposed:

- 30 – 2.5-inch deciduous trees (30 Woodland Replacement Credits @ 1:1 replacement ratio);
- 8 – evergreen trees (5 Woodland Replacement Credits @ 1.5:1 replacement ratio);
- 38 Woodland Replacement Trees (35 Woodland Replacement Credits)

These proposed Woodland Replacement Trees are proposed around the wetland mitigation area. Sheets WM101 and WM102 (*Wetland Mitigation and Tree Replacement Plan*) indicate the proposed locations and species of the Woodland Replacement Trees. The proposed deciduous Woodland Replacement trees are proposed along the bottom of the proposed wetland mitigation area. The proposed evergreen Woodland Replacement trees are located along the upper side slopes of the proposed wetland mitigation area. The applicant should ensure that the Woodland Replacement trees are not planted in locations where they will experience standing water at a frequency and duration that will hinder their establishment/growth.

The following Woodland Replacement Trees are proposed:

- 7 – hackberry (*Celtis occidentalis*), 7 Credits;
- 7 – sycamore (*Platanus occidentalis*), 7 Credits;
- 8 – swamp white oak (*Quercus bicolor*), 8 Credits;
- 8 – silver maple (*Acer saccharinum*), 8 Credits;
- Subtotal 30 credits (deciduous tree planting)

- 4 – white pine (*Pinus strobus*), 2.6 Credits (1.5-to-1);
- 4 – eastern hemlock (*Tsuga canadensis*), 2.6 Credits (1.5-to-1);
- SubTotal 5.2 (evergreen tree planting)

Woodland Review Comments

Please consider the following comments when preparing subsequent site plan submittals:

1. A Woodland Replacement Performance financial guarantee for the planting of on-site replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400. Currently, this Woodland Replacement Performance Guarantee will be **\$14,000** (35 Woodland Replacement Credits Required x \$400/Credit).
2. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement financial guarantee will be returned to the Applicant. A Woodland Maintenance financial guarantee in the amount of twenty-five percent (25%) of the original Woodland Replacement financial guarantee will then be provided by the applicant. This Woodland Maintenance financial guarantee will be kept for a period of 2-years after the successful inspection of the on-site woodland replacement tree installation. This Woodland Maintenance Guarantee will be **\$3,500** (35 Woodland Replacement Credits Required x \$400/Credit x 0.25).
3. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement Tree Credits that cannot be placed on-site.
4. The proposed deciduous Woodland Replacement trees are proposed along the bottom of the proposed wetland mitigation area. The proposed evergreen Woodland Replacement trees are located along the upper side slopes of the proposed wetland mitigation area. The applicant should ensure that the Woodland Replacement trees are not planted in locations where they will experience standing water at a frequency and duration that will hinder their establishment/growth.
5. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees to be installed in a currently non-regulated woodland area. The applicant shall demonstrate that the all proposed woodland replacement trees will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the City. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. These easement areas shall be indicated on the Plan.

Recommendation

ECT currently recommends approval of the Combined Preliminary & Final Site Plan (PSP20-0008) for Woodlands. The Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving Woodland approval of the Final Stamping Set Plan.

Catholic Central Frontage Improvements (JSP19-0048)
Woodland Review of the Combined Preliminary & Final Site Plan (PSP20-0008)
February 14, 2020
Page 5 of 10

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

Respectfully submitted,
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Pete Hill, P.E.
Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner
Sri Komaragiri, City of Novi Planner
Madeleine Kopko, City of Novi Planning Assistant
Rick Meader, City of Novi Landscape Architect

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

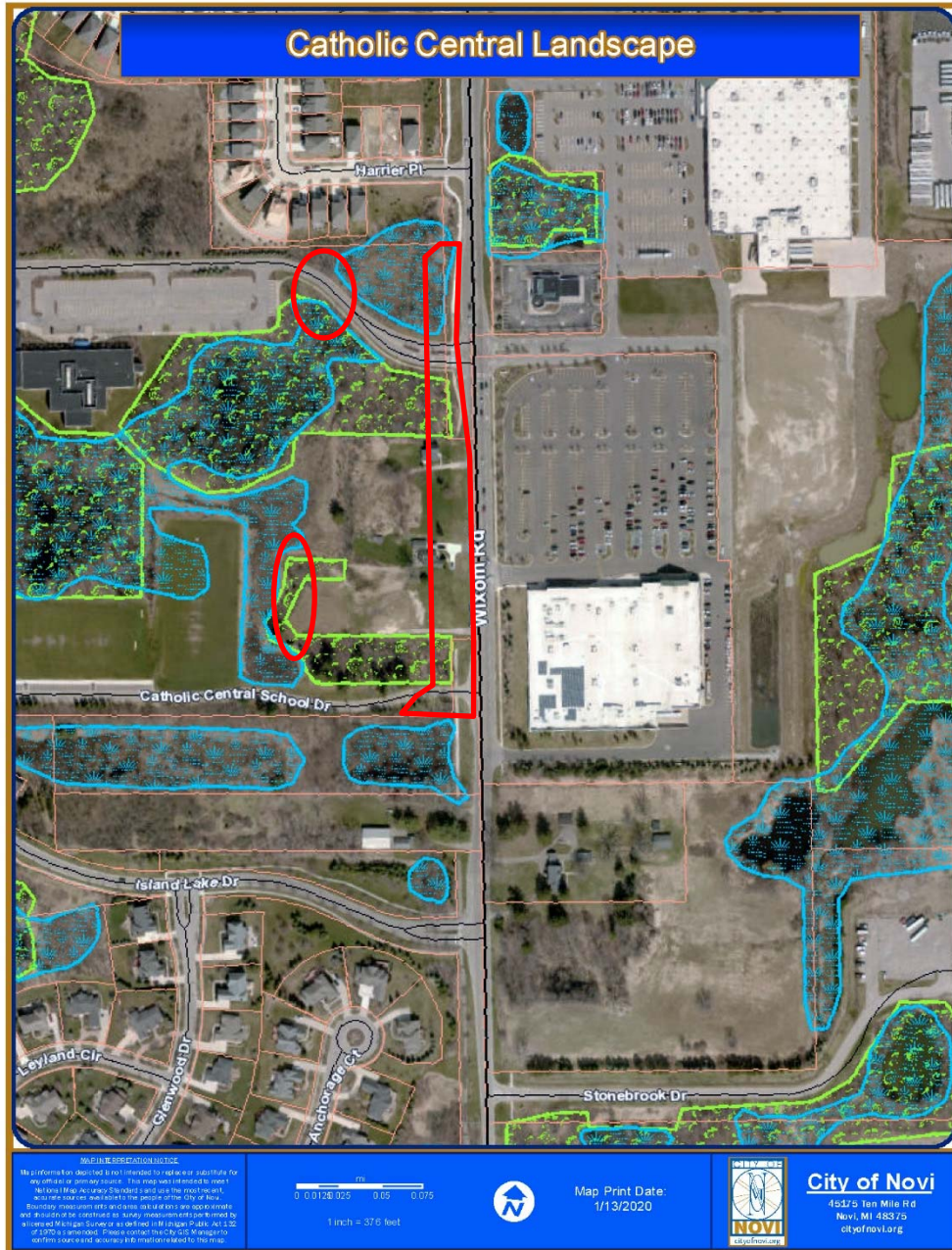


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project areas are shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.

Woodland Tree Replacement Chart

(from Chapter 37 Woodlands Protection)
 (All canopy trees to be 2.5" cal or larger, evergreens as listed)

Common Name	Botanical Name
Black Maple	Acer nigrum
Striped Maple	Acer pennsylvanicum
Red Maple	Acer rubrum
Sugar Maple	Acer saccharum
Mountain Maple	Acer spicatum
Ohio Buckeye	Aesculus glabra
Downy Serviceberry	Amelanchier arborea
Smooth Shadbush	Amelanchier laevis
Yellow Birch	Betula alleghaniensis
Paper Birch	Betula papyrifera
American Hornbeam	Carpinus caroliniana
Bitternut Hickory	Carya cordiformis
Pignut Hickory	Carya glabra
Shagbark Hickory	Carya ovata
Northern Hackberry	Celtis occidentalis
Eastern Redbud	Cercis canadensis
Pagoda Dogwood	Cornus alternifolia
Flowering Dogwood	Cornus florida
American Beech	Fagus grandifolia
Thornless Honeylocust	Gleditsia triacanthos inermis
Kentucky Coffeetree	Gymnocladus dioica
Walnut	Juglans nigra or Juglans cinerea
Eastern Larch	Larix laricina
Tuliptree	Liriodendron tulipifera
Tupelo	Nyssa sylvatica
American Hophornbeam	Ostrya virginiana
White Spruce_(1.5:1 ratio) (6' ht.)	Picea glauca
Black Spruce_(1.5:1 ratio) (6' ht.)	Picea mariana
Red Pine_(1.5:1 ratio) (6' ht.)	Pinus resinosa
White Pine_(1.5:1 ratio) (6' ht.)	Pinus strobus
American Sycamore	Platanus occidentalis
Black Cherry	Prunus serotina
White Oak	Quercus alba
Swamp White Oak	Quercus bicolor
Scarlet Oak	Quercus coccinea
Shingle Oak	Quercus imbricaria
Burr Oak	Quercus macrocarpa
Chinkapin Oak	Quercus muehlenbergii
Red Oak	Quercus rubra
Black Oak	Quercus velutina
American Basswood	Tilia americana

Site Photos



Photo 1. Looking north at the northern extents of the proposed project (ECT, January 31, 2020). Proposed area of impact to Wetland Area G1 as well as existing trees. This area is not currently mapped as City of Novi Regulated Woodland.



Photo 2. View of Tree #338 (10" silver maple) located north of the main entrance drive (ECT January 31, 2020). This tree is proposed for removal and is not currently located in an area mapped as City of Novi Regulated Woodland.



Photo 3. Looking north at the northern extents of the proposed project (ECT, January 31, 2020). Proposed area of impact to Wetland Area F as well as Regulated Woodland. This area is just south of the main entrance drive.



Photo 4. Tree No's. 136, 137, and 138 (13" white pine, 11" blue spruce, and 28" Siberian elm) located near Wixom Road and the eastern edge of Wetland G2 (ECT, January 31, 2020). These trees are proposed for removal and are not located within area mapped as City Regulated Woodlands.



Photo 5. Several (7) City-Regulated Trees located north of the southern entrance drive are proposed for removal (ECT, January 31, 2020).

TRAFFIC REVIEW



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

Project name:
JSP19-48 Catholic Central Landscape
Preliminary/Final Site Plan Traffic Review

From:
AECOM

Date:
February 18, 2020

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

CC:
Sri Komaragiri, Lindsay Bell, Kate Richardson,
Madeleine Kopko, Victor Boron

Memo

Subject: JSP19-48 Catholic Central Landscape Preliminary/Final Site Plan Traffic Review

The combined preliminary and final site plan was reviewed to the level of detail provided and AECOM recommends **approval** of the preliminary site plan and **denial** of the final site plan until the comments provided below are adequately addressed to the satisfaction of the City.

GENERAL COMMENTS

1. The applicant, Catholic Central High School, is proposing changes to the entryways to the Catholic Central High School, located on Wixom Road, south of Grand River Avenue.
2. Wixom Road is under the jurisdiction of the City of Novi.
3. The parcel is currently zoned R-1 and B-1.
4. There are no traffic related variances or waivers requested at this time.

TRAFFIC IMPACTS

As the only changes proposed are aesthetic, no trip generation was conducted.

EXTERNAL SITE ACCESS AND OPERATIONS

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

1. The applicant should provide sight distance measurements per Figure VIII-E of the City's Code of Ordinances and Section 5.9 of the City's Zoning Ordinance to ensure compliance.
 - a. Per Section 5.9 of the City's Zoning Ordinance, no obstruction to vision above a height of 2' from the established street grades shall be permitted within the clear view zone. The proposed signs are above 2' and appear to be within the clear view zone at the south entrance.
 - b. Both entrances are considered roadways, requiring a 25' clear zone.
2. The applicant is proposing a pedestrian crossing in Area C without crosswalk markings. To improve the visibility of the crossing to drivers, the applicant could consider adding crosswalk markings to this location.

INTERNAL SITE OPERATIONS

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

1. General Traffic Flow
 - a. The applicant is not proposing any changes to internal site traffic flow.
2. Parking Facilities
 - a. The applicant is not proposing any parking changes at the site.
3. Sidewalk Requirements
 - a. The applicant has indicated portions of proposed 8' wide sidewalk along Wixom Road.
 - b. The applicant has indicated proposed sidewalk ramps and revise the Michigan Department of Transportation (MDOT) sidewalk detail to the most current version date 7-26-2019.

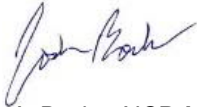
SIGNING AND STRIPING

1. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices (MMUTCD).
 - a. There are not currently any signs or pavement markings proposed.

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

Sincerely,

AECOM



Josh A. Bocks, AICP, MBA
Senior Transportation Planner/Project Manager



Patricia Thompson, EIT
Traffic Engineer

FIRE REVIEW



January 30, 2020

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

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City Manager

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**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: Catholic Central School 27225 Wixom Rd, Novi Mi. 48374, frontage improvements.

PSP# 20-0008

JSP# 19-0048

Project Description:

Landscape upgrades and improvements near front driveway.

Comments:

- This plan does not impact any building fire service protection feature(s).
- All fire lanes and fire service access drives into and out of the property/campus MUST be maintained at all times. No construction vehicles can be parked in listed fire lanes.

Recommendation:

Meets fire department standards

Sincerely,

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 LETTERS

February 20, 2020

Ms. Lindsay Bell, AICP
City of Novi Planning Dept.
45175 Ten Mile Road
Novi, MI 48375

**Re: Preliminary and Final Site Plan Review for Catholic Central High School
Wixom Road Frontage Improvements
JSP 19-48**

Dear Ms. Bell:

Thank you for your support of this project. Attached please find the following response letters as outlined in your email dated February 18, 2020:

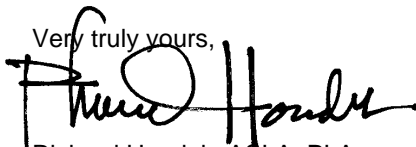
1. Original Site Plan submittal in 8.5 x 11 PDF format (maximum of 10MB). **NO CHANGES MADE.**
2. A response letter addressing ALL the comments from ALL the review letters and **a request for waivers and variances.**

Response letters addressing outstanding comments from Pre-application reviews from these city agents:

- Planning (Lindsay Bell) from Grissim Metz Andriese
 - Engineering (Kate Richardson) from Zeimet Wozniak
 - Landscaping (Rick Meader) from Grissim Metz Andriese
 - Wetlands and Woodland (Pete Hill) from King and MacGregor
 - Traffic (Josh A. Bocks) from Grissim Metz Andriese
 - A response to Fire (Andrew Copeland) from Zeimet Wozniak
3. A color rendering of the Site Plan. (A video fly through of the project will be presented during the Planning Commission meeting).
 4. There are 5 waivers being requested;
 - a. Waiver to meander sidewalk along Wixom Road. Supported by staff.
 - b. Waiver for steeper slopes on earth mounds, utilizing no-mow lawn. Supported by staff.
 - c. Waiver to substitute smaller upright evergreens in lieu of ornamental trees for Greenbelt screening. Supported by staff.
 - d. Waiver to place street trees beyond the sidewalk limits, not between road and sidewalk. Not supported by staff.
 - e. Waiver to accept street tree species specified due to the nature of the design intent and quality to be provided.

Please contact us if you have any additional questions or comments. Thank you for your assistance with this project.

Very truly yours,



Richard Houdek, ASLA, PLA
Principal

Enc.

February 20, 2020

Ms. Lindsay Bell, AICP
City of Novi Planning Dept.
45175 Ten Mile Road
Novi, MI 48375

**Re: Planning Review for Catholic Central High School
Wixom Road Frontage Improvements
JSP 19-48**

Dear Ms. Bell:

Please find the following responses to your review comments provided in the PLANNING REVIEW CHART dated February 18, 2020.

**Sidewalk Requirements:
Article XI. Off-Road Non-Motorized Facilities**

1. The undulating sidewalk has been reviewed and supported with regards to the Engineering Department's comments. A separate response to Ms. Kate Richardson has been prepared by Zeimet Wozniak and is enclosed under separate cover.

General layout and dimension of proposed physical improvements

1. All requests for additional information have been provided within each relative response letter.

Development / Business Sign and Street addressing

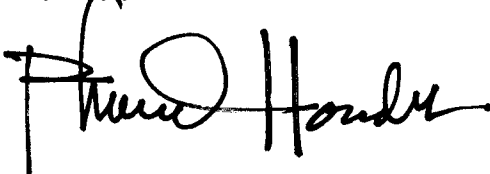
1. Sign permit applications and related drawings for each of the signs were submitted to the City for review February 20, 2020.

Lighting and Photometric Plan [Intent (Section 5.7.1)]

1. A lighting/photometric plan will be developed and submitted at a future date for approval as part of the signage permit application and drawings submittal. The lighting intent is to provide only lighting as needed to illuminate the proposed signage and at such levels to meet the intent of the City of Novi zoning ordinance. All signage will be controlled through the application of an Astronomical timer and dimmers to prevent unwanted glare and to avoid transmission of uncontrolled light into the night sky.

Please contact us if you have any additional questions or comments.

Very truly yours,



Richard Houdek, ASLA, PLA
Principal

Enc.

Z EIMET **W** OZNIAK & ASSOCIATES

Civil Engineers & Land Surveyors

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

February 19, 2020

Ms. Kate Richardson, EIT
City of Novi Engineering Dept.
45175 Ten Mile Road
Novi, MI 48375

Re: Engineering Plan Review for
Catholic Central High School
Wixom Road Frontage Improvements
JSP 19-48

Dear Ms. Richardson:

Thank you for your recommendation for approval of the Combined Preliminary/Final Site Plan and the Preliminary Storm Water Management Plan. We offer the following response to your review letter dated February 14, 2020:

General

- 1) A right-of way permit application has been submitted to the City of Novi. We do not believe that a permit is required from Oakland County since Wixom Road is under the jurisdiction of the City of Novi.
- 2) We believe that all existing utilities are shown on sheet RW100.
- 3) The proposed landscape drain will be shown on sheet L201.
 - a. The proposed storm sewer will be changed to a 12" diameter pipe and a 4' catch basin.

Paving & Grading

- 4) The height of the curbs to be replaced will be added to sheet L202.
- 5) The width of the sidewalk along the Catholic Central School Drive will be added to the plans.
- 6) We are requesting a variance to meander the sidewalk along Wixom Rd. Thank you for your support.

Storm Water Management Plan

- 7) Noted

Soil Erosion and Sediment Control

- 8) Application for a SESC permit has been made. If required, updated plans will be submitted.

Stamping Set

- 9) A draft copy of the warranty deed for dedication of the additional proposed 60' half width right-of-way will be submitted for review and approval.
- 10) A letter will be provided detailing plan revisions and sheet numbers. A statement will be provided stating that all changes to the plan have been discussed in the response letter.

Prior to Construction

Items 11-17 will be addressed prior to construction.

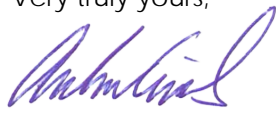
- 18) As noted above, we do not believe that a permit is required from Oakland County since Wixom Road is under the jurisdiction of the City of Novi.

Prior to ICO

- 19) We would like to clarify if a performance guarantee will be required for this project.
20) Noted.
21) We would like to clarify if record drawings will be required for this project.
22) Noted.

Please contact us if you have any additional questions or comments.

Very truly yours,



Andrew Wozniak

February 20, 2020

Mr. Rick Meader
Landscape Architect
City of Novi Planning Department
45175 Ten Mile Road
Novi, MI 48375

**Re: Landscape Review for Catholic Central High School
Wixom Road Frontage Improvements
JSP 19-48**

Dear Mr. Meader:

Please find the following responses to your review comments provided in the Landscape Review Summary Chart for Preliminary / Final Site Plan dated February 18, 2020.

Landscape Plan Requirements [LDM (2)]

Sealed by LA (LDM 2.g)

1. A live signature and seal will be provided on the Stamping set.

Existing plant material / Existing woodlands or wetlands [LDM 2.e.(2)]

1. Please refer to the King & MacGregor Environmental, Inc. response letter to ECT's recommended approval of the Woodland Review of the Combined Preliminary and Final Site Plan (PSP20-008) for Woodlands.
2. When designing the wetland mitigation area, every effort was made to preserve the 15" swamp oak, as previously requested. Unfortunately, the tree is located directly in the mitigation area. Maintaining the tree would require that an unreasonable amount of additional upland be converted for mitigation. This area would far exceed the required mitigation area and would eliminate potentially future valuable buildable upland. Replacement tree credits for the removal of the swamp oak have been provided.
3. Tree protection fencing is reflected on the Demolition, Grading and Drainage and Landscape drawings, sheets L101-L105, L301- L304 and L601-L605 respectively. Additional tree protection fencing within the confluence of construction will be added to the drawings as required. Wetland/Woodland and Buffer Protection Fencing detail is provided on the Soil Erosion drawing, sheet EC106.
4. It was GMA's understanding per the LANDSCAPE DESIGN MANUAL, page 9, that "*Woodland tree replacement species shall have roughly the same percentage of the composition as the native trees removed in order to maintain some semblance of the impacted woodland*". Therefore, like material (evergreens) were replaced with similar material at the replacement credit requirement. If desired, less evergreen trees can be provided to meet the 10% maximum. This will reduce the evergreen count from 8 to 4 and 4 deciduous trees added. Please provide direction.
5. A different species of evergreen tree will be substituted for the Hemlock. If the request to substitute 4 evergreens for deciduous is desired, the Hemlock will be removed and substituted with deciduous trees.

February 20, 2020
Rick Meader
City of Novi
Page 2

**Landscaping Requirements:
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o)**

Clear Zones [LDM 2.3.(5)]

1. The 25' clear vision zones per Section 5 Site Standards, 5.9 Corner Clearance will be provided at both entrances.

Access way perimeter (Zoning Section 5.5.3.C.iii Footnote 5)

1. Transplanted trees will be relocated along the entry drives within 15' of the drive to meet the intent of the Access way perimeter.

**Berms, Walls and ROW Planting Requirements:
Berms**

**Cross-Section of Berms (LDM 2.j)
Slope, height and width**

1. Berm cross sections have been provided on the Grading and Drainage plans, sheets L302 and L303 will be modified to reflect the 6" profile of topsoil.
2. **We are respectfully requesting a waiver for the steeper slopes on the earth mounds as reflected in the drawings and as supported by staff per the review letter.**

Walls (LDM 2.k & Zoning Sec 5.5.3.vi)

Material, height and type of construction footing

1. The decorative metal screen is constructed of painted aluminum tubes and posts with concrete support footings. The screen is located along the finish grade between the berms and is not located along the top of the berms as indicated in the review comments. An elevation and cross section of the decorative screen is provided in the drawing set on Sheet L502.

ROW Landscape Screening Requirements (Sec 5.5.3.B.ii):

Canopy deciduous or large evergreen trees Notes (1) (10)

1. Because of their recognizable, vertical structure and habit the Armstrong Maple, Sentry Ginkgo, and Dawn Redwood were selected to emphasize strength and identity, important aspects of CC's legacy. According to the Morton and Missouri Botanical Arboretum websites both the Armstrong Maple and Sentry Ginkgo's will grow far in excess of the 30' ht. requirement (Armstrong estimates of 40'- 60'+ht.) and the Sentry Ginkgo (40'-80'ht.). Widths vary between 15'-30'spreads. As all required Street trees are to be provided at a minimum 2 1/2" caliper, over 70% of all the provided project trees will be installed at a 3" or larger caliper size. Catholic Central, under the guidance of Grissim Metz Andriese, has

February 20, 2020
Rick Meader
City of Novi
Page 3

also contracted with an arborist/broker to hand select and pre-purchase each tree for this project to ensure all trees exceed industry standards. **We are respectfully requesting a waiver that the tree species specified be accepted due to the nature of the design intent and quality to be provided.**

Sub-Canopy deciduous trees Notes (2) (10)

1. It is the design intent to provide smaller evergreen plant material, ie. upright junipers and arborvitae to provide additional variety to the green belt screening. **We are respectfully requesting a waiver for the use of these smaller evergreens as reflected in the drawings and as supported by staff per the review letter.**

Canopy deciduous trees in area between sidewalk and curb (Novi Street Tree List)

1. The improvements being proposed by Catholic Central are solely voluntary. There is no new construction proposed along Wixom Road that requires CC to install any of the landscaping. The landscape improvements are intended to benefit the school by providing it with exposure along Wixom Road frontage since the school is located 700' behind densely wooded wetlands/woodlands and is not visible. This landscape project also greatly benefits the community through beautification of Wixom Road by way of the landscape improvements proposed as well in relocating, at great cost to CC, large unsightly utility poles located along their frontage. Catholic Central is also funding and providing the sidewalk connection between Island Lake and Berkshire Pointe subdivisions. The costs for these improvements are voluntary and at great expense to Catholic Central and the landscape provided far exceeds the standard greenbelt requirements of the City of Novi.

We acknowledge that there are now only 23 street trees required to be installed as part of this project and it is the desire of the City to install these between the sidewalk and curb line. Due to the fact that this landscape project is primarily being installed to create an identity for CC along Wixom Road, it is a concern that placing these street trees between the sidewalk and curb line will diminish the overall impact that the project was intended to deliver, therefore Catholic Central strongly disagrees with this requirement. To this point CC has not only provided all the required street trees, greenbelt and woodland replacement trees, but an additional 72 non-required trees are proposed as part of the landscape improvements. **We are respectfully requesting a waiver to place the street trees beyond the sidewalks to fulfill the intent of the project.**

Non-Residential Zoning Sec 5.5.3.E.iii & LDM1.d(2)

Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM

Transformers/Utility boxes (LDM 1.e from 1 through 5)

1. There are no transformers or above ground irrigation boxes proposed within the frontage landscape, therefore no detail has been provided.

Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)

February 20, 2020
Rick Meader
City of Novi
Page 4

Phragmites Control (Sec 5.5.6.C)

1. Phragmites locations to be addressed within the project area are designated on the Demolition drawings, sheets L101-L105. Notes regarding the removal / eradication of the Phragmites are located on the Wetland Mitigation/Woodland Replacement drawings, sheet WM103 and have been accepted by ECT as a part of their wetland review. The current standard is per EGLE, requiring no more than 10 percent cover of Phragmites in a wetland mitigation area. This will be a difficult enough standard to meet because it's already in the seed bank and can be re-introduced at any time from seeds blown from nearby off-site sources or from seeds in the fur and feathers of wildlife. A standard of 100% eradication would not only be nearly impossible to meet, but would only be temporary without control efforts placed in perpetuity.

Landscaping Notes, Details and General Requirements:

Other Information (LDM 2.u)

1. Installation spec #3 will be revised to reflect April 15 as the first date of inspection, not March 15.

Plant List (LDM 2.h):

Botanical and common names

1. The 37 Dawn Redwoods specified do not fall under any required landscape category as these plants are part of the 72 additional trees provided above and beyond all required plant material. As these are not required trees and are considered a key design element, it is not the desire of Catholic Central to decrease count from 37 to 23 or substitute for other species that do not provide the same design intent.

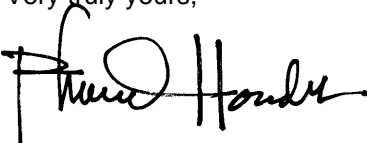
Planting Details / Info (LDM 2.1) – Utilize City of Novi Standard Details

Tree protection fencing

1. The City of Novi standard detail for Wetland/Woodland and Buffer Protection Fence detail is provided on Sheet EC106 Erosion Control Details. If a separate tree protection fence detail is required it will be provided.

Please contact us if you have any additional questions or comments.

Very truly yours,



Richard Houdek, PLA, ASLA
Principal
Enc.



King & MacGregor
Environmental
Inc.

February 19, 2020

Sent Via Email

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

Re: ECT Wetland and Watercourse Review for Catholic Central High School
Wixom Road Frontage Improvements JSP 19-48

Dear Ms. McBeth:

We offer the following response to comments in the above reference ECT letter dated February 14, 2020.

Wetland and Watercourse Comments

1. See enclosed MDEGLE Permit Application Submittal of January 22, 2020.
2. Retaining walls are proposed to minimize impacts to wetlands and wetland setbacks.
3. On-site acreages for the 25-foot wetland setback areas of the directly affected wetlands will be indicated.
4. Volumes (cubic yards) of proposed wetland impacts will be added.
5. See enclosed MDEGLE Permit Application Submittal of January 22, 2020.
6. See Sheet WM102 for Upland Buffer Seed Mix.
7. Performance standards and annual monitoring methodology will be added to the wetland mitigation plans.
8. A conservation easement over the wetland mitigation area will be granted to the MDEGLE.

Please contact us if you have any additional questions or comments.

Sincerely,

King & MacGregor Environmental, Inc.
Woody L. Held

Enclosure: MDEGLE Permit Application Submittal

2520 Woodmeadow SE
Grand Rapids, MI 49546
Phone: 616/957-1321
Fax: 616/957-2198

43050 Ford Road, Suite 130
Canton, MI 48187
Phone: 734/354-0594
Fax: 734/354-0593

162 Kuivila Road
Crystal Falls, MI 49920
Phone: 906/367-0171

email: kme@king-macgregor.com

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Digital EGLE/USACE Joint Permit Application (JPA) for Inland Lakes and Streams, Great Lakes, Wetlands, Floodplains, Dams, Environmental Areas, High Risk Erosion Areas and Critical Dune Areas

version 1.16

(Submission #: HNW-GEDQ-MSY1M, version 2)

Details

Form Alias Digital EGLE/USACE Joint Permit Application (JPA) for Inland Lakes and Streams, Great Lakes, Wetlands, Floodplains, Dams, Environmental Areas, High Risk Erosion Areas and Critical Dune Areas

Submission # HNW-GEDQ-MSY1M

Submission Reason New

Status Submitted

Fee \$500.00 (Paid)

Form Input

Instructions

[To download a copy or print these instructions. Please click this link \(recommended\).](#)

Contact Information

Applicant Information (Usually the property owner)

First Name **Last Name**

Michael *Wilson*

Organization Name

Detroit Catholic Central High School

Phone Type **Number** **Extension**

Other 248-596-3899

Email

mwilson@catholiccentral.net

27225 Wixom Road

Novi, MI 48374

Is the Property Owner different from the Applicant?

No

Has the applicant hired an agent or cooperating agency (agency or firm assisting applicant) to complete the application process?

Yes

Upload Attachment for Authorization from Agent

[Agency Letter for EGLE.pdf - 01/06/2020 03:05 PM](#)

Comment

NONE PROVIDED

Agent Contact

First Name Last Name

Woody Held

Organization Name

King & MacGregor Environmental, Inc.

Phone Type Number Extension

Mobile 734-558-9288

Email

wheld@king-macgregor.com

43050 Ford Road Suite 130

Canton, MI 48187

Are there additional property owners or other contacts you would like to add to the application?

No

Project Location

DEQ Site Reference Number (Pre-Populated)

997501496565784239

Project Location

42.4894269,-83.54006579999998

Project Location Address

27225 Wixom Road

Novi, MI 48374

County

Oakland

Is there a Property Tax ID Number(s) for the project area?

Yes

Please enter the Tax ID Number(s) for the project location

22-18-200-027

Is there Subdivision/Plat and Lot Number(s)?

No

Is this project within Indian Lands?

No

Local Unit of Government (LUG)

Novi

Directions to Project Site

Project site is located on quarter mile south of the intersection of Wixom Road and Grand River Avenue, on the east side of Wixom Road.

Background Information

Has the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and/or United States Army Corps of Engineers (USACE) conducted a pre-application meeting/inspection for this project?

No

Has the EGLE completed a Wetland Identification Program (WIP) assessment for this site?

No

Environmental Area Number (if known):

NONE PROVIDED

Has the United States Army Corps of Engineers (USACE) completed either an approved or preliminary jurisdictional determination for this site?

No

Were any regulated activities previously completed on this site under an EGLE and/or USACE permit?

Yes

List the permit numbers.

02-63-0424-P

Describe the regulated activities that were previously permitted.

Placing 5,548 cubic yards of fill within 1.09 acres between 8 wetlands. Temporarily impact 0.52 acres of wetland for construction activities. Construct 18 linear feet of boardwalk over wetland. Discharge storm water in to 3 wetlands, detain storm water in wetlands. Excavate 27 cubic yards from 0.06 ac. of wetland to construct drainage swale. Construct 1.75 acres of wetland mitigation..

Have any activities commenced on this project?

Yes

Describe the activities.

The houses on the newly acquired homes sites along Wixom Road have been demolished.

Is this an after-the-fact application?

No

Are you aware of any unresolved violations of environmental law or litigation involving the property?

No

Is there a conservation easement or other easement, deed restriction, lease, or other encumbrance upon the property?

Yes

Easement Holder Contact Information

First Name

Mike

Last Name

Wilson

Organization Name

NONE PROVIDED

Phone Type

Other

Number

248-596-3899

Extension

Email

NONE PROVIDED

[NO STREET ADDRESS SPECIFIED]

[NO CITY SPECIFIED], [NO STATE SPECIFIED] [NO ZIP CODE SPECIFIED]

[NO COUNTRY SPECIFIED]

Describe the type of easement or encumbrance

Conservation easement over 1.75 acre of on-site wetland mitigation.

Attach a copy of a description of the easement or encumbrance

NONE PROVIDED

Comment

NONE PROVIDED

Are there any other federal, interstate, state, or local agency authorizations associated with this project?

Yes

List all other federal, interstate, state, or local agency authorizations.

Agency	Type of Approval	Number	Date Applied	Approved/Denied/Undetermined
City of Novi	Site Plan Approval	NONE PROVIDED	12/20/2019	NONE PROVIDED

Comments

NONE PROVIDED

Permit Application Category and Public Notice Information

Indicate the type of permit being applied for.

Individual Permit for all other projects

This type of permit application requires that you include contact information for the adjacent landowners to this project. If you are only entering in a small number of bordering parcel owners contact information, please select "Enter list of recipients". If there is a rather large number of affected property owners such as a project that significantly affects lake levels, please upload a spreadsheet of the property owners. Please include names and mailing addresses.

Upload a list.

Uploads/Attachments

[Adjacent Property Owners.pdf - 01/03/2020 04:06 PM](#)

Comment

NONE PROVIDED

Project Description

Project Use: (select all that apply - Private, Commercial, Public/Government/Tribal, Receiving Federal/State Transportation Funds, Non-profit, or Other)

Private

Project Type (select all that apply):

Other: Signage and landscape improvements

Project Summary (Purpose and Use): Provide a summary of all proposed activities including the intended use and reason for the proposed project.

Place 1,010 cubic yards fill in 0.16 acres of wetland and excavate 7 cubic yards of fill from 0.01 acres of wetland, along with installing 130 linear feet of sheet pile wall to facilitate the installation of a new sign. Install 10 linear feet of 6 inch PVC for storm water management. See attached Project Description for further detail.

Project Construction Sequence, Methods, and Equipment: Describe how the proposed project timing, methods, and equipment will minimize disturbance from the project construction, including but not limited to soil erosion and sedimentation control measures.

Sequence of Construction: 1) Installation of soil erosion control measures; 2) mechanical clearing areas of proposed grading; 3) install sheet pile wall , 4) install over headlines, and new sign; 5) complete site grading, 6) seed and plant to stabilize upland portions of the site; 7) finish landscape plantings; 8) remove soil erosion control measures after site has stabilized.

Project Alternatives: Describe all options considered as alternatives to the proposed project, and describe how impacts to state and federal regulated waters will be avoided and minimized. This may include other locations, materials, etc.

See attached Project Description.

Project Compensation: Describe how the proposed impacts to state and federal regulated waters will be compensated, OR explain why compensatory mitigation should not be required for the proposed impacts. Include amount, location, and method of compensation (i.e., bank, on-site, preservation, etc.)

Proposed impacts to forested wetland will be compensated for by constructing a forested mitigation wetland on site. Impacts will be compensated at a 2 to 1 ratio.

Upload any additional information as needed to provide information applicable to your project regarding project purpose sequence, methods, alternatives, or compensation.

[EGLE Project Narrative_DCC_2020-01-08 ZWA Comments.pdf - 01/10/2020 09:27 AM](#)

Comment

NONE PROVIDED

Resource and Activity Type

SELECT THE ACTIVITIES from the list below that are proposed in your project (check ALL that apply). If you don't see your project type listed, select "Other Project Type". These activities listed require additional information to be gathered later in the application.

- Other Project Type
- Utility Crossings - Below Ground
- Utility Crossings - Above Ground

The Proposed Project will involve the following resources (check ALL that apply).

Wetland

Major Project Fee Calculation Questions

Is filling of 10,000 cubic yards or more proposed (cumulatively) within wetlands, streams, lakes, or Great Lakes?

No

Is dredging of 10,000 cubic yards (cumulatively) or more proposed within streams, lakes, or Great Lakes? (wetlands not included)

No

Is new dredging or adjacent upland excavation in suspected contamination areas proposed by this application?

No

Is a subdivision, condominium, or new golf course proposed?

No

Wetland Project Information and Impacts

Has a professional wetland delineation been completed for this site?

Yes

Attach a copy of wetland delineation report with data form.

[Wetland F Determination Form.pdf - 01/03/2020 04:43 PM](#)

[Wetland G Determination Form.pdf - 01/03/2020 04:43 PM](#)

Comment

NONE PROVIDED

Total acres of wetland affected by this project.

Category	Affected area (acres)
Permanent	0.17
Temporary	0
	Sum: 0.17

Is filling or draining of 1 acre or more (cumulatively) of wetland proposed?

No

Select all wetland types that will be affected by this project:

Forested

If your project includes placing fill in wetland then select the proposed activities from the following list. If your activity is not shown, then select None of the Above and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries):

None of the above

Select from the following list for Excavation/Dredge Activities (if your proposed project is primarily a structure enter the impact as a structure. Only enter an impacted area in one of the impact tables in one impact section):

Excavation (wetlands)

If your project includes EXCAVATION/DREDGE IN WETLAND then select all of the proposed activities in the

following list. If your activity is not shown, then select None of the Above and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries).:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (sq. feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
Wetland F Excavation	43.56	10	.45	435.6	196.02	7	435.6
				Sum: 435.6	Sum: 196.02	Sum: 7	Sum: 435.6

Spoils Disposal

Will the excavation/dredge spoils be disposed of on site or off site?

On site

Describe any measures used to retain sediment:

NONE PROVIDED

If your project includes STRUCTURES IN WETLAND then select all of the proposed activities in the following list. If your activity is not shown, then select None of the Above and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries).:

Utility Structure

Building - accessory Structure

Projects involving Structures:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (Sq. feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
Signage-Wetland G1	67.016	32.5	4.44	2178.02	9670.408800000001	358	2178
Signage-Wetland F	115.17	41.6	3.675	4791.072	17607.189599999998	652	4791
				Sum: 6969.092	Sum: 27277.5984	Sum: 1010	Sum: 6969

If your project includes Other Activities in WETLAND not listed in this section, then select from the proposed activities in the following list. If your activity in Wetland has not been listed in this Wetland Section, then select Other and enter a description of your activity. Only enter an impacted area in one of the impact tables (do not duplicate impact entries). If you selected a Fill, Excavation/Dredging, or Structure activity above in this section, but do not have an activity listed as Other, then select None of the Above for this question.

None of the above

Is Wetland Mitigation being proposed as part of this proposed project?

Yes

Mitigation Project Details for Wetlands

Impact Location (include identifier on site plan)	Impact Type:	Impact Amount (acres)	Replacement Ratio (include any reduction)	Mitigation Type	Mitigation Amount (acres)	Kind of Mitigation
Wetland F and G	Forested	0.17	2:1	Forested	0.34	On-site Creation
		Sum: 0.17			Sum: 0.34	

Wetland mitigation plan or associated documents

[Wetland Mitigation Plan 1.22.20.pdf - 01/22/2020 01:00 PM](#)

Comment

NONE PROVIDED

Utility Crossings

Select all resource types that are proposed to be crossed by this project:

Wetlands

How many total wetland crossings are proposed?

4

Enter the type and total number of acres of wetland that will be converted from one wetland type to another wetland type.

Wetland type	Acres of impact
Forested	0.0001

List of Utility Crossing Impacts

Unique Identifier	Type of Crossing	Method	Utility Type	Length (feet)	Pipe diameter (inches)	Distance below surface (feet)	Trench width (feet)
6" STM.	Wetland	Open Trench	Storm sewer	10	6	1.3	NONE PROVIDED

Upload of Proposed Site Plans

Required on all Site Plan uploads. Please identify that all of the following items are included on your plans that you upload with this application.

Site Plan Features	Existing and Proposed Plan Set
Scale, Compass North, and Property Lines	Yes
Fill and Excavation areas with associated amounts in cubic yards	Yes
Any rivers, lakes, or ponds and associated Ordinary High Water Mark (OHWM)	N/A
Exterior dimensions of Structures, Fill and Excavation areas associated with the proposed project	Yes
Dimensions to other Structures and Lot Lines associated with the project	Yes
Topographic Contour Lines from licensed surveyor or engineer when applicable	Yes

Upload Site Plans and Cross Section Drawings for your Proposed Project

[W102.pdf - 01/09/2020 02:10 PM](#)

[W101.pdf - 01/09/2020 02:10 PM](#)

Comment

NONE PROVIDED

Additional Required and Supplementary Documents

NONE PROVIDED

Comment

NONE PROVIDED

Fees

Individual Permit Fee:
+\$500.00

Total Fee Amount:

\$500.00

Is the applicant or landowner a State of Michigan Agency?

No

Attachments

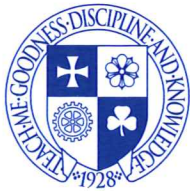
Date	Attachment Name	Context	User
1/22/2020 1:00 PM	Wetland Mitigation Plan 1.22.20.pdf	Attachment	King and MacGregor
1/10/2020 9:27 AM	EGLE Project Narrative_DCC_2020-01-08 ZWA Comments.pdf	Attachment	King and MacGregor
1/9/2020 2:10 PM	W102.pdf	Attachment	King and MacGregor
1/9/2020 2:10 PM	W101.pdf	Attachment	King and MacGregor
1/6/2020 3:05 PM	Agency Letter for EGLE.pdf	Attachment	King and MacGregor
1/3/2020 4:43 PM	Wetland G Determination Form.pdf	Attachment	King and MacGregor
1/3/2020 4:43 PM	Wetland F Determination Form.pdf	Attachment	King and MacGregor
1/3/2020 4:06 PM	Adjacent Property Owners.pdf	Attachment	King and MacGregor

Status History

	User	Processing Status
1/22/2020 12:59:58 PM	King and MacGregor	Draft
1/22/2020 1:01:05 PM	King and MacGregor	Submitted

Revisions

Revision	Revision Date	Revision By
Revision 1	1/3/2020 12:36 PM	King and MacGregor
Revision 2	1/22/2020 12:59 PM	King and MacGregor



January 6, 2020

Mr. Woody Held
King & MacGregor Environmental, Inc.
43050 Ford Road, Suite 130
Canton, MI 48187

Re: Detroit Catholic Central High School, City of Novi

Dear Mr. Held:

Please consider this letter as authorization for King & MacGregor Environmental, Inc. to act as our agent for the above-referenced project in making application to the Michigan Department of Environment, Great Lakes, and Energy (EGLE), including uploading application documents to the MiWaters database and meeting EGLE representatives on the subject property. Please contact me at your convenience if you have any questions.

Sincerely,

Michael D. Wilson
CFO/Treasurer
(248)596-3899

Adjacent Property Owners – EGLE Joint Permit Application
Detroit Catholic Central High School

1. City of Novi
45175 W Ten Mile Road
Novi, MI 48375
2. Pulte Land Co, LLC
100 Bloomfield Hills Pkwy STE 140
Bloomfield Hills, MI 48304
3. Carline and Dejuan Woods
49589 Hartwick Drive
Novi, MI 48374
4. Jennifer and David Bennett
49597 Hartwick Drive
Novi, MI 48374
5. Chandan and Shridevi Nayak
49605 Hartwick Drive
Novi, MI 48374
6. Prabhakar Purushothaman
49613 Hartwick Drive
Novi, MI 48374
7. Venkata Prasad Atluri
49621 Hartwick Drive
Novi, MI 48374
8. Homeowner
46418 Crystal Downs West
Northville, MI 48168
9. Ruchi Sarotri
49741 Hartwick Drive
Novi, MI 48374
10. Rajasekhar Polanki
49749 Hartwick Drive
Novi, MI 48374
11. Sanjaykumar Patel
49757 Hartwick Drive
Novi, MI 48374
12. Muhinthan Murugesu
46418 Crystal Downs West
Northville, MI 48167
13. Anand Spinivasav
49773 Hartwick Drive
Novi, MI 48374

14. Jignesh Kiritbhai Patel
49781 Hartwick Drive
Novi, MI 48374

15. Pinnacle – Novi 12 LLC
28800 Orchard Lake Road Suite 200
Farmington Hills, MI 48334

16. Christine Vance
50912 Sevilla Circle
Novi, MI 48374

17. Island Lake of Novi Community
Assoc.
142 Cady Center, Suite 205
Northville, MI 48167

18. Target Corporation
P. O. Box 9456
Minneapolis, MN 55440-9456

19. Novi Grand Promenade Holdings,
LLC
38600 Van Dyke Suite 300
Sterling Heights, MI 48312

20. Siddiqui Properties LLC
2211 Monroe Street
Dearborn, MI 4814

21. Meadowood Park Apts of Wixon LLC
255 East Brown Street Suite 310
Birmingham, MI 48009

22. Josph and Donna Getzen
1175 Wabasso Street
Walled Lake, MI 48390

23. Helfer Leisure Coop Phase 1
50200 Helfer Blvd.
Wixom, MI 48393

24. Wartesian Properties LLC
5499 Commerce Road
West Bloomfield, MI 48324

25. MLS Grand LLC
37771 7 Mile Road Suite C
Livonia, MI 48152

**Detroit Catholic Central High School
City of Novi
Michigan Department of Environment, Great Lakes and Energy
Application for Permit**

Project Description

Detroit Catholic Central High School (DCC) is a private, catholic high school established in 1928 by the Basilian Fathers. The students, faculty and alumni of DCC have had an overwhelming impact of service and philanthropy in the greater-Detroit area for over 90 years. As a private religious school, it receives no state funding and relies solely on private tuition and fund raising to sustain itself. In 2005, DCC relocated to a 60-acre campus in Novi from a former public middle school in Redford Township. The land for the campus, which is now expanded to 117 acres, was gifted donors with the exception of 35 acres purchased by DCC. The new facilities on the campus are being funded by the DCC donor network.

The site came with some constraints; namely, regulated City woodlands and City and State regulated wetlands that dictated much of the initial design for the site. Because of DCC's unique site configuration and location within the woodlands and wetlands, the school building is located over 700' away from the road and is completely hidden in the trees. This location is both an amenity and hindrance. The site in general is a beautiful campus, surrounded by large mature wooded areas and wetlands, however due to the lack of road visibility the school has no public presence.

DCC has an enrollment of just under 1,000 young men and ranks as one of the top academic and athletic institutions in the country, but has found it increasingly more difficult to compete for students with the surrounding public school districts. Recently approved State funded bond issues for the City of Novi will further put a burden on DCC to match other school facilities and amenities, along with current enrollment projections reflecting a district wide decline in student population.

DCC alumni are making a concerted effort to enhance the campus identity and draw more students to the school by investing in improvements along the Wixom Road frontage to increase the school's visibility while also benefitting the community at large. Due to this effort DCC has recently been able to purchase three residential properties located between its two existing entrance drives along Wixom Road in order to develop a comprehensive landscape frontage identity. To achieve visual impact and draw attention to the site, DCC is proposing new landscape improvements and signage that will celebrate the school's heritage as well as complement the surrounding natural landscape.

The landscape design concept borrows from the natural features of the property in a refined manner that utilizes large format, stacked, natural stone from the Great Lakes along with sweeping land forms over the approximate 1,100 linear feet of landscaped frontage. A variety of native deciduous, semi-deciduous, and evergreen trees will be interspersed amongst the landforms and stone walls to blend the new landscape with the surrounding natural areas.

Alternatives Analysis and Constraints

Due to the proximity of the main entrance drive to surrounding natural features, the proposed landscape and signage improvements will necessarily impact a portion of State regulated

wetlands and City regulated woodlands. The main entrance drive bisects State regulated wetlands to the north and south with the edge of the wetlands coming within a few feet of the existing curbs. The wetlands and City regulated wetland setbacks currently extend into the public right-of-way, up to and including a portion of Wixom Road. Additionally, a City regulated woodland occupies the wetland to the south of the drive.

Ideally, signage would be located closer to Wixom Road to reduce wetland impact and improve visibility, however the setbacks required by the City of Novi's Traffic Division limit such adjustment. Vision triangle setback dimensions, which are measured 25 feet back from the right-of-way and curb lines in order to provide clear sight lines to approaching traffic, greatly dictate the sign locations and resultant encroachment into the wetlands.

Aside from the naturalized landscape that exists today, which the design team intends to maintain to the largest extent possible, the site landscape improvements of stacked natural stone that will support the school's signage requires that the grades be raised from their current depressed elevations so that the signs are clearly visible from the road. In order to minimize wetland impacts due to the necessary fill conditions, sheet pile walls will be installed directly behind the new landscaping within the wetland areas in order to further reduce grading and construction impacts.

Also, due to the need and desire to provide an enhanced entry image for the school and in working with the very tight constraints provided, woodland trees required removal. Many of the tree species are of lower quality value (e.g. Silver Maples and Siberian Elms). With these removals, new higher quality woodland tree species will be provided. City of Novi requirements dictate that the new plantings be located within proximity of the woodland area being affected, therefore trees will be located close behind the proposed entrance signage.

Given the location of existing entrance drives, State regulated wetlands, City regulated woodlands, City required visibility setbacks, and required tree replacements, the site landscape improvements have been designed to limit environmental impacts while providing the school with an enhanced identity along Wixom Road to attract potential students and enrich the visual aesthetic of the surrounding community.

Forested wetland mitigation is proposed on the subject property at a ratio of 2 to 1 for all wetland impacts.

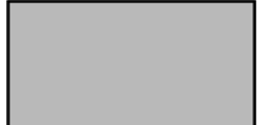


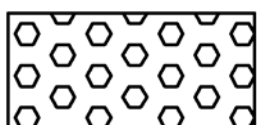
WETLAND INFORMATION:

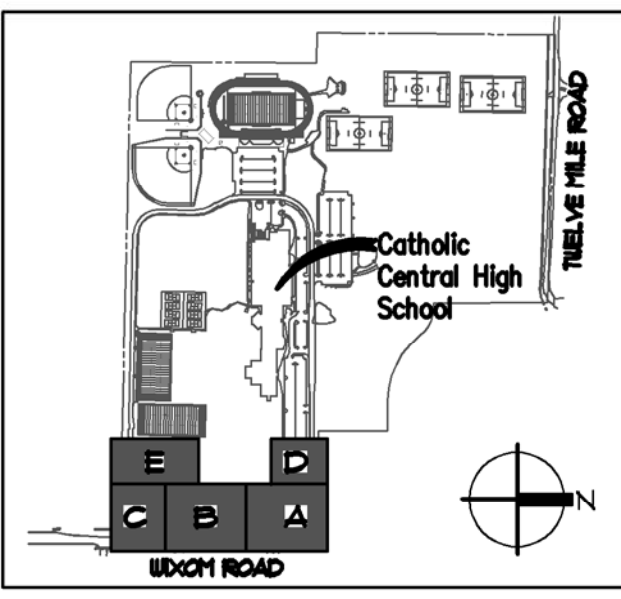
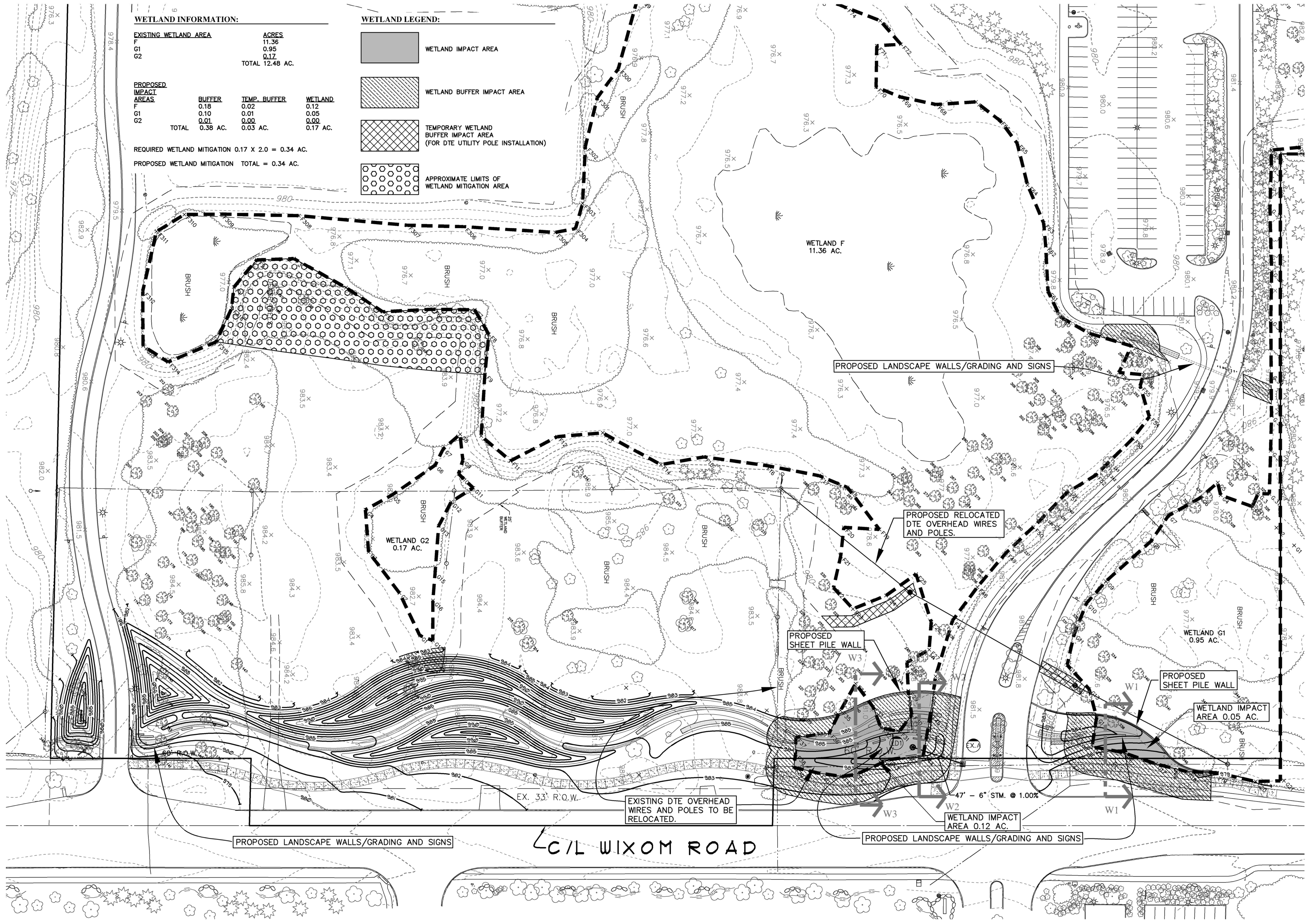
EXISTING WETLAND AREA	ACRES
F	11.36
G1	0.95
G2	0.17
TOTAL	12.48 AC.

PROPOSED IMPACT AREAS	BUFFER	TEMP. BUFFER	WETLAND
F	0.18	0.02	0.12
G1	0.10	0.01	0.05
G2	0.01	0.00	0.00
TOTAL	0.38 AC.	0.03 AC.	0.17 AC.

REQUIRED WETLAND MITIGATION $0.17 \times 2.0 = 0.34$ AC.
 PROPOSED WETLAND MITIGATION TOTAL = 0.34 AC.

WETLAND LEGEND:

-  WETLAND IMPACT AREA
-  WETLAND BUFFER IMPACT AREA
-  TEMPORARY WETLAND BUFFER IMPACT AREA (FOR DTE UTILITY POLE INSTALLATION)
-  APPROXIMATE LIMITS OF WETLAND MITIGATION AREA



Key Map
 Scale: Not to Scale

King & MacGregor Environmental Inc.
 2520 Woodmeadow SE
 Grand Rapids, MI 49546
 Phone: (616) 957-1231
 43050 Ford Road, Suite 130
 Canton, MI 48187
 Phone: (734) 354-0594

ZEIMET WOZNIAK & ASSOCIATES
 Civil Engineers & Land Surveyors
 5880 GRAND RIVER AVE., SUITE 100
 NEW HULLON, MICHIGAN 48165
 P: (248) 437-5099 F: (248) 437-5222 www.zeimetwozniak.com

GRISSIM METZ ASSOCIATES ANDRIESE
 Landscape Architecture
 311 East Cady Street
 Northville, MI 48167
 Ph: 248-347-7010

Project: **Catholic Central High School Wixom Road Frontage Improvements**
 Novi, Michigan

Sheet: **WETLAND IMPACT AND MITIGATION PLAN**

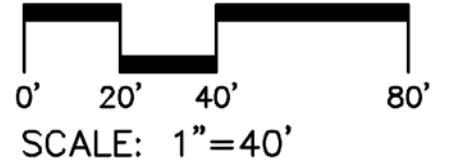
Job Number: C22-191
 Drawn: SAE
 Checked: RGH
 Scale: As Noted

Date: Issued for:
 PRE-APPLICATION REVIEW 12-20-19
 REVISE IMPACT AREA 1-2-20

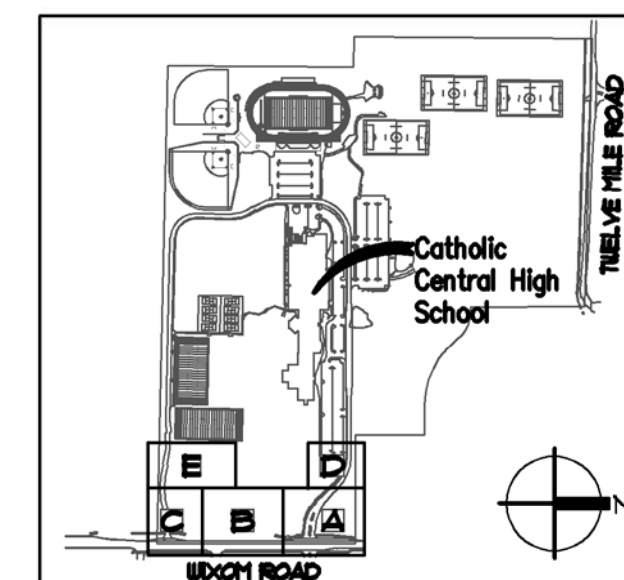
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 © Grissim Metz Andriese Associates, 2020



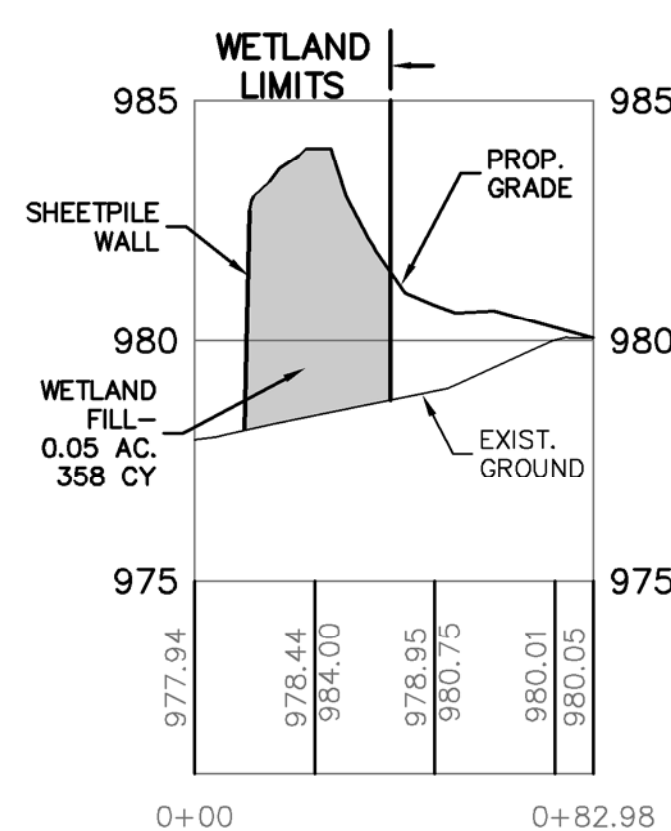
SEE SHEET W102 FOR CROSS SECTIONS



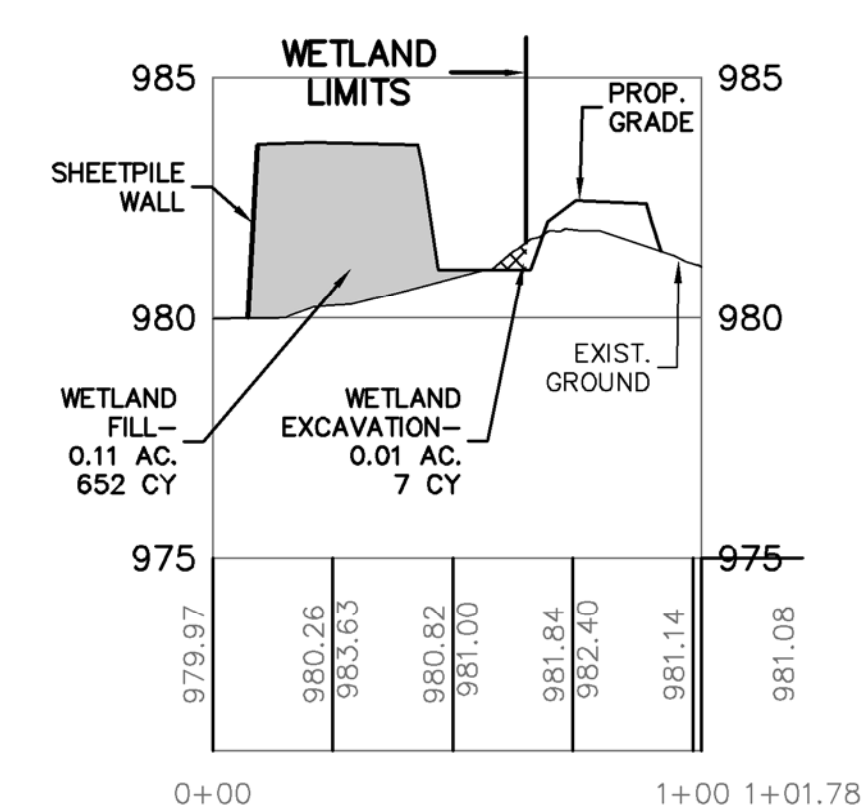
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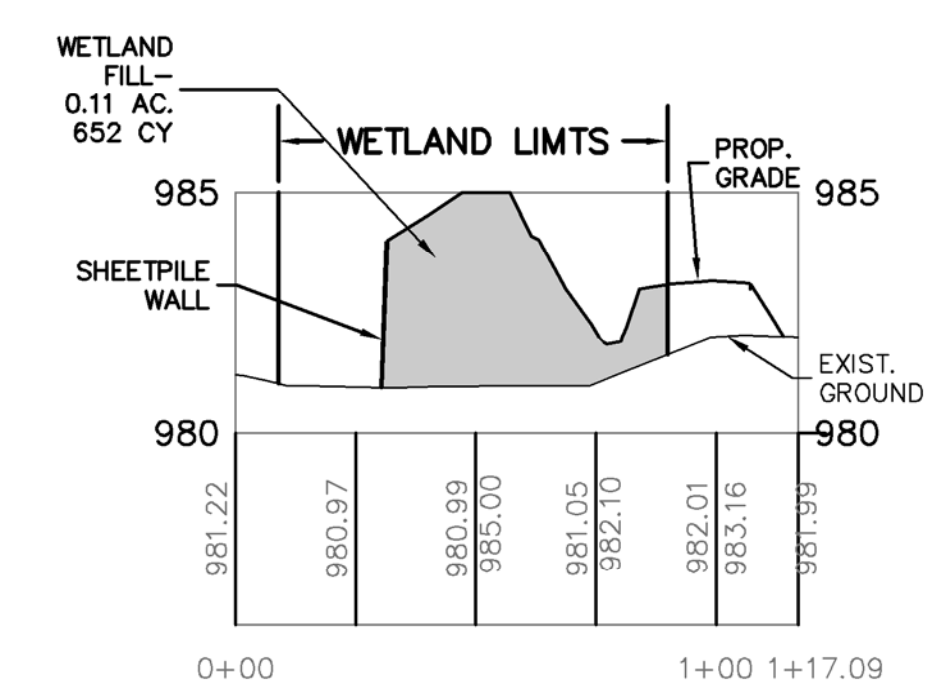
Key Map
Scale: Not to Scale



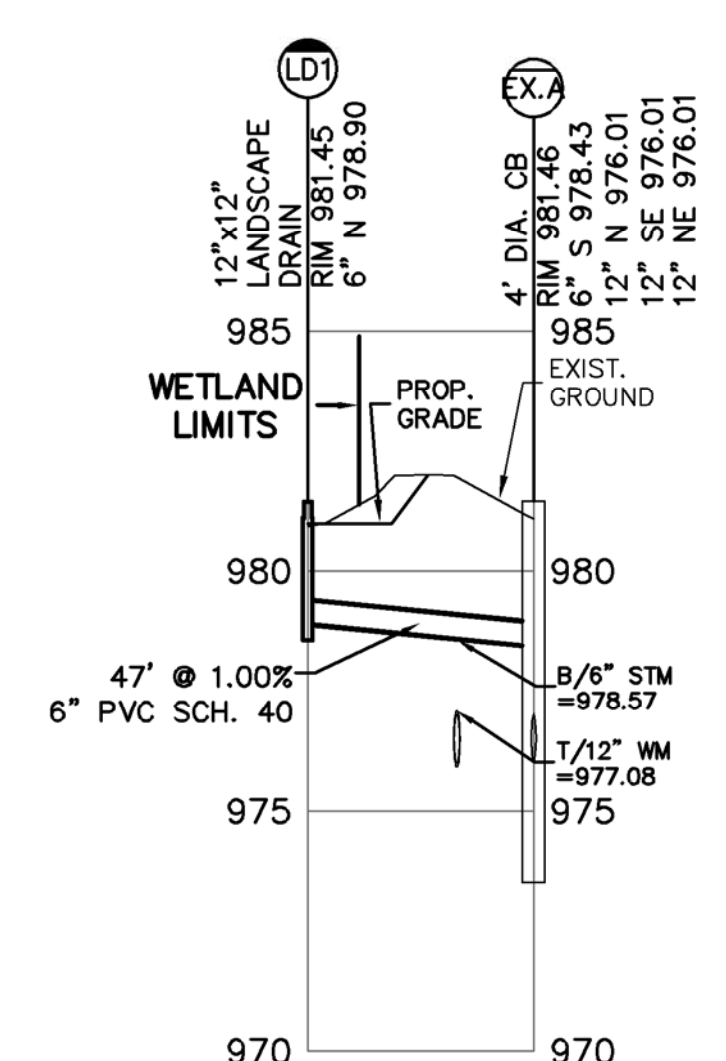
WETLAND SECTION W1
SCALE: 1"=40' H
1"=4' V



WETLAND SECTION W2
SCALE: 1"=40' H
1"=4' V



WETLAND SECTION W3
SCALE: 1"=40' H
1"=4' V



WETLAND SECTION STORM CROSSING
SCALE: 1"=40' H
1"=4' V

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2520 Woodmeadow SE
Grand Rapids, MI 49546
Phone: (616) 957-1231
43050 Ford Road, Suite 130
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Civil Engineers & Land Surveyors
5800 GRAND RIVER AVE., SUITE 100
NEW HULLSON, MICHIGAN 48165
P: (248) 437-5099 F: (248) 437-5222 www.zeimetwozniak.com

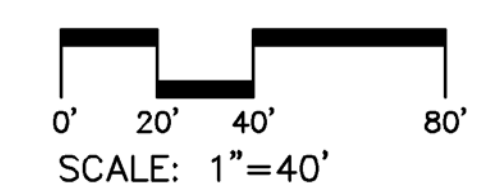
GRISSIM METZ ANDRIESE ASSOCIATES
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project: Catholic Central High School
Wixom Road Frontage Improvements
Novi, Michigan

Sheet: **WETLAND IMPACT SECTIONS**

Job Number: C22-191
Drawn: SAE
Checked: RGH
Scale: As Noted

Date: Issued for:



Z:\Projects\19120\DWG\19120 WixomRd Wetland Impact Sections.dwg_W102_16/2020 8:15:55 AM_slaszczyk

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Detroit Catholic Central City/County: Oakland Co. Sampling Date: 11/4/2019
 Applicant/Owner: Detroit Catholic Central High School State: MI Sampling Point: F44 Wetl.
 Investigator(s): Woody Held and Bill Brodovich Section, Township, Range: 18,1N,8E
 Landform (hillside, terrace, etc.): _____ Local relief (concave, convex, none): concave Slope %: 6
 Subregion (LRR or MLRA): LRR L Lat: 42.489 Long: -83.540 Datum: NAV 88
 Soil Map Unit Name: Marlette Sandy Loam NWI classification: PFO / PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Plants in adjacent upland: grass lawn, Lonicera morrowii, planted oaks.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
---	---

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Detroit Catholic Central City/County: Oakland Co. Sampling Date: 11/4/2019
 Applicant/Owner: Deroit Catholic Central High School State: MI Sampling Point: G14 Wetl.
 Investigator(s): Woody Held and Bill Brodovich Section, Township, Range: 18,1N,8E
 Landform (hillside, terrace, etc.): _____ Local relief (concave, convex, none): concave Slope %: 6
 Subregion (LRR or MLRA): LRR L Lat: 42.489 Long: -83.540 Datum: NAV88
 Soil Map Unit Name: Marlette Sandy Loam NWI classification: PFO / PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Plants in adjacent upland: <i>Juniperus virginiana</i> , <i>Solidago altissima</i> (common), <i>Asparagus officinalis</i> , <i>Vitis aestivalis</i> , <i>Lonicera morrowii</i> (frequent).	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
---	---

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: G14 Wetl.

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Ulmus americana</i></u>	20	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>87.5%</u> (A/B)																
2. <u><i>Acer saccharinum</i></u>	15	Yes	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>35</u>	=Total Cover		Prevalence Index worksheet: <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>95</u></td> <td>x 2 = <u>190</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>145</u></td> <td>(A) <u>380</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>2.62</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>95</u>	x 2 = <u>190</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>145</u>	(A) <u>380</u> (B)	Prevalence Index = B/A = <u>2.62</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>95</u>	x 2 = <u>190</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>40</u>	x 4 = <u>160</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>145</u>	(A) <u>380</u> (B)																			
Prevalence Index = B/A = <u>2.62</u>																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)																				
1. <u><i>Ulmus americana</i></u>	15	Yes	FACW																	
2. <u><i>Fraxinus pennsylvanica</i></u>	10	Yes	FACW																	
3. <u><i>Rhamnus cathartica</i></u>	10	Yes	FAC																	
4. <u><i>Cornus obliqua</i></u>	10	Yes	FACW																	
5. _____																				
6. _____																				
7. _____																				
	<u>45</u>	=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u><i>Carex gracillima</i></u>	40	Yes	FACU																	
2. <u><i>Solidago gigantea</i></u>	15	Yes	FACW																	
3. <u><i>Symphyotrichum novae-angliae</i></u>	5	No	FACW																	
4. <u><i>Gentiana andrewsii</i></u>	5	No	FACW																	
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	<u>65</u>	=Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
1. _____																				
2. _____																				
3. _____																				
4. _____																				
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____																

Remarks: (Include photo numbers here or on a separate sheet.)



King & MacGregor
Environmental
Inc.

February 19, 2020

Sent Via Email

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

Re: ECT Woodland Review for Catholic Central High School
Wixom Road Frontage Improvements JSP 19-48

Dear Ms. McBeth:

We offer the following response to comments in the above reference ECT letter dated February 14, 2020.

1. Woodland Replacement Performance financial guarantee requirement is noted.
2. Woodland Maintenance financial guarantee requirement is noted.
3. Potential payment to the City of Novi Tree Fund is noted.
4. The proposed deciduous woodland replacement trees are species commonly found in wetlands and should tolerate the proposed wetland hydrology.
5. Conservation easements shall be provided as directed and will be indicated on the Plan.

Please contact us if you have any additional questions or comments.

Sincerely,

King & MacGregor Environmental, Inc.
Woody L. Held

2520 Woodmeadow SE
Grand Rapids, MI 49546
Phone: 616/957-1321
Fax: 616/957-2198

43050 Ford Road, Suite 130
Canton, MI 48187
Phone: 734/354-0594
Fax: 734/354-0593

162 Kuivila Road
Crystal Falls, MI 49920
Phone: 906/367-0171

email: kme@king-macgregor.com

February 20, 2020

Mr. Josh A Bocks, AICP, MBA
AECOM
27777 Franklin Road
Southfield, MI 48034

**Re: Traffic Review for Catholic Central High School
Wixom Road Frontage Improvements
JSP 19-48**

Dear Mr. Bocks:

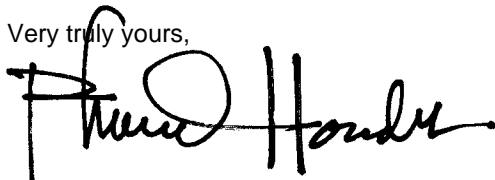
Please find the following responses to your review comments provided in the JSP 19-48 Catholic Central High School Landscape Preliminary / Final Site Plan Traffic Review Memo dated February 18, 2020.

External Site Access and Operations

1. Site Distance Measurements per Figure VIII-E of the City's Code of Ordinances will be provided at both north and south entrances on both the Site Layout and Dimension Plans, sheets L001, L201, L203 as well as the Landscape Plans, sheets L601 and L603.
 - a. The south entry sign walls will be moved west out of and in compliance with the 25' clear vision zone.
 - b. Both north and south entrances will be shown with the 25' clear zone triangle as noted above.
2. Crosswalk markings exist at both the north entrance drive and across Wixom Road. Crosswalk markings will be provided at the south entrance drive and will conform to the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) as required.

Please contact us if you have any additional questions or comments.

Very truly yours,



Richard Houdek, ASLA, PLA

Enc.

Z EIMET W OZNIAK
& ASSOCIATES

Civil Engineers & Land Surveyors

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

February 19, 2020

Ms. Lindsay Bell, AICP
City of Novi Planning Dept.
45175 Ten Mile Road
Novi, MI 48375

Re: Fire Department Review for
Catholic Central High School
Wixom Road Frontage Improvements
JSP 19-48

Dear Ms. Bell:

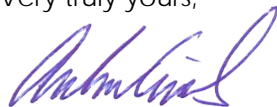
We have reviewed the City of Novi Fire Department review letter, dated January 30, 2020, for the of the Combined Preliminary/Final Site Plan and offer the following response:

Comments:

- This plan does not impact any building fire service protection feature(s). NOTED
- All fire lanes and fire service access drives into and out of the property/campus will be maintained at all times. No construction vehicles can be parked in listed fire lanes.

Please contact us if you have any additional questions or comments.

Very truly yours,



Andrew Wozniak