



## 27629 HAGGERTY ROAD – HEFCO JSP24-22

### **27629 HAGGERTY ROAD – HEFCO - JSP24-22**

Public Hearing at the request of Hefco Haggerty LLC for Preliminary Site Plan, Woodland Permit, and Stormwater Management Plan approval to build a speculative (SPEC) building. The subject parcel is zoned OST, Office Service and Technology and is located south of Twelve Mile Road, on the west side of Haggerty Road. The applicant is proposing to construct a 37,925 square foot building on 9.47 acres of land with wetland mitigation proposed at the rear of the property by the Sheetz development that is proposed at the corner of Twelve Mile and Haggerty Road.

### **Required Action**

Approve/Deny the Preliminary Site Plan, Woodland Permit, and Stormwater Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Contingent Approval Recommended	02.26.25	<b>A temporary construction easement and access easement are likely required for monitoring and maintenance of the Sheetz wetland mitigation area. Conservation easements for the wetland mitigation area and woodland replacement tree area should be depicted on all applicable sheets across the plan set.</b>
Engineering	Approval Recommended	10.31.24	Items to be addressed at Final Site Plan submittal
Landscape	Approval Recommended	02.25.25	Items to be addressed at Final Site Plan submittal
Woodland/ Wetland	Approval Recommended	10.29.24	<b>A Woodland Permit is required for the removal of 3 regulated trees, requiring 10 replacement trees. A Minor Wetland Permit is also required.</b>
Traffic	Approval Recommended	10.30.24	Items to be addressed at Final Site Plan submittal
Façade	Approval Recommended	10.24.24	Full compliance with the façade ordinance
Fire	Contingent Approval Recommended	10.21.24	<b>A secondary access point is required to provide safe ingress and egress – provided</b>

**MOTION SHEET:**

**Approval – Preliminary Site Plan**

In the matter of 27629 Haggerty Road – HEFCO JSP24-22, motion to approve the Preliminary Site Plan based on and subject to the following:

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

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

**- AND -**

**Approval – Woodland Permit**

In the matter of 27629 Haggerty Road – HEFCO JSP24-22, 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 27629 Haggerty Road – HEFCO JSP24-22, motion to approve the Stormwater Management Plan based on and subject to the following:

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

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

**- OR -**

**Denial – Preliminary Site Plan**

In the matter of 27629 Haggerty Road – HEFCO JSP24-22, 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 – Woodland Permit**

In the matter of 27629 Haggerty Road – HEFCO JSP24-22, 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 27629 Haggerty Road – HEFCO JSP24-22, 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**

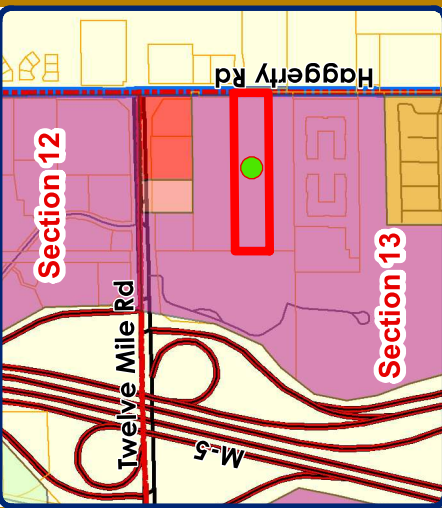
**Future Land Use**

**Natural Features**


# 27629 Haggerty Road – HEFCO LOCATION



Copyright nearmap 2015



**Legend**

 Subject Area

**City of Novi**  
 Dept. of Community Development  
 City Hall / Civic Center  
 45175 W Ten Mile Rd  
 Novi, MI 48375  
[cityofnovi.org](http://cityofnovi.org)

Map Author: Dan Commer  
 Date: 3/7/25  
 Project: 27629 Haggerty Road – HEFCO  
 Version #: 1

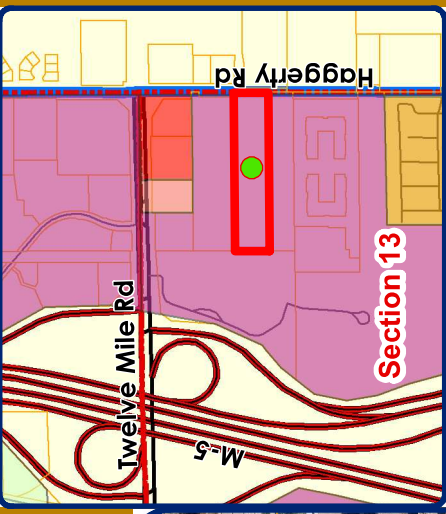
0 45 90 180 270  
 Feet  
 1 inch = 208 feet

**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.

# 27629 Haggerty Road – HEFCO ZONING



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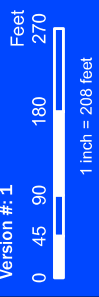
### Legend

- B-2: Community Business District
- B-3: General Business District
- OST: Office Service Technology
- Subject Area



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

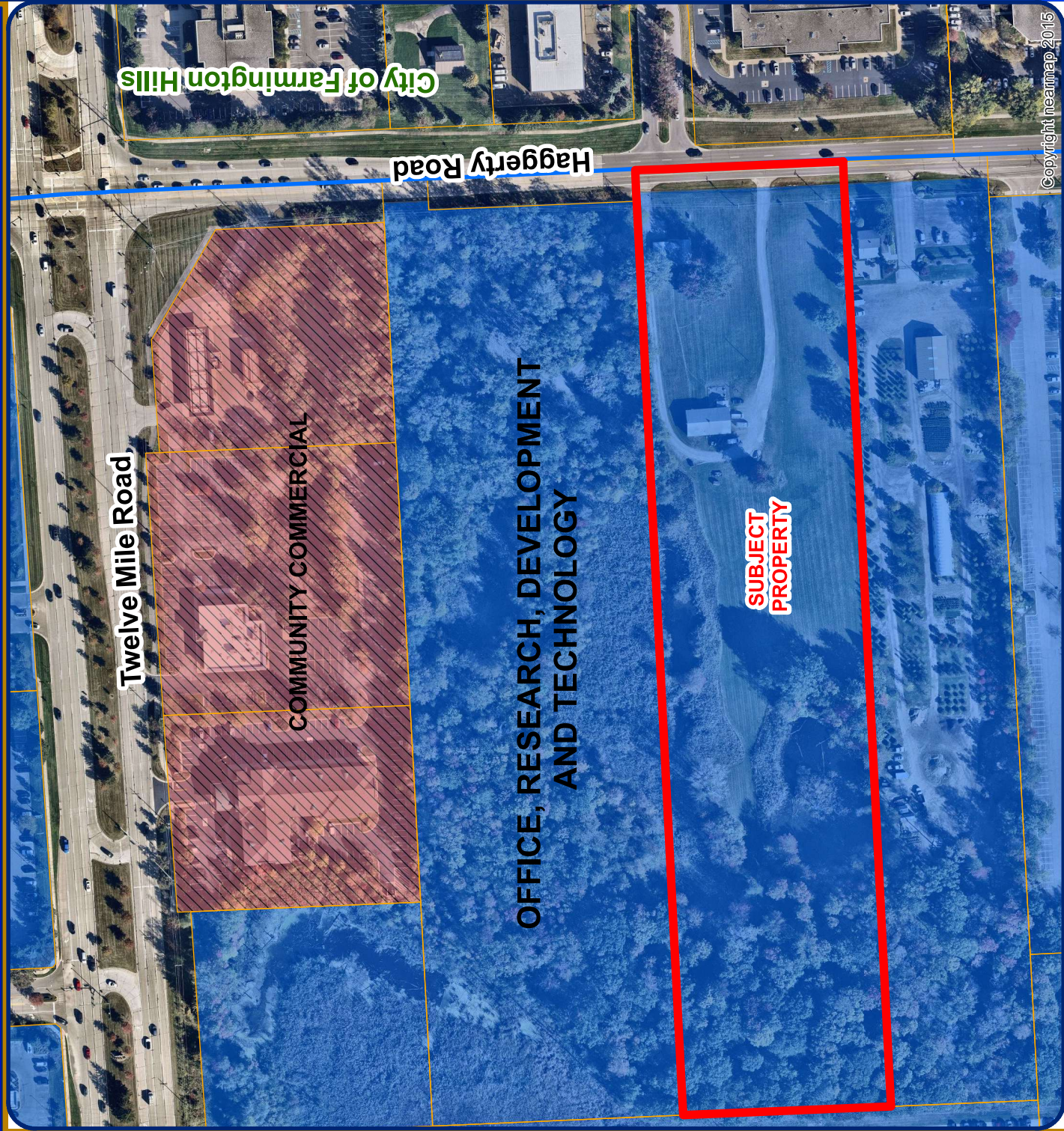
Map Author: Dan Commer  
 Date: 3/7/25  
 Project: 27629 Haggerty Road – HEFCO  
 Version #: 1



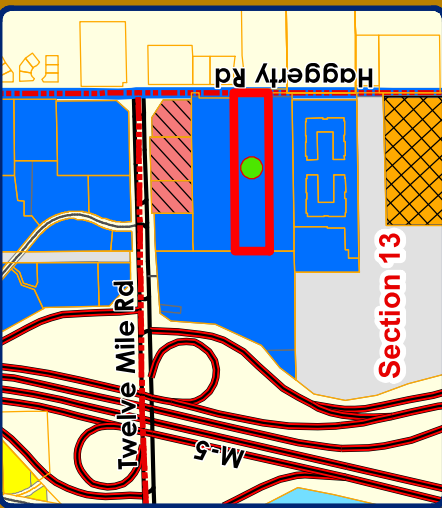
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# 27629 Haggerty Road – HEFCO FUTURE LAND USE



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**Legend**

-  Office, Research, Development and Technology
-  Community Commercial
-  Subject Area

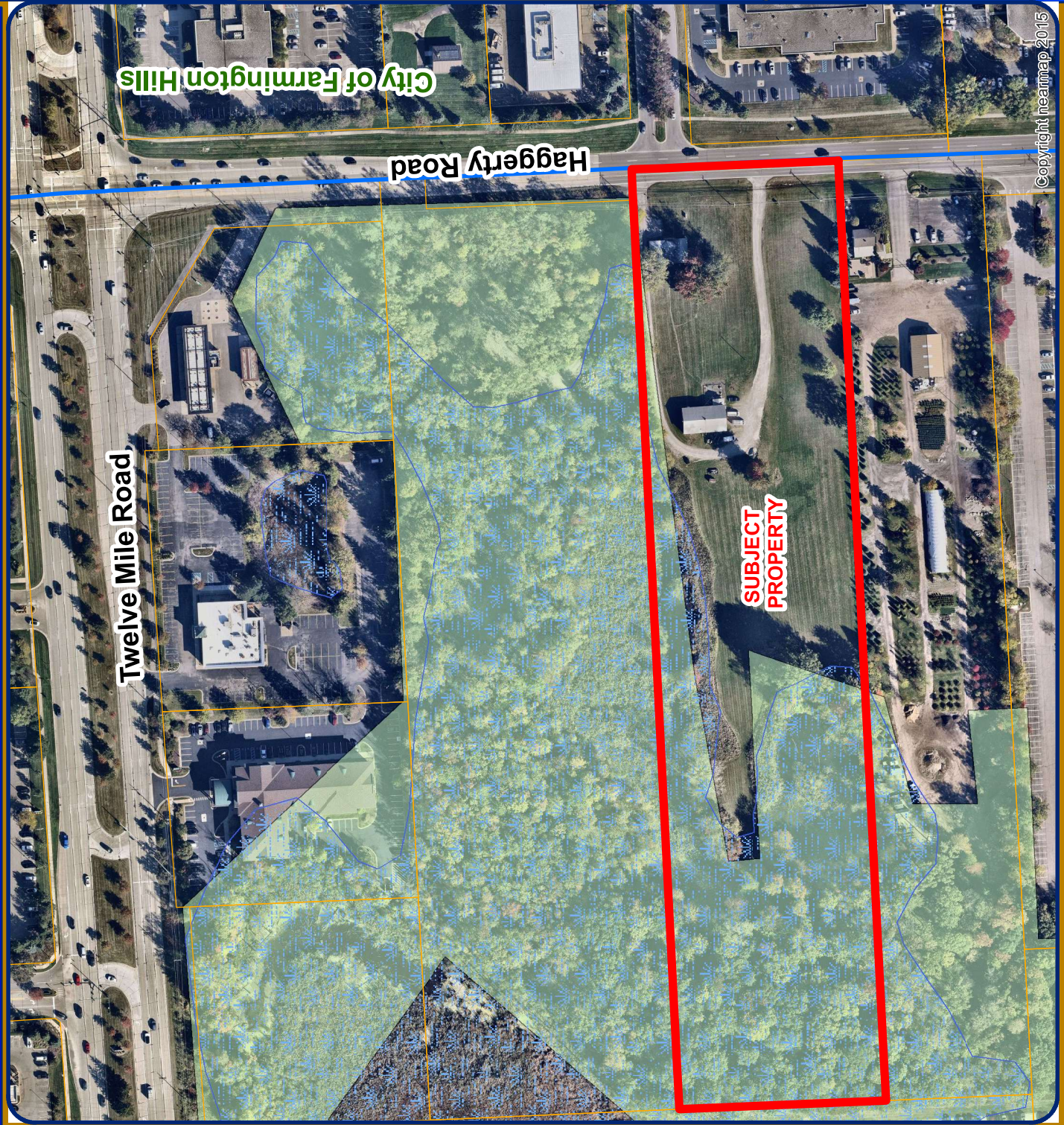
**City of Novi**  
 Dept. of Community Development  
 City Hall / Civic Center  
 45175 W Ten Mile Rd  
 Novi, MI 48375  
[cityofnovi.org](http://cityofnovi.org)

Map Author: Dan Commer  
 Date: 3/5/25  
 Project: 27629 Haggerty Road – HEFCO  
 Version #: 1

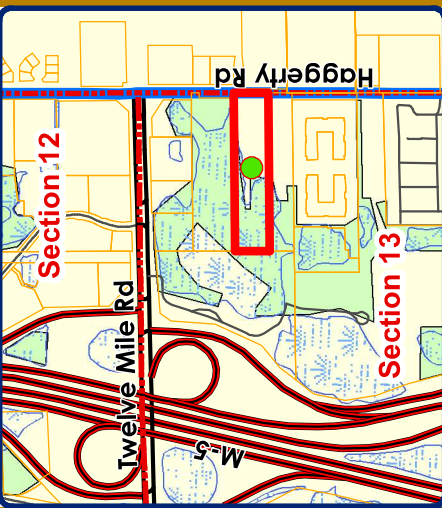
0 45 90 180 270  
 Feet  
 1 inch = 208 feet

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

# 27629 Haggerty Road – HEFCO NATURAL FEATURES



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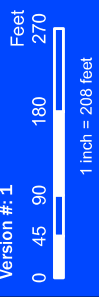
## Legend

-  Wetlands
-  Woodlands
-  Subject Area



**City of Novi**  
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cityofnovi.org

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Date: 3/5/25  
Project: 27629 Haggerty Road – HEFCO  
Version #: 1



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**SITE PLAN**





**INVASIVE SPECIES MANAGEMENT PLAN**  
 IDENTIFICATION GUIDE TO INVASIVE PLANTS IN MICHIGAN'S NATURAL COMMUNITIES BY THE HERBICIDE TREATMENT IN LATE SUMMER OR FALL DURING SITE PHASES. THIS GUIDE IS INTENDED TO ASSIST LANDOWNERS AND LOCAL HERBICIDE TREATMENT CONTRACTORS IN IDENTIFYING AND TREATING INVASIVE SPECIES. THIS GUIDE IS NOT A SUBSTITUTE FOR A PROFESSIONAL HERBICIDE APPLICATION. FOR MORE INFORMATION, VISIT THE WEBSITE: <https://www.dnr.state.mi.us/invasive>. THIS GUIDE WAS CREATED BY PHARMATICS-BEST MANAGEMENT PRACTICES 2017 PDP CREATED BY PHARMATICS-BEST MANAGEMENT PRACTICES WORKING GROUP. THE LINK CAN BE FOUND AT: [https://www.opmc.ca/wp-content/uploads/2017/06/PHARMATICS-BMP\\_FINAL.PDF](https://www.opmc.ca/wp-content/uploads/2017/06/PHARMATICS-BMP_FINAL.PDF)

**PIEZOMETER BEARINGS:**

Monitoring Location	Ground Elevation (ft)	Water Elevation (ft)
P-1	895.9	894.3
P-2	895.9	894.3
P-3	895.3	894.7
P-4	895.1	894.1

ANTICIPATED WATER TABLE ELEVATION 894.3

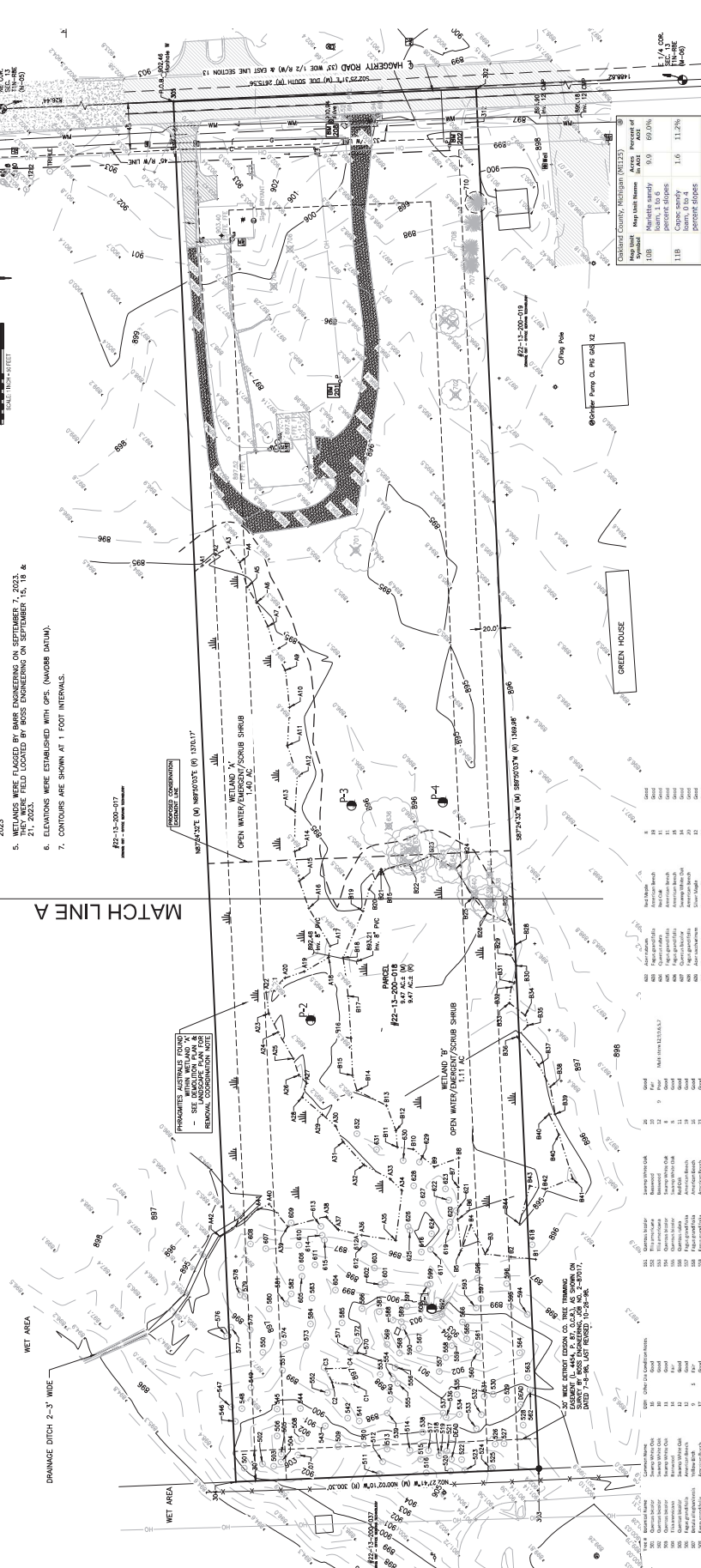
**GENERAL SURVEY NOTES:**

- BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM SOUTH ZONE RECORD BEARINGS ADJUSTED FROM A PRECISE SURVEY BY J. BOSS, ENGINEER, PROFESSIONAL LAND SURVEYOR, 1998.
- SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
- NO EXISTING OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING.
- THESE INDUSTRY WAS COMPLETED BY BOSS ENGINEERING ON SEPTEMBER 20, 2023.
- METRICS WERE FLAGGED BY BOSS ENGINEERING ON SEPTEMBER 7, 2023. METRICS WERE FLAGGED BY BOSS ENGINEERING ON SEPTEMBER 15, 19 & 21, 2023.
- ELEVATIONS WERE ESTABLISHED WITH GPS. (NAVD83 DATUM).
- CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.

**SITE BENCHMARKS (NAVD83 DATUM):**

- BM 1001 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1002 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1003 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1004 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1005 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1006 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1007 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1008 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1009 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1010 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1011 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1012 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1013 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1014 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1015 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1016 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1017 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1018 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1019 = 892.81 ± 0.02 P/AVE. ELEV. 891.71
- BM 1020 = 892.81 ± 0.02 P/AVE. ELEV. 891.71

**SEE SHEET 2 FOR GENERAL NOTES & LEGENDS SHEET**



Plant Name	Code	Notes
101	101	Aspen
102	102	Balsam Poplar
103	103	Basswood
104	104	Betula
105	105	Birch
106	106	Bitterbrush
107	107	Black Alder
108	108	Black Birch
109	109	Black Cherry
110	110	Black Locust
111	111	Black Spruce
112	112	Black Walnut
113	113	Blackberry
114	114	Blackberry
115	115	Blackberry
116	116	Blackberry
117	117	Blackberry
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197	197	Blackberry
198	198	Blackberry
199	199	Blackberry
200	200	Blackberry

**Soil Analysis Summary:**

Soil Type	Area (sq ft)	Percent of Area
Agriette sandy	9.9	69.0%
Agriette silty	1.6	11.2%
Coppe sandy	2.8	19.3%
Houghton and	0.1	0.5%
Adrian mucks	14.4	100.0%



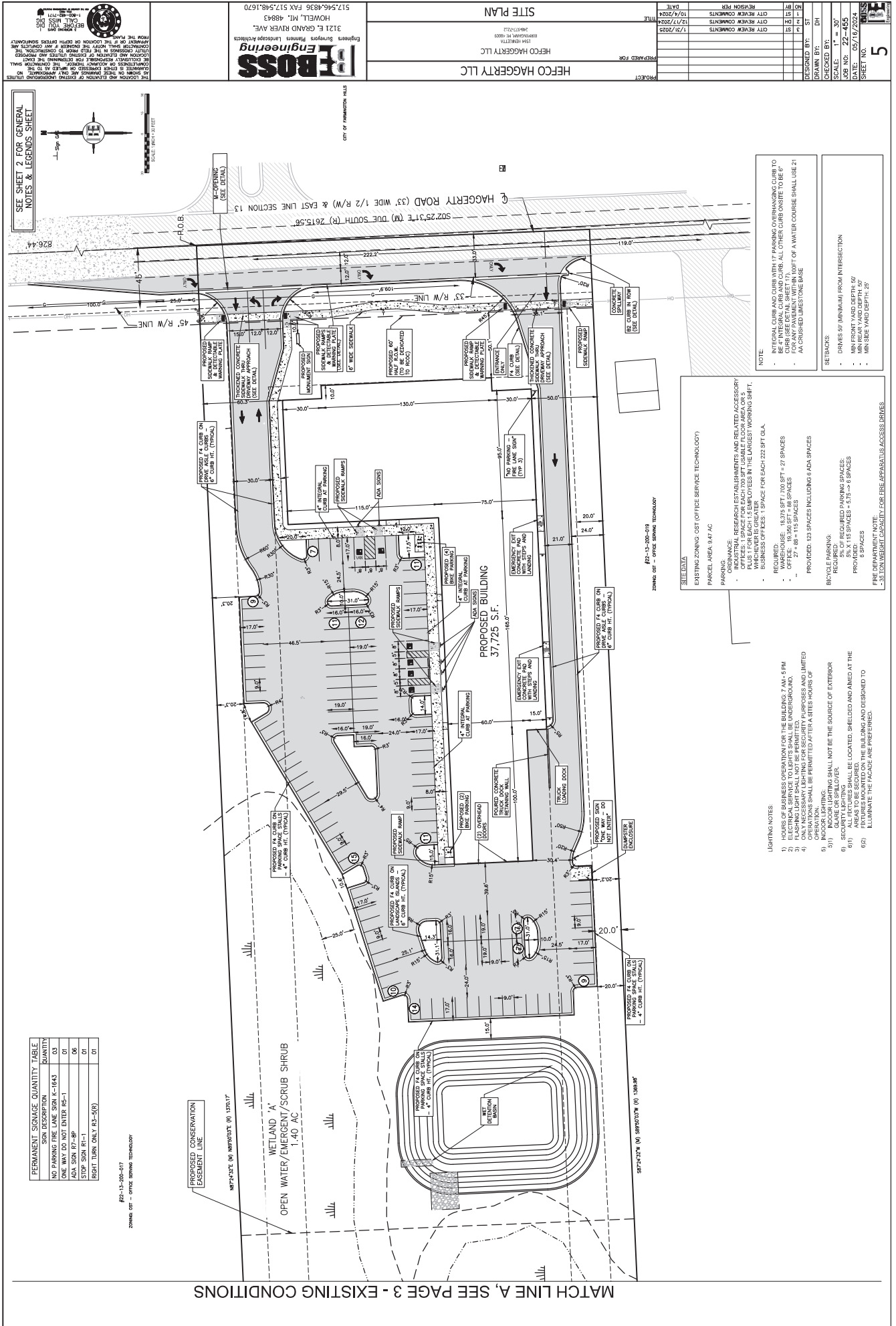
**HEFCO HAGGERTY LLC**  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4936 FAX 517.548.1670

**REBOSS Engineering**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4936 FAX 517.548.1670

**EXISTING CONDITIONS**

PROJECT: HEFCO HAGGERTY LLC  
 DATE: 1/27/2023  
 DESIGNED BY: ST  
 CHECKED BY: DH  
 SCALE: 1" = 50'  
 JOB NO: 22-455  
 DATE: 05/17/2024  
 SHEET NO: 3



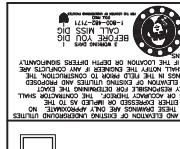


MATCH LINE A, SEE PAGE 3 - EXISTING CONDITIONS

PERMANENT SIGNAGE QUANTITY TABLE	QUANTITY
NO PARKING FIRE LINE SIGN K-1843	03
ONE WAY DO NOT ENTER RS-1	01
ADA SIGN RS-1P	06
STOP SIGN RS-1	01
RIGHT TURN ONLY RS-5(X)	01

SEE SHEET 2 FOR GENERAL NOTES & LEGENDS SHEET

**PEBOSS Engineering**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4136 FAX 517.548.1670



**HECO HAGGERTY LLC**  
 HECO HAGGERTY LLC  
 PREPARED FOR  
 HECO HAGGERTY LLC  
 DATE: 1/31/2024  
 SCALE: 1" = 30'  
 SHEET NO: 5

**PERMANENT SIGNAGE QUANTITY TABLE**  
 NO PARKING FIRE LINE SIGN K-1843  
 ONE WAY DO NOT ENTER RS-1  
 ADA SIGN RS-1P  
 STOP SIGN RS-1  
 RIGHT TURN ONLY RS-5(X)

EXISTING ZONING DISTRICT (OFFICE SERVICE TECHNOLOGY)  
 PARCEL AREA 9,47 AC

**PARKING**  
 ORDINANCE: OFFICE PARKING SPACES PER 700 SFT OF FLOOR AREA PLUS 1 SPACE FOR EACH 700 SFT OF FLOOR AREA OR MORE.  
 BUSINESS OFFICES: 1 SPACE FOR EACH 223 SFT G.L.A.  
 PROVIDED: 13 SPACES INCLUDING 6 ADA SPACES

**BICYCLE PARKING**  
 REQUIRED: 12 BICYCLES PER 1,000 SFT OF G.F.A.  
 PROVIDED: 27 BICYCLE SPACES  
 PROVIDED: 5% X 15 SPACES - 6.75 X 6 SPACES

**LIGHTING NOTES**  
 1) HOURS OF BUSINESS OPERATION FOR THE BUILDING 7 AM - 5 PM  
 2) FLASHING LIGHT SHALL NOT BE PERMITTED.  
 3) ONLY NECESSARY LIGHTING FOR SECURITY PURPOSES AND LIMITED OPERATION.  
 4) ALL LIGHTING SHALL NOT BE THE SOURCE OF EXTERIOR GLARE OR SPALLOVER.  
 5) ALL LIGHT FIXTURES SHALL BE LOCATED, SHIELDED AND AIMED AT THE AREAS TO BE SECURED.  
 6) ILLUMINATE THE FACADE ARE PREFERRED.

**REVISIONS**

DATE	REVISION
1/31/2024	DTY REVIEW COMMENTS
1/31/2024	DTY REVIEW COMMENTS
1/31/2024	DTY REVIEW COMMENTS
1/31/2024	DTY REVIEW COMMENTS

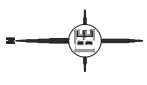
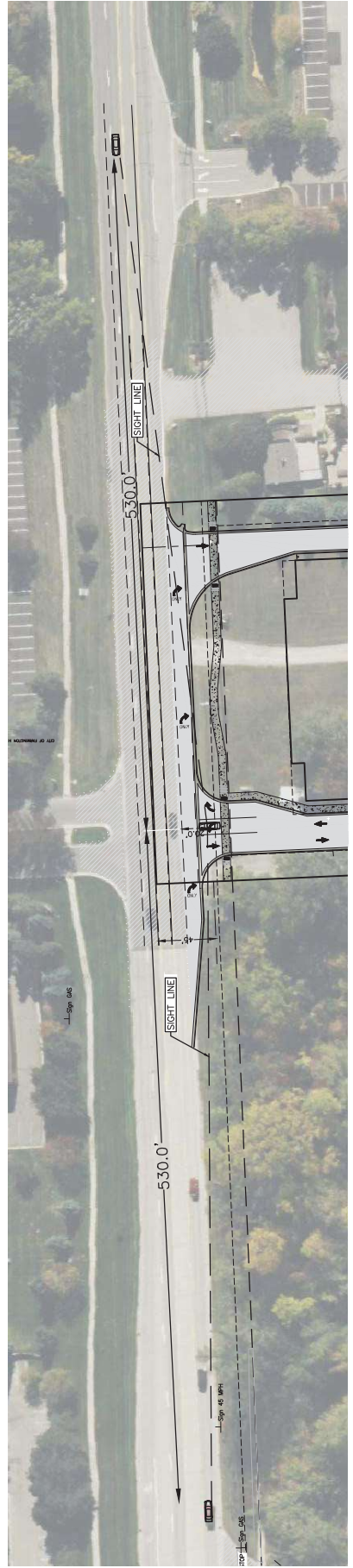
DESIGNED BY: ST  
 DRAWN BY: DH  
 CHECKED BY: SK  
 SCALE: 1" = 30'  
 SHEET NO: 5

NO	REVISION PER	DATE
1	DTY REVIEW COMMENTS	12/17/2024
2	DTY REVIEW COMMENTS	12/17/2024
3	DTY REVIEW COMMENTS	1/31/2025
4	DTY REVIEW COMMENTS	12/17/2024

DESIGNED BY: SJ  
 DRAWN BY: DH  
 CHECKED BY:  
 SCALE: 1" = 40'  
 MSJ NO: 22-465  
 DATE: 05/18/2024  
 SHEET NO

**REBOSS** Engineering  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4836 FAX 517.548.1670

HFCO HAGGERTY LLC  
 PREPARED FOR  
 PROJECT:



SEE SHEET 8 FOR GENERAL NOTES & LEGENDS SHEET

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL VERIFY THE DEPTH OF ANY UTILITIES BEFORE ANY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITIES NOT SHOWN ON THIS DRAWING OR OF ANY CHANGES TO THE LOCATION AND ELEVATION OF EXISTING UTILITIES AND SERVICES. THE ENGINEER IS NOT RESPONSIBLE FOR DETERMINING THE LOCATION AND ELEVATION OF EXISTING UTILITIES AND SERVICES.

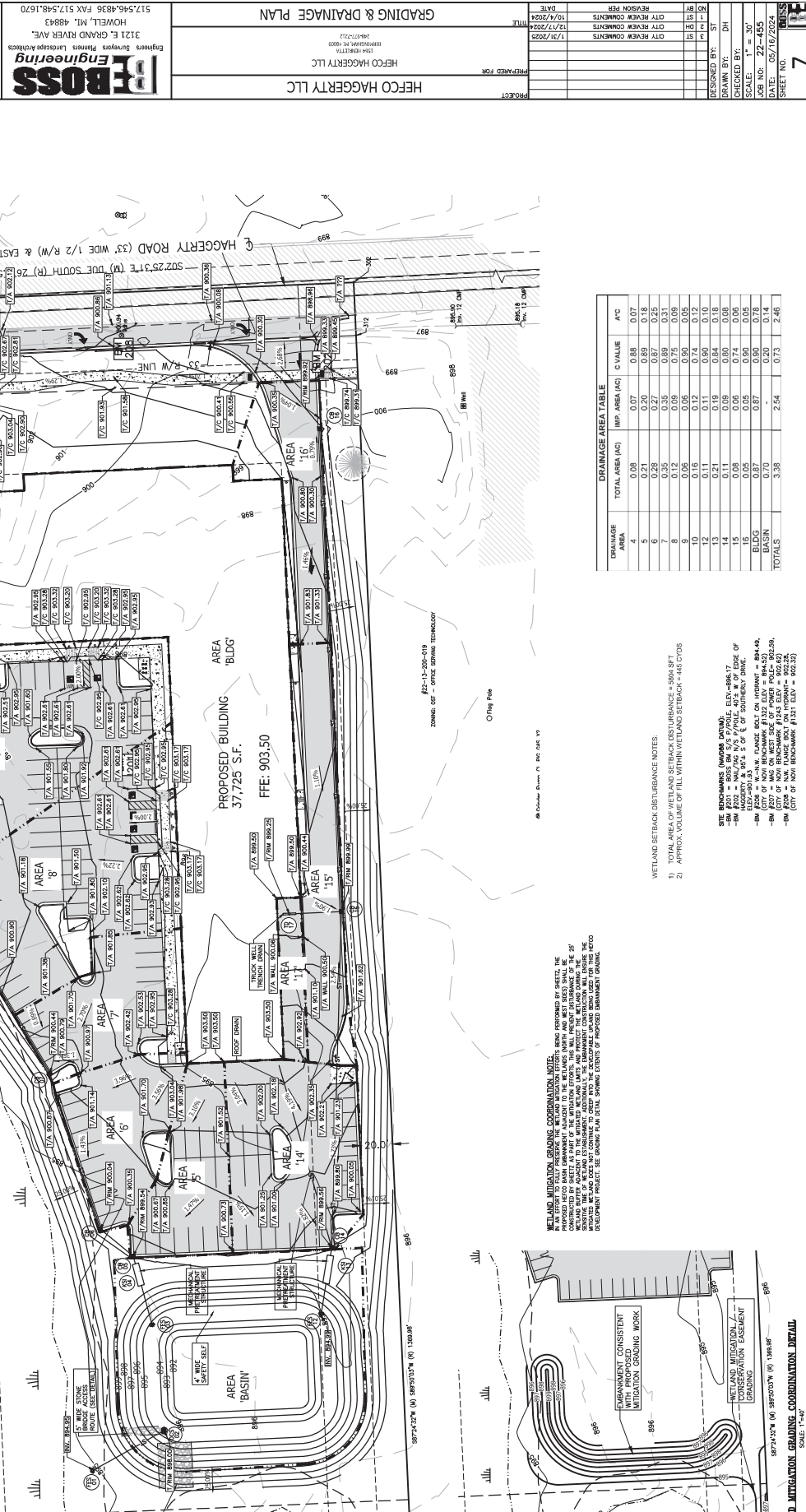
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 HOWELL, MI, 48843  
 517.546.4836 FAX 517.548.1670

PROJECT: GRADING & DRAINAGE PLAN  
 SHEET NO. 7  
 DATE: 05/18/2024  
 J09 NO. 22-455  
 SCALE: 1" = 30'  
 CHECKED BY:  
 DRAWN BY: DH  
 DESIGNED BY: ST  
 CITY REVIEW COMMENTS: 1/17/2024  
 CIVIL REVIEW COMMENTS: 1/17/2024  
 CITY REVIEW COMMENTS: 1/17/2024



SEE SHEET 8 FOR GENERAL NOTES & LEGENDS SHEET

PROPOSED CONSERVATION EASEMENT LINE

WETLAND 'A' OPEN WATER/EMERGENT/SCRUB SHRUB 1.40 AC

PROPOSED BUILDING 37,725 S.F. FEE: 903.50

AREA 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

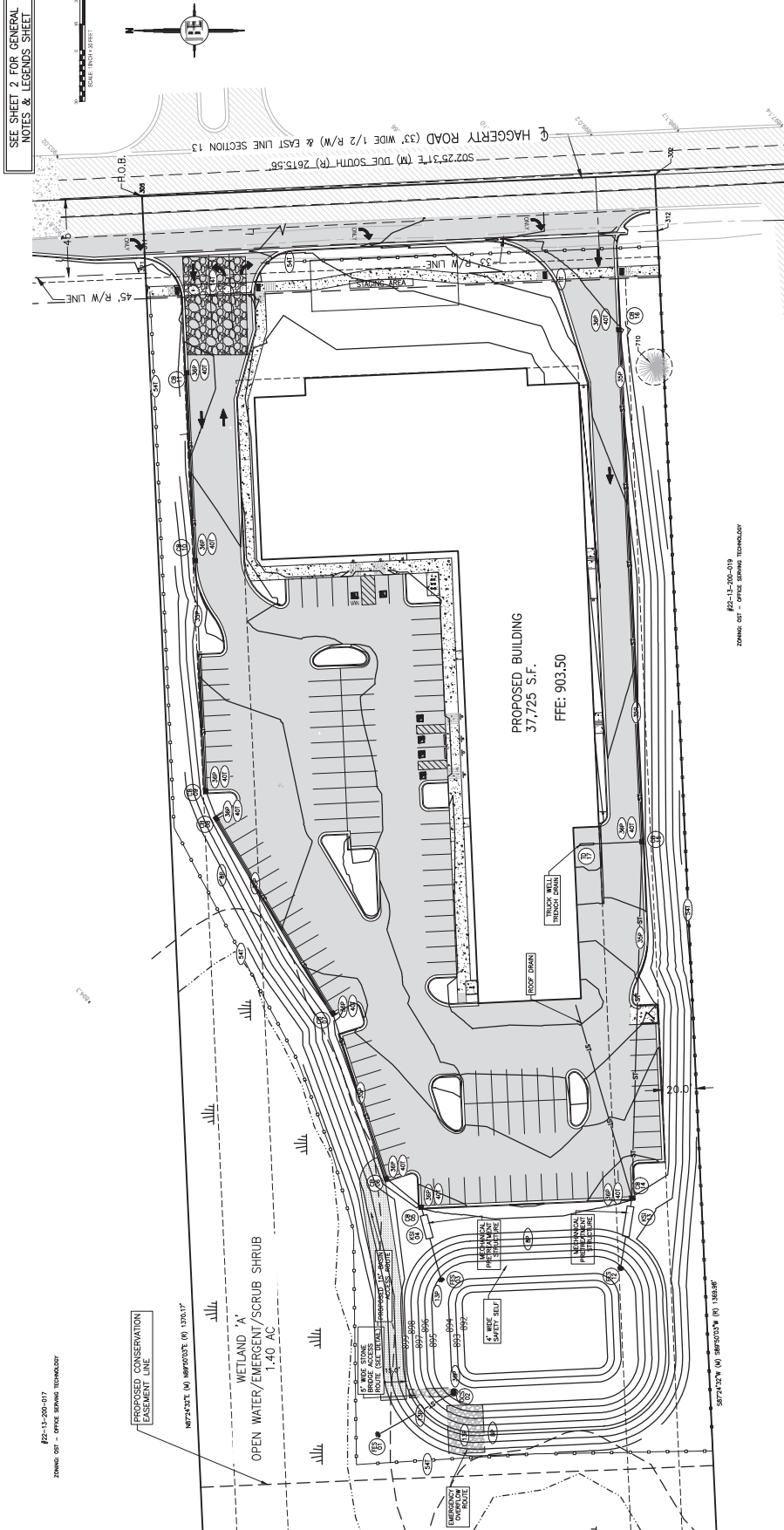
AREA BLDG

WETLAND MITIGATION GRADING COORDINATION DETAIL

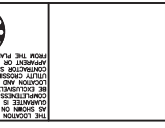
SCALE: 1" = 40'



MATCH LINE A, SEE PAGE 3 - EXISTING CONDITIONS



SEE SHEET B FOR GENERAL NOTES & LEGENDS SHEET



HEFCO HAGGERTY LLC  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4836 FAX 517.548.1670

HEFCO HAGGERTY LLC  
 SOIL EROSION & SEDIMENTATION PLAN

NO.	REVISION PER	DATE
1	DTY REVIEW COMMENTS	10/4/2022
2	DTY REVIEW COMMENTS	11/17/2022
3	DTY REVIEW COMMENTS	1/19/2023
4	DTY REVIEW COMMENTS	12/17/2023

DESIGNED BY: ST  
 DRAWN BY: DH  
 CHECKED BY: JH  
 SCALE: 1" = 30'  
 JDS NO: 22-455  
 DATE: 05/18/2024  
 SHEET NO: 8

PROPOSED BUILDING  
 37,725 S.F.  
 FFE: 903.50

SOIL EROSION CONTROL MEASURES

1	1.0' SLOPE PROTECTION	1.0' SLOPE PROTECTION SHALL BE INSTALLED PER THE SLOPE PROTECTION SCHEDULE FOR THE YEAR 2025.
8	SEDIMENT BASIN	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
13	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
14	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
35	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
36	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
37	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
38	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
39	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
40	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.
54	TRUCK WASH	INSTALL AND MAINTAIN PER THE SCHEDULE FOR THE YEAR 2025.

PROPOSED CONST. SCHEDULE FOR THE YEAR 2025

ACTIVITY	MAY	JUNE	JULY	AUG	SEPT	OCT
DEMOLITION						
FOUNDATION						
FRAME						
ROOFING						
MECHANICAL/ELECTRICAL						
FINISHES						
LANDSCAPE						

CONSTRUCTION SEQUENCE  
 1. DEMOLITION  
 2. FOUNDATION  
 3. FRAME  
 4. ROOFING  
 5. MECHANICAL/ELECTRICAL  
 6. FINISHES  
 7. LANDSCAPE

CONTROLS & MEASURES NARRATIVE

ACTIVITY	MONTHLY	AS REQUIRED
COLLECT GRASS, TREES, AND SHRUB REMAINS	X	X
COLLECT DEBRIS	X	X
COLLECT LITTER	X	X
COLLECT WASTE	X	X
COLLECT FUEL OIL	X	X
COLLECT HYDROCARBONS	X	X
COLLECT PAINTS	X	X
COLLECT OTHER HAZARDOUS WASTE	X	X
COLLECT OTHER CONTAMINANTS	X	X
COLLECT OTHER	X	X

TOTAL DISTURBED AREA = 4.23 AC.



NO	DATE	REVISION PER
1	10/16/2024	CITY REVIEW COMMENTS
2	12/17/2024	CITY REVIEW COMMENTS
3	1/19/2025	CITY REVIEW COMMENTS

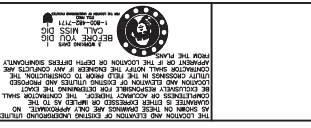
HEFCO HAGGERTY LLC  
 HEFCO HAGGERTY LLC  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4836 FAX 517.548.1670

REVISION PER  
 DATE  
 NO

DESIGNED BY: ST  
 DRAWN BY: DH  
 CHECKED BY: DH  
 SCALE: 1" = 50'  
 JES NO: 22-455  
 DATE: 05/18/2024

CIRCULATION PLAN

REBOSS  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4836 FAX 517.548.1670



SEE SHEET 9 FOR GENERAL NOTES & LEGENDS SHEET

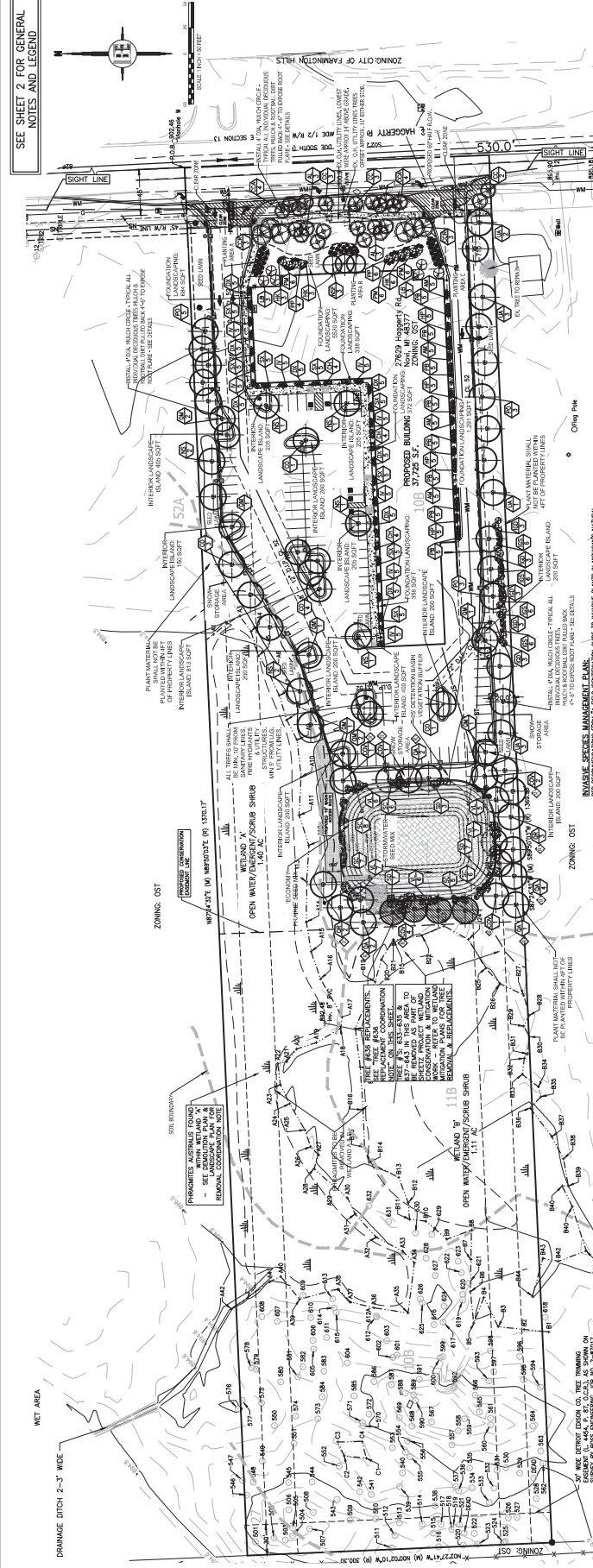


HEFCO HAGGERTY LLC  
 HEFCO HAGGERTY LLC  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
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**BOSS Engineering**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 517.546.4836 FAX 517.546.1670

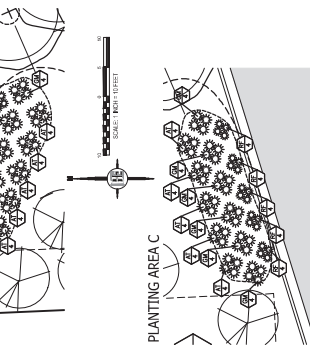
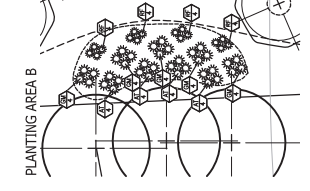
PROJECT: HFCO HAGGERTY LLC  
 PREPARED FOR: HFCO HAGGERTY LLC  
 DATE: 12/17/2023  
 CITY REVIEW COMMENTS: 12/17/2023  
 CITY REVIEW COMMENTS: 12/17/2023  
 DATE: 12/17/2023

DESIGNED BY: TC  
 CHECKED BY: TC  
 SCALE: 1" = 50'  
 JOB NO: 22-455  
 DATE: 05/19/2024  
 SHEET NO: 11



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

27629 Haggerty Rd.  
 Novi, MI 48377



LANDSCAPE PLAN PREPARED BY:  
 BOSS ENGINEERING  
 3121 E GRAND RIVER AVE  
 HOWELL, MI 48843  
 CONTACT: PATRICK CLEARY, PLA  
 PHONE: 517-546-4836  
 EMAIL: PATRICK@BOSSENG.COM

**GROUND COVER NOTES:**  
 1. ALL SPOTS WILL BE GUARANTEED QUANTITIES FOR 3 YEARS.  
 2. DURING 2 YEAR MAINTENANCE PERIOD, ONE COLLECTIVE IN JUNE, JULY, AND AUGUST.  
 3. ANNUAL BUDGET FOR MAINTENANCE SHALL BE \$100,000 PER ANNUM.  
 4. LANDSCAPE INSTALLATION DATE: MARCH 15th - NOVEMBER 15th  
 5. LANDSCAPE ISLANDS SHALL BE RELOCATED AND REPLANTED WITHIN 30 DAYS OF THE DATE OF THE CONTRACT SIGNATURE.  
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 10. LANDSCAPE ISLANDS SHALL BE RELOCATED AND REPLANTED WITHIN 30 DAYS OF THE DATE OF THE CONTRACT SIGNATURE.

**IRRIGATOR SPECIFICATIONS:**  
 1. ALL IRRIGATION SYSTEMS SHALL BE DESIGNED BY THE LANDSCAPE ARCHITECT AND SHALL BE INSTALLED BY THE LANDSCAPE CONTRACTOR.  
 2. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE SUFFICIENT WATER TO ALL PLANTS AND SHRUBS.  
 3. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE SUFFICIENT WATER TO ALL PLANTS AND SHRUBS.  
 4. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE SUFFICIENT WATER TO ALL PLANTS AND SHRUBS.  
 5. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE SUFFICIENT WATER TO ALL PLANTS AND SHRUBS.

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
1	Landscaping	100	100.00	10000.00
2	Planting	200	50.00	10000.00
3	Water	100	100.00	10000.00
4	Electric	100	100.00	10000.00
5	Material	100	100.00	10000.00
6	Labor	100	100.00	10000.00
7	Planting	200	50.00	10000.00
8	Water	100	100.00	10000.00
9	Electric	100	100.00	10000.00
10	Material	100	100.00	10000.00
11	Labor	100	100.00	10000.00
12	Planting	200	50.00	10000.00
13	Water	100	100.00	10000.00
14	Electric	100	100.00	10000.00
15	Material	100	100.00	10000.00
16	Labor	100	100.00	10000.00
17	Planting	200	50.00	10000.00
18	Water	100	100.00	10000.00
19	Electric	100	100.00	10000.00
20	Material	100	100.00	10000.00
21	Labor	100	100.00	10000.00
22	Planting	200	50.00	10000.00
23	Water	100	100.00	10000.00
24	Electric	100	100.00	10000.00
25	Material	100	100.00	10000.00
26	Labor	100	100.00	10000.00
27	Planting	200	50.00	10000.00
28	Water	100	100.00	10000.00
29	Electric	100	100.00	10000.00
30	Material	100	100.00	10000.00
31	Labor	100	100.00	10000.00
32	Planting	200	50.00	10000.00
33	Water	100	100.00	10000.00
34	Electric	100	100.00	10000.00
35	Material	100	100.00	10000.00
36	Labor	100	100.00	10000.00
37	Planting	200	50.00	10000.00
38	Water	100	100.00	10000.00
39	Electric	100	100.00	10000.00
40	Material	100	100.00	10000.00
41	Labor	100	100.00	10000.00
42	Planting	200	50.00	10000.00
43	Water	100	100.00	10000.00
44	Electric	100	100.00	10000.00
45	Material	100	100.00	10000.00
46	Labor	100	100.00	10000.00
47	Planting	200	50.00	10000.00
48	Water	100	100.00	10000.00
49	Electric	100	100.00	10000.00
50	Material	100	100.00	10000.00
51	Labor	100	100.00	10000.00
52	Planting	200	50.00	10000.00
53	Water	100	100.00	10000.00
54	Electric	100	100.00	10000.00
55	Material	100	100.00	10000.00
56	Labor	100	100.00	10000.00
57	Planting	200	50.00	10000.00
58	Water	100	100.00	10000.00
59	Electric	100	100.00	10000.00
60	Material	100	100.00	10000.00
61	Labor	100	100.00	10000.00
62	Planting	200	50.00	10000.00
63	Water	100	100.00	10000.00
64	Electric	100	100.00	10000.00
65	Material	100	100.00	10000.00
66	Labor	100	100.00	10000.00
67	Planting	200	50.00	10000.00
68	Water	100	100.00	10000.00
69	Electric	100	100.00	10000.00
70	Material	100	100.00	10000.00
71	Labor	100	100.00	10000.00
72	Planting	200	50.00	10000.00
73	Water	100	100.00	10000.00
74	Electric	100	100.00	10000.00
75	Material	100	100.00	10000.00
76	Labor	100	100.00	10000.00
77	Planting	200	50.00	10000.00
78	Water	100	100.00	10000.00
79	Electric	100	100.00	10000.00
80	Material	100	100.00	10000.00
81	Labor	100	100.00	10000.00
82	Planting	200	50.00	10000.00
83	Water	100	100.00	10000.00
84	Electric	100	100.00	10000.00
85	Material	100	100.00	10000.00
86	Labor	100	100.00	10000.00
87	Planting	200	50.00	10000.00
88	Water	100	100.00	10000.00
89	Electric	100	100.00	10000.00
90	Material	100	100.00	10000.00
91	Labor	100	100.00	10000.00
92	Planting	200	50.00	10000.00
93	Water	100	100.00	10000.00
94	Electric	100	100.00	10000.00
95	Material	100	100.00	10000.00
96	Labor	100	100.00	10000.00
97	Planting	200	50.00	10000.00
98	Water	100	100.00	10000.00
99	Electric	100	100.00	10000.00
100	Material	100	100.00	10000.00

**SUBSTITUTIONAL LANDSCAPE NOTES:**  
 1. ALL SPOTS WILL BE GUARANTEED QUANTITIES FOR 3 YEARS.  
 2. DURING 2 YEAR MAINTENANCE PERIOD, ONE COLLECTIVE IN JUNE, JULY, AND AUGUST.  
 3. ANNUAL BUDGET FOR MAINTENANCE SHALL BE \$100,000 PER ANNUM.  
 4. LANDSCAPE INSTALLATION DATE: MARCH 15th - NOVEMBER 15th  
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 10. LANDSCAPE ISLANDS SHALL BE RELOCATED AND REPLANTED WITHIN 30 DAYS OF THE DATE OF THE CONTRACT SIGNATURE.

KEY QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS	GENUS & SPECIES %
1	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
2	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
3	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
4	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
5	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
6	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
7	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
8	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
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77	Amelanchier canadensis	Waxhaw	3" col.	B-B	11%
78					

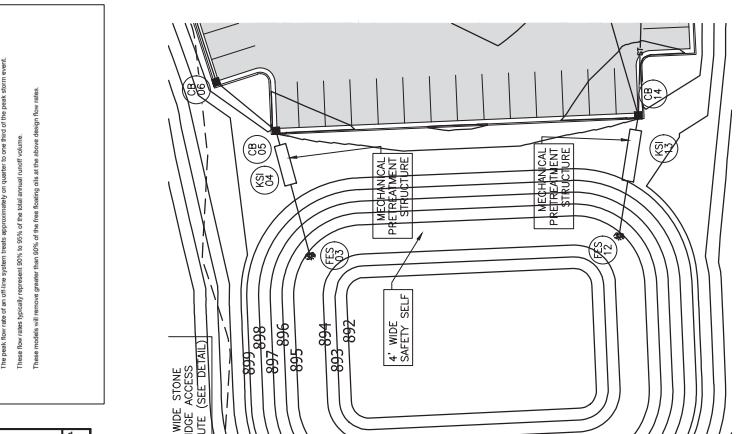




HEFCO HAGGERTY LLC  
 SHEET NO. 13  
 DATE: 05/19/2024  
 J05 NO: 22-455  
 SCALE: 1" = 20'  
 CHECKED BY: DH  
 DRAWN BY: ST

REVISION PER DATE  
 1 ST QTY REVIEW COMMENTS 12/17/2023  
 2 ST QTY REVIEW COMMENTS 12/17/2023  
 3 ST QTY REVIEW COMMENTS 1/29/2024

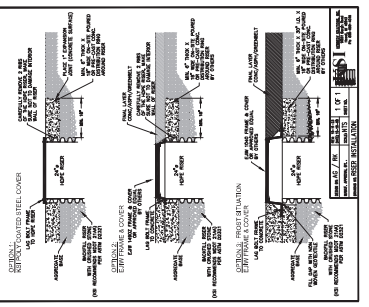
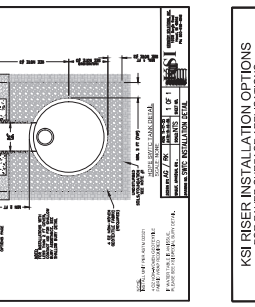
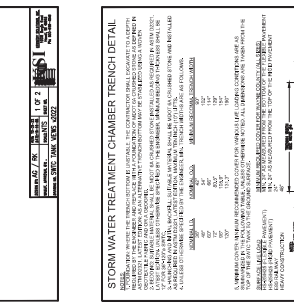
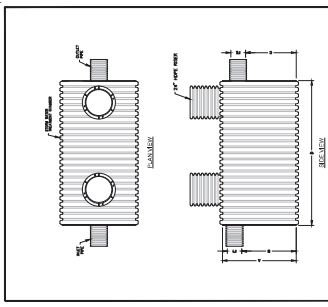
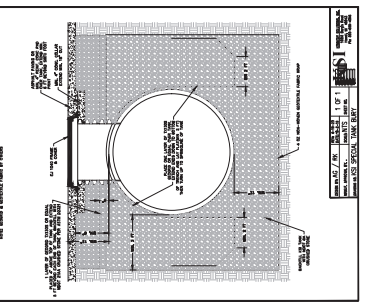
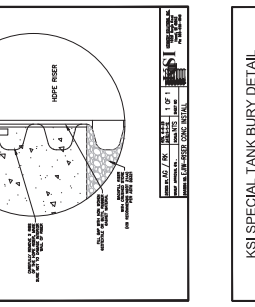
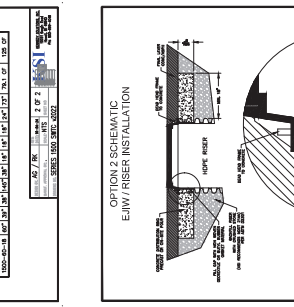
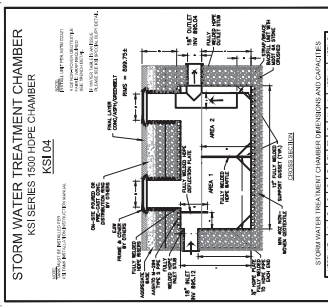
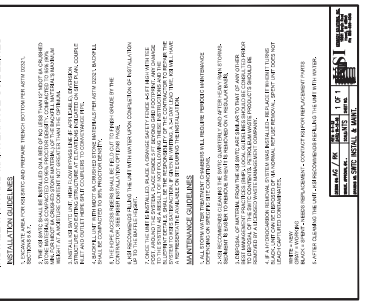
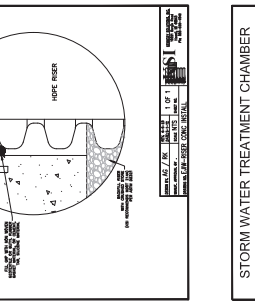
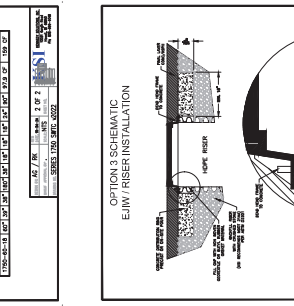
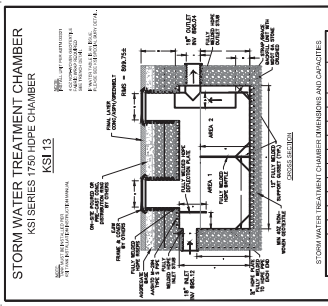
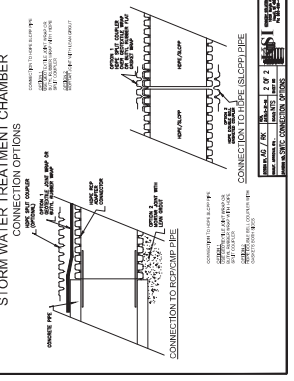
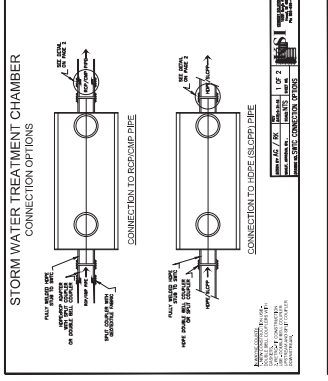
HEFCO HAGGERTY LLC  
 PROJECT PREPARED FOR  
 HECFO HAGGERTY LLC  
 2121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4836 FAX 517.548.1670  
 Engineers  
 Surveyors  
 Planners  
 Landscape Architects  
**REBOSS Engineering**



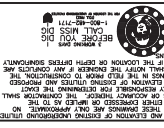
**KSI Storm Water Treatment Chamber (SWTC) Sizing Chart**  
 (80% annual TSS removal based on particle size)  
 August 2019

MODEL	WAYNE CO FLOW RATES	75 MICRON	110 MICRON
360	1.8-CFS	2.2-CFS	2.3-CFS
500	3.3-CFS	3.0-CFS	3.0-CFS
780	4.1-CFS	4.1-CFS	4.2-CFS
1060	6.0-CFS	6.2-CFS	6.3-CFS
1360	7.2-CFS	7.2-CFS	7.3-CFS
1760	9.3-CFS	9.3-CFS	9.5-CFS
2060	11.3-CFS	11.3-CFS	11.4-CFS
2400	13.3-CFS	13.3-CFS	13.4-CFS
2760	15.3-CFS	15.3-CFS	15.4-CFS
3160	18.3-CFS	18.3-CFS	18.4-CFS
3560	20.3-CFS	20.4-CFS	20.4-CFS
3960	22.3-CFS	22.3-CFS	22.3-CFS
4360	24.3-CFS	24.3-CFS	24.3-CFS
4760	26.3-CFS	26.3-CFS	26.3-CFS
5160	28.3-CFS	28.3-CFS	28.3-CFS
5560	30.3-CFS	30.3-CFS	30.3-CFS
5960	32.3-CFS	32.3-CFS	32.3-CFS
6360	34.3-CFS	34.3-CFS	34.3-CFS
6760	36.3-CFS	36.3-CFS	36.3-CFS
7160	38.3-CFS	38.3-CFS	38.3-CFS
7560	40.3-CFS	40.3-CFS	40.3-CFS
7960	42.3-CFS	42.3-CFS	42.3-CFS
8360	44.3-CFS	44.3-CFS	44.3-CFS
8760	46.3-CFS	46.3-CFS	46.3-CFS
9160	48.3-CFS	48.3-CFS	48.3-CFS
9560	50.3-CFS	50.3-CFS	50.3-CFS
9960	52.3-CFS	52.3-CFS	52.3-CFS
10360	54.3-CFS	54.3-CFS	54.3-CFS
10760	56.3-CFS	56.3-CFS	56.3-CFS
11160	58.3-CFS	58.3-CFS	58.3-CFS
11560	60.3-CFS	60.3-CFS	60.3-CFS
11960	62.3-CFS	62.3-CFS	62.3-CFS
12360	64.3-CFS	64.3-CFS	64.3-CFS
12760	66.3-CFS	66.3-CFS	66.3-CFS
13160	68.3-CFS	68.3-CFS	68.3-CFS
13560	70.3-CFS	70.3-CFS	70.3-CFS
13960	72.3-CFS	72.3-CFS	72.3-CFS
14360	74.3-CFS	74.3-CFS	74.3-CFS
14760	76.3-CFS	76.3-CFS	76.3-CFS
15160	78.3-CFS	78.3-CFS	78.3-CFS
15560	80.3-CFS	80.3-CFS	80.3-CFS
15960	82.3-CFS	82.3-CFS	82.3-CFS
16360	84.3-CFS	84.3-CFS	84.3-CFS
16760	86.3-CFS	86.3-CFS	86.3-CFS
17160	88.3-CFS	88.3-CFS	88.3-CFS
17560	90.3-CFS	90.3-CFS	90.3-CFS
17960	92.3-CFS	92.3-CFS	92.3-CFS
18360	94.3-CFS	94.3-CFS	94.3-CFS
18760	96.3-CFS	96.3-CFS	96.3-CFS
19160	98.3-CFS	98.3-CFS	98.3-CFS
19560	100.3-CFS	100.3-CFS	100.3-CFS
19960	102.3-CFS	102.3-CFS	102.3-CFS
20360	104.3-CFS	104.3-CFS	104.3-CFS
20760	106.3-CFS	106.3-CFS	106.3-CFS
21160	108.3-CFS	108.3-CFS	108.3-CFS
21560	110.3-CFS	110.3-CFS	110.3-CFS

All KSI models will require some form of automation to meet the specific conditions. Please see KSI at 800-666-4688 for design assistance. Details and specifications are available. The peak flow rate of an all-in-one system is based approximately on quarter to one third of the peak storm event. These flow rates typically represent 80% to 95% of the total annual runoff volume. These models will remove greater than 80% of the fine floating solids at the above design flow rates.



SEE SHEET 9 FOR GENERAL NOTES & LEGENDS SHEET



HEFCO HAGGERTY LLC  
 PROJECT PREPARED FOR  
 HECFO HAGGERTY LLC  
 2121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4836 FAX 517.548.1670  
 Engineers  
 Surveyors  
 Planners  
 Landscape Architects  
**REBOSS Engineering**

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**REBOSS Engineering**

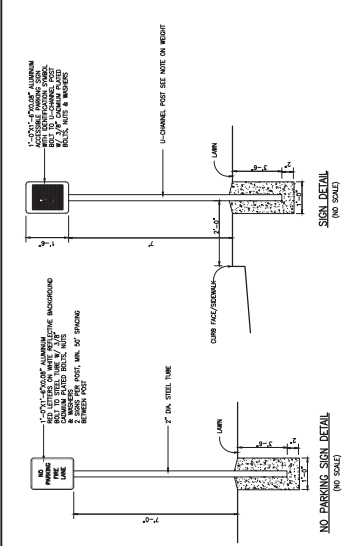
HEFCO HAGGERTY LLC  
 SHEET NO. 13  
 DATE: 05/19/2024  
 J05 NO: 22-455  
 SCALE: 1" = 20'  
 CHECKED BY: DH  
 DRAWN BY: ST





REVISION PER: [Blank]  
DATE: 12/17/2024  
QTY REVIEW COMMENTS: [Blank]  
DATE: 12/17/2024  
QTY REVIEW COMMENTS: [Blank]

DESIGNED BY: DH  
DRAWN BY: SH  
CHECKED BY: [Blank]  
SCALE: NO SCALE  
JOB NO: 22-465  
DATE: 05/15/2024  
SHEET NO: 15

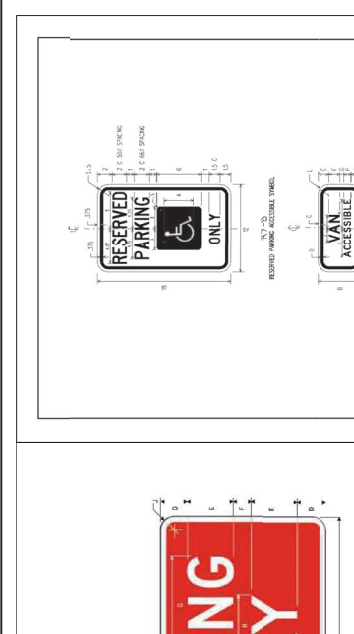
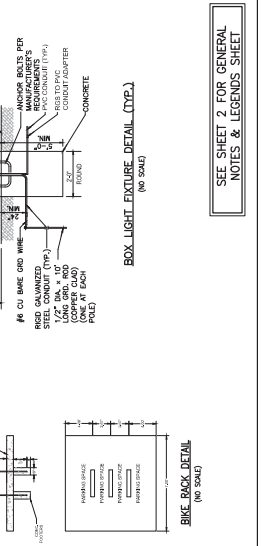
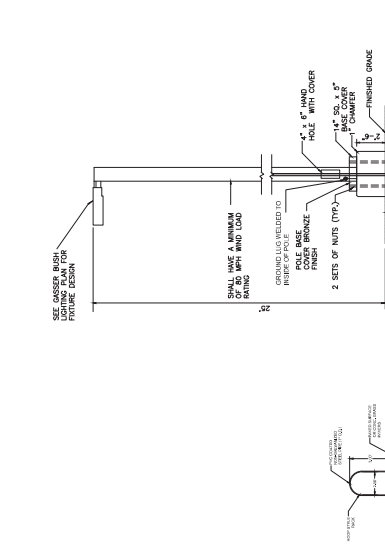


**POSTAGE NOTES:**

- ALL ON-SITE STORAGE AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE MUTCD.
- ALL STORAGE SHALL BE PLACED AT LEAST 20 FEET FROM THE FACE OF CURB TO THE NEAR SIDE OF THE SIGN.
- FVAH STANDARD ALPHABET SERIES USED FOR ALL SIGN.
- ALL SIGNS SHALL BE A HEIGHT OF 7 FEET FROM FINAL GRADE TO TOP OF SIGN.
- SMALLER SIGNS SHALL BE MOUNTED ON A GALVANIZED, 2.5" CHANNEL POST.
- 3.0" OR GREATER CHANNEL POST SHALL BE MOUNTED ON A GALVANIZED, 4" x 4" SQUARE POST.
- HIGH-INTENSITY PRismatic (HIP) SHEETING TO MEET FVAH.
- CROSSWALK LINES SHALL NOT BE LESS THAN 6" OR GREATER THAN 24" APART.
- UNLESS OTHERWISE SPECIFIED, ON-SITE PAVEMENT MARKINGS SHALL BE 6" WIDE AND WHITE.

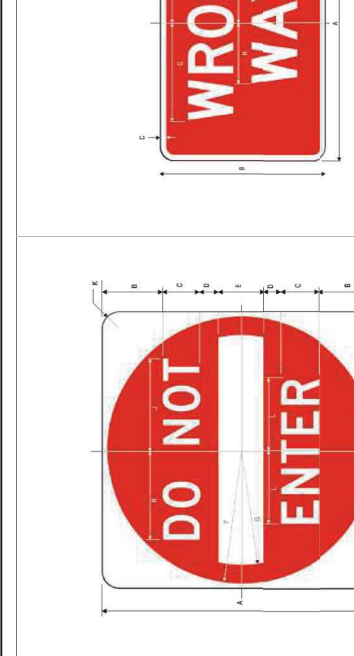
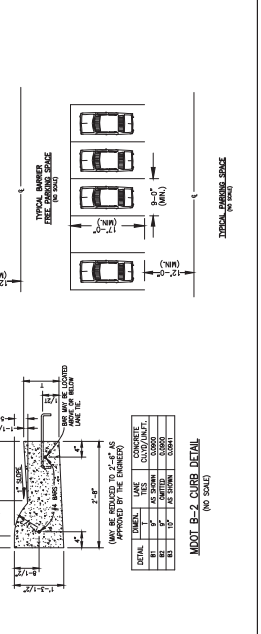
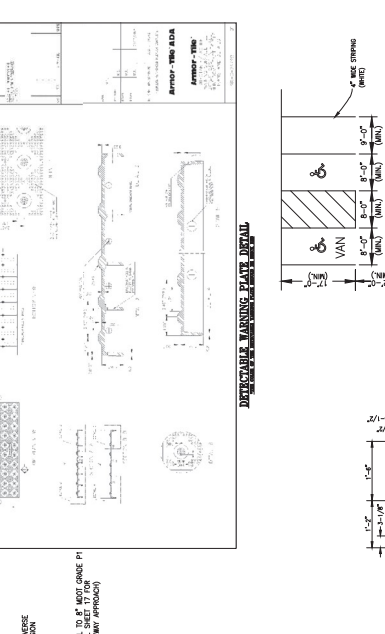
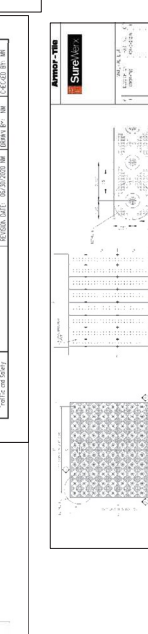
**SIGN LEGEND**

DESCRIPTION	QUANTITY
R7-1A HANGAR/PARKING SIGN (12'x14')	21 LBS
R6-1A VAN ACCESSIBLE SIGN (12'x24')	21 LBS
R5-1A VERTICAL WAY SIGN (18'x24')	31 LBS
R4-1A DO NOT ENTER (30'x24')	31 LBS
NO PARKING - RED LANE (12'x18')	21 LBS



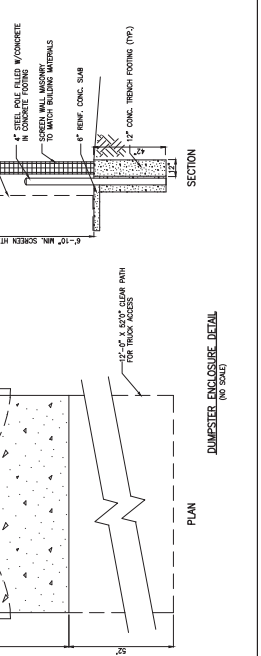
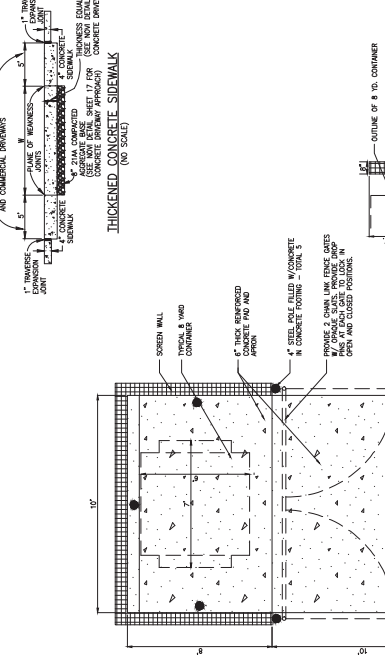
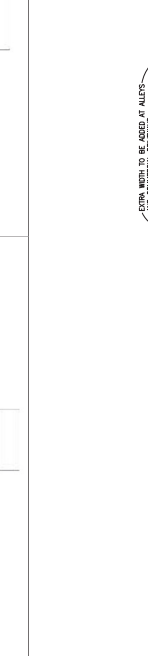
**FIGURE 3822 INTERNATIONAL SYMBOLS OF ACCESSIBILITY MARKINGS SPACE MARKINGS**

TYPE	HEIGHT (MIN.)	WIDTH (MIN.)	SPACING (MIN.)
Wheelchair	48"	36"	48"
Van Accessible	48"	36"	48"
Reserved	48"	36"	48"



**WRONG WAY SIGN (NO SCALE)**

TYPE	HEIGHT (MIN.)	WIDTH (MIN.)	SPACING (MIN.)
Wrong Way	48"	36"	48"





**REBOSS** Engineering  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4936 FAX 517.548.1670

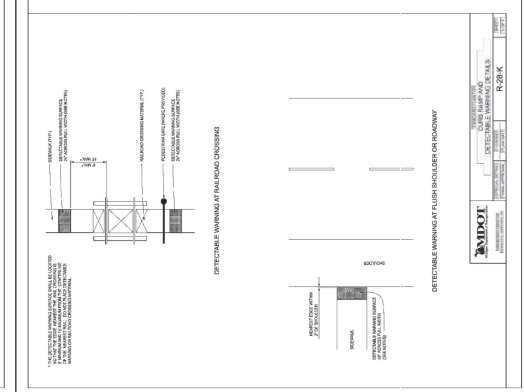
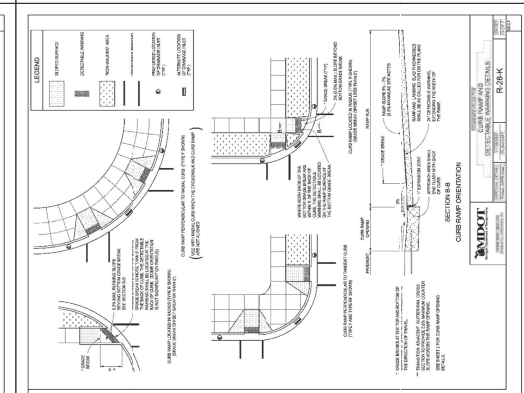
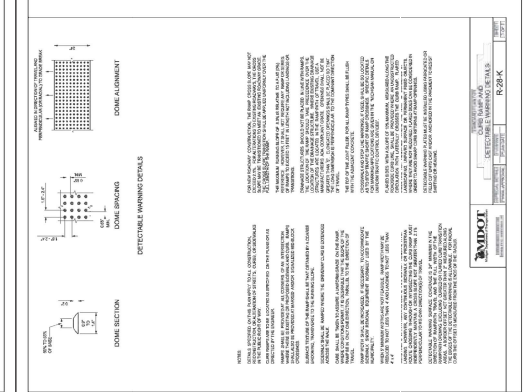
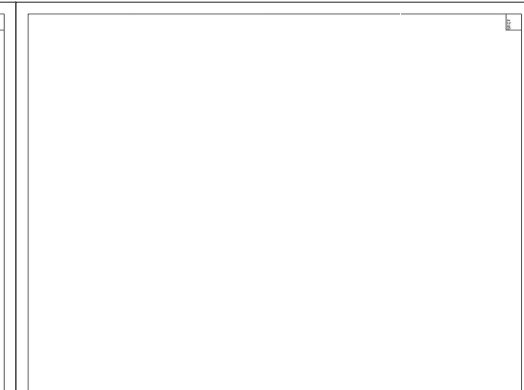
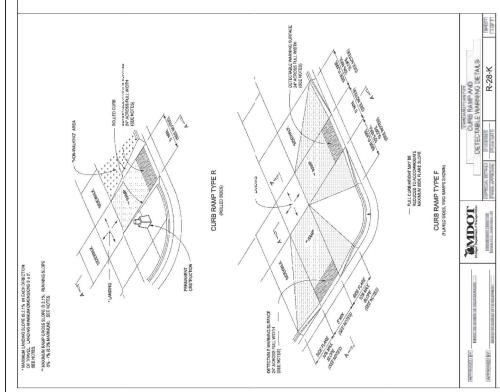
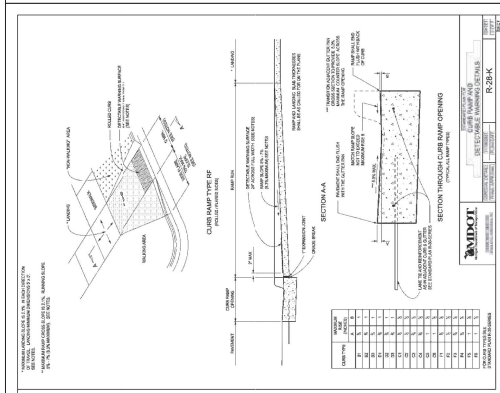
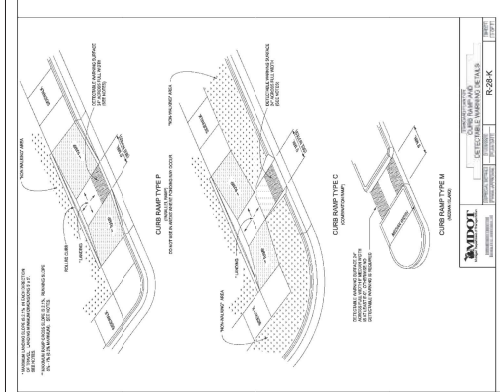
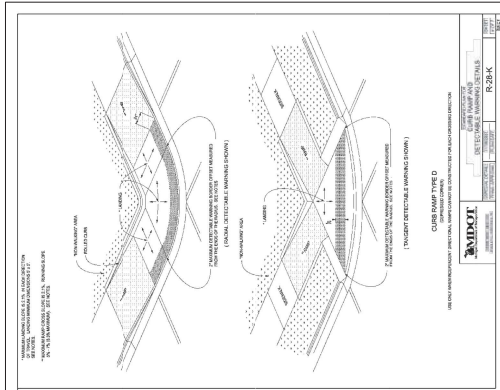
**HEFCO HAGGERTY LLC**  
 HEFCO HAGGERTY LLC  
 1600 RIVERVIEW BLVD  
 RICHMOND MI 48062

PROJECT: MDOT SIDEWALK DETAILS  
 PREPARED FOR: HEFCO HAGGERTY LLC  
 DATE: 1/29/2022  
 SHEET NO. 16  
 SHEET TITLE: MDOT SIDEWALK DETAILS

NO	BY	REVISION PER
1	ST	CITY REVIEW COMMENTS 12/17/2021
2	ST	CITY REVIEW COMMENTS 1/21/2022
3	ST	CITY REVIEW COMMENTS 1/29/2022

DESIGNED BY: ST  
 DRAWN BY: DH  
 CHECKED BY: NO SCALE  
 SCALE: NO SCALE  
 J99 NO. 22-465  
 DATE: 05/19/2024

SEE SHEET 2 FOR GENERAL NOTES & LEGENDS SHEET





**REBOSS**  
 Engineering  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 517.546.4936 FAX 517.548.1670

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NOVI AND THE STATE OF MICHIGAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NOVI AND THE STATE OF MICHIGAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NOVI AND THE STATE OF MICHIGAN.

SEE SHEET 9 FOR GENERAL NOTES & LEGENDS SHEET

**1-4** CITY OF NOVI STANDARD DETAILS

1. TRENCH AND BEDDING: TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 48" BELOW FINISH GRADE. THE TRENCH SHALL BE BROADENED TO A MINIMUM OF 12" ON EACH SIDE OF THE PIPE. THE BEDDING SHALL BE 4" OF 1/2" SAND ON TOP OF THE EXCAVATED MATERIAL. THE BEDDING SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.

2. PIPE: PIPE SHALL BE 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 1.5". THE PIPE SHALL BE JOINTED WITH GASKETED JOINTS. THE PIPE SHALL BE INSTALLED WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE.

3. MANHOLE: MANHOLES SHALL BE 48" DIA. CONCRETE MANHOLES WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE. THE MANHOLES SHALL BE INSTALLED WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE.

4. BACKFILL: THE TRENCH SHALL BE BACKFILLED WITH 4" OF 1/2" SAND ON TOP OF THE BEDDING. THE TRENCH SHALL BE BACKFILLED WITH 12" OF 3/4" SAND ON TOP OF THE 4" OF 1/2" SAND. THE TRENCH SHALL BE BACKFILLED WITH 12" OF 3/4" SAND ON TOP OF THE 12" OF 3/4" SAND.

5. FINISH GRADE: THE FINISH GRADE SHALL BE 18" ABOVE THE TOP OF THE PIPE. THE FINISH GRADE SHALL BE 18" ABOVE THE TOP OF THE PIPE.

**1-5** CITY OF NOVI STANDARD DETAILS

1. TRENCH AND BEDDING: TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 48" BELOW FINISH GRADE. THE TRENCH SHALL BE BROADENED TO A MINIMUM OF 12" ON EACH SIDE OF THE PIPE. THE BEDDING SHALL BE 4" OF 1/2" SAND ON TOP OF THE EXCAVATED MATERIAL. THE BEDDING SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.

2. PIPE: PIPE SHALL BE 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 1.5". THE PIPE SHALL BE JOINTED WITH GASKETED JOINTS. THE PIPE SHALL BE INSTALLED WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE.

3. MANHOLE: MANHOLES SHALL BE 48" DIA. CONCRETE MANHOLES WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE. THE MANHOLES SHALL BE INSTALLED WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE.

4. BACKFILL: THE TRENCH SHALL BE BACKFILLED WITH 4" OF 1/2" SAND ON TOP OF THE BEDDING. THE TRENCH SHALL BE BACKFILLED WITH 12" OF 3/4" SAND ON TOP OF THE 4" OF 1/2" SAND. THE TRENCH SHALL BE BACKFILLED WITH 12" OF 3/4" SAND ON TOP OF THE 12" OF 3/4" SAND.

5. FINISH GRADE: THE FINISH GRADE SHALL BE 18" ABOVE THE TOP OF THE PIPE. THE FINISH GRADE SHALL BE 18" ABOVE THE TOP OF THE PIPE.

**1-6** CITY OF NOVI STANDARD DETAILS

1. TRENCH AND BEDDING: TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 48" BELOW FINISH GRADE. THE TRENCH SHALL BE BROADENED TO A MINIMUM OF 12" ON EACH SIDE OF THE PIPE. THE BEDDING SHALL BE 4" OF 1/2" SAND ON TOP OF THE EXCAVATED MATERIAL. THE BEDDING SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.

2. PIPE: PIPE SHALL BE 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 1.5". THE PIPE SHALL BE JOINTED WITH GASKETED JOINTS. THE PIPE SHALL BE INSTALLED WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE.

3. MANHOLE: MANHOLES SHALL BE 48" DIA. CONCRETE MANHOLES WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE. THE MANHOLES SHALL BE INSTALLED WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE.

4. BACKFILL: THE TRENCH SHALL BE BACKFILLED WITH 4" OF 1/2" SAND ON TOP OF THE BEDDING. THE TRENCH SHALL BE BACKFILLED WITH 12" OF 3/4" SAND ON TOP OF THE 4" OF 1/2" SAND. THE TRENCH SHALL BE BACKFILLED WITH 12" OF 3/4" SAND ON TOP OF THE 12" OF 3/4" SAND.

5. FINISH GRADE: THE FINISH GRADE SHALL BE 18" ABOVE THE TOP OF THE PIPE. THE FINISH GRADE SHALL BE 18" ABOVE THE TOP OF THE PIPE.

**1-7** CITY OF NOVI STANDARD DETAILS

1. TRENCH AND BEDDING: TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 48" BELOW FINISH GRADE. THE TRENCH SHALL BE BROADENED TO A MINIMUM OF 12" ON EACH SIDE OF THE PIPE. THE BEDDING SHALL BE 4" OF 1/2" SAND ON TOP OF THE EXCAVATED MATERIAL. THE BEDDING SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.

2. PIPE: PIPE SHALL BE 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 1.5". THE PIPE SHALL BE JOINTED WITH GASKETED JOINTS. THE PIPE SHALL BE INSTALLED WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE.

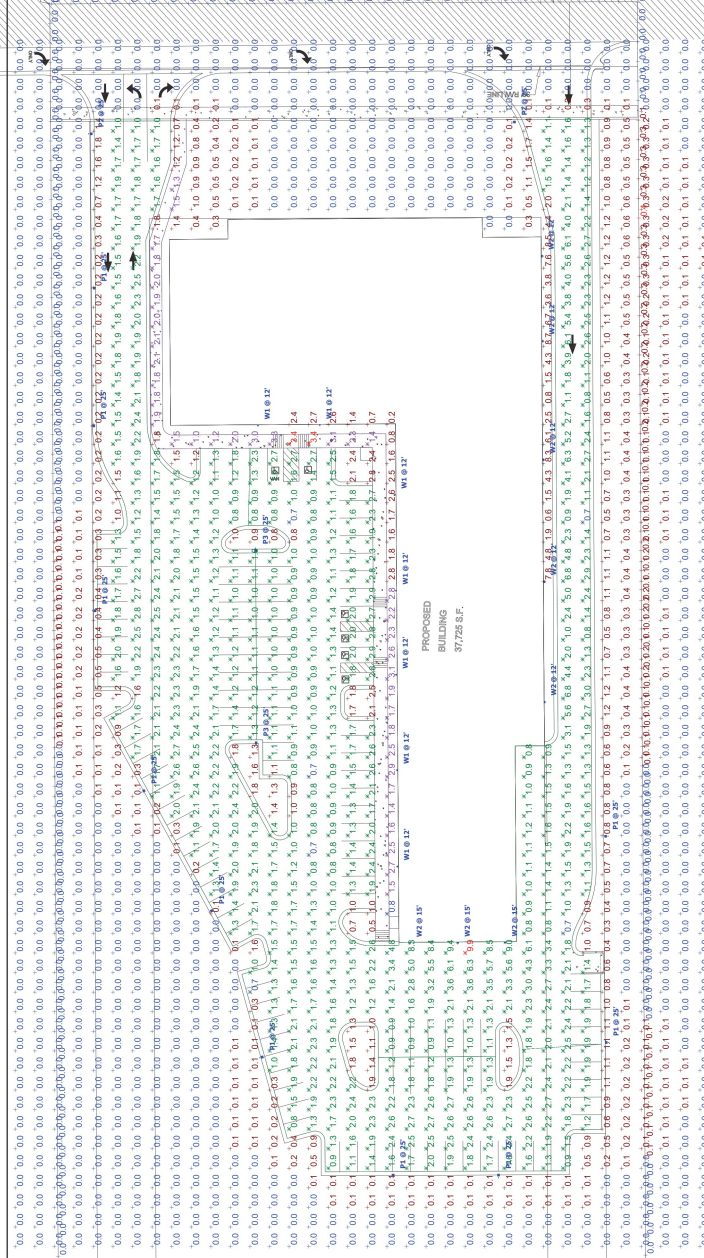
3. MANHOLE: MANHOLES SHALL BE 48" DIA. CONCRETE MANHOLES WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE. THE MANHOLES SHALL BE INSTALLED WITH A MINIMUM COVER OF 18" BELOW FINISH GRADE.

4. BACKFILL: THE TRENCH SHALL BE BACKFILLED WITH 4" OF 1/2" SAND ON TOP OF THE BEDDING. THE TRENCH SHALL BE BACKFILLED WITH 12" OF 3/4" SAND ON TOP OF THE 4" OF 1/2" SAND. THE TRENCH SHALL BE BACKFILLED WITH 12" OF 3/4" SAND ON TOP OF THE 12" OF 3/4" SAND.

5. FINISH GRADE: THE FINISH GRADE SHALL BE 18" ABOVE THE TOP OF THE PIPE. THE FINISH GRADE SHALL BE 18" ABOVE THE TOP OF THE PIPE.







Plan View  
Scale: 1/8" = 1'-0"

**Schedule**

Symbol	Label	QTY	Manufacturer	Catalog	Description	Min	Max	Avg	Symbol	Avg	Min	Max	Avg/Min
◁	W1	7	Lithonia Lighting	WDGE2 LED 30K 80CRI	WDGE2 LED, 3000K, 80CRI	0.7 fc	9.9 fc	1.9 fc	✕	1.9 fc	0.7 fc	9.9 fc	2.7:1
◁	W2	8	Lithonia Lighting	WDGE3 LED 70CRI	WDGE3 LED, 3000K, 70CRI	0.0 fc	0.4 fc	0.0 fc	+	0.0 fc	0.0 fc	0.4 fc	N/A
◻	P1	10	Lithonia Lighting	DSX1 LED 30K 80CRI EGS	D-Series Size 1 Area Luminaire 3000K CCT 80 CRI External Glare Shield	0.0 fc	0.8 fc	2.1 fc	✕	2.1 fc	0.8 fc	3.4 fc	2.6:1
◻	P2	2	Lithonia Lighting	DSX1 LED 30K 80CRI EGS	D-Series Size 1 Area Luminaire 3000K CCT 80 CRI External Glare Shield	0.0 fc	0.8 fc	0.8 fc	+	0.8 fc	0.0 fc	0.8 fc	N/A
◻	P3	2	Lithonia Lighting	DSX1 LED 30K 80CRI EGS	D-Series Size 1 Area Luminaire 3000K CCT 80 CRI External Glare Shield	0.0 fc	0.8 fc	0.8 fc	+	0.8 fc	0.0 fc	0.8 fc	N/A
◻	P4	0	Lithonia Lighting	DSX1 LED 30K 80CRI EGS	D-Series Size 1 Area Luminaire 3000K CCT 80 CRI External Glare Shield	0.0 fc	0.8 fc	0.8 fc	+	0.8 fc	0.0 fc	0.8 fc	N/A

**Statistics**

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking & Drive Lanes	✕	1.9 fc	9.9 fc	0.7 fc	14.1:1	2.7:1
Property Line	+	0.0 fc	0.4 fc	0.0 fc	N/A	N/A
Sidewalk	✕	2.1 fc	3.4 fc	0.8 fc	4.3:1	2.6:1
Overall/Grade	+	0.8 fc	9.9 fc	0.0 fc	N/A	N/A

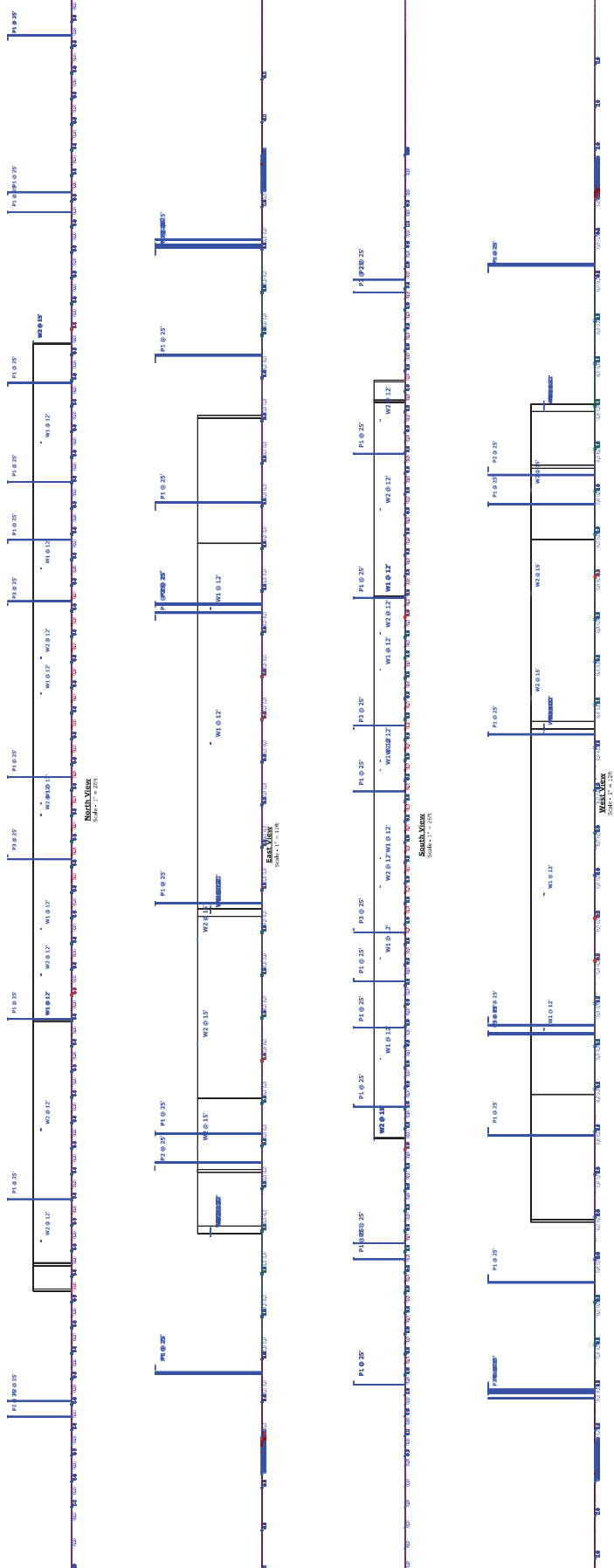
**Ordering Note**  
CONTACT GASSER BUSH AT  
QUOTES@GASSERBUSH.COM OR 734-266-6705.

**Mounting Height Note**  
MOUNTING HEIGHT IS MEASURED FROM GRADE TO  
THE CENTER OF THE LUMINAIRE. MOUNTING HEIGHT IS  
CALCULATED AS THE MOUNTING HEIGHT LESS BASE  
HEIGHT.

**Drawing Note**  
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC  
DATA FILE. PLEASE NOTE: LAYOUT TO BE  
VERIFIED IN FIELD BY OTHERS.

**General Note**  
1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.  
2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.  
3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT GRADE.  
  
THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO  
EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS  
CALCULATED FOOTCANDLES AT GRADE FOR INFORMATION ONLY. THE ENGINEERING SOCIETY  
OF MICHIGAN (ESM) HAS REVIEWED THIS LAYOUT FOR COMPLIANCE WITH THE  
APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY  
VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER  
AND/OR FLOOR UP.  
  
THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT  
ENGINEERING. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND  
LIGHTING QUALITY COMPLIANCE.  
  
UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS  
DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS  
GROUP AT AS6@GASSERBUSH.COM OR 734-266-6705.

**Alternates Note**  
THE USE OF FIXTURE ALTERNATES MUST BE  
RESUBMITTED TO THE CITY FOR APPROVAL.

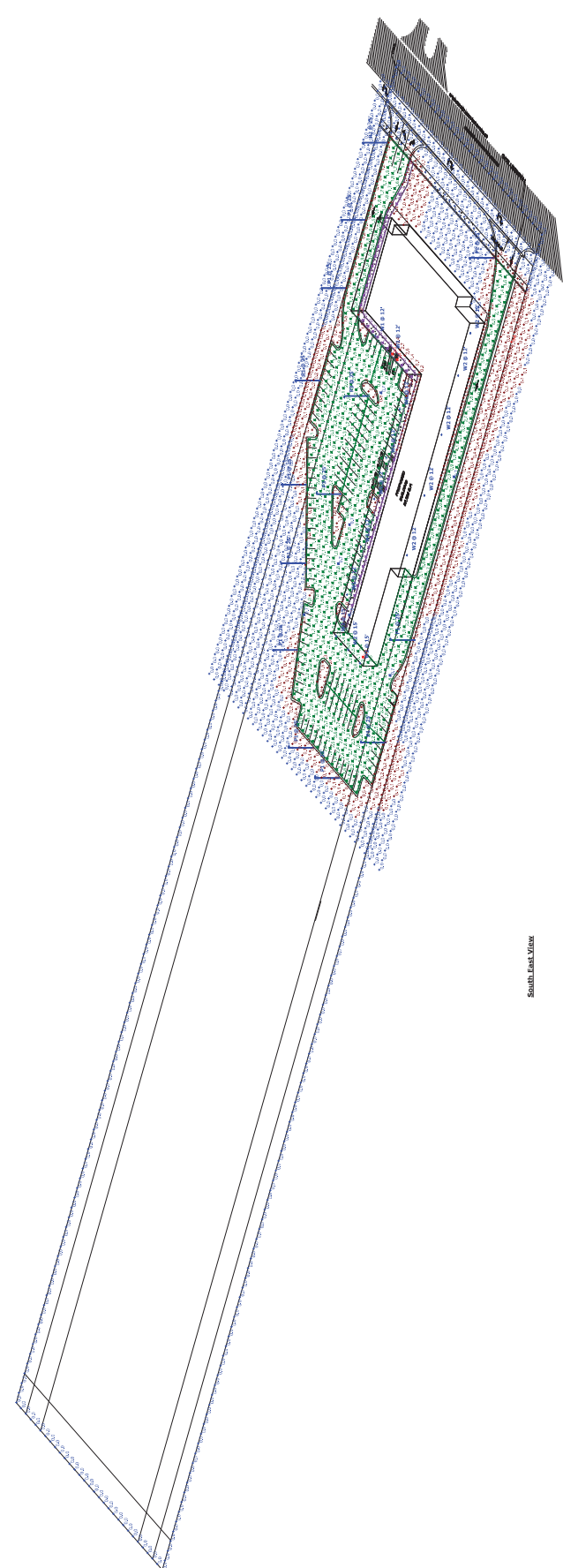


North View  
 2024.07.15.001

East View  
 2024.07.15.001

South View  
 2024.07.15.001

West View  
 2024.07.15.001



South East View





# Haggerty Property Development

Concept Development



October 01, 2024

Owner HEFCO Haggerty LLC

27629 Haggerty Road  
Novi, MI 48377





HPD22 - Haggerty Property Development  
Concept Development

Front Facade from North

OX STUDIO  
INC.

October 01, 2024  
SK-02



HPD22 - Haggerty Property Development  
| Concept Development

Front Facade from South

O | X STUDIO  
INC.

October 01, 2024  
SK-03



HPD22 - Haggerty Property Development  
Concept Development

Rear Facade

OX STUDIO  
INC.

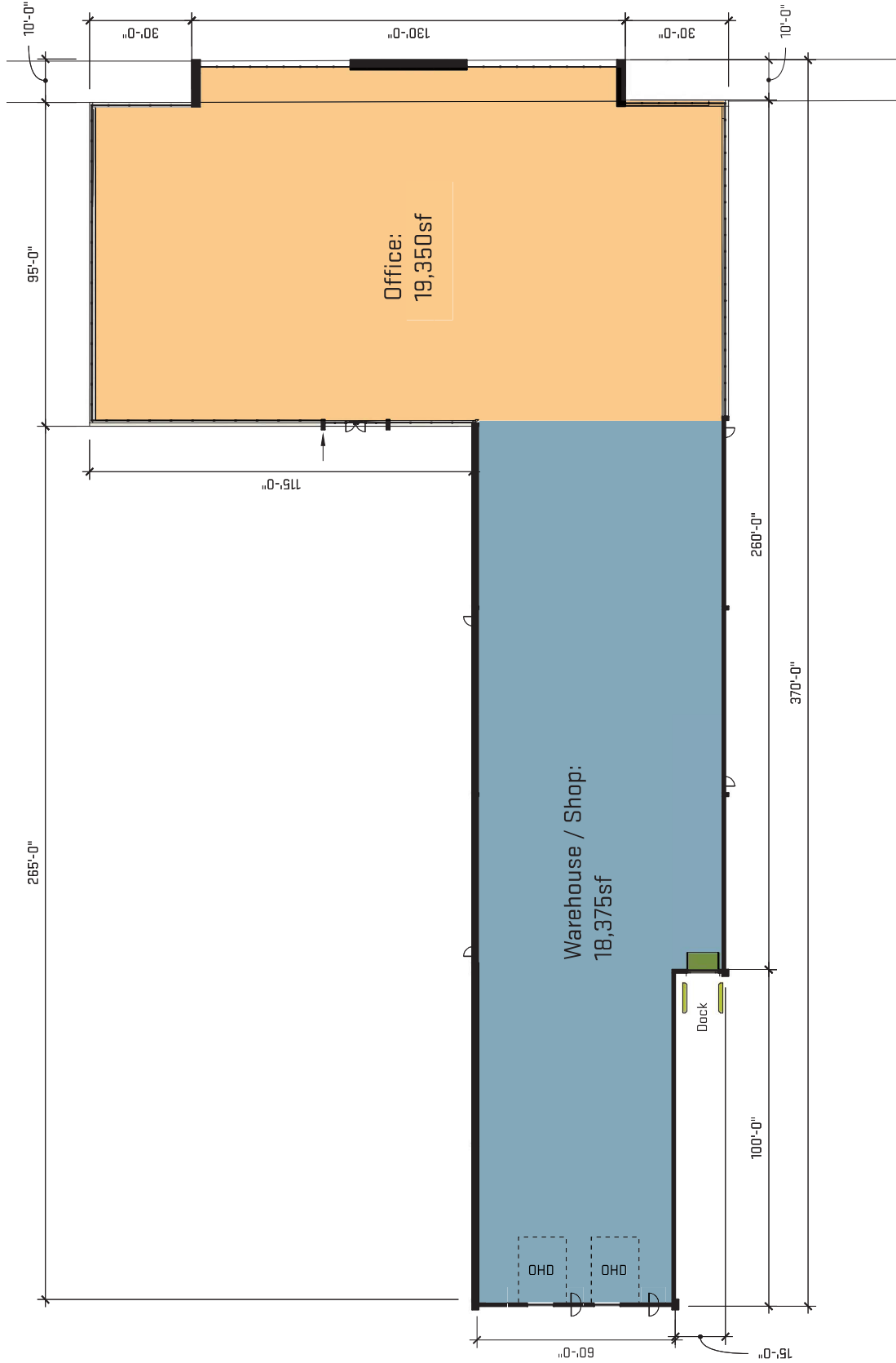
October 01, 2024  
SK-04

**PLAN KEY**

Office: 19,350sf



Warehouse / Shop: 18,375sf



**GROUND FLOOR**



1/32" = 1'-0"



16' 32' 64'

HPD22 - Haggerty Property Development  
Concept Development



**Ground Floor Plan**

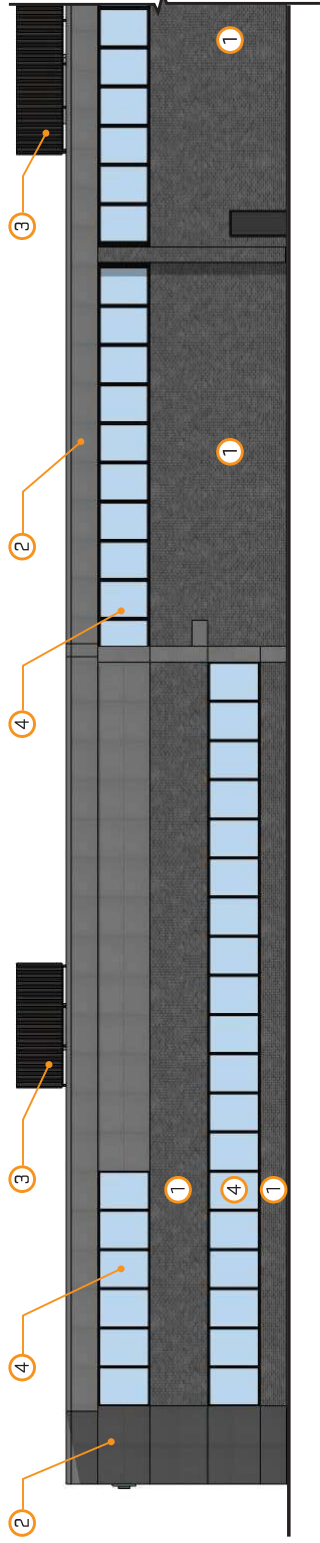


October 01, 2024

SK-05

**ELEVATION MATERIAL KEY**

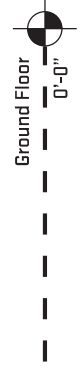
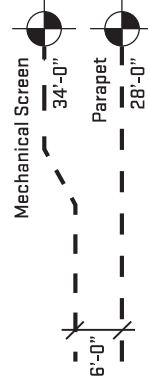
- ① Jumbo Brick | Dark Grey
- ② Aluminum Panel | Dark Grey
- ③ Mechanical Screen Wall
- ④ Aluminum Storefront



**PARTIAL NORTH ELEVATION**

1" = 16'

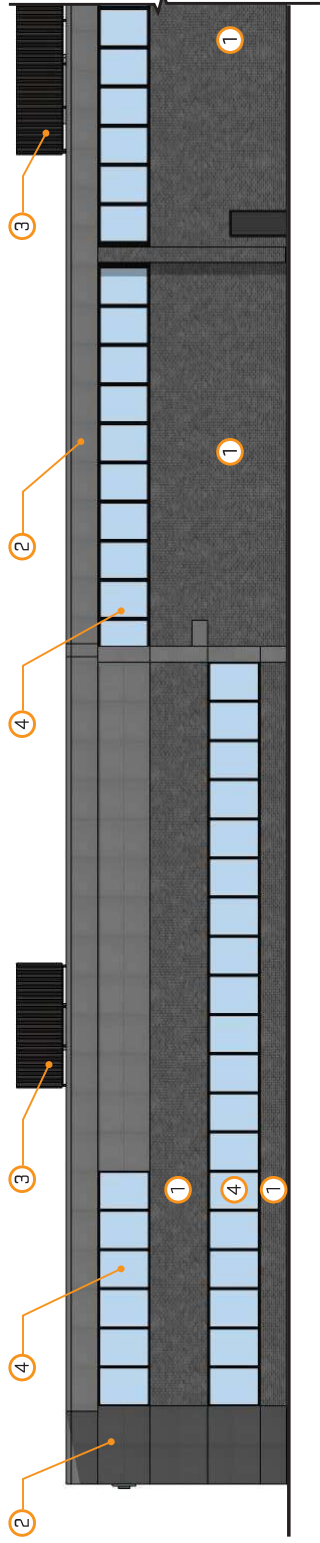
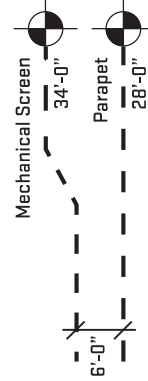
KEY PLAN



**PARTIAL NORTH ELEVATION**

1" = 16'

KEY PLAN



**EAST ELEVATION**

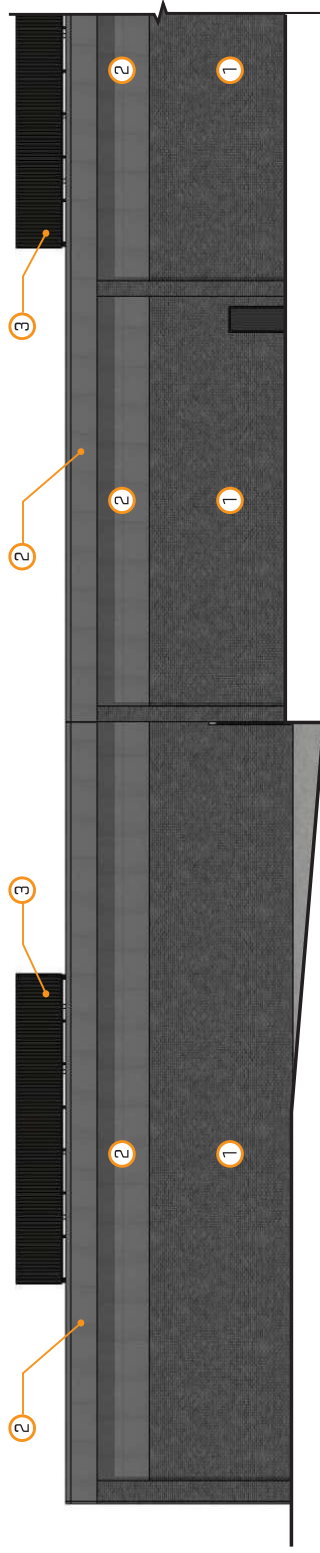
1" = 16'

KEY PLAN



**ELEVATION MATERIAL KEY**

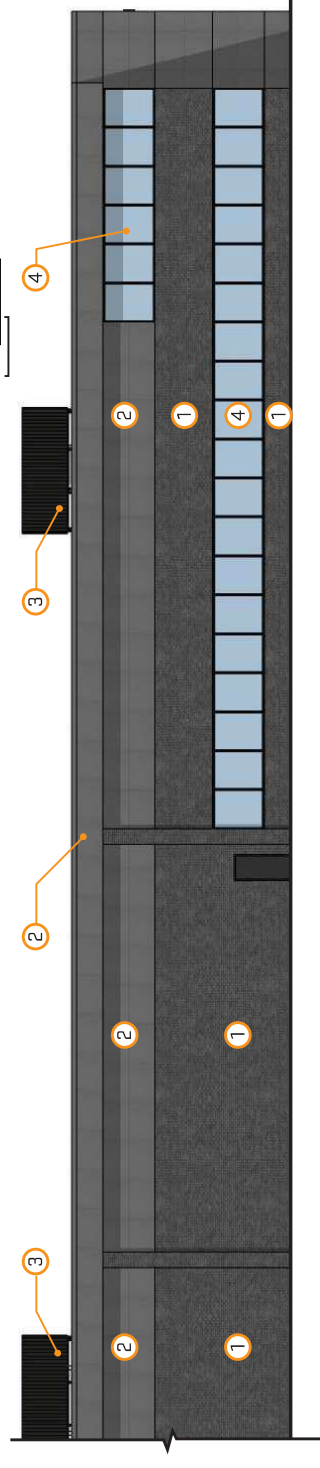
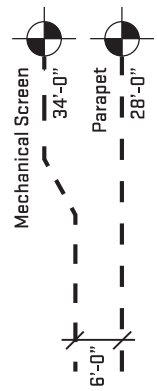
- ① Jumbo Brick | Dark Grey
- ② Aluminum Panel | Dark Grey
- ③ Mechanical Screen Wall
- ④ Aluminum Storefront



**PARTIAL SOUTH ELEVATION**

1" = 16'

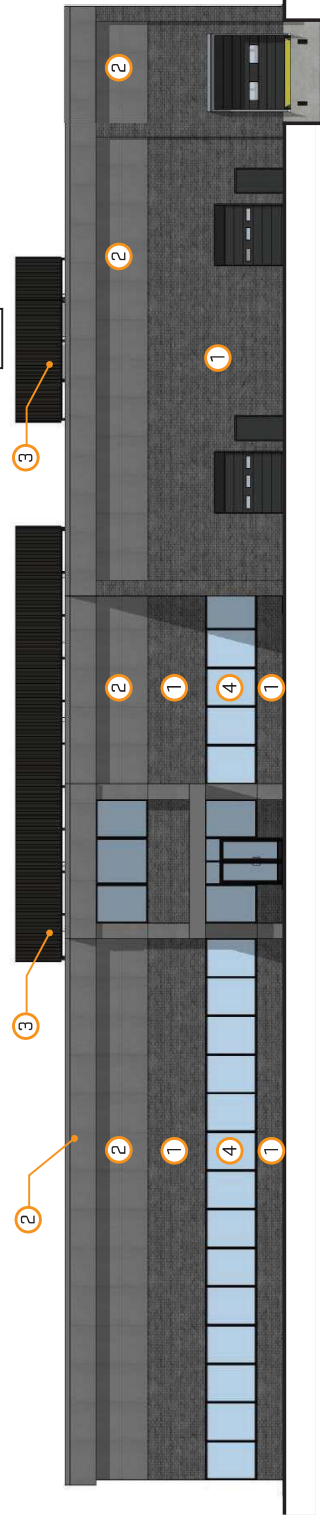
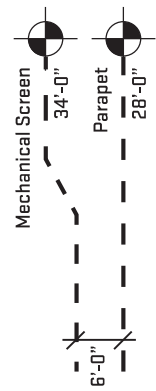
KEY PLAN



**PARTIAL SOUTH ELEVATION**

1" = 16'

KEY PLAN



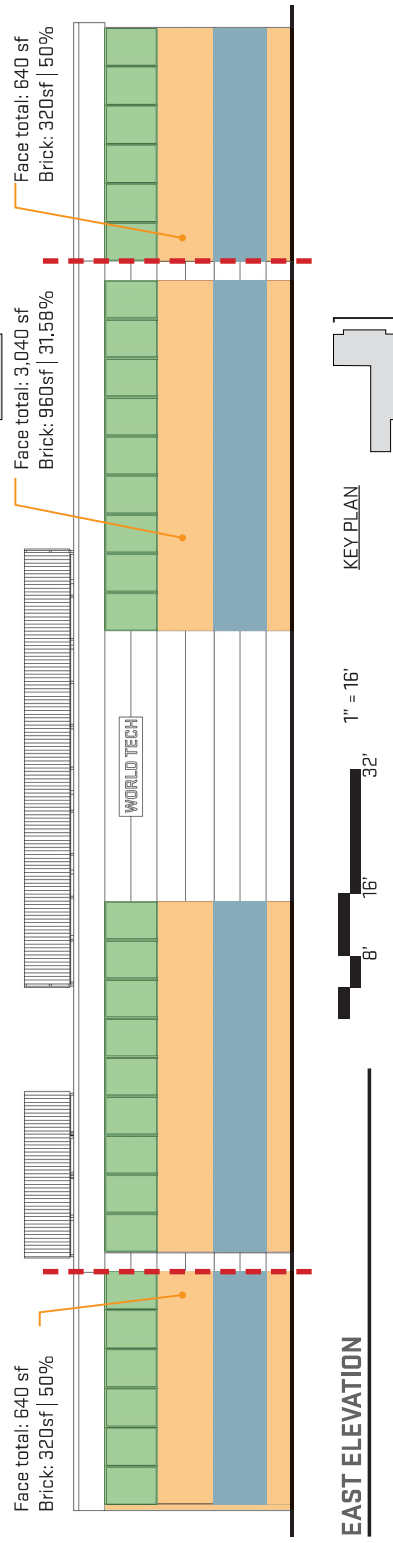
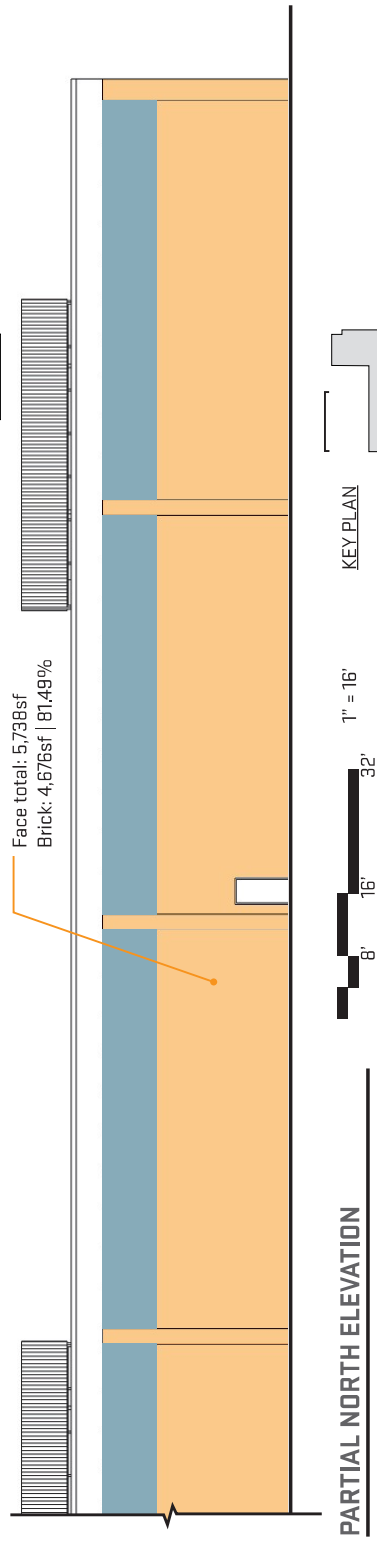
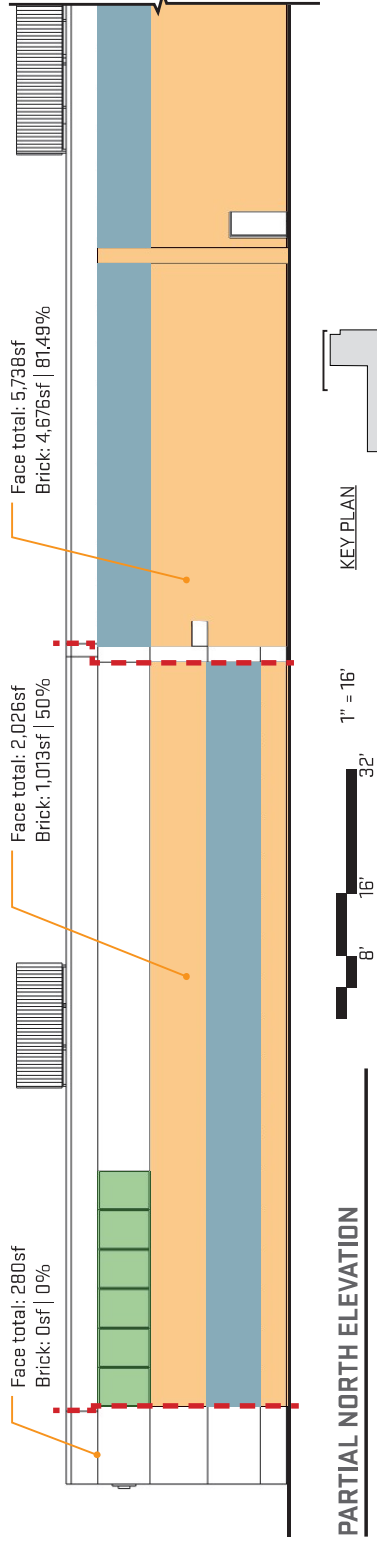
**WEST ELEVATION**

1" = 16'

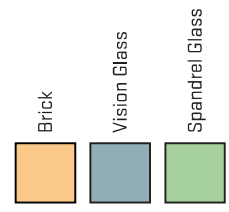
KEY PLAN







**ELEVATION MATERIAL KEY**



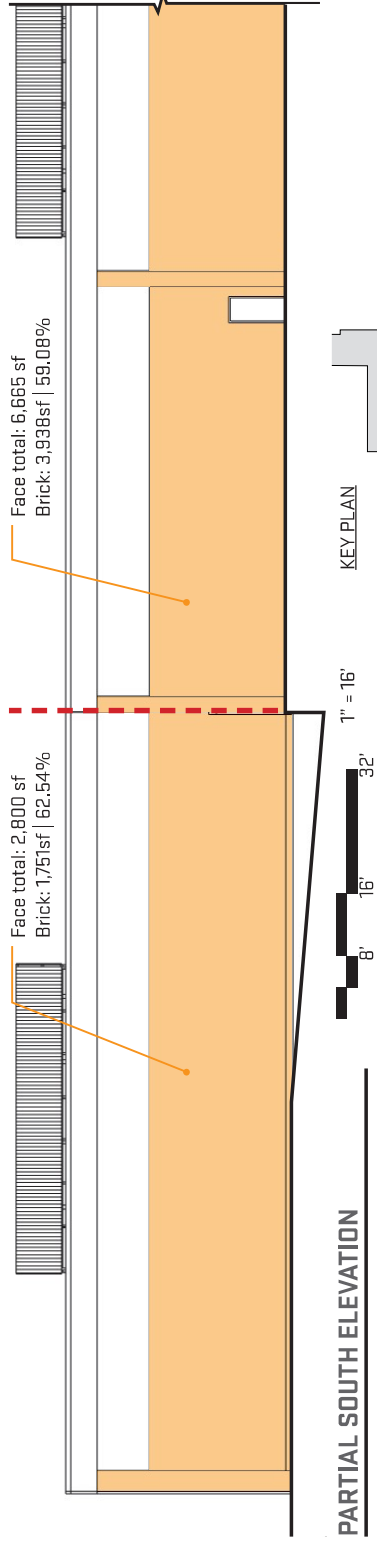
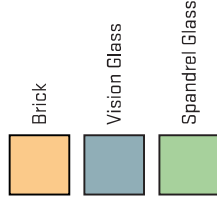
**ELEVATION MATERIAL CHART**

Overall Building	26,425sf	15,272sf brick   57.79%
North Facade	8,044sf	5,689sf brick   70.72%
East Facade	4,320sf	1,600 sf brick   37.04%
South Facade	9,465sf	5,689sf brick   60.11%
West Facade	4,665sf	2,294sf brick   49.17%

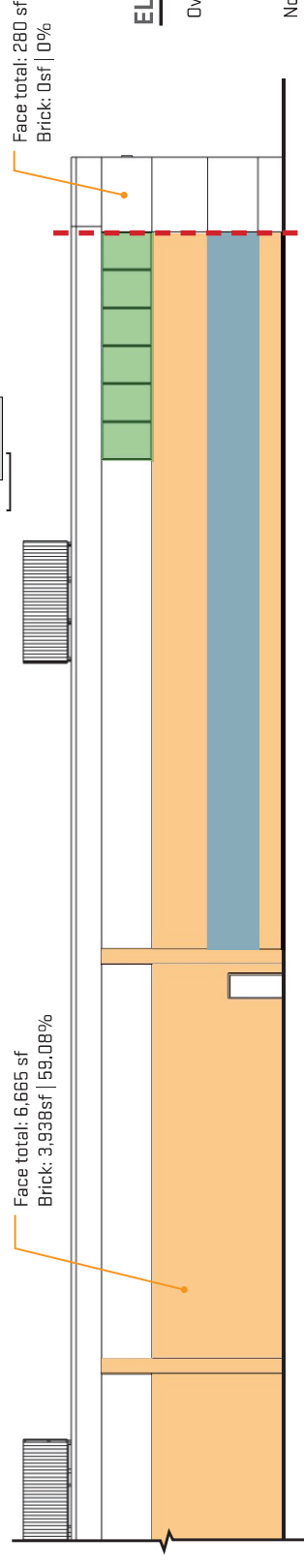
\*Face total calculated without vision glass\*



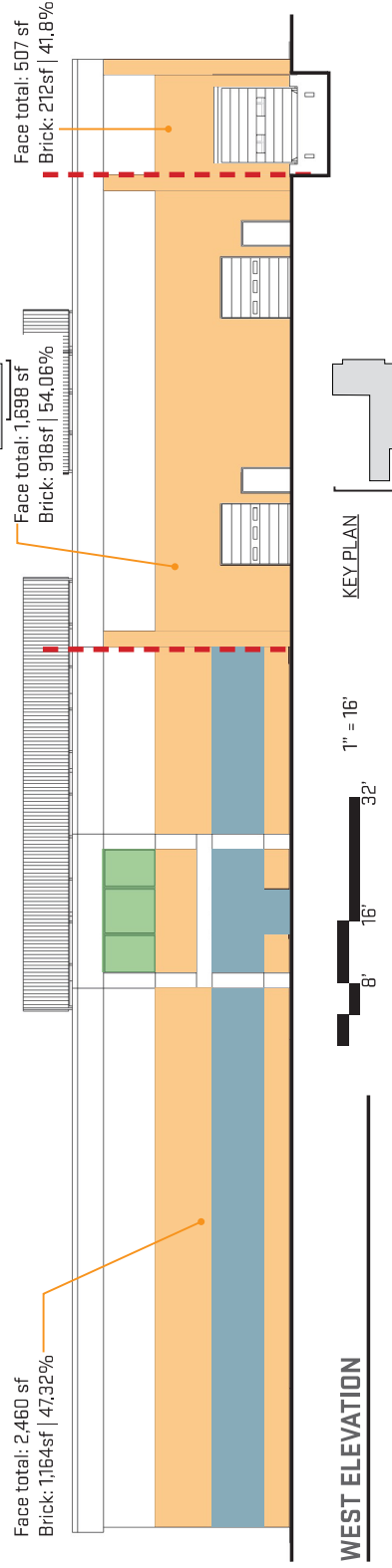
### ELEVATION MATERIAL KEY



PARTIAL SOUTH ELEVATION



PARTIAL SOUTH ELEVATION



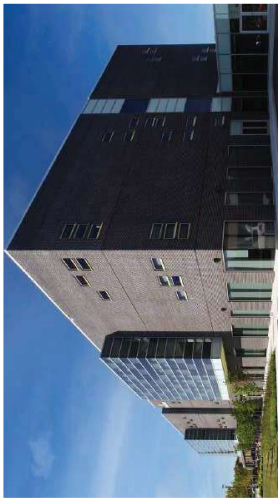
WEST ELEVATION

### ELEVATION MATERIAL CHART

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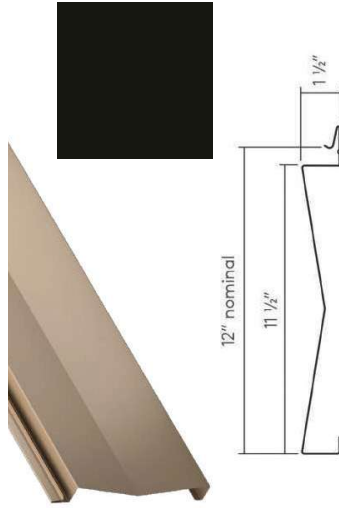
**1 | Brick**

Belden Brick  
Black Diamond Velour



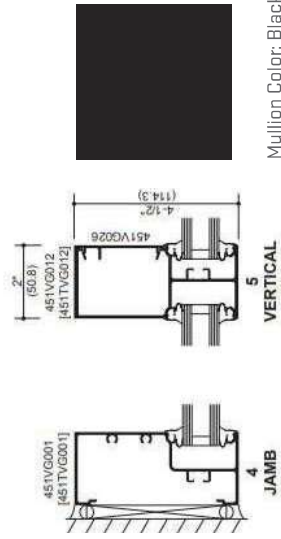
**2 | Aluminum Panel**

Alucobond  
Color: Dusty Charcoal II



**3 | Mechanical Screen Wall**

Morin, Pulse P-9 |  
Color: Bristol Black



**4 | Aluminum Storefront**

Kawneer | Trifab VersaGlaze 451/451T  
Framing System

**ELEVATION MATERIAL KEY**

- ① Jumbo Brick | Dark Grey
- ② Aluminum Panel | Dark Grey
- ③ Mechanical Screen Wall
- ④ Aluminum Storefront



## PLANNING REVIEW



# PLAN REVIEW CENTER REPORT

February 6, 2025

## Planning Review

27629 Haggerty – HEFCO

JSP 24-22

### PETITIONER:

Hefco Haggerty LLC

### REVIEW TYPE:

Revised Preliminary Site Plan

### PROPERTY CHARACTERISTICS

<b>Section</b>	13	
<b>Site Location</b>	50-22-13-200-018	
<b>Site School District</b>	Novi Community School District	
<b>Site Zoning</b>	OST: Office Service Technology	
<b>Adjoining Zoning</b>	North	OST: Office Service Technology
	East	City of Farmington Hills – Industrial Research Office (IRO)
	West	OST: Office Service Technology
	South	OST: Office Service Technology
<b>Current Site Use</b>	Vacant	
<b>Adjoining Uses</b>	North	Vacant - Woodlands
	East	City of Farmington Hills – Industrial Research Office (IRO)
	West	Vacant – International Transmission Company (ITC)
	South	Pellegata Landscape Design (Commercial-Landscape)
<b>Site Size</b>	9.47 acres	
<b>Plan Date</b>	01-31-2025	

### PROJECT SUMMARY

The applicant is proposing to construct a 37,925 square foot Speculative (SPEC) building on a 9.47-acre parcel fronting on the west side of Haggerty Road south of 12 Mile Road. The project will be comprised of the proposed building, an associated parking lot, and sunken truck well. The west side of the site will remain as is with existing natural woodlands and wetlands, and will be supplemented with wetland mitigation areas as required for the Sheetz development to the north. Conservation easement details will need to be shown on the Final Site Plans, as required for wetland mitigation areas.

### RECOMMENDATION

**Approval of the revised Preliminary Site Plan is recommended.** Planning and Landscape are now recommending approval, with items to be addressed at the Final Site Plan. Engineering, Woodland, Wetland, Traffic, Façade, and Fire recommended approval of the Preliminary Site Plan with items to be addressed at the Final Site Plan.

## ORDINANCE REQUIREMENTS

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This project was reviewed for conformance with the Zoning Ordinance with respect to Article 3 (Zoning Districts), Article 4 (Use Standards), Article 5 (Site Standards), and any other applicable provisions of the Zoning Ordinance. Items in **bold** must be addressed within the next submittal or by the Planning Commission.

1. Administrative Approval (Sec. 6.1.C.x): This project does not qualify for administrative approval
2. Site Plans (Sec 6.1.B.i): Building of any structure(s): Requires Planning Commission approval. **Planning Commission approval of Preliminary Site Plan will be required.**
3. Woodland Replacement: Based on a review of the plan 10 woodland replacement trees are required. **Please include these woodland replacement trees within a conservation easement.**
4. Parking Lot Landscaping (Sec. 5.5.3.C): There is a 5 tree deficiency in the required accessway perimeter trees proposed. *Five additional trees have been added along the north side of the entrance drive to the parking lot.*
5. Storm Basin Landscape (Sec. 5.5.3.E.iv and LDM 3): The grading on the west side of the detention pond will likely be impacted by the grading of the Sheetz wetland mitigation. *Please coordinate with Sheetz to make the grading in this area consistent between projects – Additional grading coordination has taken place between involved parties.*
6. Wetland Mitigation Plan: **The Final Site Plan shall include a separate plan sheet that shows the wetland mitigation that is proposed onsite for the Sheetz development, and the location(s) of all conservation easements that shall be provided.**
7. Loading and Unloading Screening (Sec. 30.20.2.A): Truck service areas shall be totally screened from adjacent properties. *An evergreen hedge is now proposed as requested to be maintained between 6 and 10 feet in height.*
8. Building Height (Sec. 3.1.23 D & SEC. 3.20.1): Maximum height is 46' or 3 stories, whichever is less. *Elevation views on sheets SK-06 and SK-07 have been added with associated building height information. The height from the ground to the parapet is proposed to be 28', and 34' from the ground to the top of the mechanical rooftop screening.*
9. Building Setbacks (Sec.1.23.D): 50' minimum requirement fronting Haggerty Road. *Planned Right-of-Way (ROW) width is 33' and proposed setback is 50' from the 60' half ROW (dedicated to Road Commission of Oakland County (RCOC)). A dimension has been added to the site plan sheet showing the building setback is 50.1' from the proposed 60' half ROW.*
10. Wetland / Watercourse Setback (Sec. 3.6.2.M): A setback of 25 feet from the wetlands and from high watermark course shall be maintained. A wetland permit (minor) and wetland buffer authorization shall be required— *Applicant has acknowledged this.* Please see note 4 and adjust accordingly on subsequent submittal – *Acknowledged.*
11. Required Parking Calculation (Sec. 5.2.12.D & 5.2.12.E): For Business Offices: 1:222 SF Gross Floor Area (GLA).  $19,350/222 \text{ sf} = 88 \text{ spaces required}$ . For Industrial Warehouses: 1:700 SF of usable floor area.  $18,575/700 \text{ sf} = 27 \text{ spaces}$ . 115 total spaces required. *Applicant has proposed 125 total spaces.*
12. End Islands (Sec. 5.3.12) 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 ft. wide, have an outside radius of 15 ft., and be constructed 3 ft. shorter than the adjacent parking stall.

*Applicant has acknowledged this, and dimensions have been added to the site plan (Sheet 5) for landscape islands.*

13. Minimum number of Bicycle Parking (Sec. 5.16.1): General Offices: 5% of required automobile spaces, minimum 2 spaces. For 115 parking spaces = 6 bicycle parking spaces. *A bicycle parking calculation has been added to the site plan sheet 5. 4 spaces are provided near the main entrance at the integral sidewalk and 2 spaces are provided near the rear access points of the warehouse off the integral sidewalk.*
14. Dumpster Enclosure (Sec. 21-145.c.1–Chapter 21 of City Code of Ordinances): All refuse bins within the city must be enclosed and screened from public view. *Sheet 15 depicts a dumpster enclosure detail. The detail includes the enclosure wall height, depicts the protective bollards, concrete pad, and screening materials to match the proposed building material.*
15. Non-Motorized Facilities (Article XI. Off-Road Non-Motorized Facilities): A 6-foot wide sidewalk is required along major roads. *A 6' wide sidewalk has been added along Haggerty Road, see sheet 5.*
16. Development/Business Sign & Street Addressing: Signage if proposed requires a permit. The applicant should contact the Building Division for an address prior to stamping set approval. *A monument sign is now depicted at the site entrance and is seen on the site plan sheet 5. A dimension has been added indicating a setback from the proposed 60' half right of way line. For sign permit information please contact Deborah Martinez at 248-735-5671 or [dmartinez@cityofnovi.org](mailto:dmartinez@cityofnovi.org) in the Code Compliance Division.*
17. Economic Impact: Total cost of the proposed building and site improvements, and number of anticipated jobs created. *Per the applicant response letter, the estimated project cost is \$3 million. The end user is not known at this time so economic impact as it pertains to number of jobs created is unknown at this time.*
18. Lighting Plan (Sec. 5.7.A.1): Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas, walkways, and lighting fixtures. *The photometric plan has been updated to show parking spaces and walkways, as well as clarify the hours of operation of the lighting, as requested.*

## **OTHER REVIEWS**

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- a. Engineering Review: Engineering previously recommended approval of the Preliminary Site Plan, with items to be addressed at the Final Site Plan submittal.
- b. Landscape Review: Landscape now **recommends approval** of the Revised Preliminary Site Plan, with items to be addressed at the Final Site Plan submittal.
- c. Woodlands Review: Woodlands previously recommended approval of the Preliminary Site Plan, with comments provided to meet the requirements of the Woodland Protection Ordinance. Please see woodlands review for additional information.
- d. Wetlands Review: Wetlands previously recommended approval of the Preliminary Site Plan, with wetland-related permitting considerations provided. Please see wetlands review for additional information.
- e. Traffic Review: Traffic previously recommended approval of the Preliminary Site Plan, with comments to be addressed at the Final Site Plan submittal.
- f. Facade Review: Façade previously recommended approval. Full compliance with the façade ordinance.
- g. Fire Review Fire previously recommended conditional approval of the Preliminary Site Plan, with comments to be addressed at the Final Site Plan submittal. Please see fire review for additional information.

## **NEXT STEP: PLANNING COMMISSION MEETING**

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With all reviews now recommending approval of the Preliminary Site Plan, this project will be scheduled to appear at the Planning Commission. The Preliminary Site Plan, Woodland Permit, and Stormwater Management Plan will need approval from the Planning Commission. Please provide the following via email one week prior to the meeting once this stage is reached:

1. Site Plan submittal in PDF format (maximum of 10MB) **NO CHANGES MADE**
2. A response letter addressing ALL the comments from ALL review letters and a request for waivers/variances as you see fit.
3. A color rendering of the Site Plan (to be used for Planning Commission presentation).

#### **FUTURE STEP: FINAL SITE PLAN SUBMITTAL**

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After receiving Planning Commission's approval of the Preliminary Site Plan, please submit the following for review:

1. **Seven** copies of Final Site Plan sets (24" x 36", folded) addressing ALL comments from Preliminary Site Plan Review.
2. Response letter addressing **ALL** comments from **ALL** review letters and refer to sheet numbers
3. where the change is reflected.
4. [Final Site Plan Application](#)
5. [Final Site Plan Checklist](#)
6. [No Revision Façade Affidavit](#) (only if no façade changes have been made)
7. An itemized engineering cost estimate including sanitary sewer, watermain, storm sewer, paving and grading costs, size 8.5" x 11" (The cost estimate should not include soil erosion or demolition costs.)
8. An itemized landscaping cost estimate including greenbelt and greenbelt ornamental trees, perennials, pond plantings, shrubs, edging, mulch, seed mix and seeded lawn, size 8.5" x 11" (The cost estimate should not include woodland trees, replacement trees or mitigation.)

#### **CHAPTER 26.5**

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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 you have any questions concerning the above review or the process in general, please do not hesitate to contact me at (248) 735-5607 or [dcommer@cityofnovi.org](mailto:dcommer@cityofnovi.org).

Sincerely,

*Dan Commer*

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Dan Commer, AICP | Planner





## PLANNING REVIEW CHART: Office Service Technology (OST)

**Review Date:** February 6, 2025  
**Review Type:** Revised Preliminary Site Plan  
**Project Name:** **27629 Haggerty Road**  
**Plan Date:** January 31, 2025  
**Prepared by:** Dan Commer, Planner  
**E-mail:** dcommer@cityofnovi.org; **Phone:** (248) 735-5607

Items in **Bold** need to be addressed by the applicant before next submittal

Item	Required Code	Proposed	Meets Code	Comments
<b>Zoning and Use Requirements</b>				
<b>Master Plan</b> <i>(adopted August 25, 2010)</i>	Office research development and technology	Warehouse–Office	<b>TBD</b>	
<b>Area Study</b>	The site does not fall under any special category	NA	Yes	
<b>Zoning</b> <i>(Effective June 4, 2018)</i>	OST: Office Service and Technology	OST	Yes	
<b>Uses Permitted</b> (Sec 3.1.23.B & C)	Sec. 3.1.23.B. - Principal Uses Permitted. Sec. 3.1.23.C. – Special Land Uses Permitted.	Warehouse–Office	<b>TBD</b>	<b>The Preliminary Site Plan will require Planning Commission approval</b>
<b>Height, bulk, density and area limitations (Sec 3.1.23.D)</b>				
<b>Frontage on a Public Street.</b> <i>(Sec. 5.12)</i> <b>Access To Major Thoroughfare</b> <i>(Sec. 5.12)</i>	Frontage on a Public Street is required	The site has frontage and access to Haggerty Road	Yes	
<b>Minimum Zoning Lot Size</b> for each Unit in Ac <i>(Sec 3.6.2.D)</i>	Except where otherwise provided in this Ordinance, the minimum lot area and width, and the maximum percent of lot coverage shall be determined on the basis of off-street parking, loading, greenbelt screening, yard setback or usable open space		NA	
<b>Minimum Zoning Lot Size</b> for each Unit: Width in Feet <i>(Sec 3.6.2.D)</i>			NA	
<b>Maximum % of Lot Area Covered</b> (By All Buildings)	<i>(Sec 3.6.2.D)</i>	37,925 square foot building on 9.47-acre site; 9%	Yes	
<b>Building Height</b> <i>(Sec. 3.1.23.D &amp; Sec. 3.20.1)</i>	Maximum height 46' or 3 stories, whichever is less	28' ground to parapet, 34' ground to top of mechanical screening	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	Additional height can be proposed if met with the conditions listed in Section 3.20	is proposed		
<b>Building Setbacks (Sec 3.1.23.D)</b>				
Front east @ Haggerty Road	50 ft.	Planned ROW width is 33' and proposed setback is 50' from the 60' half ROW (dedicated to RCOC)	Yes	
Rear west	50 ft.	~ 920 ft.	Yes	
Side (north)	50 ft.	60.3 ft.	Yes	
Side (south)	50 ft.	50 ft.	Yes	
<b>Parking Setback (Sec 3.1.23.D) Refer to applicable notes in Sec 3.6.2</b>				
Front east @ Haggerty Rd.	20 ft.	NA	Yes	
Rear west	20 ft.	NA	Yes	
Side (north)	20 ft.	20.3'	Yes	
Side (south)	20 ft.	20'	Yes	
<b>Note To District Standards (Sec 3.6.2)</b>				
<b>Exterior Side Yard Abutting a Street (Sec 3.6.2.C)</b>	All exterior side yards abutting a street shall be provided with a setback equal to front yard.	No exterior side yards	NA	
<b>Off-Street Parking in Front Yard (Sec 3.6.2.E)</b>	Off-street parking is allowed in front yard	No front yard parking is proposed	NA	
<b>Distance between buildings (Sec 3.6.2.H)</b>	It is governed by sec. 3.8.2 or by the minimum setback requirements, whichever is greater		NA	
<b>Wetland/Watercourse Setback (Sec 3.6.2.M)</b>	A setback of 25ft from wetlands and from high watermark course shall be maintained	Wetlands exist on site	<b>TBD</b>	<b>Please refer to woodland/wetland and landscape review for additional information</b>
<b>Parking setback screening (Sec 3.6.2.P)</b>	Required parking setback area shall be landscaped per sec 5.5.3.	A landscape plan is provided	<b>TBD</b>	<b>Please refer to landscape review for additional information</b>
<b>Modification of parking setback requirements (Sec 3.6.2.Q)</b>	The Planning Commission may modify setback requirements in those instances where it determines that such modification may result in improved use of the site and/ or in improved landscaping; provided, however, that such	NA	<b>TBD</b>	

Item	Required Code	Proposed	Meets Code	Comments
	modification of the setback requirements does not reduce the total area of setback on a site below the minimum setback area requirements of this Section			
<b>OST District Required Conditions (Sec 3.20)</b>				
<b>Additional Height (Sec 3.20.1)</b>	Properties north of Grand River Avenue: Max height: 65 ft with additional setbacks of 2 ft for every 1 ft in excess of 46 ft.	28' to parapet, 34' to top of mechanical screening	NA	
<b>Loading and Unloading Screening (Sec 3.20.2.A)</b>	Truck service areas and overhead truck loading/unloading doors shall be totally screened from view from any public right-of-way, including freeway right-of-way, and adjacent properties, except for required driveway access.	An evergreen hedge is now proposed as requested. The height of the hedge is to be maintained at least 6' in height.	Yes	Additional screening from adjacent properties may be required. Does not appear to reach 90% opacity.
<b>Required Parking Calculation (Sec 3.20.2.B)</b>	A floor plan indicating different uses, usable floor space used for calculating parking should be shown on the plans	Floor plan included. The entire floor appears to be usable area.	Yes	
<b>Additional conditions for permitted uses in 3.1.23.B.ii – v (Sec 3.20.2.C)</b>	Uses permitted under subsections 3.1.23.B.ii - v shall not be located on property sharing a common boundary with property zoned for R-A, R-1, R-2, R-3, R-4 or MH district use unless conditions in section 3.20.2.C are met	The property is not located adjacent to the zoning districts mentioned	NA	
<b>Outdoor storage (Sec 3.20.2.D)</b>	The outdoor storage of goods or materials shall be prohibited.		Yes	
<b>Parking, Loading and Dumpster Requirements</b>				
<b>Number of Parking Spaces Professional Office (Sec.5.2.12.D)</b>	- For buildings up to 100,000 square feet, 1 space per 222 SF GLA - Lab/warehouse: 1 space/700 sf Usable	19,350 sf/222= 88 18,575 sf/700 = 27 spaces 115 spaces required Total Proposed =	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Industrial/research (Sec.5.2.12.E)	area	125 spaces		
<b>Parking Space Dimensions and Maneuvering Lanes</b> (Sec. 5.3.2)	<ul style="list-style-type: none"> <li>- 90° Parking: 9 ft. x 19 ft.</li> <li>- 24 ft. two way drives</li> <li>- 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</li> </ul>	Dimensions added to the site plan (Sheet 5)	Yes	<b>See traffic letter for details</b>
<b>Parking stall located adjacent to a parking lot entrance</b> (public or private) (Sec. 5.3.13)	<ul style="list-style-type: none"> <li>- 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</li> </ul>	Not applicable	NA	
<b>End Islands</b> (Sec. 5.3.12)	<ul style="list-style-type: none"> <li>- End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles.</li> <li>- 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</li> </ul>	End Islands are proposed and dimensioned	Yes	
<b>Contiguous space limit</b> (Zoning sec 5.5.3.C)	Maximum of 15 contiguous spaces	Landscape islands have been added to the site plan (Sheet 5). Parking is no more than 15 contiguous spaces	Yes	
<b>Barrier Free Spaces</b> Barrier Free Code	For total 101 to 150 = 5 spaces including 1 van accessible	6 Barrier Free parking spaces provided, including 1 van accessible	Yes	
<b>Barrier Free Space Dimensions</b> Barrier Free Code	<ul style="list-style-type: none"> <li>- 8' wide with an 8' wide access aisle for van accessible spaces</li> <li>- 8' wide with a 5' wide access aisle for regular accessible spaces</li> </ul>	Two types of accessible spaces are provided and dimensioned on the site	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>Barrier Free Signs</b> <i>Barrier Free Code</i>	One sign for each accessible parking space.	Details provided on Sheet 5	Yes	<b>Refer to Traffic review for additional comments</b>
<b>Minimum number of Bicycle Parking</b> <i>(Sec. 5.16.1)</i>	<u>General Offices:</u> Five (5) percent of required automobile spaces, minimum two (2) spaces For 115 spaces, 6 spaces	6 bicycle parking spaces provided	Yes	
<b>Bicycle Parking General requirements</b> <i>(Sec. 5.16)</i>	<ul style="list-style-type: none"> <li>- No farther than 120 ft. from the entrance being served</li> <li>- When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations</li> <li>- Spaces to be paved and the bike rack shall be inverted "U" design</li> <li>- Shall be accessible via 6 ft. paved sidewalk</li> </ul>	4 bicycle parking spaces provided near main entrance, and 2 provided near rear access points	Yes	
<b>Bicycle Parking Lot layout</b> <i>(Sec 5.16.6)</i>	Parking space width: 7 ft. One tier width: 11 ft. Two tier width: 18 ft. Maneuvering lane width: 4 ft. Parking space depth: 32 inches	Spacing detail added to Detail Sheet 15	Yes	
<b>Loading Spaces</b> <i>Sec. 5.4.1</i>	<ul style="list-style-type: none"> <li>- Within the OS districts, loading space shall be provided in the rear yard or</li> <li>- in the case of a double frontage lot, in the interior side yard,</li> <li>- in the ratio of five (5) square feet per front foot of building up to a total area of three-hundred sixty (360) square feet per building.</li> </ul>	Loading Area in the rear yard in a sunken truck well  Truck loading dock is 1,500 square feet per site plan	Yes	
<b>Dumpster</b> <i>Sec 4.19.2.F</i>	<ul style="list-style-type: none"> <li>- Located in rear yard</li> <li>- Attached to the building or</li> <li>- No closer than 10 ft. from building if not attached</li> <li>- Not located in parking</li> </ul>	Dumpster located in the rear yard  Farther than 10 ft. (30.4')  Outside the parking	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	setback - If no setback, then it cannot be any closer than 10 ft, from property line. - Away from Barrier free Spaces	setback (20')		
<b>Dumpster Enclosure</b> Sec. 21-145. (c) Chapter 21 of City Code of Ordinances	- 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	Sheet 15 depicts dumpster enclosure detail.  Wall height is 6'10"	Yes	<b>Refer to architectural review for comments on dumpster enclosure</b>
<b>Exterior lighting</b> Sec. 5.7	Photometric plan and exterior lighting details needed at time of Final Site Plan submittal	A lighting plan is provided	Yes	
<b>Roof top equipment and wall mounted utility equipment</b> Sec. 4.19.2.E.ii	- All roof top equipment must be screened, and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	Architecture elevation views on Sheets SK-06 and SK-07	Yes	
<b>Roof top appurtenances screening</b>	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.	Rooftop mechanical is screened from view (see Sheets SK-06 and SK-07)	Yes	
<b>Non-Motorized Facilities</b>				
<b>Article XI. Off-Road Non-Motorized Facilities</b>	A 6-foot sidewalk is required along major roads	A 6' wide sidewalk has been added along Haggerty Rd	Yes	
<b>Pedestrian Connectivity</b>	Assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets	A sidewalk is now proposed connecting internal site sidewalk to proposed Haggerty Rd sidewalk	Yes	

Item	Required Code	Proposed	Meets Code	Comments
		The sidewalk connection occurs at the north side of the building on the south side of the entry drive		
<b>Building Code and Other Requirements</b>				
<b>Building Code</b>	Building exits must be connected to sidewalk system or parking lot.	All exits are connected to internal sidewalk	Yes	
<b>Design and Construction Standards Manual</b>	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Legal description is provided	Yes	
<b>General layout and dimension of proposed physical improvements</b>	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).	Additional details are requested with the Preliminary Site Plan Submittal	Yes	
<b>Economic Impact</b>	<ul style="list-style-type: none"> <li>- Total cost of the proposed building &amp; site improvements</li> <li>- Number of anticipated jobs created (during construction &amp; after building is occupied, if known)</li> </ul>	<p>Estimated project cost is \$3Million</p> <p>The end user is not known at this time so economic impact as it pertains to the number of jobs created is unknown at this time</p>	<b>TBD</b>	
<b>Development/ Business Sign &amp; Street addressing</b>	<ul style="list-style-type: none"> <li>- Signage if proposed requires a permit.</li> <li>- The applicant should contact the Building Division for an address prior to applying for a building permit.</li> </ul>	<p>A monument sign is now depicted at the site entrance (see Sheet 5)</p> <p>Acknowledged an address will need to be applied for prior to building permitting</p>	<b>TBD</b>	<p><b>Apply for lot addressing prior to stamping set approval</b></p> <p><b>Apply for Sign permit</b></p> <p><u>For further information regarding signage contact Deborah Martinez 248-735-5671.</u></p>
<b>Project and Street naming</b>	Some projects may need approval from the Street and Project Naming	Not required	NA	

Item	Required Code	Proposed	Meets Code	Comments
	Committee.			
<b>Property Split</b>	Any proposed property split must be submitted to the Assessing Department for approval.		NA	
<b>Lighting and Photometric Plan (Sec. 5.7)</b>				
<b>Intent (Sec. 5.7.1)</b>	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	A lighting and photometric plan is provided	Yes	
<b>Lighting Plan (Sec. 5.7.A.1)</b>	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	A lighting and photometric plan is provided	Yes	
<b>Building Lighting (Sec. 5.7.2.A.iii)</b>	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.	Sheet 2 of photometric plan includes elevation views with the lights	Yes	
<b>Lighting Plan Elements (Sec.5.7.2.A.ii)</b>	Specifications for all proposed & existing lighting fixtures	Cut sheets are included	Yes	
	Photometric data		Yes	
	Fixture height	25 ft	Yes	
	Mounting & design	Pole lights, wall packs	Yes	
	Glare control devices	Provided	Yes	
	Type & color rendition of lamps	LED	Yes	
	Hours of operation	7am-5pm	Yes	
<b>Maximum Height (Sec. 5.7.3.A)</b>	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses.		Yes	
<b>Required Conditions (Sec. 5.7.3.B)</b>	- Electrical service to light fixtures shall be placed underground - Flashing light shall not	"Lighting Notes" added to Site Plan (Sheet 5)	Yes	



Item	Required Code	Proposed	Meets Code	Comments
	be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation			
<b>Indoor Lighting</b> (Sec. 5.7.3.H)	Indoor lighting shall not be the source of exterior glare or spillover	"Lighting Notes" added to Site Plan (Sheet 5)	Yes	
<b>Security Lighting</b> (Sec. 5.7.3.I)  Lighting for security purposes shall be directed only onto the area to be secured.	- 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 Notes" added to Site Plan (Sheet 5)	Yes	
<b>Color Spectrum Management</b> (Sec. 5.7.3.F)	Non-Res and Multifamily: For all permanent lighting installations - minimum Color Rendering Index of 70 and Correlated Color Temperature of no greater than 3000 Kelvin	Lithonia LED 70-80 CRI, 3000K proposed	Yes	
<b>Parking Lot Lighting</b> (Sec. 5.7.3.J)	- Provide the minimum illumination necessary to ensure adequate vision and comfort. - Full cut-off fixtures shall be used to prevent glare and spillover.	Lithonia D-Series External Glare Shield proposed	Yes	
<b>Min. Illumination</b> (Sec. 5.7.3.k)	Parking areas: 0.2 min	0.2 min	Yes	
	Loading & unloading areas: 0.4 min	0.8 min	Yes	
	Walkways: 0.2 min	0.5 min	Yes	
	Building entrances, frequent use: 1.0 min	2.6 min	Yes	
	Building entrances, infrequent use: 0.2 min	1.6 min	Yes	
<b>Average Light Level</b> (Sec.5.7.3.L)	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1	2.7:1	Yes	
<b>Max. Illumination adjacent to Non-Residential</b> (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle	0.5 Maximum	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>Cut off Angles</b> (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	Cut off angles appear to comply.	NA	

**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

10/31/2024

## Engineering Review

Haggerty - HEFCO  
JSP24-0022

### **APPLICANT**

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Hefco Haggerty LLC

### **REVIEW TYPE**

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Preliminary Site Plan

### **PROPERTY CHARACTERISTICS**

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- Site Location: West side of Haggerty Rd just south of Country Club Dr
- Site Size: 9.47 acres
- Plan Date: 10/04/2024
- Design Engineer: Boss Engineering

### **PROJECT SUMMARY**

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- Construction of an approximately 37,725 square-foot commercial building and associated parking. Site access would be provided via public roadways.
- Water service would be provided by a 12-inch extension from the existing 12-inch water main along the west side of Haggerty Road. A 2-inch domestic lead and a 6-inch fire lead would be provided to serve the building, along with four additional hydrants along the looped system.
- Sanitary sewer service would be provided by creating an 8-inch main extension from the existing 18-inch sanitary sewer along the west side of Haggerty Road. A 6-inch lead would be provided to serve the building, along with a monitoring manhole.
- Storm water would be collected by two storm sewer collection systems and discharged to an on-site detention basin.

### **RECOMMENDATION**

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

**Comments:**

The Preliminary Site Plan meets the general requirements of the design and construction standards as set forth in [Chapter 11 of the City of Novi Code of Ordinances](#), the Storm Water Management Ordinance and the [Engineering Design Manual](#) with the following items to be addressed at the time of Final Site Plan submittal:

**General**

1. Provide at least two reference benchmarks at intervals no greater than 1,200 feet. At least one referenced benchmark must be a City-established benchmark, refer to [City of Novi Survey Benchmarks Arch Map](#).
2. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.
3. **Only at the time of the printed Stamping Set submittal**, provide the City's standard detail sheets for water main (5 sheets), sanitary sewer (3 sheets), storm sewer (2 sheets), and paving (2 sheets). The most updated details can be found on the City's website under [Engineering Standards and Construction Details](#).
4. Provide soil borings and a geotechnical investigation for the location of the detention basin. If infiltration is explored as an option in later reviews, an infiltration study will also be required.
5. A same-side driveway spacing of the Southern entrance drive with respect to the adjacent drive to the south (85' proposed vs. 230' required) is deficient according to City of Novi standards. However, the traffic review by AECOM mentions that RCOC has approved of these locations. Please provide us with a copy of this communication from RCOC for our records.
  - Commercial drive approaches ([Section 11-216 \(d\)](#)) must be spaced according to the following minimum standards:

Road speed (mph)	Driveway spacing* (feet)
20	85
25	105
30	125
35	150
40	185
45	230
50+	275

\* Near approach curb to near approach curb on same side of street. Does not apply to a single one-way pair of driveways meeting city standards.

6. The dedication of the master-planned right-of-way is requested for the project. Label the additional right-of-way width to be dedicated along Haggerty as "proposed" right-of-way.
7. Provide a traffic control sign table listing the quantities of each **permanent** sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.

8. Traffic signs in the Road Commission for Oakland County (RCOC) right-of-way will be installed by RCOC.
9. Provide a traffic control plan for the proposed road work activity.
10. Provide a note that compacted sand backfill (MDOT sand Class II) shall be provided for all utilities within the influence of paved areas; illustrate and label on the profiles.
11. Provide a construction materials table on the utility plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
12. Provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided, or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.
13. Where the minimum 18-inch clearance at utility crossings cannot be achieved, provide a prominent note stating the substandard clearance and that proper bedding/encasement will be determined by the inspecting engineer.
14. Provide a note stating if dewatering is anticipated or encountered during construction, then a dewatering plan must be submitted to the Engineering Division for review.
15. Generally, all proposed trees shall remain outside utility easements. Where proposed trees are required within a utility easement, the trees shall maintain a minimum 5-foot horizontal separation from water main and storm sewer and 10-foot horizontal separation from sanitary sewer. All utilities shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance.
16. Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur. Light poles in a utility easement will require a License Agreement.
17. grading and SESC sheets shall show the tree fence at least as far from the trunk as the critical root zone, defined as a circular area around a tree with a radius measured to the tree's longest dripline radius plus one (1) foot. No grading shall occur within the dripline. If the critical root zone is not fully protected, then replacements for that tree may be required.

**Water Main**

18. Show a 20-foot wide proposed watermain easement around the relocated hydrant assembly east of the building if it is outside of the existing watermain easement. Please show and label the existing watermain easement as well. Also, this hydrant seems to be right above the gas line going N/S there, it should be moved to give more horizontal spacing from the gas line.
19. Place the hydrants at least 7 feet off back of curb (allowing 3-foot clearance from sidewalk).
20. A tapping sleeve, valve and well is required at the connection to the existing water main.

21. Water Systems must have the ability to serve at least four thousand (4,000) gallons per minute in office, industrial and shopping centers.
22. Provide additional valves to limit pipe runs to a maximum of 800 feet between valves.
23. Per current EGLE requirement, provide a profile for all proposed water main 8-inch and larger.
24. 6-inch hydrant leads are allowed for leads less than or equal to 25 feet in length. 8-inch leads are required for leads greater than 25 feet in length.
25. All gate valves 6" or larger shall be placed in a well with the exception of a hydrant shut off valve. A valve shall be placed in a box for water main smaller than 6".
26. Valves shall be arranged so that no single line failure will require more than eight hundred (800) feet of main to be out of service.
27. In the general notes and on the profile, add the following note: "Per the Ten States Standards Article 8.8.3, one full 20-foot pipe length of water main shall be used whenever storm sewer or sanitary sewer is crossed, and the pipe shall be centered on the crossing, in order to ensure 10-foot separation between water main and sewers." Additionally, show the 20-foot pipe lengths on the profile.
28. A sealed set of utility plans along with the [Michigan Department of Environment, Great Lakes & Energy \(EGLE\) permit application](#) for water main construction, the [Streamlined Water Main Permit Checklist](#), [Contaminated Site Evaluation Checklist](#), [Basis of Design](#), and an electronic version of the utility plan should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets, and the standard detail sheets.

### **Irrigation Comments**

29. If irrigation is proposed, include an irrigation letter and containment letter for review. Also, include containment notes on irrigation sheets as well.

### **Sanitary Sewer**

30. The 20-foot-wide sanitary sewer easement is called out as 5' beyond the 60' ROW in multiple ways on the sewer plan and profile sheet. Please make all callouts to the sanitary easement consistent.
31. Provide a sanitary sewer monitoring manhole, unique to this site, within a dedicated access easement or within the road right-of-way. If not in the right-of-way, provide a 20-foot-wide access easement to the monitoring manhole from the right-of-way (rather than a public sanitary sewer easement).
32. Provide a sanitary sewer basis of design for the development on the utility plan sheet. (Calculations should use peaking factor of 4.0 and 3.2 People/REU, peaking factor of 4.0 is only for sanitary not for water main).
33. Provide a note on the Utility Plan and sanitary profile stating the sanitary leads will be buried at least 5 feet deep where under the influence of pavement.
34. *For 8-inch and larger extensions* - Provide a testing bulkhead immediately upstream of the sanitary connection point.

35. Show the monitoring manhole connection to SAN EX on the profile and include the invert elevation.
36. Illustrate all pipes intersecting with manholes on the sanitary profiles.
37. Three (3) sealed sets of revised utility plans along with the [Michigan Department of Environment, Great Lakes & Energy \(EGLE\) permit application](#), electronic utility plan for sanitary sewer construction, and the Streamlined Sanitary Sewer Permit Certification Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets, and the standard detail sheets. It should be indicated with the application if an expedited EGLE review is requested. EGLE will charge a fee that can be paid directly to the State.

### **Storm Sewer**

38. A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. Grades shall be elevated, and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.
39. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
40. Match the 0.80 diameter depth above invert for pipe size increases.
41. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot-deep plunge pool.
42. The minimum pipe size for storm sewers receiving surface runoff shall be 12-inch diameter.
43. Provide profiles for all storm sewer 12-inch and larger. All storm pipes accepting surface drainage shall be 12-inch or larger.
44. Label all inlet storm structures on the profiles. Inlets are only permitted in paved areas and when followed by a catch basin within 50-feet.
45. Label the 10-year HGL on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure.
46. Illustrate all pipes intersecting storm structures on the storm profiles.
47. Provide a schedule listing the casting type, rim elevation, diameter, and invert sizes/elevations for each proposed, adjusted, or modified storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.
48. Show and label all roof conductors and show where they tie into the storm sewer.
49. Please confirm that there will be no roof drains necessary on the east/north side of the proposed building.



**Storm Water Management Plan**

50. The Storm Water Management Plan (SWMP) for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the [Engineering Design Manual \(updated Jan 31, 2024\)](#)
51. Provide calculations verifying the post-development runoff rate directed to the proposed receiving drainage course does not exceed the pre-development runoff rate for the site.
52. The SWMP must address the discharge of storm water off-site, and evidence of its adequacy must be provided. This should be done by comparing pre- and post-development discharge rates. The area being used for this off-site discharge should be delineated and the ultimate location of discharge shown.
53. An adequate maintenance access route to the basin outlet structure and any other pretreatment structures shall be provided (15 feet wide, maximum running slope of 1V:5H, maximum cross slope of 3%, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
54. Provide a 5-foot-wide stone bridge/access route allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high-water elevation). Provide a detail and/or note as necessary.
55. As part of the Storm Drainage Facility Maintenance Easement Agreement, provide an access easement for maintenance over the storm water detention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.
56. The pretreatment structures treated flow rates should be based on the 1-year storm event intensity (~2.3 In/Hr), resulting in a flow rate of approximately 5.9 CFS. Higher flows shall be bypassed.
57. The primary outlet standpipe shall be designed with a secondary outer pipe with numerous holes. The stone filter would rest against this outer pipe and would help protect the outlet standpipe from clogging.
58. Provide a soil boring in the vicinity of the storm water basin to determine soil conditions and to establish the high-water elevation of the groundwater table. Note the bottom of the detention facility must be a minimum of **three (3) feet** above the groundwater elevation.
59. A 4-foot-wide safety shelf is required one foot below the permanent water surface elevation within the basin.
60. A 25-foot vegetated buffer shall be provided around the perimeter of the storm water basin where impervious area is directed to the basin via surface flow.
61. If mechanical separators are proposed, then a 3' permanent pool would not be required for the basin. If mechanical separators are not used and only the 3' permanent pool is proposed, then in the last storm structure prior to discharge into the basin would require a four-foot-deep sump and an oil/gas separator.

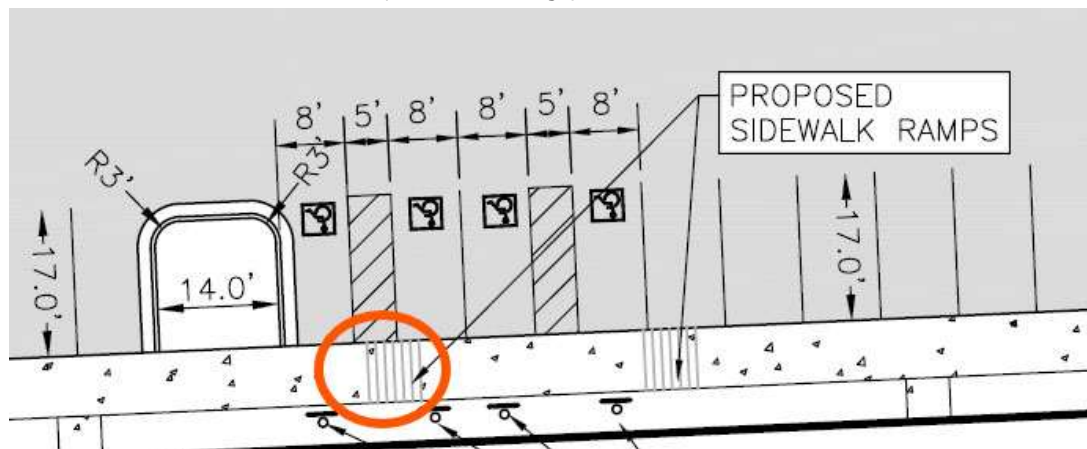
62. The drainage area table on the Grading & Drainage Plan sheet lists areas 4 to 16, but the plan view shows areas CB-5 to TD-17. Please revise this sheet to be consistent between the plan view drainage areas and those listed in the table.

### **Paving & Grading**

63. Provide a construction materials table on the Site Plan sheet listing the quantity and material type for each pavement cross-section being proposed.
64. Provide a minimum of 6 spot elevations where the pathway crosses each driveway (one at each corner and two in the center of the driveway on each side of the pathway). Spot elevations shall be provided to demonstrate a level landing adjacent to each side of the pathway crossing.
65. No more than ¼" vertical obstacle shall be allowed at each transition between the pathway and the drive approach.
66. Detectable warning plates are required at all barrier-free ramps, hazardous vehicular crossings and other areas where the sidewalk is flush with the adjacent drive or parking pavement. The barrier-free ramps shall comply with current MDOT specifications for ADA Sidewalk Ramps.
67. Label specific ramp locations on the plans where the detectable warning surface is to be installed.
68. Specify the product proposed and provide a detail for the detectable warning surface for barrier free ramps. The product shall be the concrete-embedded detectable warning plates, or equal, and shall be approved by the Engineering Division. Stamped concrete will not be acceptable.
69. Verify the slopes along the ingress/egress routing to the building from the barrier-free stalls. All barrier-free stalls shall comply with Michigan Barrier-Free regulations.
70. Provide existing and proposed contours on the Grading Plan at the time of the Final Site Plan submittal.
71. Provide at least 3-foot of buffer distance between the sidewalk and any fixed objects, including hydrants and irrigation backflow devices. Include a note on the plan where the 3-foot separation cannot be provided.
72. Site grading shall be limited to 1V:4H (25-percent), excluding landscaping berms. Numerous areas appear to exceed this standard.
73. The grade of the drive approach shall not exceed 2-percent within the first 25 feet of the intersection. Provide spot grades as necessary to establish this grade.
74. The sidewalk within the right-of-way shall continue through the drive approach. The thickness of the sidewalk shall be increased to 8 inches across the drive approach. Provide additional spot grades as necessary to verify the maximum 2-percent cross-slope is being maintained along the walk.
75. Per MDOT Special Provision for Crushed Concrete; the use of crushed concrete is prohibited on the project within 100 feet of any water course (stream, river, county drain, etc.) and lake, regardless of the application of location of the water course or lake relative to the project limits. Add note to

use 21AA crushed limestone base for any pavement within 100 feet of a water course.

76. Provide spot grades along property lines adjacent to perimeter curb at 20-foot intervals to demonstrate site drainage is self-contained.
77. Provide additional spot grades as necessary to demonstrate that a minimum 5-percent slope away from the building is provided for a minimum distance of ten feet around the perimeter of the building in landscaped/grass areas.
78. The end islands shall conform to the City standard island design, or variations of the standard design, while still conforming to the standards as outlined in Section 2506 of Appendix A of the Zoning ordinance (i.e. 2' minor radius, 15' major radius, minimum 10' wide, 3' shorter than adjacent 19' stall).
79. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
80. Dimensions of parking stalls abutting a curb or sidewalk are to the face of curb or walk. All other dimensions are to back of curb unless otherwise indicated.
81. Curbing and walks adjacent to the end of 17-foot stalls shall be reduced to 4-inches high (rather than the standard 6-inch height to be provided adjacent to 19-foot stalls). Additionally, 2-foot overhang should be provided adjacent to 17-foot parking stalls (show 2-foot overhang on paving sheets). Provide additional details as necessary. Sidewalk width should be adjusted to 8-foot wide in order to have the required 2-foot overhang, if overhang cannot be provided in this area 19-foot stalls with 6-inch curb should be proposed.
82. Label the actual usable length of the proposed angled parking stalls. This is done by measuring between parallel lines representing the position at the front and rear of the car, without the rear of the car conflicting with the maneuvering aisle.
83. The ramp shown below is in the middle of the ADA accessible walkway. Please shift the location of the ramp accordingly.



### **Soil Erosion and Sediment Control**

84. A SESC permit is required (link to [Soil Erosion Permit Application](#)). A review will be done when a completed packet is submitted to Sarah Marchioni at Community Development.

### **Off-Site Easements**

85. Any off-site utility easements anticipated must be executed **prior to Stamping Set Approval**. If you have not already done so, drafts of the easements and a recent title search shall be submitted to the Community Development Department as soon as possible for review and shall be approved by the Engineering Division and the City Attorney prior to executing the easements.
86. Approval from the neighboring property owner for the work associated with the off-site sanitary sewer shall be forwarded to the Engineering Division **prior to Stamping Set approval**.

### **The following must be submitted with the Final Site Plan:**

87. 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.**
88. An itemized construction cost estimate must be submitted to the Community Development Department for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. **The estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving (square yardage, should include number do detectable warning plates), right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pre-treatment structure and restoration).

### **The following must be submitted with the Stamping Set:**

*(Please note that all documents must be submitted together as a package with the Stamping Set submittal with the **legal review transmittal form that is attached to this review letter**. Partial submittals will **not** be accepted. Links to the PDF copy of the easements are below, word document versions of each legal document can be found on the City's Website under [Forms and Permits](#))*

89. A draft copy of the [Storm Drainage Facility Maintenance Easement Agreement \(SDFMEA\)](#), as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department. Once the agreement is approved by the City's Legal Counsel, this agreement will then be sent to City Council for approval/acceptance. The SDFMEA will then be recorded at the office of the Oakland County Register of Deeds. This document is available on our website.
90. A draft copy of the 20-foot-wide [Watermain System Easement](#) onsite must be submitted to the Community Development Department.
91. A draft copy of the 20-foot-wide [Sanitary Sewer Easement](#) onsite must be submitted to the Community Development Department.

92. A draft copy of the 20-foot-wide [Sanitary Sewer Monitoring Manhole Access Easement](#) onsite must be submitted to the Community Development Department.
93. Executed copies of approved off-site utility easements must be submitted.

**The following must be addressed prior to construction:**

94. 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). **Be advised that scheduling the pre-construction meeting can take 2-4 weeks.**
95. 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.
96. 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.
97. Construction inspection fees in the amount of **\$TBD** must be paid to the Community Development Department. **\*\*fees are subject to change.**
98. Off-Site Legal exhibit review fees in the amount of **\$TBD** must be paid to the Community Development Department. **(ONLY FOR OFF-SITE DOCUMENTS)**
99. Legal escrow fees in the amount of **\$TBD** must be deposited with the Community Development Department. **All unused escrow will be returned to the payee at the end of the project** (except for escrows that are \$50 or less). This amount includes engineering legal fees only. There may be additional legal fees for planning legal documents. **\*\*fees are subject to change.**
100. Legal fees for off-site easements should be paid as soon as possible so that documents can be approved.
101. A storm water performance guarantee in the amount of **\$TBD** (Equal to 120% of the cost required to complete the storm water management facilities) as specified in the Storm Water Management Ordinance must be posted at the Community Development Department.
102. Water and Sanitary Sewer Fees must be paid prior to the pre-construction meeting. Contact the Treasury Department at 248-347-0498 to determine the amount of these fees.
103. A street sign financial guarantee in the amount of **\$TBD** (\$400 per traffic control sign proposed) must be posted at the Community Development Department. Signs must be installed in accordance with MMUTCD standards.
104. A traffic control inspection fee of **\$TBD** must be paid to Community Development. This fee is the inspection of traffic control items such as signs, striping, curbs, parking stalls, sidewalk, detectable warning surfaces, and temporary pavement markings.

105. 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.
106. A permit for work within the road right-of-way of Haggerty 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. **Be advised that review by the RCOC may take four weeks or longer.**
107. An [Act 399 Permit for Community Water Supply Systems](#) for water main construction must be obtained from EGLE. This permit application must be submitted through the Engineering Division after the water main plans have been approved. Please submit the cover sheet, overall utility sheet, standard details, and plan/profile sheets applicable to the permit.
108. A [Part 41 Permit For Wastewater Systems](#) for sanitary sewer construction must be obtained from EGLE. This permit application must be submitted through the Engineering Division after the sanitary sewer plans have been approved. Please submit the cover sheet, overall utility sheet, standard details and plan/profile sheets applicable to the permit. **Be aware that approval by Oakland County Water Resources Commissioner (OCWRC) is required prior to submittal to EGLE.**
109. An NPDES permit must be obtained from EGLE since the site is over 5 acres in size. EGLE may require an approved SESC plan to be submitted with the Notice of Coverage.
110. An inspection permit for the sanitary sewer tap must be obtained from the Oakland County Water Resources Commissioner (OCWRC).

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 Ben Nelson at (248)735-5643 or email at [bnelson@cityofnovi.org](mailto:bnelson@cityofnovi.org) with any questions.

*Benjamin Nelson*

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Ben Nelson,  
Project Engineer

cc: Dan Commer, Community Development  
Humna Anjum, Engineering  
Milad Alesmail, Engineering  
Ben Croy, City Engineer

## LANDSCAPE REVIEW



**PLAN REVIEW CENTER REPORT**  
**February 5, 2025**  
**27629 Haggerty Rd - HEFCO**  
**Revised Preliminary Site Plan - Landscaping**

**Review Type**

Revised Preliminary Site Plan Landscape Review

**Job #**

JSP24-0022

**Property Characteristics**

- Site Location: 27629 Haggerty Road
- Site Acreage: 9.47 ac.
- Site Zoning: OST
- Adjacent Zoning: North, South, West: OST, East: Farmington Hills Office
- Plan Date: 1/31/2025

**Ordinance Considerations**

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

**RECOMMENDATION:**

This project is **recommended for approval**. There are some things that still need to be addressed but that can be done on Final Site Plans.

**No landscape deviations are required for the proposed layout.**

**Ordinance Considerations**

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

1. Tree survey is provided.
2. Wetland survey is provided.
3. All required woodland replacements are proposed on the site but the replacement trees shown on the east side of the pond will need to be shown elsewhere on the site.

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

The project is not adjacent to residential property so this screening is not required.

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

1. The required landscaping is provided
2. If the RCOC does not allow the proposed plantings in the ROW, they don't need to be planted but a copy of their decision must be provided to the City.

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

1. The required interior parking lot area and trees are proposed.
2. The required parking lot perimeter trees are proposed. One needs to be moved to avoid



- overcrowding with other trees on the north side of the site.
3. The 5 new accessway perimeter trees along the north drive need to be moved and adjusted to relieve the overcrowding.

Building Foundation Landscaping (Zoning Sec 5.5.3.D)

The required building foundation area and plantings are proposed.

Plant List (LDM 4, 10)

1. 22 of 27 species (81%) proposed are native to Michigan.
2. The tree diversity is met for the non-woodland replacement trees.
3. See the landscape chart for a discussion of some of the species used.

Planting Notations and Details (LDM 10)

Provided

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

1. The required detention basin landscaping is proposed.
2. An acceptable agreement between the Sheetz project and this one related to the detention pond grading and landscaping has been reached and is outlined on the landscape plan.
3. **HEFCO will probably need to grant a temporary construction easement for the work Sheetz' contractor will do, as well as an access easement for monitoring and maintenance of the Sheetz wetland mitigation area.**
4. **Those easements, as well as the Sheetz wetland mitigation area conservation easement, should also appear on the HEFCO plans. They may be more appropriate on sheets other than the landscape plans.**

Irrigation (LDM 10)

1. If an irrigation system will be used, a plan for it must be provided with Final Site Plans.
2. If alternative means of providing water to the plants for their establishment and long-term survival, information regarding that is also required with Final Site Plans.

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](mailto:rmeader@cityofnovi.org).



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Rick Meader – Landscape Architect

## LANDSCAPE REVIEW SUMMARY CHART – Revised Preliminary Site Plan

**Review Date:** February 5, 2025  
**Project Name:** JSP24-0022: 27629 Haggerty Road  
**Project Location:** 27629 Haggerty Road  
**Plan Date:** January 31, 2025  
**Prepared by:** Rick Meader, Landscape Architect E-mail: [rmeader@cityofnovi.org](mailto: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.

**NO LANDSCAPE WAIVERS ARE REQUIRED FOR THE PROPOSED LAYOUT.**

Item	Required	Proposed	Meets Code	Comments
<b>Landscape Plan Requirements (Landscape Design Manual (LDM) and Zoning Ordinance (Zoning Sec))</b>				
<b>Landscape Plan</b> (Zoning Sec 5.5.2, LDM 2, 10)	<ul style="list-style-type: none"> <li>• New commercial or residential developments</li> <li>• Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less.</li> <li>• 1" = 20' minimum with proper North. Variations from this scale can be approved by LA</li> <li>• Consistent with plans throughout set</li> </ul>	Landscape plan Sheet 10: 1" = 50'	Yes	
<b>Project Information</b> (LDM 10)	Name and Address	On landscape plan	Yes	
<b>Owner/Developer Contact Information</b> (LDM 10)	Name, address and telephone number of the owner and developer or association	On title block	Yes	
<b>Landscape Architect contact information</b> (LDM 10)	Name, Address and telephone number of RLA/PLA/LLA who created the plan	Patrick Cleary - Boss Engineering	Yes	
<b>Sealed by LA.</b> (LDM 10)	Requires original signature	Seal and signature provided	Yes	
<b>Miss Dig Note</b> (800) 482-7171 (LDM 10)	Show on all plan sheets	On Title Block	Yes	
<b>Zoning</b> (LDM 10)	Include all adjacent zoning	<ul style="list-style-type: none"> <li>• <u>Parcel</u>: OST</li> <li>• <u>North, South, West</u>: OST</li> <li>• <u>East</u>: Farmington Hills Office</li> </ul>	Yes	

Item	Required	Proposed	Meets Code	Comments
<b>Survey information</b> (LDM 10)	<ul style="list-style-type: none"> <li>• <u>Legal description or boundary line survey</u></li> <li>• <u>Existing topography</u></li> </ul>	<ul style="list-style-type: none"> <li>• Description on Cover Sheet</li> <li>• Topo survey on Sheet 3</li> </ul>	Yes	
<b>Existing plant material</b> <b>Existing woodlands or wetlands</b> (LDM 10)	<ul style="list-style-type: none"> <li>• <u>Show location type and size. Label to be saved or removed.</u></li> <li>• <u>Plan shall state if none exists.</u></li> </ul>	<ul style="list-style-type: none"> <li>• Sheet 3</li> <li>• Regulated woodlands are shown on west end of site</li> <li>• Wetlands occupy the center of the site</li> </ul>	Yes	<b>See the Merjent letter for a discussion of the woodlands and wetlands.</b>
<b>Soil types</b> (LDM10)	<ul style="list-style-type: none"> <li>• <u>As determined by Soils survey of Oakland county</u></li> <li>• <u>Show types, boundaries</u></li> </ul>	<ul style="list-style-type: none"> <li>• Sheet 3</li> <li>• Soil boundaries and key on landscape plan</li> </ul>	Yes	
<b>Existing and proposed improvements</b> (LDM 10)	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	All proposed layout elements are shown on the landscape plan	Yes	
<b>Existing and proposed utilities</b> (LDM 10)	<ul style="list-style-type: none"> <li>• Overhead and underground utilities, including hydrants</li> <li>• Include light posts</li> </ul>	<ul style="list-style-type: none"> <li>• Utility Plan Sheet 9</li> <li>• Utilities are shown on the landscape plan</li> <li>• Light posts are shown on the landscape plans</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> <li>• Yes</li> </ul>	<b>Please restore the utility lines to the landscape plan (at least the proposed sanitary line along the entry is missing)</b>
<b>Proposed grading. 2' contour minimum</b> (LDM 10)	Provide proposed contours at 2' interval	<ul style="list-style-type: none"> <li>• Sheet 6</li> <li>• Coordination for the grading of the two projects' elements has been worked out between the two developers and explained with a note.</li> </ul>	Yes	The proposed solutions, for the grading by Sheetz and 4 woodland replacements by HEFCO, are reasonable and are accepted.
<b>Snow deposit</b> (LDM 10)	Show snow deposit areas on plan	Yes	Yes	
<b>LANDSCAPING REQUIREMENTS</b>				
<b>Parking Area Landscape Requirements</b> (Zoning Sec 5.5.3.C and LDM 5)				
<b>General requirements</b> (LDM 5)	<ul style="list-style-type: none"> <li>• Clear sight distance within parking islands</li> <li>• No evergreen trees</li> </ul>	No landscaping in parking lot will block vision	Yes	
<b>Name, type and number of ground cover</b> (LDM 5)	As proposed on planting islands	Lawn is indicated	Yes	
<b>General</b> (Zoning Sec 5.5.3.C)				

Item	Required	Proposed	Meets Code	Comments
<b>Parking lot Islands</b>	<ul style="list-style-type: none"> <li>• A minimum of 200 SF to qualify</li> <li>• A minimum of 200sf unpaved area per tree planted in an island</li> <li>• 6" curbs</li> <li>• Islands minimum width 10' BOC to BOC</li> </ul>	All islands are appropriately sized for the trees in them	Yes	<b>The two oaks in the island with the hydrant are now just 10 feet apart, which is too close. The area per tree is okay, but the spacing is too tight.</b>
<b>Curbs and Parking stall reduction</b> (Zoning Sec 5.3.12)	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	17/19 feet	Yes	
<b>Contiguous space limit</b> (Zoning sec 5.5.3.C)	Maximum of 15 contiguous spaces	15 spaces is the maximum bay length	Yes	
<b>Plantings around Fire Hydrant</b> (Zoning sec 5.5.3.C)	<ul style="list-style-type: none"> <li>• No plantings with matured height greater than 12' within 10 ft. of fire hydrants</li> <li>• Plant trees at least 5 ft from underground utility lines</li> <li>• Plantings near hydrants or FDCs should be no taller than 12"</li> </ul>	Sufficient spacing is provided for all hydrants	Yes	<u>Please add a clearly visible note stating that trees shall be at least 10 feet away from sanitary lines, hydrants and utility structures, and 5 feet away from underground utility lines.</u>
<b>Landscaped area</b> (Zoning sec 5.5.3.C)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Yes	Yes	
<b>Clear Zones</b> (Zoning sec 5.5.3.B.ii Footnote 10)	<ul style="list-style-type: none"> <li>• 25 ft corner clearance required.</li> <li>• Refer to Zoning Section 5.5.9</li> <li>• Road Commission for Oakland County zone for RCOC jurisdiction roads</li> </ul>	The RCOC clear vision zone is now shown and no plants are within it.	Yes	
<b>Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district</b> (Zoning Sec 5.5.3.C)				
A = Total square footage of vehicular use areas up to 50,000sf x 7.5%	<ul style="list-style-type: none"> <li>• <math>A = x \text{ sf} * 7.5\% = A \text{ sf}</math></li> <li>• <math>47,255 * 7.5\% = 3544 \text{ sf}</math></li> </ul>	The calculation is provided	Yes	
B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %	<ul style="list-style-type: none"> <li>• <math>B = x \text{ sf} * 1\% = B \text{ sf}</math></li> <li>• <math>(xxx - 50000) * 1\% = xx \text{ sf}</math></li> </ul>	NA		

Item	Required	Proposed	Meets Code	Comments
<b>Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C)</b>				
A. = Total square footage of vehicular use area up to 50,000 sf x 5%	$A = x \text{ sf} * 6\% = A \text{ sf}$	NA		
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5%	$B = 0.5\% \times 0 \text{ sf} = B \text{ SF}$	NA		
<b>All Categories</b>				
<b>Total square footage of landscaped islands</b> $C = A+B$	<ul style="list-style-type: none"> <li><math>C = A + B</math></li> <li><math>C = 3544 + 0 = 3544 \text{ SF}</math></li> </ul>	3933 SF	Yes	
<b>Number of canopy trees required</b> $D = C/200$	<ul style="list-style-type: none"> <li><math>D = C/200 \text{ trees}</math></li> <li><math>3544/200 = 18 \text{ Trees}</math></li> </ul>	19 trees	Yes	<ol style="list-style-type: none"> <li>As noted above, the two oaks in the island with the hydrant are only 10 feet apart.</li> <li><b>Since there is an extra interior tree, one can be removed from that island and still meet the requirement, and should be since the hydrant prevents better spacing.</b></li> </ol>
<b>Parking Lot Perimeter Trees</b> (Zoning Sec 5.5.3.C)	<ul style="list-style-type: none"> <li>1 Canopy tree per 35 lf</li> <li><math>500/35 = 14 \text{ trees}</math></li> </ul> <p>Perimeter trees are not required for sides of lot where building is within 20 feet of the lot</p>	14 canopy trees	Yes	<ol style="list-style-type: none"> <li>Woodland replacement trees cannot be double-counted as parking lot perimeter trees.</li> <li>Parking lot perimeter trees can be used to meet the canopy tree requirement for the eastern side of the detention pond.</li> <li><b>Please add additional woodland replacement trees elsewhere on the property, within a conservation easement.</b></li> </ol>
<b>Accessway perimeter</b> (Zoning Sec 5.5.3.C)	<ul style="list-style-type: none"> <li>1 canopy tree per 35 lf on each side of road, less widths of access drives.</li> <li><math>(400+180+60+60)/35 =</math></li> </ul>	<b>20 trees including:</b> <ul style="list-style-type: none"> <li>12 canopy trees along south drive</li> <li>2 greenbelt trees within 15 feet of</li> </ul>	Yes/No	<ol style="list-style-type: none"> <li>The sycamores and oaks along the north side of the drive are crowded too close together. <b>Please</b></li> </ol>

Item	Required	Proposed	Meets Code	Comments
	<p>20 trees</p> <p>As with the parking lot perimeter trees, accessway perimeter trees are not required for sides of the drive where the building is within 20 feet of the lot</p>	<p>access drive</p> <ul style="list-style-type: none"> <li>• 1 existing tree along south drive</li> <li>• 5 trees crowded along the north access drive</li> </ul>		<p>move one of the trees to the south side of that drive and adjust the proposed sanitary line to provide the room needed for the 4 trees remaining on that side of the drive.</p> <p>2. If sufficient room cannot be gained, one of the 4 trees can be placed along the south access drive.</p> <p>3. Please move the oak, which is a parking lot perimeter tree, to be along the north side of the parking lot. The trees there are spaced at about 40' o.c. so they can be shifted to about 30 feet apart and still fit 8 perimeter trees along there.</p>
<b>Parking land banked</b> (Zoning Sec 5.2.14.D)	NA	None		
<b>Berms, Walls and ROW Planting Requirements</b>				
<b>Berms</b> (Zoning Sec 5.5.3.A & LDM 1)				
<ul style="list-style-type: none"> <li>• All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours</li> <li>• Berm should be located on lot line except in conflict with utilities.</li> <li>• Berms should be constructed with 6" of topsoil.</li> </ul>				
<b>Residential Adjacent to Non-residential</b> (Sec 5.5.3.A & LDM 1.a)				
<b>Berm requirements</b> (Zoning Sec 5.5.A)	The site is not adjacent to residential property so this is not required	None	Yes	
<b>Planting requirements</b> (LDM 1.a.)	LDM Novi Street Tree List	NA		
<b>Adjacent to Public Rights-of-Way</b> (Sec 5.5.3.B and LDM 1.b)				
<b>Berm requirements</b> (Zoning Sec 5.5.3.A.(5))	No berm is required as parking is not adjacent to the greenbelt	None	Yes	
<b>Cross-Section of Berms</b> (LDM 10)				
<b>Slope, height and width</b>	<ul style="list-style-type: none"> <li>• Label contour lines</li> <li>• Maximum 33%</li> <li>• Min. 3 feet flat</li> </ul>	None	Yes	

Item	Required	Proposed	Meets Code	Comments
	horizontal area <ul style="list-style-type: none"> <li>• Minimum 3 feet high</li> <li>• Constructed of loam with 6' top layer of topsoil.</li> </ul>			
<b>Type of Ground Cover</b>		NA		
<b>Setbacks from Utilities</b>	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	Overhead lines exist along the Haggerty Road frontage	Yes	
<b>Walls (Zoning Sec 5.5.3.A &amp; LDM 10)</b>				
<b>Material, height and type of construction footing</b>	Freestanding walls should have brick or stone exterior with masonry or concrete interior	No walls exist or are proposed	NA	
<b>Walls greater than 4 ft. should be designed and sealed by an Engineer</b>		NA		
<b>ROW Landscape Screening Requirements (Zoning Sec 5.5.3.B.ii)</b>				
<b>Greenbelt width</b>	Adj to Pkg: 20 ft. Not adj to Pkg: 25 ft	<ul style="list-style-type: none"> <li>• The proposed additional ROW is now shown.</li> <li>• 50 ft</li> </ul>	Yes	
<b>Min. berm crest width</b>	None required as there is only an access drive adjacent to the right-of-way	None	Yes	
<b>Minimum berm height</b>	None	None	Yes	
<b>3' wall</b>	(2)(3)(4)	No walls are proposed		
<b>Canopy deciduous or large evergreen trees</b>	<ul style="list-style-type: none"> <li>• Not adj to Pkg: 1 per 60 ft</li> <li>• <math>(300-40)/60 = 4</math> trees</li> <li>• Below lines <math>4 * 1.5 = 6</math> trees</li> </ul>	<ul style="list-style-type: none"> <li>• 3 canopy trees</li> <li>• 6 subcanopy trees</li> </ul>	Yes	<ol style="list-style-type: none"> <li>1. The Firestarter blackgum's mature canopy width is not wide enough to qualify as a deciduous canopy tree.</li> <li>2. <u>Please use the straight species instead.</u></li> </ol>
<b>Sub-canopy deciduous trees)</b>	<ul style="list-style-type: none"> <li>• Not adj to Pkg: 1 per 40 ft</li> <li>• <math>(300-40)/40 = 7</math> trees</li> </ul>	10 subcanopy trees	Yes	
<b>Canopy deciduous trees in area between sidewalk and curb</b>	<ul style="list-style-type: none"> <li>• Parking &amp; No Parking: 1 tree per 35 lf</li> <li>• <math>(300-60)/35 = 7</math> trees</li> </ul>	13 subcanopy trees	Yes	<u>If utility conflicts or the RCOC don't allow some or all of the trees to be</u>

Item	Required	Proposed	Meets Code	Comments
				<u>planted, they don't have to be, but a copy of the RCOC decision must be provided to the City.</u>
<b>Non-Residential Projects (Zoning Sec 5.5.3.F.iii)</b>				
<b>Screening of outdoor storage, loading/unloading</b> (Zoning Sec. 3.14, 3.15, 3.20, 4.55, 4.56, 5.5)	The loading area is behind the building	An Ilex glabra hedge has been added south of the loading zone	Yes	<u>Please add a note stating that the hedge will be maintained at a height of at least 6 feet and include that in the master deed for the property.</u>
<b>Transformers/Utility boxes</b> (LDM 6)	<ul style="list-style-type: none"> <li>A minimum of 2ft. separation between box and the plants</li> <li>Ground cover below 4" is allowed up to pad.</li> <li>No plant materials within 8 ft. from the doors</li> </ul>	<ul style="list-style-type: none"> <li>No transformers are shown</li> <li>The detail has been added to the plans</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> <li>Yes</li> </ul>	<ol style="list-style-type: none"> <li><u>When transformer locations are finalized, screening shrubs per the standard detail are required.</u></li> <li><u>Please add 10 shrubs per expected transformer to the plant list and identify them as transformer screening shrubs so they are included in the cost estimate.</u></li> </ol>
<b>Building Foundation Landscape Requirements (Zoning Sec 5.5.3.D)</b>				
<b>Interior site landscaping SF</b> (Zoning Sec 5.5.3.D)	<ul style="list-style-type: none"> <li>Equal to entire perimeter of the building x 8 less door widths with a minimum width of 4 ft.</li> <li>A: 1099 lf x 8ft = 8792 sf</li> <li>At least 75% of the building must be landscaped</li> </ul>	A: 9100 sf	Yes	
<b>Building Frontage Landscaping</b> (Zoning Sec 5.5.3.D)	If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space	100% of the front is landscaped	Yes	
<b>Detention/Retention Basin Requirements (Zoning Sec. 5.5.3.E &amp; LDM 3)</b>				
<b>Planting requirements</b> (Zoning Sec 5.5.3.E & LDM 3)	<ul style="list-style-type: none"> <li>Clusters of large native shrubs shall cover 70-75% of the basin rim area at 10 lf from permanent water level</li> <li>10" to 14" tall grass along sides of basin</li> <li>Refer to wetland for</li> </ul>	<ul style="list-style-type: none"> <li>It appears that at least 70% of the basin rims will be landscaped with large native shrubs.</li> <li>The parking lot perimeter trees</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>	<ol style="list-style-type: none"> <li>Woodland replacement trees are used to meet the requirement for the south and west side, but may not be used on the east side since parking lot</li> </ol>



Item	Required	Proposed	Meets Code	Comments
	basin mix • Deciduous canopy tree 1/35 of east, south and west sides of pond at 10 feet from permanent water level • Woodland replacement trees can be used to meet the tree requirement	can serve the function of the required shading trees on the east side. • Sufficient trees are proposed on the south edge.		perimeter trees are required along there. <b>2. Please show the replacement trees on the east side as parking lot perimeter trees. They can be used to meet the detention pond tree requirement.</b> 3. <u>Please move the shrubs to within 10 feet of the water edge.</u>
<b>Phragmites and Japanese Knotweed Control</b> (Zoning Sec 5.5.6.B)	• Any and all populations of Phragmites australis and/or Japanese Knotweed on site shall be included on tree survey. • Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site.	• A note indicates that Phragmites exists in Wetland A • Removal plans are noted in the upper left corner of Sheet 3	• Yes • Yes	
<b>LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS</b>				
<b>Landscape Notes – Utilize City of Novi Standard Notes</b>				
<b>Installation date</b> (LDM 10)	Provide intended date	Mar - Nov	Yes	
<b>Maintenance &amp; Statement of intent</b> (Zoning Sec 5.5.6 & LDM 10)	• 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.	• Guarantee note is provided • Maintenance note is provided	• Yes • Yes	<u>Please correct the landscape note #9 on Sheet 2 to show a 2-year maintenance guarantee, not 1.</u>
<b>Plant source</b> (LDM 10 & 11)	Shall be northern nursery grown, No.1 grade.	Provided	Yes	
<b>Irrigation plan</b> (LDM 10)	• A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans. • If irrigation won't be used, note how trees will get sufficient water	• No • The response letter indicates that an irrigation system plan will be provided in the final site plans.		1. <u>Please add an irrigation system plan or information as to how plants will be watered sufficiently for establishment and long- term survival on the Final Site Plans</u> 2. <u>The system should</u>

Item	Required	Proposed	Meets Code	Comments
	for establishment and long-term survival			<u>meet the requirements listed at the bottom of this chart.</u> 3. <u>If xeriscaping is used, please provide information about plantings included.</u>
<b>Seed</b>		<ul style="list-style-type: none"> <li>Seed mix lists are provided.</li> <li>The areas where each should be placed are indicated with hatching and call-outs.</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> </ul>	1. <u>Please make the seed mix species lists easier to read.</u> 2. <u>Please move the note stating that "The contractor shall send proof of the seed mix to be planted before installation. Send a copy of the seed invoice or photo of the seed bag label to <a href="mailto:rmeader@cityofnovi.org">rmeader@cityofnovi.org</a>" to a place near the seed mixes.</u>
<b>Other information</b> (LDM 10)	Required by Planning Commission	Peat has been replaced with compost	Yes	
<b>Establishment period</b> (Zoning Sec 5.5.6 & LDM 10)	<b>2 yr. Guarantee</b>	Yes – on Sheet 11 but not on Sheet 2	Yes/No	<u>Please correct Landscape Note #9 on Sheet 2 to read 2 years.</u>
<b>Approval of substitutions.</b> (Zoning Sec 5.5.5 & LDM 10)	City must approve any substitutions in writing prior to installation.	Yes	Yes	
<b>Plant List (LDM 10 &amp; 11) – Include all cost estimates</b>				
Quantities and sizes	<ul style="list-style-type: none"> <li>Minimum of 50% native species used for non-woodland replacements</li> <li>No more than 15% species/25% genus for non-woodland replacement trees</li> </ul>	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names (LDM 4 & 11)		<ul style="list-style-type: none"> <li>22 of 27 species (81%) proposed are native to Michigan</li> <li>The tree diversity requirement is now met</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> </ul>	
Type and amount of lawn		Lawn seed	Yes	
Cost estimate (LDM 10)		For all new plantings, mulch and sod as listed on the plan	Yes	Yes

Item	Required	Proposed	Meets Code	Comments
<b>Planting Details/Info (LDM Part III) – Utilize City of Novi Standard Details</b>				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	<u>Please change rootball to root flare on the new call-out.</u>
Evergreen Tree		Yes	Yes	<u>Please change rootball to root flare on the new call-out.</u>
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)	<ul style="list-style-type: none"> <li>Detail on Sheet 12</li> <li>Shown by trees on Demolition and SESC plan</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> </ul>	
<b>Other Plant Material Requirements (LDM 11)</b>				
<b>General Conditions</b>	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
<b>Plant Materials &amp; Existing Plant Material (LDM 11)</b>	Clearly show trees to be removed and trees to be saved.	Shown on Sheet 3	Yes	
<b>Landscape tree credit (LDM 11)</b>	<ul style="list-style-type: none"> <li>Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA.</li> <li>Refer to Landscape tree Credit Chart in LDM</li> </ul>	No		
<b>Plant Sizes for ROW, Woodland replacement and others (LDM 11)</b>	<ul style="list-style-type: none"> <li>Size determined by use detailed in LDM Table 11.b.(2)a.i</li> <li>Indicate on plant list</li> </ul>	Shown on plant list	Yes	
<b>Plant size credit (LDM 11)</b>	NA	No		
<b>Prohibited Plants (LDM 11.b)</b>	No plants on City Invasive Species List	None are proposed	Yes	
<b>Recommended trees for planting under overhead utilities (LDM 11)</b>	Label the distance from the overhead utilities	Overhead lines are shown along the Haggerty Road ROW line, about 14 feet high	Yes	
<b>Collected or</b>		None		

Item	Required	Proposed	Meets Code	Comments
<b>Transplanted trees</b> (LDM 11)				
<b>Nonliving Durable Material: Mulch</b> (LDM 12)	<ul style="list-style-type: none"> <li>• Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth</li> <li>• Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate.</li> </ul>	Yes -	Yes	
<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.</li> <li>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.</li> <li>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.</li> </ol>				

Irrigation System Requirements

1. Any booster pump installed to connect the project's irrigation system to an existing irrigation system must be downstream of the RPZ.
2. The RPZ must be installed in accordance with the 2015 Michigan Plumbing Code.
3. The RPZ must be installed in accordance with the manufacture installation instructions for winterization that includes drain ports and blowout ports.
4. The RPZ must be installed a minimum of 12-inches above FINISHED grade.
5. Attached is a handout that addresses winterization installation requirements to assist with this.
6. A plumbing permit is required.
7. The assembly must be tested after installation with results recorded on the City of Novi test report form.

## WOODLANDS REVIEW



October 29, 2024

Dan Commer  
Planner – Community Development  
City of Novi  
45175 Ten Mile Road  
Novi, MI 48375

Submitted electronically to [dcommer@cityofnovi.org](mailto:dcommer@cityofnovi.org)

Re: Haggerty Hefco Preliminary Site Plan Wetland Review (JSP24-22)

Dear Dan,

Merjent, Inc. (Merjent) has conducted a review of the preliminary site plan (PSP) for the proposed project located at 27629 Haggerty Road (site; parcel 50-22-13-200-018) prepared by Boss Engineering (issue date 5/15/2024; rev. date 10/4/2024). The site contains City of Novi (City)-regulated woodlands (**Figure 1**) and City-regulated wetlands (**Figure 2**).

**Woodlands**

**Woodland Recommendation:** Merjent **recommends approval** of the proposed project located at 27629 Haggerty Road. Additional Woodland Review comments have been provided below to meet the requirements of the Woodland Protection Ordinance. The following Woodland Regulations apply to this site:

Woodland Regulation	Required
Woodland Permit (Chapter 37, Section 37-26)	Yes
Tree Replacement (Chapter 37, Section 37-8)	Yes
Tree Protection (Fence; Chapter 37, Section 37-9)	Yes
Woodland Conservation Easement (Chapter 37-30[e])	No

**Woodland Review Comments**

1. City-regulated woodlands, as identified on the City of Novi Woodlands interactive map website, are present onsite. Note that both the woodlands and property limits depicted on the City map are considered approximations (**Figure 1**).
2. Merjent conducted a site visit on October 18, 2024 to review the site conditions relative to the PSP submittal. Site photographs are included in **Attachment A**. The on-site conditions reflect the conditions listed in the PSP.
3. When a proposed site plan is located within a regulated woodland, any tree proposed for removal with a diameter at breast height (DBH) greater than or equal to eight inches will require tree replacement

and a Woodland Use Permit per Section 37-8. This also applies to any tree that will be preserved, but where impacts to critical root zones are proposed.

4. Regardless of the presence of regulated woodlands onsite, a Woodland Use Permit is required to perform construction on any site containing the removal of trees larger than 36 inches DBH. No trees on-site are larger than 36 inches DBH.
5. The plan has proposed to impact three regulated trees. Other trees to be impacted are outside of City-regulated woodlands. A **Woodland Use Permit** is required to perform construction on any site containing regulated woodlands. Because three trees are proposed for removal, Planning Commission Approval is required.
6. **Woodland Replacement.** Based on a review of the plan, the following woodland replacements are required:

Tree Size (DBH, inches)	Number of Trees	Ratio Replacement/Removed Tree	Total Replacements Required
8-11	0	1	0
12-20	0	2	0
21-29	2 <sup>1</sup>	3	6
30+	1	4	4
Multi-stem	0	Sum of Stem DBH/8 (rounded up)	0
Total	12	-	-
<b>Total Replacements Required</b>			<b>10</b>

<sup>1</sup>Trees 635 and 637 are depicted on the Demolition Plan (Sheet 4) as being removed. The list of trees to be removed on the Demolition Plan did not include Trees 635 and 637. For the purposes of this review Trees 635 and 637 were assumed to be proposed for removal or within the Critical Root Zone.

Sheet 4 provides a summary of the trees to be removed for the proposed project.

It should be noted that the applicant states on Sheet 11 that 23 replacement trees are required. Most of the trees that are proposed to be removed are not regulated woodland trees and only Trees 635-637 are required to be replaced under Chapter 37.

7. A replacement plan and cost estimate for the tree replacement will be necessary prior to final site plan approval by the City. Woodland replacement credits can be provided by:
  - a. Planting the woodland tree replacement credits on-site.
  - b. Payment to the City of Novi Tree Fund at a rate of \$400/woodland replacement credit.
  - c. Combination of on-site tree planting and payment into the City of Novi Tree Fund (\$400/woodland replacement credit).

**The applicant has proposed planting 10 trees on-site for the impacts.** For the tree replacement credits that will be planted on-site, a financial guarantee of \$400/tree replacement credit is required to ensure the planting of the on-site woodland replacement credits. The financial guarantee will be released after trees have been planted and approved by the City of Novi. The applicant must request

---

a tree planting inspection. Based on the current site plan, **a financial guarantee of \$4,000 will be required.**

Woodland replacements shall be guaranteed for two growing seasons after the applicant's installation and the City's acceptance. A two-year maintenance bond in the amount of 25% of the value of the trees, but in no case less than \$1,000, shall be required to ensure the continued health of the trees following acceptance. Based on the current site plan, **a maintenance bond of \$1,000 will be required.** Based on a successful inspection two years after installation of the on-site Woodland Replacement trees, the Woodland Replacement Performance Guarantee shall be returned to the Applicant. The Applicant is responsible for requesting this inspection. See Chapter 26.5, Section 26.5-37 for additional information.

With no remaining trees from the impacts, no payment will be required to the City of Novi Tree Fund.

8. **Critical root zone.** Accurate critical root zones must be depicted on the site plan for all regulated trees within 50 feet of the proposed grading or construction activities. Section 37-2 defines a critical root zone as a circular area around a tree with a radius measured to the tree's longest dripline radius plus one foot.
  - a. The applicant has accurately depicted root zones on Sheet 4. Trees 635 and 637 are depicted on Sheet 4 as being removed. **The list of trees to be removed on Sheet 4 does not include Trees 635 and 637 and it is not clear if this is intended to indicate impacts to the Critical Root Zone of Trees 635 and 637.**
9. A **woodland fence guarantee of \$6,000** (\$5,000 x 120%) is required per Chapter 26.5-37. The financial guarantee shall be paid prior to issuance of the City of Novi Woodland Use Permit.
10. **Woodland Replacement Inspection** – The Applicant is responsible for walking the entire site to confirm that all woodland replacement trees/shrubs have been planted on site according to the approved site plan stamping set. If any material is missing, dead or dying, replacements should be made prior to requesting the inspection. The applicant should also provide an as-built landscape plan if the trees planted do not match the species and/or location shown on the approved site plan stamping set. Once this occurs the Applicant should contact the Bond Coordinator to schedule the inspection (Angie Sosnowski at [asosnowski@cityofnovi.org](mailto:asosnowski@cityofnovi.org); 248-347-0441) and complete the inspection request form. If additional inspections are needed, then additional inspection fees will be required to be paid by the applicant.
11. **Woodland Guarantee Inspection** – Prior to requesting the 2-year woodland guarantee inspection, the Applicant is responsible for walking the entire site to confirm that all plant material has survived and is healthy. If any material is missing, dead or dying, replacements should be made prior to requesting the inspection. Once this occurs the Applicant should contact the Bond Coordinator to schedule the 2-year guarantee inspection (Angie Sosnowski at [asosnowski@cityofnovi.org](mailto:asosnowski@cityofnovi.org) / 248-347-0441) and complete the inspection request form. If additional inspections are needed, then additional inspection fees will be required to be paid by the applicant. Based upon a successful inspection for the 2-year warranty the Landscape/Woodland/Street trees financial guarantee will be returned to the Applicant.



If the woodland replacements, street trees, or landscaping guarantee period is scheduled to end during the period when inspections are not conducted (November 15th – April 15th) the Applicant is responsible for contacting the Bond Coordinator and Woodland/Landscape Inspector in the late summer/early fall prior to the 2-year expiration to schedule an inspection.

12. The Applicant may be required to provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees. The applicant shall demonstrate that all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. Any associated easement boundaries shall be indicated on the Plan.

**Wetlands**

**Wetland Recommendation:** Merjent **recommends approval** of proposed project located at 27629 Haggerty Road based on the comments provided below.

Upon review of published resources, the Site appears to contain or immediately borders:

- City-regulated wetlands, as identified on the City of Novi interactive map website. Note that both wetland and property limits depicted on the City’s map are considered approximations (**Figure 2**).
- Wetlands that are regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE).
- Wetlands as identified on National Wetland Inventory (NWI) and Michigan Resource Inventory System (MIRIS) maps, as identified on the EGLE Wetlands Viewer interactive map website (maps included in previous reviews). NWI and MIRIS wetlands are identified by the associated governmental bodies' interpretation of topographic data and aerial photographs.
- Hydric (wetland) soil as mapped by the U.S. Department of Agriculture, Natural Resource Conservation Service, as identified on the EGLE Wetlands Viewer interactive map website.

Merjent conducted a site visit on October 18, 2024 and observed conditions on-site consistent with the provided PSP. The PSP identified two emergent/scrub-shrub wetlands (Wetlands A and B) on-site.

**Permits and Regulatory Status**

The City of Novi Code of Ordinances, Chapter 12, Article V defines an essential wetland as meeting one or more of the criteria listed in subsections 12-174(b)(1) through (10). It is Merjent’s opinion that the delineated wetlands on-site provide the functional characteristics of stormwater storage capacity and/or wildlife habitat.

Due to the comments below, the following wetland-related considerations may be required for this project (**Table 1**):

**Table 1. Permitting Considerations**

Item	Required/Not Required
<b>Wetland Permit (specify Non-minor or Minor)</b>	Required, Minor
<b>Wetland Mitigation</b>	Not Required
<b>Environmental Enhancement Plan</b>	Not Required



Item	Required/Not Required
Wetland Buffer Authorization	Required
EGLE Wetland Permit	Required, obtained
Wetland Conservation Easement	Not Required

Wetland Review Comments

1. As stated above, Merjent conducted a site visit on October 18, 2024. Select photos are included in **Attachment A**.
2. Impacts to Wetland A will result from construction of the stormwater basin outfall. A non-residential minor use permit will be required. EGLE has issued Part 303: Wetlands Protection Permit Number WRP042863 v.1 to discharge pre-treated and detained stormwater upland of Wetland A through a 15" diameter outfall structure.
3. In addition to wetlands, the City of Novi regulates wetland and watercourse buffers/setbacks. Article 3.0 (Section 3.6 [M]) of the Zoning Ordinance states: "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". The established wetland and watercourse buffer/setback limit is 25 horizontal feet, regardless of grade change. The location and area of affected wetland buffers/setbacks must be identified on site development plans.
  - a. The 25-foot setback buffer is identified on the PSP.
  - b. As noted in the PSP, there are 5,804 square feet of proposed impacts within the 25-foot natural features setback. Therefore, a wetland buffer authorization is needed for this project.
4. The City of Novi requires the boundary lines of any watercourses or wetlands on the Site to be clearly flagged or staked and such flagging/staking shall remain in place throughout the conduct of permit activity (Section 12-172). The site does not need to be re-flagged during the site plan review process, but prior to construction, the wetlands should be marked or identified for avoidance in the field if the original flagging is removed or has deteriorated.
5. Merjent understands that the western portion of the site will be used as the wetland mitigation site for the proposed JSP23-33 Sheetz. The proposed stormwater basin may interfere with the proposed mitigation site (or vice-versa). To accommodate both the stormwater basin and the proposed mitigation site, changes may be required to the outline of the basin. The applicant is encouraged to work with all parties to ensure both the mitigation site can succeed while meeting the original objectives of this project. It should be noted that in Section 5.5.E (Landscape Standards) of the City of Novi Zoning Ordinance, basins should be designed to have a natural appearance, utilizing natural-looking contours and native plant materials wherever possible. The most recent proposed mitigation area is included as **Attachment B**.

Should you have any questions or concerns with this review, please contact me via email at [jason.demoss@merjent.com](mailto:jason.demoss@merjent.com) or via phone at (619) 944-3835.



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Sincerely,

**Merjent, Inc.**



Jason DeMoss, PWS  
Environmental Consultant



Ken Leister  
Environmental Consultant

Enclosures:

Figure 1 – City of Novi Woodlands Map

Figure 2 – City of Novi Wetlands Map

Attachment A – Site Photographs

Attachment B – Proposed Adjacent Mitigation

CC:

Diana Shanahan, City of Novi, [dshanahan@cityofnovi.org](mailto:dshanahan@cityofnovi.org)

Rick Meader, City of Novi, [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org)

Barbara McBeth, City of Novi, [bmcbeth@cityofnovi.org](mailto:bmcbeth@cityofnovi.org)

Ken Leister, Merjent, [ken.leister@merjent.com](mailto:ken.leister@merjent.com)

Robb Roos, Merjent, [Robb.roos@merjent.com](mailto:Robb.roos@merjent.com)

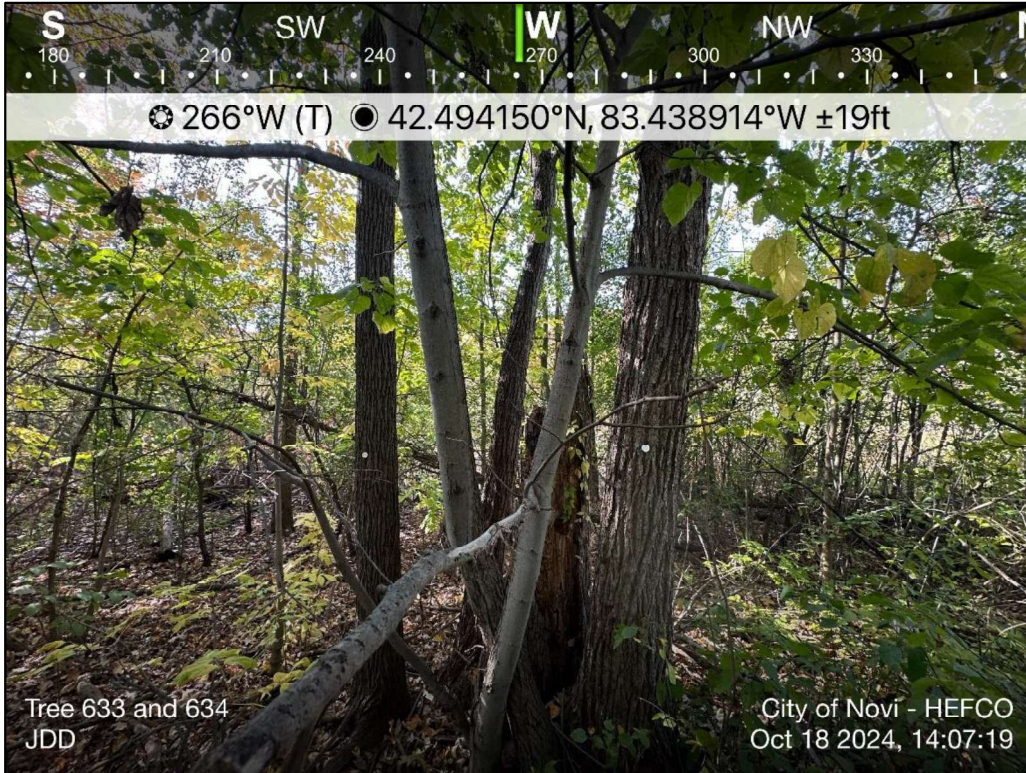


**Figure 1. City of Novi Regulated Woodlands Map**  
 Approximate Site boundary is shown in Red.  
 (Approximate) Regulated Woodland areas are shown in Green.

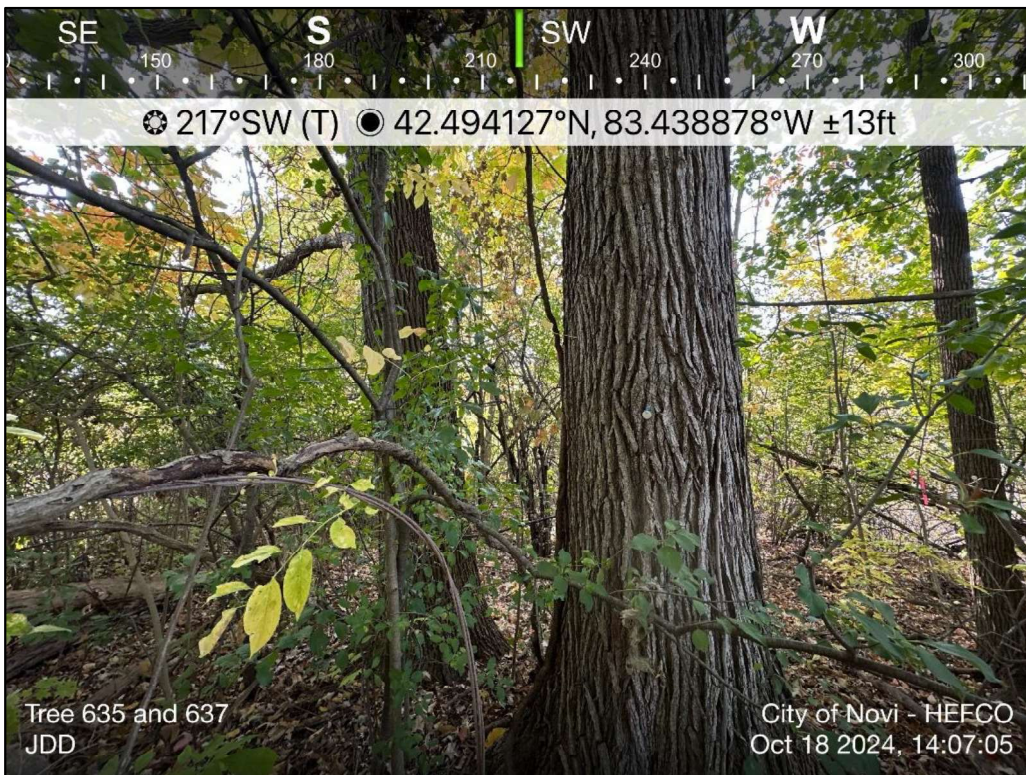


**Figure 2. City of Novi Regulated Wetlands Map**  
 Approximate Site boundary is shown in red.  
 (Approximate) Regulated Wetland areas are shown in blue.

**Attachment A  
Site Photographs**



Overview of the forested area on-site. View of Trees 633 and 634



Overview of Trees 635 and 637



Overview of Tree 636



Overview of typical flagging seen in Wetland A





Overview of typical flagging seen in Wetland B



Overview of typical flagging seen in Wetland B (small pink flag seen in bottom left corner of photo)

**Attachment B**  
**Proposed Adjacent Mitigation**

Executive	NS
Manager	NS
Designer	NS
Quality Control	JR
Surveyor	TS
TIGHT ROUSE	

DATE	ISSUE
02/13/2024	OWNER REVIEW
02/14/2024	SUBMIT FRESH DRAWING
08/07/2024	RESUBMIT PRELIMINARY
07/12/2024	REDESIGN LAYOUT
07/23/2024	WETLAND COMMENTS
07/23/2024	REDESIGN PRELIMINARY
08/23/2024	MITIGATION AREAS

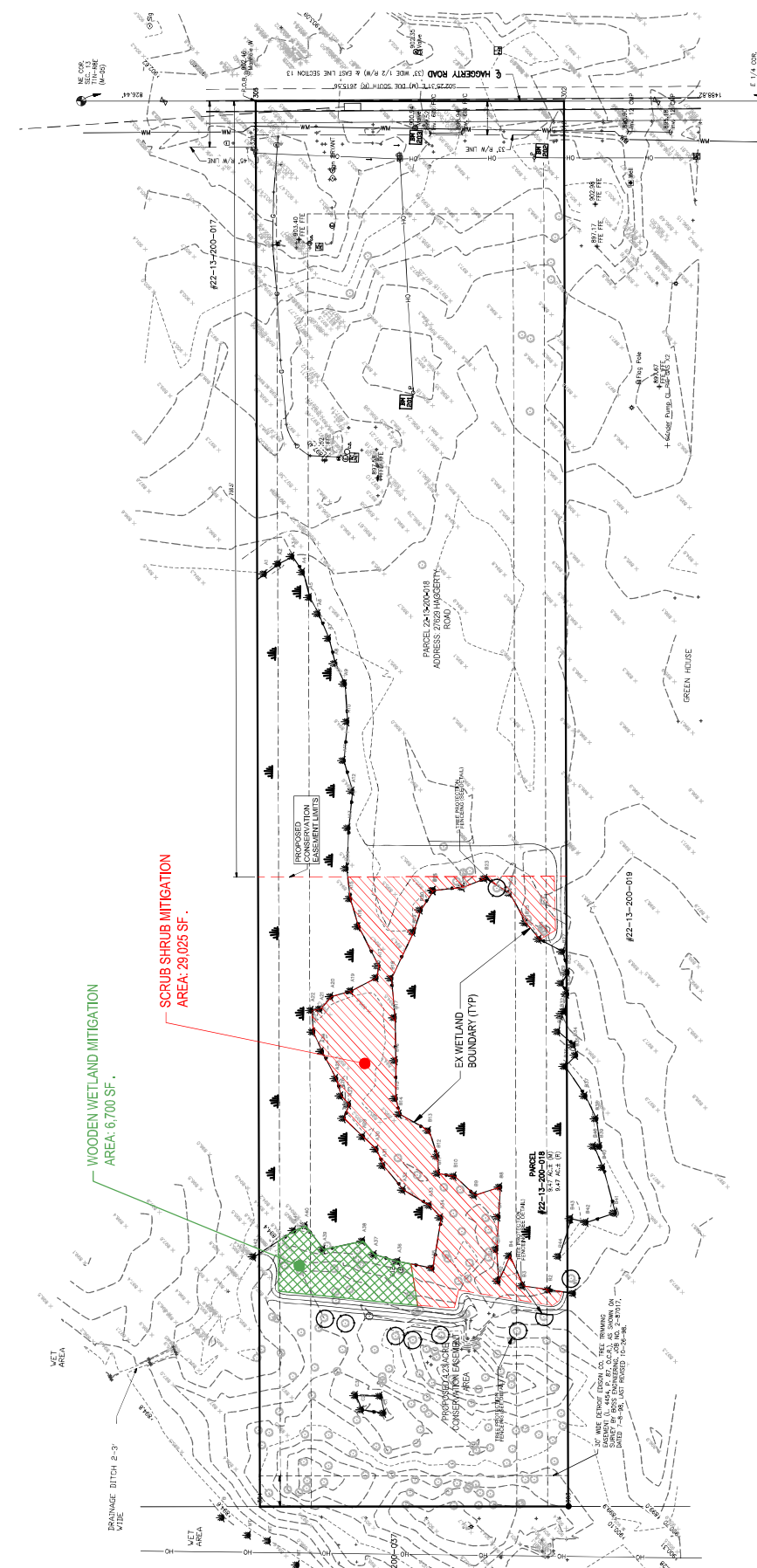


**SKILKEN | GOLD**  
 Real Estate Development  
 4270 MORSE ROAD  
 COLUMBUS, OH 43230

8141823100  
**CONCEPTUAL MITIGATION PLAN**  
 SHEET 23010.M (HAGBERT1)  
 CITY OF NOLI  
 OAKLAND COUNTY  
 MICHIGAN

Date	11.08.2023
Scale	1"=50'
Sheet	C14
Project	230142.00

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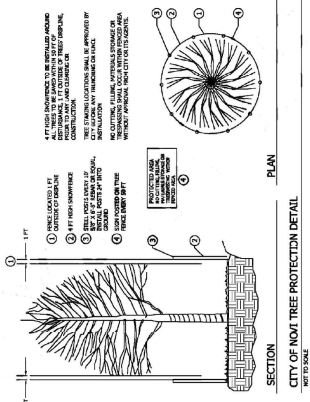


**TREE CALCULATIONS:**  
 MITIGATION SITE TREE REMOVAL COUNT = 88 REQUIRED REPLACEMENT TREES  
 DEVELOPMENT SITE TREE REMOVAL COUNT = 85 REQUIRED REPLACEMENT TREES  
 TOTAL REQUIRED 2" CALIPER REPLACEMENT TREES = 170 TOTAL REPLACEMENT TREES  
 TOTAL NOT PLANTED REQUIRED REPLACEMENTS = 170 TREES PAID INTO THE TREE FUND

Replacements Required	Tree	# Trees Removed	Total
8-11 inches at DBH	1, 2" cal. Tree	12	12
12-20	2, 2" cal Trees	26	52
21-29	3, 2" cal. Trees	5	15
Multi-stem	Sum of Stem DBH/8 (rounded up)	16"	2
30+	4, 2" cal. Trees	1	4
<b>Grand Total =</b>			<b>85</b>

**NOTES:**  
 1. TREE REPLACEMENTS PLACED WITHIN THE PROPOSED MITIGATION AREA SHALL MEET REQUIRED CITY DIVERSITY REQUIREMENTS.  
 2. TREES SHALL BE SUITABLE FOR A WOODED WETLAND ENVIRONMENT.  
 3. SEE SHEET 14 FOR TREE REMOVALS NEEDED FOR MITIGATION AREA CREATION.

- FORRESTED WETLAND (SEE D.M.X. TO BE PLANTED IN MITIGATION AREA)**
- BLUE GRASS
  - COMMON HOP SEDGE
  - FRINGED SEDGE
  - GREEN BURNING BUSH
  - NARROW LEAF SEDGE
  - CLUSTERED SEDGE
  - FOAL MANNA GRASS
  - VIRGINIA WILD RYE
  - GREEN RUSH
  - PRairie DOGGRASS
  - COMMON OAT
  - ANNUAL RYE
  - WATER PLANTAIN
  - GREAT ANGELOA
  - BRISTLY ASTER
  - WOODING BURN MARIWOOD
  - TALL BELL FLOWER
  - WATER HEMLOCK
  - GREEN BULLHEAD
  - MONKEY FLOWER
  - WINDY BELLFLOW
  - WINDY BELLFLOW
  - WINDY BELLFLOW
- SEEDS AND GRASSES**
- AMERICAN WILD RICE
  - CAREX CRINITA
  - CAREX LUPULINA
  - CAREX SARICOSA
  - CAREX SPARGANIACOIDES
  - ELVULVA VIRGINICA
  - GLYCERIA STRIATA
  - SPARGANIACOIDES
  - SPARTINA PECTINATA
  - TEMPORARY GRASSES/SEED
  - AVENA SATIVA
  - LOLIUM MULTIFLORUM
  - FORRESTED WETLAND OWNERS
  - ALBERCA 870
  - ANGELICA ALTIPLORIPUREA
  - ASTER FUNKIUS
  - BIDENS CERNUA
  - CAMPANULA AMERICANA
  - HELENIUM AUTUMNALE
  - LEPILLODIUM
  - MILLYLUS RINGENS
  - VERBENA ALBERTINIA



**TRAFFIC REVIEW**



AECOM  
 39575 Lewis Dr, Ste. 400  
 Novi  
 MI, 48377  
 USA  
 aecom.com

**Project name:**  
 JSP24-22 – 27629 Haggerty Road Preliminary  
 Plan Traffic Review

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

**From:**  
 AECOM

**Date:**  
 October 30, 2024

**CC:**  
 Lindsay Bell, Humna Anjum, Diana Shanahan, Adam  
 Yako, Dan Commer

# Memo

**Subject:** JSP24-22 – 27629 Haggerty Road - HEFCO Preliminary Plan Traffic Review

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

## GENERAL COMMENTS

1. The applicant, HEFCO Haggerty, LLC, is proposing a 37,725 SF building consisting of 18,375 SF of warehouse and 19,350 SF of office.
2. The development is located on the west side of Haggerty Road, south of Twelve Mile Road. Haggerty Road is under the jurisdiction of the Road Commission for Oakland County.
3. The site is zoned OST (Office Service Technology).
4. There are no traffic related deviations required.

## TRAFFIC IMPACTS

1. AECOM performed an initial trip generation based on the ITE Trip Generation Manual, 11<sup>th</sup> Edition, as follows.

ITE Code: 150 – Warehousing / 710 – General Office Building  
 Development-specific Quantity: 18,375 SF Warehouse and 19,350 SF Office  
 Zoning Change: N/A

Trip Generation Summary	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold	Above Threshold?
<b>AM Peak-Hour Trips</b>	26 + 41 = 67	20 + 36 = 56	100	No
<b>PM Peak-Hour Trips</b>	29 + 42 = 71	21 + 35 = 56	100	No
<b>Daily (One-Directional) Trips</b>	67 + 278 = 345	-	750	No

2. The City of Novi generally requires a traffic impact study/statement if the number of trips generated by the proposed development exceeds the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour or if the project meets other specified criteria.

Trip Impact Study Recommendation	
Type of Study:	Justification
<b>None</b>	Estimated trips generated are below the City's threshold.

## TRAFFIC REVIEW

The following table identifies the aspects of the plan that were reviewed. Items marked O are listed in the City’s Code of Ordinances. Items marked with ZO are listed in the City’s Zoning Ordinance. Items marked with ADA are listed in the Americans with Disabilities Act. Items marked with MMUTCD are listed in the Michigan Manual on Uniform Traffic Control Devices.

The values in the ‘Compliance’ column read as ‘met’ for plan provision meeting the standard it refers to, ‘not met’ stands for provision not meeting the standard and ‘inconclusive’ indicates applicant to provide data or information for review and ‘NA’ stands for not applicable for subject Project. The ‘remarks’ column covers any comments reviewer has and/or ‘requested/required variance’ and ‘potential variance’. A potential variance indicates a variance that will be required if modifications are not made or further information provided to show compliance with the standards and ordinances. The applicant should put effort into complying with the standards; the variances should be the last resort after all avenues for complying have been exhausted. Indication of a potential variance does not imply support unless explicitly stated.

EXTERNAL SITE ACCESS AND OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
1	Driveway Radii   O <a href="#">Figure IX.3</a>	25’, 20’ and 45’	Met	45’ over range but required per truck circulation plan for one-way entrance.
2	Driveway Width   O <a href="#">Figure IX.3</a>	39’ and 38’	Met	38’ over range but required per truck circulation plan for one-way entrance.
3	Driveway Taper   O <a href="#">Figure IX.11</a>			
3a	Taper length	Not dimensioned	<b>Not Met</b>	<b>Add taper length dimension.</b>
3b	Tangent	Not dimensioned	<b>Not Met</b>	<b>Add tangent length dimension.</b>
4	Emergency Access   O <a href="#">11-194.a.19</a>	2 Access Points	Met	
5	Driveway sight distance   O <a href="#">Figure VIII-E</a>	530’	Met	
6	Driveway spacing			
6a	Same-side   O <a href="#">11.216.d.1.d</a>	119’ from one-way entrance to south driveway	Met	For 45 mph, 230’ same side driveway spacing is required but the applicant indicated that the driveway locations have been approved by RCOC.
6b	Opposite side   O <a href="#">11.216.d.1.e</a>	Located across from Country Club Drive	Met	
7	External coordination (Road agency)	Note provided to obtain permit	Met	
8	External Sidewalk   <a href="#">Master Plan &amp; EDM</a>	6’ proposed	Met	
9	Sidewalk Ramps   <a href="#">EDM 7.4 &amp; R-28-K</a>	Indicated	Met	
10	Any Other Comments:			

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
11	Loading zone   <a href="#">ZO 5.4</a>	15' x 100' loading dock in rear of building	Met	
12	Trash receptacle   <a href="#">ZO 5.4.4</a>	Proposed in rear of site	Met	
13	Emergency Vehicle Access	Circulation plan provided	Met	
14	Maneuvering Lane   <a href="#">ZO 5.3.2</a>	Varies, minimum 24'	Met	
15	End islands   <a href="#">ZO 5.3.12</a>			
15a	Adjacent to a travel way	Dimensioned	<b>Partially Met</b>	<b>Add dimension for end island 3' shorter than adjacent parking space.</b>
15b	Internal to parking bays	Dimensioned	Met	
16	Parking spaces   <a href="#">ZO 5.2.12</a>	125 proposed		See Planning review letter.
17	Adjacent parking spaces   <a href="#">ZO 5.5.3.C.ii.p</a>	≤15 spaces without an island	Met	
18	Parking space length   <a href="#">ZO 5.3.2</a>	17' and 19'	Met	
19	Parking space Width   <a href="#">ZO 5.3.2</a>	9'	Met	
20	Parking space front curb height   <a href="#">ZO 5.3.2</a>	4" in front of 17' spaces, all other curb 6"	<b>Partially Met</b>	<b>Provide detail indicating sidewalk in front of 17' parking spaces are to be 4" with a 2' overhang.</b>
21	Accessible parking – number   <a href="#">ADA</a>	6 proposed, 5 required	Met	
22	Accessible parking – size   <a href="#">ADA</a>	17' x 8' with 5' or 8' aisle	Met	
23	Number of Van-accessible space   <a href="#">ADA</a>	1 proposed, 1 required	Met	
24	Bicycle parking			
24a	Requirement   <a href="#">ZO 5.16.1</a>	6 proposed	Met	
24b	Location   <a href="#">ZO 5.16.1</a>	Indicated	Met	
24c	Clear path from Street   <a href="#">ZO 5.16.1</a>	5' proposed	<b>Not Met</b>	<b>6' clear path required, only 5' proposed on the 7' sidewalk due to the 2' overhang.</b>
24d	Height of rack   <a href="#">ZO 5.16.5.B</a>	3'	Met	
24e	Other (Covered / Layout)   <a href="#">ZO 5.16.1, Text Amendment 18.301</a>	Provided	Met	
25	Sidewalk – min 5' wide   <a href="#">Master Plan</a>	6' and 7'	Met	
26	Sidewalk ramps   <a href="#">EDM 7.4 &amp; R-28-K</a>	Indicated	Met	
27	Sidewalk – distance back of curb   <a href="#">EDM 7.4</a>	N/A	-	Sidewalk only proposed along building parking spaces.
28	Cul-De-Sac   O <a href="#">Figure VIII-F</a>	N/A	-	
29	EyeBrow   O <a href="#">Figure VIII-G</a>	N/A	-	
30	Turnaround   <a href="#">ZO 5.10</a>	N/A	-	
31	Any Other Comments:			

SIGNING AND STRIPING				
No.	Item	Proposed	Compliance	Remarks
32	Signing: Sizes   <a href="#">MMUTCD</a>	Indicated	Met	
33	Signing table: quantities and sizes	Partially indicated on site plan	<b>Partially Met</b>	<b>Add sign table and driveway proposed sign locations to site plan. Add a R1-1 stop sign at exit driveway. Could add "Right Turn Only" signs on Haggerty Road.</b>
34	Signs 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post   <a href="#">MMUTCD</a>	Indicated	Met	
35	Signs greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post   <a href="#">MMUTCD</a>	Indicated	Met	
36	Sign bottom height of 7' from final grade   <a href="#">MMUTCD</a>	Indicated	Met	
37	Signing shall be placed 2' from the face of the curb or edge of the nearest sidewalk to the near edge of the sign   <a href="#">MMUTCD</a>	Indicated	Met	Indicated
38	FHWA Standard Alphabet series used for all sign language   <a href="#">MMUTCD</a>	Indicated	Met	Indicated
39	High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity   <a href="#">MMUTCD</a>	Indicated	Met	Indicated
40	Parking space striping notes	Partially indicated	<b>Partially Met</b>	<b>Provide pavement marking notes/details for accessible parking spaces aisles, as well as arrow and only markings.</b>
41	The international symbol for accessibility pavement markings   ADA	Provided	Met	
42	Crosswalk pavement marking detail	N/A	-	<b>No crosswalk markings proposed on site plan but noted on item 8 on sheet 15 in "Signage Notes".</b>
43	Any Other Comments:			

Note: Hyperlinks to the standards and Ordinances are for reference purposes only, the applicant and City of Novi to ensure referring to the latest standards and Ordinances in its entirety.

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

Sincerely,

**AECOM**



Paula K. Johnson, PE  
Senior Transportation Engineer



Saumil Shah, PMP  
Project Manager



## FAÇADE REVIEW



October 24, 2024

**Façade Review Status:**  
**Approved, Full Compliance**

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

Attn: Ms. Barb McBeth – Director of Community Development

Re: **FACADE ORDINANCE REVIEW**  
**27629 Haggerty - HEFCO, JSP24-22**  
 Façade Region: 1, Zoning District: B-3


Dear Ms. McBeth:

The following Façade Review is based on the drawings prepared by O/X Studio, dated 10/1/24. The percentages of materials for each façade are shown on the table below. The maximum and minimum percentages required by the Façade Ordinance are shown in the right-hand column. As shown below all materials are in full compliance with the Façade Ordinance.

	East (Front)	North	South	West	Ordinance Maximum (Minimum)
Brick (Existing, proposed to be painted)	38%	74%	58%	52%	30% Minimum
Flat Metal Panels	33%	18%	36%	40%	50%
Spandrel Glass	22%	2%	2%	2%	50%
RTU Screens	7%	6%	4%	6%	50%

**Notes to the Applicant:**

1. Inspections – The Façade Ordinance requires inspection(s) for all projects. The applicant should request inspection of the brick and awning color prior to installation. It is the applicant’s responsibility to request the inspection at the appropriate time (before installation). Inspections may be requested using the Novi Building Department’s Online Inspection Portal with the following link. Please click on “Click here to Request an Inspection” under “Contractors”, then click “Façade”. <http://www.cityofnovi.org/Services/CommDev/OnlineInspectionPortal.asp>.

Sincerely,  
  
 Douglas R. Necci, AIA

## FIRE REVIEW



October 21, 2024

TO: Barbara McBeth - City Planner  
Lindsay Bell - Plan Review Center  
Dan Commer – Plan Review Center  
Diana Shanahan – Plan Review Center

**CITY COUNCIL**

**Mayor**  
Justin Fischer

**Mayor Pro Tem**  
Laura Marie Casey

Dave Staudt

Brian Smith

Ericka Thomas

Matt Heintz

Priya Gurumurthy

**City Manager**  
Victor Cardenas

**Director of Public Safety**  
**Chief of Police**  
Erick W. Zinser

**Fire Chief**  
John B. Martin

**Assistant Chief of Police**  
Scott R. Baetens

**Assistant Fire Chief**  
Todd Seog

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

cityofnovi.org

RE: Hefco Haggerty 27629 Haggerty Rd

**PSP #24-0049**  
PreApp24-09

**Project Description:**

Build a 2-story 37,725 Sq. Ft. building off Haggerty Rd and Twelve Mile.

**Comments:**

- **All** fire hydrants **MUST** be installed and operational prior to any combustible material is brought on site. **IFC 2015 3312.1**
- For new buildings and existing buildings, you **MUST** comply with the International Fire Code Section 510 for Emergency Radio Coverage. This shall be completed by the time the final inspection of the fire alarm and fire suppression permits.
- When the property has limited frontage along external arterials, or topographic conditions on the external arterials reduce sight line distances so that a secondary access point cannot be established which will provide safe ingress and egress, the City shall require access roads for emergency vehicles, where feasible. A secondary access driveway shall be a minimum of twenty (20 feet in width and paved to provide all-weather access and shall be designed to support a vehicle of thirty-five (35) tons. Minimum easement width for secondary access driveways shall be twenty-five (25) feet. A permanent "break-away" gate shall be provided at the secondary access driveway's intersection with the public roadway in accordance with Figure VIII-K of the Design and Construction Standards. To discourage non-emergency vehicles, emergency access roads shall be designated by signage as for emergency access only, shall be separated from the other roadways by mountable curbs, and shall utilize entrance radii designed to permit emergency vehicles while discouraging non-emergency traffic. **(D.C.S. Sec 11-194 (a)(19))**
- Fire apparatus access drives to and from buildings through parking lots shall have a minimum fifty (50) feet outside turning radius and designed to support a minimum of thirty-five (35) tons. **(D.C.S. Sec 11-239(b)(5) (Note on plans the 35 ton weigh capacity).**

- The ability to serve at least two thousand (2,000) gallons per minute in single-family detached residential; three thousand (3,000) gallons per school areas; and at least four thousand (4,000) gallons per minute in office, industrial and shopping centers is essential.

**(D.C.S. Sec.11-68(a))**

- Hydrants shall be spaced approximately three hundred (300) feet apart online in commercial, industrial, and multiple-residential areas. In cases where the buildings within developments are fully fire suppressed, hydrants shall be no more than five hundred (500) feet apart. The spacing of hydrants around commercial and/or industrial developments shall be considered as individual cases where special circumstances exist upon consultation with the fire chief. **(D.C.S. Sec. 11-68 (f)(1)c) (Note on utility plan the nearest fire hydrant's location on Haggerty Rd) (Fire hydrant spacing is approx. 300' apart. Need to add at least 2 fire hydrants behind building).**
- Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved by the code official. **(International Fire Code 912.2.1)**
- Proximity to hydrant: In any building or structure required to be equipped with a fire department connection, the connection shall be located within one hundred (100) feet of a fire hydrant. **(Fire Prevention Ord. Sec. 15-17 912.2.3)**
- Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other object for a minimum of 3 feet (914 mm). **(International Fire Code 912.4)**
- A hazardous chemical survey is required to be submitted to the Planning & Community Development Department for distribution to the Fire Department at the time any Preliminary Site Plan is submitted for review and approval. Definitions of chemical types can be obtained from the Fire Department at (248) 735-5674.

**Recommendation:**

Approved with Conditions

Sincerely,



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

cc: file

**RESPONSE LETTER**



3121 E. Grand River Howell, MI 48843  
517.546.4836 fax 517.548.1670  
www.bosseng.com

March 4<sup>th</sup>, 2025

City of Novi  
45175 Ten Mile Road  
Novi, MI 48375

Re: 27629 Haggarty Road Preliminary Site Plan Review

To Whom it May Concern,

We have received the review letters from Planning Review dated February 6<sup>th</sup>, 2025, Engineering Review dated October 31<sup>st</sup>, 2024, Landscape Review dated February 5<sup>th</sup>, 2025, Merjent dated October 29<sup>th</sup>, 2024, Aecom dated October 30<sup>th</sup>, 2024 and Fire Department dated October 21<sup>st</sup>, 2024, for the 27629 Haggarty Road development in City of Novi, Michigan and offer the following comments:

## Ordinance Requirements

1. Zoning and Use Requirements- Acknowledged.
2. Site Plans- Acknowledged. Planning Commission approval is being sought.
3. Woodland Replacement- Replacement trees will be included in a conservation easement as requested. The conservation easement will be depicted in the Final Site plan and necessary documentation provided to the City at that time.
4. Parking Lot Landscaping – Acknowledged. No additional plan changes needed.
5. Storm Basin Landscape- Acknowledged. Coordination has taken place to ensure the grading depicted is cohesive between the basin grading and the wetland mitigation grading.
6. Wetland Mitigation Plans – A separate plan sheet will be included in the Final Plan set as requested.
7. Loading and Unloading Screening-Acknowledged. In addition, additional quantity and staggering has been added and shown on the landscape plan to improve opacity and a note has been added stating that the hedge will be maintained at a height of 'at least 6-feet' and that this requirement will be included in the master deed for the property.
8. Building Height – Acknowledged.
9. Building Setbacks- Acknowledged.
10. Wetland/ Watercourse Setback- Acknowledged.
11. Required Parking Calculations- Acknowledged.
12. End Islands- Acknowledged.
13. Minimum number of Bicycle Parking- Acknowledged.
14. Dumpster Enclosure- Acknowledged.
15. Non-Motorized Facilities- Acknowledged.
16. Development/Business Sign & Street Addressing- Acknowledged.
17. Economic Impact- Acknowledged.
18. Lighting Plan- Acknowledged.

# Planning Review Chart

## Zoning and Use Requirements:

**Master Plan:** Acknowledged.

**Area Study:** Acknowledged.

**Zoning:** Acknowledged.

**Uses Permitted:** Acknowledged. This project will be required to go through the Planning Commission.

## Height, Bulk, Density and Area Limitations:

**Frontage on a Public Street:** Acknowledged.

**Access to Major Thoroughfare:** Acknowledged.

**Minimum Zoning Lot Size:** Not Applicable.

**Minimum Zoning Lot Size:** Not Applicable.

**Maximum % of Lot Area Covered:** Acknowledged.

**Building Height:** Acknowledged.

## Building Setbacks:

**Front east @ Haggerty Road:** Acknowledged.

**Rear (west):** Acknowledged.

**Side (north):** Acknowledged.

**Side (south):** Acknowledged.

## Parking Setback:

**Front east @ Haggerty Road:** Acknowledged.

**Rear (west):** Acknowledged.

**Side (north):** Acknowledged.

**Side (south):** Acknowledged.

## Note To District Standards:

**Exterior Side Yard Abutting a Street:** Not Applicable. No plan changes made.

**Off-Street Parking in Front Yard:** Not applicable. No plan changes made.

**Distance between Buildings:** Not Applicable. No plan changes made.

**Wetland/Watercourse Setback:** Acknowledged. Woodland /Wetland indicated preliminary approval.

Any remaining comments on the Woodland/Wetland review to be provided for Final Site Plan.

**Parking Setback screening:** Acknowledged. See landscape plan and landscape review comments.

**Modification of parking setback requirements:** Acknowledged. No plan changes made.

## OST District Required Conditions:

**Additional Height:** Not applicable.

**Loading and Unloading Screen:** Columnar evergreen shrubs are shown staggered on the landscape plan to maximize screening opacity while the plants mature. See landscape plan showing additional plant quantity and further staggering.

**Required Parking Calculation:** Acknowledged.

**Additional conditions for permitted uses in 3.1.23.B.ii-v:** Not applicable.

**Outdoor Storage:** No outdoor storage is proposed.

## Parking, Loading and Dumpster Requirements:

**Number of Parking Spaces:** Acknowledged.

**Parking Space Dimensions and Maneuvering Lanes:** Acknowledged.



**Parking Stall located adjacent to a parking lot entrance:** Not applicable.  
**End Islands:** Acknowledged.  
**Contiguous space limit:** Acknowledged.  
**Barrier Free Spaces:** Acknowledged.  
**Barrier Free Space Dimensions:** Acknowledged.  
**Barrier Free Signs:** Acknowledged.  
**Minimum Number of Bicycle Parking:** Acknowledged.  
**Bicycle Parking General Requirements:** Acknowledged.  
**Bicycle Parking Lot Layout:** Acknowledged.  
**Loading Spaces:** Acknowledged.  
**Dumpster:** Acknowledged.  
**Dumpster Enclosure:** Acknowledged.  
**Exterior Lighting:** Acknowledged.  
**Roof top equipment and wall mounted utility equipment:** Acknowledged.  
**Roof top appurtenances screening:** Acknowledged.

#### **Non-Motorized Facilities:**

**Article XI Off-Road Non-Motorized Facilities:** Acknowledged.  
**Pedestrian Connectivity:** Acknowledged.

#### **Building Code and Other Requirements:**

**Building Code:** Acknowledged.  
**Design and Construction Standards Manual:** Acknowledged.  
**General layout and dimension of proposed physical improvements:** Acknowledged.  
**Economic Impact:** The estimated project cost is \$3 million. The end user is not known at this time so economic impact as it pertains to number of jobs created is unknown at this time.  
**Development/Business Sign & Street addressing:** Acknowledged. An address will need to be applied for prior to building permitting. A sign permit will be applied for at the appropriate time.  
**Project and Street Naming:** Not Applicable.  
**Property Split:** Not Applicable.

#### **Lighting and Photometric Plan:**

**Intent:** Acknowledged.  
**Lighting Plan:** Acknowledged.  
**Building Lighting:** Acknowledged.  
**Lighting Plan Elements:** Acknowledged.  
**Maximum Height:** Acknowledged.  
**Required Conditions:** Acknowledged.  
**Indoor Lighting:** Acknowledged.  
**Security Lighting:** Acknowledged.  
**Color Spectrum Management:** Acknowledged.  
**Parking Lot Lighting:** Acknowledged.  
**Min Illumination:** Acknowledged.  
**Average Light Level:** Acknowledged.  
**Max Illumination adjacent to Non-Residential:** Acknowledged.  
**Cut off Angles:** Not applicable.

# Engineering Review

## General:

1. Two City Benchmarks have been added to the plan set.
2. The note for all work to conform to the current city of Novi standards and specifications has been added to the General Notes & Legend (Sheet 2) under the general notes tab number 36.
3. Acknowledged.
4. Acknowledged. Additional geotechnical information will be provided during final site plan.
5. RCOC has provided preliminary approval of the shown geometrics. RCOC Right Of Way permitting will take place during the final site plan phase.
6. The additional ROW dedicated to the RCOC has been labeled as proposed on the site plan sheet 5.
7. Acknowledged. This will be added to the plan set for Final Site Plan review.
8. Acknowledged.
9. Acknowledged. This will be added to the plan set for Final Site Plan review.
10. The note for the compacted sand backfill on all utilities within the influence of paved areas has been added to the General Notes & Legend (Sheet 2) under the General Utility Notes tab. The compacted sand backfill is also called illustrated and labels in the sanitary sewer extension plan and profile. When construction plans are submitted, the compacted sand backfill illustration and note will be shown on all profiles.
11. Acknowledged. This will be added to the plan set for Final Site Plan review.
12. Acknowledged. This will be added to the plan set for Final Site Plan review.
13. Acknowledged. This will be added to the plan set for Final Site Plan review.
14. A note has been provided on General Notes & Legend (Sheet 2) under General Grading & SESC Notes number 12.
15. The utilities were added to the landscape plan. The proposed trees will maintain all the required separation that is required.
16. All location for the light poles has been shown on the Utility Plan (Sheet 9). A light poles detail has been placed on the construction details page sheet 15 showing the height and foundation depth of the light poles. There will be no light poles proposed within the utility easements.
17. Acknowledged. This will be added to the plan set for Final Site Plan review.

## Watermain:

18. The relocated existing hydrant assembly was moved closer to the existing curb to allow a larger separation from the existing gas line. The relocated hydrant is 3' off the back of curb to match the separation of the other existing hydrants along Haggerty Road.
19. All hydrants proposed on site (other than the relocated existing hydrant) are placed at least 7' off back of curb.
20. The required tapping sleeve, valve and well have been included for both watermain connection.
21. Acknowledged.
22. Acknowledged. This will be added to the plan set for Final Site Plan review.
23. Acknowledged. This will be added to the plan set for Final Site Plan review.
24. Acknowledged. This will be added to the plan set for Final Site Plan review.
25. Acknowledged. This will be added to the plan set for Final Site Plan review.
26. Acknowledged. This will be added to the plan set for Final Site Plan review.
27. Acknowledged. This will be added to the plan set for Final Site Plan review.
28. Acknowledged. This will be added to the plan set for Final Site Plan review.

## Irrigation:

29. Acknowledged. This will be added to the plan set for Final Site Plan review.

## Sanitary Sewer:

30. The 20-foot-wide sanitary sewer easement callouts have been rewritten to be consistent on the Utility Plan (Sheet 9)

31. A monitor manhole is shown to the north entrance of the site on the Utility Plan and Sanitary Sewer Extension Plan (Sheet 9 & 14). A 20' wide access easement was added around the monitor manhole location and called out on the Utility Plan (Sheet 9).
32. Acknowledged. This will be added to the plan set for Final Site Plan review.
33. A note has been added to the utility plan and sanitary plan stating that the sanitary leads will be buried at least 5 feet deep under the influence of pavement.
34. A Note for the testing bulkhead immediately upstream of the sanitary connection point is shown on the plan and profile on the Sanitary Sewer Extension Plan & Profiles Sheet (Sheet 14).
35. The monitoring manhole was added to the sanitary profile on sheet 14 along with its rim and inverts.
36. All pipe intersecting with the sanitary manholes are shown on the sanitary profiles sheet 14.
37. Acknowledged. This will be added to the plan set for Final Site Plan review.

#### **Storm Sewer:**

38. Acknowledged. This will be added to the plan set for Final Site Plan review.
39. The 0.1 foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater was required and designed on CB 06 and CB 05.
40. Acknowledged. This will be added to the plan set for Final Site Plan review.
41. There are no storm manholes with differences in invert elevations exceeding two feet.
42. All storm pipes that are receiving surface runoff are 12-inch in diameter.
43. Acknowledged. This will be added to the plan set for Final Site Plan review.
44. Acknowledged. This will be added to the plan set for Final Site Plan review.
45. Acknowledged. This will be added to the plan set for Final Site Plan review.
46. Acknowledged. This will be added to the plan set for Final Site Plan review.
47. Acknowledged. This will be added to the plan set for Final Site Plan review.
48. Acknowledged. This will be added to the plan set for Final Site Plan review.
49. Acknowledged. This will be added to the plan set for Final Site Plan review.

#### **Storm Water Management Plan:**

50. Acknowledged. This will be added to the plan set for Final Site Plan review.
51. Acknowledged. This will be added to the plan set for Final Site Plan review.
52. Acknowledged. This will be added to the plan set for Final Site Plan review.
53. An adequate maintenance access route to the basin outlet structure and all the pretreatment structures are provided. These access routes do not conflict with the proposed landscaping.
54. A 5' wide stone bridge/access route has been added to the basin OCS structure along with detail and note on the Storm Water Management Plan (Sheet 12).
55. Acknowledged. This will be added to the plan set for Final Site Plan review.
56. Acknowledged. This will be added to the plan set for Final Site Plan review.
57. Acknowledged. This will be added to the plan set for Final Site Plan review.
58. Acknowledged. This will be added to the plan set for Final Site Plan review.
59. A 4' wide safety shelf 1' under the permanent water surface elevation in the basin has been added and noted on the details and plan view on the Storm Water Management Plan (Sheet 12)
60. The landscape buffer between the impervious area and basin is provided and a note was added to the Landscape Plan stating this (Sheet 11).
61. Acknowledged. This will be added to the plan set for Final Site Plan review.
62. The Drainage Area Labels in plan view have been updated to be consistent with the Drainage Area Table on the Grading & Drainage Plan (Sheet 7).

#### **Paving & Grading:**

63. Acknowledged. This will be added to the plan set for Final Site Plan review.
64. Acknowledged. This will be added to the plan set for Final Site Plan review.
65. Acknowledged. This will be added to the plan set for Final Site Plan review.
66. It is acknowledged that detectable warning plates are required at all barrier free ramps, hazardous vehicular crossings and other areas where the sidewalk is flush with the adjacent drive or parking pavements.

67. All detectable warning plate locations are labeled on the Site Plan (Sheet 5).
68. The chosen product for the detectable warning plate is shown in the detail on the Site Plan (Sheet5).
69. Acknowledged. This will be added to the plan set for Final Site Plan review.
70. The existing and proposed contours are displayed on the Grading Plan (Sheet 7).
71. There is at least a 3' buffer distance between the sidewalk and any fixed object on the site.
72. All locations on site including the grading to existing grade will not exceed the 1V:4H grading limit.
73. The grade of the drive approach does not exceed 2 percent within the first 25 feet of the intersection.
74. Acknowledged. This will be added to the plan set for Final Site Plan review.
75. Acknowledged. This will be added to the plan set for Final Site Plan review.
76. Acknowledged. This will be added to the plan set for Final Site Plan review.
77. Acknowledged. This will be added to the plan set for Final Site Plan review.
78. Acknowledged. This will be added to the plan set for Final Site Plan review.
79. Acknowledged. This will be added to the plan set for Final Site Plan review.
80. All dimensions of parking stalls abutting a curb or sidewalk are to the face of the curb and the other dimensions are to the back of curb.
81. Acknowledged. This will be added to the plan set for Final Site Plan review.
82. There are no proposed angled parking stalls on the project.
83. The ramp shown has been relocated to not be in the middle of the ADA accessible walkway.

**Soil Erosion and Sedimentation Control:**

84. Acknowledged.

**Off-Site Easements:**

85. Acknowledged. This will be added to the plan set for Final Site Plan review. Draft sanitary easements have been provided to the Community Development for review.
86. Acknowledged. This will be forwarded to the Engineering Division prior to the Final Site plan review.

**Must Be Submitted with Final Site Plan:**

87. Acknowledged. This will be provided at the time of Final Site Plan.
88. Acknowledged. This will be provided at the time of Final Site Plan.

**Must Be Submitted with Stamping Set:**

89. Acknowledged. This will be provided at the time of Final Site Plan.
90. Acknowledged. This will be provided at the time of Final Site Plan.
91. Acknowledged. This will be provided at the time of Final Site Plan.
92. Acknowledged. This will be provided at the time of Final Site Plan.
93. Acknowledged. This will be provided at the time of Final Site Plan.

**Must be Addressed Prior to Construction:**

94. Acknowledged.
95. Acknowledged.
96. Acknowledged.
97. Acknowledged.
98. Acknowledged.
99. Acknowledged.
100. Acknowledged.
101. Acknowledged.
102. Acknowledged.
103. Acknowledged.
104. Acknowledged.
105. Acknowledged.

- 106. Acknowledged.
- 107. Acknowledged.
- 108. Acknowledged.
- 109. Acknowledged.
- 110. Acknowledged.

## Landscape Review

### **Landscape Plan Requirements (Landscape Design Manual and Zoning Ordinance)**

**Landscape Plan:** Acknowledged. No plan changes needed.

**Project Information:** Acknowledged. No plan changes needed.

**Owner/Developer Contact Information:** Acknowledged. No plan changes needed.

**Landscape Architect contact information:** Acknowledged. No plan changes needed.

**Sealed by LA:** Acknowledged. No plan changes needed.

**Miss Dig Note:** Acknowledged. No plan changes needed.

**Zoning:** Acknowledged. No plan changes needed.

**Survey information:** Acknowledged. No plan changes needed.

**Existing Plant material Existing Woodlands or wetlands:** Acknowledged. Merjent indicated Preliminary approval. Any remaining Merjent comments are to be addressed during the Final Site Plan package.

**Soil types:** Acknowledged. No plan changes needed.

**Existing and proposed Improvements:** Acknowledged. No plan changes needed.

**Existing and proposed utilities:** Utility lines restored to the drawing sheet.

**Proposed grading, 2' contour minimum:** Acknowledged. No plan changes needed.

**Snow deposit:** Acknowledged. No plan changes needed.

### **Parking Area Landscape Requirements (Zoning Sec 5.5.3.C and LDM 5)**

**General Requirements:** Acknowledged. No plan changes needed.

**Name, type and number of ground cover:** Acknowledged. No plan changes needed.

### **General (Zoning Sec 5.5.3.C)**

**Parking lot Islands:** One Oak will be removed from the landscape island.

**Curbs and Parking Stall reduction:** Acknowledged.

**Contiguous space limit:** Acknowledged.

**Plantings around Fire Hydrant:** Note regarding distance from utility lines and structures added to the Supplemental Landscape Notes on Sheet 11.

**Landscaped Area:** Acknowledged. No plan changes needed.

**Clear Zones:** Acknowledged. No plan changes needed.

### **Category 1: FOR OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non residential land use in any R district**

**Vehicular use area up to 50,000 sft:** Acknowledged. No plan changes needed.

**Vehicular Use area over 50,000 sft:** Acknowledged. No plan changes needed.

### **Category 2: for I-1 and I-2**

**Vehicular use area up to 50,000 sft:** Not applicable.

**Vehicular Use area over 50,000 sft:** Not applicable.

### **All Categories**

**Total Square footage of landscape islands:** Acknowledged. No plan changes needed.

**Number of canopy trees required:** One Oak removed from island.

**Parking Lot Perimeter Trees:** Four replacement trees shown on the east side of the pond have been relocated to the north of the accessway and shown within a conservation easement.

**Accessway Perimeter** The sanitary lead has been adjusted to allow for all the Oaks and Sycamores to remain on the north side of the north access drive and be spaced 30-ft on-center.

**Parking land banked:** Not applicable.

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

#### **Berms**

**Berms:** There are no proposed berms within this project.

### **Residential Adjacent to Non-Residential**

**Berm Requirements:** Acknowledged. No plan changes needed.

**Planting Requirements:** Not Applicable.

### **Adjacent to Public Right-of-Way**

**Berm Requirements:** Acknowledged. No plan changes needed.

### **Cross-Section of Berms**

**Slope Height and Width:** Acknowledged. No plan changes needed.

**Type of Ground Cover:** Acknowledged. No plan changes needed.

**Setbacks from Utilities:** Acknowledged. No plan changes needed.

### **Walls**

**Material, height and type of construction footing:** Not applicable.

**Walls greater than 4' should be designed and sealed by an engineer:** Not Applicable.

### **ROW Landscape Screening Requirements**

**Greenbelt width:** Acknowledged. No plan changes needed.

**Minimum berm crest width:** Acknowledged. No plan changes needed.

**Minimum berm height:** Not applicable

**3' Wall:** Not applicable. No walls proposed.

**Canopy Deciduous or large evergreen trees:** Firestarter Black Gum removed from the plant list and substituted with the straight species.

**Sub-Canopy deciduous trees:** Acknowledged. No plan changes needed.

**Canopy deciduous trees in area between sidewalk and curb:** Acknowledged. No RCOC determination has been made at the time of this submittal. The RCOC Right of Way permit will be sought prior to the time of Final site plan, and a copy will be provided to the City.

### **Non-Residential Projects**

**Screening of outdoor storage, loading/unloading:** A note regarding maintaining the hedge at least 6-ft and including in the property master deed has been added to the Supplemental Landscape Notes (Note 10) on Sheet 11 and cross-referenced on the landscape plan itself.

**Transformers/Utility Boxes:** Ten shrubs have been added to the plant list and identified as 'transformer screening shrubs.' They will be included in the revised cost opinion at the time of Final Site Plan submittal.

### **Building Foundation Landscape Requirements**

**Interior site landscaping SF:** Acknowledged. No plan changes needed.

**Building frontage Landscaping:** Acknowledged. No plan changes needed.

### **Detention/Retention Basin Requirements**

**Planting Requirements:** Replacement trees on the east side of the basin have been relocated to the north of the access path to be included in a conservation easement. Additional detention basin / parking

lot trees have been added to the east side of the basin. Shrubs have been moved to within 10-ft of the basin design high water.

**Phragmites and Japanese Knotweed Control:** Acknowledged. No plan changes needed.

## **LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS**

### **Landscape Notes – Utilize City of Novi Standard Notes**

**Installation date:** Acknowledged. No plan changes needed.

**Maintenance & Statement of Intent:** Note #9 corrected on Sheet 2

**Plant source:** Acknowledged. No plan changes needed.

**Irrigation Plan:** Landscape irrigation plan will be provided as part of the final site plan package and so noted in the Supplemental Landscape Notes (Note #8) on Sheet 11.

**Seed:** Seed mix lists have been enlarged and note relating to submittal to City has been added below.

**Other Information:** Acknowledged. No plan changes needed.

**Establishment Period:** Note #9 corrected on Sheet 2

**Approval of substitutions:** Acknowledged. No plan changes needed.

### **Plant List (LDM Part III) – Include all cost estimates**

**Quantities and sizes:** Acknowledged. No plan changes needed.

**Root type:** Acknowledged. No plan changes needed.

**Botanical and common names:** Acknowledged. No plan changes needed.

**Type and amount of lawn:** Acknowledged.

**Cost estimate:** Acknowledged. No plan changes needed.

### **Planting Details/Info (LDM Part III)**

**Canopy Deciduous Tree:** Root-ball to root-flare note has been changed.

**Evergreen Tree:** Root-ball to root-flare note has been changed

**Multi-stem Tree:** Acknowledged. No plan changes needed.

**Shrub:** Acknowledged. No plan changes needed

**Perennial/Ground Cover:** Acknowledged. No plan changes needed.

**Tree stakes and guys. (Wood stakes, fabric guys):** Acknowledged. No plan changes made.

**Tree protection fencing:** Acknowledged. No plan changes needed.

### **Other Plant Material Requirements (LDM 11)**

**General Conditions:** Acknowledged. No plan changes needed.

**Plant materials & Existing Plant Material:** Acknowledged. No plan changes needed

**Landscape tree credit:** Acknowledged. No plan changes needed.

**Plant Sizes for ROW, Woodland replacement and others:** Acknowledged. No plan changes needed.

**Plant size credit:** Acknowledged. No plan changes needed.

**Prohibited Plants:** Acknowledged. No plan changes needed.

**Recommended trees for planting under overhead utilities:** Acknowledged. No plan changes made.

**Collected or transplanted trees:** Acknowledged. No plan changes needed.

**Nonliving Durable Material Mulch:** Acknowledged. No plan changes needed.

### **Irrigation System Requirements**

1-7. Acknowledged.

# Merjent, Inc.

## **General Woodland Review:**

1. Acknowledged. No plan changes needed.
2. Acknowledged. No plan changes needed.
3. See Landscape Plan for proposed tree replacements.
4. Acknowledged. No plan changes needed.
5. Acknowledged.
6. Acknowledged. No plan changes needed.
7. Acknowledged.
8. Additional language has been added to the tree removal list regarding these trees.
9. Acknowledged.
10. Acknowledged.
11. Acknowledged.
12. Acknowledged.

## **General Wetland Review:**

1. Acknowledged. No plan changes needed.
2. Acknowledged. No plan changes needed.
3. Acknowledged. We are seeking a wetland buffer authorization as part of this project.
4. Acknowledged. Flagging will be provided at time of construction.
5. Additional coordination has taken place with the Sheetz development engineers to ensure the grading plan of the basin and the mitigation is cohesive. The plans have been revised accordingly to show the grading.

# Aecom

## **General Comments:**

1. Acknowledged. No plan changes needed.
2. Acknowledged. No plan changes needed.
3. Acknowledged. No plan changes needed.
4. Acknowledged. No plan changes needed.

## **Traffic Impacts:**

1. Acknowledged. No plan changes needed.
2. Acknowledged. No plan changes needed.

## **Traffic Review:**

1. Acknowledged. No plan changes needed.
2. Acknowledged. No plan changes needed.
3. Driveway Taper
  - a. The taper length dimension will be added to the plan as part of the Final Site Plan.
  - b. The tangent length dimension will be added to the plan as part of the Final Site Plan.
4. Acknowledged. No plan changes needed.
5. Acknowledged. No plan changes needed.
6. Acknowledged. No plan changes needed.
7. Acknowledged. No plan changes needed.
8. Acknowledged. No plan changes needed.
9. Acknowledged. No plan changes needed.
10. Acknowledged. No plan changes needed.
11. Acknowledged. No plan changes needed.
12. Acknowledged. No plan changes needed.



13. Acknowledged. No plan changes needed.
14. Acknowledged. No plan changes needed.
15. End Islands
  - a. Dimensions for end island adjacent parking spaces were added to the Site Plan (Sheet 5).
  - b. Acknowledged. No plan changes needed.
16. Acknowledged.
17. Acknowledged. No plan changes needed.
18. Acknowledged. No plan changes needed.
19. Acknowledged. No plan changes needed.
20. A detail will be added to the plan as part of the Final Site Plan.
21. Acknowledged. No plan changes needed.
22. Acknowledged. No plan changes needed.
23. Acknowledged. No plan changes needed.
24. Bicycle Parking
  - a. Acknowledged. No plan changes needed.
  - b. Acknowledged. No plan changes needed.
  - c. The sidewalk along the building increased from a 7' walk to and 8' walk to allow a 6' clear path from the car 2' overhang.
  - d. Acknowledged. No plan changes needed.
25. Acknowledged. No plan changes needed.
26. Acknowledged. No plan changes needed.
27. Not Applicable. No plan changes needed.
28. Not Applicable. No plan changes needed.
29. Not Applicable. No plan changes needed.
30. Not Applicable. No plan changes needed.
31. Not Applicable. No plan changes needed.
32. Acknowledged. No plan changes needed.
33. Additional signage information will be added to the Final Site Plan set.
34. Acknowledged. No plan changes needed.
35. Acknowledged. No plan changes needed.
36. Acknowledged. No plan changes needed.
37. Acknowledged. No plan changes needed.
38. Acknowledged. No plan changes needed.
39. Acknowledged. No plan changes needed.
40. A pavement marking notes and details will be provided in the Final Site Plan set.
41. Acknowledged. No plan changes needed.
42. Acknowledged. The crosswalk striping will be clearly denoted in the Final Site Plans.
43. Acknowledged. No plan changes needed.

## Façade Review – DRN Associates

Acknowledged. Façade is in compliance.

## Fire Department

### Comments:

- Acknowledged. A note has been added to the plans on the Utility Plan sheet 9. See note 1 under fire department notes in the bottom right corner of the page.
- Acknowledged. A note has been added to the plans on the Utility Plan sheet 9. See note 2 under fire department notes in the bottom right corner of the page.

- A second access point has been added to the site on the south side as an entrance only. This will serve as a second point of site access. The drive locations and geometrics have been submitted on a preliminary level to the RCOC and reviewed and approved by the RCOC.
- Acknowledged. A note has been added to the plans on the Utility Plan sheet 9. See note 3 under fire department notes in the bottom right corner of the page.
- Acknowledged. The proposed watermain is now looped through the site which will help fire flows as well as reliability. The proposed watermain was upsized to be a 12" watermain to achieve said fire flows.
- The circulation plan sheet 10 shows the fire truck circulation as well as the hydrant coverage. An additional hydrant was added on the south side of the building as well as an existing hydrant along the Haggerty Road frontage is being extended beyond the new right turn lane. The nearest fire hydrant on Haggerty Road is the relocated hydrant at the midpoint of the building in front of the site.
- The Fire Department Connection has been relocated to the front northeast corner of the building. See Utility Plan sheet 9.
- Acknowledged. See Landscape Plan sheet 11. The landscape plan shows a clearing of landscape in the immediate vicinity of the FDC.
- The proposed submittal doesn't have a tenant lined up for the space. Therefore, operations specific questions as it pertains to any potential hazardous chemicals is unknown at this time. Once a tenant is selected, a hazardous chemical survey will need to be conducted at that time.

A Woodland Use Permit for construction on a site containing regulated woodlands and Wetland Buffer Authorization is being requested for fill areas within the wetland buffer.

Feel free to contact us should you have any questions, or if you are in need of any additional information.

Sincerely,  
BOSS ENGINEERING COMPANY



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