



CITY OF NOVI CITY COUNCIL
MAY 5, 2025

SUBJECT: Consideration of tentative approval of Feldman Kia, JZ24-32, with Zoning Map Amendment 18.746 to rezone property at the southwest corner of Grand River Avenue and Joseph Drive from Non-Center Commercial to General Business with a Planned Rezoning Overlay.

SUBMITTING DEPARTMENT: Community Development Department, Planning Division

KEY HIGHLIGHTS:

- Rezoning of 4.88 acres on Grand River Avenue to allow an auto dealership development in the B-3 District.
- Redevelopment of a vacant parcel on a commercial corridor.
- Public benefit offered is design and construction of three pedestrian seating areas and an "enhanced sidewalk" along Joseph Drive, as well as two covered seating areas at nearby bus stops.
- Council's initial consideration of the PRO was on December 2, 2024.
- Planning Commission recommended approval of the PRO Plan on April 9, 2025.

BACKGROUND INFORMATION:

Feldman Automotive is requesting a Zoning Map Amendment for approximately 4.88 acres of property on the south side of Grand River Avenue, to the west of Joseph Drive, utilizing the Planned Rezoning Overlay option. The site is vacant and was formerly the site of Glenda's Garden Center for many years. The current zoning is Non-Center Commercial.

As shown in the PRO Concept Plan, the applicant proposes to rezone to B-3 General Business and redevelop the property with an auto dealership with accessory outside storage of the inventory vehicles. The proposed dealership building would have a footprint of approximately 18,800 square feet with a mezzanine floor for parts storage. The parking lot consists of approximately 300 spaces.

In this area of Grand River, there are professional offices, small strip retail centers, sit down restaurants and the US Energy fuel supplier. Single family residential homes are located to the south of the property. The current zoning of the surrounding area is I-1

Light Industrial to the north, OS-1 Office Service to the west, NCC Non-Center Commercial to the east, and R-4 One Family Residential to the south.

The current Non-Center Commercial Zoning District allows uses such as retail business and service uses, professional and medical offices, financial institutions, sit-down restaurants, and instructional centers. Special Land Use permits could also allow low density multi-family or single-family dwellings, day care centers, places of worship, public utility buildings, and veterinary hospitals or clinics. Similar commercial uses are allowed in the B-3 District, as well as more intense uses such as fueling stations, auto washes, vehicle sales, microbrews or brewpubs as permitted uses.

The Future Land Use Map identifies this property and the parcel to the east as Community Commercial. The parcels to the west along Grand River Avenue are planned for Community Office. To the north of Grand River is planned for Industrial, Research Development and Technology. To the south is planned for single family residential uses.

There are no regulated natural features on the site since it was previously developed.

Engineering review found that there are adequate public utilities to serve the parcel, and that the impacts from B-3 uses are expected to be the same as potential NCC uses. The stormwater management plan consists of underground detention with infiltration, as well as above-ground infiltration trench and basin.

Traffic consultants have reviewed the anticipated traffic generation from the proposed use and found the impacts under the proposed rezoning are expected to be similar compared to what could be developed under the existing zoning. The site plan utilizes the existing curb cuts on Grand River Avenue, so no changes are proposed to driveway spacing. No curb cuts are proposed along Joseph Drive.

Façade review notes that the building will require a Section 9 façade waiver for an underage of brick on the front facade. This waiver is supported because the front of the building is primarily showroom glass, and adding brick would not enhance the facade. On all other facades, the amount of brick proposed significantly exceeds the required amount.

BURDEN ON APPLICANT

The applicant bears the burden of demonstrating eligibility for a PRO:

In order to be eligible for the proposal and review of a rezoning with PRO, an applicant must propose a rezoning of property to a new zoning district classification, and **must, as part of such proposal, propose clearly-identified site-specific conditions relating to the proposed improvements that (1) are in material respects, more strict or limiting than the regulations that would apply to the land under the proposed new zoning district, including such regulations or conditions as set forth in Subsection C below; and (2) constitute an overall benefit to the public that outweighs any material detriments or that could not otherwise be accomplished without the proposed rezoning.**

The ordinance then goes on to specifically describe the applicant's burden in proving to the Planning Commission and City Council that its property is a good candidate for a PRO:

- a) The PRO accomplishes the integration of the proposed land development project with the characteristics of the project area in such a manner that results in **an enhancement of the project area as compared to the existing zoning that would be unlikely to be achieved, or would not be assured, in the absence of the use of a PRO.**

In other words, an applicant needs to prove not only that its proposed project can integrate with the other development in the area, but that it results in an **enhancement** of the project area as compared to the existing zoning, one that couldn't happen without the rezoning and the PRO.

The ordinance adds to the "restrictions" requirement as follows:

- 1) Restrictions/limitations not required by ordinance. Development and use of the property **shall propose and be subject to**, following City Council review and approval, **requirements** shown, depicted, or specified on the PRO Plan, and/or in the PRO Conditions imposed, and/or in other conditions and provisions set forth in the PRO Agreement, **that are more restrictive, in ways that are material and identifiable and capable of being shown or described and as required in this Ordinance.** Such PRO Plan, PRO Conditions, and PRO Agreement shall overlay and supersede all inconsistent regulations otherwise applicable under this Ordinance.

The PRO ordinance also separately discusses the concept of "benefits" as a concept related to the PRO Conditions and the public interest generally:

- b) **Sufficient conditions have been included** on and in the PRO Plan and the PRO Agreement such that the City Council concludes, in its discretion, that, as compared to the existing zoning and considering the site-specific land use proposed by the applicant, **it would be in the public interest to grant the rezoning with PRO.** In determining whether approval of a proposed application would be in **the public interest**, the benefits which would reasonably be expected to accrue from the proposal shall be balanced against, and be found to clearly outweigh the reasonably foreseeable detriments thereof, taking into consideration reasonably accepted planning, engineering, environmental and other principles, as presented to the City Council, following recommendation by the Planning Commission, and also taking into consideration the special knowledge and understanding of the City by the City Council and Planning Commission.

The PRO Conditions shall not authorize uses or development not permitted in the district proposed by the zoning (and shall not permit uses or development expressly or implicitly prohibited in the PRO Agreement), and **may include some or all of the following, in addition to conditions that may be imposed by the City under MCL 125.3504:**

- 1) Establishment of development features such as the location, size, height, area, or mass of buildings, structures, or other improvements in a manner that cannot be required under the Ordinance or the City's Code of Ordinances, to be shown on the PRO Plan.
- 2) Specification of the maximum density or intensity of development and/or use, as shown on the PRO Plan and expressed in terms fashioned for the particular development and/or use (for example, and in no respect by way of limitation, units per acre, maximum usable floor area, hours of operation, and the like).
- 3) Provision for setbacks, landscaping, and other buffers in a manner that exceeds what the Ordinance of the Code of Ordinances can require.
- 4) Exceptional site and building design, architecture, and other features beyond the minimum requirements of the Ordinance or the Code of Ordinances.
- 5) Preservation of natural resources and/or features, such as woodlands and wetlands, in a manner that cannot be accomplished through the Ordinance or the Code of Ordinances and that exceeds what is otherwise required. If such areas are to be affected by the proposed development, provisions designed to minimize or mitigate such impact.
- 6) Limitations on the land uses otherwise allowed under the proposed zoning district, including, but not limited to, specification of uses that are permitted and those that are not permitted.
- 7) Provision of a public improvement or improvements that would not otherwise be required under the ordinance or Code of Ordinances to further the public health, safety, and welfare, protect existing or planned uses, or alleviate or lessen an existing or potential problem relating to public facilities. These can include, but are not limited to, road and infrastructure improvements; relocation of overhead utilities; or other public facilities or improvements.
- 8) Improvements or other measures to improve traffic congestion or vehicular movement with regard to existing conditions or conditions anticipated to result from the development.
- 9) Improvements to site drainage (storm water) or drainage in the area of the development not otherwise required by the Code of Ordinances.
- 10) Limitations on signage.
- 11) Creation or preservation of public or private parkland or open space.

- 12) Other representations, limitations, improvements, or provisions approved by the City Council.

CONDITIONS/BENEFITS PROPOSED BY APPLICANT

The applicant has described restrictive conditions, including providing **greater building and parking setbacks than the B-3 ordinance requires**. Additional conditions to reduce noise impacts, such as limiting the hours of operation and delivery of vehicles, are also proposed as shown in the draft motion below.

The physical benefit proposed is an **enhanced sidewalk along their Joseph Drive frontage**. This includes a **meandering sidewalk with decorative light poles and the construction of three seating areas**.

The applicant has also offered to **build covered shelters with seating at two nearby existing bus stops**. The images provided on Sheet 9 of the PRO Plan show **a paved pad with a shelter at the bus stops approximately 300 feet to the east of the property on Grand River Avenue, one on the north and one on the south**.

The applicant's response letter indicates that they will be able to eliminate the need for 3 of the deviations that Staff had identified in our initial review of the project.

The remaining deviations are supported by staff given the justifications provided.

MASTER PLAN FOR LAND USE

The proposal helps fulfill objectives contained in the Master Plan for Land use, as well as other positive outcomes, such as:

1. The objective to support retail commercial uses along established transportation corridors,
2. The B-3 district is consistent with the Master Plan for Land Use designation for Community Commercial.
3. The impacts on traffic and public utilities are expected to be similar to development under the existing zoning.
4. Submittal of a Concept Plan and any resulting PRO Agreement provides assurance to the Planning Commission and the City Council of the manner in which the property will be developed and can provide benefits that would not be likely to be offered under standard development options.

BUFFER FOR RESIDENTS TO THE SOUTH/SCREENING BERM

While many commercial uses could be developed on the site under the current zoning, Staff has highlighted some of the detriments of a car dealership adjacent to residential areas, which include noise, lighting, traffic, and security concerns. The City wants to ensure that if this project is approved, those detriments are minimized or mitigated to protect the adjacent neighbors.

In particular, the issue of the screening buffer along the south property line has been a topic of significant discussion. The current berm is only 2-3 feet from the overall grade of the Feldman site, and once grading/paving is completed it would only be 1-2 feet above the finished parking lot grade. (The average grade of the Feldman site is 3-4 feet higher than the residential properties to the south.) Staff felt this would not provide

sufficient sound and visual buffering to the residential properties. The applicant proposed raising the berm to 6 feet in height relative to the parking lot grade, which would require removing all the existing trees. As shown in the tree list, most of the trees on the berm are in poor condition, with many of the evergreens suffering from dieback and covered in deciduous vines. Once raised, the new berm would be planted with a double row of evergreens to provide the necessary screening.

One adjacent resident has stated he would prefer the existing trees to remain, with only those that are dead or nearly dead to be removed, and new plantings to infill any gaps. His property abuts the southeastern corner of the property. Staff looked into the possibility of retaining the existing trees on his end of the berm only. This area has additional distance from the proposed parking lot because of the stormwater basin between, and a lower elevation than the west side of the site. Four-to-five trees in fair condition could be maintained if this section of the berm was left alone but staff's opinion is that all trees in poor condition should be removed and replaced with new trees and supplemental plantings to provide the 80-90% opacity requirement. The Planning Commission recommended this alternative, as well as a condition that the berm work and plantings are to be completed early during construction so that the neighbors have screening in place for the bulk of the work. The applicant has confirmed that they would agree to the changes to the berm and landscaping, and have provided revised grading and landscaping plans that show this change.

PLANNING COMMISSION

The Planning Commission held a Public Hearing on the formal PRO Plan on April 9, 2025 and recommended approval to the City Council. Comments made at that time are reflected in the meeting minutes included in this packet.

CITY COUNCIL ACTION

If the City Council is inclined to approve the rezoning request with PRO at this time, the City Council's motion would be to direct the City Attorney to prepare a PRO Agreement with specified PRO Conditions. Once completed, the PRO Agreement will return to Council for final approval.

RECOMMENDED ACTION: Tentative indication that Council may approve the request of Feldman Automotive, for JZ24-32, with Zoning Map Amendment 18.746, to rezone property at the southwest corner of Grand River Avenue and Joseph Drive from Non-Center Commercial to General Business with a Planned Rezoning Overlay Agreement, and corresponding PRO Concept Plan, and direction to the City Attorney to prepare the PRO Agreement including items A through C:

- A.** All deviations from the ordinance requirements shall be identified and included in PRO Agreement, including:
 - 1. Deviation from Section 3.10.3 to allow the Service Bay Doors to face a major thoroughfare and a residential district. *The service reception area is proposed to have a total of four overhead doors. The northern overhead*

doors are 129 feet from the Grand River Avenue right of way. The southern overhead doors are located 281 feet from the southern property line. There will be a screen wall and berm with landscaping along the southern property line to screen the overhead doors from the residential uses from the south. The overhead doors are needed for customer use.

2. Traffic deviation from Section 5.3.12. There are two locations, on either side of the building, where 2 customer parking spaces have an end island on one side, but not the side adjacent to the entry/exit point of the service area. *This is supported as the area next to the parking spaces has been striped out.*
3. Landscape deviation from Section 5.5.3.B.ii and iii to permit a continuous evergreen hedge along Grand River Avenue and Joseph Drive in lieu of the required minimum 3-foot-high berm along the road rights of way. *The deviation is supported as the applicant has proposed to use evergreen shrubs to achieve the intent of the ordinance.*
4. Landscape deviation from Section 5.5.3.D to permit only 79% of the building foundation landscaping to be located at the building. *This is supported as the required foundation area is provided in total, and the remaining landscaping is placed in areas that will enhance the appearance of the site.*
5. Lighting deviation from Section 5.7.3.L to exceed the 1 footcandle limit at the north and east property lines (3.4 fc and 6.2 fc, respectively). *This deviation is supported as these areas are illuminating the sidewalks along the road frontages.*
6. Façade deviation from Section 5.15 for the north facade to contain 0% brick rather than the minimum 30% brick. The front consists of 70% showroom glass and 30% flat metal panels. *The deviation is supported as the addition of brick would not offer an enhancement to the design.*
7. Landscape deviation from Section 5.5.3.B.ii and iii for insufficient screening berm for the southeastern portion of the property that abuts parcel 22-24-326-004. *This deviation is supported as it was requested by the adjacent property owner in order to preserve existing trees, however additional inspection as to the viability of the trees shall be conducted by the applicant before final approval and landscaping shall be provided to achieve the 80-90% opacity requirement.*

B. The following conditions shall be requirements of the PRO Agreement:

1. The use of the property is a New and Used Car Salesroom, Showroom and Office with a Servicing department and outdoor inventory of vehicles, as typically associated with dealerships.

2. Accessory to the Car Dealership, Outdoor Space for exclusive sale of new or used automobiles will be permitted under the conditions for Special Land Use approval:

- i. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service. *(The traffic impact study provided indicates fewer trips generated by the proposed use than other potential uses.)*
- ii. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area. *(The use is not expected to increase the demand on public services and utilities relative to other feasible uses of the site.)*
- iii. Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats. *(There are no significant natural features or characteristics present on the site.)*
- iv. Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood. *(The proposed use is similarly compatible to other uses that could be developed under the current NCC zoning district. No major automobile repair or service, as defined in Section 4.50 of the Zoning Ordinance, shall be permitted on the site.)*
- v. Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use. *(The Master Plan recommends Community Commercial uses, which includes uses permitted within the B-2 and B-3 districts.)*
- vi. Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner. *(The redevelopment of the site will remove a long-standing non-conforming use and improve the site visually from Grand River Avenue. The investments in the site improvements as well as the jobs created will benefit the area economically.)*
- vii. Whether, relative to other feasible uses of the site, the proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located. *(1. Outdoor Space for exclusive sale of new or*

used automobiles is listed as a Special Land Use in the B-3 District, and 2. the applicant has addressed the concerns previously raised so that the proposed use better conforms to the site design regulations.)

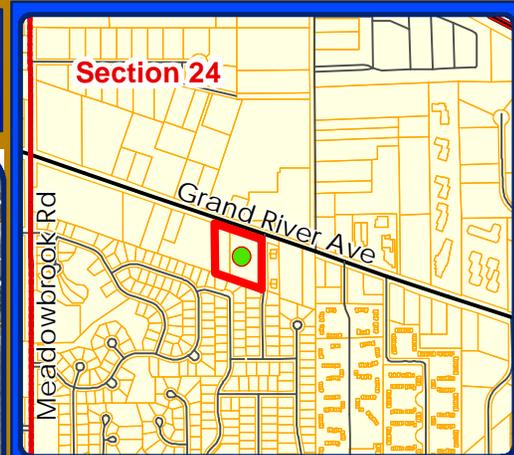
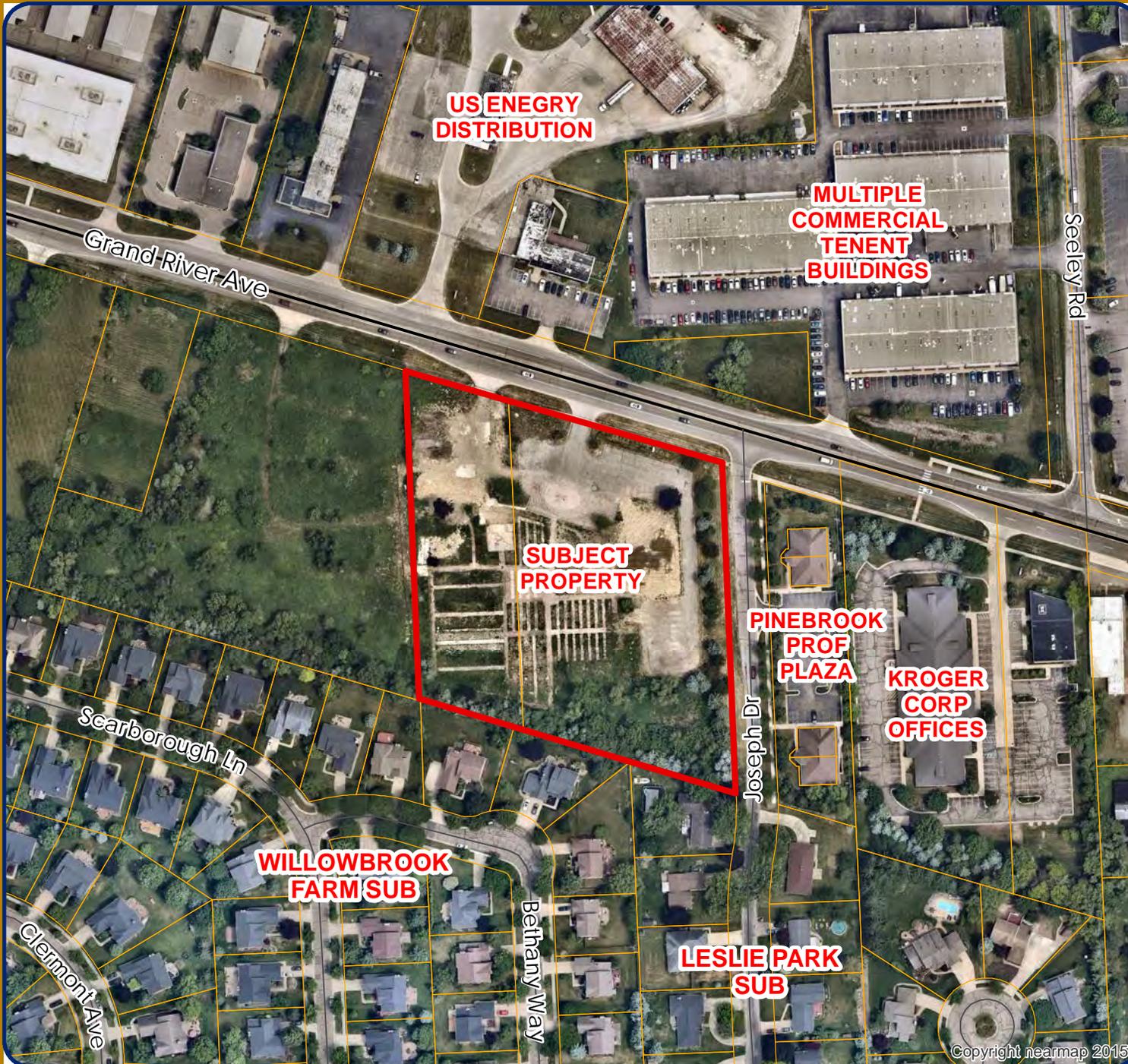
3. The applicant shall provide a unique streetscape along Joseph Drive with a winding sidewalk and the installation of a bench node on a concrete platform, decorative light poles, and significant landscaping across the western side of Joseph Drive, as shown on the PRO Plan.
 4. The applicant shall construct two covered bus stop shelters along Grand River Avenue to serve the nearby SMART bus stops.
 5. The days of operation shall be limited to Monday – Saturday. The business shall not be open on Sundays.
 6. The hours of operation shall be limited to the following, as described by the applicant: 7:00 a.m. to 6:00 p.m. on Tuesday, Wednesday and Friday, 7:00 a.m. to 9:00 p.m. on Monday and Thursday, and 8:00 a.m. to 4:00 p.m. on Saturdays.
 7. Outdoor speakers for security purposes may be permitted but must be attuned to meet the requirements of the noise ordinance and avoid disturbance of the adjacent residential neighborhood.
 8. No outdoor compressors shall be permitted.
 9. Automobile transit deliveries shall be limited to 8:00 a.m. to 6:00 p.m. on weekdays and must take place on the site in the designated loading/unloading area. Unloading shall not take place in any public right-of-way.
 10. The parking setback shall be no less than 53 feet from the property line to the south.
 11. The footprint of the building shall be limited to approximately 18,900 square feet, excluding mezzanine space.
 12. The overhead service doors shall remain closed except to allow the entering and existing of vehicles.
 13. The berm and landscape plantings along the southern property line shall be installed early in construction to protect the residents from the negative impacts of construction.
- C.** This motion is made because the proposed B-3 General Business zoning district is a reasonable alternative to the NCC Non-Center Commercial district and fulfills the intent of the Master Plan for Land Use, and because of the following enhancements that will result in an overall benefit to the public:

1. The applicant proposes a unique streetscape along Joseph Drive with a winding sidewalk and the installation of a bench node on a concrete platform, decorative light poles, and significant landscaping across the western side of Joseph Drive.
2. The applicant states that the economic impact of this development includes an investment of \$7 million, the creation of 175-200 construction jobs, and the creation of 40-50 full-time permanent jobs.
3. The applicant has proposed to construct two covered bus stop shelters along Grand River Avenue to serve the nearby SMART bus stops.

MAPS
Location
Zoning
Future Land Use
Natural Features

JZ24-32 FELDMAN KIA PRO

LOCATION



Legend

 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: Lindsay Bell
Date: 9/11/24
Project: FELDMAN KIA
Version #: 1

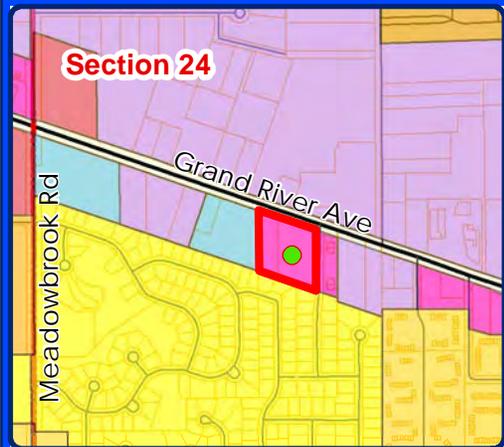
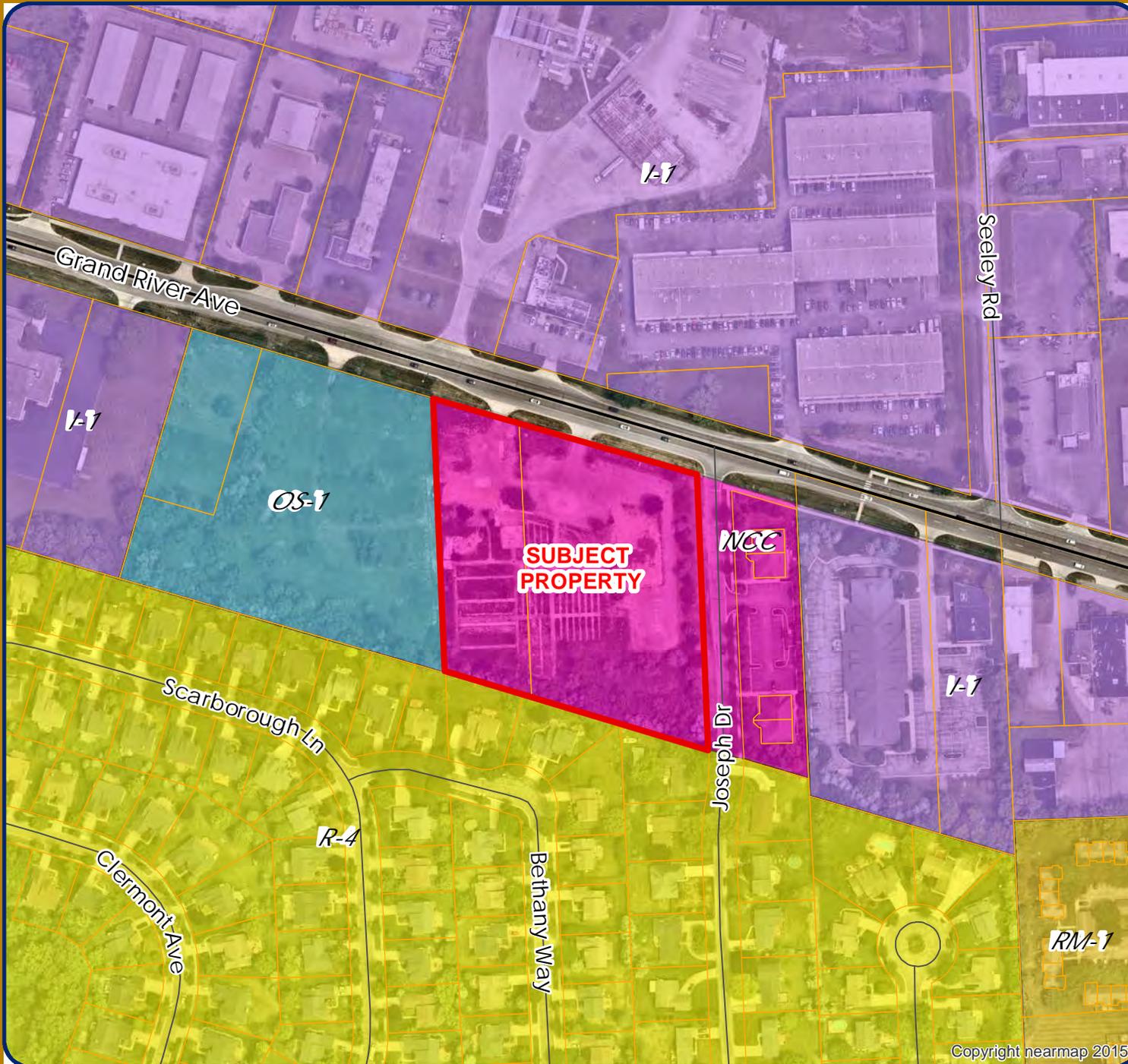
0 45 90 180 270 Feet
1 inch = 208 feet



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.

JZ24-32 FELDMAN KIA PRO

ZONING



Legend

- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- RM-2: High-Density Multiple Family
- MH: Mobile Home District
- GE: Gateway East District
- I-1: Light Industrial District
- NCC: Non-Center Commercial District
- OS-1: Office Service District
- 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: Lindsay Bell
Date: 9/11/24
Project: FELDMAN KIA
Version #: 1

0 55 110 220 330 Feet
1 inch = 250 feet



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JZ24-32 FELDMAN KIA PRO

FUTURE LAND USE



Legend

- Single Family
- Multiple-Family Residential
- Manufactured Home Residential
- Community Office
- Industrial, Research, Development and Technology
- Community Commercial
- Town Center Gateway
- Private Park
- Subject Area

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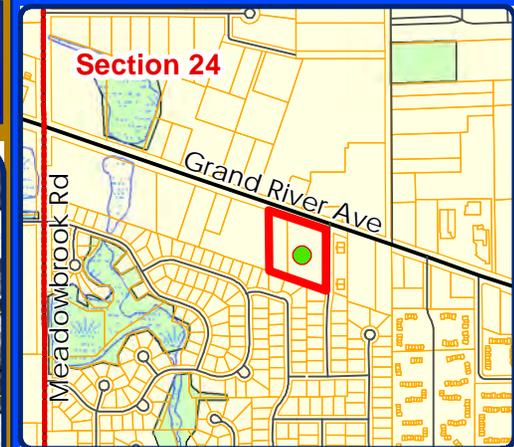
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JZ24-32 FELDMAN KIA PRO

NATURAL FEATURES



Legend

- WETLANDS
- WOODLANDS
- Subject Area



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PRO CONCEPT PLAN

ZONING: LIGHT INDUSTRIAL 1 (I-1)

GRAND RIVER AVENUE
(100' WIDE, PUBLIC)

PROF. BUILDING
PROPOSED ZONING:
GENERAL BUSINESS
(B-3)

ZONING:
OFFICE
SERVICE
(OS-1)

PARCEL NO.
22-24-301-011

BENCHMARKS:

BM#1 - BENCH IN POWER POLE ON EAST SIDE OF SUBJECT PARCEL ON W-1/2 SECTION OF 60'x120' LOTS. ELEVATION - 815.18 NAVD83

BM#2 - BENCH ON INTERSECT ON EAST SIDE OF 60'x120' LOTS AND SOUTH OF DRIVE (IN RANGE TO 4000' ASHTRAY DRIVE). ELEVATION - 815.23 NAVD83

BM#3 - BENCH ON INTERSECT WITHIN 1/4 SECTION NORTH OF TOWN POLE SOUTH OF INTERSECT OF GRAND NORTH AND STEELE ROAD, WEST SIDE OF 60'x120' LOTS. ELEVATION - 815.58

NOA (NORTH ARROW) 2445
7' ON NORTH END OF GATEWELL LOCATED TO EAST NORTH OF GRAND RIVER AND TO WEST WEST OF CENTERLINE OF DRIVE #10500
ELEVATION: 809.736
*ADD 0.06 FT. TO DAT TO NAVD83

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

NOTE:
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROPRIATE MANNER AS DISCUSSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

ZONING:
ONE-FAMILY
RESIDENTIAL
(R-1)

PARCEL NO.
22-24-330-001

ZONING:
ONE-FAMILY
RESIDENTIAL
(R-1)

PARCEL NO.
22-24-326-015

ZONING:
ONE-FAMILY
RESIDENTIAL
(R-1)

PARCEL NO.
22-24-326-016

PARCEL NO.
22-24-326-017

ZONING:
ONE-FAMILY
RESIDENTIAL
(R-1)

PAVING LEGEND:



PARKING SUMMARY LEGEND:



ZONING:
NON-CENTER
COMMERCIAL
(NCC)

PARCEL ID:
22-24-326-014 & 22-24-326-014

SITE DATA:
SITE AREA: 4.881 ACRES GROSS
4.882 ACRES NET

EXISTING ZONING: NCC NON-CENTER COMMERCIAL

PROPOSED ZONING: B3 GENERAL BUSINESS

PROPOSED BUILDING: 18,540 SF (FIRST FLOOR)
1,322 S.F. (MEZZANINE)
20,862 S.F. TOTAL GARAGES

SETBACKS:
30' FRONT MIN
15' SIDE MIN
20' REAR MIN

REQUIRED VEHICLE PARKING:
MOTION VEHICLE SALES AND SERVICE ESTABLISHMENTS - ONE (1) FOR EACH TWO HUNDRED (200) SQUARE FEET OF USABLE FLOOR AREA OF SALES ROOM AND ONE (1) FOR EACH ONE (1) AUTO SERVICE STALL IN THE SERVICE ROOM

SALES AREA = 7,716 SF SHOWROOM / 200 x 30 SPACES
SERVICE BAYS = 12 SERVICE BAYS 9' x 12 SPACES

REQUIRED VEHICLE PARKING: 51 SPACES
PROVIDED VEHICLE PARKING: 298 SPACES (INCLUDES 3 BARRIER FREE SPACES AND INVENTORY SPACES)

REQUIRED BICYCLE PARKING: 2 SPACES
PROVIDED BICYCLE PARKING: 2 SPACES

MAXIMUM HEIGHT OF STRUCTURES: 2 STORIES/30 FEET

FIRE DEPARTMENT NOTES:

- 1) ALL FIRE DEPARTMENTS MUST BE INSTALLED AND OPERATIONAL PRIOR TO ANY COMBUSTIBLE MATERIALS IS BROUGHT ON SITE (ICC 2015 510.2.3.1)
- 2) NEW BUILDINGS AND EXISTING BUILDINGS SHALL COMPLY WITH THE INTERNATIONAL FIRE CODE SECTION 102 FOR EMERGENCY ACCESS COVERAGE. THIS SHALL BE COMPLETED BY THE TIME THE FINAL PERMIT OF THE FIRE ALARM AND GAS SUPPLY PERMIT IS ISSUED. NO SIGN (OTHER THAN TYPICAL TRAFFIC CONTROL SIGNS) ARE APPROVED AS PART OF THIS SITE PLAN APPROVAL. PRIOR TO ERECTION OF A SIGN, AN APPLICATION AND APPROPRIATE SUBMISSIONS SHALL BE MADE TO THE BUILDING DEPARTMENT FOR REVIEW, APPROVAL AND ISSUANCE OF A SIGN PERMIT.
- 3) FIRE LANES MUST BE DESIGNATED BY THE FIRE CHIEF OR HIS DESIGNEE WHEN IT IS DEEMED NECESSARY AND SHALL COMPLY WITH THE FIRE PREVENTION ORDINANCES ADOPTED BY THE CITY OF HOWA.
- 4) FIRE ARRAYS/ACCESS DRIVES TO AND FROM BUILDINGS THROUGH PARKING LOTS SHALL HAVE A MINIMUM FIFTY (50) FEET OUTSIDE TURNING RADIUS AND BE DESIGNED TO SUPPORT A MINIMUM OF THREE-TWO (32) TONS OF CS. SEE 11-2305(2)(B).

GENERAL SITE NOTES:

- 1) ALL WORK SHALL CONFORM TO THE CURRENT CITY OF HOWA STANDARDS AND SPECIFICATIONS.
- 2) ROOFTOP EQUIPMENT MUST BE SCREENED PER ORDINANCE REQUIREMENTS.
- 3) EXTERIOR LIGHTING MUST COMPLY WITH SECTION 2511 OF THE CITY OF HOWA CODE.
- 4) MOST OF ANY PERMIT IS REQUIRED FROM THE CITY OF HOWA/C.O.C. FOR ANY WORK IN THE GRAND RIVER AVE. AND JOSEPH DR. RIGHT-OF-WAY.
- 5) ALL SIGNS SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES (CHAPTER 28) OF THE CITY OF HOWA, AND WHERE REQUIRED SHALL BE REVIEWED AND APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY AND A PERMIT ISSUED. NO SIGN (OTHER THAN TYPICAL TRAFFIC CONTROL SIGNS) ARE APPROVED AS PART OF THIS SITE PLAN APPROVAL. PRIOR TO ERECTION OF A SIGN, AN APPLICATION AND APPROPRIATE SUBMISSIONS SHALL BE MADE TO THE BUILDING DEPARTMENT FOR REVIEW, APPROVAL AND ISSUANCE OF A SIGN PERMIT.
- 6) ALL PARKING AND TRAFFIC CONTROL SIGNS SHALL COMPLY WITH THE CURRENT DESIGN AND PLACEMENT REQUIREMENTS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 7) NOTIFY THE CITY OF HOWA A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- 8) CALL MISS DIG (811) A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- 9) ALL SOIL EROSION AND SILT MUST BE CONTROLLED AND CONFINED ON-SITE.
- 10) ALL FICATION UNDER OR WITHIN A 10' H HULLANCE OF PUBLIC PAVEMENT, EXISTING OR PROPOSED, SHALL BE BACKFILLED AND COMPACTED WITH SAND (CLASS 4 WOOD).
- 11) THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
- 12) PRIOR TO ISSUANCE OF AN OCCUPANCY PERMIT, ENGINEERING SITE INSPECTION IS REQUIRED.
- 13) IF DEWATERING IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION THE CONTRACTOR IS REQUIRED TO SUBMIT A DEWATERING PLAN TO THE CITY ENGINEERING DIVISION FOR REVIEW.
- 14) 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.
- 15) NO MAJOR REPAIR OR MAJOR REFINISHING TO BE DONE IN THE LOT.

TRAFFIC SIGNING REQUIREMENTS

| ITEM | MINIMUM CODE | QUANTITY | SIZE | DESCRIPTION |
|------|--------------|----------|---------|-----------------------|
| A | R7-B | 3 | 12"x18" | RESERVED PARKING ONLY |
| B | R7-BP | 1 | 12"x6" | VAN ACCESSIBLE |
| C | R1-1 | 2 | 30"x30" | STOP |
| D | R7-BA MOD | 6 | 12"x18" | NO PARKING FIRE LANE |

TRAFFIC SIGNING AND STRIPING REQUIREMENTS

- 1) ALL PERMANENT AND TEMPORARY TRAFFIC SIGNAGE & STRIPING SHALL COMPLY WITH THE MUTCD MANUAL.
- 2) SIGN POSTS ARE REQUIRED TO BE U-CHANNEL FOR ALL SIGNS. SIGN POSTS SHOULD BE 2.0 LB FOR SIGNS LESS THAN 12"x18". SIGN POSTS SHOULD BE 3.5 LB FOR SIGNS GREATER THAN 12"x18". FOR POSTS WITH MULTIPLE SIGNS, OR STREET NAME SIGNS.
- 3) STRIPING FOR HANDICAPPED PARKING SPACES SHALL BE BLUE AND MARKINGS FOR NON-HANDICAPPED PARKING SPACES SHALL BE WHITE. WHERE A HANDICAPPED PARKING SPACE ADJUTS A NON-HANDICAPPED SPACE, THE TWO SPACES SHALL BE SEPARATED BY A WHITE BLUE AND WHITE STRIPES.
- 4) AN END PARKING SPACE ADJUTING A CURB OR WALK SHOULD BE 8 FEET WIDE IF DESIGNATED A HANDICAPPED SPACE OR 9 FEET WIDE IF NOT. THESE WIDTHS ARE REFERENCED TO THE FACE OF CURB OR WALK.
- 5) EACH INTERNATIONAL SYMBOL OF ACCESSIBILITY (WHEELCHAIR) TO BE PAINTED ON THE PAVEMENT SHALL BE WHITE.
- 6) SEE SHEET 7 FOR BARRIER FREE PARKING DETAILS.
- 7) ALL SIGNS ARE TO BE LOCATED AT LEAST 2 FEET FROM THE EDGE OF A CURB OR PERSIDIAN TRAVEL WAY WITH SIGN BOTTOM HEIGHT 7 FEET FROM FINAL GRADE (EXCEPT AS NOTED).
- 8) HIGH-INTENSITY PRISMATIC (HIP) SLEETING TO MEET FHWA RETRO-REFLECTIVITY.
- 9) THREE STANDARD ALPHABET STYLES TO BE USED FOR ALL SIGN LANGUAGE.

NOT FOR CONSTRUCTION

COMMERCIAL
SURVEYING
SITE PLANNING
AS-BUILT SURVEYS
TOPOGRAPHIC SURVEYS
PARCEL SPLITS
CONSTRUCTION LAYOUT

RESIDENTIAL
RECONSTRUCTION
MULTI-FAMILY
RUST FARM
CONSTRUCTION LAYOUT

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(480) 435-2100 (CELL)

46802 WEST ROAD
NOV, MICHIGAN 48377



CLIENT: FELDMAN 40575 GRAND RIVER AVENUE, LLC

PRELIMINARY SITE PLAN
COLOR RENDERING

RANGE BE

FELDMAN KIA OF NOV
TOWNSHIP IN
CITY OF HOWA
MICHIGAN

SECTION 24

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|------------|-------------------|
| 1 | 09-20-2023 | ISSUE FOR PERMITS |
| 2 | 09-20-2023 | ISSUE FOR PERMITS |
| 3 | 09-20-2023 | ISSUE FOR PERMITS |

DATE: 09-20-2023

DRAWN BY: SD/TG

CHECKED BY: SD/TG

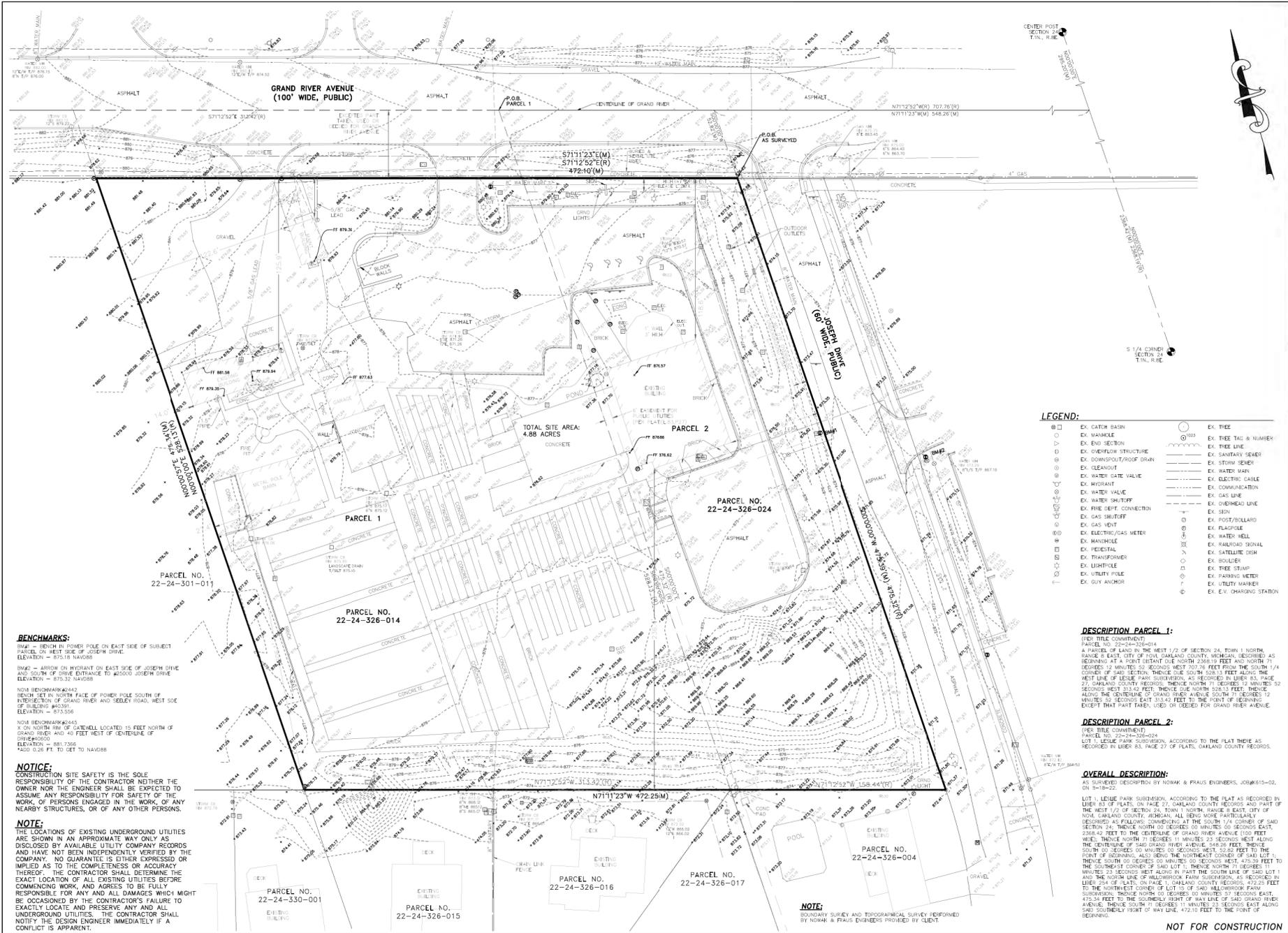
PER: SDP

DATE: 09-20-23

SCALE: 1" = 30' FT

3

21-11A



LEGEND:

| | | | |
|---|---------------------------|---|---------------------------|
| □ | EX. CATCH BASIN | ○ | EX. TREE TAG & NUMBER |
| ○ | EX. MANHOLE | ○ | EX. TREE TAG & NUMBER |
| ○ | EX. END SECTION | — | EX. TREE LINE |
| ○ | EX. OVERFLOW STRUCTURE | — | EX. SANITARY SEWER |
| ○ | EX. DOWNSPOUT/ROOF DRAIN | — | EX. STORM SEWER |
| ○ | EX. CLEANOUT | — | EX. WATER MAIN |
| ○ | EX. WATER GATE VALVE | — | EX. WATER VALVE |
| ○ | EX. HYDRANT | — | EX. GAS LINE |
| ○ | EX. WATER VALVE | — | EX. OVERHEAD LINE |
| ○ | EX. WATER SHUTOFF | — | EX. SIGN |
| ○ | EX. FIRE GRAFT CONNECTION | — | EX. POST/ROLLUP |
| ○ | EX. GAS SHUTOFF | — | EX. FLAGPOLE |
| ○ | EX. GAS VENT | — | EX. WATER WELL |
| ○ | EX. ELECTRIC/GAS METER | — | EX. RAILROAD SIGNAL |
| ○ | EX. HANDBILE | — | EX. SATELLITE DISH |
| ○ | EX. RECESSED | — | EX. BOLLARD |
| ○ | EX. TRANSFORMER | — | EX. LIGHTPILE |
| ○ | EX. LIGHTPILE | — | EX. TREE STUMP |
| ○ | EX. UTILITY POLE | — | EX. PARKING METER |
| ○ | EX. GUY ANCHOR | — | EX. UTILITY MARKER |
| ○ | EX. TREE | — | EX. E.V. CHARGING STATION |

DESCRIPTION PARCEL 1:

(SEE TITLE COMMITMENT)
 PARCEL NO. 22-24-326-014
 4 PARCELS OF LAND IN THE WEST 1/2 OF SECTION 24, TOWN 1 NORTH, RANGE 8 EAST, CITY OF ROLL OAKLAND COUNTY, MICHIGAN, DESCRIBED AS BEGINNING AT A POINT BEARING DUE NORTH 208.19 FEET AND NORTH 71 DEGREES 12 MINUTES 52 SECONDS WEST 707.76 FEET FROM THE SOUTH 1/4 CORNER OF SAID SECTION, THENCE DUE SOUTH 608.13 FEET ALONG THE WEST LINE OF LESLIE PARK SUBDIVISION, AS RECORDED IN LIVER 83, PAGE 23, OAKLAND COUNTY RECORDS, THENCE NORTH 71 DEGREES 12 MINUTES 52 SECONDS WEST 313.42 FEET, THENCE DUE NORTH 528.13 FEET, THENCE ALONG THE CENTERLINE OF GRAND RIVER AVENUE SOUTH 71 DEGREES 12 MINUTES 52 SECONDS EAST 313.42 FEET TO THE POINT OF BEGINNING, EXCEPT THAT PART THEREOF, USED OR REFERRED FOR GRAND RIVER AVENUE.

DESCRIPTION PARCEL 2:

(SEE TITLE COMMITMENT)
 PARCEL NO. 22-24-326-024
 LOT 1 LESLIE PARK SUBDIVISION, ACCORDING TO THE PLAT THEREAS AS RECORDED IN LIVER 83, PAGE 27 OF PLATS, OAKLAND COUNTY RECORDS.

OVERALL DESCRIPTION:

AS SURVEYED DESCRIPTION BY NOWAK & FRAUS ENGINEERS, JOB#615-02, ON 9-18-22.
 LOT 1 LESLIE PARK SUBDIVISION, ACCORDING TO THE PLAT AS RECORDED IN LIVER 83 OF PLATS, ON PAGE 27, OAKLAND COUNTY RECORDS, AND PART OF THE WEST 1/2 OF SECTION 24, TOWN 1 NORTH, RANGE 8 EAST, CITY OF ROLL OAKLAND COUNTY, MICHIGAN, ALL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 24, THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, 2388.42 FEET TO THE CENTERLINE OF GRAND RIVER AVENUE (100 FEET WIDE), THENCE NORTH 71 DEGREES 11 MINUTES 23 SECONDS WEST ALONG THE CENTERLINE OF SAID GRAND RIVER AVENUE 548.28 FEET, THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, 22.62 FEET TO THE POINT OF BEGINNING, ALSO BEING THE NORTHEAST CORNER OF SAID LOT 1, THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, 475.09 FEET TO THE SOUTHWEST CORNER OF SAID LOT 1, THENCE NORTH 71 DEGREES 11 MINUTES 23 SECONDS WEST ALONG THE SOUTH LINE OF SAID LOT 1 AND THE NORTH LINE OF WILLOWBROOK FARM SUBDIVISION, AS RECORDED IN LIVER 258, THENCE NORTH 71 DEGREES 11 MINUTES 23 SECONDS WEST, 475.34 FEET TO THE SOUTHWEST CORNER OF LOT 15 OF SAID WILLOWBROOK FARM SUBDIVISION, THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, 475.34 FEET TO THE SOUTHWEST CORNER OF SAID GRAND RIVER AVENUE, THENCE NORTH 71 DEGREES 11 MINUTES 23 SECONDS EAST ALONG SAID SOUTHWEST FRONT OF WAY LINE, 472.10 FEET TO THE POINT OF BEGINNING.

BENCHMARKS:

BM#1 = BENCH IN POWER POLE ON EAST SIDE OF SUBJECT PARCEL ON WEST SIDE OF JOSEPH DRIVE. ELEVATION = 875.18 NAVD88
 BM#2 = ARROW ON HYDRANT ON EAST SIDE OF JOSEPH DRIVE AND SOUTH OF DRIVE ENTRANCE TO #25000 JOSEPH DRIVE. ELEVATION = 875.32 NAVD88
 NODI BENCHMARK#2443
 NODI MET IN NORTH FACE OF POWER POLE SOUTH OF INTERSECTION OF GRAND RIVER AND SEDLEY ROAD, WEST SIDE OF BUILDING #40310. ELEVATION = 873.556
 NODI BENCHMARK#2445
 NODI MET ON NORTH FACE OF GATEWELL LOCATED 15 FEET NORTH OF GRAND RIVER AND 40 FEET WEST OF CENTERLINE OF DRIVE#40300. ELEVATION = 881.7356
 #40300 IS 0.26 FEET TO SET TO NAVD88

NOTICE:

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

NOTE:

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE ENGINEER. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

NOTE:
 BOUNDARY SURVEY AND TOPOGRAPHIC SURVEY PERFORMED BY NOWAK & FRAUS ENGINEERS PROVIDED BY CLIENT.

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 SITE ENGINEERING
 BOUNDARY SURVEYS
 INDUSTRIAL SURVEYS
 CONSTRUCTION LAYOUT

RESIDENTIAL
 BOUNDARY SURVEYS
 CONSTRUCTION LAYOUT

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 SUITE 109
 HOW, MICHIGAN 48037

(248) 908-3701 (BUS)
 (248) 908-3766 (FAX)
 WWW.ALPI-INC.NET

Know what's below
 Call before you dig.

FIELDMAN 40575 GRAND RIVER AVENUE, LLC

TOPOGRAPHIC SURVEY

SECTION: 24
 FIELDMAN KIA OF NOVI
 CITY OF NOVI
 OAKLAND COUNTY
 MICHIGAN

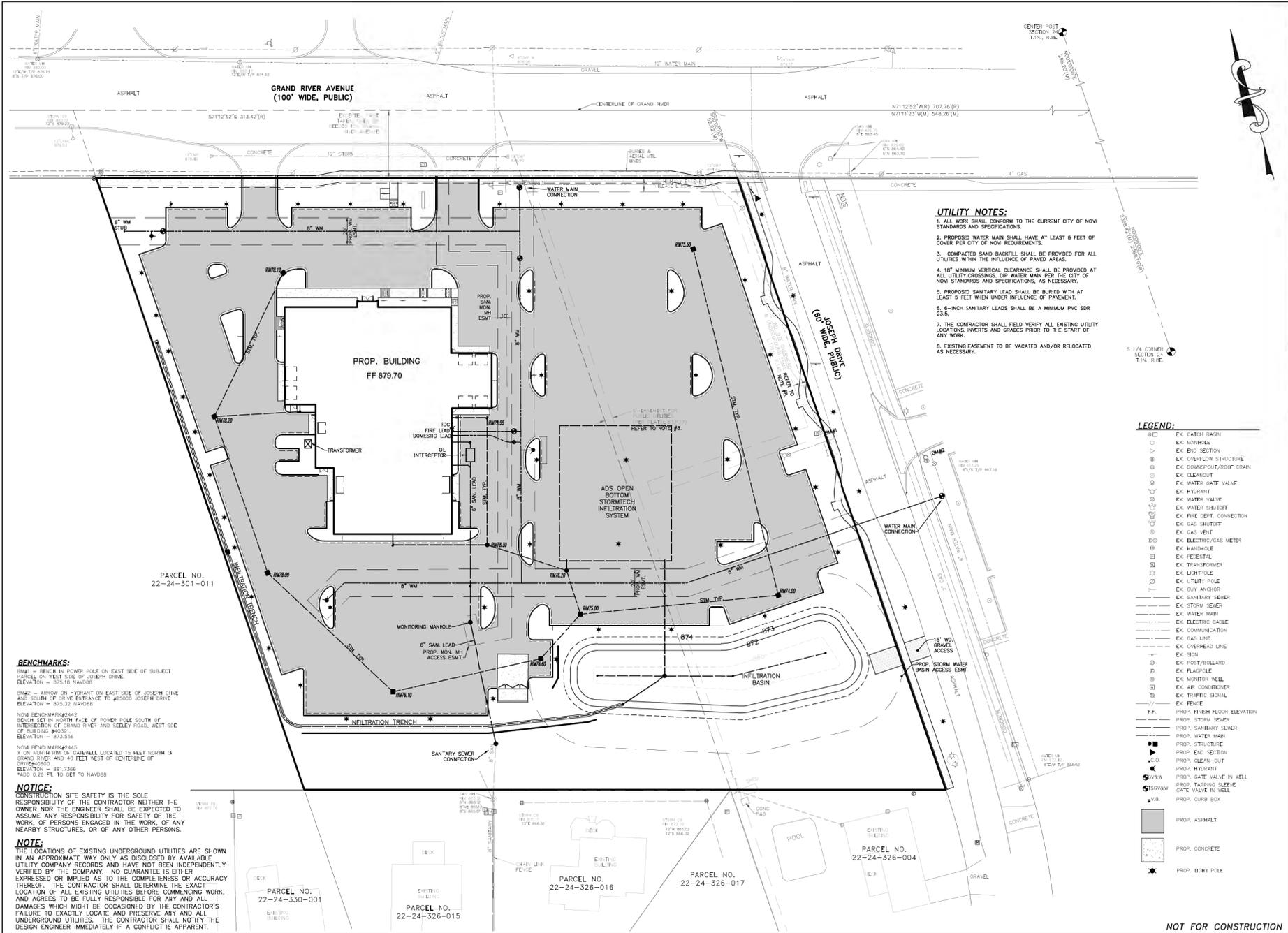
REVISION

| DATE | DESCRIPTION |
|------------|---------------------|
| 2023-12-19 | PRE-CON SUBMITTAL |
| 2024-05-09 | PRO SUBMITTAL |
| 2025-02-14 | PRO SUBMITTAL |
| 2025-04-22 | PRO SUBMITTAL-ITEMS |

DATE: 38-20-2023

DRAWN BY: SD/TO

CHECKED BY: SD/TO



UTILITY NOTES:

1. ALL WORK SHALL CONFORM TO THE CURRENT CITY OF NOW STANDARDS AND SPECIFICATIONS.
2. PROPOSED WATER MAIN SHALL HAVE AT LEAST 6 FEET OF COVER PER CITY OF NOW REQUIREMENTS.
3. COMPACTED SAND BACKFILL SHALL BE PROVIDED FOR ALL UTILITIES WITHIN THE INFLUENCE OF PAVED AREAS.
4. 18" MINIMUM VERTICAL CLEARANCE SHALL BE PROVIDED AT ALL UTILITY CROSSINGS OVER WATER MAIN PER THE CITY OF NOW STANDARDS AND SPECIFICATIONS, AS NECESSARY.
5. PROPOSED SANITARY LEAD SHALL BE BURIED WITH AT LEAST 5 FEET WHEN UNDER INFLUENCE OF PAVEMENT.
6. 8-INCH SANITARY LEADS SHALL BE A MINIMUM PVC SDR 23.5.
7. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, INVERTS AND GRADES PRIOR TO THE START OF ANY WORK.
8. EXISTING EASEMENT TO BE VACATED AND/OR RELOCATED AS NECESSARY.

- LEGEND:**
- ⊗ EX. CATCH BASIN
 - EX. HANDBOLE
 - EX. END SECTION
 - ⊕ EX. OVERFLOW STRUCTURE
 - ⊕ EX. DOWNSPOUT/ROOF DRAIN
 - ⊕ EX. CLEANOUT
 - ⊕ EX. WATER GATE VALVE
 - ⊕ EX. HYDRANT
 - ⊕ EX. WATER VALVE
 - ⊕ EX. WATER SHUTOFF
 - ⊕ EX. FIRE DEPT. CONNECTION
 - ⊕ EX. GAS SHUTOFF
 - ⊕ EX. GAS VENT
 - ⊕ EX. ELECTRIC/GAS METER
 - ⊕ EX. HANDBOLE
 - ⊕ EX. FEDESTAL
 - ⊕ EX. TRANSFORMER
 - ⊕ EX. LIGHTPOLE
 - ⊕ EX. UTILITY POLE
 - ⊕ EX. GUY ANCHOR
 - ⊕ EX. SANITARY SEWER
 - ⊕ EX. STORM SEWER
 - ⊕ EX. WATER MAIN
 - ⊕ EX. ELECTRIC CABLE
 - ⊕ EX. COMMUNICATION
 - ⊕ EX. GAS LINE
 - ⊕ EX. OVERHEAD LINE
 - ⊕ EX. SIGN
 - ⊕ EX. POST/BOLLARD
 - ⊕ EX. FLAGPOLE
 - ⊕ EX. MONITOR WELL
 - ⊕ EX. AIR CONDITIONER
 - ⊕ EX. TRAFFIC SIGNAL
 - ⊕ EX. FENCE
 - FF. PROP. FINISH FLOOR ELEVATION
 - PRO. STORM SEWER
 - PRO. SANITARY SEWER
 - PRO. WATER MAIN
 - PRO. STRUCTURE
 - PRO. END SECTION
 - , ⊕ PROP. CLEAN-OUT
 - , ⊕ PROP. HYDRANT
 - ⊕ PROP. GATE VALVE IN WELL
 - ⊕ PROP. TRAFFIC SIGNAL GATE VALVE IN WELL
 - ⊕ PROP. CURB BOX
 - PROP. ASPHALT
 - PROP. CONCRETE
 - ★ PROP. LIGHT POLE

BENCHMARKS:

BM#1 - BENCH IN POWER POLE ON EAST SIDE OF SUBJECT PARCEL ON WEST SIDE OF JOSEPH DRIVE. ELEVATION = 875.19 NAVD83

BM#2 - ARROW ON HYDRANT ON EAST SIDE OF JOSEPH DRIVE AND SOUTH OF DRIVE ENTRANCE TO #25000 JOSEPH DRIVE. ELEVATION = 875.32 NAVD83

NOV#1 BENCHMARK#2442 - BENCH SET IN NORTH FACE OF POWER POLE SOUTH OF INTERSECTION OF GRAND RIVER AND SIBLEY ROAD, WEST SIDE OF SIBLEY ROAD. ELEVATION = 873.556

NOV#1 BENCHMARK#2445 - BENCH SET ON NORTH SIDE OF GARDENWELL LOCATED 15 FEET NORTH OF GRAND RIVER AND 40 FEET WEST OF CENTERLINE OF DRIVE#20000. ELEVATION = 881.7356
 MDD: 0.28 FT TO GET TO NAVD83

NOTICE:
 CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

NOTE:
 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

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 SUITE 109
 NOW, MICHIGAN 48037

(248) 908-3701 (BUS)
 (248) 908-3766 (FAX)
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PRELIMINARY UTILITY PLAN

DATE: 39-20-2023
 DRAWN BY: SD/TO
 CHECKED BY: SD/TO

FBK: 389
 CHF: BAJ

SCALE: HOR 1" = 30' FT
 VER 1" = 10' FT

REVISIONS

| | |
|------------|--------------------|
| 2023-12-19 | PRE-CON SUBMITTAL |
| 2024-05-09 | PRO SUBMITTAL |
| 2025-02-14 | PRO SUBMITTAL |
| 2025-04-22 | PRO SUBMITTAL-SEDM |

DATE: 39-20-2023
 DRAWN BY: SD/TO
 CHECKED BY: SD/TO

FBK: 389
 CHF: BAJ

5

SCALE: HOR 1" = 30' FT
 VER 1" = 10' FT

23-148

NOT FOR CONSTRUCTION

DRAINAGE NARRATIVE:

EASTING DRAINAGE PATTERNS:
THE EXISTING TOPOGRAPHY INDICATES THE SITE DRAINS TOWARDS THE REAR (SOUTHWEST AREA) OF THE PROPERTY INTO AN EXISTING DRAINAGE WITH NO STORM WATER OUTLET.

EXISTING SOILS:
PER THE GEOTECHNICAL INVESTIGATION FAVORABLE SOILS EXIST TO ACCOMMODATE INFILTRATION WITH RATES VARYING FROM 2.3 IN/HR TO 15.3 IN/HR AT THE PROPOSED INFILTRATION AREA LOCATIONS.

PROPOSED INFILTRATION:
DUE TO NO STORM WATER OUTLET FOR THE SITE AND FAVORABLE ON-SITE SOILS (SOIL GROUP A) PER SOIL MAPS, STORM WATER INFILTRATION IS PROPOSED TO ACCOMMODATE THE VOLUME FROM A 105-YEAR 24-HOUR STORM EVENT.

AN OIL/GAS SEPARATOR, INFILTRATION TRENCH, AND UNDERGROUND INFILTRATION STORMTECH SYSTEM IS PROPOSED PRIOR TO DRAINAGE INTO THE PRIMARY INFILTRATION BASIN TO ACCOMMODATE STORM WATER PRE-TREATMENT. AN ISOLATOR ROW DESIGNED TO COLLECT SEDIMENT ALLOW FOR USE OF BACKFILL OF THE UNDERGROUND SYSTEM WILL BE PROVIDED WITHIN THE STORMTECH SYSTEM PRIOR TO ENTERING THE REST OF THE UNDERGROUND SYSTEM.

STORM WATER CALCULATIONS:

ESTIMATED RUNOFF COEFFICIENT CALCULATION

| LAND USE | AREA (A) | RUNOFF COEFFICIENT (C) |
|---------------------------------|--------------|------------------------|
| Building / Pavement | 3.16 (acres) | 0.95 |
| On-Site Grass | 1.00 | 0.35 |
| Off-Site Grass (0.50-0.80) AREA | 1.52 | 0.15 |
| TOTAL AREA | 5.78 | |

CALCULATE THE WEIGHTED RUNOFF COEFFICIENT:

$$C_{WTD} = \frac{(A_1 \times C_1) + (A_2 \times C_2) + (A_3 \times C_3)}{A_{TOTAL}} = \frac{(3.16 \times 0.95) + (1.00 \times 0.35) + (1.52 \times 0.15)}{5.78} = 0.62$$

CITY OF NOVI 105-YEAR STORM WATER DETENTION BASIN DESIGN

DESIGN VARIABLES: Tributary Area (A) = 5.78 acres
Run-Off Coefficient (C) = 0.62
CALCULATE THE 105-YEAR DETENTION VOLUME (V₁₀₅)
V₁₀₅ = 18,385 C² A = 68,035 cf
CALCULATE THE REQUIRED VOLUME BASED STORM WATER QUALITY CONTROL (V₂)
V₂ = 545 C² A = 1,903 cf

PROPOSED VOLUME CALCULATIONS

INFILTRATION TRENCH:
INFILTRATION VOLUME (CF) = INFILTRATION AREA (SF) X INFILTRATION PERIOD (HR) X INFILTRATION PERIOD (HR) X (1/12)
TRENCH WIDTH = 2.6 FEET
TRENCH LENGTH = 550.0 FEET
INFILTRATION AREA (TRENCH WIDTH) = 1,300 SQ. FT.
INFILTRATION DESIGN RATE = 7.28 IN/HR AVERAGE FROM INFILTRATION TESTS
INFILTRATION PERIOD = 6 HOURS IMPACTOR OF SAFETY=2
INFILTRATION VOLUME = 4,001 CU. FT.

STORMTECH INFILTRATION BASIN:
INFILTRATION VOLUME (CF) = INFILTRATION AREA (SF) X INFILTRATION PERIOD (HR) X (1/12)
INFILTRATION AREA = 2,375 SQ. FT.
INFILTRATION DESIGN RATE = 2.33 IN/HR AVERAGE FROM INFILTRATION TESTS
INFILTRATION PERIOD = 6 HOURS IMPACTOR OF SAFETY=2
INFILTRATION VOLUME = 8,614 CU. FT.

VOLUME PROVIDED IN STORMTECH UNITS
Storm Tech Section Chamber Volume
ONE END CAP VOLUME = 393 CU. FT. DOES NOT INCLUDE BACKFILL VOIDS
ONE CHAMBER VOLUME = 1763 CU. FT. DOES NOT INCLUDE BACKFILL VOIDS
STORMTECH UNITS PROVIDED = 10
OF END CAPS = 10
OF CHAMBERS = 10
STORMTECH UNITS VOLUME = 22,163 CU. FT.
STORMTECH UNITS VOLUME = 22,874 CU. FT.

PROPOSED INFILTRATION BASIN VOLUME CALCULATIONS

| Surface Storage Volume | Elevation | Area | Avg. Area | Depth | Volume |
|------------------------|-----------|--------|-----------|-------|--------|
| | 873 | 10,455 | | | |
| | 872 | 9,455 | 1 | 9,455 | 9,455 |
| | 871 | 8,225 | | | |

AGGREGATE STORAGE VOLUME
assume 40% void

| Elevation | Area | Avg. | Depth | Void Ratio | Volume |
|-----------|-------|-------|-------|------------|--------|
| 872 | 9,455 | 5,660 | 6.0 | 0.4 | 13,658 |
| 866 | 3,125 | | | | |

BASIN INFILTRATION
* INFILTRATION VOLUME (CF) = INFILTRATION AREA (SF) X INFILTRATION PERIOD (HR) X INFILTRATION PERIOD (HR) X (1/12)
INFILTRATION AREA = 8,225 SQ. FT.
INFILTRATION DESIGN RATE = 2.28 IN/HR AVERAGE FROM INFILTRATION TESTS
INFILTRATION PERIOD = 6 HOURS IMPACTOR OF SAFETY=2
BASIN INFILTRATION VOLUME = 9,380 CU. FT.
TOTAL VOLUME PROVIDED = 68,981 CU. FT.
TOTAL VOLUME REQUIRED = 69,938 CU. FT.

100-YEAR STORM WATER BASIN DESIGN
V₁₀₅ = 68,035 cf
INFILTRATION VOLUME (CF) = INFILTRATION AREA (SF) X INFILTRATION PERIOD (HR) X INFILTRATION PERIOD (HR) X (1/12)
INFILTRATION AREA = 8,225 SF
INFILTRATION DESIGN RATE = 2.28 IN/HR AVERAGE FROM INFILTRATION TESTS
INFILTRATION PERIOD = 72 HOURS IMPACTOR OF SAFETY=2
INFILTRATION VOLUME = 112,881 CU. FT.

G2 INFILTRATION TESTING RESULTS

INFILTRATION CONSIDERATIONS
The table below provides the results of our observations and testing during the soil boring operations:

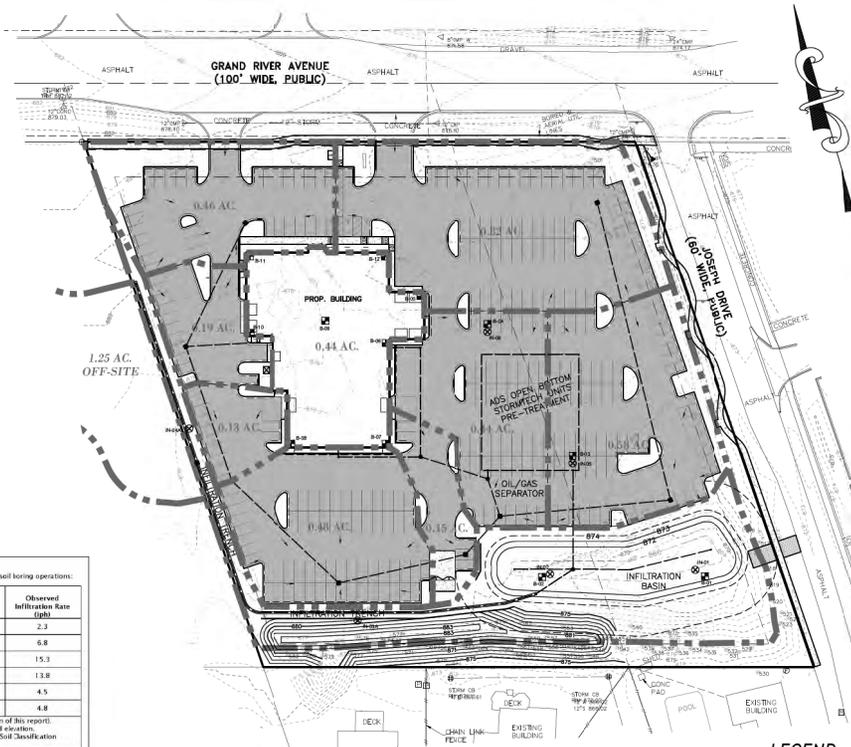
| Infiltration Location No. | Ground Surface Elevation (ft) | Ground Water Elevation (ft) | Test Elevation (ft) | Soil Type (USCS) | Observed Infiltration Rate (in/hr) |
|---------------------------|-------------------------------|-----------------------------|---------------------|------------------|------------------------------------|
| IR-01 | 868.6 | 858.4 | 864.1 | Brown Sand (SP) | 2.3 |
| IR-02 | 872.0 | 861.7 | 866.0 | Brown Sand (SP) | 6.8 |
| IR-03A | 875.9 | --- | 870.9 | Brown Sand (SP) | 15.3 |
| IR-04A | 877.6 | --- | 871.6 | Brown Sand (SP) | 13.8 |
| IR-05 | 875.9 | 855 | 867.7 | Brown Sand (SP) | 4.5 |
| IR-06 | 877.2 | 859.9 | 868.0 | Brown Sand (SP) | 4.8 |

Notes:
1. Elevations based on interpolation from field operations section of this report.
2. Determined from adjacent boring. Regional highest observed elevation.
3. Description in general accordance with Visual Manual Unified Soil Classification System (ASTM D2488).



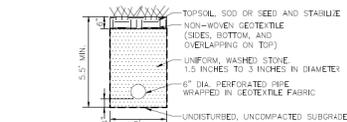
EXISTING SOILS

PER 105-YEAR STORM WATER DETENTION BASIN DESIGN
SOIL TYPE: G2 = GM(PO)-SOILS LIGHTLY SANDS
SEE SOIL BORINGS FOR DETAILS

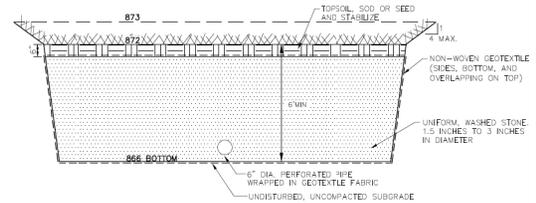


LEGEND:

- SOIL BORING
- INFILTRATION TEST



INFILTRATION TRENCH DETAIL



INFILTRATION BASIN CROSS-SECTION

NOTES:
UNIFORM, WASHED STONE, 1.5 INCHES TO 3 INCHES IN DIAMETER WILL BE USED WITHIN THE FACILITY.
OBSERVATION WELLS, CONSISTING OF A PERFORATED VERTICAL PIPE WITHIN THE INFILTRATION BASIN & TRENCH SHALL BE INSTALLED TO MONITOR PERFORMANCE.
GREAT CARE SHALL BE TAKEN DURING CONSTRUCTION TO AVOID COMPACTION OF THE EXISTING IN-SITU SOILS. THE BOTTOM OF THE INFILTRATION FACILITY SHALL BE SCARIFIED OR ROTO-TILLED TO A DEPTH OF 6 INCHES OR MORE TO REDUCE THE POSSIBILITY OF INITIAL SOIL COMPACTION CAUSED BY EXCAVATION WITH HEAVY EQUIPMENT.

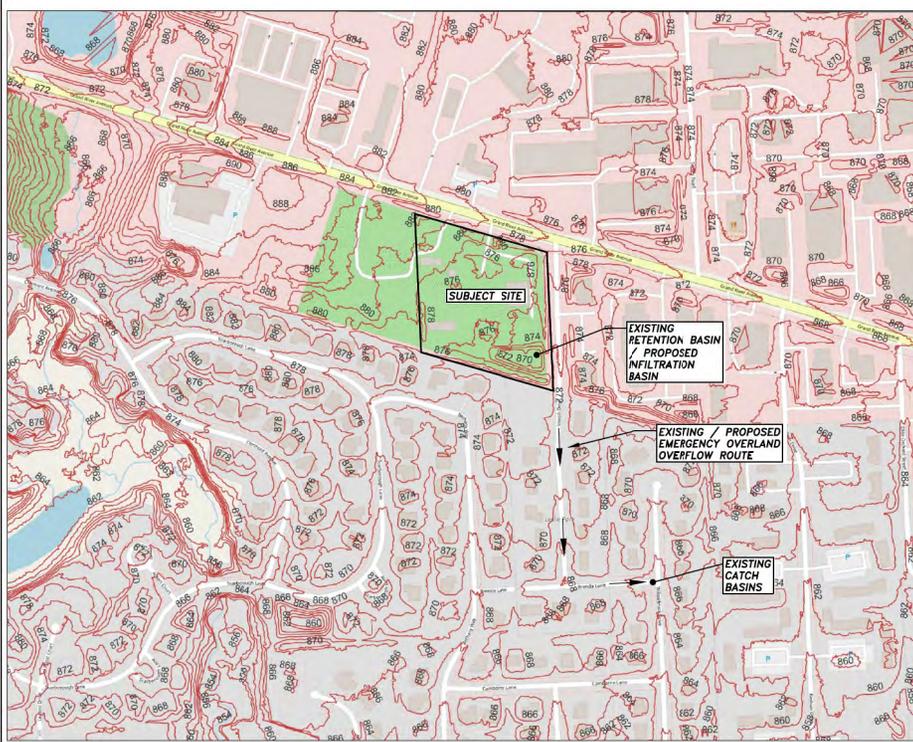
ALPINE ENGINEERING INC.
RESIDENTIAL SURVEYING: SITE CONDOMINIUM BOUNDARY SURVEYS, EASEMENT SURVEYS, PROPERTY LAYOUT, CONSTRUCTION LAYOUT
COMMERCIAL SURVEYING: SITE ENGINEERING, BOUNDARY SURVEYS, INDUSTRIAL SURVEYS, CONSTRUCTION LAYOUT
4885 WEST ROAD SUITE 109 FARMINGTON, MICHIGAN 48337
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Know what's below
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FELDMAN 40575 GRAND RIVER AVENUE, LLC
PRELIMINARY STORM WATER MANAGEMENT PLAN - 1
SECTION: 24
FELDMAN KIA OF NOVI
CITY OF NOVI
OAKLAND COUNTY
MICHIGAN
RANDBEE

DATE: 30-20-2023
DRAWN BY: SD/TO
CHECKED BY: SD/TO
SCALE: 1" = 40' FT.
VER. 1" = 40' FT.
FBK: 389
CHF: BAJ
6A
23-148

NOT FOR CONSTRUCTION



OVERALL REGIONAL DRAINAGE PLAN
SCALE: 1" = 200 FEET



STORM WATER UNDERGROUND DETENTION:

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

| MATERIAL LOCATION | DESCRIPTION | ASHTO MATERIAL CLASSIFICATIONS | COMPACTION / DENSITY REQUIREMENT |
|-------------------|---|---|--|
| D | PAVEMENT FILL LAYERS FROM CURBS TO STREETS BEHIND THE TOP OF THE "C" LAYER TO THE BOTTOM OF EXISTING OR PROPOSED (OR EXISTING) PAVED SURFACE ABOVE THE TOP OF THE SUBGRADE. PAVEMENT SUBGRADE MAY BE PART OF THE LAYER. | ANY ROLLOVER MATERIAL, NATIVE SOILS, OR FINE ENGINEERED FILL. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS. | PREPARE FOR SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MUST MEET EXISTING NATURAL AND IRRIGATION REQUIREMENTS. |
| C | INTERNAL FILL MATERIAL FOR LAYER "C" STARTS FROM THE TOP OF THE EXISTING STONE OR LAYER "B" AND EXTENDS ABOVE THE TOP OF THE CHAMBER. NOTE THAT PRESENT SUBGRADE MAY BE PART OF THE "C" LAYER. | ORBITAL WELL-SORTED SOLO-SUBGRADE GRADES, GRAVELS OR MOST PREVENT SUBGRADE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | SEEN COMPACTION/DEPTH OF 100MM OF MATERIAL OVER THE CHAMBERS IS REQUIRED. EXISTING MATERIALS MUST BE 100% COMPACTED TO A MIN. 95% PROCTOR DENSITY FOR WELL-SORTED GRADES AND 90% RELATIVE DENSITY FOR PROPOSED SUBGRADE MATERIALS. |
| B | PREVENTION STONE FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ("A" LAYER) TO THE LAYER ABOVE. | CLEAN CRUSHED ANGLULAR STONE | NO COMPACTION REQUIRED. |
| A | FOUNDATION STONE FILL BELOW CHAMBERS FROM THE FOUNDATION UP TO THE FOOT SECTION OF THE CHAMBERS. | CLEAN CRUSHED ANGLULAR STONE | FLUTE COMPACT ORKAL TO ACHIEVE A FLAT SURFACE!! |

PLEASE NOTE:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2150, STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORUGATED WALL STORMWATER COLLECTION CHAMBER CLASSIFICATION TYPE B.
- MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2150 STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORUGATED WALL STORMWATER COLLECTION CHAMBERS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSURING THE BEARING RESISTANCE ALLOWABLE BEARING CAPACITY OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PREVENTION STONE SHALL BE PLACED HORIZONTALLY TO THE EXHAUSTION WALL FOR BOTH VERTICAL AND SLOPED EXHAUSTION WALLS.

REQUIREMENTS FOR WALLS AND INSTALLATION:

- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTERNAL, INTERLOCKING SPACING LUGS.
- TO ENSURE PROPER JOINT DURING INSTALLATION AND REMOVAL, THE JOINT OF THE CHAMBER JOINT SHALL NOT BE GREATER THAN 1/8".
- TO ENSURE THE INTEGRITY OF THE JOINT DURING SETTLEMENT, THE JOINT STRENGTH SHALL BE DEFINED IN SECTION 8.0.0. JOINT STRENGTH SHALL BE GREATER THAN OR EQUAL TO 90% DEPTH. AND TO RESIST CHAMBER DEFORMATION DURING INSTALLATION, IF SUBGRADE TEMPERATURES ABOVE 70 °F (21 °C), CHAMBERS SHALL BE PROTECTED FROM REFLECTIVE SOILS OR TELL CLOSURES.

*** FOR COVER DEPTHS GREATER THAN 7.0 (2.1 m) PLEASE CONTACT STORMTECH**

NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2150, STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORUGATED WALL STORMWATER COLLECTION CHAMBER CLASSIFICATION TYPE B.
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1 SHEET OF 1

StormTech® MC-7200 Chamber

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. Nominal chambers can be designed to meet the most stringent performance standards, thus enhancing the performance and extending the service life of these practices.

| Nominal Chamber Specifications (Not to scale) | Nominal End Cap Specifications (Not to scale) |
|--|--|
| Size (L x W x H) 83" x 100" x 60" 2108 mm x 2540 mm x 1524 mm | Size (L x W x H) 38" x 100" x 60" 965 mm x 2585 mm x 1549 mm |
| Chamber Storage 175.9 ft³ (4.98 m³) | End Cap Storage 39.5 ft³ (1.12 m³) |
| Min. Installed Storage* 391.3 ft³ (11.07 m³) | Min. Installed Storage* 115.1 ft³ (3.26 m³) |
| Weight 302 lbs (13.6 kg) | Weight Nominal 90.0 lbs (40.8 kg) |
| Shipping 7 chambers/pallet 5 end caps/pallet 8 pallets/truck | Shipping Assumes a maximum of 12" (300 mm) of stone above, 12" (300 mm) of stone below, 12" (300 mm) of stone between chambers, 12" (300 mm) of stone between chambers, and caps and 60% stone porosity. |

ADS StormTech

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INDUSTRIAL SURVEYS
CONSTRUCTION LAYOUT

RESIDENTIAL
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FELDMAN 40575 GRAND RIVER AVENUE, LLC
PRELIMINARY STORM WATER MANAGEMENT PLAN - 2
SECTION: 24
FELDMAN KIA OF NOVI
CITY OF NOVI
OAKLAND COUNTY
MICHIGAN

DATE: 39-20-2023
DRAWN BY: SD/TO
CHECKED BY: SD/TO

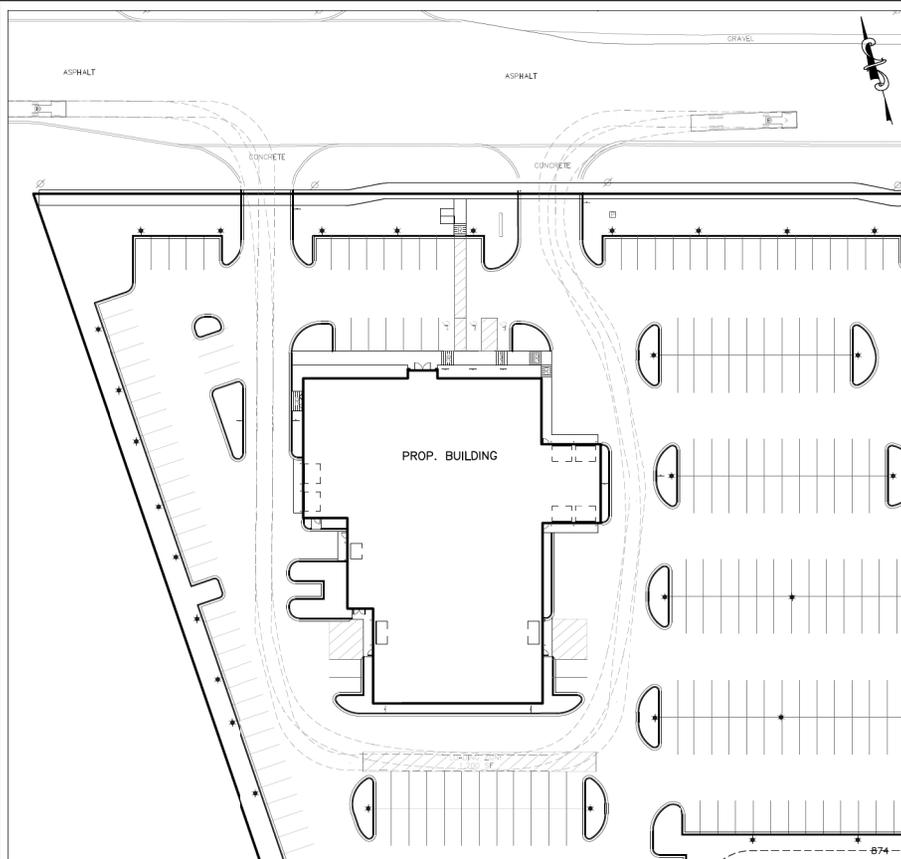
FBK: 389
CHF: BAJ

6B

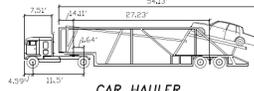
SCALE: 1" = 200 FT

23-148

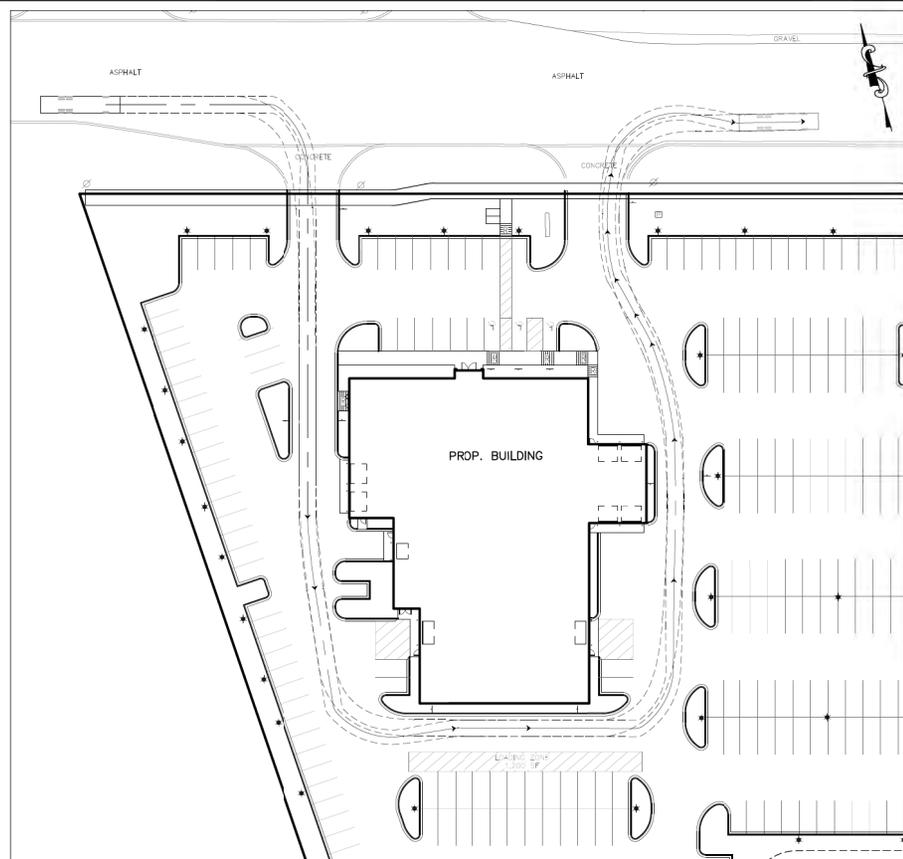
NOT FOR CONSTRUCTION



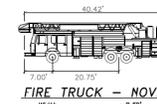
CAR HAULER TURNING
1" = 30'



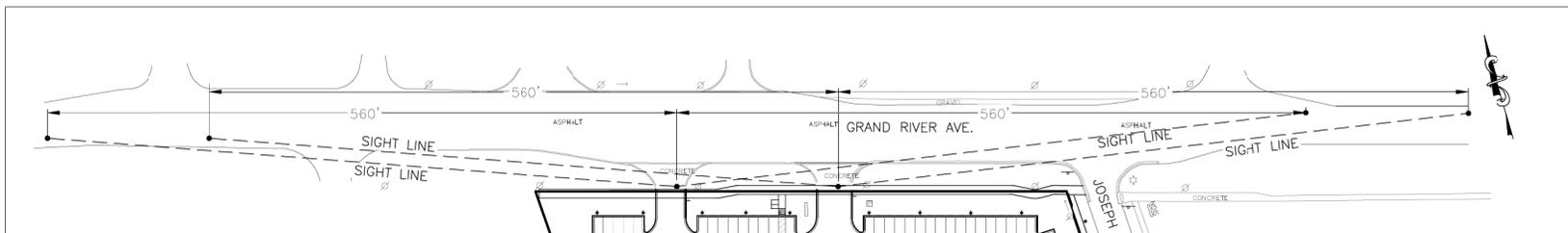
CAR HAULER
 Tractor Width : 8.20' Lock to Lock Time : 6.0s
 Trailer Width : 8.20' Steering Angle : 21.2°
 Tractor Track : 8.20' Articulating Angle : 70.0°
 Trailer Track : 8.20'



FIRE TRUCK TURNING
1" = 30'



FIRE TRUCK - NOV1
 Width : 6.30'
 Track : 8.20'
 Lock to Lock Time : 6.0s
 Steering Angle : 33.2°



MIN. REQ'D CORNER SIGHT DISTANCE
1" = 50'

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CLIENT: **FELDMAN 40575 GRAND RIVER AVENUE, LLC**
SITE DETAILS - 2
 SECTION: 24
FELDMAN KIA OF NOVI
 CITY OF NOVI
 OAKLAND COUNTY
 MICHIGAN

DATE: 39-20-2023
 DRAWN BY: SD/TO
 CHECKED BY: SD/TO

REVISIONS
 2023-12-19 P&E-APP SUBMITTAL
 2024-05-09 PRO SUBMITTAL
 2025-02-14 PRO SUBMITTAL
 2025-04-22 PRO SUBMITTAL-SIGN

DATE: 39-20-2023
 DRAWN BY: SD/TO
 CHECKED BY: SD/TO

FBK: 389
 CHF: BAJ
 SCALE: HOR 1" = 30' VER 1" = 50'
 8
 23-148

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OVERALL
SCALE: 1" = 2,200 FEET



EXISTING CONDITIONS (PICTURE 1)
FACING SOUTHEAST



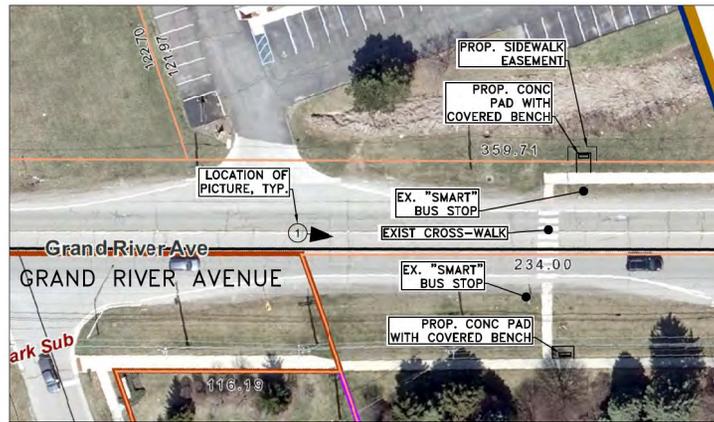
NORTH BENCH



SOUTH BENCH

FELDMAN KIA NOVI
GRAND RIVER BUS STOP SCHEMATIC VISUALIZATIONS

STUDIODETROIT
ARCHITECTS



PROJECT AREA
SCALE: 1" = 230 FEET

NOTE:
1. SIDEWALK LAYOUTS ARE CONCEPTUAL AND ARE BASED ON AERIAL INFORMATION ONLY. DUE TO THE LIMITATIONS IN THE RESOLUTION AND ACCURACY OF THE AERIAL DATA, THERE MAY BE DISCREPANCIES IN SCALING OR ALIGNMENTS. A TOPOGRAPHIC SURVEY WILL BE REQUIRED PRIOR TO PREPARING A SITE PLAN TO VERIFY LAYOUT, GRADING, ROW/EASEMENTS, ETC.

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CONCEPTUAL PLANNING ONLY

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CONSTRUCTION LAYOUT

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PROPERTY SURVEYS
CONSTRUCTION LAYOUT

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PROPERTY SURVEYS
CONSTRUCTION LAYOUT

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NOVI, MICHIGAN 48277

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PROJECT: GRAND RIVER AVE. PROPOSED BUS STOP IMPROVEMENTS (PUBLIC BENEFIT)

SECTION: 24 FELDMAN KIA OF NOVI
CITY OF NOVI
OAKLAND COUNTY
MICHIGAN

RANDI BE

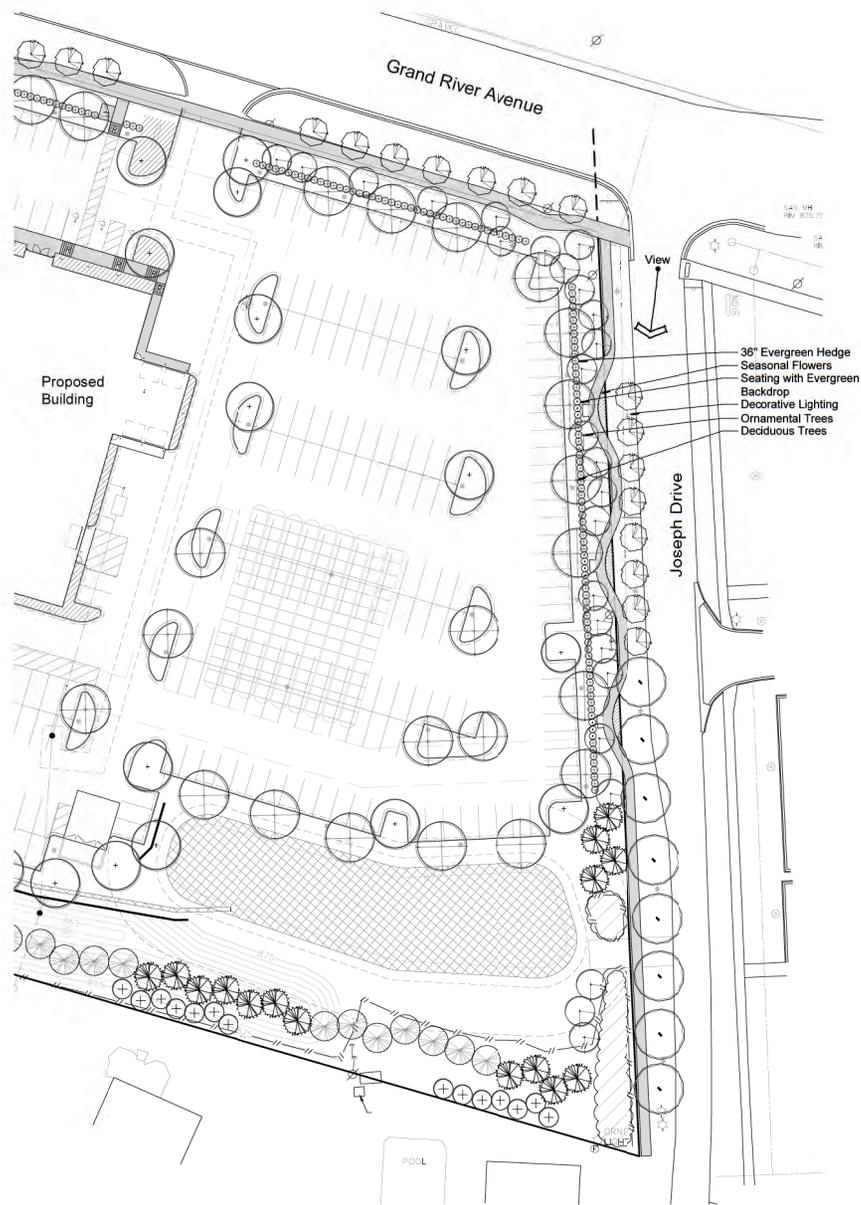
| NO. | DATE | REVISION |
|-----|----------|--------------------|
| 001 | 10-11-20 | INITIAL |
| 002 | 02-14-21 | PRO SUBMITTAL |
| 003 | 04-27-21 | PRO SUBMITTAL-SEMI |

DATE: 38-22-2023
DRAWN BY: SD
CHECKED BY: TD

PK: 389
DPI: BAJ

SCALE: HOR 1" = 100' FT
VER 1" = 10' FT

23-148



Bench - 3 Total



8' Bench by DuMor
Model 490

Street Lighting - 6 Total



Decorative Lighting
DTE Community Lighting

Joseph Drive Looking South



Seal:

Title:

Joseph Drive

Project:

Feldman Kia of Novi
Novi, Michigan
40575 Grand River Avenue

Prepared for:

Feldman Kia of Novi
40575 Grand River Avenue
Novi, Michigan 48375

Revision:

Review
Revised
Revised
Revised

Issued:

September 20, 2023
October 9, 2023
May 7, 2024
February 18, 2025
April 22, 2025

Job Number:

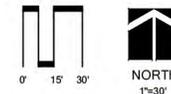
23-056

Drawn By:

jca

Checked By:

jca



Sheet No.

| SITE DATA | |
|---|--|
| NOVI, MI | |
| SITE AREA | -4.9 ACRES |
| ZONING | (PROPOSED) B-3 GENERAL BUSINESS DISTRICT |
| FRONT BLDG SETBACK | 30' |
| SIDE BLDG SETBACK (WEST) | 30' |
| SIDE BLDG SETBACK (EAST) | 15' |
| REAR BLDG SETBACK | 20' |
| FRONT PARKING SETBACK | 20' |
| SIDE PARKING SETBACK | 10' |
| REAR PARKING SETBACK | 10' |
| MAX BUILDING HEIGHT | 2 STORIES / 30' |
| BUILDING AREAS | |
| PROPOSED KIA (FOOTPRINT) | 18,830 GSF |
| PARKING REQUIREMENTS | |
| SALES AREA = 1 SPACE / 200 SF OF SHOWROOM | |
| SERVICE BAYS = 1 SPACES / SERVICE BAY | |
| CALCULATION | |
| 7716 SF SHOWROOM / 200 | = 39 SPACES |
| 11 SERVICE BAYS x 1 | = 11 SPACES |
| TOTAL | = 51 SPACES REQ'D |
| PARKING PROVIDED | = 298 SPACES |
| LOADING REQUIREMENTS | |
| 13 SF / BUILDING LENGTH ALONG FRONTAGE | |
| LOADING AREA = 10 x 100 = 1,000 SF | |

DO NOT SCALE DRAWINGS

| ISSUED | |
|----------|----------------|
| 09.20.23 | CITY PRE-APP |
| 02.XX.24 | PRO SUBMISSION |
| 03.19.25 | PRO SUBMISSION |
| | |
| | |
| | |

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CHECKED SMB

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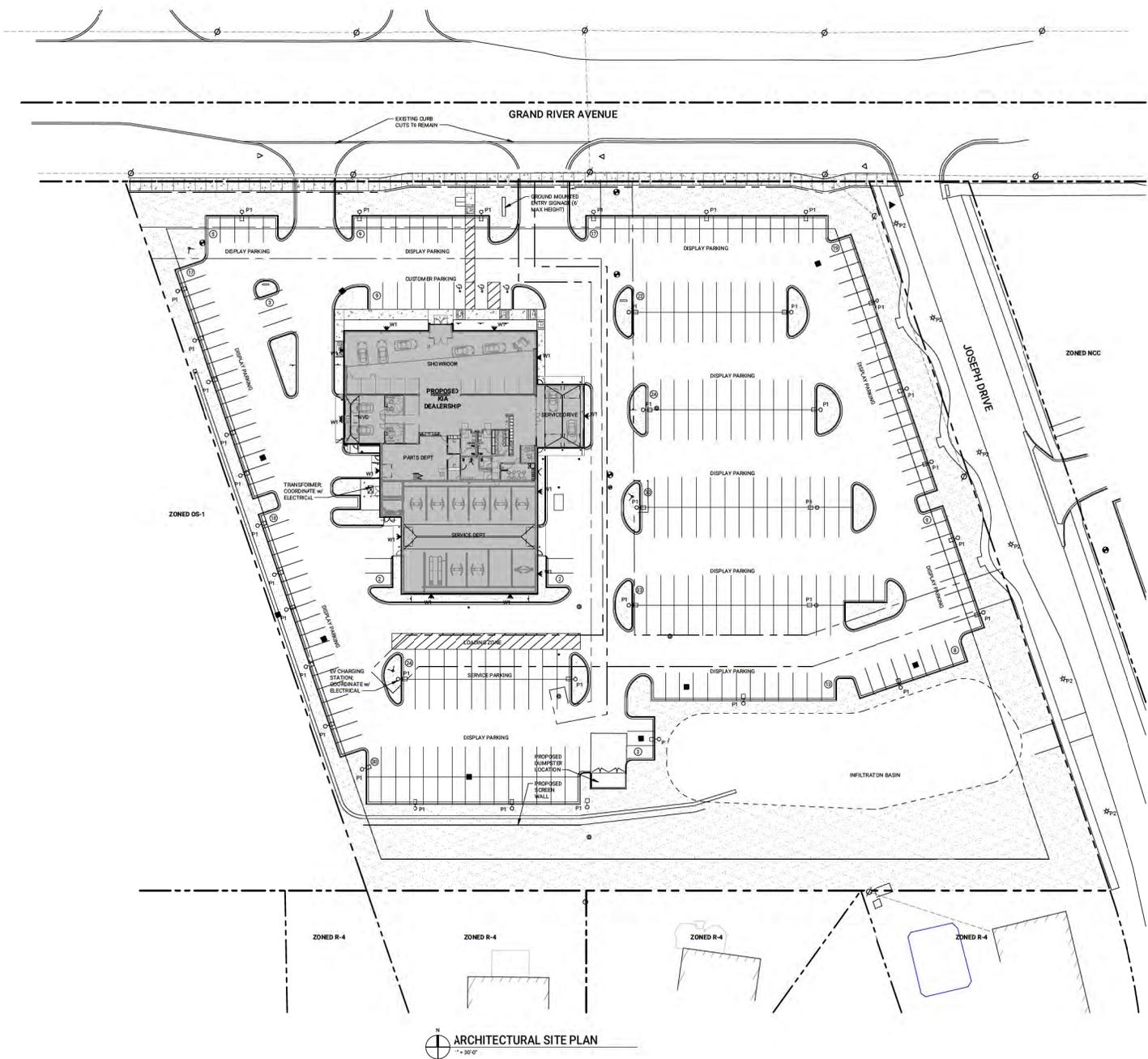
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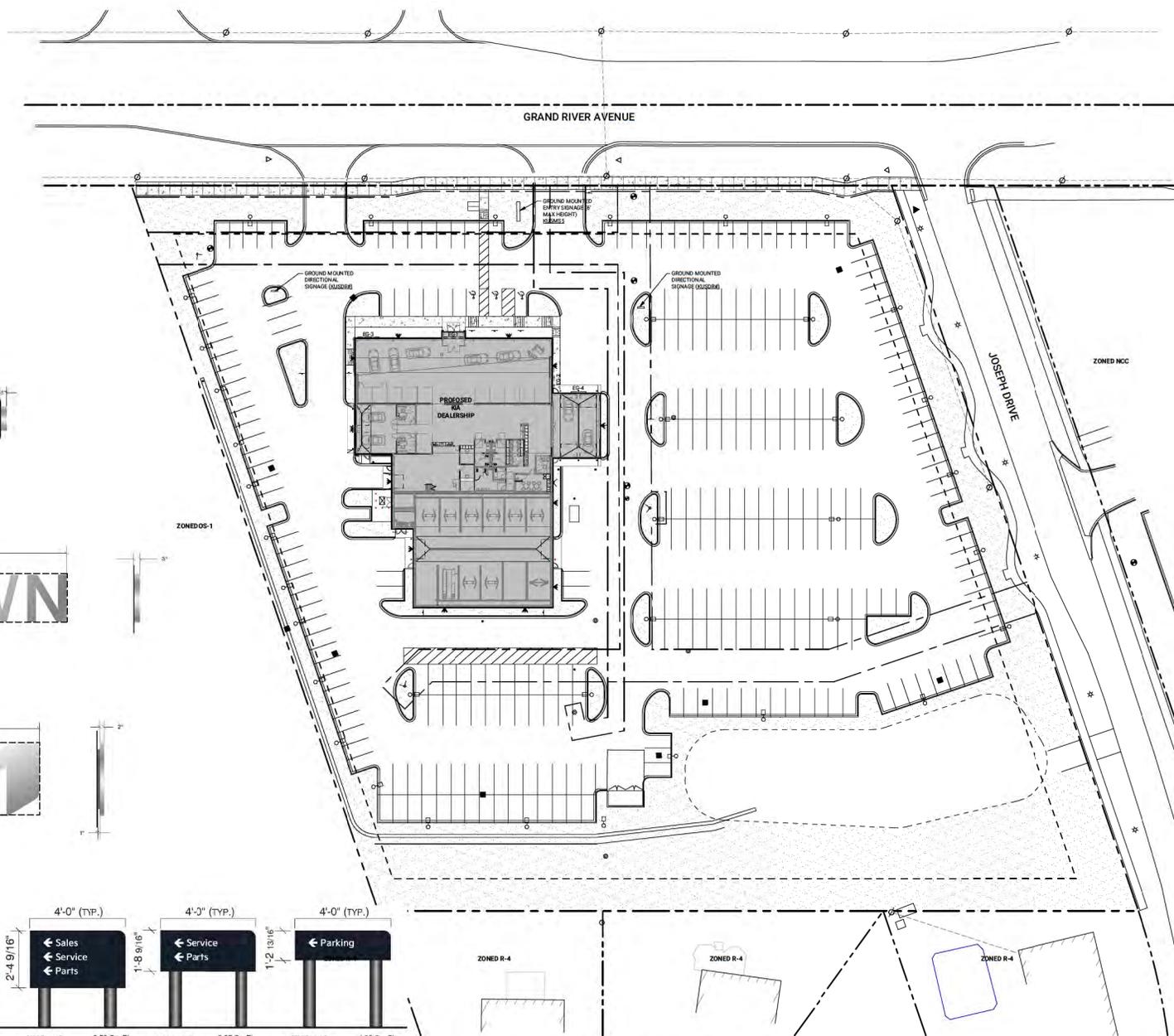
PROJECT
**FELDMAN KIA OF NOVI
NEW DEALERSHIP**
40575 GRAND RIVER AVE
NOVI, MICHIGAN 48375

PROJECT NO. 2192

ARCHITECTURAL SITE PLAN
SP1.1



ARCHITECTURAL SITE PLAN
1" = 30'0"



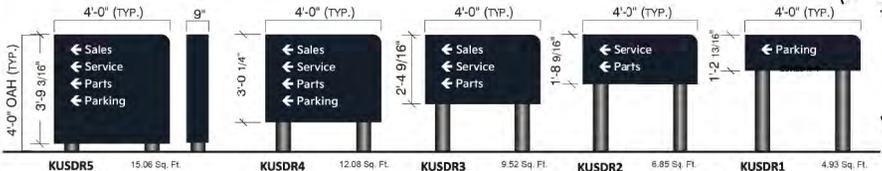
4 SIGN DETAIL
TYP 1/2"=1'-0" EG-4



3 SIGN DETAIL
TYP 1/2"=1'-0" EG-3/REF



2 SIGN DETAIL
TYP 1/2"=1'-0" EG-1 + EG-2



1 SIGN DETAIL
TYP 1/2"=1'-0" DIRECTIONAL SIGNAGE

ARCHITECTURAL SITE PLAN - SIGNAGE
1"=30'-0"

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| | |
|----------|----------------|
| ISSUED | |
| 09.20.23 | CITY PRE-APP |
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| 02.19.25 | PRO SUBMISSION |

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PROJECT

**FELDMAN KIA OF NOVI
NEW DEALERSHIP**
40575 GRAND RIVER AVE
NOVI, MICHIGAN 48375

PROJECT NO. 2192

ARCHITECTURAL SITE PLAN - SIGNAGE

SP1.2

DO NOT SCALE DRAWINGS

| ISSUED | |
|----------|----------------|
| 09.20.23 | CITY PRE-APP |
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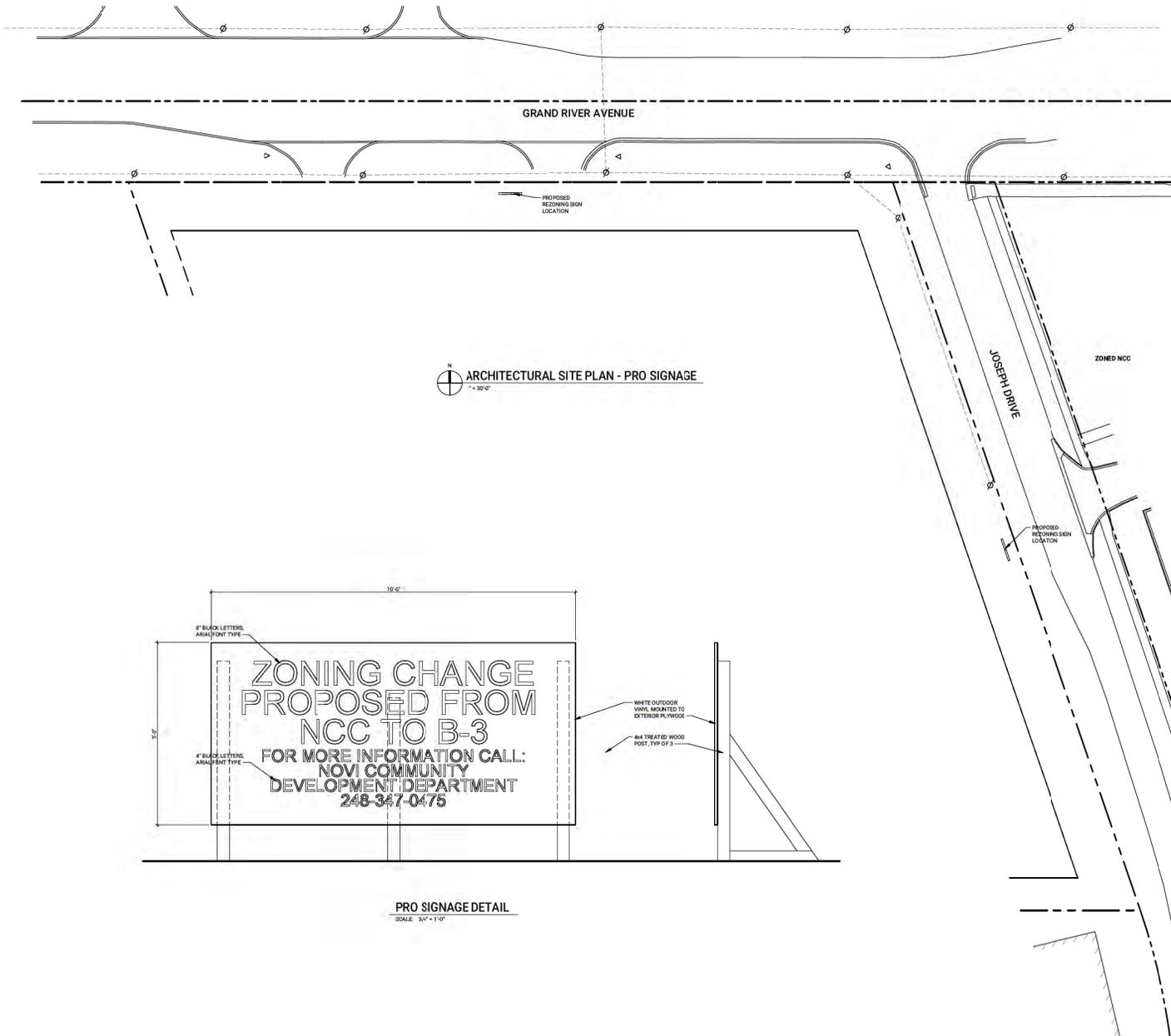
PROJECT

FELDMAN KIA OF NOVI
NEW DEALERSHIP
40575 GRAND RIVER AVE
NOVI, MICHIGAN 48375

PROJECT NO. 2192

ARCHITECTURAL SITE
PLAN - PRO SIGNAGE

SP1.3



ARCHITECTURAL SITE PLAN - PRO SIGNAGE
N
* + 30°

PRO SIGNAGE DETAIL
SCALE: 3/4" = 1'-0"

DESCRIPTION: KIA AMERICA
 2021 SIGNAGE PROGRAM
 KUSMSS MONUMENT
 INSTALL - 115 MPH

PROPERTY: KUSMSS MONUMENT

| DATE | DESCRIPTION |
|--------|-------------------------|
| 1/1/21 | ISSUED FOR PERMIT |
| 1/1/21 | ISSUED FOR CONSTRUCTION |



Patton Sign Group
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 TEL: (313) 232-1100 FAX: (313) 232-1101 WWW.PATTONSIGN.COM

Project Number: 21-0905 Drawing Number: B2582841
 SHEET: 1 OF 2 DATE: 1/27/22 BY: TR

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ISSUED: 09.20.23 CITY PRE-APP
 02.XV.24 SITE UPDATE
 02.19.25 PRO SUBMISSION

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 NEW HAVEN, MI 48165

PROJECT: FELDMAN KIA OF NOVI NEW DEALERSHIP
 40575 BENDER AVE
 NOVI, MICHIGAN 48375

PROJECT NO. 2192

DESCRIPTION: KIA AMERICA
 2021 SIGNAGE PROGRAM
 KUSMSS MONUMENT
 INSTALL - 115 MPH

PROPERTY: KUSMSS MONUMENT

| DATE | DESCRIPTION |
|--------|-------------------------|
| 1/1/21 | ISSUED FOR PERMIT |
| 1/1/21 | ISSUED FOR CONSTRUCTION |



Patton Sign Group
 Powering Your Brand
 400 WEST CAMP AVE., SUITE 100, DETROIT, MI 48226
 TEL: (313) 232-1100 FAX: (313) 232-1101 WWW.PATTONSIGN.COM

Project Number: 21-0905 Drawing Number: B2582841
 SHEET: 2 OF 2 DATE: 1/27/22 BY: TR

ARCHITECTURAL SITE DETAILS
SP1.4

General Notes:

- Design is based on a 115 mph, 3 second gust wind speed per IRC 2018, Category II, Exposure C.
- Spread Foundations is based on a presumptive safe vertical soil bearing pressure minimum of 2000 psf. Caisson and Vertical Slab Foundations are based on a presumptive safe lateral soil bearing pressure minimum of 150 psf per foot of depth. Isolated lateral bearing footings subject to short-term lateral loads and not adversely affected by a 1/2" motion at grade are permitted to be designed using twice the tabulated value of the corresponding soil class.
- A soil report was not provided. Foundation analysis assumes: Soil Classification 4. Allowable bearing pressure should be verified prior to placement of concrete. In the event that the stated requirements are not met and conditions appear deleterious, cease and secure excavation and immediately contact PATTON SIGN GROUP.
- Foundation shall not be placed at the top of, or on the side of a slope exceeding 3:1, or adjacent to a fill slope unless re-evaluated by a competent Professional Engineer. Do not place foundation in fill. Concrete shall be mixed to attain a minimum 28 day compressive strength of 3000 psi.
- Steel reinforcing bars shall conform to ASTM A615, Grade 60 with deformations in accordance with ASTM A305. Welding of reinforcing bars is prohibited.
- All voids between column base plate and foundation surface shall be completely filled with high-strength, non-shrink grout.
- Anchor bolts shall meet ASTM F1554 Grade 36. Exposed surfaces shall be galvanized or coated to prevent corrosion.
- All support members shall be free from defects. Steel tube shall meet ASTM A500 Grade B with a minimum yield strength of 46000 psi. Steel angle, channel and plate shall meet ASTM A36. Extruded aluminum shapes shall be 6061-T6 alloy. Aluminum sheet shall be 6061-H14 alloy. Aluminum plate shall be 5052-H34 alloy.
- Welds shall be made with low hydrogen E70xx electrodes for steel & with 5556 filler for aluminum by persons qualified in accordance with AWS standards within the past two years.
- All structural bolts shall conform to ASTM A325, and be zinc coated unless noted otherwise. When used with structural bolts, heavy hex nuts shall conform to ASTM A563, and washers shall conform to ASTM F536. Tighten all high strength bolts using the Turn-of-Nut method unless noted otherwise.
- The scope of this engineering does not include onsite observations.
- Patton Sign Group will not be responsible for the safety of this job site before, during or after installation of this structure. It is the responsibility of the owners, contractors and installers to ensure that the installation and erection of this structure is performed using methods that are in full compliance with OSHA regulations.
- Any deviation from this design or from any part of this drawing, including the General Notes, without prior written consent from Patton Sign Group voids this drawing in its entirety.
- This design is professional and should not be used for site specific applications unless reviewed and deemed suitable for use at that site by a competent Professional Engineer.

REBAR SCHEDULE
 5'x14' FOUNDATION

| PLACEMENT | SIZE | SPACING | QUANTITY |
|--------------------|------|---------|----------|
| LONG BOTTOM STEEL | #4 | 11" | 3 |
| LONG TOP STEEL | #4 | 11" | 3 |
| BOTTOM CROSS STEEL | #4 | 16" | 3 |
| TOP CROSS STEEL | #4 | 16" | 3 |

DO NOT WELD REBAR 3" MIN. COVER

WHERE THE EXTREME FROST PENETRATION DEPTH REQUIREMENT IS GREATER THAN THE SPECIFIED DEPTH OF THE FOUNDATION(S) SHOWN, THE FOUNDATION(S) DESIGN SHOULD BE ALTERED TO MEET THE LOCAL FROST DEPTH REQUIREMENTS.

WHERE THE EXTREME FROST PENETRATION DEPTH REQUIREMENT IS GREATER THAN THE SPECIFIED DEPTH OF THE FOUNDATION(S) SHOWN, THE FOUNDATION(S) DESIGN SHOULD BE ALTERED TO MEET THE LOCAL FROST DEPTH REQUIREMENTS.

OPTIONAL VERTICAL FOUNDATION

OPTIONAL CAISSON FOUNDATION - ELEVATION

SECTION THROUGH CAISSON AT ANCHOR BOLTS

KUSMSS5

Logo: 3 Sq. Ft.
 Total: 26.71 Sq. Ft.

4 MONUMENT SIGN
 1/2" x 1'-0"

3 DUMPSTER ENCLOSURE DETAIL
 SPI.4 1/2" x 1'-0"

1' CROWN AT PORTS
 HOLD DOWN EXPANSION MATERIAL. PROVIDE SEALANT. COLOR TO MATCH PAVING, TYP.
 FIN. GRADE, REFER TO CIVIL

6" DIA. CONC. FILLED STEEL PIPE - 30" ABOVE GRADE IN 18" DIA. 24" D. CONC. TRENCH FOOTING TYP.
 LINE OF 18" W. MIN. x 40" MIN. CONC. TRENCH FOOTING BELOW BRICK TO MATCH BUILDING FACADE OR 8" REINFORCED CONCRETE WALL - GROUT SOLID

2-YARD DUMPSTER w/ ENCLOSING LID BY OWNER

FENCE POST BELIEVE CAST IN CONC. FOOTING

VERTICAL 5/8" x 4' COMPOSITE PLANK CAST ON 24" PRESSURE TREATED FRAME, COLOR TO BE SELECTED BY ARCHITECT

4" REINFORCED CONCRETE PAD COORDINATE TO CIVIL

2 DUMPSTER ENCLOSURE PLAN
 TYP. 1/4" x 1'-0"

1 TYPICAL BOLLARD DETAIL
 TYP. 1" x 1'-0"

FILL PIPE WITH CONC. AND FORM 1" CROWN AT TOP

6" DIAMETER CONCRETE FILLED STEEL PIPE BOLLARD

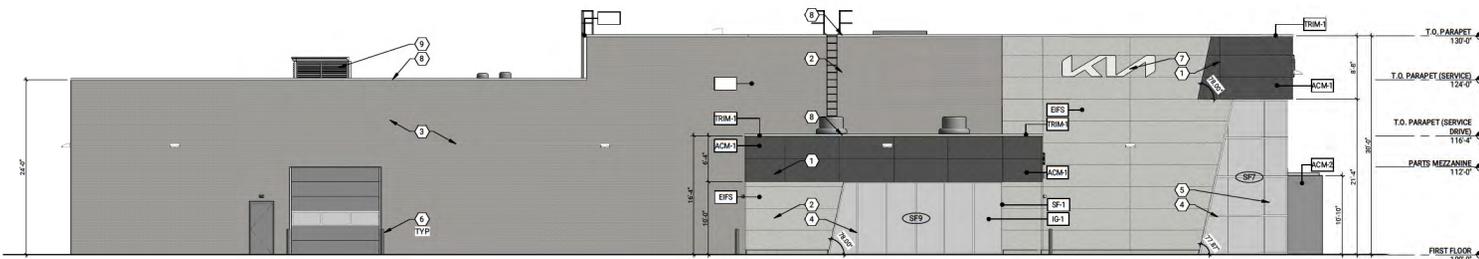
6" DIA. CONC. FILLED STEEL PIPE - 30" ABOVE GRADE IN 18" DIA. 24" D. CONC. TRENCH FOOTING TYP.
 LINE OF 18" W. MIN. x 40" MIN. CONC. TRENCH FOOTING BELOW BRICK TO MATCH BUILDING FACADE OR 8" REINFORCED CONCRETE WALL - GROUT SOLID

2-YARD DUMPSTER w/ ENCLOSING LID BY OWNER

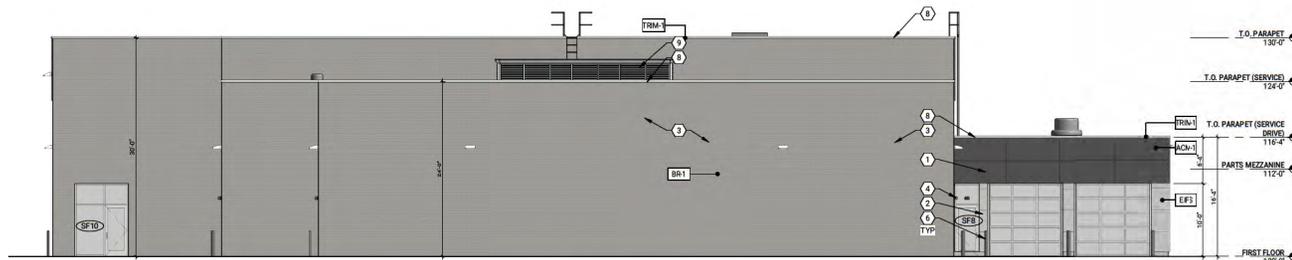
FENCE POST BELIEVE CAST IN CONC. FOOTING

VERTICAL 5/8" x 4' COMPOSITE PLANK CAST ON 24" PRESSURE TREATED FRAME, COLOR TO BE SELECTED BY ARCHITECT

4" REINFORCED CONCRETE PAD COORDINATE TO CIVIL



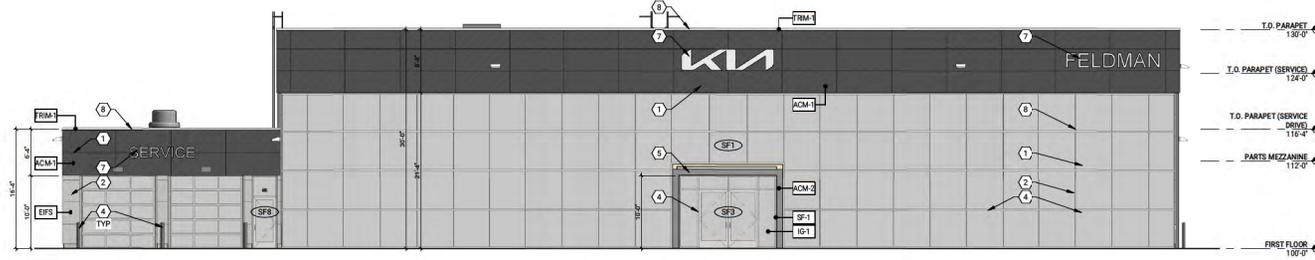
EAST ELEVATION
SCALE: 1/8" = 1'-0"



SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



WEST ELEVATION
SCALE: 1/8" = 1'-0"



NORTH ELEVATION
SCALE: 1/8" = 1'-0"

**EXTERIOR ELEVATION KEY NOTES:
(TYPICAL THIS SHEET ONLY)**

- ① ALUMINUM COMPOSITE PANEL (RAINSCREEN w/ DRY JOINT) w/ 1/2" REVEAL BY PATTON SIGN GROUP. SEE MATERIAL FINISH SCHEDULE
- ② EPS. PROVIDE IMPACT RESISTANT EPS TO 3'-4" ABOVE GRADE MIN.; SEE MATERIAL FINISH SCHEDULE
- ③ BRICK VENEER. SEE MATERIAL FINISH SCHEDULE
- ④ GLASS AND ALUMINUM STOREFRONT / CURTAINWALL SYSTEM. SEE FRAME ELEVATIONS
- ⑤ ENTRY PORTAL BY PATTON SIGN GROUP. COORDINATE ALL REQUIREMENTS
- ⑥ 6" CONC. FILLED STL. BOLLARD, PRIMED W/ PLASTIC COVER
- ⑦ BUILDING MOUNTED SIGNAGE BY PATTON SIGN GROUP. COORDINATE POWER REQUIREMENTS AND INTERIOR ACCESS PANEL LOCATIONS w/ APPROVED SIGNAGE DRAWINGS
- ⑧ PREFINISHED METAL COPING
- ⑨ LOUVERED METAL PANEL ROOF SCREENING. COLOR AS SELECTED FROM MANUFACTURER'S STANDARDS

EXTERIOR MATERIALS

| TAG | LEGEND | MATERIAL | FINISH |
|-------|----------|--|---|
| IG-1 | [Symbol] | EXTERIOR SOLARBAN 72 w/ ACUITY GLASS, 1" CLEAR INSULATED GLAZING | |
| CW-1 | [Symbol] | CURTAINWALL CLEAR ANODIZED ALUMINUM FRAMING; THERMALLY BROKEN | |
| SFS-1 | [Symbol] | CURTAINWALL CLEAR ANODIZED ALUMINUM FRAMING; THERMALLY BROKEN | |
| ACM-1 | [Symbol] | ALUMINUM COMPOSITE MATERIAL | ALPOLIC - TOB BLACK |
| ACM-2 | [Symbol] | ALUMINUM COMPOSITE MATERIAL | ALPOLIC - SILVER METALLIC |
| EPS-1 | [Symbol] | EXTERIOR INSULATING FINISH SYSTEM | EPS - FINISH TO MATCH EP-1 |
| TRM-1 | [Symbol] | REFINISHED ALUMINUM | METAL COPING, TOP CAP OR FLASHING |
| BR-1 | [Symbol] | MASONRY BRICK | TBD - COLOR AS SELECTED TO MATCH EP-1 |
| P-4 | [Symbol] | EXTERIOR PAINT | BENJAMIN MOORE, COLOR: COVENTRY GRAY HC-169 |

EXTERIOR MATERIALS CALCULATIONS

| ELEVATION | MATERIAL | PROPOSED SF | % OF ELEV | REQ'D % |
|-----------------|------------------|-------------|-----------|---------|
| EAST ELEVATION | BRICK | 2,681 SF | 66.03% | 30% MIN |
| | ACM PANEL (FLAT) | 417 SF | 10.27% | 50% MAX |
| | EPS | 962 SF | 23.70% | 25% MAX |
| | GLAZING + DOORS | OMITTED | OMITTED | |
| WEST ELEVATION | BRICK | 2,805 SF | 76.49% | 30% MIN |
| | ACM PANEL (FLAT) | 256 SF | 6.96% | 50% MAX |
| | EPS | 606 SF | 16.53% | 25% MAX |
| | GLAZING + DOORS | OMITTED | OMITTED | |
| NORTH ELEVATION | BRICK | - | - | 30% MIN |
| | ACM PANEL (FLAT) | 1,335 SF | 95.97% | 50% MAX |
| | EPS | 56 SF | 4.03% | 25% MAX |
| | GLAZING + DOORS | OMITTED | OMITTED | |
| SOUTH ELEVATION | BRICK | 3,669 SF | 95.13% | 30% MIN |
| | ACM PANEL (FLAT) | 188 SF | 4.87% | 50% MAX |
| | EPS | - | - | 25% MAX |
| | GLAZING + DOORS | OMITTED | OMITTED | |
| TOTAL SF | 3,857 SF | | | |

SIGNAGE CALCULATION

| SIGN | LOCATION | AREA |
|---------------------------|-----------------|------------------|
| EG-1 KIA LOGO | NORTH ELEVATION | 38.25 SF |
| EG-2 KIA LOGO | EAST ELEVATION | 38.25 SF |
| EG-3 DEALER NAME | NORTH ELEVATION | 29.00 SF |
| EG-4 SERVICE | NORTH ELEVATION | 12.38 SF |
| TOTAL WALL SIGN SF | | 117.88 SF |
| RUSMSS GROUND SIGN | SITE ENTRANCE | 26.71 SF |
| TOTAL SIGN SF | | 144.59 SF |

DO NOT SCALE DRAWINGS

ISSUED
09.20.23 CITY PRE-APP
02.XV.24 PRO SUBMISSION
05.24.24 PRO RESPONSE
02.19.25 PRO SUBMISSION

DRAWN PNP
CHECKED SMB

SEAL

NOT FOR CONSTRUCTION

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CLIENT

FELDMAN

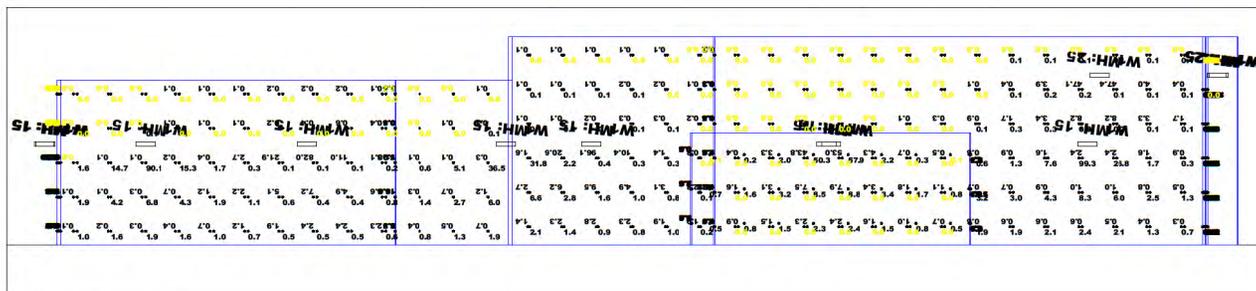
PROJECT

FELDMAN KIA OF NOVI
NEW DEALERSHIP
40575 GRAND RIVER AVE
NOVI, MICHIGAN 48375

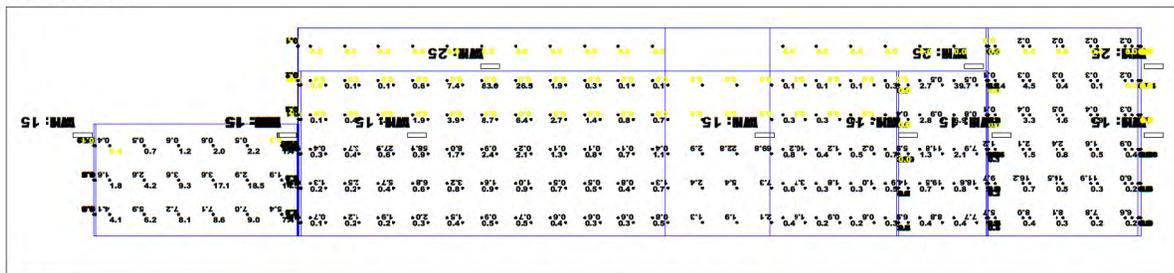
PROJECT NO. 2192

EXTERIOR ELEVATIONS
- SPA

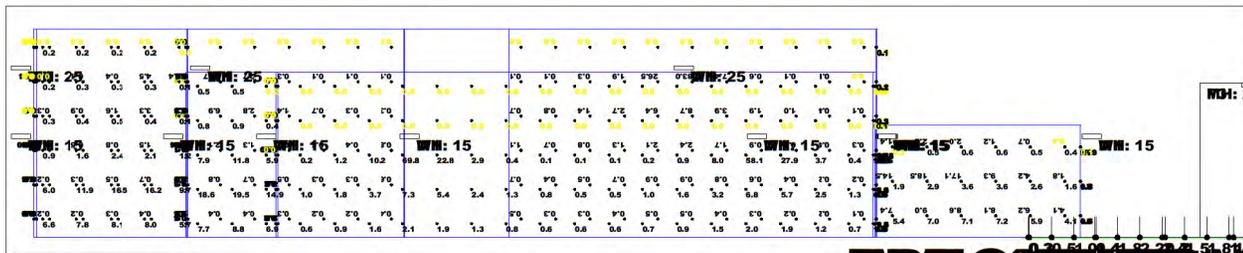
A2.1



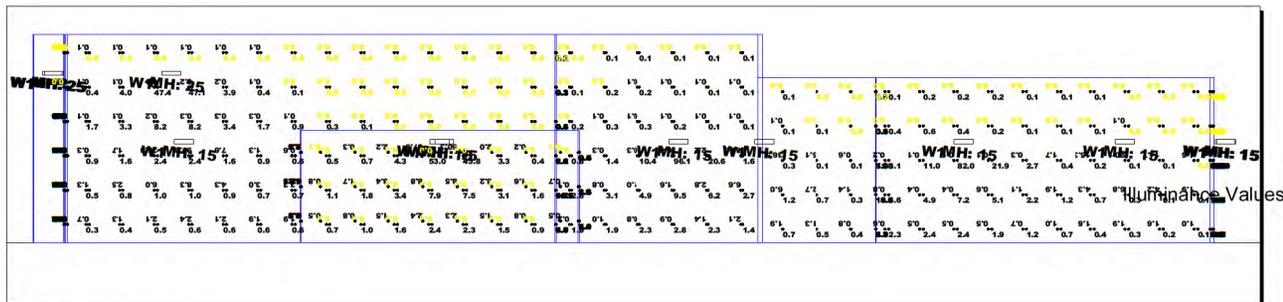
EAST ELEVATION



NORTH ELEVATION



SOUTH ELEVATION



WEST ELEVATION

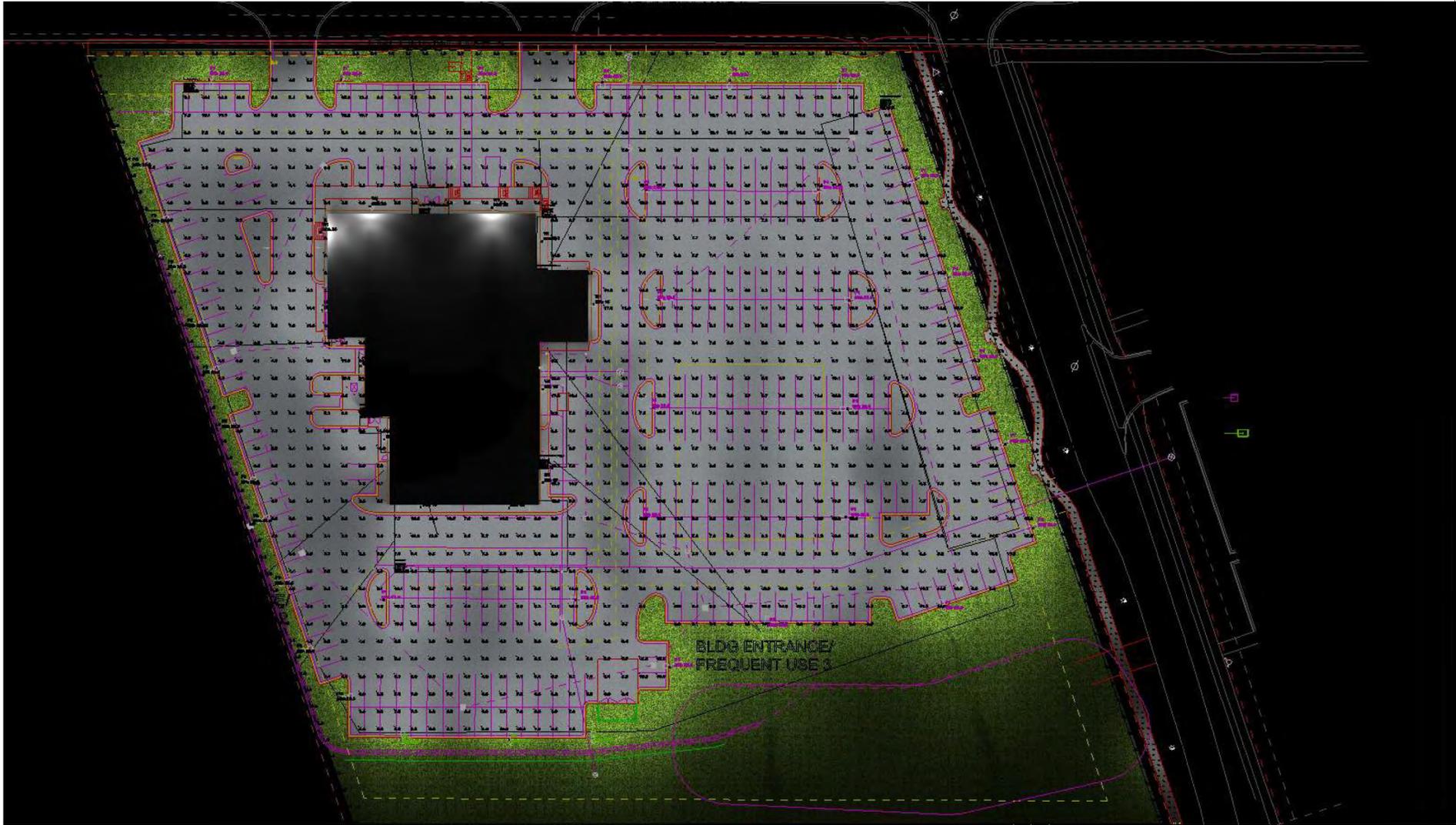
THE ENGINEER AND/OR ARCHITECT MUST DETERMINE THE APPLICABILITY OF THE LAYOUT TO EXISTING/FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP. THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

| Date | Comments |
|------|----------|
| | |
| | |
| | |

Revisions

Drawn By: M. Woznicki, LC
Checked By:
Date: 2/13/2025
Scale:

Feldman KIA Novi
7



Feldman KIA Novi

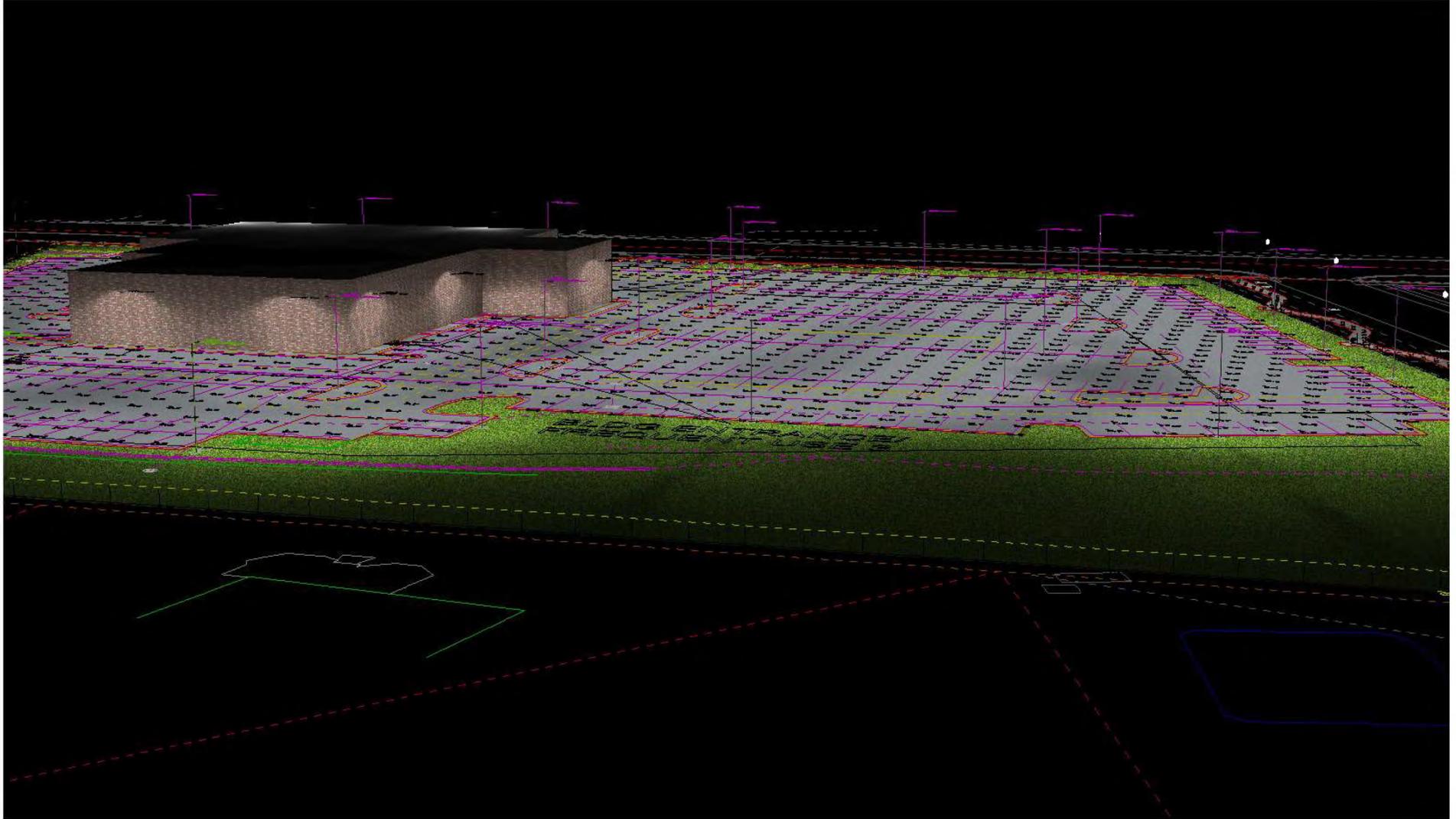
7

Page 3 of 4

Drawn By: M. Woznicki, LC
 Checked By:
 Date: 2/13/2025

Scale:

| # | Date | Comments |
|---|------|----------|
| | | |
| | | |
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Comments

Date

#

Revisions

Drawn By: M. Woznicki, LC

Checked By:

Date: 2/13/2025

Scale:

Feldman KIA Novi

7

Page 4 of 4

PROJECT NARRATIVE

LAW OFFICES
LANDRY, MAZZEO, DEMBINSKI & STEVENS, P.C.
37000 GRAND RIVER AVENUE, SUITE 200
FARMINGTON HILLS, MICHIGAN 48335
www.lmdlaw.com

D. B. LANDRY
dlandry@lmdlaw.com

Office: (248) 476-6900
Direct: (248) 919-3783
Fax: (248) 476-6564

February 18, 2025

VIA HAND DELIVERY & EMAIL: LBell@cityofnovi.org

City of Novi Community Development Department
Attn: Ms. Lindsay Bell
45175 West 10 Mile Road
Novi, MI 48375-3042

RE: JZ 24-32 Feldman Kia Application for rezoning with PRO.

Dear Ms. Bell:

Please accept this as the applicant's Supplemental Submittal in support of a Request for a rezoning with PRO. Under the City of Novi's Zoning Ordinance Article 7 Section 7-13.2.D.iii, the procedure for Application for Rezoning with PRO is a two-step process. Step one includes the submittal of an application, review by the Community Development Department and submission to the Planning Commission and City Council for eligibility review. Step two includes a formal submittal to the Planning Commission for recommendation and City Council for final determination. The application was submitted to the Planning Commission for an eligibility review on October 16, 2024 and an eligibility review by the City Council on December 2, 2024. The applicant has taken into consideration the comments of the City staff, the Planning Commission and the City Council and hereby submits the formal application for a rezoning with PRO approval pursuant to Zoning Ordinance Article 7 Section 7-13.2.D.iv.

In addition, the applicant requests that the Planning Commission grant Preliminary Site Plan approval contingent on City Council approval of the rezoning with PRO to avoid the necessity of the applicant having to return to the Planning Commission for a third time.

Attached hereto are the following:

- A. Site Plan Revision Submittal Form
- B. Site Plan sheets.
- C. Color rendering for reference at Planning Commission and City Council meetings.
- D. Letter of Alpine Engineering dated February 14, 2025 addressing City review comments.
- E. Letter of Allen Design dated February 18, 2025 addressing landscape review comments.
- F. Letter of Studio Detroit dated January 30, 2025 addressing lighting.
- G. Updated memorandum dated February 14, 2025 addressing all requested deviations.

- H. Landscape Plan sheet number 4 depicting proposed Public Benefit of meandering sidewalk along Joseph Dr with benches and continuous hedge
- I. Site Plan sheet 9 depicting additional Public Benefit offering by the applicant to construct two bus stop shelters on Grand River Ave.

All of the above are being provided in digital and paper format including 24” X 36” Site Plan sheets.

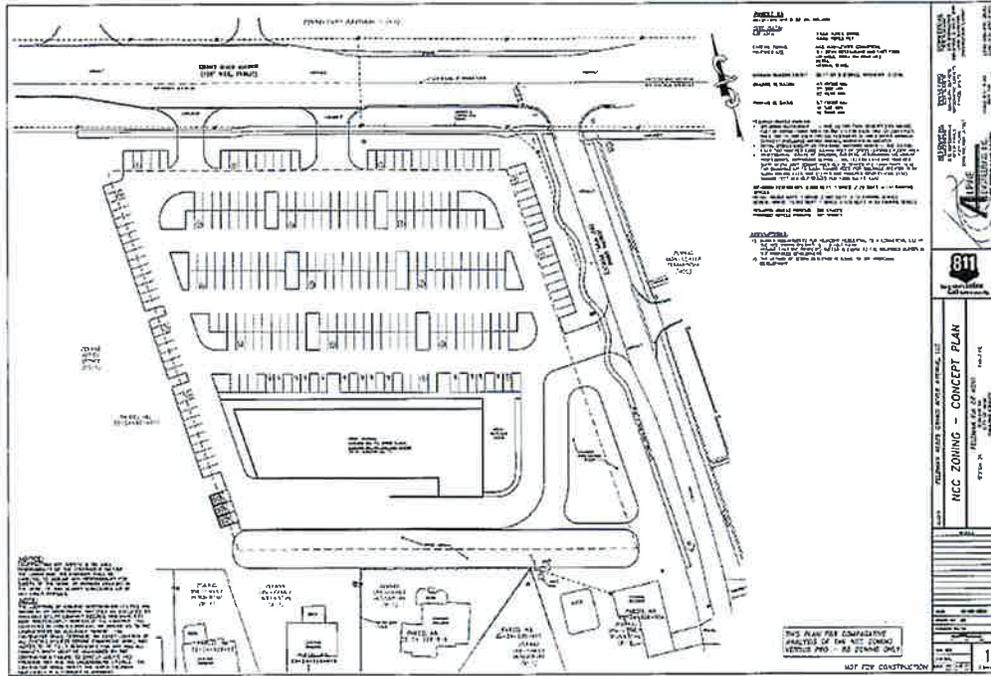
The applicant proposes to replace a long standing non-conforming use with a Kia automobile dealership that is consistent with the existing uses along Grand River Ave. In fact, the requested rezoning is consistent with the City of Novi’s Master Plan as noted by the City’s Plan Review letter of September 18, 2024 which pointed out “The future land use map of the 2016 City of Novi Master Plan for Land Use identifies this property and property adjacent to the East as Community Commercial...the B-3 General Business District generally falls within areas planned for Community Commercial, as do the B-2 Community Business, and NCC Non-Center Commercial district.” Moreover, in the December 2, 2024 City Review Memorandum the administration noted the following:

“The proposal helps fulfill objectives contained in the Master Plan for Land Use, as well as other positive outcomes, such as:

- 1. The objective to support retail, commercial uses along established transportation corridors.
- 2. The B-3 district is consistent with the Master Plan for Land Use designation for Community Commercial.
- 3. The impacts on traffic and public utilities are expected to be similar to development under the existing zoning.
- 4. Submittal of the Concept Plan and any resulting PRO agreement, provides assurance to the Planning Commission and the City Council of the manner in which the property will be developed, and can provide benefits that would not be likely to be offered under standard development options.”

The proposed development is not more intense than what could be developed under the existing NCC zoning. Below is a visual comparison of what could be developed under the current zoning – a 36,400 sq ft retail facility – and the proposed Kia dealership.

Potential development under current zoning NCC:



Proposed Development



The following are responses to the comments by the Planning Commission and City Council during the initial eligibility review of this proposal.

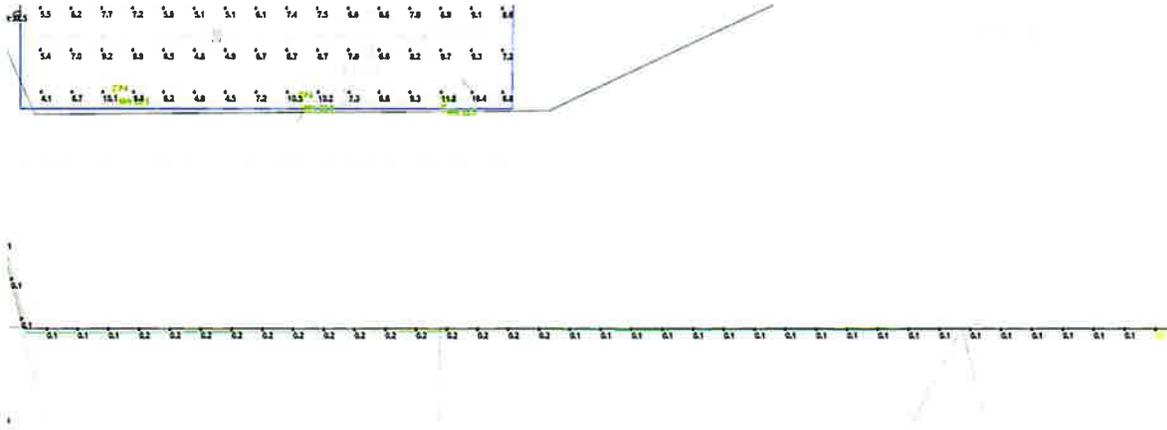
BUFFERING OF THE SOUTHERN PROPERTY LINE ADJACENT TO RESIDENTIAL

The Southern property line abuts residential. This condition exists whether the parcel is developed as proposed – a Kia dealership – or as allowed under the current NCC zoning with a large retail use with significant parking. The City Zoning Ordinance requires a 6 – 8 ft obscuring landscape berm with plantings when commercial uses abut residential uses. There is currently a 3 – 5 ft berm with trees that are described by the administration as “mostly in poor condition and covered in vines”. (September 12, 2024 Plan Review letter page 12). Much discussion has occurred with the City Landscape Architect. The applicant will raise the height of the existing 3 -5 ft berm to a 6 – 8 ft berm. In addition, as requested by the City Landscape Architect, the applicant will remove all of the existing trees and plant new trees along the top of the raised berm. In the discussions with Landscape Architect, Rick Meader, Mr. Meader indicated that it is not appropriate to raise the height of the berm and allow the existing trees to remain and to add a few new trees. The existing trees are mostly dead and Mr. Meader would like to “make it right”. The City requested removing the existing trees, raising the height of the berm to 6 – 8 ft and planting new trees, at least 6 ft in height on top of the berm. The applicant is proposing to raise the berm to 6 – 8 ft in height and add trees 8 ft in height. This is the best buffering which meets and exceeds the City requirements.

In addition, please note that on the Kia dealership side of the berm there will be a large retention pond on the East one half of the property. Along the Western half of the property on the Kia dealership side of the berm there will be a 4 ft retaining wall.

LIGHTING

Some concern was expressed at the City Council meeting regarding lighting. The City Zoning Ordinance Section 5.7.3.L requires that when a parking lot abuts a residential district the maximum height of the light fixtures shall not exceed 25 ft and the maximum illumination at the property line shall not exceed one half (i.e. .5) ft candles. The proposed parking lot light fixtures will be 22.6 ft in height which are shorter than the maximum allowed by the city standards. Moreover, the illumination at the rear property line is .1 - .2 ft candles which is far less than what the city standards allow. While the city ordinance allows lighting of .5 ft candles of the property line, Site Plan lighting sheet P-1 depicts the lighting illumination of the South property line of .1 - .2 ft candles. Below is an enlargement of the Southern property line with the illumination ratings of .1 - .2 ft candles.



In addition, back light cut - off shades will be installed on the light poles to reduce light shed.

Thus, the proposed lighting exceeds i.e., is less, than what is allowed under the City Zoning Ordinance standards.

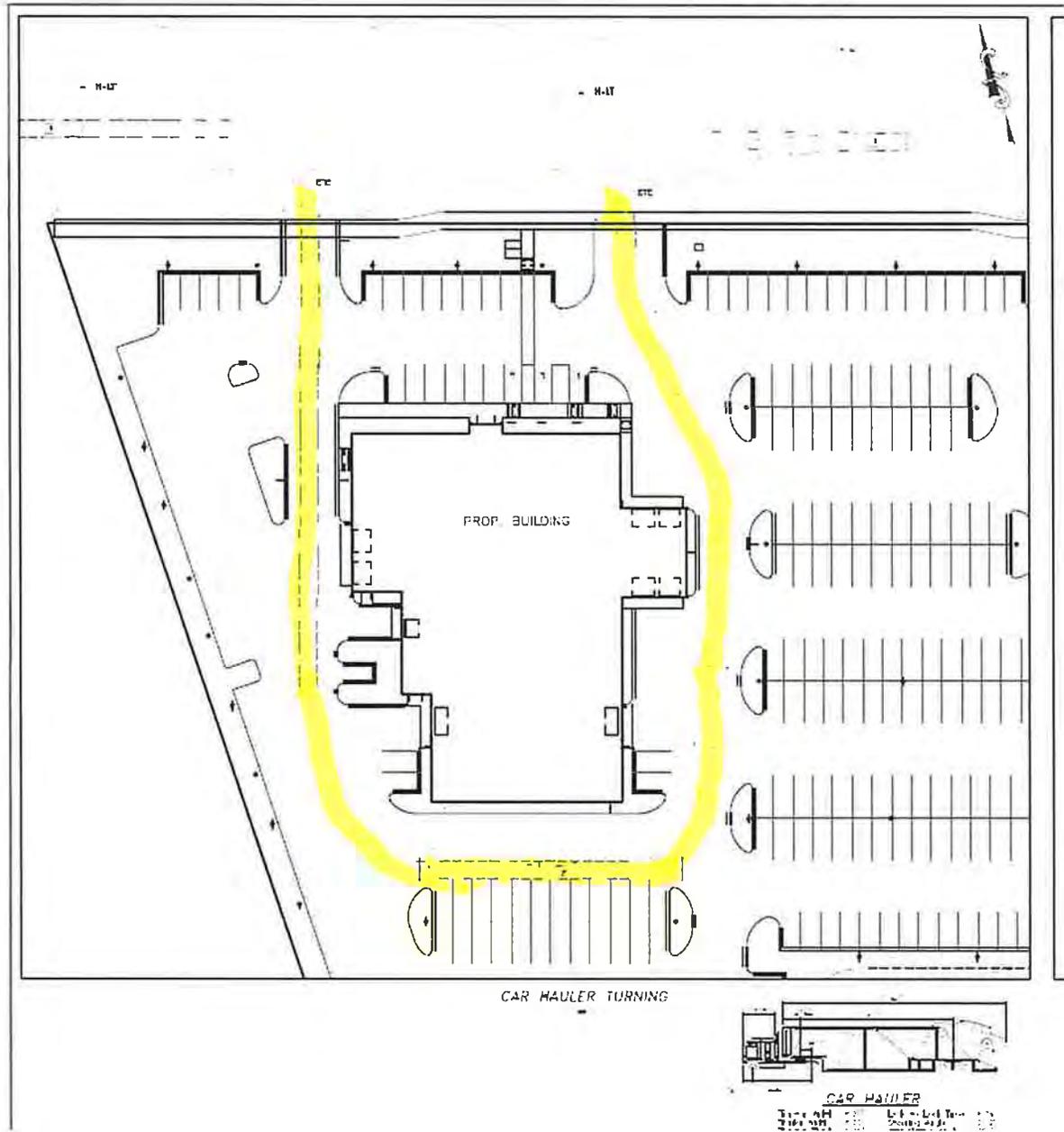
ACOUSTICS

Discussion was also had regarding the security system for auto dealership. Theft of automobiles from dealership parking lots is a concern for all dealerships. To address that concern dealerships have speakers mounted on the dealership buildings which activate with an audible warning to “leave the premises” in the event of an after-hours theft attempt. Mention was made of the speakers at the existing nearby Feldman Chevrolet dealership. There are two factors relevant for the proposed Kia dealership. First, the Feldman Chevrolet property is 12 acres. The Kia property is only 4 acres. The Feldman Chevrolet speakers were initially set at 100% volume. They have been reduced to 70% volume and the applicant is committed to reducing the volume for the Kia dealership speakers to the lowest volume to still be effective. Moreover, Kia dealership building, on which the speakers are located, is 188 ft set back from the South residential property line.

UNLOADING OF CAR HAULERS

It has been commented that car hauling trucks delivering vehicles to dealerships may park in the middle turn lane of Grand River Ave and unload cars from that point. First, such unloading is a violation of Michigan Traffic Laws. We have had discussions with the Novi Police Department. Traffic tickets can be issued to traffic car haulers who unload in this fashion and will be issued by the Novi Police Department. Second, Feldman cannot control the traffic haulers. They are not Feldman employees or Feldman contractors. They are hired by the automobile manufacturers. Feldman has repeatedly instructed the car haulers not to unload from Grand River Ave. At times this has been ignored by the car haulers. Third, the car haulers comment that they do not want to unload in the parking lot of the existing Feldman Chevrolet dealership because of that parking lot configuration. Accordingly, the applicant has planned the proposed Kia parking

lot so that there is a clear path around the dealership to the rear parking lot with sufficient room for car hauler turning radius. See Site Plan sheet number 8 and below:



Moreover, the applicant is creating a specific loading/unloading space at the rear of the parking lot for car haulers to unload the vehicles. The applicant is encouraging the Novi Police Department to issue tickets to any car hauler that unloads from Grand River Ave.

PUBLIC BENEFIT

The City Zoning Ordinance addressing a rezoning with a PRO requires that the applicant propose a Public Benefit. The City Zoning Ordinance defines such a public benefit as follows: “. . . as part of such proposal, propose clearly identified site specific conditions relating to the proposed improvements (1) that are in material respects, more strict or limiting than the regulations that would apply to the land under the proposed new zoning district...and (2) constitute an overall benefit to the public that outweighs any material detriments or that could not otherwise be accomplished without the proposed rezoning.” The applicant is proposing to satisfy both of these requirements as follows:

With respect to the first requirement that the proposed improvements are more strict or limiting than the regulations that would have applied to the land under the proposed zoning district the applicant points to the following aspects of this proposed rezoning.

| | B-3 | Proposed PRO |
|------------------------|---|----------------------------------|
| Limited use | Twenty principal permitted uses allowed | Only one use – auto dealership |
| Set back front | 30 ft | 90 ft |
| Set back rear | 20 ft | 188 ft |
| Set back side | 15 ft | 212 ft East Side 77 ft West side |
| Parking set back front | 20 ft | 20 ft |
| Parking set back rear | 10 ft | 53 ft |

- J. Days of operation 6 days, no Sunday operation
- K. Hours of operation: 7:00 a.m. – 6:00 p.m. Tuesday/Wednesday/Friday
7:00 a.m. – 9:00 p.m. Monday/Thursday
8:00 a.m. – 4:00 p.m. Saturday
- L. Automobile transit deliveries 8:00 a.m. – 6:00 p.m. weekdays.

With respect to the second aspect of the public benefit regarding a public benefit that outweighs the determinant, the applicant is proposing two specific aspects: (1) a meandering sidewalk along Joseph Ave. with three sitting benches, with a solid hedge and decorative light poles. Below is a photograph of the proposed meandering sidewalk along Joseph Ave.

Joseph Drive Looking South



In addition, the applicant is proposing to construct two covered bus stop shelters along Grand River Ave. Please see Site Plan sheet number 9 depicting the locations and photographs of the proposed bus stop shelters. Below are enlarged photographs of the proposed shelters.



The applicant looks forward to a presentation before the Novi Planning Commission and would specifically request that we be placed on the Planning Commission Agenda of April 9, 2025. Again, the applicant would respectfully request that the matter be presented to the Planning

Commission with a request for a positive recommendation for the rezoning to the City Council and, moreover, for Preliminary Site Plan approval contingent upon City Council approving the rezoning.

Please contact me directly if you have any other requirements with respect to this application.

Thank you.

Very truly yours,
LANDRY, MAZZEO, DEMBINSKI & STEVENS, P.C.

/s/ David B. Landry

David B. Landry

DBL/slw

Cc: Barbara McBeth via e-mail
Steven Saltz via e-mail
Shiloh Dahlin via e-mail

REQUESTED DEVIATIONS

FELDMAN KIA OF NOVI

JZ 24-32

DATE: 10-08-2024

REVISED DATE: 03-31-2025

Requested Ordinance Deviations:

1. **SERVICE BAY DOORS (NORTH AND SOUTH SIDES):** Section 3.10.3 - In the B-2 and B-3 districts: No truck well, loading dock, overhead door or other type of service bay door shall face a major thoroughfare, nor an abutting residential district. Pedestrian exits or emergency doors are permitted on such building facades.

Staff Comment from the March 11, 2025 Planning Review: *The justification provided by the applicant appears to be adequate to protect adjacent uses from negative impacts, provided the buffer / screening at the southern property line is approved. Staff supports the deviation for the overhead doors if this buffer will meet or exceed the requirements of the ordinance. The applicant is asked to clarify whether they would agree to a condition that the service bay doors shall remain closed except to allow the entering / exiting of vehicles, to further limit noise emissions from the building*

A service reception area that is easily accessible to the customers is a necessity for this type of business. The service reception area is proposed to be situated parallel to the development's main driveway for easy customer access and to maintain a safe and organized flow within the parking lot. This portion of the building is for customer reception and generally automotive service will be completed within the southern part of the building separate from this area. Refer to the "Composite Floor Plan" for additional information regarding the proposed floor plan.

The service reception area is proposed to have a total of four (4) overhead doors. The northern overhead doors are located 129 feet from the Grand River Avenue Right-of-Way. The southern overhead doors are located 281 feet from the southern property line. There will be a berm with landscaping along the southern property line to screen the overhead doors from the residential uses to the south.

The Applicant has indicated that they would agree to a condition that the service bay doors shall remain closed except to allow the entering/exiting of vehicles, to future limit noise emissions from the building.

It is respectively requested that a waiver be granted for this deviation.

2. **FAÇADE WAIVER:** Section 5.15 – A minimum of 30% of the front façade is required to be brick.
Staff Comment from the March 11, 2025 Planning Review: *As noted in the façade review, the front façade consists primarily of showroom glass, which is not regulated by the façade ordinance. "In this case the addition of brick would not enhance the front façade and all other façades have large percentages of brick. For this reason, we recommend that the design is consistent with the intent and purpose of the façade ordinance and that a Section 9 façade waiver be granted for all underage of brick on the front façade.*

It is respectively requested that a Section 9 Waiver be granted for the underage of brick on the front façade.

3. **RIGHT-OF-WAY GREENBELT BERM:** Section 5.5.3.B.ii.f Right-of-way Landscape Screening Requirements Table – In the B-3 zoning district and where the right-of-way is adjacent to parking, a twenty (20)-ft greenbelt width with a minimum three (3)-ft high berm is required along the road rights-of-way.

Staff Comment from the March 11, 2025 Planning Review: This is supported by staff for the frontages since the continuous hedge proposed provides an alternative form of screening, and this has been allowed for other dealerships.

Parking is setback the required twenty (20)-ft from both the Grand River Avenue and Joseph Drive rights-of-way; however, in lieu of a 3-foot-tall berm, the Applicant respectively requests to provide a three (3) ft high continuous hedge along the Grand River Avenue Right-of-Way and the Joseph Drive Right-of-Way. Refer to the "Landscaping Plan" for additional information.

It is respectively requested that a waiver be granted to utilize a continuous hedge in lieu of a three (3)-foot high berm.

4. **DEVELOPMENT/BUSINESS SIGN:** Chapter 28 Signs, Section 28-5 table, and applicable footnotes provides that with respect to wall signs a single tenant within a B-3 district is allowed one wall sign up to 250 square foot maximum. Additional requirements (Section 28-5.b.1.b) indicates the maximum wall sign area as it correlates to the setback distance for the adjacent road. Due to the nature of the business, it is respectfully requested that additional wall signs be allowed to indicate dealership branding and to provide wayfinding for the customers. Dimensions indicating the distance from the building to the centerlines of the roads are located on the preliminary site plan. The applicant is requesting two wall-mounted brand signs, one dealer sign and one directional sign for service reception area. The total wall signage are is approximately 118 square feet.

Staff Comment from the March 11, 2025 Planning Review: See staff comments on signage on page 3-4 of this review. The applicant was asked to submit Sign Permit Applications for each sign proposed in order to fully determine the deviations required for the proposed signage.

The Applicant respectively requests that signage be applied for at a later date.

5. **BUILDING FOUNDATION LANDSCAPING:** Sec. 5.5.3.D – The required foundation area is provided in total, but only 72% is at the building.

Staff Comment from the March 11, 2025 Planning Review: As the remaining landscaping is provided in areas that will enhance the appearance of the site from Grand River, it would be supported by staff.

It is respectfully requested that a waiver be granted for the building foundation landscaping.

6. **PARKING LOT ISLANDS:** Section 5.3.12. There are two locations, on either side of the building, where 2 customer parking spaces have an end island on one side, but not the side adjacent to the entry / exit point of the service area.

Staff Comment from the March 11, 2025 Planning Review: We support the deviation to allow the striped vehicle entry to serve as the painted end islands in lieu of curbed islands.

It is respectfully requested that a waiver be granted to provide striped out areas in lieu of a landscape island.

7. **GREEN BELT LANDSCAPING:** Sec. 5.5.3.B.ii.III – Ordinance requirements for the number of trees along Grand River Avenue and Joseph Drive have not been met. There is also a deficiency in subcanopy trees on Joseph Drive. These conditions require deviations to be approved.

Staff Comment from the March 11, 2025 Planning Review: Supported by staff.

The Landscape plan will be revised to accommodate the additional required green belt landscaping.

With the above change, it is our understanding that this deviation can be removed.

8. **BERM SCREENING ALONG THE SOUTH PROPERTY LINE – While the berm height of 6 to 8 feet is now proposed adjacent to a residential use, the landscaping proposed does not appear sufficient to meet the opacity of 80%-90% within two years. This would require a deviation.**

Staff Comment from the March 11, 2025 Planning Review: Staff does not support the deviation. See the Landscape Review for detailed recommendations to be able to remove this deviation.

The project's Landscape Architecture indicated that additional landscaping/screening will be added to the berm to increase opacity on the next plan revision.

With the above change, it is our understanding that this deviation can be removed.

9. **MAXIMUM ILLUMINATION ADJACENT TO NON-RESIDENTIAL (Sec. 5.7.3.L): Where abutting a non-residential district, the maximum illumination at the property line shall not exceed 1 footcandle. This limit is exceeded at the western property line with a level of 2.4 footcandles. The north and east property lines also exceed the limit (3.4 fc and 6.2 fc, respectively), however these are road frontages and the applicant states they are illuminating the sidewalks**

Staff Comment from the March 11, 2025 Planning Review: The deviation is supported by staff where the intention is to illuminate the sidewalks. The applicant should provide similar back-shield on the west side of the property to more closely comply with the 1 fc limit.

The project's Architect indicated that the lights along the western side of the property will be back shielded as needed to reduce the lights to the appropriate footcandle level.

It is respectively requested that a waiver be granted to allow the increased footcandles for the purposes of illuminating the sidewalks along the road rights-of-way.

PLANNING REVIEW



PLAN REVIEW CENTER REPORT
Planning Review
 March 11, 2025
JZ24-32 Feldman Kia PRO
 Zoning Map Amendment No. 18.746

PETITIONER

Feldman Automotive, Inc.

REVIEW TYPE

Rezoning Request from NCC (Non-Center Commercial District) to B-3 (General Business) with Planned Rezoning Overlay (PRO)

PROPERTY CHARACTERISTICS

| | | |
|-----------------------------|---|---|
| Section | 24 | |
| Site Location | South of Grand River Avenue, East of Meadowbrook (Parcels 22-24-326-014, 22-24-326-024) | |
| Site School District | Novi Community School District | |
| Site Zoning | NCC Non-Center Commercial | |
| Adjoining Zoning | North | I-1 Light Industrial District |
| | East | NCC Non-Center Commercial |
| | West | OS-1 Office Service |
| | South | R-4 One Family Residential |
| Current Site Use | Vacant; formerly Glenda’s Garden Center – plant nursery/landscaping | |
| Adjoining Uses | North | Delta Fuels, office/service providers, Religious Organization |
| | East | Office Buildings |
| | West | Vacant |
| | South | Single Family Residences |
| Site Size | 4.88 Acres | |
| Plan Date | February 14, 2025 | |

PROJECT SUMMARY

The petitioner is requesting a Zoning Map amendment for a 4.88 acre property located on the southwest corner of Grand River Avenue and Joseph Drive (Section 24) from NCC (Non-Center Commercial) to B-3 (General Business). Rezoning of the property is necessary to redevelop the site as an automobile dealership, which is only permitted in the B-3 district, with outdoor space for exclusive sale of new and used automobiles, which is a Special Land Use in the B-3 district. The proposed dealership would have a footprint of approximately 18,830 gross square feet, with a mezzanine floor for parts storage of 1,322 square feet.

The site has operated for many years (pre-1990) as Glenda’s Garden Center and Market, a non-conforming use in the NCC District. The garden center was demolished in 2023 when the property was purchased by a new owner.

PRO OPTION

The PRO option creates a “floating district” with a conceptual plan attached to the rezoning of a parcel. As part of the PRO, the underlying zoning is proposed to be changed (in this case from

NCC to B-3), and the applicant submits a detailed conceptual plan for development of the site, along with site-specific conditions relating to the proposed improvements. After Staff and consultant review, the proposed request goes through initial review by the Planning Commission and City Council to review and comment on whether the project meets the requirements of eligibility for a PRO. The applicant can then make any changes to the Concept Plan based on the feedback received, and resubmit for formal review. The Planning Commission holds a public hearing and makes a recommendation to City Council. The City Council reviews the Concept Plan, and if the plan receives tentative approval, it directs the preparation of an agreement between the City and the applicant, which also requires City Council approval. Following final approval of the PRO concept plan and PRO agreement, the applicant will submit for Preliminary and Final Site Plan approval under standard site plan review procedures. If development is not commenced within two years from the effective date of the PRO Agreement it will expire, unless otherwise agreed to by the parties.

PROJECT HISTORY

The project was submitted and reviewed by staff and consultants in a pre-application submittal in January 2024. Comments were provided on the concept plans submitted, but no recommendations for approval were made at that time.

The initial PRO plan was submitted and reviewed in August/September, 2024. The Planning Commission held a public hearing on October 16, 2024 and provided feedback on the proposal. On December 2, 2024, City Council considered the request and provided feedback to the applicant. Minutes from both meetings are included as attachments to this letter.

RECOMMENDATION

Staff recommends approval at this time of the Formal PRO Plan. Approval of the Preliminary Site Plan is not recommended as the level of detail required for such approval has not been provided. The screening has been improved by increasing the height of the berm and providing new evergreen landscaping. The applicant has also offered to install two covered benches at nearby bus stops that would be considered a benefit to the public. In addition, the enhanced walkway along Joseph Drive is proposed.

PLANNING COMMISSION

The Planning Commission held a Public Hearing on October 16, 2024, to review and make comments on the proposal's eligibility for using the Planned Rezoning Overlay option. Comments made at that time are reflected in the [meeting minutes](#) and are summarized here:

- Commissioners said they thought the use proposed made sense, and could be compatible with adjacent uses if other concerns are addressed.
- Commissioners stated that greater effort to provide a public benefit was needed.
- Commissioners were concerned about whether sufficient buffers or screening to adjacent residential properties are included.
- Commissioners were concerned about car haulers unloading in the center turn lane of Grand River Avenue.
- Commissioners stated they would like to get a better idea of the acoustics and what would be done to minimize the noise impacts on neighbors.
- Commissioners encouraged the applicant to consider units that would accommodate senior housing.
- Commissioners wanted to ensure that no test drives happen on Joseph Drive, and wondered if concerns raised by residents about the speed of traffic on that street could be addressed.

- Commissioners would like to see data regarding issues/security for locations where dealerships are adjacent to residential neighborhoods.

CITY COUNCIL

The City Council provided feedback at its meeting on December 2, 2024, on the proposal's eligibility for using the Planned Rezoning Overlay option. Comments made at that time are reflected in the [meeting minutes](#), and comments are summarized here:

- Councilmembers thought the car dealership use made sense at this site on Grand River.
- Councilmembers expressed concerns about car haulers unloading vehicles on Grand River and customers test-driving vehicles in the adjacent neighborhood, and wondered if there is a way to prevent those issues within the terms of a PRO Agreement.
- Councilmembers appreciated that no body shop work will be done on the site.
- Councilmembers liked the benefits offered by the applicant to do the enhanced sidewalk along Joseph Drive and the two bus shelters on Grand Rive.
- Councilmembers expressed concerns about the lighting and noise impacts on the adjacent neighborhood, and want to be sure those are minimized as much as possible.
- Councilmembers wanted to see the berm and landscaping along the south edge improved.

REVIEW NOTES

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), Section 7.13 (Amendments to Ordinance) and any other applicable provisions of the Zoning Ordinance. **Please see the attached chart for additional information pertaining to ordinance requirements.** Items in **bold** below must be addressed and incorporated as part of the next submittal:

1. Supporting Documentation: The applicant has provided the following as part of their application packet:
 - a. Narrative: The statement provided states Rezoning allows for development of a use that is consistent with the Master Plan's vision for a Community Commercial use. The parcel has not been well maintained, and redevelopment/reinvestment of the property is a benefit to the public.
 - b. The statement includes conditions to limit the permitted use of the parcel to an auto dealership (with accessory uses) and exceed setbacks. **The applicant should verify what type of work will be done in the service department to verify it would be permitted in this location.**
 - c. Rezoning Traffic Impact Study: AECOM's review noted at the time of Pre-application submittal that the proposed project did not meet the threshold to require a RTIS.
 - d. Sign Location Plan: A rezoning sign location plan and sign detail has been provided on Sheet SP1.3. The sign locations and wording are acceptable, and were posted prior to the previous public hearing.
 - e. Noise Impact Statement: A noise impact statement, dated 2/22/24 by Studio Detroit Architects, is required for the outdoor space for the auto dealership inventory vehicles. The statement includes the hours of operation of the dealership, which differ slightly from those listed on the Photometric plan in the PRO Plan set. **The noise statement indicates only the exterior roof mounted mechanical units as a source of noise. The statement should be updated to evaluate other sources of noise associated with this use, including delivery vehicles, any security alarm equipment, car alarms, and service area equipment that can be anticipated to be used.**

2. Eligibility for PRO (Section 7.13.2): *"In order to be eligible for the proposal and review of a rezoning with PRO, an applicant must propose a rezoning of property to a new zoning district classification, and must, as part of such proposal, propose clearly-identified site-specific conditions relating to the proposed improvements that (1) are in material respects, more strict or limiting than the regulations that would apply to the land under the proposed new zoning district, including such regulations or conditions as set forth in Subsection C [of the Ordinance]; and (2) constitute an overall benefit to the public that outweighs any material detriments or that could not otherwise be accomplished without the proposed rezoning."* **The applicant provided a request to rezone to B-3, along with a PRO Plan. The conditions proposed that are more strict than typical B-3 standards are limiting the permitted use of the parcel to an auto dealership with associated inventory vehicle and customer parking, exceed building setbacks and rear parking setback. The applicant states that their proposal constitutes an overall enhancement of the area because they intend to improve a vacant parcel that is an "eyesore" and upgrade the landscaping provided, capital investment and job creation. In addition, they will create "a unique streetscape along Joseph Drive with the construction of a meandering sidewalk...with the installation of a bench node on a concrete platform, decorative light poles and significant landscaping," and provide two covered seating areas at the nearby bus stops to the east.**

3. Detrimental Effects on Residential Areas: Compared to the types of commercial establishments that could be developed by-right in the current NCC District, car dealerships are a more intensive use that can bring some greater drawbacks to the area when located adjacent to residential neighborhoods, such as:
 - a. Noise: Auto dealerships can create noise disturbances such as the sound of security alarms, loudspeakers, delivery trucks, and use of equipment in service areas. The City has received numerous complaints from neighbors of the existing Feldman dealership at 42235 Grand River related to the after-hours, audible, speech-enhanced alarm system. After making adjustments to the alarm system, the disturbance was minimized.
 - b. Lighting: Dealership inventory parking lots often have bright lights on throughout the night to showcase their inventory and to deter crime. If visible to the adjacent homes, this can affect the ability to sleep and overall comfort.
 - c. Traffic: Increased traffic from customers and delivery trucks coming and going from the site can lead to congestion on the nearby roads.
 - d. Security Concerns: Car dealerships can attract theft and vandalism to the site. Alarms to deter crime increase the noise impacts.

If the PRO rezoning is to be approved, the City will want to ensure that these detriments are minimized or offset to a large extent to protect the existing neighborhood. Additional conditions have been included in the formal submittal that are more strict or limiting than would be permitted under the B-3 district to minimize these negative impacts.

4. Buffer to Neighborhood to the South: The ordinance requires a buffer in the form of a 6-8 foot obscuring landscaped earth berm and plantings when a commercial use abuts any residential district. The applicant is proposing to raise the height of the existing berm to 6-8 feet and plant new 8-foot trees to provide the required buffer. **See Landscape review for additional comments.**

5. Signage: Proposed signage has been included in the PRO Concept plan submittal, and the applicant requests a deviation to allow the signage as proposed. In some cases, deviations from the Sign Ordinance (Chapter 28 of the City Code) have been included in previous PRO Agreements. The sign details provided in the submittal do not include all measurements in order to determine the total area of the signs. The sign ordinance allows the following in the B-3 district for a single tenant building or development parcel: 250 square foot maximum – 1 wall sign (shall not exceed 1 sf for each 2 feet of setback from the nearest thoroughfare; and (1) ground sign

a maximum of 6 feet high. Allowable size is determined by 1 square foot of sign for each 2 feet of setback from the thoroughfare centerline (appears that 30 sf allowed).

The applicant is proposing 3 wall signs on the north elevation, which is 144 feet from the Grand River centerline ("KIA" = 38.25 sf, "Feldman" = 29 sf, "Service" = 12.4 sf) with a total area of 79.63 square feet. One sign is proposed on the east elevation ("KIA" = 38.25 sf). One ground mounted sign, located 60 feet from the street centerline, is shown as 6 feet tall with a total area of about 26.71 square feet. **A Sign Permit Application is required for each sign proposed – it is recommended you apply for those now so that any deviations from Ordinance standards can be identified and included in the PRO Agreement. Otherwise, the PRO Agreement can stipulate that signage will be applied for later, and any deviations needed can be requested from the Zoning Board of Appeals.**



6. Lighting (Section 5.7): The maximum height of proposed parking lot fixtures is 22.6 feet, which is less than the 25-feet permitted. The illumination at the rear property line is a maximum of 0.1-0.2 footcandles, which meets the ordinance standards. The ratio of Average to Minimum lighting for the paved area of the site is below the maximum 4:1 limit, indicating a uniform level of lighting over the site. **See the Planning Chart for additional details that must be provided at the time of Final Site Plan submittal. A response letter to address lighting questions from the previous review was not provided with this submittal.**
7. Plan Review Chart: **The Plan Review chart provides additional comments on many of the Ordinance review standards. Please refer to it in detail.**

MASTER PLAN FOR LAND USE

The Future Land Use Map of the 2016 City of Novi Master Plan for Land Use identifies this property and property adjacent to the east as Community Commercial. As the Master Plan states, "This land use is designated for comparison-shopping needs of a larger population base. They are along major thoroughfares and roadway intersections." The B-3 General Business District generally falls within areas planned for Community Commercial, as do the B-2 Community Business, and NCC Non-Center Commercial districts.

Property to the west is identified in the Master Plan as Community Office, while the area north of Grand River is planned for Industrial, Research, Development and Technology land uses. The area to the south is planned for Single Family use.

The proposal would follow objectives listed in the Master Plan for Land Use including the following:

1. Objective: Retain and support the growth of existing businesses and attract new businesses to the City of Novi.
2. Advocacy Action Item: Support retail commercial uses along established transportation corridors that are accessible for the community at large, such as along Grand River Avenue to preclude future traffic congestion.
3. Objective: Provide and maintain adequate water and sewer service for the City's needs.
4. Objective: Provide and maintain adequate transportation facilities for the City's needs. Address vehicular and non-motorized transportation facilities.

Staff Comment: Public water main and sanitary sewer exists on Grand River Avenue. On-site detention is proposed for storm water management in a new underground facility, an infiltration trench, and an infiltration basin. The proposed concept plan indicates pedestrian improvements along Grand River Avenue including replacing the existing 5-foot sidewalk with an 8-foot sidewalk that would extend across the site frontage. A 5-foot undulating sidewalk is also proposed for the frontage on Joseph Drive. In addition, applicant proposes to install 2 covered bus stop seating areas at nearby SMART stops.

5. Objective: Ensure compatibility between residential and non-residential developments.
Staff Comment: The primary concern with this proposal is compatibility with the residential neighborhood to the south. This is an important objective and the quality of life for the residents directly impacted has been given consideration by the applicant.



Figure 1: Current image of subject property

2023 ACTIVE MOBILITY PLAN (AMP)

Grand River Avenue is classified as a Multi-modal Thoroughfare in the AMP. The recommended baseline pedestrian facility improvements for minor road stops (where the pathway crosses the entrances to a development) on both roads would include crosswalk lighting, a raised high visibility crossing and recessed crossings where feasible. Along the south side of Grand River, an 8-foot sidewalk is planned. With the recent addition of SMART transit service along Grand River, the Near-Term priorities in this area include completing sidewalk gaps and providing mid-block crossings to allow pedestrians to safely and conveniently access the bus stops.

The applicant is proposing to reconstruct the sidewalk along their Grand River frontage to be 8-feet in width, which will also complete about 160-feet of the missing gap in this area. To the west, there is no sidewalk on the south side all the way to Meadowbrook Road, so there will remain an 1,800-foot gap in the non-motorized network. There are also two gaps in the sidewalk to the east – one about 320 feet and the other 380 feet in length.

EXISTING ZONING AND LAND USE

The following table summarizes the zoning and land use status for the subject property and surrounding properties.

Land Use and Zoning: For Subject Property and Adjacent Properties

| | Existing Zoning | Existing Land Use | Master Plan Land Use Designation |
|-------------------------|-------------------------------|--|--|
| Subject Property | NCC Non-Center Commercial | Garden Center | Community Commercial (uses consistent with NCC, B-2 and B-3 Districts) |
| Northern Parcels | I-1 Light Industrial District | Offices, Delta Fuels, Religious Center | Industrial research development and technology. (uses consistent with Light Industrial Districts, I-1) |
| Southern Parcels | R-4 One Family Residential | Single Family Neighborhood | Single Family |
| Eastern Parcel | NCC Non-Center Commercial | Offices | Community Commercial (uses consistent with NCC, B-2, and B-3 Districts) |
| Western Parcels | OS-1 Office Service | Vacant | Community Office (small and medium-scale office uses, human care, recreation) |

COMPATIBILITY WITH SURROUNDING LAND USE

The surrounding land uses are shown in the above chart. The compatibility of the proposed rezoning with the zoning and uses on the adjacent properties should be considered by the Planning Commission in making the recommendation to City Council on the rezoning request. In particular, the Planning Commission should review the plan carefully to insure that negative impacts (such as noise, lighting) are minimized and mitigated to protect the residential properties to the south.

The properties directly **north** of the subject area are currently used as a fuel distribution station, a religious organization, and offices of service providers. The current zoning map indicates I-1 for these properties.

Directly to the **south** of the subject property is a single family neighborhood. Four residential lots directly about the subject property.

The property to the **west** of the subject property is currently vacant and is zoned OS-1 Office Service.

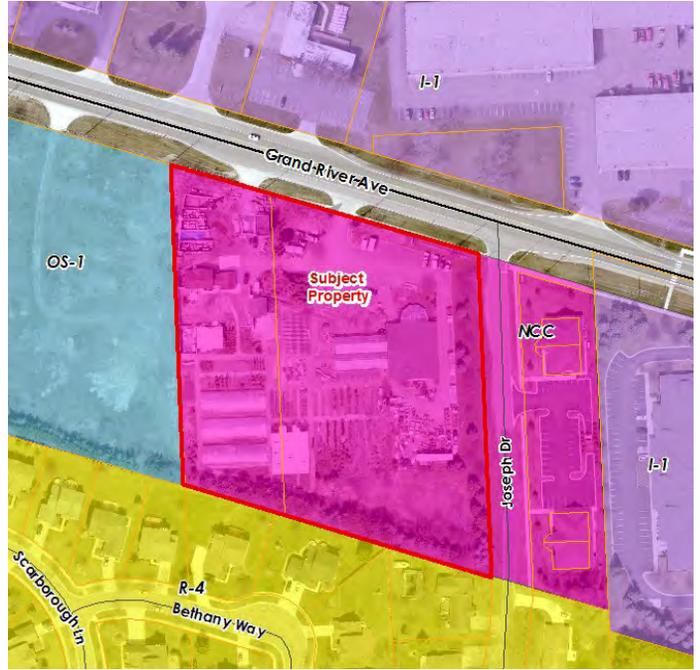
To the **east** of the subject property is a small office complex which is zoned NCC.

DEVELOPMENT POTENTIAL

The parcels to be rezoned are currently vacant. The site was used as a garden center, a non-conforming use in the NCC District, for many years but was demolished in 2023. Development under either the current NCC zoning or the proposed B-3 zoning could result in the construction of similarly sized retail shopping center, an office complex, or sit-down restaurants on the 4.88 acre site. Uses permitted in the B-3 zoning district that are not allowed in the NCC district include fueling stations, private health and fitness facilities, tattoo parlors, auto washes, and automobile sales. Fast food restaurants with a drive through window, motels, and veterinary hospitals are also permitted with Special Land Use approval in the B-3 District. A change to B-3 zoning would also remove the potential for redevelopment of the site for any residential uses, which could be permitted as special land uses in the NCC district. Through the PRO process, the applicant and the City would agree to restrict the B-3 use allowed to the requested automobile dealership, with outdoor space for exclusive sale of new and used automobiles and service center. Any other uses typically permitted in the B-3 district would not be permitted within the terms of the PRO Agreement.



Future Land Use



Existing Zoning

COMPARISON OF ZONING DISTRICTS

The following table provides a comparison of the current and proposed zoning development standards. The applicant is requesting a change of districts from the existing NCC Non-Center Commercial to B-3 General Business. The types of uses allowed in these districts have some overlap, although they also differ in important ways. The proposed B-3 district allows a maximum building height of up to 30 feet compared to the 25 feet allowed in the NCC district. The building setbacks in the NCC district are slightly larger than the B-3 standards. Parking setbacks are the same in both districts. However, the terms of the PRO Agreement may be more restrictive than what could otherwise be allowed under B-3 zoning. For instance, the applicant is proposing greater building setbacks and rear yard parking setback, and restricting the use allowed to an automobile dealership.

| | NCC (Existing) | B-3 Zoning (Proposed) |
|---------------------------------|--|--|
| Principal Permitted Uses | <ol style="list-style-type: none"> 1. Retail businesses use 2. Retail business service use 3. Professional office buildings 4. Medical offices, including laboratories and clinics 5. Financial institutions, stock brokerages 6. Sit-down restaurants 7. Publicly owned and operated parks, parkways and outdoor recreational facilities 8. Instructional centers 9. Other uses similar to the above uses 10. Accessory buildings, structures and uses customarily incident to the above permitted uses | <ol style="list-style-type: none"> 1. Retail businesses use 2. Retail business service uses 3. Dry cleaning establishments, or pick-up stations, dealing directly with the consumer 4. Business establishments which perform services on the premises 5. Professional services 6. Retail business or retail business service establishments 7. Professional or medical offices, including laboratories 8. Fueling station 9. Sale of produce and seasonal plant materials |

| | | |
|--------------------------|---|--|
| | | <ol style="list-style-type: none"> 10. Auto wash 11. Bus passenger stations 12. New and used car salesroom, showroom, or office 13. Other uses similar to the above uses 14. Tattoo parlors 15. Publicly owned and operated parks, parkways and outdoor recreational facilities 16. Accessory structures and uses customarily incident to the above permitted uses 17. Public or private health and fitness facilities and clubs 18. Microbreweries 19. Brewpubs |
| Special Land Uses | <ol style="list-style-type: none"> 1. Day care centers and adult day care centers 2. Places of worship 3. Private clubs, fraternal organizations and lodge halls 4. Museums 5. Publicly utility buildings and uses without service yards 6. Veterinary hospitals or clinics 7. Multiple-family dwellings 8. Independent and congregate elderly living facilities 9. Two-family dwellings 10. Shared elderly housing 11. One-family detached dwellings 12. Farms and greenhouses 13. Publicly owned and operated parks, parkways and outdoor recreational facilities 14. Cemeteries 15. Home occupations 16. Keeping of horses and ponies 17. Family Day Care Homes 18. Accessory buildings and uses customarily incident to any of the above permitted uses | <ol style="list-style-type: none"> 1. Outdoor space for exclusive sale of new or used automobiles, campers, recreation vehicles, mobile homes, or rental of trailers or automobiles 2. Motel 3. Business in the character of a drive-in or open front store 4. Veterinary hospitals or clinics 5. Plant materials nursery 6. Public or private indoor and private outdoor recreation facilities 7. Mini-lube or oil change establishments 8. Sale of produce and seasonal plant materials outdoors 9. Restaurant in the character of a fast food carryout, drive-in, fast food drive-through, or fast food sit-down |
| Minimum Lot Size | 2 acres | Determined by off-street parking, loading, greenbelt screening, yard setback or usable open space requirements |
| Minimum Lot Width | 200 feet | Determined by off-street parking, loading, greenbelt screening, yard setback or usable open space requirements |
| Building Height | 25 feet or 2 stories, whichever is less | 30 feet |
| Building Setbacks | Front: 40 feet Side: 20 feet Rear: 20 feet | Front: 30 feet Side: 15 feet Rear: 20 feet |

| | | |
|-------------------------|--|--|
| Parking Setbacks | Front: 20 feet Side: 10 feet Rear: 10 feet | Front: 20 feet Side: 10 feet Rear: 10 feet |
|-------------------------|--|--|

INFRASTRUCTURE

Engineering

The Staff Engineer has reviewed the rezoning request and expressed no concerns regarding sanitary sewer capacity and available water capacity. The impacts of B-3 land use on the utilities in this area are expected to be similar to utility demands if developed under NCC uses.

Traffic

City Traffic consultants estimated the vehicle trips of the proposed use and determined the project did not meet the threshold to require a Rezoning Traffic Impact Study. The proposed development is expected to result in fewer trips than alternative land uses under the current NCC zoning as well as other B-3 land uses. See the traffic review letter for additional information.

NATURAL FEATURES

There are no significant natural features present on the site or adjacent to the site.

MAJOR CONDITIONS OF PLANNED REZONING OVERLAY AGREEMENT

The Planned Rezoning Overlay process involves a PRO concept plan and specific PRO conditions in conjunction with a rezoning request. The submittal requirements and the process are codified under the PRO ordinance (Section 7.13.2). Within the process, which is completely voluntary by the applicant, the applicant and City Council can agree on a series of conditions to be included as part of the approval.

The applicant is required to submit a conceptual plan and a list of terms that they are willing to include with the PRO agreement. The applicant has submitted a conceptual plan showing the general layout of the driveways, parking, building, stormwater detention, and a general layout of landscaping throughout the development. The applicant has provided a narrative describing the proposed public benefits. At this time, staff can identify some conditions that might be included in the agreement if the current design moves forward:

1. The use of the property is a New and Used Car Salesroom, Showroom and Office with a Servicing department as typically associated with dealerships.
2. Accessory to the Car Dealership, Outdoor Space for exclusive sale of new or used automobiles will be permitted under the conditions for Special Land Use approval:
 - a. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service. (*The traffic impact study provided indicates fewer trips generated by the proposed use than other potential uses.*)
 - b. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area. (*The use is not expected to increase the demand on public services and utilities relative to other feasible uses of the site.*)
 - c. Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including

- existing woodlands, wetlands, watercourses and wildlife habitats. *(There are no significant natural features or characteristics present on the site.)*
- d. Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood. *(The proposed use is similarly compatible to other uses that could be developed under the current NCC zoning district. No major automobile repair or service, as defined in Section 4.50 of the Zoning Ordinance, shall be permitted on the site.)*
 - e. Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use. *(The Master Plan recommends Community Commercial uses, which includes uses permitted within the B-2 and B-3 districts.)*
 - f. Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner. *(The redevelopment of the site will remove a long-standing non-conforming use and improve the site visually from Grand River Avenue. The investments in the site improvements as well as the jobs created will benefit the area economically.)*
 - g. Whether, relative to other feasible uses of the site, the proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located. *(1. Outdoor Space for exclusive sale of new or used automobiles is listed as a Special Land Use in the B-3 District, and 2. the applicant has addressed the concerns previously raised so that the proposed use better conforms to the site design regulations.)*
3. The days of operation shall be limited to Monday – Saturday. The business will not be open on Sundays;
 4. The hours of operation shall be limited to the following, as described by the applicant: 7:00 a.m. to 6:00 p.m. on Tuesday, Wednesday and Friday, 7:00 a.m. to 9:00 p.m. on Monday and Thursday, and 8:00 a.m. to 4:00 p.m. on Saturdays;
 5. Outdoor speakers for security purposes may be permitted, but must be attuned to meet the requirements of the noise ordinance and avoid disturbance of the adjacent residential neighborhood;
 6. No outdoor compressors shall be permitted;
 7. Automobile transit deliveries shall be limited to 8:00 a.m. to 6:00 p.m. on weekdays and must take place on the site in the designated loading/unloading area;
 8. The parking setback shall be no less than 53 feet from the property line to the south;
 9. The footprint of the building shall be limited to approximately 18,900 square feet, excluding mezzanine space.
 10. The overhead service doors shall remain closed except to allow the entering and existing of vehicles.

The PRO conditions must be in material respects, more strict or limiting than the regulations that would apply to the land under the proposed new zoning district. **The applicant should submit a list of conditions that they are seeking to include within the PRO agreement, which may include those listed above if the applicant is willing to comply with them.**

ORDINANCE DEVIATIONS

Section 7.13.2.D.i.c(2) permits deviations from the strict interpretation of the Zoning Ordinance within a PRO agreement. These deviations must be accompanied by a finding by City Council that ***"each Zoning Ordinance provision sought to be deviated would, if the deviation were not granted, prohibit an enhancement of the development that would be in the public interest, and that***

approving the deviation would be consistent with the Master Plan and compatible with the surrounding areas. Such deviations must be considered by City Council, who will make a finding of whether to include those deviations in a proposed PRO agreement. A PRO agreement would be considered by City Council only after tentative approval of the proposed concept plan and rezoning.

The concept plan submitted with an application for a rezoning with a PRO is not required to contain the same level of detail as a preliminary site plan. Staff has reviewed the Concept Plan provided in as much detail as possible to determine what deviations from the Zoning Ordinance are currently shown. The applicant may choose to revise the concept plan to better comply with the standards of the Zoning Ordinance in future submittals. Any deviations in the Formal PRO Plan would have to be approved by City Council in a proposed PRO agreement. The current deviations identified are as follows:

1. Service Bay Doors (Sec. 3.10.3):

In the B-3 district the ordinance provides that no overhead door should face a major thoroughfare or abut a residential district. Pedestrian exits or emergency doors are permitted on such building facades. A service reception area that is easily accessible to the customers is a necessity for the proposed type of business. The service reception area is proposed to be situated parallel to the development's main drive for easy customer access and to maintain a safe and organized flow within the parking lot. This portion of the building is for customers reception and generally automotive service will be completed within the southern part of the building separate from this area. See the "composite floor plan."

The service reception area is proposed to have a total of four overhead doors. The northern overhead doors are 129 feet from the Grand River Avenue right of way. The southern overhead doors are located 281 feet from the southern property line. There will be a screen wall and berm with landscaping along the southern property line to screen the overhead doors from the residential uses from the south. The overhead doors are needed for customer use.

Staff Comment: The justification provided by the applicant appears to be adequate to protect adjacent uses from negative impacts, with the proposed buffer/screening at the southern property line. Staff supports the deviation for the overhead doors if this buffer will meet or exceed the requirements of the ordinance. The applicant states they would agree to a condition that the service bay doors shall remain closed except to allow the entering/exiting of vehicles, to further limit noise emissions from the building.

2. Façade Waiver (Sec. 5.15): As noted in the pre-application review comments, all of the facades are in full compliance except the north (front). The north facade does not have the minimum 30% brick. The front is virtually 70% showroom glass and 30% flat metal panels. We would respectfully request the section 9 waiver for the façade.

Staff Comment: As noted in the Façade Review, the front façade consists primarily of showroom glass, which is not regulated by the façade ordinance. "In this case the addition of Brick would not enhance the front façade and all other facades have large percentages of brick. For this reason, we recommend that the design is consistent with the intent and purpose of the Façade Ordinance and that a Section 9 Façade Waiver be granted for the underage of Brick on the front facade."

3. Right of Way Green Belt Berm. The right of way landscape screening requirements table for a B-3 zoning district, where the right of way is adjacent to parking, requires a 20-foot green belt width with a minimum 3-foot-high berm is required along the road rights of way. Here parking is set back the required 20 feet from both Grand River Avenue and Joseph Drive rights of way,

however, in lieu of a 3-foot-tall berm, the applicant respectfully requests to provide a 3-foot-high continuous hedge along the Grand River Avenue right of way and the Joseph Drive right of way. See the landscape site plans for additional information.

Staff Comment: This is supported by staff for the frontages since the continuous hedge proposed provides an alternative form of screening, and this has been allowed for other dealerships.

4. Business Sign. City Code, Chapter 28 Signs, Section 28-5 table and applicable footnotes provides that with respect to wall signs a single tenant within a B-3 district is allowed one wall sign up to 250 square foot maximum. Additional requirements (Section 28-5.b.1.b) indicates the maximum wall sign area as it correlates to the setback distance from the adjacent road. Due to the nature of the business, it is respectfully requested that additional wall signs be allowed to indicate dealership branding and to provide wayfinding for the customers. Dimensions indicating the distance from the building to the centerlines of the roads are located on the preliminary site plan. The applicant is requesting two wall-mounted brand signs, one dealer sign and one directional sign for service reception area. The total wall signage area is approximately 118 square feet.

Staff Comment: See staff comments on signage on page 3-4 of this review. The applicant was asked to submit Sign Permit Applications for each sign proposed in order to fully determine the deviations required for the proposed signage.

5. Building Foundation Landscaping (Sec 5.5.3.D): The required foundation area is provided in total, but only 72% is at the building.

Staff Comment: As the remaining landscaping is provided in areas that will enhance the appearance of the site from Grand River, it would be supported by staff.

6. Parking Lot Islands (Sec. 5.3.12): There are two locations, on either side of the building, where 2 customer parking spaces have an end island on one side, but not the side adjacent to the entry/exit point of the service area.

Staff Comment: We support the deviation to allow the striped vehicle entry to serve as the painted end islands in lieu of curbed islands.

7. Greenbelt Landscaping (Sec. 5.5.3.B.ii, iii): Ordinance requirements for the number of subcanopy trees along the southern part of Joseph Drive have not been met. This condition requires a deviation to be approved.

Staff Comment: Supported by staff.

Additional Deviations Identified:

8. Berm Screening along the south property line. While the berm height of 6 to 8 feet is now proposed adjacent to a residential use, the landscaping proposed does not appear sufficient to meet the opacity of 80-90% within two years. This would require a deviation.

Staff Comment: Staff does not support the deviation. See the Landscape Review for detailed recommendations to be able to remove this deviation.

9. Maximum Illumination Adjacent to Non-Residential (Sec. 5.7.3.L): Where abutting a non-residential district, the maximum illumination at the property line shall not exceed 1 footcandle. This limit is exceeded at the western property line with a level of 2.4 footcandles. The north and east property lines also exceed the limit (3.4 fc and 6.2 fc, respectively), however these are road frontages and the applicant states they are illuminating the sidewalks.

Staff Comment: *The deviation is supported by staff where the intention is to illuminate the sidewalks. The applicant should provide similar back-shield on the west side of the property to more closely comply with the 1 fc limit.*

APPLICANT'S BURDEN UNDER PRO ORDINANCE

The Planned Rezoning Overlay ordinance (PRO) requires the applicant to demonstrate that certain requirements and standards are met. The applicant should be prepared to discuss these items, especially in number 1 below, where the ordinance suggests that the enhancement under the PRO request would be unlikely to be achieved or would not be assured without utilizing the Planned Rezoning Overlay. Section 7.13.2.D.ii states the following:

1. (Sec. 7.13.2.D.ii.a) *The PRO accomplishes the integration of the proposed land development project with the characteristics of the project area in such a manner that results in an enhancement of the project area as compared to the existing zoning that would be unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay.*
2. (Sec. 7.13.2.D.ii.b) *Sufficient conditions shall be included on and in the PRO Plan and PRO Agreement such that the City Council concludes, in its discretion, that, as compared to the existing zoning and considering the site specific land use proposed by the applicant, it would be in the public interest to grant the Rezoning with Planned Rezoning Overlay. In determining whether approval of a proposed application would be in the public interest, the benefits which would reasonably be expected to accrue from the proposal shall be balanced against, and be found to clearly outweigh the reasonably foreseeable detriments thereof, taking into consideration reasonably accepted planning, engineering, environmental and other principles, as presented to the City Council, following recommendation by the Planning Commission, and also taking into consideration the special knowledge and understanding of the City by the City Council and Planning Commission.*

The following benefits are proposed by the applicant (as listed in their narrative) to qualify as an enhancement of the project area:

1. *Economic Impact:* The applicant states that the economic impact of this development includes an investment of \$7 million, the creation of 175-200 construction jobs, and the creation of 40-50 full-time permanent jobs.

Staff Comment: **While an economic impact will result from the proposed dealership, a similar impact would be likely for other types of uses developed under the current NCC zoning. An economic impact is incidental to any type of redevelopment of the site, and is not "unlikely to be achieved...in the absence of the use of a Planned Rezoning Overlay."**

2. *Streetscape Enhancements:* The applicant proposes a "unique streetscape along Joseph Drive" with a winding sidewalk and "the installation of a bench node on a concrete platform, decorative light poles, and significant landscaping across the western side of Joseph Drive.

Staff Comment: **Sheet L-4 of the PRO Plan shows a total of 3 benches to be provided at intervals along the sidewalk, and includes a detail of the proposed benches and decorative lighting fixtures. The benches and decorative lighting can be considered an enhancement. Providing a sidewalk on the Joseph Drive frontage is a requirement, so the meandering nature of it is the only unique feature, which may or not be considered an "enhancement."**

As for the landscaping, the only element that exceeds what is required by the ordinance are the seasonal flowers. While those could be considered a nice enhancement, it would be a difficult item to inspect and enforce each year if it is made a condition of the PRO Agreement. Besides the flowers, the landscaping would not be above what is expected of any development on the site.

3. Bus Shelters: The applicant has proposed to construct two covered bus stop shelters along Grand River Avenue to serve the nearby SMART bus stops.

Staff Comment: This is an enhancement to the area that provides a benefit to the general public.

4. Increased Building and Parking Setbacks: Increased building setbacks from the front, rear and side setbacks are proposed. Especially where adjacent to the Residential uses to the south, the 188-foot setback is more restrictive than the 20-foot minimum permitted in B-3. At the rear of the property the parking is setback 53 feet where the ordinance would otherwise allow a 10-foot setback.

Staff Comment: The greater building and parking setbacks does reduce the impact of any noises within the building and keeps the bulk of the activity further away from the adjacent residences and other adjacent sites. It is more limiting than what the B-3 district allows.

SUMMARY OF OTHER REVIEWS:

All reviewers are currently recommending approval.

- a. **Engineering**: Engineering recommends approval of the Formal PRO Plan. Negative impacts to public utilities are not expected with the requested zoning change. The plans do not contain the required details to approve the Preliminary Site Plan.
- b. **Landscape**: Landscape review notes concerns with insufficient buffer on the south. **Landscape recommends approval at this time.**
- c. **Traffic**: Traffic review notes that the applicant would need a deviation for lack of end islands in two locations. **Approval is recommended, with comments to be addressed in future submittals.**
- d. **Woodlands**: There are no regulated woodland trees on the site.
- e. **Wetlands**: There are no wetland areas on the site.
- f. **Façade**: Façade notes that the front elevation of the building does not have the minimum 30% brick required by the ordinance. The front is primarily showroom glass, and the other elevations exceed the 30% requirement of brick, and overall the design is consistent with the intent of the Ordinance. **A Section 9 waiver is recommended for approval as a deviation in the PRO Agreement.**
- g. **Fire**: **Fire has no objections to the rezoning at this time.** Standards will need to be met during site plan review process.

NEXT STEP: PLANNING COMMISSION PUBLIC HEARING

With all reviewers recommending approval or conditional approval, Planning Commission will hold a public hearing on the rezoning request from NCC (Non-Center Commercial) to B-3 (General Business) with a Planned Rezoning Overlay. Following the public hearing, they will make a recommendation to City Council whether to approve or deny the request, or may postpone making a recommendation if they determine additional information or changes are needed. **The next available agenda would be April 9th. Please provide an applicant response letter addressing any outstanding issues raised, and updates to the conditions and deviations requested, no later than Wednesday, April 2nd.**

CITY COUNCIL CONSIDERATION

After the Planning Commission makes its recommendation, the PRO Concept Plan will be scheduled for consideration by the City Council. If the City Council grants tentative approval at that time, they will direct the City Attorney to draft a PRO Agreement describing the terms of the rezoning approval. Once the PRO Agreement has been drafted and approved by the applicant's attorney, it will return City Council for final approval.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.347.0484 or lbell@cityofnovi.org.



Lindsay Bell, AICP – Senior Planner



PLANNING REVIEW CHART: B-3 General Business District with PRO

Review Date: March 11, 2025
Review Type: Formal PRO Concept
Project Name: Feldman KIA PRO
Location: 40575 Grand River; Parcel 22-24-326-025
Plan Date: February 14, 2025
Prepared by: Lindsay Bell, Senior Planner
Contact: **E-mail:** lbell@cityofnovi.org; **Phone:** (248) 347-0484

Bold To be addressed in Formal PRO Plan submittal
Underline To be addressed with Preliminary Site Plan submittal
Bold and Underline Possible deviations to be included as part of PRO agreement
Italics Items to be noted

| Item | Required Code | Proposed | Meets Code | Comments |
|---|--|--|------------|---|
| Zoning and Use Requirements | | | | |
| Master Plan | Regional Commercial | B-3 Community Business | | B-3 is a community commercial district; however no other B-3 district adjacent |
| Zoning <i>(Effective Jan. 8, 2015)</i> | RC: Regional Center District | B-3 with Planned Rezoning Overlay | | PRO requested |
| Uses Permitted <i>(Sec 3.1.11.B & C)</i> | Sec 3.1.12.B Principal Uses Permitted. | Car salesroom, showroom or office permitted use in B-3 only; Outdoor space for sale of new or used autos is Special Land Use | Yes | PRO Rezoning requested to allow use |
| Phasing | Provide phases lines and detail description of activities in each phase | Phasing not proposed | NA | |
| Planned Rezoning Overlay Document Requirements (Section 7.13.2 & Site Plan & Development Manual) | | | | |
| Written Statement (Section 7.13.2) The statement should include the following: | Statement of eligibility for PRO Approval: Describe the rezoning requested including uses proposed, justification for why it makes sense | Attorney letter states use limited to Auto Dealership with associated outdoor parking for inventory and customers/employees | Yes | |
| | How does the project constitute an overall benefit to the public that | Enhanced sidewalk on Joseph Dr, covered bus stop benches | Yes | See Planning Review for detailed comments |

| Item | Required Code | Proposed | Meets Code | Comments |
|--|--|--|------------|---|
| | outweighs any detriments or could not otherwise be accomplished without the rezoning? Deviations and Conditions proposed for inclusion in the PRO Agreement (i.e., ZO deviations, limitation on total units, height, uses, etc) | Use to be restricted to Auto Wash only; height and setbacks more limiting, exceeding brick requirement | Yes | See Planning Review letter for detailed discussion |
| Rezoning Traffic Impact Study Site Plan & Development Manual | Required with requirements in SDM | Not required as does not meet threshold conditions | NA | |
| Community Impact Statement (Sec. 2.2) | Required according to site plan manual (SDM link: Site Plan & Development Manual) | Not required | NA | |
| Rezoning Signs (Site Plan Development Manual) | Sign location plan Mock-up of sign details | Provided Provided | Yes | |
| B-3 Business District Required Conditions (Sec. 3.10) | | | | |
| Service Bay Doors (Sec 3.10.3) | - No truck well, loading dock, overhead door or other type of service bay door shall face a major thoroughfare, nor an abutting residential district. - Pedestrian exits or emergency doors are permitted on such building facades. | Service bay doors face north and south and west; Loading area on east side of building | No | <u>Applicant requests deviation for service bay doors facing major thoroughfare to north and residential neighborhood to the south</u> |
| Height, bulk, density, and area limitations (Sec 3.1.12) | | | | |
| Frontage on a Public Street. (Sec. 5.12) | Frontage on a Public Street is required | Frontage on Grand River | Yes | |
| Access to Major Thoroughfare (Sec. 5.13) | Direct access to Major Thoroughfare is required unless noted in Section 5.13 | Access to Grand River Ave | Yes | |
| Minimum Zoning Lot Size for each Unit in Ac | Except where otherwise provided in this Ordinance, the minimum | ~ 4.9 acres | Yes | |

| Item | Required Code | Proposed | Meets Code | Comments |
|--|---|---|------------|--|
| (Sec 3.6.2.D) | 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 | | | |
| Minimum Zoning Lot Size for each Unit: Width in Feet | | | NA | |
| Maximum % of Lot Area Covered (By All Buildings) | (Sec 3.6.2.D) | ~9% | Yes | |
| Building Height (Sec. 3.1.12.D) | 30 ft | 30 ft. | Yes | |
| Building Setbacks (Sec 3.1.12.D) | | | | |
| Front (Grand River) | 30 ft. | 94 | Yes | |
| Exterior Side (Joseph Dr) | 30 ft. | 212 | Yes | |
| Side (west) | 15 ft. | 77 | Yes | |
| Side (south) | 15 ft. | 188 | Yes | |
| Parking Setback (Sec 3.1.12.D) | | | | |
| Front (Grand River) | 20 ft. | 22 | Yes | |
| Exterior Side (Joseph Dr) | 20 ft. | 22 | Yes | |
| Side (west) | 10 ft. | 10 | Yes | |
| Side (south) | 10 ft. | 53 | Yes | |
| Outdoor Space For Exclusive Sale of New or Used Automobiles (Sec. 4.36) | | | | |
| Paving and draining of lot (Sec 4.36.1) | Lot or area paved and graded/drained to dispose of all surface water accumulated | Underground infiltration system, Infiltration trench storm water detention proposed | Yes | See Engineering comments |
| Access to Outdoor Sales Area (Sec 4.36.2) | Access at least 60 feet from the intersection of any 2 streets | Site entrance ~ 158' from Grand River/Joseph Drive intersection | Yes | Site plan proposes to use 2 existing curb cuts |
| Greenbelt Planting Strip (Sec 4.36.3) | 10 ft wide greenbelt between ROW and parking/vehicle display | Continuous hedge proposed in 15, 20-foot greenbelt | Yes | |

| Item | Required Code | Proposed | Meets Code | Comments |
|--|--|--|------------|---|
| Repair/Refinishing (Sec 4.36.4) | No major repair or major refinishing to be done on the lot | | Yes? | Provide note on the plans to document. Not addressed in response letters received |
| Lighting (Sec 4.36.5) | Lighting to be shielded from adjacent residential districts | Lighting Plan shown | Yes | Confirm with additional details – see page 10- 11 |
| Noise Impact Statement (Sec 4.36.6) | Noise impact statement is required subject to the standards of Section 5.14.10.B. | Noise Impact Statement provided | No | Statement only provides noise of HVAC; what about car haulers? Service dept? Security alarms? |
| Note To District Standards (Sec 3.6.2) | | | | |
| Exterior Side Yard Abutting a Street (Sec 3.6.2.C) | All exterior side yards abutting a street shall be provided with a setback equal to the front yard setback requirement of the district in which located. | Exterior side yard on Joseph – 22 ft parking setback proposed | Yes | |
| Minimum Lot Area (Sec. 3.6.2.D) | 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 requirements | | Yes | |
| Off-Street Parking in Front Yard (Sec 3.6.2.E) | Off-street parking shall be permitted in the front yard, except that said parking shall observe the minimum off-street parking setback requirements in Sec. 3.1 and 5.5.3 | Abuts residential to the south – parking setback exceeds requirement (~53 ft proposed) | Yes | |
| Wetland/ Watercourse Setback (Sec 3.6.2.M) | Refer to Sec 3.6.2 for more details. | No wetlands present | Yes | |
| Parking setback screening (Sec 3.6.2.P) | Required parking setback area shall be landscaped per sec 5.5.3. | | | See Landscape chart for requirements |
| Modification of parking setback requirements (Sec 3.6.2.Q) | Refer to Sec 3.6.2 for more details | | NA | |

| Item | Required Code | Proposed | Meets Code | Comments |
|---|---|--|------------|--|
| Parking, Loading, and Dumpster Requirements | | | | |
| Number of Parking Spaces Motor vehicle sales and service (Sec.5.2.12.C) | One (1) for each two hundred (200) square feet of usable floor area of sales room and one (1) for each one (1) auto service stall in the service room 7716 sf sales/200 = 39 12 service stalls = 12 51 spaces required | 297 spaces indicated on plans; 17 customer parking spaces, 37 employee/ service parking spaces, remainder parking spaces for inventory | Yes | |
| Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2) | - 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping | Both 9' x 17' and 9' x 19' spaces proposed Min 24' drive aisles indicated | Yes | |
| Posted Fire Lanes (D.C.S Sec. 158-99(a)) | The minimum width of a posted fire lane is 20 feet. The minimum height of a posted fire lane is 14 feet. | | Yes | |
| Parking stall located adjacent to a parking lot entrance (public or private) (Sec. 5.3.13) | Shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer | Appears to comply | Yes | |
| 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 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 | Appears to mostly comply | No | Waiver is requested for 2 areas on either side of the service entrance – painted rather than raised curbs |
| Barrier Free Spaces Barrier Free Code | - 22 parking spaces: 1 van Accessible Space required | 3 barrier free spaces indicated | Yes | <i>Inventory vehicles do not require barrier free spaces</i> |

| Item | Required Code | Proposed | Meets Code | Comments |
|--|--|---|------------|----------|
| (2012 Michigan Building Code) | - Every 6 or fraction of six accessible parking spaces, at least one shall be van-accessible | | | |
| Barrier Free Space Dimensions <i>Barrier Free Code (2012 Michigan Building Code)</i> | - 8' wide with an 8' wide access aisle for van accessible spaces - 8' wide with a 5' wide access aisle for regular accessible spaces | 8' spaces and shared 8' access aisle shown | Yes | |
| Barrier Free Signs <i>Barrier Free Code</i> | One sign for each accessible parking space. | Signs indicated | Yes | |
| Minimum number of Bicycle Parking <i>(Sec. 5.16.1)</i> | Minimum 2 spaces | 2 bike parking spaces proposed | Yes | |
| Bicycle Parking General requirements <i>(Sec. 5.16)</i> | - No farther than 120 ft. from the entrance being served - When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations - Spaces to be paved and the bike rack shall be inverted "U" design - Shall be accessible via 6 ft. paved sidewalk | | Yes | |
| Bicycle Parking Lot layout <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 in. | Width: 7ft Space depth: 32 in. | Yes | |
| Loading Spaces <i>(Sec. 5.4.2)</i> | - Loading, unloading space shall be provided in the rear yard at a ratio of 10 sq. ft. for each front foot of building - Except in the case of a double frontage lot, loading-unloading, as well as trash receptacles may be located in an interior side yard beyond | Loading area located to the rear of building with landscape screening to east (120 ft frontage x 10 = 1,200 sf) | Yes | |

| Item | Required Code | Proposed | Meets Code | Comments |
|---|---|---|------------|--|
| | the minimum side yard setback requirement of the district; location subject to approval by the City. | | | |
| Dumpster (Sec 4.19.2.F) | <ul style="list-style-type: none"> - Located in rear yard or interior side yard in case of double frontage - Attached to the building OR - No closer than 10 ft. from building if not attached - Not located in parking setback - If no setback, then it cannot be any closer than 10 ft, from property line. - Away from Barrier free Spaces | Dumpster indicated in rear yard | Yes | |
| Dumpster Enclosure (Sec. 21-145. (c)) | <ul style="list-style-type: none"> - Screened from public view - A wall or fence 1 ft. higher than height of refuse bin - And no less than 5 ft. on three sides - Posts or bumpers to protect the screening - Hard surface pad. - Screening Materials: Masonry, wood or evergreen shrubbery | Enclosure detail shown on sheet SP1.4 – enclosure Brick to match the building | Yes | <i>This has been corrected in this submittal</i> |
| Sidewalk Requirements | | | | |
| Article XI. Off-Road Non-Motorized Facilities | An 8-foot sidewalk is required along Grand River; 5' Required along Joseph Dr | 8' Proposed along Grand River; 5' sidewalk along Joseph Dr proposed | Yes | Sidewalk not within ROW will require sidewalk easements |
| Pedestrian Connectivity | Assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets | Sidewalk shown from Grand River onto site | Yes | |
| Accessory Structure and Equipment Requirements | | | | |
| Accessory | - Accessory structures | | | |

| Item | Required Code | Proposed | Meets Code | Comments |
|--|--|--|------------|---|
| Structures (Sec. 4.19.2.A) | shall be located in the rear yard and shall meet 6-foot setback requirement | | | |
| Flagpoles (Sec 4.19.2.B) | May be located in front or exterior side yard, no closer to ROW than ½ the distance between the ROW and Principal building | Not proposed | NA | If proposed, must show on Final Site Plan |
| Roof top equipment and wall mounted utility equipment (Sec. 4.19.2.E.ii) | - All roof top equipment must be screened, and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building | Roof equipment shown to be screened | | |
| Roof top appurtenances screening | Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road, or adjacent property | 6' Screening proposed on lower rear portion of the building – does not exceed 30 feet height limit | Yes | |
| Transformers/ Utility Boxes (Sec. 4.19.2.I) | <ul style="list-style-type: none"> - If under 4-ft in height may be located next to a building in a rear or side yard and meet the setback for accessory building; - Shall not interfere with pedestrian or vehicle flow; - Units over 4 ft shall be located in the rear yard - All units must be screened per Landscape Design Manual | Transformer located on west side of building, will mostly be screened by front of building; | Yes | <i>Note landscape screening will also be required</i> |
| Building Code and Other Design Standard Requirements | | | | |
| Building Code | Building exits must be connected to sidewalk system or parking lot. | Public exits appear to be connected to sidewalk or parking area | Yes | |

| Item | Required Code | Proposed | Meets Code | Comments |
|---|--|---|------------|--|
| Design and Construction Standards Manual | Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions). | Provided | Yes | <i>Lot combination has been completed</i> |
| General layout and dimension of proposed physical improvements | Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in sq. ft.), location of proposed parking and parking layout, streets, and drives, and indicate sq. ft. of pavement area (indicate public or private). | Generally provided | Yes | |
| Economic Impact | <ul style="list-style-type: none"> - Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied) | \$7 million 40-50 full time employees 175-200 construction jobs | Yes | |
| Other Permits and Approvals | | | | |
| Development/ Business Sign | <ul style="list-style-type: none"> - Signage if proposed requires a permit. - Exterior Signage is not regulated by the Planning Division or Planning Commission. | Signage design detailed on sheet SP1.4 | | <u>For sign permit information contact Deborah Martinez 248-735-5671.</u> Deviations from the sign ordinance can be requested within the PRO process – sign permit applications are needed to evaluate |
| Development and Street Names | Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval | Project name does not require approval. | NA | |
| Property Combo/Split | The proposed property split must be submitted to the Assessing Department for approval prior to Final Stamping Set approval. | Lot combination appears to be proposed | Yes | <i>Lot combination will need to be completed prior to final stamping set approval with new legal description and parcel ID</i> |
| Other Legal Requirements | | | | |

| Item | Required Code | Proposed | Meets Code | Comments |
|--|---|--|------------|--|
| Existing Easements | Show all easements on a site survey | Easement areas do not appear to be shown | No | Provide easement areas with Liber/Page on Topo Survey |
| Lighting and Photometric Plan (Sec. 5.7) | | | | |
| Intent (Sec. 5.7.1) | Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky | Provided | | |
| Lighting Plan (Sec. 5.7.A.1) | Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures | Provided | Yes | |
| Building Lighting (Sec. 5.7.2.A.iii) | Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures. | Provided | Yes | |
| Lighting Plan (Sec. 5.7.2.A.ii) | Specifications for all proposed & existing lighting fixtures | Provided in previous submittal | TBD | Provide in FSP submittal |
| | Photometric data | Provided | Yes | |
| | Fixture height | Max 22.6 ft | Yes | |
| | Mounting & design | Not indicated | No | |
| | Glare control devices | Stated will comply | Yes | |
| | Type & color rendition of lamps | LED | Yes | |
| | Hours of operation | Not shown | No | Include on lighting plan |
| Maximum height when abutting residential districts (Sec. 5.7.3.A) | Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses) | Max 22.6 ft | Yes | |
| Standard Notes (Sec. 5.7.3.B) | - Electrical service to light fixtures shall be placed | Not indicated | TBD | Include standard notes on the plans |

| Item | Required Code | Proposed | Meets Code | Comments |
|---|--|--|------------|---|
| | underground - Flashing light shall not be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation | | | |
| Average light levels (Sec.5.7.3.E) | Average light level of the surface being lit to the lowest light of the surface being lit; not exceed 4:1 | 3.6:1 | Yes | |
| Color Spectrum Management (Sec. 5.7.3.F) | For all permanent lighting installations - minimum Color Rendering Index of 70 and Correlated Color Temperature of no greater than 3000 Kelvin | Response letter stated would comply | TBD | Provide in FSP submittal |
| Indoor Lighting (Sec. 5.7.3.H) | Indoor lighting shall not be the source of exterior glare or spillover | Not shown | TBD | Shall comply |
| Security Lighting (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 to not cast light toward adjacent properties or streets, or into the night sky. - Fixtures mounted on the building and designed to illuminate the facade are preferred | | TBD | |
| Parking Lot Lighting (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. | Applicant letter indicates back light cut-off shades will be installed | Yes | |
| Min. Illumination (Sec. 5.7.3.L) | Parking areas: 0.2 min | 2.1 min | Yes | <u>Adjust lighting to meet minimum standards or seek a deviation</u> |
| | Loading & unloading areas: 0.4 min | 5.7 fc min | Yes | |
| | Walkways: 0.2 min | 0.1 min | Yes | |
| | Building entrances, frequent use: 1.0 min | 0.0 fc | No | |

| Item | Required Code | Proposed | Meets Code | Comments |
|---|---|--|---------------------------|---|
| | Building entrances, infrequent use: 0.2 min | | NA | |
| Average Light Level (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 | Asphalt – 3.64:1 | Yes | |
| Max. Illumination adjacent to Non-Residential (Sec. 5.7.3.L) | When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle | Max at property line: <ul style="list-style-type: none"> • West: 2.4 max • East: 6.2 max • North: 3.4 max | No | <u>Non-residential property lines exceed max of 1 footcandle – adjust or seek a deviation</u> |
| Adjacent to Residential (Sec. 5.7.3.M) | <ul style="list-style-type: none"> ▪ Height of fixtures not to exceed 25 feet ▪ No direct light source shall be visible at the property line at ground level ▪ All cut off angles of fixtures must be 90° when adjacent to residential districts - Maximum illumination at the property line shall not exceed 0.5 foot candle | 22.6 ft max Glare shields proposed Max at property line to south appears to be 0.1-0.2 fc | Yes Yes Yes | |

NOTES:

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

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

03-10-2025

Engineering Review

Feldman Kia
JSP24-0032

APPLICANT

Feldman Automotive

REVIEW TYPE

Formal PRO/ Preliminary Site Plan

PROPERTY CHARACTERISTICS

- Site Location: Located on the south side of Grand River Avenue, west of Joseph Drive
- Site Size: 4.88 acres
- Plan Date: 02-14-2025
- Design Engineer: Alpine Engineering, INC

PROJECT SUMMARY

- Construction of an approximately 20,152 square foot square-foot building and associated parking. Site access would be provided via public roadways.
- Water service would be provided by an 8-inch extension from the existing 8-inch water main along Grand River Avenue. Along with three additional hydrants.
- Sanitary sewer service would be provided by an extension from existing off-site sanitary sewer on the south side of the property, along with a monitoring manhole for the site.
- Storm water would be collected by an underground storm water detention/infiltration system, an infiltration basin, and an infiltration trench.

RECOMMENDATION

Approval of the Plan Rezoning Overlay is **recommended** at this time, however approval of the Preliminary Site Plan is **NOT recommended** at this time, the plans do not meet the general requirements of [Chapter 11 of the City of Novi Code of Ordinances](#), the Storm Water Management Ordinance and the [Engineering Design Manual](#). The following items must be addressed at the time of Revised Preliminary Site Plan resubmittal:

COMMENTS

1. Provide the soil boring report, and the infiltration testing study for this site.
2. **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.
3. A right-of-way permit will be required from the City of Novi and Oakland County.
4. Clearly distinguish between proposed and existing easements; the current easements are hard to differentiate.
5. Show the Right-of-Way limits on the plans.
6. The Non-Domestic User Survey Form for sanitary sewer flow shall be submitted to the City so it can be forwarded to Oakland County.
7. Provide a construction materials table on the utility plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
8. 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.
9. 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.
10. 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 and easements shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance. Some trees appear close to the trench drain on the west side of the site, please check these separation distances to ensure that there will be no conflict.
11. A License Agreement will be required for the light poles that are proposed within the utility easements unless they are relocated outside the easement.
12. The 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

13. Provide the material and size of the proposed main and domestic water lead.
14. Place the hydrants at least 7 feet off back of curb (allowing 3-foot clearance from sidewalk).
15. A tapping sleeve, valve and well is required at the connection to the existing water main.
16. Per current EGLE requirement, provide a profile for all proposed water main 8-inch and larger.
17. 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.
18. The water main stub at the northwest corner of the property shall terminate with a hydrant followed by a valve in well. If the hydrant is not a requirement of the development at this location, the hydrant can be labeled as "temporary", allowing it to be relocated in the future.
19. 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".
20. 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.
21. Provide a water main basis of design for the development on the utility plan sheet.
22. 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.
23. 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, 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

24. Indicate if an irrigation system will be proposed on the site.

SANITARY SEWER

25. The note on the existing sanitary sewer manhole indicates a 6-inch invert, while the pipe label specifies 8-inch. Please ensure consistency between the note and the label on the plans.
26. The City suggests making the sanitary sewer pipe between the sanitary sewer connection and the monitoring manhole public by upgrading it to an 8-inch pipe and placing it in an easement to eliminate the sanitary sewer access easement.
27. If this suggestion cannot be implemented, the sanitary sewer access easement for the monitoring manhole shall be 20-foot wide, which is inconsistent with the pervious reviewer requested.
28. 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.
29. Section 11-164 (g)-4 states the maximum length of a sanitary sewer lead shall not exceed 100-feet unless otherwise approved, so ensure clean-outs are provided every 100-feet.
30. Illustrate all pipes intersecting with manholes on the sanitary profiles.

STORM SEWER

31. A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. 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.
32. 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.
33. Match the 0.80 diameter depth above invert for pipe size increases.
34. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot-deep plunge pool.
35. The minimum pipe size for storm sewers receiving surface runoff shall be 12-inch diameter.
36. Provide profiles for all storm sewer 12-inch and larger.
37. Plastic pipe is not allowed in the right-of-way, the maximum allowable size for plastic storm sewer is 12-inch. (Smaller diameters are allowed for roof drains)
38. 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.
39. 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.
40. Illustrate all pipes intersecting storm structures on the storm profiles.

41. 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.

Storm Water Management Plan

42. The proposed basin shall be considered as a retention basin instead of a detention basin since there isn't an outlet control structure for the basin provided. Therefore, to accommodate the retention, the storm water calculations need to be revised by adding the following items:
 - a. CPVC.
 - b. CPRC - Extended Detention.
 - c. CPRC Allowable Outlet Rate.
 - d. The volume and discharge of Water Quality Control.
 - e. 100-Year Allowable Release Rate.
 - f. 100-Year Peak Allowable Discharge.
 - g. 100-Year Runoff Volume.
 - h. 100-Year Peak Inflow.
 - i. Storage Curve Factor.
 - j. 2 x 100-Year Storage Volume.
43. If there is an outlet control structure provided that drains on site, then detention basin will be allowed, and the storage volume will be for a 100-year event only. Additionally, the storage volume of the detention basin should be determined by subtracting the CPVC from the runoff volume.
44. 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).
45. 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.
46. Explain where the runoff coefficient of 0.15 is coming from. If the soil is hydrologic soil group A, please list that.
47. 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.
48. Provide a pretreatment structure for the site and provide manufacturer's details and sizing calculations for this structure on the plans. The treated flow rate should be based on the 1-year storm event intensity (~1.6 In/Hr); higher flows shall be bypassed.

49. Provide supporting details for the runoff coefficient of the "Off-site Grass/On-Site Basin Area" and why this was different from the on-site grass. Use the Oakland County stormwater standards for the runoff coefficients.
50. 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.

UNDERGROUND DETENTION REQUIREMENTS

51. Provide an underdrain along the downstream side of the underground detention system which is tied into a manhole as a means of secondary storm water conveyance to the outlet.
52. Cleanouts shall be provided at each end of the proposed underdrain for periodic maintenance.
53. Provide a table or note addressing the required bedding depth vs. bearing capacity of the underlying soils in the vicinity of the underground detention system per the manufacturer's specifications.
54. Provide a note on the plans stating the City's inspecting engineers shall verify the bearing capacity of the native soils to verify an adequate bedding depth is provided.
55. Indicate the assumed porosity of the aggregate. The volume calculations shall consider only 85-percent of that volume as available for storage to account for sediment accumulation in the aggregate. This means that the usual 40% porosity assumed by many manufacturers must be reduced to 0.85 of that = 34%.
56. Provide a note on the underground detention detail that aggregate porosity will be tested, and results provided to the City's inspecting engineers.
57. Provide an isolator row in the underground detention system in addition to the swirl concentrator chamber. Contact the Engineering Division for further information.
58. Provide inspection ports throughout the underground detention system at the midpoint of all storage rows. Additional inspection ports may be required for systems larger than 200 feet. One inspection port every 50 feet for isolator row.
59. Inspection ports shall be a minimum of 8-inches.
60. For piped/chamber systems, the underground storage system shall include 4-foot diameter manholes at one end of each row for maintenance access purposes.
61. Provide critical elevations for the detention system. Also, provide a cross-section for the underground detention system. Ensure that there is at least 1 foot of freeboard between the 100-year elevation and the subgrade elevation beneath the pavement.

62. The underground detention system shall be kept outside of the influence of any planting areas.
63. In order to prevent scouring (per Table 4 of StormTech manual), do not exceed the maximum inlet flow rates.

INFILTRATION TRENCH AND INFILTRATION BASIN:

64. The Infiltration Trench shall be sized for a portion of the 100-year detention volume. This volume shall include the below-grade pipe and gravel media. The available storage volume in the gravel shall assume that only 85-percent of the volume is available for storage to account for sediment accumulation within the media [Same as underground detention note for stone volume; see above]. Provide these calculations on the plans.
65. The detail for the Infiltration Basin shall indicate the above-grade ponding depth and shall show the overflow catch basin. Include the design side slopes.
66. Provide a geotextile filter fabric under the planting material to separate it from the underdrain/base material or in-situ soils.
67. Provide a cross-section that includes the Infiltration basin outlet structure, with all relevant elevations, inverts, and dimensions.

PAVING & GRADING

68. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.
69. 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.
70. No more than ¼" vertical obstacle shall be allowed at each transition between the pathway and the drive approach.
71. Dumpster Pad details shall meet city standards, 8" concrete on 8" 21 AA aggregate base. Note: Dumpster pad shall extend minimum 10' beyond dumpster enclosure.
72. The pathway cross-section shall have a maximum cross-slope of 2%. Add the maximum 2-percent cross-slope to the sidewalk detail.
73. The public pathway shall be within a dedicated easement unless proposed in the right-of-way.
74. Provide spot elevations at the intersection of the proposed pathway with the existing pathway.
75. 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. Provide the latest version of the

MDOT standard detail for detectable surfaces. Please ensure that the product is the concrete-embedded detectable warning plates, or equal, and shall be approved by the Engineering Division. Stamped concrete will not be acceptable.

76. Label specific ramp locations on the plans where the detectable warning surface is to be installed.
77. 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.
78. Provide existing and proposed contours on the Grading Plan at the time of the Final Site Plan submittal.
79. Provide a note on the Grading Plan stating that the proposed pathway within the road right-of-way shall match existing grades at both ends.
80. 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.
81. Site grading shall be limited to 1V:4H (25-percent), excluding landscaping berms.
82. 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.
83. Provide spot grades along property lines to demonstrate site drainage is self-contained.
84. 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).
85. The City standard straight-faced curb (MDOT F-4 curb detail) shall be provided.

SOIL EROSION & SEDIMENT CONTROL

86. A SESC permit is required. A full review has not been completed at this time. A review will be done when a completed packet is submitted to Sarah Marchioni at Community Development.

OFF-SITE EASEMENTS

87. 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.

88. Any off-site utility easements anticipated must be executed prior to final approval of the plans.
89. 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 NEXT SUBMITTAL:

90. 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.
91. 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 of 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).

REQUIRED LEGAL DOCUMENTS

The following must be submitted with the Stamping Set: 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](#))

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

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 Milad Alesmail at (248) 735-5695 or email at hanjum@cityofnovi.org or malesmail@cityofnovi.org with any questions.

Milad Alesmail

Milad Alesmail,
Project Engineer

cc: Lindsay Bell, Community Development
Humna Anjum, Engineering
Ben Croy, City Engineer

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT
February 20, 2025
Feldman Kia of Novi
Formal PRO Concept Site Plan - Landscaping

Review Type
Formal PRO Concept Plan Landscape Review

Job #
JZ24-38

Property Characteristics

- Site Location: 40575 Grand River Avenue
- Site Acreage: 4.88 ac.
- Site Zoning: NCC
- Adjacent Zoning: North: I-1, East: NCC, South: R-4, West: OST
- Plan Date: 2/18/2025

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 Formal PRO Concept plan submittal. Underlined items must be addressed on the Preliminary or 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**, contingent on the relatively minor changes required to remove the unsupported deviation being made.

LANDSCAPE DEVIATIONS REQUIRED:

- Deficiency in berm screening along the south property line – *not supported by staff. If additional trees are added as described on the landscape chart to increase the opacity provided by the trees to 80-90% within 2 years of planting this waiver will not be required.*
- Lack of greenbelt berms for both Grand River Avenue and Joseph Drive – *supported by staff for Grand River Avenue frontage since continuous hedge is proposed but denser branched deciduous or evergreen shrubs must be used along the entire length.*
- Deficiency in subcanopy trees provided along the southern 135lf of Joseph Drive – *supported by staff*
- Deficiency in building foundation landscaping being located at the building – *supported by staff*

PLEASE REVISE THE PLANS TO ELIMINATE THE ABOVE UNSUPPORTED DEVIATION.

Ordinance Considerations

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

1. Tree survey is provided.
2. Most of the existing evergreens along the south edge of the site are shown as being removed and replaced with new plantings on the enhanced berm. Those are not regulated woodland trees.

3. One regulated tree is shown as being removed and replacement plantings are proposed on the site.

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

1. The project is adjacent to residential property to the south so a 6-8 foot tall, landscaped berm is required for the proposed project.
2. The plan now proposes a larger, taller berm (6-8 feet tall) with new evergreen tree plantings.
3. Much of the berm has significant landscaping, but the sections with just large evergreens need to be adjusted and enhanced to provide 80-90% screening within two years.
4. **The proposed screening would still require a landscape deviation.**
5. *If the recommendation to add more trees to provide 80-90% opacity within 2 years is made the deviation could gain support of staff.*

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

1. A continuous hedge is proposed along both Grand River and Joseph Drive instead of the hedge. **This requires a landscape deviation.** *It would be supported by staff if evergreen or densely branched deciduous shrubs are used for all of the hedge.*
2. The required greenbelt width is provided for both frontages.
3. A number of greenbelt trees are used incorrectly. **See the more detailed discussion on the landscape chart.**
4. A landscape deviation is requested for the 135lf of southern Joseph Drive frontage to preserve the existing landscaping. Since enough large evergreen trees are being preserved, a deviation for those trees is not required. **A deviation for the insufficient number of subcanopy trees would be required.** *That deviation would be supported by staff as the large evergreen trees to be removed have a very wide base and leave little room in the greenbelt for all of the required trees.*

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

1. Four of the bays have over 15 spaces without a landscape island but they are allowed to be up to 25 spaces since they are for storage/inventory.
2. **Please follow the instructions regarding tree labeling listed on the landscape chart so the provided trees can be used to meet all of the requirements.**
3. The required parking lot interior and perimeter trees are proposed.

Building Foundation Landscaping (Zoning Sec 5.5.3.D)

1. The required foundation area is provided in total, but only 79% is at the building. **This requires a landscape deviation.** *As the remaining landscaping is provided in areas that will enhance the appearance of the site from Grand River, it would be supported by staff.*
2. The percentage of the building's frontages that are landscaped exceed the 60% requirement.

Plant List (LDM 4, 10)

1. 13 of 25 species used (52%) are native to Michigan. Please keep or exceed that percentage when the final site plan is developed and foundation plantings are detailed.
2. The tree diversity requirement of LDM 4 is met.

Planting Notations and Details (LDM 10)

1. Provided
2. Please see the landscape chart for some detailed comments.

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

1. Underground detention is proposed for pre-treatment and the existing detention area will be retrofitted to be an infiltration basin
2. The required shrubs and seeding is proposed.
3. As the pond will drain within 72 hours, the canopy tree requirement does not need to be met.

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.



Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – Formal PRO Concept Plan

Review Date: February 20, 2025
Project Name: JZ24-38: FELDMAN KIA OF NOVI
Project Location: 40575 Grand River Avenue
Plan Date: February 18, 2025
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org;
 Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant before approval of the PRO Concept Plan. Underlined items need to be addressed on the Site Plans.

LANDSCAPE DEVIATIONS REQUIRED:

- Deficiency in berm screening along the south property line – *not supported by staff. If the additional trees noted below are provided, this waiver won't be required.*
- Lack of greenbelt berms for both Grand River Avenue and Joseph Drive – *supported by staff for Grand River Avenue frontage since continuous hedge is proposed but denser branched or evergreen shrubs must be used.*
- Deficiency in subcanopy trees provided along the southern 135lf of Joseph Drive – *supported by staff*
- Deficiency in building foundation landscaping being located at the building – *supported by staff*

| Item | Required | Proposed | Meets Code | Comments |
|---|---|--------------------------|------------|--|
| Landscape Plan Requirements (Landscape Design Manual (LDM) and Zoning Ordinance (Zoning Sec) | | | | |
| Landscape Plan <i>(Zoning Sec 5.5.2, LDM 2, 10)</i> | <ul style="list-style-type: none"> • New commercial or residential developments • Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. • 1"=20' minimum with proper North. Variations from this scale can be approved by LA • Consistent with plans throughout set | Scale: 1" = 30' | Yes | <u>A smaller scale may be required for the foundation plantings.</u> |
| Project Information <i>(LDM 10)</i> | Name and Address | On title block | Yes | |
| Owner/Developer Contact Information <i>(LDM 10)</i> | Name, address and telephone number of the owner and developer or association | On title block | Yes | |
| Landscape Architect contact information <i>(LDM 10)</i> | Name, Address and telephone number of RLA/PLA/LLA who created the plan | Jim Allen – Allen Design | Yes | |

| Item | Required | Proposed | Meets Code | Comments |
|---|--|---|--|--|
| Sealed by LA. (LDM 10) | Requires original signature | Copy of seal and signature on title block | Yes | |
| Miss Dig Note (800) 482-7171 | Show on all plan sheets | On title block | Yes | |
| Zoning (LDM 10) | Include all adjacent zoning | Shown on Location Map <ul style="list-style-type: none"> • <u>Parcel:</u> NCC • <u>North:</u> I-1, • <u>East:</u> NCC, • <u>South:</u> R-4, • <u>West:</u> OS-1 | Yes | |
| Survey information (LDM 10) | <ul style="list-style-type: none"> • <u>Legal description or boundary line survey</u> • <u>Existing topography</u> | Description and topographical survey on Sheet 3 | Yes | |
| Existing plant material Existing woodlands or wetlands (LDM 10) | <ul style="list-style-type: none"> • <u>Show location type and size. Label to be saved or removed.</u> • <u>Plan shall state if none exists.</u> | <ul style="list-style-type: none"> • Tree survey and chart on Sheet L-2 • Removals are shown on L-2 - all of the trees along the south edge of the property, except along Joseph Drive, are shown as being removed • Woodland replacement calculations on L-2 – one 26" dbh tree is shown as being removed and 3 replacements provided on site | Yes | <ol style="list-style-type: none"> 1. A single flowering pear tree facing Grand River and listed as being in fair condition is being saved – as this is now a prohibited species, removing it and replacing it with a better species would be preferred but is not required. 2. See Merjent letter for a complete review of the woodlands and wetlands |
| Soil types (LDM10) | <ul style="list-style-type: none"> • <u>As determined by Soils survey of Oakland county</u> • <u>Show types, boundaries</u> | Soil boring info and a soils map are provided on Sheet 6A | Yes | |
| Existing and proposed improvements (LDM 10) | Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W | All elements are included on the landscape plan | Yes | |
| Existing and proposed utilities (LDM 10) | <ul style="list-style-type: none"> • Overhead and underground utilities, including hydrants • Proposed light poles | <ul style="list-style-type: none"> • All existing and proposed utilities are shown • Proposed lighting is shown | <ul style="list-style-type: none"> • Yes • Yes | <ol style="list-style-type: none"> 1. <u>If the easements entering the site from the east and traveling north-south through the east lot will be abandoned, please remove them</u> |

| Item | Required | Proposed | Meets Code | Comments |
|---|---|--|------------|--|
| | | | | <u>from the landscape plan and note that on the utility plan.</u> 2. There are a number of tree/light pole conflicts or sites where they are very close. <u>Please adjust the lighting and/or tree locations.</u> |
| Proposed grading. 2' contour minimum (LDM 10) | Provide proposed contours at 2' interval | <ul style="list-style-type: none"> • Sheet 4 • The southern berm is being increased in height to between 7-10 feet | Yes | |
| Snow deposit (LDM 10) | Show snow deposit areas on plan | Two are shown | Yes | <u>Please add more to the plan so all of the site's snow can be handled and move the southeast pointer to a gap north of the pond where it is more likely to be used.</u> |
| LANDSCAPING REQUIREMENTS | | | | |
| Parking Area Landscape Requirements (Zoning Sec 5.5.3.C and LDM 5) | | | | |
| General requirements (LDM 5) | <ul style="list-style-type: none"> • Clear sight distance within parking islands • No evergreen trees | No proposed plantings appear to block visibility within the parking lot | Yes | |
| Name, type and number of ground cover (LDM 5) | As proposed on planting islands | Sod is indicated | Yes | |
| General (Zoning Sec 5.5.3.C) | | | | |
| Parking lot Islands | <ul style="list-style-type: none"> • A minimum of 200 SF to qualify • A minimum of 200sf unpaved area per tree planted in an island • 6" curbs • Islands minimum width 10' BOC to BOC | All islands' areas are labeled and appear to be sufficiently sized | Yes | |
| Curbs and Parking stall reduction (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. | Exterior spaces are 17 feet long and interior spaces are 19 feet long | Yes | |
| Contiguous space | <ul style="list-style-type: none"> • Maximum of 15 | <ul style="list-style-type: none"> • There are 4 bays | Yes | |

| Item | Required | Proposed | Meets Code | Comments |
|---|--|--|--|---|
| limit (Zoning sec 5.5.3.C) | contiguous spaces <ul style="list-style-type: none"> As the long bay is shown as being used for vehicle storage and display it may be 25 spaces long. | around the perimeter of the lot longer than 15 spaces <ul style="list-style-type: none"> As the bays are indicated to be for storage and inventory, they can be up to 25 spaces. | | |
| Plantings around Fire Hydrant (Zoning sec 5.5.3.C) | <ul style="list-style-type: none"> No plantings with matured height greater than 12' within 10 ft. of fire hydrants Plant trees at least 10 feet from underground sanitary sewer lines Plant trees at least 5 ft from underground water and storm sewer lines Plantings near hydrants or FDCs should be no taller than 12" | No trees are proposed within 10 feet of hydrants. | Yes | <u>Add a note stating that any foundation plantings within 3 feet of the FDC shall be 12" or shorter on the final site plans.</u> |
| Landscaped area (Zoning sec 5.5.3.C) | Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped | Yes | | <u>Please indicate some sort of landscaping in the small island in the western parking lot (not trees)</u> |
| Clear Zones (Zoning sec 5.5.3.B.ii Footnote 10) | <ul style="list-style-type: none"> 25 ft corner clearance required. Refer to Zoning Section 5.5.9 Road Commission for Oakland County zone for RCOC jurisdiction roads | <ul style="list-style-type: none"> Road Commission for Oakland County clear vision zones are provided for both entries. Street trees are proposed outside of the clear vision zones. | <ul style="list-style-type: none"> Yes Yes | <u>If the RCOC does not allow some or all of the Grand River street trees, the disallowed trees do not need to be planted, but documentation of that ruling must be provided.</u> |
| 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 (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"> A = x sf * 7.5 % A = 50,000 * 7.5% = 3750 sf | | | Calculation is provided |
| 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"> B = x sf * 1% B = (121,299 – 50000) * 1% = 713 sf | | | Calculation is provided |

| Item | Required | Proposed | Meets Code | Comments |
|--|--|---|------------|--|
| Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C) | | | | |
| A. = Total square footage of vehicular use area up to 50,000 sf x 5% | $A = x \text{ sf} * 6\%$ | NA | | |
| B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5% | $B = 0.5\% \times 0 \text{ sf}$ | NA | | |
| All Categories | | | | |
| C = A+B Total square footage of landscaped islands | <ul style="list-style-type: none"> • $C = A + B$ • $C = 3,750 + 713 = 4,463 \text{ SF}$ | 5,718 sf | Yes | |
| D = C/200 Number of canopy trees required | <ul style="list-style-type: none"> • $D = C/200 \text{ trees}$ • $4,463/200 = 22 \text{ Trees}$ | 20 trees | No | <ol style="list-style-type: none"> 1. Two trees in northern corner lots are shown as greenbelt trees. They should be shown as parking lot interior trees. 2. One tree at the south end of the lot is shown as a double-counted parking lot interior and perimeter tree. This is not allowed – it should just be shown as a perimeter tree. |
| Perimeter Green space (Zoning Sec 5.5.3.C) | <ul style="list-style-type: none"> • 1 Canopy tree per 35 lf • $1,138/35 = 33 \text{ trees}$ | 34 trees <ul style="list-style-type: none"> • 12 greenbelt/perimeter trees • 22 perimeter trees | Yes | |
| Accessway perimeter (Zoning Sec 5.5.3.C.iv.j) | <ul style="list-style-type: none"> • 1 canopy tree per 35 lf on each side of road, less widths of access drives. • $(40*2+35*2)lf/35 = 4 \text{ trees}$ | <ul style="list-style-type: none"> • 4 trees • 2 are double-counted as accessway perimeter/greenbelt canopy trees – this is allowed | Yes | |
| Parking land banked (Zoning Sec 5.2.14.D) | NA | None | | |
| Berms, Walls and ROW Planting Requirements | | | | |
| Berms (Zoning Sec 5.5.3.A & LDM 1) | | | | |
| <ul style="list-style-type: none"> • All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours • Berm should be located on lot line except in conflict with utilities. • Berms should be constructed with 6" of topsoil. | | | | |

| Item | Required | Proposed | Meets Code | Comments |
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| Residential Adjacent to Non-residential (Sec 5.5.3.A & LDM 1.a) | | | | |
| Berm requirements (Zoning Sec 5.5.A) | Landscaped berm 6-8 feet tall | <ul style="list-style-type: none"> • Existing berm approximately 3 feet tall with large evergreens of varying health • All of the existing evergreen trees on the berm are being removed and replaced due to their poor health • The berm is being raised to between 6-8 feet. • A line of large evergreen trees is proposed, with a second row of Green Giant arborvitaes between homes and the site (not the entire frontage) | No | <ol style="list-style-type: none"> 1. Although the proposed berm and landscaping is a big improvement over what was previously proposed, the proposed spacing of the large evergreen trees won't provide the required opacity after 2 years of growth so the deviation is still required, and is <i>not supported by staff</i>. 2. More evergreen trees need to be provided where there is not a "backup" row of Green Giant arborvitaes behind them, either by adding more large evergreen trees in a closer-spaced "zigzag" pattern or by continuing the row of arborvitaes. 3. If that is done, the waiver won't be required. |
| Planting requirements (LDM 1.a.) | LDM Novi Street Tree List | NA | | <u>The requirement is that the plants will provide visual opacity of 80% in the winter and 90% in the summer within two years.</u> |
| Adjacent to Public Rights-of-Way (Sec 5.5.3.B and LDM 1.b) | | | | |
| Berm requirements (Zoning Sec 5.5.3.A.(5)) | An undulating berm a minimum of 3 feet high with a 2-foot-wide crest is required | A continuous hedge is proposed along both frontages in lieu of the berm | No | <ol style="list-style-type: none"> 1. A landscape deviation for this is required. 2. <i>The deviation can only be supported by staff for the areas with shrubs with persistent winter blockage due to a dense branching structure (ninebark)</i> |

| Item | Required | Proposed | Meets Code | Comments |
|--|--|--|--|--|
| | | | | <i>or persistent berries that fill the shrubs (winterberry). Please replace the hydrangea with either evergreens or a shrub variety with a dense branching structure.</i> |
| Cross-Section of Berms (LDM 10) | | | | |
| Slope, height and width | <ul style="list-style-type: none"> Label contour lines Maximum 33% Min. 3 feet flat horizontal area Minimum 3 feet high Constructed of loam with 6' top layer of topsoil. | No | NA | |
| Type of Ground Cover | | NA | | |
| Setbacks from Utilities | Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole | <ul style="list-style-type: none"> Overhead lines exist along both frontages. Subcanopy trees are proposed under the lines. | Yes | |
| Walls (Zoning Sec 5.5.3.A & LDM 10) | | | | |
| Material, height and type of construction footing | Freestanding walls should have brick or stone exterior with masonry or concrete interior | No walls are required or proposed | NA | |
| Walls greater than 4 ft. should be designed and sealed by an Engineer | | NA | NA | |
| ROW Landscape Screening Requirements (Zoning Sec 5.5.3.B.ii) | | | | |
| Greenbelt width | Adj to Parking: 20 ft. Not adj to Pkg: 25 ft | <ul style="list-style-type: none"> Grand River: 21 ft Joseph Drive: 21 ft | <ul style="list-style-type: none"> Yes Yes | |
| Min. berm crest width | Adj to Parking: 2 ft. Not adj to Pkg: 0 ft | <ul style="list-style-type: none"> Grand River: 0 ft Joseph Drive: 0 ft A continuous hedge is proposed along Grand River and Joseph Drive | <ul style="list-style-type: none"> No No | <ol style="list-style-type: none"> A landscape deviation is required for the lack of berms. <i>It would be supported by staff if denser branched species and/or more evergreens are used.</i> |
| Minimum berm height | Adj to Parking: 3 ft. Not adj to Pkg: 0 ft | <ul style="list-style-type: none"> Grand River: 0 ft Joseph Drive: 0 ft | <ul style="list-style-type: none"> No No | See above |
| 3' wall | (2)(3)(4) | None | | |

| Item | Required | Proposed | Meets Code | Comments |
|---|---|--|---|--|
| <p>Canopy deciduous or large evergreen trees</p> | <ul style="list-style-type: none"> • Adj to Pkg: 1 tree per 35 lf • Not adj to Pkg: 1 tree per 60 lf • Grand River – all adjacent to parking: (472-24-32)/35 = 12 trees • Joseph Dr: <ul style="list-style-type: none"> o 296lf adj to pkg: 296/35=8 trees o 179lf not adj to pkg (179/60) = 3 trees | <ul style="list-style-type: none"> • Grand River: 13 trees – 6 canopy trees double-counted as parking lot perimeter trees + 1 south of the sign + 3 accessway/greenbelt double counted trees + 2 greenbelt trees used as parking lot interior trees (not allowed) plus 1 existing tree to remain • Joseph Drive: 18 trees – 6 double-counted greenbelt canopy trees adj to pkg + 4 new large evergreens + 8 existing evergreen trees to remain | <ul style="list-style-type: none"> • Yes/No • Yes | <ol style="list-style-type: none"> 1. <u>Please relabel the following trees to better meet the ordinance (no new trees will be necessary):</u> <ol style="list-style-type: none"> a. <u>Relabel the tree in the northwest island as a parking lot interior tree.</u> b. <u>Relabel the tree south of the sign as a double-counted accessway perimeter/greenbelt tree</u> c. <u>Relabel the tree across the drive from #3 as a double-counted accessway perimeter/greenbelt tree</u> d. <u>Label the tree north of it as a Greenbelt tree</u> e. <u>Relabel the tree in the northeast island as a parking lot interior tree.</u> |
| <p>Sub-canopy deciduous trees)</p> | <ul style="list-style-type: none"> • Adj to Pkg: 1 tree per 20 lf • Not adj to Pkg: 1 tree per 40 lf • Grand River (all adj to pkg): (472-24-32)/20 = 20 trees • Joseph Dr: (290/20)+(165/40) = 19 trees | <ul style="list-style-type: none"> • Grand River: 21 trees • Joseph Drive: 17 trees | <ul style="list-style-type: none"> • Yes • No | <ol style="list-style-type: none"> 1. The deficiency in trees along the south section of Joseph Drive requires a landscape deviation. 2. <i>It would be supported by staff since the existing vegetation to be preserved is dense and doesn't leave room for all of the trees.</i> 3. <u>Please add a note to the demolition plan to remove any invasive volunteers from the evergreens to be preserved along Joseph Drive to maintain their</u> |

| Item | Required | Proposed | Meets Code | Comments |
|--|--|---|--|--|
| | | | | <u>health.</u> |
| Canopy deciduous trees in area between sidewalk and curb | <ul style="list-style-type: none"> • Parking & No Parking: 1 tree per 35 lf • Grand River: (465-24-32)/35 = 12 trees • Joseph Dr: (463/35 = 13 trees | <ul style="list-style-type: none"> • Grand River: 12 subcanopy trees due to overhead wires – clear vision zones limit the number of trees that can be planted • Joseph Drive: 8 canopy trees + 8 subcanopy trees under overhead wires | <ul style="list-style-type: none"> • No • Yes | If the Road Commission for Oakland County does not allow some or all of the Grand River trees to be planted, they do not have to be, and don't need to be planted elsewhere on the site, but a copy of their decision must be provided to staff. |
| Non-Residential Projects (Zoning Sec 5.5.3.F.iii) | | | | |
| Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM | | | | |
| Screening of outdoor storage, loading/unloading (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5) | Loading areas must be completely screened from roads | <ul style="list-style-type: none"> • Loading zone is shown south of the building and north of the employee and service parking. • The building blocks it from Grand River and significant greenbelt landscaping screens it sufficiently from Joseph Drive | Yes | |
| Transformers/Utility boxes (LDM 6) | <ul style="list-style-type: none"> • A minimum of 2ft. separation between box and the plants • Ground cover below 4" is allowed up to pad. • No plant materials within 8 ft. from the doors | <ul style="list-style-type: none"> • None are shown • Screening detail is on L-3 | No | <ol style="list-style-type: none"> 1. <u>When transformer locations are finalized, screening shrubs per standard detail are required.</u> 2. <u>If none are shown on final site plans, an estimate of how many will be needed should be made and 10 shrubs per transformer should be added to the plant list and noted as being for transformer.</u> |
| Building Foundation Landscape Requirements (Zoning Sec 5.5.3.D) | | | | |
| Interior site landscaping SF (Zoning Sec 5.5.3.D) | • Equals to entire perimeter of the building x 8 | <ul style="list-style-type: none"> • A = 4,395 sf • 3,470sf of that (79%) is at the | <ul style="list-style-type: none"> • Yes • No • Yes | 1. A landscape deviation is required for the area that is |

| Item | Required | Proposed | Meets Code | Comments |
|---|--|---|--|---|
| | <ul style="list-style-type: none"> • Landscape areas must be at least 4 ft. wide • A: (638-123)lf x 8ft = 4,120 SF | <ul style="list-style-type: none"> • building – the remaining landscaping is near the building • Shaded areas show areas to be landscaped. • More than 75% of the building is landscaped | <ul style="list-style-type: none"> • Yes | <p>not at the building foundation</p> <p>2. <u>It would be supported by staff as the areas away from the building are near enough to enhance its appearance.</u></p> <p>3. <u>Foundation plantings are to be included in the final site plans, plant list and cost estimate.</u></p> |
| Building Frontage Landscaping (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 | Grand River: 126/152 = 83% Joseph Drive: 108/165 = 65% | <ul style="list-style-type: none"> • Yes • Yes | |
| Detention/Retention Basin Requirements (Zoning Sec. 5.5.3.E & LDM 3) | | | | |
| Planting requirements (Zoning Sec 5.5.3.E & LDM 3) | <ul style="list-style-type: none"> • Clusters of large native shrubs shall cover 70-75% of the basin rim area at 10 lf from permanent water level • 10" to 14" tall grass along sides of basin • Refer to wetland for basin mix • Deciduous canopy tree 1/35 of east, south and west sides of pond at 10 feet from permanent water level | <ul style="list-style-type: none"> • The required shrubs are provided. • There are no canopy trees along most of the south side of the pond | <ul style="list-style-type: none"> • Yes • Yes | Since the calculations show that the pond will infiltrate over 72 hours, the canopy trees are not required. |
| Phragmites and Japanese Knotweed Control (Zoning Sec 5.5.6.B) | <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • A note indicates that there is none of either species. • A site visit found a small patch of Phragmites in the area that will be paved, so treatments won't be necessary | No | <u>Please add a note stating that if any Phragmites or Japanese knotweed are found during construction, they must be controlled.</u> |
| LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS | | | | |
| Landscape Notes – Utilize City of Novi Standard Notes | | | | |
| Installation date (LDM 10) | Provide intended date | Between March and November. | Yes | |
| Maintenance & Statement of intent | • Include statement of intent to install and | Yes | Yes | |

| Item | Required | Proposed | Meets Code | Comments |
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| (Zoning Sec 5.5.6 & LDM 10) | guarantee all materials for 2 years. • Include a minimum one cultivation in June, July and August for the 2-year warranty period. | | | |
| Plant source (LDM 10 & 11) | Shall be northern nursery grown, No.1 grade. | Yes | Yes | |
| Irrigation plan (LDM 10) | <ul style="list-style-type: none"> • 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 isn't used, note how trees will get sufficient water for establishment and long-term survival | No | | <ol style="list-style-type: none"> 1. Please add an <u>irrigation plan or information as to how plants will be watered sufficiently for establishment and long-term survival in the Final Site Plans.</u> 2. If an irrigation system is provided, it must <u>meet the requirements listed at the end of this chart.</u> 3. If xeriscaping is used, <u>please provide information about plantings included.</u> |
| Other information (LDM 10) | Required by Planning Commission | NA | | |
| Establishment period (Zoning Sec 5.5.6 & LDM 10) | 2 yr. Guarantee | Yes | Yes | |
| Approval of substitutions. (Zoning Sec 5.5.5 & LDM 10) | City must approve any substitutions in writing prior to installation. | Yes | Yes | <u>Please add "Written approval from the City Landscape Architect is required" to Landscape Note #12.</u> |
| Plant List (LDM 10 & 11) – Include all cost estimates | | | | |
| Quantities and sizes | <ul style="list-style-type: none"> • At least 50% of species used shall be native to Michigan • Tree diversity shall follow guidelines of LDM Section 4 • Refer to LDM suggested plant list | Yes | Yes | |
| Root type | | Yes | Yes | |
| Botanical and common names (LDM 4 & 11) | | <ul style="list-style-type: none"> • 13 of 25 species used (52%) are native to Michigan • The tree diversity requirement is met | <ul style="list-style-type: none"> • Yes • Yes | <ol style="list-style-type: none"> 1. <u>When foundation landscaping is added, at least 50% of the total species must be native to Michigan, preferably more.</u> 2. <u>Itea virginica and Tilia cordata are not native to Michigan.</u> |

| Item | Required | Proposed | Meets Code | Comments |
|---|--|--|------------|--|
| | | | | 3. <u>If berries are desired in future years, some male winterberries should be mixed in at a rate of 1 male per 8-10 females.</u> |
| Type and amount of lawn | | Sod is indicated everywhere but in the infiltration basin area | Yes | |
| Cost estimate (LDM 10) | For all new plantings, mulch and sod as listed on the plan | Yes | | |
| Planting Details/Info (LDM Part III) – Utilize City of Novi Standard Details | | | | |
| Canopy Deciduous Tree | Refer to LDM for detail drawings | Yes – Sheet L-3 | Yes | |
| Evergreen Tree | | Yes – Sheet L-3 | Yes | |
| Multi-stem Tree | | Yes – Sheet L-3 | Yes | |
| Shrub | | Yes – Sheet L-3 | Yes | |
| Perennial/ Ground Cover | | Yes – Sheet L-3 | Yes | |
| Tree stakes and guys. (Wood stakes, fabric guys) | | Yes – Sheet L-3 | Yes | |
| Tree protection fencing | Located at Critical Root Zone (1’ outside of dripline) | Yes – Sheet L-2 | Yes | |
| Other Plant Material Requirements (LDM 11) | | | | |
| General Conditions | Plant materials shall not be planted within 4 ft. of property line | Yes | | |
| Plant Materials & Existing Plant Material (LDM 11) | Clearly show trees to be removed and trees to be saved. | Yes – Sheet L-2 | Yes | |
| Landscape tree credit (LDM 11) | <ul style="list-style-type: none"> Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM | No | | |
| Plant Sizes for ROW, Woodland replacement and others (LDM 11) | <ul style="list-style-type: none"> Size determined by use detailed in LDM Table 11.b.(2)a.i Indicate on plant list | On plant list | Yes | |

| Item | Required | Proposed | Meets Code | Comments |
|---|--|---|------------|----------|
| Plant size credit (LDM 11) | NA | No | | |
| Prohibited Plants (LDM 11.b) | No plants on City Invasive Species List | None are used | Yes | |
| Recommended trees for planting under overhead utilities (LDM 11) | Label the distance from the overhead utilities | Subcanopy trees are proposed under the overhead lines | Yes | |
| Collected or Transplanted trees (LDM 11) | | None indicated | | |
| Nonliving Durable Material: Mulch (LDM 12) | <ul style="list-style-type: none"> • Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth • Specify natural color, finely shredded hardwood bark mulch. | Shown on details | Yes | |

NOTES:

1. This table is a working summary chart and is not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 and the Landscape Design Manual for the appropriate items under the applicable zoning classification.
3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

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 at 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.

TRAFFIC REVIEW



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

Project name:
 JZ24-32 – Feldman Kia PRO Preliminary Traffic Review

From:
 AECOM

Date:
 March 11, 2025

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

CC:
 Lindsay Bell, Dan Commer, Humna Anjum, Diana Shanahan, Milad Alesmail, Stacey Choi

Memo

Subject: JZ24-32 – Feldman Kia PRO Preliminary Traffic Review

The PRO 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, Feldman Automotive, is proposing a 18,830 SF Kia dealership, consisting of a 7,716 SF showroom and 12 service bays.
2. The development is located on the southwest corner of Grand River Avenue and Joseph Drive. Grand River Avenue is under the jurisdiction of the Road Commission for Oakland County and Joseph Drive is under the jurisdiction of the City of Novi.
3. The site is zoned NCC – Non-Center Commercial and the applicant is proposing to rezone to B-3 - General Business.
4. The following traffic-related deviations are being requested by the applicant:
 - a. Lack of landscape end island.

TRAFFIC IMPACTS

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

ITE Code: 840 – Automobile Sales (New)
 Development-specific Quantity: 18,830 GLA
 Zoning Change: NCC to B-3

| Trip Generation Summary | Estimated Trips | Estimated Peak-Direction Trips | City of Novi Threshold | Above Threshold? |
|--------------------------------------|-----------------|--------------------------------|------------------------|------------------|
| AM Peak-Hour Trips | 35 | 26 | 100 | No |
| PM Peak-Hour Trips | 55 | 33 | 100 | No |
| Daily (One-Directional) Trips | 524 | N/A | 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 |
| - | N/A |

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 Figure IX.3 | - | N/A | No changes proposed. |
| 2 | Driveway Width O Figure IX.3 | 26.8’ and 32.9’ | Met | |
| 3 | Driveway Taper O Figure IX.11 | - | N/A | No changes proposed. |
| 3a | Taper length | | | |
| 3b | Tangent | | | |
| 4 | Emergency Access O 11-194.a.19 | 2 access points | Met | |
| 5 | Driveway sight distance O Figure VIII-E | 560’ | Met | |
| 6 | Driveway spacing | | | |
| 6a | Same-side O 11.216.d.1.d | - | N/A | No changes proposed. |
| 6b | Opposite side O 11.216.d.1.e | - | N/A | No changes proposed. |
| 7 | External coordination (Road agency) | - | N/A | No changes proposed to Grand River Avenue. |
| 8 | External Sidewalk Master Plan & EDM | 8’ proposed on Grand River Ave, 5’ proposed on Joseph Dr | Met | |
| 9 | Sidewalk Ramps EDM 7.4 & R-28-K | None proposed at driveways | Met | |
| 10 | Any Other Comments: | | | |

| INTERNAL SITE OPERATIONS | | | | |
|--------------------------|--|---|----------------------|---|
| No. | Item | Proposed | Compliance | Remarks |
| 11 | Loading zone ZO 5.4 | 1,200 SF in rear of building | Met | |
| 12 | Trash receptacle ZO 5.4.4 | Proposed in rear of site | Met | |
| 13 | Emergency Vehicle Access | Turning movements provided | Met | |
| 14 | Maneuvering Lane ZO 5.3.2 | 24' and 25' | Met | |
| 15 | End islands ZO 5.3.12 | | | |
| 15a | Adjacent to a travel way | Width and radii dimensioned, 3' shorter than adjacent space | Partially Met | There are 2 locations, on either side of the building, where 2 customer parking spaces have an end island on one side and a painted island on the other. The applicant has requested a waiver for painted end islands. |
| 15b | Internal to parking bays | Width and radii dimensioned | Met | |
| 16 | Parking spaces ZO 5.2.12 | 300 spaces (includes inventory spaces) | | See Planning review letter. |
| 17 | Adjacent parking spaces ZO 5.5.3.C.ii.i | >15 spaces in inventory parking bays only | Met | |
| 18 | Parking space length ZO 5.3.2 | 17' and 19' | Met | |
| 19 | Parking space Width ZO 5.3.2 | 9' | Met | |
| 20 | Parking space front curb height ZO 5.3.2 | 4" in front of 17' spaces, 6" everywhere else | Met | |
| 21 | Accessible parking – number ADA | 3 | Met | |
| 22 | Accessible parking – size ADA | 17' x 8' with 8' and 6' aisles | Met | |
| 23 | Number of Van-accessible space ADA | 1 | Met | |
| 24 | Bicycle parking | | | |
| 24a | Requirement ZO 5.16.1 | 2 required, 2 proposed | Met | |
| 24b | Location ZO 5.16.1 | Provided | Met | |
| 24c | Clear path from Street ZO 5.16.1 | 6' | Met | |
| 24d | Height of rack ZO 5.16.5.B | 3' | Met | |
| 24e | Other (Covered / Layout) ZO 5.16.1 | Provided | Met | |
| 25 | Sidewalk – min 5' wide Master Plan | 5' and 7' | Met | |
| 26 | Sidewalk ramps EDM 7.4 & R-28-K | Provided | Met | |
| 27 | Sidewalk – distance back of curb EDM 7.4 | - | N/A | |

| INTERNAL SITE OPERATIONS | | | | |
|--------------------------|--|----------|------------|---------|
| No. | Item | Proposed | Compliance | Remarks |
| 28 | Cul-De-Sac O Figure VIII-F | - | N/A | |
| 29 | EyeBrow O Figure VIII-G | - | N/A | |
| 30 | Turnaround ZO 5.10 | - | N/A | |
| 31 | Any Other Comments: | | | |

| SIGNING AND STRIPING | | | | |
|----------------------|--|--|------------|---------|
| No. | Item | Proposed | Compliance | Remarks |
| 32 | Signing: Sizes MMUTCD | Provided | Met | |
| 33 | Signing table: quantities and sizes | Provided | Met | |
| 34 | Signs 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post MMUTCD | Provided | Met | |
| 35 | Signs greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post MMUTCD | Provided | Met | |
| 36 | Sign bottom height of 7' from final grade MMUTCD | Provided | 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 MMUTCD | Provided | Met | |
| 38 | FHWA Standard Alphabet series used for all sign language MMUTCD | Provided | Met | |
| 39 | High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity MMUTCD | Provided | Met | |
| 40 | Parking space striping notes | Provided | Met | |
| 41 | The international symbol for accessibility pavement markings ADA | Provided | Met | |
| 42 | Crosswalk pavement marking detail | Provided | Met | |
| 43 | Any Other Comments: | Pavement marking details provided for hatched areas. | | |

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



September 9, 2024

Façade Review Status:
Approved, Section 9 Waiver Recommended

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
Feldman Kia PRO, JZ24-32,
 Façade Region: 1, Zoning District: OS-1

Dear Ms. McBeth:

The following Façade Review is based on the drawings prepared by Studio Detroit Architects, dated 8/XX/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. Materials in non-compliance, if any, are highlighted in bold.

| | North (Front) | South | East | West | Ordinance Maximum (Minimum) |
|------------------|---------------|-------|------|------|-----------------------------|
| Brick | 0% | 94% | 65% | 75% | 100% (30%) |
| EIFS | 4% | 0% | 24% | 17% | 25% |
| Flat Metal (ACM) | 95% | 5% | 10% | 7% | 50% |
| Roof Screens | 1% | 1% | 1% | 1% | 25% |
| | | | | | |

As shown above the minimum amount of Brick is not provided on the front façade. The front façade consists primarily of showroom glass which is not regulated by the Façade Ordinance. In this case the addition of Brick would not enhance the front façade and all other facades have large percentages of Brick. For this reason, we recommend that the design is consistent with the intent and purpose of the Façade Ordinance and that a Section 9 Waiver be granted for the underage of Brick on the front façade.

The sample board required by Section 5.15.4.D was not provided at the time of this review. It should be noted that the Façade Ordinance prohibits intense colors. This includes corporate lighting that may be located within the showroom and visible through the showroom glass.

Dumpster Enclosure – The drawings (SP1.4) indicates that the dumpster enclosure is constructed of 8” CMU grouted solid”. It should be noted that the Façade Ordinance requires that the dumpster enclosure be Brick to match the primary building.

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,
DRN & Architects PC



Douglas R. Necci, AIA

FIRE REVIEW



August 27, 2024

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

CITY COUNCIL

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Fire Chief
John B. Martin

Assistant Chief of Police
Scott R. Baetens

Assistant Fire Chief
Todd Seog

RE: Feldman KIA – Intimal Concept

**PSP#24-24-004
JSP#24- 32**

Project Description:
New 2 story building on 4.88 acre site.

- 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.
 - All notes on plan set sheet #2 for Fire Dept. shall be followed.

Recommendation:
The Fire Dept has no objections at this time.

Sincerely,

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

Andrew Copeland – Acting Fire Marshal
City of Novi Fire Department

cityofnovi.org

cc: file

APPLICANT RESPONSE LETTERS



46892 West Road, Suite 109
Novi, Michigan 48377
Phone: (248) 926-3701
Fax: (248) 926-3765
Web: www.alpine-inc.net

March 31, 2025

Lindsay Bell
City of Novi Community Development Department
45175 West 10 Mile Road
Novi, MI 48375

**Re: Feldman Kia Dealership
Response to Review Comments / PRO Submittal
Alpine Engineering Inc. Project #23-148
JZ 24-32**

Dear Lindsay:

On behalf of our client, Feldman Automotive, please find the following information enclosed for your review and distribution

- PRO plan set (dated 2025-02-14)
- Color Rendering of the Site Plan (dated 2025-02-14)
- Report of Geotechnical Investigation (dated March 23, 2024)
- Response to review letter from Allen Design (dated March 27, 2025)
- Updated List of Requested Ordinance Deviations (03-31-2025)
- Revised Noise Impact Statement (03-31-2025)

The following is in response to the reviews received on March 11, 2025, via email for the above referenced project:

PLANNING REVIEW CHART (dated March 11, 2025)

- **Comment: See Planning Review for detailed comments/See Planning Review letter for detailed discussion.**
Response: Refer to the previously submitted information provided by Landry, Mazzeo, Dembinski & Stevens PC.
- **Comment: Applicant requests deviation for service bay doors facing major thoroughfare to north and residential neighborhood to the south.**
Response: The Applicant respectively requests that a deviation be granted for the overhead doors facing Grand River Avenue and the residential neighborhood. Note that the overhead doors are 129-ft from Grand River Avenue and 281-ft from the residential neighborhood.
- **Comment: Provide note on the plans to document. [No major repair or major refinishing to be done on the lot] Not addressed in response letters received.**
Response: A note indicating this will be provided on the next plan revision.
- **Comment: Confirm with additional details – see page 10-11 [Lighting]**
Response: Refer to the responses related to the lighting below.
- **Comment: Statement only provided noise of HVAC; what about car haulers? Service dept? Security alarms?**
Response: Refer to the revised noise impact statement letter prepared by Studio Detroit.

- **Comment: See Traffic review letter for comments on 2 locations of concern – the response letter indicated end islands would be striped but this is not shown on the plan.**
Response: Refer to the AECOM review comment #2 and the response within this response to review letter.
- **Comment: Development/Business Sign – Deviations from the sign ordinance can be requested within the PRO process - sign permit applications are needed to evaluate**
Response: Sign permit applications will be prepared by others and additional signage detail will be provided at a later date.
- **Comment: Existing Easements – Provide easement areas with Liber/Page on Topo Survey**
Response: Additional information to provide clarity for the easement areas will be provided in the next plan revision.
- **Comment: Lighting plan {specifications and hours of operation}**
Response: Additional information will be provided in the Final Site Plan submittal.
- **Comment: Standard Notes [relating to the photometrics plan]**
Response: Additional information will be provided in the Final Site Plan submittal.
- **Comment: Lighting plan - Color Spectrum Management. For all permanent lighting installations – minimum color rendering index of 70 and correlated color temperature of no greater than 3000 Kelvin**
Response: The lighting plan will be designed in accordance with the City Zoning Ordinance. Additional information will be provided on the Final Site Plan as needed.
- **Comment: Indoor Lighting – Indoor lighting shall not be the source of exterior glare of spillover.**
Response: The lighting plan will be designed in accordance with the City Zoning Ordinance. Additional information will be provided on the Final Site Plan as needed.
- **Comment: Lighting plan – Min. Illumination. Adjust lighting to meet minimum standards or seek a deviation.**
Response: All building entrances meet the minimum 1.0 footcandle requirement.
- **Comment: Lighting Plan – Max. Illumination adjacent to Non-Residential. Non-residential property lines exceed max of 1 footcandle – adjust or seek a deviation**
Response: The Architect indicated that they will adjust the light illumination along the west property line to meet City requirements. It is respectfully requested that a waiver be granted to allow the increased footcandles for the purposes of illuminating the sidewalks along the road rights-of-way.

ENGINEERING REVIEW (dated 03-10-2025)

Approval of the Plan Rezoning Overlay is recommended at this time; however, approval of the Preliminary Site Plan is NOT recommended at this time, the plans do not meet the general requirements of Chapter 11 of the City of Novi Code of Ordinances, the Storm Water Management Ordinance and the Engineering Design Manual. The following items must be addressed at the time of Revised Preliminary Site Plan resubmittal:

1. **Comment: Provide the soil boring report, and the infiltration testing study for this site.**
Response: The Geotechnical Investigation Report has been included with this submittal.

2. **Comment: 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.**
Response: Noted.
3. **Comment: A right-of-way permit will be required from the City of Novi and Oakland County.**
Response: Noted.
4. **Comment: Clearly distinguish between proposed and existing easements; the current easements are hard to differentiate.**
Response: The existing and proposed easements will be more clearly defined on the next plan revision.
5. **Comment: Show the Right-of-Way limits on the plans.**
Response: The Right-of-Way limits will be labeled more clearly on the next plan revision.
6. **Comment: The Non-Domestic User Survey Form for sanitary sewer flow shall be submitted to the City so it can be forwarded to Oakland County.**
Response: The Non-Domestic User Survey Form will be submitted with the next plan revision.
7. **Comment: Provide a construction materials table on the utility plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.**
Response: A construction materials table will be added for the Final Site Plan submittal.
8. **Comment: 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.**
Response: The utility crossing table will be added for the Final Site Plan submittal.
9. **Comment: 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.**
Response: A note indicating the requirements for utility crossings less than 18-inches will be added at the pertinent crossings for the Final Site Plan submittal.
10. **Comment: 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 and easements shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance. Some trees appear close to the trench drain on the west side of the site, please check these separation distances to ensure that there will be no conflict.**
Response: The distances between the proposed trees and the utilities will be verified on the next plan revision.
11. **Comment: A License Agreement will be required for the light poles that are proposed within the utility easements unless they are relocated outside the easement.**
Response: Noted. A License Agreement will be requested for light poles proposed to be located within the easements.

12. **Comment:** *The 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.*

Response: The location of the tree fence will be confirmed on the next plan revision.

13. **Comment:** *Provide the material and size of the proposed main and domestic water lead.*

Response: The size of the proposed water main is labeled on the plans. Refer to the "Preliminary Utility Plan". The size of the domestic and fire leads is to be determined. Additional design information will be added for the Final Site Plan submittal.

14. **Comment:** *Place the hydrants at least 7 feet off back of curb (allowing 3-foot clearance from sidewalk)*

Response: The hydrant locations will be verified for the next plan revision.

15. **Comment:** *A tapping sleeve, valve and well is required at the connection to the existing water main.*

Response: A tapping sleeve, valve and well is proposed at the connections to the existing water main. Additional labeling to provide clarity will be provided for the Final Site Plan submittal.

16. **Comment:** *Per current EGLE requirement, provide a profile for all proposed water main 8-inch and larger.*

Response: Water main profiles will be provided for the Final Site Plan submittal.

17. **Comment:** *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.*

Response: Additional engineering information will be provided for the Final Site Plan submittal.

18. **Comment:** *The water main stub at the northwest corner of the property shall terminate with a hydrant followed by a valve in well. If the hydrants is not a requirement of the development at this location, the hydrant can be labeled as "temporary", allowing it to be relocated in the future.*

Response: Additional design information will be provided on the Final Site Plan submittal

19. **Comment:** *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".*

Response: Additional labeling will be provided on the Final Site Plan.

20. **Comment:** *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.*

Response: Gate valves are currently placed so that no single line failure will create more than eight hundred feet of main to be out of service. Additionally labeling information will be provided on the Final Site Plan to provide clarity.

21. **Comment:** *Provide a water main basis of design for the development on the utility plan sheet.*

Response: Additional design information will be provided for the Final Site Plan submittal.

22. **Comment:** *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.*

Response: Additional design information will be provided for the Final Site Plan submittal.

- 23. Comment: A sealed set of utility plans along with the Michigan Department of Environmental, Great Lakes & Energy (EGLE) permit application for water main construction, the Streamlined Water Main Permit Checklist, Contaminated Site Evaluation Checklist, 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.**

Response: Plans will be sent to EGLE for permitting once the City Engineer okays this process to proceed.

- 24. Comment: Indicate if an irrigation system will be proposed on the site.**

Response: A note indicating an irrigation system will be proposed will be added on the next plan revision.

- 25. Comment: The note on the existing sanitary sewer manhole indicates a 6-inch invert, while the pipe label specifies 8-inch. Please ensure consistency between the note and the label on the plans.**

Response: A label for the 6-inch sanitary sewer will be added to provide clarity on the next plan revision.

- 26. Comment: The City suggests making the sanitary sewer pipe between the sanitary sewer connection and the monitoring manhole public by upgrading it to an 8-inch pipe and pacing it in an easement to eliminate the sanitary sewer access easement.**

Response: The design team will review increasing the pipe diameter of the sanitary lead on future plan revisions.

- 27. Comment: If this suggestion cannot be implemented, the sanitary sewer access easement for the monitoring manhole shall be 20-foot wide, which is inconsistent with the pervious reviewer requested.**

Response: Additional design information will be provided on the next plan revision.

- 28. Comment: 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.**

Response: Additional design information will be provided on the Final Site Plan submittal.

- 29. Comment: Section 11-164 (g)-4 states the maximum length of a sanitary sewer lead shall not exceed 100-feet unless otherwise approved, so ensure clean-outs are provided every 100-feet.**

Response: A cleanout is provided to provide the required spacing. Additional design information and labeling will be provided for the Final Site Plan submittal.

- 30. Comment: Illustrate all pipes intersecting with manholes on the sanitary profiles.**

Response: Profiles will be provided as necessary on the Final Site Plan submittal.

- 31. Comment: A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. 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.**

Response: Additional design information will be provided for the Final Site Plan submittal.

- 32. Comment: 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.**

Response: Additional design information will be provided for the Final Site Plan submittal.

- 33. Comment: Match the 0.80 diameter depth above invert for pipe sizes increases.**

Response: Additional design information will be provided for the Final Site Plan submittal.

34. Comment: Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot deep plunge pool.

Response: Additional design information will be provided for the Final Site Plan submittal.

35. Comment: The minimum pipe size for storm sewers receiving surface runoff shall be 12-inch diameter.

Response: Additional design information will be provided for the Final Site Plan submittal.

36. Comment: Provide profiles for all storm sewer 12-inch and larger.

Response: Profiles will be provided as necessary on the Final Site Plan submittal.

37. Comment: Plastic pipe is not allowed in the right-of-way, the maximum allowable size for plastic storm sewer is 12-inch. (Smaller diameters are allowed for roof drains)

Response: Additional design information will be provided for the Final Site Plan submittal.

38. Comment: 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.

Response: Additional design information will be provided for the Final Site Plan submittal.

39. Comment: 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.

Response: Additional design information will be provided for the Final Site Plan submittal.

40. Comment: Illustrate all pipes intersection storm structures on the storm profiles.

Response: Additional design information will be provided for the Final Site Plan submittal.

41. Comment: 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.

Response: Additional design information will be provided for the Final Site Plan submittal.

42. Comment: The proposed basin shall be considered as a retention basin instead of a detention basin since there isn't an outlet control structure for the basin provided. Therefore, to accommodate the retention, the storm water calculations need to be revised by adding the following items:

- a. CPVC
- b. CPRC – Extended Detention
- c. CPRC Allowable Outlet Rate
- d. The volume and discharge of Water Quality Control
- e. 100-year Allowable Release Rate
- f. 100-year Peak Allowable Discharge
- g. 100-year Runoff Volume
- h. 100-year Peak Inflow
- i. Storage Curve Factor
- j. 2 x 100-year Storage Volume

Response: Additional design information will be provided on the next plan revision.

43. Comment: If there is an outlet control structure provided that drains on site, then detention basin will be allowed, and the storage volume will be for a 100-year event only. Additionally, the storage volume of the detention basin should be determined by subtracting the CPVC from the runoff volume.

Response: Additional design information will be provided on the next plan revision.

- 44. Comment: 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).**
Response: Additional design information will be provided on the next plan revision. Detailed engineering information will be provided on the Final Site Plan submittal.
- 45. Comment: Provide calculations verifying the post-development runoff rate directed to the proposed receiving drainage course does not exceed the pre-development runoff rate for this site.**
Response: Additional design information will be provided on the Final Site Plan submittal.
- 46. Comment: Explain where the runoff coefficient of 0.15 is coming from. If the soil is hydrologic soil group A, please list that.**
Response: Additional design information will be provided on the next plan revision.
- 47. Comment: 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.**
Response: Additional design information will be provided on the Final Site Plan submittal.
- 48. Comment: Provide a pretreatment structure for the site and provide manufacturer's details and sizing calculations for this structure on the plans. The treated flow rate should be based on the 1-year storm event intensity (~1.6 in/hr); higher flows shall be bypassed.**
Response: Additional design information will be provided on the next plan revision.
- 49. Comment: Provide supporting details for the runoff coefficient of the "Off-site Grass/On-Site Basin Area" and why this was different from the on-site grass. Use the Oakland County stormwater standards for the runoff coefficients.**
Response: Additional design information will be provided on the next plan revision.
- 50. Comment: 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.**
Response: The parking lot surrounding the infiltration basin is curbed. Additionally, the parking lot is graded such that water drains away from the infiltration basin. Refer to the "Preliminary Grading Plan".
- 51. Comment: Provide an underdrain along the downstream side of the underground detention system which is tied into a manhole as a means of secondary storm water conveyance to the outlet.**
Response: Additional design information will be provided on the Final Site Plan submittal.
- 52. Comment: Cleanouts shall be provided at each end of the proposed underdrain for periodic maintenance.**
Response: Additional design information and clarity will be provided on the Final Site Plan submittal.
- 53. Comment: Provide a table or note addressing the required bedding depth vs. bearing capacity of the underlying soils in the vicinity of the underground detention system per the manufacturer's specifications.**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 54. Comment: Provide a note on the plans stating the City's inspecting engineers shall verify the bearing capacity of the native soils to verify an adequate bedding depth is provided.**
Response: A note regarding the City's inspectors verifying the bearing capacity will be provided on the Final Site Plan submittal.

- 55. Comment: Indicate the assumed porosity of the aggregate. The volume calculations shall consider only 85-percent of that volume as available for storage to account for sediment accumulation in the aggregate. This means that the usual 40% porosity assumed by many manufacturers must be reduced to 0.85 of that = 34%.**

Response: The void ratio will be updated on the next plan revision.

- 56. Comment: Provide a note on the underground detention detail that aggregate porosity will be tested, and results provided to the City's inspecting engineers.**

Response: A note regarding testing the underground detention will be provided for the Final Site Plan submittal.

- 57. Comment: Provide an isolator row in the underground detention system in addition to the swirl concentrator chamber. Contact the Engineering Division for further information.**

Response: Additional design information will be provided on the Final Site Plan submittal.

- 58. Comment: Provide inspection ports throughout the underground detention system at the midpoint of all storage rows. Additional inspection ports may be required for systems larger than 200 feet. One inspection port every 50 feet for isolator row.**

Response: Additional design information will be provided on the Final Site Plan submittal.

- 59. Comment: Inspection ports shall be a minimum of 8-inches.**

Response: Additional design information will be provided for the Final Site Plan submittal.

- 60. Comment: For piped/chamber systems, the underground storage system shall include 4-foot diameter manholes at one end of each row for maintenance access purposes.**

Response: Additional design information will be provided on the Final Site Plan submittal.

- 61. Comment: Provide critical elevations for the detention system. Also, provide a cross-section for the underground detention system. Ensure that there is at least 1 foot of freeboard between the 100-year elevation and the subgrade elevation beneath the pavement.**

Response: Additional design information will be provided on the Final Site Plan submittal.

- 62. Comment: The underground detention system shall be kept outside of the influence of any planting areas.**

Response: the underground detention system

- 63. Comment: In order to prevent scouring (per Table 4 of StormTech manual), do not exceed the maximum inlet flow rates.**

Response: Additional design information will be provided for the Final Site Plan submittal.

- 64. Comment: The Infiltration Trench shall be sized for a portion of the 100-year detention volume. This volume shall include the below-grade pipe and gravel media. The available storage volume in the gravel shall assume that only 85-percent of the volume is available for storage to account for sediment accumulation within the media [Same as underground detention note for stone volume; see above]. Provide these calculations on the plans.**

Response: Additional design information will be provided in the next plan revision.

- 65. Comment: The detail for the Infiltration Basin shall indicate the above-grade ponding depth and shall show the overflow catch basin. Include the design side slopes.**

Response: Additional design information will be provided for the Final Site Plan submittal.

66. **Comment: Provide a geotextile filter fabric under the planting material to separate it from the underdrain/base material or in-situ soils.**
Response: Additional design information will be provided for the Final Site Plan submittal.
67. **Comment: Provide a cross-section that includes the Infiltration basin outlet structure, with all relevant elevations, inverts, and dimensions.**
Response: Additional design information will be provided for the Final Site Plan submittal.
68. **Comment: Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.**
Response: Additional design information will be provided for the Final Site Plan submittal.
69. **Comment: 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.**
Response: Additional design information will be provided for the Final Site Plan submittal.
70. **Comment: No more than ¼" vertical obstacle shall be allowed at each transition between the pathway and the drive approach.**
Response: Additional design information will be provided on the Final Site Plan submittal.
71. **Comment: Dumpster Pad details shall meet city standards, 8" concrete on 8" 21AA aggregate base. Note: Dumpster pad shall extend minimum 10' beyond dumpster enclosure.**
Response: Additional design information will be provided in the next plan revision.
72. **Comment: The pathway cross-section shall have a maximum cross-slope of 2%. Add the maximum 2-percent cross-slope to the sidewalk detail.**
Response: Additional design information will be provided for the Final Site Plan submittal.
73. **Comment: The public pathway shall be within a dedicated easement unless proposed in the right-of-way.**
Response: A proposed sidewalk easement will be shown as necessary in the next plan revision.
74. **Comment: Provide spot elevations at the intersection of the proposed pathway with the existing pathway.**
Response: Additional design information will be provided for the Final Site Plan submittal.
75. **Comment: 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. Provide the latest version of the MDOT standard detail for detectable surfaces. Please ensure that the product is the concrete-embedded detectable warning plates, or equal, and shall be approved by the Engineering Division. Stamped concrete will not be acceptable.**
Response: Additional design information will be provided for the Final Site Plan submittal.
76. **Comment: Label specific ramp locations on the plans where the detectable warning surface is to be installed.**
Response: Additional design information will be provided for the Final Site Plan submittal.

- 77. Comment: Verify the slopes along the ingress/egress routing to the building from the barrier-free stalls. All barrier-free stalls comply with Michigan Barrier-Free regulations.**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 78. Comment: Provide existing and proposed contours on the Grading Plan at the time of the Final Site Plan submittal**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 79. Comment: Revise the pathway cross-section to indicate a maximum cross-slope of 2%. Add the maximum 2-percent cross-slope to the sidewalk detail.**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 80. Comment: 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.**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 81. Comment: Site grading shall be limited to 1V:4H (25-percent), excluding landscaping berms.**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 82. Comment: 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.**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 83. Comment: Provide spot grades along property lines to demonstrate site drainage is self-contained.**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 84. Comment: The end islands shall conform to the City standard island design, or variations of the standard design, while still conforming to 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).**
Response: Additional dimensions will be provided for the Final Site Plan submittal to indicate compliance.
- 85. Comment: The City standard straight-faced curb (MDOT F-4 curb detail) shall be provided.**
Response: Additional design information will be provided for the Final Site Plan submittal.
- 86. Comment: A SESC permit is required. A full review has not been completed at this time. A review will be done when a completed packet is submitted to Sarah Marchioni at Community Development.**
Response: Understood, the SESC permit will be applied for once Final Site Plan drawings are completed.
- 87. Comment: 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.**
Response: Off-site easements, if required, will be prepared and submitted prior to the submittal of the Final Site Plan.
- 88. Comment: Any off-site utility easements anticipated must be executed prior to final approval of the plans.**
Response: Off-site easements, if required, will be prepared and submitted prior to the submittal of the Final Site Plan.

- 89. Comment: 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.**
Response: Approval, when needed, will be prepared and submitted prior to submittal of the Final Site Plan.
- 90. Comment: 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.**
Response: A response to review letter will be provided for the Stamping Set submittal.
- 91. Comment: 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 of 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).**
Response: An itemized construction cost estimate will be provided with the Final Site Plan submittal.
- 92. Comment: 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.**
Response: A draft copy of the SDFMEA will be provided with the Final Site Plan submittal.
- 93. Comment: A draft copy of the 20-foot-wide Watermain System Easement onsite must be submitted to the Community Development Department.**
Response: A draft copy of the water main easement will be submitted during the preparation of the Final Site Plan.
- 94. Comment: A draft copy of the 20-foot-wide Sanitary Sewer Easement onsite must be submitted to the Community Development Department.**
Response: A draft copy of the sanitary sewer easement will be submitted during the preparation of the Final Site Plan.
- 95. Comment: A draft copy of the 20-foot-wide Sanitary Sewer Monitoring Manhole Access Easement onsite must be submitted to the Community Development Department.**
Response: A draft copy of the sanitary sewer monitoring manhole access easement will be submitted during the preparation of the Final Site Plan.
- 96. Comment: Executed copies of approved off-site utility easements must be submitted.**
Response: Executed copies of approved off-site utility easements, if necessary, will be submitted prior to the stamping sets.

Landscape Review Report and Summary Chart (dated February 20, 2025)

Refer to the response to review letter prepared by Allen Design.

AECOM – Pre-Application Traffic Review (dated March 11, 2025)

15a. Comment: End Islands – Adjacent to a travel way. There are 2 locations, on either side of the building, where 2 customer parking spaces have an end island on one side but not on the other. The applicant has requested a waiver for painted end islands.

Response: Per the previously stated alternative from AECOM, the areas in front of the service drive entrances have been shown as being striped out. Refer to the “Preliminary Site Plan”.

If you have any questions/comments, please feel free to contact me at (248) 941-5624 or shiloh@alpine-inc.net.

Thank you.

Sincerely,
Alpine Engineering, Inc.



Shiloh Dahlin
Senior Project Engineer

Cc: Feldman Automotive Inc (Steven Saltz) via email ssaltz@feldmanauto.com
Landry, Mazzeo, Dembinski & Stevens PC (David Landry) via email dlandry@lmdlaw.com
Studio Detroit (Peter Pentescu) via email pete@studio-detroit.com

March 27, 2025

Mr. Rick Meader, Landscape Architect
City of Novi Community Development
45175 West 10 Mile
Novi, MI 48375

RE: Feldman Kia of Novi

Dear Mr. Meader:

Below are our responses to your review dated February 20, 2025.

Landscape Comments:

- *Existing plant material.* The pear tree near Grand River will be removed but not replaced since it isn't regulated.
- *Parking lot landscaping.* The two trees in the northern corner lots will be shown as parking lot trees. The tree located in the south end of the lot will be shown as a perimeter tree.
- *Berm requirements.* Additional Green Giant Arborvitaes will be added to the berm for better opacity.
- *Berm adjacent to public rights-of-way.* The hydrangeas will be replaced with an evergreen species.
- *ROW landscape screening requirements.* The plantings will be relabeled as suggested. A note will be added to the tree removal plan stating any invasive volunteers from evergreens will be removed to maintain existing tree health.
- *Phragmites and Japanese Knotweed.* A note will be added that any of these species are found during construction, they will be controlled.
- *Substitution approvals.* Note #12 will be revised stating substitutions must be written and approved by the City Landscape Architect.

If you have any questions or comments regarding this response, please contact me at your convenience.

Sincerely,



James C. Allen
Allen Design L.L.C.

January 30, 2025

Landry, Mazzeo, Dembinski & Stevens PC
37000 Grand River Ave.
Farmington Hills, Michigan 48335

RE: FELDMAN KIA NOVI
40575 Grand River Avenue
Novi, Michigan 48375
ARCHITECT'S PROJECT NO. 2192

Dear Mr. Landry,

We understand that there were questions by City Council members regarding the amount of lighting from the proposed Feldman Kia dealership located at 40575 Grand River Avenue.

The overall site lighting plan is designed in accordance with the City Zoning Ordinance. In particular, we understand that there were concerns regarding the amount of light that would spill over the southern property line where it abuts residential properties. The City Ordinance requires that the light poles / fixtures not exceed 25 feet tall. The proposed poles / and fixtures are set to a mounting height of 22'-6". Additionally, these perimeter light fixtures will be equipped with full cut-off shields eliminating any backlight from the fixtures. This significantly reduces any light at the southern property line. The City Ordinance also requires that the lighting level abutting residential properties not exceed 0.5 footcandles. The lighting for the proposed Feldman Kia Dealership, at the southern property line, will be 0.1 and 0.2 foot candles as shown in the lighting plans and sheets provided. Thus, the proposed lighting is well below the City Ordinance requirements.

Again, the overall proposed lighting plan has been designed in accordance with all City Ordinance requirements. Please feel free to contact us should you need any additional information.

Sincerely,



Peter N. Pentescu
Studio Detroit
2040 Park Ave, Suite 200
Detroit, MI 48226
pete@studio-detroit.com
586.747.9717

PLANNING COMMISSION MINUTES

EXCERPT 10-16-24



PLANNING COMMISSION MINUTES CITY OF NOVI Regular Meeting October 16, 2024 7:00 PM

Council Chambers | Novi Civic Center
45175 Ten Mile Road, Novi, MI 48375 (248) 347-0475

CALL TO ORDER

The meeting was called to order at 7:00 PM.

ROLL CALL

Present: Member Avdoulos, Member Becker, Member Lynch, Chair Pehrson, Member Roney, Member Verma

Absent Excused: Member Dismondy

Staff: Barbara McBeth, City Planner; Beth Saarela, City Attorney; Lindsay Bell, Senior Planner; Dan Commer, Planner; Humna Anjum, Plan Review Engineer; Ben Nelson, Plan Review Engineer; Rick Meader, Landscape Architect

PLEDGE OF ALLEGIANCE

Member Becker led the meeting attendees in the recitation of the Pledge of Allegiance.

APPROVAL OF AGENDA

Motion made by Member Lynch and seconded by Member Becker to approve the October 16, 2024 Planning Commission Agenda.

VOICE VOTE ON MOTION TO APPROVE THE OCTOBER 16, 2024 PLANNING COMMISSION AGENDA MOVED BY MEMBER LYNCH AND SECONDED BY MEMBER BECKER. *Motion carried 6-0.*

AUDIENCE PARTICIPATION

Chair Pehrson invited members of the audience who wished to address the Planning Commission during the first audience participation to come forward. Seeing no one, Chair Pehrson closed the first public audience participation.

CORRESPONDENCE

There was not any correspondence.

COMMITTEE REPORTS

There were no Committee reports.

CITY PLANNER REPORT

There was no City Planner Report.

CONSENT AGENDA - REMOVALS AND APPROVALS

There were no Consent Agenda Removals and Approvals.

PUBLIC HEARINGS

1. 22615 NOVI ROAD WOODLAND PERMIT PBR24-0106

Public hearing at the request of Anywhere Lombardo LLC, for a Woodland Use Permit for 22615 Novi Road. The site is located west of Novi Road, and north of Nine Mile Road in Section 27 of the

permitted on the south side of Grand River. Senior Planner Bell responded that before City Council adopted the City West amendment, they wanted to remove the option to build hotels on the south side of Grand River. No hotels will be permitted on the south side, there are a variety of other mixed uses, such as offices, daycare, financial institutions, retail instruction centers, businesses, schools, along with other uses that could be developed there as well as residential housing. Hotels are permitted to be developed on the north side of Grand River.

Member Roney stated he likes the proposal for rezoning. A lot of great work went into this. It looks like it's a great opportunity for developers to do something really nice in the City. Of course we need to attract them, and by setting up the foundation here, hopefully we will.

Member Avdoulos stated he is in favor of the City West rezoning. He was on the Implementation Committee when City West was introduced; a lot of consideration went into creating some activity for the area. As Member Becker mentioned, it currently is a hodgepodge or random with a lot of different things going on. The City West zoning will allow some cohesiveness in the area. A lot of consideration was put forward related to the residents and the residential area abutting along the south border shared with them related to buffer zones and building height permitted.

Members of the Committee and staff from the City went to visit other cities to see what was going on in those different locations and take a look at the precedent set, so as not to reinvent the wheel but learn from others. This is a great opportunity to allow the existing businesses also to be successful. Member Avdoulos is very proud of the fact that Novi really supports its businesses and its community. If we can get some residential in this area to provide apartment living or condo living that would be great not only for young professionals, but also for empty nesters and for anybody really who wants to be a part of this City.

Motion to recommend approval to City Council to rezone the subject property to City West made by Member Avdoulos and seconded by Member Lynch.

In the matter of Zoning Map Amendment 18.747, motion to recommend approval to City Council to rezone the subject property from OS-1 (Office Service), RA (Residential Acreage), and I-1 (Light Industrial) to CW (City West) for the following reasons:

- a. The 2016 Master Plan for Land Use recommended the creation and adoption of a new zoning district for this area of the City in order to foster redevelopment of underutilized parcels, and to create a vibrant, walkable, mixed-use district.
- b. The Master Plan for Land Use objective to foster a favorable business climate is fulfilled by allowing more flexible development standards for a unique area of the City.
- c. The Master Plan for Land Use objective to support and strengthen existing businesses and attract new businesses is fulfilled by allowing existing businesses to expand and creating new development opportunities in a mixed-use setting.
- d. The Master Plan for Land Use objective to provide a wide range of housing options is supported as the new district allows residential use in a mixed-use setting.
- e. The Master Plan for Land Use objective to develop the City West/Grand River and Beck area in a manner that supports and complements neighboring areas through the use of setback and height restrictions to provide buffers to single family districts.
- f. It provides an opportunity for long-standing businesses to remain at their current location.

ROLL CALL VOTE ON MOTION TO RECOMMEND APPROVAL TO CITY COUNCIL TO REZONE THE SUBJECT PROPERTY TO CITY WEST MOVED BY MEMBER AVDOULOS AND SECONDED BY MEMBER LYNCH. *Motion carried 6-0.*

5. JZ24-32 FELDMAN KIA PRO PLAN WITH REZONING 18.746

Public hearing at the request of Feldman Automotive for initial submittal and eligibility discussion for a Zoning Map Amendment from Non-Center Commercial (NCC) to General Business (B-3) with a Planned Rezoning Overlay. The subject site is approximately 4.88-acres and is located west of Joseph Drive, south of Grand River Avenue (Section 24). The applicant is proposing to develop an automotive dealership with outdoor vehicle inventory, which is not a permitted use in the NCC District.

Senior Planner Bell stated the petitioner is requesting a Planning Rezoning Overlay for two parcels located

southwest of the Grand River Avenue and Joseph Drive intersection from NCC (Non-Center Commercial) to B-3 (General Business). The site, located in Section 24, was formerly the location of Glenda's Garden Center for many years, which was a non-conforming use in the NCC District.

In this area of Grand River, there are professional offices, small strip retail centers, sit down restaurants and the US Energy fuel supplier. Single family residential homes are located to the south of the property.

The Non-Center Commercial Zoning District allows uses such as retail business and service uses, professional and medical offices, financial institutions, sit-down restaurants, and instructional centers. Special Land Use permits could also allow low density multi-family or single-family dwellings, day care centers, places of worship, public utility buildings, and veterinary hospitals or clinics. Similar commercial uses are allowed in the B-3 District, as well as more intense uses such as fueling stations, auto washes, vehicle sales, microbrews or brewpubs as permitted uses.

Current zoning of the surrounding area is I-1 Light Industrial to the north, OS-1 Office Service to the west, NCC Non-Center Commercial to the east, and R-4 One Family Residential to the south.

The Future Land Use Map identifies this property and the parcel to the east as Community Commercial. The parcels to the west along Grand River are planned for Community Office. To the north of Grand River is planned for Industrial, Research Development and Technology. To the south is planned for single family residential uses.

There are no regulated natural features on the site.

As shown in the PRO Concept Plan, the applicant proposes to redevelop the approximately 5 acre property for an auto dealership with accessory outside storage of the inventory vehicles. The proposed dealership building would have a footprint of approximately 18,800 square feet with a mezzanine floor for parts storage, and the parking area consists of approximately 300 spaces.

The stormwater management plan consists of underground infiltration, as well as above-ground infiltration trench and basin.

Engineering review found that there are adequate public utilities to serve the parcel, and that the impacts from B-3 uses are expected to be the same as potential NCC uses.

Traffic consultants have reviewed the anticipated traffic generation from the proposed use and found the impacts are expected to be similar compared to what could be developed under the existing zoning. The site plan utilizes the existing curb cuts on Grand River, so no changes are proposed to driveway spacing.

The applicant has submitted public benefits being offered to meet the objective of the benefits to the public, including providing greater building and parking setbacks than the B-3 ordinance requires. The physical benefit proposed is an enhanced sidewalk along their Joseph Drive frontage. This includes a meandering sidewalk with decorative light poles and the construction of three inset areas with benches. Staff feels these are minor in nature and could be achieved under alternative development scenarios. We would encourage the applicant to consider other ways the detriments of the project could be off set with the provision of more significant community enhancements, including looking at recommendations in the Active Mobility Plan or providing a bus shelter at the nearby transit stop.

The applicant's response letter indicates that they will be able to eliminate the need for four for the deviations that staff had identified in our initial review of the project. This includes the biggest issue we had with the project, which was the berm and landscaping along the southern property line where the site is adjacent to existing residential neighborhoods. They state that the existing trees will be removed (most are in poor health), the berm height will be raised, and new landscaping, including a significant number of evergreens, will be planted to provide the necessary screening.

The remaining deviations Identified are listed in the Planning Commission packet and are generally

supported by staff given the justifications provided. Additional information will need to be reviewed at the time for Formal PRO plan submittal to confirm.

While many commercial uses could be developed on the site under the current zoning, staff has highlighted some of the detriments of a car dealership adjacent to residential areas, which include noise, lighting, traffic, and security concerns. The City will want to ensure that if this project is approved, those detriments are minimized or mitigated to protect the adjacent neighbors.

The proposal helps fulfill objectives contained in the Master Plan for Land use, as well as other positive outcomes, such as:

1. The objective to support retail commercial uses along established transportation corridors,
2. The B-3 district is consistent with the Master Plan for Land Use designation for Community Commercial.
3. The impacts on traffic and public utilities are expected to be similar to development under the existing zoning.
4. Submittal of a Concept Plan and any resulting PRO Agreement provides assurance to the Planning Commission and the City Council of the manner in which the property will be developed, and can provide benefits that would not be likely to be offered under standard development options.

As detailed in the review letters, there are comments staff will look at closely in the Formal PRO submittal, which include:

1. Whether the buffer proposed along the south property line will be sufficient to provide the desired audio and visual screening to the adjacent residential district to the south.
2. Identifying the deviations requested from the sign ordinance standards,
3. Additional information to determine compliance of the lighting plan,
4. Whether any additional conditions that would provide a benefit to the public will be offered as part of this request.

This initial public hearing is an opportunity for the members of the Planning Commission to hear public comment, and to review and comment on whether the project meets the requirements of eligibility for Planned Rezoning Overlay proposal. Following the Planning Commission public hearing, the project would then go to City Council for its review and comment on the eligibility.

After this initial round of comments by the public bodies, the applicant may choose to make any changes, additions or deletions to the proposal based on the feedback received. The subsequent submittal would then be reviewed by City staff and consultants, and then the project would be scheduled for another public hearing before Planning Commission. Following the second public hearing on the formal PRO Plan the Planning Commission would make a recommendation for approval or denial to City Council.

Tonight, the Planning Commission is asked to hold the public hearing, and to review and comment on the proposed rezoning. Members may offer feedback for the applicant to consider that would be an enhancement to the project and surrounding area, including suggesting site-specific conditions, revisions to the plans or the deviations requested, and other impressions. No motion is needed.

Representing the project tonight are attorney David Landry and dealership owner Steven Saltz and their team.

Chair Pehrson invited the applicant to address the Planning Commission.

David Landry stated he is representing Feldman KIA requesting a rezoning from NCC to B-3 with a PRO to limit the development to a single B-3 use auto dealership. The history of the property is that it was previously used as a long-standing Glenda's Nursery for landscaping.

The existing NCC zoning would permit a 36,000 square foot retail building with significant parking and the building could be significantly closer to the southern border, which has residential. What KIA is proposing is not a whole lot different, except the building is significantly more to the north than what could be built

on an NCC property.

The use is consistent with other uses on Grand River. There are several auto dealerships along Grand River, so this use is certainly not strange to this particular part of the city or Grand River Ave. There are no additional curb cuts that are being proposed.

With respect to the adjacency to the south, there are four residences immediately abutting this property. The existing 4-6 foot berm would be raised to 8 feet to satisfy the Ordinance. Existing dead plantings would be removed, and evergreens would be added on top of the berm to satisfy the ordinance opacity requirements. In addition, there would be a retaining wall on the northern side of the berm, on the KIA property. The building itself would be 188 feet away from any residence to the south. For the residents abutting the southeast corner there is the detention basin.

The economic impact - \$7,000,000 is what this will cost. It would create 175 to 200 construction jobs, and it would create between 40 and 50 permanent jobs at the dealership.

The PRO ordinance requires two things. First, site specific conditions that are more limiting than the proposed zoning ordinance, which would be B-3. The proposed use setbacks are greater, and the use would be limited to auto dealership use. The dealership would not operate on Sunday, an NCC use could operate seven days a week. Hours of operation would be limited and because this is an auto dealership, the transits where the big trucks come and deliver the vehicles would be limited to 8:00 AM to 6:00 PM on weekdays only.

Mr. Landry is interested at this stage of the PRO process what the Planning Commission has to say about the use. It is important to recognize what the planning department has stated about the use in comparison to NCC. They examined whether relative to other feasible uses that would have detrimental impact on existing thoroughfares, and the conclusion was the use is not expected to increase the demand on public services and utilities. Also important is the Master Plan, whether relative to other feasible uses, the proposed site is consistent with the goals, objectives and recommendations of the Master Plan. The conclusion was the Master Plan recommends community commercial uses, which include uses permitted within B-2 or B-3. Finally, whether relative to other feasible uses on the site, will the proposed use promote the use of land in a socially and economically desirable manner. The conclusion is the redevelopment of the site will remove a long standing non-conforming use and improve the site visually from Grand River Ave. The investment in site improvements as well as the jobs created will benefit the area economically.

Five waivers have been requested. That's not for this stage of the analysis, but four have been supported by the administration. The fifth is dealing with signage which is still being addressed and will be resolved.

Public benefit is always an issue with respect to a PRO as there is no specific public benefit mentioned in the Ordinance. It simply must outweigh the detriment. The report from the Planning Department is that this is similar to other uses that could be there. There is much detriment. A meandering sidewalk is being proposed along Joseph Avenue with three specific areas with benches and decorative light poles. Mr. Landry believes that would be a public benefit.

With respect to the public responses in the Planning Commission packet, there was one negative comment from a gentleman who does not reside directly behind the proposed dealership.

Chair Pehrson opened the public hearing and invited members of the audience who wished to speak to approach the podium.

Dave Stanley stated he has lived on Joseph Drive for forty years. He has seen the complete evolution of this dead-end cul-de-sac that when Mr. Stanley moved in had corn growing on three sides around the development. Today, it seems to be an expressway between Ten Mile and Grand River when some angry driver gets upset and endangers all our children and grandchildren. Mr. Stanley is ready for the construction to be done.

Another concern is if this new development will create more traffic on Joseph Drive from customers who

want a test drive or repairmen who want to test repairs. That's not acceptable to the parents and grandparents that live on the street who feel like it's unnecessarily endangering children. Over the last couple of years especially, there has been zero enforcement of the excessive speed down through what was a dirt road and is now just a chip sealed piece of asphalt. It's not very wide, so drivers are dodging children and other cars as they race up and down it. Anything that causes additional traffic down Joseph is not acceptable.

The berm on the south side of the proposed development has been improved, but the berm along Joseph Drive has been eliminated. There has been a berm surrounding both the residential side and the Joseph Drive side for about the past 20 years. Eliminating that berm along Joseph and moving the pond closer to the road seems to add an element of danger to our children.

Mr. Stanley is essentially not against this use, but another concern is the traffic. If you've tried to go down Joseph and turn on Grand River, particularly during rush hours, it's imperative to use the center lane to wait until traffic is clear and then merge into the traffic stream. More traffic coming in and out on the south side of the road is only going to make it that much harder for us to get out of the subdivision. There are some logistical concerns that Mr. Stanley prays the Planning Commission will consider to allow people to feel as safe as possible in their homes.

Anthony Geers, 24806 Joseph Drive, stated he is not necessarily opposed to the property being developed but is concerned with what may come along with that. If you drive down Grand River from Haggerty to Meadowbrook, where all the car dealerships are, the car haulers off load in the center lane. They don't pull onto the property. That is a concern for residents to turn left onto Grand River off Joseph Drive.

Mr. Geers had five kids in an area without sidewalks. What Mr. Stanley just stated about traffic already being bad coming down Joseph will only increase. Mr. Geers is concerned about the safety of his kids. Mr. Geers is also concerned about the lighting at night since the property abuts a residential area and hearing, "Harry, you have a customer in the showroom" over the loudspeakers. If these issues could be addressed, Mr. Geers would not be opposed to the development.

Seeing no one else, Chair Pehrson requested Member Lynch read the correspondence received on the matter. There were eleven responses received, one in support and three opposed.

Chair Pehrson closed the public hearing and turned the matter over to the Planning Commission for consideration.

Member Lynch stated that his biggest concern has been addressed which was the berm. Adding evergreens with get up to 90% opacity plus sound deadening in all seasons. The access drive off Joseph Drive in an earlier proposal has been eliminated. Member Lynch thinks it fits the area even though it might not be next to all the other car dealerships.

Member Lynch inquired to the applicant regarding unloading in the center lane on Grand River. Steve Saltz responded he is the owner's representative. The dealership is not allowed to unload in the center lane. At the Chevy store, there is a loading zone at the back of the property. If they were to unload in the center lane would get a fine. There will also be no test drives on Joseph Drive.

Member Lynch was concerned about the abutment to residential if this were to be rezoned. It looks like there is plenty of foliage and a five-foot hedge along Joseph with street trees. The landscape review recommends approval. The lighting will all be pointed down so the evergreens on the berm will shield any spillover lighting to residential.

Member Becker stated he is not sure about the idea that if there are no detriments, then there doesn't have to be any public benefit for PRO. That might be a little dangerous when the applicant comes back to request approval of the PRO. He does not see a lot of public benefit here other than perhaps the sidewalk.

Member Becker will challenge the idea that no trucks unload or load cars from the center left turn lane

in front of the Feldman dealerships. He lives very close to there and it happens quite regularly.

The other thing for public benefit is KIA already has an existing building and employees, so quoting the public benefit of new employees would have to subtract how many are currently employed and what's the total employment in your new building. Otherwise, that's kind of a misstatement of fact.

Grand River is between Haggerty and Novi Road is all car dealerships, so it certainly does fit. It's probably better than what might be built on the former Glenda's property.

Member Becker would recommend that the applicant look into building up the public benefit with real numbers and terms.

Member Verma had two concerns, which have already been addressed. One was the loading and unloading of vehicles, and the other was the lighting.

Member Roney stated that it seems Novi has an auto corridor along Grand River, with about seven dealerships there, so this is very fitting. He is in favor of the project. The Glenda's property has been looking pretty bad for a number of years now. It was a good improvement to get the old structures removed and the lot cleaned up, but it still needs some love. He is not sure if the sidewalk is enough of a benefit. There may be opportunities with bus stops along Grand River.

Member Avdoulos agrees that the proposal is compatible with what that area of Grand River is known for. The applicant has provided a great graphic that shows the lighting calculations along the property line to be one foot candle or less. That graphic could be made available to the resident who had concerns about the lighting.

The hedge and sidewalk along Joseph Drive is a nice addition. Maybe there is a way to talk to the City to help mitigate the speeding down Joseph as a public benefit, possibly with speed bumps.

Member Avdoulos would like to better understand the acoustics in terms of any noise emanating from the dealership for the residents. Most of his other concerns have been addressed.

Chair Pehrson stated he agrees with the Planning Commissioners comments. He would also suggest looking into other dealerships that abut residential to get feedback from those residents relative to their experience being next to a dealership as well as any available empirical data that exists relative to security surrounding car dealerships to help the residents feel more comfortable. The language in the PRO document should include emphasis on not driving down Joseph for any test drives or unloading in the center lane of Grand River Avenue.

This agenda item was discussed, but a motion on the item was not required.

6. JZ23-41 SAKURA EAST PRO PLAN WITH REZONING 18.743

Public hearing at the request of Sakura Novi LLC for Planning Commission's recommendation to City Council for a Zoning Map Amendment from Light Industrial to Town Center One with a Planned Rezoning Overlay. The subject site is approximately 3.5-acres and is located south of Eleven Mile Road, west of Meadowbrook Road (Section 23). The applicant is proposing to develop a 45-unit multiple-family townhome development.

Senior Planner Bell stated the applicant is proposing to rezone about 3.5 acres south of Eleven Mile Road, to the west of Meadowbrook Road, utilizing the Planned Rezoning Overlay (PRO) option. The existing development to the east is largely office developments, with some vacant parcels to the west. The City's public works and police training facility is to the north, and a Verizon cell tower is located on the property to the south.

The current zoning of the property is I-1 Light Industrial as are the properties surrounding the site.

The Future Land Use Map identifies this property and those around it in red hatch as TC Gateway, which

CITY COUNCIL MINUTES
EXCERPT DECEMBER 2, 2024

**REGULAR MEETING OF THE COUNCIL OF THE CITY OF NOVI
MONDAY, DECEMBER 2, 2024, AT 7:00 P.M.**

Mayor Fischer called the meeting to order at 7:00 P.M.

PLEDGE OF ALLEGIANCE

ROLL CALL: Mayor Fischer, Mayor Pro Tem Casey, Council Members Gurumurthy, Heintz, Smith, Staudt, Thomas

ALSO PRESENT: Victor Cardenas, City Manager
Danielle Mahoney, Assistant City Manager
Tom Schultz, City Attorney

APPROVAL OF AGENDA:

CM 24-12-162 Moved by Casey, seconded by Thomas; MOTION CARRIED: 7-0

To approve the agenda as presented.

Roll call vote on CM 24-12-162 **Yeas: Casey, Gurumurthy, Heintz, Smith, Staudt, Thomas, Fischer**
Nays: None

PUBLIC HEARINGS:

1. Program Year 2025 Community Development Block Grant (CDBG) Application

No public comments were made.

PRESENTATIONS:

1. Robotics Demonstration

Black Frog Robotics Team #6134 from Novi Middle School was present to talk about FIRST Robotics and what their team does. FIRST is a world leading youth serving global organization founded by mentor Dean Kamen. Its purpose is to prepare the young people of today for the world of tomorrow. Its vision is to transform our culture by creating a world where science and technology are celebrated and where young people can dream of becoming science and technology leaders. FIRST core value is Gracious Professionalism which encourages high-quality work, emphasizes the value of others and respects individuals & the community. The second core value is Coopertition which fosters innovation by promoting unqualified kindness and respect in the face of intense competition. FIRST Robotics has three competitions: Lego League, Tech Challenge and Robotics Competition. Every team starts by going to qualifying tournaments. After that, they advance to the state championships. Finally, some teams advance to the World Championships. Their state competition is next week. There are also different awards they can win. Their team has ten members from grade six to eight. They have coaches, mentors, sponsors and their parents are very helpful. The team was founded in 2011 and has an amazing history. They were the first FTC team in Novi. They got to World seven times and won the Inspire Award 12 times. There are certain timelines that allow people to join and register for the team. Gracious Professionalism is an important part of the FTC. Their coaches emphasize the values of being respectful to each other and humble and

Approval to purchase two 2025 Police Chevrolet Tahoe from Berger Chevrolet through the MiDeal Cooperative purchasing contract, in the total amount of \$105,648.00.

Roll call vote on CM 24-12-165

Yeas: Smith, Staudt, Thomas, Fischer, Casey, Gurumurthy, Heintz

Nays: None

3. Initial review of the eligibility of Feldman Kia, JZ24-32, to rezone property at the southwest corner of Grand River Avenue and Joseph Drive from Non-Center Commercial to General Business with a Planned Rezoning Overlay.

The City Manager said this request involves nearly five acres on Grand River Avenue and is formerly the site of Glenda's Garden Center. The plan is to move the Feldman Kia dealership from down the street to this location and convert the current Kia to a Genesis store. The site will be rezoned B-3. The current zoning does not allow car dealerships, and this PRO request will do exactly that. This is an initial review and requires no action from Council. It will go to the Planning Commission before returning to Council for consideration.

The Mayor reminded his colleagues of the process and that this will go to Planning and then come back to them for tentative approval of the agreement. Council's goal at this meeting is to give clear indication of any thoughts, considerations and some indication of where they might fall on a future vote.

David Landry was present on behalf of Feldman Kia. The applicant is requesting a rezoning from NCC, non-center commercial, to B-3 with a planned rezoning overlay. They are proposing to limit the development to a single B-3 use, an auto dealership. The property has been a longstanding non-conforming use and the idea with a non-conforming use is it can't be expanded and eventually, you want it to go away. We are proposing an auto dealership, a Feldman Kia Dealership. Under the current zoning, a 36,000 square foot building could be built with a rear setback of 20 feet. There are residential properties along the back of the property. The use in question would be consistent with what in on Grand River. What they are proposing is to build a building which will have a 188 foot rear setback. NCC parking setback if 10 feet and they are proposing 53 feet plus there's a retention pond at the rear so for those folks, the setback is even further. The existing berm has dead trees on it. They are proposing to raise it to eight feet, which would satisfy the ordinance. The numerous dead trees would be removed, and they would be replaced with evergreen trees. On the north side of the berm, there will be a four foot retaining wall, so headlights are not going to shine there. So, you take the four foot retaining wall, the additional four feet is eight feet and then on top of that would be the evergreen trees. With respect to the impact on traffic, the Planning department concluded the traffic impact study provided indicates fewer trips generated by the proposed use than other potential uses. There would be no curb cuts on Joseph Drive so no one could come in and out of that residential drive. With respect to capabilities of public services, the use is not expected to increase the demand on the public service and utilities relative to other feasible uses of the site. There aren't any compatibility issues with natural features. Whether it's compatible with adjacent uses, the proposed use is similarly compatible to their uses that could be developed under the current NCC zoning master plan. The administration says

the master plan recommends community commercial uses, which include uses permitted within the B-3 district. We are consistent with the master plan and whether relative to other uses, the proposed use will promote the use of land in a socially and economically desirable manner. The administrator points out the redevelopment of the site will remove a longstanding non-conforming use and improve the site visually from Grand River. The investments in the site improvements as well as the jobs created will benefit the area. Economic impact is \$7 million. This would create 175 to 200 construction jobs and about 25 new full-time jobs when Feldman's expands. With respect to the PRO ordinance, there's two requirements. Number one, it has to be shown site conditions more limited than the proposed zoning district. Number two, a public benefit has to be shown. With respect to the site specific aspects that are more limiting than B-3 would allow, they're limiting the use. There's 20 principle permitted uses allowed in B-3 and they're willing to limit it to one. Setbacks in B-3 are 30 feet from the front and this will be 90 feet. Rear setbacks are 20 feet, and this will be 188 feet. Side setbacks under B-3 are 15 feet and this will be 212 feet on the east and 77 feet on the west. Parking setbacks are 20 feet from the front and 10 feet from the rear. This would be 20 feet from the front and 53 feet from the rear. This is more strict than B-3 would allow. Days of operation would be six days a week, Monday through Saturday, which is more restrictive than an NCC use. Hours of operation would be 7:00 AM to 6:00 PM Tuesday, Wednesday & Friday, 7:00 AM to 9:00 PM Monday & Thursday and 8:00 AM to 4:00 PM on Saturday. The applicant would be happy to include in the PRO that the large auto transit vehicles would not be allowed on Grand River and all unloading would be done on premises. Moving on the public benefit, it's known that the public benefit has to outweigh the detriment. Along Joseph Drive, the applicant proposes putting in a meandering sidewalk. There would be three points along that sidewalk that would have a bench and a decorative bench in the back with decorative light poles. In addition, they are also proposing to put two covers at the existing bus stops on the north and south side of Grand River.

Mayor Pro Tem Casey said she thinks that having car dealerships on Grand River makes a lot of sense and what is planned makes a lot of sense. She does have concerns about how close the residential area is to the south. She knows there's been a noise impact study, but Council did not get it. She wants to understand the impact of the general operation of a dealership to the residents to the south. Steve Saltz, Director of Facility and Real Estate for Feldman, responded that the loading and unloading of cars would take place at the rear of the facility and would occur weekly. The Mayor Pro Tem confirmed with Mr. Saltz where the public can enter the building for vehicle service in addition to where employees who service the vehicles enter and leave the building. She also confirmed that Saturdays were also available for service. The Mayor Pro Tem inquired if cars parked at the very rear of the property would need to be started and allowed to run on any kind of a regular basis and Mr. Saltz replied no, not to his knowledge, and that vehicles parked back there will mostly be service vehicles. Mr. Saltz also said that the current location will not be a Genesis dealership but a used car expansion to the Chevy store. The Mayor Pro Tem then asked City Attorney Schultz if car deliveries can only take place on site and test drives are not allowed on Joseph Drive, how does the City enforce those? Mr. Schultz said it's essentially a breach of contract and there are various enforcement mechanisms written into the agreement plus it's all subject to the code violation provisions. She loves the idea of the berm and retaining wall but would like to see if there's a way to consider doing more of a wall which will help screen some of the noise. Mr. Saltz for clarification on what the Mayor Pro Tem is asking for exactly in terms

of the audible concerns as the service department is closed earlier than the store and it's not a body shop with banging of metals. He doesn't know that there's noise that transfers outside the shop into the parking lot. He's never had that as a complaint. Mayor Pro Tem Casey explained that since she doesn't know what's in the noise impact study yet, she was just sharing some initial concerns and thinks it's helpful to know that there is no body shop work that will take place at the site. She thinks the covered benches are a lovely suggestion but there will have to be conversations with SMART to make sure they will accept that opportunity as well.

Member Staudt said as somebody who's lived in that area for 30 years and watched tractors, forklifts and lots of other equipment, this is a huge benefit to not having a greenhouse with a robust farm around it. He's not worried about the noise. This is one of the best proposals he's seen in a long time. This dealer has clearly listened to the Planning Commission staff. This is an excellent piece of property to put this. They always want to put our new commercial business on the Grand River corridor as opposed to some of the others. He's pleased with what he's seen at the Jaguar dealership which has been outstanding. This is an excellent development and he's going to support it.

Member Smith said he was concerned about the parking lot lighting, especially the south side that butts right up against the residential and wanted to know if those lights were on all night. Shane Burley of Studio Detroit Architect said they use full cutoff fixtures, and they also put on back shields. Those help to mitigate glare and lights spilling over the property lines. The controls for these types of lights are pretty much wireless to where they can be dimmed down to 30% at night. If somebody pulls on the site, those lights in that area can go to 50%, 60%, 80% brightness and alert security. They can keep a secure site monitor activity but then afterwards, they dim back down. Member Smith asked for further explanation regarding the underground storage and how that works. Shiloh Dahlin of Alpine Engineering, site civil engineers for the project, said there is a small infiltration basin on the southeast corner of the property. What they are proposing to do is to enlarge that infiltration basin that's currently there and include some underground detention. They did some preliminary soil borings, and the infiltration rate seems to be favorable for infiltration at the site. There will be storm sewer with the parking lot itself, basically to route it to the infiltration basins and underground detention area. Member Smith says he likes not unloading on Grand River and thinks that is a positive thing.

Member Gurumurthy noted that there have been numerous complaints from neighbors of the existing Feldman dealership related to the afterhours audible speech enhanced alarm system and wanted to know how to make sure that doesn't happen at the new premises. Mr. Saltz replied that they have quite a large investment in these vehicles, and they have to protect their investment, so they have a live monitoring system that's in place. That means they have camera surveillance throughout the parking lot. There are audible announcements that ask people, if they're there after certain times, to leave the private property. They did turn the volume down at the Novi Chevy store because they did receive complaints, but they've also had a lot of vehicles stolen from there. They have this system in 15 of their 20 locations and it has cut down theft dramatically and they have reports to show that. They had the volume at the Novi Kia and Chevy store turned down so much that the police asked them to turn it up because as a deterrent, it was working. They're cognizant of their neighbors but they do have to protect their investment. They have an alarm, and it goes off as needed but not 24/7.

Member Thomas was concerned about light pollution and asked how tall the lights would be. Mr. Burley replied that a typical interior parking lot light is 22.5 feet tall overall. Member Thomas asked where those lights would be located in regard to the south and he replied they would be at the 55' setback, on the edge of the parking lot. Member Thomas stated that she was concerned about those residents and keeping them shielded away from that light pollution. We've had complaints from people regarding lighting and they'd have to buy blackout curtains. It's terrible to have to try to deal with that in the nighttime. She knows dealerships with the security issues, the lights are on all the time. She's also concerned about the impacts the additional traffic will have on an already congested Grand River. Mr. Landry thanked her for her concern, and they'll address that in their additional submissions. Member Thomas said she did like the covered benches for the bus stops, but her biggest concern is the lighting and making sure that the lighting is not affecting those people who live behind that area.

Member Heintz said one thing that piqued his interest was the security sound system and the applicant's ability to increase and decrease the volume to have a maximum sense of security without trying to disrupt or bother the neighbors. He asked the applicant if they knew what distance did they need to have to keep the volume mitigated at the residents' level? He acknowledged that they are at that beginning phase and inquired if they also knew at what distance and thickness of trees to block out the sound. He thinks it's great to think about a balance for everyone.

The Mayor asked the applicant, since they are over the required amount of parking spaces allowed under B-3, if they have contemplated removing the 15 spaces in the southern part of the lot in order to enhance the setback or expanding the retaining wall. Mr. Saltz responded that they do need to have a certain number of parking spaces to make this work financially and what they've designed here is to house the employees, new cars and service vehicles. Mr. Landry also stated that parking is a huge issue for car dealerships because manufacturers require that they hold a certain amount of inventory. He stated that they would look into the Mayor's recommendation. The Mayor said this was just an interesting concept that just came to him, and it seems to him that if there was a way to enhance the berm, it would be a good thing. The last thing they want to do is cause a parking issue on Grand River or along Joseph. The Mayor said he considers this to be compatible with the area, the master plan and current NCC zoning. He likes that there's no additional curb cuts required as well as the winding path and thinks the enhancement with the bushes behind the benches will be a nice addition along Joseph Drive and the retention pond is also a good addition. He would like to see the unloading issue addressed in the PRO. The work the applicant has done with the berm and inclusion of new trees is a wonderful addition that will do the best to shield the residents that will be impacted. He's seeing a situation where the benefits outweigh any detriment. He thinks a lot of good work has gone into this and looks forward to seeing further revisions and enhancements through the planning process.

Member Smith said that in regard to the berm he thinks more detail on the trees, such as height and density, would help them to feel more comfortable about the noise and lighting issues.

Member Staudt asked City Attorney Schultz if there was a law against trucks parking in the middle lane and unloading. Mr. Schultz replied that he suspects there is. Member Staudt said he drives that stretch past the other Feldman dealership every day and every day there are trucks sitting in front of Feldman unloading vehicles and thinks there should be a conversation with the general manager.

AUDIENCE COMMENTS: John Waack, 24841 Joseph Drive, lives in the house that would be directly behind the proposed dealership. He spoke about the trees located on the existing berm. There are about 50 – 60 trees currently and only about a third of them need care. His concern is if the berm is raised, all the existing trees will be removed and replaced with smaller and fewer trees. Right now, there is 30 feet tall trees and five feet of berm which gives 35 feet of barrier. He doesn't think it makes sense to take all the trees down. If the berm is taken care of, the lighting issue will probably be okay. In regard to storm water management, there will be a lot more asphalt going in. Glanda's was pavers and water goes through pavers but not through asphalt so when there's overflow, it goes down Joseph and there are no drains and that's not good.

COMMITTEE REPORTS:

1. Ordinance Review Committee

Mayor Fischer said the Committee met earlier to discuss the fireworks ordinance. They should be bringing something before Council at a date at meeting soon. Another item discussed was uses under the B-3 district.

2. Environmental Sustainability Committee

Council member Smith said the Committee met earlier and it was a working session to prepare their first report to Council which they would like to give at the next Council meeting.

MAYOR AND COUNCIL ISSUES: None

COMMUNICATIONS: None

Council adjourned at 8:58 PM to enter Executive Session

CALL TO ORDER – The Regular City Council meeting resumed at 10:10 PM

CM 24-12-166 **Moved by Staudt, seconded by Smith; MOTION CARRIED: 6-1**

Approval of the purchase agreement for property discussed in executive session.

Roll call vote on CM 24-12-166

**Yeas: Thomas, Fischer, Gurumurthy, Heintz,
Smith, Staudt**
Nays: Casey

PLANNING COMMISSION MINUTES

EXCERPT 4-9-2025



PLANNING COMMISSION MINUTES

CITY OF NOVI
Regular Meeting

April 9, 2025 7:00 PM

Council Chambers | Novi Civic Center
45175 Ten Mile Road, Novi, MI 48375 (248) 347-0475

CALL TO ORDER

The meeting was called to order at 7:00 PM.

ROLL CALL

Present: Chair Pehrson, Member Avdoulos, Member Becker, Member Dismondy, Member Roney, Member Verma

Absent Excused: Member Lynch

Staff: Barbara McBeth, City Planner; Beth Saarela, City Attorney; Lindsay Bell, Senior Planner; Dan Commer, Planner; Rick Meader, Landscape Architect; Milad Alesmail, Project Engineer

PLEDGE OF ALLEGIANCE

Member Becker led the meeting attendees in the recitation of the Pledge of Allegiance.

APPROVAL OF AGENDA

Motion made by Member Avdoulos and seconded by Member Dismondy to approve the April 9, 2025 Planning Commission Agenda.

VOICE VOTE ON MOTION TO APPROVE THE APRIL 9, 2025 PLANNING COMMISSION AGENDA MOVED BY MEMBER AVDOULOS AND SECONDED BY MEMBER DISMONDY. *Motion carried 6-0.*

AUDIENCE PARTICIPATION

Chair Pehrson invited members of the audience who wished to address the Planning Commission during the first audience participation to come forward. Seeing no one, Acting Chair Avdoulos closed the first public audience participation.

CORRESPONDENCE

There was not any correspondence.

COMMITTEE REPORTS

There were no Committee reports.

CITY PLANNER REPORT

There was no City Planner report.

CONSENT AGENDA - REMOVALS AND APPROVALS

There were no consent agenda removals or approvals.

received from Mr. Gary Roberts. Mr. Roberts stated in the correspondence that he is in support and glad they are going from the cul-de-sac to the North instead of disturbing the Great Oaks Landscape property. Chair Pehrson closed the public hearing and turned the matter over to the Planning Commission.

Member Becker stated he had no concerns as long as the newly restored Magellan cul-de-sac is left undisturbed. Member Becker asked Mr. Falzarano if there would be additional trees disturbed when the water and sewer lines are extended.

Mr. Falzarano stated they are open to exploring the possibility of boring further onto the property to avoid natura feature impacts.

Member Dismody had no comment.

Member Verma had no comment.

Member Roney had no comment.

Member Avdoulos stated he had no concerns and noted the distance is short which is advantageous to the property and the future project.

Motion to approve the JSP24-24 Crown Utility Extension Preliminary Site Plan made by Member Avdoulos and seconded by Member Dismody.

In the matter of Crown Utility Extension JSP24-24, motion to approve the Preliminary Site Plan based on and subject to 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.

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.

ROLL CALL VOICE VOTE TO APPROVE JSP24-24 CROWN UTILITY EXTENSION PRELIMINARY SITE PLAN MOVED BY MEMBER AVDOULOS AND SECONDED BY MEMBER DISMONDY. *Motion carried 6-0.*

Motion to approve the JSP24-24 Crown Utility Extension Woodland Permit made by Member Avdoulos and seconded by Member Dismody.

In the matter of Crown Utility Extension JSP24-24, motion to approve the Woodland Permit based on and subject to 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.

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.

ROLL CALL VOICE VOTE TO APPROVE JSP24-24 CROWN UTILITY EXTENSION WOODLAND PERMIT MOVED BY MEMBER AVDOULOS AND SECONDED BY MEMBER DISMONDY. *Motion carried 6-0.*

2. JZ24-32 FELDMAN KIA PRO PLAN WITH REZONING 18.746

Public hearing at the request of Feldman Automotive for Planning Commission's recommendation to City Council for a Zoning Map Amendment from Non-Center Commercial to General Business with a Planned Rezoning Overlay. The subject site is approximately 4.88-acres and is located west of Joseph Drive, south of Grand River Avenue (Section 24). The applicant is proposing to develop an automotive dealership with outdoor vehicle inventory.

Senior Planner Lindsay Bell stated the petitioner is requesting a Planned Rezoning Overlay for a parcel located southwest of the Grand River Avenue and Joseph Drive intersection from NCC (Non-Center Commercial) to B-3 (General Business). The site, located in Section 24, was formerly the location of Glenda's Garden Center for many years, which was a non-conforming use in the NCC District.

In this area of Grand River, there are professional offices, small strip retail centers, sit down restaurants and the US Energy fuel supplier. Single family residential homes are located to the south of the property.

The Non-Center Commercial Zoning District allows uses such as retail business and service uses, professional and medical offices, financial institutions, sit-down restaurants, and instructional centers. Special Land Use permits could also allow low density multi-family or single-family dwellings, day care centers, places of worship, public utility buildings, and veterinary hospitals or clinics. Similar commercial uses are allowed in the B-3 District, as well as more intense uses such as fueling stations, auto washes, vehicle sales, microbrews or brewpubs as permitted uses.

Current zoning of the surrounding area is I-1 Light Industrial to the north, OS-1 Office Service to the west, NCC Non-Center Commercial to the east, and R-4 One Family Residential to the south.

Senior Planner Bell stated that the Future Land Use Map identifies this property and the parcel to the east as Community Commercial. The parcels to the west along Grand River are planned for Community Office. To the north of Grand River is planned for Industrial, Research Development and Technology. To the south is planned for single family residential uses. There are no regulated natural features on the site.

As shown in the PRO Concept Plan, the applicant proposes to redevelop the approximately 5 acre property for an auto dealership with accessory outside storage of the inventory vehicles. The proposed dealership building would have a footprint of approximately 18,800 square feet with a mezzanine floor for parts storage, and the parking area consists of approximately 300 spaces.

The stormwater management plan consists of underground infiltration, as well as above-ground infiltration trench and basin.

The engineering review found that there are adequate public utilities to serve the parcel, and that the impacts from B-3 uses are expected to be the same as potential NCC uses.

Traffic consultants have reviewed the anticipated traffic generation from the proposed use and found the impacts are expected to be similar compared to what could be developed under the existing zoning. The site plan utilizes the existing curb cuts on Grand River, so no changes are proposed to driveway spacing.

The applicant has submitted public benefits being offered to meet the objective of the benefits to the public, including providing greater building and parking setbacks than the B-3 ordinance requires. The physical benefit proposed is an enhanced sidewalk along their Joseph Drive frontage. This includes a meandering sidewalk with decorative light poles and the construction of three inset areas with benches. Since the initial submittal, the applicant has also proposed to provide two bus shelters at the nearby transit stops on either side of Grand River Avenue.

The applicant has eliminated the need for several of the deviations we had identified previously. This includes the biggest issue we had with the project, which was the berm and landscaping along the southern property line where the site is adjacent to existing residential neighborhoods. The current berm is only 2-3 feet from the overall grade of the Feldman site, and once grading/paving is completed would only be 1-2 feet above the parking lot grade. (The average grade of the Feldman site is 3-4 feet higher than the residential properties to the south.) Staff felt this would not provide sufficient sound and visual buffering to the residential properties. The applicant has proposed raising the berm to 6 feet in height relative to the parking lot grade, which will require removing the existing trees. As shown in the tree list,

most of the trees on the berm are in poor condition, with many of the evergreens suffering from dieback and covered in deciduous vines. Once raised, the new berm would be planted with a double row of evergreens to provide the necessary screening.

We have heard from one adjacent resident that he would prefer the existing trees remain, with only those that are dead or nearly dead to be removed, and new plantings added to infill any gaps. His property abuts the southeastern corner of the property. Staff looked into the possibility of retaining the existing trees on his end of the berm only. This area has additional distance from the proposed parking lot because of the stormwater basin between, and a lower elevation than the west side of the site. Four trees in fair condition could be maintained if this section of the berm was left alone but we still feel all trees in poor condition should be removed and replaced with new trees and supplemental plantings to provide the 80-90% opacity requirement. An amended suggested motion in the packet in front of you has an additional deviation for berm height for this portion of the property if the Commission wishes to make this part of your recommendation to City Council. We have also included a condition that the berm work and plantings are to be completed early during construction so that the neighbors have screening in place for the bulk of the construction work. The applicant has confirmed that they would agree to the changes to the berm and landscaping.

The remaining deviations requested are listed in your packet, and are generally supported by staff given the justifications provided. The exception is for the deviations from the sign ordinance. The applicant does not want to submit Sign Permits until later, so a full review of the proposed signs has not been completed. Staff is concerned that any changes to the signage in the future will require amendment of the PRO Agreement, so would prefer that all signage issues be handled separately from the PRO Agreement in the typical manner.

Senior Planner Bell stated the proposal helps fulfill objectives contained in the Master Plan for Land use, as well as other positive outcomes, such as; The objective to support retail commercial uses along established transportation corridors, the B-3 district is consistent with the Master Plan for Land Use designation for Community Commercial, the impacts on traffic and public utilities are expected to be similar to development under the existing zoning and submittal of a Concept Plan and any resulting PRO Agreement, provides assurance to the Planning Commission and the City Council of the manner in which the property will be developed, and can provide benefits that would not be likely to be offered under standard development options.

the Planning Commission is asked to hold the public hearing, and to make a recommendation to City Council on the proposed rezoning. Representing the project are attorney David Landry and dealership owner Steven Saltz and their team to tell you more about their request. Staff are available to answer questions.

Chair Pehrson invited the applicant to address the Planning Commission.

Mr. David Landry stated a rezoning from Non-Center Commercial to B-3 with a Planned Rezoning Overlay is being requested. Mr. Landry expressed they are proposing to limit this use to a single B-3 use under a Planned Rezoning Overlay. He noted that if the B-3 use of an Auto Dealership were ever not there the zoning would revert back to Non-Center Commercial.

Mr. Landry touched on the properties history and stated that Glenda's Nursery was a longstanding non-conforming use. Mr. Landry noted under the current zoning a 36,000 square foot retail building could be built with parking closer to the residential area to the South. Mr. Landry stated what is being proposed is a dealership with the building much further away, a large retention area, and minimal parking closer to the residential area.

Mr. Landry relayed he would like to address four comments that were raised by the Planning Commission and City Council regarding adjacency, lighting, sound, and car haulers.

First, with respect to adjacency, Mr. Landry stated to the South are four residential homes. The Auto Dealership building being proposed would be 188 feet away from this residential area. He noted that the Non-Center Commercial set back requirement is 20 feet. Additionally, the Non-Center Commercial parking set back is 10 feet, and what is being proposed is 53 feet. The proposal includes raising the berm from one to three feet in height to six to eight feet. Mr. Landry stated originally, they had planned to remove the dead trees and fill in the berm with additional landscaping. It was noted that the administration looked at it and had a preference to remove the trees all together and plant new trees. Mr. Landry stated that they agreed to the administration's request.

Mr. Landry shared a resident contacted him regarding the trees and they discussed leaving the live trees. The idea of leaving the live trees was then discussed with the City. Mr. Landry stated they are happy to leave live trees in place, increase the size of the berm, and add a double row of evergreens. In addition, at the request of the City they have agreed to add a number of green giant arborvitaes. He noted there would also be a four-foot retention wall on the north side of the berm that would block vehicle headlights.

Secondly, with respect to lighting, Mr. Landry noted the ordinance provides that the maximum height of lighting poles can be 25 feet. He stated what is being proposed are lighting poles that are 22.6 feet with backlighting shields. At the southern property line, the ordinance calls for a maximum illumination of .5 foot-candles, the proposed illumination at the property line is .1 and .2 foot-candles.

Thirdly, with respect to sound, Mr. Landry stated when adjacent to the R-4 District the daytime maximum is 60 decibels and the nighttime maximum is 55 decibels. Mr. Landry identified a few sources of sound, the first being HVAC units on the building. He noted the units create 90 decibels of sound at their location which is 220 feet away from the property line. With the sound attenuation from 220 feet, the sound would be 53 decibels at the property line. He noted the berm, and trees would further attenuate the sound. Next, he touched on security alarms. He stated these alarms can be controlled and would be below 55 decibels. Lastly, he addressed car haulers and stated that car haulers, at thirty-five miles per hour, produce 80 decibels. He noted that the haulers would not be going thirty-five miles per hour on the property. Additionally, a designated loading zone has been designed to be 151 feet away from the property line and would measure 46 decibels at the property line.

Mr. Landry expounded that car haulers are hired by the car manufacturers. At Feldman's current location on Grand River Avenue, they have communicated to the car haulers not to unload on Grand River Avenue. Mr. Landry stated he has personally spoken to the police department, and they indicated they would issue citations because it is against the law to unload on Grand River Avenue. The car haulers have communicated the reason they unload on Grand River Avenue is due to the current site being too tight and the inability to make the necessary turns and maneuvers. The new site has been designed with a loading zone which eliminates the need to back up and allows access to the site from either side.

Mr. Landry shared an example when he was recently driving down Grand River Avenue and saw a car hauler unloading on Grand River in front of the KIA Dealership, he noted the police were there with the lights flashing. He stated they are doing everything they can regarding this issue.

Mr. Landry shared as indicated in the plan review report by Ms. Bell, there is no impact on traffic, no impact on public services, no natural features, it is compatible with adjacent land uses, and consistent with the Master Plan for Land Use. Relative to other uses on the site, this use would promote social and economic desirables, remove a long standing non-conforming use, improve the visual on Grand River, and create jobs. Mr. Landry noted all together it is a 7-million-dollar investment.

Mr. Landry expressed with respect to the PRO Ordinance, two things must be proven. The first being, site specific conditions are more limiting than the proposed use. Secondly, a public benefit. Mr. Landry stated the proposed use is B-3 and noted there are twenty principle permitted uses under B-3; they are limiting it to one. The front setbacks under B-3 are 30 feet, what is being proposed is 90 feet. The rear setback under B-3 is 20 feet, what is being proposed is 188 feet. The side setbacks under B-3 are 15 feet, what is being proposed is 212 feet to the East and 77 feet to the West. The parking setbacks under B-3 are 20 feet in the

front and 10 feet in the rear, what is proposed is 20 feet in the front and 53 feet in the rear. The dealership operates six days a week. The hours of operation are 7am-6pm Tuesday, Wednesday, Friday; 7am-9am Monday and Thursday; 8am-4pm on Saturday.

Mr. Landry expressed the public benefit must outweigh the detriment. He noted the administration has recognized what has been proposed as a public benefit which would qualify under the PRO. He stated the benefit being proposed is twofold. First, an upscale meandering sidewalk along Joseph Avenue with three public benches, large landscaping walls, and decorative light poles. Secondly, two bus stops on either side of Grand River Avenue. Representatives from KIA were present to answer any questions.

Chair Pehrson opened the public hearing and invited members of the audience who wished to address the Planning Commission on this topic to come forward.

Mr. John Waack of 24841 Joseph Drive, adjacent to the property stated the berm is his main concern. He noted that he has lived on Joseph Drive for forty-two years. Mr. Waack referred to a photograph, which was taken the day prior, of the trees located on the berm. He stated the reason there has been so much discussion about the trees is because the dealership had proposed some trees to stay with replacement of the dead trees. He stated the original plan to remove the dead trees and keep the live trees was changed to taking everything down. He expressed that the large trees that are approximately 30-35 feet tall would part of that plan for removal. The trees are fifteen inches in circumference at the bottom and over a foot in breast height. He noted there are fifty-seven trees like this along the whole berm. The entire berm measures approximately four hundred feet long. Mr. Waack expressed disappointment that it was being proposed to take all the trees down. He stated when he moved in there were six hundred feet of tomatoes, and the trees were put in by Glenda's in 2001. He estimated the trees are twenty-three years old. Mr. Waack stated he would like to keep the berm intact and believes that taking the mature trees down is not the right approach. He thanked the City and Feldman for working with him.

Mr. Antoine Buggs of 24710 Bethany Way inquired when the new trees would be planted. He expressed concern with all the trees being taken down and everything else being built with the new trees being planted last.

Chair Pehrson stated Mr. Buggs question would be asked of the applicant in a few minutes.

Seeing no other audience members who wished to speak, Chair Pehrson requested Member Becker read into the record the correspondence received. Member Becker relayed two correspondences were received from Mr. Daniel Weiss, who expressed support and thinks it is a good fit. Additionally, Jacob Lee objects due to noise, fumes, and traffic, Oswaldo Ruiz objects for reasons due to noise and traffic posing a risk to pedestrians, Ramaswamy Raju objects and would like to know about four season screening, limits to the times when cars can be dropped off, and sound and visual barriers.

Chair Pehrson closed the public hearing and turned the matter over to the Planning Commission for consideration.

Member Becker inquired if the bus stops were coordinated with bus operators.

Senior Planner Lindsay Bell stated that it will be coordinated.

Mr. Steve Saltz, facility director with Feldman Automotive, confirmed that they did coordinate with Smart.

Member Becker asked Landscape Architect Rick Meader if the healthy existing trees remain on the southeast corner of the berm if the berm would not be as high on that corner.

Mr. Meader confirmed that the berm would taper down at Mr. Waack's property line. He stated four trees in good condition would remain and the other trees would be replaced.

Member Becker stated he appreciates how the applicant has worked with the Planning Commission, Staff, and residents. He stated there are much greater setbacks than they would have if a number of other types of projects were to go in. Additionally, there is 60-80 percent less light going across the southern boundary. He noted with other potential uses you might not have a business, who like this one, only operates six days a week. Member Becker expressed he is in support.

Member Dismondy stated he is in support of the project. He expressed it is important to listen to the residents. He noted he would keep the large healthy trees that are present and fill in as appropriate. He stated the concern with approving a project like this is to take care of the residents.

Member Verma inquired if Mr. Raju had spoken to anyone from the Feldman Kia team.

Mr. Landry stated they had spoken with Mr. Waack but had not spoken to anyone else.

Member Verma asked if the objection from Mr. Raju had been seen.

Chair Pehrson stated that the objection had been received April 9, 2025. He noted that the objections listed in the correspondence from Mr. Raju in relation to noise, sound, and screening had been addressed by the applicant.

Member Roney stated he agrees with Member Becker in that they have done a good job thinking of all the details. He expressed that it looks good and he appreciates the accommodation they have provided throughout the review.

Member Avdoulos stated that the items of concern have been addressed. The item of concern that was discussed previously was delivery of vehicles. He noted the diagram showing the car hauler and fire truck indicates that there is enough room to pull in, unload, and pull out. He noted adding height and new landscaping on top of the four-foot berm creates a good visual barrier. Regarding lighting, he noted lights can be cut off right at the property line and are state of the art. Member Avdoulos stated he appreciates the cooperation with the City and neighbors.

Motion to recommend approval to City Council to rezone the subject property from Non-Center Commercial (NCC) to General Business (B-3) with a Planned Rezoning Overlay Concept Plan made by Member Avdoulos and seconded by Member Roney.

In the matter of JZ24-32 Feldman Kia, with Zoning Map Amendment 18.746 motion to recommend approval to City Council to rezone the subject property from Non-Center Commercial (NCC) to General Business (B-3) with a Planned Rezoning Overlay Concept Plan.

A. The recommendation includes the following ordinance deviations for consideration by the City Council, for the reasons noted in italics:

1. Deviation from Section 3.10.3 to allow the Service Bay Doors to face a major thoroughfare and a residential district. *The service reception area is proposed to have a total of four overhead doors. The northern overhead doors are 129 feet from the Grand River Avenue right of way. The southern overhead doors are located 281 feet from the southern property line. There will be a screen wall and berm with landscaping along the southern property line to screen the overhead doors from the residential uses from the south. The overhead doors are needed for customer use.*
2. Traffic deviation from Section 5.3.12. There are two locations, on either side of the building, where 2 customer parking spaces have an end island on one side, but not the side adjacent to the entry/exit point of the service area. *This is supported as the area next to the parking spaces has been striped out.*
3. Landscape deviation from Section 5.5.3.B.ii and iii to permit a continuous evergreen hedge along Grand River Avenue and Joseph Drive in lieu of the required minimum 3-foot-high berm along the road rights of way. *The deviation is supported as the applicant has proposed to use evergreen shrubs to achieve the intent of the ordinance.*

4. Landscape deviation from Section 5.5.3.D to permit only 79% of the building foundation landscaping to be located at the building. *This is supported as the required foundation area is provided in total, and the remaining landscaping is placed in areas that will enhance the appearance of the site.*
 5. Lighting deviation from Section 5.7.3.L to exceed the 1 footcandle limit at the north and east property lines (3.4 fc and 6.2 fc, respectively). *This deviation is supported as these areas are illuminating the sidewalks along the road frontages.*
 6. Façade deviation from Section 5.15 for the north facade to contain 0% brick rather than the minimum 30% brick. The front consists of 70% showroom glass and 30% flat metal panels. *The deviation is supported as the addition of brick would not offer an enhancement to the design.*
 7. Landscape deviation from Section 5.5.3.B.ii and iii for insufficient screening berm for the southeastern portion of the property that abuts parcel 22-24-326-004. *This deviation is supported as it was requested by the adjacent property owner in order to preserve existing trees, however additional inspection as to the viability of the trees shall be conducted by the applicant before final approval and landscaping shall be provided to achieve the 80-90% opacity requirement.*
- B. If the City Council approves the rezoning, the Planning Commission recommends the following conditions be made part of the PRO Agreement:
1. The use of the property is a New and Used Car Salesroom, Showroom and Office with a Servicing department and outdoor inventory of vehicles, as typically associated with dealerships.
 2. Accessory to the Car Dealership, Outdoor Space for exclusive sale of new or used automobiles will be permitted under the conditions for Special Land Use approval:
 - i. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service. *(The traffic impact study provided indicates fewer trips generated by the proposed use than other potential uses.)*
 - ii. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area. *(The use is not expected to increase the demand on public services and utilities relative to other feasible uses of the site.)*
 - iii. Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats. *(There are no significant natural features or characteristics present on the site.)*
 - iv. Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood. *(The proposed use is similarly compatible to other uses that could be developed under the current NCC zoning district. No major automobile repair or service, as defined in Section 4.50 of the Zoning Ordinance, shall be permitted on the site.)*
 - v. Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use. *(The Master Plan recommends Community Commercial uses, which includes uses permitted within the B-2 and B-3 districts.)*
 - vi. Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner. *(The redevelopment of the site will remove a long-standing non-conforming use and*

- improve the site visually from Grand River Avenue. The investments in the site improvements as well as the jobs created will benefit the area economically.)*
- vii. Whether, relative to other feasible uses of the site, the proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located. (1. *Outdoor Space for exclusive sale of new or used automobiles is listed as a Special Land Use in the B-3 District, and 2. the applicant has addressed the concerns previously raised so that the proposed use better conforms to the site design regulations.*)
3. The applicant shall provide a unique streetscape along Joseph Drive with a winding sidewalk and the installation of a bench node on a concrete platform, decorative light poles, and significant landscaping across the western side of Joseph Drive, as shown on the PRO Plan.
 4. The applicant shall construct two covered bus stop shelters along Grand River Avenue to serve the nearby SMART bus stops.
 5. The days of operation shall be limited to Monday – Saturday. The business shall not be open on Sundays.
 6. The hours of operation shall be limited to the following, as described by the applicant: 7:00 a.m. to 6:00 p.m. on Tuesday, Wednesday and Friday, 7:00 a.m. to 9:00 p.m. on Monday and Thursday, and 8:00 a.m. to 4:00 p.m. on Saturdays.
 7. Outdoor speakers for security purposes may be permitted but must be attuned to meet the requirements of the noise ordinance and avoid disturbance of the adjacent residential neighborhood.
 8. No outdoor compressors shall be permitted.
 9. Automobile transit deliveries shall be limited to 8:00 a.m. to 6:00 p.m. on weekdays and must take place on the site in the designated loading/unloading area. Unloading shall not take place in any public right-of-way.
 10. The parking setback shall be no less than 53 feet from the property line to the south.
 11. The footprint of the building shall be limited to approximately 18,900 square feet, excluding mezzanine space.
 12. The overhead service doors shall remain closed except to allow the entering and existing of vehicles.
 13. The berm and landscape plantings along the southern property line shall be installed early in construction to protect the residents from the negative impacts of construction.
- C. This motion is made because the proposed B-3 General Business zoning district is a reasonable alternative to the NCC Non-Center Commercial district and fulfills the intent of the Master Plan for Land Use, and because of the following enhancements that will result in an overall benefit to the public:
1. The applicant proposes a unique streetscape along Joseph Drive with a winding sidewalk and the installation of a bench node on a concrete platform, decorative light poles, and significant landscaping across the western side of Joseph Drive.
 2. The applicant states that the economic impact of this development includes an investment of \$7 million, the creation of 175-200 construction jobs, and the creation of 40-50 full-time permanent jobs.
 3. The applicant has proposed to construct two covered bus stop shelters along Grand River Avenue to serve the nearby SMART bus stops.

ROLL CALL VOICE VOTE ON MOTION TO RECOMMEND APPROVAL TO CITY COUNCIL TO REZONE THE SUBJECT PROPERTY FROM NON-CENTER COMMERCIAL (NCC) TO GENERAL BUSINESS (B-3) WITH A PLANNED REZONING OVERLAY CONCEPT PLAN MADE BY MEMBER AVDOULOS AND SECONDED BY MEMBER RONEY.
Motion carried 6-0.

MATTERS FOR CONSIDERATION

NOISE IMPACT STATEMENT

March 31, 2025

Community Development Department

45175 Ten Mile Road
Novi, Michigan 48375

RE: FELDMAN KIA NOVI
40575 Grand River Avenue
Novi, Michigan 48375
ARCHITECT'S PROJECT NO. 2192

Dear Ms. Bell,

The purpose for this letter is to address the requirement of providing a **Noise Impact Statement** as required per the Pre-Application Planning Review Summary dated January 10, 2024.

1. Noise Impact Statement (Sec. 5.14.10.B): A Noise Impact Statement is required for outdoor space for exclusive sale of new or used automobiles, campers, recreation vehicles, mobile homes, or rental of trailers or automobiles within a B-3 district. The noise impact statement shall demonstrate that the completed structure and all activities associated with the structure and land use will comply with the standards in Table 5.14.10.A.ii at all times. Please see Section 5.14.10.B for a full description of the standards and requirements. This statement is required to be provided prior to the Planning Commission public hearing.

Per Table 5.14.10.A.ii Weighted Sound Levels Limits Decibels

- **R-4 use One Family Residential**
 - **Daytime Allowable Levels** **60 dB (decibels)**
 - **Nighttime Allowable Levels** **55 dB (decibels)**

The proposed Feldman KIA dealership that is to be constructed at 40575 Grand River Avenue will not house any excessive noise generating equipment. This facility is primarily a relocation of the existing KIA dealership at 42235 Grand River Avenue and will house the same functions of automobile showroom and an associated repair garage. The service garage is setback from the R-4 property line 188 feet and, in addition to being fully enclosed, will be screened by a mixture of new and existing vegetation as well as an existing berm. The hours of operation for this facility are as follows:

- M, TH 7 am – 9 pm
- T, W, F 7 am – 6 pm
- Sat 8 am – 4 pm

The only exterior equipment will be roof mounted mechanical units which will be screened by roof parapets with additional screening where required per the City's equipment screening requirements. The roof mounted mechanical units are conservatively estimated to produce 90 dB (decibels) of sound pressure at 3 feet from the unit. Due to sound attenuation over distance, this will dissipate to 53 dB (decibels) over the 220 feet from the unit to the R-4 property line. This does not account for the additional attenuation that will be provided by the screening and vegetation between the source of the sound and the R-4 property line.

The new facility will utilize an audible, speech enhanced alarm system including three (3) loudspeakers mounted to the new building. The loudspeaker volume is adjustable and will be set to limit the sound level at the adjacent residential property lines to under 55 dB. Based on sound attenuation over distance, not including additional attenuation by the required berm and landscaping, this will allow a source volume of 90 dB.

The sound pressure level of a car hauler and other similar delivery trucks at speeds less than 35 miles per hour is approximately 80 dB. Based on the site layout and the location of the loading zone, the delivery trucks should never be closer than 150 feet to the adjacent residential property line. Due to sound attenuation over distance, this will dissipate to 46 dB at the R-4 property line, meeting all sound requirements.

Please feel free to contact us should you need any additional information.

Sincerely,



Peter N. Pentescu
Studio Detroit
2040 Park Ave, Suite 200
Detroit, MI 48226
pete@studio-detroit.com
586.747.9717

GEOTECHNICAL REPORT



Report of Geotechnical Investigation

**Feldman Kia of Novi
SW Corner of Joseph Drive
and Grand River Avenue
City of Novi,
Oakland County, Michigan**

Latitude: 42.47330271 ° N
Longitude: 83.44746217 ° W

Prepared for:

Feldman Automotive Group
30400 Lyon Center Drive
New Hudson, Michigan 48165

G2 Project No. 243082
March 23, 2024



CONSULTING
GROUP

March 23, 2024

Mr. Steven Saltz
Director of Real Estate & Facilities
Feldman Automotive Group
30400 Lyon Center Drive
New Hudson, Michigan 48165

Re: Report of Geotechnical Investigation
Feldman Kia of Novi
SW Corner of Joseph Drive and Grand River Avenue
City of Novi, Oakland County, Michigan
G2 Project No. 243082

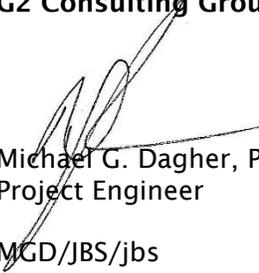
Dear Mr. Saltz:

We have completed the geotechnical investigation associated with the proposed Feldman Kia of Novi to be constructed within the vacant parcel located at the above intersection in the City of Novi, Michigan. This report presents the results of our field investigation, observations, analyses, and our recommendations for subgrade preparation, foundation design, pavement design, and construction considerations as they relate to the geotechnical conditions at the site.

We appreciate the opportunity to be of service to you on this project and look forward to discussing the recommendations presented herein. In the meantime, if you have any questions regarding this report or any other matter pertaining to the project, please call us.

Sincerely,

G2 Consulting Group, LLC



Michael G. Dagher, P.E.
Project Engineer

MGD/JBS/jbs



Jason B. Stoops, P.E.
Project Manager/Associate

g2consultinggroup.com

| | | | | |
|---------------------|--------------------|-----------------------|----------------|----------------|
| Headquarters | 1866 Woodslee St | Troy, MI 48083 | P 248.680.0400 | F 248.680.9745 |
| Ann Arbor | 1350 Eisenhower Pl | Ann Arbor, MI 48108 | P 734.390.9330 | F 734.390.9331 |
| Chicagoland | 1186 Heather Dr | Lake Zurich, IL 60047 | P 847.353.8740 | F 847.353.8742 |



EXECUTIVE SUMMARY

The proposed Feldman Kia of Novi will be constructed within a vacant lot located at the southwest corner of Joseph Drive and Grand River Avenue. The lot was formerly the home of Glenda's Garden Center; however, the former buildings have recently been demolished to make way for a new showroom. The showroom will be constructed toward the west of the site and will have a footprint of approximately 19,000 square feet. We understand the proposed building will be constructed having a finished floor elevation of approximately 879.70 feet in an area where the existing site grades range from 876 to 878 feet. New pavements will be constructed surrounding the building and will extend eastward toward the property limits on the east of the site. Consideration is being given to expanding the existing stormwater basin and/or the construction of below-grade stormwater management chambers.

Approximately 2 inches of bituminous concrete is present at the ground surface of soil boring B-12 and is underlain by an aggregate base consisting of gravelly sand having a thickness of 4 inches. Approximately 12 to 14 inches of topsoil are present at the ground surface of soil borings B-01 and B-02. Fill consisting of very loose to medium compact clayey sand or silty sand is present beneath the aggregate base in B-12, beneath the topsoil in B-01, and at the ground surface of B-03, B-04, and IN-03 through IN-06 extending to depths ranging from 3-1/2 to 8-1/2 feet below the existing grades. Native granular soils consisting of gravelly sand, sand, and silty sand are present beneath the fill soils extending to the explored depths. We observed organic matter contents in the fill soils ranging from 1 to 6 percent, with the highest organic matter content near soil boring B-05. We observed the natural groundwater levels ranging from 10 to 17-1/2 feet during the drilling operations in borings B-01 through B-04 and at depths ranging from 9 to 11 feet in soil borings B-01 and B-02. We observed no measurable groundwater in the remaining borings.

The existing fill soils having organic matter contents of 4 percent, or more, should be considered unsuitable for the support of floor slabs and foundations; whereas, the existing fill soils having an organic matter content of less than 4 percent should be considered unsuitable for the support of foundations and marginally suitable for the support of floor slabs. Provided the risk of floor slab settlement can be tolerated, the existing fill soils having organic matter contents of less than 4 percent may remain in place provided they pass the proof-compaction operations described in the Site Preparation section of this report.

We recommend foundations for the proposed structure consist of shallow spread and/or strip footings designed to extend through the upper fill soils and bear within the native loose to medium compact granular soils. Foundations bearing within the native loose to medium compact granular soils or on engineered fill placed atop the native loose to medium compact granular soils may be designed using a net allowable soil bearing pressure of 2,000 psf. To achieve a change in the level of a strip footing, the footing should be gradually stepped at a grade no steeper than two units horizontal to one unit vertical.

Given the predominantly loose granular materials, we recommend the foundation contractor come to the site prepared to over excavate and form foundations extending through the existing native granular soils or granular engineered fill placed throughout the site. The sides of the foundation excavations must be straight and vertical.

Do not consider this summary separate from the entire text of this report, with all the conclusions and qualifications mentioned herein. Details of our analysis and recommendations are discussed in the following sections and in the Appendix of this report.



PROJECT DESCRIPTION

The proposed Feldman Kia of Novi will be constructed within a vacant lot located at the southwest corner of Joseph Drive and Grand River Avenue. The lot was formerly the home of Glenda’s Garden Center; however, the former buildings have recently been demolished to make way for a new showroom. The showroom will be constructed toward the west of the site and will have a footprint of approximately 19,000 square feet.

We understand the proposed building will be constructed having a finished floor elevation of approximately 879.70 feet in an area where the existing site grades range from 876 to 878 feet. New pavements will be constructed surrounding the building and will extend eastward toward the property limits on the east of the site. Due to the increase in collected stormwater due to the new impervious areas, consideration is being given to expanding the existing stormwater basin at the south of the site and/or constructing an underground storage chamber. We understand a trash enclosure, underground utilities, and pavement will also be constructed as part of the project.

Our understanding of the proposed development is based on the drawing titled “Soil Borings & Infiltration Testing Plan” dated January 26, 2024 by Alpine Engineering, Inc., our conversations, and our experience with similar projects. Limited information beyond the location and finished slab elevation for the project was available to us at the time of this report; however, considering the proposed building will be a showroom, we anticipate the proposed foundations will be moderately loaded. Once the finalized plans and specifications for the project become available, G2 Consulting Group, LLC (G2) should be notified so that we can review and modify the recommendations in this report, if necessary.

SCOPE OF SERVICES

The field operations, laboratory testing, and engineering report preparation were performed under the direction and supervision of a licensed professional engineer in the State of Michigan. We performed our services according to generally accepted standards and procedures in the practice of geotechnical engineering in this area. Our scope of services for this project is as follow:

1. We drilled a total of twenty (20) soil borings extending to variable depths. We drilled soil borings B-01 through B-04, IN-01 through IN-06, and IN-03A through IN-04A in the footprint of the proposed stormwater management structures. We drilled the remaining soil borings, B-05 through B-12, in the footprint of the proposed building. We present a summary of the soil borings, the ground surface elevation at the borings, and respective target depths in the following tables:

| Soil Boring ID | Ground Surface Elevation (feet) | Target Depth (feet) |
|----------------|---------------------------------|---------------------|
| B-01 | 868.4 | 25 |
| B-02 | 872.7 | 30 |
| B-03 | 876 | 30 |
| B-04 | 877.4 | 30 |
| B-05 | 875.4 | 15 |
| B-06 | 876.5 | 15 |
| B-07 | 876.4 | 15 |
| B-08 | 876.2 | 15 |
| B-09 | 876.8 | 15 |
| B-10 | 878.2 | 15 |

| Soil Boring ID | Ground Surface Elevation (feet) | Target Depth (feet) |
|----------------|---------------------------------|---------------------|
| B-11 | 878.6 | 15 |
| B-12 | 875 | 15 |
| IN-01 | 868.6 | 4-1/2 |
| IN-02 | 872 | 6 |
| IN-03 | 875.9 | 10 |
| IN-03A | 875.9 | 5 |
| IN-04 | 877.6 | 10 |
| IN-04A | 877.6 | 6 |
| IN-05 | 875.9 | 9 |
| IN-06 | 877.2 | 9-1/4 |



2. We performed laboratory testing on representative samples obtained from the soil borings. Due to the granular nature of the soils encountered, we performed a limited suite of testing including visual-engineering classification, grainsize distribution determinations, and organic matter content testing.
3. We prepared this engineering report which includes our recommendations related to subgrade preparation, soil bearing capacity, estimated settlement, pavement design and construction considerations as they relate to the project.

FIELD OPERATIONS

Alpine Engineering, Inc., in conjunction with G2 Consulting Group, LLC (G2), selected the number, depth, and location of the soil borings. We estimated the field position of the soil borings presented on the drawing titled “Soil Borings & Infiltration Testing Plan – Feldman Kia of Novi” dated January 26, 2024 by Alpine Engineering, Inc, by overlaying the scaled site plan on aerial imagery. In our overlaying process, we fit the scaled site plan to fixed reference points at the ground level and ultimately assigned latitude and longitude to the borings. We used a hand-held GPS device to field locate the latitude and longitude of the test locations. We have assigned ground surface elevations to the borings based on topographical information presented in the above drawing. If you would like more accurate positional information at the boring locations, we recommend the as-drilled locations be determined using conventional surveying techniques.

The soil borings were drilled by Strata Drilling, Inc. using track-mounted rotary drilling rig. The driller used 2-1/4 inch inside diameter hollow-stem augers to advance the soil borings to the desired depths. Within each soil boring, we obtained soil samples at regular 2-1/2-foot intervals within the upper 10 feet and at intervals of 5-feet thereafter extending to the explored depth. We obtained the soil samples in general accordance with the Standard Penetration Test (SPT) method (ASTM D1586) which involves driving a 2-inch diameter split-spoon sample into the ground with a 140-pound hammer falling 30 inches. The sampler is generally driven three successive 6-inch increments, with the number of blows for each increment recorded. The number of blows required to advance the sampler the last 12 inches is termed the Standard Penetration Resistance (N or N-Value). Blow counts for each six-inch increment and resulting N-values are presented on the individual soil boring logs at the depths they were determined.

At some of the soil boring locations, we offset from the original soil boring location and drilled without sampling to a point approximately 1-1/2 feet above the target infiltration test elevation. We obtained samples of the soils at these depths using SPT sampling techniques. We continued to advance the split-spoon sampler to a depth where we were confidently out of the soils above the test layer. After achieving the target test elevation and verifying soils suitable for infiltration test were present, we installed a modified version of the encased falling head permeameter into the resulting excavation and subsequently performed infiltration tests. We performed infiltration tests in general accordance with the “Oakland County Water Resources Commissioner – Stormwater Engineering Design Standards – Requirements, Rules, and Design Criteria for Stormwater Management”. We present a summary of the infiltration test locations and their parent soil borings in the following table:

| Infiltration Test Soil Boring ID | Parent Soil Boring ID |
|---|------------------------------|
| IN-01 | B-01 |
| IN-02 | B-02 |
| IN-03A | IN-03 |
| IN-04A | IN-04 |
| IN-05 | B-03 |
| IN-06 | B-04 |

The driller placed the obtained samples in sealed containers and transported the samples to our Ann



Arbor laboratory for testing and classification. During the drilling operations, a representative of the drilling crew maintained a log of the encountered subsurface soil and groundwater conditions to be used in conjunction with our analysis of the site. The final soil boring logs are based on the field and laboratory soil classification and testing. Upon completion of the drilling operations, the boreholes were backfilled with excavated soil.

LABORATORY TESTING

We subjected representative soil samples to laboratory testing to determine soil parameters pertinent to foundation design, pavement design, infiltration capacity, and site preparation. An experienced geotechnical engineer classified the soil samples in general accordance with the G2 General Notes Terminology. We performed laboratory testing on representative samples in accordance with the following test methods:

- ASTM D2488 – Visual-Manual Soil Classification
- ASTM D2974 – Organic Matter Content (Loss-on-Ignition)
- ASTM D422 – Sieve Analysis (Coarse-Fraction Only)

We present the results of our laboratory testing program and soil classifications on the individual soil boring logs at the depths we took the samples. We will hold the soil samples from the current investigation for a period of 60 days following the issuance of this report after which they will be discarded. If you would like to have the soil samples, please let us know.

SITE CONDITIONS

The proposed Feldman of Kia development will be constructed near a former gardening center that has since been demolished. At the time of our site visit, we observed existing pavements and hardscapes have been abandoned in place and an existing retaining wall near the crest of the existing basin that appears to be beyond its serviceable life.

The existing site grades are the highest near the bounding roads and slope downward toward the central portion of the development area at elevations ranging from 876 to 878 feet. The site remains relatively flat within most of the proposed development area; however, the grades drop steeply at the southern perimeter of the site where the existing basin is at a depth of approximately 10 feet relative to the surrounding grades.

Based on our review of historical aerial imagery available on the Oakland County Michigan Property Gateway, we surmise that the site has been historically used as farm field prior to the construction of the nursery. The basin at the south of the site appears to have been excavated around the time of the construction of the original nursery building.

The site is located on the south side of Grand River Avenue approximately halfway between Meadowbrook Road to the west and Haggerty Road to the east. The site is bounded by residential properties to the west and south and by Joseph Drive to the east.

SOIL AND GROUNDWATER CONDITIONS

Building Borings (B-05 through B-12)

Approximately 2 inches of bituminous concrete is present at the ground surface of soil boring B-12 and is underlain by an aggregate base consisting of gravelly sand having a thickness of 4 inches. Fill consisting of clayey sand or silty sand is present beneath the aggregate base in B-12 and at the ground surface of the remaining borings extending to depths ranging from 4 to 6 feet. Native granular soils consisting of gravelly sand, sand, and silty sand are present beneath the fill soils extending to their explored depths.



The existing fill soils are generally very loose to medium compact having Standard Penetration Test (SPT) N-values ranging from 0 to 11 blows per foot and organic matter contents ranging from 1 to 6 percent. The native granular soils are generally loose to medium compact having SPT N-values ranging from 5 to 26 blows per foot.

Infiltration Borings (B-01 through B-04 and IN-03 through IN-06)

Approximately 12 to 14 inches of topsoil are present at the ground surface of soil borings B-01 and B-02. Fill consisting of silty sand and clayey sand is present beneath the topsoil in B-01 and at the ground surface of B-03, B-04, and IN-03 through IN-06 extending to depths ranging from 3-1/2 to 8-1/2 feet below the existing grades. Native granular soils consisting of clayey sand, sand, and gravelly sand are present beneath the topsoil in B-02 and the fill in the remaining borings extending to the explored depths.

The existing fill soils are generally loose to medium compact having SPT N-values ranging from 6 to 17 bpf and organic matter contents ranging from 1 to 2 percent. The underlying native granular soils are generally loose to medium compact having SPT N-values ranging from 10 to 19 blows per foot.

We performed infiltration testing in soil borings offset from the original soil boring locations and drilled without sampling extending to a point 1-1/2 feet above the target test depth. At this point, we obtained split spoon samples to confirm the anticipated soil type prior to setting up for infiltration testing. We present a summary of the soil descriptions of the soils encountered at the test elevation in the Infiltration Recommendations section of this report.

Groundwater Conditions

We observed the natural groundwater levels both during and upon completion of the drilling operations. During the drilling operations we observed the natural groundwater level at depths ranging from 10 to 17-1/2 feet within soil borings B-01 through B-04. Upon completion of the drilling operations, we observed the natural groundwater level at a depth of 9 feet in soil boring B-01 and at a depth of 11 feet in soil boring B-02. We did not observe measurable groundwater within the remaining borings either during or upon completion of the drilling operations. We present a summary of the observed groundwater levels, their depths, and the estimated elevation of the natural groundwater level in the following table:

| Soil Boring ID | Ground Surface Elevation (feet) | Groundwater Depth (During Drilling) (feet) | Groundwater Depth (Upon Completion) (feet) | Groundwater Elevation (During Drilling) (feet) | Groundwater Elevation (Upon Completion) (feet) |
|-----------------------|--|---|---|---|---|
| B-01 | 868.4 | 10 | 9 | 858.4 | 859.4 |
| B-02 | 872.7 | 13 | 11 | 859.7 | 861.7 |
| B-03 | 872 | 17 | --- | 855 | --- |
| B-04 | 877.4 | 17-1/2 | --- | 859.9 | --- |

We made our observations of the natural groundwater levels during a period of uncharacteristically warm weather during the winter. Fluctuations in perched and long-term groundwater levels should be anticipated due to seasonal variations and following periods of prolonged precipitation.



General

The stratification depths shown on the soil boring logs represent the soil conditions at the boring locations. Variations will occur away from the boring locations. Additionally, the stratigraphic lines represent the approximate boundary between soil types. The transition may be more gradual than what is shown. We have prepared the soil boring logs based on the field logs of encountered soil conditions supplemented by laboratory classification and testing.

The Soil Boring Location Plan, Plate No. 1, the Soil Boring Logs, Figure Nos. 1 through 20, and the graphical results of our grainsize distribution determinations, Figure No. 21, are presented in the Appendix. The soil profiles described above are generalized descriptions of the soil conditions at the test locations. General Notes Terminology defining the nomenclature on the soil boring logs and elsewhere in this report is presented on Figure No. 9.

INFILTRATION CONSIDERATIONS

The table below provides the results of our observations and testing during the soil boring operations:

| Infiltration Location No. | Ground Surface Elevation ¹ (ft) | Ground Water Elevation (ft) ² | Test Elevation (ft) | Soil Type (USCS) ² | Observed Infiltration Rate (iph) |
|---------------------------|--|--|---------------------|-------------------------------|----------------------------------|
| IN-01 | 868.6 | 858.4 | 864.1 | Brown Sand (SP) | 2.3 |
| IN-02 | 872.0 | 861.7 | 866.0 | Brown Sand (SP) | 6.8 |
| IN-03A | 875.9 | --- | 870.9 | Brown Sand (SP) | 15.3 |
| IN-04A | 877.6 | --- | 871.6 | Brown Sand (SP) | 13.8 |
| IN-05 | 875.9 | 855 | 867.7 | Brown Sand (SP) | 4.5 |
| IN-06 | 877.2 | 859.9 | 868.0 | Brown Sand (SP) | 4.8 |
| Notes: | 1. Elevations based on interpolation (see Field Operations section of this report). 2. Determined from adjacent boring. Represent highest observed elevation. 3. Description in general accordance with Visual-Manual Unified Soil Classification System (ASTM D2488). | | | | |

4.6
 BASIN
 TRENCH
 STORM TECH

Variations in the observed infiltration rate can be attributed to variations in the overall grainsize distribution of the soil layer and the relative compactness of the soil layer. The infiltration rates we present in this report are based on the observed infiltration rates observed at the test locations. We do not incorporate a factor of safety in the observed infiltration rates. We recommend the designer of the proposed infiltration structures incorporate a factor of safety based on their experience with the design and construction of infiltration structures. We present logs of the encased falling head infiltration test results as Figure Nos. 22 through 27 in the Appendix.

SITE PREPARATION RECOMMENDATIONS

We understand the proposed building will be constructed having a finished floor elevation of 879.70 feet in an area where the existing site grades range from 876 to 878 feet. The existing fill soils have organic matter contents ranging from 1 to 6 percent. The existing fill soils having organic matter contents of 4 percent, or more, should be considered unsuitable for the support of floor slabs and foundations; whereas, the existing fill soils having an organic matter content of less than 4 percent should be considered unsuitable for the support of foundations and marginally suitable for the support of floor

slabs. Provided the risk of floor slab settlement can be tolerated, the existing fill soils having organic matter contents of less than 4 percent may remain in place provided they pass the proof-compaction operations described later in this section of the report.

Based on the proposed slab elevation, we anticipate the earthwork operations will including stripping the existing topsoil, trees, and abandoned pavements, undercutting the existing organic soils near soil boring B-05, proof-compacting the exposed subgrade, improving the subgrade soils as necessary, placing and compacting engineered fill to achieve the proposed slab elevation, excavating for foundations, and preparing the site for floor slab support. In general, we recommend all earthwork operations be performed in accordance with comprehensive specifications and be properly monitored in the field by qualified personnel under the direction of a licensed professional engineer.

At the start of the earthwork operations, all existing topsoil, vegetation, abandoned utilities, or otherwise unsuitable soils should be removed from the proposed development area. The base of resulting excavations should be thoroughly proof-compacted prior to their receipt of engineered fill. Any abandoned utilities around the new structures should be removed and replaced with engineered fill. Utilities outside the proposed structure should be completely filled with cementitious grout.

Following the removal of the pavements, topsoil, trees, vegetation, abandoned utilities, and otherwise unsuitable soils, we anticipate the exposed subgrade will consist of existing granular fill soils and/or native granular soils. Exposed granular soils should be thoroughly proof-compacted using a 15-ton vibratory roller with its vibration setting set to the maximum amplitude. We recommend a minimum of 10 passes in two perpendicular directions for the proof-compaction operations. During the proof-compacting operations, we recommend the exposed subgrade be visually evaluated for stability prior to the receipt of engineered fill. Unstable or otherwise unsuitable soils should be improved with additional compaction or be undercut to expose stable soils. Resulting excavations should be backfilled with engineered fill placed and compacted in controlled lifts.

Engineered fill should be free of organic matter, frozen soil, clay clods, or other harmful material. The fill should be placed in uniform horizontal layers, having a consistent soil type, not more than 9 inches in loose thickness. The engineered fill should be compacted to achieve a density of at least 95 percent of the maximum dry density as determined by the Modified Proctor compaction test (ASTM D1557). All engineered fill material should be placed and compacted at approximately the optimum moisture content. We recommend in-situ density tests be performed on applicable engineered fill soils to verify they have been placed at the optimal moisture and compacted to their density in general accordance with ASTM D6938. Engineered fill placed on slopes should be keyed into the slope compacted in loose lifts not to exceed 9 inches.

To economically conduct earthwork operations at the site, engineered fill, adhering to the above requirements, should consist of low plasticity clays or well-graded aggregates. Low plasticity clays, having a plasticity index less than 20 percent, should be placed within +3 or -1 percent of the optimum moisture content as determined by the Modified Proctor Test (ASTM D1557). For well-graded aggregates, such as MDOT Class II Sand, we recommend the engineered fill be placed at ± 2 percent of the optimum moisture content as determined by ASTM D1557. In no case should high-plasticity clays (fat clays) be used as engineered fill.

We recommend the use of free-draining granular soils, such as MDOT Class II sand, within utility trenches, and during earthwork operations conducted in wintry months. We recommend the use of engineered fill with a sufficient amount of fines (material passing the No. 200 sieve) in order to facilitate trenching and excavation techniques for strip and spread footing foundations.



FOUNDATION RECOMMENDATIONS

We recommend foundations for the proposed structure consist of shallow spread and/or strip footings designed to extend through the upper fill soils and bear within the native loose to medium compact granular soils. Foundations bearing within the native loose to medium compact granular soils or on engineered fill placed atop the native loose to medium compact granular soils may be designed using a net allowable soil bearing pressure of 2,000 psf.

Exterior foundations must bear at a minimum depth of 3-1/2 feet below finished grade for protection against frost heave. Interior footings may bear at shallower depths provided suitable bearing materials are available for support and provided the foundations soils are continuously protected from frost penetration during construction. Continuous wall or strip footings should be at least 16 inches in width and isolated spread footings should be at least 36 inches in their least dimension. To achieve a change in the level of a strip footing, the footing should be gradually stepped at a grade no steeper than two units horizontal to one unit vertical. If required to construct foundations at different levels, adjacent spread foundations should be designed and constructed so the least lateral distance between the foundations is equivalent to or more than the difference in their bearing levels. We recommend G2 be on site during construction to observe the foundations excavations and to confirm the bearing soils.

If the recommendations outlined in this report are adhered to, total and differential settlements for the completed structure should be within 1 inch and 1/2 inch, respectively. We expect settlements of these magnitudes are within tolerable limits for the type of structures proposed. We recommend all foundations be suitably reinforced to minimize the effects of differential settlements associated with local variations in subsoil conditions.

FLOOR SLAB RECOMMENDATIONS

We anticipate the existing fill soils having elevated organic matter contents will be entirely removed from within the footprint of the proposed building prior to raising grades at the site. Provided the remaining soils having organic matter contents of less than 4 percent pass the proof-compaction operations, the existing fill soils may remain in place.

Following the satisfactory completion of the subgrade preparation recommendations, we anticipate the resulting subgrade will consist of existing granular fill soils or engineered fill. A subgrade modulus (k) of 90 pounds per cubic inch (pci) may be used in the design of floor slabs supported on these soils.

We recommend at least 4 inches of clean coarse sand or crushed stone be placed between the subgrade and the bottom of the floor slab for use as a capillary break to reduce moisture transmission through the concrete floors and to reduce the potential for concrete curling. If moisture sensitive floor coverings are planned or if greater protection against vapor transmission is desired, a vapor barrier consisting of 10-mil plastic sheeting, or equivalent, may be placed on the sand layer beneath floor slabs. However, additional floor slab curing techniques will be required especially if floor slab placement occurs in the winter months to prevent floor slab curling. The floor slab should be isolated from the foundation system to allow for independent movement.

PAVEMENT RECOMMENDATIONS

We anticipate the proposed pavements will generally support passenger vehicle traffic, daily delivery traffic, weekly car delivery traffic, snow removal equipment, and infrequent emergency vehicle traffic. Information about the anticipated traffic volumes was not available to us at the time of this report. In general, we recommend two pavement design cross-sections be considered for the project: a standard-duty pavement where passenger vehicles traffic is planned and a heavy-duty pavements where truck traffic is planned.

We anticipate the proposed pavements at the site will be supported by the existing granular fill soils or



engineered fill. Based on the anticipated subgrade soils, we have assigned an effective subgrade resilient modulus of 10,000 psi.

We have analyzed the proposed pavement cross sections in accordance with the “1993 AASHTO Guide for Design of Pavement Structures”. For the pavement design, we have assumed a serviceability loss of 2.0, a standard of deviation of 0.49, and a reliability of 0.90. The proposed pavement design cross sections are presented below:

| Standard Duty Bituminous Concrete Pavement Section | | | |
|---|--------------------------------|-------------------------------|--------------------------|
| Material Type | Material Thickness (in) | Structural Coefficient | Structural Number |
| MDOT 5EML | 1-1/2 | 0.42 | 0.63 |
| MDOT 3C | 2 | 0.42 | 0.84 |
| MDOT 21AA Limestone | 8 | 0.14 | 1.12 |
| Total SN → | | | 2.59 |

| Heavy Duty Bituminous Concrete Pavement Section | | | |
|--|--------------------------------|-------------------------------|--------------------------|
| Material Type | Material Thickness (in) | Structural Coefficient | Structural Number |
| MDOT 5EML | 1-1/2 | 0.42 | 0.63 |
| MDOT 3C | 3 | 0.42 | 1.26 |
| MDOT 21AA Limestone | 10 | 0.14 | 1.40 |
| Total SN → | | | 3.29 |

Our analyses indicate the proposed Standard Duty Bituminous Concrete can service a total of approximately 270,000 equivalent single-axle loads (ESALs) over a 20-year design life, corresponding to approximately 21 truck passes per day. The Heavy Duty Bituminous Concrete can service a total of approximately 760,000 ESALs over a 20-year design life, corresponding to approximately 52 truck passes per day. If actual traffic volume information becomes available, G2 Consulting Group, LLC, should be notified so we can reevaluate our analyses of the proposed pavement section.

Large front-loading refuse trucks can impose significant concentrated wheel loads within trash dumpster pick-up areas. This type of loading can result in rutting of asphalt pavements and ultimately in failure. Therefore, we recommend non-reinforced concrete pavement at least 8 inches in thickness be used in these areas. The concrete pad should be large enough to support the entire refuse truck during pick-up operations.

All pavement materials are specified within the 2020 Standard Specifications for Construction from the Michigan Department of Transportation. The aggregate materials for the subbase and concrete are described in Section 902. The Portland cement concrete pavement materials are described in Section 601. The bituminous pavement materials are described in Section 501 and can be assigned a structural coefficient number of 0.42.

We recommend regular timely maintenance be performed on the bituminous pavements to reduce the potential deterioration associated with moisture infiltration through surface cracks. The owner should be prepared to seal the cracks with a hot-applied elastic crack filler as soon as possible after cracking develops and as often as necessary to block the passage of water to the subgrade soils.

CONSTRUCTION CONSIDERATIONS

We anticipate utility excavations extending to depths ranging from 5 to 8 feet relative to the existing grades and foundation excavations extending to depths of 3-1/2 feet below the proposed finished grades. Given the predominantly loose granular materials, we recommend the foundation contractor



come to the site prepared to over excavate and form foundations extending through the existing native granular soils or granular engineered fill placed throughout the site. The sides of the foundation excavations must be straight and vertical. If earth-formed footings are attempted, we recommend foundation excavation and concrete placement operations be conducted on the same day to minimize potential for cave-ins or surface run-off into the open excavations.

All excavations must be safely shored or sloped in accordance with MI-OSHA requirements. If material is stored or equipment is operated near an excavation, lower angle slopes or stronger shoring must be used to resist the extra pressure due to the superimposed loads. Care should be exercised when excavating near existing roadways or utilities to avoid undermining.

We recommend maximum slope inclinations of 2 horizontal unit to 1 vertical unit (2H:1V) within the very loose to loose granular soils and 1-1/2H:1V within the medium compact to compact granular soils for temporary excavations extending below a depth of 5 feet. Where seepage from excavation cuts is observed, the slopes will need to be flattened sufficiently to achieve stability, but in no case left steeper than 3H:1V at and below the seepage level. All excavations should be safely sheeted, shored, sloped, or braced in accordance with MI-OSHA requirements. If material is stored or equipment is operated near an excavation, lower angle slopes or stronger shoring must be used to resist the extra pressure due to the superimposed loads.

GENERAL COMMENTS

We have formulated the evaluations and recommendations presented in this report relative to site preparation and foundations based on data provided to us relating to the location, type, and grade for the proposed site. Any significant change in this data should be brought to our attention for review and evaluation with respect to the prevailing subsurface conditions. Furthermore, if changes occur in the design, location, or concept of the project, the conclusions and recommendations contained in this report are not valid unless G2 Consulting Group, LLC reviews the changes. G2 Consulting Group, LLC will then confirm the recommendations presented herein or make changes in writing.

The scope of the present investigation was limited to evaluation of subsurface conditions for the support of proposed building and other related aspects of the development. No chemical, environmental or hydrogeological testing or analyses were included in the scope of this investigation.

We base the analyses and recommendations submitted in this report upon the data from the soil borings at the approximate locations depicted on the Soil Boring Location Plan, Plate No.1, in the Appendix. This report does not reflect variations that may occur away from the actual boring locations. The nature and extent of any such variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.

Accordingly, we recommend G2 Consulting Group, LLC observe all geotechnical related work, including foundation construction, subgrade preparation, and engineered fill placement. G2 Consulting Group, LLC will perform the appropriate testing to confirm the geotechnical conditions given in the report are found during construction.

APPENDIX

Soil Boring Location Plan

Plate No. 1

Soil Boring Logs

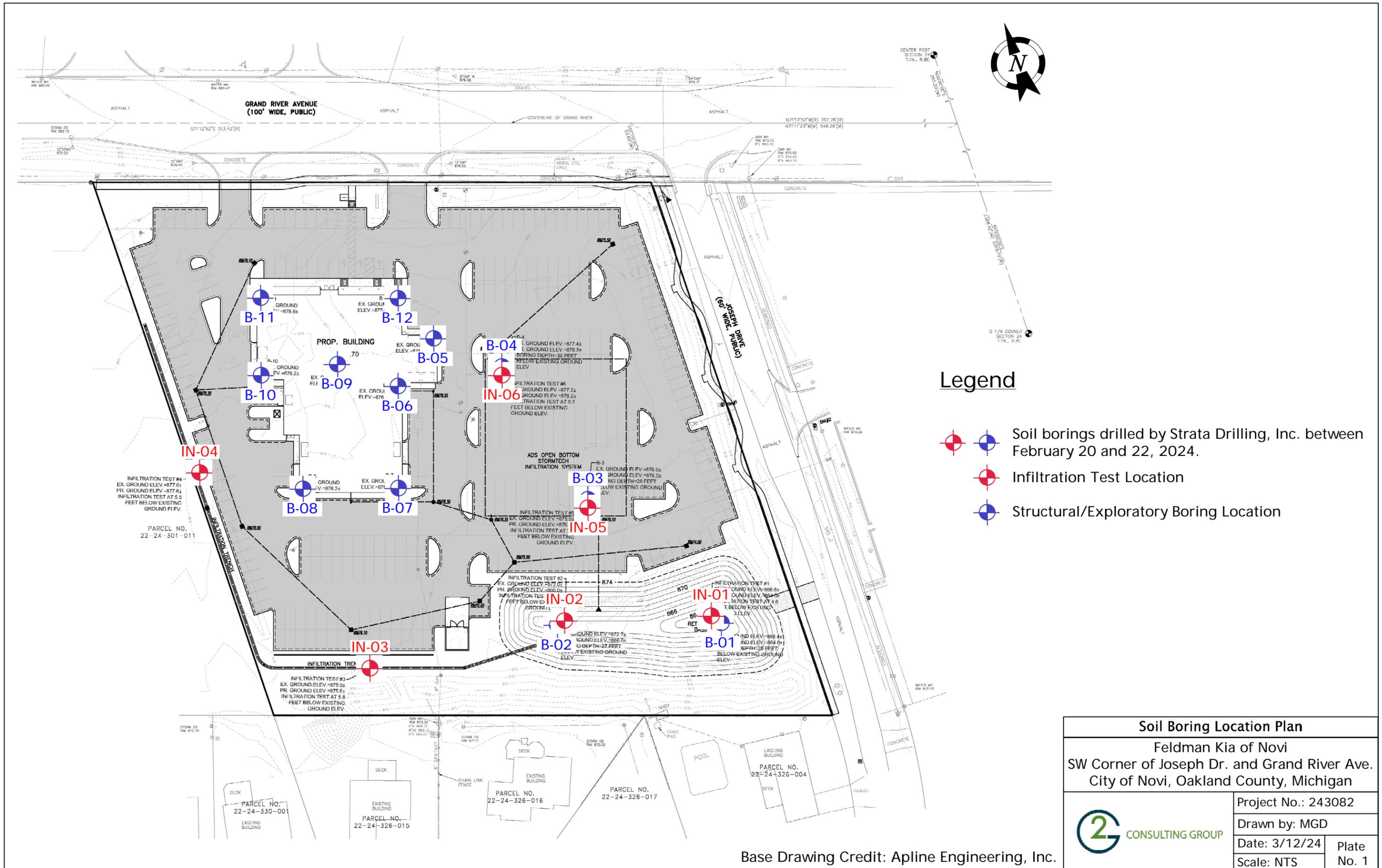
Figure No. 1 through 20

Grainsize Distribution Results

Figure No. 21

G2 General Notes Terminology

Figure No. 22



Legend

-   Soil borings drilled by Strata Drilling, Inc. between February 20 and 22, 2024.
-  Infiltration Test Location
-  Structural/Exploratory Boring Location

| | |
|---|---------------------|
| Soil Boring Location Plan | |
| Feldman Kia of Novi SW Corner of Joseph Dr. and Grand River Ave. City of Novi, Oakland County, Michigan | |
|  | Project No.: 243082 |
| | Drawn by: MGD |
| | Date: 3/12/24 |
| Scale: NTS | Plate No. 1 |

Base Drawing Credit: Apline Engineering, Inc.

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47330271° Longitude: -83.44746217°



Soil Boring No. B-01
G2 CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|---|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 868.4 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | Topsoil: Dark Brown Silty Sand with trace clay and gravel (12 inches) | 1.0 | | 3 | | | | |
| | | Fill: Loose Brown Silty Sand with trace gravel | 3.5 | S-01 | 3 | 6 | | | |
| 863.4 | | Loose to Medium Compact Brown Sand with trace silt and gravel | 5 | S-02 | 5 | 10 | | | |
| | | | | | | | | | |
| 858.4 | | Medium Compact Brown Sand with trace silt and gravel | 10 | S-04 | 7 | 16 | | | |
| | | | | | | | | | |
| 853.4 | | Medium Compact Brown Sand with trace silt and gravel | 15 | S-05 | 6 | 11 | | | |
| | | | | | | | | | |
| 848.4 | | Medium Compact Brown Sand with trace silt and gravel | 20 | S-06 | 7 | 13 | | | |
| | | | | | | | | | |
| 843.4 | | End of Boring @ 25 ft | 25 | S-07 | 6 | 11 | | | |
| | | | | | | | | | |
| 838.4 | | | 30 | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 25 ft
 Drilling Date: February 20, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 10 feet during drilling; 9 feet upon completion

Notes:
 Borehole collapsed at 9 ft after auger removal

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Figure No. 1

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47332407° Longitude: -83.44748616°



Soil Boring No. IN-01

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|---|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 868.6 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | (Profile Drilled to 3 feet) | | | | | | | |
| | | 3.0 Fill: Brown Silty Sand with trace gravel | | | 3 | | | | |
| | | 3.5 Medium Compact Brown Sand with trace silt and gravel (Observed Infiltration Rate = 2.3 iph) | | S-01 | 6 | 12 | | | |
| 863.6 | | 4.5 End of Boring @ 4.5 ft | 5 | | | | | | |
| | | | | | | | | | |
| 858.6 | | | 10 | | | | | | |
| | | | | | | | | | |
| 853.6 | | | 15 | | | | | | |
| | | | | | | | | | |
| 848.6 | | | 20 | | | | | | |
| | | | | | | | | | |
| 843.6 | | | 25 | | | | | | |
| | | | | | | | | | |
| 838.6 | | | 30 | | | | | | |

Total Depth: 4.5 ft
 Drilling Date: February 20, 2024
 Inspector: Z. Lilly
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 Dry during and upon completion

Notes:
 Offset from soil boring B-01

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Figure No. 2

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47341144° Longitude: -83.44795737°



Soil Boring No. B-02
G2 CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|---|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 872.7 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | Topsoil: Dark Brown Sand with trace gravel (14 inches) | 1.2 | | 3 5 5 | 10 | | | |
| 867.7 | | | 5 | S-02 | 3 4 5 | 9 | | | |
| | | Loose to Medium Compact Brown Sand with trace silt and gravel | | | 6 8 9 | 17 | | | |
| 862.7 | | | 10 | S-04 | 6 8 10 | 18 | | | |
| | | | | | | | | | |
| 857.7 | | | 15 | S-05 | 4 6 7 | 13 | | | |
| | | | | | | | | | |
| 852.7 | | Medium Compact Brown Sand with trace silt and gravel | 20 | S-06 | 3 5 7 | 12 | | | |
| | | | | | | | | | |
| 847.7 | | | 25 | S-07 | 4 5 7 | 12 | | | |
| | | | | | | | | | |
| | | | 27.0 | | | | | | |
| 842.7 | | Medium Compact Gravelly Sand with trace silt | 30 | S-08 | 6 8 8 | 16 | | | |
| | | End of Boring @ 30 ft | | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 30 ft
 Drilling Date: February 20, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 13 feet during drilling; 11 feet upon completion

Notes:
 Borehole collapsed at 11 ft after auger removal

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Figure No. 3

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47341352° Longitude: -83.4479302°



Soil Boring No. IN-02
G2 CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|---|-----------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 872.0 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | (Profile Drilled to 4-1/2 feet) | | | | | | | |
| 867.0 | | Loose Light Brown Sand with trace silt and gravel (Observed Infiltration Rate = 6.8 iph) | 4.5 5 6.0 | S-01 | 4 5 4 | 9 | | | |
| | | End of Boring @ 6 ft | | | | | | | |
| 862.0 | | | 10 | | | | | | |
| 857.0 | | | 15 | | | | | | |
| 852.0 | | | 20 | | | | | | |
| 847.0 | | | 25 | | | | | | |
| 842.0 | | | 30 | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 6 ft
 Drilling Date: February 20, 2024
 Inspector: Z. Lilly
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 Dry during and upon completion

Notes:
 Offset from soil boring B-02

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Figure No. 4

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47366289° Longitude: -83.44775214°



Soil Boring No. B-03

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | | |
|--------------------|----------|--|--|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|--|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 876.0 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) | |
| 871.0 | | (Organic Matter Content = 1.8%) | | S-01 | 6 4 3 | 7 | | | | |
| | | Fill: Loose Brown Clayey Sand with trace gravel; intermixed organic matter | 5 | S-02 | 3 3 4 | 7 | | | | |
| | | (Organic Matter Content = 2.0%) | | | | | | | | |
| | | (Organic Matter Content = 1.3%) | 8.5 | | S-03 | 2 2 3 | 5 | | | |
| 866.0 | | | Medium Compact Sand with trace silt and gravel | 10 | S-04 | 6 8 9 | 17 | | | |
| 861.0 | | | | 15 | S-05 | 4 6 6 | 12 | | | |
| | | | | 17.0 | | | | | | |
| 856.0 | | | | | 20 | S-06 | 3 4 5 | 9 | | |
| 851.0 | | | Loose Brown Sand with trace silt and gravel | 25 | S-07 | 3 4 6 | 10 | | | |
| 846.0 | | | 30.0 | 30 | S-08 | 3 4 5 | 9 | | | |
| | | End of Boring @ 30 ft | | | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 30 ft
 Drilling Date: February 20, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 17 feet during drilling; dry upon completion

Notes:
 Borehole collapsed at 13 ft after auger removal

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Excavation Backfilling Procedure:
 Auger cuttings

Figure No. 5

Project Name: Feldman Kia of Novi

Project Location: SW Corner of Joseph Drive and Grand River Avenue
City of Novi, Oakland County, Michigan

G2 Project No. 243082

Latitude: 42.47364629° Longitude: -83.44775934°



Soil Boring No. IN-05

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|---|--|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 875.9 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| 870.9 | | (Profile Drilled to 6-1/2 feet) | 5 | | | | | | |
| | | | 6.5 | | 2 | | | | |
| |  | Fill: Loose Brown Silty Sand with trace gravel | | S-01 | 3 | 5 | | | |
| |  | Loose Brown Sand with trace silt and gravel | 8.3 | | 2 | | | | |
| 865.9 | | (Observed Infiltration Rate = 4.5 iph) | 9.0 | S-02 | 3 | --- | | | |
| | | End of Boring @ 9 ft | 10 | | | | | | |
| 860.9 | | | 15 | | | | | | |
| 855.9 | | | 20 | | | | | | |
| 850.9 | | | 25 | | | | | | |
| 845.9 | | | 30 | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 9 ft
Drilling Date: February 20, 2024
Inspector: Z. Lilly
Contractor: Strata Drilling, Inc.
Driller: B. Sienkiewicz

Water Level Observation:
Dry during and upon completion

Notes:
Offset from soil boring B-03

Excavation Backfilling Procedure:
Auger cuttings

Drilling Method:
2-1/4 inch inside diameter hollow-stem augers

Figure No. 6

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47401605° Longitude: -83.44788862°



Soil Boring No. B-04
G2 CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|---|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 877.4 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| 872.4 | | (Organic Matter Content = 2.1%) Fill: Loose to Medium Compact Dark Brown Silty Sand with trace gravel; intermixed debris and organic matter (Organic Matter Content = 1.2%) | 5 | S-01 | 6 8 9 | 17 | | | |
| | | | 5 | S-02 | 2 3 4 | 7 | | | |
| | | | 6.0 | S-03 | 4 8 10 | 18 | | | |
| 867.4 | | | 10 | S-04 | 3 5 7 | 12 | | | |
| 862.4 | | | 15 | S-05 | 6 8 10 | 18 | | | |
| 857.4 | | | 20 | S-06 | 8 9 10 | 19 | | | |
| 852.4 | | | 25 | S-07 | 4 5 7 | 12 | | | |
| 847.4 | | | 30.0 | 30 | S-08 | 7 7 10 | 17 | | |
| | | End of Boring @ 30 ft | | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 30 ft
 Drilling Date: February 20, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 17-1/2 feet during drilling; dry upon completion

Notes:
 Borehole collapsed at 13-1/2 ft after auger removal

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Figure No. 7

Project Name: Feldman Kia of Novi

Project Location: SW Corner of Joseph Drive and Grand River Avenue
City of Novi, Oakland County, Michigan

G2 Project No. 243082

Latitude: 42.47399881° Longitude: -83.44789565°



Soil Boring No. IN-06

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|--|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 877.2 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| 872.2 | | (Profile Drilled to 7-3/4 feet) | 5 | | | | | | |
| | | | 7.8 | | | | | | |
| 867.2 | | Medium Compact Brown Sand with trace silt and gravel (Observed Infiltration Rate = 4.8 iph) | 9.3 | S-01 | 5 8 8 | 16 | | | |
| | | End of Boring @ 9.3 ft | 10 | | | | | | |
| 862.2 | | | 15 | | | | | | |
| 857.2 | | | 20 | | | | | | |
| 852.2 | | | 25 | | | | | | |
| 847.2 | | | 30 | | | | | | |

Total Depth: 9.3 ft
 Drilling Date: February 20, 2024
 Inspector: Z. Lilly
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 Dry during and upon completion

Notes:
 Offset from soil boring B-04

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Figure No. 8

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.4741249° Longitude: -83.44806909°



Soil Boring No. B-05
CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|-------------------------|--|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 875.4 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | [Cross-hatched pattern] | Fill: Loose Dark Brown Clayey Sand with trace gravel; intermixed organic matter (Organic Matter Content = 5.8%) | 3.5 | S-01 | 3 2 4 | 6 | | | |
| 870.4 | | | 5 | | S-02 | | 1 1 WOH | --- | |
| | [Stippled pattern] | Medium Compact Brown Gravelly Sand with trace silt | 6.0 | S-03 | 6 10 16 | 26 | | | |
| | | | 8.5 | | | | | | |
| 865.4 | [Dotted pattern] | Medium Compact Brown Sand with trace silt and gravel | 10 | S-04 | 8 9 12 | 21 | | | |
| | | | 15.0 | | 15 | | S-05 | 6 9 9 | 18 |
| 860.4 | | End of Boring @ 15 ft | | | | | | | |
| 855.4 | | | 20 | | | | | | |
| 850.4 | | | 25 | | | | | | |
| 845.4 | | | 30 | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 15 ft
 Drilling Date: February 22, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

Water Level Observation:
 Dry during and upon completion

Notes:
 Borehole collapsed at 9 ft after auger removal

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Figure No. 9

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47404369° Longitude: -83.44821767°



Soil Boring No. B-06
G2 CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|-------------------------|---|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 876.5 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | [Cross-hatched pattern] | Fill: Medium Compact Dark Brown Silty Sand with trace gravel; intermixed organic matter (Organic Matter Content = 1.5%) | 3.5 | S-01 | 4 6 5 | 11 | | | |
| 871.5 | | | 5 | S-02 | 3 5 6 | 11 | | | |
| | [Dotted pattern] | Fill: Medium Compact Brown and Dark Brown Silty Sand with trace gravel; intermixed organic matter (Organic Matter Content = 1.5%) | 6.0 | | 8 9 10 | 19 | | | |
| 866.5 | | | 10 | S-03 | 8 8 8 | 16 | | | |
| | [Dotted pattern] | Medium Compact Brown Sand with trace silt and gravel | 15.0 | | 6 9 10 | 19 | | | |
| 861.5 | | | 15 | S-04 | 6 9 10 | 19 | | | |
| | | End of Boring @ 15 ft | | | | | | | |
| 856.5 | | | 20 | | | | | | |
| 851.5 | | | 25 | | | | | | |
| 846.5 | | | 30 | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 15 ft
 Drilling Date: February 22, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

Water Level Observation:
 Dry during and upon completion

Notes:
 Borehole collapsed at 10 ft after auger removal

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Excavation Backfilling Procedure:
 Auger cuttings

Figure No. 10

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47381719° Longitude: -83.44831015°



Soil Boring No. B-07

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|---|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 876.4 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | Brick Pavers | 0.2 | | | | | | |
| | | Fill: Very Loose to Loose Dark Brown and Brown Clayey Sand with trace gravel; intermixed organic matter (Organic Matter Content = 2.0%) | 4.8 | S-01 | 2 3 3 | 6 | | | |
| 871.4 | | | 5 | S-02 | 1 2 2 | 4 | | | |
| | | Loose to Medium Compact Brown Sand with trace silt and gravel | | S-03 | 2 4 7 | 11 | | | |
| 866.4 | | | 10 | S-04 | 3 3 3 | 6 | | | |
| 861.4 | | | 15.0 | 15 | S-05 | 6 8 10 | 18 | | |
| | | End of Boring @ 15 ft | | | | | | | |
| 856.4 | | | 20 | | | | | | |
| 851.4 | | | 25 | | | | | | |
| 846.4 | | | 30 | | | | | | |

Total Depth: 15 ft
 Drilling Date: February 22, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

Water Level Observation:
 Dry during and upon completion

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Figure No. 11

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47388063° Longitude: -83.44859723°



Soil Boring No. B-08
CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | | |
|--------------------|----------|---|------------|--|----------------|--------------------------|----------------------|-------------------|--------------------------|--|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 876.2 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) | |
| | | Fill: Loose Dark Brown Clayey Sand with trace gravel; intermixed organic matter (Organic Matter Content = 2.1%) | 4.0 | S-01 | 4 4 5 | 9 | | | | |
| 871.2 | | | 5 | S-02 | 3 5 7 | 12 | | | | |
| | | | | Medium Compact Brown Sand with trace silt and gravel | | S-03 | 5 7 9 | 16 | | |
| 866.2 | | | 10 | | S-04 | 3 5 7 | 12 | | | |
| | | | | Medium Compact Silty Sand with trace gravel | 13.5 | | 5 9 | | | |
| 861.2 | 15.0 | S-05 | 10 | | 19 | | | | | |
| | | End of Boring @ 15 ft | | | | | | | | |
| 856.2 | | | 20 | | | | | | | |
| 851.2 | | | 25 | | | | | | | |
| 846.2 | | | 30 | | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 15 ft
 Drilling Date: February 21, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

Water Level Observation:
 Dry during and upon completion

Notes:
 Borehole collapsed at 9 ft after auger removal

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Figure No. 12

Project Name: Feldman Kia of Novi

Project Location: SW Corner of Joseph Drive and Grand River Avenue
City of Novi, Oakland County, Michigan

G2 Project No. 243082

Latitude: 42.47413237° Longitude: -83.44837923°



Soil Boring No. B-09

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | | |
|--------------------|----------|---|------------|---|----------------|--------------------------|----------------------|-------------------|--------------------------|--|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 876.8 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) | |
| | | Fill: Loose Dark Brown Clayey Sand with trace gravel; intermixed organic matter (Organic Matter Content = 1.3%) | 4.0 | S-01 | 2 3 2 | 5 | | | | |
| 871.8 | | | 5 | S-02A | WOH 3 2 | | | | | |
| | | | | S-02B | | 5 | | | | |
| | | | 6.0 | Loose to Medium Compact Brown Sand with trace silt and gravel | | S-03 | 3 3 5 | 8 | | |
| 866.8 | | | 10 | | S-04 | 4 5 6 | 11 | | | |
| 861.8 | | | 15.0 | 15 | S-05 | 3 4 5 | 9 | | | |
| | | End of Boring @ 15 ft | | | | | | | | |
| 856.8 | | | | | | | | | | |
| 851.8 | | | | | | | | | | |
| 846.8 | | | | | | | | | | |

Total Depth: 15 ft
Drilling Date: February 21, 2024
Inspector: ---
Contractor: Strata Drilling, Inc.
Driller: J. Haynor

Water Level Observation:
Dry during and upon completion

Notes:
Borehole collapsed at 11 ft after auger removal

Excavation Backfilling Procedure:
Auger cuttings

Drilling Method:
2-1/4 inch inside diameter hollow-stem augers

Figure No. 13

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47415838° Longitude: -83.44862182°



Soil Boring No. B-10
G2 CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | | |
|--------------------|----------|---|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|--|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 878.2 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) | |
| 873.2 | | (Organic Matter Content = 2.6%) Fill: Loose Dark Brown Clayey Sand with trace gravel; intermixed organic matter (Organic Matter Content = 1.8%) | | S-01 | 3 3 4 | 7 | | | | |
| | | | 5 | S-02 | 3 3 3 | 6 | | | | |
| | | | 6.0 | | S-03 | 2 2 5 | 7 | | | |
| 868.2 | | | | 10 | S-04 | 4 5 7 | 12 | | | |
| | | | 13.5 | | | | | | | |
| 863.2 | | Loose to Medium Compact Brown Sand with trace silt and gravel | | | | | | | | |
| | | | 15.0 | | | | | | | |
| | | | 15 | S-05 | 5 7 9 | 16 | | | | |
| | | End of Boring @ 15 ft | | | | | | | | |
| 858.2 | | | 20 | | | | | | | |
| 853.2 | | | 25 | | | | | | | |
| 848.2 | | | 30 | | | | | | | |

Total Depth: 15 ft
 Drilling Date: February 21, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

Water Level Observation:
 Dry during and upon completion

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Figure No. 14

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47433004° Longitude: -83.44854985°



Soil Boring No. B-11

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|--|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 878.6 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| 873.6 | | Crushed Stone: Light Gray Gravelly Sand with trace silt | 2.0 | S-01 | 3 3 4 | 7 | | | |
| | | (Organic Matter Content = 1.6%) Fill: Loose Dark Brown and Brown Clayey Sand with trace gravel; intermixed organic matter (Organic Matter Content = 1.1%) | 5 | | S-02 | | | | |
| 868.6 | | Loose Brown Gravelly Sand with trace silt | 6.0 | S-03 | 4 4 5 | 9 | | | |
| | | | 8.5 | | S-04 | | | | |
| 863.6 | | Medium Compact Brown Sand with trace silt and gravel | 15.0 | S-05 | | 6 7 10 | 17 | | |
| | | End of Boring @ 15 ft | | | | | | | |
| 858.6 | | | 20 | | | | | | |
| 853.6 | | | 25 | | | | | | |
| 848.6 | | | 30 | | | | | | |

Total Depth: 15 ft
 Drilling Date: February 21, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

Water Level Observation:
 Dry during and upon completion

Notes:
 Borehole collapsed at 10 ft after auger removal

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Figure No. 15

Project Name: Feldman Kia of Novi

Project Location: SW Corner of Joseph Drive and Grand River Avenue
City of Novi, Oakland County, Michigan

G2 Project No. 243082

Latitude: 42.47423805° Longitude: -83.44813844°



Soil Boring No. B-12

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|--|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 875.0 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | Bituminous Pavement (2 inches) Aggregate Base: Dark Brown Gravelly Sand with trace silt (4 inches) (Organic Matter Content = 2.0%) Fill: Loose Brown Clayey Sand with trace gravel; intermixed organic matter | 0.2 0.5 | | | | | | |
| | | | 5 | S-01 | 4 3 4 | 7 | | | |
| 870.0 | | | | S-02 | 2 2 7 | 9 | | | |
| | | | 6.0 | | | | | | |
| | | Medium Compact Brown Sand with trace silt and gravel | | S-03 | 4 6 8 | 14 | | | |
| 865.0 | | | 10 | S-04 | 6 8 9 | 17 | | | |
| | | | | | | | | | |
| 860.0 | | | 15.0 | S-05 | 3 5 8 | 13 | | | |
| | | End of Boring @ 15 ft | | | | | | | |
| 855.0 | | | 20 | | | | | | |
| 850.0 | | | 25 | | | | | | |
| 845.0 | | | 30 | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 15 ft
Drilling Date: February 21, 2024
Inspector: ---
Contractor: Strata Drilling, Inc.
Driller: J. Haynor

Water Level Observation:
Dry during and upon completion

Notes:
Borehole collapsed at 9 ft after auger removal

Drilling Method:
2-1/4 inch inside diameter hollow-stem augers

Excavation Backfilling Procedure:
Auger cuttings

Figure No. 16

Project Name: Feldman Kia of Novi

Project Location: SW Corner of Joseph Drive and Grand River Avenue
City of Novi, Oakland County, Michigan

G2 Project No. 243082

Latitude: 42.47343951° Longitude: -83.44855781°



Soil Boring No. IN-03

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|--|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 875.9 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | Brick Pavers (3 inches) | 0.3 | | | | | | |
| | | Aggregate Base: Light Gray Gravelly Sand with trace silt | 0.5 | | | | | | |
| | | Buried Topsoil: Dark Brown Clayey Sand with trace gravel (Organic Matter Content = 2.0%) | 3.5 | S-01 | 6 8 6 | 14 | | | |
| 870.9 | | Medium Compact Brown Gravelly Sand with trace silt | 5 | S-02 | 7 8 9 | 17 | | | |
| | | | | S-03 | 8 10 11 | 21 | | | |
| 865.9 | | | 10.0 | 10 | S-04 | 5 5 8 | 13 | | |
| | | End of Boring @ 10 ft | | | | | | | |
| 860.9 | | | 15 | | | | | | |
| 855.9 | | | 20 | | | | | | |
| 850.9 | | | 25 | | | | | | |
| 845.9 | | | 30 | | | | | | |

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Total Depth: 10 ft
Drilling Date: February 21, 2024
Inspector: ---
Contractor: Strata Drilling, Inc.
Driller: J. Haynor

Water Level Observation:
Dry during and upon completion

Notes:
Offset 12 feet east of staked location
Borehole collapsed at 5 ft after auger removal

Drilling Method:
2-1/4 inch inside diameter hollow-stem augers

Excavation Backfilling Procedure:
Auger cuttings

Figure No. 17

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.47343951° Longitude: -83.44855781°



Soil Boring No. IN-03A

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|--|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 875.9 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | (Profile Drilled to 3 feet) (Refer to soil boring IN-03) | | | | | | | |
| | | | 3.0 | | 3 | | | | |
| 870.9 | | Loose Brown Sand with trace silt and gravel (Observed Infiltration Rate = 15.3 iph) | 5.0 | S-01 S-02 | 3 4 6 | 7 --- | | | |
| | | End of Boring @ 5 ft | | | | | | | |
| 865.9 | | | 10 | | | | | | |
| 860.9 | | | 15 | | | | | | |
| 855.9 | | | 20 | | | | | | |
| 850.9 | | | 25 | | | | | | |
| 845.9 | | | 30 | | | | | | |

Total Depth: 5 ft
 Drilling Date: February 21, 2024
 Inspector: Z. Lilly
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

Water Level Observation:
 Dry during and upon completion

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.4739851° Longitude: -83.44889392°



Soil Boring No. IN-04
G2 CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|---|------------|------------------|----------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 877.6 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | Fill: Compact Dark Grayish Brown Silty Sand with trace gravel (Organic Matter Content = 2.6%) | 3.5 | S-01 | 16 18 12 | 30 | | | |
| 872.6 | | Very Loose Brown Clayey Sand with trace gravel | 5 | S-02 | 3 2 2 | 4 | | | |
| | | Loose to Medium Compact Brown Sand with trace silt and gravel | 6.0 | S-03 | 2 3 6 | 9 | | | |
| 867.6 | | End of Boring @ 10 ft | 10.0 | S-04 | 4 5 6 | 11 | | | |
| | | | | | | | | | |
| 862.6 | | | 15 | | | | | | |
| | | | | | | | | | |
| 857.6 | | | 20 | | | | | | |
| | | | | | | | | | |
| 852.6 | | | 25 | | | | | | |
| | | | | | | | | | |
| 847.6 | | | 30 | | | | | | |

Total Depth: 10 ft
 Drilling Date: February 21, 2024
 Inspector: ---
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

Water Level Observation:
 Dry during and upon completion

Notes:
 Borehole collapsed at 5-1/2 ft after auger removal

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

Figure No. 19

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No. 243082
 Latitude: 42.4739851° Longitude: -83.44889392°



Soil Boring No. IN-04A

CONSULTING GROUP

| SUBSURFACE PROFILE | | | | SOIL SAMPLE DATA | | | | | |
|--------------------|----------|--|------------|------------------|------------------|--------------------------|----------------------|-------------------|--------------------------|
| ELEV. (ft) | PRO-FILE | GROUND SURFACE ELEVATION: 877.6 ft ± | DEPTH (ft) | SAMPLE TYPE-NO. | BLOWS/6-INCHES | STD. PEN. RESISTANCE (N) | MOISTURE CONTENT (%) | DRY DENSITY (PCF) | UNCONF. COMP. STR. (PSF) |
| | | (Profile Drilled to 4 feet) (Refer to soil boring IN-04) | | | | | | | |
| 872.6 | | Loose Brown Sand with trace silt and gravel (Observed Infiltration Rate = 13.8 iph) | 4.0 5 | S-01 S-02 | 4 4 5 3 | 9 --- | | | |
| | | End of Boring @ 6 ft | | | | | | | |
| 867.6 | | | 10 | | | | | | |
| 862.6 | | | 15 | | | | | | |
| 857.6 | | | 20 | | | | | | |
| 852.6 | | | 25 | | | | | | |
| 847.6 | | | 30 | | | | | | |

Total Depth: 6 ft
 Drilling Date: February 21, 2024
 Inspector: Z. Lilly
 Contractor: Strata Drilling, Inc.
 Driller: J. Haynor

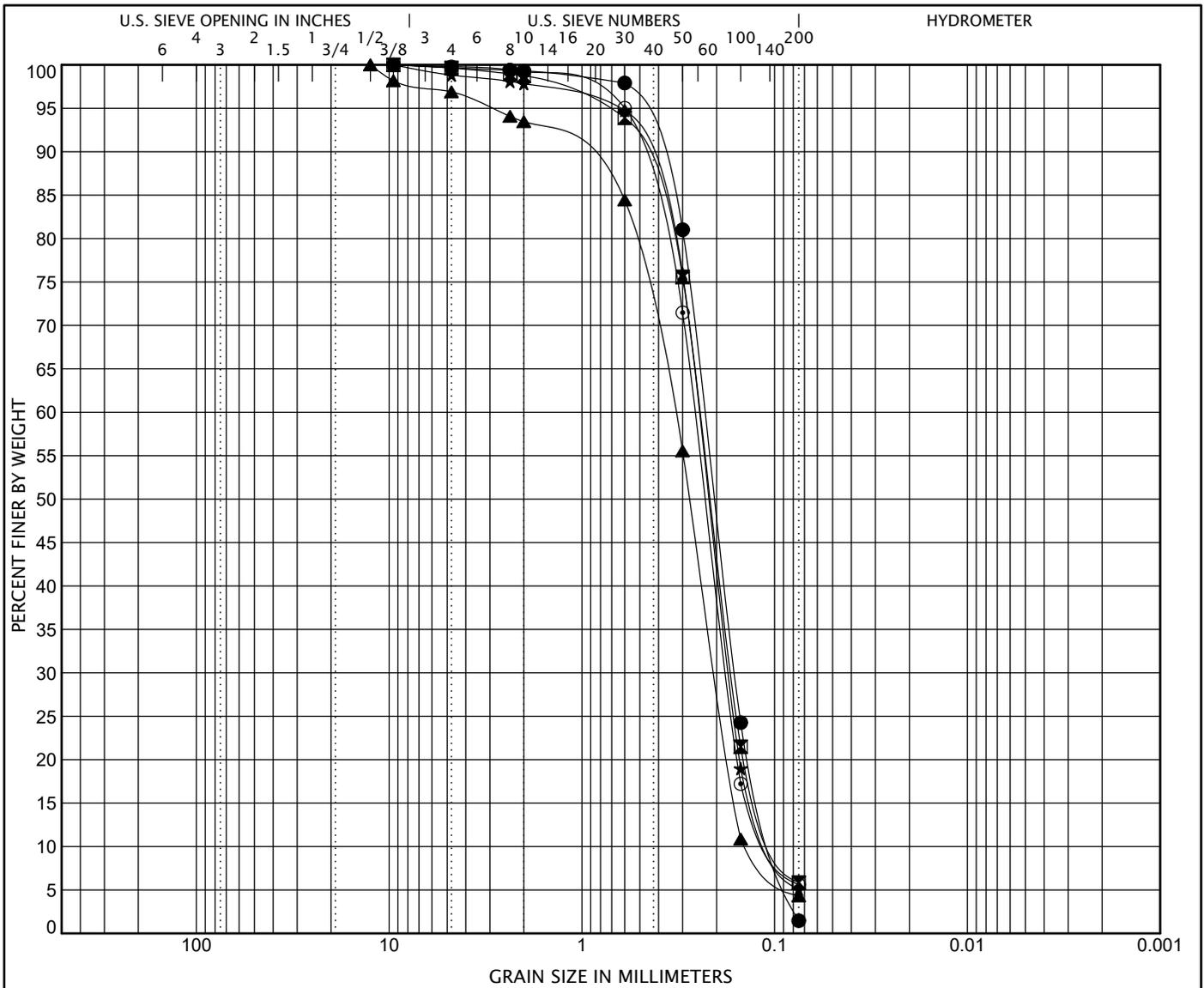
Water Level Observation:
 Dry during and upon completion

Excavation Backfilling Procedure:
 Auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem augers

SOIL / PAVEMENT BORING 243082.CPJ 20150116 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

Figure No. 20



| COBBLES | GRAVEL | | SAND | | | SILT OR CLAY |
|---------|--------|------|--------|--------|------|--------------|
| | coarse | fine | coarse | medium | fine | |

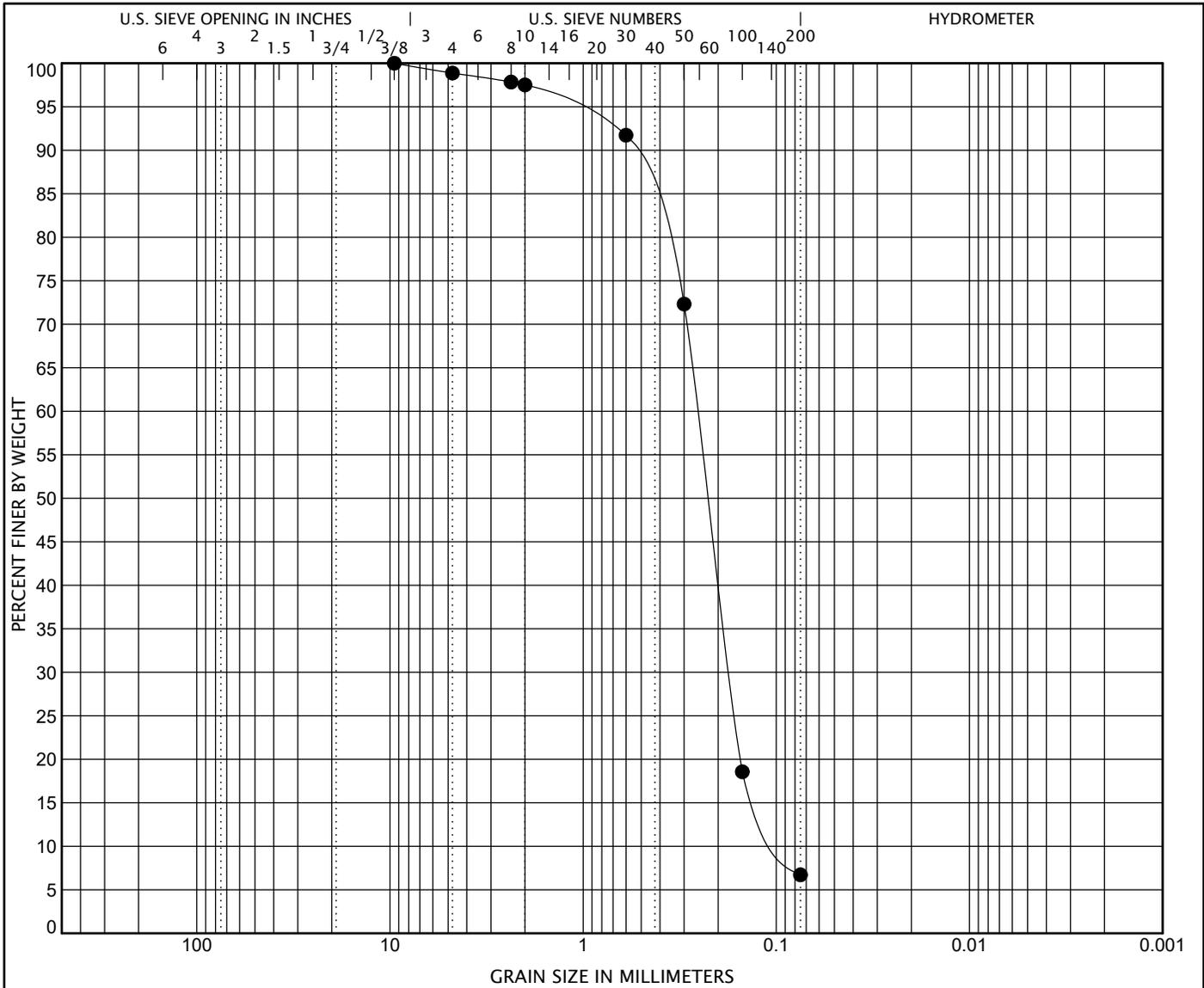
| Specimen ID | Description | LL | PL | PI | Cc | Cu | | |
|--------------|---------------------------------------|-------|-------|-------|---------|-------|-------|-------|
| ● IN-01 S-01 | Brown Sand with trace silt | | | | 1.1 | 2.4 | | |
| ☒ IN-02 S-01 | Brown Sand with trace silt | | | | 1.3 | 2.7 | | |
| ▲ IN-03AS-02 | Brown Sand with trace silt and gravel | | | | 0.9 | 2.4 | | |
| ★ IN-04AS-02 | Brown Sand with trace silt and gravel | | | | 1.2 | 2.6 | | |
| ◎ IN-05 S-02 | Brown Sand with trace silt | | | | 1.2 | 2.7 | | |
| Specimen ID | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
| ● IN-01 S-01 | 9.5 | 0.232 | 0.161 | 0.097 | 0.3 | 98.2 | 1.5 | |
| ☒ IN-02 S-01 | 9.5 | 0.246 | 0.167 | 0.09 | 0.4 | 93.8 | 5.8 | |
| ▲ IN-03AS-02 | 12.5 | 0.334 | 0.202 | 0.137 | 3.1 | 92.6 | 4.3 | |
| ★ IN-04AS-02 | 9.5 | 0.247 | 0.172 | 0.096 | 1.2 | 93.8 | 5.1 | |
| ◎ IN-05 S-02 | 9.5 | 0.259 | 0.177 | 0.097 | 0.2 | 94.2 | 5.6 | |

GRAIN SIZE DISTRIBUTION

| | |
|-------------------|--|
| Project Name: | Feldman Kia of Novi |
| Project Location: | SW Corner of Joseph Drive and Grand River Avenue City of Novi, Oakland County, Michigan |
| G2 Project No.: | 243082 |
| | Figure No. 21 |



US_GRAIN_SIZE_243082.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24



| COBBLES | GRAVEL | | SAND | | | SILT OR CLAY |
|---------|--------|------|--------|--------|------|--------------|
| | coarse | fine | coarse | medium | fine | |

| Specimen ID | Description | LL | PL | PI | Cc | Cu |
|--------------|---------------------------------------|----|----|----|-----|-----|
| ● IN-06 S-01 | Brown Sand with trace silt and gravel | | | | 1.3 | 2.8 |

| Specimen ID | D100 | D60 | D30 | D10 | %Gravel | %Sand | %Silt | %Clay |
|--------------|------|-------|-------|-------|---------|-------|-------|-------|
| ● IN-06 S-01 | 9.5 | 0.256 | 0.174 | 0.091 | 1.1 | 92.2 | 6.7 | |

GRAIN SIZE DISTRIBUTION

Project Name: Feldman Kia of Novi
 Project Location: SW Corner of Joseph Drive and Grand River Avenue
 City of Novi, Oakland County, Michigan
 G2 Project No.: 243082 Figure No. 22



U.S. GRAIN SIZE 243082.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 3/12/24

G2 Consulting Group, LLC

Encased Falling Head Infiltration Test (WCWRC 2016)



Project: Feldman Kia of Novi Job No.: 243082
 Location of Project: Novi, MI Boring No. IN-01 Depth (in) 54
 Description of Soil: Br. Sand w/ tr. Silt Depth of Test (in): 54
 Tested By: Z. Lilly Date of Testing: 2/21/2024
 Casing Diameter (in): 4 Casing Embedment (in): 6
 Initial Head of Water (in): 12 Pre-Soak Time (min): 120

| Reading No. | Trial 1 | | Trial 2 | | Trial 3 | |
|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) |
| 1 | 0 | 12 | | | | |
| 2 | 10 | 11 5/8 | | | | |
| 3 | 20 | 11 2/8 | | | | |
| 4 | 30 | 10 7/8 | | | | |
| 5 | 40 | 10 4/8 | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |

| Reading No. | Trial 1 | Trial 2 | Trial 3 |
|-------------|---------------------------|---------------------------|---------------------------|
| | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) |
| 1 | --- | --- | --- |
| 2 | 2.25 | --- | --- |
| 3 | 2.25 | --- | --- |
| 4 | 2.25 | --- | --- |
| 5 | 2.25 | --- | --- |
| 6 | --- | --- | --- |
| 7 | --- | --- | --- |
| 8 | --- | --- | --- |
| 9 | --- | --- | --- |
| 10 | --- | --- | --- |
| 11 | --- | --- | --- |
| 12 | --- | --- | --- |
| 13 | --- | --- | --- |

| Elapsed Time (min) | Head Drop (in) | Observed Infiltration Rate (iph) |
|--------------------|----------------|----------------------------------|
| 40 | 1 4/8 | 2.3 |

- Notes:
1. Refer to "Rules and Guidelines - Procedures & Design Criteria for Stormwater Management Systems", WCWRC, Rev. Oct. 2016.
 2. ← = Used in Calculating Infiltration Rate

G2 Consulting Group, LLC

Encased Falling Head Infiltration Test (WCWRC 2016)



Project: Feldman Kia of Novi Job No.: 2430802
 Location of Project: Novi, MI Boring No. IN-02 Depth (in) 72
 Description of Soil: Br. Sand w/ tr. Silt Depth of Test (in): 72
 Tested By: Z. Lilly Date of Testing: 2/21/2024
 Casing Diameter (in): 4 Casing Embedment (in): 6
 Initial Head of Water (in): 12 Pre-Soak Time (min): 185

| Reading No. | Trial 1 | | Trial 2 | | Trial 3 | |
|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) |
| 1 | 0 | 12 | | | | |
| 2 | 10 | 10 4/8 | | | | |
| 3 | 20 | 9 4/8 | | | | |
| 4 | 30 | 8 4/8 | | | | |
| 5 | 40 | 7 4/8 | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |

| Reading No. | Trial 1 | Trial 2 | Trial 3 |
|-------------|---------------------------|---------------------------|---------------------------|
| | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) |
| 1 | --- | --- | --- |
| 2 | 9.00 | --- | --- |
| 3 | 6.00 | --- | --- |
| 4 | 6.00 | --- | --- |
| 5 | 6.00 | --- | --- |
| 6 | --- | --- | --- |
| 7 | --- | --- | --- |
| 8 | --- | --- | --- |
| 9 | --- | --- | --- |
| 10 | --- | --- | --- |
| 11 | --- | --- | --- |
| 12 | --- | --- | --- |
| 13 | --- | --- | --- |

| Elapsed Time (min) | Head Drop (in) | Observed Infiltration Rate (iph) |
|--------------------|----------------|----------------------------------|
| 40 | 4 4/8 | 6.8 |

- Notes:
1. Refer to "Rules and Guidelines - Procedures & Design Criteria for Stormwater Management Systems", WCWRC, Rev. Oct. 2016.
 2. ← = Used in Calculating Infiltration Rate

G2 Consulting Group, LLC

Encased Falling Head Infiltration Test (WCWRC 2016)



Project: Feldman Kia of Novi Job No.: 2430802
 Location of Project: Novi, MI Boring No. Depth (in) 60
 Description of Soil: Br. Sand w/ tr. Silt Depth of Test (in): 60
 Tested By: Z. Lilly Date of Testing: 2/21/2024
 Casing Diameter (in): 4 Casing Embedment (in): 6
 Initial Head of Water (in): 12 Pre-Soak Time (min): 132

| Reading No. | Trial 1 | | Trial 2 | | Trial 3 | |
|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) |
| 1 | 0 | 12 | | | | |
| 2 | 5 | 9 7/8 | | | | |
| 3 | 10 | 8 3/8 | | | | |
| 4 | 15 | 7 1/8 | | | | |
| 5 | 20 | 5 7/8 | | | | |
| 6 | 25 | 5 1/8 | | | | |
| 7 | 30 | 4 3/8 | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |

| Reading No. | Trial 1 | Trial 2 | Trial 3 |
|-------------|---------------------------|---------------------------|---------------------------|
| | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) |
| 1 | --- | --- | --- |
| 2 | 25.50 | --- | --- |
| 3 | 18.00 | --- | --- |
| 4 | 15.00 | --- | --- |
| 5 | 15.00 | --- | --- |
| 6 | 9.00 | --- | --- |
| 7 | 9.00 | --- | --- |
| 8 | --- | --- | --- |
| 9 | --- | --- | --- |
| 10 | --- | --- | --- |
| 11 | --- | --- | --- |
| 12 | --- | --- | --- |
| 13 | --- | --- | --- |

| Elapsed Time (min) | Head Drop (in) | Observed Infiltration Rate (iph) |
|--------------------|----------------|----------------------------------|
| 30 | 7 5/8 | 15.3 |

- Notes:
1. Refer to "Rules and Guidelines - Procedures & Design Criteria for Stormwater Management Systems", WCWRC, Rev. Oct. 2016.
 2. ← = Used in Calculating Infiltration Rate

G2 Consulting Group, LLC

Encased Falling Head Infiltration Test (WCWRC 2016)



Project: Feldman Kia of Novi Job No.: 2430802
 Location of Project: Novi, MI Boring No. IN-04 Depth (in) 72
 Description of Soil: Br. Sand w/ tr. Silt Depth of Test (in): 72
 Tested By: Z. Lilly Date of Testing: 2/21/2024
 Casing Diameter (in): 4 Casing Embedment (in): 6
 Initial Head of Water (in): 12 Pre-Soak Time (min): 162

| Reading No. | Trial 1 | | Trial 2 | | Trial 3 | |
|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) |
| 1 | 0 | 12 | | | | |
| 2 | 5 | 10 2/8 | | | | |
| 3 | 10 | 9 2/8 | | | | |
| 4 | 15 | 8 2/8 | | | | |
| 5 | 20 | 7 2/8 | | | | |
| 6 | 25 | 6 2/8 | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |

| Reading No. | Trial 1 | Trial 2 | Trial 3 |
|-------------|---------------------------|---------------------------|---------------------------|
| | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) |
| 1 | --- | --- | --- |
| 2 | 21.00 | --- | --- |
| 3 | 12.00 | --- | --- |
| 4 | 12.00 | --- | --- |
| 5 | 12.00 | --- | --- |
| 6 | 12.00 | --- | --- |
| 7 | --- | --- | --- |
| 8 | --- | --- | --- |
| 9 | --- | --- | --- |
| 10 | --- | --- | --- |
| 11 | --- | --- | --- |
| 12 | --- | --- | --- |
| 13 | --- | --- | --- |

| Elapsed Time (min) | Head Drop (in) | Observed Infiltration Rate (iph) |
|--------------------|----------------|----------------------------------|
| 25 | 5 6/8 | 13.8 |

- Notes:
1. Refer to "Rules and Guidelines - Procedures & Design Criteria for Stormwater Management Systems", WCWRC, Rev. Oct. 2016.
 2. ← = Used in Calculating Infiltration Rate

G2 Consulting Group, LLC

Encased Falling Head Infiltration Test (WCWRC 2016)



Project: Feldman Kia of Novi Job No.: 2430802
 Location of Project: Novi, MI Boring No. IN-05 Depth (in) 99
 Description of Soil: Br. Sand w/ tr. Silt Depth of Test (in): 99
 Tested By: Z. Lilly Date of Testing: 2/20/2021
 Casing Diameter (in): 4 Casing Embedment (in): 6
 Initial Head of Water (in): 12 Pre-Soak Time (min): 175

| Reading No. | Trial 1 | | Trial 2 | | Trial 3 | |
|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) |
| 1 | 0 | 12 | | | | |
| 2 | 10 | 11 2/8 | | | | |
| 3 | 20 | 10 4/8 | | | | |
| 4 | 30 | 9 6/8 | | | | |
| 5 | 40 | 9 | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |

| Reading No. | Trial 1 | Trial 2 | Trial 3 |
|-------------|---------------------------|---------------------------|---------------------------|
| | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) |
| 1 | --- | --- | --- |
| 2 | 4.50 | --- | --- |
| 3 | 4.50 | --- | --- |
| 4 | 4.50 | --- | --- |
| 5 | 4.50 | --- | --- |
| 6 | --- | --- | --- |
| 7 | --- | --- | --- |
| 8 | --- | --- | --- |
| 9 | --- | --- | --- |
| 10 | --- | --- | --- |
| 11 | --- | --- | --- |
| 12 | --- | --- | --- |
| 13 | --- | --- | --- |

| Elapsed Time (min) | Head Drop (in) | Observed Infiltration Rate (iph) |
|--------------------|----------------|----------------------------------|
| 40 | 3 | 4.5 |

- Notes:
1. Refer to "Rules and Guidelines - Procedures & Design Criteria for Stormwater Management Systems", WCWRC, Rev. Oct. 2016.
 2. ← = Used in Calculating Infiltration Rate

G2 Consulting Group, LLC

Encased Falling Head Infiltration Test (WCWRC 2016)



Project: Feldman Kia of Novi Job No.: 2430802
 Location of Project: Novi, MI Boring No. IN-06 Depth (in) 111
 Description of Soil: Br. Sand w/ tr. Silt Depth of Test (in): 111
 Tested By: Z. Lilly Date of Testing: 2/20/2024
 Casing Diameter (in): 4 Casing Embedment (in): 6
 Initial Head of Water (in): 12 Pre-Soak Time (min): 176

| Reading No. | Trial 1 | | Trial 2 | | Trial 3 | |
|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) | Elapsed Time (min) | Depth Reading (in) |
| 1 | 0 | 12 | | | | |
| 2 | 10 | 11 | | | | |
| 3 | 20 | 10 2/8 | | | | |
| 4 | 30 | 9 4/8 | | | | |
| 5 | 40 | 8 6/8 | | | | |
| 6 | 50 | 8 | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |

| Reading No. | Trial 1 | Trial 2 | Trial 3 |
|-------------|---------------------------|---------------------------|---------------------------|
| | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) | Infiltration Rate (in/hr) |
| 1 | --- | --- | --- |
| 2 | 6.00 | --- | --- |
| 3 | 4.50 | --- | --- |
| 4 | 4.50 | --- | --- |
| 5 | 4.50 | --- | --- |
| 6 | 4.50 | --- | --- |
| 7 | --- | --- | --- |
| 8 | --- | --- | --- |
| 9 | --- | --- | --- |
| 10 | --- | --- | --- |
| 11 | --- | --- | --- |
| 12 | --- | --- | --- |
| 13 | --- | --- | --- |

| Elapsed Time (min) | Head Drop (in) | Observed Infiltration Rate (iph) |
|--------------------|----------------|----------------------------------|
| 50 | 4 | 4.8 |

- Notes:
1. Refer to "Rules and Guidelines - Procedures & Design Criteria for Stormwater Management Systems", WCWRC, Rev. Oct. 2016.
 2. ← = Used in Calculating Infiltration Rate

GENERAL NOTES TERMINOLOGY

Unless otherwise noted, all terms herein refer to the Standard Definitions presented in ASTM 653.

PARTICLE SIZE

| | |
|-----------------|--------------------------|
| Boulders | - greater than 12 inches |
| Cobbles | - 3 inches to 12 inches |
| Gravel - Coarse | - 3/4 inches to 3 inches |
| - Fine | - No. 4 to 3/4 inches |
| Sand - Coarse | - No. 10 to No. 4 |
| - Medium | - No. 40 to No. 10 |
| - Fine | - No. 200 to No. 40 |
| Silt | - 0.005mm to 0.074mm |
| Clay | - Less than 0.005mm |

CLASSIFICATION

The major soil constituent is the principal noun, i.e. clay, silt, sand, gravel. The second major soil constituent and other minor constituents are reported as follows:

| Second Major Constituent (percent by weight) | Minor Constituent (percent by weight) |
|---|--|
| Trace - 1 to 12% | Trace - 1 to 12% |
| Adjective - 12 to 35% | Little - 12 to 23% |
| And - over 35% | Some - 23 to 33% |

COHESIVE SOILS

If clay content is sufficient so that clay dominates soil properties, clay becomes the principal noun with the other major soil constituent as modifier, i.e. sandy clay. Other minor soil constituents may be included in accordance with the classification breakdown for cohesionless soils, i.e. silty clay, trace sand, little gravel.

| Consistency | Unconfined Compressive Strength (psf) | Approximate Range of (N) |
|-------------|--|--------------------------|
| Very Soft | Below 500 | 0 - 2 |
| Soft | 500 - 1,000 | 3 - 4 |
| Medium | 1,000 - 2,000 | 5 - 8 |
| Stiff | 2,000 - 4,000 | 9 - 15 |
| Very Stiff | 4,000 - 8,000 | 16 - 30 |
| Hard | 8,000 - 16,000 | 31 - 50 |
| Very Hard | Over 16,000 | Over 50 |

Consistency of cohesive soils is based upon an evaluation of the observed resistance to deformation under load and not upon the Standard Penetration Resistance (N).

| Density Classification | COHESIONLESS SOILS Relative Density % | Approximate Range of (N) |
|------------------------|--|--------------------------|
| Very Loose | 0 - 15 | 0 - 4 |
| Loose | 16 - 35 | 5 - 10 |
| Medium Compact | 36 - 65 | 11 - 30 |
| Compact | 66 - 85 | 31 - 50 |
| Very Compact | 86 - 100 | Over 50 |

Relative Density of cohesionless soils is based upon the evaluation of the Standard Penetration Resistance (N), modified as required for depth effects, sampling effects, etc.

SAMPLE DESIGNATIONS

- AS - Auger Sample - Cuttings directly from auger flight
- BS - Bottle or Bag Samples
- S - Split Spoon Sample - ASTM D 1586
- LS - Liner Sample with liner insert 3 inches in length
- ST - Shelby Tube sample - 3 inch diameter unless otherwise noted
- PS - Piston Sample - 3 inch diameter unless otherwise noted
- RC - Rock Core - NX core unless otherwise noted

STANDARD PENETRATION TEST (ASTM D 1586) - A 2.0 inch outside-diameter, 1-3/8 inch inside-diameter split barrel sampler is driven into undisturbed soil by means of a 140-pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven three successive 6-inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).