SAKURA NOVI
JZ19-31

SAKURA NOVI JZ19-31 WITH REZONING 18.732

Consideration at the request of Robert B. Aikens & Associates, LLC and Robertson Brothers Homes for Planning Commission's recommendation to City Council for a Zoning Map amendment from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay. The subject property is approximately 15.59 acres and is located north of Grand River Avenue, south of Eleven Mile Road and east of Town Center Drive (Section 23). The applicant is proposing to develop the property as an Asian-themed mixed-use development.

REQUIRED ACTION

Recommendation to City Council for approval or denial, or postpone the recommendation, of the rezoning request from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended with conditions	1/8/2020	• **Side yard building setback reduced to 10 feet (50 feet required). *Supported by staff.*** • **Deviation to allow balconies to extend 4 feet into front yard building setback along 11 Mile Rd. *Supported by staff.*** • **Deviation to allow building and parking setbacks to be reduced up to 0' when adjacent to General Common Element boundary areas of the Site Condominium. *Supported by staff.*** • **Side yard parking setback reduced to 5 feet in commercial areas.** • **Front yard parking setback reduced to 6 feet, 20 feet required, in NE corner or residential area. *Supported by staff.*** • **Deviation for Loading area size and locations. *Supported by staff.*** • **Deviation to allow Buildings A and C to exceed 7,500 square feet. *Supported by staff.*** • **Deviation to allow lighting levels to fall below 0.2 fc minimum around the pond walkway and in residential area. *Supported by staff.*** • **Sign area deviations to allow dual language signage. *Supported by staff.*** • **Deviation to allow 6 foot sidewalk along 11 Mile road, 12.5 feet required in the TC-1 District.** • **Deviation to allow 72 square feet of pedestrian-level projecting signage, 6 sf permitted. *Not supported by staff.***

			• Items to be addressed by the applicant prior to Concept Plan approval
Engineering	Approval recommended	1/7/2020	• **Deviation for lack of 25' vegetated buffer around storm water pond in residential area. *Supported by staff.*** • Items to be addressed by the applicant during detailed Site Plan approval process
Landscaping	Approval recommended with conditions	12/27/19	• **Insufficient interior parking lot landscaping area, interior and endcap islands, and canopy trees provided. *Not supported by staff.*** • **Insufficient parking lot perimeter trees provided. *Not supported by staff.*** • **Lack of screening wall or berm for parking areas along Grand River. *Supported by staff.*** • **Lack of screening wall or berm for parking areas along 11 Mile Road. *Not supported by staff*** • **Insufficient building foundation landscaping. *Not supported by staff.*** • **No buffering berms for multi-family housing provided between residential buildings and the B-3 property to the south. *Supported by staff.*** • **Insufficient greenbelt width and berm between parking lot and 11 Mile Road (Phase 1). *Supported by staff.*** • **Use of subcanopy trees for 25% of multifamily unit landscaping trees. *Supported by staff (29% is not supported by staff).*** • **Phase 2 Insufficient parking lot trees (interior and perimeter). *Not supported by staff.*** • Items to be addressed by the applicant prior to Site Plan approval
Woodlands	Approval not recommended at this time	1/6/2020	• **Conflicting information on Woodland Tree removals needs to be corrected**
Wetlands	Approval not recommended at this time	1/6/2020	• **Deviation for lack of 25' wetland buffer around western pond.** • **Impacts to on-site wetland areas require 2.41 acres of wetland mitigation** • **Wetland mitigation areas proposed are all on City-owned properties**
Traffic	Approval recommended	1/8/2020	• **Deviation for existing Ecco Tool parking setback *Supported by staff as it is an existing condition.*** • **Deviation for parking setback in the NE corner. *Supported by staff.*** • **Deviation for deficiencies in loading zone areas *Support conditioned on truck turning movements to verify accessibility.*** • **Deviation for drive lane width in Phase 1B *Support conditioned on No Parking signage posted along curbs.*** • Items to be addressed by the applicant prior to

			Site Plan approval
Traffic Study	Approval recommended	1/8/2020	• Proposed uses will result in fewer vehicle trips than previous submittal due to changes to Phase 2 development • Shared parking study predicts no surplus of parking during weekend peak demand
Façade	Approval recommended	1/8/2020	• **Section 9 Façade Waivers recommended**
Fire	Approval recommended with conditions	1/3/2020	Items to be addressed by the applicant prior to Site Plan approval

MOTION SHEET

Approval

In the matter of Sakura Novi, JZ19-31, with Zoning Map Amendment 18.732 motion to **recommend approval** to City Council to rezone the subject property from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay Concept Plan.

A. The recommendation includes the following ordinance deviations for consideration by the City Council:

1. Deviation from Section 3.27.1.C for an exterior side yard setback of 10 feet (50 feet required) for Building A, where adjacent to B-3 zoning to the east, which is justified due to the continuation of commercial uses in both districts, which does not require a wide buffer of separation.
2. Deviation from Section 3.27.1.C to allow building and parking setbacks to be reduced up to 0' when adjacent to General Common Element boundary areas of the Site Condominium, as they are internal to the overall site and do not create a negative impact on the development.
3. Deviation from Section 4.82.2.e. to allow second floor residential balconies to encroach 4 feet into the front yard setback (11 feet proposed, 15 feet required).
4. Per section 3.1.26, deviation to allow a reduction of side yard parking setback (10 feet required, up to 5 feet requested) on the western property line with the Town Center green space area adjacent. Deviation would also allow the parking setback to be reduced to 5 feet (10 feet required) for the commercial parking area behind Building A adjacent to the B-3 zoned parcel to the south.
5. Deviation from section 3.6.2.M to eliminate the Wetland Setback (25' required) to accommodate the remediation process, development of landscaped feature retention basin on western portion of site and for careful integration of on-site detention on far eastern portion of site, abutting city-owned retention/wetland basin.
6. Deviation from Section 3.1.26.D to allow the existing front yard parking lot along 11 Mile Road for Ecco Tool shop, which is less than 20 feet from ROW (approximately 15 feet measured). This deviation would not apply to redevelopment of the Ecco Tool parcel.
7. A second deviation from Section 3.1.26.D to allow the parking area in front of Building 4 on the northeast corner of the site to extend into the front parking setback (6 feet proposed, 20 feet required), as the retaining wall to the north will screen this area from 11 Mile Road.
8. On the commercial buildings, Section 9 façade waivers to allow an overage of EIFS on the west, east and north facades of Building A; an overage of Flat Metal Panels on the west and east facades of Building B; and an overage of EIFS on the west façade of Building C. These overages are relatively minor in nature and result in an enhancement of the overall design quality of the project; therefore the waivers are supported. *See PRO plan Elevations and design statement from the project architects.*
9. On the residential buildings, a Section 9 façade waiver to allow an overage of Cement Fiber siding. The applicant shall ensure all references to Vinyl siding on the elevations and accompanying documents are revised to reflect the change in material to Cement Fiber board siding. See PRO plan Elevations and design statement from the project architects.
10. Deviation from Section 3.27.1.H. and/or Section 5.4 to permit loading/unloading spaces of the commercial buildings to be located in rear and side yards, and for

deficiencies in the size of loading area required (10 square feet per front foot of building), as shown on the PRO Concept Plan, if truck turning movements are shown on the plans to demonstrate accessibility. This is necessary because multiple sides of the buildings will be public-facing. Screening will be provided for all trash/loading areas not facing a directly adjacent loading area.

11. Deviation from Section 3.27.2.B to allow the proposed specialty market and food hall to exceed 7,500 square feet of gross leasable floor area, with a total of 30,000 sf on two levels, identified on the plans as Building A. Tenant will contain 25,000sf on main level with 3,500sf support office use and 1,500sf overflow seating on mezzanine level. The deviation is justified to create an anchor for the Asian village concept and allows an existing Novi business to expand.

12. Deviation from Section 3.27.2.B to allow Building C (13,102 sf) to exceed 7,500 square feet, as it is not a multi-story building. Building C will contain a mix of retail and restaurant uses, and will be broken up into smaller tenant spaces and continue to build on the Asian dining and retail destination theme.

13. Deviation requested from Section 5.7.3.K for site illumination level variance for multiple walkway areas and residential parking areas. Site walkway areas will vary below 0.2 fc minimum standard on natural pathway around the water feature. Site walkway areas in residential portion will vary below 0.2 fc minimum standard. Parking area in residential area will fall below 0.2 fc minimum standard. *Lighting levels will be evaluated again for appropriateness at the time of Site Plan submittal.*

14. Deviation from Section 3.27.1.L to allow project-appropriate selection of exterior lighting fixtures, paved activity nodes, street/sidewalk furniture, safety paths, screening walls and planters, which is necessary to carry the design theme through the project while meeting the intent of the recommended design guidelines of the Town Center Area study.

15. Deviation from Chapter 28 of the City Code for TC-1 tenant signage standards in order to accommodate dual-language signage for authentic presentation of international tenants and clientele expectations. Many tenants will have both interior-facing and frontage-facing signage. The Sakura Novi project will adhere to the following signage standards, with areas generally shown on the sign elevations sheet in the Concept Plan:
    a. Per section 28-5.c.1.a, deviation to allow up to 2.5 square feet of signage per linear foot (1.25 sf/lf permitted) of contiguous public or private street frontage, up to a maximum of 130 square feet (65 sf permitted).
    b. Per section 28-5.c.1.b, deviation to allow 2.5 square feet of signage per linear foot (1 sf/2 lf allowed) of contiguous public or private street frontage on a rear/secondary façade with a pedestrian entrance, up to a maximum of 130 square feet (24 sf allowed).
    c. Per section 28-5.c.1.d, a deviation to allow 2 signs of equal permitted size for each interior retail/restaurant tenant not fronting public streets. Sign area allowed up to 2.5 square feet of signage per linear foot of elevation frontage, up to a maximum of 130 square feet (24 sf permitted). The signs shall be located no closer than 30 feet on center from any other similar sign (except those of the same message but different languages, which may be located closer), and shall be located adjacent to such parking lot or street, as applicable.

16. Deviation from Section 5.3.2 to allow drive lane reduction to 20-22 feet (22 feet required when no parking spaces are present, and 24 feet when adjacent to 90 degree parking spaces) in residential Phase 1B area as shown on the Concept Plan, provided no parking signage is posted in these areas and provided sufficient

clearance is available for emergency vehicle movements.

17. Deviation from Section 3.27.1.I to allow a 6 foot sidewalk along 11 Mile Road, where the TC-1 district requires 12.5 foot sidewalks along non-residential collector and local streets. The deviation is necessary to provide sufficient landscaping material for the greenbelt screening while maintaining the proposed setbacks for the residential uses (11' to porch and 16' to townhouse facades, 15' to facades without porches).
18. Landscape deviation from section 5.5.3.A to allow a continuous 6 foot evergreen hedge with densely planted deciduous canopy trees in lieu of the required 6-8 foot berm required when TC-1 district abuts a B-3 district.
19. Landscape deviation from section 5.5.3.A for the absence of a 6 foot high wall between the residential units in Phase 1B and the existing Ecco Tool light industrial use. In lieu of the wall, applicant proposes a 5 foot tall continuous evergreen hedge and densely planted upright canopy trees. The applicant will be required to submit a noise impact statement at the time of Preliminary Site Plan approval and provide any necessary mitigation measures if unacceptable noise levels are found to exist.
20. Deviation to allow Ecco Tool to continue to operate as a nonconforming use in the TC-1 district until their operations cease, which allows an existing business to maintain operations, while ensuring that redevelopment in the future will be consistent with the surrounding TC-1 District, should the Planned Rezoning Overlay be approved.
21. Engineering Design Manual section 5.6.5 (b)(a) deviation for lack of 25' vegetated buffer around the storm water management pond in the residential use area, as providing the buffer is infeasible.
22. Landscaping deviation from Section 5.5.3.B.ii and iii. for lack of screening wall or berm for parking areas along Grand River*, because a decorative fence and plantings are used as an alternative to screen the parking areas.*
23. Landscaping deviation from Section 5.5.3.B.ii and iii. for insufficient greenbelt width and berm between parking lot and 11 Mile Road (Phase 1B), as the retaining wall will screen this parking area*.*
24. Landscaping deviation from Section 5.5.3.F.ii. for use of subcanopy trees for 25% of multifamily unit landscaping trees*. Supported by staff (29% is not supported by staff).*

B. Additional deviations requested by the applicant, but **not supported by staff** include the following:

a. Per Sections 28-5.e.1.a: deviation to allow up to 72 square feet total maximum pedestrian-level projecting signage (6 square feet permitted). ***Staff recommends this deviation be deferred as there are no details to help visualize, making the impacts difficult to evaluate. These items could be deferred to City Council or Zoning Board of Appeals determination as necessary, along with additional sign ordinance deviations related to lighted materials that are not permitted by the ordinance.***

b. Landscaping deviation from Section 5.5.3.B.ii and iii. for lack of screening wall or berm for parking areas along 11 Mile Road (north of parking area 5B). ***The applicant has not provided justification as to why additional plantings (such as continuing the Juniper hedge or replicating the plantings along Grand River) could not be provided north of parking area 5B to meet the intent of the ordinance.***

c. Landscape deviation from section 5.5.3.C. for deficiency of parking lot interior landscape area, as the total amount of landscaping provided around the pond feature provides a greater amount of contiguous landscaped amenity that benefits the community. ***Staff does not support the deviation as provided. The applicant is urged to make greater efforts to reduce the parking lot interior landscaping deviations.***

d. Landscaping deviation from Section 5.5.3.C for insufficient parking lot perimeter

trees provided. ***Staff believes the applicant could further reduce the deviation.***

e. Landscape deviation from section 5.5.3.D to allow 61% of the required foundation planting area around all Phase 1 Commercial buildings. Plantings have been proposed along the façade of all phase 1 commercial buildings in beds measuring at least 4' wide. These plantings, combined with adjacent decorative paving areas, extend across at least 75% of all commercial building perimeters. *"With respect to projects in the TC and TC-1 districts, the Planning Commission may waive the 8 foot width calculation requirements if significant additional planting and/or decorative paving or amenities are added adjacent to the building."* ***Staff believes the applicant could further reduce the deviation.***

C. If the City Council approves the rezoning, the Planning Commission recommends the following conditions be made part of the PRO Agreement:

1. Developer shall develop the Land in accordance with all applicable laws, ordinances, and regulations, including all applicable setback requirements of the Zoning Ordinance under the Proposed Classification, except as expressly authorized herein, and all storm water and soil erosion requirements and measures throughout the site during the design and construction phases of the Development, and during the subsequent use of the Land as contemplated in this Agreement.

2. The grass-land pads shown on the landscape plans shall be properly maintained as grass-land pads, utilizing a native meadow planting mix approved by the City's Landscape Architect, until such time that area is needed for Phase 2 uses to be developed.

3. The maximum number of dwellings to be constructed in Phase 1B shall be 68.

4. The maximum number of dwelling units to be constructed in Phase 2 shall be 50.

5. The maximum number of dwelling units to be constructed in total for the Sakura Novi project seeking rezoning under this PRO Agreement shall not exceed 118. The resultant ratio is approximately 8 units/acre. A PRO Amendment will be sought if additional residential units/buildings are proposed for future Phase modifications.

6. Phase 1 non-residential uses shall be limited to a 30,000 sf market; and restaurants and retail space totaling approximately 25,000 sf as shown on the PRO Concept Plan.

7. Phase 2 non-residential uses shall be no greater than 4,500 square feet of retail/restaurant use.

8. Changes to the mix of uses of +/-10% shall be permitted to be approved administratively as long as additional deviations are not required and associated Ordinance requirements can be met.

9. Woodland tree removals during Phase 1 and Phase 2 shall be approximately 133 trees, which shall require 256 woodland replacement credits for Phase 1, and an additional 13 credits for Phase 2. Developer will plant a minimum of 17 credits as replacements on site through the planting of canopy trees, evergreen trees and native groundcover seeding. Native ground cover seeding shall not exceed 5% of the replacement credits planted on site. All woodland replacement credits planted on-site shall be

permanently protected via conservation easement or landscape easement. Any credits not planted on site will require a payment of $400 per credit into the Novi Tree Fund.

10. Any additional regulated woodland tree removals shall meet the requirements of the City of Novi Woodland Protection Ordinance, and may be granted administratively up to 10 trees with proper justification. If additional regulated trees proposed for removal exceeds 10, Planning Commission approval must be granted.

11. Proposed parking is being provided as per the Parking Study recommendations, which has been reviewed and approved by the City's traffic consultant. Future phase parking requirements will also be a function of shared parking analysis findings, if supported by City's review and approval.

12. Tentative completion date for Phase 1A shall be calendar year 2022.

13. Impacts to wetland and wetland buffer areas have been indicated and quantified and submitted as part of the PRO package. Specific remedies to be included in the PRO Agreement conditions.

14. Open space standards have been achieved and will be exceeded as part of Phase 1 site work. The existing pond and setback exceeds 2.45 acre of area, or 15.3% of the overall subject property. After remediation and necessary reconfiguration, 2.11 acre of water feature and landscape perimeter will be maintained. Additional Open Space, totaling 20.9% of the subject parcels' area, has been committed in Phase 1 to exceed the ordinance requirement of 15% for the overall development parcels.

15. To protect future residents of the Phase 1B units from excessive noise impacts from the existing Ecco Tool business, the developer shall provide a Noise Impact Statement at the time of Preliminary Site Plan submittal to determine if ordinance performance standards will be exceeded. Provide any necessary mitigation measures if required.

16. The adjacent non-conforming Light Industrial use owned by Ecco Tool Co is to be addressed in the PRO Agreement conditions including:
    a. Access for delivery trucks on the retained parcel; which will require cross access rights;
    b. Twelve parking spaces on the retained parcel or access to parking spaces on adjacent areas to make up for any shortfall.

17. Developer offers to dedicate continuous Right-of-Way (ROW), and future ROW, along 11 Mile and Grand River. The amount of ROW proposed to be dedicated along 11 Mile is 0.028 acres (Anglin) and 0.165 acre (eastern area). Along Grand River Avenue, the proposed ROW dedication would be 0.149 acre. The total dedication would be 0.342 acre.

18. Developer offers an easement at the southeast corner of the proposed development for the use as for a public art display or another amenity for the public. The PRO Agreement should make clear who would be responsible for selecting, commissioning, paying for the piece or signage and maintenance of the area.

19. The developer offers to construct an off-site sidewalk connection (~30 ft) to the plaza on the Northeast corner of Town Center Drive and Grand River Avenue to complete a necessary link from the development to surrounding areas.
20. The developer "potentially" offers to provide additional on-street public parking on the south side of 11 Mile Road within the ROW;

21. The developer offers to pursue establishing a partnership with Novi Public Library to provide useful supplemental facilities within the Sakura Novi project for their collections/operations.

22. Developer offers to establish a Community Room function within the Market space available for free use for public gathering and meetings. The parameters of the Community Room function, including room size, capacity and availability, shall be a condition of the PRO Agreement to ensure this would be a benefit to the public.

D. This motion is made because the proposed Town Center-1 zoning district is a reasonable alternative and fulfills the intent of the Master Plan for Land Use, and because:

1. The proposed neighborhood-scaled, mixed-use, pedestrian accessible development would be in line with the intent of the 2016 Master Plan. Developer indicates that the proposed development complements the 2016 Master Plan vision for a unique, well-designed, mixed-use facility.
2. Growing an important existing Novi retailer (One World Market) would complement the goals and objectives of the 2016 Master Plan.
3. Sakura Novi, as a unique development would reinforce the vision of the 2014 Town Center Area Study, namely by creating *a dynamic, attractive city core that provides residents and visitors with unique opportunities to participate in active community life, and meet their needs for goods, services, housing and entertainment*.
4. The proposed Sakura Novi, with its unique collection of market, restaurants and retail is anticipated to be an economic engine, generating 170 permanent jobs.
5. The proposed residences at Sakura Novi will provide smaller footprint, middle-market rate residential rental offerings. The new homes would be a draw to Asian ex-patriot professionals and their families, as well as the large corporations that sponsor many of these families.
6. The developer indicates that the proposed Sakura Novi is anticipated to reinforce Novi's tax base beyond the project itself by creating a platform that can foster partnerships among the City of Novi, cultural institutions and the corporate community. An example provided is the partnership with the STAMPS School of Art and Design at UM, and the Japan America Society to create a Japanese themed illuminated applique (a back-lit piece laid over glass, proposed to be located on Building C facing Grand River).
7. The development will create a park-like environment around the existing pond, including a walking path around the pond and throughout the site, available to the general public. Landscaping treatments, the pathway, and a small building at the edge of the pond will "activate" the pond. These efforts will foster walkability and connectivity within an important corner at the heart of Novi, as well as potentially energize other areas in the Town Center core.
8. In keeping with the intent to create an Asian village theme, Sakura Novi's design features, as described in the Architects' Design Statements, intends to create a bold, yet refined, aesthetic reminiscent of upscale shopping, dining and entertainment districts one may find in Osaka, Seoul and Hong Kong.

-OR-

Postpone Recommendation

In the matter of Sakura Novi, JZ19-31, with Zoning Map Amendment 18.732, motion to postpone making a recommendation to the City Council to rezone the subject property from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay Concept Plan. This motion is made for the following reasons:

1. To allow the applicant time to provide additional details as indicated in the staff and consultant review letters;
2. To allow the applicant time to determine details such as wetland mitigation, woodland discrepancies;
3. To allow the applicant to work with staff to resolve some of the deviations requested;
4. To allow additional time for the applicant to submit additional evidence/information in support of the public benefits to be achieved through this development and to justify the proposed ordinance deviations and the intent of the section 7.13.2.D.ii that the proposed PRO rezoning would be in the public interest and the benefits to public of the proposed PRO rezoning would clearly outweigh the detriments.
5. The applicant shall have the opportunity to clarify through a modified submittal if any PRO conditions are being offered under the PRO provisions of the Zoning Ordinance;
6. *(Additional reasons here if any).*

-OR-

Denial

In the matter of Sakura Novi, JZ19-31, with Zoning Map Amendment 18.732 motion to **recommend denial** to City Council to rezone the subject property from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay Concept Plan… *because [insert any reasons]*

MAPS

Location

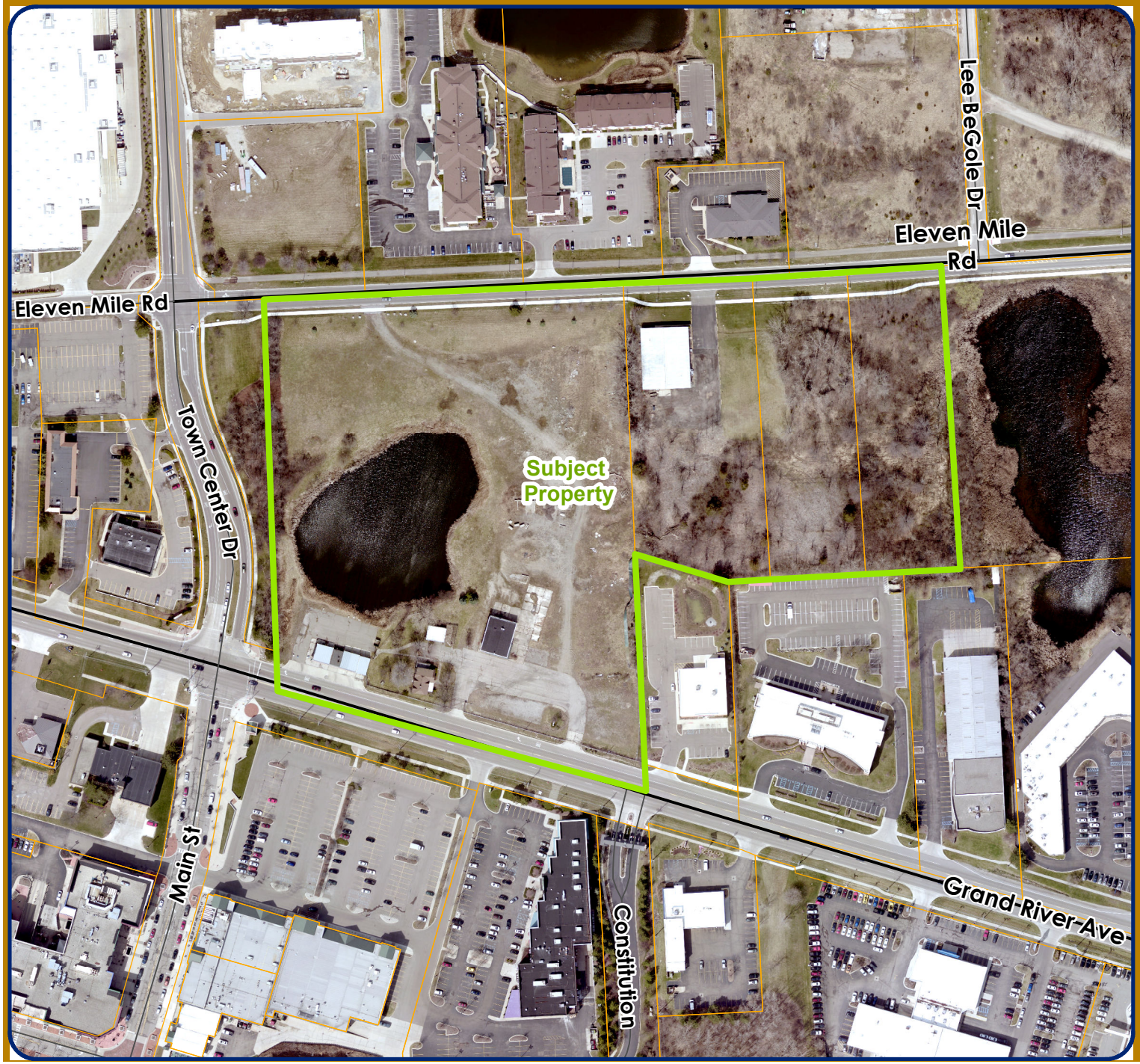
Zoning

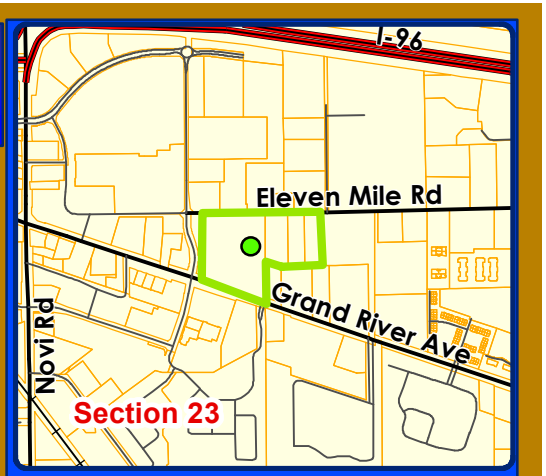
Future Land Use

Natural Features

SAKURA WAY: JZ19-31

LOCATION





LEGEND

Subject Property

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

Map Author: Lindsay Bell
Date: 7/22/19
Project: SAKURA WAY JZ 19-31
Version #: 1

Feet
0 55 110 220 330

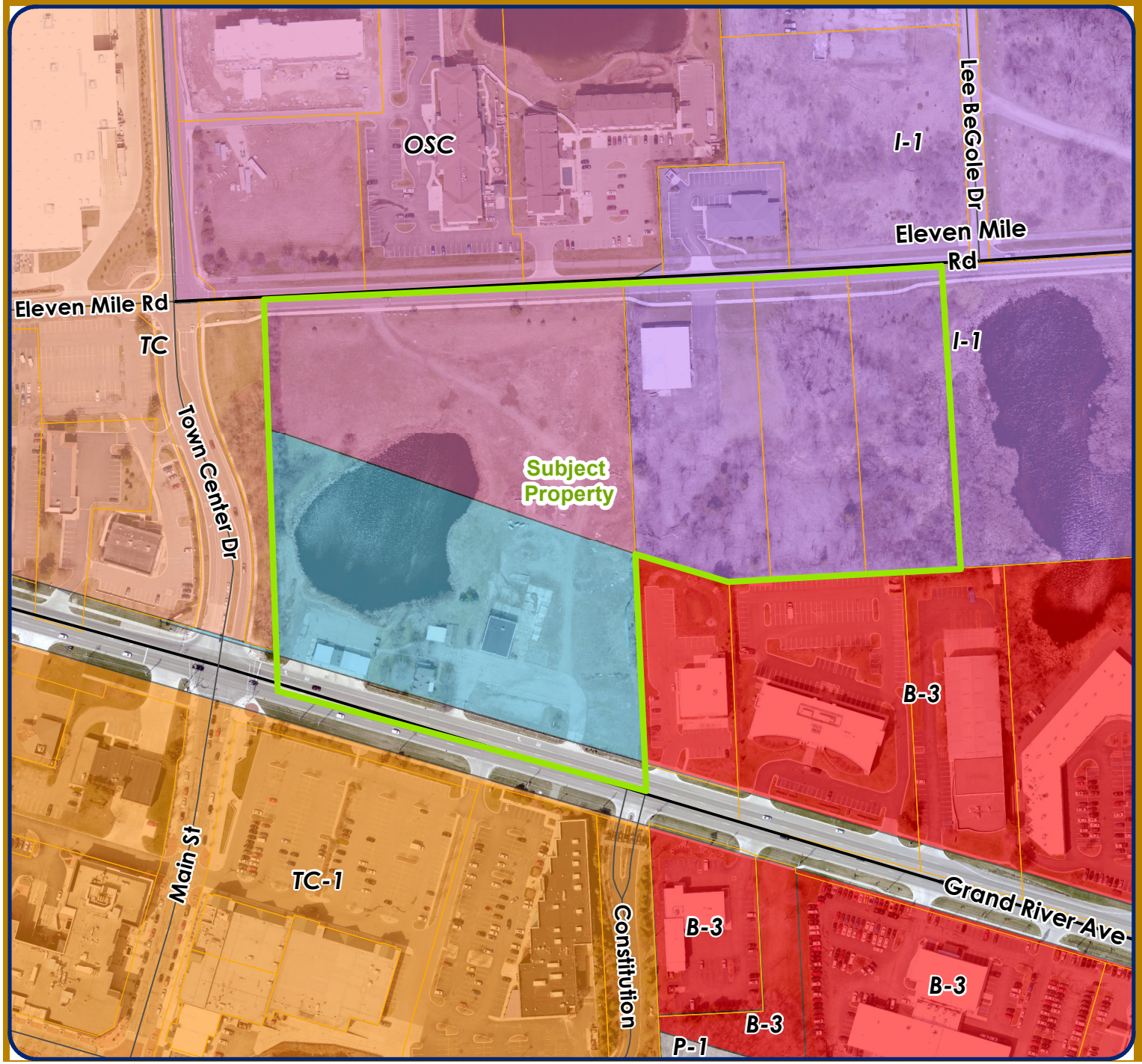
1 inch = 250 feet

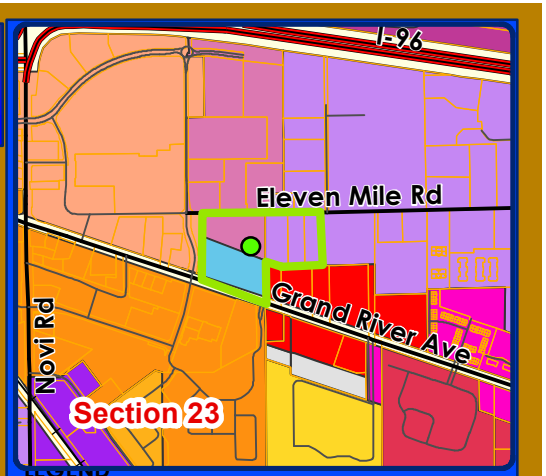
MAP INTERPRETATION NOTICE

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

SAKURA WAY: JZ19-31

ZONING





LEGEND

- RM-1: Low-Density Multiple Family
- RM-2: High-Density Multiple Family
- B-3: General Business District
- GE: Gateway East District
- I-1: Light Industrial District
- I-2: General Industrial District
- NCC: Non-Center Commercial District
- OS-1: Office Service District
- OSC: Office Service Commercial
- OST: Office Service Technology
- P-1: Vehicular Parking District
- TC: Town Center District
- TC-1: Town Center -1 District
- Subject Property

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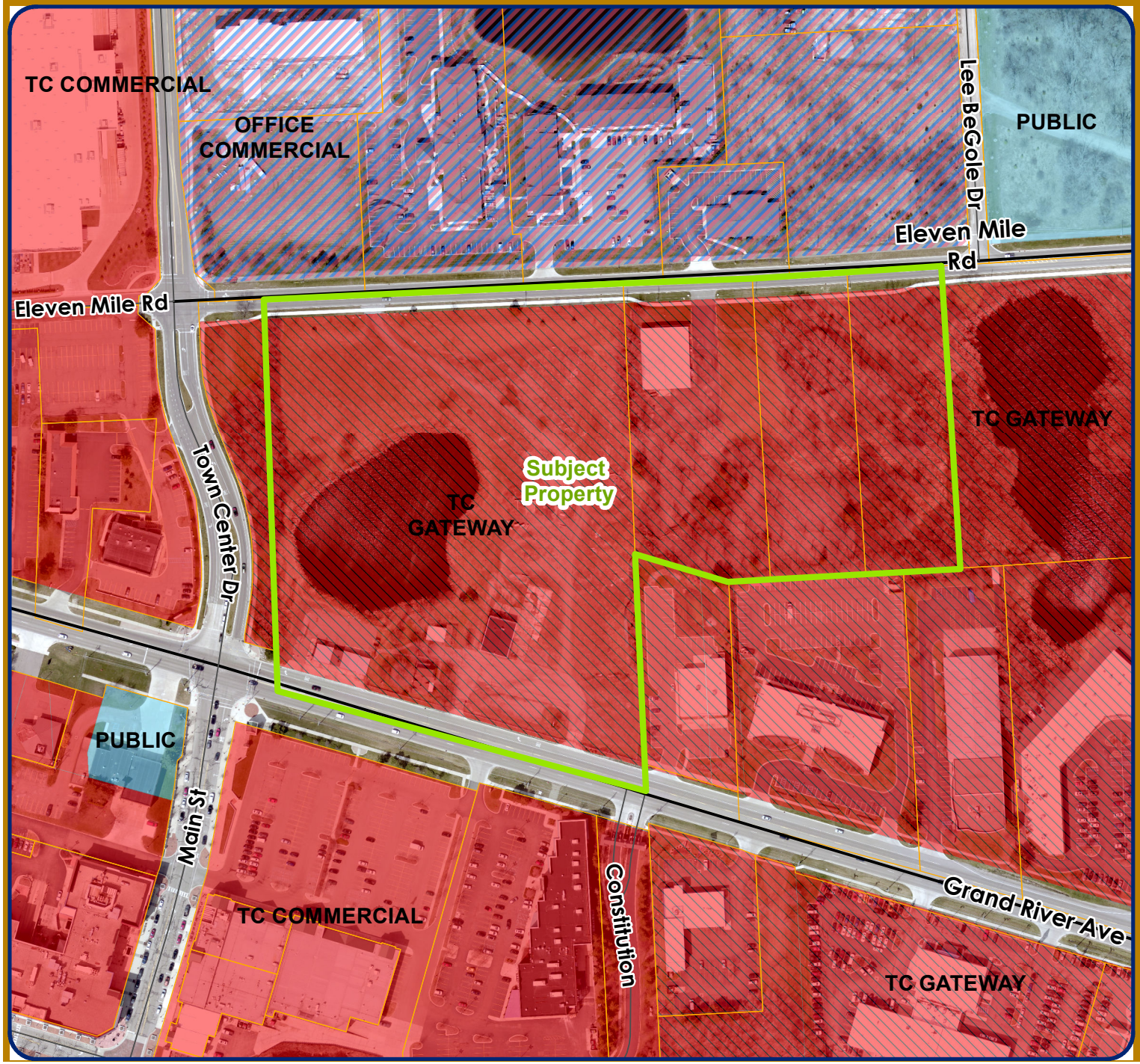
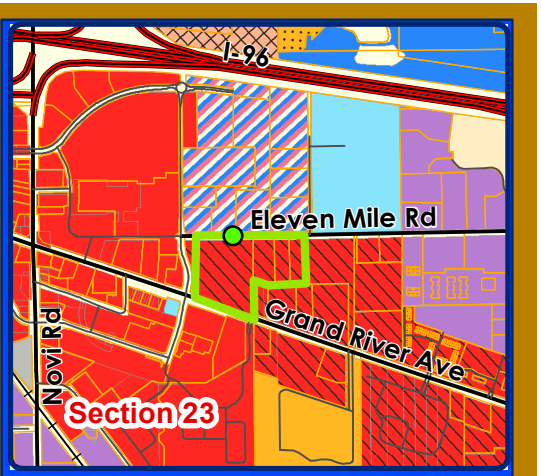
SAKURA WAY: JZ19-31

FUTURE LAND USE





LEGEND

- Multiple Family
- PD1
- Office Research Development Technology
- Office Commercial
- Industrial Research Development Technology
- Regional Commercial
- TC Commercial
- TC Gateway
- Educational Facility
- Public
- Cemetery
- Subject Property

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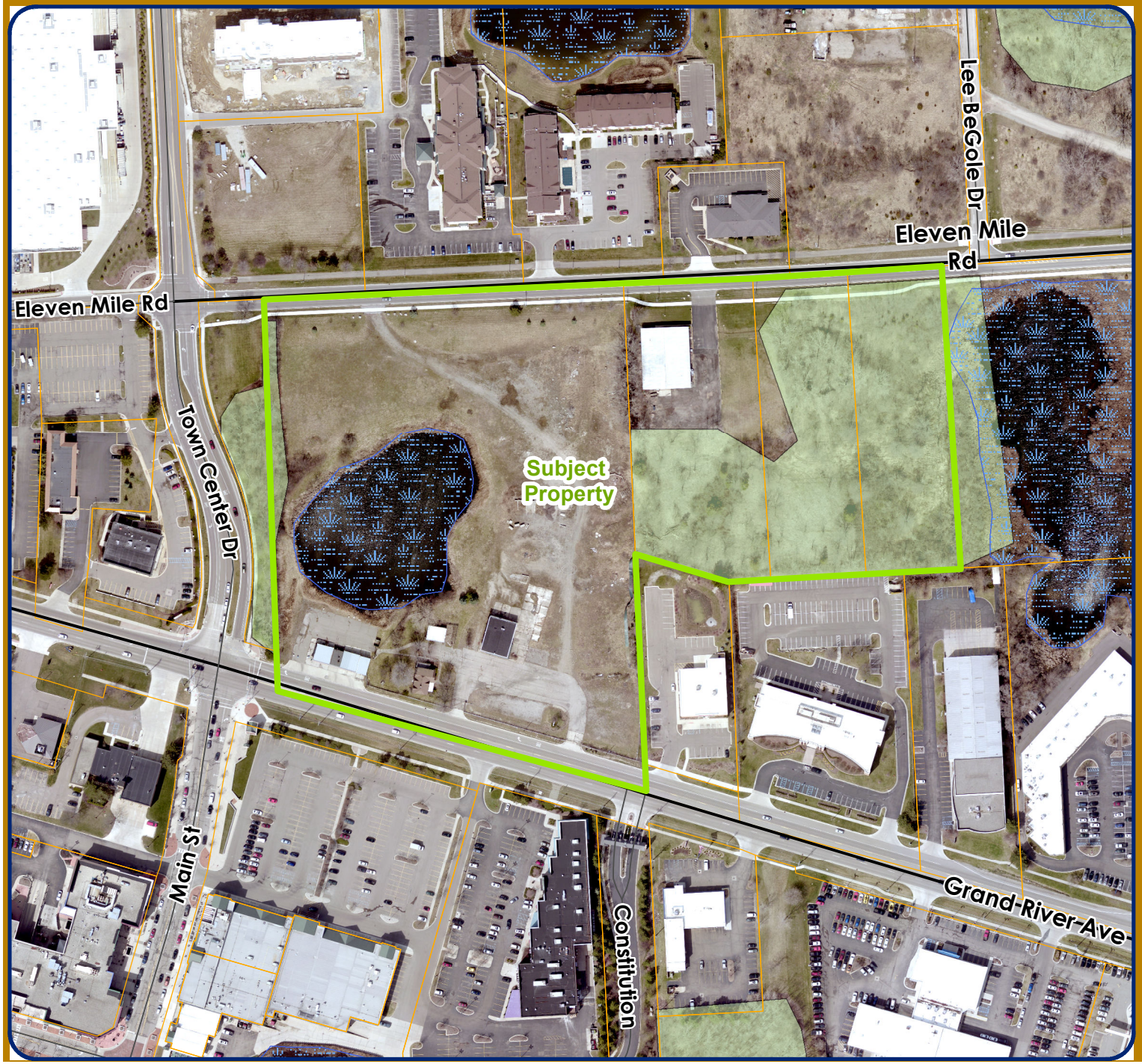
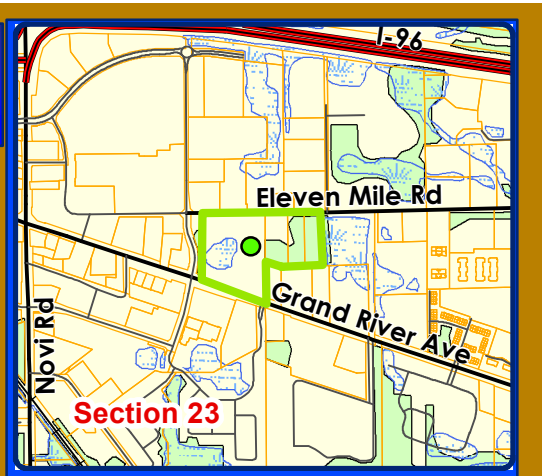
SAKURA WAY: JZ19-31

NATURAL FEATURES





LEGEND

- WETLANDS
- WOODLANDS
- Subject Property

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

Map Author: Lindsay Bell
Date: 7/22/19
Project: SAKURA WAY JZ 19-31
Version #: 1

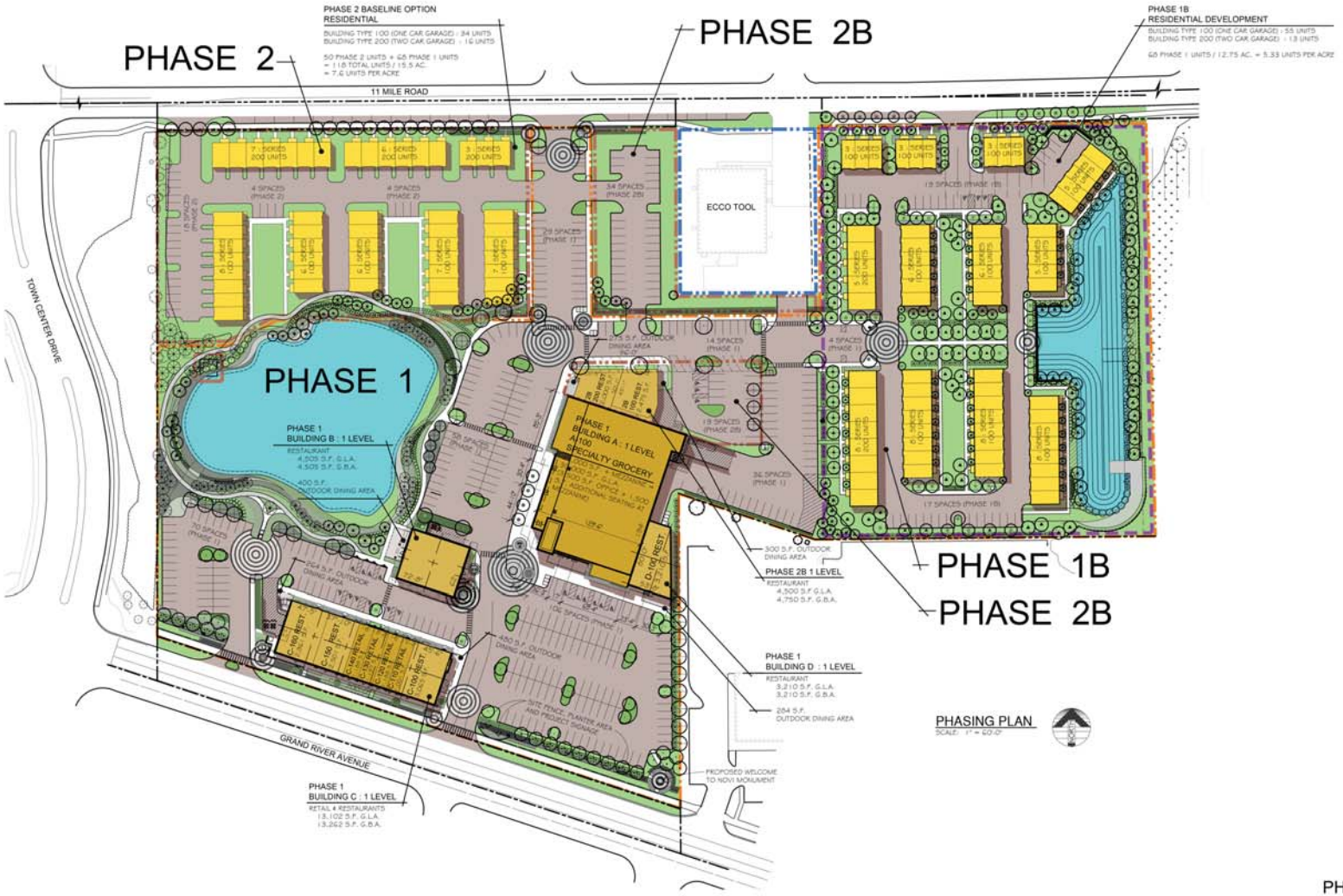
Feet
0 55 110 220 330

1 inch = 250 feet

MAP INTERPRETATION NOTICE

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

PRO CONCEPT PLAN
DECEMBER 20, 2019



TOTAL DEVELOPMENT SITE :
15.51 AC. GROSS : 15.04 AC. NET

PHASE 1 & 1B	: 12.75 AC.
PHASE 2 & 2B	: 2.76 AC.
RESIDENTIAL	
DISTRICT (PHASE 1B)	: 4.50 AC.
ECCO PARCEL	: 0.90 AC.
GRANDFATHER I-1 USE	

PHASES 1 & 2
BASELINE OPTION :
PROJECT CALCULATIONS

PHASE 1 & 1B : COMMERCIAL BUILDING AREA : 50,817 S.F. G.L.A. 50,977 S.F. G.B.A.

: RESIDENTIAL DEVELOPMENT
55 ONE CAR GARAGE UNITS, 13 TWO TWO CAR GARAGE UNITS
(68 TOTAL UNITS), ALL BEING 2 BEDROOM)

PHASE 2 & 2B : RESTAURANT BUILDING AREA : 4,500 S.F. G.L.A. 4,750 S.F. G.B.A.

RESIDENTIAL DEVELOPMENT
34 ONE CAR GARAGE UNITS, 16 TWO CAR GARAGE UNITS
(50 TOTAL UNITS), ALL BEING 2 BEDROOM)

NOTE : SEE CIVIL ENGINEER SHEET C2.0 FOR ALL PARKING CALCULATIONS.

PHASE 1 & 1B USES :

- 30,000 S.F. MARKET (25,000 S.F. + 3,500 S.F. MEZZ. OFFICE + 1,500 S.F. MEZZ. ADDITIONAL SEATING)
- 5 RESTAURANTS
- 4 RETAIL SPACES
- 68 TOWN-HOME APARTMENTS
  (55 - 1,184 S.F. & 13 - 1,541 S.F. UNITS)
  121 PARKING SPACES

  68 PHASE 1 UNITS / 12.75 AC. = 5.33 UNITS PER ACRE
- LIGHT INDUSTRIAL USE ECCO TOOL CO.
  PARCEL GRANDFATHERED IN

PHASE 2 & 2B BASELINE OPTION :

- 2 RESTAURANTS
- 50 TOWN-HOME RESIDENTIAL UNITS
  (34 - 1,184 S.F. & 16 - 1,541 S.F. UNITS)
  92 PARKING SPACES

  50 PHASE 2 UNITS + 68 PHASE 1B UNITS
  = 118 TOTAL UNITS / 15.5 AC. = 7.6 UNITS PER ACRE

PHASING EXHIBIT C :
PHASE 1 + 2 BASELINE OPTION

SAKURA • NOVI

NOVI, MICHIGAN

Robert B. Aikens & Associates, L.L.C.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-263-1071

WAH YEE ASSOCIATES
ARCHITECTS & PLANNERS
42400 GRAND RIVER AVENUE, SUITE 200
NOVI, MICHIGAN 48375
PHONE 248.489.9160
PROJECT NO. 5035

ISSUED FOR
CONCEPT MEETING
FEB. 27, 2019
PRE-APP. MEETING
MAY 8, 2019
PRO REZONING
JUNE 28, 2019
PRO REZONING
REVISED SUBMITTAL
OCTOBER 2, 2019
PRO REZONING P.C.
& PUBLIC HEARING
DECEMBER 4, 2019
PRO REZONING
REVISED SUBMITTAL
DECEMBER 20, 2019

PRELIMINARY
NOT FOR CONSTRUCTION

CAD DWG C: PHASE 1 + 2 B.L.EXHIBIT 12-20-19_LANDSCAPE.DWG

LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows:
Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows:
Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence
North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

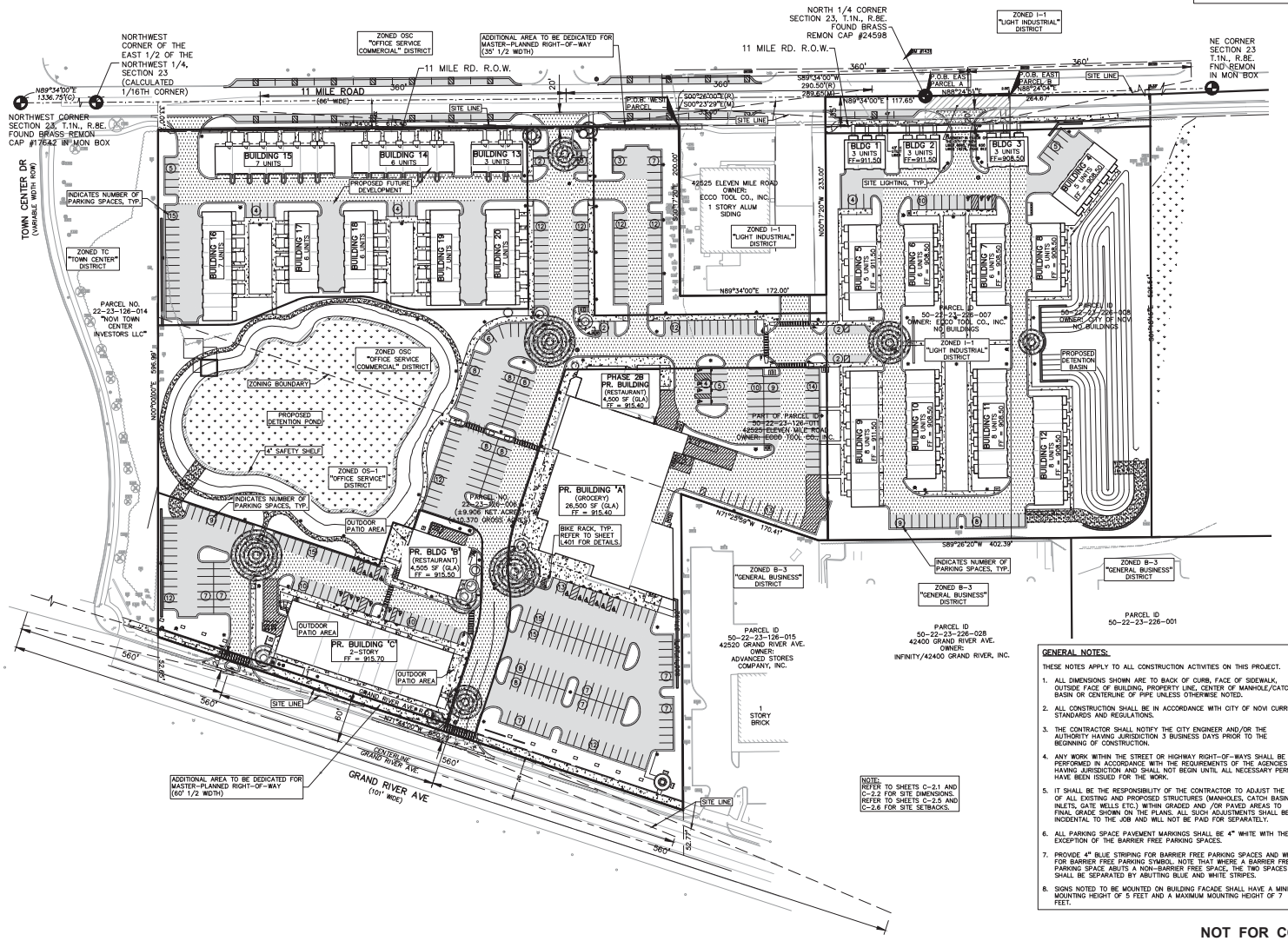
Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as:
Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

GRAPHIC SCALE
−60 0 30 60 120 240
(IN FEET)
1 Inch = 60 ft.

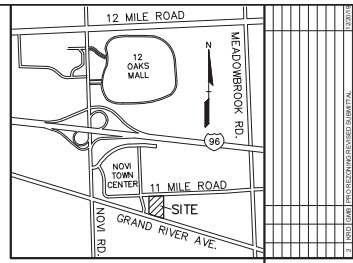
CITY OF NOVI FIRE DEPARTMENT NOTES:
1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

DEWATERING NOTE:
DEWATERING IS NOT ANTICIPATED DURING CONSTRUCTION.



GENERAL NOTES:
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.
6. ALL PARKING SPACE PAVEMENT MARKINGS SHALL BE 4" WHITE WITH THE EXCEPTION OF THE BARRIER FREE PARKING SPACES.
7. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOL. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ABUTS A NON-BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

NOT FOR CONSTRUCTION



LOCATION MAP – NOT TO SCALE

LEGEND

EXISTING	PROPOSED
IRON FOUND	BRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	
ELEC., PHONE OR CABLE TV GUY LINE, POLE & GUY WIRE	
UNDERGROUND CABLE TV, CATV PEDESTAL	
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
GAS MAIN, VALVE & GAS LINE MARKER	
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
SANITARY SEWER, CLEANOUT & MANHOLE	
STORM SEWER, CLEANOUT & MANHOLE	
COMBINED SEWER & MANHOLE	
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN	
POST INDICATOR VALVE	
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
UNIDENTIFIED STRUCTURE	
SPOT ELEVATION	
CONTOUR LINE	
FENCE	
GUARD RAIL	
STREET LIGHT	
SIGN	
CONCRETE	
ASPH.	ASPHALT
GRAVEL	GRAVEL SHOULDER
	WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 07-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:
By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS
BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

SITE DATA TABLE:

SITE AREA: 15.51 ACRES (675,755 SF) GROSS
15.04 ACRES (655,343 SF) NET

ZONING: OSC: OFFICE SERVICE COMMERCIAL
OS-1: OFFICE SERVICE
I-1: LIGHT INDUSTRIAL

PROPOSED ZONING: TC-1 W/ PRO-PLANNED REZONING OVERLAY
PROPOSED USE:
–MIXED USE COMMERCIAL (SEE BUILDING USE BELOW FOR BREAKDOWN)
–MULTI-FAMILY RESIDENTIAL (118 UNITS)

PARKING CALCULATIONS: (SHARED PARKING STUDY PREPARED BY BERGMANN)

BUILDING USE:	WEEKEND PEAK DEMAND:
RETAIL = 4,575 SF	18
MARKET = 26,500 SF	119
QUALITY RESTAURANT = 6,275 SF	58
SIT-DOWN RESTAURANT = 4,505 SF	46
FAST CASUAL RESTAURANT = 9,962 SF	99
MULTI-FAMILY RESIDENTIAL = 118 UNITS	133
10% EFFECTIVE SUPPLY	48

PARKING REQUIRED:
MIXED USE DEVELOPMENT PARKING = (18+119+58+48+99) = 342 SPACES
MULTI-FAMILY RESIDENTIAL PARKING = 133 SPACES
10% EFFECTIVE SUPPLY = (342 + 133) • 0.1 = 48 SPACES
TOTAL PARKING REQUIRED = 342 + 133 + 48 = 523 SPACES

PARKING PROVIDED:
PHASE 1 COMMERCIAL = 323 SPACES
PHASE 1 RESIDENTIAL = 108 SPACES (68 GARAGE, 40 SURFACE)
PHASE 2 COMMERCIAL = 43 SPACES
PHASE 2 RESIDENTIAL = 94 SPACES (66 GARAGE, 28 SURFACE)
11 MILE ROAD ON-STREET = 46 SPACES

TOTAL PARKING = 614 SPACES, INC. 23 ADA SPACES

BICYCLE PARKING CALCULATIONS:
MIXED USE DEVELOPMENT = 5% OF REQUIRED AUTOMOBILE SPACES
= 366 • 0.05 = 18.3 ~ 18 SPACES
MULTI-FAMILY RESIDENTIAL = 1 SPACE PER 5 DWELLING UNITS
= 118/5 = 23.6 ~ 24 SPACES
TOTAL BICYCLE PARKING REQUIRED = 18 + 24 = 42 SPACES

TOTAL BICYCLE PARKING PROVIDED = 33 SPACES

REVISIONS	DATE
1. PER CITY COMMENTS	3.20.19
2. PER CITY COMMENTS	4.30.19
3. PER CITY COMMENTS	5.24.19

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

THIS DRAWING AND DESIGNS AND THE PROPERTY OF PEA, INC. AND ARE NOT TO BE USED IN WHOLE OR PART, THAT THEY ARE NOT TO BE USED, REPRODUCED, OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO OTHERS, WITHOUT THE PRIOR WRITTEN CONSENT OF PEA, INC. ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS ARE HEREBY SPECIFICALLY RESERVED. © 2019 PEA, INC.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND CONTRACTOR SHALL FURTHER INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

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MISS DIG System, Inc.
1-800-482-7171 www.missdig.org

PEA, Inc.
2430 Rochester Ct., Ste. 100
Troy, MI 48083-1872
f: 248.689.9090
f: 248.689.1044
www.peainc.com

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

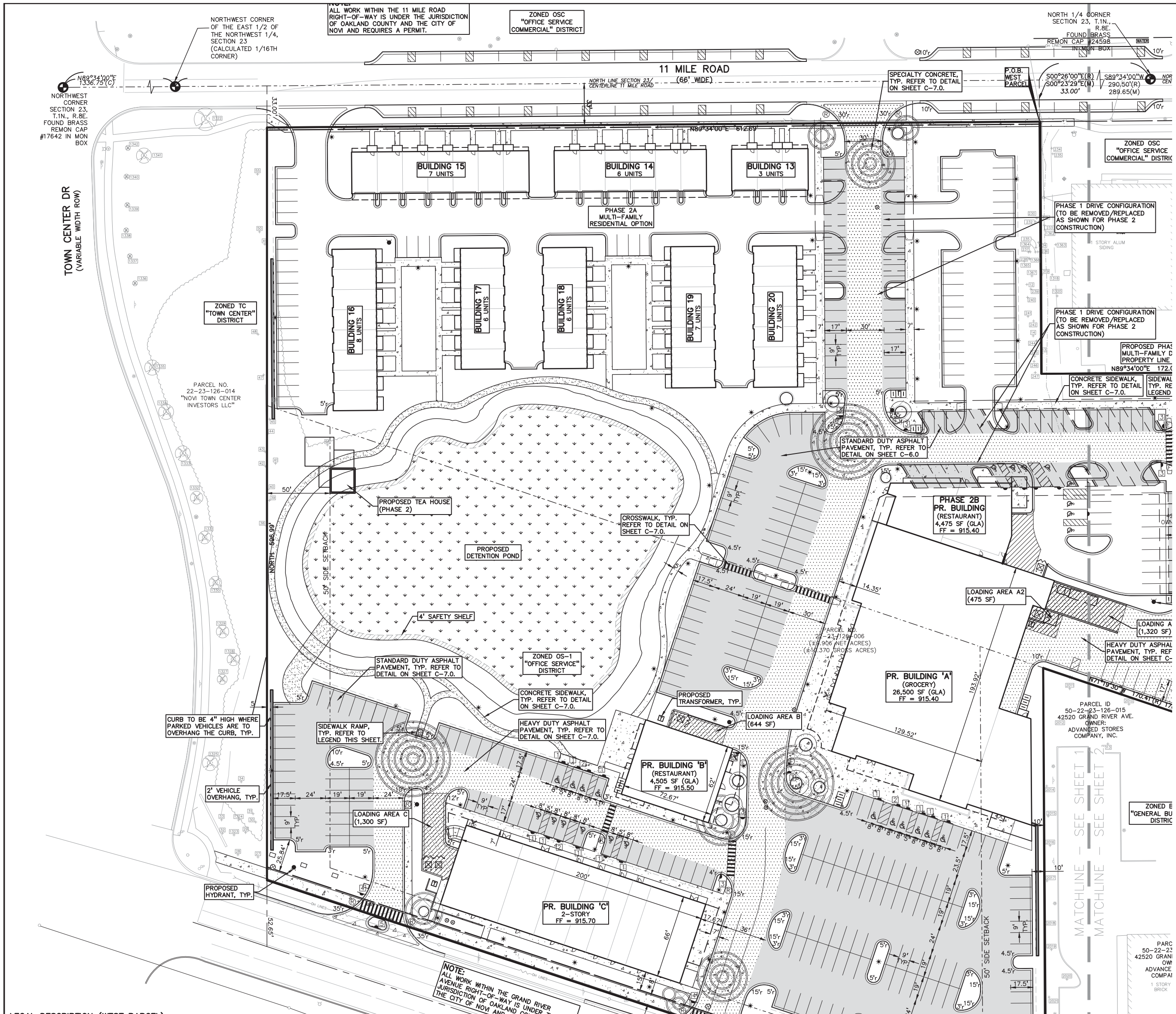
OVERALL SITE PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

X:\PROJECTS\2018\18033\CAD\SITE PLANS\C-2.0 OVERALL - 18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019
PEA JOB NO. 2018-033
SCALE: 1" = 60'
DRAWING NUMBER: C-2.0

XREF: S:\PROJECTS\2018\18033\CAD\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\18033\CAD\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\18033\CAD\SITE PLANS\X-TRUC-18033.DWG



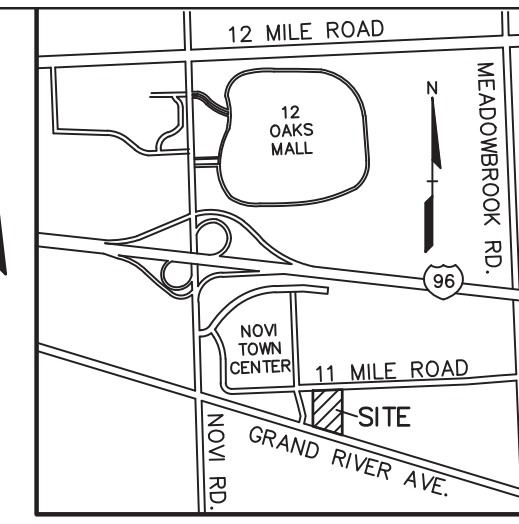
LEGAL DESCRIPTION (WEST PARCEL)

(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows: Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726



LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
POST INDICATOR VALVE
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION (816.06 / 671.21)
CONTOUR LINE (670 / 671)
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONCRETE (STD DUTY, HEAVY DUTY, R.O.W. ONLY)
ASPHALT (STD DUTY, HEAVY DUTY, DEEP STRENGTH)
GRAVEL SHOULDER
WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-58-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

BENCHMARKS

BM #1431
'X' ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

SIGN LEGEND:

'BARRIER FREE PARKING' SIGN	1	18 EA.
'VAN ACCESSIBLE' SIGN	2	5 EA.
'CROSSWALK' SIGN	3	12 EA.
'STOP' SIGN	4	2 EA.
'NO LEFT TURN' SIGN	5	1 EA.

ALL TRAFFIC SIGNAGE SHALL COMPLY WITH CURRENT MMUTCD STANDARDS. REFER TO SHEET C-7.0 FOR SIGN DETAILS.

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE R' Ⓡ
SIDEWALK RAMP 'TYPE F' Ⓕ

REFER TO LATEST M.D.O.T. R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

LOADING CALCULATIONS:

LOADING AREA:	REQUIRED:	PROVIDED:
A1	1,295 SF	1,320 SF
A2	537 SF	475 SF*
B	620 SF	644 SF
C	2,000 SF	1,300 SF*

*VARIANCE REQUESTED

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
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6. ALL PARKING SPACE PAVEMENT MARKINGS SHALL BE 4" WHITE WITH THE EXCEPTION OF THE BARRIER FREE PARKING SPACES.
7. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOL. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ABUTS A NON-BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

CITY OF NOVI FIRE DEPARTMENT NOTES:

1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X-TBLK-18033.DWG

REVISIONS

No.	BY	CHK	DESCRIPTION	DATE
1	KRD	GMB	PRO REZONING REVISED SUBMITTAL	10/2/19
2	KRD	GMB	PRO REZONING REVISED SUBMITTAL	12/20/19

STATE OF MICHIGAN GREGORY BONO ENGINEER No. LICENSED PROFESSIONAL ENGINEER

CAUTION!!
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f: 248.689.1044
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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE., SUITE 300
BIRMINGHAM, MI 48009

DIMENSION AND PAVING PLAN - PHASE 1B
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	SUR.	P.M.
GMB	JKS	GWC	JPB

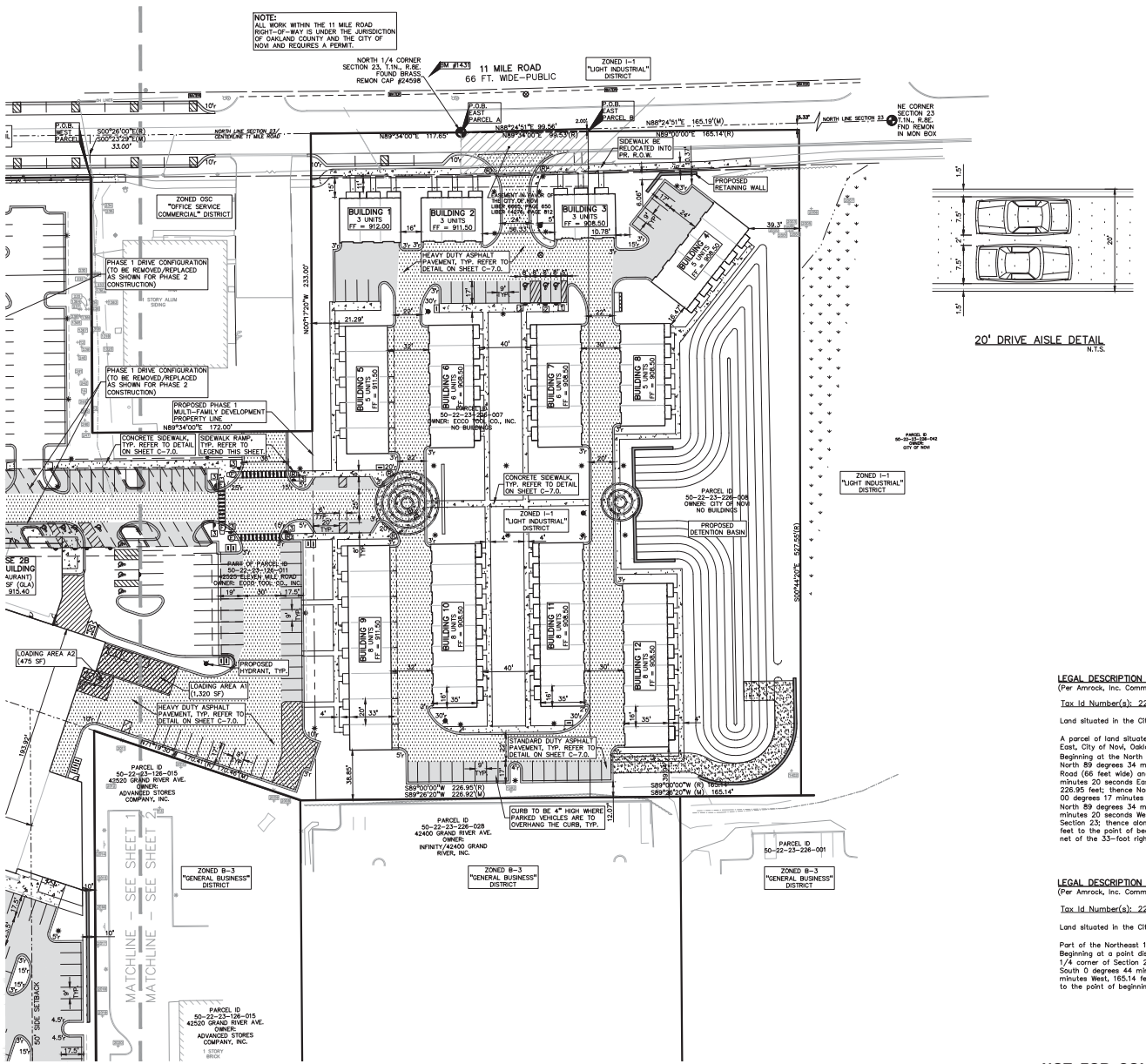
S:\PROJECTS\2018\2018-033 AIKEN NOVI-JPB\DWG\SITE PLANS\(C-2.1)DIM-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-2.2



LEGEND

IRON FOUND		BRASS PLUG SET	SEC. CORNER FOUND
IRON SET		MONUMENT FOUND	R RECORDED
NAIL FOUND		MONUMENT SET	M MEASURED
NAIL & CAP SET			C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPH. — ASPHALT
- GRAVEL — GRAVEL SHOULDER
- WETLAND

STD DUTY CURB | HEAVY DUTY CURB | R.D.B. ONLY
STD DUTY CURB & GUTTER | HEAVY DUTY CURB & GUTTER | DEEP STRENGTH CURB & GUTTER

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-05B-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows: Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-TRUC-18033.DWG

REVISIONS	DATE
1. PER CITY COMMENTS	3/20/19
2. PER CITY COMMENTS REVISED SUBMITTAL	4/29/19
3. PER CITY COMMENTS REVISED SUBMITTAL	5/29/19

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

DIMENSION AND PAVING PLAN - PHASE 1A
SAKURA NOVI

PART OF THE E 1/2 OF THE NE 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	CK.	JKS	SUR.	GWC	P.M.	JPB

P:\PROJECTS\2018\2018-033 AIKEN AVE\SITE PLANS\D-2\18M-18033.dwg

CAUTION!!
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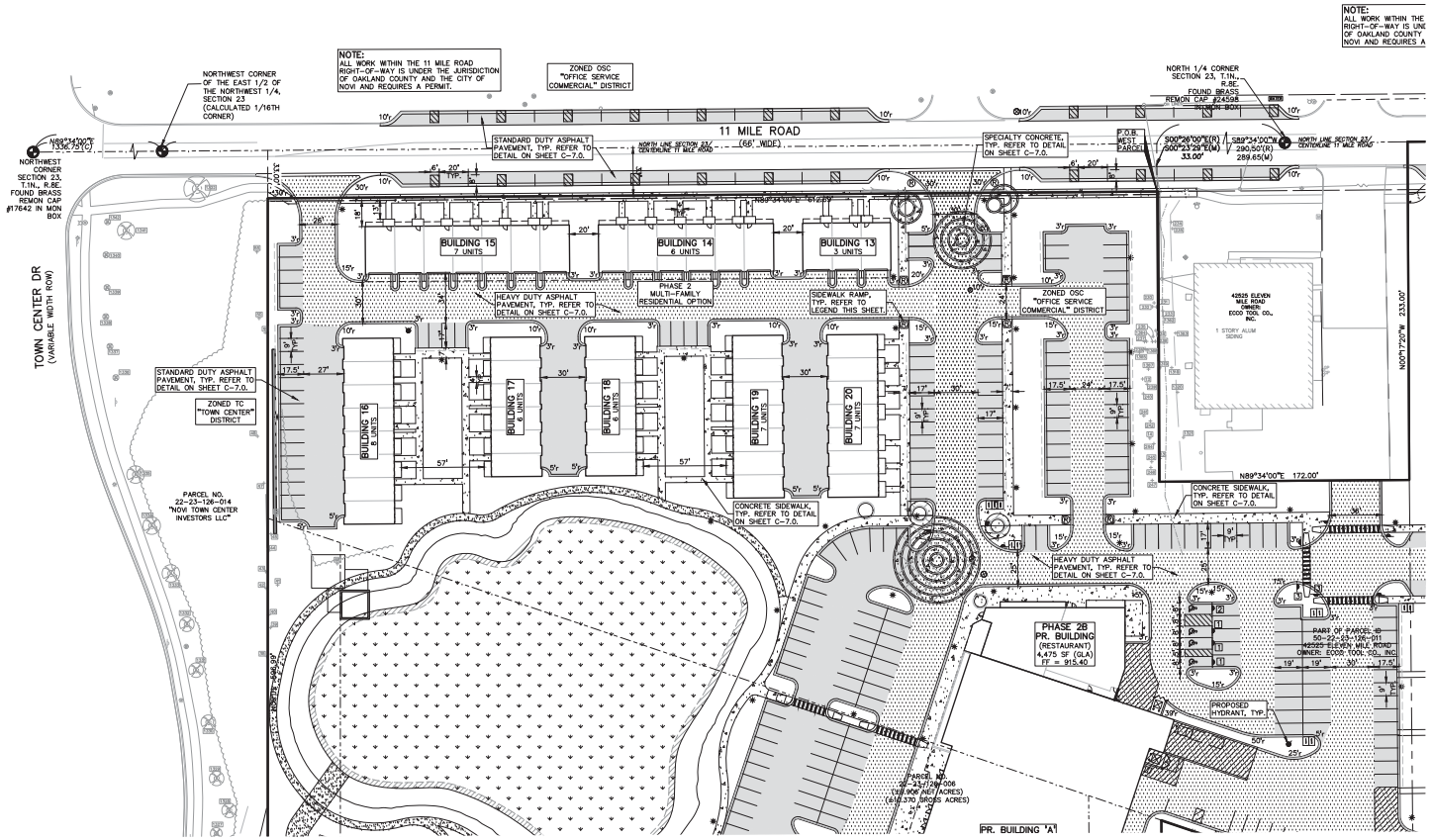
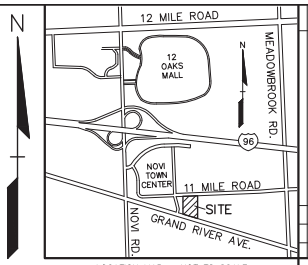
ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-2.1





LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

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- UNDERGROUND CABLE TV, CATV PEDESTAL
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- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPHALT
- GRAVEL
- GRAVEL SHOULDER
- WETLAND

STD DUTY: 6" CONC. / 2" ASPH. / 6" CL. II
HEAVY DUTY: 8" CONC. / 2" ASPH. / 10" CL. II
R.O.W. ONLY: 10" CONC.
STD DUTY: 6" CONC. / 2" ASPH. / 6" CL. II
HEAVY DEEP DUTY STRENGTH: 8" CONC. / 2" ASPH. / 12" CL. II

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.
6. ALL PARKING SPACE PAVEMENT MARKINGS SHALL BE 4" WHITE WITH THE EXCEPTION OF THE BARRIER FREE PARKING SPACES.
7. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOL. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ABUTS A NON-BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

CITY OF NOVI FIRE DEPARTMENT NOTES:

1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS	DATE
1. PER CITY COMMENTS	12/21/18
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General Notes:

1. ALL PLANTS SHALL BE LOCATED TO PROVIDE THE MINIMUM REQUIRED SET BACK FROM UTILITIES AND PROPERTY LINES. THE LANDSCAPE PLANTING PLANS IN THE FINAL SITE PLAN SUBMISSION WILL PROVIDE DIMENSION TO THE UTILITIES AND PROPERTY LINES.
2. THE PHASE 1 LANDSCAPE IMPROVEMENTS ARE SCHEDULED FOR FALL 2022.
3. REFER TO SHEET L489 FOR ADDITIONAL LANDSCAPE NOTES AND DETAILS.

USDA Soils Classification:

6B|B	MARLETTE SANDY LOAM, 1-6% SLOPES
6C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
11B	CAPAC SANDY LOAM, 0-4% SLOPES
21	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
5G	URBAN LAND
BmaB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

Landscape Planting Legend:

- PLANT TAG - REFER TO PLANT LIST FOR SPECIFICATION AND QUANTITIES ON L484
- GREENBELT CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- ROW / GREENBELT SUB-CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- INTERIOR STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- PARKING LOT INTERIOR TREES SEE LANDSCAPE ORDINANCE PLANS
- PARKING LOT PERIMETER TREES - DECIDUOUS AND EVERGREEN. SEE LANDSCAPE ORDINANCE PLANS
- RESIDENTIAL BUILDING UNIT TREES - DECIDUOUS AND EVERGREEN. SEE LANDSCAPE ORDINANCE PLANS
- WOODLAND REPLACEMENT TREES SEE WOODLAND REPLACEMENT PLANS
- ADDITIONAL IDENTITY TREES
- FOUNDATION TREE
- RELOCATED GREENBELT TREES
- EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- SODDED LAWN
- MEADOW LAWN - TYPE 'A' ON 2" TOPSOIL
- STORMWATER SEED MIXTURE TYPE 'B' ON 2" TOPSOIL
- EMERGENT WETLAND SEED MIXTURE TYPE 'C' - SEED TO EXISTING WATER LINE AT TIME OF CONSTRUCTION
- BIKE RACKS - SEE TYP. DETAIL
- BENCH - SEE TYP. DETAIL
- 4" DEPTH DECORATIVE STONE MULCH TYPE 'A' OVER NON-WOVEN FILTER FABRIC
- 4" DEPTH DECORATIVE STONE MULCH TYPE 'B' OVER NON-WOVEN FILTER FABRIC
- CROSSWALK
- RETAINING WALL - REFER TO CIVIL DOCUMENTATION
- LIGHT POLES - REFER TO LIGHTING PLAN
- LIGHT BOLLARDS - REFER TO LIGHTING PLAN
- MAIL BOXES REFER TO DETAIL

Note Key:

(APPLIES TO SHEETS L301 - L302, NOT ALL APPLY PER SHEET)

1. HEAVY DUTY COLORED CONCRETE ACCENT PAVING, TYP. - REFER TO DETAIL AND CIVIL PLANS
2. CONCRETE WALK, TYP.
3. IN-GROUND PLANTERS WITH ORNAMENTAL TREES OR PLANTINGS - REFER TO DETAILS
4. STREET TREES IN TREE GRATES
5. SAKURA NOVI IDENTIFICATION SIGNAGE - REFER TO ARCHITECTURAL PLANS
6. MASONRY PIERS WITH ORNAMENTAL FENCING - REFER TO ARCHITECTURAL PLANS
7. PEDESTRIAN PLAZA WITH COLORED CONCRETE ACCENT PAVING AND ORNAMENTAL PLANTINGS
8. SERVICE/LOADING AREA WITH PLANTING SCREEN
9. DETENTION POND / WATER FEATURE WITH AERATING FOUNTAINS
10. 6' WIDE DECORATIVE STONE WALKWAY
11. OUTDOOR DINING
12. SIGHT VISION TRIANGLE
13. TERRACE OVERLOOK
14. RESIDENTIAL IDENTIFICATION MONUMENT SIGN
15. BIKE RACK, TYP. - REFER TO DETAIL
16. BENCH, TYP. - REFER TO DETAIL
17. STORM BASIN MAINTENANCE ACCESS ROUTE - REFER TO CIVIL DRAWINGS
18. OPEN LAWN GAME AREA
19. RIDE SHARING PICK UP / DROP OFF AREA
20. ORNAMENTAL MOON GATE
21. EASEMENT FOR CITY GATEWAY FEATURE
22. DETENTION BASIN - REFER TO CIVIL DRAWINGS
23. HEDGE TO BE MAINTAINED AT 6' HT. - REFER TO DETAIL
24. HEDGE TO BE MAINTAINED AT 5' HT. - REFER TO DETAIL
25. OWNER WILL OBTAIN EASEMENT FROM ADJACENT PROPERTY OWNER TO PLANT AND MAINTAIN PERIMETER PARKING LOT TREES NEAR PROPERTY LINE
26. OWNER WILL COORDINATE LOCATION OF PERIMETER PARKING LOT TREES WITH ADJACENT PROPERTY OWNER
27. PARKING LOT SCREENING HEDGE TO BE MAINTAINED AT 3' HT.
28. RELOCATE EXISTING GREENBELT TREES TO ROW.
29. SNOW STORAGE
30. STRUCTURAL SOIL TO BE INSTALLED WHERE REQUIRED PLANTING SPACE IS INSUFFICIENT

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'

NORTH



Key Map
Scale: Not to Scale

SUSAN L. GRISSIM LANDSCAPE ARCHITECT No. 1541 REGISTERED

Owner/Developer:
Robert B. Aikens & Associates, LLC.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

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

Project: Sakura Novi
Novi, Michigan

Sheet: Landscape Planting Plan - Phase 1

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: 1"=40'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L301

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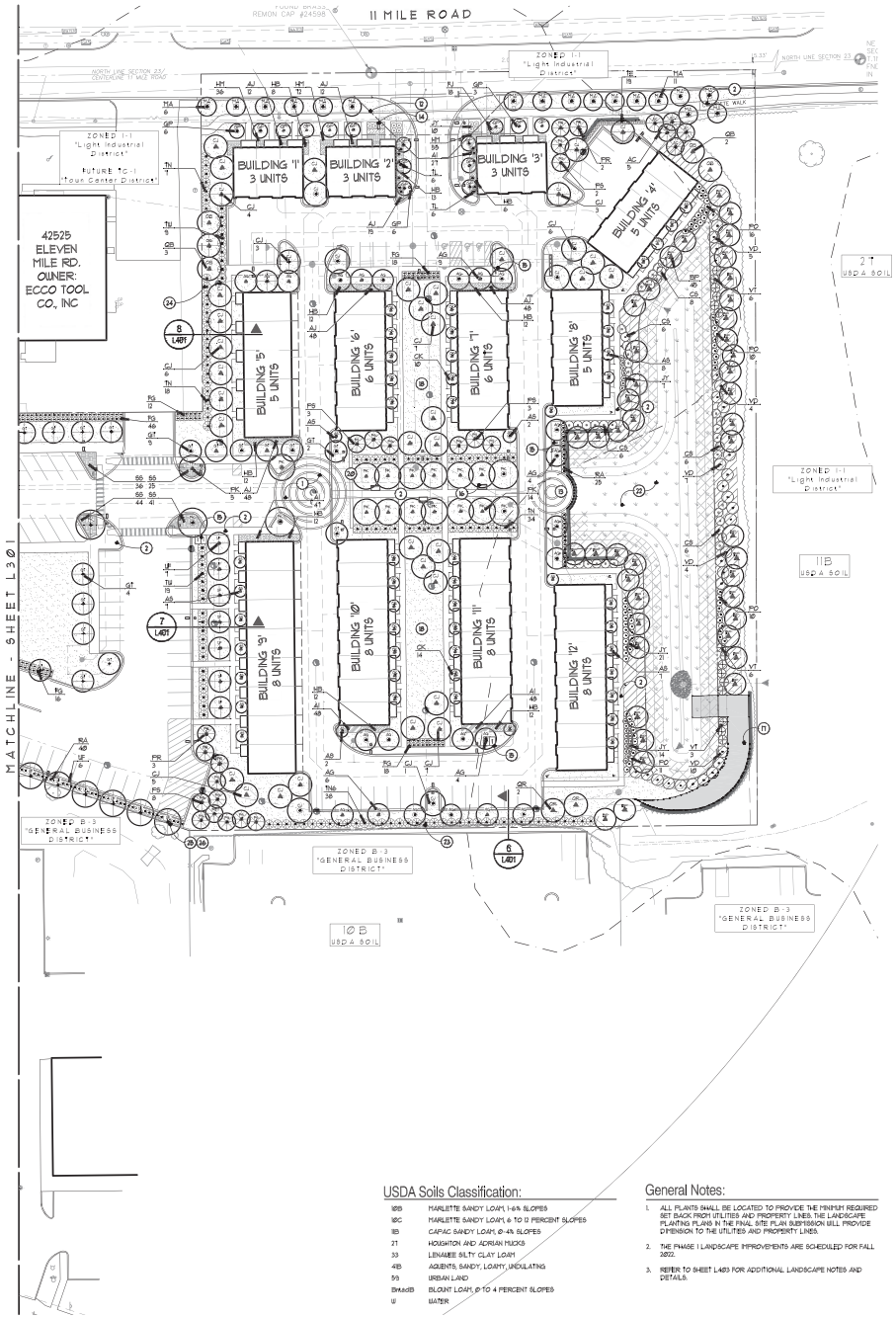

Landscape Planting Legend:

- PLANT TAG - REFER TO PLANT LIST FOR SPECIFICATION AND QUANTITIES ON L404
- GREENBELT CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- ROW / GREENBELT SUB-CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- INTERIOR STREET TREES SEE LANDSCAPE ORDINANCE PLANS
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- ADDITIONAL IDENTITY TREES
- FOUNDATION TREE
- RELOCATED GREENBELT TREES
- EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- SODDED LAWN
- MEADOW LAWN - TYPE 'A' ON 2" TOPSOIL
- STORMWATER SEED MIXTURE TYPE 'B' ON 2" TOPSOIL
- EMERGENT WETLAND SEED MIXTURE TYPE 'C' - SEED TO EXISTING WATER LINE AT TIME OF CONSTRUCTION
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- CROSSWALK
- RETAINING WALL - REFER TO CIVIL DOCUMENTATION
- LIGHT POLES - REFER TO LIGHTING PLAN
- LIGHT BOLLARDS - REFER TO LIGHTING PLAN
- MAIL BOXES REFER TO DETAIL

Note Key:

(APPLIES TO SHEETS L301 - L302, NOT ALL APPLY PER SHEET)

1. HEAVY DUTY COLORED CONCRETE ACCENT PAVING, TYP. - REFER TO DETAIL AND CIVIL PLANS
2. CONCRETE WALK, TYP.
3. IN-GROUND PLANTERS WITH ORNAMENTAL TREES OR PLANTINGS - REFER TO DETAILS
4. STREET TREES IN TREE GRATES
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USDA Soils Classification:

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General Notes:

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0' 20' 40' 80'

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Key Map

Scale: Not to Scale

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Owner/Developer:

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Birmingham, MI 48009 ph: 248-283-1071

GRISSIM METZ ASSOCIATES ANDRIESE

Landscape Architecture

311 East Cady Street
Northville, MI 48167

Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
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Job Number:	A01-191
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Scale:	1"=40'

Date:	Issued for:
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10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L302

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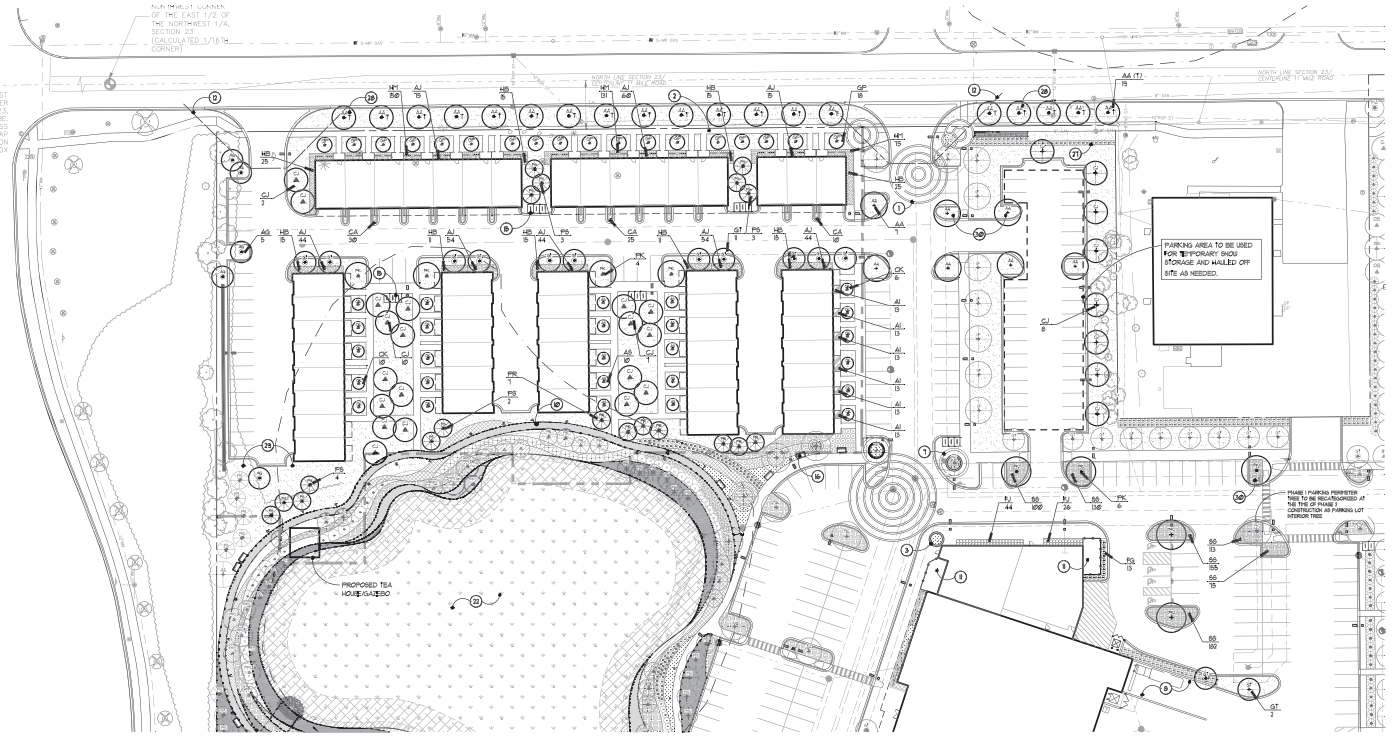

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Note Key:

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4. STREET TREES IN TREE GRATES
5. SAKURA NOVI IDENTIFICATION SIGNAGE - REFER TO ARCHITECTURAL PLANS
6. MASONRY PIERS WITH ORNAMENTAL FENCING - REFER TO ARCHITECTURAL PLANS
7. PEDESTRIAN PLAZA WITH COLORED CONCRETE ACCENT PAVING AND ORNAMENTAL PLANTINGS
8. SERVICE/LOADING AREA WITH PLANTING SCREEN
9. DETENTION POND / WATER FEATURE WITH AERATING FOUNTAINS
10. 6' WIDE DECORATIVE STONE WALKWAY
11. OUTDOOR DINING
12. SIGHT VISION TRIANGLE
13. TERRACE OVERLOOK
14. RESIDENTIAL IDENTIFICATION MONUMENT SIGN
15. BIKE RACK, TYP. - REFER TO DETAIL
16. BENCH, TYP. - REFER TO DETAIL
17. STORM BASIN MAINTENANCE ACCESS ROUTE - REFER TO CIVIL DRAWINGS
18. OPEN LAWN GAME AREA
19. RIDE SHARING PICK UP / DROP OFF AREA
20. ORNAMENTAL MOON GATE
21. EASEMENT FOR CITY GATEWAY FEATURE
22. DETENTION BASIN - REFER TO CIVIL DRAWINGS
23. HEDGE TO BE MAINTAINED AT 6' HT. - REFER TO DETAIL
24. HEDGE TO BE MAINTAINED AT 5' HT. - REFER TO DETAIL
25. OWNER WILL OBTAIN EASEMENT FROM ADJACENT PROPERTY OWNER TO PLANT AND MAINTAIN PERIMETER PARKING LOT TREES NEAR PROPERTY LINE
26. OWNER WILL COORDINATE LOCATION OF PERIMETER PARKING LOT TREES WITH ADJACENT PROPERTY OWNER
27. PARKING LOT SCREENING HEDGE TO BE MAINTAINED AT 3' HT.
28. RELOCATE EXISTING GREENBELT TREES TO ROW.
29. SNOW STORAGE
30. STRUCTURAL SOIL TO BE INSTALLED WHERE REQUIRED PLANTING SPACE IS INSUFFICIENT

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'

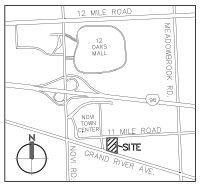
NORTH

USDA Soils Classification:

18B	MARLETTE SANDY LOAM, 1-6% SLOPES
18C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
19	CAPAC SANDY LOAM, 0-4% SLOPES
27	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
59	URBAN LAND
BmaxB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

General Notes:

1. ALL PLANTS SHALL BE LOCATED TO PROVIDE THE MINIMUM REQUIRED SET BACK FROM UTILITIES AND PROPERTY LINES. THE LANDSCAPE PLANTING PLANS IN THE FINAL SITE PLAN SUBMISSION WILL PROVIDE DIMENSION TO THE UTILITIES AND PROPERTY LINES.
2. THE LANDSCAPE IMPROVEMENTS ARE SCHEDULED FOR SPRING 2020.
3. REFER TO SHEET L403 FOR ADDITIONAL LANDSCAPE NOTES AND DETAILS.
4. PHASE 2 LANDSCAPE IMPROVEMENTS TO BE INSTALLED IN FALL 2020.



Key Map

Scale: Not to Scale

SUSAN L. GRISSIM LANDSCAPE ARCHITECT No. 1581 LANDSCAPE ARCHITECT STATE OF MICHIGAN

Owner/Developer:

Robert B. Aikens & Associates, LLC.

350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-263-1071

GRISSIM METZ ASSOCIATES ANDRIESE

Landscape Architecture

311 East Cady Street
Northville, MI 48167

Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
Landscape Planting Plan - Phase 2

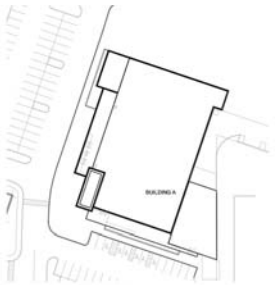
Job Number:	A01-191
Drawn:	MS/EG/SE
Checked:	SG
Scale:	1"=40'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L303

© Grissim Metz Andriese Associates, 2019


ラーメン屋敷
RAMEN HOUSE
ONE WORLD MARKET
桜
SAKURA • NOVI



KEY PLAN
SCALE: N.T.S.

BR-1
Belden
Gray Bricks
Beacon Velour

FCP-1
Nichiha
VintageWood
Cedar EPC762F

EIFS-1
Dryvit
Commercial Cement Plaster
PPG Gray Palomino 521-3

MTL-1
Alpolic
Alpolic/PE
CLR Anodized Clear

GFRC-1
ConcreteWorks East
GFRC Wall Panels
Cumulus G



A WEST ELEVATION
SCALE: 3/32" = 1'-0"

WEST ELEVATION MATERIALS

TAG	MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BR-1	BRICK	100 % 30% MIN	1,569 S.F.	37.0 %
MTL-1	FLAT METL PANEL	25 %	141 S.F.	3.0 %
FCP-1	FIBER CEMENT PANEL(NICHIHA)	25 %	630 S.F.	15 %
GFRC-1	G.F.R.C CLADDING SYSTEM	25 %	498 S.F.	12.0 %
EIFS-1	E.I.F.S.(DRYVIT)	25 %	1,143 S.F.	27.0 %
	AWNINGS: FABRIC OR MEMBRANE	10 %	113 S.F.	3 %
	TOTAL		4,007 S.F.	100.0 %



B SOUTH ELEVATION
SCALE: 3/32" = 1'-0"

SOUTH ELEVATION MATERIALS

TAG	MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BR-1	BRICK	100 % 30% MIN	1,347 S.F.	31%
MTL-1	FLAT METL PANEL ALUMINUM COMPOSITE (ALPOLIC)	25%	807 S.F.	12 %
FCP-1	FIBER CEMENT PANEL(NICHIHA)	25 %	1,159 S.F.	23 %
GFRC-1	G.F.R.C CADDING SYSTEM	25 %	604 S.F.	12 %
EIFS-1	E.I.F.S.(DRYVIT)	25 %	871 S.F.	17.5 %
	AWNINGS: FABRIC OR MEMBRANE	10 %	247 S.F.	4.5 %
	TOTAL		5,031 S.F.	100.0 %

ONE WORLD MARKET
NOVI MICHIGAN

BUILDING A ELEVATIONS
SAKURA WAY
NOVI, MICHIGAN

P4.1

PRELIMINARY
NOT FOR CONSTRUCTION

www.dwdw.co dwdw



NORTH ELEVATION
SCALE: 3/32" = 1'-0"
1 / P4.4

NORTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	292 S.F.	7.8 %
BRICK	30 % MIN.	2,186 S.F.	58.4 %
EIFS FACADE	25 %	467 S.F.	12.4 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	352 S.F.	9.3 %
PREFINISHED METAL PANELS (FLAT)	25 %	455 S.F.	12.1 %
TOTAL		3,764 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 5,320 S.F. - GLASS STOREFRONT AND DOOR AREA OF 1,556 S.F. = 3,764 S.F.
2. NO SECTION 9 FACADE WAIVERS ARE REQUIRED.



WEST ELEVATION
SCALE: 3/32" = 1'-0"
3 / P4.4

WEST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	55 S.F.	3.6 %
BRICK	30 % MIN.	625 S.F.	40.4 %
EIFS FACADE	25 %	610 S.F.	39.5 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	98 S.F.	6.3 %
PREFINISHED METAL PANELS (FLAT)	25 %	158 S.F.	10.2 %
TOTAL		1,546 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,746 S.F. - GLASS STOREFRONT AND DOOR AREA OF 202 S.F. = 1,546 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR E.I.F.S. OVERAGE OF 14.5 %



EAST ELEVATION
SCALE: 3/32" = 1'-0"
2 / P4.4

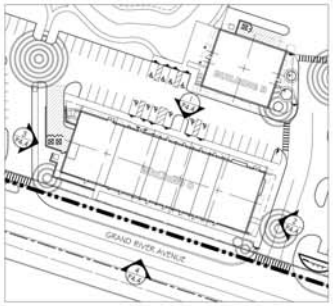
EAST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	156 S.F.	11.4 %
BRICK	30 % MIN.	434 S.F.	31.7 %
EIFS FACADE	25 %	392 S.F.	28.7 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	52 S.F.	3.8 %
PREFINISHED METAL PANELS (FLAT)	25 %	333 S.F.	24.4 %
TOTAL		1,367 S.F.	100.0 %

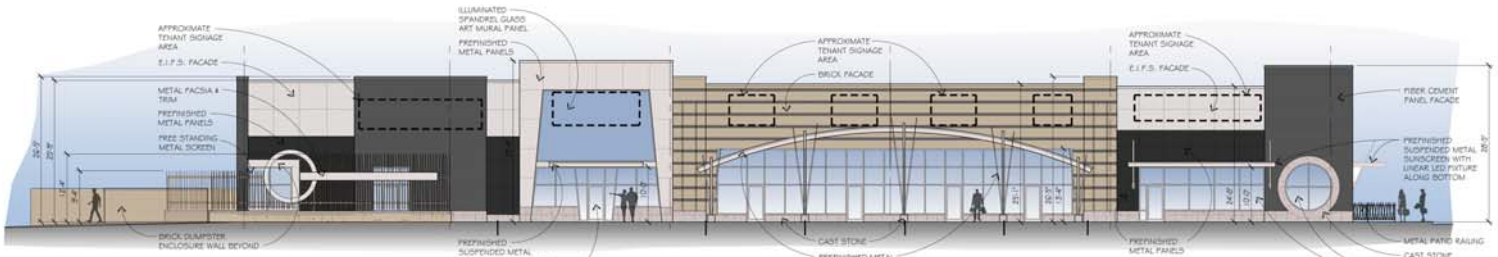
NOTE : 1. TOTAL FACADE = 1,757 S.F. - GLASS STOREFRONT AND DOOR AREA OF 390 S.F. = 1,367 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR E.I.F.S. OVERAGE OF 3.7 %

GENERAL NOTES :

1. CANOPIES AND AWNINGS TO BE BY TENANTS SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
2. DOOR LOCATIONS SHOWN FOR CONCEPT ONLY, SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
3. ROOF TOP MECHANICAL EQUIPMENT TO BE SCREENED BY BUILDING PARAPETS OR SCREEN ENCLOSURES OF SIMILAR MATERIAL AND CHARACTER AS THE BUILDING.
4. ALL OUTDOOR PATIO / DINING AREAS SERVING ALCOHOL WILL BE ENCLOSED WITH A METAL RAILING SYSTEM.
5. OUTDOOR SEATING SHALL BE PERMITTED BETWEEN MARCH 1ST AND NOVEMBER 30TH, WITH ALL FURNITURE AND FIXTURES INCLUDING, BUT NOT LIMITED TO, TABLES, CHAIRS AND WASTE RECEPTACLES REMOVED FROM THE EXTERIOR PREMISES BY NOVEMBER 30TH. OUTDOOR SEATING SHALL NOT BE THE PRIMARY SEATING OF THE RESTAURANT.
6. SIGNAGE AREAS SHOWN FOR CONCEPT ONLY. ACTUAL SIGNAGE TO BE SUBMITTED ON A TENANT BY TENANT BASIS, IN CONFORMANCE WITH THE APPROVED PRO AGREEMENT.



KEY PLAN
SCALE: N.T.S.



SOUTH ELEVATION
SCALE: 3/32" = 1'-0"
4 / P4.4

SOUTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	340 S.F.	8.3 %
BRICK	30 % MIN.	2,060 S.F.	50.7 %
EIFS FACADE	25 %	475 S.F.	11.6 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	234 S.F.	5.7 %
PREFINISHED METAL PANELS (FLAT)	25 %	704 S.F.	17.2 %
SPANDREL GLASS - ART MURAL PANEL	50 %	269 S.F.	6.5 %
TOTAL		4,102 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 5,456 S.F. - GLASS STOREFRONT AND DOOR AREA OF 1,354 S.F. = 4,102 S.F.
2. NO SECTION 9 FACADE WAIVERS ARE REQUIRED.

BUILDING C ELEVATIONS

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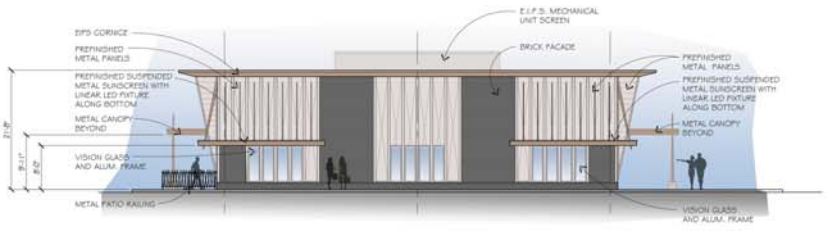
WAH YEE ASSOCIATES
ARCHITECTS & PLANNERS
42400 GRAND RIVER AVENUE, SUITE 200
NOVI, MICHIGAN 48375
PHONE 248.489.9160

PROJECT NO. 5035

ISSUED FOR
CONCEPT MEETING
FEB. 27, 2019
PRE-APP. MEETING
MAY 8, 2019
PRO REZONING
JUNE 28, 2019
PRO REZONING
REVISED SUBMITTAL
SEPTEMBER 30, 2019

PRELIMINARY
NOT FOR CONSTRUCTION
(P4.4)

CAD DWG 5035 COLOR P44 9-30-19.DWG



SOUTH ELEVATION

SCALE: 3/32" = 1'-0"

2 / P4.3

SOUTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	544 S.F.	34.5 %
EIFS	25 %	198 S.F.	12.6 %
METAL CANOPIES & SUNSCREENS	15 %	50 S.F.	3.2 %
PREFINISHED METAL PANELS (FLAT)	25 %	784 S.F.	49.7 %
TOTAL		1,576 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,774 S.F. - GLASS STOREFRONT AND DOOR AREA OF 198 S.F. = 1,576 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 24.7%.



EAST ELEVATION

SCALE: 3/32" = 1'-0"

1 / P4.3

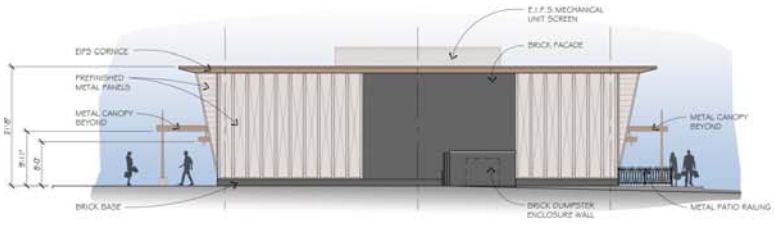
EAST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	350 S.F.	26.7 %
EIFS	25 %	207 S.F.	15.8 %
METAL CANOPIES & SUNSCREENS	15 %	85 S.F.	6.4 %
PREFINISHED METAL PANELS (FLAT)	25 %	670 S.F.	51.1 %
TOTAL		1,312 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,647 S.F. - GLASS STOREFRONT AND DOOR AREA OF 335 S.F. = 1,312 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 26.1 % AND BRICK SHORTAGE OF 3.3 %.

GENERAL NOTES :

1. CANOPIES AND AWNINGS TO BE BY TENANTS SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
2. DOOR LOCATIONS SHOWN FOR CONCEPT ONLY,SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
3. ROOF TOP MECHANICAL EQUIPMENT TO BE SCREENED BY BUILDING PARAPETS OR SCREEN ENCLOSURES OF SIMILAR MATERIAL AND CHARACTER AS THE BUILDING.
4. ALL OUTDOOR PATIO / DINING AREAS SERVING ALCOHOL WILL BE ENCLOSED WITH A METAL RAILING SYSTEM.
5. OUTDOOR SEATING SHALL BE PERMITTED BETWEEN MARCH 1ST AND NOVEMBER 30TH, WITH ALL FURNITURE AND FIXTURES INCLUDING, BUT NOT LIMITED TO, TABLES, CHAIRS AND WASTE RECEPTACLES REMOVED FROM THE EXTERIOR PREMISES BY NOVEMBER 30TH. OUTDOOR SEATING SHALL NOT BE THE PRIMARY SEATING OF THE RESTAURANT.
6. SIGNAGE AREAS SHOWN FOR CONCEPT ONLY. ACTUAL SIGNAGE TO BE SUBMITTED ON A TENANT BY TENANT BASIS, IN CONFORMANCE WITH THE APPROVED PRO AGREEMENT.



NORTH ELEVATION

SCALE: 3/32" = 1'-0"

4 / P4.3

NORTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	621 S.F.	35.1 %
EIFS	25 %	198 S.F.	11.2 %
METAL CANOPIES & SUNSCREENS	15 %	0 S.F.	0.0 %
PREFINISHED METAL PANELS (FLAT)	25 %	950 S.F.	53.7 %
TOTAL		1,769 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,769 S.F. - GLASS STOREFRONT AND DOOR AREA OF 0 S.F. = 1,769 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 28.7 %.



WEST ELEVATION

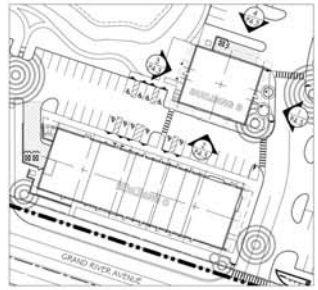
SCALE: 3/32" = 1'-0"

3 / P4.3

WEST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	418 S.F.	30.0 %
EIFS CORNICE & FACADE	25 %	210 S.F.	15.1 %
METAL CANOPIES & SUNSCREENS	15 %	85 S.F.	6.1 %
PREFINISHED METAL PANELS (FLAT)	25 %	680 S.F.	48.8 %
TOTAL		1,393 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,664 S.F. - GLASS STOREFRONT AND DOOR AREA OF 271 S.F. = 1,393 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 23.8 %.



KEY PLAN

SCALE: N.T.S.

BUILDING B ELEVATIONS

SAKURA NOVI

NOVI, MICHIGAN

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ARCHITECTS & PLANNERS
42400 GRAND RIVER AVENUE, SUITE 200
NOVI, MICHIGAN 48375
PHONE 248.489.9160
PROJECT NO. 5035

ISSUED FOR
CONCEPT MEETING
FEB. 27, 2019
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PRO REZONING
JUNE 26, 2019
PRO REZONING
REVISED SUBMITTAL
SEPTEMBER 30, 2019

PRELIMINARY
NOT FOR CONSTRUCTION

P4.3

CAD DWG 5035 COLOR P43 9-30-19.DWG

PLANNING REVIEW

PLAN REVIEW CENTER REPORT

January 8, 2020

Planning Review

Sakura Way PRO

JZ 19-31 with Rezoning 18.732

PETITIONER

Sakura Novi, LLC

REVIEW TYPE

2nd Revised: Rezoning Request from OSC (Office Service Commercial), OS-1 (Office Service), and I-1 (Light Industrial) to TC-1 (Town Center - 1) with a Planned Rezoning Overlay (PRO)

PROPERTY CHARACTERISTICS

Section	23	
Site Location	Parcel Ids: 22-23-126-006, 22-23-126-011, 22-23-226-007, 22-23-226-008, 22-23-226-021, 22-23-226-022 North of Grand River Avenue and south of Eleven Mile Road, east of Town	
Site School	Novi Community School District	
Current Site Zoning	OSC (Office Service Commercial), OS-1 (Office Service), and I-1 (Light Industrial)	
Proposed Site	TC-1: Town Center - 1	
Adjoining Zoning	North	OSC: Office Service Commercial and I-1: Light Industrial
	East	B-3: General Business and I-1: Light Industrial
	West	TC: Town Center
	South	TC-1: Town Center - 1
Current Site Use	Vacant; Temporary City Vehicle Storage; Tool & Die shop	
Adjoining Uses	North	Novi Oaks Hotels
	East	Retail/Restaurants
	West	Industrial Office
	South	Industrial Office
Site Size	15.59 Acres	
Plan Date	December 20, 2019	

PROJECT SUMMARY

The applicant is proposing to develop the property as an Asian-themed mixed-use development with access points off of Grand River Avenue and Eleven Mile Road. The first phase of the development proposes a Japanese grocery and food hall concept as the central tenant and anchor. Two additional buildings would contain additional Asian restaurants and retail spaces. Sixty-eight multifamily residential rental units in attached townhome buildings would be located on the eastern portion of the site with access to Eleven Mile Road. For clarity, we refer throughout our review to the commercial portion as Phase 1A and the residential portion as Phase 1B. The existing pond on the west side of the site would serve as a focal point and public gathering space, to be enhanced with Japanese gardens and a walkway around the perimeter.

The 2nd revised PRO Concept Plan and narrative eliminates the Phase 2 options contained in the previous plan. Phase 2 is proposed to be developed with 50 townhome units matching the form

and style of those proposed for Phase 1B, and a 4,500 square foot restaurant. The plan also includes some on-street parking along 11 Mile Road.

The table below lists the prospective uses for each building based on the information provided by the applicant.

Building/Area	Size (GLA)	Proposed Height	Proposed Use Category
Phase 1A			
Building A	33,210 sf	2 story	Retail, restaurant
Building B	4,505 sf	1 story	Restaurant
Building C	13,102 sf	1 story	Restaurant, retail
Phase 1B			
Attached townhomes	68 two-bedroom units	30 ft 8 in (3 story)	Multifamily residential units
Phase 2			
Attached townhomes	50 two-bedroom units	30 ft 8 in (3 story)	Multifamily residential units
2B Restaurant	4,500 sf	1 story	Restaurant

PROJECT REVIEW HISTORY

The applicant submitted for a Pre-Application Meeting, which was held on May 8, 2019. Staff indicated that the proposed rezoning would require additional details for the PRO Concept Plan submittal and identified deviations from the ordinance requirements based on the plans provided.

The applicant submitted their PRO Concept Plan on July 1, 2019. Staff reviewed the plans and provided comments on July 29. Several of the reviews were not recommending approval of the PRO Concept Plan. There were a number of items that needed to be clarified and further information was requested for review. Staff met with the applicant on July 25 to discuss the comments and concerns. It was agreed that further revisions would be required before the PRO Concept Plan could be presented to the Master Planning & Zoning Committee and the Planning Commission.

On October 3, the applicant submitted revised plans to respond to the previous round of comments. In addition to presenting two possible development scenarios for Phase 2 of the project, the plans also added a Phase 3 component involving two parcels that are not contiguous to the main project area.

The City attorney's determined the purchase agreement and the amendments to that agreement with the City of Novi specify which parcels are permitted to be included in the PRO Agreement with the City. Therefore it appears the Phase 3 parcels have not been authorized to be part of this process at this time, and further amendment of the purchase agreement would be required to do so.

The project was presented to the Master Plan and Zoning (MPZ) Committee on November 13th, where the members offered feedback and largely positive comments on the Concept Plan for the development. A public hearing before the Planning Commission was held on December 11th, where they postponed making a recommendation until additional details on Phase 2 could be provided.

On December 20, the applicant submitted a 2nd revised submittal which attempts to addresses the previous staff reviews, as well as comments received at the MPZ meeting and the public hearing. The applicant has removed Phase 3 from the proposal, and has modified the Phase 2 plans to reduce the ambiguity and present a clearly defined development option.

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 OSC, OS-1, and I-1 to TC-1) and the applicant enters into a PRO agreement with the City, whereby the applicant submits a conceptual plan for development of the site. The City Council reviews the Concept Plan, and if the plan may be acceptable, it directs for 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. The PRO runs with the land, so future owners, successors, or assignees are bound by the terms of the agreement, absent modification by the City of Novi. If the development has not begun within two (2) years, the rezoning and PRO concept plan expires and the agreement becomes void.

RECOMMENDATION

The proposed rezoning category requested by the applicant is not supported by the Future Land Use Map, which indicates TC Gateway. The Master Plan text recommends rezoning the property to TC, Town Center. The Master Planning & Zoning Committee reviewed the proposal to give informal guidance, and indicated they were very supportive of the Asian village concept.

Staff is able to recommend approval for the project, albeit with some remaining items to be addressed before the PRO Agreement is finalized. The same can be said about the overall benefits to the public from this project, many of which—as identified by the applicant—would seem to flow from any redevelopment in the area.

At this point, provided the applicant can reduce or better justify certain deviations, and further provided that the applicant can further define the benefits and conditions to be attached to the project such that project can meet the requirement that the *conditions are more restrictive than might otherwise apply to a development under the existing or proposed zoning classification and the plan provides a significant enhancement to the area that could not otherwise be required of a developer*, staff supports the applicant moving forward. As it stands now, there are many deviations requested but not a substantial public benefit offered.

COMMENTS

It is staff's opinion that the proposed rezoning district of TC-1, Town Center-1 may be a reasonable alternative for the subject properties, and is largely supported by the recommendations in the Master Plan and the Town Center Study. The project represents an exciting opportunity to highlight the cultural diversity of Novi and add a vibrant destination in the Town Center area. The integration of residential uses will provide an attractive living option for residents interested in a walkable community context, including millennials and older adults. Some of the concerns are as follows:

1. At the time of the pre-application meeting, staff asked the applicant to provide proposed parcel lines on the plans in order to fully evaluate deviations that will be required. The revised PRO Concept Plan submittal now shows a future lot line for the residential portion. **The applicant has confirmed it is their intent to create a site condominium ownership, and has included a unit boundary plan on sheet C-2.8. The unit boundaries will be given their own parcel numbers, which will be interpreted as parcel lines. Therefore this will require new deviations to be identified for inclusion in the PRO Agreement. These deviations would be**

supported by staff given they are internal to the site and do not cause health or safety issues.

2. The project narrative submitted indicates that the Ecco Tool property would be included in the rezoning to TC-1, and would remain as a non-conforming use. The Ecco Tool property owner has provided a notarized letter indicating they consent to the rezoning, and must be a signatory to the PRO Agreement as they will be subject to its terms and conditions under a PRO approval to TC-1. If rezoned to TC-1, the existing tool & die shop would be subject to the Zoning Ordinance conditions for non-conforming uses in Section 7.1, which permits such uses to "continue until they are removed but not to encourage their survival." This would prohibit the use from being enlarged or increased, "nor extended to occupy a greater area of land."
3. The applicant previously submitted a Rezoning Sign Location Plan, as required for rezoning, and the signs were properly posted in advance of the public hearing.
4. The 2nd revised PRO Concept plan now shows one development scenario for Phase 2: 50 townhome units and an approximately 4,500 sf restaurant located on the north side of Building A.
5. The City's Future Land Use map indicates Town Center Gateway, which allows most of the uses proposed such as office, retail and restaurant. The 2016 Master Plan Update identified the Anglin Property as one of three sites within the city where redevelopment is desired. The uses recommended by the Master Plan include multi-family and townhome residential, limited commercial uses, and office uses along Grand River. The plan recommends the property be rezoned to TC - Town Center. The plan notes that "It may be necessary to amend the TC district to fully incorporate creative attached residential alternatives and ensure that reduced setback recommendations are reflected in the district standards." The Master Plan does not envision the parcels would be developed under the existing zoning categories. Because the applicant's requested zoning category, TC-1, is not consistent with the Master Plans' recommendation, the applicant presented the project to the Master Plan and Zoning Committee of the Planning Commission. The members were supportive of the direction and concept of the project, and offered several suggestions for improvement to the applicant.

The proposed uses and the rezoning category is an acceptable alternative to the current zoning as the Concept Plan would largely advance the vision described in the Master Plan for this area. The proposed plan does require some deviations from the TC-1 requirements of the Ordinance. Staff notes the following for applicant's consideration:

1. **TOWN CENTER AREA STUDY & MASTER PLAN:** The property's proximity to the surrounding retail, restaurants and hotels could make the proposed rezoning category appropriate and integrate the site into the vision described in the Town Center Study and Master Plan. Town Center area study offers the following recommendations for the Anglin Area:
    a. Serve as the eastern "gateway" into the Grand River/Novi Road Business and Main Street Areas.
    b. A wide variety of permitted uses and pedestrian-oriented form will activate the area and provide a logical entranceway.
    c. Preferred land uses include retail, professional offices, research & technology uses.
    d. Other land uses to be considered: personal service establishments, municipal services, and restaurants.
    e. Future development should utilize the existing pond as a site amenity.
    f. Buildings along Grand River should be pedestrian oriented with reduced front setbacks. Pedestrian paths should connect to the Town Center, Grand-River/ Novi Road Business, Hotel/Office and Main Street Areas. The pond and wetland area should be used as a focal point for the new commercial or office space. This green space could also be used to host community events, and the pond used as an outdoor ice rink.

g. Create stronger, meaningful associations between businesses and Grand River, such as restaurant patios, new construction sited at lot line, or amenities carefully placed. Create opportunities for pedestrians to pause as they cross Grand River by shortening the distance they have to walk. Use pedestrian refuge islands in the center or bump-outs at the sides.

2. **DESIGN AND LAYOUT CONCERNS: The current layout appears to offer a walkable development with a unique mix of uses and could create a vibrant destination in the Town Center area of Novi.** However, the applicant must consider:
   a. The City's emergency apparatus must be able to fully access the entire site, as well as delivery vehicles accessing the loading areas. Provide a plan showing truck turning movements are possible throughout the site (including all loading/service areas, and 50' outside, 30' inside turning radius in the residential portion). **The Fire Review indicates the previous issues with turning radii in the residential portion of Phase 1B appear to be resolved. The turning radii will be confirmed again at the time of Preliminary Site Plan approval.** *(Phase 1B)*
   b. If the Ecco Tool property will continue to operate indefinitely as a non-conforming use, the residential units adjacent to the site must have appropriate protections from any negative impacts. Provide a noise impact study at the time of Preliminary Site Plan to determine if ordinance performance standards will be exceeded. Provide any necessary mitigation measures if required. *(Phase 1B)*
   c. The vinyl siding proposed for residential townhouse buildings is not a material permitted by the Façade Ordinance. **The applicant has revised the material to Cement Fiber siding in order to gain support for the Section 9 façade waiver required by the overage of siding material on the residential buildings.** See Façade letter for more details. *(Phase 1B, Phase 2)*

3. **INTENT OF THE TC-1 DISTRICT:** As stated in Sec. 3.1.26.A., *'The TC-1, Town Center district is designed and intended to promote the development of a pedestrian accessible, commercial service district in which a variety of retail, commercial, office, civic and residential uses are permitted'. The p*roposed uses (with the exception of Ecco Tool) are all principal permitted uses which align with the intent of TC-1, Town Center-1 district. **However the character of the proposed development is more residential neighborhood with a restaurant and retail component than was previously proposed.**

4. **OFF-STREET PARKING LOTS FOR SEPARATE USES:** *'The TC-1 Town Center district is further designed and intended to discourage the development of separate off-street parking facilities for each individual use, and to encourage the development of off-street parking facilities designed to accommodate the needs of several individual uses'.* The proposed concept plan depicts the parking lots shared among the uses throughout the site, and the applicant has provided a shared parking study that demonstrates the number of proposed spaces will be sufficient for the mix of uses proposed. Staff supports the opportunity to reduce parking through a shared parking arrangement, supported by the shared parking study that shows a sufficient number of parking spaces are proposed for the uses to be developed. **The applicant should explore whether the number of parking spaces could be reduced by a few additional spaces in order to reduce the deviations required for landscaped end islands. If the 25 on-street parking spaces on the south side of 11 Mile Road are approved, the total number of parking spaces proposed would be 605. The parking study indicated a total of 523 parking spaces would be required for the mix of uses proposed, however the study also showed the weekend peak demand would use all available parking spaces. The shared parking study did not account for any on-street parking along 11 Mile Road.**

5. **PUBLIC BENEFITS:** The list of public benefits provided by the applicant is reviewed in detail later in this letter. Several of the improvements listed are requirements under the Zoning Ordinance, and would be expected with any development in the city, or could be achieved through a traditional rezoning process and therefore are not unique to the PRO process and do not qualify as "benefits to the public." Others require additional information in order to be evaluated. **In the latest submittal, the applicant provided a list of additional items they were "interested" in pursuing, however they have not committed to them. Several of these items would be welcomed as enhancements to the project.**

6. **DEVIATIONS:** Many of the original deviations requested have been eliminated due to modifications of the plans. The applicant has provided a list of 17 remaining deviations with some additional details, as well as justifications. The applicant is asked to continue to revise the list based on staff's comments provided in this and other review letters. **Detailed comments on the deviations requested are provided on pages 14-18 of this letter.**

7. **FUTURE SITE PLAN REVIEWS:** The proposed development is an ambitious project that will require a carefully laid out implementation plan. Until all construction is completed, the impacts of construction traffic to the surrounding areas/businesses are hard to contemplate. The narrative from the applicant indicates a tentative Grand Opening of Phase 1 approximately 2 years from purchase of the property. **The applicant should consider adding a tentative completion date for each phase as a condition for the PRO agreement.**

   Since the development will be tied to the PRO Concept plan, when site plans for the various phases are submitted for review, they are expected to conform to the code requirements for all items that are not regulated by the approved deviations and conditions within the PRO Agreement.

COMPARISON OF ZONING DISTRICTS

The following table provides a comparison of the current (OS-1 and OSC) and proposed (TC-1) zoning classifications.

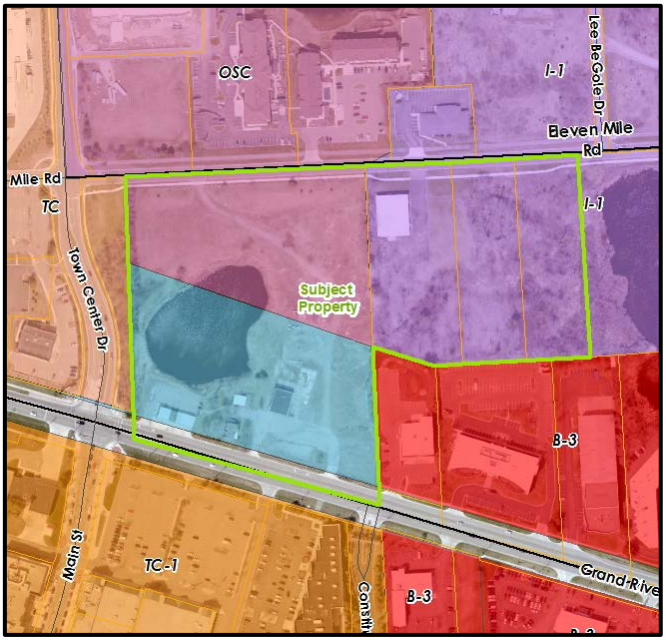
	OS-1,OSC and I-1 Zoning (Existing)	TC-1 (Proposed)
Intent	The OS-1 district is intended for community office uses. The OSC District is intended for large office buildings or office complexes with related commercial retail and service establishments. The I-1 Distirct is intended for research, office and light industrial uses while protecting residential districts from adverse impacts.	The TC-1, Town Center -1 district is designed and intended to promote the development of a pedestrian accessible, commercial service district in which a variety of retail, commercial, office, civic and residential uses are permitted.
Principal Permitted Uses	See attached copy of Section 3.1.21.B for OS-1 uses, Section 3.1.22.B for OSC uses, and 3.1.18.B for I-1 uses Professional and medical offices and personal service establishments are allowed in OS-1 and OSC districts. OSC district also permits hotels Tool & Die shop permitted use in I-1 District	See attached copy of Section 3.1.26.B All of the proposed uses are permitted except the existing tool & die shop that will remain.
Special Land Uses	See attached copy of Section 3.1.21.C for OS-1 uses, Section 3.1.22.C for OSC uses, and 3.1.18.C for I-1 uses OSC permits retail commercial and sit-	See attached copy of Section 3.1.26.C

	OS-1,OSC and I-1 Zoning (Existing)	TC-1 (Proposed)
	down restaurants as part of an office complex with Special Land Use approval	
Minimum Lot Size	Section 3.6.2.D determined by lot layout	Sec. 3.6.2.D determined by lot layout
Maximum Lot Coverage		
Building Height	OS-1: 30 feet OSC: 65 ft or 5 stories I-1: 40 feet	65 feet or 5 stories whichever is less** (exception in Section 3.27.2.A)
Building Setbacks	OS-1: 20 ft. front and rear, 15 ft side OSC: 35 ft from all sides I-1: 40 ft front, 20 ft side and rear	Sec. 3.27.1.C Depends on type of road frontage; Grand River is an arterial while 11 Mill is classified a non-residential collector; GRA: Front: 80-137 ft from centerline; Side and rear: 50 feet 11 Mile: Front: 0 ft. minimum; 10 feet maximum Side and rear: 0 feet minimum; no maximum
Usable Open Space	Not Applicable	200 sq. ft. Minimum usable open space per dwelling unit 15% gross open space
Minimum Square Footage	Not Applicable	Not Applicable

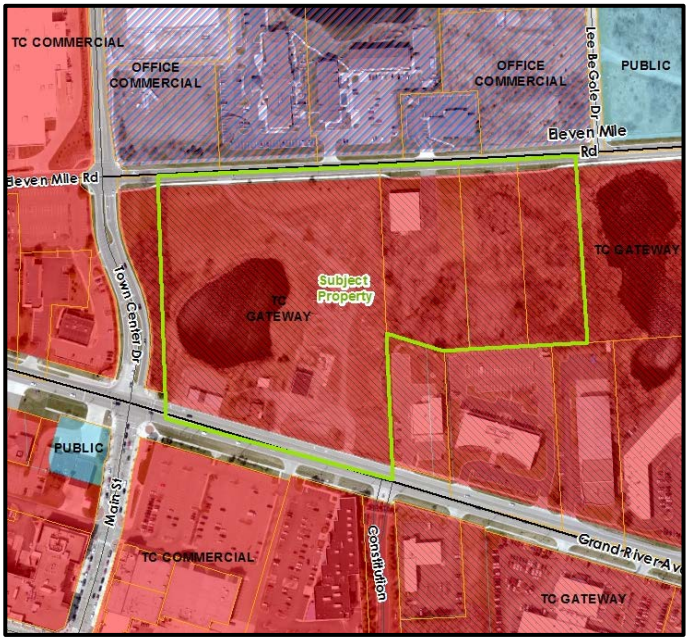
COMPATIBILITY WITH SURROUNDING LAND USE

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

	Existing Zoning	Existing Land Use	Master Plan Land Use Designation
Subject Property	Current: OS-1, OSC, and I-1	Vacant/Former car wash/Tool & Die shop	Town Center Gateway (uses consistent with Gateway East Zoning District)
Western Parcels	TC Town Center	Retail/Restaurants	TC Commercial (uses consistent with TC Zoning District)
Eastern Parcels	I-1 Light Industrial and B-3 General Business	11 Mile frontage: Vacant/Wetland GR frontage: Retail Auto parts	Town Center Gateway (uses consistent with Gateway East Zoning District)
Northern Parcels	OSC and I-1	Hotels, Day Care Center, Office building	Office Commercial (uses consistent with OSC Zoning District)
Southern Parcels	TC-1	Main Street retail and restaurants	TC Commercial (uses consistent with TC and TC-1 Zoning Districts)



Zoning



Future Land Use

The subject property for Phases 1 and 2 of the proposed project has frontage along both Grand River Avenue and Eleven Mile Road. The site location provides good connectivity to adjoining properties to north, west and south.

Novi Town Center, located to the **west and northwest**, is a well-established retail center with Walmart as the biggest retail store. There are many restaurants within the center, both sit-down and fast causal, as well.



Existing Land Use in the Vicinity

To the **north** are two older hotel/extended stay properties, as well as a new hotel and child care center developed recently. North of the residential portion of the project is a vacant parcel zoned I-1. This parcel could be developed with uses that could have a negative impact on residential uses. The I-1 district does restrict the uses permitted when there are residential uses adjacent, which would be examined in the site plan approval process if development is proposed at that location. Just east of the residential portion is Lee BeGole drive, which provides access to the City's Department of Public Works facilities, including the maintenance vehicle fleet that is stored there. The existing heavy vehicle traffic could present an undesirable impact if the proposed residential units are built nearby.

South of the residential portion is an area zoned B-3 developed with an auto parts store and office uses. The parking lots of one of the office buildings will be very close to the property line.

Existing land use patterns indicate a concentration of retail and restaurants to the northwest, west and south, with some residential to the south of Grand River Avenue. North of the property are several hotels and office buildings, as well as a recently developed child care center. **The subject property is an ideal candidate for redevelopment.** It is currently zoned as OS-1 (Office Service), OSC (Office Service Commercial), and I-1 (Light Industrial). The Anglin property formerly was the site of a car wash and a garden center until about 2012, and was purchased by the City in 2016. There are a few small buildings on the property along Grand River – one has recently been occupied by the City's maintenance division while their facility on Lee BeGole Drive was under renovation.

The structures proposed range from 1- to 3-stories in height. Other buildings in this area range in height from approximately 2-5 stories. The applicant is proposing a unified landscape and hardscape design throughout the site to tie the development together.

DEVELOPMENT POTENTIAL: ALL PHASES

For the western portion of the project, the current zoning of OS-1 and OSC (9.9 acres) both allow professional and medical offices, personal service establishments, and off street parking lots as permitted uses. OSC also permits hotels, as well as retail and restaurant uses as Special Land Uses. On the parcels zoned I-1, professional and medical office buildings are also permitted, as are research and development, manufacturing, pet boarding, veterinary clinics when not adjacent to residential uses. In total, the Phase 1 & 2 site measures over 15 acres (excluding the Right of Way), of which approximately 2 acres are covered by regulated wetlands. This leaves about 13 acres of contiguous land for development. **The redevelopment potential for the site using the current zoning is entirely possible, given the flexibility that the current zoning districts afford. However that potential has not been pursued seriously by any developer in recent years. In addition, the Master Plan indicates a broader vision for the future development of the area, and recommends a mix of residential, commercial, and office uses which is not achievable under the current zoning district.**

The Future Land Use map recommends Town Center Gateway (Gateway East - GE) uses of the site. The GE District allows most of the uses such as professional offices, sit-down restaurants and retail and retail service uses as permitted uses. The GE district allows additional uses, like multifamily residential, under a Special Development Option process.

Although significant opportunities exist to develop the property both as zoned (Office uses primarily and Light Industrial) and as master planned (TC or Gateway East uses), it is staff's opinion that the proposed rezoning to Town Center-1 district is a reasonable alternative and fulfills the intent of the Master Plan recommendation for this area, subject to finalizing a Concept Plan and PRO Agreement that confirm the benefits to the public required by the zoning ordinance.

REVIEW CONCERNS

ENGINEERING: The requested rezoning to Town Center-1 will result in utility demands that are approximately equal to the utility demand if the property were to be redeveloped under the current OS-1, OSC zoning and I-1 zoning. The Concept Plans for Phases 1 and 2 meet the general requirements of the City's design and construction standards, Storm Water Management ordinance, and Engineering Design Manual. Additional details will be needed in the site plan approval process. **Please refer to Engineering review letter for more details.**

LANDSCAPING: The Landscape review has identified a few remaining deviations from ordinance standards. For Phase 1, 8 deviations are required, only 4 of which are supported by staff. For Phase 2, from the information provided it appears one deviation is required, however detailed design and

layout may reveal additional waivers may be needed. **Most of the landscape deviations could be reduced through various strategies, including reducing the size of buildings or number of units proposed in order to more closely meet the ordinance requirements. Please refer to Landscape review letter for more details.**

TRAFFIC: Based on the results of a Traffic Study submitted by the applicant, the development will increase traffic on Grand River by 7%. The City's consultants, in a 2018 traffic study of the area, identified two improvements that would be needed to maintain acceptable levels of service in the vicinity of this project: 1) widening Grand River Avenue to 5 lanes between Meadowbrook Road and Novi Road, and 2) Installing a right-turn overlap phasing for northbound Main Street and southbound Town Center Drive approaches at their intersection of Grand River. The applicant has submitted a Rezoning Traffic Statement and Traffic Impact Study as required. The intersection of Main Street/Town Center Drive and Grand River currently operates under congested conditions, and the Sakura Novi development is expected to increase traffic by 7%. The applicant does not propose to provide the improvements recommended by the City's study, as they state the improvements are necessary regardless of the development they are proposing. **Please refer to Traffic review letter for more details.**

WOODLANDS: Based on the Tree Protection Plan Sheets T-1.0 and Tree List T-1.1, there appear to be a total of 275 surveyed trees. Plan sheet L101 indicates 130 trees (47%) will be removed, which would require 253 replacement credits. However, the Woodland review letter notes that based on the Tree Protection Plan Sheets T-1.0 and Tree List T-1.1, there appear to be 133 total regulated trees to be removed, with 269 replacement credits required.

The applicant currently proposes 17 replacement credits would be planted on-site. However the proposed replacements consist of 47% native ground cover seeding and 41% evergreen trees. The woodland ordinance allows for up to 5% of credits to be native ground cover seeding. Only 8 of the 133 Woodland trees being removed are evergreens. **The applicant should rebalance the percentage of credits proposed to be consistent with the Woodland Ordinance. In addition, the applicant shall ensure that all proposed woodland replacement trees will be guaranteed to be preserved as planted within a conservation easement or landscape easement granted to the City. Additional comments and concerns are detailed in woodland review letter.**

WETLANDS: There are four wetland areas on the subject site: a small forested wetland located just west of Ecco Tool (Wetland 1), the pond on the Anglin property (Wetland 2), a small scrub-shrub wetland on the southwest portion of the site (Wetland 3), and a scrub-shrub wetland on the eastern portion of the site that connects to a larger wetland on the adjacent property (Wetland 4). The proposed plans indicate impacts to all four wetlands, including filling 3 of them in order to develop on, with a total of 1.66 acres of permanent wetland impact. The City requires mitigation for impacts greater than .25 acre. Permanent impacts to on-site 25-foot wetland buffers total 1.695 acres. The storm water management pond on the east side of the site is also proposed to discharge onto the City's adjacent property, which will require approval and a storm water discharge easement to be granted to the developer.

All four wetlands meet the essentiality criteria of the Wetland Protection Ordinance and are considered regulated by the City of Novi. The permanent wetland impacts will require 2.41 acres of wetland mitigation. A Wetland Mitigation Conceptual Plan provided by Atwell, the applicants' consultant, dated December 18, 2019, proposes three mitigation areas to satisfy the City's requirements. **All three areas are located on City property, including 2 areas on the east side of the "lake" area on parcel 22-23-226-042 (adjacent to the Sakura site to the east), and one 1.67 acre area on Department of Public Works complex site on the north side of 11 Mile Road. According to Novi's City administration, the use of the DPW property is not open to consideration as a wetland mitigation site by this developer, and the use of parcel 22-23-226-042 is yet to be determined as viable. While the ordinance prioritizes on-site mitigation, it also permits mitigation to be constructed**

on near-by locations. A less desirable option is for the mitigation to be constructed elsewhere in the city. The City does own properties in the vicinity; however it would be quite unusual to allow a private developer the opportunity to use public property for their own purposes. If the applicant still controls the property formerly submitted as "Phase 3," perhaps they could consider constructing mitigation on that nearby location. Additional comments and concerns are detailed in wetland review letter.



ARCHITECTURAL DESIGN: The elevations submitted for buildings A-C and the residential townhome buildings have been reviewed by the City's Façade Consultant. A Section 9 waiver is required for minor deviations from the ordinance standards for the commercial buildings, which is supported. The applicant has increased the amount of brick material on the residential buildings in this submittal, but the percentage of siding is still over what the ordinance permits. The applicant's response letter indicates the vinyl siding has been switched to Cement Fiber Board, so a Section 9 waiver could be supported by staff or the architectural consultant.

It is unclear from the Building A elevation whether the "Custom Mural Panel" is included in the architectural material chart. Staff would a mural a sign, and it is not supported at this time. See more detail in the discussion of sign deviations. **Additional comments and concerns are detailed in Facade review letter.**

FIRE: The Fire Marshal had previously identified several locations throughout the site that do not meet the access requirements for fire truck apparatus. A minimum of 50 feet outside and 30 feet inside turning radii are required. The applicant has provided a revised truck turning plan (C-2.7, C-2.8) which seems to indicate these issues have been addressed. The turning radii will be confirmed at the time of Preliminary and Final Site Plan approval. **Additional comments and concerns are detailed in Fire review letter.**

2016 MASTER PLAN FOR LAND USE: GOALS AND OBJECTIVES

The proposed development could be said to follow several of the objectives listed in the 2016 Master Plan for Land Use update (adopted by Planning Commission on July 26, 2017) as listed below. Staff comments are in **bold.**

1. COMMUNITY IDENTITY

a. Maintain quality architecture and design throughout the City. **The development proposes both commercial and residential buildings that are tied together through modern architectural style with Japanese and Chinese influences. The commercial buildings (A-C) maintain cohesive design themes and materials. The residential buildings have similar bold forms with linear patterns while respecting the smaller residential scale. Building elevations for the Phase 2 restaurant building (Building F) has now been provided.**

2. ECONOMIC DEVELOPMENT

a. Retain and support the growth of existing businesses and attract new businesses to the City of Novi. **The property is positioned to accomplish this goal with the mix of uses proposed and the applicant's efforts to curate a unique collection of Asian restaurant/retail tenants. The anchor tenant, One World Market, is an existing business that is looking to expand into a prototype store that will enable them to offer a greater range of specialty foods and products.** (Phase 1A)

b. 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. **The development proposes retail and restaurant uses along Grand River.**

3. ECONOMIC DEVELOPMENT / COMMUNITY IDENTITY

a. Town Center Study Area. Develop the Anglin property in a manner that reflects the importance of this important gateway to the City in terms of its location, visibility, and economic generation. **The subject property falls in that study area and is located at an important gateway to the City. Many of the recommendations for the area have been incorporated into the proposed project.**

b. Rezone the Anglin Property to TC (Town Center) to enable a broader mix of uses and incorporation into the Town Center district. **The applicant is pursuing a PRO rezoning to TC-1 rather than TC, but TC-1 allows a similar mix of uses and intensities.**

c. Consider amendments to the TC district that would permit a greater mix of uses, including innovative attached housing types; amendments may also consider some public open space and the relationship of buildings to the street in order to create a subdistrict that emphasizes walkability. **Utilizing the TC-1 district achieves this without amending the TC district.**

4. ENVIRONMENTAL STEWARDSHIP

a. *Protect and maintain the City's woodlands, wetlands, water features and open space.* **The proposed concept plan will impact regulated wetlands and woodlands. The applicant indicates they will propose wetland mitigation and protecting woodland replacement trees by way of a conservation easement, consistent with the requirements of the Wetland and Woodland Protection ordinances. However further details are needed to evaluate the wetland mitigation plan.**

5. QUALITY AND VARIETY OF HOUSING

a. Ensure the provision of neighborhood open space within residential developments. **The Phase 1B and 2 townhouse components provide the required usable open space, however there are no amenities such as play structures that would provide active recreation opportunities for children living in the homes. There are open greenscape**

areas that could provide unprogrammed recreational space. However the applicant could consider adding at least one play structure within the development for younger children.

b. Attract new residents to the City by providing a full range of quality housing opportunities that meet the housing needs of all demographic groups including singles, couples, first time home buyers, families and the elderly. **The townhouse apartments proposed could theoretically (depending on the rental rates) provide a "missing-middle" type of house set in a walkable context that could be attractive to many different demographic groups.**

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 initiated by the applicant, the applicant and City Council can agree on a series of conditions to be included as part of the approval which must be reflected in the Concept Plan and or the PRO agreement.

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. *Development and use of the property shall be subject to the more restrictive requirements shown 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.* **The applicant has submitted a list of conditions that they are seeking to include with the PRO agreement.** This list will continue to evolve as the project review continues:

1. Developer shall develop the Land in accordance with all applicable laws, ordinances, and regulations, including all applicable setback requirements of the Zoning Ordinance under the Proposed Classification, except as expressly authorized herein, and all storm water and soil erosion requirements and measures throughout the site during the design and construction phases of the Development, and during the subsequent use of the Land as contemplated in this Agreement.

2. The grass-land pads shown on the landscape plans shall be properly maintained as grass-land pads, utilizing a native meadow planting mix approved by the City's Landscape Architect, until such time that area is needed for Phase 2 uses to be developed.

3. The maximum number of dwellings to be constructed in Phase 1B shall be 68.

4. The maximum number of dwelling units to be constructed in Phase 2 shall be 50.

5. The maximum number of dwelling units to be constructed in total for the Sakura Novi project seeking rezoning under this PRO Agreement shall not exceed 160. This resultant ratio is approximately 10 units/acre, and will be maintained at no greater than 55% of the permitted number of residential units in a TC-1 district, per section 4.82.2: 16.03 ac x 43560 sf = 698,267 sq ft/800 = 872.8 rooms/ 3 rooms per unit = 290 units x 55% = 160 units
Staff notes this condition appears to be related to the Ecco Tool property, which at this time is not proposed to be redeveloped. Including this condition at this time does not appear necessary or timely, as there are no proposed plans for staff to review to determine whether the additional units could be accommodated on that piece of property, and the PRO Agreement would need to be amended if/when redevelopment of that parcel were proposed. Staff recommends removal of this condition for the time being.

6. Phase 1 non-residential uses shall be limited to a 30,000 sf market; and restaurants and retail space totaling approximately 25,000 sf as shown on the PRO Concept Plan.

7. Phase 2 non-residential uses shall be no greater than 4,500 square feet of retail/restaurant use. **Staff notes this condition has been changed from the applicant's suggested condition to reflect the current plan proposed.**

8. Changes to the mix of uses of +/-10% shall be permitted to be approved administratively as long as additional deviations are not required and associated Ordinance requirements can be met. **Staff notes this condition has been modified from the applicant's suggested condition to reflect a greater range of Ordinance requirements than parking.**

9. Woodland tree removals during Phase 1 and Phase 2 shall be approximately 133 trees, which shall require 256 woodland replacement credits for Phase 1, and an additional 13 credits for Phase 2. Developer will plant a minimum of 17 credits as replacements on site through the planting of canopy trees, evergreen trees and native groundcover seeding. Native ground cover seeding shall not exceed 5% of the replacement credits planted on site. All woodland replacement credits planted on-site shall be permanently protected via conservation easement or landscape easement. Any credits not planted on site will require a payment of $400 per credit into the Novi Tree Fund. **Staff notes this condition has been modified from the applicant's suggested condition to be consistent with the Woodland Review letter information. Updates will be required as discrepancies in the data provided by the applicant are corrected.**

10. Any additional regulated woodland tree removals shall meet the requirements of the City of Novi Woodland Protection Ordinance, and may be granted administratively up to 10 trees with proper justification. If additional regulated trees proposed for removal exceeds 10, Planning Commission approval must be granted. **This condition has been modified from the applicant's suggested condition in order allow a limited amount of additional removals to be approved administratively.**

11. Proposed parking for Phases 1 and 2 is being provided as per the Parking Study recommendations, which has been reviewed and approved by the City's traffic consultant. Future phase parking requirements will also be a function of shared parking analysis findings, if supported by City's review and approval.

12. Tentative completion date for Phase 1A shall be calendar year 2022.

13. Impacts to wetland and wetland buffer areas have been indicated and quantified and submitted as part of the PRO package. Specific remedies to be included in the PRO Agreement conditions. **Staff notes that specific remedies have not yet been identified.**

14. Open space standards have been achieved and will be exceeded as part of Phase 1 site work. A City mandate for this property has been to maintain the existing brownfield retention area on the Anglin parcel as a site amenity. This existing natural feature and setback exceeds 2.45 acre of area, or 15.3% of the overall subject property. After remediation and necessary reconfiguration, 2.11 acre of water feature and landscape perimeter will be maintained. Additional Open Space, totaling 20.9% of the subject parcels' area, has been committed in Phase 1 to exceed the ordinance requirement of 15% for the overall rezoning parcels. **This condition has been reworded from the applicant's suggested condition.**

15. To protect future residents of the Phase 1B units from excessive noise impacts from the existing Ecco Tool business, the developer shall provide a Noise Impact Statement at the time of Preliminary Site Plan submittal to determine if ordinance performance standards will be exceeded. Provide any necessary mitigation measures if required.

16. The adjacent non-conforming Light Industrial use owned by Ecco Tool Co is to be addressed in the PRO Agreement conditions including:
    a. Access for delivery trucks on the retained parcel; which will require cross access rights;
    b. Twelve parking spaces on the retained parcel or access to parking spaces on adjacent areas to make up for any shortfall.

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 proposed 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 applicant's Concept Plan 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, or may proceed with the plan as submitted with the understanding that those deviations would have to be approved by City Council in a proposed PRO agreement. The following are deviations from the Zoning Ordinance and other applicable ordinances shown on the concept plan. The applicant has submitted a narrative describing the requested deviations.

The list of deviations has been revised based on staff's comments provided in the previous review letters. See the applicant submittal package for full text of deviations requested and justifications provided. There are 17 remaining deviations, which is a reduction from the previous plan which required 28 deviations.

Summary of deviations requested by the applicant (*in italics*) with staff comments **(in bold):**

1. *Requesting deviation from Section 3.27.1.C for an exterior side yard setback of 10 feet (50 feet required).* **Staff agrees that the adjacent commercial zoning (B-3) is similar to the commercial development proposed along Grand River Avenue in Phase 1. This deviation is supported.** (Phase 1A)
2. *Per section 3.1.26, deviation is requested for reduction of exterior side yard parking setback (10 feet required, up to 5 feet requested) on the western property line with green space area adjacent.* (Phase 1A & 2) *Deviation is similarly requested for parking setback (10 feet required, up to 5 feet requested) for the commercial parking area behind Building A adjacent to the B-3 zoned parcel to the south.* (Phase 1A)
3. ~~*Deviation Removed for 3 site entrances on Grand River Avenue*~~
4. *Deviation from section* 3.6.2.M *requested for reduction to 0' (25' required) Wetland Setback to accommodate remediation process, development of landscaped feature retention basin on western portion of site and for careful integration of on-site detention on far eastern portion of site, abutting city-owned retention/wetland basin. Noted in Wetland Report.* (Phase 1A)
5. *Deviation requested from Section 3.1.26.D for existing front yard parking lot along 11 Mile Road for Ecco Tool shop less than 20 feet from ROW (approximately 15 feet measured).* **Include specific required/proposed measurements on the plan. No parking spaces are shown on the Ecco Tool parcel to the measure distance. Staff would support the deviation as**

an existing condition if it does not conflict with safe traffic movements. It appears the parking lot would need to be restriped anyway, and the width of the existing pavement would only allow parking on one side of the drive aisle. This deviation would not apply to redevelopment of the Ecco Tool parcel. (Phase 1A) **The requested information has not yet been provided.**

6. ~~*Deviation Removed for paved parking lot on north end of property.*~~
7. ~~*Deviation removed. Section 5.5.3.B.ii.f. for reduction in parking setback (10 feet proposed, 20 feet required) for 11 Mile frontage. The deviation could either be for a temporary surface parking lot or a parking structure.*~~
8. ~~*Deviation removed. For Phase 2 Maximum Build-out scenario, Deviation requested from section 3.27.2.A.ii to allow building frontage less than 150 feet along Eleven Mile Road. Building E is estimated to be approximately 80 feet along Eleven Mile, with the longer side oriented to face the main on-site drive aisle.*~~
9. ~~*Deviation removed. For Phase 2 Maximum Build-out scenario, deviation requested from Section 3.27.1.F. for standardized Open Space requirements.*~~
10. ~~*Deviation removed for 11 Mile frontage building setbacks.*~~
11. *Pertaining to the Residential component of Phase 1, Deviation requested for parking setback of 6.1 feet (20 feet required) in the Northeast corner of the project along Eleven Mile Road, adjacent to Residential building 3.* (Phase 1B) **The applicant should clarify whether the proposed retaining wall adjacent to the parking area will be high enough to partially screen the vehicles parked in this location. There are only 5 parking spaces proposed, and they are oriented at an angle to the street, so only two of the spaces will be within 20 feet of the ROW.**
12. ~~*Deviation removed from Non-Motorized Plan for 6 foot sidewalk proposed along Eleven Mile Road, a non-residential collector.*~~ **See deviation #22.**
13. *Deviation from Section 5.15 and 3.27.1.G. requested for façade materials exceptions included as part of the submittal. Materials boards have been provided. See PRO plan Elevations and design statement from the project architects.* **See Façade review letter for detailed comments. On the Phase 1 commercial buildings, Section 9 façade waivers are needed for: an overage of EIFS on the west, east and north facades of Building A, an overage of Flat Metal Panels on the west and east facades of Building B, and an overage of EIFS on the west façade of Building C. These overages are relatively minor in nature and result in an enhancement of the overall design quality of the project; therefore the waivers are supported by Staff. On the residential buildings, the percentage of brick has been increased since the previous review and the Vinyl siding has been changed to Cement Fiber siding. A Section 9 Waiver would be supported by staff.** (Phase 1A and 1B, Phase 2 Residential)
14. *Deviation requested from* Section 3.27.1.H. and/or Section 5.4 *for loading/unloading spaces not located in the rear yard, and for deficiencies in size of loading area required. Screening will be provided for all trash/loading areas not facing a directly adjacent loading area. (Phase 1A and 2B)* **The applicant has not recalculated the loading areas to exclude the dumpsters, and has not provided the area of the loading area for Phase 2B.**
15. *Deviation requested from Section 3.27.2.B to allow the proposed specialty market and food hall, with a total of 30,000 sf on two levels, identified on the plans as Building A. Tenant will contain 25,000sf on main level with 3,500sf support office use and 1,500sf overflow seating on mezzanine level.* **Section 3.27.2.B states "No retail commercial building within the TC-1 district shall exceed 7,500 square feet in gross leasable floor area (GLA)," except under specific circumstances. It appears Building C (13,102 sf) will also require a deviation as it exceeds 7,500 square feet and it not a multi-story building. Building C will contain a mix of retail and restaurant uses. Buildings A & C do not meet the conditions of any of the circumstances stated for exception. Staff supports the deviations as the specialty market and food hall creates an anchor for the Asian village concept and allows an existing Novi business to expand. Building C will be broken up into smaller tenant spaces and continue to build on the Asian dining and retail destination theme.** (Phase 1A)

16. ~~*Deviation removed for bicycle parking ratio on residential portion of overall project.*~~
17. *Deviation requested from Section 5.7.3.K for site illumination level variance for multiple walkway areas, and for TC-1 fixture style selection. Site walkway areas will vary below 0.2 fc minimum standard on natural pathway around the water feature. Site walkway areas in residential portion will vary below 0.2 fc minimum standard. Parking area in residential area will fall below 0.2 fc minimum standard.* **The lighting plan indicates no lights will be provided in the parking areas in the residential portion of the project. Lighting is required for multifamily residential projects, and should be modified to meet the ordinance as much as possible.** (Phase 1B) **The lighting levels south of Building C (along Grand River) are difficult to read due to overlapping labels, but it is clear from the chart provided the maximum lighting levels will be significantly exceeded. The ordinance states "maximum lighting will be governed by the 4:1 ratio of average to minimum illumination of the surface being lit." The ratio shown in this area is 36.7:1, with a maximum level of 76.6 fc. Some of the labels do not appear to be illumination levels at all, but long strings of numbers that do not make sense (1.83.80.80.40.4). These occur at several locations on the plans, such as south of Building C, on the south side of the pond, and on the north side of the West/East drive through the site. Please make sure the labels are correct and remove overlapping labels to determine correct levels. Lighting south of Building C should be adjusted to be more in line with the ordinance standards, as exceeding the maximum ratio by 9 would be excessive and could cause light pollution and unsafe driving conditions due to glare and light clutter along Grand River Avenue. We need to balance the desire to create an authentic and unique destination (such as with signage and lighting) with the need to consider the environmental and safety impacts of intense lighting that can create unsafe driving conditions and visual clutter that could lead to distracted driving.**

18. *Deviation from Chapter 28 of the City Code for TC-1 tenant signage standards. The project requires dual-language signage for authentic presentation of international tenants and clientele expectations. Many tenants will have both interior-facing and frontage-facing signage. The Sakura Novi project will adhere to the following signage standards:*
    a. *Per section 28-5.c.1.a: allow double the area standards in order to accomplish the dual language signage.* ***Deviation proposes 2.5 square feet per linear foot (1.25 sf/lf allowed) of contiguous public or private street frontage, up to a maximum of 130 square feet proposed (65 sf allowed). This could be 2 separate signs or one, which seems to be indicated on the sign package from the applicant. Sign area is generally indicated in the building elevations, although location could be changed. Staff notes the "mural" shown on the north elevation of Building A would be considered a sign, and is not supported at this time.***
    b. *Per section 28-5.c.1.b: 2 signs of equal permitted size are requested for each typical retail/restaurant tenant, as well as most tenants will have pedestrian entrances on 2 facades.* ***Deviation proposes 2.5 square feet per linear foot (1.25 sf/lf allowed) of contiguous public or private street frontage on secondary facades, up to a maximum of 130 square feet (65 sf allowed).***
    c. *Per section 28-5.c.1.d: 2 signs of equal permitted size are requested for each project interior retail/restaurant tenant (not fronting public streets), consistent with other project lease space, and permitted sign area needs to be calculated as per 28-5.c.1.a.* ***Deviation would allow 48 square feet of signage (rather than permitted 24 sf), which could be the total of one sign or two signs. The signs shall be located no closer than 30 feet on center from any other similar sign (except those of the same message but different languages, which may be located closer), and shall be located adjacent to such parking lot or street, as applicable.***
    d. *Per Section 28-5.c.2.b.: signage style and type, as well as materials and illumination standards shall not adhere to the Sign Design and Review Manual for Novi TC-1 District. The standards were developed for, and still reference, a single development project undertaken over 20+ years prior.* **These standards only apply to the Main**

Street Development, so this deviation is not needed.

e. *Per Section 28-5.e.1.a.: an increase of permitted projecting sign area to match primary signage area allotted up to 72 square feet maximum, an increase of 45 square feet total area.* **This deviation seems more suited to Section 28-5.e.2, which pertains to upper level projecting signs (while 28-5.e.1 pertains to pedestrian-level projecting signs). The applicant should consider the placement of the projecting signs in mind and what deviations would be needed from the appropriate section.**

19. *Deviation requested from City Code Section 28-10.a.3 to allow string lights, exposed luminaire strip lights or neon tubes along building edges or other locations, and from Section 28-10.a.4 to allow animated signs. These elements, video display screens and/or animated LED lighting systems as part of public entertainment feature opportunity, are crucial to an authentic Asian environmental experience.* **Additional details are required to be able to evaluate. These elements would seem to be more appropriate under the previous Maximum Density Scenario, but not the current plan which is mostly residential.** (Phase 1A) **The largely residential nature of the current project also necessitates reducing the intensity of the lighting, rather than increasing it which this deviation seems to propose. Staff believes the nature of this deviation could undercut the City's ability to enforce fundamental aspects of the Sign Ordinance elsewhere. Any specific details or features deemed crucial to the development perhaps should be left to the city's determination (either Zoning Board of Appeals or City Council) after the buildings are constructed and when actual materials/locations/size and a mock-up of the element can be evaluated. Without those specific details, this deviation cannot be supported.**
20. *Deviation from Section 5.3.2 to allow a drive lane reduction in residential Phase 1B.* The site plan shows drive lanes 20-22 feet in width in several areas of Phase 1B. **The ordinance allows lane widths of 22 feet when no parking spaces are present, and 24 feet when adjacent to 90 degree parking spaces. Staff is concerned emergency vehicles will have difficulty accessing the site and recommends the applicant revise the plans to meet the minimum standards.** (Phase 1B) **Applicant has incorrectly indicated that Staff supports this deviation. If the proposed widths will comply with Fire Department requirements for emergency access, Staff will not object to the deviation.**
21. ~~*Deviation removed from Section 3.27.1.C to allow Phase 1 and 2 buildings internal to the site to exceed the maximum setback limit from Grand River Avenue and Eleven Mile Road.*~~
22. *Deviation from Section 3.27.1.I to allow a 6 foot sidewalk along 11 Mile Road, where the TC-1 district requires 12.5 foot sidewalks along non-residential collector and local streets. The deviation is necessary to provide sufficient landscaping material for the greenbelt screening while maintaining the proposed setbacks for the residential uses (11' to porch and 16' to townhouse facades, 15' to facades without porches).* (Phase 1B, Phase 2)
23. *Landscaping Deviation from section 5.5.3.A to allow a continuous 6 foot evergreen hedge with densely planted deciduous canopy trees in lieu of the required 6-8 foot berm required when TC-1 district abuts a B-3 district.* (Phase 1B) **This seems to be a reasonable accommodation as the mixed use nature of the project blends commercial and residential uses that would not need significant barriers between existing commercial uses.**
24. ~~*Deviation for buffer between commercial/residential uses: removed as both uses permitted within the TC-1 district.*~~
25. *Landscaping Deviation from section 5.5.3.A for the absence of a 6 foot high wall between the residential units in Phase 1B and the existing Ecco Tool light industrial use. In lieu of the wall, applicant proposes a 5 foot tall continuous evergreen hedge and densely planted upright canopy trees.* (Phase 1B) **The ordinance contains an exception which states "Obscuring landscaped berms and walls are not required to separate identically zoned uses…" However the Ecco Tool property will be a non-conforming use, an industrial use. It is anticipated that the Ecco Tool property will eventually be redeveloped as a conforming use in the TC-1 district. Residents of the townhomes should be protected from unhealthy noise levels, so the applicant will be required to submit a noise impact statement at the time of Preliminary Site Plan approval.**

26. *Landscaping deviation from section 5.5.3.C. for deficiency of parking lot interior landscape area, as the total amount of landscaping provided around the pond feature provides a greater amount of contiguous landscaped amenity that benefits the community.* (Phase 1A) **Staff does not support the deviation as provided. The applicant is urged to make greater efforts to reduce the parking lot landscaping deviations.**
27. ~~*Deviation Removed. Landscape deviation from section 5.5.3.F.ii to allow a deficiency in building foundation plantings and interior roadway canopy tree requirements.* **The requirement for canopy trees along interior roads excludes driveways, so the area in front of the garages is excluded. The ordinance requirement for 35% of foundation plantings required on the front façade does not apply as stated because the garage side would be considered the rear façade, even though that is the elevation that faces the roadway. This deviation is not required.** (Phase 1B)~~
28. *Deviation to allow Ecco Tool to continue to operate as a nonconforming use in the TC-1 district until their operations cease.* **Staff supports this deviation as it allows an existing business to maintain operations, while ensuring that redevelopment in the future will be consistent with the surrounding TC-1 District, should the Planned Rezoning Overlay be approved.**

Additional Deviations:
See the attached review letters and charts for other possible deviations required. Following is the list of other possible deviations or revisions based on the Planning review of PRO Concept Plan:

1. **Setbacks** (Sec. 3.27.1.F): Unit boundaries for the proposed Site Condominium are now proposed, shown on sheet C-2.8. As these will be considered legal "parcel" lines, deviations may be required for building and parking setbacks. **The applicant shall provide measurements from all unit boundaries for all parking and building setbacks in order to determine setback deviations using the table below for guidance.**

Commercial Setbacks				
	Required		**Proposed**	
Unit 1: Building	Front (south): Side (east) : Side (west) : Rear (north):	15 ft min. 50 ft min. 10 ft min. 10 ft min.	Front (south): Side (east) : Side (west) : Rear (north):	
Unit 1: Parking	Front (south): Side (east) : Side (west) : Rear (north):	20 ft from ROW 10 ft 10 ft 10 ft	Front (south): Side (east) : Side (west) : Rear (north):	
Unit 2: Building	Front (south): Side (east) : Side (west) : Rear (north):	15 ft min. 10 ft min. 10 ft min. 10 ft min.	Front (south): Side (east) : Side (west) : Rear (north):	
Unit 2: Parking	Front (south): Side (east) : Side (west) : Rear (north):	20 ft from ROW 10 ft 10 ft 10 ft	Front (south): Side (east) : Side (west) : Rear (north):	
Unit 5: Parking	Front (north): Side (east) : Side (west) : Rear (south):	20 ft from ROW 10 ft min 10 ft min 10 ft min	Front (north): Side (east) : Side (west) : Rear (south):	

Commercial Setbacks				
	Required		**Proposed**	
Residential Setbacks				
Unit 3: Building	Front (north): Side (east) : Side (west) : Rear (south):	15 ft. min. 15 ft min. 15 ft min. 15 ft min.	Front (north): Side (east) : Side (west) : Rear (south):	
Unit 3: Parking	Front (north): Side (east) : Side (west) : Rear (south):	10 ft from ROW 5 ft 5 ft 5 ft	Front (north): Side (east) : Side (west) : Rear (south):	
Unit 4: Building	Front (north): Side (east) : Side (west) : Rear (south):	15 ft. min. 15 ft min. 15 ft min. 15 ft min.	Front (north): Side (east) : Side (west) : Rear (south):	
Unit 4: Parking	Front (north): Side (east) : Side (west) : Rear (south):	10 ft from ROW 5 ft 5 ft 5 ft	Front (north): Side (east) : Side (west) : Rear (south):	

2. **Phase 1B Building Setbacks** (Sec. 4.82.2.e)**:** Setbacks for residential buildings in the TC-1 district are required to be 15 feet. **There is a provision that allows unenclosed porches to extend 4 feet into the required setback – however it appears that the structure extending into the setback is not an unenclosed porch, but a second floor balcony. This will be an additional deviation to allow an 11 foot setback where 15 feet is required.**
3. Engineering deviation for lack of 25' vegetated buffer around the storm water management pond in the residential use area. ***Supported by staff.***
4. Landscaping deviation from Section 5.5.3.C for insufficient parking lot perimeter trees provided. ***Not supported by staff.***
5. Landscaping deviation from Section 5.5.3.B.ii and iii. for lack of screening wall or berm for parking areas along Grand River. ***Supported by staff.***
6. Landscaping deviation from Section 5.5.3.B.ii and iii. for lack of screening wall or berm for parking areas along 11 Mile Road. ***Not supported by staff***
7. Landscaping deviation from Section 5.5.3.D. for insufficient building foundation landscaping. ***Not supported by staff.***
8. Landscaping deviation from Section5.5.3.B.ii and iii for not providing buffering berms for multi-family housing between residential buildings and the B-3 property to the south. ***Supported by staff.***
9. Landscaping deviation from Section 5.5.3.B.ii and iii. for insufficient greenbelt width and berm between parking lot and 11 Mile Road (Phase 1B). ***Supported by staff.***
10. Landscaping deviation from Section 5.5.3.F.ii. for use of subcanopy trees for 25% of multifamily unit landscaping trees. ***Supported by staff*** *(29% is not supported by staff).*
11. The proposed mural on the Building A north elevation was not identified as a deviation by the applicant. The city considers this a sign. Due to its size, staff does not support this as a deviation.

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) Approval of the application shall accomplish, among other things, and as determined in the discretion of the City Council, the integration of the proposed land development project with the characteristics of the project area, and result in an enhancement of the project area as compared to the existing zoning, and such enhancement 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 on the basis of which 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; provided, 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.*

PUBLIC INTEREST/ BENEFITS TO PUBLIC UNDER PRO ORDINANCE

Section 7.13.2.D.ii states that the City Council must determine that the proposed PRO rezoning would be in the public interest and the benefits to public of the proposed PRO rezoning would clearly outweigh the detriments. The following are being suggested by the applicant (in italics below as listed in their narrative) as benefits resulting from the project. Because staff is indicating that additional information about aspects of the project is needed, our comments (in bold) are minimal at this time:

1. Developer offers to dedicate continuous Right-of-Way (ROW), and future ROW, along 11 Mile and Grand River. The amount of ROW proposed to be dedicated along 11 Mile is 0.429 acres (Anglin) and 0.291 acre (eastern area). Along Grand River Avenue, the proposed ROW dedication would be 0.149 acre. The total dedication would be 0.869 acre. **Dedication of land for a public purpose can be considered a public benefit; however some of the area proposed by the applicant to be dedicated may not be sold to the developer by the City for land that it currently controls. For the Anglin parcel, the 50 foot half-width ROW along Grand River and 33 foot half-width of ROW along 11 Mile is excluded from the parcel purchase agreement. Similarly, the City would exclude the 33 foot half-width of ROW from the other parcel it currently owns.**
2. Developer offers an easement at the southeast corner of the proposed development for the City to use as for a Welcome sign. **It is unlikely the City would install a "Welcome to Novi" sign at this location as it is not on the border of the City. If the easement could also be open to other public purposes, such as art, or another amenity for the public this easement may be considered as a public benefit, however the cost may outweigh the benefit if the parameters are not carefully considered. It should be made clear who would be responsible for selecting, commissioning, paying for the piece and maintenance of the area.**
3. Developer offers that the proposed neighborhood-scaled, mixed-use, pedestrian accessible development would be in line with the intent of the 2016 Master Plan. **Staff agrees; however, this generalized effect of redevelopment could also be achieved using a simple rezoning instead of a PRO. As stated above, Section 7.13.2.D.ii.b states that proposed public enhancements should be found to be "unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay." Therefore, this item does not qualify as a public benefit as defined by the ordinance.**

4. Developer indicates that the proposed development complements the 2016 Master Plan vision for a unique, well-designed, mixed-use facility. **Staff agrees, but this seems to be the same as described in item 3 above, and this could also be done using a simple rezoning. As stated, Section 7.13.2.D.ii.b states that proposed public enhancements should be found to be "unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay." Therefore, this item does not qualify as a public benefit as defined by the ordinance.**
5. Developer states that growing an important existing Novi retailer (One World Market) would complement the goals and objectives of the 2016 Master Plan. **Again, this growth is a generalized result that could also be accomplished through a traditional rezoning request on the subject property or another location. Section 7.13.2.D.ii.b states that proposed public enhancements should be found to be "unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay." Therefore, this item does not qualify as a public benefit as defined by the ordinance.**
6. Sakura Novi, as a unique development would reinforce the vision of the 2014 Town Center Area Study, namely *to create a dynamic, attractive city core that provides residents and visitors with unique opportunities to participate in active community life, and meet their needs for goods, services, housing and entertainment*. **Staff believes that the proposal may assist the City in meeting the vision of the 2014 Town Center Study, and rezoning the property is a necessary part of making that happen. The level of specific development details that are required as part of the PRO process will help to ensure the development envisioned matches the plan presented.**
7. Developer indicates that the proposed Sakura Novi, with its unique collection of market, restaurants and retail is anticipated to be an economic engine, generating 170 permanent jobs. **While this statement is a testament to the economic benefits of the anticipated development potential, it could also be achieved with a simple rezoning instead of a PRO. Section 7.13.2.D.ii.b states that proposed public enhancements should be found to be "unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay." Therefore, this item does not qualify as a public benefit as defined by the ordinance.**
8. The proposed residences at Sakura Novi will provide smaller footprint, middle-market rate residential rental offerings. The new homes would be a draw to Asian ex-patriot professionals and their families, as well as the large corporations that sponsor many of these families. **Staff agrees that the mixed-use components, of restaurants, retail, residential, and potentially office and hotel uses, meets the intent of the Master Plan and the appeal to the many Asian residents in Novi has been well-framed by the developer; however, again, these are generalized results that could also be achieved with a simple rezoning instead of a PRO. Section 7.13.2.D.ii.b states that proposed public enhancements should be found to be "unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay." Therefore, this item does not qualify as a public benefit as defined by the ordinance.**
9. The developer indicates that the proposed Sakura Novi is anticipated to reinforce Novi's tax base beyond the project itself by creating a platform that can foster partnerships among the City of Novi, cultural institutions and the corporate community. An example provided is the partnership with the STAMPS School of Art and Design at UM, and the Japan America Society to create a Japanese themed illuminated applique (a back-lit piece laid over glass, proposed to be located on Building C facing Grand River). **While the application does not include specific details, if the intent is to provide public art within the development for the enjoyment of the general public, that could be considered a public benefit that would not otherwise be achieved through conventional rezoning proposals. We appreciate the concept of collaborations and partnerships but the actual outcomes are difficult to measure in real terms.**
10. The development will create a park-like environment around the existing pond, including a walking path around the pond and throughout the site, available to the general public.

Landscaping treatments, the pathway, and a small building at the edge of the pond will "activate" the pond. **Staff agrees that enhancing the existing water feature and inviting the public to enjoy the amenities of the site would be considered a public benefit above what may typically be provided in a conventional development proposal.**

11. Fostering walkability and connectivity within an important corner at the heart of Novi by providing the walking path around the perimeter of the pond, as well as the "tree lined boulevard" and "pocket gardens" leading to the residential common area. **This item is closely linked to item 10. While the walking path around the pond and the common area of the residential portion of Phase 1B are amenities, they are also meeting the requirements for open space of the TC-1 district, which would be expected from any development. What the applicant seems to be proposing is meeting the landscape and open space requirements of the ordinance, and not necessarily an enhancement beyond what would normally be expected.**
12. The walkability of the development can potentially energize other areas in the Town Center core. For example, there is an opportunity to create walkable connectivity to the City-owned lake to the east of the site. **Sidewalks are a requirement of any development, and the sidewalk along 11 Mile to the "lake" to the east is already constructed. "Walkability" is not considered a public benefit as the TC-1 District's stated intent is to promote a "pedestrian accessible, commercial service district" and requirements of the district further codify pedestrian orientation and design guidelines that create walkable communities. Therefore "walkability" is a requirement of any development in the TC-1 District and is not a unique enhancement of this project.**
13. In keeping with the intent to create an Asian village theme, Sakura Novi's design features, as described in the Architects' Design Statements, intends to create a bold, yet refined, aesthetic reminiscent of upscale shopping, dining and entertainment districts one may find in Osaka, Seoul and Hong Kong. **The City's façade consultant indicates that the revisions to the proposed commercial building designs more closely comply with the Façade ordinance compared to the previous submittal. The commercial buildings also include architectural features that substantially enhance the overall design quality of the project. There are also landscape, hardscape (such as decorative paving at key intersections), and accessory details, such as the proposed tea house near the pond, that will elevate and carry the theme through the development. Whether these rise to the level of a benefit to the public is a question for further discussion.**
14. The signage package, although it does not meet the ordinance standards, is meant to underscore that Sakura Novi is a cohesive, singular concept, and a regional destination to help the development team assemble an international blend of new and fresh merchant offerings. **The deviations requested for the signage package are significant. Establishing this development as a culturally diverse destination is warranted, and signage could be a way to distinguish this area of the community from other nearby developments. However, Staff believes the sign deviations requires additional details and perhaps should be left to ZBA determination after the buildings are constructed and when actual materials/locations/size can be determined. In any case staff cannot justify this item as a public benefit or enhancement without any details of the actual signage proposed.**

The applicant indicates in their response letter, dated 12/20/19, that they are also "interested in" several other items listed below. However it is unclear if this list of items are being formally offered or if they are only "considering offering" at this time:

- Providing an off-site sidewalk connection (~30 ft) to the plaza on the Northeast corner of Town Center Drive and Grand River Avenue to complete a necessary link from the development to surrounding areas. **This is an enhancement beyond what would be required of a typical development.**

- Modifying 11 Mile Road to provide additional on-street public parking; **The proposed parking would provide spaces beyond those identified as required by the parking study provided, available to the general public.**
- Establishing a partnership with Novi Public Library to provide useful supplemental facilities within the Sakura Novi project for their collections/operations. **Further details would be needed to evaluate this as a benefit to the public. We have confirmed that the applicant has met with the Director of the Library to begin the discussion of what may be appropriate.**
- Establishing a Community Room function within the Market space available for free use for public gathering and meetings; **The parameters of the Community Room function, including room size, capacity and availability, should be a condition of the PRO Agreement to ensure this would be a benefit to the public. This would likely be an enhancement beyond what would be required of a typical development.**
- The Sakura Novi project proposes to facilitate the mitigation for the necessary wetland disturbance for the City's future 60' right-of-way for the planned roadway connection of Crescent Blvd/Lee BeGole Drive from 11 Mile to Grand River. "In conjunction with a portion of the wetland mitigation efforts for the Sakura Novi project, we will facilitate the permitting and construction of wetlands sufficient to accommodate the City's future construction of the roadway...within the existing affected city wetland area." **Additional clarification is needed to determine what the applicant means by "facilitate." Based on the report provided by the applicant's wetland consultant, that portion of the road construction project will require wetland mitigation of 0.3 acre. The applicant has provided a "Mitigation Conceptual Plan" showing three areas of wetland mitigation, all on City-owned properties. Areas A and B (approximately 1.04 acres) are on parcel 22-23-226-042, to the west of where the road is expected to be sited. While there would be a benefit to the public of the applicant constructing the required mitigation for the city, the benefit only partially offsets the benefit gained by the applicant by not having to purchase the land in order to construct a portion of their mitigation. Wetland mitigation credits typically cost over $100,000 per acre.**
- **Mitigation Area C, 1.67 acres, is proposed on parcel 22-14-451-002, south of the City's Department of Public Works facilities. The applicant has been notified that, according to City Administration, this site is not open to consideration as a mitigation site, and alternatives should continue to be explored for the required wetland mitigation.**
- Seeking additional ordinance deviations required for the accessory structure heretofore referred to as the "Tea House" to be considered for the retained water feature on the west side of the Anglin parcel. **There are three squares indicated on the plan on the northwest side of the pond that are assumed to be the "Tea House." The dimensions and design of the structure are not provided. The accessory building appears to meet the setback and other requirements as described in Section 4.19 of the Ordinance, based on the limited information provided. If over 200 square feet in size, an accessory building "shall be designed and constructed of materials and architecture compatible with the principal structure, and shall have a minimum roof pitch of 3/12 and overhangs of no less than 6 inches." If offered as a public benefit, the applicant should commit to construction of the Tea House with Phase 1A of the project.**

SUMMARY OF OTHER REVIEWS

1. Engineering Review (dated 1.7.2020): The plans meet the general/preliminary requirements on Chapter 11, Storm water management ordinance and the Engineering Design Manual. Additional comments to be addressed in subsequent submittals. Engineering recommends approval of Phase 1 and 2.
2. Landscape Review (dated 12.27.2019): **Landscape recommends conditional approval at this time.** There are too many landscape deviations that could be reduced, but have not been, to recommend approval. Refer to review letter for more comments.

3. Wetland Review (dated 1.7.2020): **Wetlands does not recommend approval at this time.** Additional information is required in order to recommend approval of the PRO Concept Plan.
4. Woodland Review (dated 1.6.2020): A City of Novi woodland permit is required for the proposed plan. **Woodlands does not recommend approval at this time.** See review letter for additional comments to be addressed.
5. Traffic Review & RTIS Review (dated 1.7.2020): Additional Comments to be addressed in future submittals. **Traffic recommends approval of the PRO Concept Plan.**
6. Facade Review (dated 1.7.2020): There are minor deviations on the proposed commercial building elevations. The residential buildings have increased the percentage of brick, and vinyl siding has been changed to Cement Fiber Board. A Section 9 waiver would be supported for the commercial buildings. A Section 9 waiver for the overage of horizontal siding on the residential buildings is supported with the siding material changed to cement fiber.
7. Fire Review (dated 1.3.20): Fire has additional comments that will need to be addressed prior to Final Site Plan approval. Conditional approval is recommended, provided those issues are addressed in future submittals.

PLANNING COMMISSION MEETING

Based on the applicant's request and the project schedule, this item will be scheduled for consideration before the Planning Commission to make a recommendation to City Council on January 15, 2020. Please provide the following by **8:00 a.m. on January 10, 2020**. **Staff reserves the right to make additional comments based on additional information received.**

1. 2nd Revised Concept Plan submittal in PDF format.
2. A response letter addressing ALL the comments from ALL the review letters and **a revised request for deviations, and lists of conditions and public benefits as you see fit based on the reviews.**
3. A color rendering of the Site Plan, if any, to be used for presentation purposes.

CITY COUNCIL

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.

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

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Lindsay Bell, AICP – Senior Planner

Attachments: Planning Review Chart
Section 3.1.21.B&C –OS-1 Permitted Uses & Special Land Uses
Section 3.1.22.B&C – OSC Permitted Uses & Special Land Uses
Section 3.1.18.B&C – I-1 Permitted uses & Special Land Uses
Section 3.1.26.B&C – TC-1 Permitted Uses & Special Land Uses

PLANNING REVIEW CHART: TC-1 - Town Center 1 District with a Planned Rezoning Overlay(PRO)

Review Date: January 7, 2020
Review Type: 2nd Revised PRO Concept Plan
Project Name: **19-31 SAKURA WAY**
Plan Date: December 20, 2019
Prepared by: Lindsay Bell, Planner
E-mail: lbell@cityofnovi.org **Phone:** 248.347.0484

- **Bold**: Items that need to be addressed by the applicant prior to the approval of the PRO Concept Plan
- Underlined: Items that need to be addressed prior to the approval of the Preliminary Site Plan
- **Blue and underline:** Items in are items that do not currently conform to the Zoning Ordinance and may be considered as a deviation

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan *(adopted July 26, 2017)*	Town Center Gateway shown on Future Land Use Map Master Plan recommends rezoning to TC District to fulfill vision for Town Center area	TC-1 Rezoning proposed Phase 1:Market, Restaurants, retail, residential Phase 2: Residential and restaurants	**No**	**The subject property to be rezoned to TC-1 to permit the uses proposed** See Planning Review letter for further analysis
Town Center Area Study 2014	The Anglin Area is intended to serve as the eastern "gateway" into the Grand River/Novi Road Business and Main Street Areas. A wide variety of uses and pedestrian-oriented form will activate the area and provide a logical entranceway. Future development should utilize the existing pond as a site amenity.	The applicant is requesting to rezone to TC-1. Development proposed includes a mix of uses including specialty market and food hall, restaurants, retail, and residential. Proposal includes using the pond as a focal point and site amenity.	Yes	The Anglin property was included in the study, however the Ecco Tool and city parcels on the east proposed for the residential component were not included in the study See Planning Review letter for further analysis
Zoning *(Effective Jan. 8, 2015)*	OSC Office Service Commercial, OS-1 Office Service, and I-1 Light Industrial	TC-1: Town Center - 1	**No**	**Rezoning requested**
The applicant has provided the prospective uses. The applicant is asked to limit the type of uses as shown on the PRO concept plan as a condition of the PRO agreement for all phases.				
TC-1 District Uses Permitted (Sec 3.1.26.B & C) Sec. 3.1.25.B. - Principal Uses Permitted. Sec. 3.1.25.C. – Special Land Uses Permitted.		**Phase 1A:** Japanese Market Restaurants Retail	*Yes*	*Permitted Uses if rezoned*

Item	Required Code	Proposed	Meets Code	Comments
		Phase 1B & 2: Multifamily Residential Restaurant	*Yes*	*Permitted Use if rezoned*
		Ecco Tool would be a non-conforming use in the TC-1 district	***No***	**<u>This would be a deviation in the PRO agreement</u>**
Density *Future Land Use Map(adopted July 26, 2017)*	13.6 du/ac	Total site area Phase 1: 12.75 acres 68 multifamily units (townhomes) in Phase 1B *68 units/12.75 ac = 5.44 du/ac* *68 + 50 multifamily units (Townhomes) in Phase 2: Approx: 15 ac net* *118 units/15 ac = 7.87 du/ac*	Yes	*The number of dwelling units should be a condition of i the PRO Agreement*
Phasing	Show proposed phasing lines on site plan. Describe scope of work for each phase. Each phase should be able to stand on its own with regards to utilities and parking	Phasing lines shown **Phase 1A(South area)** Buildings A, B, and C (Market, Retail, Restaurants) 50,977 sf Surface Parking: 323 spaces Pond Amenity **Phase 1B (Eastern area)** 68 Residential 2-bed townhome units 81 garage spaces + 40 surface spaces = 121 spaces **Phase 2A (Northern area)** 50 residential 2-bed townhome units 66 garage spaces + 28 surface = 94 parking spaces **Phase 2B – Commercial** 4,500 sf Restaurant Surface Parking: 68 spaces	Yes?	**Phasing Plan (sheet P1.1) indicates 81 garage spaces for Phase 1B, however parking calcs on Sheet C-2.0 show 68 garage spaces. Clarify discrepancy.** **If 11 Mile on-street parking is to be constructed clarify which phase it will be included in.**

Item	Required Code	Proposed	Meets Code	Comments
PRO Concept Plan Submittal: Additional requirements				
Written Statement *(Site Development Manual)* *The statement should describe the items listed to the right*	Potential development under the proposed zoning and current zoning	The applicant has addressed this item in the narrative.	Yes	*Staff agrees that the Town Center-1 District may be a reasonable alternative to the existing zoning for Phase 1&2 given the vision for this area in the Town Center study and Master Plan.*
	Identified benefit(s) of the development	Applicant has provided a list of public benefits proposed at this time.	Yes	**Please refer to Plan Review letter for discussion of public benefits proposed**
	Conditions proposed for inclusion in the PRO Agreement (i.e., Zoning Ordinance deviations, limitation on total units, etc.)	List of deviations are included in the narrative	Yes	**Please refer to Plan Review letter for discussion deviations proposed**
Sign Location Plan *(Page 23,SDM)*	Installed within 15 days prior to public hearing Located along all road frontages	Signs posted previously	Yes	
Rezoning Traffic Impact Study *(Site development manual)*	Rezoning Traffic Impact Study as required by the City of Novi Site Plan and Development Manual.	A Traffic Impact Statement and Rezoning Traffic Impact Study is provided	Yes? Yes?	**Refer to Traffic review letter for more comments**
Community Impact Statement (CIS) *(Sec. 2.2)*	- Over 30 acres for permitted non-residential projects - Over 10 acres in size for a special land use - All residential projects with more than 150 units - A mixed-use development, staff shall determine	Mixed-use development, based on the number of different uses. A CIS is provided	Yes	**Refer to Planning Review letter for more comments.**
Height, bulk, density and area limitations				
Frontage on a Public Street *(Sec. 5.12)*	Frontage upon a public street.	The site has frontage and access to Grand River Avenue and Eleven Mile.	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Access To Major Thoroughfare *(Sec. 5.13)*	Access to major thoroughfare is required, unless the property directly across the street between the driveway and major thoroughfare is either multi-family or non-residential	Site has access to Grand River Avenue and Eleven Mile Road	Yes	
Maximum % of Lot Area Covered (By All Buildings) (Sec. 3.6.2 D)	No Maximum		NA	
Building Height *(Sec.3.1.26.D)*	5 stories or 65 ft, whichever is less ** Section 3.27.2.A.ii allows mixed use buildings a height bonus – for each additional floor of office or retail use above the first floor, an additional floor of residential use may be permitted. "all other standards of the ordinance apply to the height bonus, including setback, parking, landscaping, density and subsection i: "Buildings exceeding 65 ft in height shall have a minimum of 150 feet of building frontage on a roadway no less than 28-feet wide"	Building A: 2 stories	Yes	
		Building B: 1 story	Yes	
		Building C: 1 story	Yes	
		Building D: 1 story	Yes	**Note: Building "D" still appears on the Phasing plan, although the civil sheets include the area within building A**
		Phase 2 Restaurant: 1 story	Yes	
Residential portion of this development is subject to conditions and requirements of Section 4.82: Residential Dwellings in TC and TC-1 districts (Ordinance Amendment 18.279) **Commercial Portion is subject to TC and TC-1 requirements**				
Arterial and Non-residential Collector Streets *Additional setbacks may also be required by Planning Commission or City Council if deemed necessary for better design or functionality.*				
NOTE REGARDING SETBACKS: The current submittal indicates the lot lines at the future ROW line. **Grand River Avenue is classified an arterial while Eleven Mile Road is considered a non-residential collector.**				

Item	Required Code	Proposed	Meets Code	Comments
Phase 1A buildings will be considered to "front" on Grand River should adhere to "Interior" requirement as there is TC-1 District to the south. Phase 2 buildings shall consider Eleven Mile Road as "front" should adhere to Non-Residential Collector requirements.				
Commercial Building Setbacks *(Sec 3.1.26 D) and (Sec. 3.27.1.C)*				
Front (Grand River and Eleven Mile) *See 3.27.1.C for waiver conditions for City Council*	Arterials 15 ft. minimum *Setback may be increased where necessary to obtain clear vision area for vehicular traffic.	Bldg A: 217 ft	Yes	
		Bldg B: NA	Yes	
		Bldg C: 15 ft	Yes	
	Non-Residential Collector & Local Streets 0 ft min, 10 ft maximum	Phase 2 Restaurant: Fronts on internal driveway	**Yes**	
		Ecco Tool (Existing) ~52 feet	**No**	**Existing, to be made non-conforming by rezoning**
Side *Western property line is considered Interior (TC district adjacent)* *Eastern property lines considered Exterior (B-3 and I-1 Districts adjacent)*	Arterials 10 ft. Minimum Interior 50 ft Exterior	Bldg A: 10 ft (East: Exterior to B-3)	**No**	**Deviation required: 50 ft required, 10 ft proposed**
		Bldg B > 50 ft	NA	
		Bldg C > 50 ft	NA	
	Non-Residential Collector & Local Streets 0 ft min, no maximum	Phase 2 Restaurant: NA	NA	
		Ecco Tool (Existing) ~25 feet	Yes	
Rear *Western property line is considered Interior (TC district adjacent)* *Northern property lines considered*	Arterials 10 ft. Minimum Interior 50 ft Exterior	Bldg A: NA (north side)	NA	
		Bldg B: NA	NA	
		Bldg C: NA	NA	

Item	Required Code	Proposed	Meets Code	Comments
Exterior (OSC Districts adjacent)	Non-Residential Collector 0 ft min, no maximum	Phase 2 Restaurant: 75 ft (to B-3 parcel to south)	Yes	
Commercial Parking Setback *(Sec 3.1.26.D)*				
Front Grand River Ave	20 ft. from ROW	Front Grand River: 20 ft Western side yard: **5 ft (south of pond)** **~7 ft (north of pond)** Eastern side yard: 10 ft Adj to B-3: **5 ft** Exterior rear yard (11 Mile): 20 ft	Yes **No** Yes **No** Yes	**Show the setback distances on plans to verify conformance** **Setback plan (C-2.4 and C-2.5) indicates incorrect parking setbacks (5 feet) – please correct.** **Deviations requested for western side yard parking areas. Also required for parking adjacent to B-3 parcel if not corrected (south of Ecco Tool).**
Side/Rear Yard (West, East, South adj to B-3)	10 ft.			
Exterior Rear Yard (11 Mile Road)	20 ft. from ROW			
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 front yard.	11 Mile Frontage is only exterior side yard	Yes	
Minimum lot area and width *(Sec 3.6.2.D)*	Except where otherwise provided in this ordinance, the minimum lot area and width, maximum percentage of lot coverage shall be determined by the requirements set forth.	Proposed	Yes	
Yard Setbacks adjacent to Residential Districts *(Sec 3.6.2.H&L)*	If site abuts a residential zone, buildings must be set back at least 3' for each 1' of building height, but in no case can be less than 20' setback	NA	NA	Does not abut residential
Wetland/Watercourse Setback *(Sec 3.6.2.M)*	A setback of 25 ft. from wetlands and from high watermark course shall be maintained	Pond exists on the site – buffer not shown	**No**	**Indicate the buffers on the plan to verify conformance; Refer to Wetland review letter for more details** **Deviation requested**

Item	Required Code	Proposed	Meets Code	Comments
Parking setback screening *(Sec 3.6.2.P)*	Required parking setback area shall be landscaped per sec 5.5.3.	Berm required		**Refer to landscape review for more details.**
Modification of parking setback requirements *(Sec 3.6.2.Q)*	The Planning Commission may modify parking setback requirements based on its determination according to Sec 3.6.2.Q.	Parking setbacks listed incorrectly in several locations. See 3.1.26.D below	**Yes?**	**<u>Plan does not meet the setback requirements for some areas.</u> Show correct setback lines on the plans – 10 feet for side and rear yards.**
TC-1 District Required Conditions *(Sec 3.27)*				
Site Plans *(Sec. 3.27.1.A.)*	Site area under 5 acres: Requires Planning Commission approval; Site area over 5 acres: Requires City Council approval upon Planning Commission recommendation	Site is over 5 acres (15.59 acres)	Yes	*Site plan requires City Council approval upon Planning Commission recommendation*
Parking Setbacks (3.27.1 D)	20 ft. from ROW	Front and exterior side yards all min. 20 feet	Yes	
	Surface parking areas must be screened by either a 2.5 ft. brick wall or a landscaped berm from all public ROW	Screening?	**No**	**See Landscape Review Letter.**
	No front yard or side yard parking on any non-residential collector.	No parking extends in front of buildings on 11 Mile Road	Yes	
Architecture/ Pedestrian Orientation (3.27.1 E)	No building in the TC-1 district shall be in excess of one-hundred twenty-five (125) feet in width, unless pedestrian entranceways are provided at least every one-hundred twenty-five (125) feet of frontage.	This applies to the Commercial buildings. Several buildings exceed 125 ft width – Phase 1 buildings will have entrances Proposed: Decorative paving at key locations, pond/surrounding garden as focal point	Yes	**See Façade review for further architectural comment**
Open Space Area (Sec. 3.27.1.F)	15% (permanently landscaped open areas and pedestrian plazas	An Open space plan (sheet L205) is provided. Phase 1 Commercial:	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	accessible to the public)	1.63 acres (21.03% of 7.75 acre phase) Phase 2 Commercial: .17 acre (15.18% of 1.12 acre phase)	 Yes	
Façade materials (Sec. 3.27.1 G)	All sides of the building and accessory buildings must have the same materials. Façade materials may deviate from brick or stone with PC approval.			**See Façade Review Letter for comments.**
Parking, Loading, Signs, Landscaping, Lighting, Etc (Sec. 3.27.1 H)	All loading in TC-1 shall be in rear yards.	Phase 1A: loading in side and rear yards Phase 2: Side yard	**No**	**Deviations requested. Clearly show on plans all loading areas, label area (See Section 5.4 for additional requirements)**
	Off-street parking counts can be reduced by the number of on-street parking adjacent to a use	40 on-street spaces proposed along 11 Mile	Yes	
	PC may allow parking requirement reduction when parking areas serve dual functions.	The development proposes mixed uses.	Yes	**Shared parking study provided**
	Special assessment district for structured park	Not proposed	NA	
Sidewalks required (Sec. 3.27.1 I)	Sidewalks required along non-residential collector to be 12.5 ft. wide Sidewalk on Grand River should be 8'	8' sidewalk on Grand River 6' sidewalk on 11 Mile?	Yes **No**	**Show sidewalk widths** **Deviation Requested to retain existing 6' sidewalk where ordinance requires 12.5 ft**
	Direct pedestrian access between all buildings and adjacent areas	Appears to be provided, although markings on plans not consistent.	Yes	
Bicycle Paths (Sec. 3.27.1 J)	Bike paths required to connect to adjacent residential & non-residential areas.	8' Sidewalks proposed along Grand River; Existing sidewalk on 11 Mile to remain on streets proposed	**No**	**See sidewalk comment above**
Development	All sites must incorporate	L401 shows proposed	Yes	**No exterior lighting**

Item	Required Code	Proposed	Meets Code	Comments
amenities (Sec. 3.27.1 L)	amenities such as exterior lighting, outdoor furniture, safety paths in accordance with Town Center Study Area.	bench, bike rack, decorative stamped concrete Lighting specs provided sheet 2 of 2		**proposed for much of residential portion of Phase 1**
Combining Use Groups within a Structure (Sec. 3.27.1 M)	Commercial and office uses may occupy any number of total floors within a building with residential uses: - Not on same floor as residential Not above residential	Not proposed	NA	
Retail Space *(Sec.3.27.2.B)*	7,500 sq. ft. GLA max may exceed when: - All floors above 1st floor permitted in TC-1 - No retail above 2nd floor - 2nd floor retail is less than 12,000 sq. ft. or 25% of the floor area - Single user max. is 15,000 sq. ft. - 50% of retail commercial space on 1st floor is devoted to users of 5,000 sq. ft. or less	Market/food hall: 30,000 sf Building C: 13,000	Yes	**Deviation requested for Market that exceeds 15,000 sf; Building C exceeds 7,500 sf**
Street and Roadway Rights-Of-Way (Sec. 3.27.1 N)	Nonresidential collector and local streets shall provide ROWs consistent with DCS standards	**ROW to be dedicated on Grand River and 11 Mile Road**	Yes?	**Recalculate area of ROW dedication given exclusion of areas from City parcels**
Façade materials (Sec. 3.27.1 G)	All sides of the building and accessory buildings must have the same materials. Façade materials may deviate from brick or stone with PC approval.	Bldg A&D	**No**	**Section 9 waivers are required for all buildings with elevations submitted. Please refer to Façade review for more details and missing information.** **If deviations are not identified/ requested at this time, the elevations are expected to conform to the code at the time of Preliminary Site Plan approval.**
		Bldg B	**No**	
		Bldg C	**No**	
		Phase 2B Restaurant: not submitted		
		Residential Buildings: Vinyl siding is not permitted; Brick percentage has been increased	**No**	

Item	Required Code	Proposed	Meets Code	Comments
Mixed-Use Developments (Sec. 4.25) To qualify as a mixed-use development, a project must meet the following requirements.				
Each use shall comprise of at least 10% in the TC-1 district of either a. The net site area or b. The total gross floor area of all buildings		Gross site area: 15.5 acres Net site area after ROW dedication & Pond: 14.39 acres Residential Site Area: approx. 5.5 acres Commercial site area: 8.89 acre (~62% of total site area)	Yes	10% of net site area: 1.44 acres (each use should attain this minimum size to be considered mixed use)
A development with both conventional multi-family and senior, age-qualified, independent multi-family uses shall not be considered mixed use unless a non-residential use is also included		Not applicable	NA	
A performing arts facility unconditionally dedicated to the public use, under separate agreement with the City, shall be considered a second use, provided that it is a fully enclosed structure with a minimum of 500 seats.		Not applicable	NA	
Residential Dwellings / Mixed-Use in TC/TC-1 (Sec. 4.82)				
Multiple-Housing Dwellings Units *(Sec. 4.82.2)*		Must meet RM-1 district requirements.	Not Applicable	
Mixed Use Guidelines *(Sec. 4.82.2)*				
Number of Rooms and Area of Parcel *(Sec. 4.82.2.a) TC/TC-1, Multiple Family, and Mixed-Use*	Total number of rooms shall not have more than the area of the parcel in square feet, divided by a factor of 1200. **For mixed use, it is divided by factor of 800.**	For 14.3 net acres 623,779 sq. ft. / 800 = **779 rooms permitted** Phase 1B: 68 2-BR @ 3 rooms = 204 + Phase 2: 50 2-BR @ 3 rooms = 150 Total **354 rooms ***	Yes	
Allowing increase in number of rooms *(Sec. 4.82.2.b)*	Planning Commission (for sites <5 acres) or City Council (for sites >5 acres) can approve increase in number of rooms subject to conditions listed in Sec. 4.82.2.b. The increase cannot exceed more than two times the	No increase needed.	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	rooms otherwise allowed			
Floor plans for Mixed Use developments *(Sec. 4.82.2.c)*	Conceptual floor plans layouts for each dwelling unit is required to establish maximum number of rooms permitted, subject to minor modifications	Floor plans are provided for Phase 1B and 2 townhomes;	Yes	
Minimum Distance between Buildings *(Sec. 4.82.2.d)*	10 ft.	16 ft.	Yes	
Building Setbacks *(Sec. 4.82.2.e)*	- 15ft. minimum, unless conflicts with corner clearance	15 ft from ROW shown for residential buildings fronting on 11 Mile; **Balconies extend to 11 feet from ROW**	Yes	**Balconies extend to 11-13 feet from ROW (Section 3.32 allows open, unenclosed, and uncovered porch or paved terrace to project into front yard setback by 4 feet, but not balconies. <u>This would be a deviation.</u>**
Parking Setbacks Off-street Parking *(Sec. 4.82.2.f)*	10 ft. minimum from any wall of any dwelling structure, which contains openings involving living areas;	Meets requirement	Yes	Residential dwelling are subject to this section, not Sec. 3.1.26.
	5 ft. from any wall with no openings	Meets	Yes	
	10 ft. from any ROW (includes drives and loading)	Meets	Yes	
	5 ft. from all other property lines	Meets	Yes	
	30 ft. from property lines adjacent to Single family homes	Not applicable	NA	
Business and Office Uses *(Sec. 4.82.3)*	- Not occupy same floor as residential - No office use above a residential use - Separate entrance, private pedestrian entrance to residential shall be provided		NA	
Parking Location *(Sec. 4.82.5)*	Off-street parking shall be provided within a	Off-street surface parking, on-street, and	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	building, parking structure physically attached, or designed off-street parking within 300 ft. of building.	individual unit garages proposed		
Usable Open Space *(Sec. 4.82.6)*	Usable Open Space is defined as balconies, courts and yards that are private recreational uses, and no dimension is less than 50 ft. 200 sq. ft. per dwelling unit Phase 1B: 200 x 68 = 13,600 sq. ft. or 0.31 acre Phase 2: 200 x 50 = 10,000 sf or .23 ac	Usable open space shown on sheet L205 appears to comply with requirement Phase 1B: 0.52 ac proposed Phase 2: 0.36 ac proposed	Yes	
Note: Staff has made a determination for mixed use guidelines that is consistent with non-mixed use guidelines. For purpose of determining compliance, the minimum square footages are associated with number of bedroom as follows: 1 BR- 500 SF min; 2 BR- 750 SF min; 3 BR – 750 SF min; 4+ BR- 1,000 SF min ; **The applicant needs to provide the unit mix proposed. The applicant has provided floor plans of Phase 1B.**				
Maximum Room Count *: Mixed Use Guidelines(Sec. 4.82.2)*				
Efficiency-400	1	Not proposed	NA	**All units proposed exceed requirements.**
1 BR: 500 sq. ft.	2	Not proposed	NA	
2 BR: 750sq. ft.	3	3	Yes	
3 BR: 900 sq. ft.	4	Not proposed	NA	
4 BR: 1000 sq. ft.	5	Not proposed	NA	
Maximum Density: *Mixed Use Guidelines(Sec. 4.82.2)*				
Efficiency-400	--	Proposed density Phase 1: 4.8 DUA (68 units/14.3 ac) +Phase 2: 118 units/14.3 ac = 7.55 dua Allowable Density: 18 DUA; Allowable density is calculated based on maximum number of rooms allowed for this property (779 rooms) and unit type	Yes	Density for residential dwellings in TC-1 is based on the maximum number of rooms allowed.
1 BR: 500 sq. ft.	27.3 DUA (a)			
2 BR: 750sq. ft.	18.15 DUA			
3 BR: 900 sq. ft.	13.61 DUA			
4 BR: 1000 sq. ft.	10.89 DUA			
Maximum Percentage of Units : *Mixed Use Guidelines(Sec. 4.82.2)*				
Efficiency-400	5%	Not proposed		

Item	Required Code	Proposed	Meets Code	Comments
1 BR: 500 sq. ft.	50%	0		
2 BR: 750sq. ft.	100%	100	Yes	
3 BR: 900 sq. ft.	100%	0		
4 BR: 1000 sq. ft.	100%	0		
Minimum Off-street parking per unit: *Mixed Use Guidelines(Sec. 4.82.2)*				
Efficiency-400	1 per unit	Phase 1B: 68 units @ 2 spaces **Total 136 spaces required** 40 Surface spaces 81 Garage spaces Total 121 spaces proposed Phase 2: 50 units @ 2 spaces **Total 100 spaces required** Total 94 spaces proposed		**Shared parking study provided for overall project site to justify request for reduction in required parking**
1 BR: 500 sq. ft.	1 per unit			
2 BR: 750sq. ft.	2 per unit		**No**	
3 BR: 900 sq. ft.	2 per unit			
4 BR: 1000 sq. ft.	2 per unit			
Parking, Loading, and Dumpster Requirements (5.3 site specific review required)				
Required Parking Calculation *(Sec. 5.2.12)* *(Sec. 4.82.2)* **See Individual requirements below**	**Ordinance Requirement per Use**	**Parking Study Peak Demand**		Shared Parking Study indicates 578 spaces needed for peak demand, Including 10% "Effective Supply" to provide buffer for easier parking turnover 614 Spaces proposed includes 46 on-street parallel spaces on 11 Mile Road
	Retail 4,575 sf/200 = 23	18		
	Market 26,500sf/200 = 133	119		
	Quality Restaurant 6,275sf/70 = 90	58		
	Sit-Down Restaurant 7,505/70 = 64	99		
	Fast Casual Restaurant 9,962/70 = 142	74		
	Residential Buildings 118 units x 2 ea = 236	133		
	Total Ordinance Required: 688 Spaces	TOTAL PROPOSED: 614 Spaces		

Item	Required Code	Proposed	Meets Code	Comments
Required Parking Calculation *(Sec. 5.2.12)* *(Sec. 4.82.2)*	Shopping Center 1 per 250 sq. ft. of gla 54,817 / 250 = 219 spaces Res. Mixed-Use Development Rm count 1-2 = 1 space Rm count 3-5 = 2 spaces 236 total spaces required	Phase 1A: 323 spaces Restaurant Phase 2: 43 Residential Development 46 On-street 147 garage 68 surface parking	Yes?	Shared parking study provided to justify reduction of parking required for Phase 1 and at build-out of Phase 2.
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 as long as detail indicates a 4" curb at these locations - 60º 9 ft. x 18 ft.	- 9 ft. x 17 ft. parking spaces allowed as long as detail indicates a 4" curb at these locations - 60º 9 ft. x 18 ft. - 9 ft. x 19 ft. spaces - 20 ft 2-way drives	**No**	**Deviation requested for 20 ft drive aisles – 22 feet required when not adj to parking** **Deviation requested for 22 ft drive aisles – 24 feet required adj to parking**
Parking lot entrance offset (Sec. 5.3.6)	Parking lot entrances must be set back 25' from any single-family residential district.	Not applicable	NA	
End Islands *(Sec. 5.3.12)*	- End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. - The end islands shall generally be at least 8 ft. wide, have an outside radius of 15 ft., and be constructed 3 ft. shorter than the adjacent parking stall		Yes	**Refer to traffic review for additional comments.**
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	
Barrier Free Spaces *Barrier Free Code*	Phase 1B Residential: A total of 2% of required	1B Residential Development	Yes	

Item	Required Code	Proposed	Meets Code	Comments
**No deviations since this is a Michigan Building Code requirement*	parking. 96 x 2% = 2 required Phase 2 Res: 100 parking spaces x 2% = 2 required Phase 1A: 376 spaces for commercial portion requires: 6 barrier free (2 van accessible)	3 barrier free (1 van accessible) <u>2 Residential</u> 0 shown <u>Commercial</u> 20 barrier free (6 van accessible)	**No** Yes	**Provide required Barrier Free spaces in Phase 2 residential area at the time of PSP submittal**
Barrier Free Space Dimensions *Barrier Free Code*	- 8‘ wide with an 8’ wide access aisle for van accessible spaces - 8’ wide with a 5’ wide access aisle for regular accessible spaces	Spaces are distributed into 5 locations, appear to have at least 1 van accessible at each Dimensions appear to comply	Yes	Additional barrier free spaces will be required with Phase 2 as stated above
Barrier Free Signs *Barrier Free Code*	One sign for each accessible parking space.	Signs indicated	Yes	<u>Signage will need to be relocated to allow 2’ vehicle overhang for spaces less than 19’ length</u>
Minimum number of Bicycle Parking *(Sec. 5.16.1)*	<u>Multiple-Family:</u> 1 for each 5 dwellings 118/5 = 24 bike spaces <u>Retail/Shopping Center:</u> Five (5) percent of required automobile spaces 366 spaces * 5% = 18 bike spaces Total = 42 bike spaces	Residential portions: 1B - 14 spaces proposed 2A - ? Commercial: 19 spaces proposed	Yes	**<u>Sheet C-2.0 indicates 33 bicycle parking spaces are provided; however 42 are required. Provide additional spaces or request a deviation.</u> (Counted 46 spaces on the plans, so numbers may just need to be updated)**
Bicycle Parking General requirements *(Sec. 5.16)*	- 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 - When 20 or more	Multiple bike rack locations indicated To be verified at the time of PSP submittal Appear to be provided Covered spaces not	Yes Yes Yes Yes NA	**Some locations indicated may not meet ordinance requirements – may need to be moved at the time of PSP submittal** **Phase 2 bike parking not indicated at this time – see comment above**

Item	Required Code	Proposed	Meets Code	Comments
	bicycle parking spaces are required, 25% shall be covered spaces.	indicated		
Bicycle Parking Lot layout *(Sec 5.16.6)*	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double	To be determined at the time of PSP submittal		
Loading Space Area *(Sec. 5.4.2)*	Within TC zoning, loading space shall be provided in the rear yard (or in the interior side yard beyond the side yard setback for double frontage lots) in the ratio of 10 sq. ft. per front foot of building. Layout shall not cut off or diminish access to off-street parking spaces or service drives. Example: For 100 ff building, 1000 sf of loading area is required for residential and commercial buildings	Phase 1 loading area locations meet requirements for location in rear yard or interior side yard. 4 areas are indicated as loading zones on sheet C-2.1: • Area A1 + A2: 1,320 sf + 475 = 1,795 **< 1,800 sf required** • Area B: 644 sf **>** 620 sf required • Area C: 1,300 sf **< 2,000 sf required** • Phase 2B Restaurant: **??** > 1,000 sf required	**No** **No** **Yes?**	**Loading areas seem to include area where dumpster is present, which is not allowed. Area occupied by dumpster shall be excluded from loading area calculation.** **<u>Deviations needed for deficiency in area requirements for Loading areas A,B, C</u>** **Provide area of Phase 2B loading area**
Loading Space Screening (Sec. 5.4.2 B)	Loading area must be screened from view from adjoining properties and from the street.	Loading areas (A, B & C) screened with bamboo plantings – Phase 2B area does not appear to be screened	**No?**	**Refer to landscape plan for additional comments.** **<u>Waiver or deviations required if proper screening in not proposed</u>**
Dumpster *Sec 4.19.2.F*	- Located in rear yard - Attached to the building or no closer than 10 ft. from building if not attached - Not located in parking setback (20 ft.) - Rear lot abuts ROW, 50 ft. setback required. - Away from Barrier free	Phase 1A dumpster locations appear to be acceptable. Will be confirmed at the time of PSP submittal. No dumpsters in Phase 1B area	Yes?	**Clarify trash collection plans for residential areas if no dumpsters are provided**

Item	Required Code	Proposed	Meets Code	Comments
	Spaces			
Dumpster Enclosure *Sec. 21-145. (c) Chapter 21 of City Code of Ordinances*	- Screened from public view - A wall or fence 1 ft. higher than height of refuse bin - And no less than 5 ft. on three sides - Posts or bumpers to protect the screening - Hard surface pad. - Screening Materials: Masonry, wood or evergreen shrubbery	Details provided – see façade review for comments	Yes	Appear to comply with façade ordinance – will confirm at the time of site plan approval
Lighting and Photometric Plan *(Sec. 5.7)*				
STAFF COMMENT: Photometric plan and additional information is typically required at the time of Final Site Plan when the site is not abutting a residential district. **If deviations from ordinance requirements are anticipated, they should be identified and included as part of the PRO agreement.**				
Intent *(Sec. 5.7.1)*	Establish appropriate minimum levels, prevent unnecessary glare, reduce spill-over onto adjacent properties & reduce unnecessary transmission of light into the night sky		Yes	
Lighting Plan *(Sec. 5.7.2 A.i)*	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	Building outlines, pavement shown for Phase 1A & B only	Yes	**Ensure light fixtures will not conflict with landscaping/utilities**
Building Lighting *(Sec. 5.7.2.A.iii)*	Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures.	Not provided	**No**	Would be expected to conform to ordinance standards at the time of FSP approval unless deviations are identified now
Lighting Plan *(Sec.5.7.2 A.ii)*	Specifications for all proposed & existing lighting fixtures	Appear to be Provided	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	Photometric data	Provided	Yes	
	Fixture height	Not provided	No	
	Mounting & design	Provided	Yes	
	Glare control devices	Provided	Yes	
	Type & color rendition of lamps	Provided	Yes	
	Hours of operation	Not provided	No	
Required Conditions *(Sec. 5.7.3.A)*	Light pole height not to exceed maximum height of zoning district (65 ft. for TC)		NA	Light pole height not currently provided – will be reviewed in PSP submittal
Required Conditions *(Sec. 5.7.3.B&G)*	- Electrical service to light fixtures shall be placed underground - Flashing light shall not be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation			**Provide standard notes on Plan and/or incorporate into PRO Conditions**
Security Lighting *(Sec. 5.7.3.H)* Lighting for security purposes shall be directed only onto the area to be secured.	- All fixtures shall be located, shielded, and aimed at the areas to be secured. - Fixtures mounted on the building and designed to illuminate the facade are preferred.			will be reviewed in PSP submittal
Required Conditions *(Sec.5.7.3.E)*	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1	No indicated for residential portion	**No**	**<u>Deviation requested.</u>**
Required Conditions *(Sec. 5.7.3.F)*	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps	LEDs proposed	Yes	
Min. Illumination *(Sec. 5.7.3.K)*	Parking areas: 0.2 min	0.2 proposed	Yes	General parking areas expected to comply with min. requirements

Item	Required Code	Proposed	Meets Code	Comments
	Loading & unloading areas: 0.4 min	Meets min.	Yes	
	Walkways: 0.2 min	0.0 min noted in several locations	**No**	**Some areas of the public walkway are not illuminated**
	Building entrances, frequent use: 1.0 min	Front of building C – lighting below min levels	**No**	**Adjust lighting to meet min levels**
	Building entrances, infrequent use: 0.2 min	Appears to comply	Yes	
Max. Illumination adjacent to Non-Residential *(Sec. 5.7.3.K)*	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle		Yes	
Cut off Angles *(Sec. 5.7.3.L)*	When adjacent to residential districts: - All cut off angles of fixtures must be 90° - maximum illumination at the property line shall not exceed 0.5 foot candle	No residential districts adjacent	NA	
Building Code and Other Requirements				
Accessory Structures *(Sec. 4.19)*	-Each accessory building shall meet all setback requirements for the zoning district in which the property is situated -Shall meet the façade ordinance standards		NA	Tea house near pond will be considered an accessory structure, as will generators, transformers, etc. Label on plans and provide dimensions
Exterior Building Wall Façade Materials (Sec. 5.15) (Sec. 3.27.1.G)	Façade Region: 1	Elevation drawings submitted for some of the buildings	**No**	**See Façade review for additional comments and further detail**
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	Elevations are not provided for all units	**No**	This information can be provided at the time of Preliminary site plan that conforms to the code
Building Code	Building exits must be connected to sidewalk system or parking lot.	Sidewalks shown on the plans	yes	This information can be provided at the time of Preliminary site plan that

Item	Required Code	Proposed	Meets Code	Comments
				conforms to the code
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided – unit boundaries of site condominium proposed	Yes	
General layout and dimension of proposed physical improvements	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Some provided;	Yes	**Refer to review letters for missing information**
Economic Impact	- Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known)	Provided	**No**	**Should be submitted prior to Planning Commission meeting**
Signage **See link below (Chapter 28, Code of Ordinances)**	- Signage if proposed requires a permit. - Signage is not regulated by the Planning Commission or Planning Division.	Deviation requested up to 200% of current Sign ordinance allowance; Full description of proposed signage package provided	**No**	**See Planning Review letter for detailed comments**
Property Address	The applicant should contact the Building Division for an address prior to applying for a building permit.	One is not required at this time. Individual lot address would require separate addresses at a later time	**No**	Submit address application after Final Site Plan approval.
Project and Street Naming Committee	Some projects may need approval from the Street and Project Naming Committee.	The applicant requested Sakura Novi project name. Approved by committee	Yes	**Contact Madeleine Kopko at 248-347-0579 for more information on application and process**
Property Split/Combination	The proposed property split/combination must be submitted to the Assessing Department	Lot combination required	**No**	**Lot combination/split required prior to final site plan approval. Contact Assessing 248-347-0492**

Item	Required Code	Proposed	Meets Code	Comments
	for approval.			
Master Deed	Master Deed should be approved for site condominiums prior to stamping set approval	**Applicant states site condominium ownership will be utilized**	Yes	**Master Deed to be reviewed at appropriate time**
Easements	- Utilities - Emergency/Cross-Access Easements - Conservation Easements - ROW dedication - Etc.	Easement plan submitted	Yes?	**Conservation easement will be required for any wetland mitigation areas or woodland replacement trees; Access easements for Ecco Tool property if properties are connected;** Off-site Storm water discharge easement to parcel east

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

January 7, 2020

Engineering Review

Sakura Way PRO
JZ19-0031

Applicant
Sakura Novi, LLC

Review Type
Second Revised PRO Concept Plan

Property Characteristics

- Site Location: North of Grand River Avenue, East of Town Center Drive
- Site Size: 15.59 Acres
- Plan Date: October 2, 2019
- Design Engineer: PEA, Inc.

Project Summary

- Phase 1 (12.75 acres): Construction of mixed-use buildings (30,000 s.f. market, 5 restaurants, and 4 retail spaces), 68 townhomes, and associated parking.

  Phase 2 (2.76 acres): Construction of 50 townhomes, 2 restaurants and associated parking.

  Site access to phases 1 and 2 would be provided via Grand River Avenue and Eleven Mile Road.

- Water service would be provided by an 8-inch extension from the existing 12-inch water main along the north side of 11 Mile Road. The aforesaid water main extension will have two (2) connections to 11 Mile Road to provide a looped water main system on the proposed site.
- Sanitary sewer service would be provided by an 8-inch extension from the existing 8-inch sanitary sewer along the south side of 11 Mile Road.
- Storm water would be collected by two (2) separate storm sewer collection systems (detention basins). The western detention basin would be discharged to existing 12-inch storm sewer along the north side of Grand River Avenue at a controlled rate. The eastern detention basin would be discharged to a wetland on the abutting parcel to the east owned by the city of Novi.

Recommendation
Approval of the 2nd Revised PRO Concept Plan and 2nd Revised PRO Concept Storm Water Management Plan is **recommended for approval** with items to be addressed during detailed design review.

Comments:
The 2nd Revised PRO Concept Plan for phases 1 and 2 meet the general requirements of the design and construction standards as set forth in Chapter 11 of the City of Novi Codified Ordinance, the Storm Water Management Ordinance and the Engineering Design Manual with the following items that must be addressed at the time of Preliminary Site Plan submittal:

General

1. Reference benchmarks established at intervals no greater than 1,200 feet shall be noted on the plans with identification, location, description and established elevation listed. Generally, at least two benchmarks shall be noted on each sheet and one of the two shall be a City established benchmark.
   a. Provide the elevation of the City established benchmark.
   b. Reference at least two benchmarks.
2. For all non-residential development, a Non-Domestic User Survey form must be submitted to the City once a tenant has been identified so it can be forwarded to Oakland County.
3. Provide a note stating, "If dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Department for review".
4. 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 distance from any existing or proposed utility.
5. Provide soil borings, at the time of detailed site plan review, in the vicinity of the storm water basins to determine soil conditions and to establish the high water elevation of the groundwater table.
6. The master planned half width right-of-way for Eleven Mile Road is 35 feet. There is a note on the plans indicating the dedication of this right-of-way to the City.
7. The master planned half width right-of-way for Grand River Avenue is 60 feet. There is a note on the plans indicating the dedication of this right-of-way to the City.
8. Clarify what the rectangles on the western detention basin represent.
9. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan submittal highlighting the changes made to the plans addressing each of the comments in this review.

Water Main

10. A water main basis of design is not necessary and should be removed from the plans. The proposed demand is in accordance with the City's Water System Master Plan.

11. The as-builts from Advance Auto (parcel 50-22-23-126-015) do not indicate that 8-inch water main was stubbed at the western boundary of their property. A revision to this proposed water main connection may be necessary.
12. Note the diameter and length of all leads (domestic, fire and hydrant leads).
13. Provide a domestic water service lead to building 2 in phase 2. If it was missed, please rearrange the labels on sheet C-5.2 that cover up some of the water main and building leads.
14. Any hydrant lead over 25 feet long must be 8-inches in diameter.
15. There is a gate valve shown on sheet C-5.1 between building 10 and building 'A' that does not appear to be associated with any water main. If this is an error, please remove it from the plans.
16. Correct the arrows associated with the building 'A' water lead labels. They are not currently pointing at the fire and domestic water service leads.
17. Provide profile views for all proposed water main 8-inch and larger.
18. Once the water man plans have been reviewed in detail and approved, provide three (3) signed and sealed sets of utility plans along with the MDEGLE permit application (04/2019 rev.) for water main construction. The Streamlined Water Main Permit Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

Sanitary Sewer

19. Revise the sanitary sewer basis of design to reflect the correct ultimate scenario.
    a. The townhomes should be broken down by number of bedrooms. The City's Sewer Unit Factor chart has different unit factor values depending on the number of bedrooms in each unit.
20. According to the City's records, the sanitary sewer along Eleven Mile Road Is a 27-inch sewer, not 8-inch. See attached map. A revision to the sanitary sewer layout may be necessary.
21. A few of the sanitary sewer leads are missing a label and sizing information. Clearly provide and label the lead to every building.
22. Clearly label each sanitary sewer monitoring manhole unique to a non-residential building.
23. Provide profile views for all proposed sanitary sewer greater than 6-inches.
24. Once the sanitary sewer plans have been reviewed in detail and approved, provide three (3) sealed sets, as well as an electronic copy, of the utility plans along with the MDEGLE permit application (01/18 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification Checklist. These documents shall 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. Please contact the MDEGLE and the City of Novi if an expedited review is desired.

Storm Sewer

25. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.
26. Provide storm sewer profiles and illustrate all pipes intersecting storm structures.
27. Show and label all roof conductors, and show where they tie into the storm sewer.
28. Provide a four-foot deep sump and an oil/gas separator in the last storm structures prior to discharge to each storm water basin.

Storm Water Management Plan

29. The Storm Water Management Plan for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual.
30. The applicant should consider including Ecco Tool in the storm water calculations for potential redevelopment of the site and inclusion with the Sakura Novi project.
31. Consider moving the riser for the eastern basin further north from the inlet to lengthen the flow length.
32. An off-site drainage easement may be required to discharge the eastern detention basin onto City property.
33. Provide supporting calculations for the runoff coefficient determination.
34. Label the material proposed for the maintenance access route to the basin outlet structures, and label the 15-foot width and slope (maximum of 1V:5H).
35. Provide an access easement from the public right-of-way for maintenance over the storm water detention system and the pretreatment structure.
36. A 25-foot vegetated buffer shall be provided around the perimeter of each storm water basin associated with residential development. A **deviation** from this standard would be supported by the Engineering Department if the buffer is not feasible and it should be included in the PRO Agreement.
37. If a 3-foot permanent pool is provided in the detention basin to the west, as indicated in the response letter, then a mechanical treatment unit is not required in the last structure prior to discharge to the basin.
38. Indicate where the mechanical treatment unit for the eastern basin can be found.
39. An emergency spillway must be provided at an elevation that is 6-inches above the 100-year elevation and must have sufficient capacity to convey the peak flow associated with a 100-year design storm.

Paving & Grading

40. The Engineering Department is not comfortable with the on-street parking on the north side of Eleven Mile Road as it is currently shown on the plans. The 35 mph speed limit and lack of safe areas to cross the road to the Sakura Novi development pose a couple safety concerns.
41. The maneuvering lane widths throughout the development shall be 24 feet wide. Any width less than that would be considered a **deviation**.
42. The right-of-way sidewalk shall continue through the drive approach on Eleven Mile Road as well as Grand River Avenue. If like materials are used for each, the sidewalk shall be striped through the approach. Provide additional spot grades as necessary to verify the maximum 2-percent cross-slope is maintained along the walk.
43. 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.
44. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
    a. Curbing and walks adjacent to the end of 17-foot stalls shall be reduced to 4-inches high (rather than the standard 6-inch height to be provided adjacent to 19-foot stalls).

Soil Erosion and Sediment Control

45. A SESC permit is required and an application should be made with the preliminary/final site plan submittal.

Off-Site Easements

46. Any off-site utility easements anticipated must be executed **prior to final approval of the plans**.

    a. An off-site storm sewer easement may be necessary for the end section and discharge of storm water on the City of Novi's property (parcel 22-23-226-042).

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

47. A letter from either the applicant or the applicant's engineer must be submitted with the revised Preliminary Site Plan highlighting the changes made to the plans addressing each of the comments listed on this review letter and indicating the revised sheets involved.
48. 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), right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pre-treatment structure and restoration).

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

49. 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.

50. A draft copy of the 20-foot wide easement for the water main to be constructed on the site must be submitted to the Community Development Department. This document is available on our website.

51. A draft copy of the 20-foot wide easement for the sanitary sewer to be constructed on the site must be submitted to the Community Development Department. This document is available on our website.

52. A draft copy of the 20-foot wide easement for the sanitary sewer monitoring manholes to be constructed on the site must be submitted to the Community Development Department. This document is available on our website.

53. A draft copy of the cross access easement for shared access to the drive aisle between Ecco Tool and Sakura Way must be submitted to the Community Development Department. This document is available on our website.

54. A draft copy of the warranty deed for the additional proposed right-of-way along Eleven Mile Road and Grand River Avenue must be submitted for review and acceptance by the City.

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

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

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

Kate R

Kate Richardson, EIT
Plan Review Engineer

cc: Lindsay Bell, Community Development Department
Ben Croy, PE; Engineering
Victor Boron, Engineering

LANDSCAPE REVIEW

PLAN REVIEW CENTER REPORT

December 27, 2019

Second Revised PRO Concept Site Plan - Landscaping

Review Type
Second Revised PRO Concept Landscape Review

Job #
JZ19-0031

Property Characteristics

- Site Location: Northeast of Town Center and Grand River
- Site Zoning: OSC, OS-1, I-1, to be rezoned to TC-1
- Adjacent Zoning: North: 11 Mile Road, I-1, East: I-1, B-3, South: B-3, Grand River, West: TC
- Plan Date: 12/20/2019

Ordinance Considerations

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the Preliminary Site Plan submittal. Underlined items must be addressed on 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 for PRO Concept, contingent on the applicant agreeing to address the remaining unsupported deviations noted below.** There are still several deviations that must be reduced, and could be, but haven't been. While there can be some flexibility to support the design intent, and some has been granted, there are still areas that could be changed to more closely meet the ordinance that wouldn't negatively impact the design, and in fact could make it more attractive and user-friendly. The comments noted below should be addressed prior to consideration by the Planning Commission and City Council, or on the Preliminary Site Plans.

LANDSCAPE DEVIATIONS REQUIRED FOR PROPOSED CONFIGURATION:

PHASE 1

COMMERCIAL:

- Insufficient interior parking lot landscaping area, interior and endcap islands, and canopy trees provided. *Not supported by staff.*
- Insufficient parking lot perimeter trees provided. *Not supported by staff.*
- Lack of screening wall or berm for parking areas along Grand River. *Supported by staff*
- Lack of screening wall or berm for parking areas along 11 Mile Road. *Not supported by staff*
- Insufficient building foundation landscaping. *Not supported by staff.*

RESIDENTIAL:

- No buffering berms for multi-family housing provided between residential buildings and the B-3 property to the south. *Supported by staff.*
- Insufficient greenbelt width and berm between parking lot and 11 Mile Road (Phase 1). *Supported by staff.*
- Use of subcanopy trees for 25% of multifamily unit landscaping trees. *Supported by staff (29% is not supported by staff).*

PHASE 2:

- Insufficient parking lot trees (interior and perimeter). *Not supported by staff.*

Please add a summary table of all landscape deviations sought, the extent of those deviations (ie number of trees not planted) and justification for those deviations, to the landscape plans.

Wherever possible, the plans should be modified or enhanced to reduce and ideally remove as many deviations as possible.

General note:

The residential sections are designed so only the rears of the buildings are facing the drives, with no room for landscaping to soften the views of garages and the backs of townhouses. While allowed by ordinance, this would create long stretches of unattractive interior drives between the buildings, especially in the Phase 1 residential area where traffic will pass. If possible, please add some sort of landscaping between the units in those areas.

Ordinance Considerations

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

Provided

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

1. Provided
2. **Please put the hydrant in Phase 2 Parking Lot Area 6 behind a curb.**

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

1. The grading plan is not consistent with the Tree Protection Plan in terms of trees to be saved and protected. Also, trees shown as remaining at the northwest corner of the property, west of the parking, would not be able to survive given the proposed contours shown on the Grading Plan.
2. **Please correct those inconsistencies and show all trees to be removed or saved on both plans, with tree protection fence consistently shown between the plans, and the Grading and/or Demolition plan.**

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

1. Buildings 3 and 5 are adjacent to an industrial use. A tall hedge and deciduous trees are proposed but concerns remain about the potential noise from an industrial use negative impacting the adjacent residences. **Please provide a 6' tall wall as called for on Table 5.5.3.A.ii to provide more auditory buffering, instead of the hedge**. If a noise study indicating that a noise buffering wall is not necessary is provided, the present configuration would be acceptable. *As currently proposed, the proposed buffering is not supported by staff, but a deviation is not required.*
2. Building 9 is adjacent to the commercial section and a loading area for the market where large trucks will travel and back up with beepers. A 3' tall hedge and deciduous canopy trees are proposed in one area and a cluster of pine trees in another. **Please provide a taller buffer that provides significant audible buffering, such as a 6' tall wall instead of the hedge or proof that such audible buffering is not required. Or, a restriction on delivery hours to times such as 7am-11pm could be instituted.** *As currently proposed, the proposed buffering is not supported by staff, but a deviation is not required.*
3. The southern Phase 1 residential parking bay is adjacent to B-3 zoning. A 2-3' tall landscaped berm is provided. An evergreen hedge and deciduous trees are proposed as a buffer. *The landscape deviation for this frontage is supported.*

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

1. COMMERCIAL:
   a. **Grand River Avenue:**
      i. The required greenbelt width is provided.
      ii. The required berm or brick wall are not provided. A decorative fence with brick piers, with dense landscaping, is proposed instead. The detail is provided on Sheet P4.5. *The deviation for a lack of wall or berm can still be supported as the landscaping appears to provide 80-90% opacity throughout the year.*
      iii. Based on the frontage, 24 canopy trees are required but only 21 are proposed and none are provided between Building C and Grand River. *This deviation is not supported by staff.*
      iv. Please propose at least 5 canopy trees between Grand River and Building C.

   b. **11 Mile Road:**
      i. The required greenbelt width is provided.
      ii. The required berm or brick wall are not provided between the road and the parking lots abutting 11 Mile Road. *This deviation is not supported by staff. Please use a similar dense landscaping to what is proposed for Grand River between 11 Mile Road and the two eastern parking lots that are adjacent to it.*
      iii. Based on the frontage of the 2 parking lots, the Phase 2 greenbelt needs to have 6 canopy trees between the parking and 11 Mile Road or 9 subcanopy trees. 5 canopy trees are proposed in the right-of-way on L204 and 4 canopy trees are proposed in the greenbelt on L301.
      iv. **Please remove the trees from the right-of-way where parallel parking is proposed and provide all required canopy trees within the greenbelt**.

2. PHASE 1 RESIDENTIAL:
   a. The required greenbelt width is provided everywhere along the 11 Mile Road frontage except between the ROW and the Building 4 parking lot, where 20 feet is required but only 7 feet is proposed. **This requires a landscape deviation**. *It is supported because the greenbelt is densely planted with evergreens to screen the parking lot.*
   b. Most of the 11 Mile Road frontage does not front on parking, so no wall or berm is required, except in front of the small Building 4 parking lot. As noted above, the lot is screened with densely planted evergreens so *the deviation for lack of wall or berm in this area is supported by staff.*
   c. Based on the frontage, 13 deciduous canopy or large evergreen greenbelt trees or 19 subcanopy trees are required. 15 subcanopy trees are provided in the right-of-way and 4 are provided within the greenbelt.
   d. While no street trees are required in the TC-1 district, staff agrees that the addition of the crabapples between the curb and sidewalk as proposed would be an attractive look, so those trees can remain and be counted toward the requirement for subcanopy greenbelt trees.
   e. If the parallel parking spaces are to remain per the layout, the trees shown on top of them must be relocated outside of the right-of-way.

3. PHASE 2 RESIDENTIAL:
   a. The required greenbelt width is provided everywhere along the 11 Mile Road frontage.
   b. Based on the frontage, 14 deciduous canopy or large evergreen greenbelt trees or 21 subcanopy trees are required. On Sheet L204, 14 canopy trees are proposed in the right-of-way, on top of parallel parking spaces. On Sheet L301, 15 canopy trees are proposed within the greenbelt. **Once the layout is finally determined, the correct number of greenbelt trees should be proposed.**

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

1. COMMERCIAL:
   PHASE 1:
   a. Based on the vehicular use area calculations provided, a total of 7,697 of interior landscape area and 38 canopy trees are required. A total of 7,298sf of area and 31 trees are provided, more than one of which are in islands with less than 200sf per tree. Also, a number of required endcap landscaped islands were not proposed and some interior islands need to be increased in size and/or have a tree planted in them. **These shortages in interior landscape area and trees require landscape deviations**. *They are not supported by staff.* Please see the landscape chart for a detailed discussion.
   b. Based on the perimeter provided, 77 canopy trees are required and 78 trees, including 12 greenbelt trees, are proposed. **Please see the landscape chart for a detailed discussion about the perimeter trees and areas which need them.**
   c. Please add islands, trees and endcap landscaping where necessary to minimize or eliminate the landscape deviations.

   PARKING AREAS 5A AND 5B, EXPANDED AREA 6
   a. Based on the vehicular use area calculations provided, a total of 3,071sf of interior landscape area and 15 canopy trees are required. A total of 2,992 of area and 10 trees are provided. Please see the landscape chart discussion about where trees are required and what already proposed areas and trees could be counted toward the requirement
   b. Based on the perimeter of the new areas, 27 trees are required and 17 are proposed. No perimeter trees are required along the west edge of 5A since the multi-story buildings are within 20 feet of the parking lot only 22 trees are actually required. **Please propose more along the south edge of Parking Area 6 west and add more where there is room elsewhere to remove the requirement for a deviation.**
2. RESIDENTIAL:
   The parking bays are only on one side of the drive, so only perimeter trees are required (not interior trees), at the same rate as for the interior drives (1 tree per 35lf).

Building Foundation Landscaping (Zoning Sec. 5.5.3.D.)

1. Detailed foundation plantings are provided for Buildings A, B and C. The requirement for 60% of Building C's frontage being landscaped is met.
2. Per the calculations provided, a total of 11,792sf of foundation landscape area is required. 7,169sf, including are of decorative paving, is proposed (61% of the total area required). Based on this, **a landscape deviation is required**. *The deviation is not supported by staff.*
3. **Please add as much foundation planting area and/or additional decorative paving around each building as possible to lower the extent of the deviation.**
4. **See the detailed discussion of foundation plantings areas on the landscape chart.**

Multi-Family Residential Landscaping (Zoning Sec. 5.5.3.F.ii.)

1. PHASE 1 RESIDENTIAL:
   a. Unit landscaping
      i. Based on the number of units (68), 204 canopy or evergreen trees are required to be planted throughout the Phase 1 residential section of the site. 204 trees are provided, 60 of which, including 9 Princeton Sentry ginkoes, are subcanopy trees (29%).
      ii. **A landscape deviation is required to use subcanopy trees instead of large evergreen or canopy trees for unit landscaping.** *Staff supports the use of a mix of subcanopy trees for up to 25% of that requirement in order to increase the diversity of plantings on the site, but not more than 25%.*
   b. Interior drive plantings.

i. Based on the calculations provided, 25 interior street trees are required and 35 are provided. *If desired, the extra trees can be removed from the plan, or designated for other requirements, as long as the minimum number of interior drive trees is provided within 15 feet of the paving.*

c. Foundation plantings.
   i. 35% of the front of the units' front facade must be landscaped with a mix of planting types. Due to the layout of the residential section of the project, none of the required foundation plantings are located between the building and the internal drives but as the applicant has designated the fronts of all of the buildings except 1, 2 and 3 as facing the wetland or internal open space, the proposed layout and landscaping does conform to the ordinance requirement.
   ii. While the proposed layout does meet the ordinance requirements, the applicant is encouraged to provide at least some landscaping on the internal drive side of the buildings to soften what will otherwise be a very barren appearance of wide areas of paving along the long stretches of drive between the buildings. As the drives will be used extensively by residents and visitors it would be very much appreciated to do all that is possible to make those areas as attractive as possible.

2. PHASE 2 RESIDENTIAL:
   a. Unit landscaping
      i. Based on the number of units (50), 150 canopy or evergreen trees are required to be planted throughout the Phase 2 residential section of the site. 150 trees are provided among the buildings and around the western pond, 44 of which (29%) are subcanopy trees, including 18 Princeton Sentry Ginkoes.
      ii. **A landscape deviation is required to use subcanopy trees instead of large evergreen or canopy trees for unit landscaping.** *Staff supports the use of a mix of subcanopy trees for up to 25% of that requirement in order to increase the diversity of plantings on the site, but not more than 25%.* **Due to their narrow canopy, Princeton Sentry Gingkoes can't count as deciduous canopy trees.**
   b. Interior drive plantings.
      i. Based on the calculations provided, 17 interior street trees are required but only 14 are provided. A landscape deviation would be required for this deficiency **Please add more interior street trees for Phase 2 as** *the deviation would not be supported by staff.*
   c. Foundation plantings.
      i. 35% of the front of the units' front facade must be landscaped with a mix of planting types. The required foundation landscaping is proposed for the buildings facing 11 Mile Road and along the interior road frontage. As with Phase 1, no landscaping is proposed between the units on the garage side of the buildings, which will create a barren appearance.

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

1. It appears that both ponds have adequate coverage of the rim with shrubs native to Michigan.
2. Phragmites is indicated as existing on the site and plans for its removal are provided.

<u>Plant List (LDM 2.h. and t.)</u>

1. Provided
2. 16 of 40 species used (40%) are native to Michigan. **Please add or substitute native species on the plan to increase that percentage to at least 50%.**
3. The tree diversity guidelines for non-woodland replacement trees are met.
4. **Please add a note stating that Grissim Metz Andriese will decide which of the two seed mixes is to be used in the Phase 2 open space, based on soils and moisture available.**

Planting Notations and Details (LDM)

1. Provided
2. **Please see the Landscape Chart for notes about the details, notes and cost estimate.**

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

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

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

Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – Second Revised PRO Concept

Review Date: December 27, 2019
Project Name: JZ19-0031: Sakura Way
Plan Date: December 20, 2019
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org; Phone: (248) 735-5621

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

LANDSCAPE DEVIATIONS REQUIRED FOR PROPOSED CONFIGURATION:

PHASE 1

COMMERCIAL:

- Insufficient interior parking lot landscaping area, interior and endcap islands, and canopy trees provided. *Not supported by staff.*
- Insufficient parking lot perimeter trees provided. *Not supported by staff.*
- Lack of screening wall or berm for parking areas along Grand River. *Supported by staff*
- Lack of screening wall or berm for parking areas along 11 Mile Road. *Not supported by staff*
- Insufficient building foundation landscaping. *Not supported by staff.*

RESIDENTIAL:

- No buffering berms for multi-family housing provided between residential buildings and the B-3 zoned property to the south. *Supported by staff.*
- Insufficient greenbelt width and berm between parking lot and 11 Mile Road (Phase 1). *Supported by staff.*
- Use of subcanopy trees for 25% of multifamily unit landscaping trees. *Supported by staff if at least 75% of the trees required per the unit count are large evergreen or deciduous canopy trees.*

PHASE 2:

- Insufficient parking lot trees (interior and perimeter). *Not supported by staff.*

Please add a summary table of all landscape deviations sought, the extent of those deviations (ie number of trees not planted) and justification for those deviations, to the landscape plans.

Wherever possible, the plans should be modified or enhanced to reduce and ideally remove as many deviations as possible.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (LDM (2)				
Landscape Plan *(Zoning Sec 5.5.2, LDM 2.e.)*	▪ 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	Scale: 1"=40'	Yes	

Item	Required	Proposed	Meets Code	Comments
	throughout set			
Project Information *(LDM 2.d.)*	Name and Address	Location map is provided on the landscape plan	Yes	
Owner/Developer Contact Information *(LDM 2.a.)*	Name, address and telephone number of the owner and developer or association	Address and business name on the cover sheet.	Yes	
Landscape Architect contact information *(LDM 2.b.)*	Name, Address and telephone number of RLA	The landscape plan was created by Grissim Metz Andriese	Yes	
Sealed by LA. *(LDM 2.g.)*	Requires original signature	Yes	Yes	A live signature will be required on the stamping sets.
Miss Dig Note (800) 482-7171 *(LDM.3.a.(8))*	Show on all plan sheets	Yes	Yes	
Zoning *(LDM 2.f.)*	Include all adjacent zoning	Site: OSC, OS-1, I-1 – to be rezoned to TC-1 with PRO East: I-1, B-3 South: B-3, Grand River Ave West: TC North: 11 Mile Road, I-1	Yes	
Survey information *(LDM 2.c.)*	▪ Legal description or boundary line survey ▪ Existing topography	Sheets C-1.1, C-1.2, C-1.3	Yes	
Existing plant material Existing woodlands or wetlands *(LDM 2.e.(2))*	▪ Show location type and size. Label to be saved or removed. ▪ Plan shall state if none exists.	▪ It appears on C4.1 that grading along the east and west ends of Phase 2 will eliminate the trees there but T-1.0 shows them as being saved and protected. ▪ Tree survey is provided on T-1.0 and T-1.1 ▪ All on-site trees on the site except for along the property edges are proposed to be removed. ▪ Woodland	Yes	**1. Please be consistent between sheets regarding trees being saved or removed. REPEATED COMMENT** **2. Please show all off-site trees within 50' of the edge of disturbance as they could be negatively impacted by construction. REPEATED COMMENT** **3. Please propose protection for all onsite trees to be saved and nearby offsite trees and their critical root zones on**

Item	Required	Proposed	Meets Code	Comments
		replacement calculations are provided on Sheet L101		**the Grading Plan and Demolition Plan.** **4. See ECT letter for complete review of woodlands and wetlands.**
Soil types *(LDM.2.r.)*	▪ As determined by Soils survey of Oakland county ▪ Show types, boundaries	Sheet L101	Yes	
Existing and proposed improvements *(LDM 2.e.(4))*	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Shown on landscape plans	Yes	**Please consider re-arranging the crossing/tree/bike rack arrangement at the major interior intersection between Building A and Phase 2 parking areas 5A and 5B to provide more direct pedestrian crossing and room for more of the required endcap trees.** **Please make sure the landscape plan reflects the most current layout (the interior walkway layout in Phase 1 residential appears to be different from that shown on the Civil plans.)**
Existing and proposed utilities *(LDM 2.e.(4))*	• Overhead and underground utilities, including hydrants must be shown on landscape plan. • Proposed light posts must also be shown.	Utilities and light poles are shown.	Yes	1. The light locations on the north side of Building C and in Parking Area 6 are somewhat different between the photometric plan light pole locations and those on the landscape plan. 2. **Please make sure the light post locations match exactly with the latest photometric plan, which may need to be adjusted to work with the latest layout.**

Item	Required	Proposed	Meets Code	Comments
Proposed grading. 2' contour minimum *(LDM 2.e.(1))*	Provide proposed contours at 2' interval	• Spot elevations and detention basin contours provided on Sheet C-4.1, C-4.2 • No berms are proposed	Yes (grading is shown)	**1. See above note about disparity between T-1.0 and grading plan. REPEATED COMMENT** **2. Please revise the Grading Plan to include the berms proposed on Sheet L401.**
Snow deposit *(LDM.2.q.)*	Show snow deposit areas on plan	▪ An area in Phase 2 is proposed. ▪ Plans for snow deposit should also consider where snow will go when Phase 2 is built.	No	**Please add snow deposit areas on the landscape plan that won't hurt proposed landscaping for Phase 2. The current note is insufficient.**
LANDSCAPING REQUIREMENTS				
Berms, Walls and ROW Planting Requirements				
Berms				
▪ All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours ▪ Berm should be located on lot line except in conflict with utilities. ▪ Berms should be constructed of loam with 6" top layer of top soil.				
Residential Adjacent to Non-residential (Sec 5.5.3.A) & (LDM 1.a)				
Berm requirements *(Zoning Sec 5.5.A)*	▪ A 6-8 feet high berm with landscaping providing 80% winter and 90% summer opacity is required along the south property line between multi-family residential and adjacent B-3 properties. ▪ Because the industrial use and the commercial uses west of the residential use, and the residential area are all zoned TC-1, under the exception 5.5.3.A.iii, the previously required wall/berm are not required for those sections of the development.	▪ No screening berm is proposed for any of the areas in question. ▪ The proposed screening along the south property line is a continuous evergreen hedge and canopy trees placed 25 feet o.c. ▪ The proposed screening between Building 9 and the parking lot/loading area to the west is a continuous 3 ft high evergreen	▪ South property line: No ▪ Bldg 9 buffer: Yes ▪ Bldgs 3 & 5 buffer: Yes	1. **A landscape deviation is required for the south property line adjacent to B-3 zoning.** As the residential parking lot abuts the south property line, the proposed hedge is acceptable. A note has been added to Sheet L302 stating the hedge will be maintained at least 6 feet above ground level. *The deviation for this is supported by staff.* 2. While the visual screening for residential buildings 1 and 5 appears to be sufficient, staff remains concerned

Item	Required	Proposed	Meets Code	Comments
		hedge and a line of canopy trees spaced 18 feet o.c.. ▪ The proposed screening between the I-1 zoned and used property and buildings 3 and 5 is a continuous 5 ft tall evergreen hedge along the property line with a line of canopy trees spaced 18 feet o.c.. Adjacent to the parking lot is a hedge with a line of canopy trees behind it spaced 16' o.c. ▪ While not required, an evergreen hedge is located along part of the east property line of the commercial section to screen the parking and loading area from the property to the east.		about the potential noise from the industrial use. **Please provide a noise study that shows there is an acceptable noise level for the residents, or add better auditory buffering along that boundary.** 3. *Staff is also concerned about the noise from delivery vehicles in the area west of residential building 9.* **Please provide some assurance that the proposed screening will provide sufficient auditory buffering from delivery vehicles backing up and beeping, or additional sound buffering. Alternatively, a restriction on truck delivery hours to something like 7am-11pm could be instituted to alleviate the concerns.** 4. **Please show the minimum height of the hedge west of Building 9 on L302. 3 feet is shown on the cross section detail but not on L302.** 5. **Note: The applicant must incorporate all hedge minimum heights into the master deed.**
Planting requirements *(LDM 1.a.)*	LDM Novi Street Tree List	NA		
Walls (LDM 2.k & Zoning Sec 5.5.3.vi)				
Material, height and type of construction	Freestanding walls should have brick or	Five retaining walls are proposed	TBD	

Item	Required	Proposed	Meets Code	Comments
footing	stone exterior with masonry or concrete interior	around the site.		
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer		TBD		**Detailed plans need to be provided with building plans.**
ROW Landscape Screening Requirements *(Sec 5.5.3.B. ii) and (LDM 1.b)*				
Greenbelt width (2)(3) (5)	▪ Adjacent to pkg: 20 feet ▪ Not adjacent to pkg: 0 feet	<u>COMMERCIAL:</u> <u>Grand River Ave:</u> • 20 feet adj to pkg • 15 feet not adj. <u>11 Mile Road Residential:</u> Adj to pkg: 7' Not adj to pkg: 17' <u>11 Mile Road Ph 2:</u> <u>Residential:</u> 20' <u>Commercial:</u> ▪ Adj to pkg: 22' ▪ Not adj: 10'	<u>Commercial:</u> Yes <u>Residential</u> No (near parking lot) <u>Phase 2:</u> Yes	**1. Please make the right-of-way lines darker on all of the landscape sheets.** **2. A landscape deviation is required for the Phase 1 residential area with less than 20' required greenbelt width adjacent to parking in the residential area.** *As there is dense evergreen landscaping proposed between the lot and the sidewalk for that section, the deviation is supported by staff.*
Berm requirements *(Zoning Sec 5.5.3.A.(5))*				
Min. berm crest width	▪ No berm is required in TC-1 district for frontage not adjacent to parking. ▪ Per Zoning Ordinance 3-27, surface parking lots shall be screened from all public rights-of-way and internal roads by either a 2.5 foot tall ornamental brick wall or a landscaped berm.	▪ No walls or berms are proposed along the rights-of-way. ▪ A note indicates that ornamental piers with metal fencing and significant landscaping is proposed to screen parking along Grand River. No visual image of this is included in the plans. ▪ A Woodward Arborvitae hedge and clumping	<u>Grand River:</u> No <u>11 Mile Road:</u> <u>Phase 1:</u> No <u>Phase 2:</u> No	**As neither a berm nor a wall is proposed for any of the parking frontages, a landscape deviation is required.** • *It is supported by staff for the Grand River frontage as the hedge and bamboo should provide the required screening.* • *It is supported by staff for the residential parking east of Ecco Tool as the area between the road and parking is heavily planted with evergreen trees.* • *It is not supported for*

Item	Required	Proposed	Meets Code	Comments
		bamboo are also proposed to screen the parking lots from Grand River Avenue. ▪ Only a row of bamboo is proposed to screen most of the future eastern parking lot in Phase 2 and nothing of significance is proposed for the lot to be built for Phase 1.		*the 11 Mile Road frontage west of Ecco Tool as insufficient alternate screening is proposed. It would be supported if screening similar to that proposed along Grand River were proposed there.*
Minimum berm height (9)	If a berm is provided it should be at least 2.5' tall.	None	No	**See above**
3' wall	▪ (4)(7)	No walls are proposed for right-of-way except for Grand River sign.	NA	
Canopy deciduous or large evergreen trees Notes (1) (10)	▪ Adjacent to pkg: 1 tree per 25lf frontage (net of access drives) ▪ Not adjacent to pkg: 1 tree per 30 lf frontage (net of access drives) ▪ Only canopy/ evergreen OR subcanopy requirement must be met in TC-1, not both <u>11 Mile Road</u> <u>Phase 1 Residential</u> ▪ Adj: 65/25 = 3 trees ▪ Not adj: (148+79+67)/30=10 trees <u>Phase 2</u> <u>Parking</u> (171-30)/25 = 6 trees <u>Residential</u> ▪ Adj: (48-26)/25 = 1 tree ▪ Not adj: 393/30 =13	<u>11 Mile Road</u> <u>Phase 1 Residential</u> 0 canopy trees <u>Phase 2</u> 19 Autumn Blaze Maples (5 proposed between parking lots and 11 Mile Road) on Sheet L204 but only 4 shown on Sheet L301. <u>Grand River Ave</u> 21 Gingko biloba (3 fewer than required)	<u>11 Mile:</u> Ph 1: Yes Ph 2: TBD <u>Grand River:</u> No	**1. As parallel on-street parking is proposed along 11 Mile Road in front of Phase 2, no trees can be planted in the right-of-way. Please correct the plan per the layout on Sheet L204, taking all of the proposed trees out of the right-of-way and revising the proposed greenbelt and unit trees per these changes.** **2. At least 5 trees must be located between Building C and Grand River, as is required for other buildings in TC-1.** **3. A landscape deviation is required for any deficiencies in trees provided.**

Item	Required	Proposed	Meets Code	Comments
	trees Grand River ▪ Adj: 433/25 = 17 trees ▪ Not adj: 215/30 = 7 trees			*They would not be supported by staff without strong justification.* **4. If the 5' wide landscape strip between the parallel parking and sidewalk is proposed, some way to protect them from damage by opening doors and provide sufficient growing space and moisture for the trees must be proposed.**
Sub-canopy deciduous trees Notes (2)(10)	▪ Adjacent to pkg: 1 tree per 15lf frontage (net of access drives) ▪ Not adjacent to pkg: 1 tree per 20 lf frontage (net of access drives) ▪ Only canopy/ evergreen OR subcanopy requirement must be met in TC-1, not both 11 Mile Road Phase 1 Residential ▪ Adj: 65/15 = 4 trees ▪ Not adj: (148+79+67)/20 = 15 trees Phase 2 Parking (171-30)/15 = 9 trees Residential ▪ Adj: (48-26)/15 = 1 tree ▪ Not adj: 393/20 = 20 trees Grand River ▪ Adj: 323/15 = 22 trees ▪ Not adj: 238/20 = 12 trees	11 Mile Road Phase 1 Residential • 15 Adirondack crabapples, in right-of-way + 4 in front of units • Mix of deciduous and evergreen unit trees proposed in greenbelt elsewhere Phase 2 0 subcanopy trees Grand River Ave 0 subcanopy trees	11 Mile: Ph 1: Yes Ph 2: TBD Grand River: No	**1.** While street trees are not required in the TC-1 district, staff agrees that, since there is room for the trees between the sidewalk/storm line and the curb in front of the Phase 1 residential units, the addition of Adirondack flowering crabapples as proposed would be an attractive look. **2. A landscape deviation is required for any deficiencies in trees provided.** *They would not be supported by staff without strong justification.*
Canopy deciduous	Street trees are not	▪ 19 canopy trees	▪ TBD	**1. See discussion**

Item	Required	Proposed	Meets Code	Comments
trees in area between sidewalk and curb *(Novi Street Tree List)*	required in the TC-1 district.	are proposed in Phase 2 ▪ 15 subcanopy greenbelt trees placed in the ROW of the Phase 1 residential	▪ Yes	**above about parallel parking in front of Phase 2** **2. See discussion above regarding proposed crabapple trees in the right-of-way**
Cross-Section of Berms (LDM 2.j)				
Slope, height and width	▪ Label contour lines ▪ Maximum 33% ▪ Constructed of loam ▪ 6" top layer of topsoil	Cross section details are provided on Sheet L401	Yes	1. None of the proposed berms meet the height requirements. **2. A landscape deviation is required for each berm that does not meet the required height.**
Type of Ground Cover		None	No	
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	The only overhead utilities are along 11 Mile Road	TBD	**Please space trees appropriately vis a vis the overhead wires**
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements *(LDM 1.c)*	▪ Clear sight distance within parking islands ▪ No evergreen trees	Some islands will be planted with Little Bluestem grass	Yes	**1. Add clear vision triangles at the interior intersections north and south of Building B, and at the intersection between Buildings 5 and 9.** **2. Please move any trees or other plantings taller than 30" out of clear vision zones.**
Name, type and number of ground cover (LDM 1.c.(5))	As proposed on planting islands	Mix of plantings noted above	Yes	
General *(Zoning Sec 5.5.3.C.ii)*				
Parking lot Islands *(a, b. i)*	▪ A minimum of 200 SF to qualify ▪ Minimum 200 SF per tree planted in island ▪ 6" curbs ▪ Islands minimum width 10' BOC to BOC	▪ Islands are shown, and areal quantities are provided for most areas, but not all. ▪ The required endcap and	No	**1.** To count toward the required area, an island must have at least 200sf landscape area per tree planted in it, and be 10 feet wide. All of

Item	Required	Proposed	Meets Code	Comments
		interior islands with trees are missing along the northern parking bay south of the lake. ▪ All circular planting areas are significantly less than 200sf. ▪ Some small islands have trees but not sufficient area for their long-term survival. ▪ The interior island west of Building B is not 10 feet wide. ▪ Structural soil is proposed to increase the area for root growth in the smaller circular islands. This is a possible solution that would lead to support of the smaller than required islands and planting circles, but more information is needed to show that the proposed structural soil will be enough to compensate for the minimal landscape area provided for the trees in the planting circles.		the circular planting areas and many of the other interior islands do not have this area. **2.** To count toward the requirement, a tree must have at least 200sf in greenspace surrounding it. Some trees do not have this area. **3. If islands/planting areas aren't sufficiently large, please enlarge them as required or don't count the area or trees in them toward the total.** **4. Please indicate how trees in curbed planting circles will get sufficient water for survival.** **5. Porous pavement in the area around the trees would help provide more water and air to the trees' roots.** **6. Please provide more information about the area/volume needed for the trees, and about how to install, test and inspect it for correctness.** **7. A landscape deviation is required to not provide all required islands with canopy trees that meet the areal requirements.** *Currently, this deviation is not supported by staff. It is possible that the proposed structural*

Item	Required	Proposed	Meets Code	Comments
				soils can alleviate some of the concerns (if it can't, then the required areas will need to be provided in final site plans), but missing islands should still be provided, such as at the east end of the bay, west of Building B, west of the bike racks south of Building A, North of Building A and at the east end of the bay south of Ecco Tool. **8. Instead of the proposed landscaping on either side of the walkway leading to the lake, if those islands could be enlarged, Kwanzan cherries could be planted on both sides of the path to add to the desired entry look. This would remove one <u>area</u> of deviation without taking away from the desired experience.** **9. If the hatched paved area east of the parking spaces east of Building A isn't necessary for vehicular use, it should be converted to landscape area and a canopy tree should be planted in it.**
Curbs and Parking stall reduction *(c)*	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft	It appears that spaces are shortened to 17 ft where possible.	Yes	
Contiguous space	• Maximum of 15	• Several bays with	No	**1. Please add endcap**

Item	Required	Proposed	Meets Code	Comments
limit *(i)*	contiguous spaces • All endcap islands should also be at least 200sf with 1 tree planted in it.	more than 15 spaces are not broken up with a qualifying landscape island with trees or 200sf (Phase 2 interior islands, the bay south of the lake, the bay north of Building C), as required. • Endcap trees are needed at the east end of the bay south of the lake (south of Building B) and at the west end of the bay south of Building A.		**islands with at least 200sf greenspace and canopy trees for all parking bays as discussed above.** **2. A landscape deviation is required for the current lack of landscaped islands with trees breaking up long bays and missing endcap islands.** *It is not supported by staff as currently shown. If an endcap was added to the east end of the bay south of the lake, the lack of an endcap on the west end, where the maintenance path is, could be supported by staff.*
Plantings around Fire Hydrant *(d)*	No plantings with matured height greater than 12' within 10 ft. of fire hydrants of utility structures (manholes, catch basins)	Provided	TBD	**1. Please be sure to provide at least 10 feet between hydrants, manholes and catch basins and trees, and 5 feet from underground lines.** **2. If necessary, islands should be widened to provide proper spacing between hydrants or other utility structures.** **3.** The Parking Area 6 expansion layout appears to leave the fire hydrant exposed to traffic. **Please correct that.**
Landscaped area *(g)*	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Provided	Yes	
Clear Zones (LDM 2.3.(5))	25 ft corner clearance required. Refer to Zoning Section 5.9	Provided	Yes	

Item	Required	Proposed	Meets Code	Comments
Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, C, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district *(Zoning Sec 5.5.3.C.iii)*				
A = Total square footage of vehicular use area up to 50,000 sf x 7.5%	**PHASE 1** 1: 8870sf x 7.5%=665 sf 2: 7034sf x 7.5%=548 sf 3: 33488sf x 7.5%=2511 sf 4: 15342sf x 7.5%=1151 sf 5: 11535sf x 7.5%=865 sf 6: 10963sf x 7.5%=822 sf 7: 15145sf x 7.5% =1135 sf **Total: 7697 sf** **PHASE 2** 5A: 11535sf x 7.5%=865sf 5B: 10763sf x 7.5% =807sf 6: 18652sf x 7.5%=1399sf **Total: 3071 sf**	**PHASE 1** 1: 1146 sf 2: 181 sf* 3: 3274sf 4: 1004 sf* 5: 619 sf* 6: 800 sf 7: 274 sf **Total: 7298 sf** * Some areas provided aren't sufficiently large to count toward the total **PHASE 2** 5A: 1284 sf 5B: 468 sf* 6: 1240sf **Total: 2992 sf**	**PHASE 1** No **PHASE 2** Yes	**1. Treed islands must have 200sf in contiguous greenspace. If they don't, neither the tree nor the area may count toward the requirement (except edge islands abutting greenspace, as discussed previously). If sufficient supporting information for structural soil can be provided and added to the plans, this requirement could be eased.** **2. Please enlarge Phase 1 areas as required to reduce or eliminate the deviation.** **3.** Phase 2 5B north end areas can be counted toward total if a tree is added to each corner. **4.** Phase 2 5B south end areas and trees can be counted toward the area required **5. Parking Area 6 should have a canopy tree in the endcap at the north end of the original western bay.** **6. A landscape deviation is requested for the deficiency in landscape area.** *It is not supported by staff at this time as it appears*

Item	Required	Proposed	Meets Code	Comments
				improvements could still be made.
B = Total square footage of additional paved vehicular use areas over 50,000 SF) x 1 %	B = x SF x 1% = B sf	NA		
All Categories				
C = A+B Total square footage of landscaped islands required	**PHASE 1** 7697 sf **PHASE 2** 3071sf	**PHASE 1** 7298 sf **PHASE 2** 2992sf	**PHASE 1** No **PHASE 2** Yes	**1. A landscape deviation is required for Phase 1.** *It is not supported by staff.*
D = C/200 Number of canopy trees required	C/200 = xx Trees **PHASE 1** 7697/200 = 38 trees **PHASE 2** 3071sf/200 = 15 trees	**PHASE 1** 31 trees **PHASE 2** 10 trees	**PHASE 1** No **PHASE 2** No	1. Phase 1: At least 4 interior trees are in islands that are not sufficiently large. **Please add as many trees as possible, in qualifying landscape islands, as possible to reduce the deviation.** 2. **By moving the crossing to the north as suggested earlier, room can be made for the required endcap trees for Parking Areas 4, 5 and 6.** 3. **It seems there is also room for at least 1 canopy tree just north of Building A, where no tree is currently proposed.** 4. **Please add endcap trees to Parking Areas 2 and 3 where there are none now.** 5. **Phase 2: Additional trees are needed at the north corners of Parking Area 5B. The two formerly perimeter trees at the south end of 5B can be counted as interior trees for 5B. An additional endcap tree should**

Item	Required	Proposed	Meets Code	Comments
				be planted at the southeast corner of 5A. The bike racks can be moved to the east side of the sidewalk to add room for it, and the single PK tree in that large area can be moved to the west side of the 2 space bay. **6. A landscape deviation is required for all required interior canopy trees not provided.** *It is not supported by staff.*
Parking Lot Perimeter Trees (Sec 5.5.3.C.iv)	1 Canopy tree per 35 lf PHASE 1: 2687/35 = 77 trees PHASE 2: 790/35 = 22 trees	PHASE 1 • 78 trees including 12 greenbelt trees within 15' of parking areas 1 and 3. • A statement was made that landscaping easements will be sought from the adjacent properties in order to plant the required perimeter trees. • No perimeter trees are proposed along the west edge of Parking Area 1. • Only 1 perimeter tree is proposed along the west edge of the Phase 2 residential west parking area. PHASE 2 • 19 trees, including 7 between lots 5A	• Yes • TBD • No • No	1. Perimeter areas within 20' of a building 20' or taller do not need canopy trees if subcanopy trees are used as foundation planting **2. Please move the PK west of Parking Area 4 to within 15' of a parking lot curb.** 3. 5 subcanopy trees are proposed as parking lot perimeter trees west of Parking Area 4. *As they are limited in number and add to the design concept of the development, they are accepted.* **4. Parking Area 1: The current configuration, with less than 10 feet parking setback, is a zoning deviation, and no perimeter trees are proposed along the west side of the lot. As there is no requirement or guarantee that the existing vegetation**

Item	Required	Proposed	Meets Code	Comments
		and 5B are proposed		**will be maintained by the landowner of the adjacent property, some sort of landscaping should be proposed to screen/shade the parking from the west, or indication from the adjacent landowner that the existing condition will be maintained must be provided.** **5. Perimeter trees should be added along the south edge of Parking Area 6. As the plans are for a building to be installed there making the trees unnecessary, it may be desirable to require the trees' planting after a certain period of time, such as 2 years, if the building hasn't been built by then.** **6. Please add perimeter trees along the east side of the Building A loading area.** **7. Phase 2 Residential parking: For the west side of the parking area, the landscape area should be widened to 10 feet and deciduous canopy trees should be planted along that edge, as there is no guarantee or requirement that the owner of the adjacent property will maintain the existing vegetation.** **8. Parking Area 6: The**

Item	Required	Proposed	Meets Code	Comments
				Phase 2 89lf leg of perimeter can be deleted as it will be a 2-sided bay now. One additional perimeter tree may be able to added south of the Building F outside dining area to provide shade for it if the area was widened by a few feet. The paved loading area can be deleted from the perimeter length. **9. A landscape deviation is required for the shortage of perimeter trees provided.** *It is not supported by staff.*
Access way Perimeter Trees *(Zoning Sec 5.5.3.C.iii footnote (5))*	1 tree per 35lf 549lf/35 = 16 trees	11 trees	No	**1. Please see the image at the end of this chart. The basis for the calculation can be reduced to 549lf (the lines shown in pink).** **2. Please revise the calculations and provide all required trees. Some additional planting areas may be required, such as at the Parking Area 4/5/6 intersection east of Building B and west of Building C, but it seems the required number of trees could be provided.** **3. Please move all perimeter trees to within 15 feet of the pavement edge.**
Parking land banked	NA	None		
Other Landscaping				

Item	Required	Proposed	Meets Code	Comments
Non-Residential Zoning Sec 5.5.3.E.iii & LDM 1.d (2) Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM				
Other Screening				
Screening of outdoor storage, loading/unloading *(Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)*		All Phase 1 loading areas are sufficiently screened by buildings and/or landscaping.	Yes	
Transformers/Utility boxes *(LDM 1.e from 1 through 5)*	▪ A minimum of 2ft. separation between box and the plants ▪ Ground cover below 4" is allowed up to pad. ▪ No plant materials within 8 ft. from the doors	No utility boxes shown		**1. Provide proper screening for all transformers and other utility boxes.** **2. If all transformer locations are not provided on plan, please add a note stating that all transformers and other utility boxes shall be screened per the city detail.**
Building Foundation Landscape Requirements (Sec 5.5.3.D)				
Interior site landscaping SF	▪ Equal to entire perimeter of the building (less paved access areas for vehicles and man-door widths) x 8 with a minimum width of 4 ft. ▪ **xx lf x 8ft = xx SF** ▪ **Building A: 734 * 8 = 5872 sf** ▪ **Building B: 260 * 8 = 2080 sf** ▪ **Building C: 480 * 8 = 3840 sf**	▪ A combination of landscaping and decorative paving is proposed to meet the requirement in the commercial section of the project. ▪ A total: 3432sf ▪ B total: 1114sf ▪ C total: 2623sf	No	**1. Landscape deviations are required for any deficiencies in landscaping area provided.** *Those deviations are not supported by staff at this time.* **2. Please add the area requirement for each commercial building, not just what is provided, to the table on Sheet L203, so the extent of the deviation can be known.** **3. Please provide more landscaping bed and/or decorative paving area around all of the buildings than is currently proposed, preferably more live landscaping, to**

Item	Required	Proposed	Meets Code	Comments
				eliminate the necessity for the deviations. (The island with bamboo north of Building B could be used to count toward that building's foundation landscaping) **4. Any future commercial buildings in Phase 2 would need to completely meet the foundation requirements or the PRO agreement would need to be revised.**
Zoning Sec 5.5.3.D.ii. All items from (b) to (e)	If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space	▪ The proposed landscaping for Building C covers virtually the entire frontage as viewed from Grand River. ▪ Buildings A and D are over 235 feet from Grand River. The parking lot screening is sufficient to screen those buildings.	Yes	**Any future commercial buildings in Phase 2 would need to meet these requirements.**
Multi-Family Residential (Sec 5.5.3.F.ii)				
Building Landscaping *(Zoning Sec 5.5.3.E.ii.)*	▪ 3 deciduous canopy trees or large evergreen trees per dwelling unit on the first floor. ▪ Phase 1: 68 units * 3 = 204 trees required ▪ Phase 2: 50 units *3 = 150 trees required ▪ The table provided on Sheet L203 is not required for residential units. Only the building frontage is regulated (35% of the front of a building must	**Phase 1 residential** ▪ 204 unit trees are provided on the site, 60 of which are subcanopy trees (29%) (9 of those are Princeton Sentry Gingkoes). **Phase 2 residential** ▪ 150 unit trees are provided around the units and pond. 44 (29%) are subcanopy	<u>Phase 1:</u> Yes <u>Phase 2:</u> No	**1. Due to their narrow width, Princeton Sentry Gingkoes can't count as deciduous canopy trees, but could count as ornamental trees. If they are, the percentage of subcanopy trees used as unit trees is greater than 25%. Please either use a wider tree for the canopy unit trees and interior drive**

Item	Required	Proposed	Meets Code	Comments
	be landscaped).	trees (18 of those are Princeton Sentry Gingkoes).		**trees or decrease the number of subcanopy trees counted toward the requirement.** **2.** Note: Additional subcanopy trees can be used, but only 25%, or 51, can be used in Phase 1 and 38 in Phase 2. **Please either decrease the number of subcanopy trees used or add additional canopy or large evergreen unit trees to decrease the percentage of subcanopy trees to no more than 25% of the total required.** *A landscape deviation to use subcanopy trees for 25% of the multifamily unit trees would be supported by staff.* **3. Please show all Phase 2 Unit trees on Sheet L303.**
Interior Street Landscaping	▪ 1 deciduous canopy tree along interior roads for every 35 lf (both sides), excluding driveways, interior roads adjacent to public rights-of-way and parking entry drives. ▪ Phase 1: 889lf/35=25 trees ▪ Phase 2: 606lf/35=17 trees	**Phase 1** 36 trees **Phase 2** 16 trees	• Yes • No	**1. If desired, the excess perimeter trees for Phase 1 can be changed to interior unit trees as long as all required perimeter trees are within 15 feet of the pavement edge.** **2. Please add one more perimeter tree for Phase 2** **3. The proposed configuration requires a landscape deviation.** *It is not supported by staff.*
Foundation Landscaping	35% of building front façades must be landscaped with	Phase 1: ▪ At least 35% of the front facades, as	Yes Yes	While the proposed layout and landscaping meet the ordinance

Item	Required	Proposed	Meets Code	Comments
	plantings other than lawn.	defined by the applicant, of all units are landscaped sufficiently (not the sides facing the road/drives except for Buildings 1, 2 and 3, whose fronts face 11 Mile Road) ▪ No plantings are proposed between building rears, which face the interior drives, and the drives. Phase 2: ▪ The required frontage landscaping is proposed along 11 Mile Road and in the interior drive.		requirements, the applicant is encouraged to add at least some landscaping between the Phase 1 building garages to soften the appearance of the driveway areas as they will be most visible to residents and visitors of the site. As proposed, those areas will have a very barren appearance.
Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)				
Planting requirements *(Sec. 5.5.3.E.iv)*	▪ Clusters of large native shrubs shall cover 70-75% of the basin rim area ▪ 10" to 14" tall grass along sides of basin	▪ The required coverage is provided for both ponds with large native shrubs ▪ Acceptable seed mix for banks is provided.	Yes	While not required, it is advised to not use *Viburnum trilobum* as they have been hit very hard by the viburnum leaf beetle. The diversity provided by the other species is sufficient so you could use more of those species in its place. *Viburnum lentago* also does well in Novi, as a possible substitute for *Viburnum trilobum*.
Phragmites Control (Sec 5.5.6.C)	▪ Any and all populations of Phragmites australis on site shall be included on tree survey. ▪ Treat populations per MDEQ guidelines and requirements to eradicate the weed	▪ Phragmites populations are indicated on Sheet C-1.1 ▪ Plans for physical removal and follow-up herbicide treatments are	Yes	

Item	Required	Proposed	Meets Code	Comments
	from the site.	listed on Sheet L101.		
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date *(LDM 2.l. & Zoning Sec 5.5.5.B)*	• Provide intended dates • Should be between March 15 and November 15.	Phase 1: Fall 2022 Phase 2: TBD	Yes	**Please note target planting dates (between Mar 15 – Nov 15).**
Maintenance & Statement of intent *(LDM 2.m & Zoning Sec 5.5.6)*	• Include statement of intent to install and guarantee all materials for 2 years. • Include a minimum one cultivation in June, July and August for the 2-year warranty period.	Provided	Yes	
Plant source *(LDM 2.n & LDM 3.a.(2))*	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
Irrigation plan *(LDM 2.s.)*	• A fully automatic irrigation system and a method of draining is required with Final Site Plan • If a different method of providing water for establishment and long-term survival of the plants will be used, please provide information on that	No		Need for final site plan
Other information *(LDM 2.u)*	Required by Planning Commission			
Establishment period *(Zoning Sec 5.5.6.B)*	**2 yr. Guarantee**	Yes	Yes	
Approval of substitutions. *(Zoning Sec 5.5.5.E)*	City must approve any substitutions in writing prior to installation.	Yes	Yes	
Plant List (LDM 2.h., 4) – Include all cost estimates				
Quantities and sizes	Refer to LDM suggested plant list	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names		▪ 16 of 40 (40%) species used are native to Michigan ▪ The tree diversity meets the	▪ No ▪ Yes	**1. Please use more native species on the site so at least 50% of the species used are native to Michigan.** **2.** If you have questions

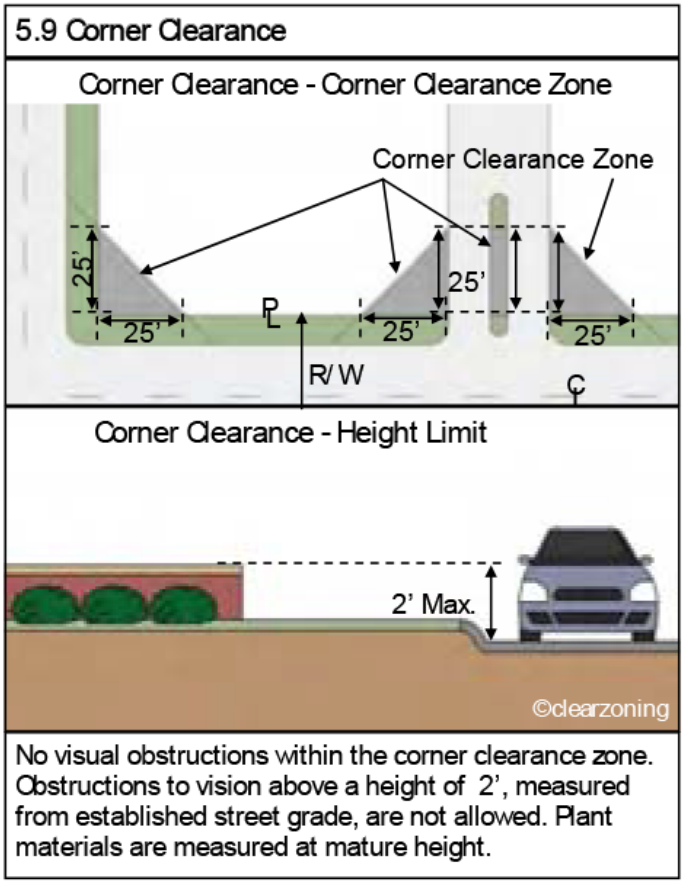
Item	Required	Proposed	Meets Code	Comments
		requirements of LDM 4		about whether a plant is native, you can ask me or consult Michiganflora.net. **3.** It may be difficult to find sources of *Pinus resinosa*. **Please suggest an alternate native species evergreen in case the landscapers cannot find it.** **4.** Per Section 37-8, only 5% of the replacement credits provided can be seed, not the 47% currently proposed. **Please add more replacement trees on site or decrease the percentage of credits taken for the seeded areas.**
Type and amount of lawn		Yes	Yes	**Please add a note stating that the choice between the two native seed types will be determined based on soil composition and moisture – and the decision will be made by Grissim Metz Andriese.**
Cost estimate *(LDM 2.t)*	For all new plantings, mulch, seed and sod as listed on the plan	No		Please add on Final Site Plans. Use these standard costs: • Canopy tree: $400ea • Subcanopy tree: $250 ea • Evergreen tree: $325 ea • Shrubs: $50 ea • Perennials $15 ea • Seed $3/syd • Sod $3/syd • Mulch $35/cyd
Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details				

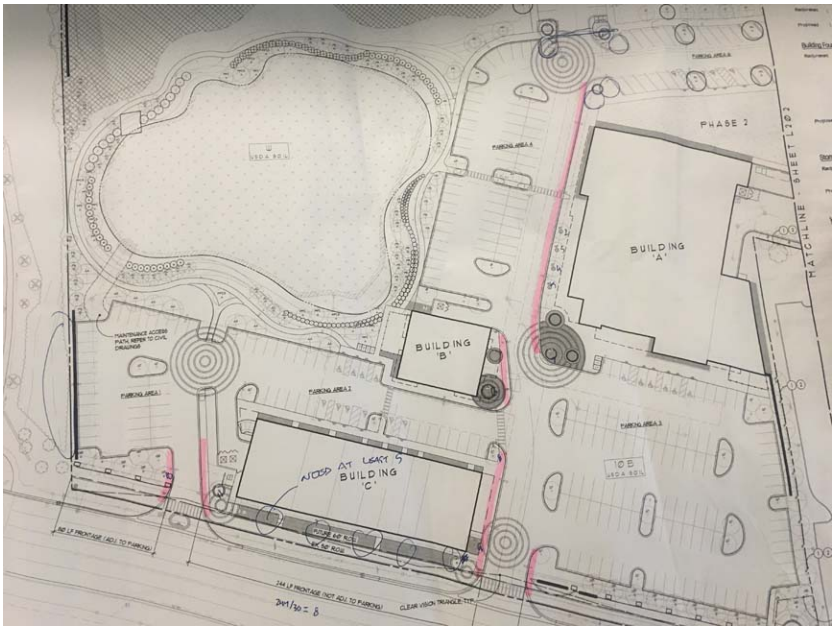
Item	Required	Proposed	Meets Code	Comments
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Evergreen Tree		Yes	Yes	
Multi-stem Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	
Other Plant Material Requirements (LDM 3)				
General Conditions *(LDM 3.a)*	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
Plant Materials & Existing Plant Material *(LDM 3.b)*	Clearly show trees to be removed and trees to be saved.	Yes	Yes	**See note above about conflict between grading plan and T-1.0**
Landscape tree credit *(LDM3.b.(d))*	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	No		
Plant Sizes for ROW, Woodland replacement and others (*LDM 3.c)*	Refer to Landscape Design Manual for requirements	On plant list	Yes	
Plant size credit *(LDM3.c.(2))*	NA	No		
Prohibited Plants *(LDM 3.d)*	No plants on City Invasive Species List	• No prohibited plants proposed • A species of clumping bamboo is used in isolated locations.	Yes	
Recommended trees for planting under overhead utilities *(LDM 3.e)*	Label the distance from the overhead utilities	Yes	Yes	
Collected or Transplanted trees *(LDM 3.f)*		None		
Nonliving Durable Material: Mulch *(LDM*	▪ Trees shall be mulched to 3"depth and shrubs,	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
4)	groundcovers to 2" depth ▪ Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate.			

NOTES:

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





Commercial Interior Drive perimeter (pink)

WOODLAND REVIEW

ECT Environmental Consulting & Technology, Inc.

ECT Project No. 190456-0600

January 6, 2020

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

Re: Sakura Way (JZ19-0031)
Woodland Review of the 2nd Revised PRO Concept Plan (PSP19-0172)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the 2nd Revised PRO Concept Plan for the proposed Sakura Way project prepared by PEA, Inc. and Wah Yee Associates dated and stamped "Received" by the City of Novi on December 20, 2019 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37.

ECT currently does not recommend approval of the 2nd Revised PRO Concept Plan for Woodlands. The Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving Woodland approval of the Plan.

The following woodland related items are required for this project:

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

The proposed project is located at the northeast corner of Grand River Avenue and Town Center Drive in Section 23. The proposed project currently consists of two (2) phases (however, previously contained three phases). Phases 1 and 2 include a total of four (4) parcels. From west to east these are: 50-22-23-126-006 (West Parcel), 50-22-23-126-011 and 50-22-23-226-007 (previously referred to as East Parcel A), and 50-22-23-226-008 (previously referred to as East Parcel B). Phase 3 has been removed from the scope of the development. Phase 3 included two (2) parcels east of the Phase 1 and 2 properties; Parcel 50-22-23-226-021 and 50-22-23-226-022.

Phase 1 (Phase 1 and 1B) consists of market, retail, restaurant, townhome residential and light industrial use (existing ECCO Tool Co., grandfathered in). Phase 2 (Phase 2 and 2B) consists of residential, restaurant and site parking uses. Phase 1B consists of 68 residential units and Phase 2 consists of 50 units for a total of 118 residential units.

The majority of the central portion of the project site is indicated as City-Regulated Woodland on the City's Regulated Woodland Map (see Figure 1, attached). There is also area designated as Regulated Woodland along the western edge of the project property. The majority of the area that contains the open water

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pond/wetland (i.e. Wetland 2) is not indicated as Regulated Woodland. It should be noted that the purpose of the City of Novi Woodland Protection Ordinance (Chapter 37) is to:

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

City of Novi Woodland Review Standards & Woodland Permit Requirements

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

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

In addition,

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

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

Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on July 16, 2019 in order to verify existing woodland information (tree sizes, species, conditions, etc.) shown on the Plan. As noted, the majority of the central portion of the project site, as well as the western edge of the project site, is indicated as City-Regulated Woodland on the City's Regulated Woodland Map (see Figure 1). It should be noted that approximately one-half of the site (the western half) has been previously disturbed and contains few trees of City-regulated size.

The surveyed trees have been marked with metal tree tags allowing ECT to compare the tree diameters reported on the *Tree List* (Sheet T-1.1) to the existing tree diameters in the field. ECT found that the Plan appears to accurately depict the location, species composition, size, and condition of the existing trees. ECT took a sample of diameter-at-breast-height (DBH) measurements and found that the data provided on the Plan was consistent with the field measurements.

The current Plan includes a *Tree Protection Plan* (Sheet T-1.0) that indicates the locations of the surveyed trees as well as a *Tree List* (Sheet T-1.1) that provides tree tag number, species, diameter, condition of the surveyed trees on the site, save/remove status and number of Woodland Replacement Credits required for each tree proposed for removal. In general, the on-site trees consist of cottonwood (*Populus deltoides*), black locust (*Robinia pseudoacacia*), box elder (*Acer negundo*), silver maple (*Acer saccharium*), red maple (*Acer rubrum*), and several other species.

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

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

Proposed Woodland Impacts and Woodland Replacements

The *Woodland Replacement Plan* (Sheet L101) indicates that a total of one hundred thirty (130) trees requiring replacement are proposed for removal (however a total of the stems removed equals 133). This includes all trees 8-inches DBH and greater and located within area designated as City-Regulated Woodland. Included in this count are two (2) trees that are over 36-inches DBH located outside of the mapped City Regulated Woodland area that are also proposed for removal (i.e., Tree #21 (43" silver maple) and Tree #24 (46" cottonwood). Each of these trees require four (4) Woodland Replacement credits as they are greater than 36-inches in diameter. Sheet L101 indicates that the removal of these 130 trees requires a total of 253 Woodland Replacement Credits. The following tree removals by diameter are indicated on Sheet L101:

- Stems to be Removed 8" to 11": 43 x 1 replacement (Requiring 43 Replacements)
- Stems to be Removed 11" to 20": 65 x 2 replacements (Requiring 130 Replacements)
- Stems to be Removed 20" to 30": 20 x 3 replacements (Requiring 60 Replacements)
- Stems to be Removed 30"+: 5 x 4 replacements (Requiring 20 Replacements)
- Total Stems Removed: 133

Total Woodland Replacement Credits Required 253 Replacements

However, an assessment of the *Tree Protection Plan* (Sheet T-1.0) and the *Tree List* (Sheet T-1.1) appears to indicate the following information:

- Total Trees to be Removed = 133
- Total Woodland Replacements Required = 269

The applicant shall review and revise the Plan to ensure that the tree removal and replacement information is consistent on all applicable plans including the *Tree Protection Plan*, the *Tree List*, and the *Woodland Replacement Plan*.

The *Woodland Replacement Plan* indicates the following regarding Woodland Replacement Credits:

- Woodland Replacement Required = 253 Tree Credits
- Woodland Replacement Provided On-Site = 17 Tree Credits (6 % of the required Credits)
- Trees Paid into Tree Fund = 236

Sheet L101 indicates that the applicant is proposing to provide 17 Credits of on-site Woodland Replacement Credit through the planting of canopy (deciduous) trees, evergreen trees and native groundcover seeding. This plan has omitted the previously proposed planting of small shrubs, large shrubs, and 1-gallon perennials for Woodland Replacement Credit. The following Woodland Replacement materials have been proposed:

Table 1. Woodland Replacement Credits Proposed

Type	Credit Ratio	Proposed Quantity	Woodland Replacement Credits
Canopy Trees (2.5" caliper)	1:1	2	2 (12%)
Evergreen Trees (6-ft. height)	1.5:1	11	7 (41%)
Understory Trees (1" caliper)	5:1	0	0
Large Shrubs (30" height)	6:1	0	0
Small Shrubs (18" height)	8:1	0	0
Tree/Shrub Whips (24" height)	50:1	0	0
Perennials (1 gallon)	25:1	0	0
Ground Cover Seeding	70 Sq.Yd.:1	613	8 (47%)
Total			**17 (100%)**

The Plant List (Sheet L404) indicates that deciduous trees (2.5" diameter), evergreen trees (6-foot height), and ground cover seeding area currently proposed as Woodland Replacements. It should be noted that the deciduous trees and evergreen trees currently proposed appear to be acceptable species per the City's Woodland Replacement Tree Chart (attached). The applicant shall clearly indicate on the Plan which native groundcover seed mix is proposed for Woodland Replacement credit. The seeding area is indicated along the eastern edge of the proposed stormwater detention basin in Phase 1B.

It should be noted that the *Reforestation Credit Table* in the Woodland Ordinance notes that the Maximum Use Percentage for native Ground Cover Seeding shall be 5% of the vegetation types utilized. Currently, the Plan proposed 8 Woodland Replacement Credits through the planting of Ground Cover seeding. This is 47% of the total Woodland Replacement Credits proposed (17 Credits total). ECT recommends that the applicant decrease the amount of Woodland Replacement Credits being requested through the planting of native Ground Cover Seeding to 5% (maximum) of the total on-site Woodland Replacement Credits being proposed.

In addition, the City's Landscape Design Manual (Section 4.e. – Tree Species Diversity) notes:

Woodland tree replacement species shall have roughly the same percentage of composition as the native trees removed in order to maintain some semblance of the impacted woodland (except in the cases of elm, ash or other species which are known to have major survivability issues due to environmental factors).

Currently, 41% of the proposed Woodland Replacement Credits are evergreens, however it appears that only approximately eight (8) of the 133 regulated trees proposed for removal are evergreen (i.e., Austrian pine, white cedar, and blue spruce). The applicant is encouraged to increase the overall quantity of Woodland Replacement Trees being provided on-site as well as increase the percentage of deciduous Woodland Replacement Trees being provided.

The applicant shall demonstrate that all proposed Woodland Replacement Tree Credits will be guaranteed to be preserved as planted within a conservation easement or landscape easement to be granted to the City.

Woodland Review Comments

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

1. ECT encourages the Applicant to minimize impacts to on-site woodlands to the greatest extent practicable. The current Plan (*Woodland Replacement Plan*; Sheet L101) indicates that a total of 130 existing regulated trees are proposed for removal requiring 253 Woodland Replacement Credits. However, an assessment of the *Tree List* (Sheet T-1.1) appears to indicate the removal of 133 regulated trees requiring 269 Woodland Replacement Credits. This discrepancy shall be reviewed and revised as necessary.

2. It should be noted that the *Reforestation Credit Table* in the Woodland Ordinance notes that the Maximum Use Percentage for native Ground Cover Seeding shall be 5% of the vegetation types utilized. Currently, the Plan proposed 8 Woodland Replacement Credits through the planting of Ground Cover seeding. This is 47% of the total Woodland Replacement Credits proposed (17 Credits total). ECT recommends that the applicant decrease the amount of Woodland Replacement Credits being requested through the planting of native Ground Cover Seeding to 5% (maximum) of the total on-site Woodland Replacement Credits being proposed.

3. The applicant shall clearly indicate on the Plan which native groundcover seed mix is proposed for Woodland Replacement credit. The seeding area is indicated along the eastern edge of the proposed stormwater detention basin in Phase 1B.

4. The City's Landscape Design Manual (Section 4.e. – Tree Species Diversity) notes:

   Woodland tree replacement species shall have roughly the same percentage of composition as the native trees removed in order to maintain some semblance of the impacted woodland (except in the cases of elm, ash or other species which are known to have major survivability issues due to environmental factors).

   Currently, 41% of the proposed Woodland Replacement Credits are evergreens, however it appears that only approximately eight (8) of the 133 regulated trees proposed for removal are evergreen (i.e., Austrian pine, white cedar, and blue spruce). The applicant is encouraged to increase the overall quantity of Woodland Replacement Trees being provided on-site as well as increase the percentage of deciduous Woodland Replacement Trees being provided.

5. A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch diameter-at-breast-height (DBH) or greater and located within an area designated as City Regulated Woodland, or any tree 36-inches DBH regardless of location on the site. Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1 tree-to-1 Woodland Replacement credit ratio and all coniferous replacement trees shall be six (6) feet in height (minimum) and count at a 1.5 tree-to-1 Woodland Replacement credit ratio. All Woodland Replacement trees shall be species that are listed on the City's Woodland Tree Replacement Chart (attached). Based on the Woodland Replacement Plan, the applicant proposes to replace 17 of the required 269 (ECT tally from the Tree List) Woodland Replacement Credits on-site. This is approximately 6% of the Total Woodland Replacement Credits Required.

6. A Woodland Replacement Performance financial guarantee for the planting of on-site replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of $400. Based on the *Woodland Replacement Plan* (Sheet L101) a total of 17 Woodland Replacement Credits are to be provided on-site. Therefore, the Woodland Replacement Performance Guarantee will be $6,800 (17 On-Site Woodland Replacement Credits x $400/Credit).

7. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement financial guarantee will be returned to the Applicant. A Woodland Maintenance financial guarantee in the amount of twenty-five percent (25%) of the original Woodland Replacement financial guarantee will then be provided by the applicant. This Woodland Maintenance financial guarantee will be kept for a period of 2-years after the successful inspection of the on-site woodland replacement tree installation. Based on the current Plan, the Woodland Maintenance Guarantee will be $1,700 (17 On-Site Woodland Replacement Credits x $400/Credit x 0.25).

8. The Applicant will be required to pay the City of Novi Tree Fund at a value of $400/credit for any Woodland Replacement Tree Credits that cannot be placed on-site. Currently, all of the required Woodland Replacement Credits are proposed through on-site plantings. However, the applicant shall review and confirm that the woodland removal and required Woodland Replacement information is correct and consistent. Currently, the Plan proposes to pay 236 Woodland Replacement Credits to the City's Tree Fund. This payment would therefore be $94,400 (236 Woodland Replacement Credits x $400/Credit).

9. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees to be installed in a currently non-regulated woodland area. The applicant shall demonstrate that the all proposed woodland replacement trees will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the City. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. These easement areas shall be indicated on the Plan.

Recommendation

ECT currently does not recommend approval of the 2nd Revised PRO Concept Plan for Woodlands. The Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving Woodland approval of the Plan.

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

Respectfully submitted,
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Pete Hill, P.E.
Senior Associate Engineer

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

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

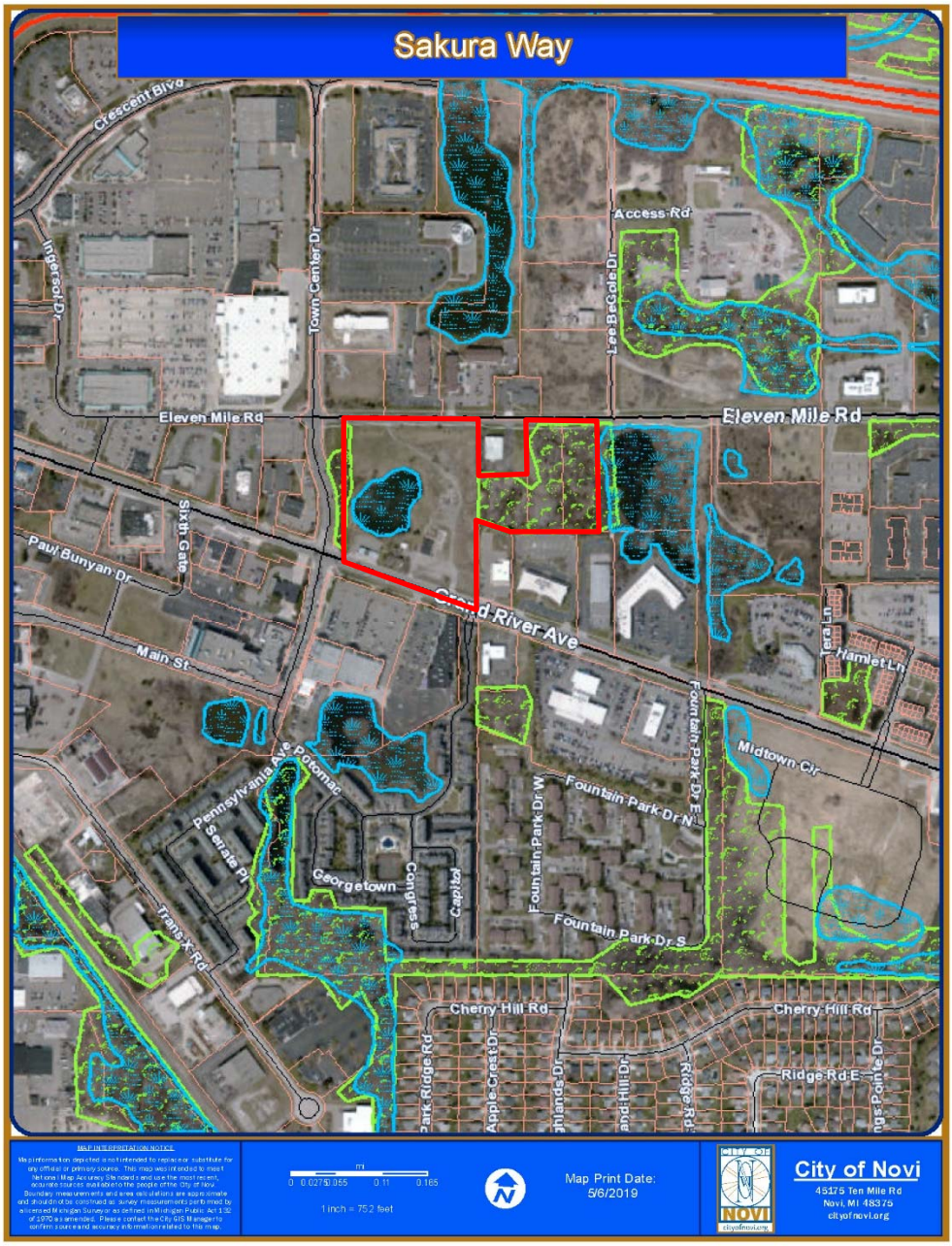

Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate parcel boundary shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.

Woodland Tree Replacement Chart

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

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

Site Photos



Photo 1. Looking west towards area of mapped City Regulated Woodland on the western side of the project (ECT, July 16, 2019).



Photo 2. Looking south towards regulated Trees #21 and #24 (ECT, July 16, 2019). These two (2) trees are regulated due to their diameter (i.e., greater than 36 inches).



Photo 3. Looking east at area of mapped City Regulated Woodland on the central/eastern portion of the project (near parcel 50-22-23-126-011 and 50-22-23-226-007 boundary), ECT, July 16, 2019.



Photo 4. Tree No. 1290 (21" silver maple) located on ECCO Tool property and proposed for removal. Trees were marked with aluminum tags allowing ECT to compare the tree diameters reported on the Plan with the existing trees in the field.



Photo 5. Tree No. 1290 (21" silver maple) located on ECCO Tool property and proposed for removal. Trees were marked with aluminum tags allowing ECT to compare the tree diameters reported on the Plan with the existing trees in the field.

WETLAND REVIEW

ECT Project No. 190456-0500

January 6, 2020

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

Re: Sakura Way (JZ19-0031)
Wetland Review of the 2nd Revised PRO Concept Plan (PSP19-0172)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the 2nd Revised PRO Concept Plan for the proposed Sakura Way project prepared by PEA, Inc. and Wah Yee Associates dated and stamped "Received" by the City of Novi on December 20, 2019 (Plan). ECT also reviewed the *EGLE Alternative Analysis* dated December 20, 2019 and the *Mitigation Conceptual Plan* dated December 18, 2019, both prepared by Atwell. Also included in the submittal is the *EGLE Impact Plan* dated August 27, 2019 and stamped received by the City on November 20, 2019.

The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance. ECT previously conducted a wetland evaluation for portions of the proposed site and most recently completed a site inspection on July 16, 2019.

ECT currently does not recommend approval of the 2nd Revised PRO Concept Plan for Wetlands. The Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving Wetland approval of the Plan.

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Required (proposed wetland impacts appear to be >0.25-acre)
Wetland Buffer Authorization	Required
EGLE Permit	To Be Determined. It is the applicant's responsibility to contact EGLE in order to determine the need for a wetland use permit.
Wetland Conservation Easement	Required for any Proposed Wetland Mitigation

The proposed project is located at the northeast corner of Grand River Avenue and Town Center Drive in Section 23. The proposed project currently consists of two (2) phases (however, previously contained three phases). Phases 1 and 2 include a total of four (4) parcels. From west to east these are: 50-22-23-126-006 (West Parcel), 50-22-23-126-011 and 50-22-23-226-007 (previously referred to as East Parcel A), and 50-22-

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Ann Arbor, MI 48105

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23-226-008 (previously referred to as East Parcel B). Phase 3 has been removed from the scope of the development. Phase 3 included two (2) parcels east of the Phase 1 and 2 properties; Parcel 50-22-23-226-021 and 50-22-23-226-022.

Phase 1 (Phase 1 and 1B) consists of market, retail, restaurant, townhome residential and light industrial use (existing ECCO Tool Co., grandfathered in). Phase 2 (Phase 2 and 2B) consists of residential, restaurant and site parking uses. Phase 1B consists of 68 residential units and Phase 2 consists of 50 units for a total of 118 residential units.

Previous plans included integrative green elements that utilized the water feature on the western portion of the site. The Plan appears to route stormwater directly to the wetland/pond located on the western side of the site. One (1) stormwater detention basin appears to be proposed on the eastern side of the site. ECT suggests that subsequent site plans be reviewed by City of Novi Engineering Staff for adherence to all applicable storm water and engineering requirements. The City of Novi's Regulated Wetland & Woodland Map indicates areas of both Regulated Wetland and Regulated Woodland on the subject site (see Figure 1).

Wetland Evaluation

ECT's in-office review of available materials included the City of Novi Regulated Wetland/Watercourse and Regulated Woodlands maps (see Figure 1, attached), USGS topographic quadrangle map, NRCS soils map, USFWS National Wetland Inventory map, and historical aerial photographs. The City of Novi Regulated Wetlands Map indicates one (1) area of existing wetland (i.e., pond/Wetland 2) on the westernmost parcel (50-22-23-126-006).

The Plan identifies a total of four (4) wetland areas on the Phase 1 and Phase 2 properties. The overall sizes of the existing wetlands do not appear to be clearly indicated on the Plan, however the proposed impacts to these wetlands are noted.

The following is a brief description of the on-site wetland features:

Wetland 1 – A small (+/- 0.01-acre) emergent wetland located in a grassy area (depression) in the northwest portion of the site (west of the existing ECCO Tool Co. building). The delineation report notes that the wetland vegetation within this area includes grass-leaved goldenrod (*Euthamia graminifolia*), yellow nutsedge (*Cyperus esculentus*), reed canary grass (*Phalaris arundinacea*), and sandbar willow (*Salix interior*).

Wetland 2 – An emergent wetland with open water area (+/- 0.74-acre emergent wetland and +/- 0.97-acre open water) located in the southwest portion of the site. The delineation report notes that the wetland vegetation within this area includes broadleaf cattail (*Typha latifolia*), narrow leaf cattail (*Typha angustifolia*), and common reed (*Phragmites australis*). The open water element is referred to as the 'pond'.

Wetland 3 – A small (+/- 0.02-acre) emergent wetland within a constructed ditch in the southwest portion of the site (adjacent to the southwest side of Wetland 2). The delineation report notes that the wetland vegetation within this area includes mainly common reed.

Wetland 4 – A large (+/- 0.90-acre) emergent/scrub-shrub wetland located within the eastern portion of the site (i.e., southeast of the existing ECCO Tool Company building). Portions of this wetland are located on parcels 50-22-23-126-011, 50-22-23-226-007, and 50-22-23-226-008. The delineation report notes that the scrub-shrub wetland vegetation within this area includes common buckthorn (*Rhamnus cathartica*) and

silky dogwood (*Cornus amomum*). The herbaceous vegetation within this wetland area included broadleaf cattail, sensitive fern (*Onoclea sensibilis*), grass-leaved goldenrod, purple loosestrife (*Lythrum salicaria*), and fringed willow herb (*Epilobium ciliatum*).

Based on the on-site wetland flagging, the existing vegetation and topography, it is ECT's assessment that the on-site wetlands were accurately delineated. The wetland boundaries appear to be accurately indicated on the Plan.

Wetland Impact Review

As noted above, several areas of wetland have been confirmed on the subject property by the applicant's wetland consultant. Currently, the Plan indicates impacts to all four (4) of the existing wetland areas. The Plan (Sheets C-1.3 and C-1.4, *Natural Features Impact Plans*) quantify the areas of the proposed wetland and wetland buffer impacts. The total amount of direct (i.e., fill or excavation) impact to on-site wetlands is 2.73 acres. The current impacts to Wetland 1 are for the construction of the Phase 2B parking area. The *Community Impact Statement* provided with the Plan notes that the pond will be maintained but will have its perimeter articulated and upgraded as a site amenity (i.e., Wetland 2 impacts). The pond will be utilized for partial site storm detention with pre-treatment. The impacts to Wetland 3 are for the purpose of constructing parking areas in the southwest portion of the site. The majority of impacts to Wetland 4 are for the purpose of constructing Phase 1B residential development as well as the proposed detention basin.

The following table summarizes the proposed wetland impacts as listed on the *Natural Features Impact Plans*:

Table 1. *Proposed Wetland Impacts*

Wetland Impact	*City Regulated?*	*MDEQ Regulated?*	*Wetland Impact Area (acre)*	*Estimated Impact Volume (cubic yards)*
1	**Yes City Regulated /Essential**	**To Be Determined**	0.007	Not Provided
2	**Yes City Regulated /Essential**	**To Be Determined**	1.809	Not Provided
3	**Yes City Regulated /Essential**	**To Be Determined**	0.016	Not Provided
4	**Yes City Regulated /Essential**	**To Be Determined**	0.902	Not Provided
TOTAL	**--**	**--**	**2.734 acres**	**Not Provided**

In addition to the proposed wetland impacts, the Plan proposes disturbance to on-site 25-foot wetland buffer areas. The proposed impacts to 25-foot wetland buffers are also provided on the *Natural Features Impact Plans*. The Plan indicates a total of 1.695 acres of impact to the on-site 25-foot wetland buffers. These impacts appear to be permanent impacts. The following table summarizes the proposed wetland buffer impacts as listed on the Plan:

Table 2. *Proposed Wetland Buffer Impacts*

Wetland Buffer Impact Area	***Buffer City Regulated?***	***Buffer MDEQ Regulated?***	***Wetland Buffer Impact Area***
			Permanent
			Acre
1	**Yes**	**No**	0.134
2 & 3	**Yes**	**No**	0.720
4	**Yes**	**No**	0.591
Wetland on Adjacent Parcel	**Yes**	**No**	0.250
TOTAL	**--**	**--**	**1.695**

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

City of Novi Wetland/Watercourse Ordinance Requirements

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

The wetland essentiality criteria as described in the Wetland and Watercourse Protection Ordinance are included below.

> *All noncontiguous wetland areas of less than two (2) acres which appear on the wetlands inventory map, or which are otherwise identified during a field inspection by the city, shall be analyzed for the purpose of determining whether such areas are essential to the preservation of the natural resources of the city….In making the determination, the city shall find that one (1) or more of the following exist at the particular site:*
>
> *(1) The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in Section 36505 of the Natural Resources Environmental Protection Act (Act 451 of 1994) [previously section 6 of the endangered species act of 1974, Act No. 203 of the Public Acts of 1974, being section 229.226 of the Michigan Compiled Laws].*
> *(2) The site represents what is identified as a locally rare or unique ecosystem.*
> *(3) The site supports plants or animals of an identified local importance.*
> *(4) The site provides groundwater recharge documented by a public agency.*
> *(5) The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.*

(6) The site provides wildlife habitat by providing breeding, nesting or feeding grounds or cover for forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened or endangered wildlife species.
(7) The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.
(8) The site provides pollution treatment by serving as a biological and chemical oxidation basin.
(9) The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.
(10) The site provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.

After determining that a wetland less than two (2) acres in size is essential to the preservation of the natural resources of the city, the wetland use permit application shall be reviewed according to the standards in subsection 12-174(a).

Based on this information, the existing on-site wetlands are considered regulated by the City of Novi for stormwater storage and/or wildlife habitat criteria.

The applicant is urged to minimize impacts to all wetlands and 25-foot wetland setback areas to the greatest extent practicable. The City regulates wetland and watercourse buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states that:

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

Wetland Regulation and Required Permits

The Michigan Department of Environment, Great Lakes, and Energy (EGLE, formerly MDEQ) generally regulates wetlands that are within 500 feet of a waterbody, regulated stream or are part of wetland system greater than 5 acres in size. It is the applicant's responsibility to contact EGLE in order to confirm the regulatory authority with respect to any on-site wetland or watercourse areas and the need for any permits based on the proposed Plan.

In 1979, the Michigan legislature passed the Geomare-Anderson Wetlands Protection Act, 1979 PA 203, which is now Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The EGLE has adopted administrative rules which provide clarification and guidance on interpreting Part 303.

In accordance with Part 303, wetlands are regulated if they are any of the following:

- Connected to one of the Great Lakes or Lake St. Clair.
- Located within 1,000 feet of one of the Great Lakes or Lake St. Clair.
- Connected to an inland lake, pond, river, or stream.
- Located within 500 feet of an inland lake, pond, river or stream.
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, but are more than 5 acres in size.
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, and less than 5 acres in size, but the DEQ has determined that these wetlands are essential to the preservation of the state's natural resources and has notified the property owner.

The law requires that persons planning to conduct certain activities in regulated wetlands apply for and receive a permit from the state before beginning the activity. A permit is required from the state for the following:

- Deposit or permit the placing of fill material in a wetland.
- Dredge, remove, or permit the removal of soil or minerals from a wetland.
- Construct, operate, or maintain any use or development in a wetland.
- Drain surface water from a wetland.

The applicant's *Wetland Delineation Letter* notes that Wetlands 1, 2, and 3 are likely not regulated by EGLE as these wetlands are isolated and less than 5 acres in size. Wetland 4, however, is adjacent to the off-site pond located on Parcel 50-22-23-226-042 (owned by the City of Novi) and is therefore likely regulated by EGLE.

Wetland Mitigation

EGLE (formerly MDEQ) generally requires mitigation for impacts greater than one-third (0.33) acre but can require mitigation for any level of impact to EGLE-regulated wetlands. The City requires mitigation for impacts greater than one-quarter (0.25) acre. The Plan indicates a total wetland impact of 2.734 acres (0.902-acre of which appears to be to EGLE-regulated wetland; i.e., Wetland 4).

A proposed wetland mitigation concept plan has been provided by Atwell (*Sakura Novi Mitigation Conceptual Plan*, dated December 18, 2019). This plan includes three (3) areas of proposed mitigation construction. All 3 areas area proposed to be constructed on City of Novi-owned properties. Areas A and B are proposed on Parcel 50-22-23-226-042, located south of Eleven Mile Road, just east of the proposed project. Portions of this parcel may be used in the future by the City to construct a 'ring-road/Lee BeGole Drive extension'. Wetland Mitigation Area C is proposed on Parcel 50-22-14-451-002. The parcel contains the City's Department of Public Services (DPS) campus and Bishop Creek flows through it. It can be noted that the following areas of mitigation are proposed:

- Area A – 0.17-acres;
- Area B – 0.87-acres;
- Area C – 1.67 acres;
- Total – 2.71 acres

It should be noted that based on correspondence received from the City of Novi Community Development Department, the use of the DPS property (Parcel 50-22-14-451-002) will not be open to consideration as a wetland mitigation site. The use of the City-owned Parcel 50-22-23-226-042 to construct a portion of the required wetland mitigation is also yet to be determined as viable.

The applicant shall continue to work towards finding a workable solution for the following wetland mitigation requirements:

Table 1. Wetland Impact and Mitigation Requirements

Feature Name	Wetland Type	Impact (Acre)	Mitigation Ratio	Mitigation Required	Regulatory Status
Wetland 1	Emergent	0.007	1.5:1	0.0105	Novi
Wetland 2	Emergent	0.57	1.5:1	0.855	Novi
Wetland 2	Open Water	0.16	1:1	0.16	Novi
Wetland 3	Emergent/Scrub-Shrub	0.02	1.5:1	0.03	Novi
Wetland 4	Scrub-Shrub	0.90	1.5:1	1.35	EGLE & Novi
Total	**--**	**1.657**	**--**	**2.41**	**--**

The *Mitigation Conceptual Plan* also includes an estimate of the proposed impact quantities for the future City road extension project.

It should be noted that Section 12-176. – Mitigation of the City's Wetlands and Watercourse Protection Ordinance states the following:

Mitigation shall be provided onsite where practical and beneficial to the wetland resources. If onsite mitigation is not practical and beneficial, mitigation in the immediate vicinity, within the same watershed, may be considered. Mitigation at other locations within the city will only be considered when the above options are impractical.

Wetland and Watercourse Comments

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

1. ECT encourages the Applicant to minimize impacts to on-site wetlands and 25-foot wetland setbacks to the greatest extent practicable and attempt to incorporate these existing natural features into the site plan. Wetland impact totals have increased from the previous PRO Concept Plan submittal.

2. The volume (cubic yards) of all wetland impacts shall be provided on the Plan. In addition, the areas (square feet or acres) of the existing wetlands and 25-foot wetland buffer areas shall be clearly indicated and the areas quantified (square feet or acres) on the Plan.

3. If the applicant is unable to modify the Plan in order to decrease the overall impact to existing wetlands they shall continue to work towards finding a workable solution for 2.41 acres of required wetland mitigation. The current Mitigation Conceptual Plan includes three (3) areas of proposed wetland mitigation construction totaling 2.71 acres. This mitigation is proposed to be constructed on City of Novi-owned properties.

   It should be noted that based on correspondence received from the City of Novi Community Development Department, the use of the DPS property (Parcel 50-22-14-451-002) will not be open to consideration as a wetland mitigation site. The use of the City-owned Parcel 50-22-23-226-042 to construct a portion of the required wetland mitigation is also yet to be determined as viable.

4. It appears as though a City of Novi *Non-Minor Wetland Use Permit* would be required for the proposed impacts to on-site wetlands. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland or watercourse buffers.

5. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from EGLE (formerly MDEQ) for any proposed wetland impacts. Final determination as to the regulatory status of any on-site wetlands (if applicable) shall be made by EGLE. The Applicant should provide a copy of this Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.

6. The Plan should address how any temporary impacts to wetland or 25-foot wetland buffers shall be restored, if applicable. Subsequent Plan submittals shall include specifications for any proposed seed mixes proposed for use within these areas. Sod or common grass seed shall not be used to restore temporary impacts within these areas. Currently, it appears as if all of the proposed impacts to wetland and wetland buffers are permanent.

7. The applicant should ensure that any proposed snow storage areas are located such that any runoff will not directly affect any remaining on-site wetlands (if applicable) and/or watercourses.

8. In subsequent plan submittals, ECT suggests that any proposed stormwater management plan be reviewed by the City of Novi Engineering Department to ensure that they meet the City of Novi design requirements.

Wetland Conclusion

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

The applicant has to construct required wetland mitigation on two (2) City-owned parcels. It should be noted that based on correspondence received from the City of Novi Community Development Department, the use of the DPS property (Parcel 50-22-14-451-002) will not be open to consideration as a wetland mitigation site. The use of the City-owned Parcel 50-22-23-226-042 to construct a portion of the required wetland mitigation is also yet to be determined as viable. The applicant shall continue to work towards finding a workable solution for the 2.41 acres of required wetland mitigation

Recommendation

ECT currently does not recommend approval of the 2nd Revised PRO Concept Plan for Wetlands. The Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving Wetland approval of the Plan.

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

Respectfully submitted,
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Pete Hill, P.E.
Senior Associate Engineer

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

Attachments: Figure 1 – City of Novi Regulated Wetland and Woodland Map
Figure 2 - Site Aerial Photo
Site Photos

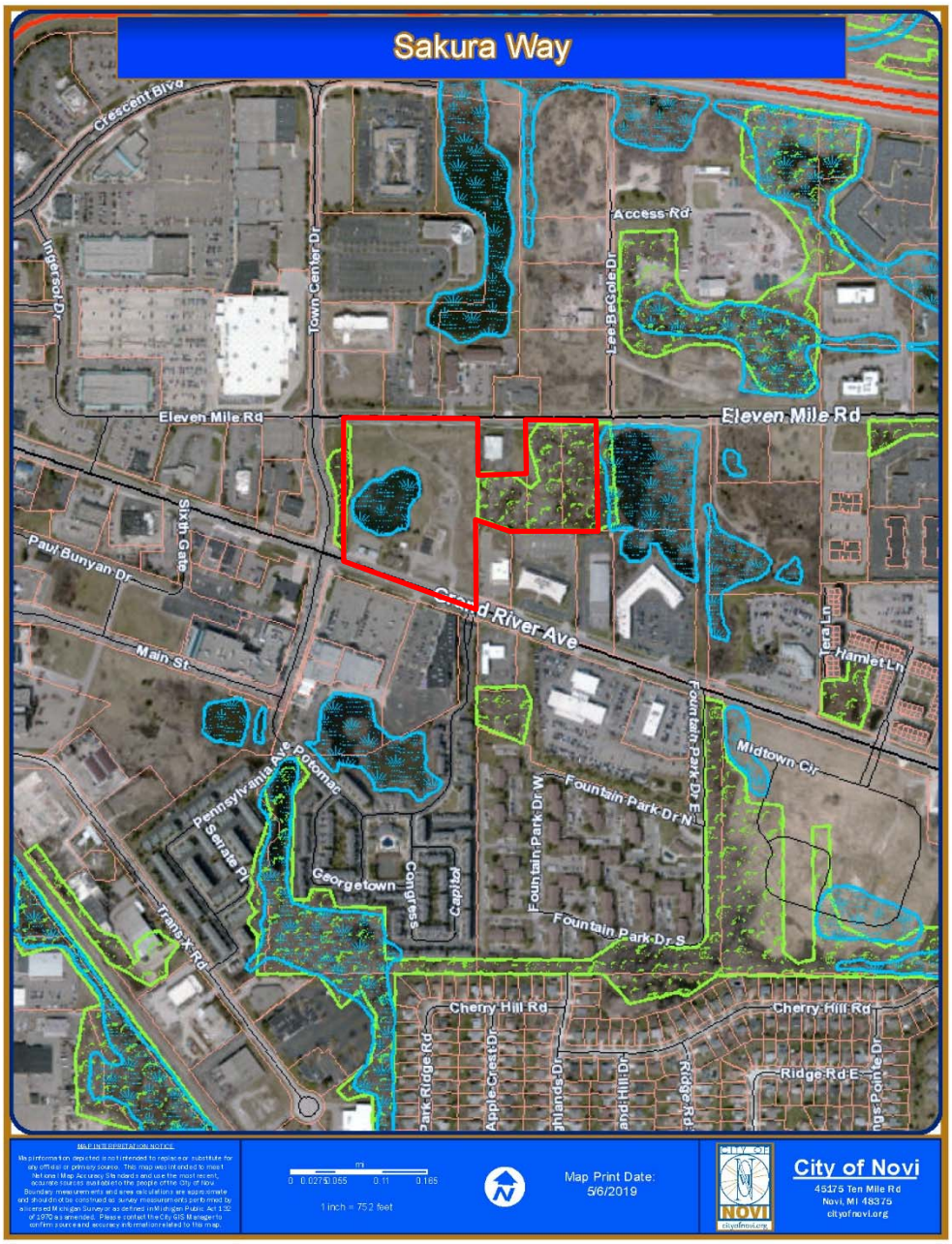


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project boundaries are shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.



Figure 2. Site Aerial Photo. Approximate wetland locations are indicated in blue (Photo source: Google Earth).

Site Photos



Photo 1. Looking east at existing Wetland 1 located west of the existing ECCO Tool Co. site, south of Eleven Mile Road (ECT, July 16, 2019).



Photo 2. Looking west at existing wetland/pond (Wetland 2) on the west side of the project site (ECT, July 16, 2019).



Photo 3. Looking east from the ECCO Tool property (50-22-23-126-011) towards area of delineated wetland (Wetland 4). Reed canary grass can be seen in the photo, growing in the wetland area (ECT, July 16, 2019)



Photo 4. Looking east at delineated wetland (Wetland 4) on 50-22-23-226-007 and -008 (ECT, June 19, 2018).

TRAFFIC REVIEW

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

Project name:
JSP19-0019 Sakura Way 2nd Revised PRO Concept Traffic Review
From:
AECOM

Date:
January 8, 2020

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

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

Memo

Subject: JSP19-0019 Sakura Way Second Revised PRO Concept Traffic Review

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

GENERAL COMMENTS

1. The applicant, Sakura Novi, LLC, is proposing a walkable mixed-use community with a grocery store, restaurants, and 118 townhomes between Eleven Mile Road and Grand River Ave, east of Town Center Drive.
2. Eleven Mile Road is under the jurisdiction of the City of Novi. Grand River Avenue is under the jurisdiction of Oakland County.
3. The parcels are zoned OSC, OS-1, and I-1. The applicant is proposing rezoning the area to TC-1 with a PRO.
4. The traffic related deviations requested by the client are discussed in the Requested Deviations section of this letter.

TRAFFIC IMPACTS

1. AECOM performed an initial trip generation estimate for phase 1 based on the ITE Trip Generation Manual, 10th Edition, as follows:

   ITE Code: 220 Multi-Family housing (Low-Rise), 850 Supermarket
   Development-specific Quantity: 68 (220), 30 (850)
   Zoning Change: As indicated above for PRO

Trip Generation Summary				
	Estimated Trips	**Estimated Peak-Direction Trips**	**City of Novi Threshold**	**Above Threshold?**
AM Peak-Hour Trips	33+115=148	25+69=94	100	Yes
PM Peak-Hour Trips	42+318=360	26+162=188	100	Yes

Daily (One-Directional) Trips	473+3203=3676	N/A	750	Yes

2. The number of trips exceeds the City's threshold of more than 750 trips per day and 100 trips per either the AM or PM peak hour. These estimates include only two (2) of the proposed sections of the development, which indicates that total trips for the development, including the restaurants, hotel, and office buildings, would be even greater. AECOM recommends performing the following traffic impact studies in accordance with the City's requirements.

Trip Impact Study Recommendation	
Type of Study:	**Justification**
Rezoning Traffic Impact Study	The applicant is proposing rezoning the parcels and so a rezoning traffic study comparing the trips possible under the current and proposed zoning, as well as the proposed land use, is required. A TIS Addendum containing the RTS information was submitted and reviewed as part of the November 1, 2019 revised PRO letter.
Traffic Impact Study	The proposed developments exceed the City of Novi thresholds for requiring a Traffic Impact Study. A revised TIS was submitted with the second revised PRO. Comments on this revised TIS are included below.

TIS COMMENTS

The following comments relate to the TIS submitted as part of the second revised PRO Concept package.

1. The proposed development is expected to generate fewer trips under all conditions than the previously submitted TIS, due to the change in the phase 2 development.
2. Most north/south movements at the signalized intersection of Grand River Ave and Main Street/Town Center Drive operate at LOS E or F during AM, PM, and Saturday peak hours.
3. The shared parking portion of the TIS indicates that there is predicted to be no surplus parking during weekend peak demand. This includes commercial parking utilizing excess residential spaces. The preparer recommends that these parking spaces be used by employees of the retail and restaurant businesses.

EXTERNAL SITE ACCESS AND OPERATIONS

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

1. The applicant is proposing five (5) points of access to the development, as follows:
    a. Two (2) driveways off of Grand River Avenue.
    b. Three (3) driveways off of Eleven Mile Road.
    c. The applicant has provided some driveway dimensions and details that are in compliance with City standards but should label for all driveways, including width and radii, for the proposed access points, and any modifications to the external roadways to review compliance with City and County design standards, as applicable.
2. The applicant should confirm that the proposed driveways meet the same side spacing requirements as indicated in Section 11-216(d)(1)(d) and Figure IX.12 of the City's Code of Ordinances and dimension the spacing on the plans. On a 35 mph roadway, driveways must be at least 150 feet apart.
3. The western driveway on Grand River Avenue is a right-in/right-out only driveway.
4. The applicant has included sight distance measurements for the driveways along Grand River Avenue and Eleven Mile Road that are in compliance with Figure VIII-E of the City's Code of Ordinances.
5. The applicant is proposing sidewalk along Grand River Avenue that connects to existing sidewalk on the east side of the site. There is existing sidewalk along Eleven Mile Road for the length of the site.

a. The applicant has provided proposed sidewalk and ramp details and included the latest Michigan Department of Transportation (MDOT) sidewalk ramp detail.
b. The applicant is proposing sidewalk to terminate at 11 Mile Road on the east side of the central driveway. The applicant should consider providing a crosswalk at this location to increase pedestrian connectivity to the development.

REQUESTED DEVIATIONS

The following comments relate to the requested deviations.

1. Deviation 5: The applicant is seeking a deviation for parking setback along 11 Mile Road. Parking is required to be 25' from the ROW line. The proposed distance is 10'. Applicant states this deviation is essential to accommodate existing conditions to avoid excessive modifications for short term use.
    a. *AECOM would support the deviation for the parking associated with Eco Tool only.*
2. Deviation 11: The applicant is seeking a deviation for parking setback in the NE corner, which is 6'.
    a. *AECOM would support this deviation.*
3. Deviation 14: The applicant is seeking loading zone requirement reductions, for amounts specified in the site plan.
    a. *AECOM would support the deviation provided the applicant can provide truck turning movements that show the loading zones can be accessed by the relevant vehicles. The applicant provided truck turning movements to loading area A but should also show movements for loading areas B and C to ensure accessibility.*
4. Deviation 20: The applicant is requesting a deviation for drive lane width in Residential Phase 1. A total width of 20' is requested as the deviation width. The ordinance requirement is 24' or 22' where no parking is present, as is the case for this location, resulting in a reduction of 2' requested.
    a. *AECOM would support this deviation in the vicinity listed, as long as signage is put in place indicating no parking is allowed outside of marked spaces in the residential area. While two (2) passenger vehicles can pass each other as indicated in the diagram on sheet C-2.2, emergency vehicles are wider, typically more than 8' wide, making a 20' roadway a tight fit for fire or medical emergency vehicles to access if vehicles are parked.*

INTERNAL SITE OPERATIONS

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

1. General Traffic Flow
    a. The site generally appears to be accessible to passenger vehicles.
    b. The applicant has provided fire truck turning paths to ensure accessibility.
    c. The applicant has provided dimensions for the landscape areas radii throughout the development.
    d. The applicant has generally indicated curb heights adjacent to parking spaces to be 4" throughout the development. Note that 6" curbs are required along all landscape areas, except when in front of a 17' parking space where a 4" curb is permitted.
    e. The applicant has indicated no more than 15 consecutive parking spaces, which is in compliance with the City's Zoning Ordinance, Section 5.5.3.C.ii.i.
    f. The applicant is required to provide a loading zone in the amount of 10 square feet for each front foot of building, per TC-1 (planned PRO zoning) district requirements in Section 5.4.
        i. The applicant has identified loading zones for three (3) of the proposed buildings.
        ii. The applicant should provide truck travel patterns throughout the site to confirm accessibility to/from loading zones B and C.

iii. The applicant has indicated they are seeking a deviation for loading zone areas.
iv. The applicant should note that loading zone areas must only include areas that a vehicle can utilize. Permanent or semi-permanent structures, such as dumpsters, cannot have their square footage included in loading zone size.

g. The applicant has proposed trash receptacles at the majority of the proposed buildings.
    i. The applicant should confirm that the trash receptacles are accessible by trash collection vehicles via turning movement paths.

2. Parking Facilities
    a. The applicant should reference the Planning Review letter for information regarding required off-street parking quantities.
    b. The proposed parking lot parking space dimensions are generally in compliance with City standards; however, curb heights should be provided to confirm space length dimensions are appropriate. The applicant should reference Section 5.5.3.C.ii for additional information about required curb heights in relation to parking space length.
        i. If a 17’ space is provided with a 4” curb, a 2’ clear overhang, free from signs or other barriers, must be provided.
    c. The applicant is generally proposing 9’ wide parking spaces within the attached parking facility, which matches the required standard.
    d. The applicant is proposing 23 barrier free parking spaces. A total of nine (9) barrier free spaces are required of the 403 parking spaces proposed in Phase 1. The applicant has indicated the proposed dimensions for the accessible parking spaces.
        i. The applicant should provide at least one (1) barrier free parking space in the Phase 2 residential area.
        ii. The applicant has indicated which spaces are intended to have van accessible signs. However, spaces on both sides of the 8’ aisles may be considered van accessible. The applicant could consider marking the spaces on both sides as van accessible. Five (5) spaces are marked van accessible, which meets the minimum of one of every six spaces.
            1. One (1) of the spaces marked as van accessible, adjacent to building “B”, does not have the required 8’ aisle. The sign should be updated to be non-van accessible or the aisle widened.
    e. The applicant has indicated on-street parking on 11 Mile Road. A crosswalk to provide access to the spaces on the north side of the road should be added to include these parking spaces in the total count. The applicant should also include the offset from the multiuse path to the parking spaces.
    f. The applicant has generally indicated 24’ aisles. Several aisles in the residential area of the development are indicated to be 20’ or 21’ wide. The applicant should increase the widths of these aisles to be 24’ in order to be in compliance with Section 5.3.2 of the City’s Zoning Ordinance.
        i. The applicant has indicated they are seeking a deviation for the width of the aisles.
    g. The applicant is required to provide 18 bicycle parking spaces for the Phase 1 mixed-use development portion of the proposed area and 24 for the residential area, totaling 42 spaces. The applicant has indicated they have provided 33 spaces. The indicators on the plans show 46 spaces. The calculations table should be updated to be consistent with the plans.
        i. The development of the Phase 2 area may require additional bicycle parking in both the mixed-use and residential areas.
        ii. The applicant has indicated bicycle parking on the south and east sides of building A, and the west side of building B, as well as in the garages of the residential area.
            1. The applicant should indicate the building entrances on the site plan to allow for identifying the distance from the bicycle parking to the entrances. Bicycle parking spaces are to be no more than 120 feet from the building entrances being served.

2. Bicycle parking is required to be separated from vehicle parking and access aisles by a raised curb, landscape area, sidewalk, or other method, as per Section 5.16.5.D of the City's Zoning Ordinance.
3. The applicant should provide bicycle parking in the Phase 2B residential area.

iii. The applicant has provided the design of proposed bicycle racks in previous submittals. However, sheet L401 was missing from the current submittal and should be included in the next.
iv. The applicant has provided the proposed bicycle parking layout. Paved pathways with a minimum width of 6' are required from the bicycle parking to roadway facilities or other mixed-use pathways. Ramps should be provided from along the paved pathway.

3. Sidewalk Requirements
   a. The applicant should provide sidewalk width details throughout the site.
      i. **In several locations, it appears the two foot parking overhang reduces the width of the meandering sidewalk around the pond to less than the required five feet. The sidewalk should be moved, widened, or otherwise modified so that there is a five foot clear sidewalk, independent of the 2' vehicle overhang.**
   b. The applicant has indicated locations of and details for all proposed sidewalk ramps throughout the site and included the latest MDOT sidewalk ramp detail.
   c. It should be noted that all bicycle parking facilities shall be accessible from adjacent street(s) and pathway(s) via a paved route that has a minimum width of 6'.

SIGNING AND STRIPING

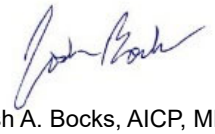
1. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). The following is a discussion of the proposed signing and striping.
   a. The applicant has provided a signing quantities table but should additional details (MMUTCD designation and proposed size) in future submittals. This information should be provided in the quantities table.
   b. The applicant should review the location of the applicable signing at the proposed right-in/right-out driveway along Grand River Avenue. The channeling island could be revised to further discourage left turns into and out of the driveway. The orientation of the "No Left Turn" sign in the island is incorrect.
   c. The applicant should note that van accessible barrier free parking spaces require both a Barrier Free Parking sign and a Van Accessible sign. The quantities table and callouts on the plans should be updated to reflect this.
2. The applicant has provided the following notes and details related to the proposed signing.
   a. Single signs with nominal dimensions of 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post. Multiple signs and/or signs with nominal dimension greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post as dictated by the weight of the proposed signs.
   b. The applicant should indicate a bottom height of 7' from final grade for all signs installed.
   c. The applicant should indicate that all signing shall be placed 2' from the face of the curb or edge of the nearest sidewalk to the near edge of the sign.
   d. Traffic control signs shall use the FHWA Standard Alphabet series.
   e. Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
3. The applicant has included parking space striping notes to indicate that:
   a. The standard parking spaces shall be striped with four (4) inch white stripes.
   b. The accessible parking space and associated aisle should be striped with four (4) inch blue stripes.
   c. Where a standard space is adjacent to an accessible space, abutting blue and white stripes shall be installed.
4. The applicant has provided a detail for the proposed international symbol for accessibility pavement markings that may be placed in the accessible parking space. The symbol shall be white or white with a blue background and white border with rounded corners.

5. The applicant has provided a detail for the proposed crosswalk markings.

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

Sincerely,

AECOM



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



Patricia Thompson, EIT
Traffic Engineer

FAÇADE REVIEW

DRN & ASSOCIATES, ARCHITECTS, PC
Phone: (248) 880-6523
E-Mail: dnecci@drnarchitects.com
Web: drnarchitects.com
50850 Applebrooke Dr., Northville, MI 48167

January 8, 2020

Façade Review Status Summary:
Approved, Section 9 Waivers recommended

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

Re: FACADE ORDINANCE REVIEW
Sakura Way PRO, JZ19-31
Façade Region: 1, Zoning District: OSC & OS-1,

Dear Ms. McBeth;
The following is the Facade Review for the above referenced project. The review of Buildings A, B and C is based on the drawings prepared by Wah Yee Associates Architects, dated 12/20/19. The review of the residential buildings is based on the drawings prepared by Brian Neeper Architecture and Robertson Brothers Homes, dated 12/20/19. The proposed percentage of materials on each elevation is shown in the table below. The maximum percentage allowed by the Ordinance is shown in the right hand column. The Façade Ordinance requires 30% minimum Brick on all buildings in Façade Region 1. In this case all buildings except several of the residential units fall in Façade Region 1. Materials in non-compliance, if any, are highlighted in bold. A photographic copy of the sample board as required by Section 5.15.4.D was provided for the residential units. No sample board was provided for buildings A, B and C.

Building A & D (Specialty Grocery)	**South (Front)**	**West**	**East**	**North**	Façade Ordinance Section 5.15 Maximum
Brick	31%	38%	31%	37%	100% (30% Minimum)
Concrete "C" Brick	0%	0%	23%	26%	25%
Fiber Cement Siding (Nichiha)	23%	16%	0%	0%	25%
EIFS	18%	**27%**	**36%**	**30%**	25%
GFRC Panels	12%	13%	3%	3%	15%
Precast Concrete	0%	0%	0%	0%	0%
Fabric Awning	4%	3%	0%	0%	10%

Building A - As shown above, the applicant has increased the percentage of Brick and reduced the percentage of Precast Concrete. The only remaining deviation is a minor overage of EIFS on the west, east and north facades. A Section 9 Waiver would be required for this deviation.

Building B (Restaurant)	**South**	**West**	**East**	**North**	Façade Ordinance Section 5.15 Maximum
Brick	35%	35%	27%	30%	100% (30% Minimum)
Flat Metal Panels	49%	**54%**	**51%**	49%	50%
EIFS	13%	11%	16%	15%	25%
Limestone (Cast Stone)	0%	0%	0%	0%	50%
Trim (canopies and sunscreens)	3%	0%	6%	6%	15%

Building B - As shown above the applicant has added Brick and reduced the percentage of EIFS and Flat Metal Panels. The only remaining deviation is a minor overage of EIFS on the west and east facades. A Section 9 Waiver would be required for this deviation.

Building C (Retail Strip)	**South** (Grand River)	**West**	**East**	**North** (Interior Front)	Façade Ordinance Section 5.15 Maximum
Brick	51%	40%	32%	59%	100% (30% Minimum)
Flat Metal Panels	17%	10%	24%	12%	50%
Fiber Cement Siding (Nichiha)	0%	0%	0%	0%	25%
Spandral Glass	7%	0%	0%	0%	50%
EIFS	11%	**40%**	29%	12%	25%
Limestone (Cast Stone)	8%	4%	11%	8%	50%
Concrete "C" Brick	0%	0%	0%	0%	25%
Trim (canopies and sunscreens)	6%	6%	4%	9%	15%

Building C - As shown above the applicant has added Brick and reduced the percentage of Flat Metal Panels. The only remaining deviation is a minor overage of EIFS on the west facade. A Section 9 Waiver would be required for this deviation.

Fence and Dumpster Enclosure	**Front**	**Rear**	**Right**	**Left**	Façade Ordinance Section 5.15 Maximum
Brick	95%	95%	95%	95%	100% (30% Minimum)
Cast Stone	5%	5%	5%	5%	50%

Site Fence and Dumpster Enclosure – As shown above, all facades are in full compliance with the Façade Ordinance. The project logo sign is not considered part of the façade materials and should comply with the City's Sign Ordinance.

Residential **100 Series, 3, 5, 6 & 8 -Unit Buildings**	**Front**	**Rear**	**Right**	**Left**	Façade Ordinance Section 5.15 Maximum
Brick	39%	41%	53%	53%	100% (30% Minimum)
Horizontal Siding, Fiber Cement	23%	25%	41%	41%	50%
Asphalt Shingles	16%	24%	0%	0%	50%
Trim	22%	10%	6%	6%	15%

100 Series Residential Buildings - As shown above the applicant has increased the Brick and reduced the percentage of Vinyl Siding. Vinyl Siding is not permitted in any Façade Region. We would support a Section 9 Waiver for the overage of siding provided that the type of siding is changed to Cement Fiber Siding or other more compliant type of siding.

Residential **200 Series, 5, & 8 -Unit Buildings**	**Front**	**Rear**	**Right**	**Left**	Façade Ordinance Section 5.15 Maximum
Brick	33%	**16%**	37%	37%	100% (30% Minimum)
Horizontal Siding, Fiber cement	40%	47%	**58%**	**58%**	50%
Asphalt Shingles	14%	20%	0%	0%	50%
Trim	13%	17%	5%	5%	15%

200 Series Residential Buildings - As shown above the applicant has increased the Brick and reduced the percentage of Vinyl Siding. The percentage of Brick on the rear façade remains in noncompliance. Vinyl Siding is not permitted in any Façade Region. We would support a Section 9 Waiver for the underage of Brick and the overage of siding provided that the type of siding is changed to Cement Fiber.

Commercial Buildings – In response to our prior review the applicant has added significant percentages of Brick and generally revised the percentages of materials to more closely comply with the Façade ordinance. The facades include architectural features such as wood trellises, brise-soleil sunscreen canopies, freestanding metal screens, second story planters and balconies, tension fabric canopies, and large overhanging cornices. Although Building C has its rear elevation facing Grand River Avenue (south) that elevation has been given equal attention to detail as the front (north) facade. These features substantially enhance the overall design quality of the project and have been taken into consideration as part of our recommendation.

Residential Buildings – The response letter provided by Brian Neeper, dated 12/20/19 indicates the siding material has been revised to "fiber cement material." The photographic sample board provided indicates "Certain Teed Wolverine Vinyl Siding". The drawings indicate "Horizontal Siding". The sample board and drawings should be revised to clearly indicate Horizontal Cement Fiber Siding.

Recommendation - With the aforementioned revisions we recommend that the application will be consistent with the intent and purpose of the Façade Ordinance and that a Section 9 Waiver be granted for the following deviations:

1. The overage of EIFS on west, east and north facades of Buildings A&D.
2. The overage of Flat Metal Panels on the west and east facades of Building B.
3. The overage of EIFS on the west facade of Building C.
4. The overage of Cement Fiber Siding (changed from vinyl) on all facades of the 100 Series buildings.
5. The underage of Brick on the rear façade of the Series 200 residential buildings.
6. The overage of Cement Fiber Siding on the right and left facades of the Series 200 buildings.

The applicant should submit revised drawings along with the Façade Material Sample Board required by Section 5.15.4.D of the Ordinance.

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

Sincerely,
DRN & Architects PC

Douglas R. Necci, AIA

Brian Neeper Architecture P.C.
630 N. Old Woodward, Suite 203 Birmingham, MI 48009
248. 259. 1784 brianneeper.com

December 20, 2019

Ms. Lindsay Bell,
Planner
45175 Ten Mile Road
Novi, MI 48375

Re: Sakura PRO

City File Number: JZ 19-31 with Rezoning 18.732

Dear Ms. Bell:

Below is the response to The Façade Ordinance Review Letter dated October 18, 2019 by Douglas R. Necci. Please note the following revisions and clarifications in response to the review letter comments:

Façade Ordinance Review

Review Date: October 18, 2019

- This response addresses Residential Building types 100 and 200.

Building Type 100

- Siding has been revised to be fiber cement material.

See Sheets R1 thru R5 for material calculations and possible Section 9 façade waivers required.

Building Type 200

- Siding has been revised to be fiber cement material.

See Sheet R6 thru R10 for material calculations and possible Section 9 façade waivers required.

Please contact me with any questions.

Sincerely,

Brian Neeper, AIA

FIRE REVIEW

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Andrew Mutch

Laura Marie Casey

Kelly Breen

Hugh Crawford

Justin Fischer

City Manager
Peter E. Auger

Director of Public Safety
Chief of Police
David E. Molloy

Fire Chief
Jeffery R. Johnson

Assistant Chief of Police
Erick W. Zinser

Assistant Chief of Police
Scott R. Baetens

Assistant Fire Chief
John B. Martin

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

January 3, 2020

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

RE: Sakura Way
PSP# 19-0172
PSP# 19-0150
PSP# 19-0112
PSP# 19-0065

Project Description:
Multi building development off of Grand River and Town Ctr Dr.

Comments:

- **All** fire hydrants **MUST** in installed and operational prior to any building construction begins.
- Fire hydrant spacing is 300' from fire hydrant to fire hydrant. Fire hydrant spacing shall be measured as "hose lay distance from fire apparatus. Hose laying distance is the distance the fire apparatus travels along improved access routes between hydrants or from a hydrant to a structure **(D.C.S. Sec. 11-68 (f)(1)c))**

.

- The ability to serve at least two thousand (2,000) gallons per minute in single-family detached residential; three thousand (3,000) gallons per school areas; and at least four thousand (4,000) gallons per minute in office, industrial and shopping centers is essential. **(D.C.S. Sec.11-68(a))**
- Fire apparatus access drives to and from buildings through parking lots shall have a minimum fifty (50) feet outside turning radius and designed to support a minimum of thirty-five (35) tons. **(Throughout site) (D.C.S. Sec 11-239(b)(5))**
  1. In front of building 9 from the west to the south.
  2. In front of building 9 from north to the east.
  3. In front of building 11 from the west to the north.
  4. In front of building 3 from the south to the west.
  5. In front of building 2 from the east to the south.
  6. In front of building 5 from the north to the west.
  7. Between buildings 2 & 3 from the north to the east and from the north to the west.
- **Corrected from 10/11/19 review** - FDC's MUST be put on the plans for review. This item will be approved during Sprinkler system review.

- FDC locations MUST be within 100' from a fire hydrant. FDC's MUST be front/road side of the structure. **IFC 912.3**
- **Corrected from 10/11/19 review** - The water main on the east side of building 12 MUST be increased to 8". **Novi City Ordinance #11-68(c)(1)c.**
- **Corrected from 10/11/19 review - ALL** water mains MUST be put on the plans for review.

Recommendation:
APPROVED WITH CONDITIONS

Sincerely,

Andrew Copeland – Acting Fire Marshal
City of Novi Fire Department

cc: file

APPLICANT RESPONSE LETTERS

Robert B. Aikens
& ASSOCIATES, L.L.C.

January 9, 2020

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

Re: PRO Site Plan Submittal Response Letter
Sakura Novi & The Residences at Sakura Novi
Novi, MI

Dear Ms. Bell,

Thank you for your Plan Review Center Report dated January 8th, 2020, and for the opportunity to present to the Planning Commission on January 15th. We are very pleased that your team is able to recommend approval of Phase 1 for Sakura Novi at this time, with anticipated adjustments. We are also thankful for the opportunity to present at the earliest Planning Commission meeting in 2020. As we have been told by City Council, we must meet our time-line over these up-coming months.

Our responses in this response memo are integrated into our correspondence starting December 4th, 2019. Given the intricacy of the give-and-take, our preference would be to start with a fresh response letter, but the turn-around time necessary to have material ready in time for the January 15, 2020 Planning Commission meeting made this infeasible.

- Our December 4th responses to the City's November 4nd review document are in RED.
- Our December 20th responses to requests posed by staff during the December 11th Planning Commission meeting are in GREEN.
- Our January 9th responses to the January 8th review comments are in ORANGE.
  Note: certain items, including listed public benefits that have been deemed to not qualify as a public benefit, have been deleted from the response letter's sequential format as they were declared not viable as part of the most recent review.

It has been a great experience working with the City of Novi since August 2016 to bring the Sakura Novi concept to the community. This concept was only in the visioning phase when the City purchased the Anglin parcel at the end of 2016, and enacted in December 2016 Ordinance No. 18.276 to amend Ordinance No. 97-18. The purpose of Ordinance No. 18.276 was to "incorporate recommendations provided in town center area study to facilitate the development of existing and vacant parcels into a

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& ASSOCIATES, L.L.C.

viable and active 'Town Center' area." Specifically, Ordinance No 18.276 amended Section 3.27 "TC and TC-1 Town Center District Required Conditions" to read as follows: "The TC-1 District is especially designed to encourage developments of an urban 'Main Street' with mixed land uses and shared parking. Flexible regulations regarding streetscape design, landscape design, provision of parking facilities, architectural and façade design, residential dwelling units, and setback standards are intended".

We are proud of what we are seeking to accomplish with Sakura Novi, and we appreciate the work the City has done in procuring the land and pushing for flexibility to introduce vital new offerings within the City's downtown. We can only hope that Sakura Novi meets the City's vision within the context of the conditions of the land in question. We are striving to add further public benefits for the community. In all cases, we thank the leadership in the City for their support to date.

We agree with Novi staff's assessment that there has been insufficient detail and ambiguity about Phase 2. Upon consideration, we have decided to focus in on refining this response letter and moving forward with a revised Baseline plan for consideration. We can, at the present time, address in adequate detail the specifics of this plan so as to eliminate ambiguity from the entitlement process.

As we discussed with staff, we want to emphasize that we are not precluding the possibility that compelling opportunities will emerge as we move forward. It is unknown what such opportunity might be. Our intent would be to resolve this, if parties are so inclined, by initiating a PRO Amendment process. We would also look to initiate a PRO Amendment process should Ecco Tool Co decide to join our cause and include their remaining parcel in a transaction. The PRO Amendment process will likely be necessary, in any case, whenever Ecco Tool Co is prepared to act, now or in the future.

We were heartened at the 11.13.19 Master Planning and Zoning Committee meeting, that Planning Commissioners Pehrson and Anthony expressed enthusiasm about Sakura Novi Phase 3, which contemplates a harmonious residential use on a parcel nearby the main Sakura Novi campus. At the same time, we do understand that there are issues with Phase 3, including, among others, that City perceives there to be legal issues vis a vis to Purchase Agreement with the City of Novi with proceeding with this plan at present; that the intent for the land in question is TC-Gateway East rather than TC-1; and that TC-Gateway East calls for parcels that are larger than the Phase 3 parcel in question. We do continue to believe that Phase 3 is a compelling addition to the Sakura Novi plan and to the downtown core. Robertson Brothers Homes, as the developer of Phase 3, will continue to advocate for its approval. Perhaps, Phase 3 can also be an opportunity that we focus on with any prospective PRO Amendment process.

We are also considering seriously other comments raised at the 11.13.19 Master Plan and Zoning Committee meeting by Commissioner Pehrson, Commissioner Anthony, Commissioner Gronachan, members of the public, and other meeting participants.

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- First, as safety is a paramount priority, we are taking all measures to ensure appropriate turning radii for fire and safety vehicles. A meeting was held with the Fire Marshall 12.19.2019, and the engineer has incorporated all modifications necessary to satisfy the concerns in the revised 12.20.2019 submission.

- Second, we understand the importance of additional public benefits, and we are keenly interested in satisfying the community's expectations. We look forward to implementing the many ways we plan to program Sakura Novi as a community entity. We are working hard and at great cost to make the pond and surrounding walking path into a signature public amenity. Our intention is to partner with the corporate community in order to program this new facility. We have also agreed with True World Group that their community room in their facility may be usable by the broader community as a public benefit. As a follow-up to suggestions at the Master Plan and Zoning Committee meeting, we are initiating a process of exploring a partnership with Novi Public Library. We have scheduled an introductory meeting with library staff to further discuss opportunities for a multi-lingual Little Free Library program. True World Group has agreed to allow us to use space for this purpose as a public benefit. Please see the detailed list of proposed Public Benefits included in this package, which have been amended per City comments.

- Third, we understand that traffic congestion is an issue in downtown Novi. We have further studied traffic flow issues resulting from the modified baseline plan, and any resulting need for road improvements. The results of this study, as stated in Bergmann's addendum, is that a tapering lane on 11 Mile Road is unnecessary. We are, however, currently studying with staff whether parallel parking on 11 Mile is feasible and desirable as a significant public benefit. We still await the formal City engineering response to the proposal. The city engineering response letter indicates engineering is not in favor of the parallel parking on the north side of 11 Mile Road, though we do not see a recommendation in favor of this proposal for the parking proposed on the south side.

- Fourth, we have worked extensively to design and create this unique destination within the boundaries of the City's Ordinances, and to refine and limit the number of deviations necessary for incorporation. Our decision to focus, at this point, primarily on Baseline Plan Phase 2, has helped with this effort. Our intensive team focus has reduced the necessary quantity requiring staff support to 9, a reduction of 69%. Please see additional deviations' documentation.

- Fifth, though our engineering team has assured us the existing city infrastructure has sufficient capacity to supply utilities for Sakura Novi, as per Commissioner Anthony's suggestions, we will

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further investigate the impact of the proposed residential uses on sanitary sewers and other infrastructure.

- Sixth, we heard repeatedly at the meeting that Sakura Novi must strive to be authentic; whether this pertains to the restaurant and retail collection, or the architecture, or the landscaping. We appreciated these comments because the Sakura Novi team takes great satisfaction professionally in this effort to present an offering that the community regards as authentic.

Sincerely,



G. Scott Aikens, Ph.D.

Robert B. Aikens
& ASSOCIATES, L.L.C.

As per the City's request in the Plan Review Center Report dated January 8th, 2020, we will respond below to each of the comments in the report marked in **red bold**.

MAJOR CONDITIONS OF PLANNED REZONING OVERLAY AGREEMENT

5. The maximum number of dwelling units to be constructed in total for the Sakura Novi project seeking rezoning under this PRO Agreement shall not exceed 160. This resultant ratio is approximately 10 units/acre, and will be maintained at no greater than 55% of the permitted number of residential units in a TC-1 district, per section 4.82.2: 16.03 ac x 43560 sf = 698,267 sq ft/800 = 872.8 rooms/ 3 rooms per unit = 290 units x 55% = 160 units
   Staff notes this condition appears to be related to the Ecco Tool property, which at this time is not proposed to be redeveloped. Including this condition at this time does not appear necessary or timely, as there are no proposed plans for staff to review to determine whether the additional units could be accommodated on that piece of property, and the PRO Agreement would need to be amended if/when redevelopment of that parcel were proposed. Staff recommends removal of this condition for the time being.

   Condition will be removed.

ORDINANCE DEVIATIONS

Sakura Novi's List of requested deviations from TC-1 Ordinance standards is included here:

1. **Deviation Supported by Staff -** Per section 3.27.1.C, Deviation is being requested for reduction of Exterior side yard setback dimension of 50' to 10' for Building A, where adjacent to Zoning B-3 commercial property (Advance Auto). RBA believes maintaining the stipulated setback would serve no good purpose as the commercial retail use on the adjacent parcel is similar in use to the uses proposed in Building A and for all GRA accessed components of proposed development. If this deviation is not obtained, the development will suffer from a large swath of the prime frontage along GRA being unusable for building footprints and useful parking, and will be unable to accommodate the driving anchor tenant's requirements. Providing cohesively designed and integrated frontage along the GRA corridor, as opposed to fractured and separate, serves the intent of Novi's Master Plan.

2. Per section 3.1.26, Deviation is being requested for reduction of Exterior side/rear yard parking setback dimension of 10' to 5' for the western parcel line, adjacent to Zoning classification TC, a woodland preserve and green space preserve area (in perpetuity) directly adjacent, and for the southern parcel line to the rear of the Auto Parts store parcel, zoned B-3. RBA believes the benefits presented by increasing the main western pedestrian project entrance sidewalk width and landscaping generosity greatly outweigh the value of additional landscaping provided against this natural, mature woodland preserve area. Additionally, separating identical use areas (delivery/trash) between like uses with excessive landscape separation serves no useful purpose. If this deviation is not obtained, the proposed development will provide a less significant public connection to the GRA/Main Street intersection and the adjacent city center developments, or unnecessarily need to reduce the proposed building footprints,

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reducing income and rendering the project un-viable. Providing cohesively designed and integrated pedestrian connections along the GRA corridor serves the intent of Novi's Master Plan.

3. Deviation per Section 11-216(d)(1) **removed** - ~~Deviation is being requested for 3 entrances from project onto Grand River Avenue, concurrent with the findings of the Traffic Report confirming this third easternmost entrance as proposed and where proposed will ease pressure on left eastbound turning movements out of site during peak times.~~

4. Per Section 3.6.2.M, a Deviation is being requested for reduction to 0' Wetland Setback to accommodate remediation process, development of feature landscaped retention basin on western portion of site and for careful integration of on-site detention on far eastern portion of site, abutting city-owned retention/wetland basin. Noted in Wetland Report. The deviation is essential to accommodate the environmental remediation process, the integration of the re-contoured and thematically planted perimeter banks, and to develop the central park-like pedestrian paths and water feature area accessible to Novi's public, designed to connect the existing Main Street area to the OSC development areas and hotels to the north. If this deviation is not obtained, creation of the public spaces and urban connectivity as envisioned in Novi's Master Plan will be far too consumptive of linear space for this particular site to be efficiently and effectively developed.

5. **A) Deviation conditionally Supported by Staff where an existing condition -** Per Section 3.1.26 - Deviation is being requested for existing and proposed side/front yard parking along 11 Mile Road. Existing occurs at Ecco Tool shop – this condition is difficult to evaluate as Ecco has not striped or sought to restripe their parking lot, though there is more than sufficient linear space to provide the parking stalls necessary for the use along one side of the drive only, with adequate minimum setback from the ROW. Proposed occurs in four locations – see PRO plan. The deviation is essential to accommodate the existing conditions of an existing use to remain. If this deviation is not obtained, extensive modifications would need to be made for an unimproved, grandfathered use that is anticipated to be relocated in the near term.
   B) Deviation support by Staff where a proposed condition is uncertain - Per Section 3.1.26 - Deviation is being requested for existing and proposed side/front yard parking along 11 Mile Road. Proposed occurs in four locations – see PRO plan. This deviation is also essential to support the phased and flexible development of the overall site as a TC-1 classification. If this deviation is not obtained, extensive plan modifications would need to be made that will decrease the efficiency of land-use, reduce the "core" project density, and in turn the "walkable" nature of the uses.

6. Deviation per Section 5.5.3.B.ii.f **removed** - ~~Per Section 5.5.3.B.ii.f - Deviation is being requested for reduction in setback from 20' to 10' for temporary paved parking field along 11Mile ROW in Phase2 section of development, to be supplanted with future structured parking. See PRO plan. This deviation is of a practical nature in anticipation of, and when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. If this deviation is not obtained, significant construction complications are anticipated for the maximum potential build-out foreseeable for this city central project site.~~

7. As a component of the Maximum Build-out scenario, Per Section 5.5.3.B.ii.f - **Deviation is removed.** ~~being requested for reduction in setback from 20' to 10' for temporary paved parking field along 11Mile ROW in~~

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~~Phase2 section of development, to be supplanted with future structured parking. See PRO plan. This deviation is of a practical nature in anticipation of, and when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. If this deviation is not obtained, significant construction complications are anticipated for the maximum potential build-out foreseeable for this city central project site.~~

8. As a component of the Maximum Build-out scenario, Per section 3.27.2.A.ii, **Deviation is removed.** ~~being requested for 11Mile buildings' frontages being less than 150'. Example: Building E currently contemplated as approximately 80'. Seeking height bonus as permitted for 6 level building E, with composition of uses as described/shown in chart on PRO plan. This deviation is essential when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent.~~

9. As a component of the Maximum Build-out scenario, Per section 3.27.1.f, **Deviation is removed.** ~~being requested for standardized Open Space requirements for Phase2. Open Space is defined in the ordinance thusly: *Open Space: An area of land that remains primarily undeveloped and in its natural state. For the purpose of this Ordinance, open space may include park lands and park facilities so long as they are provided as a part of an open space area.* There will no longer be ground on this site in its natural state. This standard is not conducive to achieving an effective development result when the goal is dense development where site sizes are limited (under 50 acres or so). This deviation is essential *for all projects* when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. *Phase1 has been designed to meet the city's ordinance, but Phase2 will need the deviation if density beyond townhomes is desired.*~~

10. Per Section 3.27.1.C - **Deviation request is removed** ~~for 11Mile frontage building setback limits.~~

11. **Deviation Supported by Staff -** Per Section 3.1.26 - Deviation is being requested for parking area setback in NE corner of project along 11 Mile Rd., adjacent to Residential Bldg3. See PRO plan. This deviation is of a practical nature as it is used in conjunction with the dropping natural grade along 11Mile Road at the east end of the site. This deviation allows more residential units to have their primary exposure and uninterrupted views toward the natural area to the east, as opposed to being elevated significantly above grade and overlooking 11 Mile Road, clearly less desirable to the occupants, fitting with the City's Master Plan intent of integrating existing natural features into new developments. If this deviation is not obtained, a harsh and unnecessary condition will be created, inconsistent with the project's desire for more natural features integration. Please note this retaining wall is an elevating wall, as the 11 Mile Road ROW is dropping in this area, and, as such, will naturally screen this parking area from pedestrian and vehicular traffic.

12. Per Non-Motorized Master Plan - **Deviation request is removed** along 11 Mile frontage – submission as proposed includes connection to existing bike path on north side of road (considered to be a Neighborhood Connector Route). ~~Per Section 3.27.1.I - Deviation is being requested for reduction in sidewalk width from 12.5' to 6', such that sidewalk as proposed can be combined with adjacent landscaping as added buffer for residential product to be used in conjunction with maximum permitted setback. This condition is proposed for the length of the 11Mile Road project frontage. See PRO Landscape Plans. This deviation is of a practical nature in anticipation of the true quantity of pedestrian~~

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& ASSOCIATES, L.L.C.

~~activity at the perimeter of the proposed TC-1 district, and is consistent with Novi's Master Plan's intent. An existing bike path is located on the north side of 11Mile Road, meeting the needs of the City's Non-Motorized Master Plan. If this deviation is not obtained, a harsh and unnecessary condition will be created, inconsistent with the project's desire for more natural features integration, which is consistent with the City's Master Plan.~~

13. **Deviation Supported by Staff -** Per Section 5.15 and 3.27.1.g – Deviation is requested for facade material exceptions included as part of the submittal, addressing comments received by city's architectural consultant. See PRO Plan Elevations. Also see included written Design Statements. The deviation is sought to accommodate the expectations of the international tenants and residents for distinctive enhancement and differentiation of this unique development destination project. This deviation allows the creation of environments more specifically tuned to the thematic Asian Village concept development that is being proposed, consistent with the intent of the City's Master Plan. If this deviation is not obtained, the significance of this unique, market specific development will be compromised. If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible.

14. **Deviation Supported by Staff -** Per Sections 3.27.1.H and Section 5.4 – Deviation is being requested for limited reductions in loading/service areas, and locations, as shown - See PRO plan and accompanying chart detail. Note that conditions for maximum density scenario have been removed. Deviation is requested for loading areas as positioned. Screening will be provided for all trash/loading areas not facing a directly adjacent loading area. This deviation provides for sufficient tenant loading and trash services, and allows for the creation of environments more specifically tuned to the thematic Asian Village concept development that is being proposed, consistent with the intent of the City's Master Plan. If this deviation is not obtained, significantly larger service areas will need to be provided in obtrusive areas that will adversely affect pedestrian traffic, which is not consistent with the City's Master Plan.

LOADING CALCULATIONS:

LOADING AREA:	REQUIRED:	PROVIDED:
A1	1,295 SF	1,320 SF
A2	537 SF	343 SF*
B	620 SF	461 SF*
C	2,000 SF	1,013 SF*
2B	960 LF	960 LF

*VARIANCE REQUESTED

Total service areas exclude trash unit footprints in area calculations

15. **A) Deviation Supported by Staff -** Per Section 3.27.2.B – Deviation is being requested for prototype store relocation opportunity. Tenant will contain 25,000sf on main level with 3,500sf support office use and 1,500sf overflow seating on mezzanine level. Tenant will have entrances on both permanent public building exposures, meeting the 125' maximum spacing criteria. See PRO plan. This deviation provides for the relocation of an existing Novi retailer, consistent with the City's Master Plan, and allows for the creation of an environment more specifically tuned to the thematic Asian Village concept development that is being proposed. If this deviation is not obtained, One World Market's development of a new

Robert B. Aikens
& ASSOCIATES, L.L.C.

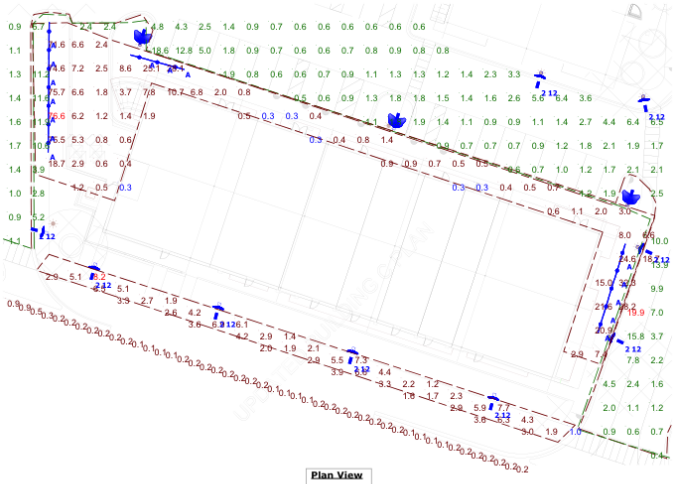
prototype store and as the Asian Village anchor may be forced to relocate outside of Novi, which is not consistent with the City's Master Plan.

B) Deviation Supported by Staff - Per Section 3.27.2.B – Deviation is being requested for 13,102 sf retail Building along GRA. This is proposed to be a multi-tenant building. Tenants will have entrances on both south and north public building exposures. See PRO plan. This deviation provides for building massing along Grand River Avenue, consistent with the City's Master Plan, and allows for the creation of an environment more specifically tuned to the thematic Asian Village concept development that is being proposed. If this deviation is not obtained, multiple buildings would need to be constructed to achieve the necessary project lease area, which would reduce parking availability and also eliminate sightlines to the key anchor tenant thusly eliminating them, which is not consistent with the City's Master Plan.

16. Deviation per Section 5.16.1 is being **removed** ~~for bicycle parking ratio on residential portion of overall project. Bicycle parking to be provided on Retail portion of project will exceed ordinance in Phase1 based on Parking Study recommendations for overall parking required.~~

17. Per Section 5.7.3.K – Deviation is being requested for site Illumination level variance for multiple walkway and residential parking areas, and for TC-1 fixture style selection. Site walkway areas will vary below 0.2fc minimum standard on natural pathway around water feature. Site walkway areas in residential portion will vary below 0.2fc minimum standard. Though illuminated, parking areas in certain residential lots will fall below 0.2fc minimum standard. See revised PRO photometric plan. This deviation provides for sufficient nighttime illumination levels for the natural pedestrian path around the water feature, and for appropriate site illumination levels within the residential portions of the project. If this deviation is not obtained, the residential portions of the project will exist with an unnatural and undesirably high lighting level during the nighttime hours, which will be detrimental to their occupants and leasing ability, which is not consistent with the City's Master Plan.

See supplemental plan inset for clarification of preliminary site lighting design intent in sidewalk area along GRA south of Building C:



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& ASSOCIATES, L.L.C.

It should be noted that the status on **Deviation #19** affects the design status of the site accent and tenant accent lighting as contemplated – these are the areas where spikes occur in measured illumination levels. The spiked illumination levels are not a result of the parking area lighting. The final fixture selections would need to be refined as appropriate, and as per tenant design needs, in the final project design and subsequent site plan submissions.

18. Per Chapter 28 of the City Code, and per the Sign Design and Review Manual for Novi TC-1 District – Deviation is being requested for TC-1 project tenant signage size standards – number and project signage types and shapes and areas calculations based on dual-language signage as part of authentic Asian Village. **Please refer to attached Signage Deviation Letter and supporting documents.** Project requires dual-language signage for authentic presentation of international tenants and clientele expectations. Many tenants will have both front (facing ROW) and rear (primary) entrances.
    a. Per 28-5.c.1.a, an increase of 100% over standards is required to accomplish the dual language signage. The mural will be removed from the Market's north façade.
    b. Per 28-5.c.1.b, (2) signs of equal permitted size are requested for each typical retail/restaurant tenant, as well, as most tenants will have pedestrian entrances on 2 separate facades.
    c. Per 28-5.c.1.d, (2) signs of equal permitted size are requested for each project interior retail/restaurant tenant (not fronting public streets), consistent with other project lease space, and permitted sign area needs to be calculated as per 28-5.c.1.a. The intent of this deviation detail request is that each project tenant be permitted distinct tenant signage on each façade where they have a public entrance, at a size consistent with street-fronting tenants.
    d. Per 28-5.c.2.b, Signage style and type, as well as materials and illumination standards shall not adhere to the Sign Design and Review Manual for Novi TC-1 District. Deviation detail no longer required per staff.
    e. 28-5.e.1.a, an increase of permitted projecting sign area to match primary signage area allotted up to 72sf maximum, and 28-5.e.2.a, an increase to 45sf of total area.

    The deviation is essential to accommodate the needs of the international tenants intended to provide their signage in both the characters of their native language along with the English translation of their names. If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible as envisioned by Novi, and as supported by the intent of the City's Master Plan.

19. Chapter 28-10 of the City Code, and per the Sign Design and Review Manual for Novi TC-1 District – Deviation is being requested for removing prohibition of 28-10.a.3 string lights, exposed luminaire strip lights or neon tubes along building edges or other locations, 28-10.a.4 animated signs. These elements, video display screens and/or animated LED lighting systems as part of public entertainment feature opportunity, are crucial to an authentic Asian environmental experience. The deviation is sought to accommodate the needs of the international corporate community to drive their endorsement and future sponsorship opportunities as the project evolves into its future phase(s). If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible. **The largely residential nature of the current project also necessitates reducing the intensity of the lighting, rather than increasing it which this deviation seems to propose. Staff believes the nature of this deviation could undercut the City's ability to enforce fundamental aspects of the Sign Ordinance elsewhere. Any specific details or features deemed crucial to the development perhaps should be left to the city's determination (either Zoning Board of Appeals or City Council) after the buildings are constructed and when actual materials/locations/size and a mock-up of the element can be evaluated. Without those specific details,**

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this deviation cannot be supported. Deviation details, at such time as they are understood and demonstrable, as directed, will be brought to ZBA or City Council as required to maintain the authenticity of the project.

20. **Deviation not objected to by Staff, as emergency vehicle clearances necessary have been met as currently proposed -** Per Section 5.3.2 – Deviation is being requested for drive lane reduction in residential Phase1. See supplemental detail on Civil Sheet C-2.2. This deviation provides for sufficient traffic movement clearances to satisfy resident, service and emergency vehicle needs in the residential portions of the project, while enhancing the Mixed-Use vibrancy of the overall development. Sufficient clearance has been provided to lanes to accommodate emergency vehicle turning movements. If this deviation is not obtained, the residential portions of the project will have an inappropriate area allocated between units in the rear/service/alley space, which is not consistent with the City's Master Plan for developing density in this core district.

21. Per Section 3.27.1.C – **Deviation is removed**. - ~~being requested for Phase 1 internal site buildings A and B that exceed permitted setback limit from Grand River Avenue, and for future proposed Phase 2 buildings with setback greater than 10' to 11 Mile Road. Phase 2 buildings will be accessed via internal drive lanes, similar to proposed residential layout for Phase 1. See P1.1. This deviation provides for the ability for any developer to generate density throughout a project of this land area in classification TC-1. If this deviation is not obtained, the proposed development will not be able to provide the future density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.~~

22. Per Section 3.27.1.i – Deviation is being requested for 11 Mile Road 6' sidewalk width as proposed – see PRO plan. The deviation is essential to provide sufficient landscaping material for the greenbelt screening for the uses proposed, while maintaining the negotiated permitted TC-1 setback limit at the residential uses (11' to porch and 16' to townhouse façade, 15' to townhouse facades without porches), and for connecting the natural features of the project to the adjacent land features. If this deviation is not obtained, creation of a beautiful and appropriately landscaped pedestrian thoroughfare will not be possible as envisioned by Novi, and as supported by the intent of the City's Master Plan.

23. **Deviation Supported by Staff -** Per ordinance 18.283 section 5.5.3.A – Landscape Deviation is being requested for landscaping buffer shown. Proposed TC-1 zoning shall have a 6-8 ft ht berm or wall when adjacent to B3 zoning. Because the buffer area is only 12ft wide and the residents' living areas are on the 2nd & 3rd floors, we are proposing a continuous evergreen hedge to be maintained at 6' ht with densely planted deciduous canopy trees. A wall would serve no additional good purpose and the proposed plantings will provide a more aesthetic screen in keeping with the landscape design. If this deviation is not obtained, the proposed development will not be able to provide the future density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

24. Buffer between commercial/residential parking lot and MF building 9 – **deviation removed** ~~as both uses are permitted uses within proposed TC-1 zoning.~~

25. Per ordinance 18.283 section 5.5.3.A, proposed TC-1 zoning residential uses shall have a 10-15ft ht berm planted to achieve 80% opacity in winter and 90% opacity in summer when adjacent to I-1 zoning. Because the distance from the face of the residential units to the property line is less than 30 ft. and has

the following conditions:

a. The current I-1 use operates during the day and there are no building openings on the east side facing the TC-1 residential to create noise.
b. The I-1 parcel is proposed to be rezoned to TC-1 as a part of this project.
c. The residential unit living areas are on the second and third floors.

We are proposing a continuous evergreen hedge to be placed and maintained at 5' ht with densely planted upright canopy trees. A wall would serve no good purpose and the proposed plantings will provide a more aesthetic screen in keeping with the landscape design. If this deviation is not obtained, the proposed development will not be able to provide the residential unit quantity necessary for project feasibility and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

26. Per ordinance 18.283 section 5.5.3.C.ii.B – Parking Area Landscape Requirements – A deviation is being requested for the landscaped area endcap island area requirements of Section 5.3.12.; *"In order to delineate on-site circulation, improve sight distance at the intersection of parking aisles, ring roads, and private roads, protect the vehicle at the end of a parking bay, and define the geometry of internal intersections, end islands (landscaped with raised curb) shall be required at the end of all parking bays that abut traffic circulation aisles in off-street parking lots."*

a. The required square footage of interior parking lot landscaping has been provided,
b. The required number of interior parking lot canopy trees has been provided,
c. The required end-cap islands have been provided in all appropriate locations,
d. The required end-cap island minimum areas have not been provided in all locations.

We are requesting a deviation from providing additional end-cap landscape area as in order to do so, we will have to reduce the large areas devoted to landscaping the west detention pond perimeter. The Town Center Area Study recommends the pond to be a focal point and that it could be used to host community events which we are providing. We believe this large and contiguous landscaped amenity provides a much greater community benefit. If this deviation is not obtained, the proposed development will be required to provide even larger overall parking lot areas along Grand River Avenue, which is not consistent with the City's Master Plan.

27. A: Per ordinance 18.283 section 5.5.3.D – Building Foundation Requirements - A Landscape **Deviation is removed.** for foundation plantings around all Phase 1 Commercial buildings. Plantings have been proposed along the façade of all phase 1 commercial buildings in beds measuring at least 4' wide. These plantings, combined with adjacent decorative paving areas, extend across at least 75% of all commercial building perimeters. With regard to the square footage requirement, we are requesting a waiver per Ordinance 5.5.3.D.ii.g; *"With respect to projects in the TC and TC-1 districts, the Planning Commission may waive the 8 foot width calculation requirements if significant additional planting and/or decorative paving or amenities are added adjacent to the building."*

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B: Per ordinance 18.283 section 5.5.3.F – Subdivision Planting Requirements – A Landscape **Deviation is removed.** for foundation plantings in front of the building garages and interior street tree requirements. We believe the area in front of the garages should be excluded similarly as driveways are excluded. In order to provide building foundation plantings adjacent to the garages the residential layout would need to change to a more suburban layout which would undermine achieving the density conducive of the TC-1 zoning. The proposed landscape meets all street tree requirements (Sec 5.5.3.F.c) and we believe the landscaping density of this compact TC-1 development far exceeds the typical amount of landscaping for multifamily developments. If this deviation is not obtained, the proposed development will not be able to provide the density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

28. Ecco Tool will remain as a part of this overall development, though its remaining parcel will be rezoned to TC-1 as a part of this redevelopment initiative. Ecco Tool will then be a non-conforming use until their operations cease. **We require a deviation for this non-conforming use.** The existing parcel occupant will be provided their own separate legal parcel as a division of their existing landholdings within the tracts. This deviation provides for the relocation of an existing Novi retailer, consistent with the City's Master Plan, and allows for the creation of an environment more specifically tuned to the thematic Asian Village concept development that is being proposed. If this deviation is not obtained, the proposed development will not be able to provide the amenities and density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

Additional Deviations:

1. **Setbacks** (Sec. 3.27.1.F): Unit boundaries for the proposed Site Condominium are now proposed, shown on sheet C-2.8. As these will be considered legal "parcel" lines, deviations may be required for building and parking setbacks. **The applicant shall provide measurements from all unit boundaries for all parking and building setbacks in order to determine setback deviations using the table below for guidance.**

Commercial Setbacks			
	Required		**Proposed**
Unit 1: Building	Front (south): Side (east) : Side (west) : Rear (north):	15 ft min. 50 ft min. 10 ft min. 10 ft min.	Front (south): **>15'** Side (east) : **10' – deviation req.** Side (west) : **>10'** Rear (north): **4' (adj to GCE)**
Unit 1: Parking	Front (south): Side (east) : Side (west) : Rear (north):	20 ft from ROW 10 ft 10 ft 10 ft	Front (south): **20' from ROW** Side (east) : **10'** Side (west) : **>10'** Rear (north): **0' (adj to GCE)**

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Unit 2: Building	Front (south): Side (east) : Side (west) : Rear (north):	15 ft min. 10 ft min. 10 ft min. 10 ft min.	Front (south): **15'** Side (east) : **>10'** Side (west) : **0' (adj to GCE)** Rear (north): **0' (adj to GCE)**
Unit 2: Parking	Front (south): Side (east) : Side (west) : Rear (north):	20 ft from ROW 10 ft 10 ft 10 ft	Front (south): **>20' from ROW** Side (east) : **>10'** Side (west) : **5' – deviation req.** Rear (north): **0' (adj to GCE)**
Unit 5: Parking	Front (north): Side (east) : Side (west) : Rear (south):	20 ft from ROW 10 ft min 10 ft min 10 ft min	Front (north): **20' from ROW** Side (east) : **19.7'** Side (west) : **>20'** Rear (south): **>10' (adj to GCE)**

Residential Setbacks			
	Required		**Proposed**
Unit 3: Building	Front (north): Side (east) : Side (west) : Rear (south):	15 ft.min. 15 ft min. 15 ft min. 15 ft min.	Front (north): **16' from ROW, 11' to balc.** Side (east) : **39'** Side (west) : **22.1' to bldg, 21.3' to balc.** Rear (south): **38.9'**
Unit 3: Parking	Front (north): Side (east) : Side (west) : Rear (south):	10 ft from ROW 5 ft 5 ft 5 ft	Front (north): **6.1' from ROW – dev. req.** Side (east) : **>5'** Side (west) : **0' (adj to GCE)** Rear (south): **12.1'**
Unit 4: Building	Front (north): Side (east) : Side (west) : Rear (south):	15 ft. min. 15 ft min. 15 ft min. 15 ft min.	Front (north): **15' from ROW** Side (east) : **5' (adj to GCE)** Side (west) : **51.5'** Rear (south): **5' (adj to GCE)**
Unit 4: Parking	Front (north): Side (east) : Side (west) : Rear (south):	10 ft from ROW 5 ft 5 ft 5 ft	Front (north): **>18' from ROW** Side (east) : **>5'** Side (west) : **6.5'** Rear (south): **>5'**

2. **Phase 1B Building Setbacks (Sec. 4.82.2.e): Setbacks for residential buildings in the TC-1 district are required to be 15 feet. There is a provision that allows unenclosed porches to extend 4 feet into the required setback – however it appears that the structure extending into the setback is not an unenclosed porch, but a second floor balcony. This will be an additional deviation to allow an 11 foot setback where 15 feet is required.** An additional deviation is requested for this condition, including the balcony above the porch roof as shown on the corresponding elevations.

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3. **Engineering deviation for lack of 25' vegetated buffer around the storm water management pond in the residential use area.** ***Supported by staff.***
4. **Landscaping deviation from Section 5.5.3.C for insufficient parking lot perimeter trees provided.** ***Not supported by staff.***
5. **Landscaping deviation from Section 5.5.3.B.ii and iii. for lack of screening wall or berm for parking areas along Grand River.** ***Supported by staff.***
6. **Landscaping deviation from Section 5.5.3.B.ii and iii. for lack of screening wall or berm for parking areas along 11 Mile Road.** ***Not supported by staff***
7. **Landscaping deviation from Section 5.5.3.D. for insufficient building foundation landscaping.** ***Not supported by staff.***
8. **Landscaping deviation from Section5.5.3.B.ii and iii for not providing buffering berms for multi-family housing between residential buildings and the B-3 property to the south.** ***Supported by staff.***
9. **Landscaping deviation from Section 5.5.3.B.ii and iii. for insufficient greenbelt width and berm between parking lot and 11 Mile Road (Phase 1B).** ***Supported by staff.***
10. **Landscaping deviation from Section 5.5.3.F.ii. for use of subcanopy trees for 25% of multifamily unit landscaping trees.** ***Supported by staff (29% is not supported by staff).***

OTHER RESPONSES TO JAN 8, 2020 REVIEW

The City's emergency apparatus must be able to fully access the entire site, as well as delivery vehicles accessing the loading areas. Provide a plan showing truck turning movements are possible throughout the site (including all loading/service areas, and 50' outside, 30' inside turning radius in the residential portion). Removal of some units may be necessary to provide the required dimensions in the interest of public safety. ***The Fire Review continues to indicate issues with turning radii in the residential portion of Phase 1B. These issues are not considered eligible for deviations as they are health and safety concerns. Widening the drive lanes to the appropriate ordinance standards could help resolve this problem.***

Please see updates from our Civil Engineer, based on Fire Marshall meeting 12.19.2019. Plans have been adjusted to eliminate potential conflict regarding balcony locations at Phase1B resi building #9 as suggested by Fire Review.

###

The vinyl siding proposed for residential townhouse buildings is not a material permitted by the Façade Ordinance. ***The applicant must revise the material to Cement Fiber siding in order to gain support for the Section 9 façade waiver required by the overage of siding material on the residential buildings.*** *See Façade letter for more details. (Phase 1B, Phase 2 Baseline, and Phase 3)*

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Sakura Novi is exploring options other than vinyl siding for compliance with remaining Section 9 Waiver requirements. Non-compliant vinyl siding will not be used on the residential buildings. Fiber-cement siding materials are being specified.

###

> ***INTENT OF THE TC-1 DISTRICT:*** *As stated in Sec. 3.1.26.A., 'The TC-1, Town Center district is designed and intended to promote the development of a pedestrian accessible, commercial service district in which a variety of retail, commercial, office, civic and residential uses are permitted'. The proposed uses (with the exception of Ecco Tool) are all principal permitted uses which align with the intent of TC-1, Town Center-1 district.* ***However the balance of uses developed will impact whether the area is seen as a mixed-use commercial service district with a residential component, or a residential neighborhood with a restaurant and retail component.***

Sakura Novi, an approximately 16-acre development abutting Grand River Avenue, incorporates a 25,000 sf Japanese Food Hall / Grocery, a collection of best-in-class Asian restaurants, and a 2 acre pond with gardens. This project has enough mass to stand on its own. The integrated residential town-home community will make this regional point of interest into a functioning 24 / 7 place, and this will do nothing but add strength to the integrated concept.

###

> ***OFF-STREET PARKING LOTS FOR SEPARATE USES:*** *'The TC-1 Town Center district is further designed and intended to discourage the development of separate off-street parking facilities for each individual use, and to encourage the development of off-street parking facilities designed to accommodate the needs of several individual uses'. The proposed concept plan depicts the parking lots shared among the uses throughout the site, and the applicant has provided a shared parking study.* ***Staff supports the opportunity to reduce parking through a shared parking arrangement, supported by the shared parking study. This strategy allows additional space for public gathering or usable open space, and to reduce deviations.***

The success of the Food Hall / Grocery Market and the restaurant collection are the most important elements to the success of Sakura Novi. We have parked Sakura Novi within the constraints of our parking study to enable this success. There is, as a result, no more space in the commercial site for public gathering or usable open space. We believe the pond, the gardens and the Village of Rochester Hills-caliber land-scaping will be points of pride in the City of Novi for years to come.

###

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PUBLIC BENEFITS: *The list of public benefits provided by the applicant is reviewed in detail later in this review. Several of the benefits listed are requirements under the Zoning Ordinance, and would be expected with any development in the city, or could be achieved through a traditional rezoning process. Others require additional information in order to be evaluated.* ***The applicant should continue to refine the list of benefits. Off-site benefits can also be considered.***

We will continue to work on our list of Public Benefits throughout this process and in response to the process. As per the response letter above, as an outcome of the Master Plan and Rezoning Committee meeting on November 13th, we are ~~interested~~ anticipating:

- Providing a GRA sidewalk extension across the adjacent Novi Town Center parcel ROW to meet corner paving plaza treatment at GRA/TCD intersection,
- Providing continuous ROW dedications along 11 Mile Road for property to be controlled by Sakura Novi, LLC, (acquired Ecco parcel limit (11MR): .165ac),
- Potentially modifying the south side of 11 Mile Road to provide additional public parking within the ROW,
- Developer wishes to grant an easement to the City of Novi in the southeast corner of the Sakura Novi site, abutting Grand River Avenue, for the City to fund/provide a "Welcome to Novi" sign, marker obelisk or other artwork and other public amenities signifying this as a gateway to Novi's Town Center. The 2016 Master Plan Update indicates a desire that the Anglin parcel be a gateway to Novi's Town Center. This signage is an opportunity to create a clear statement to this effect, and expand on the original Town Center Area Study's desire to communicate to drivers exclusively, by designing to communicate to all Novi visitors, becoming a pedestrian amenity as well. See C-2.1 for proposed City signage area,
- Completing the PRO rezoning process required for the land purchase and subsequent development of this proposed neighborhood-scaled commercial service and residential development project will update the suggested parcel zoning to be in line with the intent of the 2016 Master Plan,
- Establishing a partnership with Novi Public Library to provide useful supplemental facilities within the Sakura Novi project for their collections/operations,
- Establishing a Community Room function within the Market space available for free use for public gathering and meeting,

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- ~~The Sakura Novi project proposes to facilitate the mitigation for the necessary wetland disturbance for the City of Novi's future 60' right-of-way for the Crescent Boulevard (aka Fountain Park Drive) extension between Grand River Avenue and 11 Mile Road, as shown in the City's Master Plan. In conjunction with a portion of the wetland mitigation efforts for the Sakura Novi project, we will facilitate the permitting and construction of wetlands sufficient to accommodate the City's future construction of the roadway between Grand River and 11 Mile Road within the existing affected city wetland area,~~

- ~~Seeking the additional ordinance deviations required for the accessory structure heretofore referred to as the 'Tea House' to be considered for the retained water feature on the Anglin land parcel.~~ It is expected that the deviations/waivers required for materials necessary to construct this element will not be entertained or granted within the proposed zoning, thusly this public benefit will no longer be pursued.

###

FUTURE SITE PLAN REVIEWS: *The proposed development is an ambitious project that will require a carefully laid out implementation plan. Until all construction is completed, the impacts of construction traffic to the surrounding areas/businesses are hard to contemplate. The narrative from the applicant indicates a tentative Grand Opening of Phase 1 approximately 2 years from purchase of the property.* ***The applicant should consider adding a tentative completion date for each phase as a condition for the PRO agreement.***

We are working on an updated time-line as part of the recently initiated dialogue on the PRO Agreement and conditions to the agreement. Our decision to focus solely on a revised Baseline Plan will help facilitate this process.

###

Since the development will be tied to PRO plan, when Phase 2 and Phase 3 site plans are submitted for review, they are expected to conform to the code requirements for all items that are not regulated by the approved deviations and conditions within the PRO Agreement. For these reasons, it ***is vital for staff to have a clear understanding of what is being proposed at this time in order to provide clarity for future reviews. The applicant should provide the intent to address possible or anticipated future deviations if they are not requested at this time.***

With the revised Baseline Plan, we have now provided necessary, comprehensive deviations for both project phases. Further deviations as outlined by Staff have been included.

###

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For Phase 3, the rezoning to TC-1 is more difficult to justify since it will be surrounded on all sides by I-1 Light Industrial zoning and not connected in a meaningful way to the mixed use district of the larger Sakura Way. In essence this portion could be considered spot zoning as it is not consistent with the Master Plan, would result in incompatible land uses, and would also create hardships on future development of the surrounding parcels by limiting the by-right uses that could be developed. The intent of the TC-1 district does not match what is being proposed for this small area. Further, it is staff's understanding that the Purchase Agreement made no mention of adding this property to the proposed PRO Concept Plan and Agreement. Finally, the lack of contiguity with the other parcels may present an issue under the state zoning laws.

We believe that the residential proposed to be included as Phase3 is a crucial component of the critical mass envisioned for the ultimate success and significance of Sakura Novi's brand. However, due to Staff's apparent concerns that this land is not appropriate for inclusion in Sakura Novi at this time, the Phase3 Residential Development land will be removed for the time being from this TC-1 PRO Submittal. Ultimately, we hope to work with City representatives to include this portion of land into the Sakura Novi development as a Phase 3.

###

In addition, the applicant shall ensure that all proposed woodland replacement trees will be guaranteed to be preserved as planted within a conservation easement or landscape easement granted to the City. Additional comments and concerns are detailed in woodland review letter.

All proposed on-site woodland replacement trees have been grouped to be easily designated within landscape or conservation easements granted to the city. It should be noted that the shape of the Western easement, which encompasses the pond water feature and a stretch of the site's western boundary, is contingent upon phase 2 final structure locations and limit of work. See revised Landscape Drawings detailing the Phase 2 baseline scenario.

###

The applicant's mitigation options include certain strategies that are not currently supported by the City's wetland ordinance. Staff believes further details need to be addressed as part of the PRO Concept plan so as to include them in the PRO Agreement as conditions for approval. Additional comments and concerns are detailed in wetland review letter.

Please see the update from our Wetland Consultant. Additional wetland information and a proposed course of action are being provided concurrently as a part of this submittal response revision.

###

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Protect and maintain the City's woodlands, wetlands, water features and open space. ***The proposed concept plan will impact regulated wetlands and woodlands. The applicant indicates they will propose wetland mitigation and protecting woodland replacement trees by way of a conservation easement. However further details are needed to evaluate the mitigation plan.***

Please see updates from our Woodland consultant and our Wetland Consultant. Additional wetland information and a proposed course of action are being provided concurrently as a part of this submittal response revision. Minor discrepancies in preliminary Woodland counts will be remedied as appropriate in subsequent updates.

###

Ensure the provision of neighborhood open space within residential developments. ***The Phase 1B townhouse portion provides the Ordinance required open space. However the applicant indicates a deviation from open space requirements are requested for Phase 2 of the project, with no indication of any open space being provided.***

Phase 2 Baseline Plan also meets the residential open space requirements – see updated Landscape Drawings.

###

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. Development and use of the property shall be subject to the more restrictive requirements shown 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. ***The applicant should submit a list of conditions that they are seeking to include with the PRO agreement. The applicant's narrative does not specifically list any such PRO conditions at this time.***

For the sake of efficiency, we are now focusing more intently on conditions to the PRO Agreement as we gain clarity from the City of Novi. For example, the process has helped us determine to focus on our revised Baseline Plan for Phase 2. Such a decision has a large impact on prospective conditions.

Our development team, our attorney, the City Manager, and the City's Attorney have now started meeting to detail conditions and commence work on the PRO Agreement.

Lest anyone forget, maintaining the unregulated central water feature as a public amenity is the most restrictive component of the entire development, reducing our available development area 2+ acres. In fact, we are confident that the Anglin parcel will never be developed by itself given this restriction required by the City in the 2016 Master Plan Update, particularly in light of the very poor soils

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surrounding the water feature that impose extraordinary costs on site-work in these locations. Our discipline for 3.5 years has been to preserve the vision for Sakura Novi that we share with the City of Novi, while managing the facts on the ground so as to yield a project that can be financed and, therefore, achieved.

Developer proposes the following PRO Amendment Conditions:

1. Developer shall develop the Land in accordance with all applicable laws, ordinances, and regulations, including all applicable setback requirements of the Zoning Ordinance under the Proposed Classification, except as expressly authorized herein, and all storm water and soil erosion requirements and measures throughout the site during the design and construction phases of the Development, and during the subsequent use of the Land as contemplated in this Agreement.

2. The grass-land pads shown on the landscape plans shall be properly maintained as grass-land pads, utilizing a native meadow planting mix, until such time that area is needed for Phase 2 uses to be developed.

3. The maximum number of dwellings to be constructed in Phase 1B shall be 68.

4. The maximum number of dwelling units to be constructed in Phase 2A shall be 50.

5. The maximum number of dwelling units to be constructed in total for the Sakura Novi project seeking rezoning under this PRO Agreement shall not exceed 118. This resultant ratio is approximately 8 units/acre. A PRO Amendment will be sought if additional residential units/buildings are sought for future Phase modifications.

6. Phase 1 non-residential uses shall be limited to a 30,000 sf market; and restaurants and retail space totaling approximately 25,000 sf as shown on the PRO Concept Plan.

7. Phase 2 uses shall be no greater than 4,500 square feet of retail/restaurant use, unless a PRO Amendment is sought.

8. Changes to the mix of uses of +/-10% shall be permitted to be approved administratively as long as additional deviations are not required and parking requirements can be met.

9. Woodland tree removals during Phase 1 and Phase 2 shall be approximately 133 trees, which shall require 256 woodland replacement credits for Phase 1, and an additional 13 credits for Phase 2. Developer will plant a minimum of 17 credits as replacements on site through the planting of canopy trees, evergreen trees and native groundcover seeding. Native ground cover

seeding shall not exceed 5% of the replacement credits planted on site. All woodland replacement credits planted on-site shall be permanently protected via conservation easement or landscape easement. Any credits not planted on site will require a payment of $400 per credit into the Novi Tree Fund.

10. Any additional regulated woodland tree removals shall meet the requirements of the City of Novi Woodland Protection Ordinance, and may be granted administratively up to 10 trees with proper justification. If additional regulated trees proposed for removal exceeds 10, Planning Commission approval must be granted.

11. Proposed parking is being provided as per the Parking Study recommendations, which has been reviewed and approved by the City's traffic consultant. Future phase parking requirements will also be a function of shared parking analysis findings, if supported by City's review and approval.

12. Tentative completion date for Phase 1A shall be calendar year 2022.

13. Impacts to wetland and wetland buffer areas have been indicated and quantified and submitted as part of the PRO package. Specific remedies to be included in the PRO Agreement conditions. Specific remedies will be identified.

14. Open Space standards~~, evaluated over the entire 16.03ac PRO rezoning parcel assembly,~~ have been achieved and will be exceeded as a part of Phase1 site work. A City mandate for this property has been to maintain the existing brownfield retention area on the Anglin parcel as a site amenity. This existing natural feature and setback exceeds 2.45ac. of area - 15.3% of the overall subject property. 2.11ac of water feature and landscape perimeter will be maintained after remediation and necessary reconfiguration. Additional Open Space, totaling 20.9% of the subject parcels' area, has been committed in Phase1 to exceed the ordinance requirement of 15% for the overall rezoning parcels.

15. To protect future residents of the Phase 1B units from excessive noise impacts from the existing Ecco Tool business, the developer shall provide a Noise Impact Statement at the time of Preliminary Site Plan submittal to determine if ordinance performance standards will be exceeded. Provide any necessary mitigation measures if required.

16. The adjacent non-conforming Light Industrial use owned by Ecco Tool Co is to be addressed in the PRO Agreement conditions including:
    a. Access for delivery trucks on the retained parcel; which will require cross access rights;
    b. Twelve parking spaces on the retained parcel or access to parking spaces on adjacent areas to make up for any shortfall.

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###

PUBLIC INTEREST:

1.Developer offers to dedicate the Right-of-Way (ROW), and future ROW, along 11 Mile and Grand River. ***After reviewing the proposed purchase agreement between the City and the developer, Staff discovered a significant portion of the Right-of-Way is not being included in the property for sale. The applicant shall quantify the amount of additional property to be dedicated to the City/Oakland County for the purposes of Right-of-Way. This could be considered a public benefit, depending on how much property is identified.***

Providing continuous ROW dedications along 11 Mile Road for property to be controlled by Sakura Novi, LLC, (acquired Ecco parcel limit (11MR): .165ac).

###

2. Developer offers an easement at the southeast corner of the proposed development for the City to use as for a Welcome sign. ***If the easement could also be open to other public purposes, such as art, or another amenity for the public this easement could be considered as a public benefit.***

The intent is to be collaborative about this amenity as a public benefit.

###

5. Developer indicates that the proposed development complements the 2016 Master Plan vision for a unique, well-designed, mixed-use facility. ***Staff agrees, but this seems to be the same as described in item 3 above, and this could also be done using a simple rezoning.***

First, item 3 describes the updating of the zoning itself. Item 5 describes the prospective completion of the envisioned plan.

Second, we are driven by the task of gathering the collection of uses that we, through 3.5 years of collaboration with the City of Novi, are seeking to put together. We are neutral as to whether we use a simple rezoning or a PRO.

###

7. Sakura Novi, as a unique development would reinforce the vision of the 2014 Town Center Area Study, namely to create a dynamic, attractive city core that provides residents and visitors with unique opportunities to participate in active community life, and meet their needs for goods, services, housing and entertainment. ***Staff believes that the proposal may assist the City in meeting the vision of the 2014 Town Center Study, provided that the plan provides for the***

Robert B. Aikens
& ASSOCIATES, L.L.C.

elements that are indicated in the Phase 2 Maximum Density Scenario. The Town Center Area Study did not indicate residential uses for this location.

As mentioned, our intent is to proceed with Baseline Plan Phase 2. This eliminates a great deal of ambiguity.

Sakura Novi, an 8-acre development abutting Grand River Avenue, incorporates a 25,000 sf Japanese Food Hall / Grocery Market, a collection of best-in-class Asian restaurants, and a 2-acre pond with gardens. Sakura Novi has enough mass to stand on its own. The integrated residential town-home community will make this regional point of interest into a functioning 24 / 7 place, and this will do nothing but add strength to the integrated concept.

The 2014 Town Center Area Study indicated the Anglin parcel should be re-zoned to TC classification to better accommodate viable uses perceived for that site. TC zoning includes residential uses. Therefore, the 2014 Town Center Area Study recommends residential uses on Anglin parcel, by right. TCGateway also includes residential as a development option.

###

15. The signage package, although it does not meet the ordinance standards, is meant to underscore that Sakura Novi is a cohesive, singular concept, and a regional destination to help the development team assemble an international blend of new and fresh merchant offerings. ***The deviations requested for the signage package are significant. Establishing this development as a culturally diverse destination is warranted, and signage could be a way to distinguish this area of the community from other nearby developments. However, staff does not have enough details of the signage proposed throughout the development to determine whether this would be an enhancement to***

Final results will be a function of the dynamic business uses we sign to be Tenants at Sakura Novi. We are seeking deviations that give us the leeway to work hand-in-hand with Tenant's to put them in the best possible light. This issue will continue to be pursued through the ZBA and City Council.

ATWELL

CONSULTING. ENGINEERING. CONSTRUCTION.

Charles Boulard
City of Novi - Director
45175 W. 10 Mile Rd
Novi, MI 48375

RE: Sakura Way Wetland Mitigation Review
Atwell Project Number: **18003457**

Dear Mr. Boulard,

The proposed Sakura Novi Project is required to mitigate for 1.5 acres of Novi regulated wetland impacts and 0.16 acres of open water impacts associated with the proposed project. These impacts require 2.41 acres of mitigation to offset the loss of wetlands/open water at Novi approved mitigation ratios.

Section 12-176 Mitigation of the City of Novi code of ordinances details the requirements for providing wetland mitigation for impacts to Novi regulated wetland features. This section of the ordinance states in part:

Mitigation shall be provided onsite where practical and beneficial to the wetland resources. If onsite mitigation is not practical and beneficial, mitigation in the immediate vicinity, within the same watershed, may be considered. Mitigation at other locations within the city will only be considered when the above options are impractical.

Atwell, on behalf of Sakura Novi, has been exploring options for providing the required wetland mitigation for the project within the city of Novi limits while meeting the requirement for being *practical and beneficial to the wetland resources*. As the project has progressed, a number of options have been explored including preservation of existing wetlands, establishing a city mitigation fund, creation of wetland on privately owned land, creation of wetlands on city of Novi owned land, but all of these options were abandoned due to limitations associated with each as detailed below.

During the initial PRO review, the Applicant proposed two different options for mitigation:

1. Utilize parcel 22-23-226-021 (potential parcel for purchase) for 0.9 acres of wetland, parcel 22-23-226-042 (City owned parcel east of Sakura Novi) for 0.5 acres of mitigation, and parcel 22-17-101-006 (Hadley Towing Parcel) through the preservation of wetlands to offset the remaining required mitigation. The purpose of wetland preservation is to place a conservation easement on existing wetlands that do not have protection in perpetuity and could potentially be impacted through permits at a later date. Preservation has been utilized in the past by the State of Michigan as an appropriate form of mitigation as wetlands that have existed on the landscape for several years that could potentially be impacted, through legal channels, generally provide existing stable high-quality wetland that mitigation sites will generally take years to achieve, creating a temporal loss.

2. Create a wetland mitigation fund for the City of Novi and include funds sufficient to cover the 0.77 acres of mitigation needed to satisfy the non-EGLE regulated impacts, similar to the existing Novi woodland mitigation fund.

In the response letter received by Sakura Novi on November 4th, 2019, the following responses for each option were received:

1. “It should be noted that the City’s Wetland Ordinance does not specifically support the preservation of existing areas for mitigation.” Additionally, the City relayed to Atwell via telephone on 12/05/2019 that the City would not allow preservation to be used as a mitigation strategy.
2. “ECT recommends that the details of such a wetland mitigation fund be determined prior to approving this option as an acceptable mitigation scenario.” However, it was determined to move away from this strategy for logistic reasons in an attempt to satisfy the existing Novi ordinance.

Sakura Novi submitted a response to the City of Novi on 12/04/2019 stating:
“The Applicant is currently working with the City of Novi and ECT to determine potential mitigation options for the Project. The Applicant is attempting to mitigate for all wetland impacts within the City of Novi; however, it may not be practical due to available land within the City. Recent discussions have included pursuing the potential to mitigate outside of the City of Novi. Atwell is currently reviewing other municipality ordinances to provide example language to the City of Novi that allows mitigation outside of the associated municipality.”

Concurrently with this review, Sakura Novi also developed a Sakura Novi Mitigation Conceptual Plan that proposed mitigating for the proposed Wetland Impacts on parcels 50-22-13-451-002 (DPS property) and 50-22-23-226-042 (city- owned parcel east of Sakura Novi). This plan was submitted on 12/20/2019 for City review. In the most recent letter from the City of Novi, it states that the use of the DPS property will not be an option considered for mitigation and that the city-owned parcel to the east of Sakura Novi has yet to be determined viable.

Sakura Novi continues to exhaust its efforts in finding a workable solution that complies with the City of Novi wetland ordinance, primarily the component of staying within the City limits. Sakura Novi has reviewed several parcels throughout the entire process, some of which are City Owned in which a collaboration with the City would be a viable option to offset the loss from the Sakura Nova Development (parcels 50-22-13-451-002 [DPS property] and 50-22-23-226-042 [city- owned parcel east of Sakura Novi]), some have been privately owned (22-17-101-006 [Hadley towing parcel]). Additionally, the City relayed to Atwell during the 12/05/2019 phone call that the City is also limited for locations to mitigate for their own impacts as well, which shows the extremely limited space where mitigation may even be constructed within the City limits.

If the Applicant is able to locate sufficient land within the City of Novi to construct the required mitigation, it is likely the be extremely cost prohibitive. Review of comparable land within the City of Novi over the last 3 years indicates the price per acre is approximately $210,000, indicating 2.41 acres would cost approximately $506,000 to purchase. In addition to the purchase price, it will cost approximately $80,000/ acre to build the wetlands, increasing the total mitigation price in $699,000. Therefore, wetland mitigation within the City of Novi is not a practical and feasible option for the Project.

The Sakura Novi Alternatives Analysis provided to the city for review confirms that the wetland impacts proposed for the preferred site plan are necessary to realize a viable project and cannot be further reduced. Based on the unique requirements of the proposed project and the constraints of the existing site, providing the required mitigation on site is not an option.

Therefore, Sakura Novi explored the above alternatives for providing the required wetland mitigation off site but within the city of Novi. However, although many of the options explored could be considered beneficial to the natural resources of the city, none of them could be considered practical based on availability of sufficient land for mitigation that would not be cost prohibitive for maintaining a viable project.

Consequently, it is Atwell’s professional opinion that providing the required wetland mitigation through purchase of credits from an EGLE approved wetland mitigation bank serving the project service area is

the only practical solution. A wetland mitigation bank meets Novi's beneficial requirement in that the bank has been pre- approved for use for EGLE permitted projects within the bank service area. Wetland mitigation banks provide large contiguous blocks of wetland mitigation that are more sustainable and viable long term than a number of smaller isolated wetland mitigation sites that are more susceptible to degradation in the long term. The bank sponsor is responsible for maintaining the wetlands within the bank in perpetuity through establishment of a conservation easement and ongoing monitoring and maintenance of the site. Replacing the lost functions and values of the wetlands impacted for the proposed project within the regional service area of the bank benefits Novi on a regional scale.

In addition, providing mitigation through an EGLE approved wetland mitigation bank is the only practical solution based on cost to the project. Based on current excessive cost of land in Novi, the cost of constructing the required wetland mitigation within the city limits would add an additional approximately $434,000 to the cost of the Sakura Novi project over securing credits from an available wetland mitigation bank. This additional cost results in an overall project that is no longer economically feasible.

In conclusion, providing on or off site wetland mitigation within the city of Novi limits is cost prohibitive and therefore not practical, while obtaining mitigation credits from an EGLE approved mitigation bank provides an economically acceptable solution that will maintain the economic viability of the Sakura Novi project while also meeting the City's requirement for a practical and beneficial solution. Therefore, Atwell believes that obtaining mitigation credits from an approved wetland mitigation bank is the only solution that meets the requirements of the project and the city.

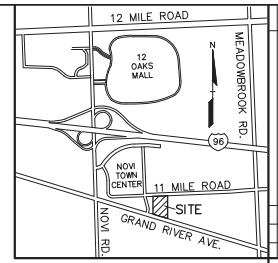
Respectfully,
ATWELL, LLC



Don Berninger
Environmental – Team Leader

cc: Barb McBeth, City of Novi
Pete Hill, ECT
Scott Aikens
Bruce Yeager
Tim Loughrin





LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING

- ELEC., PHONE OR CABLE TV OH. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
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- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
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- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT
- GRAVEL GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

•HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows:
Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS	DATE
1. PER CITY COMMENTS	3.20.19
2. PER CITY COMMENTS	4.30.19
3. PER CITY COMMENTS	5.20.19

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
No. 6201060141
REGISTERED PROFESSIONAL ENGINEER

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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

TOPOGRAPHIC SURVEY - WEST SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	CK'S	SUR.	GWC	P.M.	JPB
GMB		JKS				

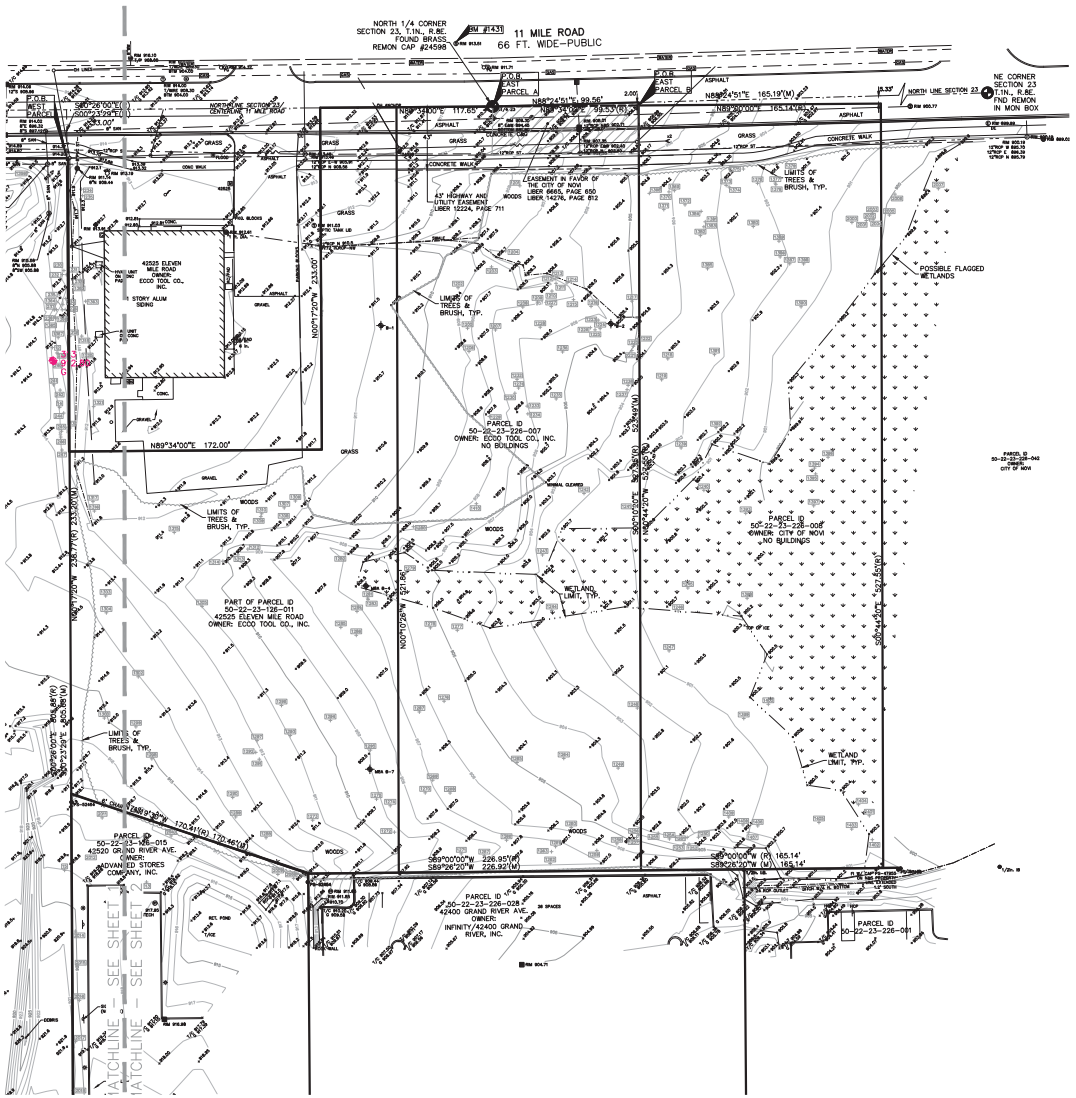
P:\PROJECTS\2018\2018-033 WEST NOVI-JMP\DWG\SITE PLANS\C-1.1TOPO-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-1.1

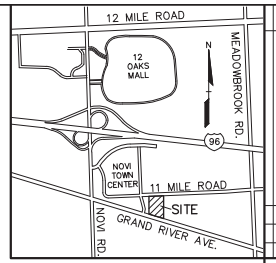


GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

N



LOCATION MAP – NOT TO SCALE

LEGEND

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- UNIDENTIFIED STRUCTURE
- 816.06 SPOT ELEVATION
- 670 CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
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REFERENCE DRAWINGS

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FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows: Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right–of–way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
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REVISIONS	DATE
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STATE OF MICHIGAN
GREGORY BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

TOPOGRAPHIC SURVEY - EAST SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

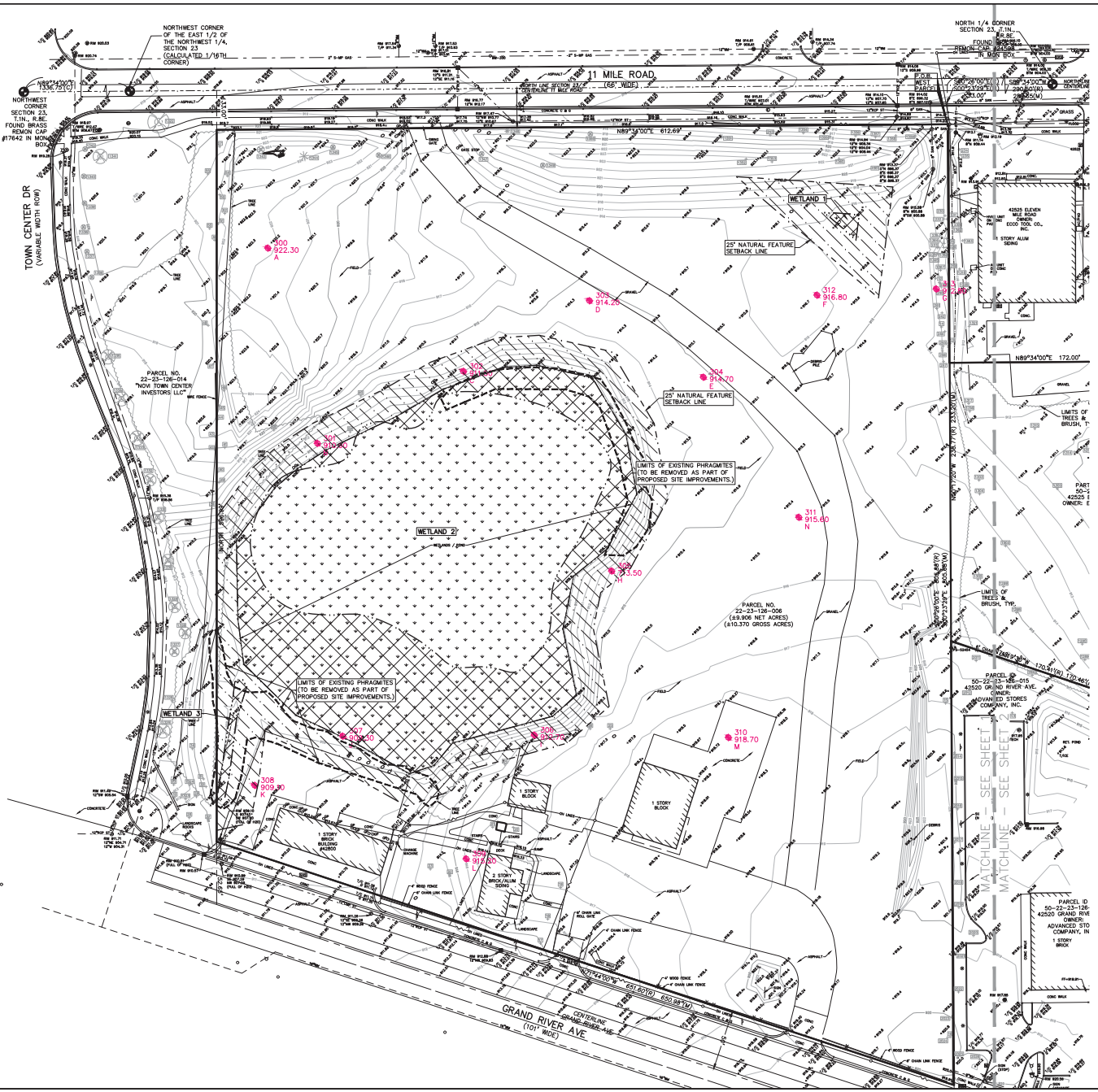
S:\PROJECTS\2018\2018-033 XREF\SITE PLANS\C-1.2TOPO-18033.dwg

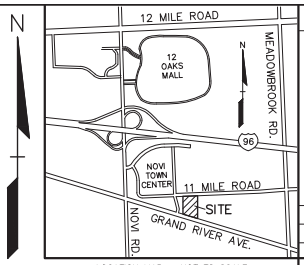
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-1.2





LOCATION MAP – NOT TO SCALE

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SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

FLOODPLAIN:

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BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGEND:

NATURAL FEATURES SETBACK IMPACT

WETLAND IMPACT

WETLAND NOTE:

NATURAL FEATURES SETBACK IMPACT:	AREA
WETLAND 1:	0.134 AC
WETLAND 2 & 3:	0.720 AC
TOTAL:	0.854 AC
WETLAND IMPACT:	**AREA**
WETLAND 1:	0.000 AC
WETLAND 2:	1.809 AC
WETLAND 3:	0.016 AC
TOTAL:	01.832 Ac

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS	DATE
1. PER CITY COMMENTS	3-20-19
2. PER CITY COMMENTS	4-30-19
3. PER CITY COMMENTS	5-24-19

STATE OF MICHIGAN – GREGORY BONO – ENGINEER – REGISTERED PROFESSIONAL ENGINEER

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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

NATURAL FEATURES IMPACT PLAN - WEST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	JKS	SUR.	GWC	P.M.	JPB

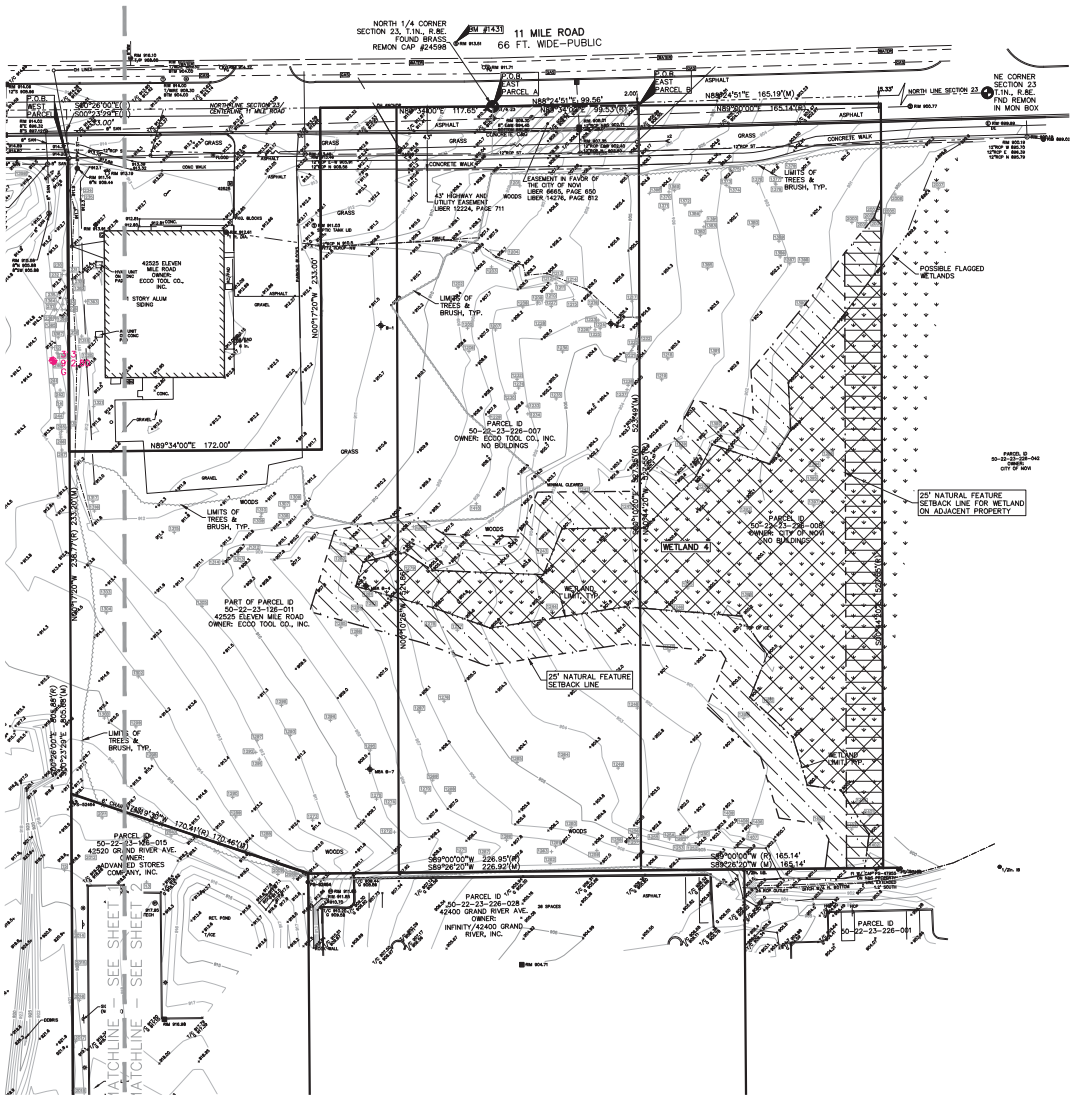
S:\PROJECTS\2018\2018-033 AIKEN RVW-JPB\DWG\SITE PLANS\X-MAP TEXT-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-1.3

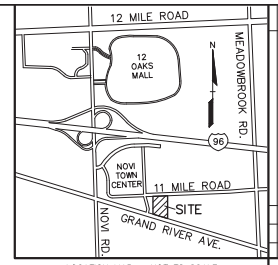


GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

N



LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND	GRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
	M MEASURED
	C CALCULATED

EXISTING

-OH-ELEC-W-O-	ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE
-UG-CATV-	UNDERGROUND CABLE TV, CATV PEDESTAL
-UG-PHONE-T-	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
-UG-ELEC-E-	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
	GAS MAIN, VALVE & GAS LINE MARKER
	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
	SANITARY SEWER, CLEANOUT & MANHOLE
	STORM SEWER, CLEANOUT & MANHOLE
	COMBINED SEWER & MANHOLE
	SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
	POST INDICATOR VALVE
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
	UNIDENTIFIED STRUCTURE
816.06	SPOT ELEVATION
870	CONTOUR LINE
	FENCE
	GUARD RAIL
	STREET LIGHT
	SIGN
CONC.	CONCRETE
ASPH.	ASPHALT
GRAVEL	GRAVEL SHOULDER
	WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

•HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGEND:

NATURAL FEATURES SETBACK IMPACT

ADJ. PARCEL NATURAL FEATURES SETBACK IMPACT

WETLAND IMPACT

WETLAND NOTE:

NATURAL FEATURES SETBACK IMPACT:	AREA
WETLAND 4:	0.591 AC
WETLAND ON ADJ. PARCEL:	0.250 AC
TOTAL:	0.841 AC
WETLAND IMPACT:	**AREA**
WETLAND 4:	0.902 AC
TOTAL:	0.902 AC

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS	DATE
1 PER CITY COMMENTS	3.20.19
2 PER CITY COMMENTS	4.22.19
3 PER CITY COMMENTS	5.10.19

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

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BIRMINGHAM, MI 48009

NATURAL FEATURES IMPACT PLAN - EAST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N, R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 AWD NOVI-JMP\DWG\SITE PLANS\X-MAST TOPO-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-1.4

ZONING CHANGE PROPOSED FROM OSC TO TC-1

For more information call:
Novi Community Development Department
248-347-0475

SIGN #1
N.T.S.

ZONING CHANGE PROPOSED FROM I-1 TO TC-1

For more information call:
Novi Community Development Department
248-347-0475

SIGN #2
N.T.S.

ZONING CHANGE PROPOSED FROM OS-1 TO TC-1

For more information call:
Novi Community Development Department
248-347-0475

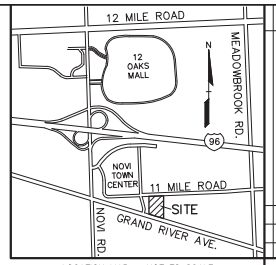
SIGN #3
N.T.S.

GRAPHIC SCALE

-80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

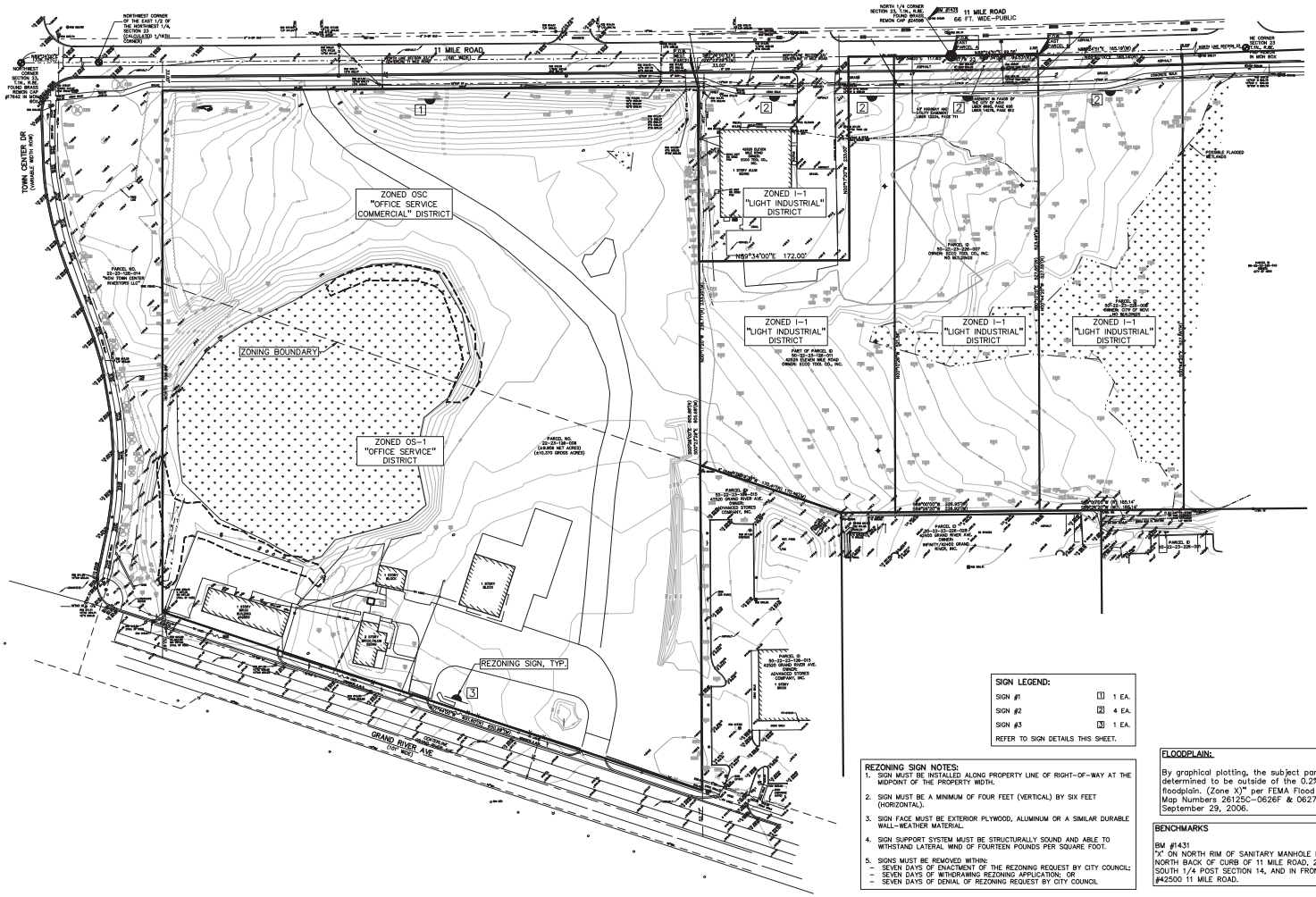
N



LOCATION MAP – NOT TO SCALE

NO.	BY	DESCRIPTION	DATE
1	KRD	CWB	PROJECT ZONING REVISED SUBMITTAL	3/20/19
2	KRD	CWB	PROJECT ZONING REVISED SUBMITTAL	1/30/19

REVISIONS



SIGN LEGEND:

SIGN #1	[1] 1 EA.
SIGN #2	[2] 4 EA.
SIGN #3	[3] 1 EA.

REFER TO SIGN DETAILS THIS SHEET.

REZONING SIGN NOTES:

1. SIGN MUST BE INSTALLED ALONG PROPERTY LINE OF RIGHT-OF-WAY AT THE MIDPOINT OF THE PROPERTY WIDTH.
2. SIGN MUST BE A MINIMUM OF FOUR FEET (VERTICAL) BY SIX FEET (HORIZONTAL).
3. SIGN FACE MUST BE EXTERIOR PLYWOOD, ALUMINUM OR A SIMILAR DURABLE WALL-WEATHER MATERIAL.
4. SIGN SUPPORT SYSTEM MUST BE STRUCTURALLY SOUND AND ABLE TO WITHSTAND LATERAL WIND OF FOURTEEN POUNDS PER SQUARE FOOT.
5. SIGNS MUST BE REMOVED WITHIN:
   - SEVEN DAYS OF ENACTMENT OF THE REZONING REQUEST BY CITY COUNCIL;
   - SEVEN DAYS OF WITHDRAWING REZONING APPLICATION; OR
   - SEVEN DAYS OF DENIAL OF REZONING REQUEST BY CITY COUNCIL

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING

ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
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SPOT ELEVATION
CONTOUR LINE
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONCRETE
ASPHALT
GRAVEL
GRAVEL SHOULDER
WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY, DATED 12-19-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

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350 OLD WOODWARD AVE., SUITE 300
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REZONING SIGN LOCATION PLAN

SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 AKRI NOVI-JRP\DWG\SITE PLANS\C-1.0SIGN-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 60'

DRAWING NUMBER:
C-1.6

LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22–23–126–006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows:
Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US–16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375–1726

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22–23–126–011, 22–23–226–007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows:
Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence
North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33–foot right–of–way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22–23–226–008

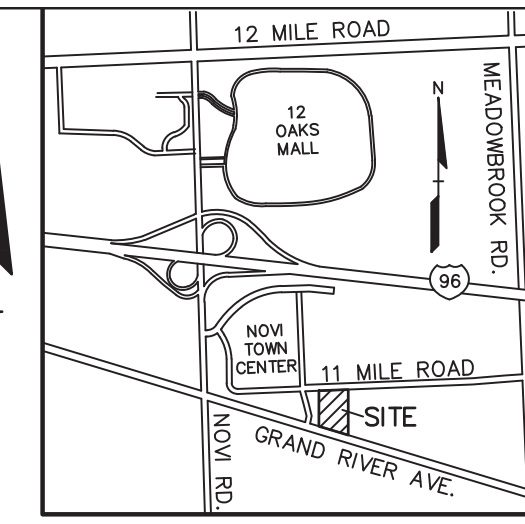
Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as:
Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

GRAPHIC SCALE
–60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

CITY OF NOVI FIRE DEPARTMENT NOTES:
1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

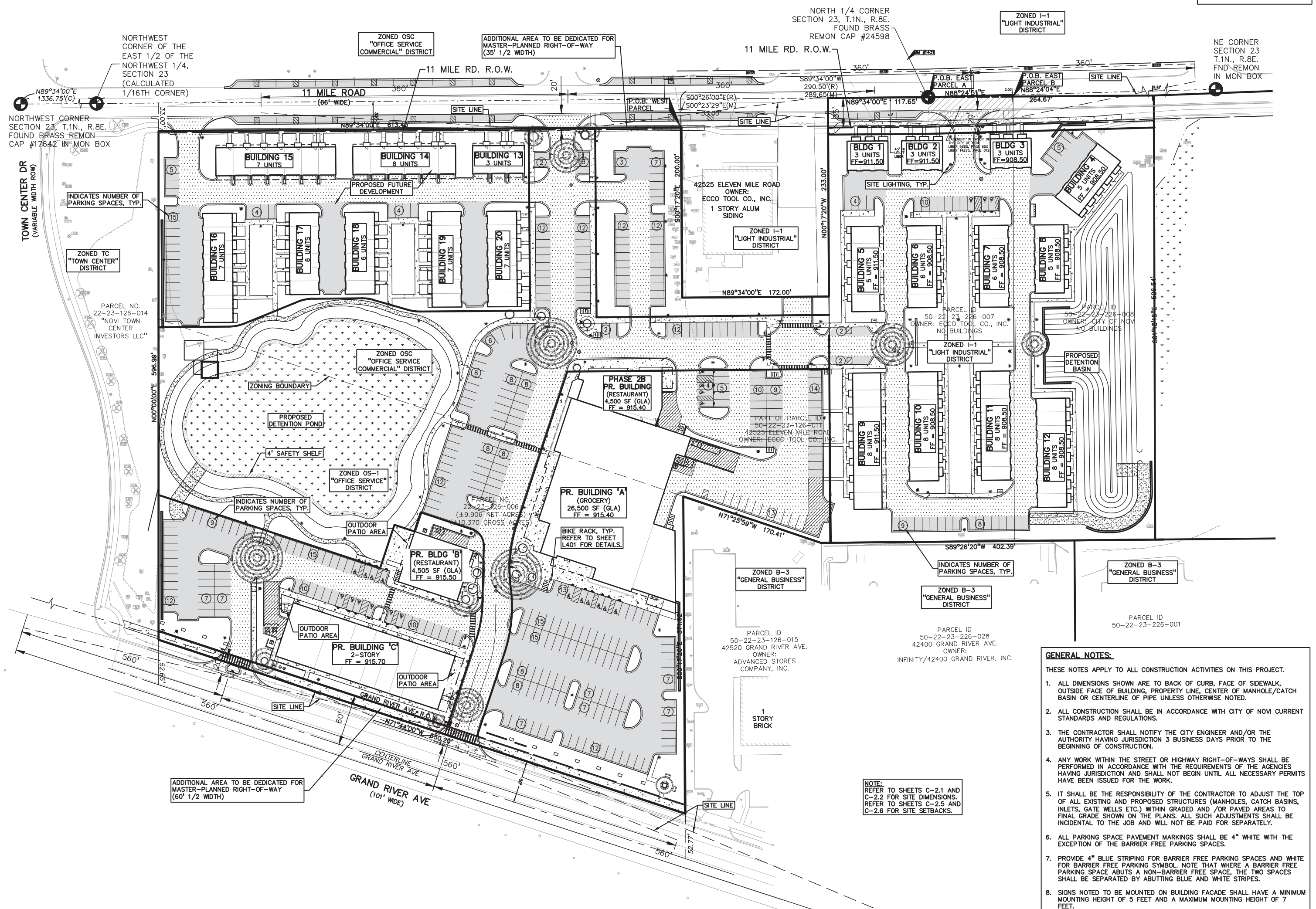
DEWATERING NOTE:
DEWATERING IS NOT ANTICIPATED DURING CONSTRUCTION.



LOCATION MAP – NOT TO SCALE

No.	BY	CHK	DESCRIPTION	DATE
2	KRD	GMB	PRO REZONING REVISED SUBMITTAL	12/20/19
1	KRD	GMB	PRO REZONING REVISED SUBMITTAL	10/2/19

REVISIONS



LEGEND
- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
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- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION (816.06 / 671.21)
- CONTOUR LINE (670 / 671)
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC. — CONCRETE (STD DUTY, HEAVY DUTY, R.O.W. ONLY)
- ASPH. — ASPHALT (STD DUTY, HEAVY DUTY, DEEP STRENGTH)
- GRAVEL — GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

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SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12–13–18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12–13–18
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OTHER	PEA ALTA, DATED 11–14–18

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BENCHMARKS
BM #1431
'X' ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

GENERAL NOTES:
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT–OF–WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.
6. ALL PARKING SPACE PAVEMENT MARKINGS SHALL BE 4" WHITE WITH THE EXCEPTION OF THE BARRIER FREE PARKING SPACES.
7. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOL. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ABUTS A NON–BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

SITE DATA TABLE:
SITE AREA: 15.51 ACRES (675,755 SF) GROSS
15.04 ACRES (655,343 SF) NET

ZONING: OSC: OFFICE SERVICE COMMERCIAL
OS–1: OFFICE SERVICE
I–1: LIGHT INDUSTRIAL

PROPOSED ZONING: TC–1 W/ PRO–PLANNED REZONING OVERLAY
PROPOSED USE:
–MIXED USE COMMERCIAL (SEE BUILDING USE BELOW FOR BREAKDOWN)
–MULTI–FAMILY RESIDENTIAL (118 UNITS)

PARKING CALCULATIONS: (SHARED PARKING STUDY PREPARED BY BERGMANN)

BUILDING USE:	WEEKEND PEAK DEMAND:
RETAIL = 4,575 SF	18
MARKET = 26,500 SF	119
QUALITY RESTAURANT = 6,275 SF	58
SIT–DOWN RESTAURANT = 4,505 SF	48
FAST CASUAL RESTAURANT = 9,962 SF	99
MULTI–FAMILY RESIDENTIAL = 118 UNITS	133
10% EFFECTIVE SUPPLY	48

PARKING REQUIRED:
MIXED USE DEVELOPMENT PARKING = (18+119+58+48+99) = 342 SPACES
MULTI–FAMILY RESIDENTIAL PARKING = 133 SPACES
10% EFFECTIVE SUPPLY = (342 + 133) * 0.1 = 48 SPACES
TOTAL PARKING REQUIRED = 342 + 133 + 48 = 523 SPACES

PARKING PROVIDED:
PHASE 1 COMMERCIAL = 323 SPACES
PHASE 1 RESIDENTIAL = 108 SPACES (68 GARAGE, 40 SURFACE)
PHASE 2 COMMERCIAL = 43 SPACES
PHASE 2 RESIDENTIAL = 94 SPACES (66 GARAGE, 28 SURFACE)
11 MILE ROAD ON–STREET = 46 SPACES

TOTAL PARKING = 614 SPACES, INC. 23 ADA SPACES

BICYCLE PARKING CALCULATIONS:
MIXED USE DEVELOPMENT = 5% OF REQUIRED AUTOMOBILE SPACES
= 366 * 0.05 = 18.3 ~ 18 SPACES
MULTI–FAMILY RESIDENTIAL = 1 SPACE PER 5 DWELLING UNITS
= 118/5 = 23.6 ~ 24 SPACES
TOTAL BICYCLE PARKING REQUIRED = 18 + 24 = 42 SPACES

TOTAL BICYCLE PARKING PROVIDED = 33 SPACES

NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2018\2018033\DWG\18033–TOPOBASE.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X–BASE–18033.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X–TBLK–18033.DWG

STATE OF MICHIGAN GREGORY BONO ENGINEER LICENSED PROFESSIONAL ENGINEER

CAUTION!!
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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE., SUITE 300
BIRMINGHAM, MI 48009

OVERALL SITE PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	SUR.	P.M.
GMB	JKS	GWC	JPB

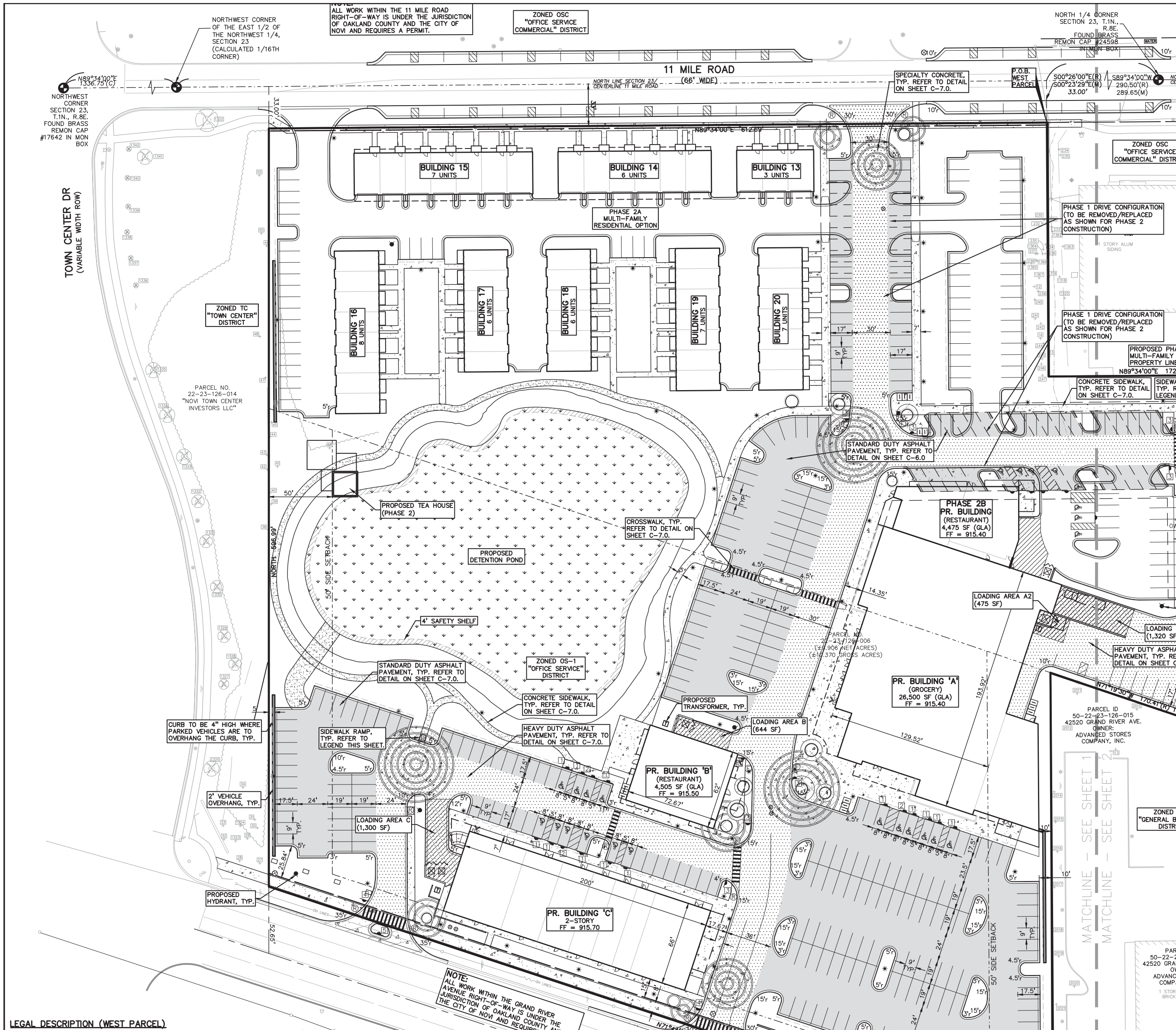
S:\PROJECTS\2018\2018–033 AIKEN NOVI–JPB\DWG\SITE PLANS\(C–2.0)OVERALL–18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 60'

DRAWING NUMBER:
C-2.0



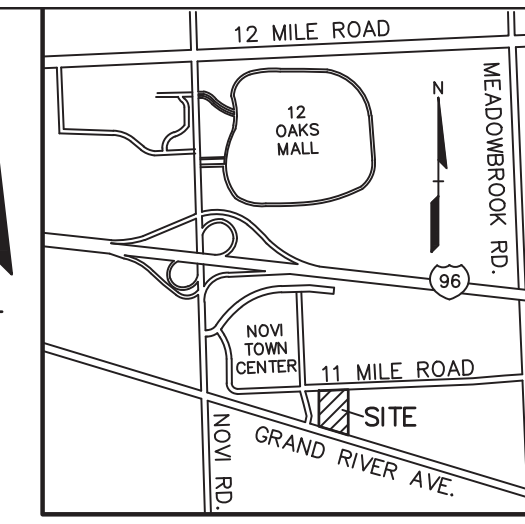
LEGAL DESCRIPTION (WEST PARCEL)

(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows: Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726



LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION (816.06 / 671.21)
- CONTOUR LINE (670 / 671)
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE (STD DUTY, HEAVY DUTY, R.O.W. ONLY)
- ASPHALT (STD DUTY, HEAVY DUTY, DEEP STRENGTH)
- GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12–13–18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12–13–18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12–13–18
GAS	CONSUMERS ENERGY MAP# 01–58–23–2, DATED 10–11–18
OTHER	PEA ALTA, DATED 11–14–18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

–40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

BENCHMARKS

BM #1431
'X' ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

SIGN LEGEND:

'BARRIER FREE PARKING' SIGN	1	18 EA.
'VAN ACCESSIBLE' SIGN	2	5 EA.
'CROSSWALK' SIGN	3	12 EA.
'STOP' SIGN	4	2 EA.
'NO LEFT TURN' SIGN	5	1 EA.

ALL TRAFFIC SIGNAGE SHALL COMPLY WITH CURRENT MMUTCD STANDARDS. REFER TO SHEET C–7.0 FOR SIGN DETAILS.

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE R'	Ⓡ
SIDEWALK RAMP 'TYPE F'	Ⓕ

REFER TO LATEST M.D.O.T. R–28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

LOADING CALCULATIONS:

LOADING AREA:	REQUIRED:	PROVIDED:
A1	1,295 SF	1,320 SF
A2	537 SF	475 SF*
B	620 SF	644 SF
C	2,000 SF	1,300 SF*

*VARIANCE REQUESTED

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

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2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.
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8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

CITY OF NOVI FIRE DEPARTMENT NOTES:

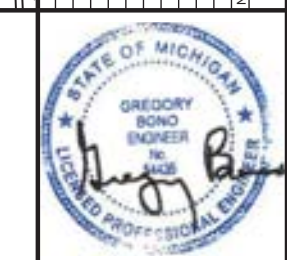
1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2018\2018033\DWG\18033–TOPOBASE.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X–BASE–18033.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X–TBLK–18033.DWG

REVISIONS

No.	BY	CHK	DESCRIPTION	DATE
1	KRD	GMB	PRO REZONING REVISED SUBMITTAL	10/2/19
2	KRD	GMB	PRO REZONING REVISED SUBMITTAL	12/20/19



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350 OLD WOODWARD AVE., SUITE 300
BIRMINGHAM, MI 48009

DIMENSION AND PAVING PLAN - PHASE 1B
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	SUR.	P.M.
GMB	JKS	GWC	JPB

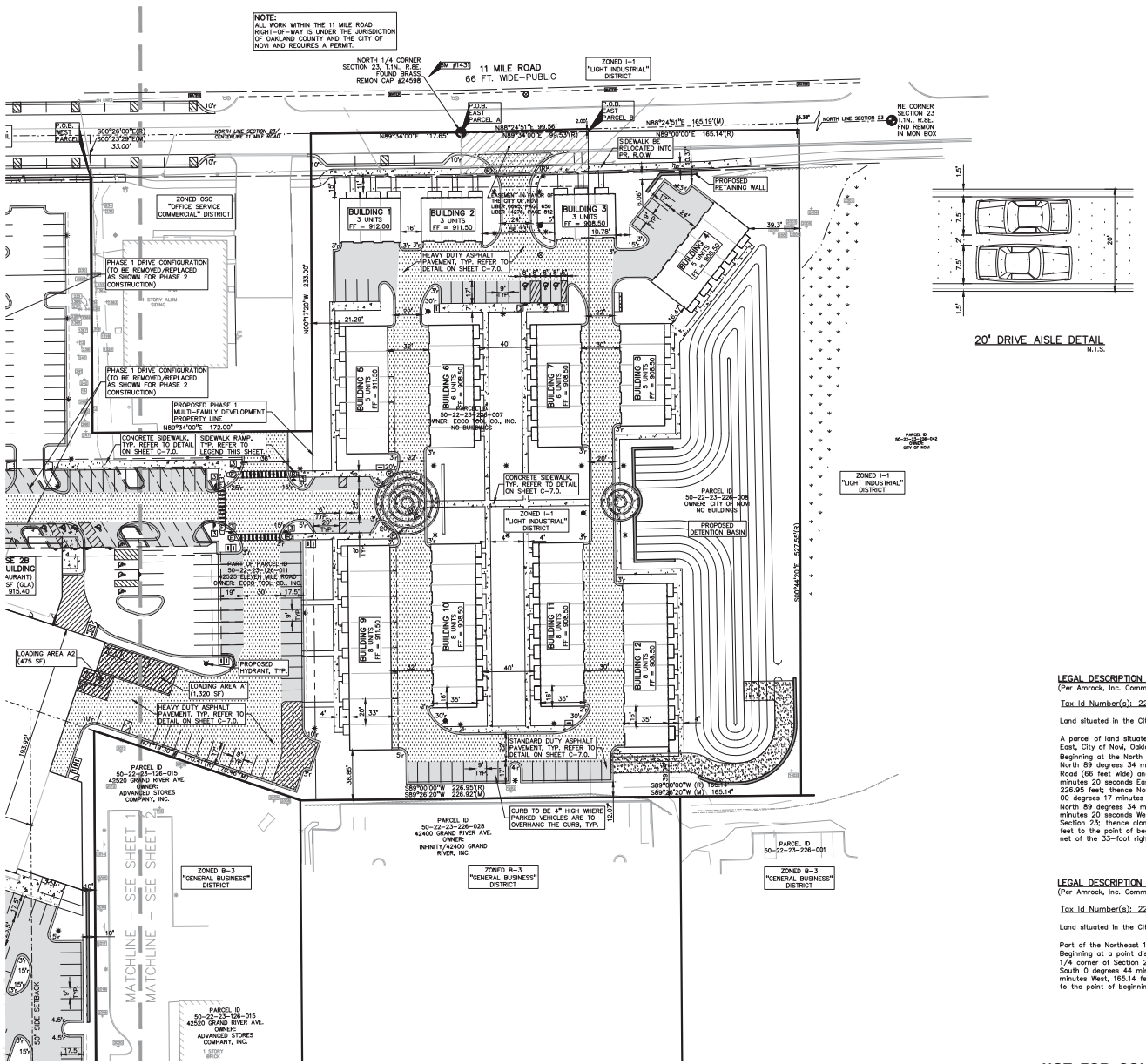
S:\PROJECTS\2018\2018–033 AIKEN NOVI–JPB\DWG\SITE PLANS\(C–2.1)DIM–18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-2.2



LEGEND

IRON FOUND		BRASS PLUG SET	SEC. CORNER FOUND
IRON SET		MONUMENT FOUND	R RECORDED
NAIL FOUND		MONUMENT SET	M MEASURED
NAIL & CAP SET			C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPH. — ASPHALT
- GRAVEL — GRAVEL SHOULDER
- WETLAND

STD DUTY CURB | HEAVY DUTY CURB | R.D.B. ONLY
STD DUTY CURB & GUTTER | HEAVY DUTY CURB & GUTTER | DEEP STRENGTH CURB & GUTTER

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-05B-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows: Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-TRUC-18033.DWG

REVISIONS	DATE
1. PER CITY COMMENTS	3/20/19
2. PER CITY COMMENTS REVISED SUBMITTAL	4/29/19
3. PER CITY COMMENTS REVISED SUBMITTAL	5/29/19

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

DIMENSION AND PAVING PLAN - PHASE 1A
SAKURA NOVI

PART OF THE E 1/2 OF THE NE 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	CK.	JKS	SUR.	GWC	P.M.	JPB

P:\PROJECTS\2018\2018-033 AIKEN AVE\SITE PLANS\D-2\18M-18033.dwg

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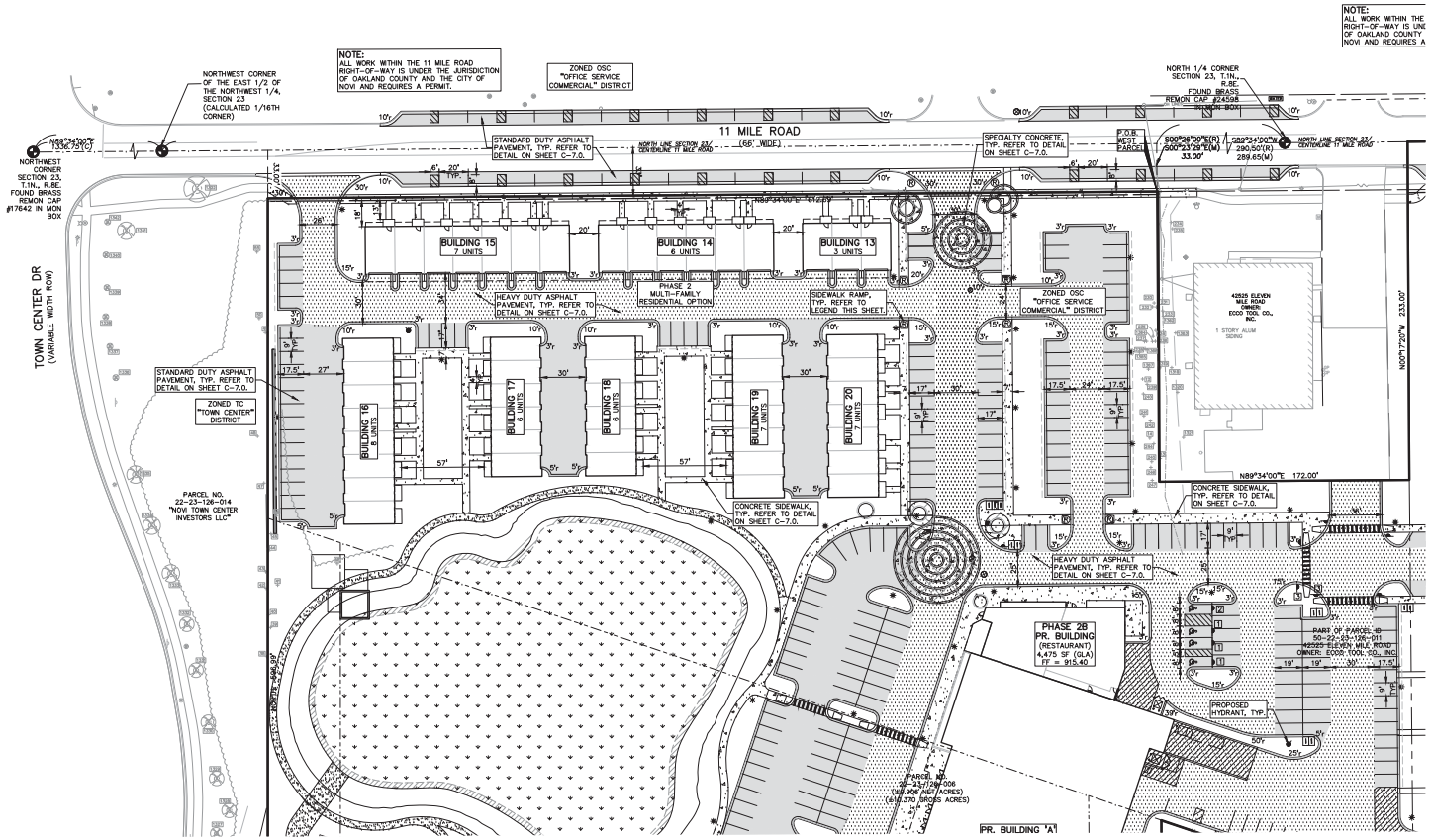
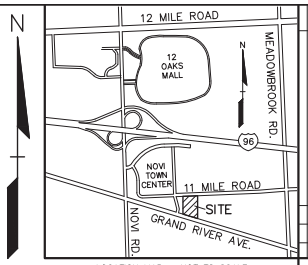
ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-2.1





LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPHALT
- GRAVEL
- GRAVEL SHOULDER
- WETLAND

STD DUTY: 6" CONC. / 2" ASPH. / 6" CL. II
HEAVY DUTY: 8" CONC. / 2" ASPH. / 10" CL. II
R.O.W. ONLY: 10" CONC.
STD DUTY: 6" CONC. / 2" ASPH. / 6" CL. II
HEAVY DEEP DUTY STRENGTH: 8" CONC. / 2" ASPH. / 12" CL. II

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.
6. ALL PARKING SPACE PAVEMENT MARKINGS SHALL BE 4" WHITE WITH THE EXCEPTION OF THE BARRIER FREE PARKING SPACES.
7. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOL. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ABUTS A NON-BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

CITY OF NOVI FIRE DEPARTMENT NOTES:

1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

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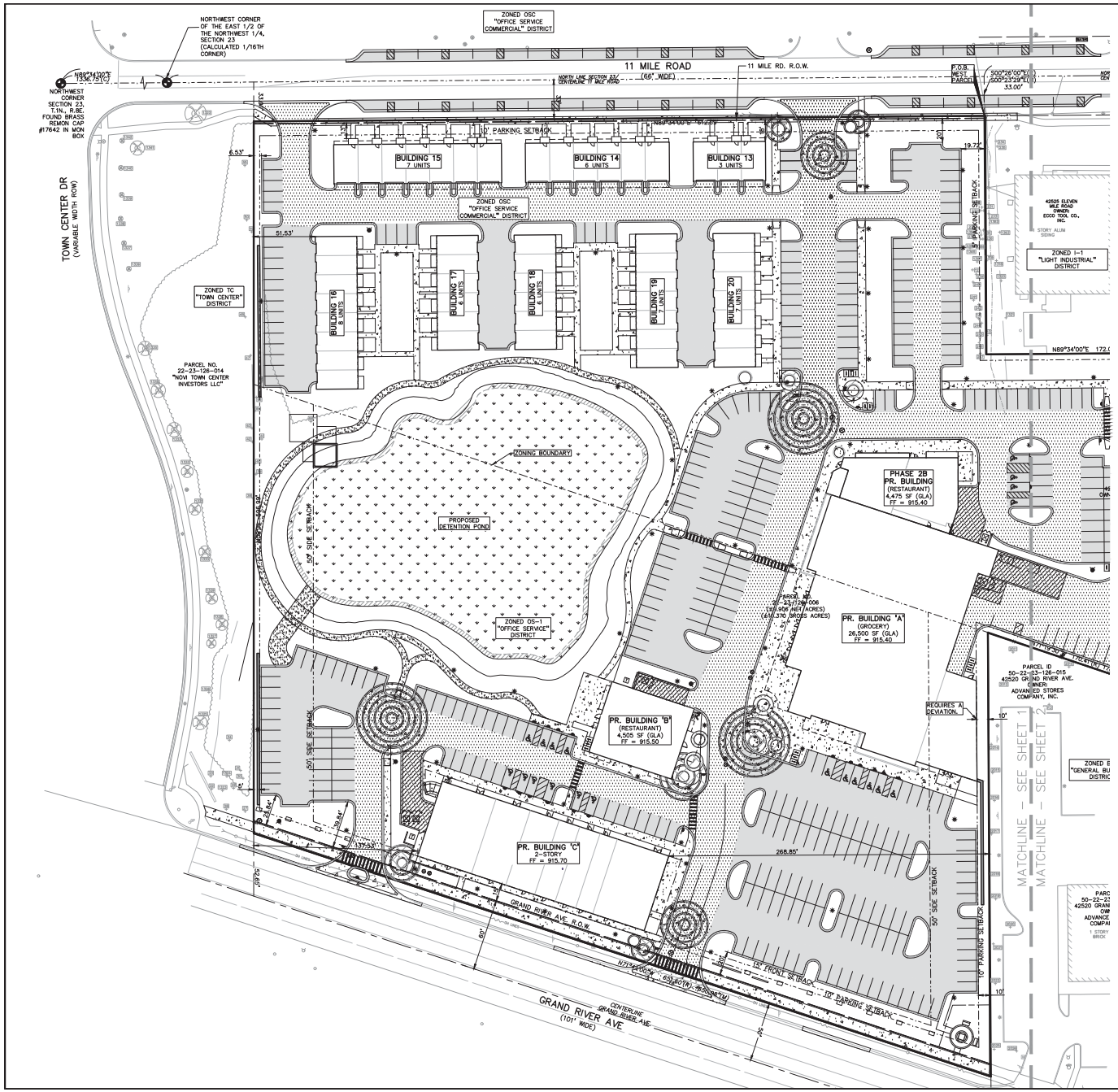
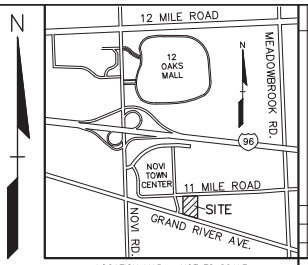
444. PER CITY COMMENTS	11/20/55
445. PER CITY COMMENTS	12/20/55
446. PER CITY COMMENTS	1/20/56
447. PER CITY COMMENTS	2/20/56
448. PER CITY COMMENTS	3/20/56
449. PER CITY COMMENTS	4/20/56
450. PER CITY COMMENTS	5/20/56
451. PER CITY COMMENTS	6/20/56
452. PER CITY COMMENTS	7/20/56
453. PER CITY COMMENTS	8/20/56
454. PER CITY COMMENTS	9/20/56
455. PER CITY COMMENTS	10/20/56
456. PER CITY COMMENTS	11/20/56
457. PER CITY COMMENTS	12/20/56
458. PER CITY COMMENTS	1/20/57
459. PER CITY COMMENTS	2/20/57
460. PER CITY COMMENTS	3/20/57
461. PER C





LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MARKER, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECHYE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPH. — ASPHALT
- GRAVEL — GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

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NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS	DATE
1. PER CITY COMMENTS	3/20/19
2. PER CITY COMMENTS	4/29/19
3. PER CITY COMMENTS	5/29/19

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

SETBACK PLAN - WEST
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N, R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

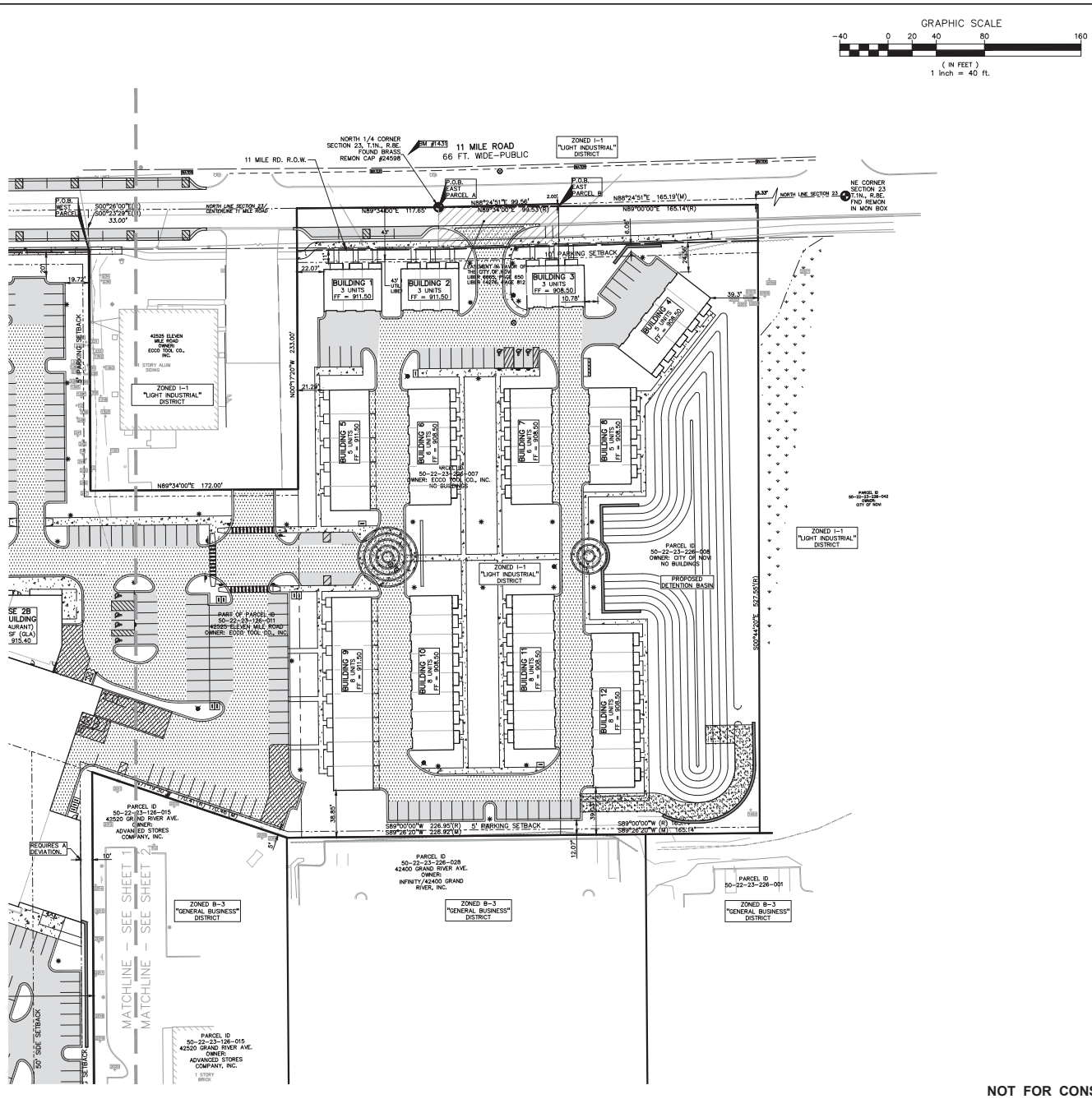
P:\PROJECTS\2018\2018-033 NOVI-JPB\DWG\SITE PLANS\C-2.4-SETBACK-18033.dwg

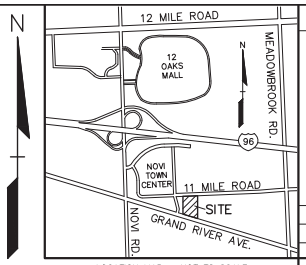
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-2.4





LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING		PROPOSED
-OH-ELEC-W-	ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE	
-UG-CATV-T-	UNDERGROUND CABLE TV, CATV PEDESTAL	
-UG-PHONE-T-	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
-UG-ELEC-E-	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
	GAS MAIN, VALVE & GAS LINE MARKER	
	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
	SANITARY SEWER, CLEANOUT & MANHOLE	
	STORM SEWER, CLEANOUT & MANHOLE	
	COMBINED SEWER & MANHOLE	
	SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN	
	POST INDICATOR VALVE	
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
	UNIDENTIFIED STRUCTURE	
916.06	SPOT ELEVATION	671.21
670	CONTOUR LINE	671
	FENCE	
	GUARD RAIL	
	STREET LIGHT	
	SIGN	
CONC.	CONCRETE	STD DUTY / HEAVY DUTY / R.O.W. ONLY
ASPH.	ASPHALT	STD DUTY / HEAVY DUTY / DEEP STRENGTH
GRAVEL	GRAVEL SHOULDER	
	WETLAND	

REFERENCE DRAWINGS

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STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS DT-SS-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

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BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	KRD	PROJECT/ZONING REVISED SUBMITTAL	3/20/19
2	KRD	PROJECT/ZONING REVISED SUBMITTAL	1/30/19
3	KRD	PROJECT/ZONING REVISED SUBMITTAL	12/21/18

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

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350 OLD WOODWARD AVE., SUITE 300
BIRMINGHAM, MI 48009

SETBACK PLAN - EAST
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T1N, R8E, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 ANN ARBOR\SITE PLANS\C-2.5 SETBACK-18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

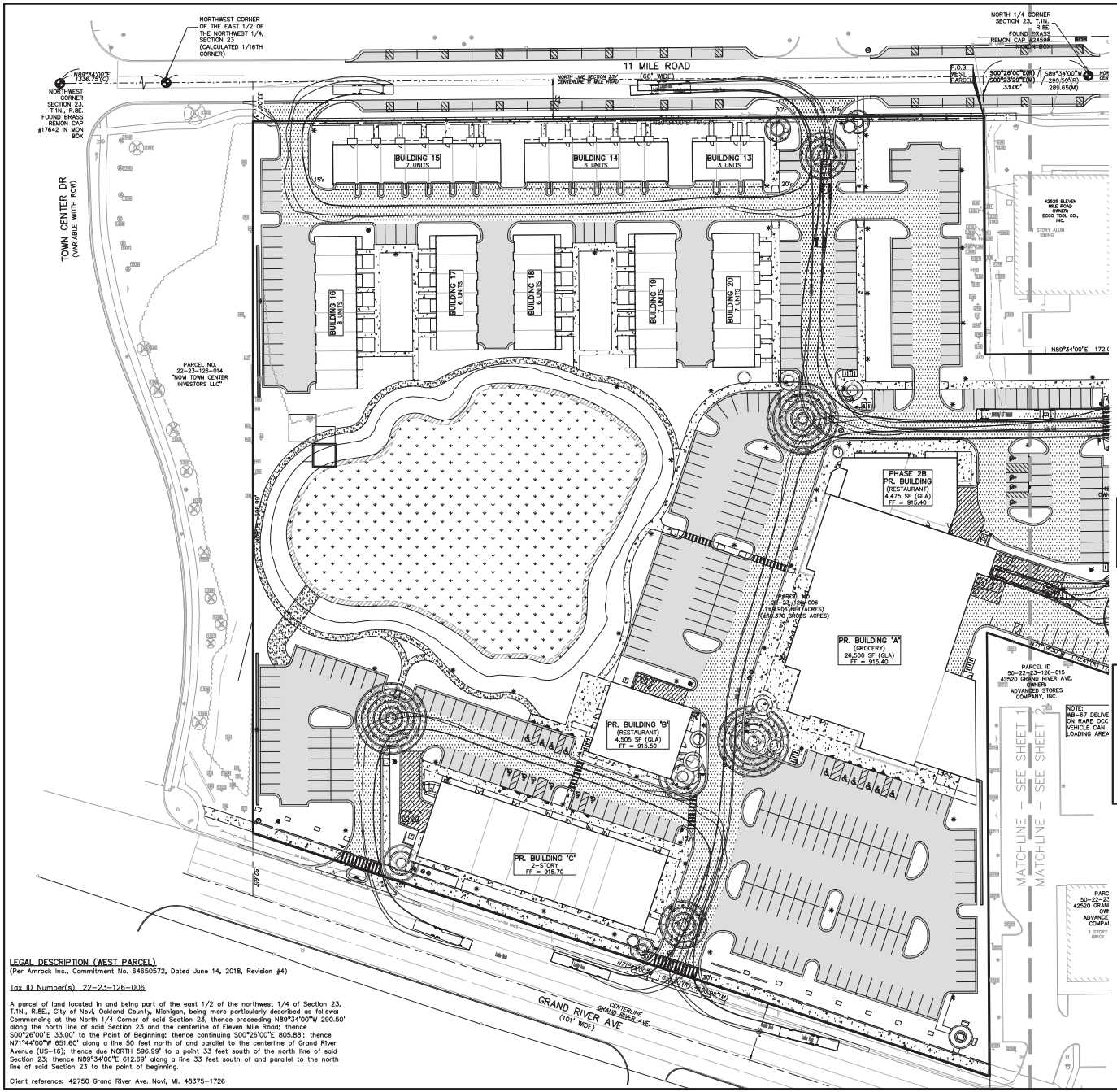
PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-2.5

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\V-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\V-TRUC-18033.DWG

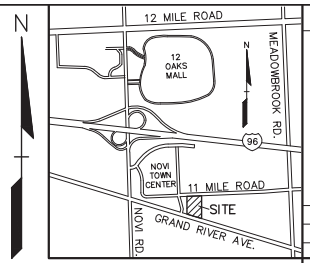


LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows: Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726



LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND · IRON SET · NAIL FOUND · NAIL & CAP SET · BRASS PLUG SET · MONUMENT FOUND · MONUMENT SET · SEC. CORNER FOUND · R RECORDED · M MEASURED · C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
POST INDICATOR VALVE
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION
CONTOUR LINE
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONCRETE
ASPH.
ASPHALT
GRAVEL
GRAVEL SHOULDER
WETLAND

BENCHMARKS

BM #1431
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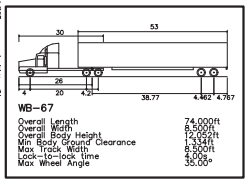
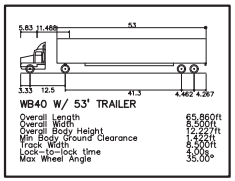
*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE
−40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.



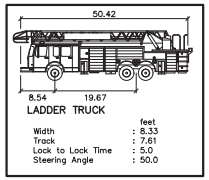
WB-67

Overall Length	74.000ft
Overall Width	8.500ft
Overall Body Height	12.667ft
Min Body Ground Clearance	1.433ft
Track Width	8.500ft
Lock-to-lock time	4.00s
Max Wheel Angle	35.00°



WB40 W/ 53' TRAILER

Overall Length	65.860ft
Overall Width	8.500ft
Overall Body Height	12.667ft
Min Body Ground Clearance	1.433ft
Track Width	8.500ft
Lock-to-lock time	4.00s
Max Wheel Angle	35.00°



LADDER TRUCK

	feet
Width	: 8.33
Track	: 7.61
Lock to Lock Time	: 5.0
Steering Angle	: 50.0

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\V-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\V-TRUC-18033.DWG

REVISIONS	DATE
1. PRO CMB PRO/ZONING REVISED SUBMITTAL	3.20.19
2. PRO CMB PRO/ZONING REVISED SUBMITTAL	1.03.19
No.1 PRT CMB DESIGN/PRO	DATE

STATE OF MICHIGAN · GREGORY BONO · ENGINEER · REGISTERED PROFESSIONAL ENGINEER

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VEHICLE ACCESS PLAN - WEST
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN:	JKS	SUR:	GWC	P.M.	JPB

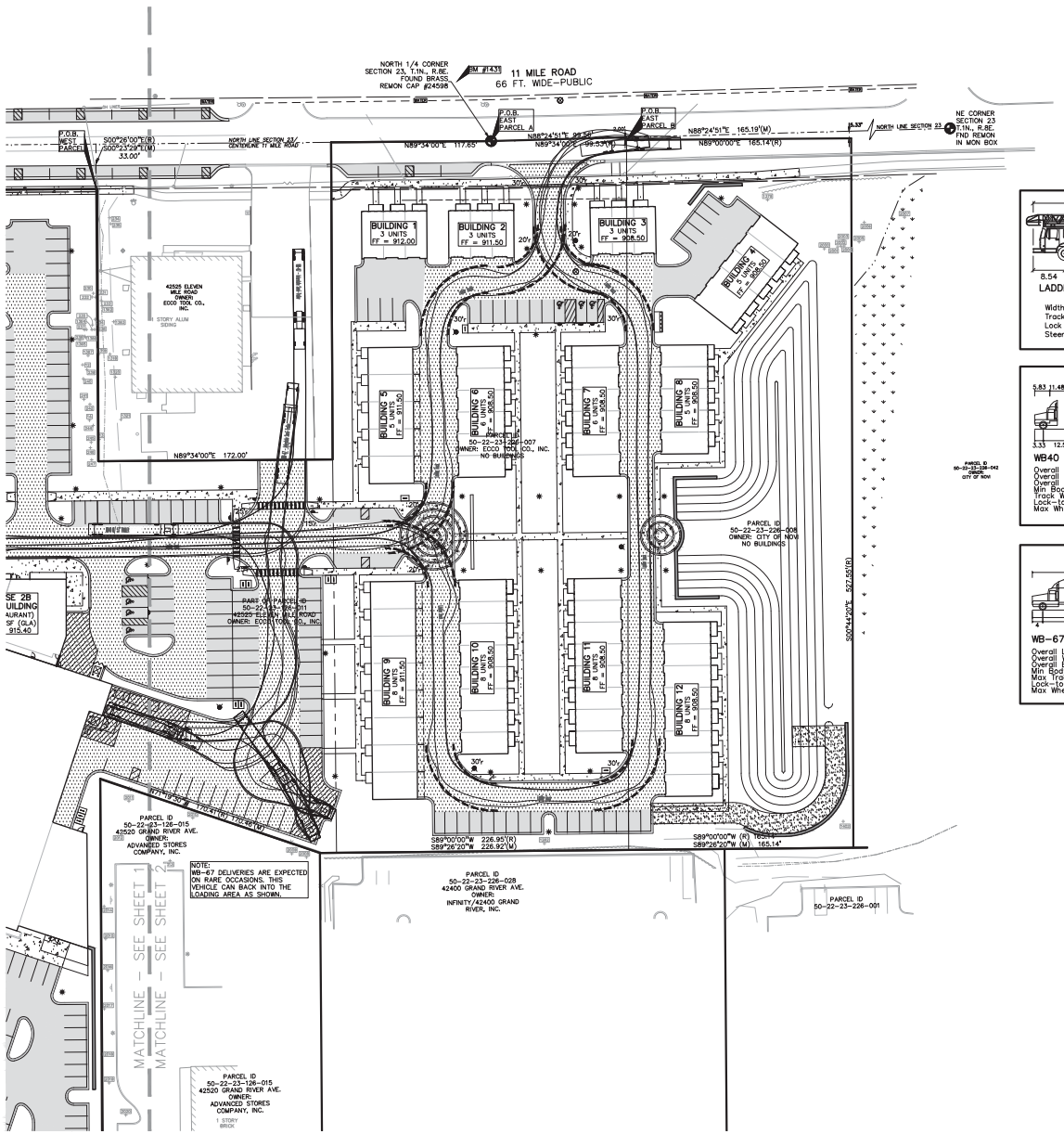
S:\PROJECTS\2018\2018-033 AIKEN INV\-JMP\DWG\SITE PLANS\2-SAKRAVEC-18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-2.6

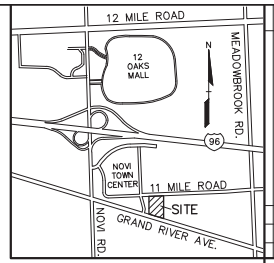


GRAPHIC SCALE

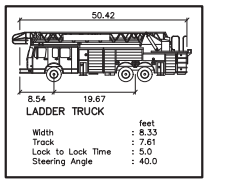
-40 0 20 40 80 160

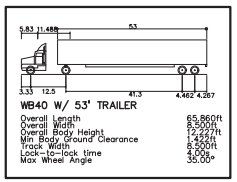
(IN FEET)
1 inch = 40 ft.

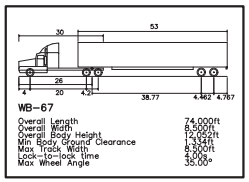
N



LOCATION MAP – NOT TO SCALE







LEGEND

IRON FOUND	BRASS PLUG SET	SEC. CORNER FOUND
IRON SET	MONUMENT FOUND	R RECORDED
NAIL FOUND	MONUMENT SET	M MEASURED
NAIL & CAP SET		C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
POST INDICATOR VALVE
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION
CONTOUR LINE
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONCRETE
ASPHALT
GRAVEL
GRAVEL SHOULDER
WETLAND

STD DUTY HEAVY DUTY R.O.W. ONLY
STD DUTY HEAVY DUTY DEEP STRUCTURE

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH OF BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows: Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land groas and 3.52± acres of land net of the 33-foot right-of-way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS	DATE
1. PER CITY COMMENTS	3.20.19
2. PER CITY COMMENTS	4.30.19
3. PER CITY COMMENTS	5.10.19

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

CAUTION!!!
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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

VEHICLE ACCESS PLAN - EAST
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	JKS	SUR.	GWC	P.M.	JPB
GMB						

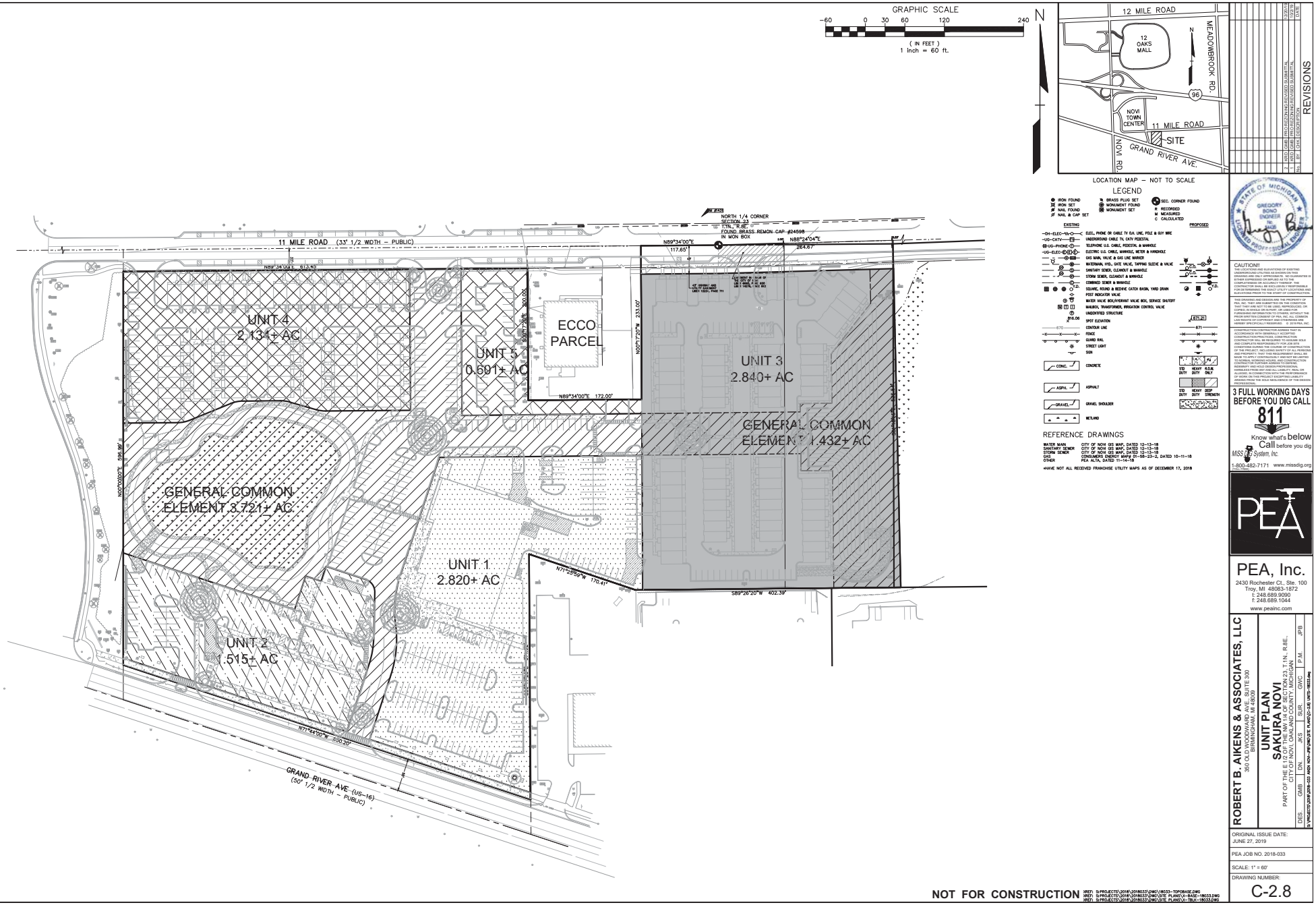
S:\PROJECTS\2018\2018-033 AMER INVS-JMP\SITE PLANS\C-2.6SHEET(S)-18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-2.7



NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-TRUC-18033.DWG

REVISIONS	DATE
1 JPB1 CMA PER CITY COMMENTS	3/20/19
2 JPB1 CMA PROFESSIONAL REVISED SUBMITTAL	4/29/19
3 JPB1 CMA PROFESSIONAL REVISED SUBMITTAL	5/29/19

STATE OF MICHIGAN GREGORY BONO ENGINEER REGISTERED PROFESSIONAL ENGINEER

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BIRMINGHAM, MI 48009

UNIT PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

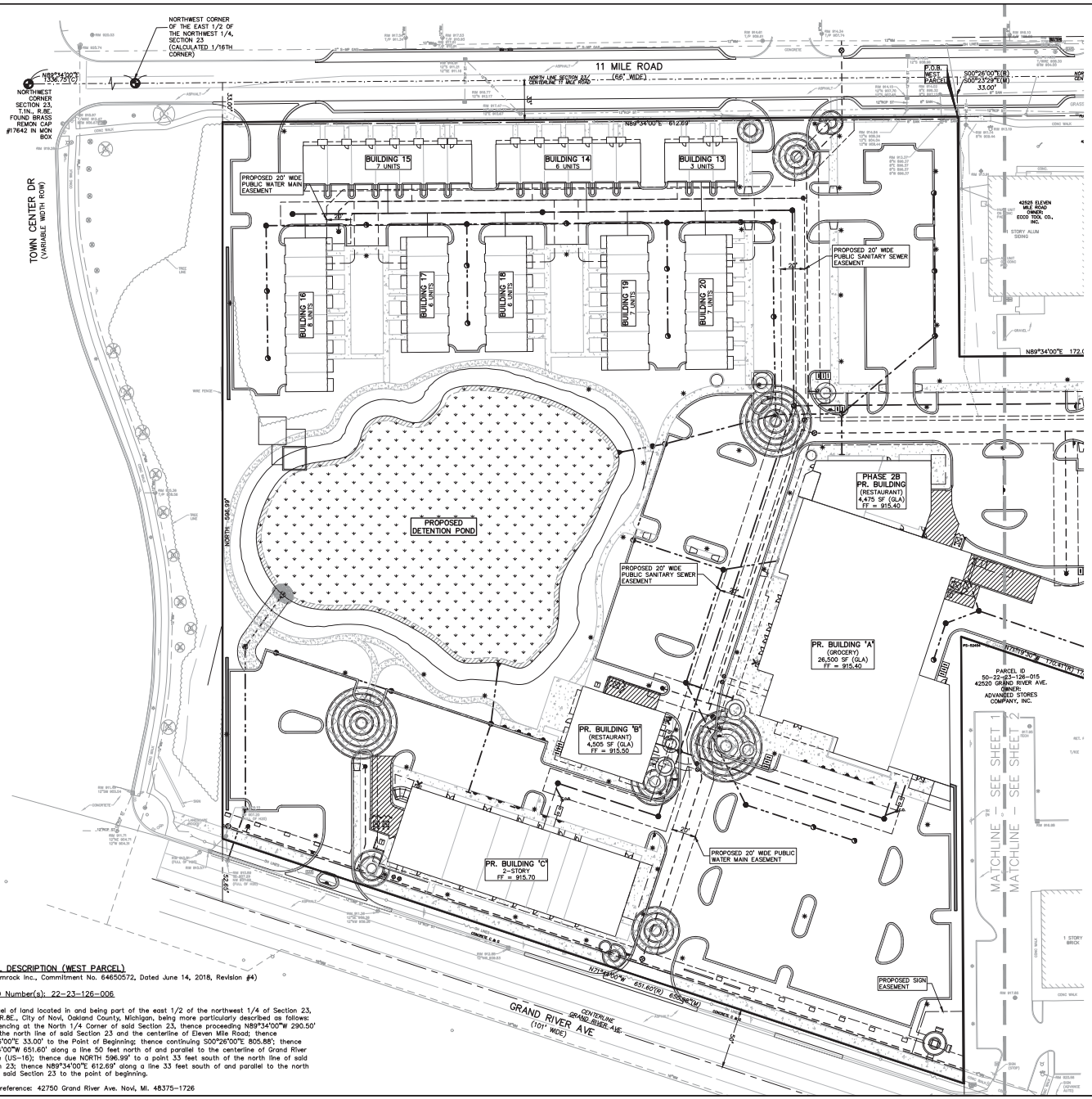
S:\PROJECTS\2018\2018-033 NOVI-JPB\DWG\SITE PLANS\C-2.8 UNITS-18033.dwg

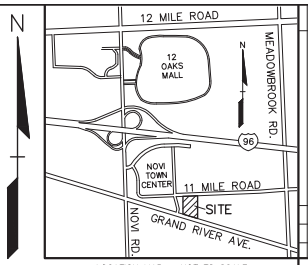
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 60'

DRAWING NUMBER:
C-2.8





LOCATION MAP – NOT TO SCALE

N

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPHALT
- GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-05B-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

PUBLIC UTILITY EASEMENTS:

ALL WATER MAIN AND SANITARY SEWER IS TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT.

LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows: Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client references: 42750 Grand River Ave. Novi, MI. 48375-1726

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\V-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\V-TRUC-18033.DWG

REVISIONS	DATE
1. JKS/ GWB: PROJECT/ZONING REVISED SUBMITTAL	3/20/19
2. JKS/ GWB: PROJECT/ZONING REVISED SUBMITTAL	1/23/19
No. BY: ITEM DESCRIPTION	DATE

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — LICENSED PROFESSIONAL ENGINEER

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350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

EASEMENT PLAN - WEST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES	GMB	DN	JKS	SUR	GWC	P.M.	JPB

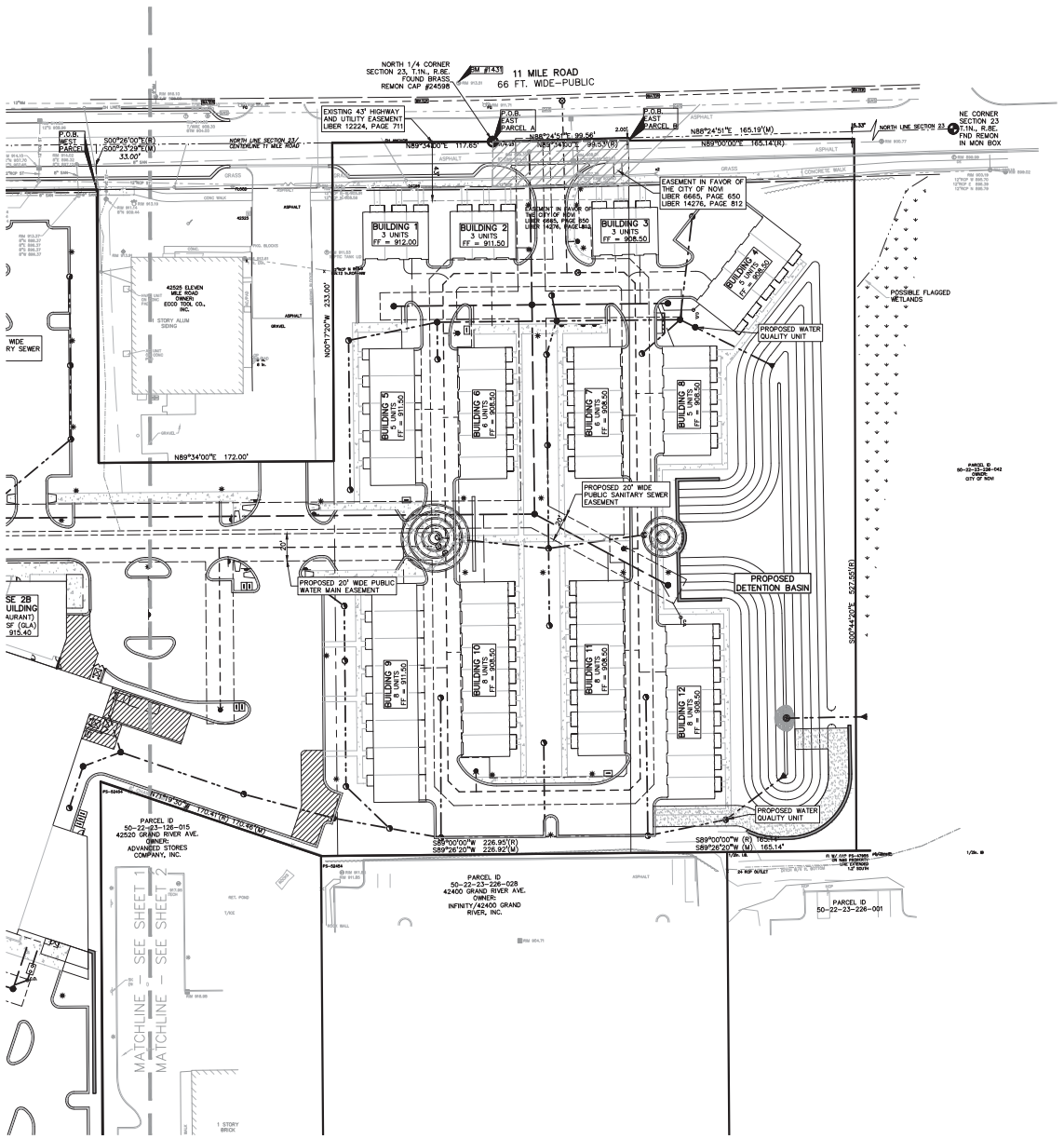
S:\PROJECTS\2018\2018-033 AIKEN RVW+JMP\SITE PLANS\C-3.1 EMP - 18033.dwg

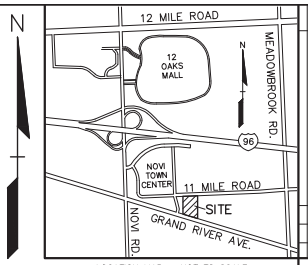
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-3.1





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND / IRON SET / NAIL FOUND / NAIL & CAP SET
BRASS PLUG SET / MONUMENT FOUND / MONUMENT SET
SEC. CORNER FOUND / R RECORDED / M MEASURED / C CALCULATED

EXISTING / PROPOSED

-OH-ELEC-W- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
-UG-CATV- UNDERGROUND CABLE TV, CATV PEDESTAL
-UG-PHONE- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
-UG-ELEC- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
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POST INDICATOR VALVE
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION
CONTOUR LINE
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SIGN
CONCRETE
ASPHALT
GRAVEL SHOULDER
WETLAND

REFERENCE DRAWINGS

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SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS DT-GS-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

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BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

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LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS	DATE
1. PER CITY COMMENTS	1.30.19
2. PER CITY COMMENTS	2.20.19
3. PER CITY COMMENTS	3.20.19

GREGORY BONO ENGINEER LICENSED PROFESSIONAL ENGINEER

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EASEMENT PLAN - EAST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	JKS	SUR.	GWC	P.M.	JPB
GMB						

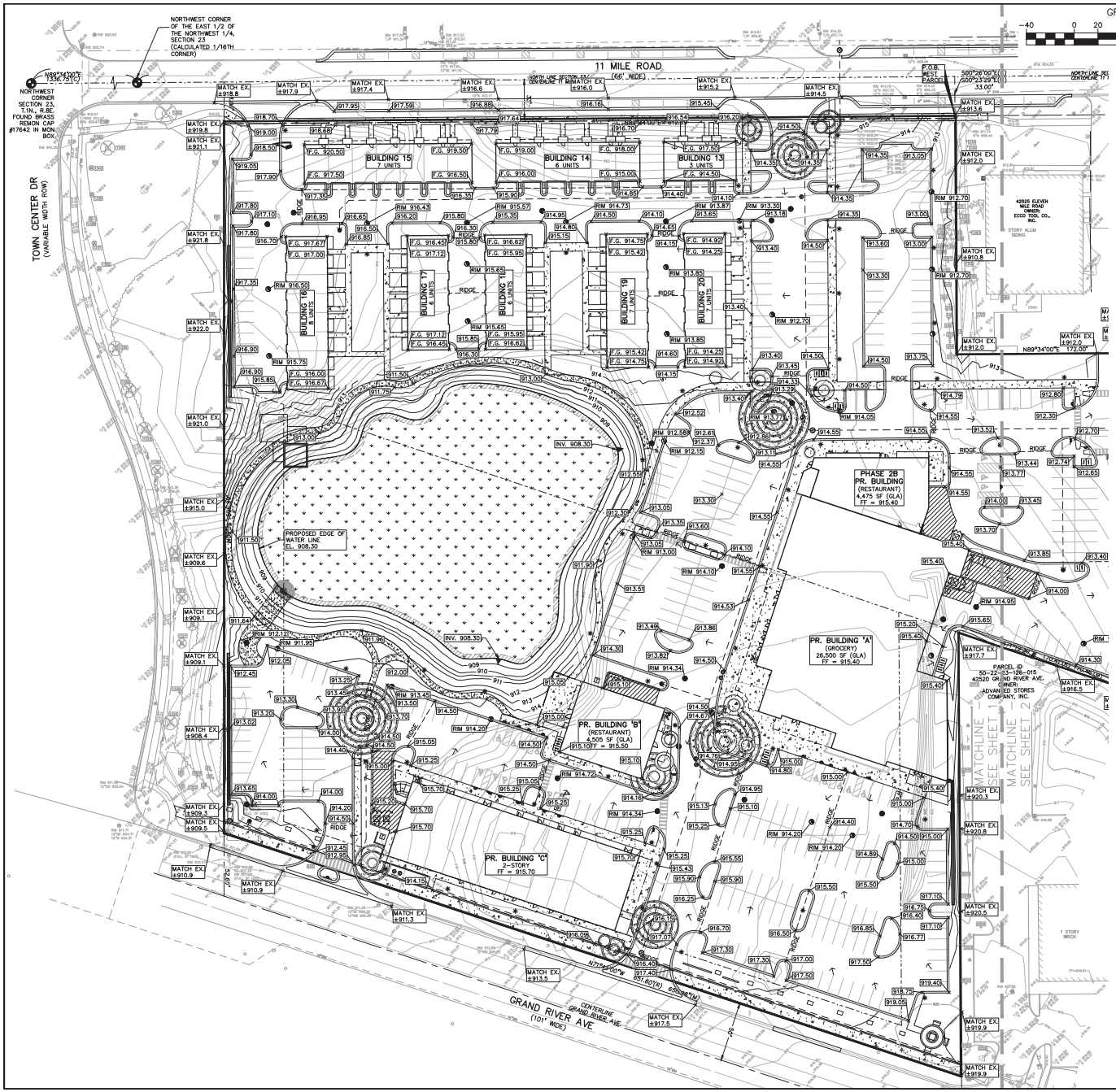
P:\PROJECTS\2018\2018-033 AKRI NOVI-JMP\DWG\SITE PLANS\C0-3.2.dwg – 18033.dwg

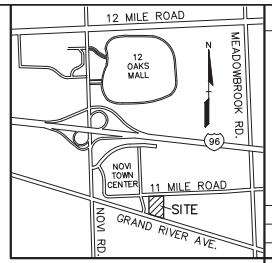
ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-3.2





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND	BRASS PLUG SET	SEC. CORNER FOUND
IRON SET	MONUMENT FOUND	R RECORDED
NAIL FOUND	MONUMENT SET	M MEASURED
NAIL & CAP SET		C CALCULATED

EXISTING	PROPOSED
ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
UNDERGROUND CABLE TV, CATV PEDESTAL	
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
GAS MAIN, VALVE & GAS LINE MARKER	
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
SANITARY SEWER, CLEANOUT & MANHOLE	
STORM SEWER, CLEANOUT & MANHOLE	
COMBINED SEWER & MANHOLE	
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN	
POST INDICATOR VALVE	
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
UNIDENTIFIED STRUCTURE	
SPOT ELEVATION	
CONTOUR LINE	
FENCE	
GUARD RAIL	
STREET LIGHT	
SIGN	
CONCRETE	
ASPH. ASPHALT	
GRAVEL GRAVEL SHOULDER	
WETLAND	

STD DUTY: 6" CONC. OVER 6" COMPACTED SAND SUBBASE
HEAVY DUTY: 8" CONC. OVER 6" COMPACTED SAND SUBBASE
B.D.B. DUTY ONLY: 8" CONC. OVER 6" COMPACTED SAND SUBBASE
STD DUTY: 2" ASPH. OVER 8" COMPACTED AGGREGATE BASE
HEAVY DUTY: 3" ASPH. OVER 10" COMPACTED AGGREGATE BASE

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS DT-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

SYMBOLS: GRADING

PROPOSED SPOT GRADE ELEVATION. ALL GRADES INDICATED ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED. 914.50

PROPOSED CONTOUR LINE 915

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
2. THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
3. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE CITY OF NOVI. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE CITY PRIOR TO CONSTRUCTION.
4. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT PREPARED BY PEA, INC. DATED SEPTEMBER 28, 2018.
5. SEE ADDITIONAL GRADING AND EARTHWORK NOTES ON DETAIL SHEET C-10.1
6. REFER TO CONSTRUCTION PLANS FOR ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
7. ALL SLOPES EXCEEDING 1:6 MUST BE STABILIZED BY SODDING OR BY PLACING A MULCH BLANKET PEGGED IN PLACE OVER SEED.
8. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL, IN THE OPINION OF THE GEOTECHNICAL ENGINEER, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.
10. PROPOSED PATHWAY WITHIN THE R.O.W. SHALL MEET EXISTING GRADES AT BOTH ENDS.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS			
NO.	BY	ITEM DESCRIPTION	DATE
1	KRD	OAR PROJECT/ZONING REVISED SUBMITTAL	3/20/19
2	KRD	OAR PROJECT/ZONING REVISED SUBMITTAL	4/29/19

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

PRELIMINARY GRADING PLAN - WEST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N, R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN:	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 WKR PRV-APP\SHEETS PLANS\C-433PRAVC-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-4.1

GREGORY BONO ENGINEER 6201 LICENSED PROFESSIONAL ENGINEER STATE OF MICHIGAN

CAUTION!!
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THIS DRAWING AND DESIGNS AND THE PROPERTY OF PEA, INC. AND ARE NOT TO BE USED IN ANY WAY THAT THEY ARE NOT TO BE USED, REPRODUCED, OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO OTHERS, WITHOUT THE PRIOR WRITTEN CONSENT OF PEA, INC. ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS ARE HEREBY SPECIFICALLY RESERVED. © 2019 PEA, INC.

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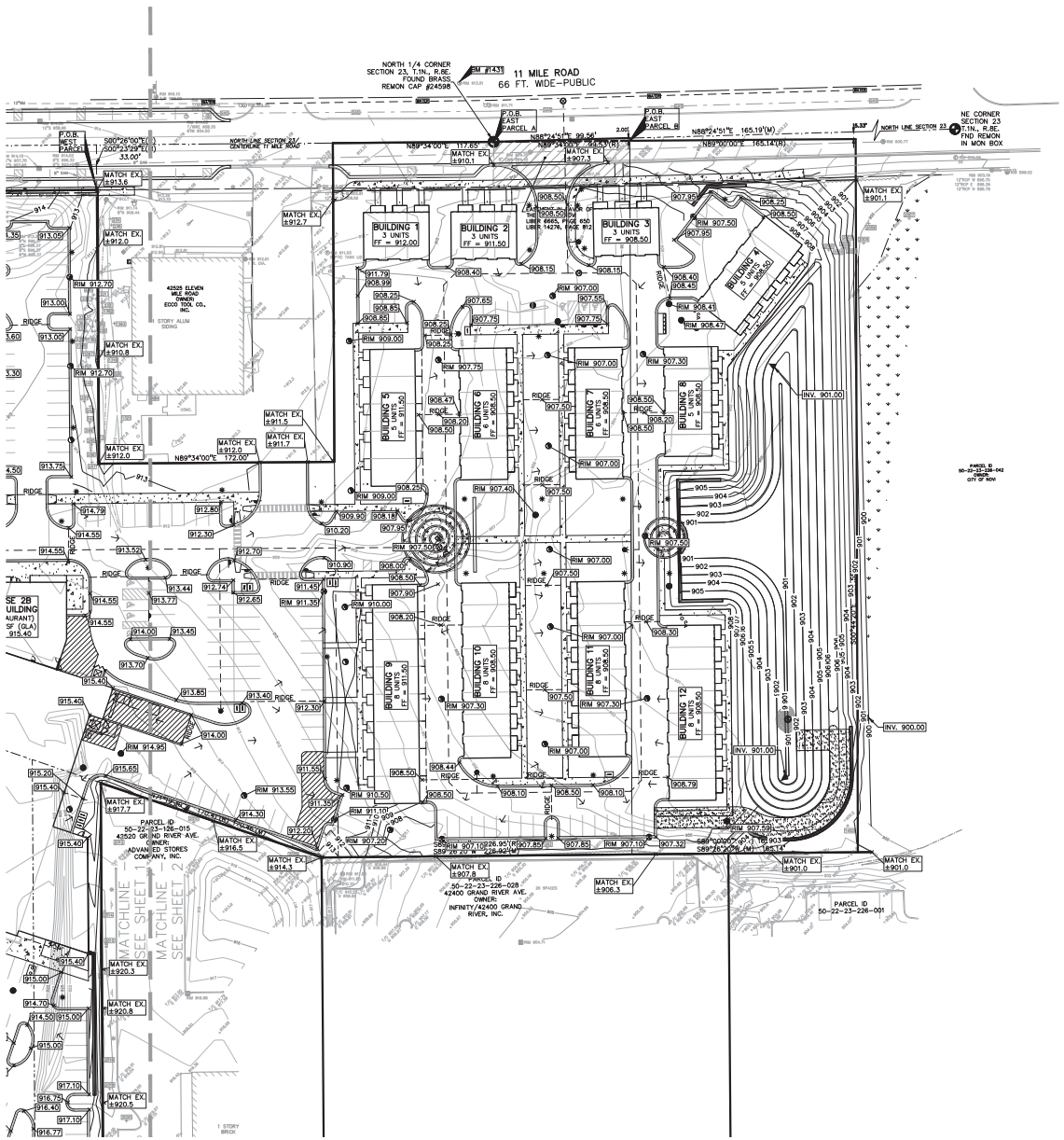

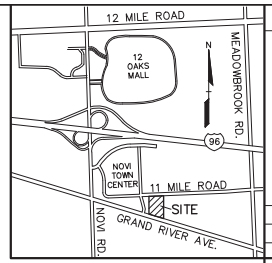

LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND	BRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
	M MEASURED
	C CALCULATED

EXISTING	PROPOSED
ELEC., PHONE OR CABLE TV OH. LINE, POLE & GUY WIRE	
UNDERGROUND CABLE TV, CATV PEDESTAL	
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
ELECTRIC U.G. CABLE, MARKER, METER & HANDHOLE	
GAS MAIN, VALVE & GAS LINE MARKER	
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
SANITARY SEWER, CLEANOUT & MANHOLE	
STORM SEWER, CLEANOUT & MANHOLE	
COMBINED SEWER & MANHOLE	
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN	
POST INDICATOR VALVE	
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
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SPOT ELEVATION	
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FENCE	
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STREET LIGHT	
SIGN	
CONCRETE	
ASPH. ASPHALT	
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REFERENCE DRAWINGS

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OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

REVISIONS	DATE
1. PEA, JPB, CWM, DESIGN UPDATE	1.03.19
2. PEA, GMB, CWM, PROFESSIONAL REVIEWED SUBMITTAL	2.20.19
3. PEA, GMB, CWM, PROFESSIONAL REVIEWED SUBMITTAL	3.20.19

STATE OF MICHIGAN GREGORY BONO ENGINEER LICENSED PROFESSIONAL ENGINEER

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PRELIMINARY GRADING PLAN - EAST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T1N, R8E,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018033\DWG\SITE PLANS\C-4.2GRADE-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

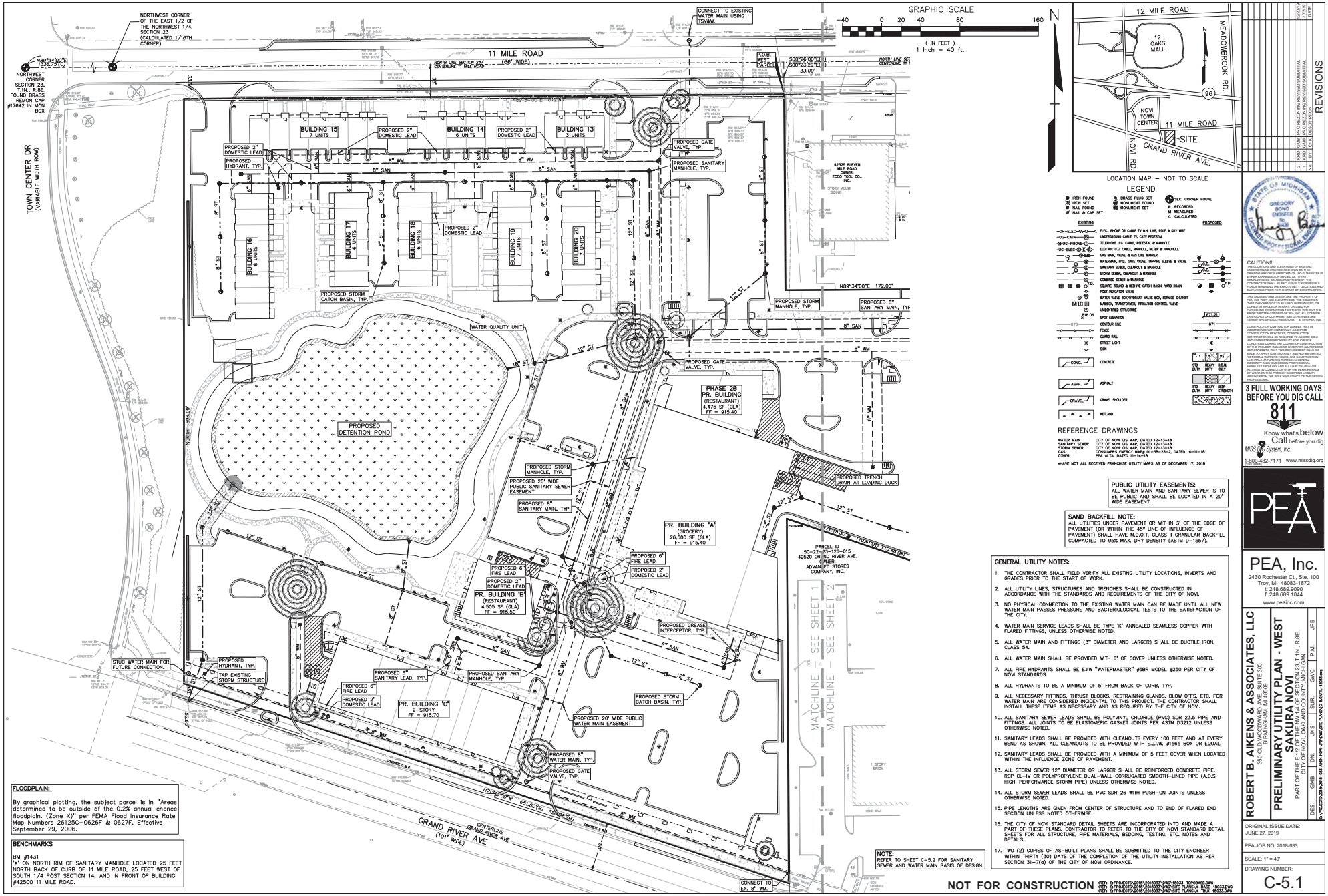
PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-4.2

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-TRUC-18033.DWG



LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- GRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
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- SPOT ELEVATION
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- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPHALT
- GRAVEL SHOULDER
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REFERENCE DRAWINGS

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OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

PUBLIC UTILITY EASEMENTS:
ALL WATER MAIN AND SANITARY SEWER IS TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT.

SAND BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

GENERAL UTILITY NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, INVERTS AND GRADES PRIOR TO THE START OF WORK.
2. ALL UTILITY LINES, STRUCTURES AND TRENCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE CITY OF NOVI.
3. NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE CITY.
4. WATER MAIN SERVICE LEADS SHALL BE TYPE 'K' ANNEALED SEAMLESS COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.
5. ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.
6. ALL WATER MAIN SHALL BE PROVIDED WITH 6' OF COVER UNLESS OTHERWISE NOTED.
7. ALL FIRE HYDRANTS SHALL BE EJIW "WATERMASTER" #6BR MODEL #250 PER CITY OF NOVI STANDARDS.
8. ALL HYDRANTS TO BE A MINIMUM OF 5' FROM BACK OF CURB, TYP.
9. ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE CITY OF NOVI.
10. ALL SANITARY SEWER LEADS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
11. SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.J.I.W. #1565 BOX OR EQUAL.
12. SANITARY LEADS SHALL BE PROVIDED WITH A MINIMUM OF 5 FEET COVER WHEN LOCATED WITHIN THE INFLUENCE ZONE OF PAVEMENT.
13. ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE, RCP CL-IV OR POLYPROPYLENE DUAL-WALL CORRUGATED SMOOTH-LINED PIPE (A.D.S. HIGH-PERFORMANCE STORM PIPE) UNLESS OTHERWISE NOTED.
14. ALL STORM SEWER LEADS SHALL BE PVC SDR 26 WITH PUSH-ON JOINTS UNLESS OTHERWISE NOTED.
15. PIPE LENGTHS ARE GIVEN FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.
16. THE CITY OF NOVI STANDARD DETAIL SHEETS ARE INCORPORATED INTO AND MADE A PART OF THESE PLANS. CONTRACTOR TO REFER TO THE CITY OF NOVI STANDARD DETAIL SHEETS FOR ALL STRUCTURE, PIPE MATERIALS, BEDDING, TESTING, ETC. NOTES AND DETAILS.
17. TWO (2) COPIES OF AS-BUILT PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER WITHIN THIRTY (30) DAYS OF THE COMPLETION OF THE UTILITY INSTALLATION AS PER SECTION 31-7(a) OF THE CITY OF NOVI ORDINANCE.

FLOODPLAIN:
By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS
BM #1431
'X' ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

NOT FOR CONSTRUCTION

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XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS		
NO.	BY	DATE
1	GMB	2/20/19
2	GMB	3/29/19
3	GMB	4/26/19

GREGORY BONO ENGINEER LICENSED PROFESSIONAL ENGINEER

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BIRMINGHAM, MI 48009

PRELIMINARY UTILITY PLAN - WEST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N, R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	JKS	SUR.	GWC	P.M.	JPB
GMB						

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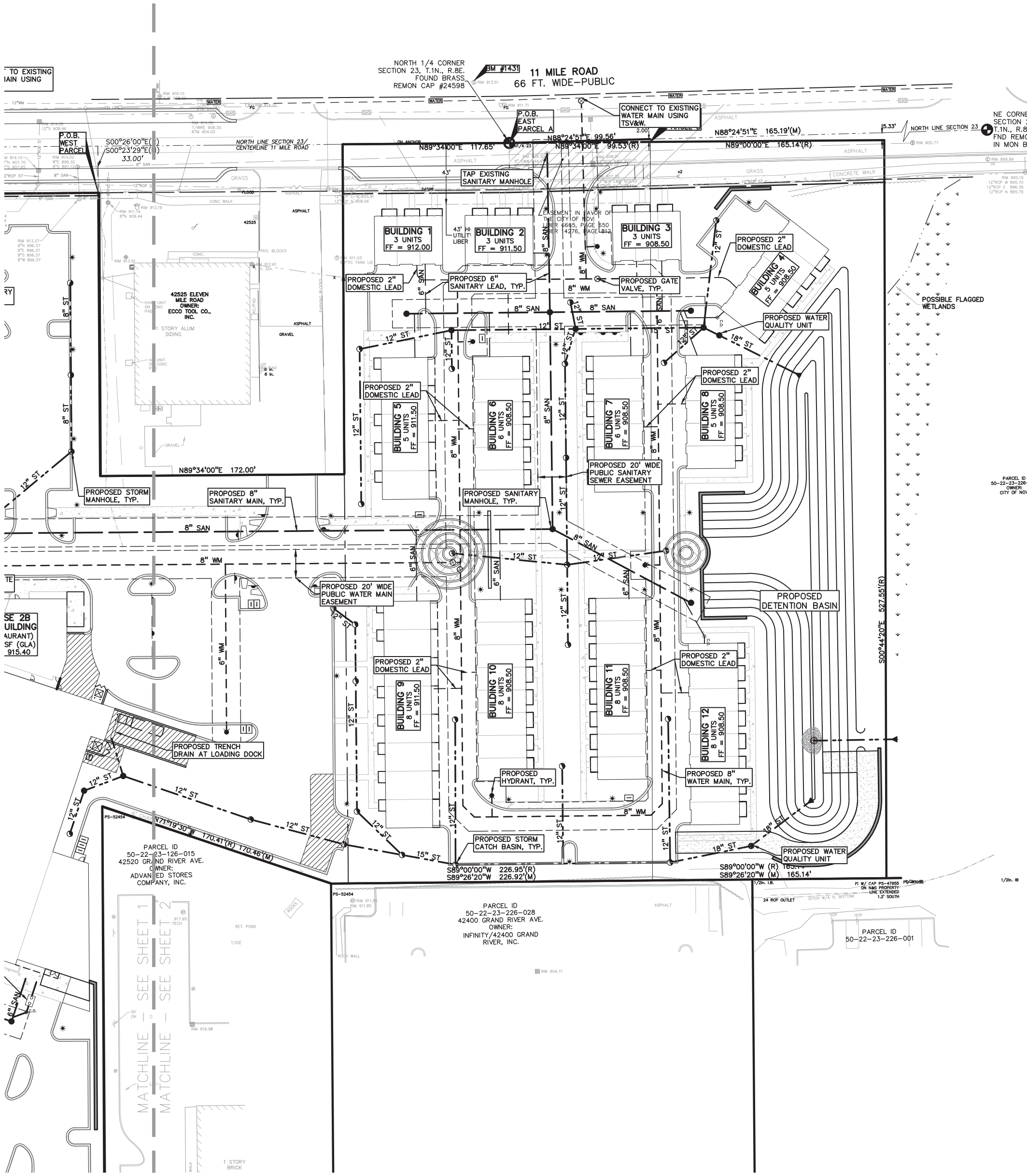
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

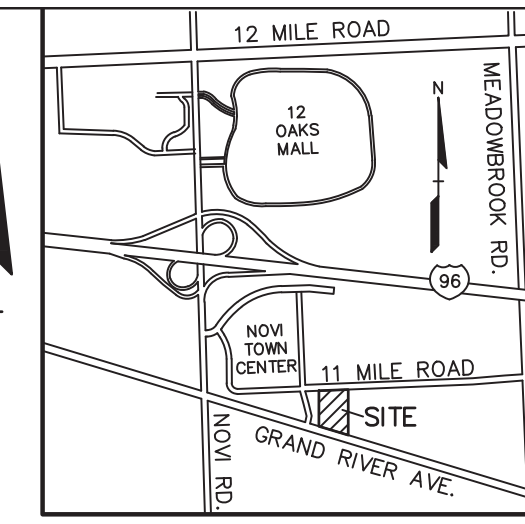
SCALE: 1" = 40'

DRAWING NUMBER:
C-5.1



GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.



LOCATION MAP – NOT TO SCALE

No.	BY	CHK	DESCRIPTION	DATE
1	KRD	GMB	PRO REZONING REVISED SUBMITTAL	10/2/19
2	KRD	GMB	PRO REZONING REVISED SUBMITTAL	12/20/19

REVISIONS

SANITARY SEWER BASIS OF DESIGN:

(Unit Factors Based City of Novi Sewer Unit Factors)

Building	Description	Units	Unit Factor	REU	Population (3.2 people/REU)
Initial					
Building A	Specialty Grocery	26,500 sf	0.31 per 1000 sf	8.22	26
Building A	Office	1,500 sf	0.40 per 1000 sf	0.60	2
Building B	Restaurant with Liquor	125 seats	0.13 per seat	16.25	52
Building B	Outdoor Dining Area	15 seats	0.13 per seat * 5/12	0.81	3
Building C	Retail	4,570 sf	0.34 per 1000 sf	1.55	5
Building C	Restaurant with Liquor	370 seats	0.13 per seat	48.10	154
Building C	Outdoor Dining Area	25 seats	0.13 per seat * 5/12	1.35	4
Building D	Restaurant with Liquor	100 seats	0.13 per seat	13.00	42
Building D	Outdoor Dining Area	10 seats	0.13 per seat * 5/12	0.54	2
	Multi-Family Residential	68 units	1.00 per dwelling	68.00	218
Ultimate					
Building E	First Level - Retail	8,320 sf	0.34 per 1000 sf	2.83	9
Building E	First Level - Restaurant with Liquor	280 seats	0.13 per seat	36.40	116
Building E	5 Levels - Residential	50 units	1.00 per residence	50.00	160
Building F	First Level - Retail	5,271 sf	0.34 per 1000 sf	1.79	6
Building F	First Level - Restaurant with Liquor	175 seats	0.13 per seat	22.75	73
Building F	1 Level - Office	10,542 sf	0.40 per 1000 sf	4.22	13
Building G	First Level - Retail	6,732 sf	0.34 per 1000 sf	2.29	7
Building G	First Level - Restaurant with Liquor	200 seats	0.13 per seat	26.00	83
Building G	4 Levels - Office	53,856 sf	0.40 per 1000 sf	21.54	69
Building H	4 Levels - Hotel	120 rooms	0.38 per room	45.60	146
			totals	371.8	1,190
TOTAL					
	Initial REU		(bldgs A-D & MF Res.)	158.4	
				507	People
	Average Flow (100 GPCPD)			50,700	G.P.D.
				0.078	C.F.S.
				0.051	M.G.D.
	P (1000s)			0.507	
	Peaking Factor (PF)			3.97	
	PF = (18+sqrt(P))/(4+sqrt(P))				
	Peak Flow (G.D.P.)			201,335	
	Peak Flow (C.F.S.)			0.312	
	8" Pipe Capacity Provided =			1.10	C.F.S.
	Ultimate REU			371.8	
				1190	People
	Average Flow (100 GPCPD)			119,000	G.P.D.
				0.184	C.F.S.
				0.119	M.G.D.
	P (1000s)			1.190	
	Peaking Factor (PF)			3.75	
	PF = (18+sqrt(P))/(4+sqrt(P))				
	Peak Flow (G.D.P.)			446,252	
	Peak Flow (C.F.S.)			0.690	
	8" Pipe Capacity Provided =			1.10	C.F.S.

WATER MAIN BASIS OF DESIGN:

(Unit Factors Based on OCDC Unit Assignment Factors)

Building	Description	Units	Unit Factor	REU	Population (3.2 people/REU)
Initial					
Building A	Specialty Grocery	26,500 sf	0.31 per 1000 sf	8.22	26
Building A	Office	1,500 sf	0.40 per 1000 sf	0.60	2
Building B	Restaurant with Liquor	125 seats	0.13 per seat	16.25	52
Building B	Outdoor Dining Area	15 seats	0.13 per seat * 5/12	0.81	3
Building C	Retail	4,570 sf	0.34 per 1000 sf	1.55	5
Building C	Restaurant with Liquor	370 seats	0.13 per seat	48.10	154
Building C	Outdoor Dining Area	25 seats	0.13 per seat * 5/12	1.35	4
Building D	Restaurant with Liquor	100 seats	0.13 per seat	13.00	42
Building D	Outdoor Dining Area	10 seats	0.13 per seat * 5/12	0.54	2
	Multi-Family Residential	68 units	1.00 per dwelling	68.00	218
Ultimate					
Building E	First Level - Retail	8,320 sf	0.34 per 1000 sf	2.83	9
Building E	First Level - Restaurant with Liquor	280 seats	0.13 per seat	36.40	116
Building E	5 Levels - Residential	50 units	1.00 per residence	50.00	160
Building F	First Level - Retail	5,271 sf	0.34 per 1000 sf	1.79	6
Building F	First Level - Restaurant with Liquor	175 seats	0.13 per seat	22.75	73
Building F	1 Level - Office	10,542 sf	0.40 per 1000 sf	4.22	13
Building G	First Level - Retail	6,732 sf	0.34 per 1000 sf	2.29	7
Building G	First Level - Restaurant with Liquor	200 seats	0.13 per seat	26.00	83
Building G	4 Levels - Office	53,856 sf	0.40 per 1000 sf	21.54	69
Building H	4 Levels - Hotel	120 rooms	0.38 per room	45.60	146
			totals	371.8	1,190
TOTAL					
	Initial REU		(bldgs A-D & MF Res.)	158.4	
				507	People
	Average Flow (150 GPCPD)			76,050	G.P.D.
				0.118	C.F.S.
				0.076	M.G.D.
	Design Max. Flow = (2*avg)			152,100	G.P.D.
				0.235	C.F.S.
				0.152	M.G.D.
	Building Type =			various	
	Required Fire Flow =			1500 gpm for 2 hours	
	Ultimate REU			371.8	
				1190	People
	Average Flow (150 GPCPD)			178,486	G.P.D.
				0.276	C.F.S.
				0.178	M.G.D.
	Design Max. Flow = (2*avg)			356,972	G.P.D.
				0.552	C.F.S.
				0.357	M.G.D.
	Building Type =			various	
	Required Fire Flow =			1500 gpm for 2 hours	

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION (816.06 / 671.21)
- CONTOUR LINE (670 / 671)
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE (STD DUTY, HEAVY DUTY, R.O.W. ONLY)
- ASPHALT (STD DUTY, HEAVY DUTY, DEEP STRENGTH)
- GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-58-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
'X' ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

STATE OF MICHIGAN GREGORY BONO ENGINEER LICENSED PROFESSIONAL ENGINEER

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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t: 248.689.9090
f: 248.689.1044
www.peainc.com

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE., SUITE 300
BIRMINGHAM, MI 48009

PRELIMINARY UTILITY PLAN - EAST SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 AIKEN NOVI-JPB\DWG\SITE PLANS\(C-5.0)UTIL-18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019
PEA JOB NO. 2018-033
SCALE: 1" = 40'
DRAWING NUMBER: C-5.2

NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X-TBLK-18033.DWG

LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows:
Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows:
Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence
North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

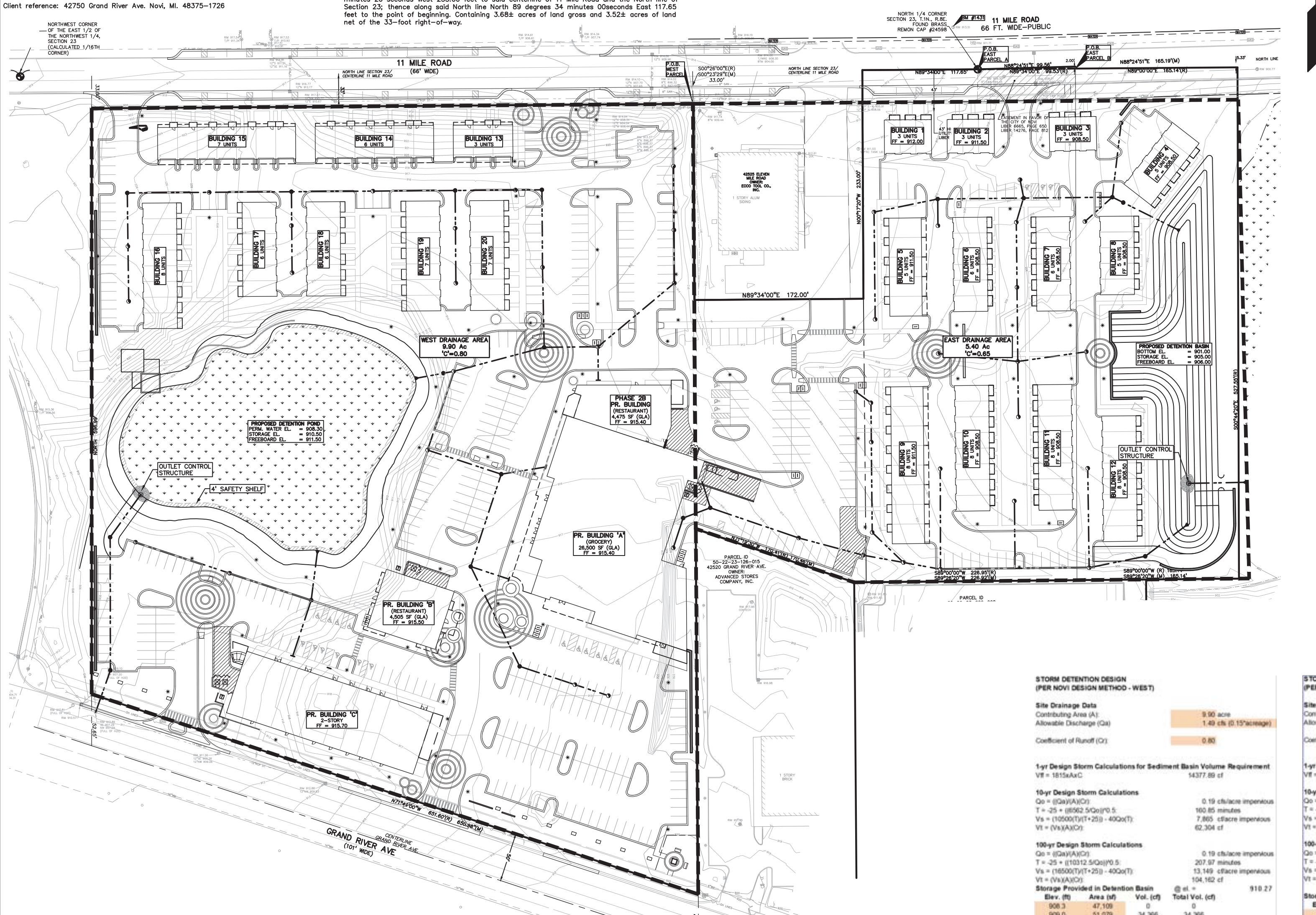
LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

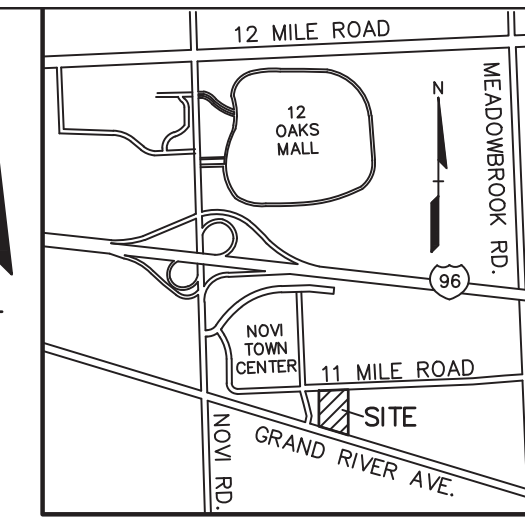
Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as:
Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

GRAPHIC SCALE
-50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.





LOCATION MAP - NOT TO SCALE

REVISIONS

No.	BY	CHK	DESCRIPTION	DATE
1	KRD	GMB	PRO REZONING REVISED SUBMITTAL	10/2/19
2	KRD	GMB	PRO REZONING REVISED SUBMITTAL	12/20/19

LEGEND

IRON FOUND; IRON SET; NAIL FOUND; NAIL & CAP SET; BRASS PLUG SET; MONUMENT FOUND; MONUMENT SET; SEC. CORNER FOUND; R RECORDED; M MEASURED; C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
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- STORM SEWER, CLEANOUT & MANHOLE
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- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION (816.06 / 671.21)
- CONTOUR LINE (670 / 671)
- FENCE
- GUARD RAIL
- STREET LIGHT
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- CONCRETE (STD DUTY, HEAVY DUTY, R.O.W. ONLY)
- ASPHALT (STD DUTY, HEAVY DUTY, DEEP STRENGTH)
- GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

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SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
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GAS	CONSUMERS ENERGY MAP# 01-58-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
'X' ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

STORM DETENTION DESIGN (PER NOVI DESIGN METHOD - WEST)

Site Drainage Data

Contributing Area (A):	9.90	acre
Allowable Discharge (Qa)	1.49	cfs (0.15*acreage)
Coefficient of Runoff (Cr):	0.80	

1-yr Design Storm Calculations for Sediment Basin Volume Requirement

Vff = 1815xAxC	14377.89	cf

10-yr Design Storm Calculations

Qo = ((Qa)/(A)(Cr)):	0.19	cfs/acre impervious
T = -25 + ((6562.5/Qo))^0.5:	160.85	minutes
Vs = (10500(T)/(T+25)) - 40Qo(T):	7,865	cf/acre impervious
Vt = (Vs)(A)(Cr):	62,304	cf

100-yr Design Storm Calculations

Qo = ((Qa)/(A)(Cr)):	0.19	cfs/acre impervious
T = -25 + ((10312.5/Qo))^0.5:	207.97	minutes
Vs = (16500(T)/(T+25)) - 40Qo(T):	13,149	cf/acre impervious
Vt = (Vs)(A)(Cr):	104,162	cf

Storage Provided in Detention Basin @ el. = 910.27

Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
908.3	47,109	0	0
909.0	51,079	34,366	34,366
910.0	56,787	53,933	88,299
910.50	59,608	29,099	117,398

STORM DETENTION DESIGN (PER NOVI DESIGN METHOD - EAST)

Site Drainage Data

Contributing Area (A):	5.40	acre
Allowable Discharge (Qa)	0.81	cfs (0.15*acreage)
Coefficient of Runoff (Cr):	0.65	

1-yr Design Storm Calculations for Sediment Basin Volume Requirement

Vff = 1815xAxC	6368.78	cf

10-yr Design Storm Calculations

Qo = ((Qa)/(A)(Cr)):	0.23	cfs/acre impervious
T = -25 + ((6562.5/Qo))^0.5:	143.92	minutes
Vs = (10500(T)/(T+25)) - 40Qo(T):	7,622	cf/acre impervious
Vt = (Vs)(A)(Cr):	26,745	cf

100-yr Design Storm Calculations

Qo = ((Qa)/(A)(Cr)):	0.23	cfs/acre impervious
T = -25 + ((10312.5/Qo))^0.5:	186.75	minutes
Vs = (16500(T)/(T+25)) - 40Qo(T):	12,834	cf/acre impervious
Vt = (Vs)(A)(Cr):	45,034	cf

Storage Provided in Detention Basin

Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
901.0	3,275	0	0
902.0	7,606	5,441	5,441
903.0	12,158	9,882	15,323
904.0	16,936	14,547	29,870
905.0	21,940	19,438	49,308

NOT FOR CONSTRUCTION

XREF: S:PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X-TBLK-18033.DWG

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
LICENSED PROFESSIONAL ENGINEER

CAUTION!!
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350 OLD WOODWARD AVE., SUITE 300
BIRMINGHAM, MI 48009

STORM WATER MAINTENANCE PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	SUR.	P.M.
GMB	JKS	GWC	JPB

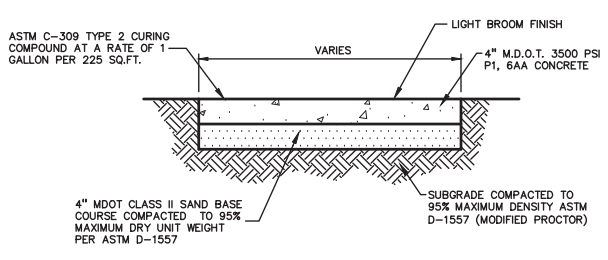
S:\PROJECTS\2018\2018-033 AIKEN NOVI--JPB\DWG\SITE PLANS\(C-6.0)STMP-18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

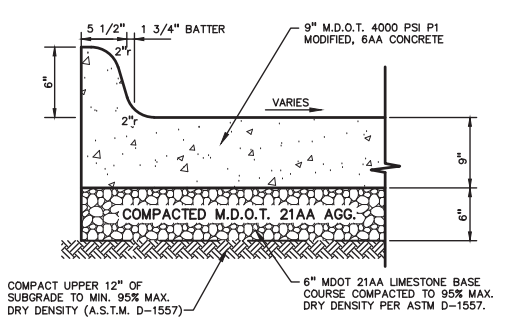
PEA JOB NO. 2018-033

SCALE: 1" = 50'

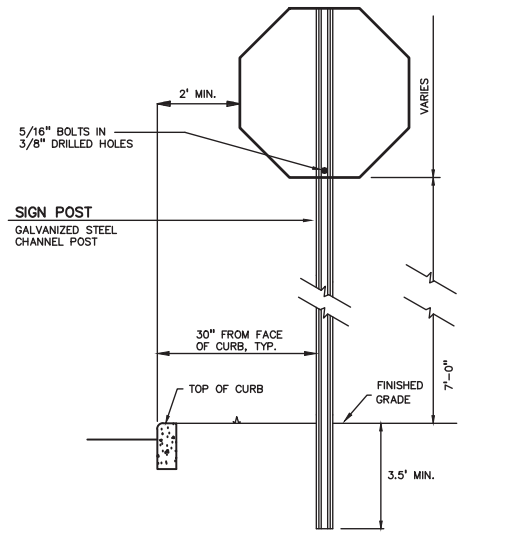
DRAWING NUMBER: C-6.0



BIKE RACK PAD DETAIL
NOT TO SCALE

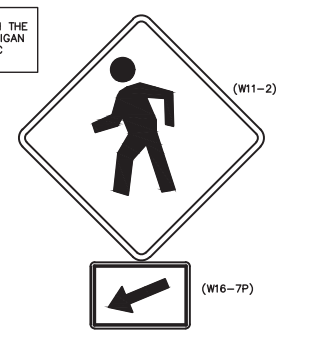


DRIVE APPROACH CONCRETE PAVEMENT
(TO BE USED FOR RIGHT-OF-WAY PAVEMENT) NOT TO SCALE



SIGN AND POST INSTALLATION IN LANDSCAPED AREAS
NOT TO SCALE

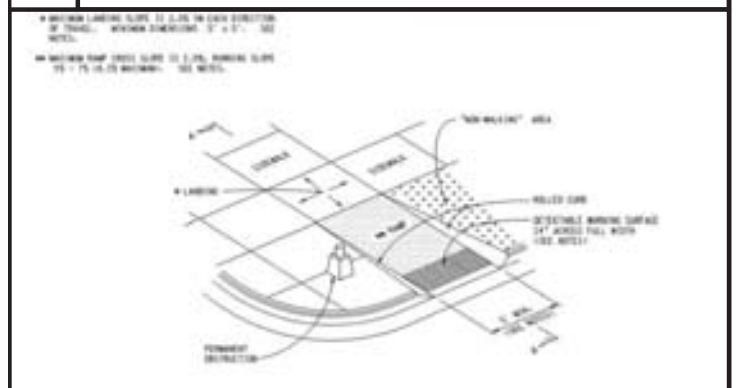
NOTE:
ALL SIGNS WILL COMPLY WITH THE LATEST EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)



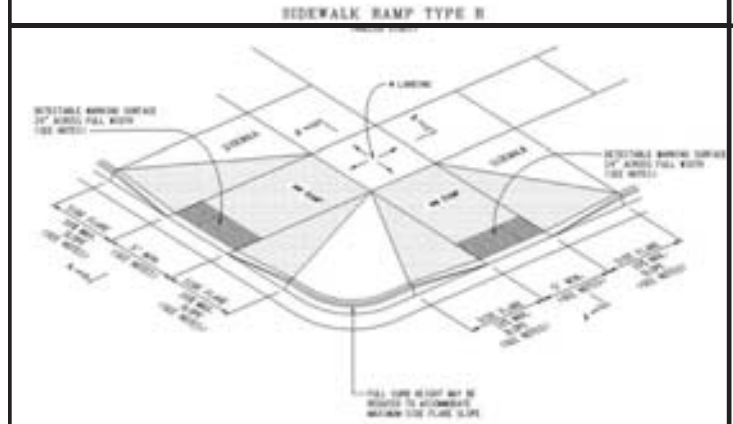
30" x 30"
BLACK ON YELLOW REFLECTORIZED
7'-0" MOUNTING HEIGHT
(W11-2)

24" x 12"
BLACK ON YELLOW REFLECTORIZED
MOUNTING BELOW W11-2
(W16-7P)

CROSSWALK SIGNS DETAIL
NOT TO SCALE



SIDEWALK RAMP TYPE B



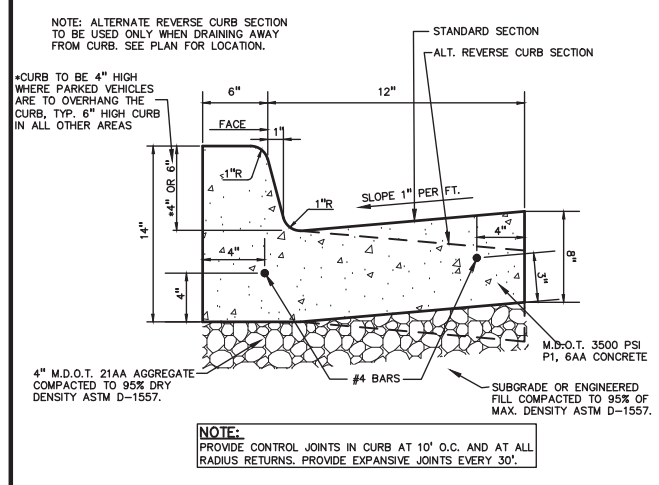
SIDEWALK RAMP TYPE F

NOTE:
ALL SIGNS WILL COMPLY WITH THE LATEST EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)



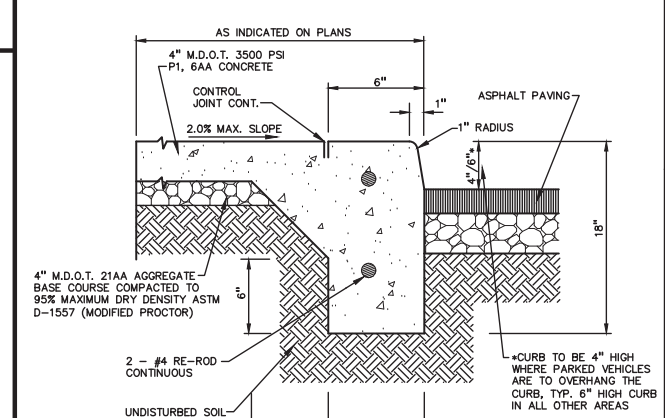
30" x 30"
WHITE ON RED REFLECTORIZED
7'-0" MOUNTING HEIGHT
(R1-1)

STOP SIGN DETAIL
NOT TO SCALE



NOTE:
PROVIDE CONTROL JOINTS IN CURB AT 10' O.C. AND AT ALL RADIUS RETURNS. PROVIDE EXPANSIVE JOINTS EVERY 30'.

18" CONCRETE CURB AND GUTTER DETAIL
NOT TO SCALE

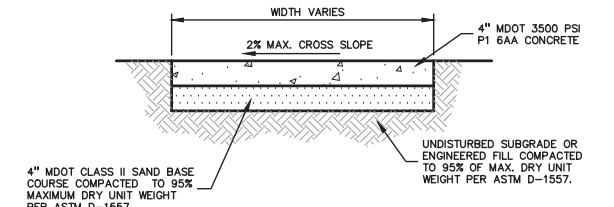


CONTRACTION JOINTS TO BE 2 1/2" DEEP. SPACED AT 5' INTERVALS (TOOLED). EXPANSION JOINTS TO BE 1/2" PREMOLDED FILLER, SPACED A MAXIMUM OF 30' APART.

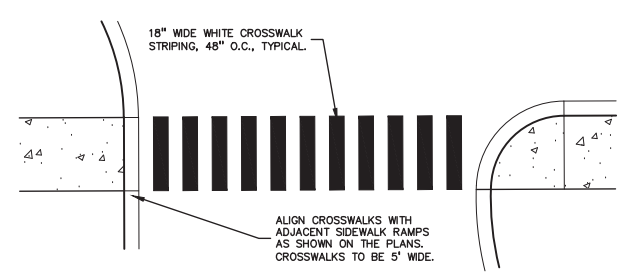
INTEGRAL CURB AND SIDEWALK
NOT TO SCALE

NOTE:
CROSS-SLOPE OF SIDEWALK MUST NOT EXCEED 2.0%, EXCEPT IN TRANSITION AREA MATCHING INTO EXISTING SIDEWALK

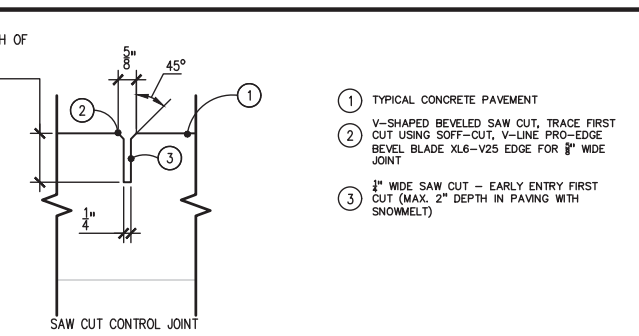
PROVIDE 1" DEPTH SAWCUT CONTROL JOINTS AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK (NOT TO EXCEED 8' INTERVAL).



CONCRETE SIDEWALK
NOT TO SCALE

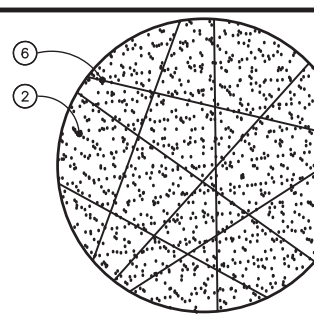


STRIPED CROSSWALK DETAIL
NOT TO SCALE

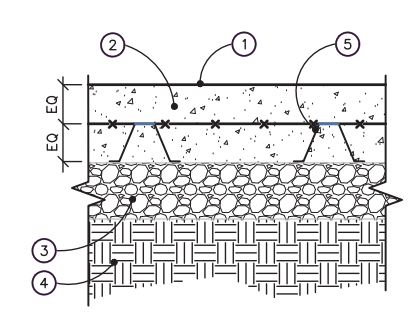


1. TYPICAL CONCRETE PAVEMENT
2. V-SHAPED BEVELED SAW CUT, TRACE FIRST CUT USING SOFF-CUT, V-LINE PRO-EDGE BEVEL BLADE XL6-V25 EDGE FOR 5/8" WIDE JOINT
3. 1/4" WIDE SAW CUT – EARLY ENTRY FIRST CUT (MAX. 2" DEPTH IN PAVING WITH SNOWMELT)

TYPICAL SAW CUT CONTROL JOINT DETAIL
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

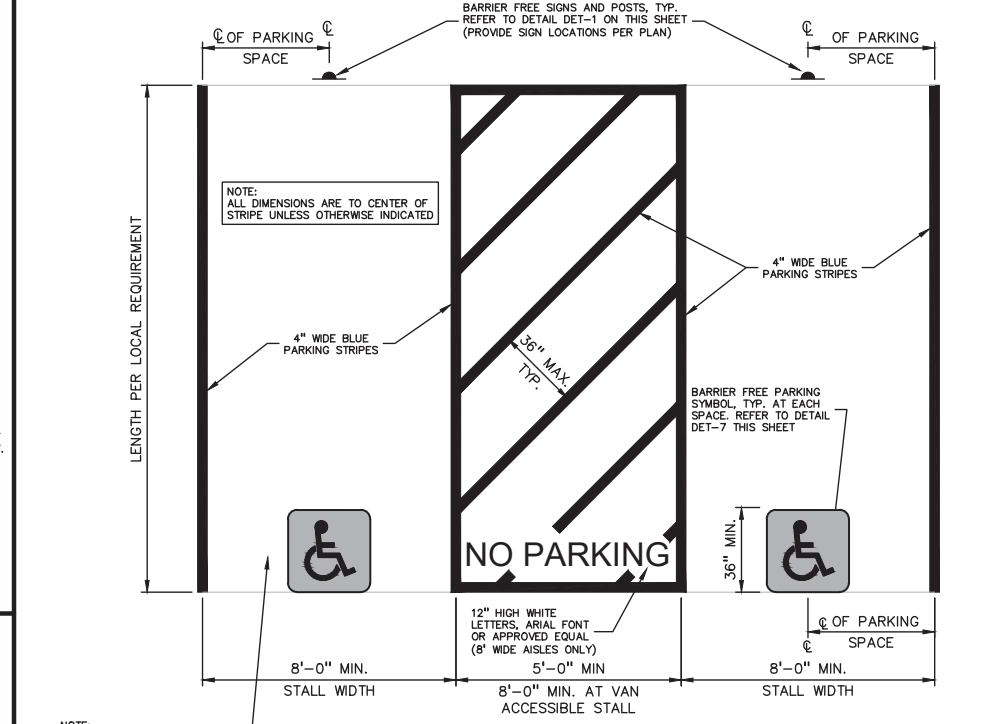


1. FINISH GRADE
2. 8" TH. POURED, INTEGRALLY COLORED, CONCRETE PAVEMENT WITH 6X6 W4.0X W4.0 WWF AND MEDIUM BROOM FINISH
3. 6" MIN. DEPTH MDOT 21AA LIMESTONE AGGREGATE BASE COMPACTED TO 95% MODIFIED PROCTOR
4. COMPACTED SUBGRADE TO 95% MODIFIED PROCTOR
5. SUPPORT CHAIRS AS REQUIRED
6. SAW CUT CONTROL JOINT – REFER TO TYP. DETAIL

HEAVY DUTY COLORED CONCRETE PAVEMENT
SCALE: 1" = 1'-0"

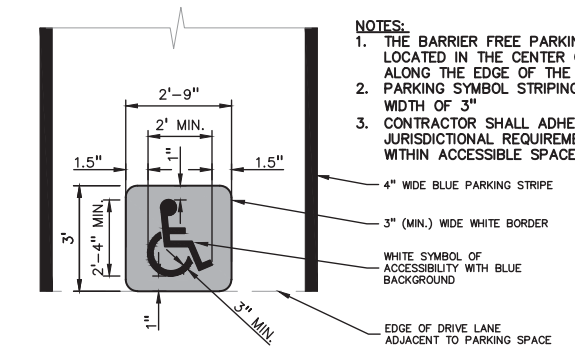
PROPOSED SIGN NOTES:

1. SINGLE SIGNS WITH NORMAL DIMENSIONS OF 12" x 18" OR SMALLER IN SIZE SHALL BE MOUNTED ON A GALVANIZED 2 LB. U-CHANNEL POST. MULTIPLE SIGNS AND/OR SIGNS WITH NOMINAL DIMENSION GREATER THAN 12" x 18" SHALL BE MOUNTED ON A GALVANIZED 3 LB. OR GREATER U-CHANNEL POST AS DICTATED BY THE WEIGHT OF THE PROPOSED SIGNS.
2. THE APPLICANT SHOULD INDICATE A BOTTOM HEIGHT OF 7' FROM FINAL GRADE FOR ALL SIGNS INSTALLED.
3. THE APPLICANT SHOULD INDICATE THAT ALL SIGNING SHALL BE PLACED 2' FROM THE FACE OF THE CURB OR EDGE OF THE NEAREST SIDEWALK TO THE NEAR EDGE OF THE SIGN.
4. TRAFFIC CONTROL SIGNS SHALL USE THE FHWA STANDARD ALPHABET SERIES.
5. TRAFFIC CONTROL SIGNS SHALL HAVE HIGH INTENSITY PRISMATIC (HIP) SHEETING TO MEET FHWA RETROREFLECTIVITY REQUIREMENTS.

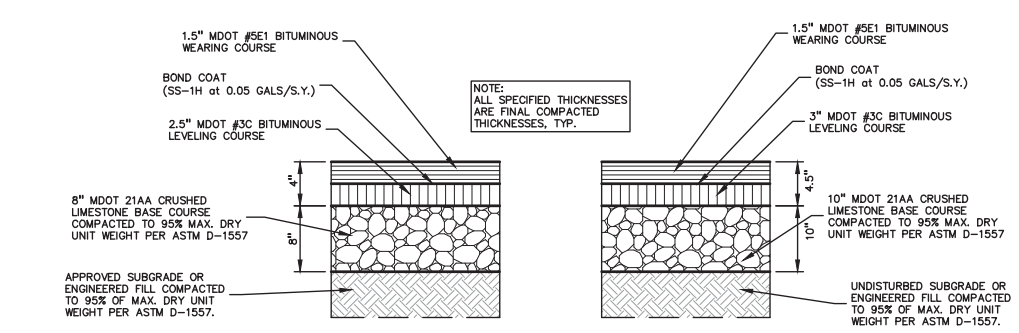


ALTERNATE BARRIER FREE PARKING STALL DETAIL
NOT TO SCALE

NOTES:
1. THE BARRIER FREE PARKING SYMBOL SHALL BE LOCATED IN THE CENTER OF THE PARKING SPACE AND ALONG THE EDGE OF THE ADJACENT DRIVE AISLE, TYP.
2. PARKING SYMBOL STRIPING SHALL HAVE A MINIMUM WIDTH OF 3"
3. CONTRACTOR SHALL ADHERE TO LOCAL/STATE JURISDICTIONAL REQUIREMENTS FOR ALL PAINTING WITHIN ACCESSIBLE SPACES.



BARRIER FREE PARKING SYMBOL DETAIL (INTERNATIONAL SYMBOL OF ACCESSIBILITY)
NOT TO SCALE

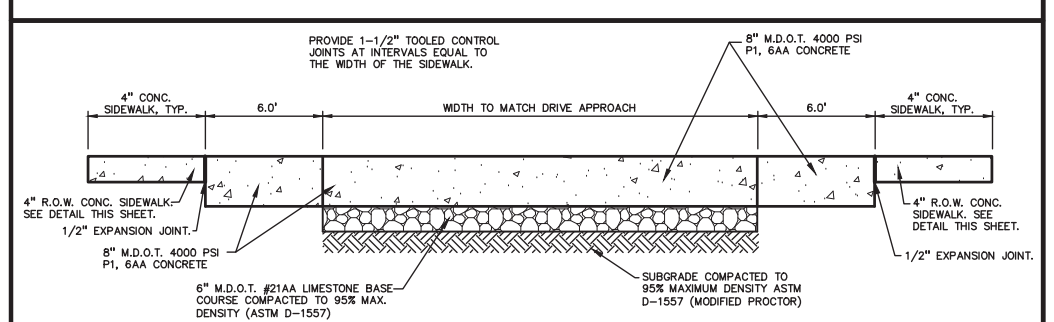


STANDARD DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY) NOT TO SCALE

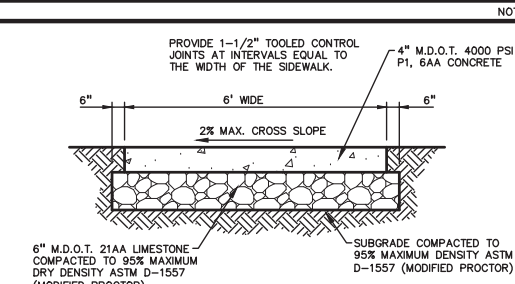
HEAVY DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY) NOT TO SCALE

AGGREGATE BASE NOTE:
THIS PAVEMENT SECTION DESIGN ASSUMES THE USE OF MDOT 21AA CRUSHED LIMESTONE BASE MATERIAL THAT MEETS THE REQUIREMENTS OF MDOT STANDARD SPECIFICATION SECTION 902 FOR AGGREGATES. IF CRUSHED CONCRETE AGGREGATE BASE IS PROPOSED IN LIEU OF THE SPECIFIED CRUSHED LIMESTONE MATERIAL, PEA INC. WILL REQUIRE A MINIMUM 25% INCREASE IN BASE THICKNESS. HOWEVER, IF TESTING DOCUMENTATION IS PROVIDED TO PEA, INC. THAT SHOWS THAT THE CRUSHED CONCRETE MATERIAL MEETS ALL REQUIREMENTS OF MDOT SPECIFICATION SECTION 902, THEN THE 25% INCREASE IN THICKNESS MAY BE REEVALUATED.

ASPHALT MATERIAL NOTES:
HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION 12SP501(E). THE BINDER GRADE FOR THIS WORK IS PG58-22. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT 'TIER 1' OR 'TIER 2' REQUIREMENTS (RAP CONTENT UP TO 27% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA INC. FOR REVIEW PRIOR TO CONSTRUCTION



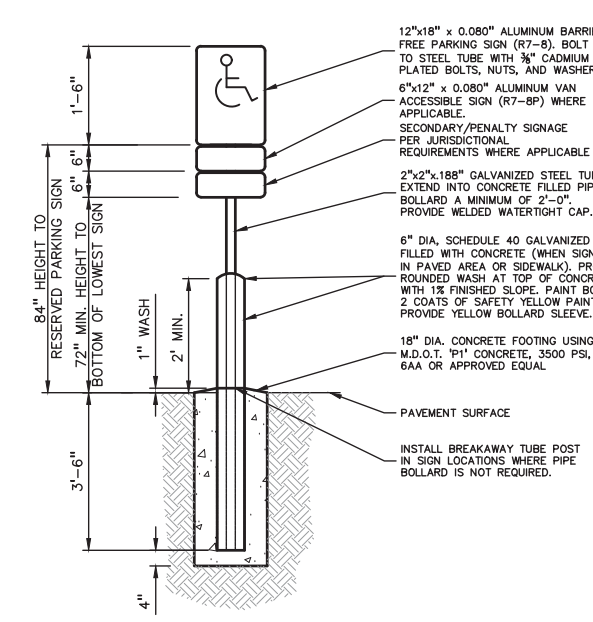
THICKENED SIDEWALK AT DRIVE APPROACH DETAIL
NOT TO SCALE



R.O.W. CONCRETE SIDEWALK
NOT TO SCALE

BARRIER FREE SIGN NOTES:

1. ONE SIGN IS REQUIRED AT EACH BARRIER FREE PARKING SPACE.
2. ALL SIGNS SHALL COMPLY WITH THE LATEST STANDARDS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
3. WHEN TWO BARRIER FREE PARKING SPACES ARE ADJACENT AND FACING EACH OTHER, TWO SIGNS ARE REQUIRED, BUT CAN BE MOUNTED ON THE SAME POST.
4. SIGN POSTS SHALL BE 2" NOM. SQUARE 14-GAUGE GALVANIZED STEEL TUBE WITH 7/16" HOLES AT 1" CENTERS. POSTS SHALL TELESCOPE INSIDE ANCHOR POSTS A MINIMUM OF 12".
5. ANCHOR POSTS SHALL BE 2.25" NOM. SQUARE 12-GAUGE GALVANIZED STEEL POST, A MINIMUM OF 3 FEET LONG.
6. IF THESE NOTES AND DETAILS CONFLICT WITH LOCAL CODES AND ORDINANCES, THE STRICTER REQUIREMENT SHOULD BE USED.
7. ALTERNATE MATERIALS MAY BE USED IF IN COMPLIANCE WITH A.D.A. GUIDELINES AND LOCAL REQUIREMENTS.



BARRIER FREE SIGN AND POST DETAIL
NOT TO SCALE



12" x 18" (R7-8)
GREEN BORDER AND LEGEND
WHITE SYMBOL, BLUE BACKGROUND.
REFLECTORIZED

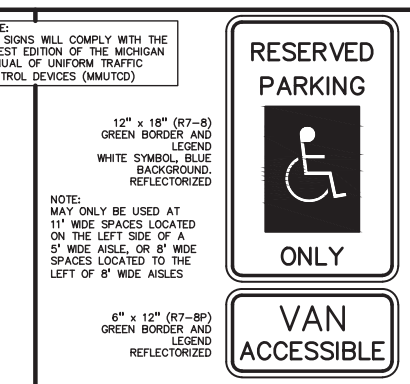
BARRIER FREE PARKING SIGN DETAIL
NOT TO SCALE

NOTE:
ALL SIGNS WILL COMPLY WITH THE LATEST EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)

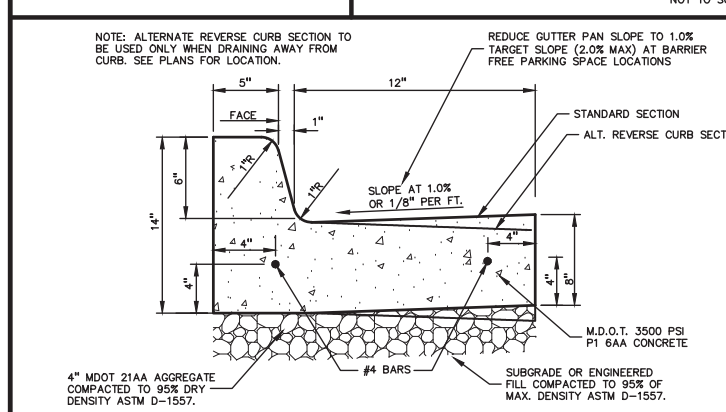
12" x 18" (R7-8)
GREEN BORDER AND LEGEND
WHITE SYMBOL, BLUE BACKGROUND.
REFLECTORIZED

NOTE:
MAY ONLY BE USED AT 11' WIDE SPACES LOCATED ON THE LEFT SIDE OF A 5' WIDE AISLE, OR 8' WIDE SPACES LOCATED TO THE LEFT OF 8' WIDE AISLES

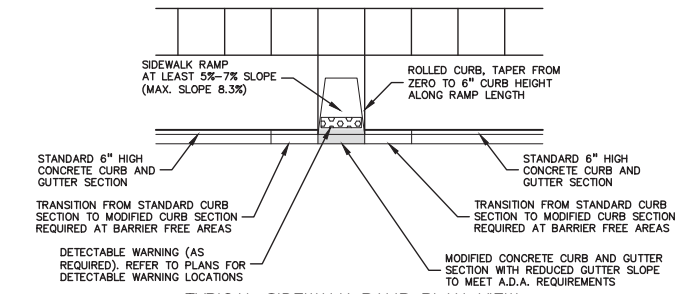
6" x 12" (R7-8P)
GREEN BORDER AND LEGEND
REFLECTORIZED



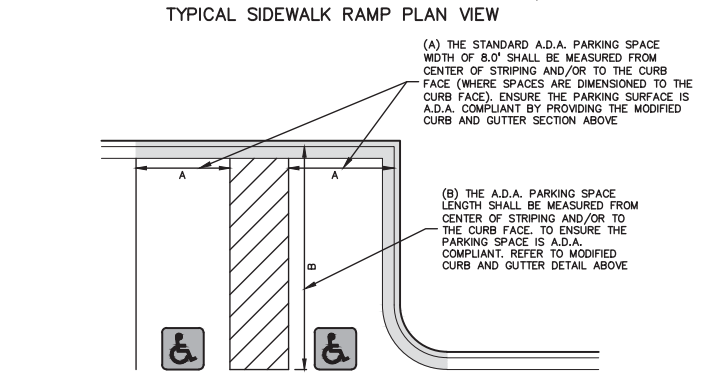
VAN ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE



MODIFIED CURB AND GUTTER SECTION FOR BARRIER FREE PARKING AREAS



TYPICAL SIDEWALK RAMP PLAN VIEW



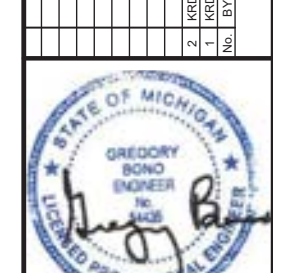
TYPICAL BARRIER FREE PARKING SPACES

MODIFIED 18"x6" CONCRETE CURB AND GUTTER DETAIL TO BE USED IN BARRIER FREE AREAS
NOT TO SCALE

NOT FOR CONSTRUCTION
XREF: S:PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:PROJECTS\2018\2018033\DWG\SITE PLANS\X-TBLK-18033.DWG

REVISIONS

No.	BY	CHK	DESCRIPTION	DATE
2	KRD	GMB	PRO REZONING REVISED SUBMITTAL	12/20/19
1	KRD	GMB	PRO REZONING REVISED SUBMITTAL	10/2/19



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350 OLD WOODWARD AVE., SUITE 300
BIRMINGHAM, MI 48009

NOTES AND DETAILS
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	SUR.	P.M.
GMB	JKS	GWC	JPB

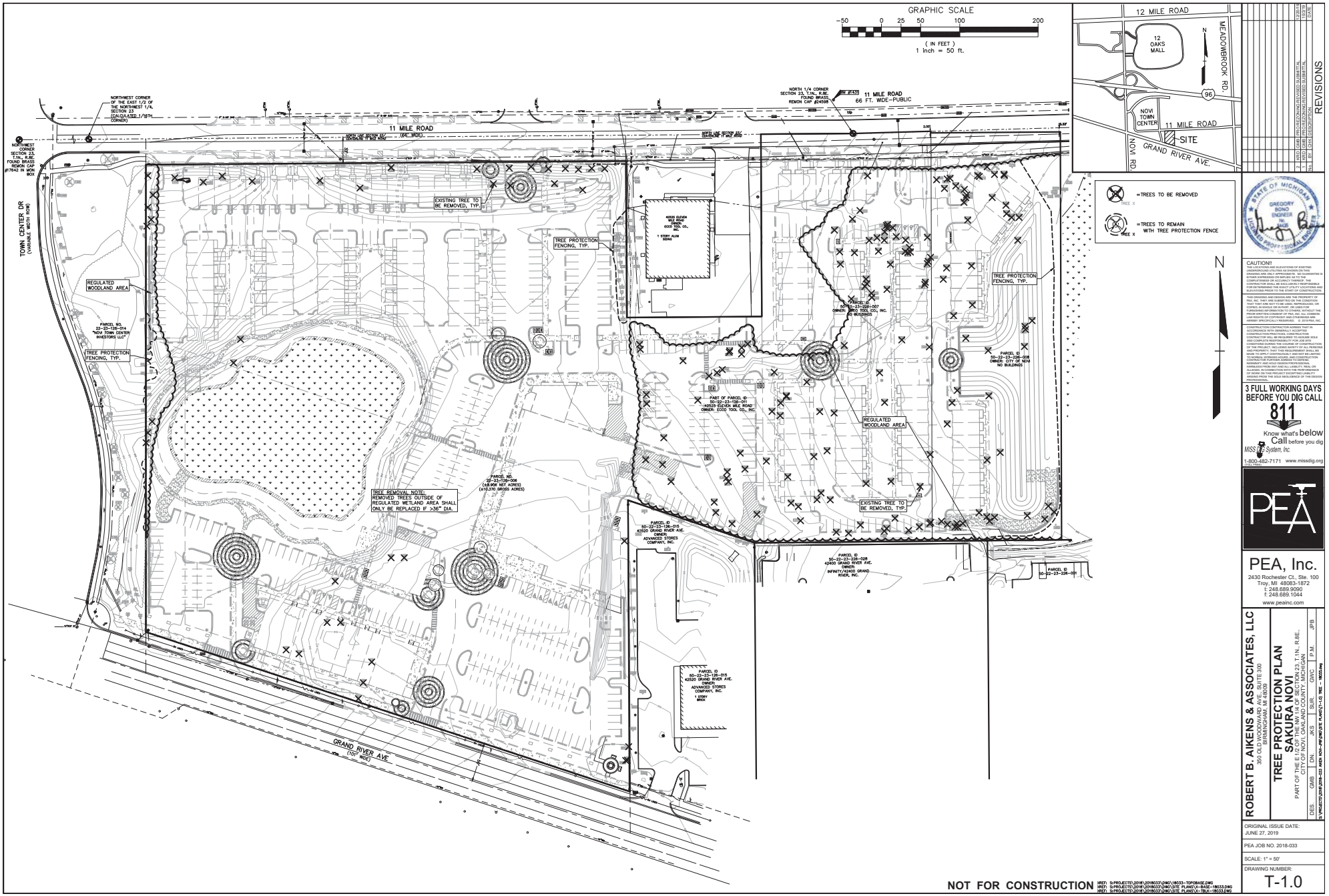
S:\PROJECTS\2018\2018-033 AIKEN NOVI-JPB\DWG\SITE PLANS\(C-7.0)DETAILS-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: N.T.S.

DRAWING NUMBER:
C-7.0



NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	OAKS PROJECT/ZONING REVISED SUBMITTAL	3/20/19
2	KRD	OAKS PROJECT/ZONING REVISED SUBMITTAL	1/30/19

REVISIONS

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

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350 OLD WOODWARD AVE., SUITE 300
BIRMINGHAM, MI 48009

TREE PROTECTION PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 NOVI SAKURA\SITE PLANS\T-1.0 TREE - 18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 50'

DRAWING NUMBER: T-1.0

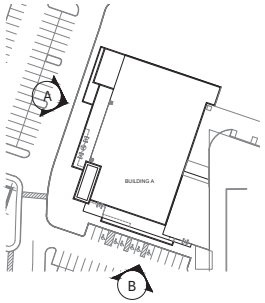
TAG #	CODE	DBH	COMMON NAME	LATIN NAME	CON	COMMENT	EXEMPT?	SAVE / REMOVE	REPLACEMENTS REQ'D
12	CW	8	Crack Willow	Salix fragilis	Good			SAVE	-
13	CT	16	Cottonwood	Populus deltoides	Good			SAVE	-
14	CT	10	Cottonwood	Populus deltoides	Good			SAVE	-
15	RM	13	Red Maple	Acer rubrum	Good		EXEMPT- LOC.	REMOVE	-
16	BP	13	Bradford Pear	Pyrus calleryanna	Good			SAVE	-
17	SM	22	Silver Maple	Acer saccharinum	Good		EXEMPT- LOC.	REMOVE	-
18	SM	20	Silver Maple	Acer saccharinum	Good		EXEMPT- LOC.	REMOVE	-
19	SM	16	Silver Maple	Acer saccharinum	Fair	13	EXEMPT- LOC.	REMOVE	-
20	SM	17	Silver Maple	Acer saccharinum	Good		EXEMPT- LOC.	REMOVE	-
21	SM	43	Silver Maple	Acer saccharinum	Good			REMOVE	4 Trees
22	SM	26	Silver Maple	Acer saccharinum	Good	21	EXEMPT- LOC.	REMOVE	-
23	CA	12	Crab Apple	Malus caronaria	Good		EXEMPT- LOC.	REMOVE	-
24	~~CT~~	46	Cottonwood	Populus deltoides	Good			REMOVE	4 Trees
25	BS	9	Blue Spruce	Picea pungens	Good		EXEMPT- LOC.	REMOVE	-
26	~~BS~~	9	Blue Spruce	Picea pungens	Good		EXEMPT- LOC.	REMOVE	-
27	AU	13	Austrian Pine	Pinus nigra	Poor			SAVE	-
28	AU	12	Austrian Pine	Pinus nigra	Poor			SAVE	-
29	AU	13	Austrian Pine	Pinus nigra	DEAD		EXEMPT- COND.	SAVE	-
30	CT		Cottonwood	Populus deltoides	Fair			SAVE	-
31	CT		Cottonwood	Populus deltoides	Fair			SAVE	-
32	AU	14	Austrian Pine	Pinus nigra	Poor			SAVE	-
33	AU	14	Austrian Pine	Pinus nigra	Poor			SAVE	-
34	CT		Cottonwood	Populus deltoides	Fair			SAVE	-
35	BL	15	Black Locust	Robinia pseudoacacia	DEAD		EXEMPT- COND.	REMOVE	-
36	BL	12	Black Locust	Robinia pseudoacacia	DEAD		EXEMPT- COND.	REMOVE	-
37	BL	21	Black Locust	Robinia pseudoacacia	Poor			REMOVE	3 Trees
38	BL	20	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
39	BL	17	Black Locust	Robinia pseudoacacia	Poor			SAVE	-
40	E	16	American Elm	Ulmus americana	Good			SAVE	-
41	BL	21	Black Locust	Robinia pseudoacacia	Poor			SAVE	-
42	BL	20	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
43	BL	23	Black Locust	Robinia pseudoacacia	Poor			SAVE	-
44	BL	24	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
45	BL	17	Black Locust	Robinia pseudoacacia	Poor	8, 6		SAVE	-
46	BL	24	Black Locust	Robinia pseudoacacia	Poor			SAVE	-
47	BL	22	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
48	RM	18	Red Maple	Acer rubrum	Good			SAVE	-
49	BL	16	Black Locust	Robinia pseudoacacia	DEAD		EXEMPT- COND.	SAVE	-
50	BL	20	Black Locust	Robinia pseudoacacia	Poor			SAVE	-
51	~~BL~~	18	Black Locust	Robinia pseudoacacia	Poor			REMOVE	2 Trees
52	~~BL~~	20	Black Locust	Robinia pseudoacacia	Fair			REMOVE	3 Trees
53	BL	16	Black Locust	Robinia pseudoacacia	Fair			REMOVE	2 Trees
54	~~BL~~	24	Black Locust	Robinia pseudoacacia	Fair			REMOVE	3 Trees
55	EE	8	Siberian Elm	Ulmus pumila	Good			SAVE	-
56	BL	20	Black Locust	Robinia pseudoacacia	Good			SAVE	-
57	~~BL~~	24	Black Locust	Robinia pseudoacacia	Good			REMOVE	3 Trees
58	BC	14	Wild Black Cherry	Prunus serotina	Fair			SAVE	-
59	~~BL~~	9	Black Locust	Robinia pseudoacacia	Good	4,3,3	EXEMPT- LOC.	REMOVE	-
60	~~BL~~	11	Black Locust	Robinia pseudoacacia	DEAD		EXEMPT- COND.	REMOVE	-
243	AU	12	Austrian Pine	Pinus nigra	Good			REMOVE	2 Trees
230	CT	17	Cottonwood	Populus deltoides	Good			SAVE	-
231	CT	16	Cottonwood	Populus deltoides	Good			SAVE	-
232	CT	15	Cottonwood	Populus deltoides	Good			SAVE	-
233	CT	20	Cottonwood	Populus deltoides	Good	12		SAVE	-
234	CT	16	Cottonwood	Populus deltoides	Good			SAVE	-
235	CT	15	Cottonwood	Populus deltoides	Good			SAVE	-
236	CT	10	Cottonwood	Populus deltoides	Good			SAVE	-
237	CT	14	Cottonwood	Populus deltoides	Good			SAVE	-
238	CT	15	Cottonwood	Populus deltoides	Good			SAVE	-
239	CT	9	Cottonwood	Populus deltoides	Good	9		SAVE	-
240	CT	11	Cottonwood	Populus deltoides	Good			SAVE	-
241	CT	15	Cottonwood	Populus deltoides	Good			SAVE	-
242	CT	10	Cottonwood	Populus deltoides	Good			SAVE	-
243	~~CT~~	9	Cottonwood	Populus deltoides	Good		EXEMPT- LOC.	REMOVE	-
244	CT	13	Cottonwood	Populus deltoides	Good			SAVE	-
245	CT	15	Cottonwood	Populus deltoides	Good			SAVE	-
246	CT	13	Cottonwood	Populus deltoides	Good			SAVE	-
247	CT	12	Cottonwood	Populus deltoides	Good			SAVE	-
1201	~~BX~~	19	Box elder	Acer negundo	DEAD	3 (dead) main leader d	EXEMPT- COND.	REMOVE	-
1202	~~CT~~	46	Cottonwood	Populus deltoides	Poor			REMOVE	4 Trees
1203	~~BX~~	16	Box elder	Acer negundo	Poor	14		REMOVE	2 Trees
1204	~~BX~~	8	Box elder	Acer negundo	DEAD	On the ground	EXEMPT- COND.	REMOVE	-
1205	~~BX~~	8	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1206	~~CT~~	26	Cottonwood	Populus deltoides	Poor			REMOVE	3 Trees
1207	~~CT~~	9	Cottonwood	Populus deltoides	Poor	5		REMOVE	1 Tree
1208	~~CT~~	12	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1209	~~CT~~	21	Cottonwood	Populus deltoides	Fair			REMOVE	3 Trees
1210	~~BX~~	11	Box elder	Acer negundo	Fair			REMOVE	1 Tree
1211	~~CT~~	9	Cottonwood	Populus deltoides	Poor			REMOVE	1 Tree
1212	~~CT~~	13	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1213	~~CT~~	16	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1214	~~CT~~	17	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1215	~~CT~~	19	Cottonwood	Populus deltoides	Poor			REMOVE	2 Trees
1216	~~CT~~	16	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1217	~~BX~~	13	Box elder	Acer negundo	Poor	5		REMOVE	2 Trees
1218	~~BX~~	10	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1219	~~CT~~	21	Cottonwood	Populus deltoides	Fair	18,17		REMOVE	5 Trees
1220	~~CT~~	24	Cottonwood	Populus deltoides	Fair			REMOVE	3 Trees
1221	~~CT~~	13	Cottonwood	Populus deltoides	Poor			REMOVE	2 Trees
1222	~~CT~~	13	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1223	~~CT~~	13	Cottonwood	Populus deltoides	Fair	10		REMOVE	2 Trees
1224	~~CT~~	6	Cottonwood	Populus deltoides	Fair		EXEMPT- SIZE	REMOVE	-
1225	~~CT~~	8	Cottonwood	Populus deltoides	Fair			REMOVE	1 Tree
1226	~~CT~~	10	Cottonwood	Populus deltoides	Poor			REMOVE	1 Tree
1227	~~CT~~	18	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1228	~~CT~~	9	Cottonwood	Populus deltoides	Poor			REMOVE	1 Tree
1229	~~CT~~	32	Cottonwood	Populus deltoides	Poor			REMOVE	4 Trees
1230	~~CT~~	20	Cottonwood	Populus deltoides	Poor			REMOVE	3 Trees
1231	~~CT~~	20	Cottonwood	Populus deltoides	Poor	11		REMOVE	3 Trees
1232	~~CT~~	18	Cottonwood	Populus deltoides	Poor			REMOVE	2 Trees
1233	~~CT~~	12	Cottonwood	Populus deltoides	DEAD		EXEMPT- COND.	REMOVE	-
1234	~~CT~~	16	Cottonwood	Populus deltoides	Poor	16		REMOVE	2 Trees
1235	~~CT~~	21	Cottonwood	Populus deltoides	Poor			REMOVE	3 Trees
1236	~~CT~~	14	Cottonwood	Populus deltoides	Poor	12		REMOVE	2 Trees

TAG #	CODE	DBH	COMMON NAME	LATIN NAME	CON	COMMENT	EXEMPT?	SAVE / REMOVE	REPLACEMENTS REQ'D
1237	~~CT~~	23	Cottonwood	Populus deltoides	Poor			REMOVE	3 Trees
1238	~~CT~~	10	Cottonwood	Populus deltoides	Fair	8		REMOVE	1 Tree
1239	~~BX~~	8	Box elder	Acer negundo	Poor	6		REMOVE	1 Tree
1240	~~BX~~	12	Box elder	Acer negundo	DEAD		EXEMPT- COND.	REMOVE	-
1241	~~SM~~	21	Silver Maple	Acer saccharinum	Fair			REMOVE	3 Trees
1242	~~BX~~	6	Box elder	Acer negundo	DEAD		EXEMPT- SIZE	REMOVE	-
1243	~~SM~~	13	Silver Maple	Acer saccharinum	Fair	12,12		REMOVE	3 Trees
1244	~~BX~~	12	Box elder	Acer negundo	DEAD		EXEMPT- COND.	REMOVE	-
1245	~~BX~~	17	Box elder	Acer negundo	DEAD		EXEMPT- COND.	REMOVE	-
1246	~~BX~~	12	Box elder	Acer negundo	DEAD		EXEMPT- COND.	REMOVE	-
1247	~~SM~~	29	Silver Maple	Acer saccharinum	Fair			REMOVE	3 Trees
1248	~~WC~~	13	White Cedar	Thuja occidentalis	Fair			REMOVE	2 Trees
1249	~~SM~~	33	Silver Maple	Acer saccharinum	Fair			REMOVE	4 Trees
1250	~~BX~~	8	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1251	~~BX~~	9	Box elder	Acer negundo	DEAD		EXEMPT- COND.	REMOVE	-
1252	~~BX~~	10	Box elder	Acer negundo	Poor	6		REMOVE	1 Tree
1253	~~BX~~	13	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1254	~~BX~~	6	Box elder	Acer negundo	DEAD		EXEMPT- SIZE	REMOVE	-
1255	~~CT~~	17	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1256	~~CT~~	14	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1257	~~CT~~	16	Cottonwood	Populus deltoides	Poor			REMOVE	2 Trees
1258	~~BX~~	12	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1259	~~CT~~	13	Cottonwood	Populus deltoides	Poor			REMOVE	2 Trees
1260	~~WC~~	11	White Cedar	Thuja occidentalis	DEAD		EXEMPT- COND.	REMOVE	-
1261	~~CT~~	17	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1262	~~BX~~	6	Box elder	Acer negundo	Poor		EXEMPT- SIZE	SAVE	-
1263	~~BX~~	7	Box elder	Acer negundo	DEAD		EXEMPT- SIZE	REMOVE	-
1264	~~BX~~	12	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1265	~~BX~~	8	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1266	~~CT~~	12	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1267	~~BX~~	8	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1268	~~BX~~	12	Box elder	Acer negundo	DEAD	7,4	EXEMPT- COND.	REMOVE	-
1269	~~WA~~	12	White Ash	Fraxinus americana	Fair			REMOVE	2 Trees
1270	~~WC~~	9	White Cedar	Thuja occidentalis	DEAD		EXEMPT- COND.	REMOVE	-
1271	~~BX~~	9	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1272	~~WC~~	13	White Cedar	Thuja occidentalis	Poor			REMOVE	2 Trees
1273	~~E~~	16	American Elm	Ulmus americana	Poor			REMOVE	2 Trees
1274	~~E~~	9	American Elm	Ulmus americana	Poor			REMOVE	1 Tree
1275	~~BX~~	18	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1276	~~BX~~	19	Box elder	Acer negundo	DEAD		EXEMPT- COND.	REMOVE	-
1277	~~GA~~	6	Green Ash	Fraxinus pennsylvanica	Poor		EXEMPT- SIZE	REMOVE	-
1278	~~SM~~	12	Silver Maple	Acer saccharinum	Fair	9,6		REMOVE	2 Trees
1279	~~SM~~	16	Silver Maple	Acer saccharinum	Fair			REMOVE	2 Trees
1280	~~RU~~	19	Russian Olive	Elaeagnus augustifolia	Poor			REMOVE	2 Trees
1281	~~BX~~	9	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1282	~~SM~~	14	Silver Maple	Acer saccharinum	Poor	12,9,8		REMOVE	4 Trees
1283	~~SM~~	13	Silver Maple	Acer saccharinum	Fair			REMOVE	2 Trees
1284	~~WA~~	6	White Ash	Fraxinus americana	Fair		EXEMPT- SIZE	REMOVE	-
1285	~~SM~~	13	Silver Maple	Acer saccharinum	Poor			REMOVE	2 Trees
1286	~~WC~~	12	White Cedar	Thuja occidentalis	DEAD	no leader	EXEMPT- COND.	REMOVE	-
1287	~~SM~~	14	Silver Maple	Acer saccharinum	Poor	12,11,9,2		REMOVE	5 Trees
1288	~~SM~~	11	Silver Maple	Acer saccharinum	Fair	9		REMOVE	1 Tree
1289	~~E~~	14	American Elm	Ulmus americana	Poor			REMOVE	2 Trees
1290	~~SM~~	21	Silver Maple	Acer saccharinum	Fair	13		REMOVE	3 Trees
1291	~~BX~~	6	Box elder	Acer negundo	Poor		EXEMPT- SIZE	REMOVE	-
1292	~~BX~~	6	Box elder	Acer negundo	Poor		EXEMPT- SIZE	REMOVE	-
1293	~~SM~~	9	Silver Maple	Acer saccharinum	Fair	7,7		REMOVE	2 Trees
1294	~~SM~~	9	Silver Maple	Acer saccharinum	Fair	9,6		REMOVE	2 Trees
1295	~~BX~~	16	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1296	~~WC~~	12	White Cedar	Thuja occidentalis	DEAD	No leader	EXEMPT- COND.	REMOVE	-
1297	~~BX~~	7	Box elder	Acer negundo	Poor		EXEMPT- SIZE	REMOVE	-
1298	~~E~~	14	American Elm	Ulmus americana	Fair			REMOVE	2 Trees
1299	~~BX~~	10	Box elder	Acer negundo	Poor	9		REMOVE	1 Tree
1300	~~SM~~	13	Silver Maple	Acer saccharinum	Poor	13		REMOVE	2 Trees
1302	~~BX~~	8	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1303	~~WC~~	18	White Cedar	Thuja occidentalis	Poor			REMOVE	2 Trees
1304	~~WC~~	9	White Cedar	Thuja occidentalis	Poor			REMOVE	1 Tree
1305	~~BX~~	16	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1306	~~CT~~	17	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1307	~~CT~~	10	Cottonwood	Populus deltoides	Fair			REMOVE	1 Tree
1308	~~CT~~	8	Cottonwood	Populus deltoides	Poor			REMOVE	1 Tree
1309	~~CT~~	7	Cottonwood	Populus deltoides	Fair		EXEMPT- SIZE	REMOVE	-
1310	~~CT~~	9	Cottonwood	Populus deltoides	Fair			REMOVE	1 Tree
1312	~~BX~~	13	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1313	~~E~~	16	American Elm	Ulmus americana	Poor			REMOVE	2 Trees
1314	~~BX~~	9	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1315	~~BX~~	16	Box elder	Acer negundo	Poor	12,9,8		REMOVE	4 Trees
1316	~~CT~~	27	Cottonwood	Populus deltoides	Fair			REMOVE	3 Trees
1317	~~SM~~	9	Silver Maple	Acer saccharinum	Fair	7		REMOVE	1 Tree
1318	CT	18	Cottonwood	Populus deltoides	Fair			SAVE	-
1319	CT	23	Cottonwood	Populus deltoides	Fair			SAVE	-
1320	SM	8	Silver Maple	Acer saccharinum	Poor	3,3		SAVE	-
1321	SM	8	Silver Maple	Acer saccharinum	Fair	4		SAVE	-
1322	SM	27	Silver Maple	Acer saccharinum	Fair			SAVE	-
1323	AU	17	Austrian Pine	Pinus nigra	Fair			SAVE	-
1324	CT	24	Cottonwood	Populus deltoides	Fair			SAVE	-
1325	CA	7	Crab Apple	Malus caronaria	Fair	5,5,3,2	EXEMPT- SIZE	SAVE	-
1326	CA	8	Crab Apple	Malus caronaria	Fair	7,2,3		SAVE	-
1327	CA	10	Crab Apple	Malus caronaria	Fair			SAVE	-
1328	CA	7	Crab Apple	Malus caronaria	DEAD		EXEMPT- SIZE	SAVE	-
1329	LL	13	Littleleaf Linden	Tilia Cordata	Good			SAVE	-
1330	LL	10	Littleleaf Linden	Tilia Cordata	Good			SAVE	-
1331	LL	13	Littleleaf Linden	Tilia Cordata	Good			SAVE	-
1332	LL	10	Littleleaf Linden	Tilia Cordata	Good			SAVE	-
1333	LL	14	Littleleaf Linden	Tilia Cordata	Fair			SAVE	-
1334	LL	13	Littleleaf Linden	Tilia Cordata	Good			SAVE	-
1335	LL	12	Littleleaf Linden	Tilia Cordata	Fair			SAVE	-
1336	RM	5	Red Maple	Acer rubrum	Fair		EXEMPT- SIZE	SAVE	-
1337	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT- SIZE	SAVE	-
1338	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT- SIZE	SAVE	-
1339	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT- SIZE	SAVE	-
1340	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT- SIZE	SAVE	-
1341	CA	8	Crab Apple	Malus caronaria	Good	7,5,4,6		SAVE	-
1342	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT- SIZE	SAVE	-

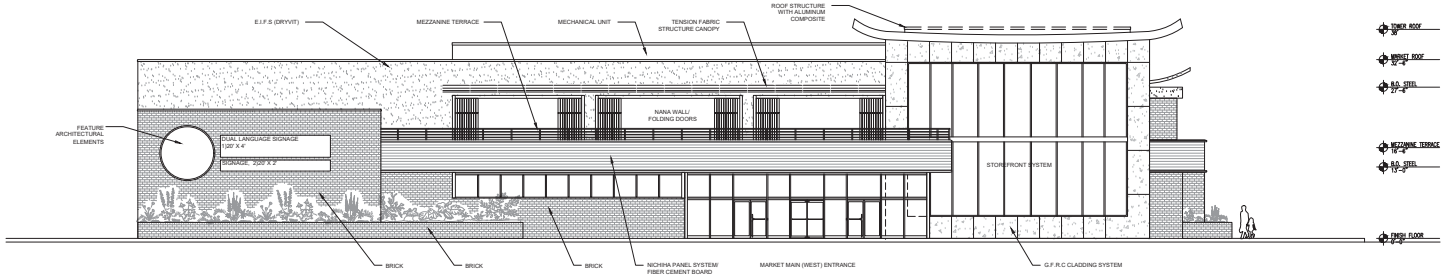
TAG #	CODE	DBH	COMMON NAME	LATIN NAME	CON	COMMENT	EXEMPT?	SAVE / REMOVE	REPLACEMENTS REQ'D
1343	RO	27	Red Oak	Quercus rubra	Good		EXEMPT- LOC.	REMOVE	-
1344	BS	6	Blue Spruce	Picea pungens	Good		EXEMPT- SIZE	REMOVE	-
1345	RO	5	Red Oak	Quercus rubra	Good		EXEMPT- SIZE	REMOVE	-
1346	BP	6	Bradford Pear	Pyrus calleryanna	Good		EXEMPT- SIZE	REMOVE	-
1347	BP	4	Bradford Pear	Pyrus calleryanna	Fair		EXEMPT- SIZE	REMOVE	-
1348	BS	9	Blue Spruce	Picea pungens	Fair			SAVE	-
1349	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT- SIZE	REMOVE	-
1350	BP	10	Bradford Pear	Pyrus calleryanna	Fair		EXEMPT- LOC.	REMOVE	-
1351	AU	15	Austrian Pine	Pinus nigra	Fair		EXEMPT- LOC.	REMOVE	-
1352	BS	6	Blue Spruce	Picea pungens	Good		EXEMPT- SIZE	REMOVE	-
1353	BS	4	Blue Spruce	Picea pungens	Fair		EXEMPT- SIZE	REMOVE	-
1354	HO	14	Horsechestnut	Aesculus hippocastanum	Fair		EXEMPT- LOC.	REMOVE	-
1355	SM	10	Silver Maple	Acer saccharinum	Fair		EXEMPT- LOC.	REMOVE	-
1356	SM	8	Silver Maple	Acer saccharinum	Good		EXEMPT- LOC.	REMOVE	-
1357	JL	6	Japanese Lilac	Syringa reticulata	DEAD	No leaves	EXEMPT- SIZE	REMOVE	-
1358	JL	4	Japanese Lilac	Syringa reticulata	DEAD		EXEMPT- SIZE	REMOVE	-
1359	SM	11	Silver Maple	Acer saccharinum	Fair		EXEMPT- LOC.	REMOVE	-
1360	BS	6	Blue Spruce	Picea pungens	Fair		EXEMPT- SIZE	REMOVE	-
1361	BP	3	Bradford Pear	Pyrus calleryanna	Fair		EXEMPT- SIZE	REMOVE	-
1362	CT	15	Cottonwood	Populus deltoides	Fair			SAVE	-
1363	CT	17	Cottonwood	Populus deltoides	Fair			SAVE	-
1364	CT	9	Cottonwood	Populus deltoides	Fair	f236		SAVE	-
1365	CT	11	Cottonwood	Populus deltoides	Fair	237 tag		SAVE	-
1366	CT	13	Cottonwood	Populus deltoides	Fair	138		SAVE	-
1367	CT	13	Cottonwood	Populus deltoides	Fair			SAVE	-
1368	BX	6	Box elder	Acer negundo	Fair	3	EXEMPT- SIZE	REMOVE	-
1369	BL	7	Black Locust	Robinia pseudoacacia	Fair	4	EXEMPT- SIZE	REMOVE	-
1370	BL	7	Black Locust	Robinia pseudoacacia	Fair		EXEMPT- SIZE	REMOVE	-
1371	BL	8	Black Locust	Robinia pseudoacacia	Fair			REMOVE	1 Tree
1372	BL	10	Black Locust	Robinia pseudoacacia	Fair			REMOVE	1 Tree
1373	BL	13	Black Locust	Robinia pseudoacacia	Fair			REMOVE	2 Trees
1374	BL	12	Black Locust	Robinia pseudoacacia	Fair	10		REMOVE	2 Trees
1375	BL	13	Black Locust	Robinia pseudoacacia	Poor			REMOVE	2 Trees
1376	BL	13	Black Locust	Robinia pseudoacacia	Fair			REMOVE	2 Trees
1377	BL	9	Black Locust	Robinia pseudoacacia	Fair			REMOVE	1 Tree
1378	BL	10	Black Locust	Robinia pseudoacacia	Poor			REMOVE	1 Tree
1379	BL	11	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
1380	BL	8	Black Locust	Robinia pseudoacacia	Poor			REMOVE	1 Tree
1381	BL	8	Black Locust	Robinia pseudoacacia	Fair			REMOVE	1 Tree
1382	BL	8	Black Locust	Robinia pseudoacacia	Fair			REMOVE	1 Tree
1383	BL	6	Black Locust	Robinia pseudoacacia	Fair		EXEMPT- SIZE	REMOVE	-
1384	BL	11	Black Locust	Robinia pseudoacacia	Poor			REMOVE	1 Tree
1385	BL	13	Black Locust	Robinia pseudoacacia	Fair	x1		REMOVE	2 Trees
1386	BL	8	Black Locust	Robinia pseudoacacia	Poor			REMOVE	1 Tree
1387	BX	17	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1388	BL	10	Black Locust	Robinia pseudoacacia	Fair			REMOVE	1 Tree
1389	BL	8	Black Locust	Robinia pseudoacacia	Poor			REMOVE	1 Tree
1390	BX	9	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1391	CT	29	Cottonwood	Populus deltoides	Fair	16		REMOVE	3 Trees
1392	C	15	Catalpa	Catalpa speciosa	Fair	13		REMOVE	2 Trees
1393	SM	16	Silver Maple	Acer saccharinum	Fair	12		REMOVE	2 Trees
1394	SM	15	Silver Maple	Acer saccharinum	Fair	13		REMOVE	2 Trees
1395	SM	21	Silver Maple	Acer saccharinum	Fair			REMOVE	3 Trees
1396	SM	18	Silver Maple	Acer saccharinum	Fair			REMOVE	2 Trees
1397	SM	14	Silver Maple	Acer saccharinum	Fair	12,6		REMOVE	3 Trees
1398	BX	15	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1399	BX	13	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1400	SM	26	Silver Maple	Acer saccharinum	Fair	13,12,8		REMOVE	5 Trees
1401	~~CT~~	22	Cottonwood	Populus deltoides	Fair			REMOVE	3 Trees
1402	CT	20	Cottonwood	Populus deltoides	Fair			SAVE	-
1403	BX	6	Box elder	Acer negundo	Fair	6	EXEMPT- SIZE	REMOVE	-
1404	BX	8	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1405	BX	7	Box elder	Acer negundo	Poor		EXEMPT- SIZE	REMOVE	-
1406	BX	8	Box elder	Acer negundo	Poor			REMOVE	1 Tree
1407	BX	18	Box elder	Acer negundo	Poor			REMOVE	2 Trees
1408	BX	7	Box elder	Acer negundo	Poor		EXEMPT- SIZE	REMOVE	-
1409	~~CT~~	17	Cottonwood	Populus deltoides	Fair			REMOVE	2 Trees
1410	~~CT~~	18	Cottonwood	Populus deltoides	Fair	10		REMOVE	2 Trees
2000	BL	26	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
2001	BL	11	Black Locust	Robinia pseudoacacia	Dead	dead	EXEMPT- COND.	SAVE	-
2002	BL	13	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
2003	BL	10	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
2004	BL	12	Black Locust	Robinia pseudoacacia	Fair			SAVE	-
2005	AP	7	Domestic Apple	Malus sylvestris	Poor	7	EXEMPT- SIZE	SAVE	-
2006	E	7	American Elm	Ulmus americana	Fair		EXEMPT- SIZE	SAVE	-
2007	WW	38	Weeping Willow	Salix babylonica	Fair			SAVE	-
2008	NS	12	Norway Spruce	Picea Abies	Poor			SAVE	-
2009	NS	15	Norway Spruce	Picea Abies	Fair			SAVE	-
2010	RB	20	River Birch	Betula nigra	Poor	7		SAVE	-
2011	NM	32	Norway Maple	Acer platanoides	Poor			SAVE	-
2012	TP	1.5	Tulip-Poplar	Liriodendron tulipifera	Fair		EXEMPT- SIZE	SAVE	-
2013	JL	5	Japanese Lilac	Syringa reticulata	Good		EXEMPT- SIZE	SAVE	-
2014	HE	2	Hedge Maple	Acer campestre	Fair		EXEMPT- SIZE	SAVE	-
2015	BO	2	Black Oak	Quercus velutina	Fair		EXEMPT- SIZE	SAVE	-
2016	BO	2	Black Oak	Quercus velutina	Fair		EXEMPT- SIZE	SAVE	-
2017	HE	2	Hedge Maple	Acer campestre	Fair		EXEMPT- SIZE	SAVE	-
2018	TP	2	Tulip-Poplar	Liriodendron tulipifera	Poor		EXEMPT- SIZE	SAVE	-
2019	BO	2	Black Oak	Quercus velutina	Fair		EXEMPT- SIZE	SAVE	-
2020	JL	3	Japanese Lilac	Syringa reticulata	Fair		EXEMPT- SIZE	SAVE	-
2021	HE	3	Hedge Maple	Acer campestre	Fair		EXEMPT- SIZE	SAVE	-
2022	TP	2	Tulip-Poplar	Liriodendron tulipifera	Fair		EXEMPT- SIZE	SAVE	-
2023	HE	3	Hedge Maple	Acer campestre	Fair		EXEMPT- SIZE	SAVE	-
2024	BP	14	Bradford Pear	Pyrus calleryanna	Good			SAVE	-
2025	TP	2	Tulip-Poplar	Liriodendron tulipifera	Fair		EXEMPT- SIZE	SAVE	-
2026	JL	6	Japanese Lilac	Syringa reticulata	Good		EXEMPT- SIZE	SAVE	-

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033--TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A--BASE--18033.DWG
XREF: S:\PRO



KEY PLAN
SCALE: N.T.S.

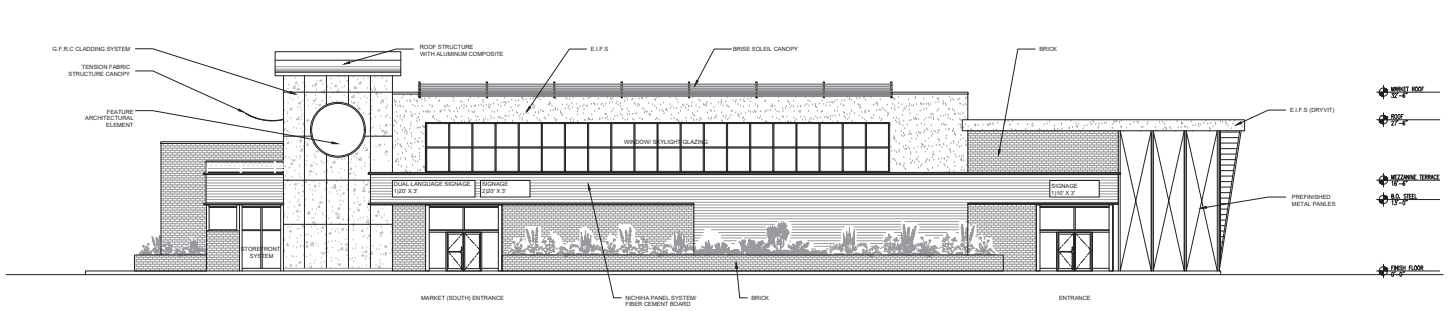


A WEST ELEVATION
SCALE: 3/32" = 1'-0"

WEST ELEVATION MATERIALS

TAG	MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BR-1	BRICK	100 % 30% MIN	1,503 S.F.	37.5 %
MTL-1	FLAT METAL PANEL ALUMINUM COMPOSITE (ALPOLIC)	25 %	140 S.F.	3.5 %
FCP-1	FIBER CEMENT PANELS(NICHIHA)	25 %	630 S.F.	16 %
GFRC-1	G.F.R.C CLADDING SYSTEM	25 %	496 S.F.	12.5 %
EIFS-1	E.I.F.S (DRYVIT)	25 %	1,143 S.F.	27.5 %
AW-1	AWNINGS - FABRIC OR MEMBRANE	10 %	113 S.F.	3 %
	TOTAL		4,027 S.F.	100.0 %

NOTE : A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR E.I.F.S OVERAGE OF 2.5%



B SOUTH ELEVATION
SCALE: 3/32" = 1'-0"

SOUTH ELEVATION MATERIALS

TAG	MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BR-1	BRICK	100 % 30% MIN	1,547 S.F.	33%
MTL-1	FLAT METAL PANEL ALUMINUM COMPOSITE (ALPOLIC)	25%	607 S.F.	12 %
FCP-1	FIBER CEMENT PANELS(NICHIHA)	25 %	1,155 S.F.	23 %
GFRC-1	G.F.R.C CLADDING SYSTEM	25 %	604 S.F.	12 %
EIFS-1	E.I.F.S (DRYVIT)	25 %	871 S.F.	17.5 %
AW-1	AWNINGS - FABRIC OR MEMBRANE	10 %	247 S.F.	4.5 %
	TOTAL		5,031 S.F.	100.0 %

NOTE : NO SECTION 9 FACADE WAIVER REQUIRED

PRO REZONING REVISED
SUBMITTAL 12-20-19
ISSUE FOR REVIEW 09.20.2019
ISSUE FOR REVIEW 06.28.2019
04.17.2019

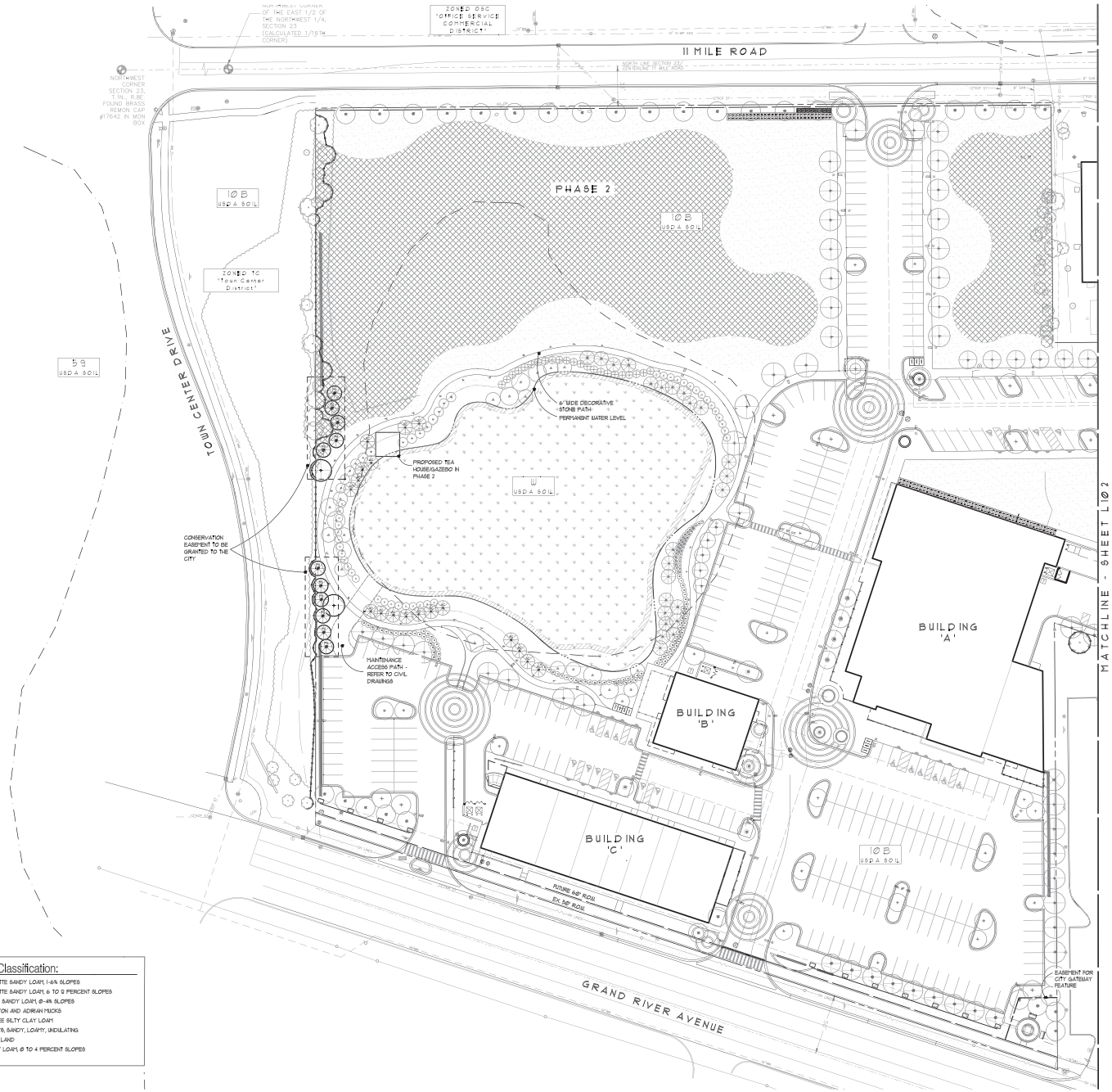
ONE WORLD MARKET
NOVI MICHIGAN

BUILDING A ELEVATIONS
SAKURA NOVI
NOVI, MICHIGAN

P4.1

PRELIMINARY
NOT FOR CONSTRUCTION

www.dwdw.co dwdw



USDA Soils Classification:

10B	MARLETTE SANDY LOAM, 1-6% SLOPES
10C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
11B	CAPAC SANDY LOAM, 0-4% SLOPES
21	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
59	URBAN LAND
BmaxB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

Ordinance Considerations:

Woodland Tree Replacement Chart — 64-EET6 L101-L102

REQUIREMENTS

1. Replace impacted trees within a City of Novi regulated woodland by planting new 2.5" caliper sized deciduous trees (or six of other vegetation), pay a fee into the City's Tree Fund or a combination of both.
2. Refer to Woodland Tree Replacement Chart below to quantify the number of replacement trees required.

DBH	8<11	11<20	20<29	>30	Total
Replacement Ratio	1 to 1	1 to 2	1 to 3	1 to 4	Replacement Ratio
Quantity Removed	42	45	28	5	120 DBH Trees to be removed
Credits Required	42	128	68	20	253 Tree Credits Required

PROPOSED

1. Applicant is proposing to remove 190 trees which are over 8" DBH and located within a city-regulated woodland, as well as 2 trees which are over 36" DBH and not located within a city-regulated woodland, as part of the construction for the new Sakura Novi development.
2. The Woodland/Tree Replacement Plans (Sheets L101 and L102) equate to 12 Woodland Tree Replacement Credits. (4 credits from evergreen and deciduous trees, plus an additional 8 credits from planting other woodland plant material) - see below.

Reforestation Credit Table

Type	Minimum Size	DBH Credit Proposed Plant Required Placement	Max. Box Percentage
Canopy Trees	2.5" caliper	1:1	70%
Evergreen Trees	6' height	2:1	30%
Understory Trees	1" caliper	5:1	30%
Large Shrubs	30" height	4:1	30%
Small Shrubs	18" height	8:1	30%
Tree, Shrub Whips	24" height	10:1	5%
Perennials	1 gallon cont.	20:1	30%
Groundcover Seeding	Per seed source recommendation	20 SF over: 1	5%

Woodland Replacement Credit Conversion

Type	Credit Conversion Ratio	Proposed Plant Quantities	Amount of Tree Credits per Plant Type
Canopy Trees	1:1	7	7
Evergreen Trees	1.5:1	11	7
Understory Trees	3:1	0	0
Large Shrubs	4:1	0	0
Small Shrubs	8:1	0	0
Tree, Shrub Whips	10:1	0	0
Perennials	20:1	0	0
Groundcover Seeding	20 SF over: 1	613 SF	0
		Total Credits Provided On Site	17
Additional Credits to be Paid into City Tree Fund			236
		Total Credits Required	253

Legend:

- PLANT TAG - REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PLANT SPECIES, SPECIFICATION, AND QUANTITIES
- WOODLAND REPLACEMENT TREES - CANOPY AND EVERGREEN
- PROPOSED TREES - REFER TO LANDSCAPE ORDINANCE PLANS, PLANTING PLANS, AND PLANT LIST
- EXISTING TREE TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- WOODLAND REPLACEMENT PERENNIAL PLANTING BED - REFER TO PLANT LIST AND DETAILS
- WOODLAND REPLACEMENT GROUNDCOVER SEEDING - REFER TO PLANT LIST
- STORM BASIN SHRUB - REFER TO PLANTING PLANS
- TREE PROTECTION FENCE - SEE TYP. DETAIL AND CIVIL DRAWINGS
- DETENTION BASIN - REFER TO CIVIL DRAWINGS
- USDA SOIL DESIGNATION BOUNDARY
- RETAINING WALL - REFER TO CIVIL DRAWINGS

Phragmites Removal and Management:

PHRAGMITES HAVE BEEN IDENTIFIED ON THE SITE. REFER TO CIVIL TOPOGRAPHIC SURVEY PLANS FOR LOCATIONS OF EXISTING PHRAGMITES. REFER TO CIVIL NATURAL FEATURES PLANS FOR LIMITS OF REMOVALS. ALL EXISTING PHRAGMITES ON THE SITE WILL BE PHYSICALLY REMOVED DURING SITE CONSTRUCTION. ANY LEFT OVER POPULATIONS WILL BE TREATED WITH HERBICIDES PER MDEQ GUIDELINES.

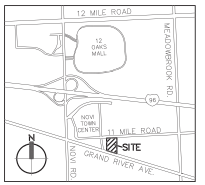
General Notes:

1. REFER TO COVER SHEET FOR DEVELOPER AND OWNER CONTACT INFORMATION
2. REFER TO CIVIL DRAWINGS FOR EXISTING TREE SURVEY, TREE LIST, EXISTING PHRAGMITES LOCATIONS, REMOVALS, WOODLAND IMPACTS AND PROTECTION.
3. REFER TO CIVIL DRAWINGS FOR EXISTING SURVEY, PROPOSED SITE LAYOUT, AND DIMENSIONS
4. REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PROPOSED PLANT SPECIES, SPECIFICATION, AND QUANTITIES
5. ALL PROPOSED WOODLAND REPLACEMENT TREES WILL BE GUARANTEED TO BE PROTECTED IF PLANTED ON SITE WITHIN A CONSERVATION EASEMENT OR LANDSCAPE EASEMENT GRANTED TO THE CITY.

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'



Key Map

Scale: NoTo Scale

GRISSIM METZ ASSOCIATES ANDRIESE

Landscape Architecture

311 East Cady Street
Northville, MI 48167

Ph: 248-347-7010

Owner/Developer:

Robert B. Aikens & ASSOCIATES, L.L.C.

350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

Project:
Sakura Novi
Novi, Michigan

Sheet:
Woodland Replacement Plan

Job Number:	A01-191
Drawn:	MS/EG/SE
Checked:	SG
Scale:	1"=40'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L101

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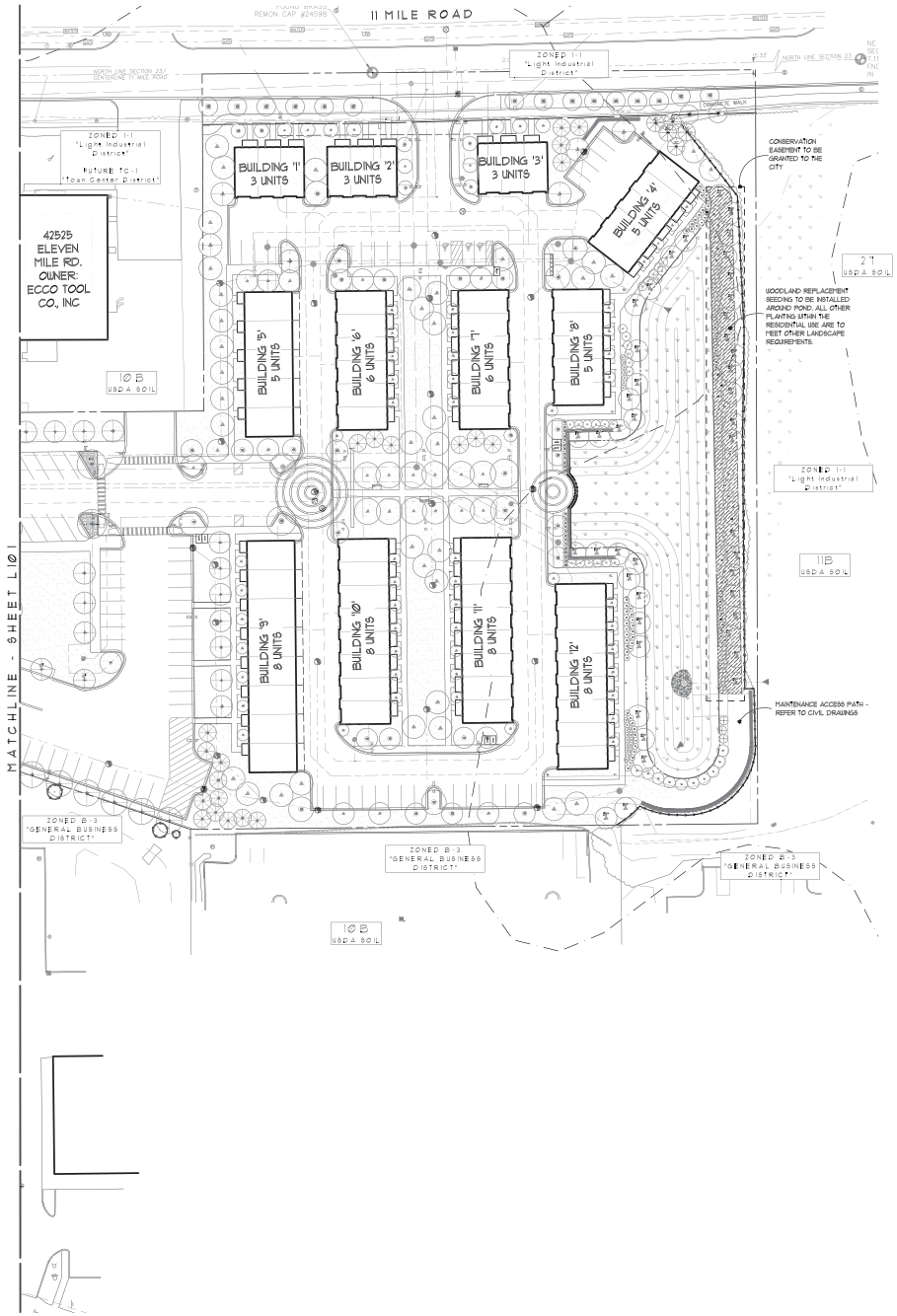

Ordinance Considerations:

Woodland Tree Replacement Chart — 64-EE76 L101-L102

REQUIREMENTS

1. Replace impacted trees within a City of Novi regulated woodland by planting new 2.5" caliper sized deciduous trees (or ex. of other vegetation), pay a fee into the City's Tree Fund or a combination of both.
2. Refer to Woodland Tree Replacement Chart below to quantify the number of replacement trees required.

DBH	6-11	11-20	20-29	>30	Total
Replacement Ratio	1 to 1	1 to 2	1 to 3	1 to 4	Replacement Ratio
Quantity Removed	42	45	28	5	120 DBHS. Trees to be removed
Credits Required	42	128	68	20	253 Tree Credits Required

PROPOSED

1. Applicant is proposing to remove 190 trees which are over 8" DBH and located within a city-regulated woodland, as well as 2 trees which are over 36" DBH and not located within a city-regulated woodland, as part of the construction for the new Sakura Way development.
2. The Woodland/Tree Replacement Plans (Sheets L101 and L102) equate to 17 Woodland Tree Replacement Credits. (4 credits from evergreen and deciduous trees, plus an additional 8 credits from planting other woodland plant material) - see below.

Reforestation Credit Table

Type	Minimum Size	DBH Credit Proposed Plant Required Placement	Max. Size Percentage
Canopy Trees	2.5" caliper	1:1	70%
Evergreen Trees	6' height	2:1	30%
Understory Trees	1" caliper	5:1	30%
Large Shrubs	30" height	6:1	30%
Small Shrubs	18" height	8:1	30%
Vine, Shrub Whips	24" height	10:1	5%
Perennials	1 gallon cont.	20:1	30%
Groundcover Seeding	Per seed source recommendation	70 SF over 1	5%

Woodland Replacement Credit Conversion

Type	Credit Conversion Ratio	Proposed Plant Quantities	Amount of Tree Credits per Plant Type
Canopy Trees	1:1	7	7
Evergreen Trees	1.5:1	11	7
Understory Trees	3:1	0	0
Large Shrubs	6:1	0	0
Small Shrubs	8:1	0	0
Vine, Shrub Whips	10:1	0	0
Perennials	20:1	0	0
Groundcover Seeding	70 SF over 1	613 SF	3
		Total Credits Provided On Site	17
Additional Credits to be Paid into City Tree Fund			236
		Total Credits Required	253

Legend:

- PLANT TAG - REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PLANT SPECIES, SPECIFICATION, AND QUANTITIES
- WOODLAND REPLACEMENT TREES - CANOPY AND EVERGREEN
- PROPOSED TREES - REFER TO LANDSCAPE ORDINANCE PLANS, PLANTING PLANS, AND PLANT LIST
- EXISTING TREE TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- WOODLAND REPLACEMENT PERENNIAL PLANTING BED - REFER TO PLANT LIST AND DETAILS
- WOODLAND REPLACEMENT GROUNDCOVER SEEDING - REFER TO PLANT LIST
- STORM BASIN SHRUB - REFER TO PLANTING PLANS
- TREE PROTECTION FENCE - SEE TYP. DETAIL AND CIVIL DRAWINGS
- DETENTION BASIN - REFER TO CIVIL DRAWINGS
- USDA SOIL DESIGNATION BOUNDARY
- RETAINING WALL - REFER TO CIVIL DRAWINGS

Phragmites Removal and Management:

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0' 20' 40' 80'

SCALE: 1"=40'

USDA Soils Classification:

10B	MARLETTE SANDY LOAM, 1-6% SLOPES
10C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
11B	CAPAC SANDY LOAM, 0-4% SLOPES
27	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
99	URBAN LAND
BmaaB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER



Key Map
Scale: NoTo Scale

Owner/Developer:

Robert B. Aikens & ASSOCIATES, LLC.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

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

Project: Sakura Novi
Novi, Michigan

Sheet: Woodland Replacement Plan

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: 1"=40'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L102

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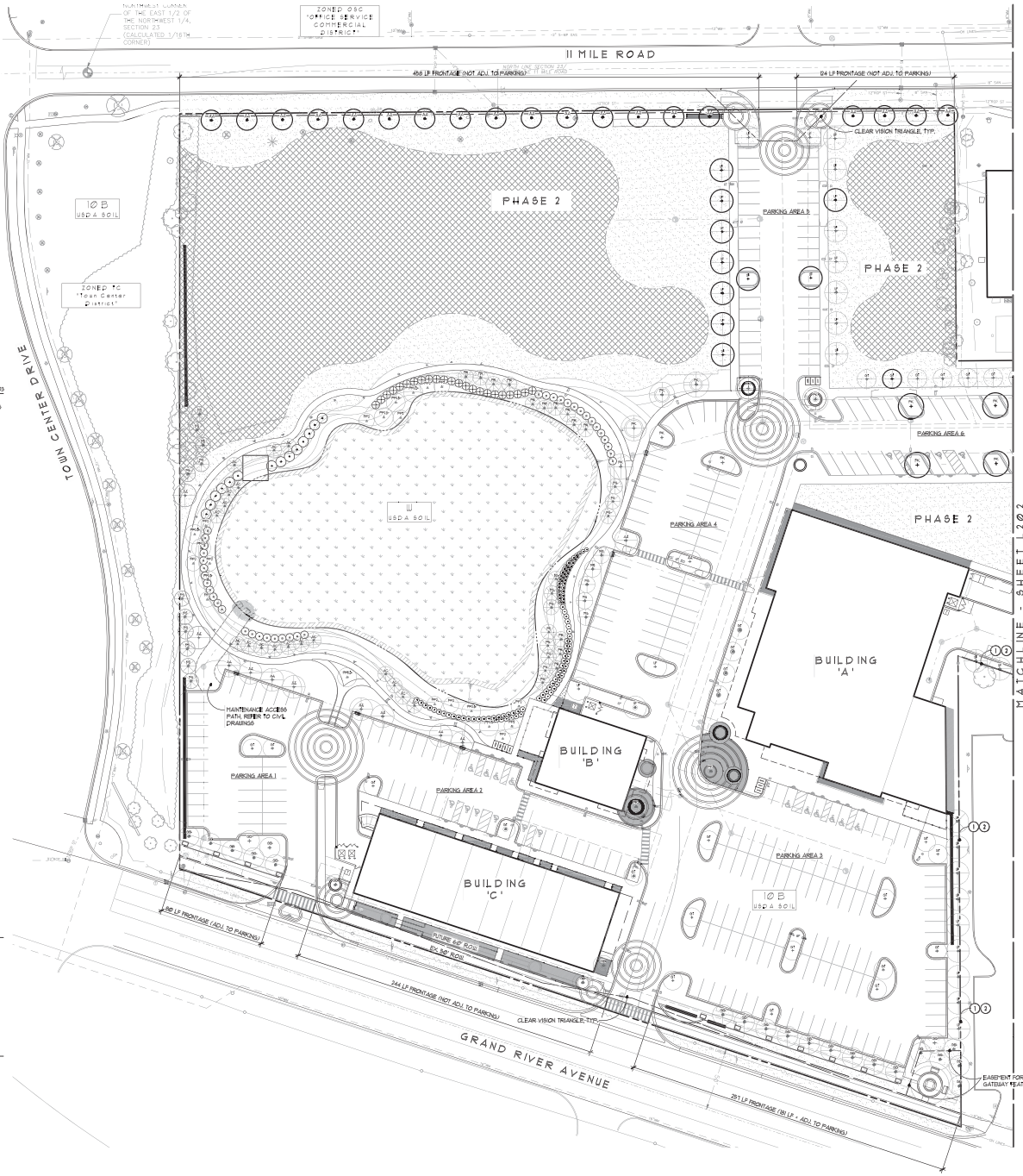

Landscape Ordinance Legend:

SHEETS L201- L203

- PLANT TAG - REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR SPECIFICATION AND QUANTITIES
- GREEN BELT CANOPY STREET TREES (SECTION 5.5.3.B.iii)
- ROW/ GREEN BELT SUB-CANOPY STREET TREES (SECTION 5.5.3.B.iii)
- INTERIOR STREET TREES (SECTION 5.5.3.E.ii.b.2)
- PARKING LOT INTERIOR TREES (SECTION 5.5.3.C.ii)
- PARKING LOT PERIMETER TREES - DECIDUOUS AND EVERGREEN (SECTION 5.5.3.C.ii)
- RESIDENTIAL BUILDING UNIT TREES - DECIDUOUS AND EVERGREEN (SECTION 5.5.3.E.ii.b.1)
- ADDITIONAL PROJECT IDENTITY TREES
- FOUNDATION TREE
- EXISTING TREE TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- WOODLAND REPLACEMENT TREES - REFER TO WOODLAND REPLACEMENT PLANS
- STORM BASIN RIM PLANTING SHRUBS - REFER TO PLANTING PLANS
- BUILDING FOUNDATION PLANTING/DECORATIVE PAVERS/PLANTERS (SECTION 5.5.3.D.ii)
- PARKING LOT INTERIOR PLANTING (SECTION 5.5.3.C.ii)
- PARKING PERIMETER CALCULATION LINE
- DETENTION BASIN - REFER TO CIVIL DOCUMENTS
- USDA SOIL DESIGNATION BOUNDARY
- LIGHT POLES - REFER TO LIGHTING PLAN
- LIGHT BOLLARDS - REFER TO LIGHTING PLAN
- CONCRETE LANDSCAPE EDGE OR PLANTER CURB
- MASONRY SEATWALL
- RETAINING WALL - REFER TO CIVIL PLANS

USDA Soils Classification:

10B	MARLETTE SANDY LOAM, 1-6% SLOPES
10C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
15	CAPAC SANDY LOAM, 0-4% SLOPES
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BrsadB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

General Notes:

1. REFER TO COVER SHEET FOR DEVELOPER AND OWNER CONTACT INFORMATION
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3. REFER TO CIVIL DRAWINGS FOR EXISTING SURVEY, PROPOSED SITE LAYOUT, AND DIMENSIONS
4. REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PROPOSED PLANT SPECIES, SPECIFICATION, AND QUANTITIES

Ordinance Consideration Notes: Commercial

11 Mile Frontage (Sec. 5.5.3.B.ii)

Requirement
1. 28' wide greenbelt along 11 Mile Rd wherever adjacent to parking, 8' wide greenbelt required elsewhere.
2. Town Center Area Study recommends use of a low, ornamental brick wall with piers or combination masonry, metal fencing and plant materials to screen parking from public ROW.
3. One canopy tree or large evergreen/30 LF of frontage (not adjacent to parking) / ORD One canopy tree or large evergreen/25 LF of frontage (adjacent to parking)
4. One subcanopy tree/18 LF of frontage (not adjacent to parking) / ORD One sub canopy tree/15 LF of frontage (adjacent to parking)
5. 15 canopy street trees are required in Phase 1. (360/30 = 11.40 trees)

Proposed
1. 15 deciduous canopy trees have been provided along the 11 Mile ROW.

Grand River Frontage (Sec. 5.5.3.B.ii)

Requirement
1. 28' wide greenbelt along Grand River Ave and 11 Mile Rd wherever adjacent to parking, 8' wide greenbelt required elsewhere.
2. Town Center Area Study recommends use of a low, ornamental brick wall with piers or combination masonry, metal fencing and plant materials to screen parking from public ROW.
3. One canopy tree or large evergreen/25 LF of frontage (adjacent to parking) / ORD One canopy tree or large evergreen/30 LF of frontage (not adjacent to parking)
4. One subcanopy tree/15 LF of frontage (adjacent to parking) / ORD One sub canopy tree/18 LF of frontage (not adjacent to parking)
5. 21 canopy street trees are required in phase 1. Adjacent to parking: (361 LF/25 = 15 trees) Non-adjacent to parking: (320 LF/30 =11 trees)

Proposed
1. 21 deciduous canopy trees have been provided along the Grand River ROW and ornamental piers with metal fencing and a continuous row of evergreen shrubs are proposed to screen all parking areas.

Parking Area Landscape (Sec. 5.5.3.C.ii)

1. Refer to Sheet L203 for parking interior greenspace square footages, perimeter lines, and ordinance calculations.

Parking Lot Perimeter Canopy Trees (Sec. 5.5.3.c.ii)

Requirement
1. One canopy tree/35 LF of parking lot boundary (2687/35 = 77 trees)

Proposed
1. 82 parking lot perimeter canopy trees have been provided - see Sheet L203 for more info.

Building Foundation Landscape (Sec. 5.5.3.D.ii)

Requirement
1. Building Foundation Landscaping equal to entire perimeter of the building (less paved access area) x 8 with a minimum width of 4'
2. Per Sec 5.5.3.D.iii.c, "With respect to projects within the TC and TC-1 districts, the Planning Commission may waive the eight (8) foot width calculation requirements, if significant additional planting and/or decorative paving or amenities are added adjacent to the building."
3. If visible from a public street a minimum of 60% of the exterior building perimeter should be covered in green space.

Proposed
1. Building Foundation Landscape requirements have been met for proposed TC-1 zoning through a combination of built-in planters, planting beds, and amenities including decorative pavement, pocket gardens, and benches. Refer to Sheet L203 for additional info.

Storm Basin Landscape - West (LDM Sec. 3)

Requirement
1. A total of 10-15% of the storm basin rim area is required to be planted with large shrubs. Rim area is 891 LF. 10% of rim area is 628 LF.

Proposed
1. 634 LF (71%) of rim area has been planted with large native shrubs.

Woodland Tree Replacement Plan (Sec. 37)

1. Refer to Sheets L101 - L102

Irrigation (LDM 1.A.(1)(e) and 2.S)

1. A permanent, automatic irrigation system will be provided for planting and sodded lawn areas as required per the ordinance.

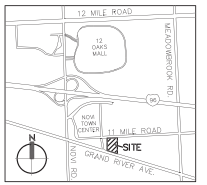
Note Key:

1. OWNER WILL OBTAIN EASEMENT FROM ADJACENT PROPERTY OWNER TO PLANT AND MAINTAIN PERIMETER PARKING LOT TREES NEAR PROPERTY LINE
2. OWNER WILL COORDINATE LOCATION OF PERIMETER PARKING LOT TREES WITH ADJACENT PROPERTY OWNER

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'



Key Map

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Birmingham, MI 48009 ph: 248-263-1071

GRISSIM METZ ASSOCIATES ANDRIESE

Landscape Architecture

311 East Cady Street
Northville, MI 48167

Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
Landscape Ordinance Plan - Phase 1

Job Number:	A01-191
Drawn:	MS/EG/SE
Checked:	SG
Scale:	1"=40'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L201

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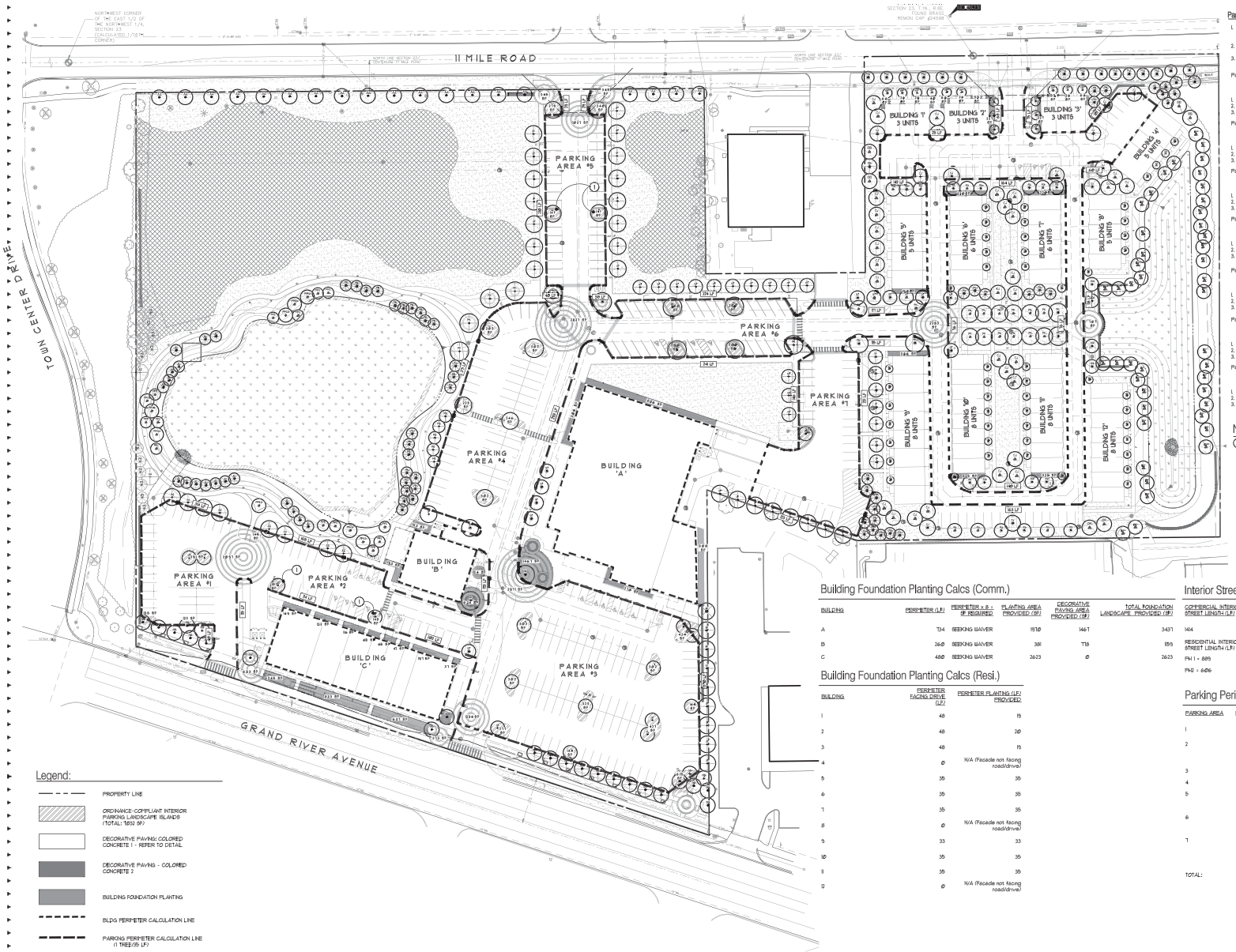


Parking Area Landscape (Sec. 5.5.3.c.ii)

1. Greenspace/ interior parking lot area landscape for total square footage of Vehicular Use Area based upon Category I of Table 5.5.3.C.ii).
2. Provide parking lot canopy trees (SF landscape area / 200); 1,000-1,999= 25 canopy interior trees
3. Provide parking lot islands (1/61) TOTAL SF REQUIRED; 1,181 TOTAL SF PROVIDED)

Parking Area 1
A) 8,782 SF x .075 (7.5%) = 665 SF
B) 0 SF x .01 (1%) = 0 SF
665 SF REQ'D.
1. 3 canopy trees required (665 / 200 = 3 trees)
2. 668 SF parking island landscaping has been provided.
3. 4 canopy interior trees has been provided.

Parking Area 2
A) 7,234 SF x .075 (7.5%) = 548 SF
B) 0 SF x .01 (1%) = 0 SF
548 SF REQ'D.
1. 3 canopy interior trees required (548 / 200 = 3 trees)
2. 475 SF parking island landscaping has been provided.
3. 1 canopy interior tree has been provided.

Parking Area 3
A) 33,486 SF x .075 (7.5%) = 2511 SF
B) 0 SF x .01 (1%) = 0 SF
2511 SF REQ'D.
1. 13 canopy interior trees required (2511 / 200 = 13 trees)
2. 3387 SF parking island landscaping has been provided.
3. 13 canopy interior trees have been provided.

Parking Area 4
A) 11,342 SF x .075 (7.5%) = 1511 SF
B) 0 SF x .01 (1%) = 0 SF
1511 SF REQ'D.
1. 6 canopy interior trees required (1511 / 200 = 6 trees)
2. 1216 SF parking island landscaping has been provided.
3. 6 canopy interior trees have been provided.

Parking Area 5
A) 11,535 SF x .075 (7.5%) = 865 SF
B) 0 SF x .01 (1%) = 0 SF
865 SF REQ'D.
1. 4 canopy interior trees required (865 / 200 = 4 trees)
2. 1691 SF parking island landscaping has been provided.
3. 2 canopy interior trees have been provided.

Parking Area 6
A) 27,963 SF x .075 (7.5%) = 822 SF
B) 0 SF x .01 (1%) = 0 SF
822 SF REQ'D.
1. 4 canopy interior trees required (822 / 200 = 4 trees)
2. 2668 SF parking island landscaping has been provided.
3. 4 canopy interior trees have been provided.

Parking Area 7
A) 9,145 SF x .075 (7.5%) = 1,135 SF
B) 0 SF x .01 (1%) = 0 SF
1,135 SF REQ'D.
1. 6 canopy interior trees required (1135 / 200 = 6 trees)
2. 274 SF parking island landscaping has been provided.
3. 1 canopy interior tree has been provided.

Note Key:

(1) TREE PLANTING TO RECEIVE SUPPLEMENTAL STRUCTURAL SOIL ADJACENT TO PLANTING PIT TO PROVIDE ADDITIONAL SOIL VOLUME FOR HEALTHY TREE GROWTH AS DETERMINED BY FUTURE SOIL STUDIES.

Building Foundation Planting Calcs (Comm.)

BUILDING	PERIMETER (LF)	PERIMETER x .8 = SF REQUIRED	PLANTING AREA PROVIDED (SF)	DECORATIVE PAVING AREA PROVIDED (SF)	TOTAL FOUNDATION LANDSCAPE PROVIDED (SF)
A	734	SEEKING WAIVER	1938	1467	3431
B	268	SEEKING WAIVER	381	778	859
C	480	SEEKING WAIVER	2623	0	2623

Building Foundation Planting Calcs (Resi.)

BUILDING	PERIMETER FACING DRIVE (LF)	PERIMETER PLANTING (LF) PROVIDED
1	48	78
2	48	28
3	48	78
4	0	N/A (Facade not facing road/drive)
5	35	35
6	35	35
7	35	35
8	0	N/A (Facade not facing road/drive)
9	33	33
10	35	35
11	35	35
12	0	N/A (Facade not facing road/drive)

Interior Street Perimeter Calculations

COMMERCIAL INTERIOR STREET LENGTH (LF)	TREES REQUIRED	TREES PROVIDED
1414	48	14
RESIDENTIAL INTERIOR STREET LENGTH (LF)		
PH 1 = 889	25	27
PH 2 = 668	17	14

Parking Perimeter Calculations

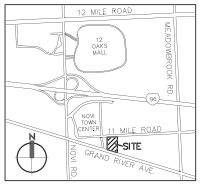
PARKING AREA	PERIMETER (LF)	TREES REQUIRED	TREES PROVIDED
1	314	9	4
2	185	5	4
	114	3	0
3	578	16	17
4	371	11	11
5	218	6	8
	218	6	5
6	224	6	10
	241	7	1
7	146	4	3
	221	6	7
	122	3	8
TOTAL:	2681	82	82

Legend:

- PROPERTY LINE
- ORDINANCE-COMPLIANT INTERIOR PARKING LANDSCAPE ISLANDS (TOTAL: 1,832 SF)
- DECORATIVE PAVING: COLORED CONCRETE 1 - REFER TO DETAIL
- DECORATIVE PAVING - COLORED CONCRETE 2
- BUILDING FOUNDATION PLANTING
- BLDG PERIMETER CALCULATION LINE
- PARKING PERIMETER CALCULATION LINE (1 TREE/35 LF)
- LENGTH DEDUCTED FROM PERIMETER CALCULATION
- INTERIOR STREET PERIMETER CALCULATION LINE (1 TREE/35 LF)
- RETAINING WALL
- BIKE RACKS
  10 TOTAL = 20 BIKES - COMMERCIAL
  7 TOTAL = 14 BIKES - RESIDENTIAL

811 Know what's below. Call before you dig.

0' 25' 50' 100'
SCALE: 1"=50'



Key Map
Scale: Not to Scale

Susan L. Grissim Landscape Architect No. 1541

Owner/Developer:
Robert B. Aikens & Associates, LLC.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-263-1071

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

Project:
Sakura Novi
Novi, Michigan

Sheet:
Landscape Ordinance Plan - Phase 1

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: 1"=50'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L203

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Landscape Ordinance Legend:

SHEETS L201-L203

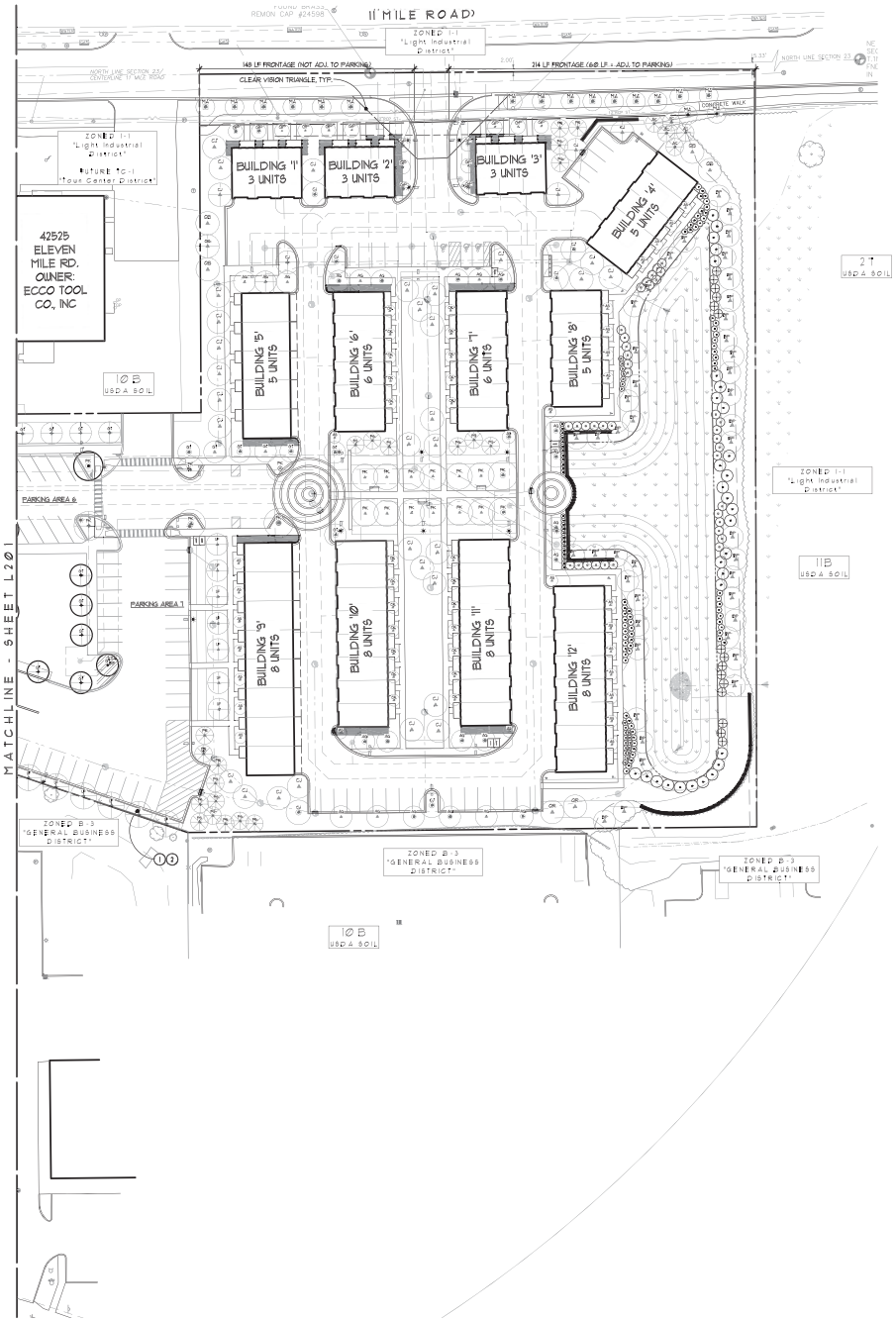
- PLANT TAG - REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR SPECIFICATION AND QUANTITIES
- GREEN BELT CANOPY STREET TREES (SECTION 5.5.3.B.ii)
- ROW/ GREEN BELT SUB-CANOPY STREET TREES (SECTION 5.5.3.B.ii)
- INTERIOR STREET TREES (SECTION 5.5.3.C.iii.b.)
- PARKING LOT INTERIOR TREES (SECTION 5.5.3.C.iii.)
- PARKING LOT PERIMETER TREES - DECIDUOUS AND EVERGREEN (SECTION 5.5.3.C.iv)
- RESIDENTIAL BUILDING UNIT TREES - DECIDUOUS AND EVERGREEN (SECTION 5.5.3.E.iii.b.)
- ADDITIONAL PROJECT IDENTITY TREES
- FOUNDATION TREE
- EXISTING TREE TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- WOODLAND REPLACEMENT TREES - REFER TO WOODLAND REPLACEMENT PLANS
- STORM BASIN RIM PLANTING SHRUBS - REFER TO PLANTING PLANS
- BUILDING FOUNDATION PLANTING/DECORATIVE PAVERS/PLANTERS (SECTION 5.5.3.D.iv)
- PARKING LOT INTERIOR PLANTING (SECTION 5.5.3.C.iv)
- PARKING PERIMETER CALCULATION LINE
- DETENTION BASIN - REFER TO CIVIL DOCUMENTS
- USDA SOIL DESIGNATION BOUNDARY
- LIGHT POLES - REFER TO LIGHTING PLAN
- LIGHT BOLLARDS - REFER TO LIGHTING PLAN
- CONCRETE LANDSCAPE EDGE OR PLANTER CURB
- MASONRY SEATWALL
- RETAINING WALL - REFER TO CIVIL PLANS

USDA Soils Classification:

MBB	MARLETTE SANDY LOAM, 1-6% SLOPES
MBC	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
BIB	CAPAC SANDY LOAM, 0-4% SLOPES
21	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
4B	AGUENTS, SANDY, LOAMY, UNDULATING
59	URBAN LAND
BrbadB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

General Notes:

1. REFER TO COVER SHEET FOR DEVELOPER AND OWNER CONTACT INFORMATION
2. REFER TO CIVIL DRAWINGS FOR EXISTING TREE SURVEY, EXISTING TREE/SHRUBS TREE LIST, REMOVALS, WOODLAND IMPACTS AND PROTECTION.
3. REFER TO CIVIL DRAWINGS FOR EXISTING SURVEY, PROPOSED SITE LAYOUT, AND DIMENSIONS
4. REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PROPOSED PLANT SPECIES, SPECIFICATION, AND QUANTITIES



Ordinance Consideration Notes: Residential

11 Mile Frontage (Sec. 5.5.3.B.ii)

Requirement
L. 1. 28' wide greenbelt along Grand River Ave and 11 Mile Rd wherever adjacent to parking, 8' wide greenbelt required elsewhere.
2. Town Center Area Study recommends use of a low, ornamental brick wall with piers or combination masonry, metal fencing and plant materials to screen site from public ROW.
3. One canopy tree or large evergreen/25 LF of frontage (adjacent to parking) (OR) One canopy tree or large evergreen/30 LF of frontage (not adjacent to parking)
4. One subcanopy tree/15 LF of frontage (adjacent to parking) (OR) One sub canopy tree/20 LF of frontage (not adjacent to parking)
5. 15 subcanopy street trees are required in Phase I. (340 LF/20 = 15 trees) (66 LF/15 = 4 trees)

Proposed
L. 20 Sub-canopy street trees are proposed along 11 Mile Road frontage.
2. Due to presence of overhead utility lines, no canopy/large evergreen trees are proposed for the public ROW along 11 Mile Road.
3. Trees to be located between sidewalk and curb wherever possible. 4 street trees will be planted south of the sidewalk near the eastern edge of the site, and near the western-most Phase I residential units.
4. Owner will maintain all greenbelt trees installed within the Right of Way and include this as a condition of the PRO approval.

West Property Line (Sec. 5.5.3.A.ii)

Requirement
L. 10'-15' tall berm required along border between site and adjacent I-1 Zoning District.

Proposed
L. Refer to sections and deviation requests.

South Property Line (Sec. 5.5.3.A.ii)

Requirement
L. 6'-8' tall berm required along border between site and adjacent B-3 Zoning District. A minimum opacity shall be provided and sustained at 80% during winter and 100% percent during summer within 2 years of acceptance by the city.

Proposed
L. Refer to section and deviation request.

Interior Street Tree Requirements (Sec. 5.5.3.F.ii)

Requirement
L. One street tree/35 LF of frontage (1018 LF proposed): 29 street trees are required (889/35 = 25.4 trees)

Proposed
L. 21 canopy trees are planted along stretches of roads designated as interior residential streets, less all paved areas in front of unit garages.

Parking Area Landscape (Sec. 5.5.3.C.ii)

Requirement
L. Greenspace/ interior parking lot area landscape for total square footage of parking spaces based upon Category I of Chart. Due to the location of driveway throughout the site, only the parking areas south of Building 1 and north of Building 4 have been considered for this requirement.
2. Per Sec. 5.5.3.C.v.H. If a parking bay abuts a drive and no other parking, only parking perimeter trees are required (no interior greenspace).

Proposed
L. No interior parking trees are proposed, as they are not required in the residential portion of the site.

Parking Lot Perimeter Canopy Trees (Sec. 5.5.3.B.ii)

Requirement
L. 1 Perimeter trees are required. One canopy tree/35 LF of parking lot boundary. 243 / 35 = 6.94

Proposed
L. 7 Canopy trees provided for 243 LF of parking lot boundary (243/35 = 6.94 trees)

Building Foundation Landscape (Sec. 5.5.3.F.ii)

Requirement
L. 35% of building facades facing roads/drives shall be landscaped with plantings other than lawn.

Proposed
L. Planting beds have been added to all building facades facing internal drives, except where adjacent to driveways of the units - refer to deviation request.
2. Building foundation planting beds are planted with a mixture of herbaceous perennial plants, shrubs and ornamental grasses.

Building Landscape (Sec. 5.5.3.F.ii)

Requirement
L. 3 deciduous canopy trees or large evergreen trees per dwelling unit on the first floor; 68 dwelling units=3 trees = 204 trees.

Proposed
L. 204 trees are shown throughout the site that are intended to meet the Unit tree requirement. This figure includes all trees also intended to meet parking area perimeter requirements.
2. Vertical permission has been received from city to allow up to 25% of the required unit trees to be subcanopy trees.

Storm Basin Landscape - East (LDM Sec. 3)

Requirement
L. A total of 50-75% of the east storm basin rim area is required to be planted with large shrubs. Rim area is 983 LF. 50% of rim area is 632 LF.

Proposed
L. 631 LF (163%) of rim area has been planted with large native shrubs.

Woodland Tree Replacement Plan (Sec. 37)

L. Refer to Sheets L101 - L102

Irrigation (LDM 1.A.(1)(e) and 2.S)

L. A permanent, automatic irrigation system will be provided for planting and sodded lawn areas as required per the ordinance.

Note Key:

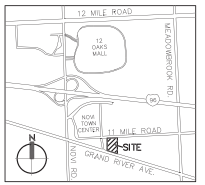
1. OWNER WILL OBTAIN EASEMENT FROM ADJACENT PROPERTY OWNER TO PLANT AND MAINTAIN PERIMETER PARKING LOT TREES NEAR PROPERTY LINE
2. OWNER WILL COORDINATE LOCATION OF PERIMETER PARKING LOT TREES WITH ADJACENT PROPERTY OWNER

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'

NORTH



Key Map
Scale: Not to Scale

SUSAN L. GRISSIM LANDSCAPE ARCHITECT No. 1541 REGISTERED STATE OF MICHIGAN

Owner/Developer:

Robert B. Aikens & Associates, LLC.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-263-1071

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

Project:
Sakura Novi
Novi, Michigan

Sheet:
Landscape Ordinance Plan - Phase 1

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: 1"=40'

Date:	Issued for:
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12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L202

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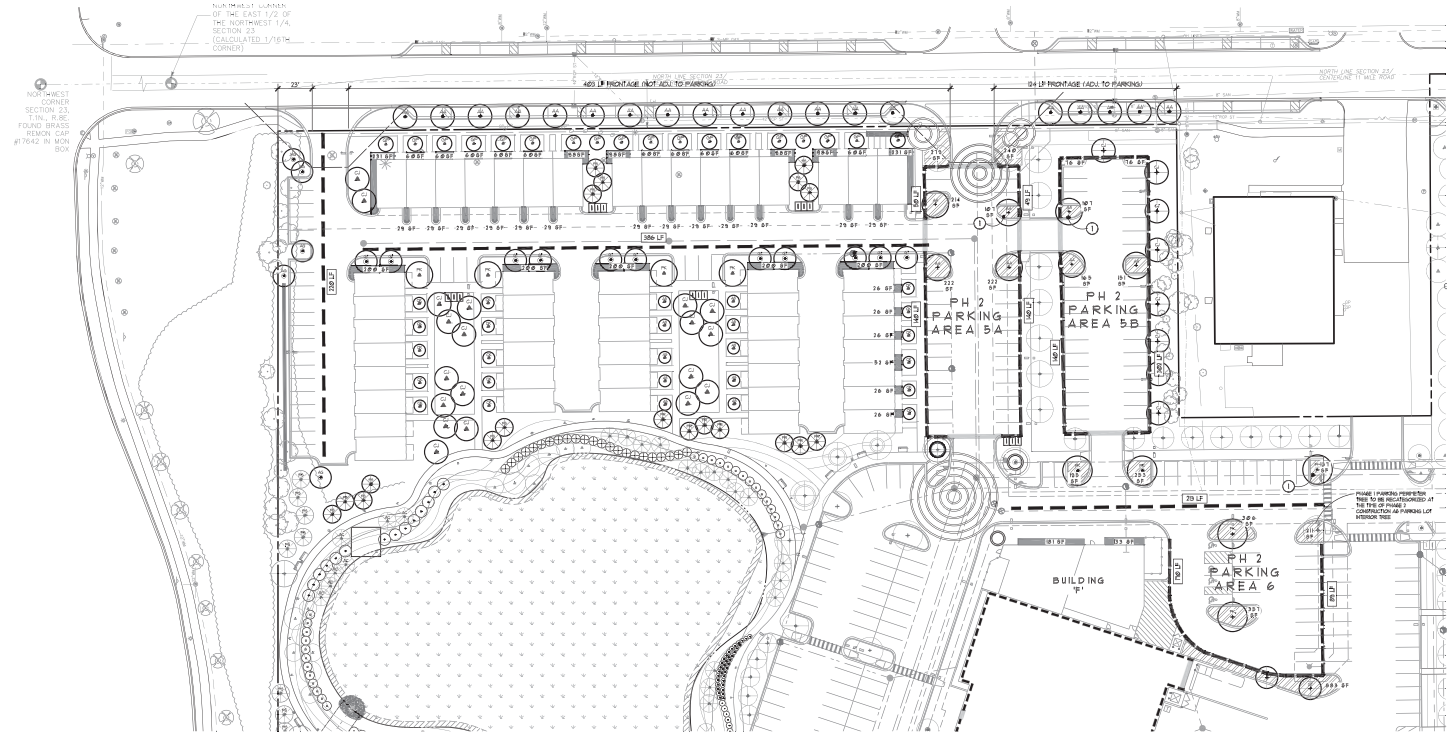


Legend:

- PROPERTY LINE
- INTERIOR PARKING LANDSCAPING (TOTAL: 1832 SF)
- DECORATIVE PAVING: COLORED CONCRETE 1 - REFER TO DETAIL
- DECORATIVE PAVING - COLORED CONCRETE 2
- BUILDING FOUNDATION PLANTING
- BLDG PERIMETER CALCULATION LINE
- PARKING PERIMETER CALCULATION LINE (1 TREE/35 LF)
- LENGTH DEDUCTED FROM PERIMETER CALCULATION
- INTERIOR STREET PERIMETER CALCULATION LINE (1 TREE/35 LF)
- RETAINING WALL
- BIKE RACKS
  - 10 TOTAL = 20 BIKES - COMMERCIAL
  - 7 TOTAL = 14 BIKES - RESIDENTIAL

Phase 2 Building Foundation Planting Calcs (Comm.)

BUILDING	PERIMETER (LF)	PERIMETER x 8 = SF REQUIRED	PLANTING AREA PROVIDED (SF)	DECORATIVE PAVING AREA PROVIDED (SF)	TOTAL FOUNDATION LANDSCAPE PROVIDED (SF)
F	136	SEEKING WAIVER	314	0	314

Phase 2 Building Foundation Planting Calcs (Resi.)

PERIMETER FACING DRIVE (LF)	PERIMETER PLANTING (LF) PROVIDED
498	367

Phase 2 Interior Street Perimeter Calculations

COMMERCIAL INTERIOR STREET LENGTH (LF)	TREES REQUIRED	TREES PROVIDED
213	6	3
RESIDENTIAL INTERIOR STREET LENGTH (LF)		
6096	171	14

Phase 2 Parking Perimeter Calculations

PARKING AREA	PERIMETER (LF)	TREES REQUIRED	TREES PROVIDED
5A	140	4	5
	140	4	0
	70	1	2
	70	1	1
5B	140	4	0
	367	9	9
6	170	5	2
	95	3	0
TOTAL	1898	31	19

11 Mile Frontage (Sec. 5.5.3.B.ii)

Requirement
1. 28' wide greenbelt along 11 Mile Rd wherever adjacent to parking, 8' wide greenbelt required elsewhere.
2. Town Center Area Study recommends use of a low, ornamental brick wall with piers or combination masonry, metal fencing and plant materials to screen parking from public ROW.
3. One canopy tree or large evergreen/30 LF of frontage (not adjacent to parking) / OR/ One canopy tree or large evergreen/25 LF of frontage (adjacent to parking)
4. One subcanopy tree/20 LF of frontage (not adjacent to parking) /OR/ One sub canopy tree/15 LF of frontage (adjacent to parking)
5. 75 canopy street trees are required in Phase 1. (580/35 = 19.40 trees)

Proposed
1. At the time of Phase 2 Construction, 4 street trees will be removed to accomodate the proposed eastern entry drive.
2. At the time of Phase 2 Construction, 1 tree will be added north of Phase 2 parking area 2, due to the added parking screening requirements and required 25' spacing.
3. At the time of Phase 2 construction, all street trees will be moved into the Right of Way.

Phase 2 Building Foundation Landscape (Sec. 5.5.3.F.ii)

Requirement
1. 35% of building facades facing road/drives shall be landscaped with plantings other than lawn.

Proposed
1. Planting beds have been added to all building facades facing internal drives, except where adjacent to driveways of the units - refer to deviation request.
2. Building foundation planting beds are planted with a mixture of herbaceous perennial plants, shrubs and ornamental grasses.

Phase 2 Building Landscape (Sec. 5.5.3.F.ii)

Requirement
1. 3 deciduous canopy trees or large evergreen trees per dwelling unit on the first floor.
   58 dwelling units*3 trees = 150 trees.

Proposed
1. 150 trees are shown throughout the site that are intended to meet the Unit tree requirement. 30 of these trees will be planted around the preserv aster feature during Phase 1 construction.
2. Verbal permission has been received from city to allow up to 25% of the required unit trees to be subcanopy trees.

Phase 2 Parking Area Landscape (Sec. 5.5.3.c.ii)

1. Greenspace/ interior parking lot area landscape for total square footage of Vehicular Use Area based upon Category 1 of Table 5.5.3.C.ii.
2. Provide parking lot canopy trees (SF landscape area / 200). 2,310/200= 12 trees required, 11 trees provided).
3. Provide parking lot islands (7,231 SF required, 7992 SF provided)

Phase 2 Parking Area 5A
A) 1535 SF x .075 (7.5%) = 865 SF
B) 0 SF x .05 (5%) = 0 SF
865 SF REQ'D.
1. 4 canopy interior trees required (865 / 200 = 4 trees)
2. 1284 SF parking island landscaping has been provided.
3. 4 canopy interior trees have been provided.

Phase 2 Parking Area 5B
A) 8763 SF x .075 (7.5%) = 657 SF
B) 0 SF x .05 (5%) = 0 SF
657 SF REQ'D.
1. 5 interior canopy trees required (657 / 200 = 4 trees)
2. 468 SF parking island landscaping has been provided.
3. 3 interior canopy trees have been provided.

Phase 2 Parking Area 6
A) 8650 SF x .075 (7.5%) = 649 SF
B) 0 SF x .05 (5%) = 0 SF
649 SF REQ'D.
1. 3 interior canopy trees required (649 / 200 = 3 trees)
2. 240 SF parking island landscaping has been provided.
3. 3 interior canopy tree has been provided.

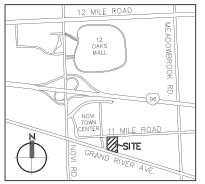
Note Key:

1. TREE PLANTING TO RECEIVE SUPPLEMENTAL STRUCTURAL SOIL ADJACENT TO PLANTING MIX TO PROVIDE ADDITIONAL SOIL VOLUME FOR HEALTHY TREE GROWTH AS DETERMINED BY FUTURE SOIL STUDIES.

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'



Key Map
Scale: Not to Scale

SUSAN L. GRISSIM LANDSCAPE ARCHITECT No. 1541 STATE OF MICHIGAN REGISTERED LANDSCAPE ARCHITECT

Owner/Developer:
Robert B. Aikens & Associates, LLC.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-263-1071

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

Project:
Sakura Novi
Novi, Michigan

Sheet:
Landscape Ordinance Plan - Phase 2

Job Number: A01-191
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Checked: SG
Scale: 1"=40'

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Sheet Number: L204

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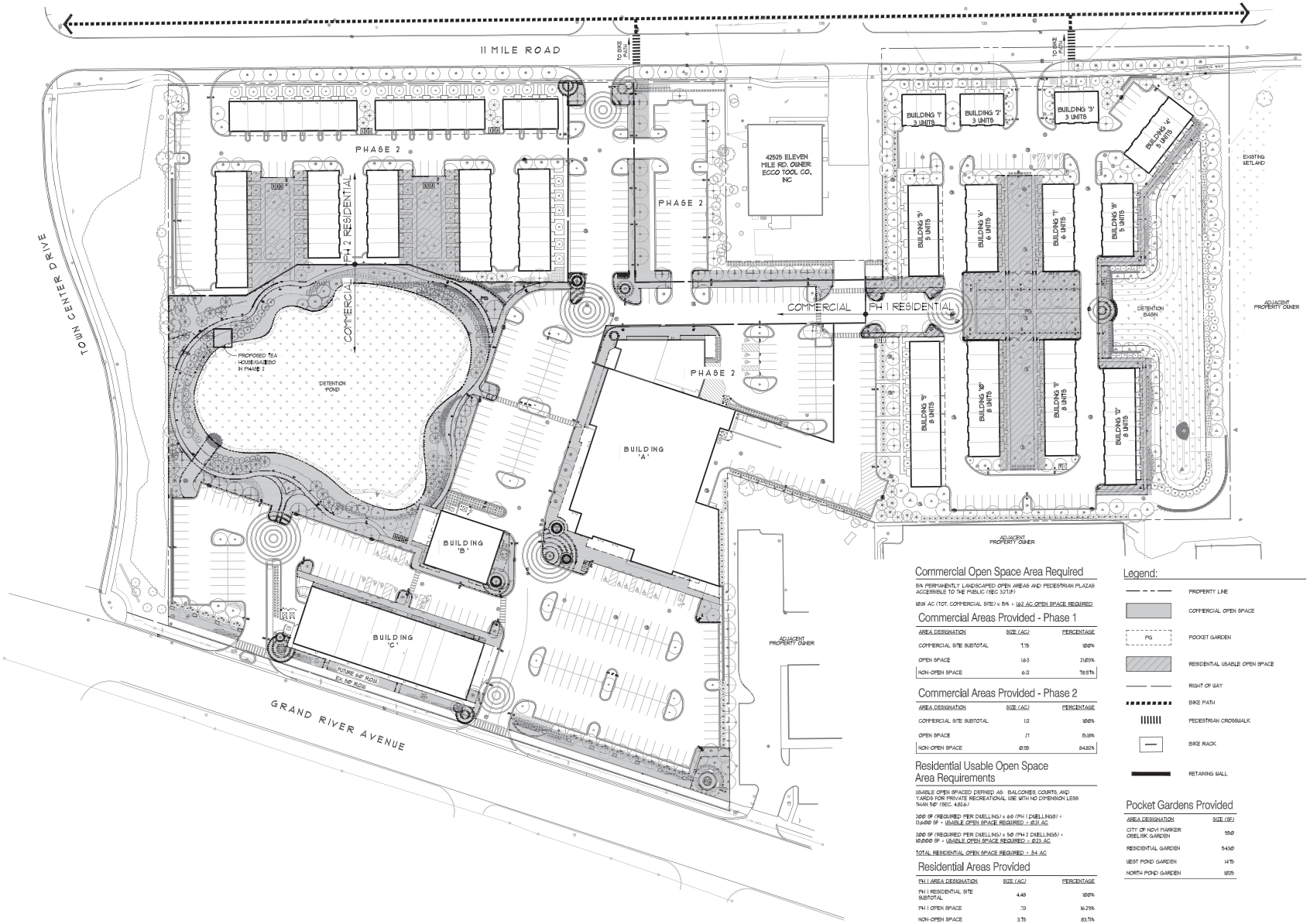

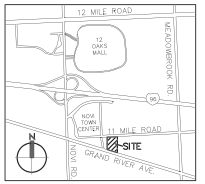

Key Map

Scale: Not to Scale

Commercial Open Space Area Required

15% PERMANENTLY LANDSCAPED OPEN AREAS AND PEDESTRIAN PLAZAS ACCESSIBLE TO THE PUBLIC (SEC 3.21.1.F)

10.81 AC (TOT. COMMERCIAL SITE) x 15% = 1.62 AC OPEN SPACE REQUIRED

Commercial Areas Provided - Phase 1

AREA DESIGNATION	SIZE (AC)	PERCENTAGE
COMMERCIAL SITE SUBTOTAL	7.75	100%
OPEN SPACE	1.63	21.03%
NON-OPEN SPACE	6.12	78.97%

Commercial Areas Provided - Phase 2

AREA DESIGNATION	SIZE (AC)	PERCENTAGE
COMMERCIAL SITE SUBTOTAL	1.12	100%
OPEN SPACE	.17	15.18%
NON-OPEN SPACE	0.95	84.82%

Residential Usable Open Space Area Requirements

USABLE OPEN SPACED DEFINED AS: BALCONIES, COURTS, AND YARDS FOR PRIVATE RECREATIONAL USE WITH NO DIMENSION LESS THAN 50' (SEC. 4.35.B.)

200 SF (REQUIRED PER DWELLING) x 68 (PH 1 DWELLINGS) = 13,600 SF = USABLE OPEN SPACE REQUIRED = .031 AC

200 SF (REQUIRED PER DWELLING) x 98 (PH 2 DWELLINGS) = 19,0000 SF = USABLE OPEN SPACE REQUIRED = .623 AC

TOTAL RESIDENTIAL OPEN SPACE REQUIRED = .54 AC

Residential Areas Provided

PH 1 AREA DESIGNATION	SIZE (AC)	PERCENTAGE
PH 1 RESIDENTIAL SITE SUBTOTAL	4.48	100%
PH 1 OPEN SPACE	.73	16.29%
NON-OPEN SPACE	3.75	83.71%
PH 2 AREA DESIGNATION SUBTOTAL	2.16	100%
PH 2 OPEN SPACE	.36	16.66%
NON-OPEN SPACE	1.80	83.33%

Bicycle Racks

WE ARE PROPOSING 25 BIKE RACKS TO ACCOMMODATE 58 BIKES TO BE INSTALLED IN LOCATIONS SHOWN. 18 BIKE RACKS ARE IN THE COMMERCIAL AREA AND 15 ARE IN THE RESIDENTIAL AREAS.

Legend:

- PROPERTY LINE
- COMMERCIAL OPEN SPACE
- POCKET GARDEN
- RESIDENTIAL USABLE OPEN SPACE
- RIGHT OF WAY
- BIKE PATH
- PEDESTRIAN CROSSWALK
- BIKE RACK
- RETAINING WALL

Pocket Gardens Provided

AREA DESIGNATION	SIZE (SF)
CITY OF NOVI MARKER OBELISK GARDEN	1,958
RESIDENTIAL GARDEN	11,438
WEST POND GARDEN	1,476
NORTH POND GARDEN	1,829

811 Know what's below. Call before you dig.

0' 25' 50' 100'

SCALE: 1"=50'

NORTH

Owner/Developer:

Robert B. Aikens & Associates, LLC.

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Birmingham, MI 48009 ph: 248-283-1071

GRISSIM METZ ASSOCIATES ANDRIESE

Landscape Architecture

311 East Cady Street
Northville, MI 48167

Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
Open Space, Bicycle, and Pedestrian Plan Phase 1 and Phase 2

Job Number: A01-191
Drawn: MS/EG/SE
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Sheet Number: L204

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General Notes:

1. ALL PLANTS SHALL BE LOCATED TO PROVIDE THE MINIMUM REQUIRED SET BACK FROM UTILITIES AND PROPERTY LINES. THE LANDSCAPE PLANTING PLANS IN THE FINAL SITE PLAN SUBMISSION WILL PROVIDE DIMENSION TO THE UTILITIES AND PROPERTY LINES.
2. THE PHASE 1 LANDSCAPE IMPROVEMENTS ARE SCHEDULED FOR FALL 2020.
3. REFER TO SHEET L400 FOR ADDITIONAL LANDSCAPE NOTES AND DETAILS.

USDA Soils Classification:

6B	MARLETTE SANDY LOAM, 1-6% SLOPES
10C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
11B	CAPAC SANDY LOAM, 0-4% SLOPES
21	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
59	URBAN LAND
BmaB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

Landscape Planting Legend:

- PLANT TAG - REFER TO PLANT LIST FOR SPECIFICATION AND QUANTITIES ON L404
- GREENBELT CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- ROW / GREENBELT SUB-CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- INTERIOR STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- PARKING LOT INTERIOR TREES SEE LANDSCAPE ORDINANCE PLANS
- PARKING LOT PERIMETER TREES - DECIDUOUS AND EVERGREEN. SEE LANDSCAPE ORDINANCE PLANS
- RESIDENTIAL BUILDING UNIT TREES - DECIDUOUS AND EVERGREEN. SEE LANDSCAPE ORDINANCE PLANS
- WOODLAND REPLACEMENT TREES SEE WOODLAND REPLACEMENT PLANS
- ADDITIONAL IDENTITY TREES
- FOUNDATION TREE
- RELOCATED GREENBELT TREES
- EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- SODDED LAWN
- MEADOW LAWN - TYPE 'A' ON 2" TOPSOIL
- STORMWATER SEED MIXTURE TYPE 'B' ON 2" TOPSOIL
- EMERGENT WETLAND SEED MIXTURE TYPE 'C' - SEED TO EXISTING WATER LINE AT TIME OF CONSTRUCTION
- BIKE RACKS - SEE TYP. DETAIL
- BENCH - SEE TYP. DETAIL
- 4" DEPTH DECORATIVE STONE MULCH TYPE 'A' OVER NON-WOVEN FILTER FABRIC
- 4" DEPTH DECORATIVE STONE MULCH TYPE 'B' OVER NON-WOVEN FILTER FABRIC
- CROSSWALK
- RETAINING WALL - REFER TO CIVIL DOCUMENTATION
- LIGHT POLES - REFER TO LIGHTING PLAN
- LIGHT BOLLARDS - REFER TO LIGHTING PLAN
- MAIL BOXES REFER TO DETAIL

Note Key:

(APPLIES TO SHEETS L301 - L302, NOT ALL APPLY PER SHEET)

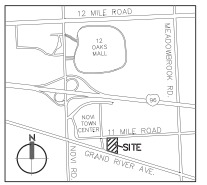
1. HEAVY DUTY COLORED CONCRETE ACCENT PAVING, TYP. - REFER TO DETAIL AND CIVIL PLANS
2. CONCRETE WALK, TYP.
3. IN-GROUND PLANTERS WITH ORNAMENTAL TREES OR PLANTINGS - REFER TO DETAILS
4. STREET TREES IN TREE GRATES
5. SAKURA NOVI IDENTIFICATION SIGNAGE - REFER TO ARCHITECTURAL PLANS
6. MASONRY PIERS WITH ORNAMENTAL FENCING - REFER TO ARCHITECTURAL PLANS
7. PEDESTRIAN PLAZA WITH COLORED CONCRETE ACCENT PAVING AND ORNAMENTAL PLANTINGS
8. SERVICE/LOADING AREA WITH PLANTING SCREEN
9. DETENTION POND / WATER FEATURE WITH AERATING FOUNTAINS
10. 6' WIDE DECORATIVE STONE WALKWAY
11. OUTDOOR DINING
12. SIGHT VISION TRIANGLE
13. TERRACE OVERLOOK
14. RESIDENTIAL IDENTIFICATION MONUMENT SIGN
15. BIKE RACK, TYP. - REFER TO DETAIL
16. BENCH, TYP. - REFER TO DETAIL
17. STORM BASIN MAINTENANCE ACCESS ROUTE - REFER TO CIVIL DRAWINGS
18. OPEN LAWN GAME AREA
19. RIDE SHARING PICK UP / DROP OFF AREA
20. ORNAMENTAL MOON GATE
21. EASEMENT FOR CITY GATEWAY FEATURE
22. DETENTION BASIN - REFER TO CIVIL DRAWINGS
23. HEDGE TO BE MAINTAINED AT 6' HT. - REFER TO DETAIL
24. HEDGE TO BE MAINTAINED AT 5' HT. - REFER TO DETAIL
25. OWNER WILL OBTAIN EASEMENT FROM ADJACENT PROPERTY OWNER TO PLANT AND MAINTAIN PERIMETER PARKING LOT TREES NEAR PROPERTY LINE
26. OWNER WILL COORDINATE LOCATION OF PERIMETER PARKING LOT TREES WITH ADJACENT PROPERTY OWNER
27. PARKING LOT SCREENING HEDGE TO BE MAINTAINED AT 3' HT.
28. RELOCATE EXISTING GREENBELT TREES TO ROW.
29. SNOW STORAGE
30. STRUCTURAL SOIL TO BE INSTALLED WHERE REQUIRED PLANTING SPACE IS INSUFFICIENT

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'

NORTH



Key Map
Scale: Not to Scale

SUSAN L. GRISSIM LANDSCAPE ARCHITECT No. 1541 REGISTERED STATE OF MICHIGAN

Owner/Developer:

Robert B. Aikens & Associates, LLC.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

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

Project: Sakura Novi
Novi, Michigan

Sheet: Landscape Planting Plan - Phase 1

Job Number:	A01-191
Drawn:	MS/EG/SE
Checked:	SG
Scale:	1"=40'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L301

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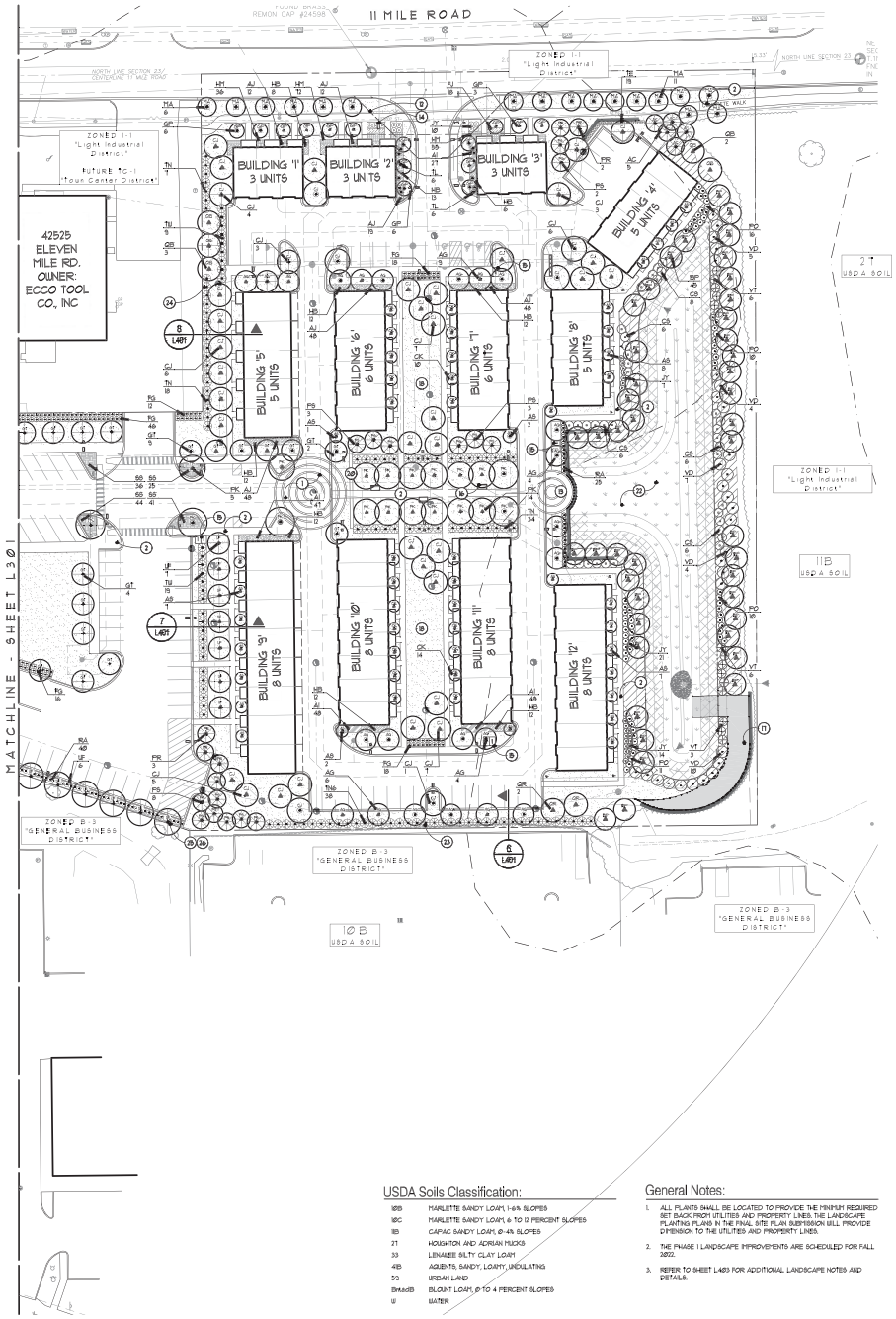

Landscape Planting Legend:

- PLANT TAG - REFER TO PLANT LIST FOR SPECIFICATION AND QUANTITIES ON L404
- GREENBELT CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- ROW / GREENBELT SUB-CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- INTERIOR STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- PARKING LOT INTERIOR TREES SEE LANDSCAPE ORDINANCE PLANS
- PARKING LOT PERIMETER TREES - DECIDUOUS AND EVERGREEN. SEE LANDSCAPE ORDINANCE PLANS
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- WOODLAND REPLACEMENT TREES SEE WOODLAND REPLACEMENT PLANS
- ADDITIONAL IDENTITY TREES
- FOUNDATION TREE
- RELOCATED GREENBELT TREES
- EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- SODDED LAWN
- MEADOW LAWN - TYPE 'A' ON 2" TOPSOIL
- STORMWATER SEED MIXTURE TYPE 'B' ON 2" TOPSOIL
- EMERGENT WETLAND SEED MIXTURE TYPE 'C' - SEED TO EXISTING WATER LINE AT TIME OF CONSTRUCTION
- BIKE RACKS - SEE TYP. DETAIL
- BENCH - SEE TYP. DETAIL
- 4" DEPTH DECORATIVE STONE MULCH TYPE 'A' OVER NON-WOVEN FILTER FABRIC
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- CROSSWALK
- RETAINING WALL - REFER TO CIVIL DOCUMENTATION
- LIGHT POLES - REFER TO LIGHTING PLAN
- LIGHT BOLLARDS - REFER TO LIGHTING PLAN
- MAIL BOXES REFER TO DETAIL

Note Key:

(APPLIES TO SHEETS L301 - L302, NOT ALL APPLY PER SHEET)

1. HEAVY DUTY COLORED CONCRETE ACCENT PAVING, TYP. - REFER TO DETAIL AND CIVIL PLANS
2. CONCRETE WALK, TYP.
3. IN-GROUND PLANTERS WITH ORNAMENTAL TREES OR PLANTINGS - REFER TO DETAILS
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USDA Soils Classification:

18B	MARLETTE SANDY LOAM, 1-6% SLOPES
18C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
1B	CASCO SANDY LOAM, 0-4% SLOPES
21	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AUBURN SANDY LOAMY, UNDULATING
59	URBAN LAND
BmaaB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

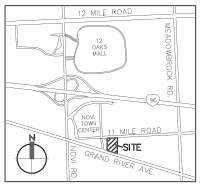
General Notes:

1. ALL PLANTS SHALL BE LOCATED TO PROVIDE THE MINIMUM REQUIRED SET BACK FROM UTILITIES AND PROPERTY LINES. THE LANDSCAPE PLANTING PLANS IN THE FINAL SITE PLAN SUBMISSION WILL PROVIDE DIMENSION TO THE UTILITIES AND PROPERTY LINES.
2. THE PHASE 1 LANDSCAPE IMPROVEMENTS ARE SCHEDULED FOR FALL 2022.
3. REFER TO SHEET L403 FOR ADDITIONAL LANDSCAPE NOTES AND DETAILS.

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'



Key Map

Scale: Not to Scale

SUSAN L. GRISSIM LANDSCAPE ARCHITECT No. 1541 LICENSED

Owner/Developer:

Robert B. Aikens & ASSOCIATES, LLC.

350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

GRISSIM METZ ASSOCIATES ANDRIESE

Landscape Architecture

311 East Cady Street
Northville, MI 48167

Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
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Date:	Issued for:
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10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L302

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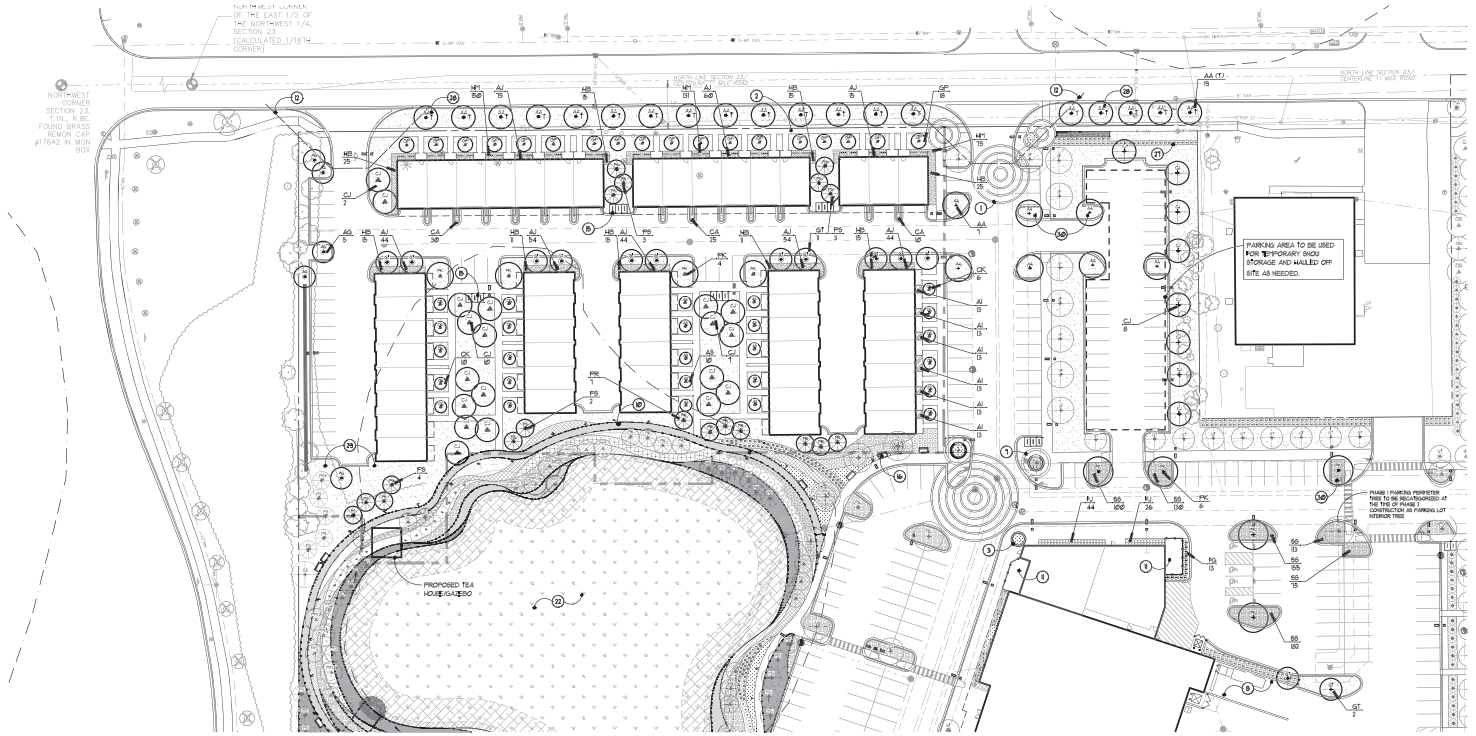

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Note Key:

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33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
59	URBAN LAND
BrkadB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

General Notes:

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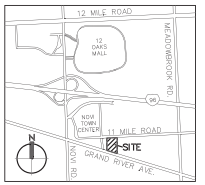
2. THE LANDSCAPE IMPROVEMENTS ARE SCHEDULED FOR SPRING 2021.
3. REFER TO SHEET L403 FOR ADDITIONAL LANDSCAPE NOTES AND DETAILS.
4. PHASE 2 LANDSCAPE IMPROVEMENTS TO BE INSTALLED IN FALL 2020.

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'



Key Map

Scale: Not to Scale

Owner/Developer:

Robert B. Aikens & Associates, LLC.

350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

GRISSIM METZ ASSOCIATES ANDRIESE

Landscape Architecture

311 East Cady Street
Northville, MI 48167

Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
Landscape Planting Plan - Phase 2

Job Number:	A01-191
Drawn:	MS/EG/SE
Checked:	SG
Scale:	1"=40'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L303

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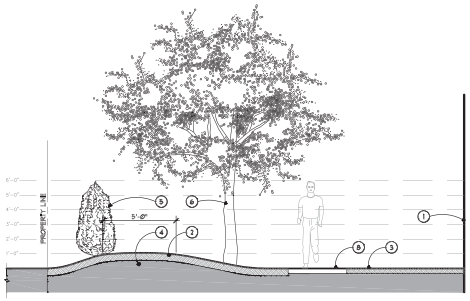
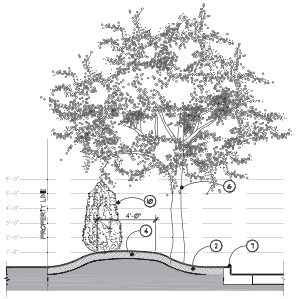


8 L302 Cross Section Through Planting Buffer
SCALE: 1/4" = 1'-0"



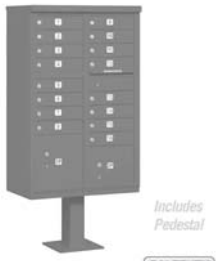
7 L302 Cross Section Through Planting Buffer
SCALE: 1/4" = 1'-0"



6 L302 Cross Section Through Planting Buffer
SCALE: 1/4" = 1'-0"

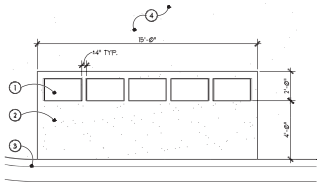
Note Key: DETAILS 6-8 (NOT ALL APPLY TO EACH)

1. LINE OF BUILDING FACE
2. SODDED LAWN ON 6" DEPTH TOPSOIL ON LOAM FILL BERM
3. SODDED LAWN
4. LOAM FILL BERM WITH 5'-0" WIDE MIN. CROWN AND 1:3 MAX. SLOPES
5. EVERGREEN HEDGE TO MAINTAINED AT A 5' HT. MINIMUM - REFER TO LANDSCAPE PLAN
6. DECIDUOUS TREE - REFER TO LANDSCAPE PLAN
7. CURB AND GUTTER - REFER TO CIVIL DOCUMENTS
8. CONCRETE SIDEWALK - REFER TO CIVIL DOCUMENTS
9. EVERGREEN HEDGE TO MAINTAINED AT A 3' HT. MINIMUM - REFER TO LANDSCAPE PLAN
10. EVERGREEN HEDGE TO MAINTAINED AT A 6' HT. MINIMUM - REFER TO LANDSCAPE PLAN



16 UNIT MAILBOX - CLUSTER BOX UNIT
MANUF. SALSBURY INDUSTRIES
WEBSITE MAILMAILBOXES.COM
MODEL 3346BLK-U
COLOR BLACK

5 Typical 16 Unit Mailbox
NOT TO SCALE



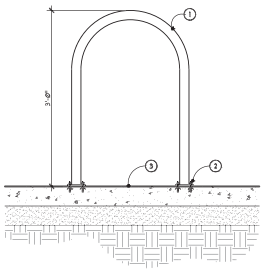
1. 36"W x 18"D x 67"H 16 UNIT MAILBOX - INSTALLED PER MANUFACTURER
2. CONCRETE SLAB - REFER TO CIVIL DOCUMENTS
3. CONCRETE CURB AND GUTTER - REFER TO CIVIL DOCUMENTS
4. LAWN - REFER TO LANDSCAPE PLAN

4 Typical Mailbox Layout Plan
SCALE: 1/4" = 1'-0"



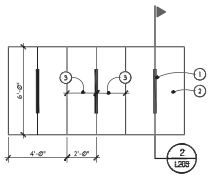
3 Typical Bench
NOT TO SCALE





1. 'U' SHAPED ORNAMENTAL BIKE RACK
   MANUF. BKG PRODUCTS
   PHONE# 573-48-5048
   COLOR BLACK MATTE FINISH
2. MODEL # 2441 SURFACE MOUNT (CONCRETE INSTALL) FLANGE MOUNT TO CONCRETE SLAB W/HILTI EXPANSION ANCHORS - SIZE & INSTALL PER MANUFACTURER RECOMMENDATIONS
3. CONCRETE SLAB - REFER TO CIVIL DOCUMENTS

2 Typical Bicycle Rack Detail
SCALE: 1" = 1'-0"



1. 'U' SHAPED ORNAMENTAL BIKE RACK
2. CONCRETE SLAB - REFER TO CIVIL DOCUMENTS
3. BIKE PARKING SPACE, TYP.

1 Typical Bicycle Parking Layout Plan
SCALE: 1/4" = 1'-0"

Owner/Developer:
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350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-263-1071

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Date:	Issued for:
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Sheet Number: L401

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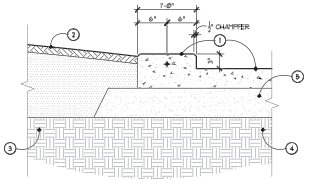
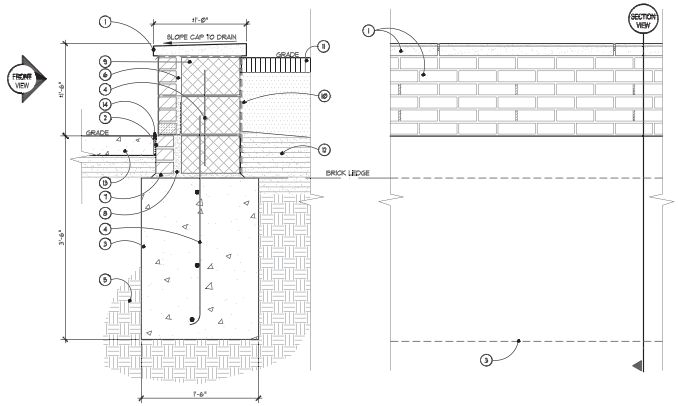
Precedent Image



1. TYPICAL CONCRETE SIDEWALK WITH INTEGRALLY FORMED PLANTER CURB WITH MEDIUM BROOM FINISH. PROVIDE (1) #4 REBAR CONTINUOUS. SAWCUT VERTICAL CONTROL JOINTS EVERY ± 4' O.C.
2. LANDSCAPE AREA
3. COMPACTED SUBGRADE TO 95% MODIFIED PROCTOR UNDER PLANT BED
4. COMPACTED SUBGRADE TO 95% MODIFIED PROCTOR UNDER PAVING AND CURBS
5. 4" DEPTH SAND BASE COMPACTED TO 95% MODIFIED PROCTOR

3 / L402 Typical Concrete Planter Curb Detail
SCALE: 1" = 1'-0"

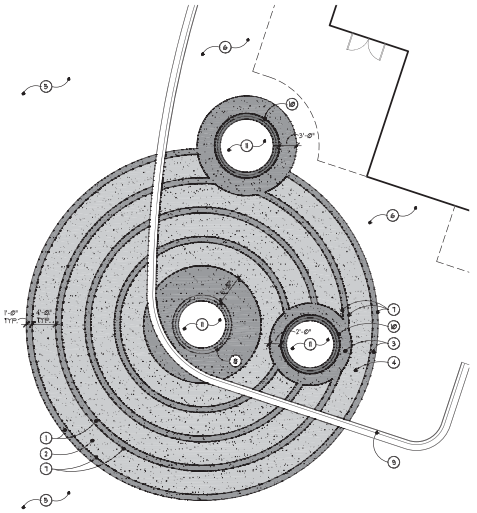


1. BRICK PLANTER WALL WITH CAST STONE CAP MATERIAL AND BRICK COURSING PATTERN TO MATCH PLANTER WALL AT ENTRY FROM GRAND RIVER AVENUE - REFER TO ARCHITECTURAL DRAWINGS
2. (3) COURSES BELOW GRADE, TYP. DAMP PROOF FACE OF ALL MASONRY BELOW GRADE, TYP.
3. CONCRETE FOUNDATION
4. VERT. BAR REINFORCING
5. COMPACTED SUBGRADE TO 95% MODIFIED PROCTOR
6. VOID SPACE
7. 1" MORTAR SETTING BED
8. GROUT FILL FULL VOID SPACE BELOW FLASHING, TYP.
9. 12" CMU BACKUP - GROUT FILL ALL ALL CORES AND VOID SPACES BETWEEN BLOCKS
10. DAMP PROOF FACE OF CMU BLOCK WHERE ADJACENT TO BACKFILL
11. LANDSCAPE AREA - REFER TO LANDSCAPE PLANS AND DETAILS
12. ENGINEERED SAND BACKFILL COMPACTED TO 98% MODIFIED PROCTOR
13. TYPICAL INTEGRALLY COLORED CONCRETE SIDEWALK
14. EXPANSION JOINT WITH BACKER ROD AND SEALANT. SEALANT COLOR TO MATCH COLORED CONCRETE

Section View

Front View

2 / L402 18" Masonry Seatwall
NOT TO SCALE



Note Key:

1. HEAVY DUTY INTEGRALLY COLORED CONCRETE PAVING WITH RAKED FINISH, COLOR A
2. HEAVY DUTY INTEGRALLY COLORED CONCRETE PAVING WITH RAKED FINISH, COLOR B
3. LIGHT DUTY INTEGRALLY COLORED CONCRETE PAVING WITH RAKED FINISH, COLOR A
4. LIGHT DUTY INTEGRALLY COLORED CONCRETE PAVING WITH RAKED FINISH, COLOR B
5. ASPHALT PAVING
6. NON-COLORED LIGHT DUTY CONCRETE PAVING WITH MEDIUM BROOM FINISH
7. PROVIDE DOWELED EXPANSION JOINTS WITH BACKER ROD AND SEALANT BETWEEN CONCRETE POURS. SEALANT COLOR TO MATCH COLORED CONCRETE BANDS, SUBMIT SAMPLES FOR APPROVAL
8. CONCRETE PLANTER CURB POURED INTEGRALLY WITH COLORED CONCRETE PAVING, COLOR 'A' - REFER TO DETAIL
9. CONCRETE CURB AND GUTTER - REFER TO CIVIL DOCUMENTS
10. MASONRY SEATWALL - REFER TO DETAIL
11. PLANTED AREA - REFER TO LANDSCAPE PLANS. NOTE THAT ALL AREAS PROPOSED FOR TREES TO RECEIVE STRUCTURAL SOIL ADJACENT TO PLANTING MIX TO PROVIDE ADDITIONAL SOIL VOLUME FOR HEALTHY TREE GROWTH AS DETERMINED BY FUTURE SOIL STUDIES.

NOTE: REFER TO CIVIL DOCUMENTS FOR TYPICAL PAVING DETAILS

Colored Concrete:

MANUFACTURER: L.M. SCOFIELD
COLOR A: CHROMIX, C-34, DARK GRAY
COLOR B: CHROMIX, C-18, COOL GRAY
CURING COMPOUND AND SEALER: LITHOCHROME COLORMAX SEALER, COLOR-MATCH TO COLORED CONCRETE, APPLY (2) COATS, SPRAYED THEN ROLLED

1 / L402 Typical Decorative Paving Enlargement
SCALE: 1" = 10'-0"

Owner/Developer:
Robert B. Aikens & Associates, LLC.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

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

Project: Sakura Novi
Novi, Michigan

Sheet: Site Details

Job Number:	A01-191
Drawn:	MS/EG/SE
Checked:	SG
Scale:	As Noted

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L402

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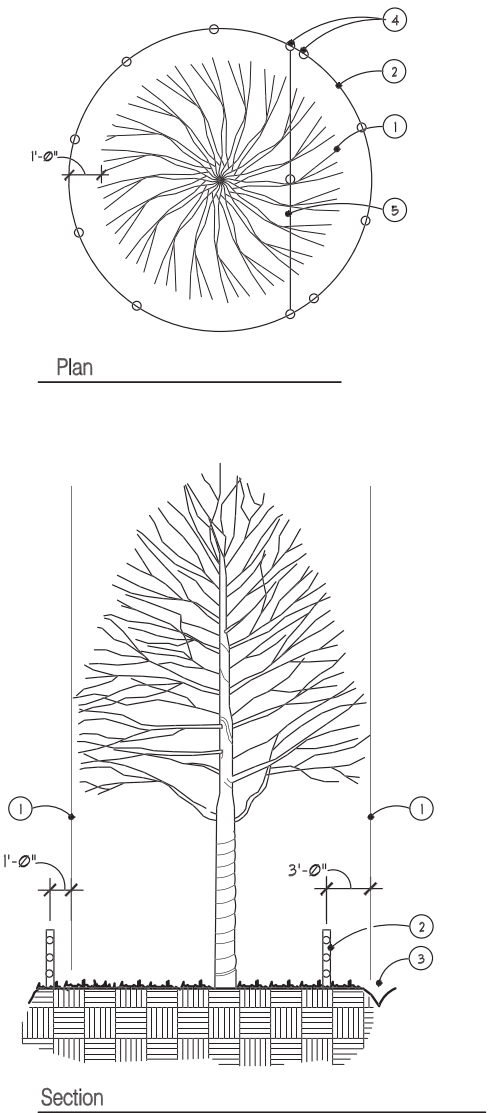
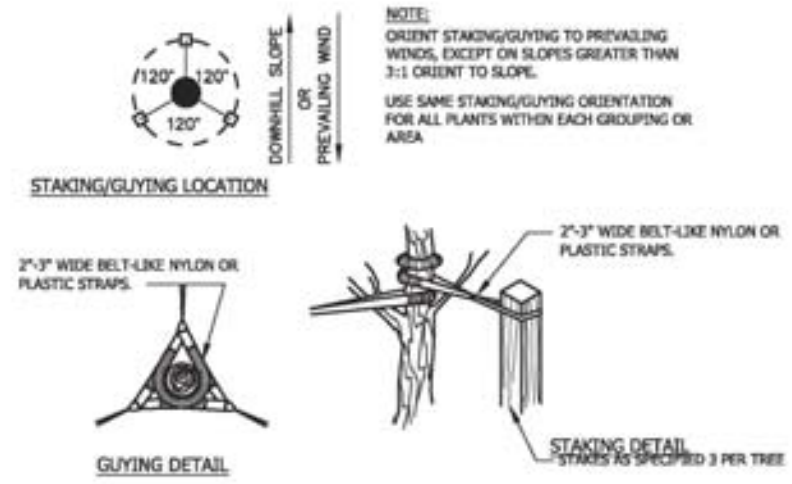


1. TREE DRIPLINE
2. 4' HIGH PLASTIC PROTECTION (SAFETY) FENCE
3. TRENCH OR CURB
4. STEEL POSTS 6' HT., 8' O.C., INSTALL POSTS 2' IN GROUND
5. ALTERNATE FENCE LINE WHERE CURB OR TRENCH ENCROACHES DRIPLINE 3' BACK OF TRENCH

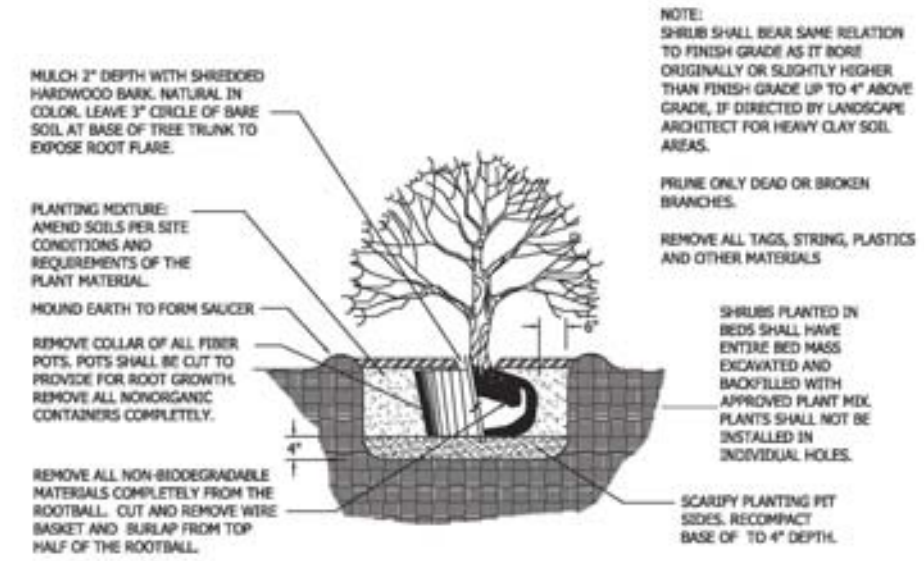
NOTES
4' HIGH PROTECTION FENCE TO BE INSTALLED 1' OUT FROM DRIP LINE OF TREES TO BE SAVED, PRIOR TO ANY LAND CLEARING OR CONSTRUCTION (PLASTIC, SAFETY FENCE)

NO CUTTING, FILLING, STORING OF MATERIALS OR TRESPASSING SHALL OCCUR INSIDE FENCED AREA WITHOUT CONTRACTOR APPROVAL

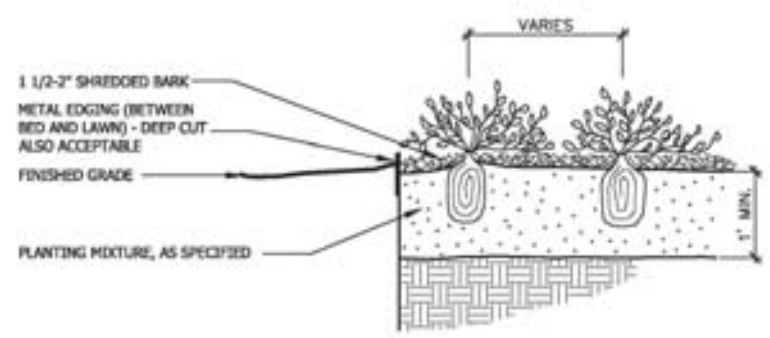
8 / L403 Tree Protection Detail
NOT TO SCALE



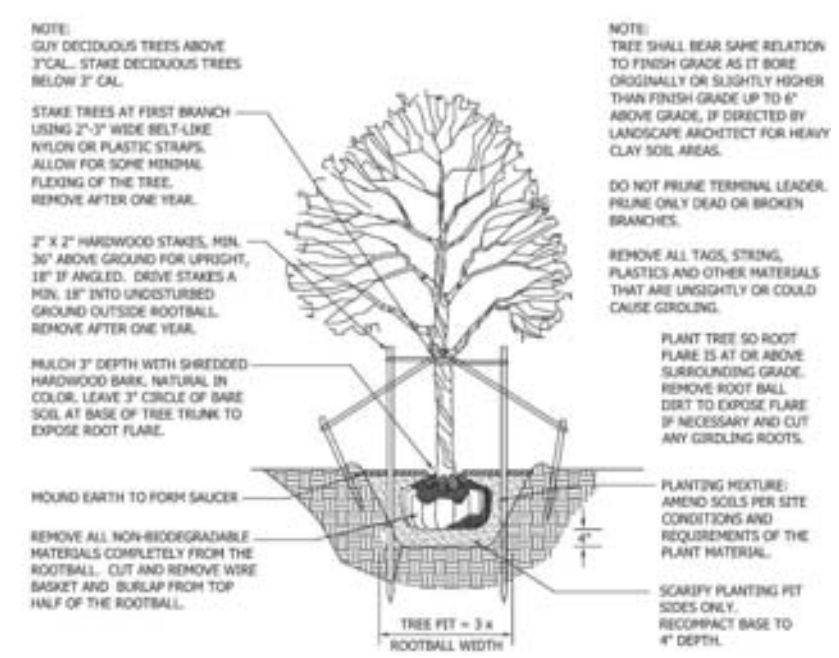
6 / L403 Tree Staking Detail
NOT TO SCALE



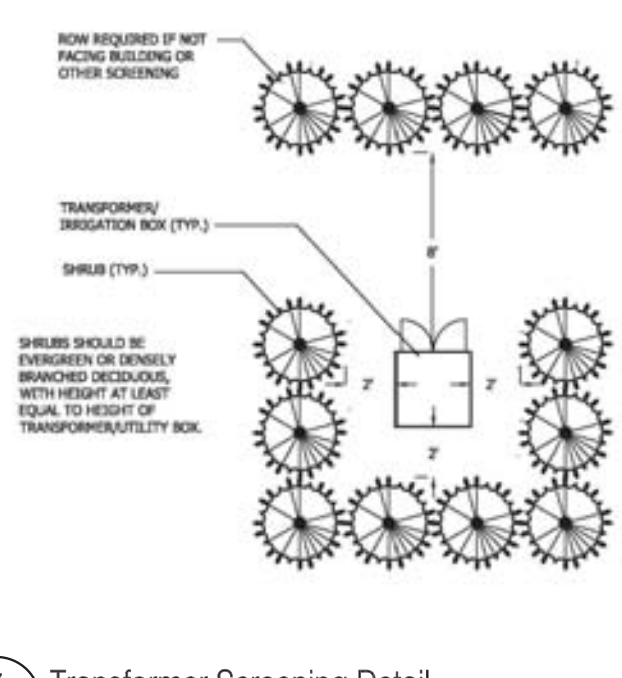
3 / L403 Shrub Planting Detail
NOT TO SCALE



5 / L403 Groundcover / Perennial Planting Detail
NOT TO SCALE

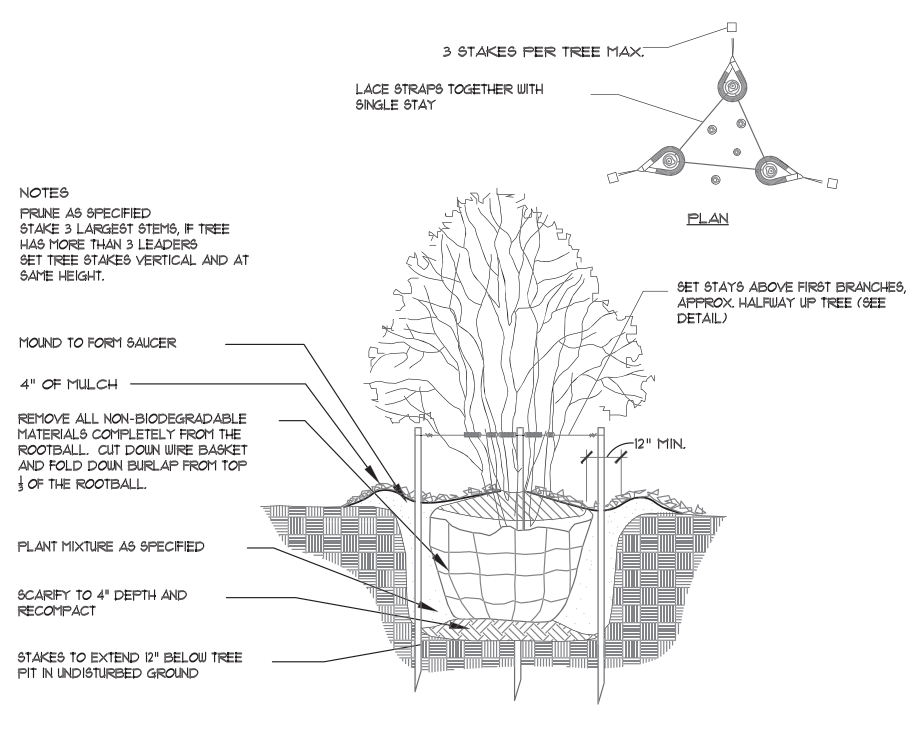


2 / L403 Deciduous Tree Planting Detail
NOT TO SCALE

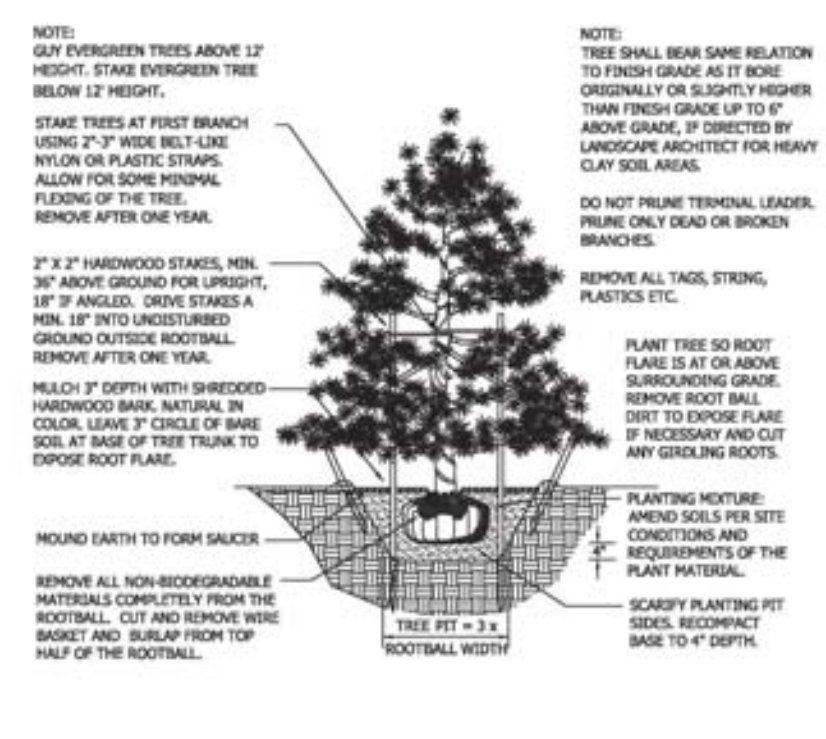


7 / L403 Transformer Screening Detail
NOT TO SCALE

NOTES
PRUNE AS SPECIFIED
STAKE 3 LARGEST STEMS, IF TREE HAS MORE THAN 3 LEADERS
SET TREE STAKES VERTICAL AND AT SAME HEIGHT.



4 / L403 Multi-stem Tree Planting Detail
NOT TO SCALE



1 / L403 Evergreen Tree Planting Detail
NOT TO SCALE

CITY OF NOVI LANDSCAPE NOTES:

1. ALL PLANT MATERIALS ARE TO BE INSTALLED IN A SOUND, WORKMAN-LIKE MANNER AND IN ACCORDANCE WITH THE CURRENT CITY OF NOVI PLANTING REQUIREMENTS

2. ALL PLANT MATERIALS ARE TO BE NORTHERN NURSERY GROWN NO.1 GRADE AND INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES. ALL PLANT MATERIALS SHALL CONFORM TO THE CURRENT AAN STANDARDS FOR NURSERY STOCK. THEY SHALL BE PLANTED ACCORDING TO THE CITY OF NOVI PLANTING DETAILS AND SPECIFICATIONS. THE CITY SHALL HAVE THE RIGHT TO INSPECT THE PLANT MATERIALS PRIOR TO PLANTING AND TO REJECT ANY PLANT MATERIALS DEEMED NOT TO MEET THE STANDARDS OF THE ZONING ORDINANCE.

3. ALL TREES SHALL HAVE A CENTRAL LEADER AND A RADIAL BRANCHING STRUCTURE. PARK GRADE TREES ARE NOT ACCEPTABLE. ALL TREES SHALL BE BALLED AND BURLAPPED (B&B).

4. ANY DECIDUOUS CANOPY TREES WITH BRANCHES THAT MIGHT TEND TO DEVELOP INTO "V" CROTCHES SHALL BE SUBORDINATED SO AS NOT TO BECOME DOMINANT BRANCHES.

5. MULCH SHALL BE NATURAL COLOR, FINELY SHREDDED HARDWOOD BARK FOR ALL PLANTINGS. 3" THICK FOR TREES IN 4-FOOT DIAMETER CIRCLE WITH 3" PULLED AWAY FROM TRUNK. 2" THICK FOR SHRUBS AND SHRUB BEDS AND 1.5" THICK BARK FOR PERENNIALS.

6. ALL PLANT MATERIAL SHALL BE WARRANTED FOR TWO (2) FULL YEARS AFTER DATE OF ACCEPTANCE BY THE CITY IF NOVI. ALL UNHEALTHY AND DEAD MATERIAL SHALL BE REPLACED WITHIN THREE (3) MONTHS OR THE NEXT APPROPRIATE PLANTING PERIOD WHICH EVER COMES FIRST.

7. ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY GROWING CONDITION, INCLUDING WATERING, CULTIVATION, WEED CONTROL AND SOIL ENRICHMENTS AS MAY BE NECESSARY.

8. A MINIMUM OF ONE WEED CONTROL CULTIVATION PER MONTH OCCURRING IN JUNE, JULY AND AUGUST SHALL BE PERFORMED DURING THE TWO-YEAR ESTABLISHMENT PERIOD.

19. ANY SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED IN WRITING BY THE CITY OF NOVI PRIOR TO INSTALLATION.

10. ALL TREE WRAP, STAKES, AND GUYS MUST BE REMOVED BY JULY 1ST FOLLOWING THE FIRST WINTER SEASON AFTER INSTALLATION.

11. ALL LANDSCAPE AREAS ARE TO BE MAINTAINED IN HEALTHY GROWING CONDITION FREE OF DEBRIS AND REFUSE AND IN CONFORMANCE WITH THE APPROVED LANDSCAPE PLAN.

12. ALL LANDSCAPE AREAS ARE TO BE WATERED BY A FULLY AUTOMATIC IRRIGATION SYSTEM EXCEPT AROUND THE DETENTION PONDS, WHICH WILL HAVE QUICK COUPLERS LOCATED 100' APART TO ACCESS FOR HOSE WATERING.

13. CONTRACTOR TO REMOVE All CONSTRUCTION DEBRIS AND EXCESS MATERIALS FROM THE SITE PRIOR TO FINAL ACCEPTANCE.

14. PLANT MATERIALS, EXCEPT SOD, GROUND COVERS, AND CREEPING VINE TYPE PLANTINGS, SHALL NOT BE LOCATED WITHIN FOUR (4) FEET OF THE PROPERTY LINE.

15. ALL TRANSFORMERS ARE TO BE SCREENED ON THREE SIDES (MIN.) IN ACCORDANCE WITH THE CITY OF NOVI ORDINANCE AND SO AS TO NOT CONFLICT WITH DTE RESTRICTIONS. (SEE DETAIL THIS SHEET).

16. ALL BERMS MUST BE PLANTED WITH A COMBINATION OF TREES, SHRUBS, LAWN OR OTHER GROUND COVERS.

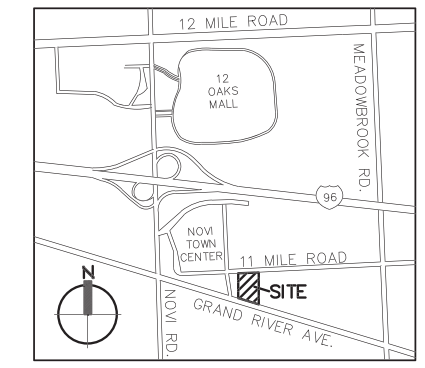
17. THE OWNER IS RESPONSIBLE FOR REQUEST OF FINAL INSPECTION AND ACCEPTANCE OF THE LANDSCAPE AT THE END OF THE 2-YEAR GUARANTEE PERIOD.

18. THE PROVIDER OF THE FINANCIAL GUARANTEE FOR THE LANDSCAPE INSTALLATION SHALL BE FULLY RESPONSIBLE FOR COMPLETION OF THE LANDSCAPE INSTALLATION AND MAINTENANCE PER THE APPROVED LANDSCAPE PLAN AND APPLICABLE CITY ORDINANCES.

19. MISS DIG MUST BE NOTIFIED TO LOCATE ALL UNDERGROUND BEFORE PLANTING BEGINS.

20. THE CONTRACTOR SHALL INSTALL AND GUARANTEE ALL PLANT MATERIALS FOR 2 YEARS AND MAINTAIN ALL SUCH LANDSCAPE AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF NOVI ZONING ORDINANCE.

THE DETAILS AND NOTES SHOWN ON THIS PAGE ARE STANDARDS. THESE DETAILS ARE NOT ALL INCLUSIVE AND ARE NOT MEANT TO SUBSTITUTE FOR ANY ORDINANCE OR CODE REQUIREMENT. FOR COMPLETE LANDSCAPE REQUIREMENTS, SEE THE ZONING ORDINANCE LANDSCAPE SECTION 5.5, THE LANDSCAPE DESIGN MANUAL AND THE APPROPRIATE REFERENCES WITHIN THE APPLICABLE ZONING CLASSIFICATION AND ANY OTHER APPLICABLE CODE REQUIREMENTS.



Key Map
Scale: Not to Scale

Owner/Developer:
Robert B. Aikens & ASSOCIATES, L.L.C.
350 N. Old Woodward Avenue, Suite 300
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Ph: 248-347-7010

Project: Sakura Novi
Novi, Michigan

Sheet: Landscape Notes & Details

Job Number:	A01-191
Drawn:	MS/EG/SE
Checked:	SG
Scale:	N.T.S.

Date:	Issued for:
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Seed Mix Type 'C' - Emergent Wetland Seed Mix

SCIENTIFIC NAME	COMMON NAME	LBS/AC
PERMANENT GRASSES/SEDGES/RUSHES:		
BOLBOSCHOENUS FLUVIATILIS	RIVER BULRUSH	1.00
CAREX COMOSA	BRISTLY SEDGE	2.50
CAREX LACUSTRIS	COMMON LAKE SEDGE	0.50
CAREX LURIDA	BOTTLEBRUSH SEDGE	4.00
CAREX STRICTA	COMMON TUSSOCK SEDGE	1.00
CAREX VULPINOIDEA	BROWN FOX SEDGE	2.00
ELEOCHARIS PALUSTRIS	GREAT SPIKE RUSH	1.00
JUNCUS EFFUSUS	COMMON RUSH	1.00
LEERSIA ORYZOIDES	RICE CUT GRASS	3.00
SCHOENOPLECTUS ACUTUS	HARD-STEMMED BULRUSH	2.50
SCHOENOPLECTUS PUNGENS	CHAIRMAKER'S RUSH	1.50
SCHOENOPLECTUS TABERNAEMONTANI	GREAT BULRUSH	6.00
TOTAL		26.00
TEMPORARY COVER:		
AVENA SATIVA	COMMON OAT	360.00
LOLIUM MULTIFLORUM	ANNUAL RYE	100.00
TOTAL		460.00
FORBS:		
ACORUS AMERICANUS	SWEET FLAG	1.00
ALISMA SUBCORDATUM	COMMON WATER PLANTAIN	2.00
ASCLEPIAS INCARNATA	SWAMP MILKWEED	1.00
BOEHMERIA CYLINDRICA	FALSE NETTLE	1.00
CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	6.00
DECODON VERTICILLATUS	SWAMP LOOSESTRIFE	0.50
EUTROCHIUM MACULATUM	SPOTTED JOE-PYE WEED	0.50
HIBISCUS SPP.	ROSE MALLOW SPECIES	4.00
IRIS VIRGINICA V. SHREVEI	BLUE FLAG	6.00
LOBELIA CARDINALIS	CARDINAL FLOWER	0.25
LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	0.25
LYCOPUS AMERICANUS	COMMON WATER HOREHOUND	1.00
MIMULUS RINGENS	MONKEY FLOWER	1.00
PELTANDRA VIRGINICA	ARROW ARUM	16.00
PENTHORUM SEDOIDES	DITCH STONECROP	0.50
PERSICARIA SPP.	PINKWEED SPECIES	2.00
PONTEDERIA CORDATA	PICKEREL WEED	4.00
SAGITTARIA LATIFOLIA	COMMON ARROWHEAD	2.00
SPARGANIUM EURYCARPUM	COMMON BUR REED	6.00
VERBENA HASTATA	BLUE VERVAIN	1.00
TOTAL		56.00

Seed Mix Type 'B' - Stormwater Seed Mix

SCIENTIFIC NAME	COMMON NAME	LBS/AC
PERMANENT GRASSES/SEDGES/RUSHES:		
BOLBOSCHOENUS FLUVIATILIS	RIVER BULRUSH	1.00
CAREX CRISTATELLA	CRESTED OVAL SEDGE	0.50
CAREX LURIDA	BOTTLEBRUSH SEDGE	3.00
CAREX VULPINOIDEA	BROWN FOX SEDGE	2.00
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	24.00
GLYCERIA STRIATA	FOWL MANNA GRASS	1.00
JUNCUS EFFUSUS	COMMON RUSH	1.00
LEERSIA ORYZOIDES	RICE CUT GRASS	1.00
PANICUM VIRGATUM	SWITCH GRASS	2.00
SCHOENOPLECTUS TABERNAEMONTANI	GREAT BULRUSH	3.00
SCIRPUS ATROVIRENS	DARK GREEN RUSH	2.00
SCIRPUS CYPERINUS	WOOL GRASS	1.00
TOTAL		41.50
TEMPORARY COVER:		
AVENA SATIVA	COMMON OAT	360.00
LOLIUM MULTIFLORUM	ANNUAL RYE	100.00
TOTAL		460.00
FORBS & SHRUBS:		
ALISMA SUBCORDATUM	COMMON WATER PLANTAIN	2.50
ASCLEPIAS INCARNATA	SWAMP MILKWEED	2.00
BIDENS SPP.	BIDENS SPECIES	2.00
EUPATORIUM PERFOLIATUM	COMMON BONESET	1.00
HELENIUM AUTUMNALE	SNEEZEWEED	2.00
IRIS VIRGINICA V. SHREVEI	BLUE FLAG	4.00
LYCOPUS AMERICANUS	COMMON WATER HOREHOUND	0.50
MIMULUS RINGENS	MONKEY FLOWER	1.00
PENTHORUM SEDOIDES	DITCH STONECROP	0.50
PERSICARIA SPP.	PINKWEED SPECIES	2.00
RUDBECKIA SUBTOMENTOSA	SWEET BLACK-EYED SUSAN	1.00
RUDBECKIA TRILOBA	BROWN-EYED SUSAN	1.50
SAGITTARIA LATIFOLIA	COMMON ARROWHEAD	1.00
SENNA HEBECARPA	WILD SENNA	2.00
SYMPHYOTRICHUM LANCEOLATUM	PANICLED ASTER	0.50
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.50
THALICTRUM DASYCARPUM	PURPLE MEADOW RUE	2.00
TOTAL		26.00

Seed Mix Type 'A' - Low Maintenance, No-Mow Meadow Lawn

Sedge Meadow

A grass and sedge mix for level sites with saturated soil conditions (although it will tolerate drier soils late in the year), this meadow seed mix creates a diverse habitat, offering a variety of cover and food options for wildlife. Many of the plants attract pollinators, such as butterflies and hummingbirds. This seed mix includes at least 14 of 18 native permanent grass and sedge species and 27 of 30 native forb and shrub species. Apply at 39.31 PLS pounds per acre.

Botanical Name	Common Name	PLS Oz/Acre
Permanent Grasses/Sedges		
Calamagrostis canadensis	Bluejoint Grass	1.00
Carex comosa	Bristly Sedge	2.00
Carex cristatella	Crested Oval Sedge	1.00
Carex frankii	Bristly Cattail Sedge	2.00
Carex lupulina	Common Hop Sedge	3.00
Carex lurida	Bottlebrush Sedge	2.00
Carex stipata	Common Fox Sedge	1.00
Carex stricta	Common Tussock Sedge	1.00
Carex vulpinoidea	Brown Fox Sedge	2.00
Elymus virginicus	Virginia Wild Rye	24.00
Glyceria striata	Fowl Manna Grass	0.50
Juncus effusus	Common Rush	0.50
Leersia oryzoides	Rice Cut Grass	1.00
Scirpus atrovirens	Dark Green Rush	1.00
Scirpus cyperinus	Wool Grass	0.50
Scirpus pendulus	Red Bulrush	0.50
Schoenoplectus tabernaemontani	Great Bulrush	1.00
Spartina pectinata	Prairie Cord Grass	2.00
	Total	47.00
Temporary Cover		
Avena sativa	Common Oat	540.00
	Total	540.00
Forbs/Shrubs		
Alisma subcordatum	Common Water Plantain	1.00
Angelica atropurpurea	Great Angelica	4.00
Asclepias incarnata	Swamp Milkweed	2.00
Bidens cernua	Nodding Bur Marigold	2.00
Boehmeria cylindrica	False Nettle	0.50
Coreopsis tripteris	Tall Coreopsis	1.00
Doellingeria umbellata	Flat-Top Aster	0.50
Eupatorium perfoliatum	Common Boneset	0.50
Eutrochium maculatum	Spotted Joe-Pye Weed	1.00
Helenium autumnale	Sneezeweed	1.00
Hibiscus laevis	Smooth Rose Mallow	2.00
Iris virginica v. shrevei	Blue Flag	3.00
Liatris spicata	Marsh Blazing Star	2.00
Lobelia cardinalis	Cardinal Flower	0.25
Lobelia siphilitica	Great Blue Lobelia	0.25
Lycopus americanus	Common Water Horehound	0.50
Penthorum sedoides	Ditch Stonecrop	1.00
Physostegia virginiana	Obedient Plant	0.50
Persicaria spp.	Pinkweed Species	2.00
Pycnanthemum virginianum	Common Mountain Mint	0.50
Sagittaria latifolia	Common Arrowhead	1.00
Senna hebecarpa	Wild Senna	4.00
Silphium perfoliatum	Cup Plant	1.00
Sparganium eurycarpum	Common Bur Reed	4.00
Symphyotrichum novae-angliae	New England Aster	0.50
Symphyotrichum puniceum	Bristly Aster	1.00
Thalictrum dasycarpum	Purple Meadow Rue	1.00
Verbena hastata	Blue Vervain	2.00
Vernonia fasciculata	Common Ironweed	1.00
Zizia aurea	Golden Alexanders	1.00
	Total	42.00

Low-Profile Prairie

This prairie seed mix provides a wide range of shorter prairie grass, sedge, and wildflower species. Most species will grow to 4 feet or less, making this an ideal mix for areas where taller forbs and grasses are not appropriate. Once established, this wildflower community displays a variety of colors, blooming from early spring to fall, creating a diverse habitat for birds, butterflies, moths, and other pollinators. This seed mix is suitable for medium-to-dry sites. This seed mix includes at least 5 of 6 native permanent grass and sedge species and 28 of 32 native forb species. Apply at 38.50 PLS pounds per acre.

Botanical Name	Common Name	PLS Oz/Acre
Permanent Grasses/Sedges		
Bouteloua curtipendula	Side-Oats Grama	16.00
Carex spp.	Prairie Sedge Species	4.00
Elymus canadensis	Canada Wild Rye	22.00
Koeleria macrantha	June Grass	1.00
Panicum virgatum	Switch Grass	1.50
Schizachyrium scoparium	Little Bluestem	36.00
	Total	80.00
Temporary Cover		
Avena sativa	Common Oat	360.00
Lolium multiflorum	Annual Rye	100.00
	Total	460.00
Forbs		
Amorpha canescens	Lead Plant	0.50
Asclepias syriaca	Common Milkweed	2.00
Asclepias tuberosa	Butterfly Weed	2.00
Baptisia alba	White Wild Indigo	2.00
Chamaecrista fasciculata	Partridge Pea	10.00
Coreopsis lanceolata	Sand Coreopsis	6.00
Coreopsis palmata	Prairie Coreopsis	1.00
Dalea candida	White Prairie Clover	1.50
Dalea purpurea	Purple Prairie Clover	1.50
Desmanthus illinoensis	Illinois Sensitive Plant	3.00
Echinacea purpurea	Broad-Leaved Purple Coneflower	8.00
Eryngium yuccifolium	Rattlesnake Master	3.00
Lespedeza capitata	Round-Headed Bush Clover	2.00
Liatris aspera	Rough Blazing Star	0.50
Lupinus perennis v. occidentalis	Wild Lupine	4.00
Monarda fistulosa	Wild Bergamot	0.50
Oligoneuron rigidum	Stiff Goldenrod	1.00
Parthenium integrifolium	Wild Quinine	1.00
Penstemon digitalis	Foxglove Beard Tongue	0.50
Penstemon hirsutus	Hairy Beard Tongue	1.00
Ratibida pinnata	Yellow Coneflower	4.00
Rudbeckia hirta	Black-Eyed Susan	5.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.00
Silphium terebinthinaceum	Prairie Dock	1.00
Solidago speciosa	Showy Goldenrod	0.50
Symphyotrichum ericoides	Heath Aster	0.25
Symphyotrichum laeve	Smooth Blue Aster	1.00
Symphyotrichum novae-angliae	New England Aster	0.50
Tradescantia ohiensis	Common Spiderwort	1.00
Verbena stricta	Hoary Vervain	1.00
Vernonia gigantea	Smooth Tall Ironweed	1.50
Veronicastrum virginicum	Culver's Root	0.25
	Total	68.00

NOTES

1. CONTRACTOR TO VERIFY SOIL CONDITIONS PRIOR TO INSTALLING SEDGE MEADOW SEED MIX. IF SOIL CONDITIONS ARE NOT CONDUCIVE FOR SEDGE MEADOW REQUIREMENTS, CONTRACTOR TO INSTALL THE LOW-PROFILE PRAIRIE SEED MIX. BOTH SEED MIXES ARE AVAILABLE THROUGH CARDNONATIVENURSERY.COM
2. CONTRACTOR TO PROVIDE VERIFICATION OF SEED MIX INSTALLATION, INCLUDING PHOTO(S) OF SEED BAG LABELS TO CITY OF NOVI LANDSCAPE ARCHITECT.

Plant List - Phase 2

Deciduous Trees

CODE	QTY.	DESCRIPTION	SIZE	GENUS %	SPECIES %	COMMENTS
AG	5	Acer saccharum 'Green Mountain'	3" cal.	10%	4.4%	B&B
		Green Mountain Sugar Maple				
AA	7	Acer x freemanii 'Autumn Blaze'	3" cal.	10%	5.6%	B&B
		Autumn Blaze Maple				
AAT	19	Acer x freemanii 'Autumn Blaze'	transplant	10%	5.6%	B&B
		Autumn Blaze Maple (Transplant from Ph. 1)				
AS	10	Amelanchier canadensis 'Autumn Brilliance'	8' ht.	6.5%	6.5%	B&B, multi-stem
		Autumn Brilliance Serviceberry				
CJ	27	Cercidiphyllum japonicum 'Red Fox'	7' ht.	10.6%	10.6%	
		Red Fox Katsura Tree				
CK	16	Cornus kousa	8' ht.	6.2%	6.2%	B&B, multi-stem
		Kousa Dogwood				
GP	18	Ginkgo biloba 'Princeton Sentry'	3" cal.	9.8%	5.1%	B&B
		Princeton Sentry Maidenhair Tree				
GT	13	Gleditsia triacanthos f. inermis 'Skycole'	3" cal.	8.4%	8.4%	B&B
		Skyline Honeylocust				
PK	10	Prunus serrulata 'Kwanzan'	3" cal.	10.1%	6.7%	B&B
		Japanese Flowering Cherry Tree				

Evergreen Trees

CODE	QTY.	DESCRIPTION	SIZE	GENUS %	SPECIES %	COMMENTS
PR	7	Pinus resinosa	8' ht.	10%	3.9%	B&B, unsheared
		Red Pine				full to ground
PS	12	Pinus strobus	8' ht.	10%	6.1%	B&B, unsheared
		Eastern White Pine				full to ground

Groundcover and Perennials

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
AI	78	Astilbe chinensis 'Vision Inferno'	24" ht./spd	plant 18" o.c.
		Chinese Astilbe	min., cont.	
AJ	390	Astilbe japonica 'Sister Teresa'	24" ht./spd	plant 18" o.c.
		Sister Teresa Astilbe	min., cont.	
HB	147	Hosta 'Blue Angel'	24" ht./spd	plant 36" o.c.
		Blue Angel Hosta	min., cont.	

Plant List - Phase 2

Grasses

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
CA	65	Calamagrostis 'Karl Foerster'	18" ht./spd.	plant 24" o.c.
		Karl Foerster Feather Reed Grass	min., cont.	
FG	13	Fargesia nitida 'Great Wall'	5' ht.	plant 3' o.c.
		Great Wall Blue Fountain Clumping Bamboo		
FJ	70	Fargesia nitida 'Jiuzhaigou'	3' ht.	plant 24" o.c.
		Red Clumping Bamboo		
HM	356	Hakonechloa macra	18" ht./spd.	plant 16" o.c.
		Japanese Forest Grass	min., cont.	
SS	755	Schizachyrium scoparium 'The Blues'	24" ht./spd.	plant 24" o.c.
		Little Bluestem	min., cont.	

Plant List - Phase 1

Grasses

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
CA	65	Calamagrostis 'Karl Foerster'	18" ht./spd.	plant 24" o.c.
		Karl Foerster Feather Reed Grass	min., cont.	
FE	888	Festuca glauca 'Elijah Blue'	10" ht./spd.	plant 12" o.c.
		Elijah Blue Fescue	min., cont.	
FG	223	Fargesia nitida 'Great Wall'	5' ht.	plant 3' o.c.
		Great Wall Blue Fountain Clumping Bamboo		
FJ	57	Fargesia nitida 'Jiuzhaigou'	3' ht.	plant 24" o.c.
		Red Clumping Bamboo		
HM	364	Hakonechloa macra	18" ht./spd.	plant 16" o.c.
		Japanese Forest Grass	min., cont.	
SH	418	Sporobolus heterolepis	24" ht./spd.	plant 24" o.c.
		Prairie Dropseed	min., cont.	
SS	2111	Schizachyrium scoparium 'The Blues'	24" ht./spd.	plant 24" o.c.
		Little Bluestem	min., cont.	

Plant List - Woodland Replacement - Phase 1

Evergreen Trees

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
AA	2	Acer saccharum 'Green Mountain'	2.5" cal.	B&B
		Green Mountain Sugar Maple		
PS	11	Pinus strobus	6' ht.	B&B, unsheared
		Eastern White Pine		full to ground

Plant List - Phase 1

Deciduous Trees

CODE	QTY.	DESCRIPTION	SIZE	GENUS %	SPECIES %	COMMENTS
AG	23	Acer saccharum 'Green Mountain'	3" cal.	10.4%	4.6%	B&B
		Green Mountain Sugar Maple				
AA	29	Acer x freemanii 'Autumn Blaze'	3" cal.	10.4%	5.8%	B&B
		Autumn Blaze Maple				
AS	32	Amelanchier canadensis 'Autumn Brilliance'	8' ht.	6.4%	6.4%	B&B, multi-stem
		Autumn Brilliance Serviceberry				
BP	45	Betula papyrifera	8' ht.	9%	9%	B&B, multi-stem
		Canoe Birch				
CJ	41	Cercidiphyllum japonicum 'Red Fox'	7' ht.	8.2%	8.2%	
		Red Fox Katsura Tree				
CK	24	Cornus kousa	8' ht.	4.8%	4.8%	B&B, multi-stem
		Kousa Dogwood				
GB	30	Ginkgo Biloba	3" cal.	9%	6%	B&B
		Maidenhair Tree				
GP	15	Ginkgo biloba 'Princeton Sentry'	3" cal.	9%	3%	B&B
		Princeton Sentry Maidenhair Tree				
GT	41	Gleditsia triacanthos f. inermis 'Skycole'	3" cal.	8.2%	8.2%	B&B
		Skyline Honeylocust				
MA	17	Malus 'Adirondack'	2" cal.	4.6%	3.4%	B&B
		Adirondack Crabapple				
MS	5	Malus 'Sugar Tyme'	2" cal.	4.6%	1%	B&B
		Sugar Tyme Crabapple				
PK	33	Prunus serrulata 'Kwanzan'	3" cal.	11%	6.6%	B&B
		Japanese Flowering Cherry Tree				
PP 2	13	Prunus subhirtella 'Pendula'	2" cal.	11%	2.6%	B&B
		Higan Cherry				
PP 2.5	9	Prunus subhirtella 'Pendula'	2.5" cal.	11%	1.8%	B&B
		Higan Cherry				
QB	30	Quercus bicolor	3" cal.	6.4%	6%	B&B
		Swamp White Oak				
QR	22	Quercus rubra	3" cal.	6.4%	0.4%	B&B
		Red Oak				
UF	40	Ulmus 'Frontier'	3" cal.	8%	8%	B&B
		Frontier Hybrid Elm				

Evergreen Trees

CODE	QTY.	DESCRIPTION	SIZE	GENUS %	SPECIES %	COMMENTS
AC	23	Abies concolor	8' ht.	4.6%	4.6%	B&B, unsheared
		White Fir				full to ground
PR	18	Pinus resinosa	8' ht.	9%	3.6%	B&B, unsheared
		Red Pine				full to ground
PS	27	Pinus strobus	8' ht.	9%	5.4%	B&B, unsheared
		Eastern White Pine				full to ground

Shrubs

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
BG	3	Buxus 'Green Velvet'	18" ht./spd.	plant 18" o.c.
		Green Velvet Boxwood	cont.	
CS	38	Cornus sericea	36"	plant 6' o.c.
		Redtwig Dogwood	spr. min.	
JY	235	Juniperus horizontalis 'Youngstown'	24"-30"	plant 36" o.c.
		Youngstown Andorra Juniper	spd. min.	
PM	110	Pinus mugo	30"	plant 4' o.c.
		Mugo Pine	spd. min.	
PO	130	Physocarpus opulifolius	36"	plant 4' o.c.
		Common Ninebark	spd. min.	
RA	121	Rhus aromatica 'Gro-Low'	30"	plant 3' o.c.
		Gro-Low Fragrant Sumac	spd. min.	
TE	91	Thuja occidentalis 'Smaragd'	5' ht.	plant 30" o.c.
		Emerald Green Arborvitae		
TL	17	Thuja occidentalis 'Little Giant'	30"	plant as shown
		Little Giant Arborvitae	spd. min.	
TN	78	Thuja occidentalis 'Nigra'	5' ht.	B&B, 6' o.c.
		Dark Green Arborvitae		
TN6	38	Thuja occidentalis 'Nigra'	6' ht.	B&B, 6' o.c.
		Dark Green Arborvitae		
TW	97	Thuja occidentalis 'Woodwardii'	30"	plant 6' o.c.
		Woodward Arbovitae	spd. min.	
VD	42	Viburnum dentatum	36"	plant 8' o.c.
		Arrowwood Viburnum	spd. min.	
VT	27	Viburnum trilobum	36"	plant 6' o.c.
		American Cranberrybush	spd. min.	

Groundcover and Perennials

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
AI	170	Astilbe chinensis 'Vision Inferno'	24" ht./spd	plant 18" o.c.
		Chinese Astilbe	min., cont.	
AJ	187	Astilbe japonica 'Sister Teresa'	24" ht./spd	plant 18" o.c.
		Sister Teresa Astilbe	min., cont.	
AM	1680	Allium millenium	12" ht./spd	plant 14" o.c.
		Ornamental Onion	min., cont.	
HB	99	Hosta 'Blue Angel'	24" ht./spd	plant 36" o.c.
		Blue Angel Hosta	min., cont.	
LM	268	Liriope muscari 'Big Blue'	10" ht./spd.	plant 16" o.c.
		Big Blue Lilyturf	min., cont.	
NF	201	Nepeta 'Walkers Low'	24" ht./spd	plant 36" o.c.
		Walkers Low Catmint	min., cont.	
PA	317	Perovskia atriplicifolia 'Longin'	12" ht./spd.	plant 30" o.c.
		Russian sage	min., cont.	

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SUSAN L. GRISSIM
LANDSCAPE ARCHITECT
No. 1141
REGISTERED LANDSCAPE ARCHITECT

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Project: Sakura Novi
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Sheet: Plant Lists - Phase 1 and Phase 2

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: N.T.S.

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal
12.20.2019	PRO Rezoning Revised Submittal

Sheet Number: L404

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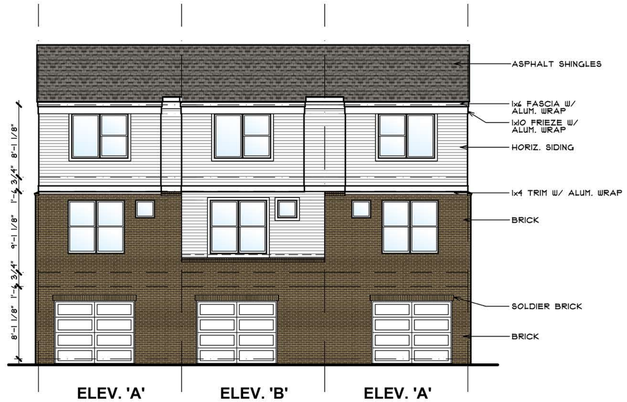
REAR ELEVATION

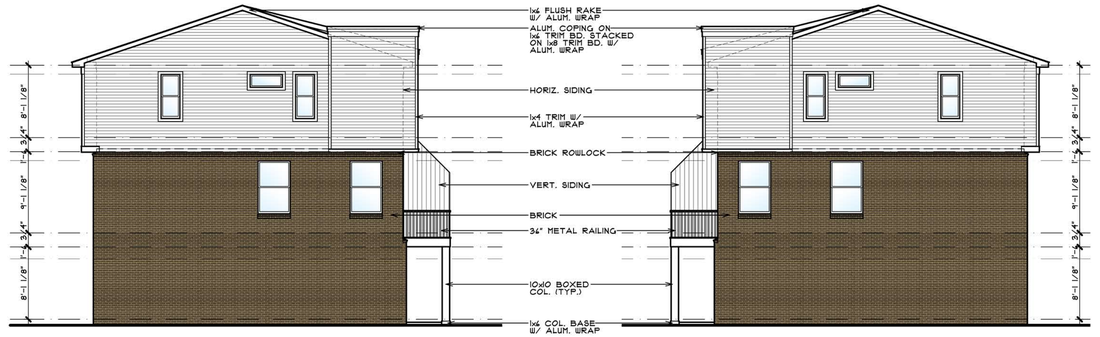
MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	537 SF	41%
SIDING	0%	344 SF	25.5%
SHINGLES	25%	308 SF	23.5%
TRIM	15%	126 SF	10%
TOTAL		1,315 SF	100%



REAR ELEVATION
3 UNIT BUILDING
SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	631 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%



LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	514 SF	39%
SIDING	0%	310 SF	23%
SHINGLES	25%	214 SF	16%
TRIM	15%	286 SF	22%
TOTAL		1,324 SF	100%



FRONT ELEVATION
3 UNIT BUILDING
*NOTE: ALL SIDING TO BE FIBER CEMENT.
SCALE: 1/8" = 1'-0"

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REAR ELEVATION

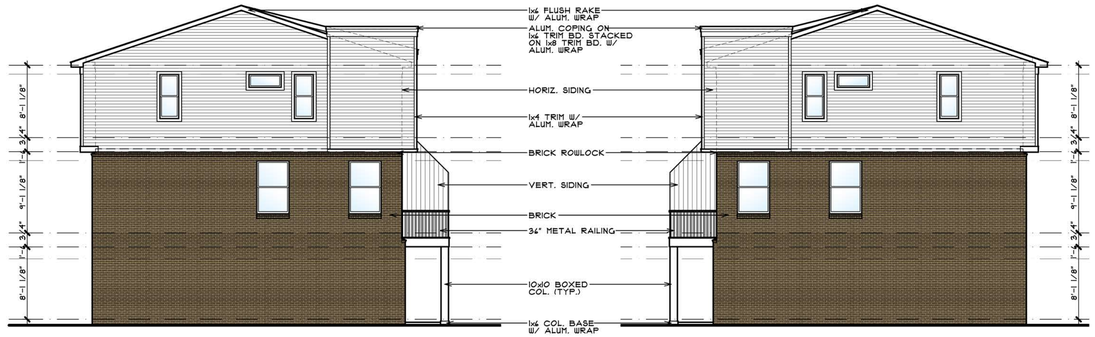
MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	863 SF	40%
SIDING	0%	596 SF	27%
SHINGLES	25%	512 SF	23%
TRIM	15%	213 SF	10%
TOTAL		2,184 SF	100%



REAR ELEVATION
5 UNIT BUILDING
SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	631 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%



LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	850 SF	39%
SIDING	0%	513 SF	23%
SHINGLES	25%	376 SF	17%
TRIM	15%	462 SF	21%
TOTAL		2,201 SF	100%



ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
5 UNIT BUILDING
*NOTE: ALL SIDING TO BE FIBER CEMENT.
SCALE: 1/8" = 1'-0"

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REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,062 SF	41%
SIDING	0%	689 SF	26%
SHINGLES	25%	614 SF	23%
TRIM	15%	252 SF	10%
TOTAL		2,617 SF	100%

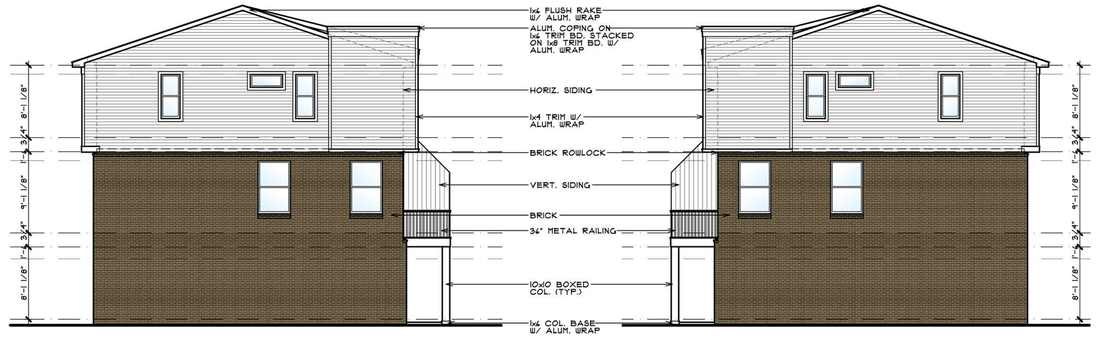


REAR ELEVATION
6 UNIT BUILDING

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

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	631 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%



LEFT SIDE ELEVATION

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

RIGHT SIDE ELEVATION

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

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,018 SF	38.5%
SIDING	0%	622 SF	23.5%
SHINGLES	25%	449 SF	17%
TRIM	15%	551 SF	21%
TOTAL		2,640 SF	100%



ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
6 UNIT BUILDING

*NOTE: ALL SIDING TO BE FIBER CEMENT.

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

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REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,189 SF	39%
SIDING	0%	847 SF	28%
SHINGLES	25%	716 SF	23%
TRIM	15%	299 SF	10%
TOTAL		3,051 SF	100%

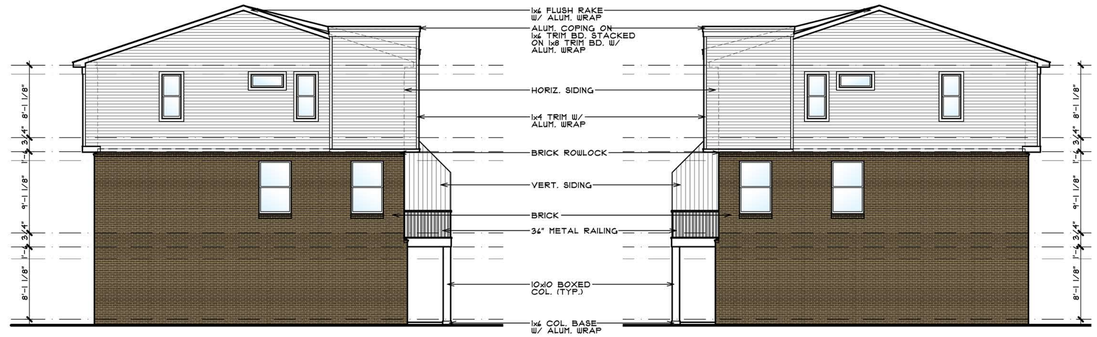


REAR ELEVATION
7 UNIT BUILDING

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

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	631 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%



LEFT SIDE ELEVATION

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

RIGHT SIDE ELEVATION

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

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,186 SF	38.5%
SIDING	0%	717 SF	23%
SHINGLES	25%	538 SF	17.5%
TRIM	15%	638 SF	21%
TOTAL		3,079 SF	100%



ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
7 UNIT BUILDING

*NOTE: ALL SIDING TO BE FIBER CEMENT.

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

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REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,316 SF	38%
SIDING	0%	1,005 SF	29%
SHINGLES	25%	819 SF	23%
TRIM	15%	346 SF	10%
TOTAL		3,486 SF	100%

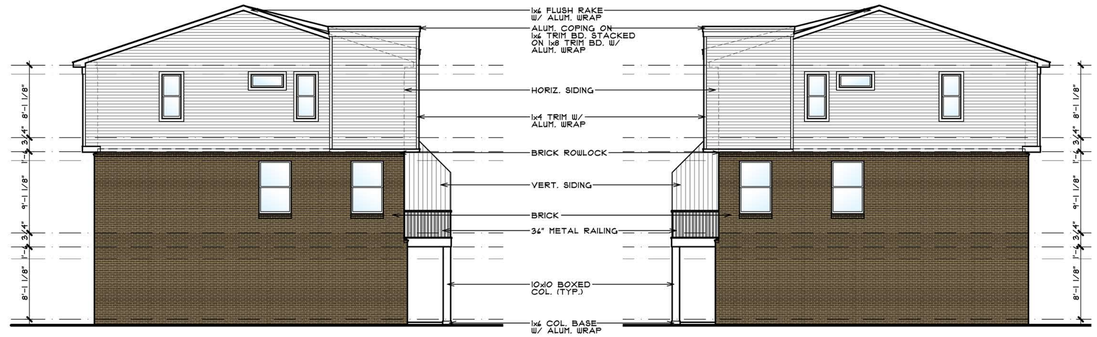


REAR ELEVATION
8 UNIT BUILDING

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

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	631 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%



LEFT SIDE ELEVATION

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

RIGHT SIDE ELEVATION

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

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,354 SF	38%
SIDING	0%	811 SF	23%
SHINGLES	25%	628 SF	18%
TRIM	15%	724 SF	21%
TOTAL		3,517 SF	100%



ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
8 UNIT BUILDING

*NOTE: ALL SIDING TO BE FIBER CEMENT.

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

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REAR ELEVATION

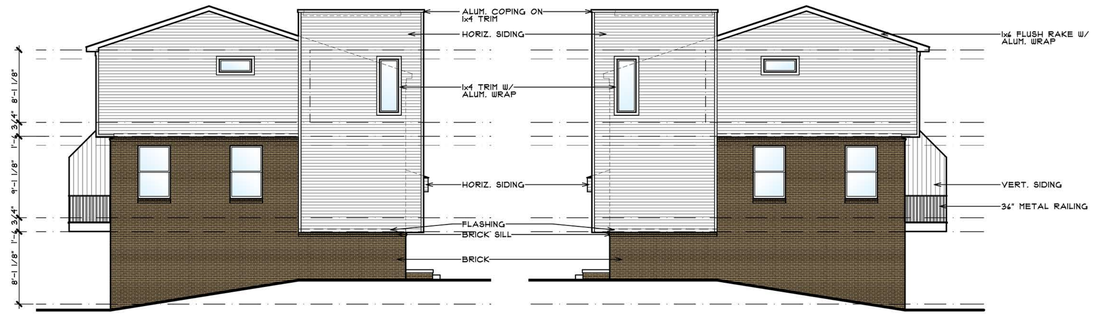
MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	224 SF	16%
SIDING	0%	651 SF	47%
SHINGLES	25%	280 SF	20%
TRIM	15%	236 SF	17%
TOTAL		1,391 SF	100%



REAR ELEVATION
3 UNIT BUILDING
SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	394 SF	37%
SIDING	0%	617 SF	58%
SHINGLES	25%	0 SF	0%
TRIM	15%	49 SF	5%
TOTAL		1,060 SF	100%



LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	471 SF	33.5%
SIDING	0%	536 SF	38%
SHINGLES	25%	204 SF	14.5%
TRIM	15%	199 SF	14%
TOTAL		1,410 SF	100%



ELEV. 'A' ELEV. 'C' ELEV. 'A'

FRONT ELEVATION
3 UNIT BUILDING
*NOTE: ALL SIDING TO BE FIBER CEMENT.
SCALE: 1/8" = 1'-0"

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REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	362 SF	16%
SIDING	0%	1,090 SF	47%
SHINGLES	25%	466 SF	20%
TRIM	15%	393 SF	17%
TOTAL		2,311 SF	100%

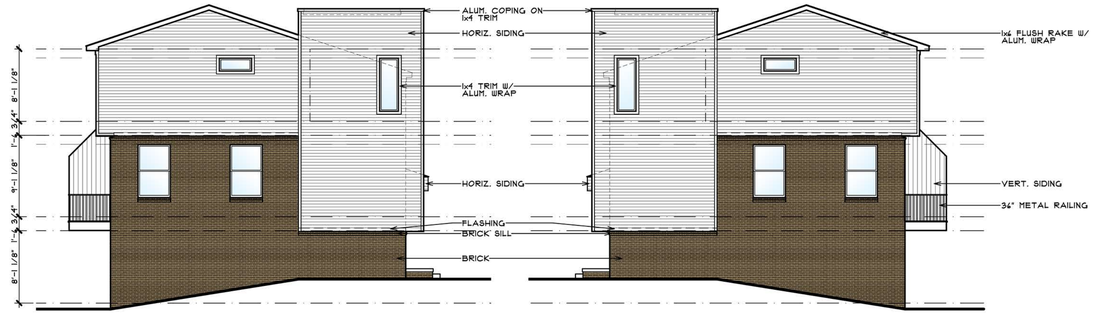


REAR ELEVATION
5 UNIT BUILDING

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

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	394 SF	37%
SIDING	0%	617 SF	58%
SHINGLES	25%	0 SF	0%
TRIM	15%	49 SF	5%
TOTAL		1,060 SF	100%



LEFT SIDE ELEVATION

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

RIGHT SIDE ELEVATION

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

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	777 SF	33%
SIDING	0%	937 SF	40%
SHINGLES	25%	317 SF	13.5%
TRIM	15%	313 SF	13.5%
TOTAL		2,344 SF	100%



ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
5 UNIT BUILDING

*NOTE: ALL SIDING TO BE FIBER CEMENT.

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

ROBERTSON BROTHERS HOMES

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SHEET TITLE
5 UNIT BUILDING
ELEVATIONS

CLIENT / PROJECT
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SAKURA NOVI
TOWNHOME UNITS - "200 SERIES"
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ARCHITECT
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LICENSED ARCHITECT

SHEET NUMBER
R-7

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	431 SF	15.5%
SIDING	0%	1,309 SF	47.3%
SHINGLES	25%	559 SF	20.2%
TRIM	15%	471 SF	17%
TOTAL		2,770 SF	100%

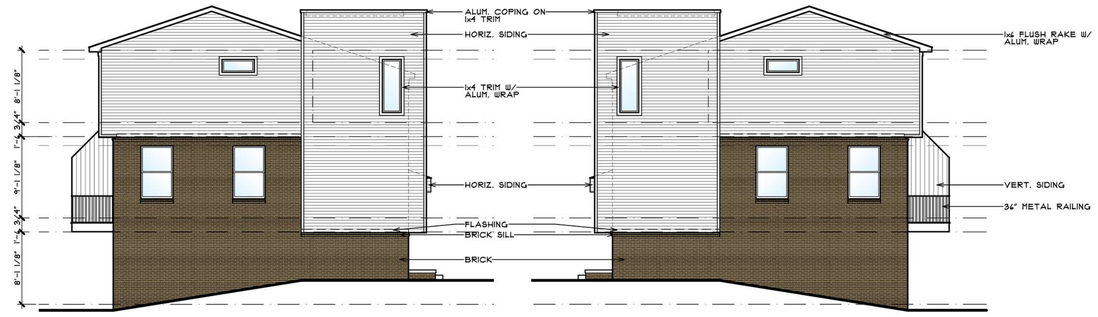


REAR ELEVATION
6 UNIT BUILDING

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

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	394 SF	37%
SIDING	0%	617 SF	58%
SHINGLES	25%	0 SF	0%
TRIM	15%	49 SF	5%
TOTAL		1,060 SF	100%



LEFT SIDE ELEVATION

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

RIGHT SIDE ELEVATION

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

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	930 SF	33%
SIDING	0%	1,096 SF	39%
SHINGLES	25%	398 SF	14%
TRIM	15%	387 SF	14%
TOTAL		2,811 SF	100%



ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'C' ELEV. 'A'

FRONT ELEVATION
6 UNIT BUILDING

*NOTE: ALL SIDING TO BE FIBER CEMENT.

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

ROBERTSON BROTHERS HOMES

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SHEET TITLE
6 UNIT BUILDING
ELEVATIONS

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LICENSED ARCHITECT

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	500 SF	15.5%
SIDING	0%	1,528 SF	47.3%
SHINGLES	25%	652 SF	20.2%
TRIM	15%	549 SF	17%
TOTAL		3,229 SF	100%

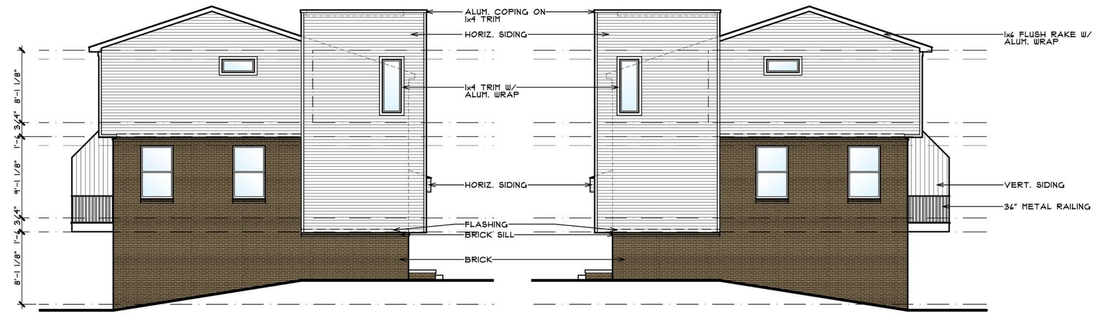


REAR ELEVATION
7 UNIT BUILDING

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

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	394 SF	37%
SIDING	0%	617 SF	58%
SHINGLES	25%	0 SF	0%
TRIM	15%	49 SF	5%
TOTAL		1,060 SF	100%



LEFT SIDE ELEVATION

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

RIGHT SIDE ELEVATION

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

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,083 SF	33%
SIDING	0%	1,296 SF	39.5%
SHINGLES	25%	454 SF	14%
TRIM	15%	444 SF	13.5%
TOTAL		3,277 SF	100%



ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
7 UNIT BUILDING

*NOTE: ALL SIDING TO BE FIBER CEMENT.

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

ROBERTSON BROTHERS HOMES

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SHEET TITLE
7 UNIT BUILDING
ELEVATIONS

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REAR ELEVATION
8 UNIT BUILDING

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

REAR ELEVATION

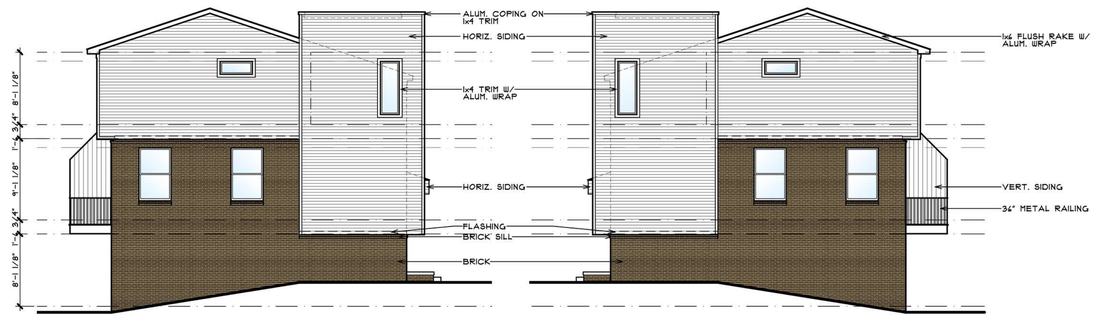
MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	549 SF	15.5%
SIDING	0%	1,748 SF	47.5%
SHINGLES	25%	745 SF	20%
TRIM	15%	629 SF	17%
TOTAL		3,691 SF	100%

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	394 SF	37%
SIDING	0%	617 SF	58%
SHINGLES	25%	0 SF	0%
TRIM	15%	49 SF	5%
TOTAL		1,060 SF	100%

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,237 SF	33%
SIDING	0%	1,455 SF	39%
SHINGLES	25%	534 SF	14%
TRIM	15%	518 SF	14%
TOTAL		3,744 SF	100%



LEFT SIDE ELEVATION

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

RIGHT SIDE ELEVATION

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



ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'C' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
8 UNIT BUILDING

*NOTE: ALL SIDING TO BE FIBER CEMENT.

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

ROBERTSON BROTHERS HOMES

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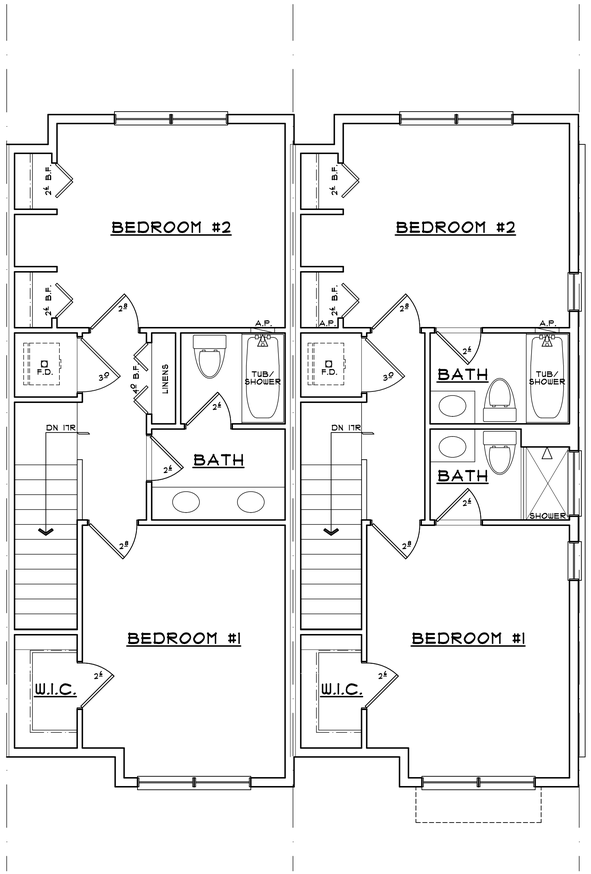
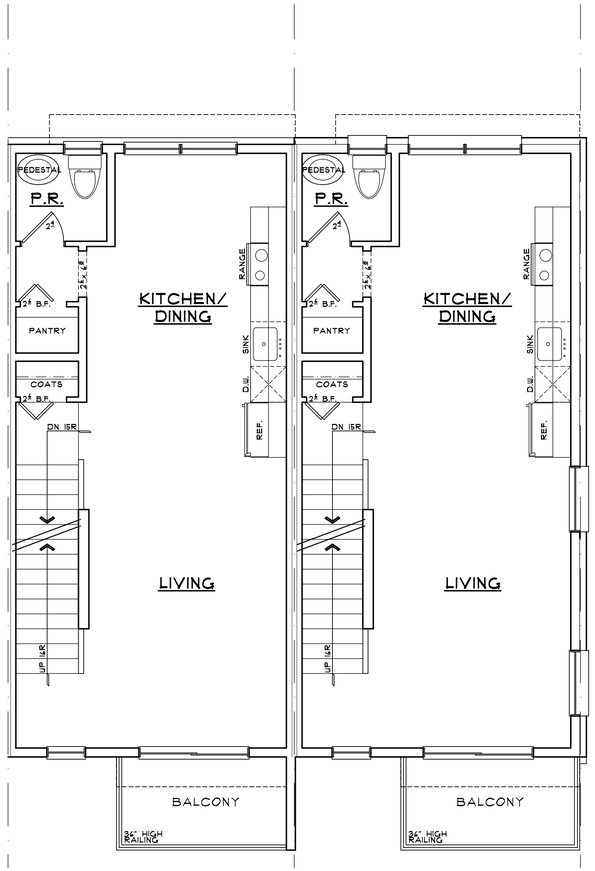
No. 1301032253
LICENSED ARCHITECT

SQUARE FOOTAGE	
LOWER LEVEL	36 SQ FT
1ST FLOOR	548 SQ FT
2ND FLOOR	601 SQ FT
TOTAL	1,184 SQ FT



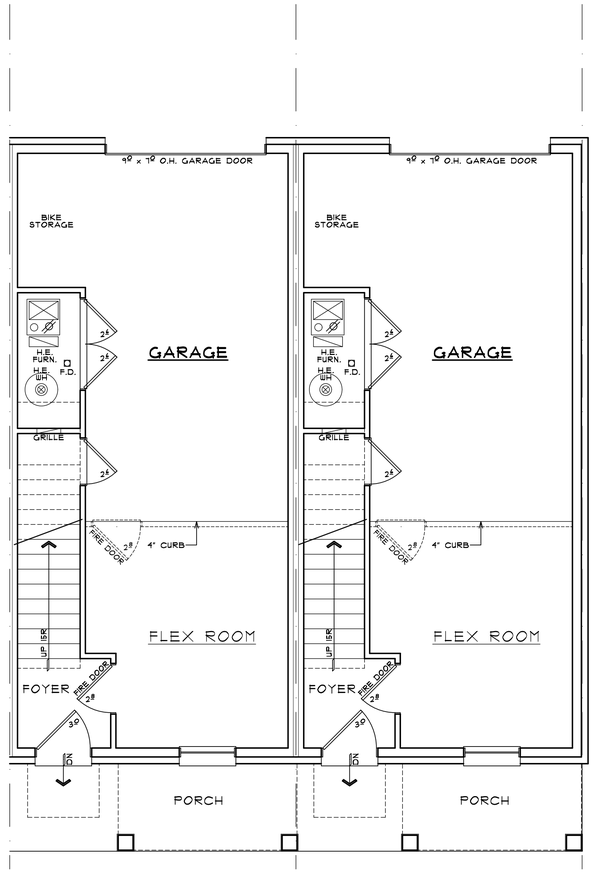
"B / C" SECOND FLOOR PLAN — END UNIT - "A"

STANDARD INTERIOR LAYOUT — SCALE: 1/4" = 1'-0"



"B / C" FIRST FLOOR PLAN — END UNIT - "A"

STANDARD INTERIOR LAYOUT — SCALE: 1/4" = 1'-0"



"B / C" GROUND FLOOR PLAN — END UNIT - "A"

STANDARD INTERIOR LAYOUT — SCALE: 1/4" = 1'-0"

RB ROBERTSON BROTHERS HOMES

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SHEET TITLE: UNIT PLANS

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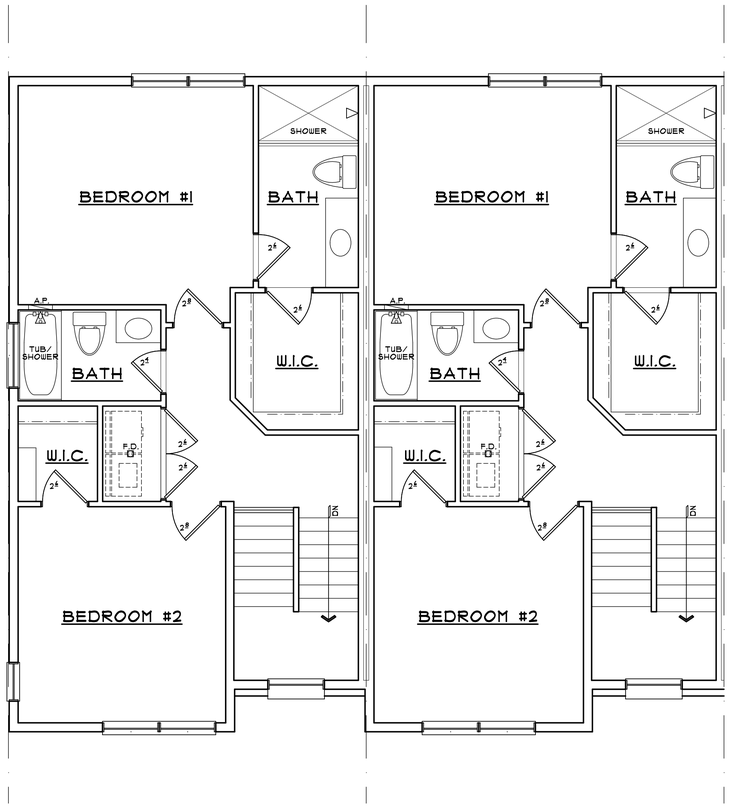
ARCHITECT
No. 1301059253
LICENSED ARCHITECT

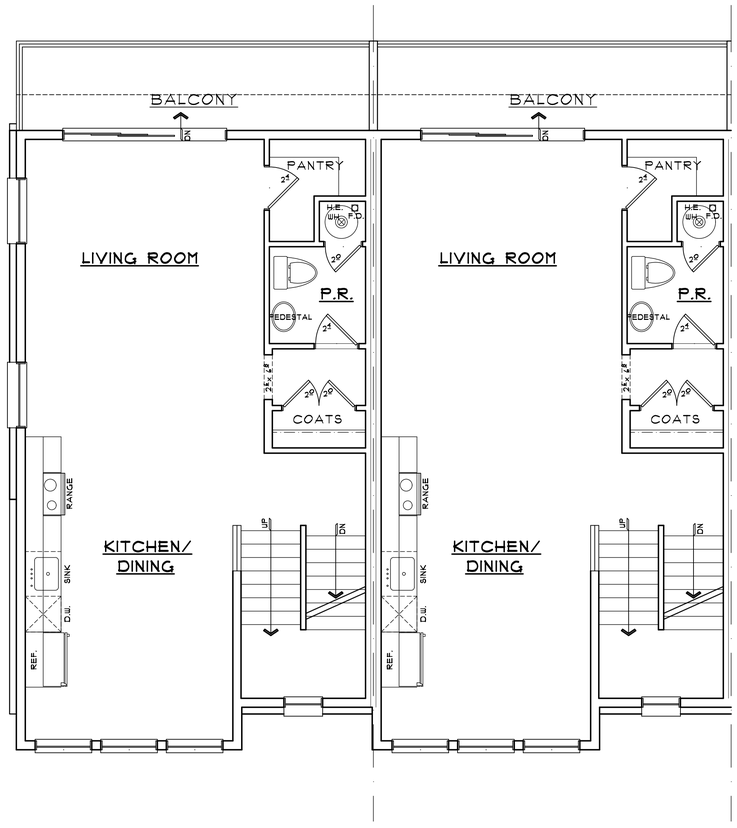
SQUARE FOOTAGE	
LOWER LEVEL	215 SQ FT
1ST FLOOR	684 SQ FT
2ND FLOOR	642 SQ FT
TOTAL	1,541 SQ FT



END UNIT - "A" "B / C"
SECOND FLOOR PLAN

STANDARD INTERIOR LAYOUT

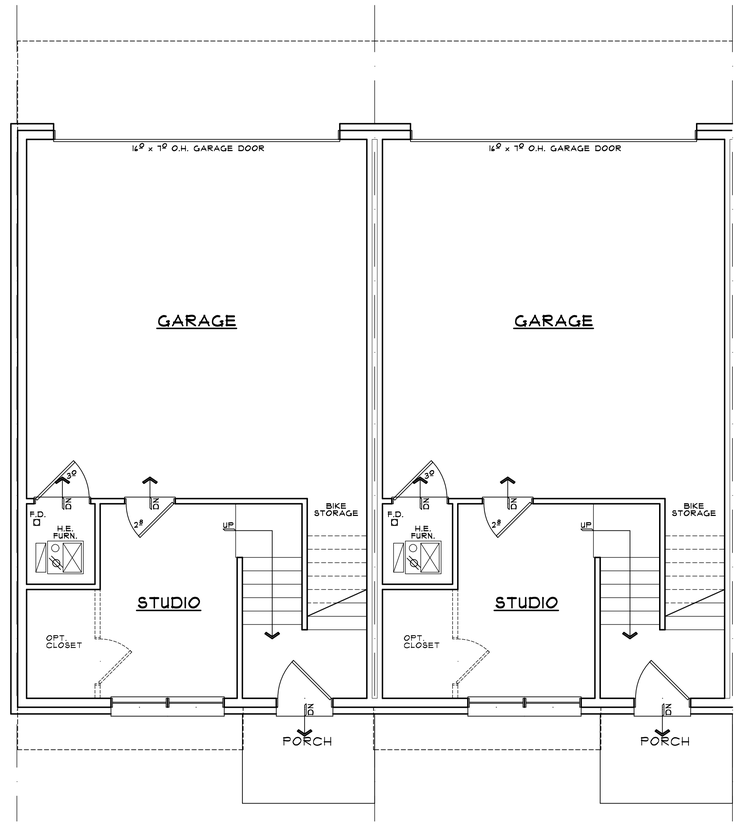
SCALE: 1/4" = 1'-0"



END UNIT - "A" "B / C"
FIRST FLOOR PLAN

STANDARD INTERIOR LAYOUT

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



END UNIT - "A" "B / C"
GROUND FLOOR PLAN

STANDARD INTERIOR LAYOUT

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

ROBERTSON BROTHERS HOMES

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SHEET TITLE: UNIT PLANS

CLIENT / PROJECT:
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ARCHITECT
No. 1301059253
LICENSED ARCHITECT

PROJECT DEVELOPER

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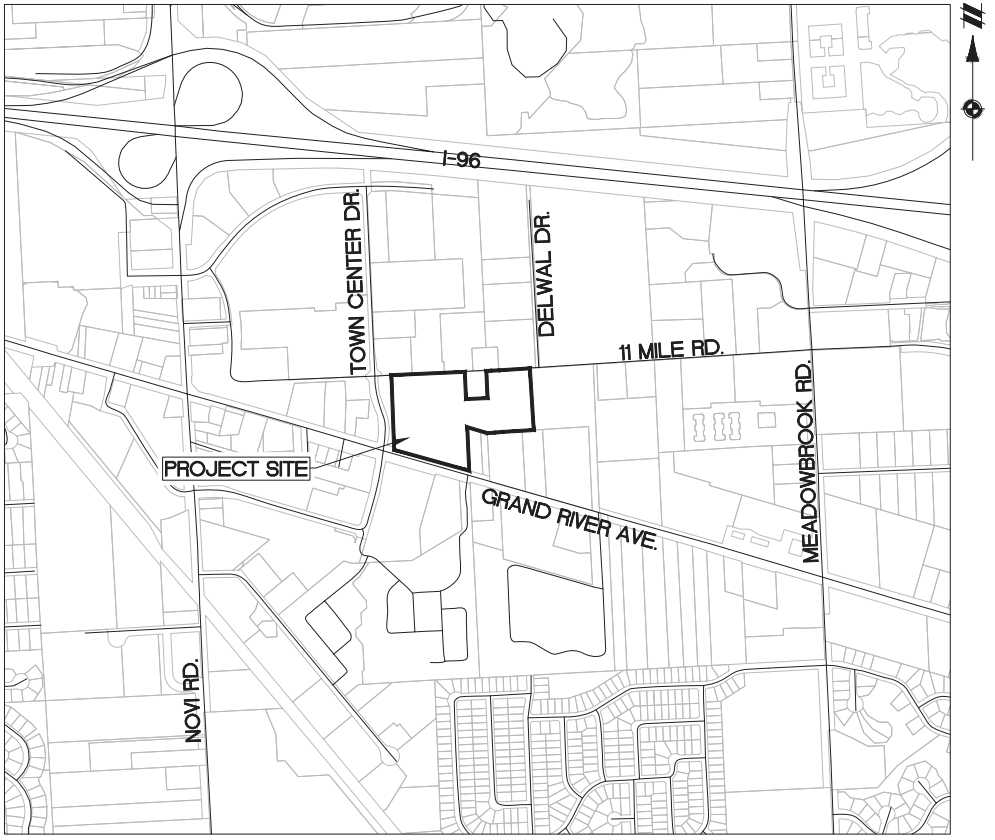
350 N. OLD WOODWARD, STE. 300
BIRMINGHAM, MICHIGAN 48009
CONTACT: SCOTT AIKENS
PHONE:
EMAIL:

PROJECT CONSULTANTS

ATWELL, LLC
TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MI 48076
PHONE: 248.447.2000
FAX: 248.447.2001
ATTN: BOURKE THOMAS

SAKURA WAY

CITY OF NOVI
OAKLAND COUNTY, MICHIGAN
EGLE IMPACT PLAN



SITE VICINITY MAP

SCALE: 1" = 500'

VERTICAL DATUM

ELEVATIONS ARE BASED ON THE NAVD 88 DATUM.

BASIS OF BEARING

STATE PLANE, MICHIGAN SOUTH, NAD 83
BASED UPON GPS OBSERVATIONS ALONG WITH SOLUTIONS PROVIDED BY O.P.U.S.

SHEET INDEX	
SHEET NO.	SHEET TITLE
01	COVER SHEET
02	EXISTING CONDITIONS
03	PROPOSED IMPACTS
04	PROFILE VIEWS
05	BMP & CONSTRUCTION DETAILS
06	SESC NOTES

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OAKLAND COUNTY, MICHIGAN

R.B.AIKENS & ASSOCIATES, LLC

SAKURA WAY
EGLE IMPACT PLAN
COVER SHEET

DATE
AUGUST 27, 2019
REVISIONS/SUBMITTALS

DRAWN BY: BS
CHECKED BY: MM
PROJECT MANAGER: DB
JOB #: 18003457
FILE CODE: –
SHEET NO. 01

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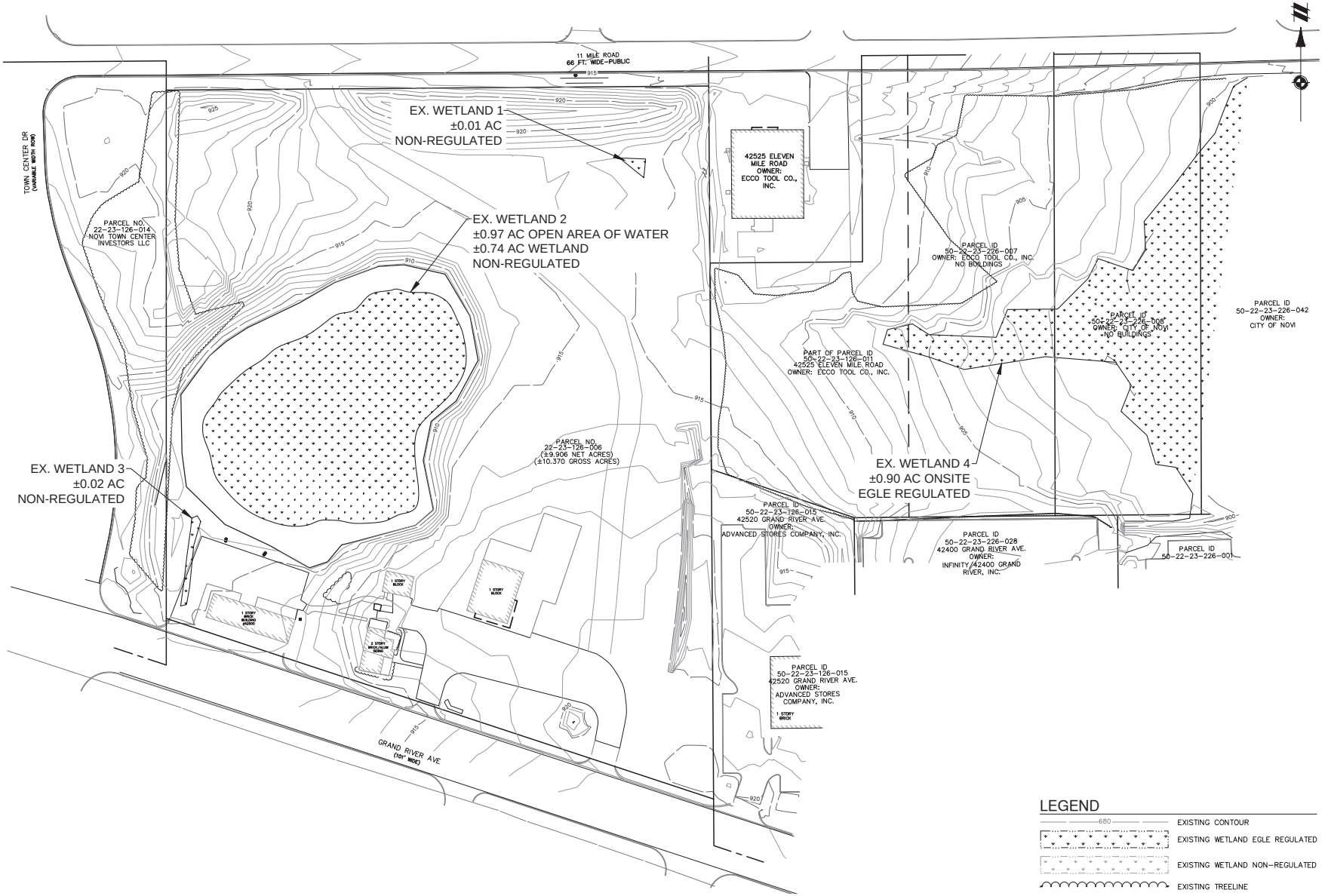

LEGEND

- EXISTING CONTOUR
- EXISTING WETLAND EGLE REGULATED
- EXISTING WETLAND NON-REGULATED
- EXISTING TREELINE

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SAKURA WAY
EGLE IMPACT PLAN
EXISTING CONDITIONS

DATE
AUGUST 27, 2019

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1 –

SCALE 0 25 50
1" = 50 FEET

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CHECKED BY: MM
PROJECT MANAGER: DB
JOB #: 18003457
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SHEET NO. 02

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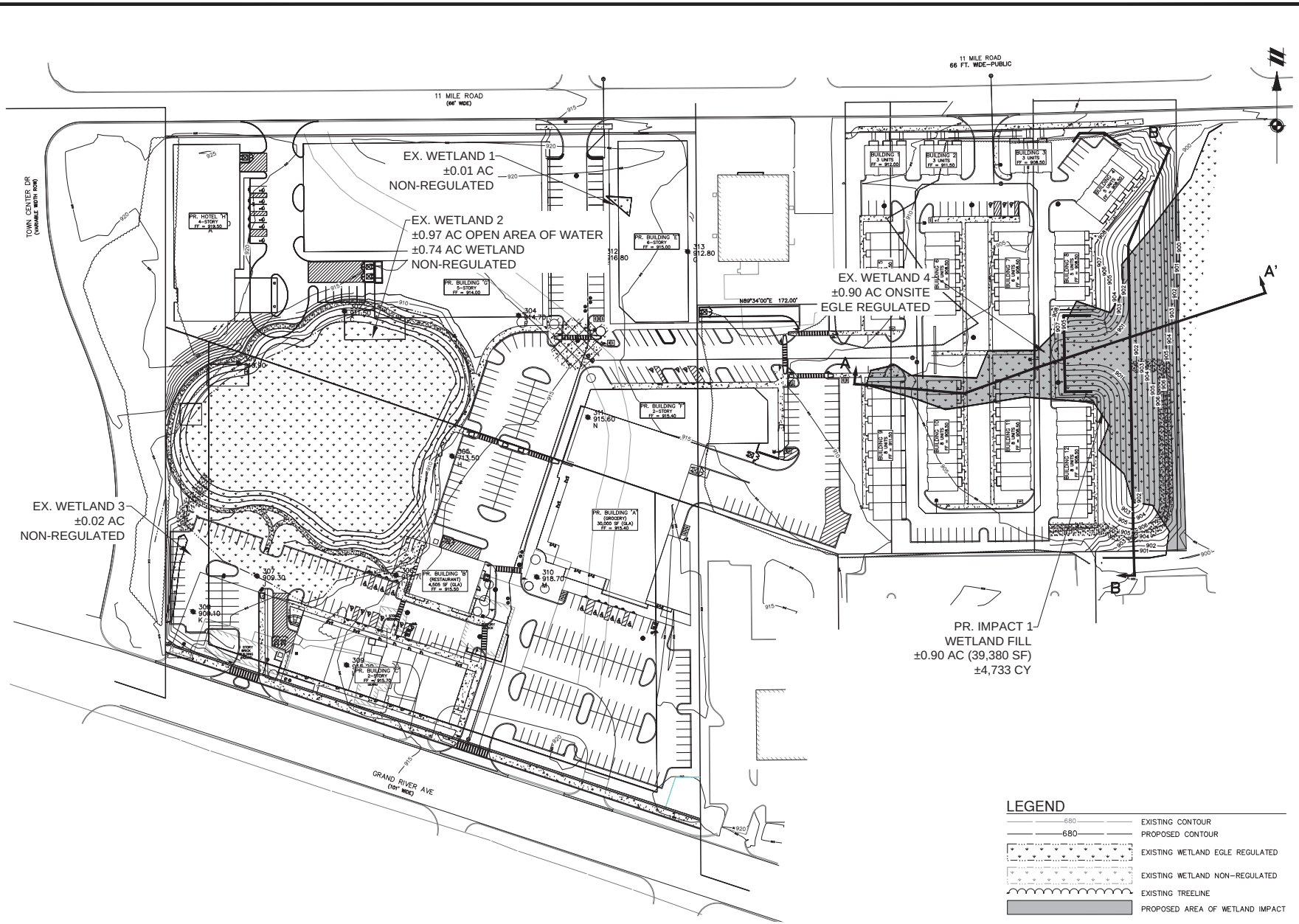

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PROPOSED IMPACTS

DATE
AUGUST 27, 2019

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PROJECT MANAGER: DB
JOB #: 18003457
FILE CODE: –
SHEET NO. 03

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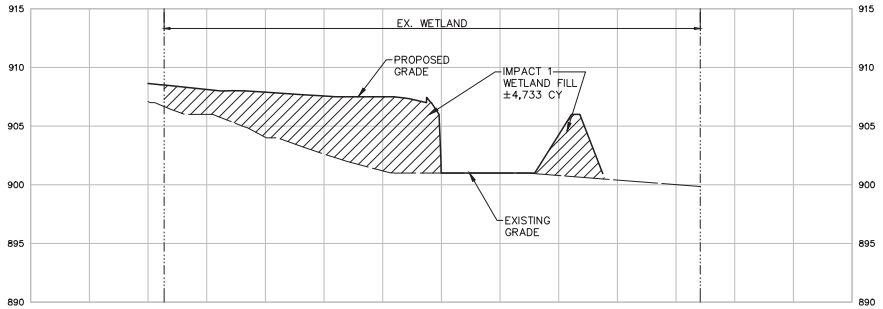
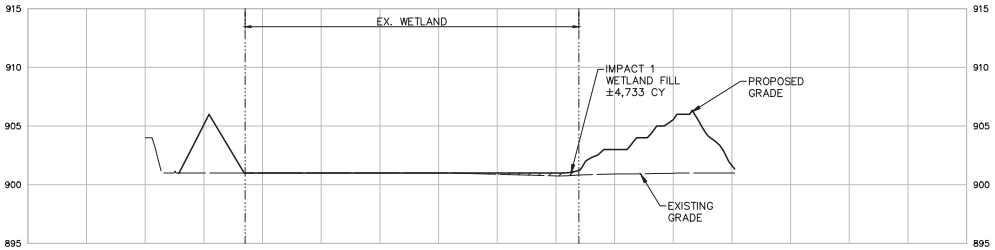


CROSS SECTION A–A'
VERT: 1" = 5'
HORZ: 1" = 50'



CROSS SECTION B–B'
VERT: 1" = 5'
HORZ: 1" = 50'

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SAKURA WAY
EGLE IMPACT PLAN
PROFILE VIEWS

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REVISIONS/SUBMITTALS
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LOCAL AND STATE CONDITIONS AND CLARIFICATIONS:

1. THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL AUTHORITY AND THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES & ENERGY (EGLE), IN FORCE ON DATE OF APPROVAL SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THESE PLANS EXCEPT AS SUCH SPECIFICATIONS ARE MODIFIED BY THE FOLLOWING SPECIFICATION, OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN
2. THE CONTRACTOR (AND ALL SUBCONTRACTORS) SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH WORK.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY LICENSES AND PERMITS PRIOR TO THE START OF CONSTRUCTION. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS AND SPECIAL CONDITIONS OF THE APPROVALS ISSUED FOR THE PROJECT.
4. THE CONTRACTOR SHALL CAUSE NOTICE TO BE GIVEN TO MISS DIG (811) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
5. ALL DRAIN TILE AND STORM SEWERS NOT NOTED TO BE REMOVED/RE-ROUTED WHICH ARE DAMAGED, DISTURBED, OR REMOVED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS EXISTING. REPLACED DRAIN TILE SHALL BE LAID ON COMPACTED BEDDING EQUAL IN DENSITY TO SURROUNDING STRATUM. REPLACEMENT SHALL BE DONE AT THE TIME OF THE BACKFILL OPERATION.
6. THE FLOW IN ALL SEWERS, DRAINS, AND WATERCOURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE CONTRACTOR AT HIS OWN COST AND EXPENSE.
7. THE CONTRACTOR SHALL RETURN ALL GRADES ALONG THE LIMITS OF DISTURBANCE TO ORIGINAL CONDITION, MATING UNDISTURBED AREAS, SO AS TO MAINTAIN ORIGINAL DRAINAGE.
8. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY, DEFICIENCIES SHALL BE CORRECTED BY THE CONTRACTOR WITHIN 24 HOURS.
9. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED BY A CERTIFIED STORM WATER OPERATOR AT LEAST ONCE EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF A OF EVERY PRECIPITATION EVENT THAT RESULTS IN A DISCHARGE FROM THE SITE OR MORE FREQUENTLY IF REQUIRED BY GOVERNING NPDES GENERAL PERMIT. ALL MAINTENANCE REQUIRED BY INSPECTION SHALL COMMENCE WITHIN 24 HOURS AND BE COMPLETED WITHIN 48 HOURS OF REPORT.
10. ALL PRACTICES MUST BE MONITORED AND MAINTAINED BY A TRAINED REPRESENTATIVE OF THE CONTRACTOR. THE CONTRACTOR MUST KEEP WRITTEN RECORDS OF SELF-MONITORING AND PROVIDE THEM TO THE LOCAL AUTHORITIES, EGLE, OR OTHER INSPECTING AUTHORITY UPON REQUEST.
11. ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS.
12. APPROPRIATE MEASURES SHALL BE PUT IN PLACE TO PREVENT POLLUTANTS - SEDIMENT, TRASH, FUEL, SOLVENTS, ETC. - FROM LEAVING THE WORK SITE AND/OR ENTERING SURFACE OR GROUND WATER. PROPER HANDLING AND STORAGE OF ALL HAZARDOUS MATERIALS SHALL BE MAINTAINED AT ALL TIMES AND SPILL PREVENTION AND CLEAN-UP PLANS SHALL BE IN PLACE PRIOR TO BRINGING HAZARDOUS MATERIALS ON-SITE.
13. CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THESE PLANS. HE/SHE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION (90% VEGETATIVE COVER) HAS BEEN ACCOMPLISHED.
14. STRAW MULCH BLANKETS MUST BE USED ON 3:1 SLOPES OR GREATER.
15. ALL EXPOSED AREAS SHALL BE STABILIZED AS SPECIFIED IMMEDIATELY FOLLOWING THE CONCLUSION FINAL GRADING IN THE DESIGNATED AREA.
16. AREAS OF DISTURBED SOIL THAT REMAIN INACTIVE FOR 14 DAYS MUST HAVE TEMPORARY OR PERMANENT STABILIZATION IN PLACE. USUALLY, THIS CONSISTS OF GRASS SEED AND MULCH, IT CAN ALSO INCLUDE NON-VEGETATIVE COVER, EROSION CONTROL BLANKETS, TURF REINFORCEMENT MATS, OR OTHER APPROPRIATE STABILIZATION PRACTICE.
17. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT AND/OR POLLUTANTS FROM LEAVING THE SITE.
18. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
19. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
20. SEDIMENT SHALL BE REMOVED FROM SILT FENCING WHEN IT IS 1/3 THE HEIGHT OF THE FENCE.
21. CLEANUP WILL BE DONE IN A MANNER TO ENSURE THAT EROSION CONTROL MEASURES ARE NOT DISTURBED.
22. CONTRACTOR SHALL PAY ALL FEES AND POST AN EROSION CONTROL PERFORMANCE BOND, IF REQUIRED, PRIOR TO ANY EARTH CHANGE.
23. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
24. BORROW AND FILL DISPOSAL AREAS WILL BE SELECTED BY THE CONTRACTOR WITH FULL CONSIDERATION FOR SOIL EROSION AND SEDIMENT CONTROL.
25. SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
26. PERMANENT STABILIZATION IS ACHIEVED ONCE THE LOCAL AUTHORITIES PERFORM A FINAL INSPECTION OF THE COMPLETED PROJECT. ONCE THE PROJECT HAS PASSED LOCAL INSPECTION, A NOTICE OF TERMINATION (NOT) SHALL BE FILED BY THE CONTRACTOR WITH THE EGLE AND NO FURTHER EARTH DISRUPTION ACTIVITIES MAY OCCUR WITHOUT A NEW PERMIT.
27. CONTRACTOR SHALL DENOTE LOCATION OF CONCRETE WASHOUT AREAS (IF USED) ON THE SWPPP.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES & ENERGY:

CONSTRUCTION PERMITTEE(S) THAT HAS AUTHORIZATION TO DISCHARGE UNDER A NATIONAL PERMIT (NPDES) SHALL COMPLY WITH THE FOLLOWING PROVISIONS (DEVELOPMENT AGREEMENT REQUIREMENTS MAY BE MORE STRINGENT):

1. NOT DIRECTLY OR INDIRECTLY DISCHARGE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LUBRICANTS, FUELS, LITTER, SANITARY WASTE, OR ANY OTHER SUBSTANCE AT THE CONSTRUCTION SITE INTO WATERS OF THE STATE IN VIOLATION OF PART 31 OF THE 1994 PA 451, MCL 324.3101 ET SEQ., AND RULES PROMULGATED UNDER THE ACT.
2. BE IN COMPLIANCE WITH A SOIL EROSION AND SEDIMENTATION CONTROL PERMIT FOR THE SITE OR, IF THE CONSTRUCTION ACTIVITY IS CARRIED OUT BY AN AUTHORIZED PUBLIC AGENCY, THE APPROVED CONTROL PLAN, INCLUDING THE SELECTED CONTROL MEASURES THAT ARE APPLICABLE TO THE SITE.
3. PROPERLY MAINTAIN AND OPERATE THE SOIL EROSION CONTROL MEASURES.
4. HAVE THE SOIL EROSION CONTROL MEASURES UNDER THE SPECIFIC SUPERVISION AND CONTROL OF A STORM WATER OPERATOR WHO HAS BEEN CERTIFIED BY THE DEPARTMENT AS PROPERLY QUALIFIED TO OPERATE THE SOIL EROSION CONTROL MEASURES. THE CERTIFICATION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF R 323.1251 ET SEQ.
5. CAUSE THE CONSTRUCTION ACTIVITY TO BE INSPECTED BY A CERTIFIED STORM WATER OPERATOR ONCE PER WEEK, AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT RESULTS IN A DISCHARGE FROM THE SITE, AND ENSURE THAT ANY NEEDED CORRECTIVE ACTIONS ARE CARRIED OUT. A LOG OF THE INSPECTIONS AND CORRECTIVE ACTIONS SHALL BE MAINTAINED ON FILE BY THE CONSTRICTION PERMITTEE FOR REVIEW AND SHALL BE RETAINED BY THE CONSTRUCTION PERMITTEE FOR A PERIOD OF THREE (3) YEARS FROM THE DATE OF THE INSPECTION OR CORRECTIVE ACTION
6. IN ACCORDANCE WITH THE REQUIREMENTS FOR ON-LAND FACILITIES AS SET FORTH IN SPILLAGE OF OIL AND POLLUTING MATERIALS, BEING PART 5 OF THESE (MICHIGAN PERMIT-BY-RULE) RULES, PROVIDE FACILITIES AND COMPLY WITH REPORTING PROCEDURES FOR CONTAINMENT OF ANY ACCIDENTAL LOSSES OF OIL OR OTHER POLLUTING MATERIALS.
7. DISPOSED OF SOLIDS, SEDIMENT, FILTER BACKWASH, OR OTHER WASTE THAT IS REMOVED FROM OR RESULTS FROM THE TREATMENT OF CONTROL OF STORM WATER IN COMPLIANCE WITH APPLICABLE STATE LAWS AND REGULATIONS AND IN A MANNER THAT PREVENTS ANY RELEASE FROM ENTERING WATERS OF THE STATE.
8. ALLOW THE DEPARTMENT TO ENTER UPON THE SITE AT ANY REASONABLE TIME BEFORE THE EXPIRATION OF THE AUTHORIZATION TO DISCHARGE AS SET FORTH IN SUBRULE (5) OF THIS RULE, UPON PRESENTATION OF CREDENTIALS AND OTHER DOCUMENTS AS MAY BE REQUIRED BY LAW, FOR THE PURPOSE OF INSPECTING CONDITIONS RELATING TO THE POLLUTION OF ANY WATERS OR DETERMINING COMPLIANCE WITH THE PROVISIONS OF THIS RULE.
9. UPON REQUEST, MAKE AVAILABLE FOR PUBLIC INSPECTION OR PROVIDE TO THE DEPARTMENT ALL REPORTS OR LOGS PREPARED PURSUANT TO THE PROVISIONS OF THIS RULE.
10. FILE A REVISED NOTICE OF COVERAGE IN COMPLIANCE WITH THE PROVISIONS OF SUBRULE (1) OF THIS RULE BEFORE ANY EXPANSION OF THE CONSTRUCTION ACTIVITY OR CHANGE IN THE SOIL EROSION CONTROL MEASURES THAT REQUIRES A CHANGE IN THE SOIL EROSION AND SEDIMENTATION PERMIT.

PROHIBITED CONSTRUCTION ACTIVITIES:

THE CONTRACTOR SHALL NOT USE CONSTRUCTION ACTIVITIES, PROCEEDINGS, OR OPERATIONS THAT MAY UNNECESSARILY IMPACT THE NATURAL ENVIRONMENT OR THE PUBLIC HEALTH AND SAFETY. PROHIBITED CONSTRUCTION ACTIVITIES, PROCEEDINGS OR OPERATIONS INCLUDE BUT ARE NOT LIMITED TO:

1. DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIALS IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER(S) WITHOUT WETLAND AND/OR FLOODPLAIN FILL PERMIT.
2. INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDOR, TRIBUTARY, WATERS, WETLANDS, OR ANY AREAS OUTSIDE OF THE PROPOSED WORK AREA.
3. PUMPING OF SEDIMENT-LADEN WATER FROM EXCAVATIONS INTO ANY SURFACE WATERS, STREAM CORRIDORS, WETLANDS, OR STORM DRAINS.
4. DISCHARGING OF POLLUTANTS SUCH AS CHEMICALS, FUEL, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE, AND OTHER HARMFUL WASTE INTO OR ALONGSIDE STREAM, RIVERS, IMPOUNDMENT, OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO.
5. PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW-LINE OF A STREAM.
6. DAMAGING OF VEGETATION OUTSIDE OF THE PROPOSED WORK LIMITS, WITHIN NO-BUILD, TREE PRESERVATION AND GREEN ZONES.
7. DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS, WETLANDS SURFACE WATERS, OR ANY OTHER UNSPECIFIED LOCATION WITHOUT A PERMIT.
8. OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT.
9. STORING OF CONSTRUCTION EQUIPMENT AND VEHICLES AND/ OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED AND APPROVED FOR THE SAID PURPOSE.
10. DISPOSAL OF CHIP WOOD IN SUCH A MANNER THAT WOULD ALLOW CHIP WOOD DECOMPOSITION AND LEACHATE WATER TO FLOW TO ANY SURFACE WATER, STREAM CORRIDOR, OR WETLAND.
11. TRACKING OF MUD AND OTHER CONSTRUCTION RELATED DEBRIS ONTO ROADWAY OR FLUSHING SEDIMENT FROM ROADWAY WITH WATER.

BMP MAINTENANCE NOTES TO CONTRACTOR:

ALL MEASURES STATED ON THIS PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION. SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS (WHO IS ALSO A CERTIFIED STORM WATER OPERATOR), AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
2. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
3. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.
4. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST CONFORM TO THE REQUIREMENTS OF MICHIGAN'S PERMIT-BY-RULE FOR CONSTRUCTION ACTIVITIES. OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.
5. REGULAR INSPECTION AND MAINTENANCE WILL BE PROVIDED FOR ALL EROSION AND SEDIMENT CONTROL PRACTICES. PERMANENT RECORDS OF MAINTENANCE AND INSPECTIONS MUST BE KEPT THROUGHOUT THE CONSTRUCTION PERIOD. INSPECTIONS MUST BE MADE BY A CERTIFIED STORM WATER OPERATOR ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT RESULTS IN A DISCHARGE FROM THE SITE. PROVIDED WILL BE THE NAME OF STORM WATER OPERATOR, CERTIFICATION NUMBER, MAJOR OBSERVATIONS, DATE OF INSPECTION AND CORRECTIVE MEASURES TAKEN. AN EGLE "SOIL EROSION AND SEDIMENTATION CONTROL INSPECTION LOG" SHALL BE FILLED OUT FOR EACH INSPECTION.
6. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE CHECKED ON A DAILY BASIS BY THE CONTRACTOR AND MISSING OR DEFICIENT MEASURES SHALL BE REPLACED OR REPAIRED IMMEDIATELY.
7. THE CONSTRUCTION ACCESS POINTS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY.
8. EXCESS DIRT/FILL IS NOT TO BE PLACED ON ANY AREAS ON OR ADJACENT TO THE SITE BEYOND THE LIMITS OF DISTURBANCE SHOWN ON THE SOIL EROSION PLANS UNLESS WRITTEN AUTHORIZATION IS PROVIDED BY THE ACCEPTING LAND OWNER AND AGREED TO BY THE DEVELOPER.
9. DUST CONTROL WILL BE EXERCISED AT ALL TIMES WITHIN THE PROJECT BY THE CONTRACTOR.
10. PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS AND/OR SEDIMENT REACHING THE PUBLIC STREET SHALL BE CLEANED IMMEDIATELY BY A METHOD OTHER THAN FLUSHING.

BEST MANAGEMENT PRACTICES SEQUENCE:

NOTE: THE FOLLOWING SESC SEQUENCE AND MEASURES ARE GENERAL TO EACH STRUCTURE LOCATION. ADDITIONAL MEASURES AND PHASING MAY BE REQUIRED DEPENDING ON THE INDIVIDUAL CONDITIONS AT THE LOCATION WORK IS BEING PERFORMED. FOUNDATION SPOIL LOCATIONS SHOWN ON THE PLAN(S) ARE FOR REFERENCE ONLY, CONTRACTOR MAY ADJUST ACTUAL LOCATION AS NECESSARY TO BEST MAINTAIN EXISTING DRAINAGE COURSES AND MINIMIZE IMPACTS TO THE EXISTING CONDITIONS SURROUNDING EACH WORK AREA. ALL EARTH DISTURBANCES ARE TO OCCUR ONLY WITHIN THE PERMITTED EASEMENT.

PULL ALL NECESSARY LOCAL, COUNTY, AND STATE PERMITS. THE CONTRACTOR SHALL CONTACT THE EGLE, IF NECESSARY, TO AMEND THE NOTICE OF COVERAGE (NOC) WITH THE NAME AND CERTIFICATION NUMBER OF THE STORM WATER OPERATOR CHARGED WITH CONDUCTING THE REQUIRED INSPECTIONS. WRITTEN NOTIFICATION FROM THE EGLE APPROVING THE CHANGE TO THE NOC SHALL BE INCLUDED IN THE INSPECTION LOG.
INSTALL SILT FENCING AS CALLED FOR ON PLANS OR AS SPECIFIC SITE CONDITIONS DICTATE. ONLY CLEAR AREAS NECESSARY TO INSTALL FENCING. FENCING SHALL BE ERECTED PRIOR TO DEMOLITION OF THE EXISTING STRUCTURE(S) AND SHALL BE MAINTAINED UNTIL THE DISTURBED AREAS AND SPOIL STOCKPILE AT THE INDIVIDUAL LOCATION ARE STABILIZED (90% VEGETATIVE COVER). SILT FENCE SHALL NOT BE PLACED ACROSS ANY ACCESS ROAD.
CLEAR AND GRUB AREA AS NECESSARY TO ALLOW FOR PLACEMENT OF FOUNDATION SPOILS.
DEMOLISH EXISTING STRUCTURE(S) & FOUNDATION(S) AS NECESSARY. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF MATERIALS/CONCRETE AT AN APPROVED AND LICENSED OFF-SITE LOCATION.
STOCKPILE TOPSOIL AND SUBSOIL FROM FOUNDATION. STOCKPILE SPOIL MATERIAL AND GRADE ADJACENT TO EXCAVATION AS SHOWN ON THE SITE DETAILS. NO DEWATERING OF EXCAVATED AREAS ARE ANTICIPATED, HOWEVER IF NECESSARY, PLANS WILL BE PROVIDED.
PLACE TOPSOIL AND SEED SOIL STOCKPILE AS SPECIFIED. PLACE EROSION BLANKETS OVER ANY EXPOSED RAW EARTH WITHIN 100 FT OF A DRAIN OR WATERCOURSE.
COMPLETE CONSTRUCTION OF NEW STRUCTURE AND REPAIR SURROUNDING AREAS AS NECESSARY.
INSPECT DISTURBED AREAS AS NECESSARY FOR ADDITIONAL SEEDING (RESEED AS NECESSARY).
ONCE THE AREA HAS ACHIEVED A MINIMUM OF 90% VEGETATIVE COVER, REMOVE SILT FENCE (AND/OR OTHER REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES). STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS. SILT FENCE AND OTHER BMPS WHICH ARE STILL IN A SERVICEABLE CONDITION MAY BE RE-USED AS WORK PROGRESSES.
IF IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE THE EARTH CHANGE, THEN MAINTAIN TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IN PLACE AND THE AREA IS STABILIZED. ANNUAL RYEGRASS SEED AT 100 LBS/ACRE MAY BE USED AS TEMPORARY STABILIZED SEED IMMEDIATELY FOLLOWING THE COMMENCEMENT OF THE NEXT PLANTING SEASON. ALL STRAW OR HAY MULCH WILL BE REMOVED OR DEEPLY INCORPORATED INTO THE SOIL BEFORE PROVIDING PERMANENT STABILIZATION. DORMANT SEEDING IS ALSO RECOMMENDED FOR EARLY SPRING GROWTH.
LANDOWNER WILL BE RESPONSIBLE FOR PERMANENT STABILIZATION OF DISTURBED AREAS FOR ONE YEAR.

FINAL PROJECT CLOSEOUT (ALL PROPOSED IMPROVEMENTS ARE COMPLETE)
ONCE ALL PERMANENT SOIL EROSION CONTROL MEASURES ARE COMPLETED AND PERMANENT VEGETATION ESTABLISHED, THE CONTRACTOR SHALL CONTACT THE GOVERNING AUTHORITIES FOR A FINAL INSPECTION. ONCE THE SITE HAS PASSED ITS FINAL INSPECTION, THE S.E.S.C. PERMIT IS CLOSED AND NO FURTHER EARTH DISRUPTION CAN OCCUR WITHOUT A NEW PERMIT.
THE NOTICE OF COVERAGE PERMITTEE SHALL FILE A NOTICE OF TERMINATION (NOT) WITH THE EGLE AND RETAIN S.E.S.C. LOGS (HARD COPIES & ELECTRONICALLY) FOR A MINIMUM OF 5 YEARS.

TEMPORARY STABILIZATION

AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY DISTURBED AREAS WITHIN 50 FEET OF A STREAM AND NOT AT FINAL GRADE	IMMEDIATELY FOLLOWING (2 DAYS MAX) THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A STREAM	DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY IS SCHEDULED TO BE INACTIVE FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED OR STABILIZED IN ANOTHER APPROPRIATE WAY AS SOON AS POSSIBLE.
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER (NOVEMBER 1)

WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLOYED. THIS CAN INCLUDE AGGREGATE COVER, EROSION CONTROL BLANKETS, TURF REINFORCEMENT MATS, OR OTHER STABILIZATION PRACTICE.

PERMANENT STABILIZATION

AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN FIVE (5) CALENDAR DAYS OF THE MOST RECENT DISTURBANCE
ANY AREAS WITHIN 50 FEET OF A STREAM AND AT FINAL GRADE	WITHIN 2 CALENDAR DAYS OF REACHING FINAL GRADE
ANY OTHER AREAS AT FINAL GRADE	WITHIN FIVE (5) CALENDAR DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

CONSTRUCTION DEWATERING PLAN

1.0 DEWATERING

DEFINITION: DEWATERING CONSISTS OF THE REMOVAL OF SURFACE WATER AND/OR GROUNDWATER BY DIVERTING AND/OR REMOVING CONSTRUCTION AREAS WITHIN WATER FEATURES (I.E. WETLANDS, WATERCOURSE, AND/OR WATERSHED), AS NEEDED FOR CONSTRUCTION.

A. GENERAL:
1. DEWATERING ACTIVITIES SHALL CONFORM TO APPLICABLE PART 91, SOIL EROSION AND SEDIMENTATION CONTROL (SESC), OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (NREPA), 1994 PA 451, AS AMENDED.
2. DURING DEWATERING ACTIVITIES, THE SEDIMENT LADEN WATER CANNOT BE DIRECTLY DISCHARGED TO SURFACE WATERS. OPTIONS FOR REDUCING THE TURBIDITY OF THE WATER INCLUDE:
   a) CONSTRUCTING A TEMPORARY SEDIMENT TRAP FOR TURBID WATER DISCHARGE PRETREATMENT.
   b) USE OF A PORTABLE SEDIMENT CONTAINMENT SYSTEM SUCH AS DUMPSTERS.
   c) APPLICATION OF NATURAL BASED FLOCCULENT TECHNOLOGY SUCH AS CHITOSAN IN SEDIMENT TRAPS OR A SERIES OF DITCH CHECKS TO CONTAIN SEDIMENT.
   d) DISCHARGE WATER THROUGH A SERIES OF FIBER LOGS OR A ROCK WEEPER INTO A LARGE VEGETATED BUFFER AREA.
   e) ENERGY DISSIPATION SHOULD BE PROVIDED AT ALL DISCHARGE POINTS.
   f) DEWATERING OR BASIN DRAINING ACTIVITIES SHOULD NOT CAUSE EROSION IN RECEIVING CHANNELS OR ADVERSELY IMPACT WETLANDS.

B. POLLUTANTS CONTROLLED AND IMPACTS:
1. PROPER DEWATERING TECHNIQUES WILL FILTER WATER OF SEDIMENT, OILS, AND OTHER CHEMICALS, THUS PREVENTING THESE POLLUTANTS FROM ENTERING THE SURFACE WATERS.

C. APPLICATION:
1. DEWATER ACCUMULATED GROUND WATER OR STORMWATER VIA PUMP, DEWATERING BAG AND ENSURE DISCHARGED WATER DOES NOT CONTRIBUTE SEDIMENTATION TO RECEIVING WATERS.

D. WHEN TO APPLY:
1. APPLY AT THE BEGINNING OF AND DURING CONSTRUCTION WHEN IT IS NECESSARY TO LOWER THE WATER LEVELS WITHIN THE CONSTRUCTION AREA. PUMPING NEEDS TO BE MAINTAINED TO KEEP UTILITY DITCHES AND COFFERDAMS DRY UNTIL ALL UNDERGROUND WORK IS COMPLETED.

E. WHERE TO APPLY:
1. APPLY ON CONSTRUCTION SITES, WHERE APPROPRIATE, OR ANYWHERE ELSE DEWATERING IS NEEDED.
   a) WHEN CONSTRUCTION ENCOUNTERS UNCONTAMINATED GROUND WATER / SPRING WATER:
      1) CLEAN WATER SHOULD BE PUMPED FROM THE GROUND AND DISCHARGED THROUGH HOSES TO DEWATERING BAGS OR OTHER ADEQUATE ENERGY DISSIPATION PRIOR TO DISCHARGING TO RECEIVING WATERS. THESE BEST MANAGEMENT PRACTICES (BMPS) SHALL BE EMPLOYED AS APPROPRIATE AND APPLICABLE ACCORDING TO LOCAL PERMITS AND REGULATIONS.
   b) WHEN CONSTRUCTION ENCOUNTERS UNCONTAMINATED EXCAVATION DEWATERING:
      1) CLEAN WATER SHOULD BE DISCHARGED TO A VEGETATED AREA, DITCHES OR OTHER CONVEYANCE VIA HOSE. ENERGY DISSIPATION SHOULD BE APPLIED TO THE DISCHARGE LOCATION TO MINIMIZE SCOUR. ALTERNATIVELY, UNCONTAMINATED WATER COULD BE DISCHARGED TO RECEIVING WATERS AS ALLOWED BY LOCAL PERMITS AND REGULATIONS OR AS LONG AS POSITIVE DRAINAGE IS PROVIDED, THE WATER COULD BE DISCHARGED INTO THE SURROUNDING AGRICULTURAL FIELDS AND ALLOWED TO INFILTRATE OR DRAIN ALONG EXISTING DRAINAGE PATTERNS PROVIDED THAT THE WATER DOES NOT CAUSE FLOODING OR CROP DAMAGE.

F. RELATIONSHIP WITH OTHER BMPS:
1. DEWATERING IS OFTEN IMPLEMENTED IN CONJUNCTION WITH DEEP FOUNDATION INSTALLATION. SEDIMENT BASINS AND FILTERS SHOULD BE CONSIDERED TO HELP FILTER THE DEWATERED WATER BEFORE IT IS DISCHARGED TO A SURFACE WATER WITHIN UPLANDS.
2. UTILIZE EROSION BLANKETS, EROSION CONTROL FENCING, STRAW BALES, LEVEL SPREADERS, SILT FENCING, ETC., WHERE NECESSARY TO MITIGATE POTENTIAL EXCESSIVE EROSION AND SEDIMENTATION. ENSURE ANY MATERIALS PLACED IN SURFACE WATER BODIES ARE FREE FROM SILT AND OTHER SUCH PARTICLES. KEEP EXTRA EROSION AND SEDIMENT CONTROL MATERIALS ON SITE (E.G., HEAVY DUTY SILT FENCING, STRAW BALES).
3. CHITOSAN AND CHITIN BASED ADDITIVES HAVE BEEN SHOWN TO SIGNIFICANTLY INCREASE THE EFFECTIVE-NESS OF FILTRATION AND SETTLING. CHITOSAN (POLY-D-GLUCOSAMINE) IS A LOW-TOXICITY PRODUCT EXTRACTED FROM CHITIN (POLY-N-ACETYL-D-GLUCOSAMINE), A BY-PRODUCT OF THE SHELLFISH INDUSTRY. OTHER PRODUCTS SUCH AS ANIONIC POLYACRYLAMIDE (ANIONIC PAM) ARE COMMERCIALLY AVAILABLE TO INCREASE SETTLING. OFTEN THESE ARE UTILIZED THROUGH WET OR DRY DOSING MECHANISMS OR AS WATER RUNS OVER A GEL BLOCK UPSTREAM OF A SETTLING OR FILTRATION PRACTICE. EACH PRODUCT SHOULD BE UTILIZED WITHIN THE MANUFACTURERS' SPECIFICATIONS AND TAILORED TO THE SOIL AND SITE CONDITIONS.
4. PARTICULATE FILTER UNITS UTILIZING CARTRIDGES OR ENCLOSED FILTER BAGS CAN REMOVE SMALLER PARTICLES DEPENDING ON THE FILTER SIZE. THIS TYPE OF MEASURE IS USUALLY NECESSARY TO TREAT CLAYS. FILTERS MAY NEED TO BE CHANGED DAILY OR MORE FREQUENTLY.
5. CHECK THAT EROSION CONTROL TOOLS ARE IN GOOD REPAIR AND PROPERLY FUNCTIONING PRIOR TO CONDUCTING DAILY WORK AND RE-INSTALL OR REPAIR AS REQUIRED PRIOR TO COMMENCING DAILY CONSTRUCTION ACTIVITIES.
6. KEEP SEDIMENT AND EROSION CONTROL MEASURES IN PLACE UNTIL DISTURBED AREAS HAVE BEEN STABILIZED (I.E., RE-VEGETATED).

G. **DESIGN SPECIFICATIONS:**
1. DEWATERING MUST BE DONE SO THAT THE VELOCITY OF THE DISCHARGED WATER DOES NOT CAUSE SCOURING OF THE RECEIVING AREA. IF THE RECEIVING AREA IS A STRUCTURAL BMP (I.E. BASIN OR SUMP), THE DESIGN OF THE BMP SHOULD BE BASED ON THE ANTICIPATED FLOW FROM THE DEWATERED AREA.
2. SEDIMENT-LADEN WATER FROM COFFERDAMS, TRENCHES, FOUNDATION EXCAVATIONS, AND OTHER AREAS WHICH NEED TO BE DEWATERED SHOULD BE PUMPED THROUGH A GEOTEXTILE MATERIAL BEFORE THE WATER IS DISCHARGED TO A SURFACE WATER BODY. THE FILTER BAG SHOULD BE DISPOSED OF BY THE CONTRACTOR AT AN UPLA

SEEDING SPECIFICATION

GENERAL
SEEDING CAN BE USED FOR TEMPORARY OR PERMANENT STABILIZATION. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED. AREAS WHERE FINAL GRADING HAS BEEN COMPLETED SHALL BE TEMPORARILY AND/OR PERMANENTLY SEEDED IMMEDIATELY FOLLOWING THE CONCLUSION OF GRADING ACTIVITIES (WEATHER PERMITTING) AND MUST BE COMPLETED WITHIN FIVE (5) DAYS. TEMPORARY AND PERMANENT SEED MIXTURES ARE SPECIFIED BELOW. TEMPORARY SEED MIX SHALL ALSO BE APPLIED DURING THE APPLICATION OF THE PERMANENT SEED MIX TO ENSURE TIMELY VEGETATIVE COVER OF EXPOSED AREAS.

IMMEDIATELY AFTER SEEDING, MULCH ALL SEEDED AREAS WITH UNWEATHERED SMALL GRAIN STRAW OR HAY UNIFORMLY AT THE RATE OF 1-1/2 TONS TO 2 TONS PER ACRE OR 100 POUNDS PER 1000 SQUARE FEET. ANCHOR MULCH WITH DISC-TYPE ANCHORING TOOL OR OTHER MEANS APPROVED BY THE LOCAL REGULATORY AGENCY.

SEEDING MIXTURES
SEE SEED MIXES IN TEMPORARY & PERMANENT SEED CHARTS.

SLOPES FLATTER THAN 3:1 (NOT INCLUDING BASINS)
APPLY 17-17-17 COMMERCIAL ORGANIC FERTILIZER AT A RATE OF 20 LBS PER 1000 SQ/FT. SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

TEMPORARY SEEDINGPLANTING DATES	SEED VARIETY	APPLICATION RATE
IMMEDIATELY FOLLOWING LAST DISTURBANCE OR WITHIN 14 DAYS	(SEE CHART BELOW)	60 LBS PER ACRE

PERMANENT SEEDING PLANTING DATES	SEED VARIETY	APPLICATION RATE
PREFERABLE EARLY SPRING OR EARLY FALL	(SEE CHART BELOW)	60 LBS PER ACRE

SLOPES 3:1 OR GREATER (NOT INCLUDING BASINS)
APPLY 17-17-17 COMMERCIAL ORGANIC FERTILIZER AT A RATE OF 20 LBS PER 1000 SQ/FT.
AND SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

TEMPORARY SEEDING PLANTING DATES	SEED VARIETY	APPLICATION RATE
IMMEDIATELY FOLLOWING LAST DISTURBANCE OR WITHIN 5 DAYS	(SEE CHART BELOW)	60 LBS PER ACRE

PERMANENT SEEDING PLANTING DATES	SEED VARIETY	APPLICATION RATE
PREFERABLE EARLY SPRING OR EARLY FALL	(SEE CHART BELOW)	60 LBS PER ACRE

TEMPORARY SEED
SEED: 60 LBS PER ACRE
MIX:
- 40% SEED OATS
- 25% KENTUCKY 31 TALL FESCUE
- 22% CREEPING RED FESCUE
- 11% TIMOTHY
- 1.0% INERT MATTER
- 1.0% OTHER CROP
- 0.01% WEED SEED

PERMANENT SEED
SEED 80 LBS PER ACRE
MIX:
- 70% TRUE BLUE KENTUCKY (BROOKLAWN, BOUTIQUE, GROME, AND HB2-203 KENTUCKY BLUEGRASS)
- 30% PERENNIAL RYE GRASS (MANHATTAN 4, CHARGER, CITATION 4, AND PIZZAZZ PERENNIAL RYE GRASS)

SEED BED PREPARATION (PERMANENT SEEDING)
SURFACE WATER CONTROL MEASURES SHALL BE IN PLACE. AREA TO BE SEEDED SHALL BE RIPPED AND SPREAD WITH AVAILABLE TOPSOIL. TOTAL SEEDBED PREPARED DEPTH SHOULD BE AT LEAST 4 INCHES. LOOSE ROCKS, ROOTS AND OTHER OBSTRUCTIONS NEED TO BE REMOVED FROM THE SURFACE SO THAT THEY WILL NOT INTERFERE WITH THE ESTABLISHMENT AND MAINTENANCE OF VEGETATION. SURFACE FOR FINAL SEEDBED PREPARATION SHOULD BE AT FINISH GRADE AND BE REASONABLY SMOOTH AND UNIFORM.

IF NO SOIL TEST IS TAKEN, FERTILIZER AND LIME SHOULD BE USED ACCORDING TO SEEDING SPECIFICATIONS. IF SOIL TEST IS TAKEN, APPLY FERTILIZER AND LIME ACCORDING TO SOIL TEST REPORT. FERTILIZER AND LIME SHALL BE APPLIED UNIFORMLY AND MIXED WITH THE SOIL DURING SEEDBED PREPARATION. WEIGHTS, SEED SPECIES AND PERCENTAGE OF PURITY AND GERMINATION MUST BE CHECKED PRIOR TO SEEDING.

SEEDING SHALL BE ACCOMPLISHED IN TWO DIRECTIONS AND AT RIGHT ANGLES TO EACH OTHER. LAWN AREAS SHALL BE SEEDED AT THE RATE INDICATED ON THE DRAWINGS BY SOWING EVENLY WITH AN APPROVED MECHANICAL CULTI-PACKER SEEDER TO COVER THE SEED AND FORM THE SEEDBED IN ONE OPERATION. IF BROADCAST SEEDER IS USED THE SEEDING RATE SHALL BE TWO (2) TIMES THE DRILL RATE. IN INACCESSIBLE AREAS, THE SEED SHALL BE LIGHTLY RAKED WITH FLEXIBLE RAKES AND ROLLED WITH A WATER BALLAST ROLLER. AFTER ROLLING SEEDED AREAS ARE TO BE MULCHED ACCORDING TO SPECIFICATION. IF HYDRO-SEED OPERATION IS USED, SEEDING RATE SHALL BE FIVE (5) TIMES THE DRILL RATE INDICATED ON THE DRAWINGS.

IF SEEDING CAN NOT BE ACCOMPLISHED DUE TO SEASONAL CONSTRAINTS, APPLY STRAW MULCH AND TACKIFIER TO ALL SLOPES AND DISTURBED AREAS UNTIL PERMANENT SEEDING IS ALLOWED. IN THE EVENT SEEDING OCCURS OUT OF SEASON, MAINTENANCE SHALL OCCUR AND CONTINUE INTO THE FOLLOWING GROWING SEASON OR UNTIL A UNIFORM STAND OF THE SPECIFIED PERMANENT GRASSES HAVE BEEN ESTABLISHED AND THE SITE HAS REACHED 90% STABILIZATION. PERMANENT AND TEMPORARY SEEDING SHALL BE ACCOMPLISHED THROUGHOUT THE CONSTRUCTION PROCESS.

INSPECTION
INSPECT SEEDED AREAS FREQUENTLY. IF SEEDED AREAS FAIL TO GERMINATE, OR TO PROVIDE ADEQUATE GROUND COVERAGE, THE AREA SHALL BE RE-SEEDED UNTIL FINAL STABILIZATION IS ACHIEVED.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE PLANS. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
2. BEST MANAGEMENT PRACTICES (BMPS) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
3. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
4. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
5. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
6. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
7. ALL DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE, MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING OR BLANKETS.
8. ALL MUD/DIRT/MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO PUBLIC ROADWAYS OR INTO WATER COURSES SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
9. ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
10. ALL STOCKPILED SOILS SHALL BE MAINTAINED IN SUCH A WAY AS TO PREVENT EROSION FROM THE WORK AREA.
11. CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.
12. EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
13. CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURE WHEN REQUIRED. HE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, STOCKPILES AND OTHER EARTH CHANGES HAVE BEEN ACCOMPLISHED.
14. LOW GROUND PRESSURE EQUIPMENT SHALL BE USED TO MINIMIZE LAND DISTURBANCE BETWEEN STRUCTURES.
15. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO THE PERMIT REQUIREMENTS OF THE OAKLAND COUNTY WATER RESOURCES COMMISSIONER.
16. ALL GRADING TO BE PERFORMED AS NOT TO OBSTRUCT UPSTREAM DRAINAGE.
17. SITES WILL BE INSPECTED WEEKLY- ANY AREAS OF OFF-SITE EROSION WILL BE CORRECTED WITHIN 2 BUSINESS DAYS.
18. TIMBER CROSSING MATS WILL BE USED AS SHOWN TO MINIMIZE DISRUPTION TO WETLAND AREAS.

SEQUENCE OF CONSTRUCTION
FOR SOIL EROSION CONTROL (FOR EACH SITE)

START DAY	END DAY	
		1. PULL ALL NECESSARY PERMITS & LICENSES.
		2. INSTALL SILT AND PROTECTIVE FENCING.
		3. CLEAR AND GRUB WORK AREA
		4. COMPLETELY REMOVE EXISTING STRUCTURE & FOUNDATION.
		5. STRIP AND STOCKPILE TOPSOIL.
		6. EXCAVATE FOR PROPOSE STRUCTURE, STOCKPILE SPOILS AND GRADE ACCORDINGLY
		7. BEGIN FOUNDATION CONSTRUCTION OF NEW STRUCTURE.
		8. REPLACE TOPSOIL, SEED AND STABILIZE DISTURBED AREAS.
		9. REMOVE SILT FENCE, REPAIR DISTURBED AREAS AS NECESSARY.
		10. COORDINATE WITH PERMITTING AGENCIES FOR CLOSEOUT INSPECTION.

*SCHEDULE TO BE FILLED OUT BY CONTRACTOR.

NOTE:
IF SEEDING CAN NOT BE ACCOMPLISHED DUE TO SEASONAL CONSTRAINTS, APPLY STRAW MULCH AND TACKIFIER TO ALL SLOPES AND DISTURBED AREAS UNTIL PERMANENT SEEDING IS ALLOWED. IN THE EVENT SEEDING OCCURS OUT OF SEASON, MAINTENANCE SHALL OCCUR AND CONTINUE INTO THE FOLLOWING GROWING SEASON. FOR ALL AREAS LEFT UNSTABILIZED DUE TO SEASONAL CONSTRAINTS, FINAL STABILIZATION SHALL BE ACHIEVED BY APRIL 15TH.

811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES SHOWN ON THESE PLANS HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. 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.

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

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SECTIONS: 14 & 23
T 01 N, R 08 E
CITY OF NOVI
OAKLAND COUNTY, MICHIGAN

R.B.AIKENS & ASSOCIATES, LLC

SAKURA WAY
EGLE IMPACT PLAN
SESC NOTES

DATE
AUGUST 27, 2019

REVISIONS/SUBMITTALS
1
2
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5
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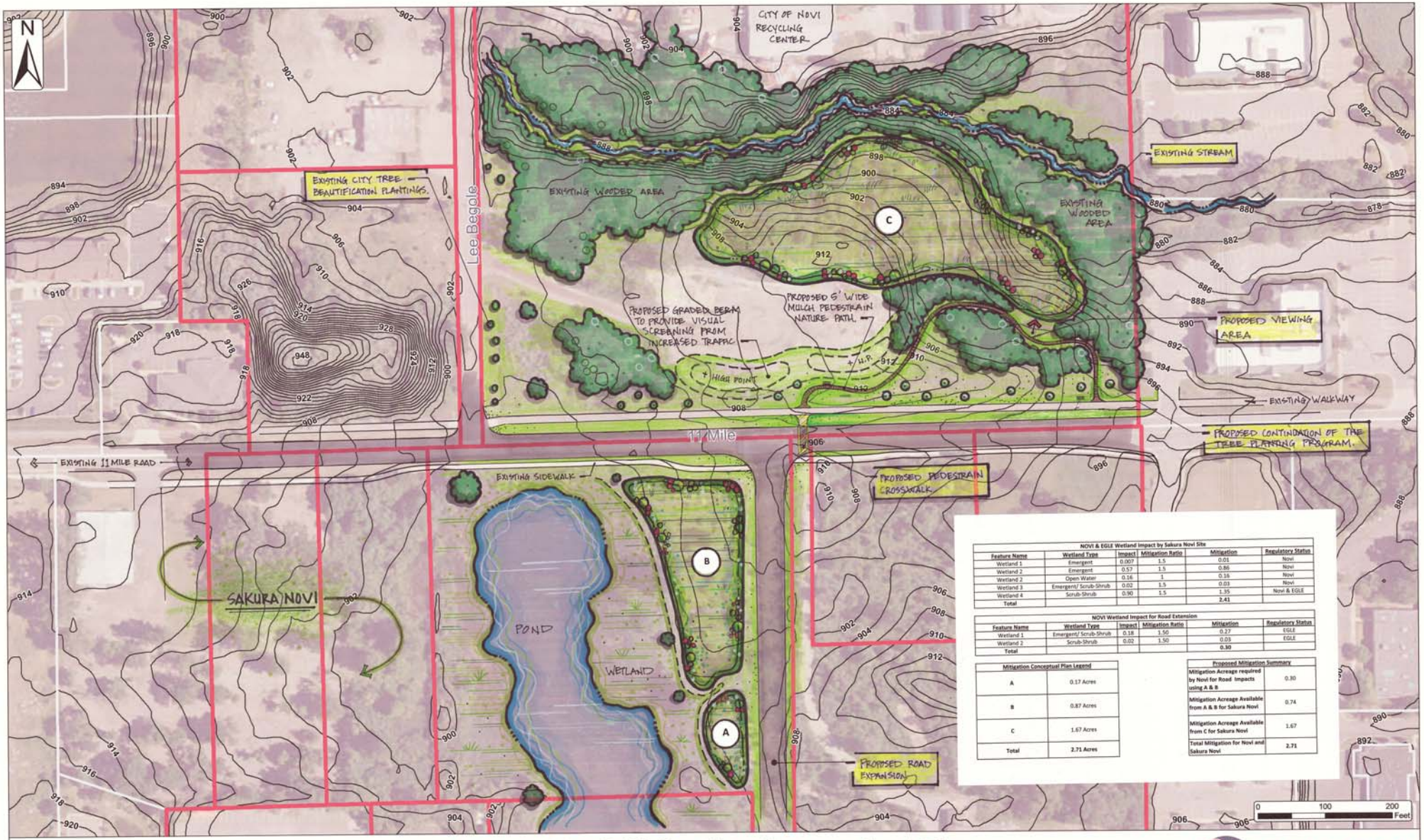
DRAWN BY: BS
CHECKED BY: MM
PROJECT MANAGER: DB
JOB #: 18003457
FILE CODE: --
SHEET NO. 06

CAD FILE: K:\18003457\DWG\PLAN SETS\EGLE\18003457EGLE-04-07



NOVI & EGLE Wetland Impact by Sakura Novi Site

Feature Name	Wetland Type	Impact	Mitigation Ratio	Mitigation	Regulatory Status
Wetland 1	Emergent	0.007	1.5	0.01	Novi
Wetland 2	Emergent	0.57	1.5	0.86	Novi
Wetland 2	Open Water	0.16	1	0.16	Novi
Wetland 3	Emergent/ Scrub-Shrub	0.02	1.5	0.03	Novi
Wetland 4	Scrub-Shrub	0.90	1.5	1.35	Novi & EGLE
Total				2.41	

NOVI Wetland Impact for Road Extension

Feature Name	Wetland Type	Impact	Mitigation Ratio	Mitigation	Regulatory Status
Wetland 1	Emergent/ Scrub-Shrub	0.18	1.50	0.27	EGLE
Wetland 2	Scrub-Shrub	0.02	1.50	0.03	EGLE
Total				0.30	

Mitigation Conceptual Plan Legend

A	0.17 Acres
B	0.87 Acres
C	1.67 Acres
Total	2.71 Acres

Proposed Mitigation Summary

Mitigation Acreage required by Novi for Road Impacts using A & B	0.30
Mitigation Acreage Available from A & B for Sakura Novi	0.74
Mitigation Acreage Available from C for Sakura Novi	1.67
Total Mitigation for Novi and Sakura Novi	2.71

2 ft. Contours

Parcels of Interest

Parcel

Sakura Novi Mitigation Conceptual Plan

Site Overview Map

Oakland County, Michigan

1 inch = 60 feet

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Source: USDA National Agricultural Imagery Program (2017)

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12/18/2019

Atwell, LLC Project: 18004015