



## CITY of NOVI CITY COUNCIL

**Agenda Item 1**  
**August 13, 2018**

**SUBJECT:** Approval of the request of Erickson Living for the revised Special Land Use permit, Revised Preliminary Site Plan with PD-1 Option (and associated Fourth Amendment to the Development Agreement), Revised Phasing Plan, Revised Wetlands Permit, Revised Woodlands Permit, and Revised Storm Water Management Plan, JSP 18-19. The property is located on the north side of Thirteen Mile Road, west of M-5 and east of Meadowbrook Road. The applicant is proposing to revise the original approval and layout of the addition to the Continuing Care Center at the Fox Run Senior Community in Phase 4. The addition would result in 90 new assisted living units along with dining, gardens and enrichment facilities.

**SUBMITTING DEPARTMENT:** Community Development Department - Planning <sup>Burb</sup>

**CITY MANAGER APPROVAL:** 

### **BACKGROUND INFORMATION:**

The subject property is approximately 102 acres and is located on the north side of Thirteen Mile Road, west of M-5 and east of Meadowbrook Road (Section 1). The multi-phase Fox Run Community was originally approved in 2001 with a Development Agreement under RM-1 (Low Density Multiple Family) zoning with a Planned Development Option (PD-1 Option). Since then, the Development Agreement has been amended three times as modifications to the layout of the site and certain buildings have been needed. Phase 1 and 2 buildings have been constructed, as has the original building of Phase 4, the Continuing Care Center, which contains 132 units.

The applicant is preparing to construct the planned addition (phase 4.2) to the Continuing Care Center, and has proposed changes to the building footprint and design from what was shown in prior approvals. The 88,690 square feet expansion of the building would result in 90 new assisted living units along with dining, gardens and enrichment facilities. The original Development Agreement for Fox Run included 390 units of assisted living/skilled nursing care. The remaining 168 units are listed as "future units" on the unit matrix in the plans, and the applicant has indicated they would like to reserve the right to build those in a future addition on the south side of the building. The addition currently proposed would attach to the north side of the existing building. Parking and roads were previously constructed in phase 4.1, and no changes to them are proposed at this time.

### **Deviations**

The site plan requires a few waivers and deviations from the Zoning Ordinance requirements as noted below and in the suggested motion. The **Planning** Review identified the following:

#### **Maximum Building Length:**

The ordinance requires building lengths cannot exceed 180 feet. However, if exceeded, the Planning Commission/City Council may modify the length requirement up to 360 feet if there are recreational or social common areas with a minimum capacity of 50 persons within the building. The floor plans provided show social common areas in the form of

dining facilities, a rooftop garden, and other enrichment areas within the addition that would accommodate more than 50 people. Such additional length would also require additional setback of 1 foot for every 3 feet in excess of 180 feet. The existing building with the new addition would be approximately 316 feet in length on the east side. The proposed building length would need an additional 45 feet of setback over the 75 feet required, for a total setback of 120 feet. The proposed building is set back 332 feet from the nearest property line. The applicant requests the City Council's approval of the modification of the maximum building length. Staff supports the deviation because the interconnected facility would better serve the intended population by providing better and safer access to facilities and amenities for staff and residents.

**Bicycle Parking:**

Six bicycle parking spaces are proposed near the main entrance of the building. The ordinance states that when more than 4 spaces are required, they shall be provided in multiple locations. The applicant has requested a waiver to allow just one location as the main entrance will be used by most visitors. The bicycle parking is also to be accessible via a 6 foot paved sidewalk. The existing sidewalk adjacent to the proposed location appears to be 5 feet. The applicant requests a waiver from this requirement in order to retain the existing sidewalk.

The **Engineering** review indicates that the building addition will be served by existing roads and parking areas. Utilities are available to be extended to provide water service, sanitary sewer service, and storm water management. Engineering recommends approval of the Preliminary Site Plan and Storm Water Management Plan.

The **Landscape** review indicates that the applicant has worked to plant more of the required multifamily trees in the minimal space available on site to the point where the following waiver can be supported: A reduction in the required number of multifamily trees (required: 87, Proposed: 50).

The **Wetlands** review indicates that there are many acres of wetlands and woodlands throughout the Fox Run parcel. The area affected by this project contains a wetland approximately 0.15 acre in size, which is proposed to be filled. A City of Novi *Nonresidential Minor Use Wetland Permit* would be required for the proposed impacts, as well as an *Authorization to Encroach the 25-Foot Natural Features Setback*. Wetland mitigation will not be required as the total area of impact is less than the 0.25 acre threshold. The City's wetland consultant recommends approval of the Preliminary Site Plan.

The **Woodlands** review indicates that there are 13 regulated woodlands trees that will be removed from the site. The woodland area contains black cherry, red oak, silver maple, American elm, sugar maple and Siberian elm trees. The applicant is proposing to remove all 13 of the regulated trees on site. Twenty replacement tree credits will be required. The plans indicate a payment will be made into the tree fund due to lack of available space on site for woodland plantings. The City's woodland consultant recommends approval of the Preliminary Site Plan.

The **Traffic Engineering** review indicates that the Roads, driveways and parking areas are all existing, with no changes proposed. Traffic is recommending approval with additional details to be provided at the time of Final Site Plan review.

The **Facade** review indicates that the proposed building elevations, dated 7/5/18, would require a Section 9 waiver due to deviations as listed below:

- o Overage of EIFS on north south and west facades
- o Overage of CMU on the west and south facades

The Planning Commission motion recommended the Section 9 waiver for the overage of EIFS but did not mention the overage of CMU as it was discovered after the motion was drafted. The Façade review notes that the addition is consistent with the materials and architecture of the existing Care Center facades. The deviations are recommended. The applicant has provided pictures of the existing façade, and images of the proposed building addition in the packet.

The **Fire Marshal** is recommending approval with additional items to be addressed at the time of Final Site Plan submittal.

### **Planning Commission Action**

On July 11, 2018, the Planning Commission held the required public hearing and recommended approval to the City Council of the revised Special Land Use Permit, Preliminary Site Plan with PD-1 Option, Phasing Plan, Wetland Permit, Woodlands Permit, and Storm Water Management Plan based on the motion listed in the action summary attached. Draft meeting minutes are also attached.

According to Section 3.31, when the PD-1 Option is utilized, Preliminary Site Plan approval shall be by the City Council after review and recommendation by the Planning Commission. Following the City Council's approval, the Final Site Plan approval may be granted administratively.

### **RECOMMENDED ACTION: (2 part motion)**

#### **Part 1:**

Approval of the request of Erickson Living for JSP 18-19 for the Revised Special Land Use Permit based on the following findings:

- a. Relative to other feasible uses of the site:
  - The proposed use will not cause any detrimental impact on existing thoroughfares *(as indicated in findings and conclusions of the traffic review letter, including the adequacy of such thoroughfares to handle the existing improvements);*
  - Subject to satisfying the requirements in the Engineering Review the proposed use will not cause any detrimental impact on the capabilities of public services and facilities *(because the plan adequately addresses and provides for water and sanitary sewer service and management of stormwater volumes in accordance with ordinance requirements as set forth in the engineering review);*
  - The proposed use is compatible with the natural features and characteristics of the land *(as proposed impacts to natural features have been minimized as described in the staff and consultant reports);*
  - The proposed use is compatible with adjacent uses of land *(as indicated in the staff and consultant review letters and as demonstrated by the longstanding relationship of the existing development to such uses);*
  - The proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use, which contemplates this use;
  - The proposed use will promote the use of land in a socially and economically desirable manner, *as it is a continuation of this planned use;*
  - The proposed use is
    - (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and

(2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located.

- b. Landscape waiver from Section 5.5.3.F.ii to allow 37 fewer multifamily unit landscaping trees than are required (87 required, 50 provided) because the existing and proposed landscaping on the site are substantial and sufficient to accomplish the intent of the ordinance.

This motion is made because the plan is otherwise in compliance with Article 3, Article 4, Article 5, and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance.

**Part 2:**

Approval of the request of Erickson Living for JSP 18-19 for the Revised Preliminary Site Plan with a PD-1 Option, and the Fourth Amendment to the Development Agreement (with any final adjustments to be made by the City Manager's Office and City Attorney), and approval of the Revised Phasing Plan, Revised Wetland Permit, Revised Woodland Permit, and Revised Storm Water Management Plan, subject to and based on the following:

1. Waiver from Section 3.8.2.C for a building exceeding 180 feet in length, up to 316 feet proposed, *because the interconnected facility will better serve the population and the ordinance allows the City Council to modify building length when additional setback from adjacent uses is provided, as it is in this proposal;*
2. Waiver from Section 5.16 for providing bicycle parking in one location rather than two *as consistent with the use at issue;*
3. Waiver from Section 5.16 for not providing a 6 foot sidewalk access to bicycle parking, *because the existing 5 foot sidewalk would need to be demolished and reconstructed;*
4. A Section 9 waiver for the following deviations *as the proposed percentages of materials are consistent with the existing facades:*
  - a. Exceeding the 25 percent maximum allowed percentage of EIFS on 3 facades (proposed: North – 29 percent, South – 31/32 percent and West – 32 percent);
  - b. Exceeding the 10 percent maximum allowed percentage of CMU on the west facade (proposed: West – 14 percent);
5. Landscape waiver from Sec. 5.5.3.F.ii.b(1) for a reduction in the total number multifamily unit trees provided (87 trees required, 50 provided) *as the existing and proposed landscaping on the site are substantial and sufficient to accomplish the intent of the Ordinance;*
6. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan.

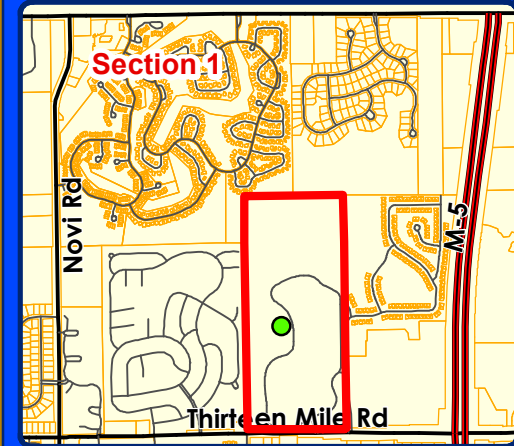
*This motion is made because the plan is otherwise in compliance with Article 3, Article 4, and Article 5 of the Zoning Ordinance, Chapter 11 and Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.*

MAPS  
Location  
Zoning  
Future Land Use  
Natural Features

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# FOX RUN CONTINUING CARE: JSP 18-19

## 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: 07/03/2018  
Project: FOX RUN CCC JSP18-19  
Version #: 1



1 inch = 583 feet

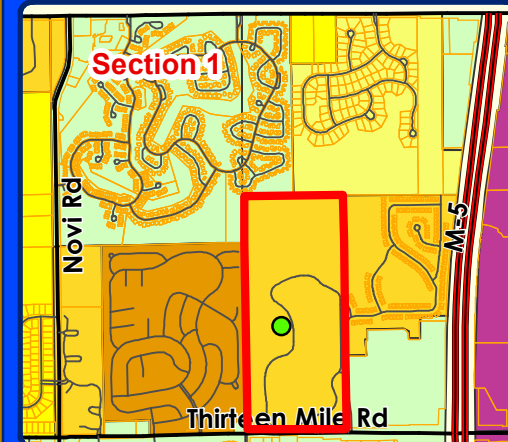
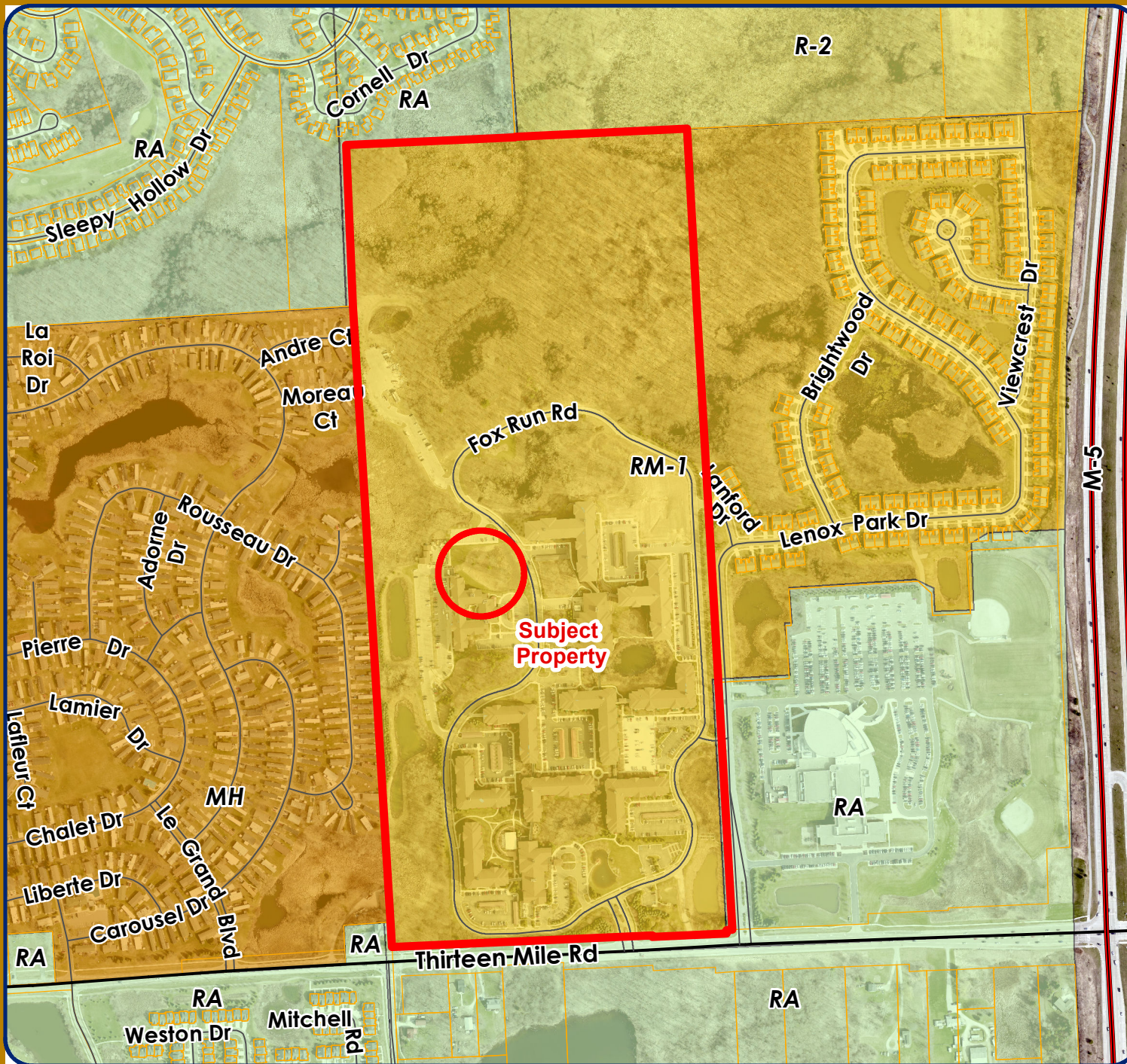


### MAP INTERPRETATION NOTICE

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.

# FOX RUN CONTINUING CARE: JSP 18-19

## ZONING



**LEGEND**

- R-A: Residential Acreage
- R-2: One-Family Residential
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- MH: Mobile Home District
- OST: Office Service Technology
- Subject Property

**City of Novi**

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

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Feet

0 130 260 520 780

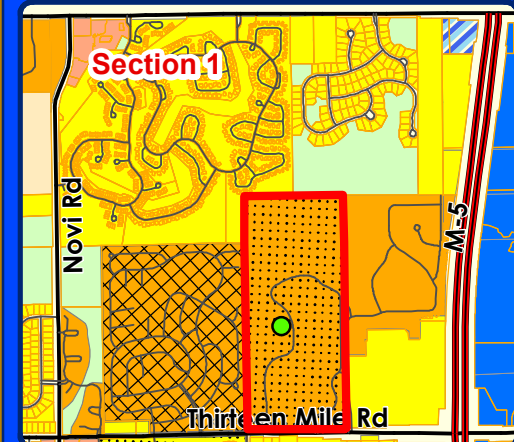
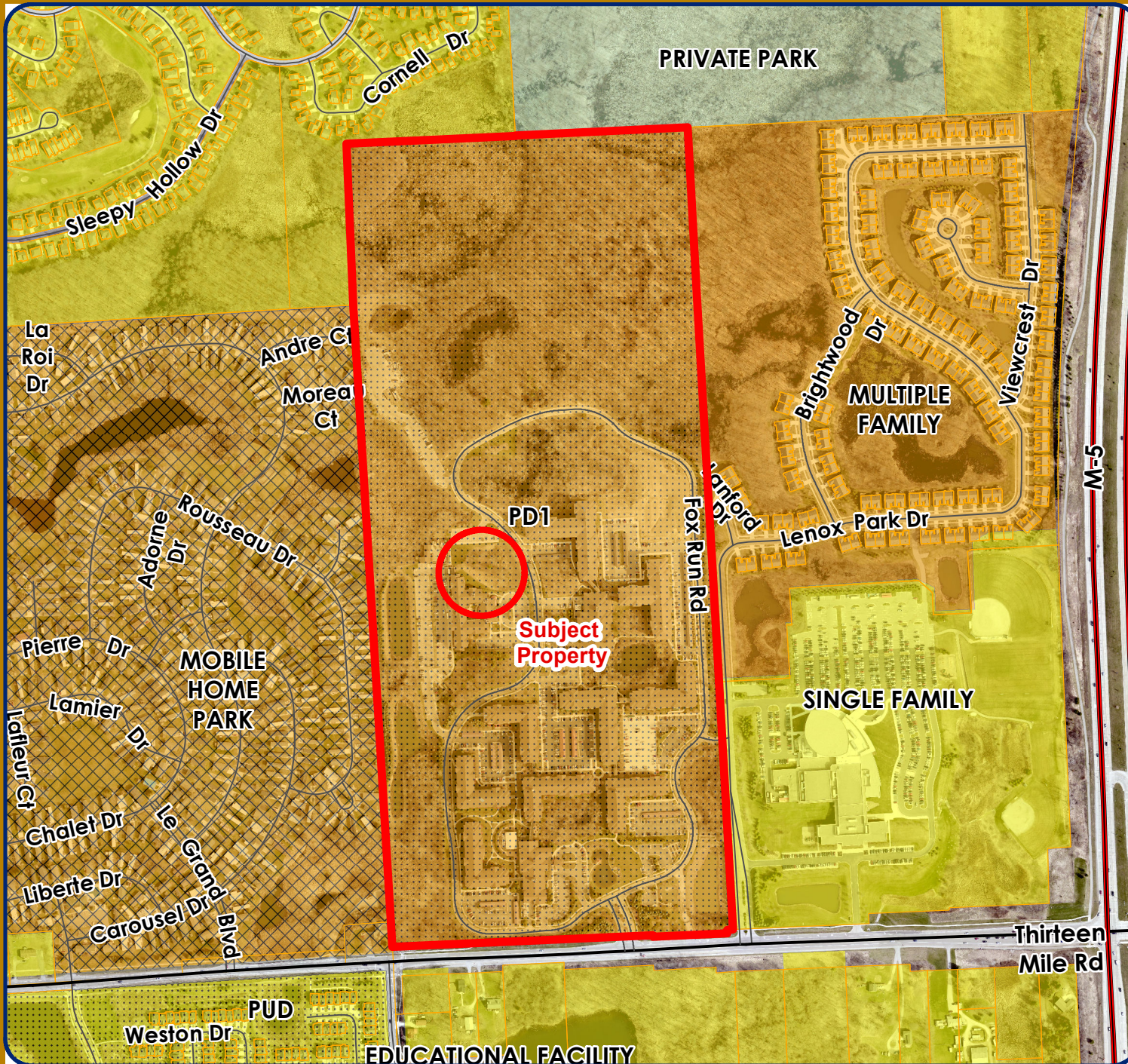
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# FOX RUN CONTINUING CARE: JSP 18-19

## FUTURE LAND USE



### LEGEND

#### FUTURE LAND USE

- Single Family
- PUD
- Multiple Family
- PD1
- Mobile Home Park
- Community Office
- Office RD Tech
- Local Commercial
- Educational Facility
- Private Park
- Subject Property



### City of Novi

Dept. of Community Development  
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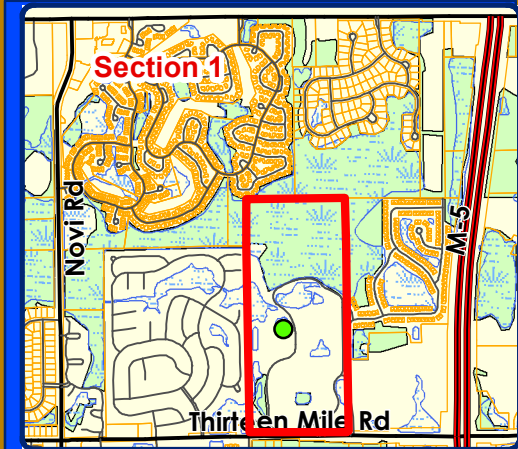
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# FOX RUN CONTINUING CARE: JSP 18-19

## NATURAL FEATURES



**LEGEND**

-  WETLANDS
-  WOODLANDS
-  Subject Property

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

Map Author: Lindsay Bell  
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 Version #: 1

0 55 110 220 330 Feet  
 1 inch = 250 feet

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SITE PLAN



ARCHITECT  
 Hord Coplan Macht, Inc.  
 750 E. Pratt St. Suite 1100  
 Baltimore, MD 21202  
 P. 410.837.7311 F. 410.837.6500

**FOX RUN CONTINUING CARE EXPANSION**  
 ERICKSON LIVING  
 41000 W. 13 Mile Rd, Novi, MI 48377

**hord | coplan | macht**

ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



no.	date	revision
1	07.25.2018	PSP APPROVAL
	4.12.18	PSE-APP REVIEW

Project Name: FOX RUN CONTINUING CARE EXPANSION  
 Project Number: 218016.00  
 Date: 05.25.2018 SPA SUBMITTAL  
 Scale:

Drawing:  
 Landscape Plan

**L301**

**LANDSCAPE PLAN**  
 SCALE 1" = 20'



748.477.9888 TEL  
 WWW.HWA.LC.COM  
 3200 BUCKSTONE LANE, FARMINGTON HILLS, MI 48334

# FOX RUN CONTINUING CARE EXPANSION

41215 FOX RUN ROAD                      NOVI, MICHIGAN  
**PRELIMINARY SITE PLAN**

**OWNER**  
**ERICKSON LIVING DEVELOPMENT**  
 701 MAIDEN CHOICE LN.  
 BALTIMORE, MD 21228  
 TEL. 410.402.2426  
 FAX 410.402.2420

**CIVIL**  
**ZEIMET WOZNIAK & ASSOCIATES**  
 55800 GRAND RIVER, SUITE 100  
 NEW HUDSON, MI 48165-8711  
 TEL. 248.437.5099  
 FAX 248.437.5222

**LANDSCAPE**  
**HWLA**  
 33203 BIDDESTONE LANE  
 FARMINGTON HILLS, MI 48334  
 TEL. 248.477.3600

**ARCHITECT**  
**HORD COPLAN MACHT, INC.**  
 750 E. PRATT STREET SUITE 1100  
 BALTIMORE, MD 21202  
 TEL. 410.837.7311  
 FAX 410.837.6530

**STRUCTURAL**  
**MORABITO CONSULTANTS**  
 952 RIDGEBROOK ROAD, SUITE 1700  
 SPARKS, MD 21152-9472  
 TEL. 410.467.2377  
 FAX 410.467.4132

**MEP**  
**CENTURY ENGINEERING**  
 10710 GILROY ROAD  
 HUNT VALLEY, MD 21031  
 TEL. 443.589.2400

UNIT MATRIX						
UNIT TYPE	NO. OF UNITS	NO. OF BEDROOMS	NO. OF BATHS	NO. OF GARAGES	TOTAL RESIDENTS	USABLE AREA
1	10	1	1	1	10	10,000
2	10	1	1	1	10	10,000
3	10	1	1	1	10	10,000
4	10	1	1	1	10	10,000
5	10	1	1	1	10	10,000
TOTAL	50	50	50	50	50	50,000



**LIST OF DRAWINGS:**

**SURVEYING AND CIVIL ENGINEERING**  
 (BY ZEIMET WOZNIAK & ASSOCIATES)

- S100 BOUNDARY SURVEY
- S101 EXISTING CONDITIONS SURVEY
- C100 OVERALL SITE PLAN
- C100.1 OVERALL PARKING PLAN
- C101 SITE DIMENSION PLAN
- C102 SITE PREPARATION PLAN
- C103 SITE GRADING AND DRAINAGE PLAN
- C104 SITE UTILITY PLAN
- C105 SITE EROSION CONTROL PLAN
- C105.1 EROSION CONTROL NOTES
- C106 STORM AREA PLAN
- C106.1 OVERALL STORM WATER MANAGEMENT ANALYSIS
- C107 CONSTRUCTION NOTES & DETAILS

**LANDSCAPING**  
 (BY HAGENBUCH WEIKAL LANDSCAPE ARCHITECTURE)

- L100 KEY PLAN
- L201 TREE REMOVAL AND SOILS PLAN
- L301 LANDSCAPE PLAN
- L302 PLANT LIST
- L303 PLANTING DETAILS

**ARCHITECTURE**  
 (BY HORD COPLAN MACHT INC.)

- CS 80 SITE IMAGES
- A2 00 OVERALL BASEMENT LEVEL PLAN
- A2 10 OVERALL FIRST FLOOR PLAN
- A2 20 OVERALL SECOND FLOOR PLAN
- A2 30 OVERALL THIRD FLOOR PLAN
- A2 40 OVERALL ROOF PLAN
- EA 00 EXTERIOR ELEVATIONS
- EA 10 EXTERIOR ELEVATIONS
- EA 20 EXTERIOR ELEVATIONS
- EA 60 UNIT PLAN - STUDIO
- EA 10 UNIT PLAN - CONCEPT
- EA 20 UNIT PLAN - ONE BEDROOM
- EA 30 UNIT PLAN - TWO BEDROOM

**USE STATEMENT:**

ERICKSON LIVING IS PROPOSING TO CONSTRUCT AN APPROXIMATE 88,690 SF ADDITION TO THEIR EXISTING "CONTINUING CARE" BUILDING AT FOX RUN. THE EXPANSION WILL PROVIDE 90 NEW BEDROOMS FOR CUSTOMIZED CARE OF ITS RESIDENTS.

THE CONTINUING CARE NEIGHBORHOOD OFFERS THESE LEVELS OF CUSTOMIZED CARE:

- INPATIENT REHABILITATION
- ASSISTED LIVING
- MEMORY CARE
- SKILLED NURSING

THE PROJECT INCLUDES THE BUILDING ADDITION AND EXTENSIONS OF EXISTING UTILITIES. NO NEW PARKING IS BEING ADDED AND NO CHANGES TO THE EXISTING PRIVATE ROADWAYS WITHIN THE DEVELOPMENT ARE PROPOSED AT THIS TIME.

THE EXPANSION IS EXPECTED TO COST APPROXIMATELY \$19,500,000.

**GENERAL NOTES:**

1. ALL WORK SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF NOVI.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR TELLING AND VERIFYING THAT ALL EXISTING UTILITIES ARE FULLY FUNCTIONAL AND SHALL REMOVE AND REPLACE ANY BROKEN OR DEFECTIVE MATERIAL, AS NEEDED.
3. PRIOR TO CONSTRUCTION, ALL EXISTING UTILITIES AT PROPOSED CONNECTIONS AND CROSSINGS SHALL BE EXCAVATED AND EXPOSED BY THE CONTRACTOR TO VERIFY LOCATION AND DEPTH. FIELD MEASUREMENTS SHALL BE SUPPLIED TO THE DESIGN ENGINEER SO THAT HE MAY CONFIRM, ADJUST, AND/OR REVERSE ELEVATIONS OF PROPOSED UTILITIES WHERE A CONFLICT IS APPARENT.
4. ALL NECESSARY PERMITS, BONDS, INSURANCES, ETC. SHALL BE PAID FOR BY THE CONTRACTOR NEEDING THE SAME.
5. SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND SHALL BE MAINTAINED BY THE CONTRACTOR THROUGH ALL PHASES OF THE CONSTRUCTION.
6. ALL ELEVATIONS ON THESE PLANS ARE UGDS DATUM.
7. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL DURING ALL PERIODS OF CONSTRUCTION.
8. SEE ARCHITECTURAL PLANS FOR ALL BUILDING DIMENSIONS.
9. THE BUILDING ADDRESS IS TO BE POSTED ON A SIGN FACING THE STREET THROUGHOUT CONSTRUCTION. THE LETTERING FOR THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON A CONTRASTING BACKGROUND.
10. COMPACTED SAND BACKFILL TO BE MOOT CLASS # GRANULAR MATERIAL, COMPACTED TO 95% MAXIMUM UNIT DENSITY.
11. NO WORK IS PROPOSED WITHIN ANY PUBLIC ROAD RIGHT-OF-WAY AND/OR CITY EASEMENT.
12. ALL STREETS AND DRIVES ARE TO BE PRIVATE.
13. NO NEW ACTIVITIES ARE PROPOSED WITHIN REGULATED WOODLANDS.
14. NEW ACTIVITIES ARE PROPOSED WITHIN REGULATED WETLANDS.

**ARCHITECT**  
 Hord Coplan Macht, Inc.  
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**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
 41000 W. 13 Mile Rd., Novi, MI 48377

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ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



PROFESSIONAL CERTIFICATION CONFIRMS THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MICHIGAN.

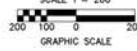
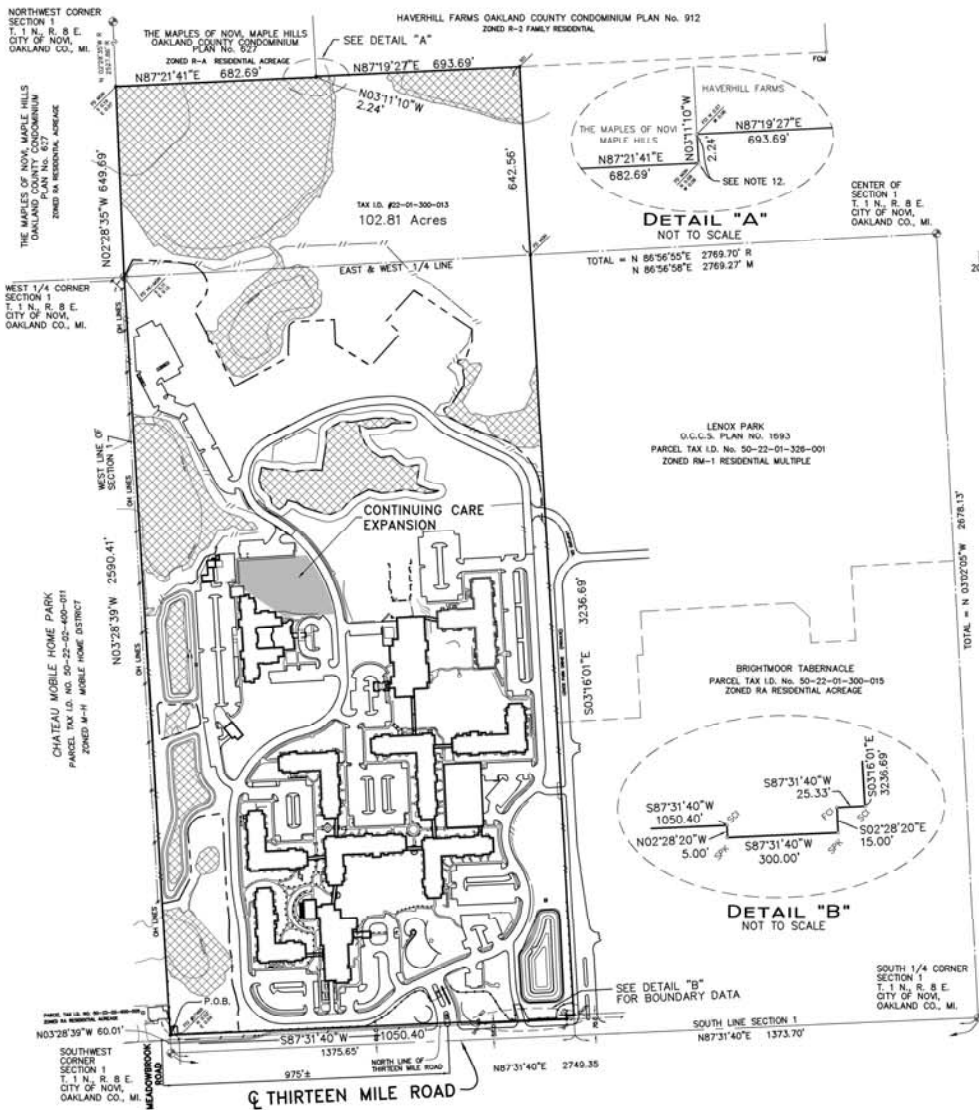
NO.	DATE	REVISION
1	05/25/2018	FOR REVIEW

Project Name  
 FOX RUN CONTINUING CARE EXPANSION  
 Project Number  
 218016.00  
 Date  
 05.25.2018  
 Scale

Drawings  
**COVER SHEET**

**COVER**

PSP REVIEW  
 © Hord Coplan Macht, Inc.



**CONSERVATION EASEMENT  
L. 43442, P. 749**

- LEGEND**
- OH OVERHEAD UTILITY POLE
  - SPK SET TOP SIGNAL
  - SI3 SET CAPPIED IRON
  - FI3 FOUND CAPPIED IRON
  - FD MON FOUND MONUMENT SECOND
  - M MEASURED
  - M.D.E.Q. CONSERVATION EASEMENT RECORDED IN L. 28338, P. 176 AND RE-RECORDED IN L. 36798, P. 499
  - CITY OF NOV CONSERVATION EASEMENT L. 43442, P. 749



**ARCHITECT**  
Hord Coplan Macht, Inc.  
750 E. Platt St. Suite 1100  
Ann Arbor, MI 48106-1211  
(419) 837-7211

**ENGINEER**  
**ZIMEI W. ZIENIAK**  
Professional Engineer No. 12127  
Civil Engineering  
1000 East Main Street, Suite 202  
Ann Arbor, MI 48106  
(419) 266-3333  
www.zimew.com

**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
41000 W. 13 Mile Rd, Novi, MI 48377

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ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN

**LEGAL DESCRIPTIONS**

**PARCEL 1:**  
PART OF THE WEST 1/2 OF SECTION 1, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOV, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT DISTANCE NORTH 03 DEGREES 29 MINUTES 02 SECONDS WEST 80.01 FEET FROM THE SOUTHWEST CORNER, THENCE NORTH 29 DEGREES 29 MINUTES 33 SECONDS WEST 259.93 FEET, THENCE NORTH 02 DEGREES 29 MINUTES 30 SECONDS WEST 629.93 FEET, THENCE NORTH 86 DEGREES 54 MINUTES 53 SECONDS EAST 691.50 FEET, THENCE SOUTH 02 DEGREES 13 MINUTES 40 SECONDS EAST 639.62 FEET, THENCE SOUTH 02 DEGREES 22 MINUTES 24 SECONDS EAST 2998.88 FEET, THENCE SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 697.54 FEET TO THE POINT OF BEGINNING.

**PARCEL 2:**  
THE EAST 123.00 FEET OF THE WEST 280.00 FEET OF THE SOUTH 354.14 FEET OF THE EAST 1/2 OF THE WEST 1/2 OF THE SOUTHWEST QUARTER OF SECTION 1, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOV, OAKLAND COUNTY, MICHIGAN, EXCEPT THE SOUTH 80.00 FEET TAKEN FOR ROAD.

**PARCEL 3:**  
PART OF THE EAST 1/2 OF THE WEST 1/2 OF THE SOUTHWEST QUARTER OF SECTION 1, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOV, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT DISTANT EAST 280.00 FEET FROM SOUTHWEST CORNER THEREOF, THENCE NORTH 354.14 FEET, THENCE EAST 227.00 FEET, THENCE SOUTH 354.14 FEET, THENCE WEST 227.00 FEET TO THE POINT OF BEGINNING, EXCEPT THAT PART IN PARCEL DESCRIBED AS: BEGINNING AT POINT DISTANT SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 1500.00 FEET AND NORTH 02 DEGREES 28 MINUTES 20 SECONDS WEST 85.00 FEET FROM THE SOUTH QUARTER CORNER, THENCE SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 300.00 FEET, THENCE NORTH 02 DEGREES 28 MINUTES 20 SECONDS WEST 5.00 FEET, THENCE SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 100.00 FEET TO THE POINT OF ENDING.

**PARCEL 4:**  
THE EAST 1/2 OF THE WEST 1/2 OF THE SOUTHWEST QUARTER, ALSO THE EAST 1/2 OF THE WEST 1/2 OF THE NORTHWEST QUARTER EXCEPT THE NORTH 80 ACRES, OF SECTION 1, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOV, OAKLAND COUNTY, MICHIGAN, ALSO EXCEPT THE EAST 350.00 FEET OF THE WEST 507.20 FEET OF THE SOUTH 354.14 FEET, ALSO EXCEPT THAT PART TAKEN FOR THE WIDENING OF THIRTEEN MILE ROAD DESCRIBED AS LYING SOUTHERLY OF THE FOLLOWING DESCRIBED LINE: BEGINNING AT A POINT DISTANCE SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 1300.00 FEET AND NORTH 02 DEGREES 28 MINUTES 20 SECONDS WEST 70.00 FEET FROM THE SOUTH QUARTER CORNER, THENCE SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 100.00 FEET, THENCE SOUTH 87 DEGREES 28 MINUTES 20 SECONDS EAST 15.00 FEET, THENCE SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 300.00 FEET, THENCE NORTH 02 DEGREES 28 MINUTES 20 SECONDS WEST 5.00 FEET, THENCE SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 450.00 FEET TO THE POINT OF BEGINNING.

THE COMBINED PARCELS 1, 2, 3 AND 4 ARE MORE PARTICULARLY DESCRIBED AS:  
PART OF THE WEST 1/2 OF SECTION 1, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOV, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT THE SOUTHWEST CORNER OF SECTION 1, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOV, OAKLAND COUNTY, MICHIGAN, THENCE ALONG THE WEST LINE OF SECTION 1, NORTH 03 DEGREES 29 MINUTES 39 SECONDS WEST 2590.40 FEET TO THE WEST QUARTER CORNER OF SECTION 1, TOWN 1 NORTH, RANGE 8 EAST, THENCE ALONG THE WEST LINE OF SECTION 1 AND ALONG THE BOUNDARY OF 'THE MAPLES OF NOV. MAPLE HILLS', OAKLAND COUNTY CONDOMINIUM PLAN NO. 827, NORTH 02 DEGREES 28 MINUTES 35 SECONDS WEST 649.69 FEET, THENCE CONTINUING ALONG THE BOUNDARY OF 'THE MAPLES OF NOV. MAPLE HILLS' THE FOLLOWING TWO (2) COURSES: ONE (1) NORTH 87 DEGREES 21 MINUTES 41 SECONDS EAST 682.69 FEET AND TWO (2) NORTH 03 DEGREES 11 MINUTES 10 SECONDS WEST 2.24 FEET, THENCE ALONG THE SOUTH BOUNDARY OF 'HAVERHILL FARMS', OAKLAND COUNTY CONDOMINIUM PLAN NO. 912, NORTH 87 DEGREES 18 MINUTES 27 SECONDS EAST 693.69 FEET, THENCE SOUTH 03 DEGREES 16 MINUTES 01 SECONDS EAST 3236.69 FEET TO A POINT 70.00 FEET NORTH OF THE SOUTH LINE OF SECTION 1, THENCE ALONG THE NORTH LINE OF THIRTEEN MILE ROAD THE FOLLOWING FIVE (5) COURSES: ONE (1) SOUTH 87 DEGREES 31 MINUTE 40 SECONDS WEST 20.20 FEET, TWO (2) SOUTH 02 DEGREES 28 MINUTES 20 SECONDS EAST 15.00 FEET, THREE (3) SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 300.00 FEET, FOUR (4) NORTH 02 DEGREES 28 MINUTES 20 SECONDS WEST 5.00 FEET AND FIVE (5) SOUTH 87 DEGREES 31 MINUTES 40 SECONDS WEST 1000.40 FEET TO THE POINT OF BEGINNING.

**PARCEL 15:** 25'-01" x 300'-01" STREET ADDRESS: 41100 W. 13 MILE RD., NOV



PROFESSIONAL ENGINEER  
ZIMEI W. ZIENIAK, No. 12127  
MICHIGAN PROFESSIONAL ENGINEER NO. 12127

Project Name: FOX RUN CONTINUING CARE EXPANSION  
Project Number: 218016.00  
Date: 05.25.2018  
Scale:  
Drawing: BOUNDARY SURVEY

**S100**

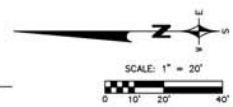
PSP REVIEW

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**TREE INVENTORY for: Fox Run Continuing Care Expansion, 41100 West 13 Mile Road, Novi, Michigan**

Tree Letter	Tree #	S.H.H.	Canopy	Diameter (D.)	Botanical Name	Common Name	Condition	Comments	(N) Not Registered in records
A	1543	19 / 13 / 14	25'	Acer saccharinum	Silver Maple	poor	Half dead or more	N 63	
B	1544	17				dead		N 63	
C	1545	9	10'	Anglica spp.	Walnut	good			
D	1546	10	3'	Prunus serotina	Black Cherry	poor	Half dead or more	N 63	
E	1547	17	15'	Acer saccharinum	Silver Maple	poor	Half dead or more	N 63	
F	1548	9	10'	Thuja pumila	Siberian Elm	good			
G	1549	8	10'	Thuja pumila	Siberian Elm	good			
H	1550	11	10'	Picea abies	Norway Spruce	poor			
I	1551	10 / 7	15'	Acer rubrum	Red Maple	fair	Poor crotch		
J	1552	10	15'	Acer rubrum	Red Maple	good			
K	1553	11				stems		N 63	
L	1554	13	15'	Quercus spp.	Oak (red family)	fair	Dead branch(es)		
M	1555	14	15'	Quercus spp.	Oak (red family)	good			
N	1556	11	15'	Quercus spp.	Oak (red family)	good			
O	1557	11	3'	Prunus serotina	Black Cherry	poor	Half dead or more	N 63	
P	1558	9	3'	Prunus serotina	Black Cherry	poor	1 live branch	N 63	
Q	1559	10	15'	Acer saccharinum	Silver Maple	good			
R	1560	13	15'	Quercus spp.	Oak (red family)	good			
S	1561	13 / 10	15'	Quercus spp.	Oak (red family)	good			
T	1562	9	10'	Thuja spp.	Elm	good			

BENCHMARK  
ARROW ON TRIBUTARY  
ELEVATION: 927.43



**CITY BENCHMARKS:**

ARROW ON HYDRANT  
S. SIDE THIRTEEN MILE RD.  
ACROSS FROM ENTRANCE  
TO FOX RUN  
ELEVATION: 906.92  
U.S.G.C. (NAD 83) DATUM  
  
BENCH NAIL W/TAG  
W. FACE 15" PINE TREE  
1000' E. N. OF THIRTEEN MILE  
20 1/2 W. OF E. PROPERTY LINE  
ELEVATION: 984.59  
U.S.G.C. (NAD 83) DATUM

**EXISTING LEGEND**

- MANHOLE
- CATCH BASIN
- INLET
- CLEANOUT
- END SECTION
- ROOF DRAIN
- GATE VALVE
- HYDRANT
- WATER SHUT-OFF
- UTILITY POLE
- GUY ANCHOR
- LIGHT POLE
- SIGN
- TREE
- TREE LINE
- FENCE
- SANITARY SEWER
- STORM SEWER
- WATER MAIN
- GAS MAIN
- ELECTRIC CABLE
- TELEPHONE/DATA/COMMUNICATIONS
- CABLE TV
- LIGHTING
- CONTOUR MAJOR
- CONTOUR MINOR
- TP TOP OF PAVEMENT
- TC TOP OF CURB
- BC BOTTOM OF CURB
- +100.00 SPOT ELEVATION

**WETLAND NOTE:**

WETLAND BOUNDARIES FLAGGED BY WOODY HELD  
(KING & MCGREGOR ENVIRONMENTAL, INC.,  
JOB NO. 16316 DATED 5/17/2018).

**STRUCTURE TABLE:**

STRUCTURE	BM	PFE (FE)	DIRECTION	GRADE	NOTES
R201A	948.87	30'	SW	939.00	
			NE	939.00	
R206	949.73	12'	NW	940.13	
			E	940.13	
			W	940.13	
R208A	PFE END	12'	SW	947.87	
R208	376.6	12'	N	940.19	PFE @ 3.0% SLOPE PER RECORDS
R229	933.87	12'	E	944.47	
			W	954.20	
			S	954.20	
R228	933.41	12'	SW	933.68	
			N	933.34	
R229C	938.77	12'	NW	940.96	
			NE	933.96	
R229D	935.37	12'	SE	931.19	
R229E	376.6	12'	E	934.65	PFE @ 3.0% SLOPE PER RECORDS
R304	448.71	6'	L	448.40	
			NE	933.36	
			SW	933.36	
R201S	376.6	8'	N	942.80	PFE @ 3.0% SLOPE PER RECORDS

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

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**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
41000 W. 13 Mile Rd., Novi, MI 48377

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INTERIOR DESIGN



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OTHERWISE INDICATED

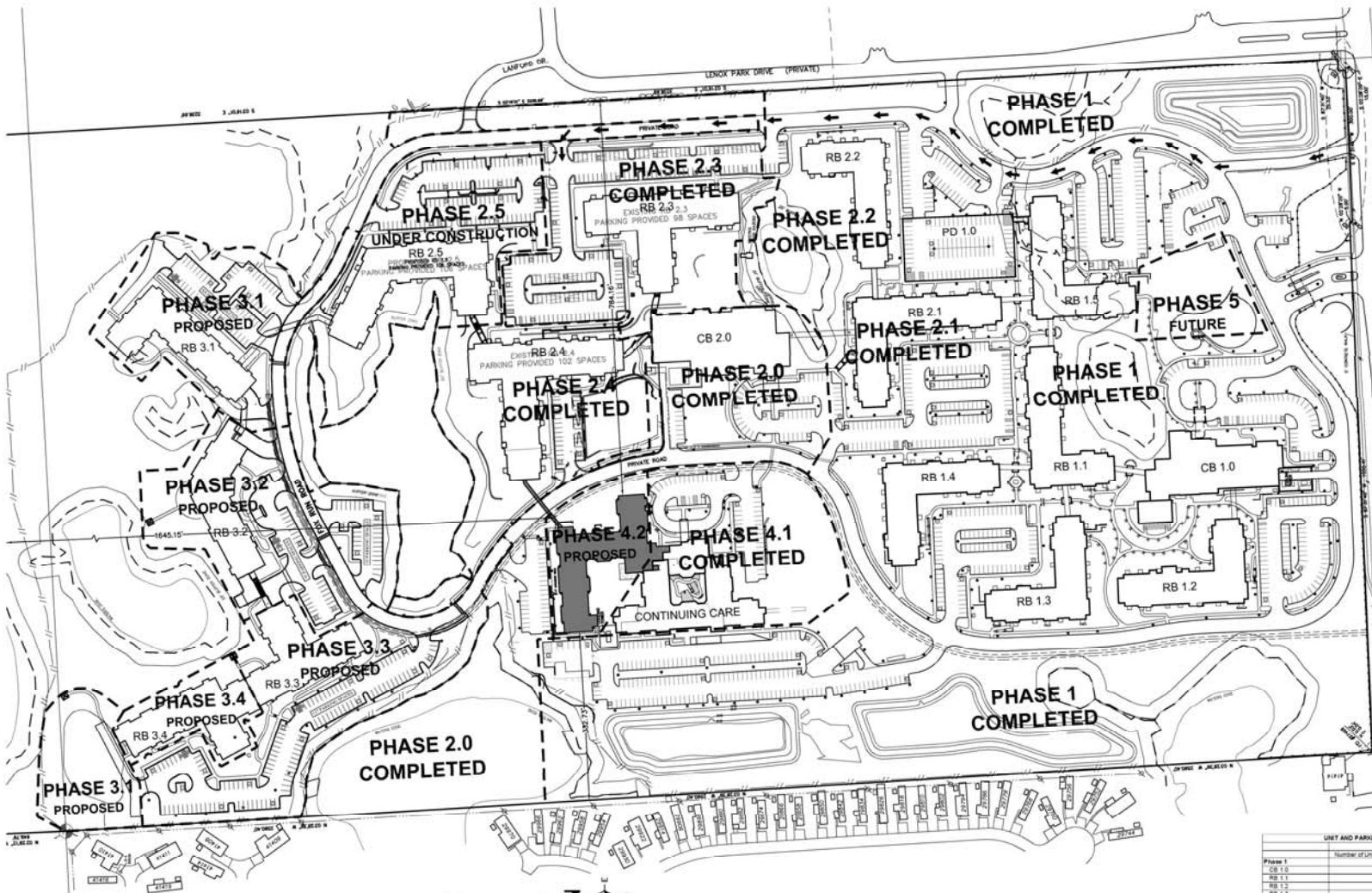
Andrew J. Hays, P.E.

Project Name  
FOX RUN CONTINUING CARE EXPANSION  
Project Number  
218016.00  
Date  
05.25.2018  
Scale

Drawing  
EXISTING CONDITIONS  
SURVEY

**S101**

PSP REVIEW



**DENSITY CALCULATION TABLE**

Unit Type	Number of Rooms	Site Area Req'd per Unit	Number of Units	Net Site Area Req'd
Studio	700	21	700	14,700
One Bedroom	1,400	376	1,400	526,400
One Bedroom + Den	2,100	146	2,100	306,600
Two Bedroom	2,100	719	2,100	1,509,900
Two Bedroom + Den	4	235	4	938,000
<b>Totals</b>			<b>1,497</b>	<b>3,015,600</b>

Asst. Living Unit n/a 1,500 192 288,000  
 Skilled Nursing Unit n/a 1,500 198 297,000  
 390 585,000

Total Site Area Required = 3,015,600 + 585,000 = 3,600,600 SF  
 Total Site Area Available = 3,784,107 SF  
 102.817 Acres - 16.405 Acres Regulated Wetlands over 2 Acres = 86.412 Acres

**PARKING PROVIDED SUMMARY**

	Standard	Barmer Free - Car (Surface)	Barmer Free - Van (Surface)	Standard (Garage)	Barmer Free - Car (Garage)	Barmer Free - Van (Garage)	Total
Phase 1	438	14	4	0	0	0	456
Phase 2	434	11	4	183	0	0	632
Phase 3	197	4	4	0	0	0	205
Phase 4	111	3	2	0	0	0	116
Phase 5	30	0	0	0	0	0	30
Visitor / Employee	252	1	0	0	0	0	253
<b>Total</b>	<b>1462</b>	<b>31</b>	<b>18</b>	<b>183</b>	<b>0</b>	<b>0</b>	<b>1757</b>

**SITE DATA**

	PER ORDINANCE	PROVIDED
MAXIMUM BUILDING HEIGHT	8 STORIES / 80'	7 STORIES / 82'
MAXIMUM BUILDING LENGTH	300'	317'
FRONT YARD SETBACK	50'	150'
SIDE YARD SETBACK	75'	85'
REAR YARD SETBACK	75'	75'
OPEN SPACE AREA	377,600 S.F.	OVER 377,600 S.F.
GROSS GROUND FLOOR AREA*	13.1%	486,061 S.F.
MAXIMUM LOT COVERAGE	25%	726,713 S.F.
PAVEMENT AREA		

\* EXCLUDES PHASE 5 CHAPEL

**UNIT AND PARKING DATA BY PHASE**

Phase	Number of Units	Parking Provided	Parking Required
Phase 1			
CB 1.0	152	339	235
RB 1.1	89	138	79
RB 1.2	89	138	79
RB 1.3	112	161	84
RB 1.4	112	161	83
RB 1.5	143	186	97
<b>Total</b>	<b>587</b>	<b>1,024</b>	<b>655</b>
Phase 2			
AT 0.18 / Unit			
CB 2.0	132	35	35
RB 2.1	132	152	152
RB 2.2	41	41	41
RB 2.3	41	75	75
RB 2.4	137	152	158
RB 2.5	137	152	157
<b>Total</b>	<b>582</b>	<b>668</b>	<b>685</b>
Phase 3			
AT 1.00 / Unit			
RB 3.1	50	50	50
RB 3.2	80	80	80
RB 3.3 (Nursing)	80	80	14
RB 3.4	104	104	104
<b>Total</b>	<b>314</b>	<b>314</b>	<b>348</b>
Phase 4			
AT 0.28 / Unit			
Assisted Living Unit	180	48	66
Skilled Nursing Unit	198	52	52
<b>Total</b>	<b>378</b>	<b>98</b>	<b>118</b>
Phase 5			
Chapel	25	25	25
Visitor/Employee	253	253	253
<b>Grand Total</b>	<b>1867</b>	<b>1994</b>	<b>1761</b>



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 CHINA ARCHITECTURE & DESIGN  
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 DENVER, CO 80202

**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
 41000 W. 13 Mile Rd., Novi, MI 48377

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ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



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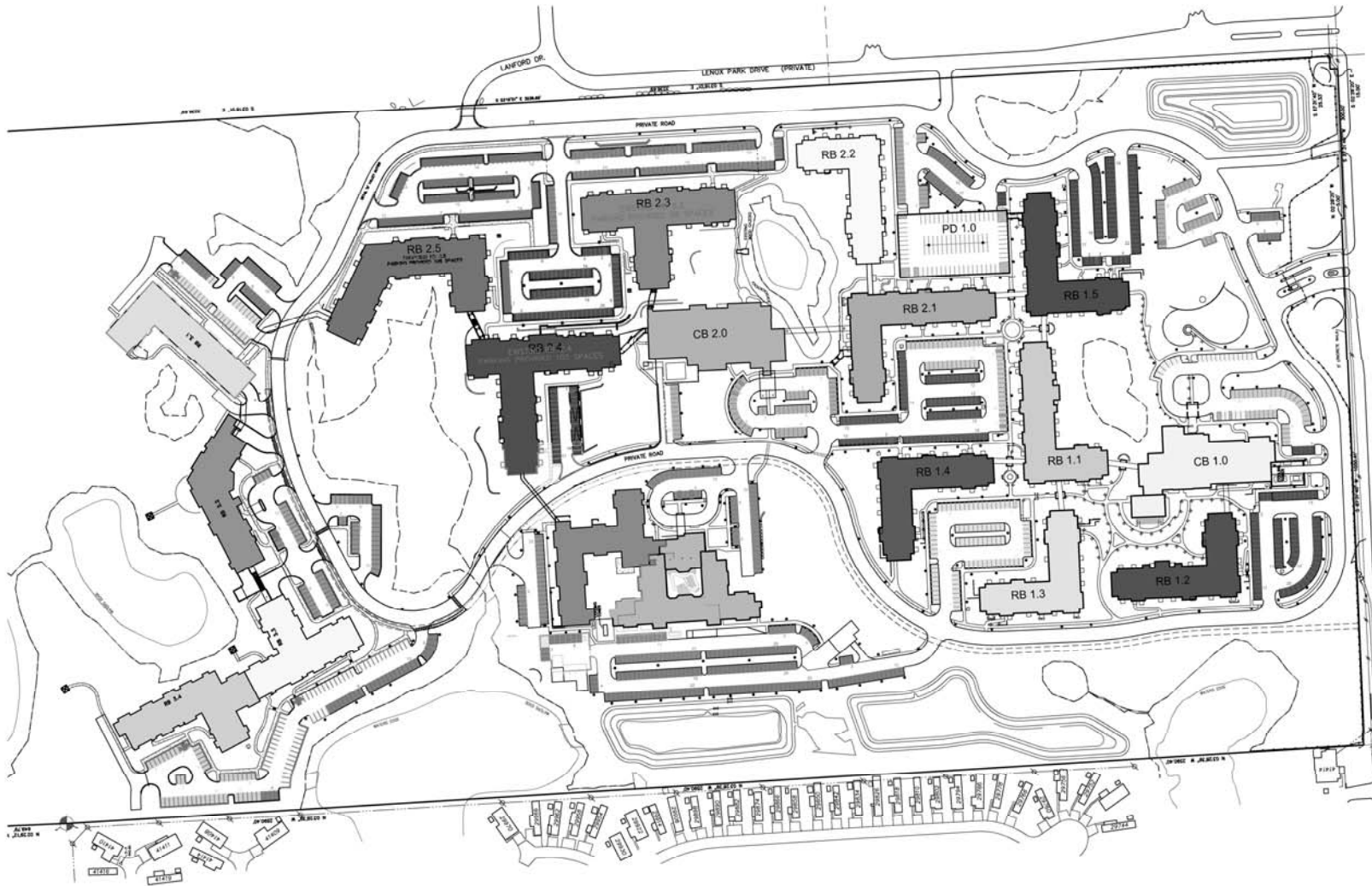
1. SCALE: FOR REVIEW  
 no. date revision

Project Name:  
**FOX RUN CONTINUING CARE EXPANSION**  
 Project Number:  
**219016.00**  
 Date:  
**05.25.2018**

Scale:  
 Drawing:  
**OVERALL SITE PLAN**

**C100**

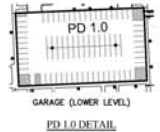
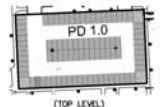
PSP REVIEW



**PARKING TABULATION:**

25	CB 1.0 PARKING LOCATIONS 75 REGULAR STALLS (21 SURFACE) 4 ADA STALLS (4 SURFACE)
79	RB 1.1 PARKING LOCATIONS 73 REGULAR STALLS (73 SURFACE) 6 ADA STALLS (6 SURFACE)
76	RB 1.2 PARKING LOCATIONS 76 REGULAR STALLS (76 SURFACE) 2 ADA STALLS (2 SURFACE)
88	RB 1.3 PARKING LOCATIONS 86 REGULAR STALLS (86 SURFACE) 2 ADA STALLS (2 SURFACE)
93	RB 1.4 PARKING LOCATIONS 91 REGULAR STALLS (91 SURFACE) 2 ADA STALLS (2 SURFACE)
84	RB 1.5 PARKING LOCATIONS 81 REGULAR STALLS (81 SURFACE) 2 ADA STALLS (2 SURFACE)
53	CB 2.0 PARKING LOCATIONS 49 REGULAR STALLS (49 SURFACE) 4 ADA STALLS (4 SURFACE)
105	RB 2.1 PARKING LOCATIONS 103 REGULAR STALLS (103 SURFACE, 0 GARAGE) 0 ADA STALLS (0 SURFACE, 0 GARAGE)
81	RB 2.2 PARKING LOCATIONS 79 REGULAR STALLS (79 SURFACE, 79 GARAGE) 2 ADA STALLS (2 SURFACE, 2 GARAGE)
78	RB 2.3 PARKING LOCATIONS 76 REGULAR STALLS (76 SURFACE, 0 GARAGE) 0 ADA STALLS (0 SURFACE, 0 GARAGE)
108	RB 2.4 PARKING LOCATIONS 101 REGULAR STALLS (101 SURFACE) 7 ADA STALLS (7 SURFACE)
107	RB 2.5 PARKING LOCATIONS 103 REGULAR STALLS (103 SURFACE) 6 ADA STALLS (6 SURFACE)
90	RB 3.1 PARKING LOCATIONS 89 REGULAR STALLS (29 SURFACE, 56 GARAGE) 2 ADA STALLS (2 SURFACE, 0 GARAGE)
80	RB 3.2 PARKING LOCATIONS 78 REGULAR STALLS (48 SURFACE, 30 GARAGE) 2 ADA STALLS (2 SURFACE, 0 GARAGE)
18	VISITOR PARKING LOCATIONS AT RB 3.2 18 REGULAR STALLS (18 SURFACE, 0 GARAGE) 0 ADA STALLS (0 SURFACE, 0 GARAGE)
104	RB 3.3 PARKING LOCATIONS 102 REGULAR STALLS (57 SURFACE, 45 GARAGE) 2 ADA STALLS (2 SURFACE, 0 GARAGE)
96	RB 3.4 PARKING LOCATIONS 94 REGULAR STALLS (59 SURFACE, 48 GARAGE) 2 ADA STALLS (2 SURFACE, 0 GARAGE)
116	CONTINUING CARE PARKING LOCATIONS 111 REGULAR STALLS (111 SURFACE) 5 ADA STALLS (5 SURFACE)
32	CHAPEL PARKING LOCATIONS 30 REGULAR STALLS (30 SURFACE) 2 ADA STALLS (2 SURFACE)
233	EMPLOYEE/EVENT PARKING LOCATIONS 233 REGULAR STALLS (233 SURFACE) 1 ADA STALLS (1 SURFACE)

**SUMMARY:**  
1704 REGULAR STALLS (1442 SURFACE, 262 GARAGE)  
32 ADA STALLS (31 SURFACE, 2 GARAGE)  
1757 STALLS



PD 1.0 DETAIL

**PROJECT SPONSOR:**  
FOX RUN CONTINUING CARE EXPANSION  
NOV, OAKLAND COUNTY, MICHIGAN

**PROJECT ARCHITECT:**  
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P: 734.769.1100 FAX: 734.769.1101  
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**DATE BY:** REVISIONS

NO.	DATE	DESCRIPTION
1	11/11/2011	ISSUED FOR PERMITS
2	11/11/2011	ISSUED FOR PERMITS
3	11/11/2011	ISSUED FOR PERMITS
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98	11/11/2011	ISSUED FOR PERMITS
99	11/11/2011	ISSUED FOR PERMITS
100	11/11/2011	ISSUED FOR PERMITS

**SCALE:** 1" = 100'  
DATE: 11/11/2011  
JOB NO: 18111  
SHEET NO: C100.1





- FULL PAVEMENT MARKING SPECIFICATIONS:**
1. BARRIER-FREE PARKING SPACES AND ASSOCIATED CROSS-HATCHED ACCESS AISLES SHALL BE MARKED IN BLUE.
  2. NON-BARRIER-FREE PARKING SPACES SHALL BE MARKED IN WHITE.
  3. ABUTTING BARRIER-FREE AND NON-BARRIER-PARKING SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
  4. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY (I.E. WHEELCHAIR) SHALL BE MARKED IN WHITE.

- NEW PAVEMENT SPECIFICATIONS:**  
(SEE DETAILS SHEET C107)
- CONCRETE SIDEWALK  
4" FRESH P.C. CONCRETE  
(3000 PSI MIN-28 DAY)  
4" M.D.O.T. CL. 8 SAND BASE
  - TOP EXISTING ASPHALT PAVING  
REPAIR EX. PAVEMENT AND PLACE  
FINAL LIFT OF ASPHALT PAVEMENT WITH  
1.5" M.D.O.T. 36A BIT. ASPHALT TOPPING

**NOTE:**  
ALL DIMENSIONS ARE FROM EDGE OF CURB

**NOTE:**  
SEE STRUCTURAL ENGINEERING PLANS FOR DESIGN OF COLUMNS AND FOOTINGS FOR LINK BETWEEN RB 2.4 AND CCE. NOTE, FOOTINGS TO BRIDGE EXISTING UTILITIES THAT MAY BE IN CONFLICT.

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**FOX RUN CONTINUING CARE EXPANSION**  
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41000 W. 13 Mile Rd., Novi, MI 48377

**hord | coplan | macht**  
ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN

PROFESSIONAL ENGINEER  
STATE OF MICHIGAN  
JULIAN LEE WOODS, JR.  
ENGINEER  
NO. 3079

*Julian J. Woods, Jr.*

PROFESSIONAL CERTIFICATION CODES THAT THESE DOCUMENTS REPRESENT APPROVED AS- SHOWN THAT THE ENGINEER HAS REVIEWED UNDER THE CARE OF THE STATE OF MICHIGAN  
LICENSE NUMBER

NO.	DATE	DESCRIPTION
1	05/25/18	PSP REVIEW

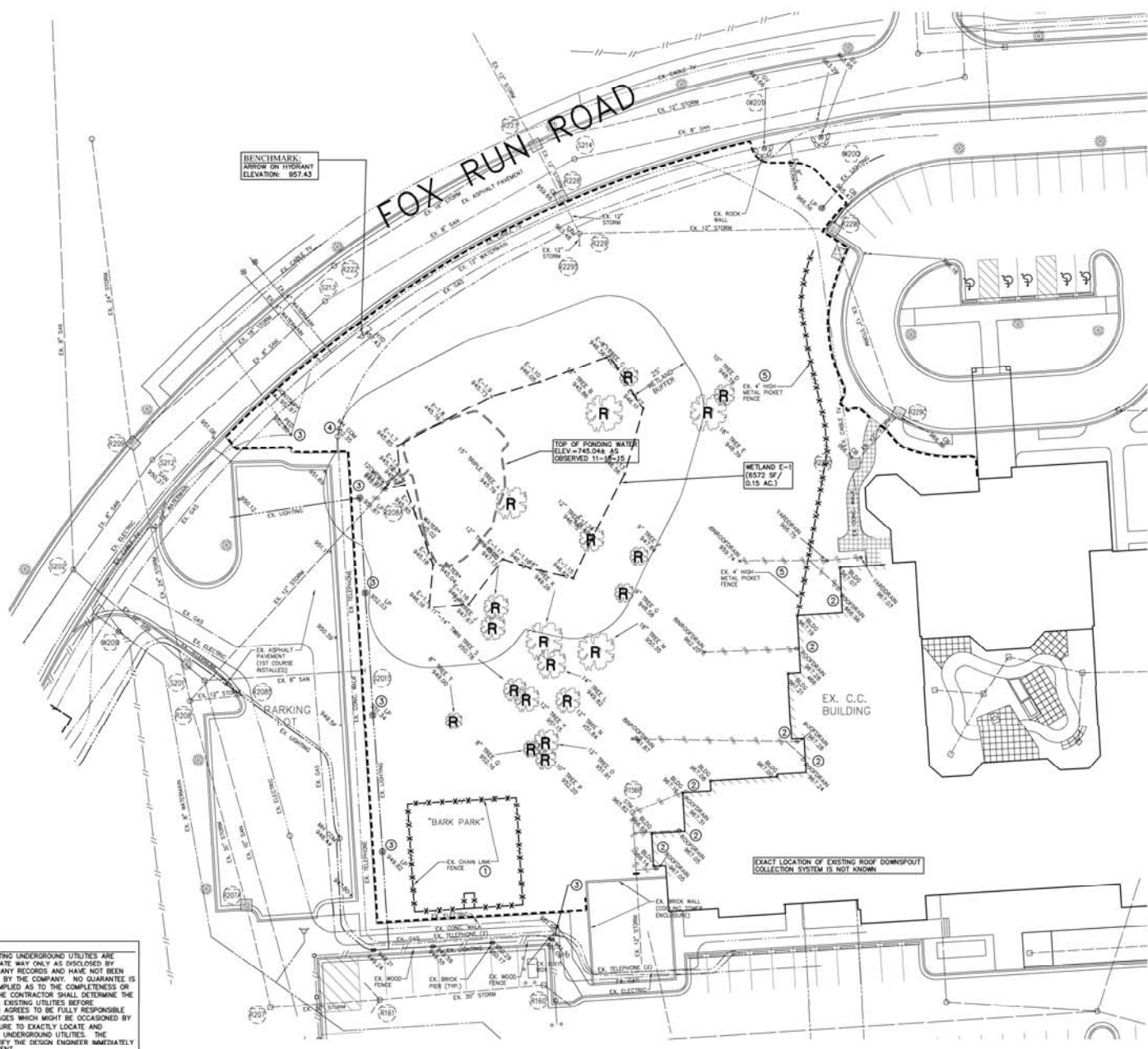
Project Name  
FOX RUN CONTINUING CARE EXPANSION  
Project Number  
218016.00  
Date  
05.25.2018  
Scale

Drawing  
SITE DIMENSION PLAN

**C101**

PSP REVIEW

MISSO SYSTEM, INC.  
THREE FILE  
REVISIONS ONLY  
BEFORE USE ONLY  
4100 W. 13 MILE RD.  
NOVI, MI 48377



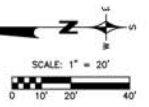
BENCHMARK  
ARROW OF HYDRANT  
ELEVATION: 957.43

TOP OF PONDING WATER  
ELEV = 743.048 AS  
OBSERVED 11-14-15

METLAND E-1  
(6572 SF /  
0.15 AC.)

EXACT LOCATION OF EXISTING ROOF DOWNSPOUT  
COLLECTION SYSTEM IS NOT KNOWN

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



**EXISTING LEGEND**

- MANHOLE
- CATCH BASIN
- ⊕ INLET
- ⊖ CLEANOUT
- ⊖ END SECTION
- ⊖ ROOF DRAIN
- ⊖ GATE VALVE
- ⊖ WATER SHUT-OFF
- ⊖ UTILITY POLE
- ⊖ GUY ANCHOR
- ⊖ LIGHT POLE
- ⊖ SIGN
- ⊖ TREE
- TREE LINE
- FENCE
- SANITARY SEWER
- STORM SEWER
- WATER MAIN
- GAS MAIN
- ELECTRIC CABLE
- TELEPHONE/DATA/COMMUNICATIONS
- CABLE TV
- LIGHTING
- CONTOUR MAJOR
- CONTOUR MINOR
- TP TOP OF PAVEMENT
- TC TOP OF CURB
- BC BOTTOM OF CURB
- SPOT ELEVATION

**SITE PREPARATION LEGEND:**

- ▨ REMOVE EXISTING CONCRETE WALK
- Ⓡ REMOVE EXISTING TREE AND STUMP
- X --- X --- REMOVE EXISTING FENCE
- X --- X --- REMOVE EXISTING UTILITY
- GEOTEXTILE SILT FENCE
- LOW POINT INLET FILTER

**NOTE KEY:**

- ① REMOVE BARR PARK FENCE AND SIGN
- ② REFER TO PLUMBING PLANS FOR RE-CONNECTION OF EXISTING ROOF DOWNSPOUTS TO PERIMETER DRAINAGE SYSTEM
- ③ PROTECT UTILITY STRUCTURE/LIGHT POLES DURING CONSTRUCTION
- ④ ADJUST/REBUILD RIM (NOW) ANY UTILITY STRUCTURE REQUIRING MORE THAN 16-INCHES OF TOTAL ADJUSTMENT (MEASURED FROM THE TOP OF THE CONE TO THE BOTTOM OF CASTING) WILL REQUIRE PRECAST RISERS OR BRICK BENEATH THE CONE AS DEEMED NECESSARY.
- ⑤ REMOVE FENCE AND POSTS

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**FOX RUN CONTINUING CARE EXPANSION**  
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**hord | coplan | macht**

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



*Andrew J. Hays, Jr.*

PROFESSIONAL CERTIFICATION (COVER) THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MICHIGAN.

NO.	DATE	DESCRIPTION
1	05/25/18	FOR REVIEW
2	06/08/18	REVISION

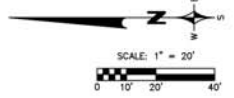
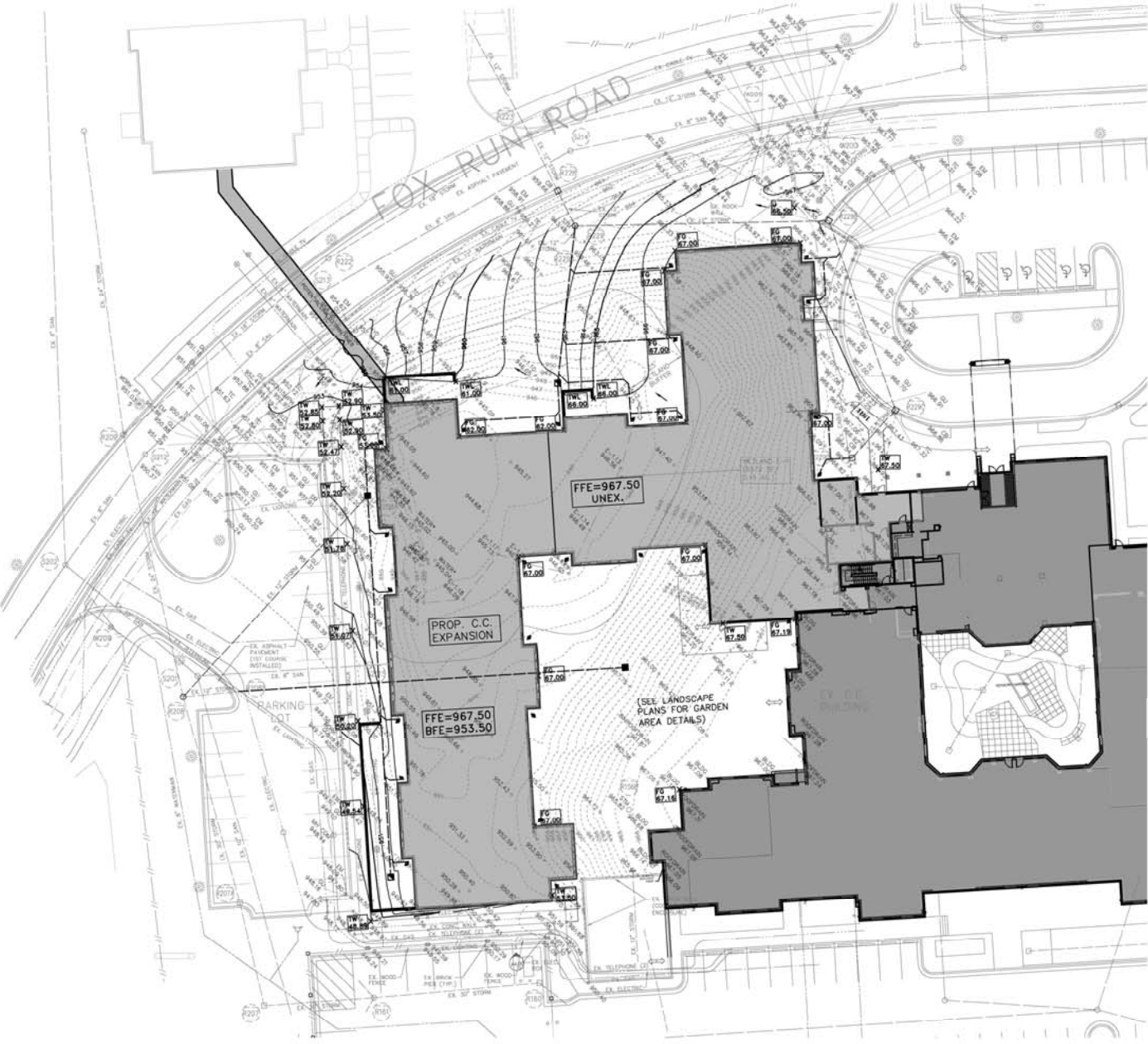
Project Name  
FOX RUN CONTINUING CARE EXPANSION  
Project Number  
218016.00  
Date  
05.25.2018  
Scale

Drawing  
**SITE PREPARATION PLAN**

**C102**

PSP REVIEW





EXISTING	PROPOSED
○ MANHOLE	● MANHOLE
□ CATCH BASIN	■ CATCH BASIN
○ INLET	■ INLET
○ CLEANOUT	■ CLEANOUT
○ END SECTION	■ END SECTION
○ ROOF DRAIN	■ ROOF DRAIN
○ GATE VALVE	■ GATE VALVE
○ HYDRANT	■ HYDRANT
○ WATER SHUT-OFF	■ WATER SHUT-OFF
○ UTILITY POLE	■ UTILITY POLE
○ GUY ANCHOR	■ GUY ANCHOR
○ SIGN	■ SIGN
○ TREE	■ TREE REMOVAL
○ TREE LINE	■ TREE REMOVAL
○ SANITARY SEWER	○ SANITARY SEWER
○ STORM SEWER	○ STORM SEWER
○ WATER MAIN	○ WATER MAIN
○ SANITARY SEWER	○ SANITARY SEWER
○ STORM SEWER	○ STORM SEWER
○ WATER MAIN	○ WATER MAIN
○ ELECTRIC CABLE	○ ELECTRIC CABLE
○ CONTOUR MAJOR	○ CONTOUR MAJOR
○ CONTOUR MINOR	○ CONTOUR MINOR
○ SPOT ELEVATION	○ SPOT ELEVATION
	○ PROPOSED GRADE
	○ TOP OF CURB
	○ TOP OF WALK
	○ TOP OF PAVEMENT
	○ TOP OF BANK
	○ GROUND
	○ DITCH
	○ GUTTER
	○ FINISH GRADE
	○ FINISH FLOOR
	○ BASEMENT FLOOR
	○ BRICK LEDGE
	○ TOP OF WALL
	○ BOTTOM OF WALL

NOTE: ALL PROPOSED GRADES ARE TOP OF PAVEMENT (TP) UNLESS NOTED OTHERWISE.

- GENERAL NOTES:**
- ALL GRADING AND UTILITY CONTRACTORS SHALL MARK AWAY ALL SPOTS.
  - ANY UTILITY STRUCTURE REQUIRING MORE THAN 18-INCHES OF TOTAL ADJUSTMENT (MEASURED FROM THE TOP OF THE CONE TO THE BOTTOM OF CASTING) WILL REQUIRE PRECAST RISERS OR BRICK BENEATH THE CONE AS DEEMED NECESSARY.
  - REFER TO PLUMBING PLANS FOR STAIRWELL AND ROOF DRAIN DETAILS.
  - REFER TO WALL PLANS FOR DETAILS ON BLOCK, ANCHORING, AND HANDRAILS.
  - REFER TO LANDSCAPE PLANS FOR SIDEWALK JOINT DETAILS AND HARDSCAPE DIMENSIONS.
  - IF DETERMINING IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION, A DETERMINING PLAN MUST BE SUBMITTED TO THE CITY'S ENGINEERING DIVISION FOR REVIEW.

**NOTE:**  
IT IS THE DEVELOPER'S RESPONSIBILITY TO GRADE AND STABILIZE DISTURBANCES DUE TO THE INSTALLATION OF PUBLIC UTILITIES.

**NOTE:**  
SEE STRUCTURAL ENGINEERING PLANS FOR DESIGN OF COLUMNS AND FOOTINGS FOR LINK BETWEEN RB 2.4 AND CCE. NOTE, FOOTINGS TO BRIDGE EXISTING UTILITIES THAT MAY BE IN CONFLICT.

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**FOX RUN CONTINUING CARE EXPANSION**  
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ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



*Alan J. Hays, J.*

PROFESSIONAL CERTIFICATION CODES THAT REQUIRE EXAMINATION AND APPROVAL BY THE BOARD OF PROFESSIONAL ENGINEERS UNDER THE CARE OF THE STATE OF MICHIGAN  
LICENSE NUMBER: 30719  
EXPIRES: 2017

NO.	DATE	REVISION
1	05/25/18	FOR REVIEW
2	06/08	REVISION

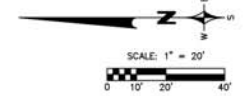
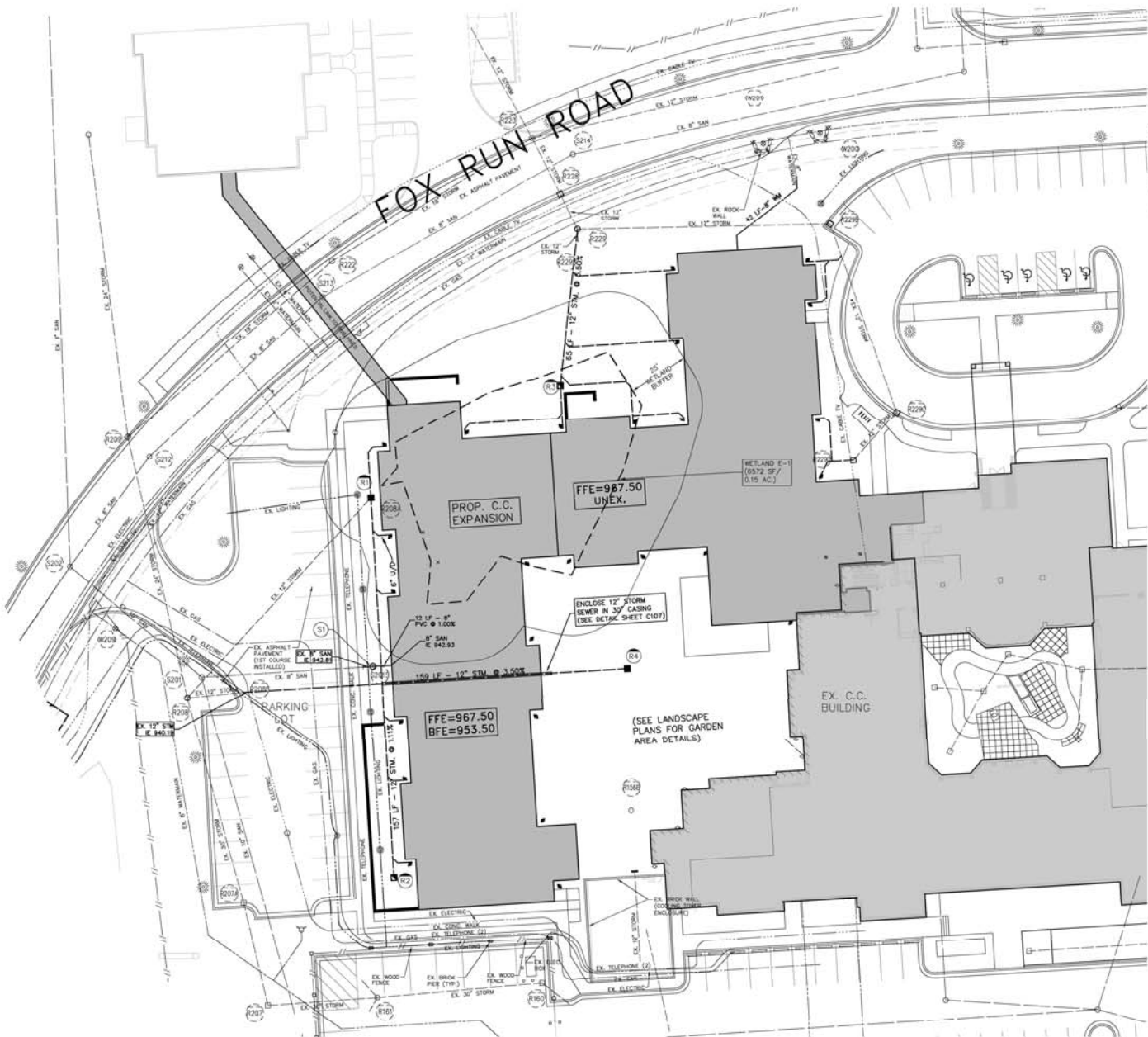
Project Name:  
FOX RUN CONTINUING CARE EXPANSION  
Project Number:  
218016.00  
Date:  
05.25.2018  
Scale:

Drawing:  
SITE GRADING AND DRAINAGE PLAN

**C103**

PSP REVIEW





**SANITARY SEWER DESIGN:**  
 ASSISTED LIVING AND SKILLED NURSING UNITS = 94 UNITS  
 POPULATION UNITS = 94 UNITS X 1 PERSON/UNIT = 94 PEOPLE  
 AVERAGE FLOW = 96 PEOPLE X 100 GPPFD = 9,600 GPD = 0.01 CFS  
 PEAK FACTOR = 4  
 PEAK FLOW = 9,600 GPD X 4 = 38,400 GPD = 0.04 CFS  
 THE CAPACITY OF AN 8-INCH SEWER @ 0.40% SLOPE (MIN.) = 0.70 CFS.

**UTILITY LEGEND**

EXISTING	PROPOSED
○ MANHOLE	● MANHOLE
□ CATCH BASIN	■ CATCH BASIN
○ INLET	○ INLET
○ CLEANOUT	○ CLEANOUT
△ END SECTION	△ END SECTION
△ ROOF DRAIN	△ ROOF DRAIN
⊗ GATE VALVE	⊗ GATE VALVE
⊕ HYDRANT	⊕ HYDRANT
⊕ WATER SHUT-OFF	⊕ WATER SHUT-OFF
⊕ UTILITY POLE	⊕ UTILITY POLE
⊕ GUY ANCHOR	⊕ GUY ANCHOR
⊕ LIGHT POLE	⊕ LIGHT POLE
⊕ SIGN	⊕ SIGN
⊕ TREE	⊕ TREE
— TREE LINE	— TREE LINE
— SANITARY SEWER	— SANITARY SEWER
— STORM SEWER	— STORM SEWER
— WATER MAIN	— WATER MAIN
— GAS MAIN	— GAS MAIN
— ELECTRIC CABLE	— ELECTRIC CABLE

**STORM SEWER TABLE:**

NO.	DESCRIPTION	RM	PIPE	DIRECTION	INVERT	FRAME & COVER
R1	4' OB OVER EXISTING 12" STORM	81	8"	N	849.00	EL940-N W/DOSE GRATE
R2	2' INLET	82	8"	N	847.45	EL940-N W/DOSE GRATE
R3	2' INLET	83	8"	N	838.45	EL940-N W/DOSE GRATE
R4	4' CATCHBASIN	84	12"	N	845.75	EL940-N W/DOSE GRATE

**WATERMAIN QUANTITIES**

8" DUCTILE IRON CLASS 54 PIPE	42 L.F.
CONNECT TO EXISTING STUB	1 EA

**SANITARY SEWER QUANTITIES**

8" PVC TRUSS PIPE	12 L.F.
1" CLEANOUT	1 EA
CONNECT TO EXISTING STUB	1 EA

**STORM SEWER QUANTITIES**

12" C76 CLASS CL4 RC PIPE	576 L.F.
8" ROOF CONDUCTOR PIPING	390 L.F.
30" DUCTILE IRON CASING PIPE	70 L.F.
4' CATCH BASIN	2 EA
4' CATCH BASIN OVER EX. 12" STORM	1 EA
2' INLET	3 EA
CONNECT TO EXISTING STUB	1 EA

**NOTE:**  
 QUANTITIES SHOWN ABOVE ARE FOR PERMIT PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING THE ACTUAL SCOPE OF WORK IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS.

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**FOX RUN CONTINUING CARE EXPANSION**  
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**hord | coplan | macht**

ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



*Alan J. Wozniak, P.E.*

PROFESSIONAL CERTIFICATION COVERED BY THESE DOCUMENTS:  
 ARCHITECTURE: [ ]  
 LANDSCAPE ARCHITECTURE: [ ]  
 PLANNING: [ ]  
 INTERIOR DESIGN: [ ]

DATE: 05.25.2018

SCALE: [ ]

Project Name:  
 FOX RUN CONTINUING CARE EXPANSION

Project Number:  
 218016.00

Date:  
 05.25.2018

Scale:  
 [ ]

**C104**

**SITE UTILITY PLAN**

**PSP REVIEW**



**TEMPORARY MAINTENANCE AND INSPECTION TASKS AND SCHEDULE (DURING CONSTRUCTION)**

Note: The contractor shall maintain a log of all inspection and maintenance activities and shall make the log available to city personnel as needed.

Tasks	Streets	Storm Sewer pipes	Catch Basin Sumps	Catch Basin Inlet Castings	Ditches & Swales	Outflow Control Structures	Rip-Rap	Sediment Basins	Storm Detention Basins	Wetlands	Emergency Overflow	Schedule
Inspect for sediment accumulation		X	X		X	X		X	X			Weekly
Removal of sediment accumulation		X	X		X	X		X	X			As needed and prior to turnover
Inspect for floatables and debris				X	X	X		X	X			Quarterly
Cleaning of floatables and debris				X	X	X		X	X			Quarterly and prior to turnover
Inspection for erosion					X	X			X		X	Weekly
Re-establish permanent vegetation on eroded slopes					X				X		X	As needed and prior to turnover
Replacement of stone (if it cannot be adequately cleaned)						X	X				X	As needed
Clean Streets	X											Daily
Mowing/remove invasive species					X				X			As needed and 0-2 times per year
Inspect storm water system components during wet weather and compare to as-built plans (by professional engineer reporting to condo assoc.)		X	X	X	X	X	X	X	X	X		Prior to turnover
Make adjustments or replacements as determined by annual wet weather inspection		X	X	X	X	X	X	X	X	X	X	Prior to turnover
Keep records of all inspections and maintenance activities and report to facilities manager	X	X	X	X	X	X	X	X	X	X	X	Prior to turnover
Keep records of all costs for inspections, maintenance and repairs report to facilities manager	X	X	X	X	X	X	X	X	X	X	X	Prior to turnover

**PERMANENT MAINTENANCE AND INSPECTION TASKS AND SCHEDULE (POST CONSTRUCTION)**

Note: The owner and/or facilities manager shall maintain a log of all inspection and maintenance activities and shall make the log available to city personnel as needed.

Tasks	Streets	Storm Sewer pipes	Catch Basin Sumps	Catch Basin Inlet Castings	Ditches & Swales	Outflow Control Structures	Rip-Rap	Sediment Basins	Storm Detention Basins	Wetlands	Emergency Overflow	Schedule
Inspect for sediment accumulation		X	X		X	X		X	X			Annually
Removal of sediment accumulation		X	X		X	X		X	X			Every 2 years as needed
Inspect for floatables and debris				X	X	X		X	X			Annually
Cleaning of floatables and debris				X	X	X		X	X			Annually
Inspection for erosion					X	X			X		X	Annually
Re-establish permanent vegetation on eroded slopes					X				X		X	As needed
Replacement of stone (if it cannot be adequately cleaned)						X	X				X	Every 3-5 years as needed
Clean Streets	X											Semi-Annually
Mowing/remove invasive species					X				X			0-2 times per year
Inspect storm water system components during wet weather and compare to as-built plans (by professional engineer reporting to condo assoc.)		X	X	X	X	X	X	X	X	X		Annually
Make adjustments or replacements as determined by annual wet weather inspection		X	X	X	X	X	X	X	X	X	X	As needed
Keep records of all inspections and maintenance activities and report to facilities manager	X	X	X	X	X	X	X	X	X	X	X	Annually
Keep records of all costs for inspections, maintenance and repairs report to facilities manager	X	X	X	X	X	X	X	X	X	X	X	Annually

**SECC NOTES:**

- DURING DRY PERIODS ALL DISTURBED AREAS SHALL BE WATERED FOR DUST CONTROL.
- ALL DIRT AND MUD TRACKED ONTO ROADWAYS SHALL BE REMOVED IMMEDIATELY.
- ALL SOIL EROSION CONTROL MEASURES SHALL CONFORM TO THE LATEST CITY OF NOVI STANDARDS.
- IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL SOIL EROSION CONTROL MEASURES ARE MAINTAINED AND IN PLACE UNTIL SITE IS COMPLETELY STABILIZED.
- COVERED AREA = 1.50 ACRES.
- PARCEL IDENTIFICATION NUMBER: 50-22-01-300-013
- THE ULTIMATE OUTLET FOR THIS PROJECT'S STORM DRAINAGE DISCHARGE IS THE SEEDLY DRAIN.
- UPON COMPLETION OF THE BUILDING CONSTRUCTION, CLEAN STORM SEWERS OF ANY ACCUMULATED SEDIMENT AND DEBRIS.
- NO PERMANENT STOOPING OF MATERIAL IS PERMITTED.
- THIS PLAN DESCRIBES THE MINIMUM EROSION CONTROL MEASURES NEEDED TO PREVENT SILT AND SEDIMENT FROM LEAVING THE SITE. ADDITIONAL SECC MEASURES MAY BE REQUIRED AS CONDITIONS IN THE FIELD WARRANT.
- IF DRAINAGING IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION, A DRAINAGING PLAN MUST BE SUBMITTED TO THE CITY'S ENGINEERING DIVISION FOR REVIEW.
- ALL DRAINAGE DITCHES SHALL BE STABILIZED WITH EROSION CONTROL BLANKET AND SHALL UTILIZE CHECK DAMS AS NECESSARY. DRAINAGE DITCHES STEEPER THAN 3% SHALL BE SLOTTED.

**SEED AND MULCH NOTES:**

- VEGETATION SHALL BE ESTABLISHED WITHIN 5 DAYS OF FINAL GRADE OR WHENEVER DISTURBED AREAS WILL REMAIN UNCHANGED FOR 15 DAYS OR GREATER.
- ALL DISTURBED AREAS WILL BE RESTORED AS FOLLOWS:
  - \*FINE GRADE
  - \*PLACE 3-4" THICKNESS OF CLEAN TOPSOIL
  - \*APPLY SEED (MIXED "ROADSIDE MIX" OR EQUIVALENT) AND FERTILIZER AS FOLLOWS:
  - \*APPLY UNWEATHERED STRAW MULCH AT THE RATE OF 2-3 BALES/1000 SQUARE FEET.
  - \*THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THE GROWTH OF ALL SEEDED AREAS, AND SHALL RE-SEED AS NECESSARY TO ACCOMPLISH THIS, IN ORDER TO PREVENT EROSION.
- DRAINAGE DITCHES STEEPER THAN 3% SHALL BE SLOTTED.
- SLOPES STEEPER THAN 1:3 (33%) SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS.

**PERMIT NOTES:**

- THIS PROJECT SHALL BE CONSTRUCTED IN COMPLIANCE WITH PART 91 OF ACT 451 OF 1994 AS AMENDED. THE SOIL EROSION AND SEDIMENT CONTROL ACT. AN NPDES NOTICE OF COVERAGE SHALL BE OBTAINED FROM THE IDEQ.
- INSTALLATION OF SILT FENCE AND TREE PROTECTION FENCE SHALL NOT OCCUR PRIOR TO THE INITIAL PRE-CONSTRUCTION MEETING WITH THE CITY. WHEN NATURAL FEATURES EXIST ON THE SITE, INSPECTION OF THE STAKING MAY BE REQUIRED PRIOR TO INSTALLATION OF THE FENCE.

**STREET CLEANING SCHEDULE \***

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
SCRAPE STREETS	X	X	X	X	X	X	X
SWEEP STREETS				X			

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

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**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
 41000 W. 13 Mile Rd., Novi, MI 48377

**hord | coplan | macht**  
 ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



*Alan J. Hugo, J.E.*

PROFESSIONAL CERTIFICATION CODES FOR THESE DOCUMENTS: PROJECT NO. 218016.00 DATE 05-25-2018

NO.	DATE	DESCRIPTION

Project Name: FOX RUN CONTINUING CARE EXPANSION  
 Project Number: 218016.00  
 Date: 05.25.2018  
 Scale: \_\_\_\_\_

Drawing: \_\_\_\_\_  
 EROSION CONTROL NOTES

**C105.1**  
 PSP REVIEW



THREE FILED REVISIONS MUST BE MADE BEFORE THE SHEET IS PRINTED FOR CONSTRUCTION.



- EROSION CONTROL LEGEND**
- GEOTEXTILE SILT FENCE AT GRADING LIMITS (PER OCWRD DETAIL SP-2)
  - LOW POINT INLET FILTER (PER OCWRD DETAIL SI-2A)
  - ◊ EXISTING WETLANDS
  - LIMITS OF DISTURBANCE (1.29 AC.)

**CONSTRUCTION AND SOIL EROSION CONTROL SEQUENCE**

1. INSTALL CONSTRUCTION MUD TRACKING MAT AT CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCE AS INDICATED ON PLAN. ADDITIONAL AREAS MAY BE REQUIRED.
  - A. THREE PROTECTION FENCE SHOULD BE INSTALLED AS INDICATED ON PLAN.
  - B. REMOVE BUILD-UP SEDIMENT WHEN IT ACCUMULATES TO 1/2 TO 3/4 THE HEIGHT OF THE SILT FENCE AND AFTER STORM EVENTS.
  - C. IF THE SILT FENCE BECOMES INEFFECTIVE OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED LIFE SPAN AND IS STILL REQUIRED TO BE IN PLACE, THE FABRIC SHALL BE REPLACED IMMEDIATELY.
  - D. INSPECTIONS OF SILT FENCE SHALL BE MADE WEEKLY UNDER NORMAL CONDITIONS, WITHIN 24 HOURS OF ANY MAINTENANCE SHALL BE DONE IMMEDIATELY.
3. CLEAR AND PREPARE SITE FOR MARKING TOPICS, AND REMOVE IT FROM THE SITE.
4. MARK GRADE SITE IMMEDIATELY INSTALL ADDITIONAL SILT FENCE AS SHOWN.
5. INSTALL UNDERGROUND UTILITIES (SANITARY, STORM AND WATERMAIN).
6. INSTALL INLET FILTERS ON ALL PAVEMENT CATCH BASINS PER CURRENT DETAILS.
  - A. INLET FILTERS SHALL BE INSPECTED WEEKLY UNDER NORMAL CONDITIONS, WITHIN 24 HOURS OF RAINFALL AND DAILY DURING PROLONGED RAINFALL.
  - B. REMOVE BUILD-UP SEDIMENT WHEN IT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE SILT FENCE AND AFTER EACH STORM EVENT.
  - C. IF THE FILTER FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO ITS EXPECTED LIFE, REPLACE FABRIC PROMPTLY.
7. ALL CURBSETS MUST CONTAIN GROUDED RSP-RAP IN ACCORDANCE WITH CITY ORDINANCE SPECIFICATIONS.
8. INSTALL REAR YARD CATCH BASIN SILT FENCE FILTER PER DETAIL.
  - A. INSPECTION OF REAR YARD FILTER SHALL BE MADE WEEKLY UNDER NORMAL CONDITIONS, WITHIN 24 HOURS OF A STORM EVENT AND DAILY DURING PROLONGED RAINFALL.
  - B. REMOVE BUILD-UP SEDIMENT WHEN IT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE SILT FENCE AND AFTER EACH STORM EVENT.
  - C. IF THE FILTER FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO ITS EXPECTED LIFE, REPLACE FABRIC PROMPTLY.
9. INSTALL UTILITIES (GAS, ELECTRIC, PHONE, ETC.).
10. INSTALL PAVEMENT COMPLETE, INCLUDING CURB AND GUTTER, REINSTALL ANY PAVEMENT FILTERS THAT WERE DISTURBED DURING INSTALLATION.
11. FINE GRADE SITE, ESTABLISH TEMPORARY VEGETATION AND/OR LANDSCAPE. ALL DISTURBED AREAS NOT BUILT UPON OR PAVED WITHIN 5 DAYS OF FINAL GRADE.
12. REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES AFTER PERMANENT LANDSCAPING IS INSTALLED AND FULL STABILIZATION IS ACHIEVED.

**SOILS NOTE:**

ACCORDING TO THE SOIL SURVEY FOR OAKLAND COUNTY, MICHIGAN ISSUED MARCH, 1982 BY THE U.S.D.A. SUB CONSERVATION SERVICE, THE SOILS FOR THIS SITE ARE CLASSIFIED AS "HARLETT SANDY LOAM" AND "OLINWOOD LOAM." THE GEOTECHNICAL REPORT BY TESTING ENGINEERS & CONSULTANTS, INC. (REPORT 44824-3 DATED JANUARY 25, 2005) SHOULD BE REFERENCED FOR GREATER DETAIL, AS WELL AS PREVIOUSLY PREPARED STUDIES BY OTHERS FOR THE OWNER.

TEMPORARY STABILIZATION MEASURES MUST BE APPLIED WITHIN 5 DAYS IF MATERIAL MUST BE STOCKPILED TEMPORARILY. ALL DISTURBANCES TO THE STOCKPILED AREA SHALL BE MINIMIZED TO THE GREATEST EXTENT POSSIBLE.

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Civil Engineering & Surveying  
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**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
41000 W. 13 Mile Rd., Novi, MI 48377

**hord | coplan | macht**

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



PROFESSIONAL ENGINEER LICENSE NO. 30713

PROJECT NAME	FOX RUN CONTINUING CARE EXPANSION
PROJECT NUMBER	218016.00
DATE	05.25.2018
SCALE	
DRAWING	SITE EROSION CONTROL PLAN
NO.	1
DATE	5/25/18
BY	gdb
REVISION	

**C105**

PSP REVIEW

THREE FILED REVISIONS SHALL BE REQUIRED BEFORE THE DATE OF THE NEXT MEETING WITH THE OWNER.

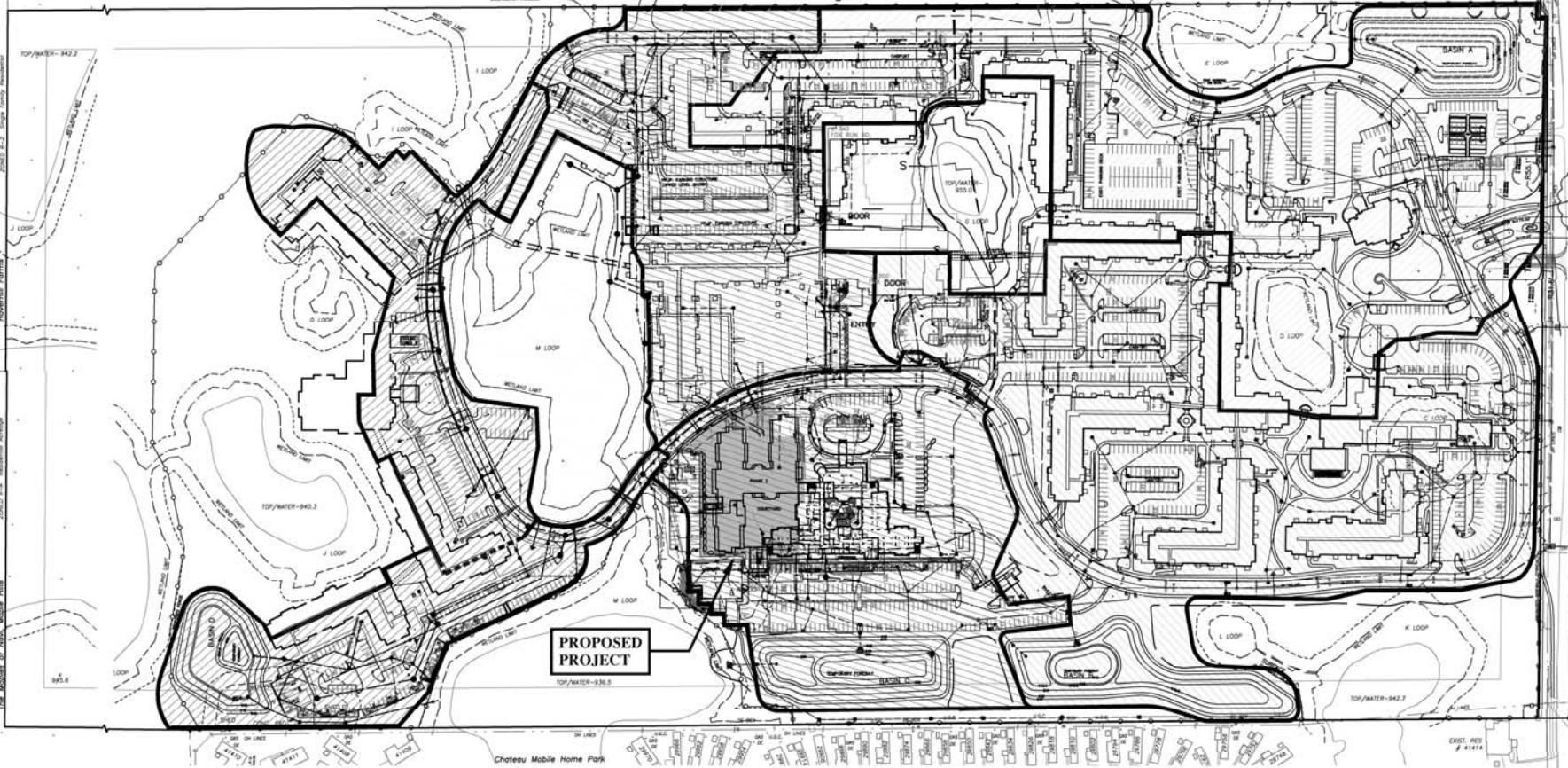
MISSO SYSTEM, INC.  
8000 ARD-1731

Brightmoor Tabernacle  
Permit No. 151 No. 20-22-01-300-210  
ZONING: P-4 Residential Single-Family

PHASE 2  
6.77 AC @ C=0.55



Deland County, Commission No. 207 / Permit No. 151 No. 20-22-01-300-210 / ZONING: P-4 Residential Single-Family / Applicant: Hord Coplan Macht, Inc. / 750 E. Pratt St. Suite 1100 / Baltimore, MD 21202 / P. 410.637.7211 / F. 410.837.6520



PRE-DEVELOPMENT  
STORMWATER MANAGEMENT SUMMARY  
(BASED UPON FIELD MEASUREMENTS PERFORMED ON 5/12/08)

Basin	Drainage District	Area (Ac)	C Factor	CA	100-Yr Design		Restriction Design		
					Req. (cf)	Prop. (cf)	Req. (cfs)	Prop. (cfs)	Prov. (cfs)
A	17.8	0.52	9.256	115,006	126,507	146,556	2.67	2.35	2.39
B	15.7	0.54	8.478	105,941	116,535	133,415	2.36	1.97	2.14
C	15.5	0.55	8.525	106,818	117,500	159,868	4.68	4.05	4.24
D	9.0	0.57	5.130	64,617	71,079	97,750	1.35	0.92	0.92

NOTE:  
THIS IS A DRAINAGE DISTRIBUTION PLAN.  
IT IS FOR REVIEW PURPOSES ONLY. IT  
SHALL NOT BE USED FOR CONSTRUCTION  
OR FIELD WORK.

**DRAINAGE DISTRICT LEGEND**

- DRAINAGE DISTRICT SERVED BY BASIN "A" - 17.8 AC.
- DRAINAGE DISTRICT SERVED BY BASIN "B" - 15.7 AC.
- DRAINAGE DISTRICT SERVED BY BASIN "C" - 15.5 AC.
- DRAINAGE DISTRICT SERVED BY BASIN "D" - 9.0 AC.
- DRAINAGE DISTRICT SERVED BY WETLAND "G" - 3.2 AC.
- DRAINAGE DISTRICT SERVED BY WETLAND "M" - 4.8 AC.

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**FOX RUN CONTINUING CARE EXPANSION**  
ERICKSON LIVING  
41000 W. 13 Mile Rd., Novi, MI 48377

**hord | coplan | macht**  
ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



PROFESSIONAL ENGINEER, LICENSE NO. 38715, STATE OF MICHIGAN  
ALAN J. HAYS  
DATE: 05/25/2018

NO.	DATE	REVISION
1	05/25/18	PSP REVIEW

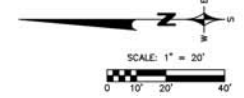
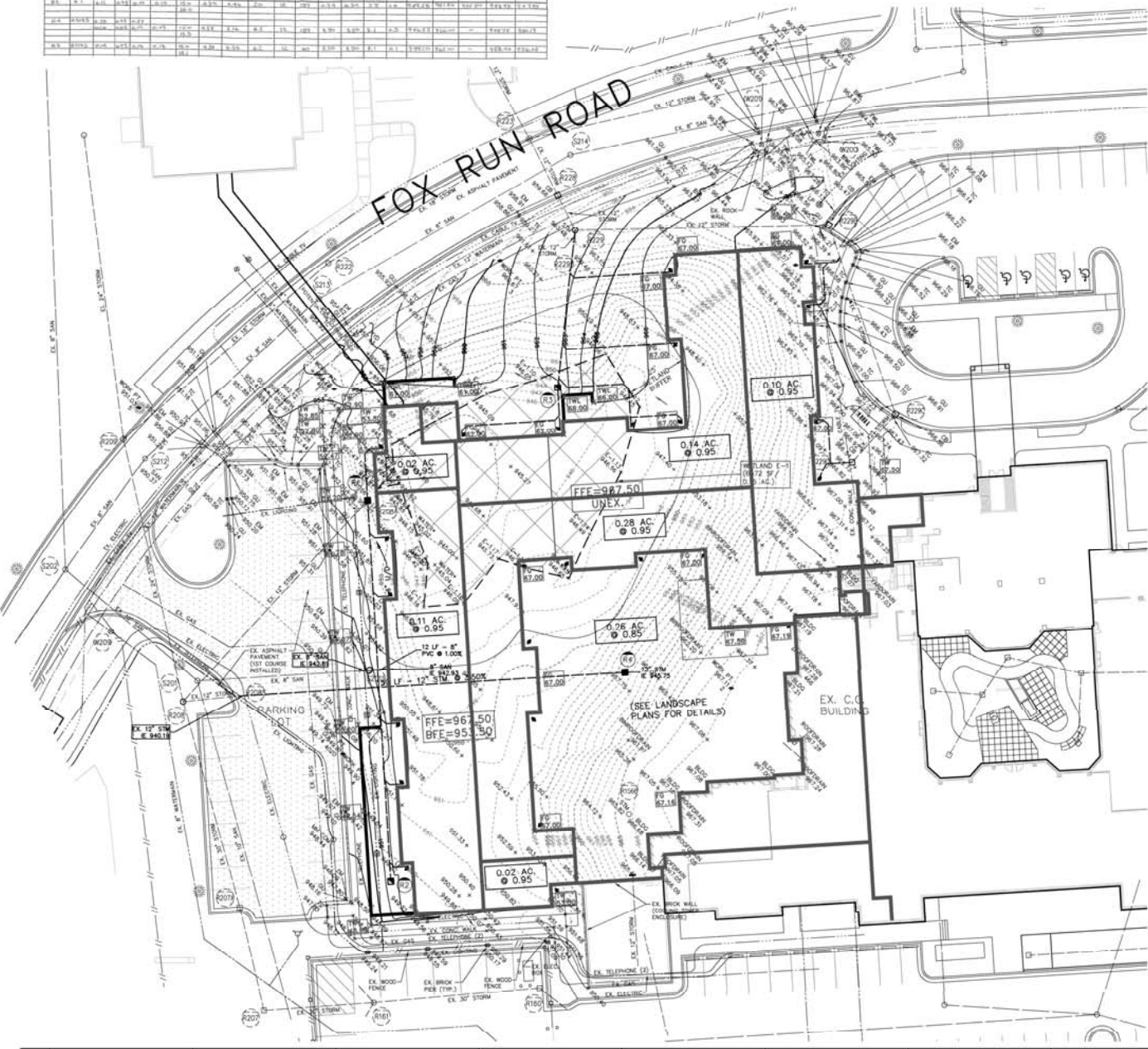
Project Name:  
FOX RUN CONTINUING CARE EXPANSION  
Project Number:  
218016.00  
Date:  
05.25.2018  
Scale:

OVERALL STORM WATER  
MANAGEMENT ANALYSIS

**C106.1**

PSP REVIEW  
© Hord Coplan Macht, Inc.

NO.	DATE	BY	DESCRIPTION
1	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
2	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
3	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
4	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
5	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
6	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
7	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
8	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
9	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
10	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
11	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
12	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
13	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
14	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
15	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
16	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
17	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
18	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
19	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW
20	05/25/2018	[redacted]	ISSUED FOR PERMIT REVIEW



- ### LEGEND
- EXISTING**

  - MANHOLE
  - CATCH BASIN
  - ⊕ INLET
  - ⊙ CLEANOUT
  - ⊖ END SECTION
  - ⊙ ROOF DRAIN
  - ⊙ GATE VALVE
  - ⊙ HYDRANT
  - ⊙ WATER SHUT-OFF
  - ⊙ UTILITY POLE
  - ⊙ GUT ANCHOR
  - ⊙ LIGHT POLE
  - ⊙ SIGN
  - ⊙ TREE
  - TREE LINE
  - SANITARY SEWER
  - STORM SEWER
  - WATER MAIN
  - GAS MAIN
  - ELECTRIC CABLE
  - CONTOUR MAJOR
  - CONTOUR MINOR
  - SPOT ELEVATION

**PROPOSED**

  - MANHOLE
  - CATCH BASIN
  - ⊕ INLET
  - ⊙ CLEANOUT
  - ⊖ END SECTION
  - ⊙ ROOF DRAIN
  - ⊙ GATE VALVE
  - ⊙ HYDRANT
  - ⊙ WATER SHUT-OFF
  - ⊙ TREE REMOVAL
  - SANITARY SEWER
  - STORM SEWER
  - WATER MAIN
  - DITCH
  - CONTOUR MAJOR
  - CONTOUR MINOR
  - PROPOSED GRADE

TC = TOP OF CURB  
 TW = TOP OF WALK  
 TP = TOP OF PAVEMENT  
 TB = TOP OF BANK  
 G = GROUND  
 D = DITCH  
 GJ = GUTTER  
 FG = FINISH GRADE  
 FF = FINISH FLOOR  
 BF = BASEMENT FLOOR  
 BL = BRICK LEDGE  
 TW = TOP OF WALL  
 BW = BOTTOM OF WALL

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**ZIMEI WERNIAK**  
 CHINA REPRESENTATIVE  
 CHINA REPRESENTATIVE  
 CHINA REPRESENTATIVE  
 CHINA REPRESENTATIVE

**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
 41000 W. 13 Mile Rd, Novi, MI 48377

**hord | coplan | macht**

ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



PROFESSIONAL CERTIFICATION CODES HAVE BEEN REVERSED  
 UNLESS INDICATED BY A REVERSE CHECKMARK

NO.	DATE	REVISION
1	05/25/18	FOR REVIEW

Project Name  
**FOX RUN CONTINUING CARE EXPANSION**

Project Number  
**218016.00**

Date  
**05.25.2018**

Scale

Drawing  
**STORM AREA PLAN**

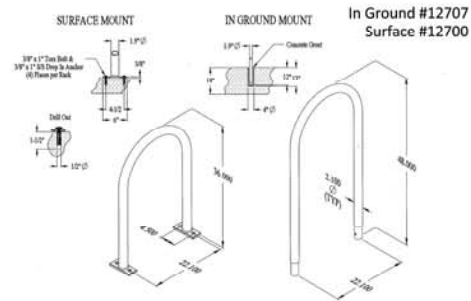
**C106**

**PSP REVIEW**



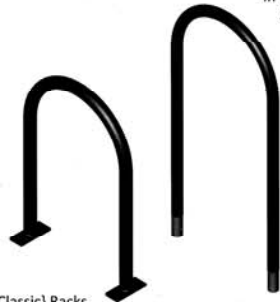
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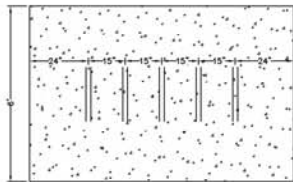
Plastisol (Classic) Racks  
Surface Mount / In Ground Mount (Dims)

CycleSafe  
www.cycleSAFE.com



Plastisol (Classic) Racks  
Surface Mount / In Ground Mount

CycleSafe  
www.cycleSAFE.com



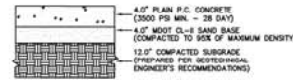
BICYCLE PARKING LAYOUT DETAIL  
NOT TO SCALE

**NEW PAVEMENT CONSTRUCTION NOTES:**

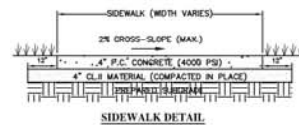
- IN GENERAL, ALL EARTHWORK AND PAVEMENT CONSTRUCTION SHOULD BE PERFORMED IN ACCORDANCE WITH THE CURRENT MOST STANDARD SPECIFICATIONS FOR CONSTRUCTION UNLESS OTHERWISE NOTED IN THE FOLLOWING ITEMS.
- CONSTRUCTION SHOULD TAKE PLACE DURING THE COOLER MONTHS OF JUNE THROUGH SEPTEMBER. DRIER WEATHER CONDITIONS ARE PREFERRED TO ALLOW FOR MORE EFFICIENT PREPARATION OF THE SUBGRADE SOILS AND INSTALLATION OF THE PAVEMENT LAYERS.
- REMOVE THE EXISTING PAVEMENT STRUCTURE, EXISTING TOPSOIL, ORGANIC SOILS, UNSUITABLE FILL, VEGETATION, TREES AND OTHER DELETERIOUS MATERIALS TO EXPOSE THE SUBGRADE SOIL. TREE ROOTS SHOULD BE COMPLETELY REMOVED. EXISTING STRUCTURES SHOULD BE REMOVED AND REPLACED WITH ENGINEERED FILL A MINIMUM OF 3 FEET BELOW THE PROPOSED PAVEMENT LAYER TO PROVIDE A UNIFORM SUBGRADE.
- LOCATE TO THE DEPTH OF THE FINAL SUBGRADE ELEVATION TO ALLOW FOR GRADE CHANGES AND THE PLACEMENT OF THE RECOMMENDED PAVEMENT SYSTEM.
- PERFORM TEST PITS AS DIRECTED BY THE OWNER'S REPRESENTATIVE ALONG THE NORTH SLOPE OF THE DETENTION BASIN TO DELINEATE PEAT SOILS, UNDERGUT AND BANCKILL. ENCASED PEAT SOILS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- THE TOP 12 INCHES OF THE EXPOSED SUBGRADE AS WELL AS INDIVIDUAL FILL LAYERS SHOULD BE COMPACTED TO ACHIEVE A MINIMUM OF 95 PERCENT OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY. MANIPULATE THE MOISTURE CONTENT TO WITHIN 2 PERCENTAGE POINTS OF THE OPTIMUM MOISTURE.
- THE FINAL SUBGRADE SHOULD BE THOROUGHLY PROFFERED USING A LOADED TANDEN AXLE TRUCK UNDER THE OBSERVATION OF THE GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CAN NOT BE MECHANICALLY STABILIZED SHOULD BE REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DIRECTED BY THE FILED CONDITIONS.
- THE AGRIGRASS BASE SHOULD BE COMPACTED TO ACHIEVE A MINIMUM OF 95 PERCENT OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY. THE BASE AND SUBGRADE COMPACTOR SHOULD EXTEND A MINIMUM OF 12 INCHES BEYOND THE PAVED EDGE OF BACK OF CURB.
- FINAL PAVEMENT ELEVATIONS SHOULD PROVIDE POSITIVE SURFACE DRAINAGE.
- UNDER DRAINS SHALL BE INSTALLED AT THE CATCH BASIN.

**TRAFFIC CONTROL AND BARRICADING NOTES:**

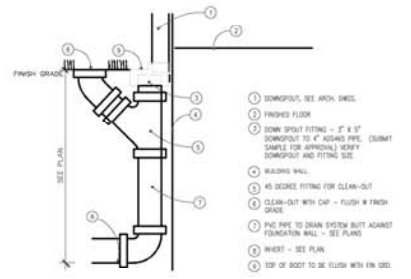
SUBCONTRACTOR TO INSTALL AND MAINTAIN ALL TEMPORARY ROAD CLOSURE, TRAFFIC CONTROL, AND PEDESTRIAN ACCESS STORAGE AND BARRICADES IN ACCORDANCE WITH CURRENT M.M.U.T.C.D. STANDARDS.



DETAIL  
NEW CONCRETE WALK

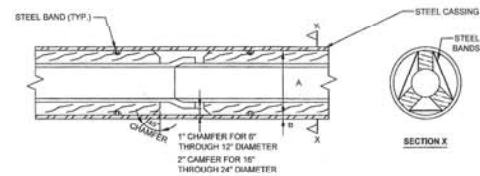


SIDEWALK DETAIL



DOWNSPOUT CONNECTOR  
NOT TO SCALE

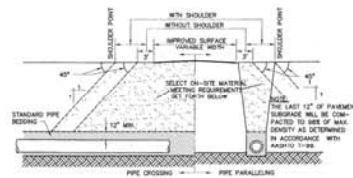
- DOWNSPOUT, SEE ARCH. SPEC.
- FINISHED FLOOR
- DOWN SPOUT FITTING - 2" x 2" DOWNSPOUT TO 4" SIZED PIPE (SUBMIT SAMPLE FOR APPROVAL) VERIFY DOWNSPOUT AND FITTING SIZE.
- WADING WALL
- 45 DEGREE FITTING FOR CLEAN-OUT
- CLEAN-OUT WITH CAP - FLOWS IN TROUGH GRADE
- PIPE PIPE TO DRAIN SYSTEM BUILT AGAINST FOUNDATION WALL - SEE PLAN
- INSET - SEE PLAN
- TOP OF FOOT TO BE FINISH WITH FIN. SOL.



DIA OF SANITARY SEWER (IN)	DIA OF WATER MAIN (IN)	MIN "A" (IN)	ROAD CROSSING MIN "B" (IN)	RAILROAD CROSSING MIN "B" (IN)
8	12	16	0.375	0.375
10	16	24	0.375	0.500
12 - 15	20	30	0.375	0.500
18	24	36	0.375	0.500

- NOTES:
- WRITE OAK SKIDS BANDED TO MAN SKIDS WILL BE NOTCHED TO PREVENT WIRE FROM RIDING AGAINST CASING PIPE.
  - NO WATER SHALL BE USED IN BORING UNDER RAILROADS.
  - MAINTAIN A MINIMUM OF 5'-6" OF COVER BETWEEN BASE OF RAIL AND TOP OF CASING.
  - THE ENDS OF THE CASING SHALL BE RELATIVELY PROTECTED AGAINST THE ENTRANCE OF FOREIGN MATERIAL AND SEALED WITH NON-SHRINKING GROUT.
  - BORING SHALL EXTEND A MINIMUM OF 10 FEET OUTSIDE THE EDGES OF THE PAVEMENT.
  - SKIDS ARE REQUIRED TO EXTEND THE FULL LENGTH OF THE CASING.
  - CASING PIPE SHALL BE WELDED STEEL PIPE A S.T.M. A-292 GR 2 UNLESS OTHERWISE SPECIFIED.

**CASING SECTION**



BACKFILLING IN THE AREAS OF STREETS, ALLEYS, SIDEWALKS, DRIVES & PARKING AREA

**(ON-SITE APPLICATIONS ONLY)**

DRINKING WATER, UNLESS OTHERWISE SPECIFIED, TO A LEVEL OF ONE FOOT ABOVE THE TOP OF PIPE OR CASING. SHALL BE CLASSIFIED BY MATERIALS TREATMENT OR DAMAGED. THE REMAINDER OF THE FRENCH SHALL BE BACKFILLED WITH NATURAL SAND, FREE FROM ROCK LARGER THAN TWO INCHES. FROZEN MATERIAL, LAYERS OF EARTH SHALL BE CLEARLY LARGER THAN TWO INCHES. BROKEN CONCRETE, SOILS, LOGS, CHAINS OF WOOD OR OTHER UNSUITABLE MATERIAL, AS DIRECTED IN THE SPECIFICATIONS OR ON THE APPROVED DRAWINGS. THE CLAY SHOULD BE PLASTERED TO A MAXIMUM SIZE OF TWO INCHES.

MISSOURI SYSTEM INC.  
1899-2021-1731

THREE FILL  
REWORKS  
BEFORE WE  
CLOSE THE  
PROJECT

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ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



John J. Hays, Jr.

PROFESSIONAL CERTIFICATION CODES THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME AND THAT I AM A LICENSED REGISTERED ENGINEER UNDER THE STATE OF MICHIGAN. OTHER NAMES: EXPERIENCES:


1. SCALE: PDP RELVIEW  
NO. DATE REVISION

Project Name  
FOX RUN CONTINUING CARE EXPANSION

Project Number  
218016.00

Date  
05.25.2018

Scale

Drawing  
CONSTRUCTION NOTES & DETAILS

C107

PSP REVIEW

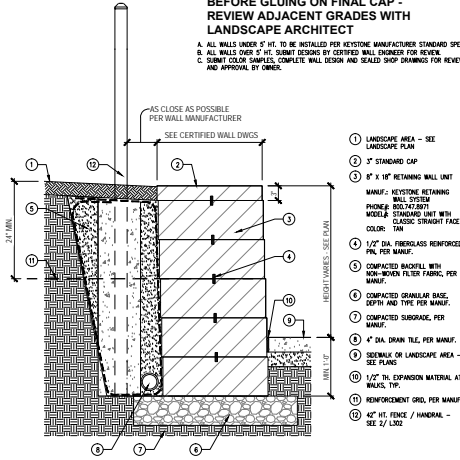




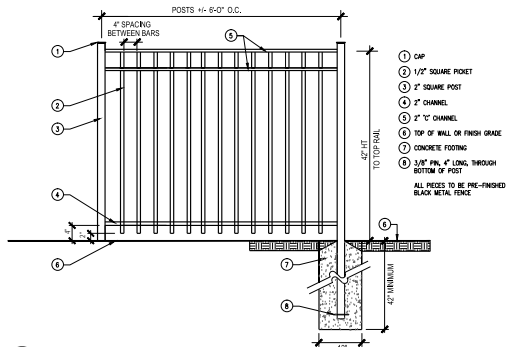


**NOTE:**  
BEFORE GLUING ON FINAL CAP -  
REVIEW ADJACENT GRADES WITH  
LANDSCAPE ARCHITECT

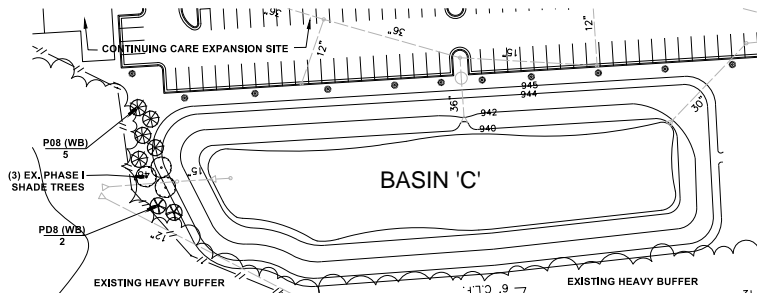
- A. ALL WALLS UNDER 2' HT. TO BE INSTALLED PER KEYSTONE MANUFACTURER STANDARD SPECS.  
B. ALL WALLS OVER 2' HT. MUST BE DESIGNED BY CERTIFIED WALL ENGINEER FOR REVIEW.  
C. STAINI COLOR SAMPLES, COMPLETE WALL DESIGN AND SCALED SHOP DRAWINGS FOR REVIEW AND APPROVAL BY OWNER.



1 KEYSTONE RETAINING WALL - SCHEMATIC  
NOT TO SCALE



2 42" FENCE / HANDRAIL DETAIL  
NOT TO SCALE



3 WEST PROPERTY BUFFER  
SCALE 1" = 40'

**CONTINUING CARE EXPANSION PLANT LISTS**

**PLANT LIST - STREET TREES (S)**

QUAN.	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.
8	AB3	Autumn Blaze Maple <i>Acer x. freemanii 'Autumn Blaze'</i>	3" Cal.	B&B

**INTERIOR ROADWAY STREET TREES**

1 TREE PER 35 L.F.  
ROADWAY = 254 L.F./35 = 8 TREES REQUIRED

8 REQUIRED  
8 PROVIDED

**COSTS - (S) STREET TREES**

\$3,200 = 8 SHADE TREES X \$400 EACH  
\$3,200 = TOTAL

**PARKING AREA TREES (P)**

0 REQUIRED  
0 PROVIDED - EXISTING PARKING LOT

**PARKING LOT PERIMETER TREES (PER)**

0 REQUIRED  
0 PROVIDED - EXISTING PARKING LOT

**PLANT LIST - WEST BUFFER (WB)**

QUAN.	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.
2	PDB	Black Hills Spruce <i>Picea g. 'Densata'</i>	8' HL	B&B
5	POB	Serbian Spruce <i>Picea omorika</i>	8' HL	B&B

**WEST BUFFER TREES (WB)**

FILL IN OPEN AREAS IN BUFFER - SEE DETAIL 3' L302 THIS PAGE

7 PROVIDED

**COSTS - (WB) WEST BUFFER TREES**

\$2,275 = 7 EVERGREEN TREES X \$325 EACH  
\$2,275 = TOTAL

**PLANT LIST - MULTI-FAMILY (M)**

QUAN.	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.
2	ALB	Serviceberry <i>Amelanchier laevis</i>	8' HT.	B&B
1	LTF3	Columnar Tulip Tree <i>Liriodendron tulipifera 'Fastigiatum'</i>	3" Cal.	B&B
10	POB	Serbian Spruce <i>Picea omorika</i>	8 HT.	B&B
279	BW24	Green Velvet Boxwood <i>Buxus m. 'Green Velvet'</i>	24" HT.	Cont.
28	FIG	Forsythia 'Gold Tide' <i>Forsythia x. 'Courtasol'</i>	36" HT.	Cont.
69	RA24	Gro-low Fragrant Sumac <i>Rhus aromatica 'Gro-low'</i>	24" HT.	Cont.
86	RAL	Alpine Currant <i>Ribes alpinum</i>	36" HT.	B&B

**MULTI-FAMILY DWELLING UNIT**

3 TREES PER FIRST FLOOR UNIT  
FIRST FLOOR UNITS = 29 X 3 = 87 TREES REQUIRED

87 REQUIRED  
55 PROVIDED

1 SHADE TREE  
8 (10) EVERGREEN TREES  
46 (462) SHRUBS = 10 SHRUBS = 1 SHADE TREE

**COSTS - (M) MULTI-FAMILY**

\$400 = 1 SHADE TREES X \$400 EACH  
\$2,600 = 8 EVERGREEN TREES X \$325 EACH  
\$23,100 = 462 SHRUBS X \$50 EACH  
\$11,500 = 2,300 5Y 500 X \$5/5Y  
\$875 = 25 CY MULCH X \$35/CY  
\$38,475 = TOTAL

**WOODLAND REPLACEMENT TREES**

SEE TREE REPLACEMENT CHART SHEET L201

20 REQUIRED  
0 PROVIDED

**COSTS - (W) WOODLAND**

\$8,000 = 20 SHADE TREES X \$400 EACH  
\$8,000 = TOTAL

\$8,000 WILL BE DONATED TO NOMI TREE FUND

**PROJECT SUMMARY**

PARKING AREA TREES (P):	\$ 0
PARKING PERIMETER TREES (PER):	\$ 0
STREET TREES (S):	\$ 3,200
MULTI-FAMILY DWELLING UNIT (M):	\$38,475
WOODLAND REPLACEMENT (W):	\$ 0
WEST BUFFER TREES (WB):	\$ 2,275
TREE FUND CONTRIBUTION	\$ 8,000
<b>\$51,950 TOTAL</b>	

NOTE: CONTRACTOR TO VERIFY ALL QUANTITIES AND SUBMIT BID USING "PROPOSAL FORM" IN SPECS

BIDS WILL NOT BE CONSIDERED IF NOT ON THE PROVIDED PROPOSAL FORM

FOX RUN CONTINUING CARE EXPANSION  
ERICKSON LIVING  
41000 W. 13 Mile Rd., Novi, MI 48377

**hord | coplan | macht**

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



PROFESSIONAL CERTIFICATION LICENSEE THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME AND THAT I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NUMBER 1937

no. date revision

Project Name  
FOX RUN CONTINUING CARE EXPANSION

Project Number  
218016.00

Date  
05.25.2018 SPA SUBMITTAL

Scale

Drawing

Plant List



248.477.3848 TEL  
800.837.6230 FAX  
2000 BUCKINGHAM LANE, FARMINGTON HILLS, MI 48334

**L302**

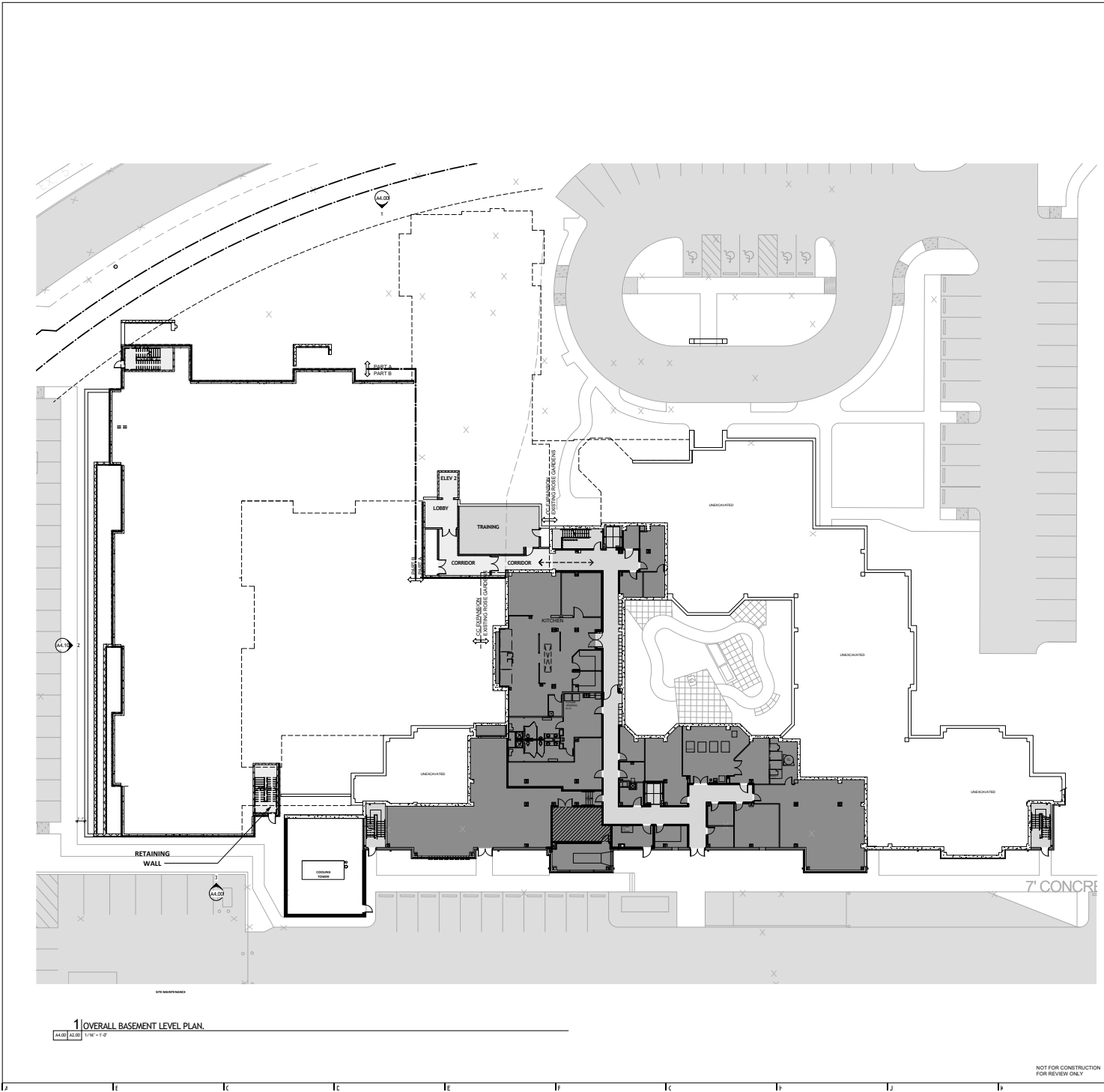






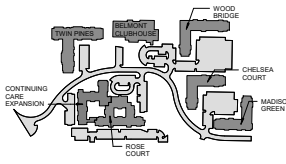


**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
 41000 W. 13 Mile Rd., Novi, MI 48377



**COLOR LEGEND**

- [Light Gray Box] UNITS CONTINUING CARE EXPANSION
- [Medium Gray Box] DINING CONTINUING CARE EXPANSION
- [Light Gray Box] COMMON AREAS CONTINUING CARE EXPANSION
- [Light Gray Box] ROOF TOP GARDEN CONTINUING CARE EXPANSION
- [Light Gray Box] CIRCULATION CONTINUING CARE EXPANSION
- [Dark Gray Box] STAFFSERVICE CONTINUING CARE EXPANSION
- [Dark Gray Box] UNITS ROSE GARDEN
- [Light Gray Box] CIRCULATION ROSE GARDEN



**KEY PLAN - OVERALL**  
 1" = 300'-0"



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**1** OVERALL BASEMENT LEVEL PLAN  
 1/8"=1'-0"

ARCHITECT  
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 p. 248. 437. 5099 f. 248. 437. 6222

LANDSCAPE  
**KWLA**  
 33223 Boonshove Lane Farmington Hills, MI 48334  
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**FOX RUN CONTINUING CARE EXPANSION**  
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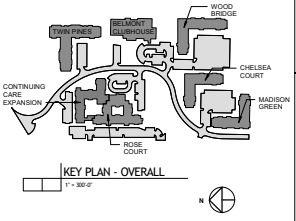
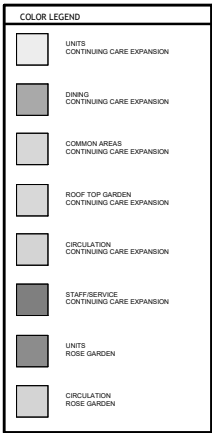
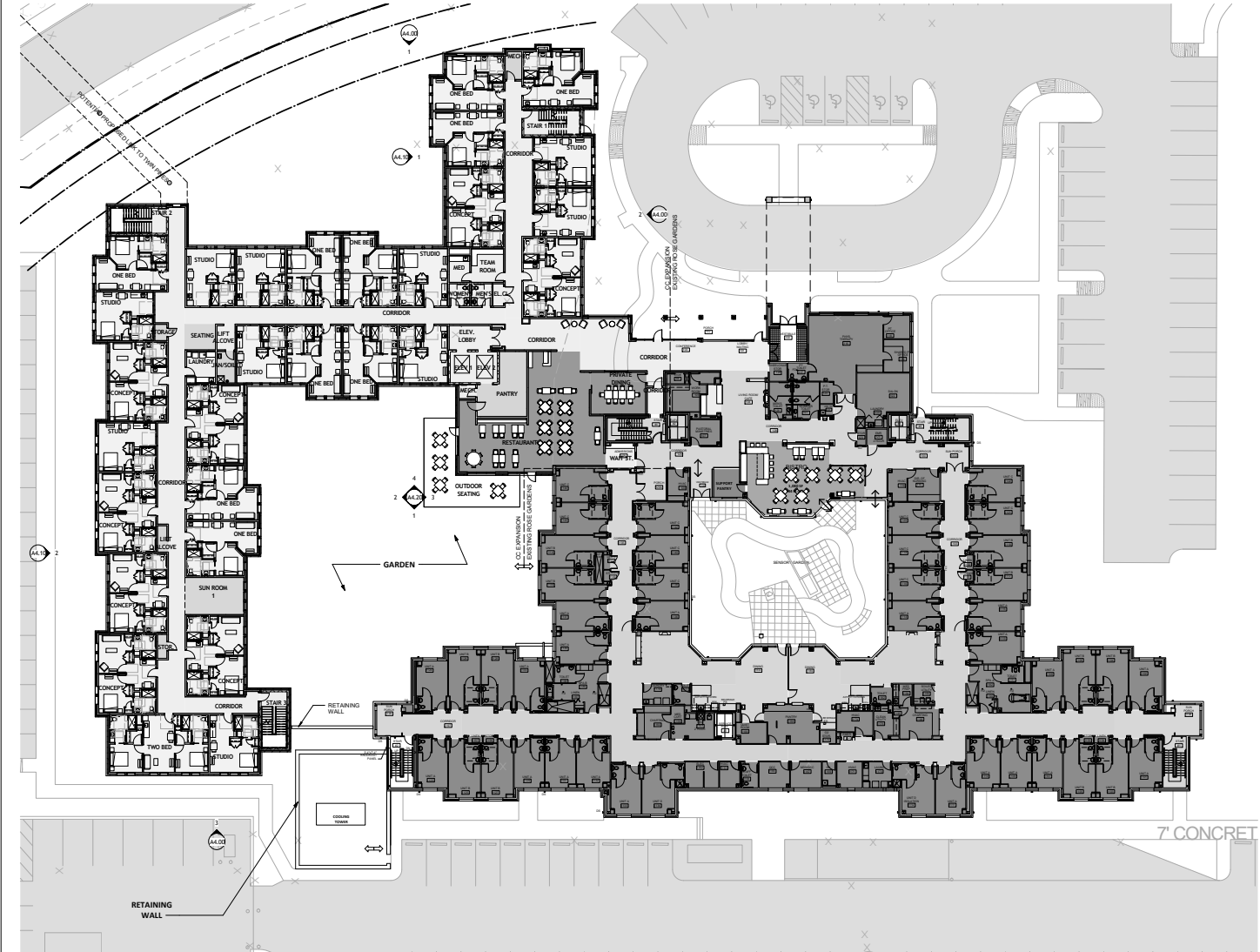


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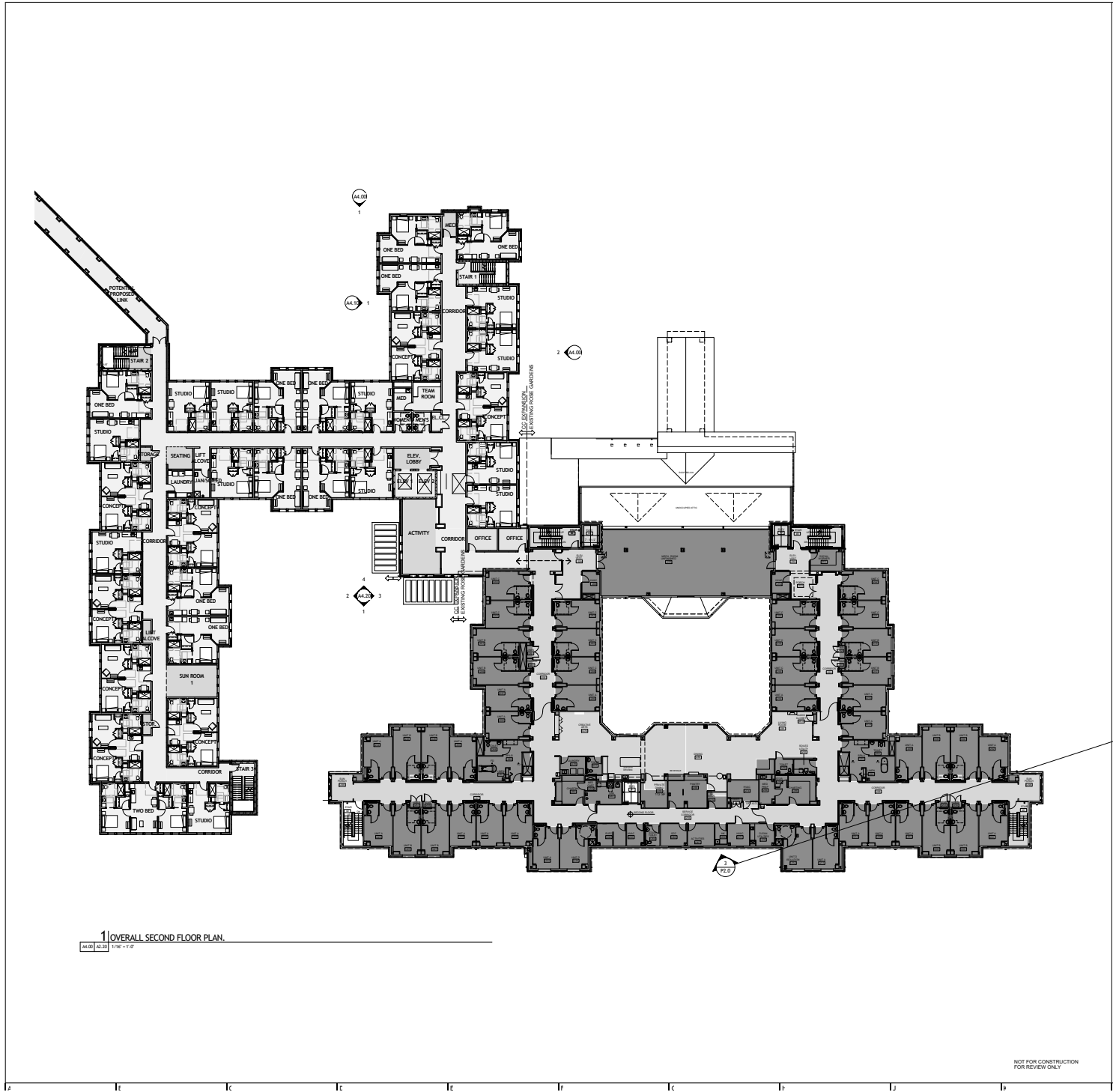
Project Name: **FOX RUN CONTINUING CARE EXPANSION**  
 Project Number: **218031.00**  
 Date: **09.23.2018**  
 Scale: **As indicated**  
 Drawing: **OVERALL FIRST FLOOR PLAN**

**A2.10**  
 PSP REVIEW  
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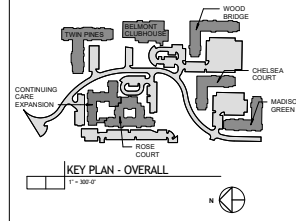
**1 OVERALL FIRST FLOOR PLAN.**  
 1/8" = 1'-0"

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COLOR LEGEND

[Light Gray Box]	UNITS CONTINUING CARE EXPANSION
[Medium Gray Box]	DINING CONTINUING CARE EXPANSION
[Light Gray Box]	COMMON AREAS CONTINUING CARE EXPANSION
[Light Gray Box]	ROOF TOP GARDEN CONTINUING CARE EXPANSION
[Light Gray Box]	CIRCULATION CONTINUING CARE EXPANSION
[Dark Gray Box]	STAFF/SERVICE CONTINUING CARE EXPANSION
[Dark Gray Box]	UNITS ROSE GARDEN
[Light Gray Box]	CIRCULATION ROSE GARDEN



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LANDSCAPE  
**KWLA**  
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**FOX RUN CONTINUING CARE EXPANSION**

**ERICKSON LIVING**

41000 W. 13 Mile Rd., Novi, MI 48377

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DATE	REVISION

Project Name  
 FOX RUN CONTINUING CARE EXPANSION

Project Number  
 218031.00

Date  
 02.22.2018

Scale  
 As indicated

Drawing  
 OVERALL SECOND FLOOR PLAN

**A2.20**

PSP REVIEW

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**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
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 PLANNING  
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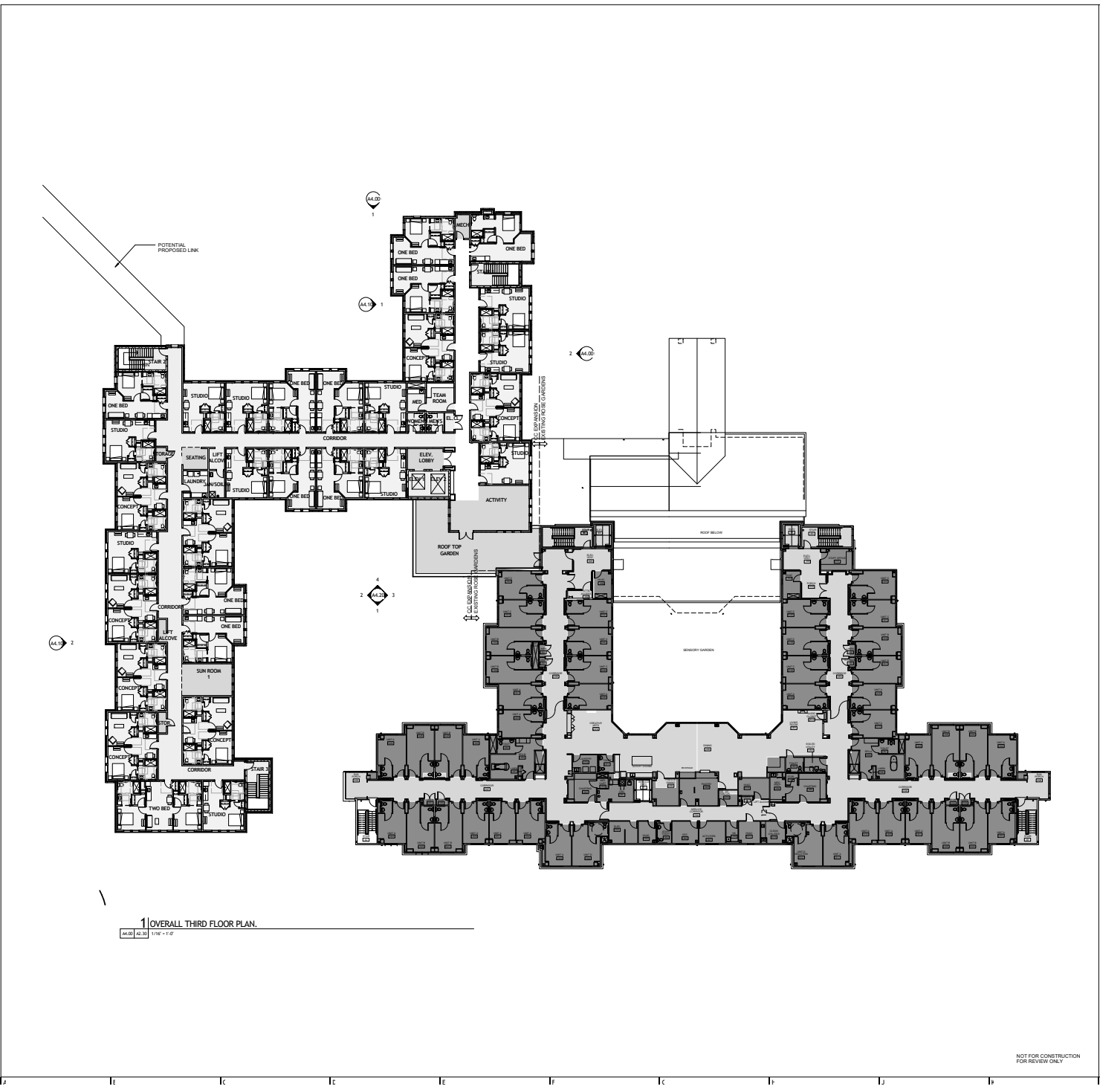


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 LICENSE NUMBER: 24801 (06/12/2018)

NO.	DATE	REVISION

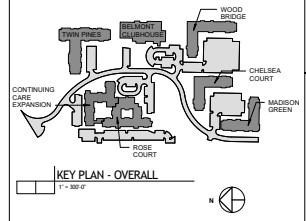
Project Name: **FOX RUN CONTINUING CARE EXPANSION**  
 Project Number: **218031.00**  
 Date: **09.23.2018**  
 Scale: **As indicated**  
 Drawing:

**OVERALL THIRD FLOOR PLAN**  
**A2.30**  
**PSP REVIEW**  
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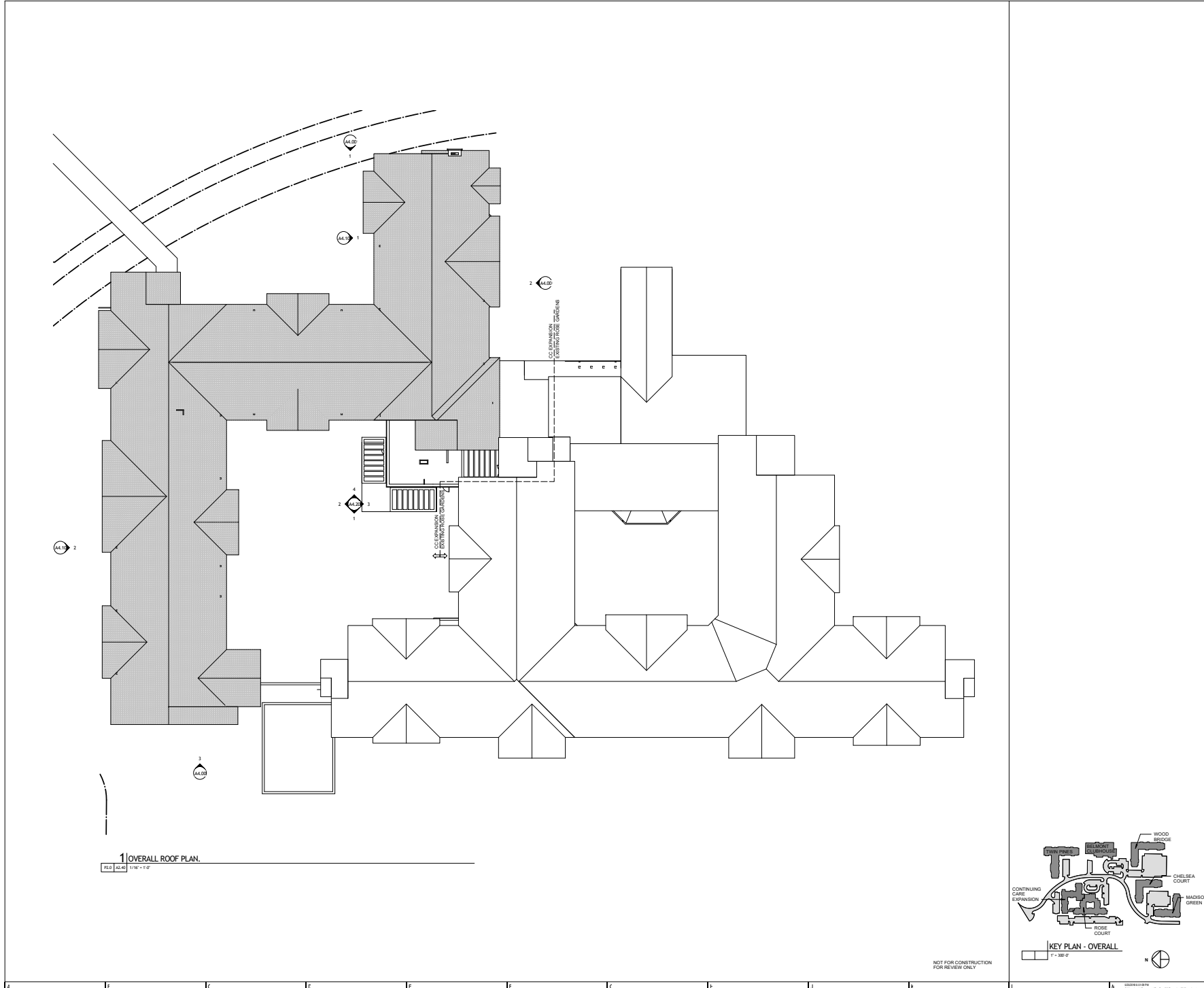


**COLOR LEGEND**

[Light Gray Box]	UNITS CONTINUING CARE EXPANSION
[Medium Gray Box]	DINING CONTINUING CARE EXPANSION
[Lightest Gray Box]	COMMON AREAS CONTINUING CARE EXPANSION
[Light Gray Box]	ROOF TOP GARDEN CONTINUING CARE EXPANSION
[Medium Gray Box]	CIRCULATION CONTINUING CARE EXPANSION
[Medium Gray Box]	STAFF/SERVICE CONTINUING CARE EXPANSION
[Darkest Gray Box]	UNITS ROSE GARDEN
[Medium Gray Box]	CIRCULATION ROSE GARDEN

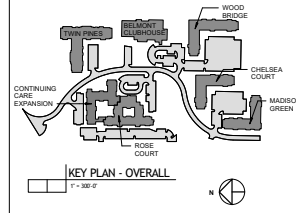


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1 OVERALL ROOF PLAN.  
 0/2.0 A2.40 1/8" = 1'-0"

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- LANDSCAPE**  
 KWA  
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**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
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NO.	DATE	REVISION

Project Name  
**FOX RUN CONTINUING CARE EXPANSION**  
 Project Number  
**218031.00**  
 Date  
**09.23.2018**  
 Scale  
 As indicated  
 Drawing  
**OVERALL ROOF PLAN**

**A2.40**

PSP REVIEW  
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EXTERIOR ELEVATION LEGEND

	BRICK SOLDIER COURSE		EPS 1		ASPHALT SHINGLE ROOF
	BRICK		EPS 2		EPS BAND
	DECORATIVE CMU BLOCK		EPS 3		

**ARCHITECT**  
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**LANDSCAPE**  
**KWLA**  
 33323 Boonshyne Lane Farmington Hills, MI 48334  
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**1 EAST ELEVATION**  
 (A4.00) (A4.00) 1/8" = 1'-0"



**2 NORTH ELEVATION**  
 (A4.00) (A4.00) 1/8" = 1'-0"



**3 WEST ELEVATION**  
 (A4.00) (A4.00) 1/8" = 1'-0"

**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
 41000 W. 13 Mile Rd, Novi, MI 48377

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ARCHITECTURE  
 LANDSCAPE ARCHITECTURE  
 PLANNING  
 INTERIOR DESIGN



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NO.	DATE	REVISION

Project Name: **FOX RUN CONTINUING CARE EXPANSION**  
 Project Number: **218031.00**  
 Date: **09.23.2018**  
 Scale: **As indicated**  
 Drawing: **EXTERIOR ELEVATIONS**

**A4.00**

**PSP REVIEW**

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 270 E. Park St., Suite 1100  
 Baltimore, MD 21202  
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


**STRUCTURAL**  
 Morabito Consultants  
 520 Ridgeway Road, Suite 1700  
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**LANDSCAPE**  
 KWA  
 33203 Boscawene Lane  
 Farmington Hills, MI 48334  
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**EXTERIOR ELEVATION LEGEND**

	BRICK SOLDIER COURSE		EFS 1		ASPHALT SHINGLE ROOF
	BRICK		EFS 2		EFS BAND
	DECORATIVE CMU BLOCK		EFS 3		



**2 | SOUTH ELEVATION**  
 (A.10) (A.11) 1/8" = 1'-0"



**1 | SOUTH ELEVATION 1**  
 (A.10) (A.11) 1/8" = 1'-0"

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**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
 41000 W. 13 Mile Rd., Novi, MI 48377

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ARCHITECTURE  
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 INTERIOR DESIGN



PROFESSIONAL DESIGNER CERTIFICATION: I have examined these drawings as prepared or approved by me and they are true and correct as shown and described on these drawings. I am a duly Licensed Architect.  
 MICHAEL J. MORABITO  
 LICENSE NUMBER: 218031-00

NO.	DATE	REVISION

Project Name: **FOX RUN CONTINUING CARE EXPANSION**  
 Project Number: **218031-00**  
 Date: **09.23.2018**  
 Scale: **As indicated**  
 Drawing: **EXTERIOR ELEVATIONS**

**A4.10**  
**PSP REVIEW**

**EXTERIOR ELEVATION LEGEND**

- BRICK SOLDIER COURSE
- BRICK
- DECORATIVE CMU BLOCK
- EFS 1
- EFS 2
- EFS 3
- ASPHALT SHINGLE ROOF
- EFS BAND

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**LANDSCAPE**  
 KWA  
 33333 Bolesworth Lane  
 Farmington Hills, MI 48334  
 p. 248.477.3600 f. 313.820.2311

**1**

**2**

**3**

**4**

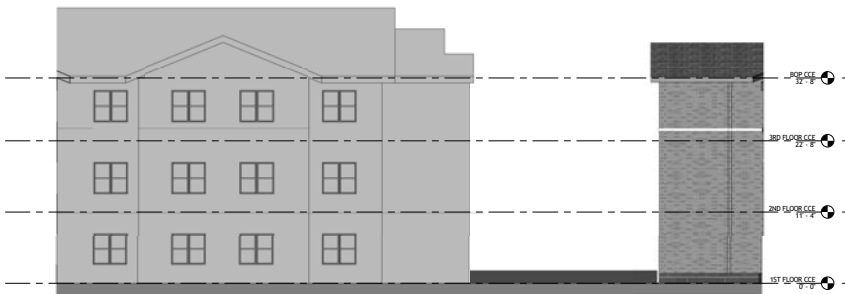
**5**

**6**

**7**

**8**

**9**



**1 EAST ELEVATION - COURTYARD**  
 (A4.20) (A4.20) 1/8" = 1'-0"



**2 NORTH ELEVATION COURTYARD**  
 (A4.20) (A4.20) 1/8" = 1'-0"



**3 SOUTH ELEVATION COURTYARD**  
 (A4.20) (A4.20) 1/8" = 1'-0"



**4 WEST ELEVATION - COURTYARD**  
 (A4.20) (A4.20) 1/8" = 1'-0"

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 LICENSE NUMBER:  
 10999 (A4.20)

NO.	DATE	REVISION

Project Name:  
**FOX RUN CONTINUING CARE EXPANSION**

Project Number:  
 218031.00

Date:  
 09.23.2018

Scale:  
 As indicated

Drawing:  
**EXTERIOR ELEVATIONS**

**A4.20**

PSP REVIEW

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**LANDSCAPE**  
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**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
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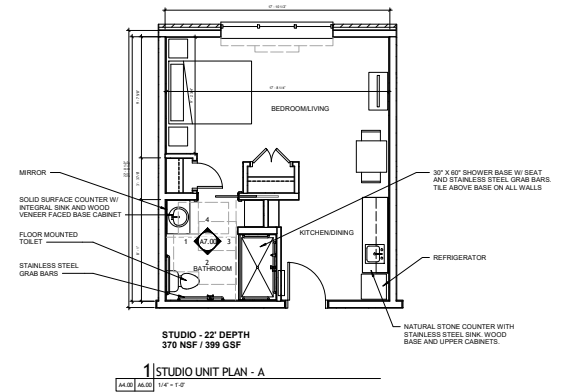
NO.	DATE	REVISION

Project Name  
**FOX RUN CONTINUING CARE EXPANSION**  
 Project Number  
**218031.00**  
 Date  
**09.23.2018**

Scale  
**1/4" = 1'-0"**  
 Drawing  
**UNIT PLAN - STUDIO**

**A6.00**

**PSP REVIEW**  
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LANDSCAPE  
 KWA  
 33023 Boiesdrive Lane  
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 P. 248.477.3000 F. 313.820.2311

FOX RUN CONTINUING CARE EXPANSION  
 ERICKSON LIVING  
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 LICENSE NUMBER: 1409910102015

NO.	DATE	REVISION

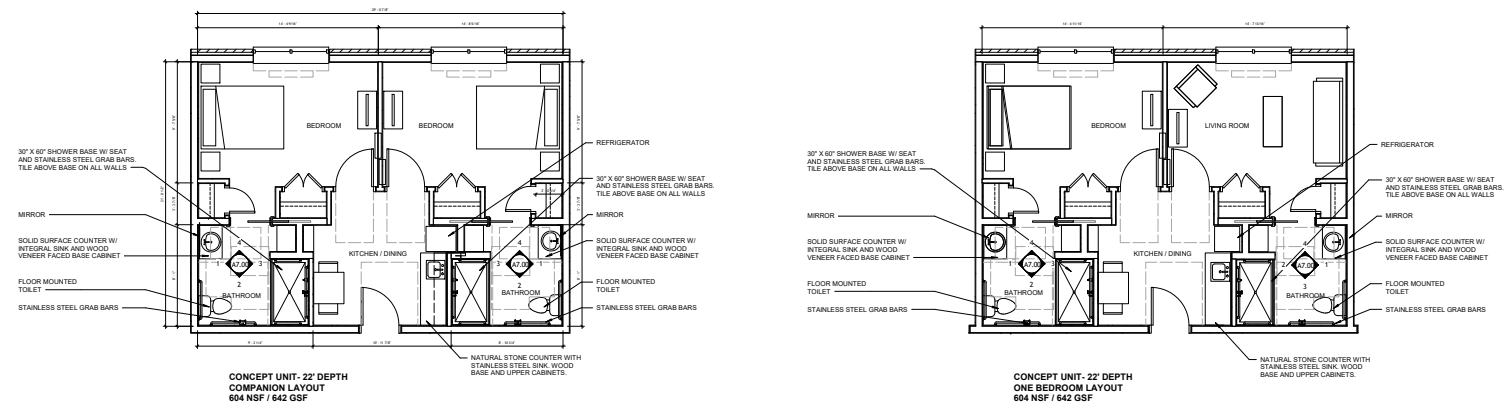
Project Number  
 FOX RUN CONTINUING CARE EXPANSION  
 218031.00  
 Date  
 09.23.2018  
 Scale  
 1/4" = 1'-0"  
 Drawing

UNIT PLAN - CONCEPT

**A6.10**

PSP REVIEW

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 FOR REVIEW ONLY



1 CONCEPT UNIT PLAN  
 A6.10 A6.10 1/4" = 1'-0"

**ARCHITECT**  
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370 E. Post St., Suite 1100 Baltimore, MD 21202  
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New Hudson, MI 48165-8711  
p. 248.437.5099 f. 248.437.6222

**LANDSCAPE**  
KWA  
33033 Bokestone Lane  
Farmington Hills, MI 48334  
p. 248.477.3600 f. 313.826.2311

**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
41000 W. 13 Mile Rd., Novi, MI 48377

**5 hord | coplan | macht**

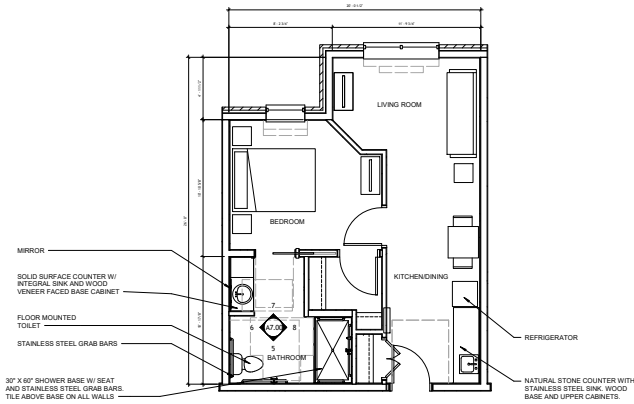
ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



PROFESSIONAL DESIGNER CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME OR A PERSON UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED ARCHITECT IN THE STATE OF MICHIGAN.

NO.	DATE	REVISION

Project Name: FOX RUN CONTINUING CARE EXPANSION  
Project Number: 218031.00  
Date: 03.23.2018  
Scale: 1/4" = 1'-0"  
Drawing:  
UNIT PLAN - ONE BED



**1 ONE BEDROOM UNIT PLAN**

NOT FOR CONSTRUCTION  
FOR REVIEW ONLY

**A6.20**

PSP REVIEW

**ARCHITECT**  
Hord Coplan Macht, Inc.  
1705 E. Potters Road, Suite 1100 Baltimore, MD 21202  
p. 410. 837. 7311 f. 410. 837. 6530

**STRUCTURAL**  
Morabito Consultants  
525 Ridgeway Road, Suite 1700  
Sparks, MD 21152  
p. 410. 487. 2377

**M/PE**  
Century Engineering, Inc.  
10715 Gilroy Road, Hunt Valley MD 21081  
p. 443-589-2400

**CIVIL**  
Zelmer Wozniak and Associates  
6880 Coastal Plaza, Suite 100  
New Hudson, MI 48165-8711  
p. 248. 437. 8099 f. 248. 437. 6222

**LANDSCAPE**  
KWA  
33023 Boscawene Lane  
Farmington Hills, MI 48334  
p. 248. 477. 3600 f. 313. 826. 2311

**FOX RUN CONTINUING CARE EXPANSION**  
**ERICKSON LIVING**  
 41000 W. 13 Mile Rd., Novi, MI 48377

**hord | coplan | macht**

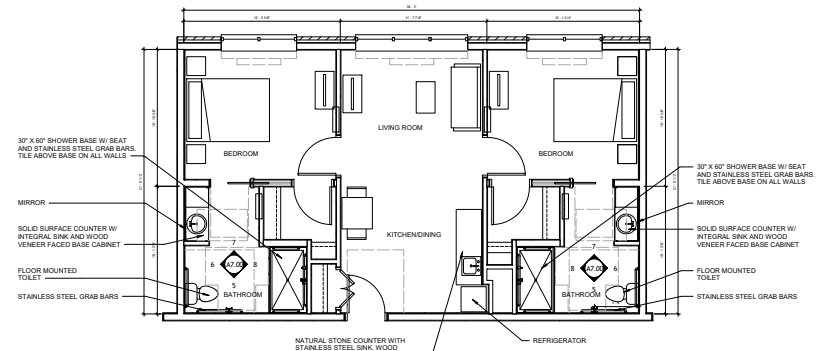
ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



PROFESSIONAL DESIGNER CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME, AND THAT I AM A duly LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MICHIGAN.  
1/20/2018  
LORD/DAVIS

NO.	DATE	REVISION

Project Number: FOX RUN CONTINUING CARE EXPANSION  
Project Number: 218031.00  
Date: 03.23.2018  
Scale: 1/4" = 1'-0"  
Drawing: UNIT PLAN - TWO BED



2 BEDROOM ALT.- 22' DEPTH  
754 NSF / 800 GSF  
**1 TWO BEDROOM UNIT PLAN**  
44.00 46.30 1/4" = 1'-0"

NOT FOR CONSTRUCTION FOR REVIEW ONLY

**A6.30**  
PSP REVIEW

FOURTH AMENDMENT TO THE DEVELOPMENT AGREEMENT

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## **FOURTH AMENDMENT TO DEVELOPMENT AGREEMENT**

**THIS AGREEMENT**, by and between Redwood-ERC Novi, LLC, a Maryland limited liability company, whose address is 701 Maiden Choice Lane, Baltimore, MD 21228 (the "Owner") and the City of Novi, a Michigan municipal corporation, 45175 West Ten Mile Road, Novi, MI 48375 (the "City").

### RECITALS:

- I. The Owner owns all interest in the Land described on the attached and incorporated Property Description Exhibit A (Property").
- II. On or about January 25, 2002, the Owner's predecessors and City entered into a certain "Development Agreement" with respect to the rezoning of the Property for improvement and use as a retirement community. The Development Agreement incorporated a Preliminary Site Plan in respect to the development of the Property. The Development Agreement is on file with the Novi City Clerk, and an Affidavit Disclosing Development Agreement was recorded at Liber 26325, page(s) 514-515, Oakland County Register of Deeds.
- III. On October 20, 2003, the Owner's predecessor sought, and the City approved, the First Amendment to the Development Agreement for purposes of incorporating a revised Preliminary Site Plan with a PD-1 option with respect to the Property for the purposes of adding a walkway, consolidating certain parking, rotating a building thereby preserving high quality trees, and modifying facades to distinguish between Phase I and Phase II. This First Amendment to the Development Agreement was executed on April 7, 2014 and is on file with the Novi City Clerk.
- III. On January 11, 2014, Owner sought, and the City approved, a revised Preliminary Site Plan with a PD-1 option in respect to the property for purposes of reconfiguring the buildings located within Phase 2.3 and demonstrating its relationship with future Phases 2.4, 2.5, Phase III and Phase IV. The Second Amendment to the Development Agreement was executed on the 7th day of April, 2014 and is on file with the Novi City Clerk.
- IV. On the 24<sup>th</sup> day of March, 2014 the Owner sought, and the City approved, a revised Preliminary Site Plan with the PD-1 Option and a revised phasing plan as the Developer had adjusted the phasing lines of the plan to include the parking lot south of Phase 2.5 into Phase 2.3. This parking lot was previously a part of Phase 2.4. Additionally, more landscape screening was added along the property line bordering the Lenox Park

Development. The Third Amendment to the Development Agreement was executed on the 7<sup>th</sup> day of April, 2014 and is on file with the Novi City Clerk.

- V. On August 13, 2018, the Owner sought, and the City approved a Revised Preliminary Site Plan with a PD-1 Option, Revised Special Land Use Permit, Revised Phasing Plan, Revised Wetland Permit, Revised Woodland Permit and Revised Stormwater Management Plan, for the purpose of revising the original approval and layout of the building addition in Phase 4, subject to the conditions and deviations listed in the City Council action.
  
- VI. The Owner and City wish to enter into this Fourth Amendment to the Development Agreement to incorporate the revised Preliminary Site Plan with PD-1 Option, Revised Special Land Use Permit, Revised Phasing Plan, Revised Wetland Permit, Revised Woodland Permit and Revised Stormwater Management Plan into the Development Agreement.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

- 1. The Development Agreement is hereby amended to include the revised Preliminary Site Plan with a PD-1 option, Revised Special Land Use Permit, Revised Phasing Plan, Revised Wetland Permit, Revised Woodland Permit and Revised Stormwater Management Plan, dated May 25, 2018, for an 88,690 square foot addition to the Continuing Care Center, also known as phase 4 of the multi-phase Fox Run Village project, which is attached hereto and incorporated as Exhibit A. The revised Preliminary Site Plan hereby supersedes all previous site plans for this phase on file with the City.
  
- 2. Except for the incorporation of the revised Preliminary Site Plan in accordance with the action of City Council of August 13, 2018, the Development Agreement, as amended, shall remain in full force and effect.
  
- 3. This Agreement may be signed in counter-parts.

OWNER

REDWOOD-ERC NOVI, LLC

By: \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 \_\_\_\_\_ )  
 COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_ day of \_\_\_\_\_, 2018, before me appeared \_\_\_\_\_, authorized representative of Owner, who states that he/she has signed this document of his/her own free will on behalf of Owner.

\_\_\_\_\_

Notary Public

\_\_\_\_\_ County, \_\_\_\_\_

My commission expires: \_\_\_\_\_

Acting in \_\_\_\_\_ County, \_\_\_\_\_



CITY OF NOVI

By: \_\_\_\_\_  
Robert J. Gatt, Mayor

By: \_\_\_\_\_  
Cortney Hanson, Clerk

STATE OF MICHIGAN \_)

COUNTY OF OAKLAND )

On this \_\_\_\_\_ day of \_\_\_\_\_, 2018, before me appeared Robert J. Gatt, Mayor and Cortney Hanson, Clerk of the City of Novi, authorized representatives of Owner, who state that they have signed this document of their own free will on behalf of Owner.

\_\_\_\_\_  
Notary Public  
\_\_\_\_\_County, \_\_\_\_\_  
My commission expires: \_\_\_\_\_  
Acting in \_\_\_\_\_ County, \_\_\_\_\_

Drafted by:  
Elizabeth K. Saarela  
Johnson, Rosati, Schultz & Joppich  
27555 Executive Drive, Suite 250  
Farmington Hills, Michigan 48336

When recorded return to:  
Cortney Hanspn, Clerk  
City of Novi  
45175 Ten Mile Road Novi, MI 48375

PLANNING COMMISSION MINUTES – EXCERPT  
JULY 11, 2018

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**EXCERPT FROM  
PLANNING COMMISSION  
DRAFT MINUTES**

CITY OF NOVI

Regular Meeting

**July 11, 2018 7:00 PM**

Council Chambers | Novi Civic Center  
45175 W. Ten Mile (248) 347-0475

**ROLL CALL**

**Present:**

Member Anthony, Member Avdoulos, Member Greco, Member Lynch, Member Maday, Chair Pehrson

**Absent:**

Member Howard (excused)

**Also Present:**

Barbara McBeth, City Planner; Sri Komaragiri, Planner; Lindsay Bell, Planner; Darcy Rechtiem, Staff Engineer; Thomas Schultz, City Attorney; Beth Saarela, City Attorney; Peter Hill, Environmental Consultant; Doug Necci, Façade Consultant; Maureen Peters, Traffic Consultant

**PUBLIC HEARINGS**

**1. FOX RUN CCC EXPANSION JSP 18-19**

Public hearing at the request of Erickson Living for Planning Commission's recommendation to the City Council of a Revised Preliminary Site Plan with a PD-1 Option, Revised Special Land Use Permit, Revised Phasing Plan, Revised Wetland Permit and Revised Stormwater Management Plan approval. The subject property is 102.8 acres in Section 1 of the City of Novi and located north of Thirteen Mile Road and west of M-5 in the RM-1, Low Density Low-Rise Multiple-Family District. The applicant is proposing to revise the original approval and layout of the building addition in Phase 4.

Planner Bell said the applicant is proposing to construct an 88,690 square foot addition to the Continuing Care Center, also known as phase 4, of the Fox Run Community. The total Fox Run site is over 102 acres and located in Section 1, north of Thirteen Mile Road, west of M-5. The location of this project is the central western area of the parcel, adjacent to the existing Continuing Care Center.

The subject property is currently zoned RM-1 and developed under a PD-1 Option development agreement. The properties to the east are zoned RM-1 Low Density, Low-Rise Multiple Family (Lenox Park) and RA Residential Acreage (developed as Brightmoor Church). The property to the west is zoned Mobile Home District and is the location of the Oakland Glens community. On the north and northwest sides is the Maples of Novi community, zoned RA Residential Acreage. The northwest side is zoned R-2 One Family Residential and is part of the Haverhill Farms development. South of Thirteen Mile is

zoned RA and contains single family homes and vacant land.

The Future Land Use Map indicates Multiple Family with the PD-1 Option for the subject property. The property to the west is planned for Manufactured Home Residential. The northern east side is planned for Multiple Family. Remaining adjacent land to the north, east, and south is planned for Single Family uses.

There are many acres of wetlands and woodlands throughout the Fox Run parcel. The area affected by this development has a wetland approximately .15 acre in size, which is proposed to be filled. A City of Novi non-minor use wetland permit would be required for the proposed impacts, as well as an Authorization to Encroach into the 25-foot natural features setback. Wetland mitigation will not be required as the total area of impact is less than the .25 acre threshold. Woodland review determined there are 13 city-regulated trees on the site, which will all be removed. Those will require 20 woodland replacement credits and a woodland permit. The applicant intends to pay into the Tree Fund for those credits.

Planner Bell said the original Continuing Care Center, phase 4.1, was built in 2007/2008 and included 132 assisted living units. The addition currently proposed, Phase 4.2, would add 90 units, for a total of 222 units. The original Planned Development agreement for Fox Run included 390 units of assisted living/skilled nursing care. The remaining 168 units are listed as "future units" on the unit matrix in the plans. The applicant has indicated they would like to reserve the right to build a new building on the south side of the existing facility, although no plans for that building have been proposed. The required parking and access roads were previously constructed in phase 4.1, so no new parking areas or driveways are proposed at this time. Six bicycle parking spaces, a new interior garden courtyard, interior common spaces and dining facilities are also proposed.

The overall Fox Run site is considered a Special Land Use, and this approval requires a revision to that permit, subject to the conditions listed in your motion sheet.

The applicant is seeking five waivers from Planning Commission: Waiver for Building length in excess of the 180 feet maximum (316 feet proposed). Such additional length would require additional setback of 1 foot for every 3 feet in excess of 180, which results in a required 120 feet setback. The building and addition are located 332 feet from the nearest property line. Staff supports the modification of building length by the Planning Commission because the interconnected facility would better serve the intended population; Waiver from Section 5.16 for providing bicycle parking in one location rather than two as consistent with the use at issue; Waiver from Section 5.16 for not providing a 6 foot sidewalk access to bicycle parking, because the existing 5 foot sidewalk would need to be demolished and reconstructed to accomplish that; Waiver to allow fewer multifamily unit landscaping trees than are required. The applicant has proposed to plant 50 of the 87 required trees on the site because of space limitations. Staff supports the waiver; Section 9 waiver for overage of EIFS on all facades due to building massing and the applicant's demonstration of proper architectural balance as set forth in the façade consultant's report.

The applicant has revised their elevations from the original submittal based on issues

raised in the façade review letter, and now proposes an overage of EIFS on all facades and overage of CMU on the west and south facades. Brick has been added to meet the ordinance requirements. The façade consultant has issued a revised letter and now recommends approval of the Section 9 waiver.

Planner Bell said the reviewers are all recommending approval with additional items to be addressed with final site plan submittal.

The Planning Commission is asked tonight to hold the required public hearing for the Revised Special Land Use permit, Revised Preliminary Site Plan, Revised Wetland permit, Revised Woodland permit, and Revised Stormwater Management Plan. The applicant Andrew Hirshfield from Erickson Living as well as his team is here tonight to tell you more about the project. Staff and consultants are here to answer any questions you may have.

Tim Barnhill, the architect of the project, said I have with me the design team tonight, as well as the executive director and Andrew Hirshfield from Erickson Living Corporate. The main goal for the project, and I think most of the key points were already touched on, but the main goal for the project is really to provide additional care for the Fox Run community. The existing care center contains skilled nursing, memory care, and assisted living. This building expansion is providing all new assisted living, which will allow for the existing assisted living to get backfilled with other skilled care and dementia care inside the existing facility.

Since the building was built, the care model has changed and this building reflects kind of the newest trends in care for assisted living – larger rooms, we have a mix of unit types that really provide for different needs for different residents and family members inside the community. And in addition to the units that are being added, we're also renovating the lobby and we're providing a new bistro, we're providing a new restaurant, there are activity rooms, game rooms, sunrooms, libraries scattered throughout the building and really providing for the needs of the residents.

Mr. Barnhill said there was some talk earlier about the length of the building and one thing we really wanted to do was connect the buildings back to the existing and we focused a lot on travel distance – making sure the elevators are located in the right spots, easy connections to the dining venues.

We talked about the exterior, it's really matching the existing building on the existing campus. We received comments from the façade consultant to increase the brick but then also tried to work with the existing language of the existing buildings to make sure it looked like one continuous building so it wasn't very clear that this was the addition and this was the existing building; we wanted to provide a continuous look on the campus. We do have the team here and can answer any questions as needed.

Chair Pehrson asked if there was anyone in the audience that wished to address the Planning Commission regarding this project. Seeing no one, he said I think we have some correspondence.

Member Lynch said we do. The first one is from Laurie Dazarow, 30155 Brightwood Drive, that is an objection and I apologize but I can't read it, but it will be added into the record. The next one is from Herman and Lisa Smith, 41418 Cornell Drive, they object for the following reasons – disruption of their lifestyle, increased traffic volumes, loss of peace and quiet, and loss of scenic views, risk of decreased property values and destruction of wildlife habitat. The last one is from Norman Frechette, 40800 West Thirteen Mile Road, in support.

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

Member Anthony said this question will be to the staff. Since this is coming back, there were some questions that we had before and I just wanted to make sure that they had complied with this. One was in granting the waiver for additional length, if I remember correctly it was attached to it that there needed to be an open common area that was large enough to handle 50 people. Can you comment on whether that's been met?

Planner Bell said yes, there are common areas both in the existing building as well as the proposed addition. They mentioned a bistro, there is an internal courtyard, there's a rooftop garden area, as well as various exercise facilities. Perhaps the applicant could speak to that, as well.

Mr. Barnhill said yes, there are multiple activity areas scattered throughout the building. I believe we have over 3,790 square feet inside of the building for those activity areas. The restaurant and the bistro and the activity room and the garden room are some of those larger rooms, but then we also have a sunroom, a game room, and a library that are nestled within the building and we tried to provide activities scattered throughout the building in addition to the larger dining venues.

Member Anthony said so are any of these open areas within the new addition?

Mr. Barnhill said yes, everything but the renovated bistro is in the new building and the square footage I mentioned is all in the new building, I didn't count any of the existing building.

Member Anthony said alright, good. There also was a comment that you needed additional dimensions on the sidewalk areas that were within the interior green areas. Was that item taken care of?

Planner Bell said there is an existing sidewalk at the entry. Basically where the current curved entry drive is to the site, there's an existing five foot sidewalk that leads up to it. They're proposing to put the bicycle parking right adjacent to that, as well as a new sidewalk leading up to a new entrance. So to accommodate the six foot requirement for a sidewalk accessing bicycle places, they'd have to tear out that sidewalk to put in the additional foot.

Member Anthony said so if I'm understanding correctly, they have to tear out the

existing sidewalk.

Planner Bell said if the waiver is not granted.

Member Anthony said if the waiver is not granted. So, if the waiver is granted then they're allowed to keep the existing sidewalk.

Planner Bell said that's correct.

Member Anthony said so really the waiver is to keep this pedestrian oriented, which is one of our goals as a community anyways.

Planner Bell said and that's why we're in support of that.

Member Anthony said very good. There was another one in there where you needed an employee count for the new addition in order to verify that the parking lot count was adequate and that you didn't need to add any more. How was that resolved? Planner Bell said the applicant indicated 40 employees during the day and 40 at night.

Member Anthony said so by the shift change, that was able to bring it into compliance.

Planner Bell said and the original parking areas were planned for a total number of rooms that were approved in the beginning.

Member Anthony said so in the Landscaping, and I know we don't have our Landscaping folks here, but there was also a requirement in shifting the location of the trees so that they were within fifteen feet of the curbs. I presume that that was also completed.

Planner Bell said the applicant indicated in their response letter that they were located more than fifteen feet because of existing utilities, and I don't know that that has been fully ironed out at this point.

Member Anthony said and that is something that before this is all finalized, staff will work on?

Planner Bell said yes, if only we had Rick here, we miss him.

Member Anthony said I know you can't dig in those utility corridors. Ok, we already covered façade that they had modified façade. And then also, Rick had a request to replace dead or weak trees to maintain opacity and I presume that that is still staying in there?

Planner Bell said yes, I believe the applicant response included a commitment to replacing some buffer areas that apparently have weakened.

Member Anthony said good, okay thank you. And to the applicant, thank you for addressing all of the items that we brought up with you last time. It certainly makes

things a lot easier when we have issues and you're able to go back and resolve them with staff. So that takes care of my questions and this is certainly something that I would support.

Member Avdoulos said I guess this is to address the concern of one of the response forms, one of the neighbors indicating that Fox Run is becoming an eye sore consisting of too much content. However, what I wanted to validate is that the site plan – I think it's C-100, indicates all the phases of the project as a whole. And so this is something that was approved as an entire project, and the phasing is numbered based on when they're going to do it and going to complete it. And so this isn't something that was unknown and not allowed.

I think adding to it and again, echoing Member Anthony's comments, appreciating the applicant working with the Planning Department because all of the waivers and everything that's been requested through working together has been supported by staff and the last sticking one for me, again, was the façade approval that we didn't get a positive determination from our consultant but the applicant has worked towards that, so I appreciate that. So what I would like to do is make a motion.

Motion made by Member Avdoulos and seconded by Member Greco.

Chair Pehrson said I'd just like to add that it's important that those who don't have this in front of them, what's being referred to in the Special Land Use revision section here is that inside what has just been read, there are certain criteria that we have to apply to make sure that it does fall within and meet the Special Land Use permit that we are authorizing at this time. So if you've never had a chance to look at what a Special Land Use permit criteria looks like, I'd encourage you to go online and look at that because it does address all of the things that Member Avdoulos has spoken about in the past relative to things like the Master Plan, relative to compatible use, satisfying the requirements of the engineering review – those items which are, again, more stringent that we have to pass at this point in time. That's my only comment.

**ROLL CALL VOTE TO RECOMMEND APPROVAL OF REVISED SPECIAL LAND USE PERMIT MADE BY MEMBER AVDOULOS AND SECONDED BY MEMBER GRECO.**

In the matter of Fox Run Continuing Care Center (CCC), JSP18-19, motion to recommend approval to the City Council of the Revised Special Land Use permit based on the following findings:

- a. Relative to other feasible uses of the site:
  - The proposed use will not cause any detrimental impact on existing thoroughfares (*as indicated in findings and conclusions of the traffic review letter, including the adequacy of such thoroughfares to handle the existing improvements*);
  - Subject to satisfying the requirements in the Engineering Review the proposed use will not cause any detrimental impact on the capabilities of public services and facilities (*because the plan adequately addresses and provides for water and sanitary sewer service and management of stormwater*



volumes in accordance with ordinance requirements as set forth in the engineering review);

- The proposed use is compatible with the natural features and characteristics of the land (as proposed impacts to natural features have been minimized as described in the staff and consultant reports);
  - The proposed use is compatible with adjacent uses of land (as indicated in the staff and consultant review letters and as demonstrated by the longstanding relationship of the existing development to such uses);
  - The proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use, which contemplates this use;
  - The proposed use will promote the use of land in a socially and economically desirable manner, as it is a continuation of this planned use;
  - The proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located.
- b. Landscape waiver from Section 5.5.3.F.ii to allow 37 fewer multifamily unit landscaping trees than are required (87 required, 50 provided) because the existing and proposed landscaping on the site are substantial and sufficient to accomplish the intent of the ordinance.

This motion is made because the plan is otherwise in compliance with Article 3, Article 4, Article 5, and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance. *Motion carried 6-0.*

**ROLL CALL VOTE TO RECOMMEND APPROVAL OF REVISED PRELIMINARY SITE PLAN MADE BY MEMBER AVDOULOS AND SECONDED BY MEMBER GRECO.**

In the matter of Fox Run CCC, JSP18-19, motion to recommend approval to the City Council of the Revised Preliminary Site Plan with a PD-1 Option based on and subject to the following:

- a. City Council finding that the standards of Section 3.31.4.A of the Zoning Ordinance are adequately addressed;
- b. Waiver from Section 3.8.2.C for a building exceeding 180 feet in length, up to 316 feet proposed, because the interconnected facility will better serve the population and the ordinance allows the Planning Commission to modify building length when additional setback from adjacent uses is provided, as it is in this proposal;
- c. Waiver from Section 5.16 for providing bicycle parking in one location rather than two as consistent with the use at issue;
- d. Waiver from Section 5.16 for not providing a 6 foot sidewalk access to bicycle parking, because the existing 5 foot sidewalk would need to be demolished and reconstructed;
- e. Section 9 waiver for overage of EIFS on all facades (25% maximum required, up to 32% proposed) due to building massing and the applicant's demonstration of proper architectural balance as set forth in the façade consultant's report;

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

This motion is made because the plan is otherwise in compliance with Article 3, Article 4, Article 5, and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance. *Motion carried 6-0.*

**ROLL CALL TO RECOMMEND APPROVAL OF REVISED PHASING PLAN MADE BY MEMBER AVDOULOS AND SECONDED BY MEMBER GRECO.**

In the matter of Fox Run CCC, JSP18-19, motion to recommend approval to the City Council of the Revised Phasing Plan based on and subject to the findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan. This motion is made because the plan is otherwise in compliance with Article 3, Article 4, Article 5, and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance. *Motion carried 6-0.*

**ROLL CALL VOTE TO RECOMMEND APPROVAL OF REVISED WETLAND PERMIT MADE BY MEMBER AVDOULOS AND SECONDED BY MEMBER GRECO.**

In the matter of Fox Run CCC, JSP18-19, motion to recommend approval to the City Council of the Revised Wetland Permit based on and subject to the findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan. This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance. *Motion carried 6-0.*

**ROLL CALL VOTE TO RECOMMEND APPROVAL OF REVISED WOODLAND PERMIT MADE BY MEMBER AVDOULOS AND SECONDED BY MEMBER GRECO.**

In the matter of Fox Run CCC, JSP18-19, motion to recommend approval to the City Council of the Revised Woodland Permit based on and subject to the findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan. This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance. *Motion carried 6-0.*

**ROLL CALL VOTE TO RECOMMEND APPROVAL OF STORMWATER MANAGEMENT PLAN MADE BY MEMBER AVDOULOS AND SECONDED BY MEMBER GRECO.**

In the matter of Fox Run CCC, JSP18-19, motion to recommend approval to the City Council of the Stormwater Management Plan, subject to the findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan. This motion is

made because the plan is otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance. *Motion carried 6-0.*

## PLANNING REVIEW

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# PLAN REVIEW CENTER REPORT

June 27, 2018

## Planning Review

Fox Run CCC – Phase 4 Preliminary Site Plan  
**JSP18-19**

### PETITIONER

Erickson Living

### REVIEW TYPE

Revised Preliminary Site Plan with PD-1 Option

### PROPERTY CHARACTERISTICS

- Site Location: North of Thirteen Mile Road, West of M-5 (Section 1)
- Site Zoning: RM-1, Low Density, Low-Rise Multiple-Family Residential with a PD-1 Option
- Adjoining Zoning: North: RA, Residential Acreage, R-2, One-Family Residential; East: RA, Residential Acreage, RM-1 Low Density Multiple-Family; South: RA, Residential Acreage and West: MH, Manufactured Home, RA, Residential Acreage.
- Adjoining Uses: North: Haverhill Farms, The Maples of Novi; East: Brightmoor Tabernacle, Lenox Park; West: Oakland Glens; South: Single-family homes, Vacant
- School District: Walled Lake School District
- Site Size: 102.8 acres
- Plan Date: 05-25-2018

### PROJECT SUMMARY

The applicant is proposing an 88,690 square foot addition to the Continuing Care Center, also known as phase 4 of the multi-phase Fox Run Village project. Phase I has been completely constructed, and the last building of phase II is nearing completion. The most recent update to the previously approved plan was approved by the City Council on January 11, 2014. The total number of units in all four phases of the project has not changed in this submittal.

Phase 4.1, the original Continuing Care Center, was completed in 2007/2008 and included 132 assisted living units. The addition currently proposed, Phase 4.2, would add 90 units, for a total of 222 units. The original Planned Development agreement for Fox Run included 390 units of assisted living/skilled nursing care. The remaining 168 units are listed as "future units" on the unit matrix in the plans, although it is unclear where they would be constructed on the Fox Run site. The required parking and access roads were previously constructed in phase 4.1, so no new parking areas or driveways are proposed at this time.

### RECOMMENDATION

**Staff recommends approval of the Preliminary Site Plan.** City Council approval of the revised Preliminary Site Plan and amended Development Agreement is required following a recommendation from the Planning Commission. The draft amended Development Agreement has not been submitted for review.

### ORDINANCE REQUIREMENTS

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 6 (RM-1 Low Density Low-Rise Multiple-Family Residential District), Article 24 (Schedule of Regulations), Article 25 (General Provisions) and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed by the applicant or the Planning Commission/City Council.

1. Maximum Length of Buildings (Sec. 3.8.2.C): The ordinance requires building lengths cannot exceed 180 feet. However, if exceeded, **the Planning Commission may modify the length requirement up to 360 feet if there are recreational or social common areas with a minimum capacity of 50 persons within the building.** Such additional length would require additional setback of 1 foot for every 3 feet in excess of 180 feet. The existing building with the new addition would be approximately 316 feet in length on the east side. The proposed building length would need an additional 45 feet of setback over the 75 feet required, for a total setback of 120 feet. The proposed building is set back 332 feet from the nearest property line. **The applicant should request the Planning Commission's approval of the modification of the maximum building length.**
2. Retaining Walls: Heavy black lines on sheets C101, C103, C104, etc. seem to indicate retaining walls on the northern and eastern sides of the building. **Please label these features, both on the site plans and in elevations.**
3. Elevation Labels: **The North and South elevations on sheets A4.00 and A4.10 are mislabeled. Please correct.**
4. Photometric Plan: Lighting and photometric plans are required when a project is adjacent to residential areas. **A photometric plan must be included with the next submittal.**
5. Continuing Care Rooms: The total number of assisted living/skilled nursing rooms approved for the Fox Run development is 390. The existing and proposed units will bring the total units provided to 222. The site plan unit matrix lists the remaining 168 units as "future units" however the location of those units is not provided. **The applicant should clarify where those units are intended to be located.**
6. Employee Counts: **The number of employees at the expanded Continuing Care Center should be provided in order to verify adequate parking and number of bicycle parking spaces required.**
7. Bicycle Parking (Sec. 5.16): Six bicycle parking spaces are proposed near the main entrance of the building. The ordinance states that when more than 4 spaces are required, they shall be provided in multiple locations. **Provide a second location, or request a waiver from the Planning Commission/Council for one location.** The bicycle parking is also to be accessible via a 6 foot paved sidewalk. The existing sidewalk adjacent to the proposed location appears to be 5 feet. **Verify width and either expand the sidewalk to 6 feet, or request a waiver from this requirement from the Planning Commission/Council.**
8. Other Reviews:
  - a. Engineering Review: Additional comments to be addressed with final site plan submittal. Engineering recommends approval.
  - b. Landscape Review: **Waiver required for lack of landscaping trees.** Additional comments to be addressed with final site plan submittal. Landscape recommends approval.
  - c. Wetland Review: Additional comments to be addressed with final site plan submittal. Wetlands recommends approval.
  - d. Woodland Review: Additional comments to be addressed with final site plan submittal. Woodlands recommends approval.
  - e. Traffic Review: Additional comments to be addressed with final site plan submittal. Traffic recommends approval.
  - f. Facade Review: **The proposed addition deviates from both the existing building and the Façade Ordinance.** Façade does not recommend approval at this time. See comments in review letter.
  - g. Fire Review: Fire recommends approval. See comments in Fire Review letter.

## **SPECIAL LAND USE CONSIDERATIONS**

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When the PD-1 Option is utilized, all uses fall under the Special Land Use requirements (Section 3.31). Section 6.1.2.C of the Zoning Ordinance outlines specific factors the Planning Commission shall consider in the review and recommendation to City Council of the Special Land Use Permit request:

- Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service.
- Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area.
- Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats.
- Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood.
- Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use.
- Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner.
- Whether, relative to other feasible uses of the site, the proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located.

## **PLANNED DEVELOPMENT OPTION**

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Section 3.31.4 of the ordinance outlines the review procedures for Site Plans using the PD Option. This requires the Preliminary Site Plan to receive a recommendation for approval or denial from the Planning Commission with City Council ultimately approving or denying the proposed plan. A revised Planned Development Option Agreement is also required for this project and has not been submitted.

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

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This site plan has been scheduled for public hearing before the Planning Commission on July 11, 2018. Please provide via email the following **no later than 5:00pm on July 5**, 2018 if you wish to keep this schedule.

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

## **FINAL SITE PLAN SUBMITTAL**

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

1. Seven copies of Final Site Plan addressing all comments from Preliminary review

2. Response letter **addressing all comments and refer to sheet numbers where the change is reflected**
3. [Final Site Plan Application](#)
4. [Final Site Plan Checklist](#)
5. Engineering Cost Estimate
6. Landscape Cost Estimate
7. [Other Agency Checklist](#)
8. [Hazardous Materials Packet](#) (Non-residential developments)
9. [Non-Domestic User Survey](#) (Non-residential developments)
10. [No Revision Façade Affidavit](#) (if no changes are proposed for Façade)
11. Legal Documents as required
12. Drafts of any legal documents (note that off-site easements need to be executed and any on-site easements need to be submitted in draft form before stamping sets will be stamped)

### **ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER**

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After receiving Final Site Plan approval, please submit the following for Electronic stamping set approval:

1. Plans addressing the comments in all of the staff and consultant review letters in PDF format.
2. Response letter addressing all comments in ALL letters and ALL charts and **refer to sheet numbers where the change is reflected.**

### **STAMPING SET APPROVAL**

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Stamping sets are still required for this project. After having received all of the review letters from City staff the applicant should make the appropriate changes on the plans and submit **10 size 24" x 36" copies with original signature and original seals,** to the Community Development Department for final Stamping Set approval.

### **PRE-CONSTRUCTION MEETING**

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**A Pre-Construction meeting is required for this project.** Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled. If you have questions regarding the checklist or the Pre-Con itself, please contact Sarah Marchioni [248.347.0430 or [smarchioni@cityofnovi.org](mailto:smarchioni@cityofnovi.org)] in the Community Development Department.

### **CHAPTER 26.5**

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Chapter 26.5 of the City of Novi Code of Ordinances generally requires all projects be completed within two years of the issuance of any starting permit. Please contact Sarah Marchioni at 248-347-0430 for additional information on starting permits. The applicant should review and be aware of the requirements of Chapter 26.5 before starting construction.

If 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](mailto:lbell@cityofnovi.org).







## PLANNING REVIEW CHART: RM-1 Low Density Multiple Family

**Review Date:** June 27, 2018  
**Review Type:** Preliminary Site Plan  
**Project Name:** JSP18-19 Fox Run Continuing Care Center  
**Location:** 41215 Fox Run; N of Thirteen Mile, E of Meadowbrook  
**Plan Date:** 5-25-18  
**Prepared by:** Lindsay Bell, Planner  
**E-mail:** lbell@cityofnovi.org; **Phone:** (248) 347-0484

Items in **Bold** need to be addressed by the applicant in a response letter and in the next submittal. Underlined items need to be revised or waivers requested from the Planning Commission and/or City Council.

Item	Required Code	Proposed	Meets Code	Comments
<b>Zoning and Use Requirements</b>				
<b>Master Plan</b> <i>(adopted August 25, 2010)</i>	PD-1 (Planned Development Option)	Assisted living and skilled nursing care	Yes	
<b>Area Study</b>	The site does not fall under any special category	NA	NA	
<b>Zoning</b> <i>(Effective December 25, 2013)</i>	RM-1 Low Density Multiple Family (Retirement Community)	Phase 4.2 of previously approved Senior Community	Yes	
<b>Uses Permitted</b> (Sec 3.1.7.B & C)	Sec. 3.1.7.B. - Principal Uses Permitted. Sec. 3.1.7.C. - Special Land Uses Permitted.	Assisted living	Yes	
<b>Height, bulk, density and area limitations (Sec 3.1.8.D)</b>				
<b>Frontage on a Public Street.</b> <i>(Sec. 5.12)</i> <b>Access To Major Thoroughfare</b> <i>(Sec. 5.12)</i>	Frontage on a Public Street is required	The development has frontage and access Thirteen Mile Road.  The development contains private roads	Yes	
<b>Minimum Zoning Lot Size</b> for each Unit in Ac <i>(Sec 3.8.1)</i>	RM-1 and RM-2 Required Conditions	102 acres	Yes	
<b>Minimum Zoning Lot Size</b> for each Unit: Width in Feet <i>(Sec 3.8.1)</i>		No lot splits proposed	Yes	
<b>Open Space Area</b>	----	---		
<b>Maximum % of Lot Area Covered</b> (By All Buildings)	45%	13%		

Item	Required Code	Proposed	Meets Code	Comments	
<b>Building Height</b> (Sec. 3.20)	PD-1 Requirements: If exceeding the height limitations of the RM-1 district, building must be between 3 and 5 stories	4 stories	Yes	<i>Previously approved in Development Agreement</i>	
<b>Minimum Floor Area per Unit</b> (Sec. 3.1.7.D)	Efficiency	400 sq. ft.	399 sq. ft.	NA	<i>Does not apply for assisted living facility</i>
	1 bedroom	500 sq. ft.	510 sq. ft.	NA	
	2 bedroom	750 sq. ft.	800 sq. ft.	NA	
	3 bedroom	900 sq. ft.			
	4 bedroom	1,000 sq. ft.			
<b>Maximum Dwelling Unit Density/Net Set Area</b> (Sec. 3.1.7.D)	Efficiency	--			
	1 bedroom	10.9			
	2 bedroom	7.3			
	3+ bedroom	5.4			
<b>Residential Building Setbacks (Sec 3.18.D) &amp; (Sec 3.1.12.D)</b>					
Front (east)	50 ft.	784 ft	Yes		
Rear (west)	75 ft.	332 ft	Yes		
Side (north)	75 ft.	1645 ft	Yes		
<b>Parking Setback (Sec 3.1.7.D) (Sec 3.1.12.D) Refer to applicable notes in Sec 3.6.2</b>					
Front	20 ft.	Greater than 20 ft	NA		
Rear	20 ft.		NA		
Side	20 ft.		Yes		
<b>Note To District Standards (Sec 3.6.2)</b>					
<b>Irregularly shaped lots (Sec 3.6.2.A)</b>	Area requirements		NA		
<b>Off-Street parking lots (Sec 3.6.2.B)</b>	Off-street parking lots: setback from any interior side or rear lot line shall be not less than twenty (20) feet, and the setback from the front and any exterior side lot line shall comply with the building setback required for such uses specified above	Parking is 20' from side lot line	Yes		
<b>Exterior Side Yard Abutting a Street (Sec 3.6.2.C)</b>	All exterior side yards abutting a street shall be provided with a setback equal to front yard.		NA		
<b>Wetland/Watercourse Setback (Sec 3.6.2.M)</b>	A setback of 25ft from wetlands and from high watermark course shall be maintained		No	<b>See ECT letter</b>	

Item	Required Code	Proposed	Meets Code	Comments
<b>RM-1 and RM-2 Required Conditions (Sec 3.8)</b>				
<b>Total number of rooms</b> (Sec. 3.8.1)	Total No. of rooms < Net site area in SF/2000		NA	Subject to PD agreement conditions
<b>Public Utilities</b> (Sec. 3.8.1)	All public utilities should be available	Public utilities available	Yes	
<b>Maximum Number of Units</b> (Sec. 3.8.1.A.i)	Efficiency < 30 percent of the units		NA	<i>Assisted living and skilled nursing units require 1,500 sf per bed – previously approved in PD agreement</i>
	Balance should be 1 bedroom units (> 80 percent of the units)		NA	
	2 bedroom units		NA	
<b>Room Count per Dwelling Unit Size</b> (Sec. 3.8.1.C) *An extra room such as den count towards an extra room	<b>Dwelling Unit Size</b>	<b>Room Count *</b>		Yes  146 rooms total for addition
	Efficiency	1	33 = 33	
	1 bedroom	2	54 = 104	
	2 bedroom	3	3 = 9	
	3 or more bedrooms	4	0	
<b>Assisted Living Facilities</b> (Sec. 3.8.1.D)	1500 sf of land area provided per bed	390*1500 = 585,000 sq ft		"land area allocated...for assisted living facilities shall be subtracted from the net site area of the parcel for the purpose of determining density of the remaining portion of the development."
<b>Setback along natural shore line</b> (Sec. 3.8.2.A)	A minimum of 150 feet along natural shore line is required.	No natural shoreline present	NA	
<b>Structure frontage</b> (Sec. 3.8.2.B)	Each structure in the dwelling group shall front either on a dedicated public street or approved private drive.	Each structure is to front on private drive	Yes	
<b>Maximum length of the buildings</b> (Sec. 3.8.2.C)	A single building or a group of attached buildings cannot exceed 180 ft.	Buildings exceed max length. ~316 feet	No	<u>See below</u>
<b>Modification of maximum length</b> (Sec. 3.8.2.C)	Planning Commission may modify the extra length up to 360 ft. if	316-180= 136' difference, So additional 45' setback		<b><u>Request Planning Commission modify requirement – adequate setback proposed to mitigate additional length</u></b>
	Common areas with a minimum capacity of 50 persons for recreation or social purposes	Setback 120' from property line required,		

Item	Required Code	Proposed	Meets Code	Comments
	Additional setback of 1 ft. for every 3 ft. in excess of 180 ft. from all property lines.	332 ft proposed		
<b>Building Orientation</b> (Sec. 3.8.2.D)	Where any multiple dwelling structure and/or accessory structure is located along an outer perimeter property line, said structure shall be oriented at a minimum angle of forty-five (45) degrees to said property line.	Building is not angled	No	<i>Planning Commission/Council waiver of this requirement was previously granted.</i>
<b>Yard setback restrictions</b> (Sec. 3.8.2.E)	Within any front, side or rear yard, off-street parking, maneuvering lanes, service drives or loading areas cannot exceed 30 % of yard area	No new parking, drives, etc. proposed	Yes	
<b>Off-Street Parking or related drives</b> (Sec. 3.8.2.F)  Off-street parking and related drives shall be	No closer than 25 ft. to any wall of a dwelling structure that contains openings involving living areas	No living areas shown at ground level on North elevation	Yes	
	No closer than 8 ft. for other walls		Yes	
	No closer than 20 ft. from ROW and property line	>20 ft from property line	Yes	
<b>Pedestrian Connectivity</b> (Sec. 3.8.2.G)	5 feet sidewalks are required to permit safe and convenient pedestrian access.	7 foot sidewalks shown	Yes	
	Where feasible sidewalks shall be connected to other pedestrian features abutting the site.	Sidewalks shown to connect with sidewalks in other phases and throughout the site;	Yes	
	All sidewalks shall comply with barrier free design standards	More details needed to verify	No	
<b>Minimum Distance between the buildings</b> (Sec. 3.8.2.H)	(Total length of building A + total length of building B + 2(height of building + height of building B))/6		Yes	
<b>Minimum Distance between the buildings</b>	In no instance shall this distance be less than thirty (30) feet unless there is a corner-to-		NA	

Item	Required Code	Proposed	Meets Code	Comments			
(Sec. 3.8.2.H)	corner relationship in which case the minimum distance shall be fifteen (15) feet.						
<b>SAMPLE TABLE TO VERIFY CONFORMANCE WITH RM-1 REQUIRED CONDITIONS</b>							
Building Number	Length	Height	Number of Efficiency units	Number of 1 bedroom units	Number of 2 bedroom units	Number of 3 bedroom units	Room Count
<b>Parking, Loading and Dumpster Requirements</b>							
<b>Number of Parking Spaces</b> Residential, Multiple-family (Sec.5.2.12.A)	One (1) for each four (4) beds and one (1) for each employee  <b>222/4 = 55.5 Required</b>	Parking counts provided on sheet C100.1; <b>116 parking spaces allocated to CCC, additional spaces available for employees</b>	Yes	<b>Provide employee count for CCC to verify numbers</b>			
<b>Parking Space Dimensions and Maneuvering Lanes</b> (Sec. 5.3.2)	- 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping		Yes	<i>Previously approved parking areas</i>			
<b>Parking stall located adjacent to a parking lot entrance</b> (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		Yes				
<b>End Islands</b> (Sec. 5.3.12)	- End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. - The end islands shall generally be at least 8 feet wide, have an outside radius of 15	Provided	Yes				

Item	Required Code	Proposed	Meets Code	Comments
	feet, and be constructed 3' shorter than the adjacent parking stall as illustrated in the ZO			
<b>Barrier Free Spaces</b> <i>Barrier Free Code</i>	For xxx parking spaces, Y Barrier Free required	Previously approved	Yes	
<b>Barrier Free Space Dimensions</b> <i>Barrier Free Code</i>	- 8' wide with an 8' wide access aisle for van accessible spaces - 5' wide with a 5' wide access aisle for regular accessible spaces	Previously approved	Yes	
<b>Barrier Free Signs</b> <i>Barrier Free Code</i>	One sign for each accessible parking space.	Previously approved	Yes	
<b>Minimum number of Bicycle Parking</b> (Sec. 5.16.1)	<u>Assisted living elderly care</u> One (1) space for each twenty (20) employees, minimum 2 spaces	Bicycle parking proposed on east side of the building, south of the expansion – 6 spaces	Yes	
<b>Bicycle Parking General requirements</b> (Sec. 5.16)	No farther than 120 ft. from the entrance being served	Less than 120 ft from 2 entrances	Yes	<b><u>Provide a second location or request a waiver from the PC/Council for one location</u></b>  <b><u>Expand existing sidewalk to 6 ft to access bike parking area, or request a waiver from the PC/Council</u></b>
	When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations	One location shown	No	
	Spaces to be paved and the bike rack shall be inverted "U" design Shall be accessible via 6 ft. paved sidewalk	Details shown on C107 Existing sidewalk may be less than 6 ft.	No	
<b>Bicycle Parking Lot layout</b> (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	Shown on sheet C107	Yes	
<b>Dumpster</b> <i>Sec 4.19.2.F</i>	- Located in rear yard - Attached to the building or - No closer than 10 ft. from building if not attached - Not located in parking	Existing dumpster to be used	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>setback</li> <li>- If no setback, then it cannot be any closer than 10 ft, from property line.</li> <li>- Away from Barrier free Spaces</li> </ul>			
<b>Dumpster Enclosure</b> <i>Sec. 21-145. (c) Chapter 21 of City Code of Ordinances</i>	<ul style="list-style-type: none"> <li>- Screened from public view</li> <li>- A wall or fence 1 ft. higher than height of refuse bin</li> <li>- And no less than 5 ft. on three sides</li> <li>- Posts or bumpers to protect the screening</li> <li>- Hard surface pad.</li> <li>- Screening Materials: Masonry, wood or evergreen shrubbery</li> </ul>		NA	
<b>Entryway lighting</b> <i>Sec. 5.7</i>	One street light is required per entrance.	Not shown	No	<b>Show on lighting plan</b>
<b>PD-1 Requirements</b>				
	If exceeding the height limitations of the RM-1 District, the building must be between 3 and 5 stories	4 stories	Yes	<i>Height part of previous approval for overall site</i>
	Total number of rooms on site shall not be more than the total area of the parcel/700.  585,000 sf/ 700= 836 rooms congregate care rooms permitted	390 assisted and skilled nursing care beds previously approved	Yes	
	A maximum of 10% of the units on site can be of the efficiency type	1.4% of all units on site will be efficiency.	Yes	
	Additional 1 foot of building setback required for each foot of height over the maximum allowed under RM-1	Not required	Yes	
	A Community Impact Statement is required for the PD-1 option	N/A	Yes	The CIS was submitted with the overall site. An update is not required.
	A Traffic Impact Statement is required for	N/A	Yes	The TIS was submitted with the overall site. An

Item	Required Code	Proposed	Meets Code	Comments
	the PD-1 option			update is not required.
<b>Non-Motorized Facilities</b>				
<b>Article XI. Off-Road Non-Motorized Facilities</b>	A 6 foot sidewalk is required along collector and arterial roads	Private roads	NA	
<b>Pedestrian Connectivity</b>	Assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets	See comments on Page 4 for Pedestrian Connectivity		
<b>Building Code and Other Requirements</b>				
<b>Building Code</b>	Building exits must be connected to sidewalk system or parking lot.	Sidewalks shown	Yes	
<b>Design and Construction Standards Manual</b>	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided	Yes	
<b>General layout and dimension of proposed physical improvements</b>	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Generally provided	Yes	
<b>Economic Impact</b>	<ul style="list-style-type: none"> <li>- Total cost of the proposed building &amp; site improvements</li> <li>- Number of anticipated jobs created (during construction &amp; after building is occupied, if known)</li> </ul>	\$19.5 million estimated project cost	Yes	
<b>Development/ Business Sign &amp; Street addressing</b>	<ul style="list-style-type: none"> <li>- Signage if proposed requires a permit.</li> <li>- The applicant should contact the Building Division for an address prior to applying for a</li> </ul>		NA	



Item	Required Code	Proposed	Meets Code	Comments
	building permit.			
<b>Project and Street naming</b> (City Code Sec. 31-51)	Some projects may need approval from the Street and Project Naming Committee.		NA	
<b>Required Legal Documents</b>				
<b>Conservation Easements</b>	Drafts for Wetland and woodland conservation easements are required prior to stamping set approvals		NA	
<b>Master Deed and Bylaws</b>	Drafts for Master Deed is required prior to stamping set approvals	Are required at the time of stamping set submittal	NA	
<b>Property Split/Combination</b>	The proposed property split must be submitted to the Assessing Department for approval.		NA	
<b>Lighting and Photometric Plan (Sec. 5.7)</b>				
<b>Intent (Sec. 5.7.1)</b>	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky			<b>A lighting and photometric is typically required with Preliminary site plan when adjacent to residential. See requirements in section below</b>
<b>Lighting Plan (Sec. 5.7.A.1)</b>	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures			
<b>Lighting Plan (Sec.5.7.A.2)</b>	Specifications for all proposed & existing lighting fixtures			
	Photometric data			
	Fixture height			
	Mounting & design			
	Glare control devices			
	Type & color rendition of lamps			
Hours of operation				

Item	Required Code	Proposed	Meets Code	Comments
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties			
<b>Required Conditions</b> (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses			
<b>Required Conditions</b> (Sec. 5.7.3.B)	<ul style="list-style-type: none"> <li>- Electrical service to light fixtures shall be placed underground</li> <li>- Flashing light shall not be permitted</li> <li>- Only necessary lighting for security purposes &amp; limited operations shall be permitted after a site's hours of operation</li> </ul>			
<b>Required Conditions</b> (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			
<b>Required Conditions</b> (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps			
<b>Min. Illumination</b> (Sec. 5.7.3.k)	Parking areas: 0.2 min			
	Loading & unloading areas: 0.4 min			
	Walkways: 0.2 min			
	Building entrances, frequent use: 1.0 min			
	Building entrances, infrequent use: 0.2 min			
<b>Max. Illumination adjacent to Non-Residential</b> (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle			

Item	Required Code	Proposed	Meets Code	Comments
<b>Cut off Angles</b> (Sec. 5.7.3.L)	when adjacent to residential districts - All cut off angles of fixtures must be 90° - maximum illumination at the property line shall not exceed 0.5 foot candle			

**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

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# PLAN REVIEW CENTER REPORT

06/27/18

## Engineering Review

Continuing Care Center  
JSP18-0019

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### Applicant

Erickson Living

### Review Type

Preliminary Site Plan

### Property Characteristics

- Site Location: North side of Thirteen Mile Road, west of M-5
- Site Size: 102.79 acres
- Plan Date: 05/25/2018
- Design Engineer: Zeimet Wozniak & Associates

### Project Summary

- Construction of an approximate 88,690 square-foot "continuing care" building. Site access would be provided through an existing private roadway system, Fox Run Road, and an existing parking lot.
- Water service would be provided by an 8-inch extension from the existing 12-inch water main along Fox Run Road.
- Sanitary sewer service would be provided by an extension of an existing lead.
- Storm water would be collected by an existing storm sewer collection system.

### Recommendation

**Approval of the Preliminary Site Plan and Preliminary Storm Water Management Plan is recommended.**

### Comments:

The Preliminary Site Plan meets the general requirements of the design and construction standards as set forth in Chapter 11 of the City of Novi Codified Ordinance, the Storm Water Management Ordinance and the Engineering Design Manual with the following items to be addressed at the time of Final Site Plan submittal (further engineering detail will be required at the time of the final site plan submittal):

### General

1. A full engineering review was not performed due to the limited information provided in this submittal. Further information related to the utilities, easements, etc. will be required to provide a more detailed review.

2. The site plan shall be designed in accordance with the Design and Construction Standards (Chapter 11).
3. The current City standard detail sheets (revised in 2018) are not required for the Final Site Plan submittal. They will be required with the final Stamping Sets, and can be found on the City website ([www.cityofnovi.org/DesignManual](http://www.cityofnovi.org/DesignManual)).
4. The plan set shall be on the City's datum, NAVD88, and reference at least one city established benchmark. An interactive map of the City's established survey benchmarks can be found under the 'Map Gallery' tab on [www.cityofnovi.org](http://www.cityofnovi.org). The City benchmarks referred to on S101 are outdated and on the wrong datum.
5. Soil borings shall be provided for a preliminary review of the constructability of the proposed development. Borings identifying soil types, and groundwater elevation should be provided at the time of Preliminary Site plan.

#### Water Main

6. Add a gate valve in well to the lead extension.
7. Verify existing finished grade of benchmark hydrant works with surrounding proposed grading. Add any adjustment work to the Utility Plan and Grading Plans.

#### Storm Sewer

8. Revise Casing Detail notes as necessary to be applicable to proposed use.
9. Clarify existing end section invert in the wetland and add R156B to the structure table on Sheet S101.
10. Adjust rim elevation of R229 to correspond to surrounding grade. Add any adjustment work to the Utility Plan and Grading Plans.

#### Storm Water Management Plan

11. Indicate the name, date and preparer of the previously approved storm water management plan that applies to this development on Sheet C106.1.
12. Provide calculations of the development area or drainage district to prove that the design c-factor for Basin C in the overall storm water management plan has not been exceeded.
13. Show the drainage area contributing to R2.
14. Show where the drainage area from the existing roof where the building is being expanded contributes to the storm system.
15. Include run R1-R208 in the design table.
16. Verify there is no surface drainage to R3.
17. Include runs R229D-R228 in the design table.

#### Paving & Grading

18. Show matching retaining and landscape walls on Landscape Plans, and clarify with top and bottom of wall and ground elevations.
19. Add finished grade elevations at building corners and appropriate transitional locations.

20. Indicate elevations of finished grades or rims of existing and proposed utility structures on the Grading Plan, specifically the protected light pole near R2, the proposed S1, and the proposed adjustment of the Com MH in the sidewalk.
21. The top lift of asphalt paving shall conform to current paving standards, 1.5 inches of 5E1. Refer to Detail 7C of the current City of Novi Paving Standard Details.

Soil Erosion and Sediment Control (SESC)

22. An SESC permit is required. A full review has not been done at this time. The review checklist detailing all SESC requirements is attached to this letter. An informal review of the provided plan:
  - a. Show blankets where slope exceeds 1:6.
  - b. Show mud mat. You may indicate it "as necessary".
  - c. Show tree fence on SESC plan.
  - d. Show topo/contours on Fox Run Road.
  - e. Show stockpile location or add large note indicating immediate removal of topsoil, negating requirement for stockpile.

**The following must be provided at the time of Preliminary Site Plan resubmittal:**

23. A letter from either the applicant or the applicant's engineer must be submitted with the Final Site Plan highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved.

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

24. An itemized construction cost estimate must be submitted to the Community Development Department at the time of Final Site Plan submittal for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. ***The cost estimate must be itemized*** for each utility (water, sanitary, storm sewer), on-site paving, right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pretreatment structure and restoration).

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

25. A pre-construction meeting shall be required prior to the commencement of any site work. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
26. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting (no application fee).

27. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department (248-347-0430) for forms and information.
28. Construction Inspection Fees, to be determined once the construction cost estimate is submitted, must be paid prior to the pre-construction meeting.
29. An incomplete site work performance guarantee, equal to 1.2 times the amount required to complete the site improvements (excluding the storm water detention facilities) as specified in the Performance Guarantee Ordinance, must be posted with Community Development.
30. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted with Community Development.
31. Permits for the construction of each retaining wall must be obtained from the Community Development Department (248-347-0415).

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 Theresa Bridges at (248) 735-5625 with any questions.

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Theresa C. Bridges, P.E.

cc: Darcy Rechten, Engineering  
George Melistas, Engineering  
Lindsay Bell, Community Development  
Ben Croy, Water and Sewer





## CITY OF NOVI ENGINEERING DIVISION SOIL EROSION AND SEDIMENTATION CONTROL PLAN CHECKLIST

PROJECT: \_\_\_\_\_ SESC Application #: SE -

Contact Name: \_\_\_\_\_ DATE COMPLETED: \_\_\_\_\_

Phone Number: \_\_\_\_\_ DATE OF PLAN: \_\_\_\_\_

Fax Number: \_\_\_\_\_ STATUS:

General Requirements – Following the initial Soil Erosion and Sedimentation Control permit application to the Community Development Department, all SESC plan revisions shall be submitted directly to the Engineering Department for further review and/or permit approval. One (1) copy of revised soil erosion plans, including response letter addressing the comments below, shall be submitted for each subsequent review until the plan has been given approval by the Engineering Department, at which point five (5) copies will be required for permit approval. Plans shall be signed and sealed, and the bond must be submitted to the Treasurer's Office prior to permit issuance.

ITEM NO.	ITEM	Provided on Plans	COMMENTS
1.	Plan shall be at scale of not more than 1" = 200', include legal description, location, proximity to lakes, streams or wetlands, slopes, etc.	<input type="checkbox"/>	
2.	Plan shall include a soil survey or a written description of soil types of the exposed land area.	<input type="checkbox"/>	
3.	Plan shall show the limits of earth disruption.	<input type="checkbox"/>	
4.	Plan shall show tree protection fencing and location of trees to be protected.	<input type="checkbox"/>	
5.	Plan shall show all existing and proposed on-site drainage and dewatering facilities (i.e. structure details, rim elev., etc.)	<input type="checkbox"/>	
6.	Detailed sequence of construction shall be provided on plans structured similar to the following, supplemented with site specific items: 1) Install tracking mat, 2) Install temp. SESC measures, 3) Construct storm water basins and install treatment structures, if applicable, 4) Install storm sewer, with inlet protection to follow immediately, 5) Remove all temp. SESC measures once site is stabilized.	<input type="checkbox"/>	
7.	Plan must address maintenance of soil erosion and sedimentation control measures (temporary and permanent)	<input type="checkbox"/>	
8.	Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Division for review.	<input type="checkbox"/>	
9.	A grading plan shall be provided, or grade information shown on plan.	<input type="checkbox"/>	

10.	Note that it is the developer's responsibility to grade and stabilize disturbances due to the installation of public utilities.	<input type="checkbox"/>	
11.	The CSWO shall be listed on permit application.	<input type="checkbox"/>	
12.	Plan sealed by registered civil engineer with original signature.	<input type="checkbox"/>	
13.	An itemized cost estimate (Silt Fence, Inlet Filters, Topsoil/Seed/Mulch, Const. Access, etc.) shall be provided.	<input type="checkbox"/>	The SESC financial guarantee will be \$ . The SESC inspection fees will be \$ .
14.	Potential stockpile areas shall be shown on the plan, with note stating a ring of silt fence will be installed surrounding any stockpiled material.	<input type="checkbox"/>	
15.	Sediment basin: Provide filter on standpipe outlet structure until site is stabilized, then removed. Noted on plan and standpipe detail(s).	<input type="checkbox"/>	
16.	Provide a note on the plan stating the storm water basin will be stabilized prior to directing flow to the basin.	<input type="checkbox"/>	
17.	Pretreatment Structures: Noted to inspect weekly for sediment accumulation until site is stabilized, and will clean as required.	<input type="checkbox"/>	.
18.	Attach the Oakland County standard detail sheet.	<input type="checkbox"/>	
19.	Construction mud tracking entrance: 75'x20', 6" of 1" to 3" stone, on geotextile fabric.	<input type="checkbox"/>	
20.	Silt fence: 6" anchor trench, stakes 6' on center. Prominent line type on plan, with legend.	<input type="checkbox"/>	
21.	Provide Silt Sack with overflow capability as the inlet protection, and provide detail on plans.	<input type="checkbox"/>	
22.	Catch basin inlet filters shall be provided on existing roadways along construction route for reasonable distance from site.	<input type="checkbox"/>	
23.	Street sweeping and dust control shall be noted on plan as responsibility of contractor.	<input type="checkbox"/>	
24.	Vegetation shall be established within 5 days of final grade, or whenever disturbed areas will remain unchanged for 30 days or greater. 3-4" of topsoil will be used where vegetation is required.	<input type="checkbox"/>	
25.	Vegetated buffer strips (25' wide wherever possible) shall be created or retained along the edges of all water bodies, water courses or wetlands.	<input type="checkbox"/>	
26.	Diversion berms or terracing shall be implemented where necessary.	<input type="checkbox"/>	
27.	All drainage ditches shall be stabilized with erosion control blanket and shall utilize check	<input type="checkbox"/>	

	dams as necessary. Drainage ditches steeper than 3% shall be sodded.		
28.	Slopes steeper than 1V:6H (16%) shall be stabilized with erosion control blanket. Add this note as a general note, and also in a prominent location near any berm, etc. where a significant slope is proposed.	<input type="checkbox"/>	
29.	All culvert end sections must contain grouted rip-rap in accordance with ordinance specifications.	<input type="checkbox"/>	

**ADDITIONAL COMMENTS:**

- Please note that installation of silt fencing or tree protection fencing shall not occur prior to the initial City pre-construction meeting. When natural features exist on the site, inspection of staking may be required prior to installation of the fencing.
- Provide an estimated time of earth disruption at the next submittal. At that time, an inspection fee will be provided.**

Reviewed By:

## LANDSCAPE REVIEW

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# PLAN REVIEW CENTER REPORT

June 26, 2018

## Preliminary Site Plan - Landscaping

Fox Run CCC Expansion

### Review Type

Preliminary Site Plan Landscape Review

### Property Characteristics

- Site Location: 41215 Fox Run Road
- Site Zoning: RM-1
- Adjacent Zoning: East: RM-1/RA, South: RA, West: MH/RA, North: RA/R-2
- Plan Date: May 25, 2018

### 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 the Final Site Plans. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review and the accompanying Landscape Chart are summaries and are not intended to substitute for any Ordinance.

### Recommendation

The plan is **recommended for approval**. Please make the changes requested below on the Final Site Plans.

### Landscape Waiver Required:

A waiver to allow fewer multifamily unit landscaping trees than are required. The building addition requires 87 trees but only 27 are provided. *While the site may not support all of the required trees as the area is fairly limited, the applicant should propose additional trees where space allows in the general vicinity of the site to decrease the extent of the waiver request.*

**Please note this required waiver on the landscape plan, with its impact (ie number of trees not planted) and justification for the waiver.**

### 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 show the utilities a little darker so they are more visible.**

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

1. A complete tree survey and removal plan are provided.
2. **See ECT's review for details.**

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

1. An existing evergreen hedge along the west property line is to remain.
2. The screening is being extended to the north to help screen the building addition from the residential property to the west.
3. **Please replace any trees in the screening vegetation that are weak or dead to maintain the opacity of the buffer.**

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

The project is internal to the site and does not front on the right-of-way.

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

1. Based on the frontage, 8 street trees are required. Nine trees including 1 existing tree are provided, but two of them are further than 15' away from the curb. Street trees need to be no more than 15' away from the curb. **Please move the street trees to within 15 feet of the curb.**
2. If the existing tree is a deciduous canopy tree in good health, it can count toward the requirement and one of the proposed trees can be removed as a street tree.
3. Based on the 29 ground floor residential units, 87 deciduous canopy or large evergreen trees are required to be planted on the site. Including the 17 trees in the courtyard. 460 shrubs are provided at a rate of 10 shrubs per tree to help make up the difference in missing trees. There is no provision in the ordinance for this substitution. A landscape waiver will be required for the deficiency in trees. **Please add more trees on and near the site to decrease the waiver as much as possible with a justification for the waiver.** If a good faith effort is offered, the waiver can be supported by staff.
4. Over 80% of the building frontage facing the internal road is landscaped, far exceeding the 35% requirement.

Parking Lot Interior and Perimeter Landscaping (Zoning Sec. 5.5.3.C.)

1. The existing parking lot is not changing and the existing landscaping is sufficient.
2. As the 4-story building is 20 feet away from the parking lot, no perimeter trees are required along that edge of the parking lot.

Loading Zone screening (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)

No new loading zones are proposed.

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

1. Provided.
2. **Please include the courtyard plants in the Multi-family plant calculations and plant list.**
3. **Please revise the plant list to use plants native to Michigan for at least 50% of the species.**

Planting Notations and Details (LDM)

1. Provided.
2. **Please make the revisions noted on the Landscape Chart.**

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

As no changes are proposed to the pond, no additional landscaping is required.

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

1. A note indicates that an underground irrigation system will be installed.
2. A plan for that needs to be provided as part of Final Site Plans.

Proposed topography. 2' contour minimum (LDM 2.e.(1))

Provided.

Snow Deposit (LDM.2.q.)

Provided.

Proposed trees to be saved (Sec 37 Woodland Protection 37-9, LDM 2.e.(1))

Trees to be saved are all protected with tree fencing shown around each tree.

Phragmites Control (Zoning Sec 5.5.6.C)

1. Please survey the site for any populations of *Phragmites australis*.
2. If any are found (even a single plant), please show that on the topographical survey. If none are found, please add a note stating that.
3. If Phragmites is found, please add a treatment/control plan to the landscape plan and carry it out until the Phragmites are completely removed from the site.
4. Please continue to control the Phragmites on an ongoing basis.

Corner Clearance (Zoning Sec 5.9)

The existing parking lot has sufficient corner clearance.

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](mailto:rmeader@cityofnovi.org).



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Rick Meader – Landscape Architect

## LANDSCAPE REVIEW SUMMARY CHART – PRELIMINARY SITE PLAN

**Review Date:** June 26, 2018  
**Project Name:** Fox Run Continuing Care Center Expansion  
**Plan Date:** May 25, 2018  
**Prepared by:** Rick Meader, Landscape Architect E-mail: [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org);  
 Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant before approval of the Preliminary Site Plan.  
Underlined items need to be addressed for Final Site Plan.

### LANDSCAPE WAIVER REQUIRED:

Waiver to provide fewer multifamily site landscaping trees than are required (87 required, 27 provided).

Item	Required	Proposed	Meets Code	Comments
<b>Landscape Plan Requirements (LDM (2))</b>				
<b>Landscape Plan</b> (Zoning Sec 5.5.2, LDM 2.e.)	<ul style="list-style-type: none"> <li>▪ New commercial or residential developments</li> <li>▪ Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less.</li> <li>▪ 1"=20' minimum with proper North. Variations from this scale can be approved by LA</li> <li>▪ Consistent with plans throughout set</li> </ul>	Scale: 1"=20'	Yes	
<b>Project Information</b> (LDM 2.d.)	Name and Address	Yes	Yes	
<b>Owner/Developer Contact Information</b> (LDM 2.a.)	Name, address and telephone number of the owner and developer or association	Yes	Yes	
<b>Landscape Architect contact information</b> (LDM 2.b.)	Name, Address and telephone number of RLA	Yes	Yes	
<b>Sealed by LA.</b> (LDM 2.g.)	Requires original signature	Yes	Yes	<u>Required for Final Site Plan</u>
<b>Miss Dig Note</b> (800) 482-7171 (LDM.3.a.(8))	Show on all plan sheets	Yes	Yes	
<b>Zoning</b> (LDM 2.f.)	Include all adjacent zoning	Site: RM-1 East: RM-1/RA South: RA West: MH/RA North: RA/R-2	No	<b>Please provide zoning of site and adjacent properties on the overall site plan.</b>
<b>Survey information</b> (LDM 2.c.)	<ul style="list-style-type: none"> <li>▪ Legal description or boundary line survey</li> </ul>	Boundary and description on S100	Yes	



Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>Existing topography</li> </ul>	Topo on S101		
<b>Existing plant material</b> <b>Existing woodlands or wetlands</b> (LDM 2.e.(2))	<ul style="list-style-type: none"> <li>Show location type and size. Label to be saved or removed.</li> <li>Plan shall state if none exists.</li> </ul>	Existing trees, tree removals on plan and tree chart are provided on L201	Yes	<b>Please see ECT letter for detailed review of wetlands and woodlands.</b>
<b>Soil types</b> (LDM.2.r.)	<ul style="list-style-type: none"> <li>As determined by Soils survey of Oakland county</li> <li>Show types, boundaries</li> </ul>	Sheet L201	Yes	
<b>Existing and proposed improvements</b> (LDM 2.e.(4))	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	No changes to existing parking are proposed.	Yes	
<b>Existing and proposed utilities</b> (LDM 2.e.(4))	Overhead and underground utilities, including hydrants	Utilities are not clearly shown on the landscape plan	No	<b>Please make all existing and proposed utilities on landscape plan a little heavier to make them easier to read so conflicts can be detected and avoided.</b>
<b>Proposed grading. 2' contour minimum</b> (LDM 2.e.(1))	Provide proposed contours at 2' interval	Yes	Yes	
<b>Snow deposit</b> (LDM.2.q.)	Show snow deposit areas on plan	Yes	Yes	<b>Please move the snow deposit on the east side of the north parking lot entry to the west side, where it appears there is more room for snow without damaging existing trees.</b>
<b>LANDSCAPING REQUIREMENTS</b>				
<b>Berms, Walls and ROW Planting Requirements</b>				
<b>Berms</b>				
<ul style="list-style-type: none"> <li>All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours</li> <li>Berm should be located on lot line except in conflict with utilities.</li> <li>Berms should be constructed of loam with 6" top layer of top soil.</li> </ul>				
<b>Residential Adjacent to Non-residential (Sec 5.5.3.A) &amp; (LDM 1.a)</b>				
<b>Berm requirements</b> (Zoning Sec 5.5.A)	Since residential abuts residential and the site is well away from the property line, separated by a detention pond, no berms are required along the western boundary.	No new berm is proposed.	Yes	

Item	Required	Proposed	Meets Code	Comments
<b>Planting requirements</b> (LDM 1.a.)	LDM Novi Street Tree List	The existing screening is extended to the north.	Yes	<b>Please add a note to the plan that any dead, missing weak trees shall be replaced to restore the opacity of the existing screening.</b>
<b>Walls (LDM 2.k &amp; Zoning Sec 5.5.3.vi)</b>				
<b>Material, height and type of construction footing</b>	Freestanding walls should have brick or stone exterior with masonry or concrete interior	<ul style="list-style-type: none"> <li>Several retaining walls are proposed in a number of areas.</li> <li>Top of wall and contours are provided to indicate the wall heights.</li> </ul>	Yes	
<b>Walls greater than 3 ½ ft. should be designed and sealed by an Engineer</b>		A standard detail for the walls is provided.	TBD	<u>Provide construction details for walls 3.5' or taller with building permit drawings.</u>
<b>ROW Landscape Screening Requirements (Sec 5.5.3.B. ii) and (LDM 1.b)</b>				
<b>Greenbelt width</b> (2)(3) (5)	As project is interior to site, along a private drive, the greenbelt width requirement does not apply.	NA	Yes	
<b>Berm requirements (Zoning Sec 5.5.3.A.(5))</b>				
Min. berm crest width		None	Yes	See above
Minimum berm height (9)		None	Yes	See above
3' wall		None		
<b>Canopy deciduous or large evergreen trees</b> Notes (1) (10)	No greenbelt plantings are required.	None	Yes	
<b>Sub-canopy deciduous trees</b> Notes (2)(10)	No greenbelt plantings are required.	None	Yes	
<b>Canopy deciduous trees in area between sidewalk and curb</b> (Novi Street Tree List)	See the multifamily requirements for street trees below.			
<b>Cross-Section of Berms (LDM 2.j)</b>				
Slope, height and width	<ul style="list-style-type: none"> <li>Label contour lines</li> <li>Maximum 33%</li> <li>Constructed of loam</li> <li>6" top layer of topsoil</li> </ul>	No berms are required or proposed.		
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from	NA		

Item	Required	Proposed	Meets Code	Comments
	edge of utility or 20 ft. setback from closest pole			
<b>Multi-family/Attached Dwelling Units (Zoning Sec 5.5.3.E.ii)</b>				
Interior Street Trees (Sec 5.5.3.F.ii.(b)(2))	<ul style="list-style-type: none"> <li>▪ 1 deciduous canopy tree per 35 lf of interior roadway, excluding driveways, parking entry drives and interior roads adjacent to public rights-of-way</li> <li>▪ Subcanopy trees can be used in place of canopy trees under overhead utility lines</li> <li>▪ <math>275/35 = 8</math> trees</li> </ul>	8 new trees	Yes/No	<ol style="list-style-type: none"> <li>1. <b>Street trees need to be within 15 feet of back of curb. Please adjust their placement.</b></li> <li>2. <b>Please identify the tree to be saved along the street. If it is a healthy canopy tree it can count toward the requirement.</b></li> </ol>
Site Landscaping (Sec. 5.5.3.F.ii.(b)(1))	<ul style="list-style-type: none"> <li>• (3) Deciduous canopy trees or large evergreen trees for each dwelling unit on the ground floor.</li> <li>• <math>29*3 = 87</math> trees</li> </ul>	27 deciduous canopy, subcanopy and evergreen trees are provided, including within the courtyard.	No	<ol style="list-style-type: none"> <li>1. The applicant has provided 460 shrubs as a substitution for 46 trees. <b>The ordinance does not allow for this substitution.</b></li> <li>2. <b>Please provide more trees near the building and in the general vicinity of the building where space allows.</b></li> <li>3. A landscape waiver will be required for any trees that aren't provided.</li> <li>4. The additional shrubs can be used to support the landscape waiver request, but there should be more canopy and/or evergreen trees provided than are currently.</li> </ol>
Foundation plantings (Sec 5.5.3.F.ii.(b)(3))	<ul style="list-style-type: none"> <li>▪ Mix of shrubs, subcanopy trees, groundcover, perennials, annuals and ornamental grasses provided at the front of each ground floor unit</li> </ul>	405/498 (81%) of the building facing the interior road is landscaped	Yes	

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>Covers at least 35% of the front building façade facing Fox Run Drive.</li> </ul>			
<b>Parking Area Landscape Requirements LDM 1.c. &amp; Calculations (LDM 2.o.)</b>				
<b>General requirements (LDM 1.c)</b>	<ul style="list-style-type: none"> <li>Clear sight distance within parking islands</li> <li>No evergreen trees</li> </ul>	Yes		
<b>Name, type and number of ground cover (LDM 1.c.(5))</b>	As proposed on planting islands	<ul style="list-style-type: none"> <li>Existing lawn</li> <li>No changes are proposed to the existing islands.</li> </ul>	Yes	
<b>General (Zoning Sec 5.5.3.C.ii)</b>				
<b>Parking lot Islands (a, b. i)</b>	<ul style="list-style-type: none"> <li>A minimum of 200 SF to qualify</li> <li>Minimum 200 SF per tree planted in island</li> <li>6" curbs</li> <li>Islands minimum width 10' BOC to BOC</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>No changes are proposed to the existing parking lot.</li> </ul>	Yes	
<b>Curbs and Parking stall reduction (c)</b>	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	No changes are proposed to the existing parking lot.		
<b>Contiguous space limit (i)</b>	Maximum of 15 contiguous spaces	Maximum bay is 15 spaces	Yes	
<b>Plantings around Fire Hydrant (d)</b>	<ul style="list-style-type: none"> <li>No plantings with matured height greater than 12' within 10 ft. of fire hydrants</li> <li>Trees should also be planted at least 5 feet away from underground utility lines.</li> </ul>	No fire hydrants or other utilities are shown on the conceptual landscape plan.	TBD	<ol style="list-style-type: none"> <li>Show all hydrants and utility structures and lines on landscape plan and locate trees appropriately.</li> <li>Add a note to the plans stating spacing requirements to assist contractors.</li> </ol>
<b>Landscaped area (g)</b>	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	No changes are proposed to the existing parking lot.	Yes	
<b>Clear Zones (LDM 2.3.(5))</b>	25 ft corner clearance required. Refer to Zoning Section 5.9	Yes	Yes	
<b>Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district (Zoning Sec 5.5.3.C.iii)</b>				
A = Total square footage of vehicular use area up to 50,000 sf x 7.5%	$A = x \text{ SF} \times 7.5\% = A \text{ sf}$	No new parking is proposed.		

Item	Required	Proposed	Meets Code	Comments
B = Total square footage of additional paved vehicular use areas over 50,000 SF) x 1 %	$C = x \text{ SF} \times 1\% = B \text{ sf}$	No new parking is proposed.		
<b>Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C.iii)</b>				
A = Total square footage of vehicular use area up to 50,000 sf x 5%	$A = x \text{ SF} \times 5\% = A \text{ sf}$	NA		
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5 %	$B = x \text{ SF} \times 0.5\% = B \text{ SF}$	NA		
<b>All Categories</b>				
C = A+B Total square footage of landscaped islands required	$A + B = C \text{ SF}$	No new parking is proposed.		
D = D/200 Number of canopy trees required	$D/200 = xx \text{ Trees}$	3 existing trees in entry island		
<b>Perimeter Green space</b>	<ul style="list-style-type: none"> <li>▪ 1 Canopy tree per 35 lf</li> <li>▪ Frontage within 20' of a building 20' or taller does not need perimeter trees.</li> <li>▪ <math>335/35 = 10 \text{ trees}</math></li> </ul>	10 trees	Yes	
<b>Parking land banked</b>	NA	No		
<b>Other Landscaping</b>				
<b>Other Screening</b>				
<b>Screening of outdoor storage, loading/unloading</b> (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)		No new loading areas are proposed.	Yes	
<b>Transformers/Utility boxes</b> (LDM 1.e from 1 through 5)	<ul style="list-style-type: none"> <li>▪ A minimum of 2ft. separation between box and the plants</li> <li>▪ Ground cover below 4" is allowed up to pad.</li> <li>▪ No plant materials within 8 ft. from doors</li> </ul>	No utility boxes are shown	TBD	<ol style="list-style-type: none"> <li>1. Provide proper screening for any transformers.</li> <li>2. Include city standard detail with other landscape details.</li> </ol>
<b>Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)</b>				
<b>Planting requirements</b>	<ul style="list-style-type: none"> <li>▪ Clusters of large native</li> </ul>	<ul style="list-style-type: none"> <li>▪ None</li> </ul>	Yes	

Item	Required	Proposed	Meets Code	Comments
(Sec. 5.5.3.E.iv)	shrubs shall cover 70-75% of the basin rim area <ul style="list-style-type: none"> <li>▪ 10" to 14" tall grass along sides of basin</li> <li>▪ Refer to wetland for basin mix</li> </ul>	<ul style="list-style-type: none"> <li>▪ No changes are proposed to the existing detention basin.</li> </ul>		
<b>Phragmites Control</b> (Sec 5.5.6.C)	<ul style="list-style-type: none"> <li>▪ Any and all populations of <i>Phragmites australis</i> on site shall be included on tree survey.</li> <li>▪ Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site.</li> </ul>	None indicated	TBD	1. Please survey the site for any populations of <i>Phragmites australis</i> , show them on the existing conditions plan and submit plans for its removal. 2. If none is found, please indicate that on the survey. 3. It is recommended that whatever <i>Phragmites</i> is found on the property be treated sooner rather than later to keep it from spreading further.
<b>LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS</b>				
<b>Landscape Notes – Utilize City of Novi Standard Notes</b>				
<b>Installation date</b> (LDM 2.i. & Zoning Sec 5.5.5.B)	<ul style="list-style-type: none"> <li>• Provide intended dates</li> <li>• Should be between March 15 and November 15.</li> </ul>	Yes	Yes	
<b>Maintenance &amp; Statement of intent</b> (LDM 2.m & Zoning Sec 5.5.6)	<ul style="list-style-type: none"> <li>▪ Include statement of intent to install and guarantee all materials for 2 years.</li> <li>▪ Include a minimum one cultivation in June, July and August for the 2-year warranty period.</li> </ul>	Yes	Yes	
<b>Plant source</b> (LDM 2.n & LDM 3.a.(2))	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
<b>Irrigation plan</b> (LDM 2.s.)	<ul style="list-style-type: none"> <li>• A fully automatic irrigation system and a method of draining is required with Final Site Plan</li> </ul>	Notes indicate that an irrigation system will be provided.	Yes	<u>Irrigation plans will be needed on final site plans.</u>

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>If an alternate method of providing sufficient water for establishment and long-term survival of the plantings is desired (xeriscaping, bibbs and hoses, treegators, etc.), a detailed description of the plan needs to be included in the final site plans.</li> </ul>			
<b>Other information</b> (LDM 2.u)	Required by Planning Commission	NA		
<b>Establishment period</b> (Zoning Sec 5.5.6.B)	<b>2 yr. Guarantee</b>	Yes	Yes	
<b>Approval of substitutions.</b> (Zoning Sec 5.5.5.E)	City must approve any substitutions in writing prior to installation.	No	No	<b>Please add note to the plan.</b>
<b>Plant List (LDM 2.h.) – Include all cost estimates</b>				
Quantities and sizes	Refer to LDM suggested plant list	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names		Yes	Yes	<ol style="list-style-type: none"> <li>Please include the courtyard plantings in the Multi family unit calculation and plant list.</li> <li>Please use plants native to Michigan for at least 50% of the species used.</li> </ol>
Type and amount of lawn		No	No	<u>Please add on Final Site Plans.</u>
Cost estimate (LDM 2.t)		For all new plantings, mulch and sod as listed on the plan	No	No
<b>Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details</b>				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	<b>Please add a callout stating that dirt from the rootball should be pulled back from the trunk.</b>
Evergreen Tree		Yes	Yes	<b>See above</b>
Multi-stem Tree		Yes	Yes	<b>See above</b>
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	
<b>Other Plant Material Requirements (LDM 3)</b>				
<b>General Conditions (LDM 3.a)</b>	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	<b>Please add note on plan view near property line.</b>
<b>Plant Materials &amp; Existing Plant Material (LDM 3.b)</b>	Clearly show trees to be removed and trees to be saved on the plan and on tree chart.	Yes	Yes	
<b>Landscape tree credit (LDM3.b.(d))</b>	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		
<b>Plant Sizes for ROW, Woodland replacement and others (LDM 3.c)</b>	Refer to Landscape Design Manual for requirements	Yes	Yes	
<b>Plant size credit (LDM3.c.(2))</b>	NA	No		
<b>Prohibited Plants (LDM 3.d)</b>	No plants on City Invasive Species List	None	Yes	
<b>Recommended trees for planting under overhead utilities (LDM 3.e)</b>	Label the distance from the overhead utilities	NA		
<b>Collected or Transplanted trees (LDM 3.f)</b>		None		
<b>Nonliving Durable Material: Mulch (LDM 4)</b>	<ul style="list-style-type: none"> <li>▪ Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth</li> <li>▪ Specify natural color, finely shredded hardwood bark mulch.</li> </ul>	Yes	Yes	

**NOTES:**

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 and the Landscape Design Manual for the appropriate items under the applicable zoning classification.



Item	Required	Proposed	Meets Code	Comments
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.				

WETLANDS REVIEW

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ECT Project No. 180384-0100

June 21, 2018

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

Re: Fox Run Continuing Care Center (CCC) - JSP18-0019  
Wetland Review of the Preliminary Site Plan (PSP18-0082)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for the proposed Fox Run Continuing Care Center (CCC) project prepared by Zeimet Wozniak & Associates dated May 25, 2018 and stamped "Received" by the City of Novi Community Development Department on June 5, 2018 (Plan). The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance.

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

The following wetland related items are required for this project:

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Not Required (Impacts currently 0.15-acre < 0.25-acre wetland mitigation threshold)
Wetland Buffer Authorization	Required
MDEQ Permit	To Be Determined. It is the applicant's responsibility to contact the MDEQ in order to determine the need for a wetland use permit.
Wetland Conservation Easement	Not Required

The project includes an expansion of the existing Continuing Care Center located within the Fox Run development. This includes a building expansion, additional parking and utilities. The site stormwater runoff appears to be directed to the existing storm sewer along Fox Run Road. ECT suggests that the current Plan be reviewed by City of Novi Engineering Staff for adherence to all applicable storm water and engineering requirements.

Based on our review of the Plan, Novi aerial photos, Novi GIS, the City of Novi Official Wetlands and Woodlands Maps (see Figure 1, attached), it appears as if the overall development site contains City-

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Regulated Wetlands but does not appear to contain area mapped as City-Regulated Woodlands. The Plan indicates one (1) area of delineated wetland (Wetland E-1). The wetland was delineated by King & MacGregor Environmental, Inc. (KME) on May 17, 2018. This wetland area is subject to regulation by the City of Novi and likely by the Michigan Department of Environmental Quality (MDEQ). Permits will likely be required from the MDEQ and the City of Novi for construction activities involving this regulated wetland area.

### **City of Novi Wetland Ordinance Requirements**

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, and Article V) describes the regulatory criteria for wetlands and review standards for wetland permit applications.

As stated in the Ordinance, it is the policy of the city to prevent a further net loss of those 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).

The wetland essentiality criteria as described in the Wetland and Watercourse Protection Ordinance are included below. Wetlands deemed essential by the City of Novi require the approval of a use permit for any proposed impacts to the wetland:

*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).*

The on-site wetland appears to meet one or more of the essentiality criteria and is therefore likely City regulated (i.e., wildlife habitat and flood and storm water control).

### **On-Site Wetland Evaluation**

ECT reviewed the site for the presence of regulated wetlands as defined in the City of Novi Wetland and Watercourse Protection Ordinance. The goal of this review was to verify the location of on-site wetland resources identified by KME and assess the regulatory status. ECT's investigation was completed on June 19, 2018. Pink wetland boundary flagging was in place at the time of this site inspection (Flags E-1.1 to E-1.18). ECT reviewed the flagging and agrees that the wetland boundaries were accurately flagged in the field. Based on the existing vegetation and topography, it is ECT's assessment that the on-site wetlands have been accurately delineated at this time.

As noted above, this wetland area is indicated on the City of Novi's Regulated Wetland Map (see Figure 1). The Plan notes that the acreage of this wetland is 6,572 square feet (0.15-acre). The wetland area is an isolated scrub-shrub and emergent wetland located in a topographic depression. Vegetation observed within the wetland included narrow-leaved cat-tail (*Typha angustifolia*), green ash (*Fraxinus pennsylvanica*), sedges (*Carex spp.*) and purple loosestrife (*Lythrum salicaria*). Surface water was present at the time of our inspection.

### **Proposed Wetland Impacts**

As noted above, the construction of the proposed development appears to require the filling of this existing wetland and its 25-foot wetland setback.

This wetland area appears to be regulated by the City of Novi and may also likely regulated by the Michigan Department of Environmental Quality (MDEQ). The DEQ must determine the following before a permit can be issued:

- The permit would be in the public interest.
- The permit would be otherwise lawful.
- The permit is necessary to realize the benefits from the activity.
- No unacceptable disruption to aquatic resources would occur.
- The proposed activity is wetland dependent **or** no feasible and prudent alternatives exist.

With regard to the 25-foot wetland setbacks, the Plan proposes encroachment into the entire, existing 25-foot wetland buffer area. The Applicant shall indicate, quantify (square feet or acres of fill or excavation within the wetland limits, if applicable) and label all proposed impacts to wetlands and 25-foot wetland buffers on subsequent plan submittals. The City of Novi regulates a 25-foot buffer surrounding all wetland and watercourses.

### **Wetland Permits & Regulatory Status**

Based on the criteria set forth in The City of Novi Wetlands and Watercourse Protection ordinance (Part II-Code of Ordinances, Ch. 12, Article V.), the wetlands to be impacted appear to meet the definition of a City-regulated wetland and meets one or more of the essentially criteria (i.e., wildlife habitat, storm water

control, etc.). A wetland use permit would be required for any proposed activities within City regulated wetlands.

It appears as though a City of Novi **Non-Minor** Use Wetland Permit would be required for the proposed impacts. The granting or denying of a Nonresidential *Minor* Use Permit shall be the responsibility of the Community Development Department. A Nonresidential *Minor* Use Permit is for activities consisting of no more than one (1) of the following activities which have a minimal environmental effect:

- a. Minor fills of three hundred (300) cubic yards or less and not exceeding ten thousand (10,000) square feet in a wetland area, providing the fill consists of clean, nonpolluting materials which will not cause siltation and do not contain soluble chemicals or organic matter which is biodegradable, and providing that any upland on the property is utilized to the greatest degree possible. All fills shall be stabilized with sod, or seeded, fertilized and mulched, or planted with other native vegetation, or riprapped as necessary to prevent soil erosion.
- b. Installation of a single water outfall provided that the outlet is riprapped or otherwise stabilized to prevent soil erosion.
- c. Watercourse crossings by utilities, pipelines, cables and sewer lines which meet all of the following design criteria:
  - i) The method of construction proposed is the least disturbing to the environment employable at the given site;
  - ii) The diameter of pipe, cable or encasement does not exceed twenty (20) inches;
  - iii) A minimum of thirty (30) inches of cover will be maintained between the top of the cable or pipe and the bed of the stream or other watercourse on buried crossings; and
  - iv) Any necessary backfilling will be of washed gravel.
- d. Extension of a wetland/watercourse permit previously approved by the planning commission.
- e. Replacement of a culvert of an identical length and size, and at the same elevation. If the proposed culvert is of a greater length or size than the existing culvert, or is a new culvert altogether, it must meet the conditions of subpart c., above, to qualify for a nonresidential minor use permit.
- f. Temporary impacts where the encroachment into protected areas is less than five hundred (500) feet.

The proposed impacts appear to likely include fill in excess of 300 cubic yards.

A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland buffers.

It should be noted that the City's threshold for the requirement of wetland mitigation is 0.25-acre of proposed wetland impact. This will not be a requirement as the total area of existing on-site wetland is 0.15-acre.

It appears as though a MDEQ Wetland Permit would be required for the proposed impacts to on-site wetlands. It should be noted that it is the Applicant's responsibility to contact MDEQ in order to determine the need for a permit from the state. 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 MDEQ 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.

This wetland area may be within 500-feet of a watercourse (located to the northeast, across Fox Run Road) that is considered regulated by the MDEQ.

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.

#### **Wetland Comments**

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

1. It appears as though a MDEQ Wetland Permit and a City of Novi *Wetland Use Permit* would be required for any proposed impacts to on-site wetlands. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland buffer.
2. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from the MDEQ for the proposed wetland impact. Final determination as to the regulatory status of the on-site wetland shall be made by MDEQ. The Applicant should provide a copy of the MDEQ 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, or correspondence from MDEQ stating that they do not have jurisdiction over the wetland.
3. The applicant shall indicate, quantify and label all proposed impacts to the existing wetland and 25-foot wetland setback on subsequent plan submittals, if applicable. This includes any impacts to the 25-foot wetland setbacks for any temporary or permanent purposes. The applicant shall provide information on subsequent plans that clearly indicates the areas of onsite wetlands as well as the area of the 25-foot wetland buffers. Specifically, the plans shall clearly indicate the area (square feet or acres) of all wetland and wetland buffer impacts (both permanent and temporary, if applicable) and the volume (cubic yards) of all wetland impacts.

Fox Run CCC (JSP18-0019)  
Wetland Review of the Preliminary Site Plan – (PSP18-0082)  
June 21, 2018  
Page 6 of 8

4. Please provide to the City of Novi Community Development Department copies of correspondence for the wetland delineation performed for this property.

**Recommendation**

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

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

Respectfully submitted,  
**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**

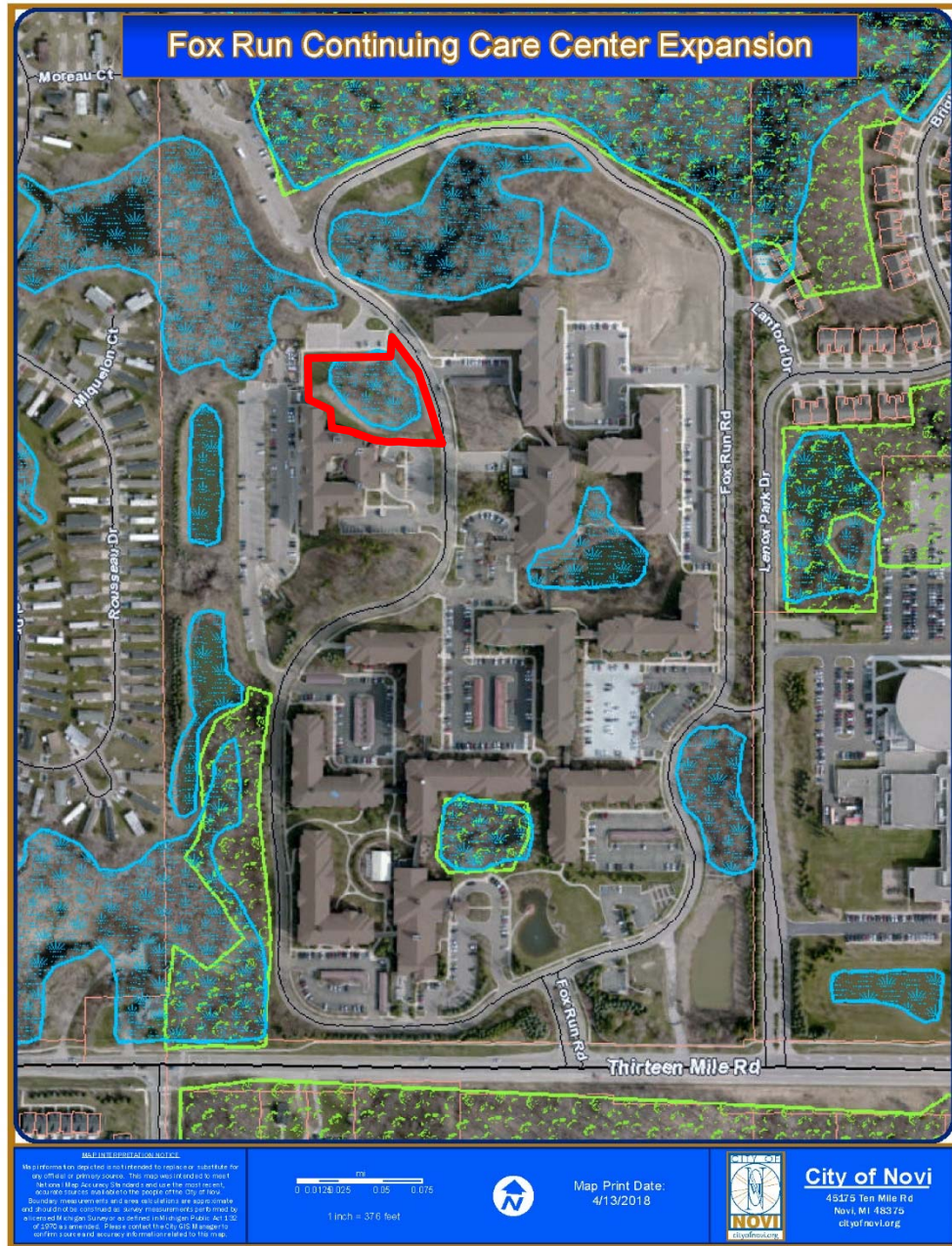


Pete Hill, P.E.  
Senior Associate Engineer

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

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





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

*Site Photos*



**Photo 1.** Looking east at existing wetland area E-1 (ECT, June 19, 2018).



**Photo 2.** Pink wetland flagging tape present on-site from the May 17, 2018 wetland delineation performed by King & MacGregor Environmental, Inc. (ECT, June 19, 2018).

WOODLANDS REVIEW

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ECT Project No. 180384-0200

June 21, 2018

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

Re: Fox Run Continuing Care Center (CCC) - JSP18-0019  
Woodland Review of the Preliminary Site Plan (PSP18-0082)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for the proposed Fox Run Continuing Care Center (CCC) prepared by Zeimet Wozniak & Associates dated May 25, 2018 and stamped "Received" by the City of Novi Community Development Department on June 5, 2018 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37.

**ECT currently recommends approval of the Preliminary Site 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 Final Site Plan.**

The following woodland related items are required for this project:

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

The project includes an expansion of the existing Continuing Care Center located within the Fox Run development. This includes a building expansion, additional parking and utilities. The site does not appear to contain City of Novi Regulated Woodlands as indicated on the City of Novi Regulated Woodlands Map (see Figure 1). However, the Plan does include a tree survey, tree list, and proposed impacts list.

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;*

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- *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.*

The central portion of the site consists of existing wetland as well as a wooded area with a significant number of existing trees greater than or equal to 8-inches diameter-at-breast-height (DBH), the City of Novi's size threshold for the regulation of trees. The site contains the following tree species: black cherry (*Prunus serotina*), red oak (*Quercus rubra*), silver maple (*Acer saccharinum*), American elm (*Ulmus americana*), sugar maple (*Acer saccharum*) and Siberian elm (*Ulmus pumila*). The majority of the trees are listed as being in 'good' or 'fair' condition and ECT was able to confirm this in our on-site evaluation. The tree sizes range from 8-inches DBH to the largest tree containing a 19-inch DBH stem.

Although the on-site trees fall outside of the City of Novi's mapped Woodland Boundaries, the City's Woodland Ordinance contains the following:

*Where uncertainty exists with respect to the boundaries of designated woodland areas shown on the regulated woodland map, the following rules shall apply:*

- *Distances not specifically indicated on the map shall be determined by the scale on the map;*
- *Where physical or natural features existing on the ground are at variance with those shown on the regulated woodland map, or in other circumstances where uncertainty exists, the community development director or his or her designee shall interpret the woodland area boundaries;*
- *On any parcel containing any degree of regulated woodland, the applicant shall provide site plan documentation showing the locations, species, size and condition of all trees of eight-inch caliper or larger. Existing site understory trees, shrubs and ground cover conditions must be documented on the site plan or woodland use permit application plan in the form of a brief narrative. The woodland conditions narrative should include information regarding plant species, general quantities and condition of the woodland vegetation*

It is ECT's opinion that the areas containing trees on the Plan, including within the project's proposed limits of disturbance, should be considered as Regulated Woodland area. As such, there are physical and natural features existing on the site that are at variance with those shown on the regulated woodland map. The Woodland Ordinance also defines Woodland Areas as:

*All lands (including all trees, shrubs and ground cover thereon regardless of size) which are subject to this chapter under section 37-4 as designated on the regulated woodland map and/or on an approved site plan. Woodlands areas are identified by such factors as: soil quality, habitat quality, tree species and diversity, health and vigor of tree stand, understory species and quality, presence of wildlife, and other factors such as the value of the woodland area as a scenic asset, windblock, noise buffer, healthy environment, and the value of historic or specimen trees.*

**Woodland Impact Review & Woodland Replacement Credits**

The *Tree Removal Plan* (L201) indicates that a total of twenty (20) trees were surveyed on the subject site that meet the minimum 8-inch diameter-at-breast-height (DBH) requirement.

As shown, there are impacts proposed to all 20 of these trees. It should be noted that seven (7) of the trees are listed as either ‘dead’ or ‘poor’ condition with half (or more) dead branches. The applicant will not be responsible for the replacement of the dead or poor trees listed in the tree survey. The Plan notes that all **20** of the on-site, regulated trees will be removed as a result of the proposed project.

As noted above, Sheet L201 notes the following:

- Total Surveyed Trees 20
- Less Dead or Poor 7
- Total Regulated Trees 13
- Regulated Trees Removed: 13 (100% Removal)
- Regulated Trees Preserved: 0
  
- Stems to be Removed 8” to 11”: 7 x 1 replacement (Requiring 7 Replacements)
- Stems to be Removed 11” to 20”: 5 x 2 replacements (Requiring 10 Replacements)
- Stems to be Removed 20” to 30”: 1 x 3 replacements (Requiring 3 Replacements)
- Stems to be Removed 30”+ : 0 x 4 replacements (Requiring 0 Replacements)
- Multi-Stemmed Trees (19 trees): (Requires 20 Replacements)
  
- Total Woodland Replacement Credits Required 20

The Plan (Sheet L203, *Plant List*) notes that all 20 required Woodland Replacement Credits will be paid into the City of Novi Tree Fund and no on-site Woodland Replacement Trees will be planted.

**City of Novi Woodland Review Standards and 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”.*

While, the overall ecological values of the existing woodlands cannot be immediately replaced through the planting of woodland replacement trees, it appears that the applicant will be prepared to meet the required Woodland Replacement requirements through a required payment to the City of Novi Tree Fund.

**Woodland Comments**

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

1. 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. The Plan notes that all twenty (20) Woodland Replacement Credits are required and that all 20 Woodland Replacement Credits will be paid to the City of Novi Tree Fund. No Woodland Replacement trees are proposed to be planted on-site.
2. ECT recommends that the applicant take all steps feasible in order to provide as many of the required Woodland Replacement credits through the planting of on-site replacement trees. If on-site Woodland Replacement planting is proposed, all deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1 replacement tree-to-1 credit replacement ratio. All coniferous replacement trees shall be six (6) feet in height (minimum) and count at a 1.5 replacement tree-to-1 credit replacement ratio. All Woodland Replacement trees shall be species that are listed on the City's Woodland Tree Replacement Chart (attached).
3. If applicable, a Woodland Replacement Performance financial guarantee for the planting of 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 a successful inspection of the installed on-site Woodland Replacement trees, the original Woodland Financial Guarantee shall be returned to the Applicant. Twenty-five percent (25%) of the value of the Woodland Replacement material shall be kept for a period of 2-years after the successful inspection of the tree replacement installation as a *Woodland Maintenance and Guarantee Bond*.
4. If applicable, Woodland Replacement material should not be located 1) within 10' of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the *Plant Material Spacing Relationship Chart for Landscape Purposes* found in the City of Novi *Landscape Design Manual*.
5. 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. If no Woodland Replacement Trees are proposed on-site, the required payment to the City of Novi Tree Fund will be \$8,000 (20 Credits Required x \$400/Credit).
6. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees (if applicable). 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.

Fox Run CCC (JSP18-0019)  
Woodland Review of the Preliminary Site Plan (PSP18-0082)  
June 21, 2018  
Page 5 of 8

**Recommendation**

ECT recommends approval of the Preliminary Site Plan for woodlands with the condition that the Applicant satisfactorily address the items noted in the “*Woodland Comments*” section of this letter at the time of Final Site Plan submittal.

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

Respectfully submitted,

**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**

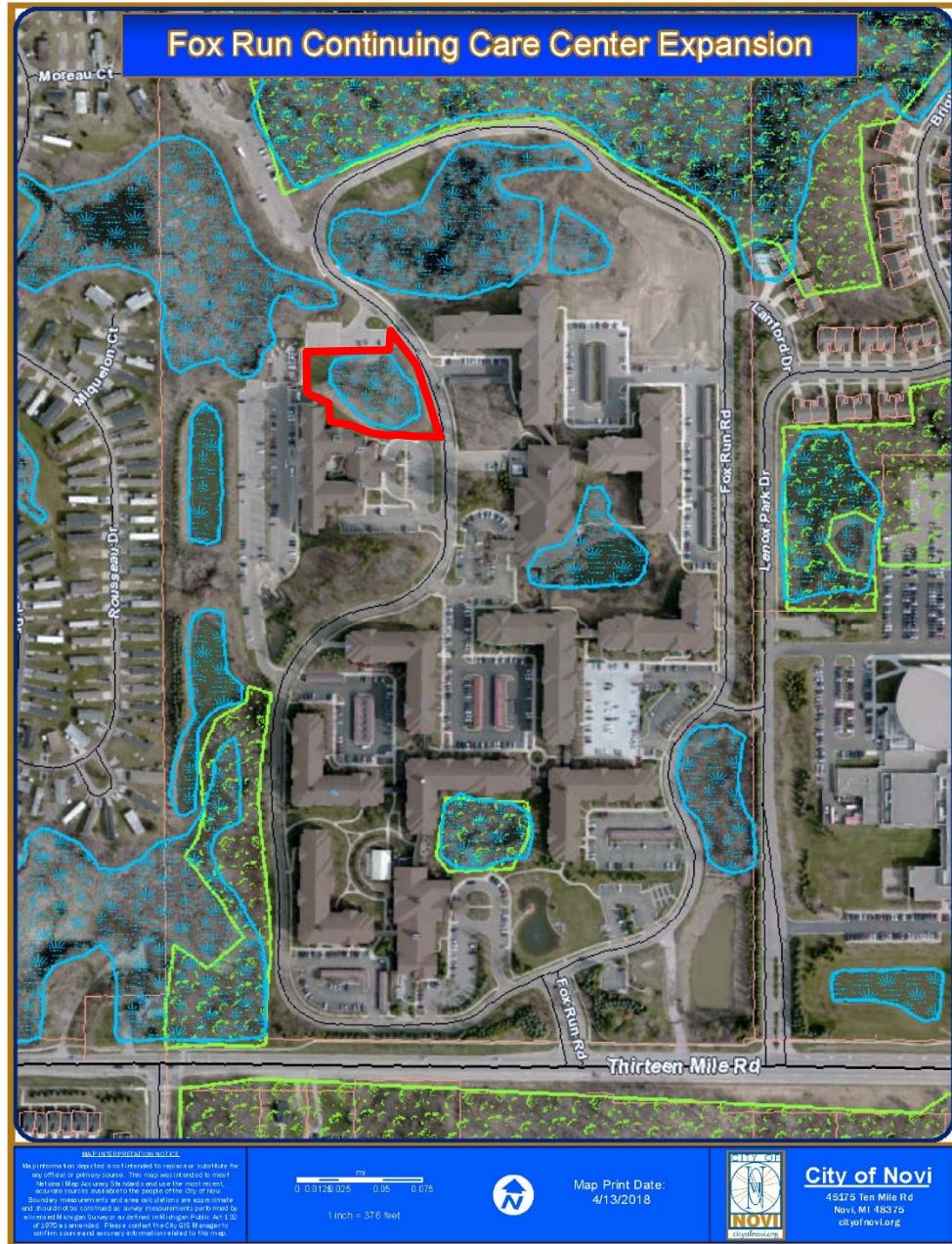


Pete Hill, P.E.  
Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner ([lbell@cityofnovi.org](mailto:lbell@cityofnovi.org))  
Sri Komaragiri, City of Novi Planner ([skomaragiri@cityofnovi.org](mailto:skomaragiri@cityofnovi.org))  
Rick Meader, City of Novi Landscape Architect ([rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org))  
Hannah Smith, City of Novi Planning Assistant ([hsmith@cityofnovi.org](mailto:hsmith@cityofnovi.org))

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





**Figure 1.** City of Novi Regulated Wetland & Woodland Map (approximate project 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
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
Yellowwood	Cladrastis lutea
Beech	Fagus sp.
Thornless Honeylocust	Gleditsia triacanthos inermis
Kentucky Coffeetree	Gymnocladus dioica
Walnut	Juglans sp.
Eastern Larch	Larix laricina
Sweetgum	Liquidambar styraciflua
Tuliptree	Liriodendron tulipifera
Tupelo	Nyssa sylvatica
American Hophornbeam	Ostrya virginiana
White Spruce_(1.5:1 ratio) (6' ht.)	Picea glauca
Black Spruce_(1.5:1 ratio) (6' ht.)	Picea mariana
Red Pine	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 Bladdernut	Staphylea trifolia
Bald Cypress	Taxodium distichum
American Basswood	Tilia americana
Hemlock (1.5:1 ratio) (6' ht.)	Tsuga canadensis

*Site Photos*



**Photo 1.** Looking west across the north end of the proposed site. Wetland (E-1) and existing trees are shown (ECT, June 19, 2018).



**Photo 2.** Tree #1551 (10"/7" red maple) to be removed for site construction (ECT, June 19, 2018).

TRAFFIC REVIEW

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

**Project name:**  
JSP18-0019 Fox Run Continuing Care Center  
Expansion Preliminary Site Plan Traffic Review

**From:**  
AECOM

**Date:**  
June 26, 2018

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

**CC:**  
Sri Komaragiri, Lindsay Bell, George Melistas,  
Theresa Bridges, Darcy Rechten, Hannah Smith

# Memo

**Subject:** Fox Run Continuing Care Center Expansion Preliminary Site Plan

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

## GENERAL COMMENTS

1. The applicant, Erickson Living, is proposing an expansion to the continuing care center that is located within the existing Fox Run development. The expansion is a total of 88,690 square feet (SF) and is comprised of three floors including a basement. The expansion building will contain a total of 90 dwelling units. The existing development is located north of 13 Mile Road west of M-5.
2. 13 Mile Road is under the jurisdiction of the City of Novi. The roadways within the Fox Run development are private roadways.
3. The existing development is zoned RM-1 (Low-Density, Multi-Family Residential). The applicant has not proposed to rezone due to the expansion.
4. The following is a summary of critical requirements to move forward, but may not be inclusive of all requirements contained within this letter:
  - a. The bicycle parking layout shall be modified to include a four foot wide access aisle adjacent to the six foot wide parking area, as show in 5.16.6 of the Zoning Ordinance.
  - b. The applicant should indicate the width of the sidewalk between the roadway and the proposed bicycle parking facility. If it is less than six (6) feet in width, the applicant should increase the width to a minimum of six (6) feet prior to installing the bicycle parking facility, or may request a Planning Commission waiver to allow the existing sidewalk to remain as is and not meet the six (6) foot requirement. Staff would support the waiver in this instance.
  - c. The applicant shall indicate the width of the proposed walkways within the garden area of the development.
5. Summary of traffic-related waivers/variances:
  - a. The applicant may request a Planning Commission waiver to allow the existing sidewalk near the proposed bicycle facility to remain as is and not meet the six (6) foot requirement, assuming it is less than six (6) feet currently. Staff would support the waiver in this instance.

## TRAFFIC IMPACTS

1. AECOM performed an initial trip generation estimate based on the ITE Trip Generation Manual, 10<sup>th</sup> Edition, as follows:

ITE Code: 253 – Congregate Care Facility  
 Development-specific Quantity: 90 dwelling units  
 Zoning Change: N/A

Trip Generation Summary				
	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold	Above Threshold?
<b>AM Peak-Hour Trips</b>	7	4	100	No
<b>PM Peak-Hour Trips</b>	18	9	100	No
<b>Daily (One-Directional) Trips</b>	182	N/A	750	No

2. The number of trips does not exceed the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour. AECOM recommends performing the following traffic impact study in accordance with the City's requirements.

Trip Impact Study Recommendation	
Type of Study:	Justification
None	N/A

## 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 not proposing modifications to the external site access and operations to the development.
2. There is an existing right turn lane and exiting taper at the development entrance.
3. There is an existing two-way left-turn lane on 13 Mile Road.

## INTERNAL SITE OPERATIONS

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

1. General Traffic Flow
  - a. The applicant has not proposed any changes to the existing private roadways in the development.
2. Parking Facilities
  - a. The applicant is not proposing any changes to the vehicular parking facilities previously constructed.

- b. The applicant is required to provide one (1) bicycle parking space for each twenty (20) employees on the maximum shift, minimum two (2) spaces, for the congregate living facility.
  - i. The applicant is proposing six bicycle parking spaces near the south side of the proposed addition. The applicant should indicate the number of employees on the maximum shift to review compliance with Section 5.16.2 of the Zoning Ordinance.
  - ii. The proposed bicycle rack design meets the requirements of the Zoning Ordinance, Section 5.16.5.B.
  - iii. The bicycle parking layout shall be modified to include a four foot wide access aisle adjacent to the six foot wide parking area, as show in 5.16.6 of the Zoning Ordinance.
- 3. Sidewalk Requirements
  - a. The applicant has indicated a sidewalk width of six (6) feet between the proposed bicycle facility and the building, which exceeds the required five (5) foot width.
  - b. All bicycle parking facilities shall be accessible from adjacent street(s) and pathway(s) via a paved route that has a minimum width of six (6) feet, per Section 5.16.5.C of the Zoning Ordinance. The applicant should indicate the width of the sidewalk between the roadway and the proposed bicycle parking facility. If it is less than six (6) feet in width, the applicant should increase the width to a minimum of six (6) feet prior to installing the bicycle parking facility, or may request a Planning Commission waiver to allow the existing sidewalk to remain as is and not meet the six (6) foot requirement. Staff would support the waiver in this instance.
  - c. The applicant should provide dimensions for any proposed sidewalks or walk-ways within the garden area.
  - d. The applicant should provide additional details for the pedestrian link to Twin Pines.
  - e. The applicant is not proposing any modifications to existing ramps, nor are they proposing any new ramps within the proposed expansion area.

## 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 not indicated any additional signing or striping as part of the proposed expansion.

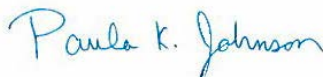
Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

**AECOM**



Maureen N. Peters, PE  
Senior Traffic/ITS Engineer



Paula K. Johnson, PE  
Senior Traffic Engineer

## FACADE REVIEW

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July 11, 2018

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

**Façade Review Status:**  
 Approved – Section 9 Waiver Recommended

Attn: Ms. Barb McBeth – Director of Community Development

Re: FACADE ORDINANCE – Final Site Plan Review  
**Fox Run Continuing Care Center, JSP18-00191,**  
 Façade Region: 1, Zoning District: RM-1

Dear Ms. McBeth:

The following is the Façade Review for Final Site Plan Approval of the above referenced project based on the REVISED drawings prepared by Hord Copland Architects, dated 7/5/18. The original and revised (original / revised) percentages of materials proposed for each façade are shown on the table below. The maximum percentages allowed by the Schedule Regulating Façade Materials of Ordinance Section 2520 are shown in the right hand column. Materials in non-compliance with the Façade Schedule, if any, are highlighted in **bold**.

	East (1,A4.00)	North (2,A4.00)	West (3,A4.00)	South (2,A4.10)	South (1,A4.10)	Ordinance Maximum (Minimum)
Brick	33% / 48%	<b>27%</b> / 32%	<b>13%</b> / 46%	32% / 37%	<b>20%</b> / 30%	100% (30% Min)
EIFS	<b>30%</b> / 22%	<b>29%</b> / <b>29%</b>	<b>45%</b> / <b>32%</b>	<b>27%</b> / <b>32%</b>	<b>35%</b> / <b>31%</b>	25%
Trim	6% / 5%	8% / 4%	6% / 5%	6% / 4%	6% / 6%	15%
Fabric Awnings	0%	0%	0%	0%	0%	10%
CMU (Type T.B.D)	<b>13%</b> / 9%	5% / 5%	<b>32%</b> / <b>14%</b>	<b>14%</b> / 10%	6% / 6%	10%
Asphalt Shingles	18% / 16%	31% / 30%	4% / 3%	21% / 17%	33% / 27%	50% (Note 14)

Recommendation - As shown above the applicant has revised the elevations in response to the comments in our prior review. The percentages of materials are now consistent with the existing facades. Therefore, it is our recommendation that the design is consistent with the intent and purpose of the Façade ordinance and that a Section 9 Waiver be granted for the overage of EIFS on all facades and the overage of CMU on the west and south facades.

## **General Façade Requirements Pertaining to all Buildings;**

1. It should be noted that revisions after approval may require reapplication as described in Section 5.15.10 of the Ordinance. Except for the specific Section 9 Waivers granted, all building must comply with the Façade Ordinance at the time of Preliminary Site Plan application.
2. All roof top equipment must be screened from view from all on-site and off-site vantage points using compliant materials consistent with the building design. In this case the elevated views from the nearby highway overpass would be included.
3. Dumpster enclosures (excluding doors) are required to be constructed of brick or stone matching the primary buildings.
4. Inspections – The Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board (in this case the adjacent existing material) will be compared to materials to be installed. It is the applicant's responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department's Online Inspection Portal with the following link. Please click on "Click here to Request an Inspection" under "Contractors", then click "Façade".

<http://www.cityofnovi.org/Services/CommDev/OnlineInspectionPortal.asp>.

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

Sincerely,  
DRN & Associates, Architects PC



Douglas R. Necci, AIA

**FIRE REVIEW**

---



June 12, 2018

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

RE: Fox Run Continuing Care Center Expansion

**CITY COUNCIL**

**Mayor**  
Bob Gatt

**Mayor Pro Tem**  
Dave Staudt

Andrew Mutch

Wayne Wrobel

Laura Marie Casey

Gwen Markham

Kelly Breen

**City Manager**  
Peter E. Auger

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

**Director of EMS/Fire Operations**  
Jeffery R. Johnson

**Assistant Chief of Police**  
Erick W. Zinser

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

PSP# Pre-App Meeting  
**PSP# 18-0082**

**Project Description:**

**Build an addition, 3 stories above ground with a basement off of Rose Ct. building.**

**Comments:**

- **All fire hydrants MUST** be accessible during construction phase.

**Recommendation:**

Approved

Sincerely,

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

cc: file

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

cityofnovi.org

APPLICANT RESPONSE LETTER

---

# ZEIMET WOZNIAK & ASSOCIATES

Civil Engineers & Land Surveyors

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

July 5, 2018

Ms. Lindsay Bell, Planner  
City of Novi Community Development Department  
45175 Ten Mile Road  
Novi, MI 48375

Re: Preliminary Site Plan Approval for  
Fox Run Continuing Care Center Expansion  
JSP18-19

**RECEIVED**

**JUL 05 2018**

**CITY OF NOVI  
COMMUNITY DEVELOPMENT**

Dear Ms. Bell:

We are in receipt of the city staff and consultant review letters for the first review of the Preliminary Site Plan this project as released on June 27, 2018. We have reviewed the comments and have addressed them on the revised preliminary site plans as described herein.

Please find attached the following for your approval:

1. An original copy of the Site Plan as submitted on May 25, 2018 (paper and on disc in .pdf format).
2. Separate sheets showing the revisions made to address the issues raised by staff in the review letters.
3. Response letters to each city reviewing agency:
  - To Planning (Planning Committee) from Timothy Barnhill
  - To Engineering (Theresa C. Bridges, PE) from Julian J. Wargo, Jr., PE
  - To Landscaping (Barbara McBeth) from Ken Weikal, RLA
  - To Wetlands and Woodlands (Peter Hill, PE) from Julian J. Wargo, Jr., PE
  - To Traffic (Sterling Frazier, PE) from Julian J. Wargo, Jr., PE
  - To Fire (Kevin Pierce) from Julian J. Wargo, Jr., PE
4. A color rendering of the Site Plan.
5. The Facade Materials Board will be presented at the July 11 hearing before the Planning Commission.

We look forward to appearing before the City's Planning Commission at their July 11, 2018 meeting.

Thank you for assistance with this project.

Very truly yours,



Julian J. Wargo, Jr., PE

Encl.

PC: J. J. Wilhour, Erickson  
Dawn Yeager, Erickson  
Tim Barnhill, HCM2 Architects  
Ken Weikal, HWLA

J:18111.Letter8

July 5<sup>th</sup>, 2018

City of Novi Community Development Department  
45175 Ten Mile Road  
Novi, MI 48375

Re: Planning Review for Fox Run Continuing Care Center Expansion  
JSP18-19

Dear Planning Committee,

Thank you for the review comments provided in regards to our project for the expansion of the Continuing Care Center at Fox Run. In response to your review comments dated June 27 2810-Revised, we offer the following:

### **ORDINANCE REQUIREMENTS**

1. *Maximum Length of Buildings (Sec. 3.8.2.C): The ordinance requires building lengths cannot exceed 180 feet. However, if exceeded, the Planning Commission may modify the length requirement up to 360 feet if there are recreational or social common areas with a minimum capacity of 50 persons within the building. Such additional length would require additional setback of 1 foot for every 3 feet in excess of 180 feet. The existing building with the new addition would be approximately 316 feet in length on the east side. The proposed building length would need an additional 45 feet of setback over the 75 feet required, for a total setback of 120 feet. The proposed building is set back 332 feet from the nearest property line. **The applicant should request the Planning Commission's approval of the modification of the maximum building length.***

**RESPONSE:** The applicant is requesting a modification to the maximum building length and meets the requirement for the setback and the recreational or social common areas. We have provided over 3,700sf of recreational and social area in the building. Based on the different uses and 30sf per person that is equal to activity space for 126 residents. This does not include the existing building which provides an additional 8,704sf for resident dining and activity area.

The Original approved SEA plan had a building that had a maximum length 310' feet in length. The proposed buildings maximum length is 316" which is 6' longer than the original approved footprint.

2. *Retaining Walls: Heavy black lines on sheets C101, C103, C104, etc. seem to indicate retaining walls on the northern and eastern sides of the building. Please label these features, both on the site plans and in elevations.*

**RESPONSE:** This will be labeled

3. *Elevation Labels: The North and South elevations on sheets A4.00 and A4.10 are mislabeled. Please correct.*

**RESPONSE:** This has been corrected.

4. *Photometric Plan: Lighting and photometric plans are required when a project is adjacent to residential areas. A photometric plan must be included with the next submittal.*

**RESPONSE:** This will be provided.

5. *Continuing Care Rooms: The total number of assisted living/skilled nursing rooms approved for the Fox Run development is 390. The existing and proposed units will bring the total units provided to 222. The site plan unit matrix lists the remaining 168 units as "future units" however the location of those units is not provided. The applicant should clarify where those units are intended to be located.*

**RESPONSE:** The applicant would like to reserve the right to build a new building on the south side of the existing care facility, acknowledging that they would have to go through the full approval process at that time.

6. *Employee Counts: The number of employees at the expanded Continuing Care Center should be provided in order to verify adequate parking and number of bicycle parking spaces required.*

**RESPONSE:** 40 full time employees and 40 part time employees will be employed due to this addition.

8e. *Facade Review: The proposed addition deviates from both the existing building and the Façade Ordinance. Façade does not recommend approval at this time. See comments in review letter.*

**RESPONSE:** We have revised the façade based on the review comments. Based on our calculations there are a few elevations that are slightly over the EIFS maximum but well above the brick minimum. This increase in EIFS is due to the massing of the building and proper balance. We would like to seek a modification based on the new elevations. The overall building calculation meets the requirements. A material board will be provided at the hearing as requested.

I believe all other comments have been addressed by Zeimet Wozniak. Please contact us if you have any questions or comments.

Thank you for assistance with this project.

Sincerely,  
**Hord Coplan Macht, Inc**



Timothy R. Barnhill, AIA  
Principal



July 5, 2018

Ms. Theresa C. Bridges, PE  
City of Novi Engineering Department  
45175 Ten Mile Road  
Novi, MI 48375

Re: Engineering Review of Preliminary Site Plan for  
Fox Run Continuing Care Center Expansion  
JSP18-19

Dear Ms. Bridges:

We are in receipt of your comments for the first review of the Preliminary Site Plan dated June 27, 2018. In response, we offer the following:

#### GENERAL

1. The enclosed site engineering plans describe the grading and utilities that support the proposed building expansion. It is understood that a more complete review shall be performed when the final engineering plans are submitted for Final Site Plan approval.
2. The site engineering plans have been prepared following the City's Design and Construction Standards.
3. The current City standard detail sheets shall be incorporated in to the final engineering plans.
4. The site engineering plans have been prepared on the City's datum, NAVD88; the established city benchmark is referenced on Sheet S101.
5. Soil borings are pending and shall be provided with the final engineering plans.

#### WATER MAIN

6. A gate valve in well has been added to the water lead extension. Please see Sheet C103.
7. The existing finished grade of the benchmark hydrant shall be adjusted as noted on Sheets C102 and C104.

#### STORM SEWER

8. The Casing Detail on Sheet C107 has been revised.
9. The inverts on the existing end section R208A and CB R156B have been added to the Structure Table on Sheet S101.
10. The existing rim elevation of CB R229 shall be adjusted as noted on Sheets C102 and C103.

#### STORM WATER MANAGEMENT PLAN

11. Information about the preparer of the previously prepared storm water management plan has been added to Sheet C106.1.
12. Pre-development and post-development C Factors are calculated on Sheet C106.
13. The drainage area contributing to CB R2 has been added to Sheet C106.1.
14. The drainage area from the existing roof where the building is being expanded that contributes to the storm sewer system has been added to Sheet C106.1.
15. Run R1 to R208 has been added to the design table on Sheet C106.1.
16. No surface drainage flows to R3 which shall be constructed as an inlet with a solid cover.
17. Run R229D to R228 has been added to the design table on Sheet C106.1.

#### PAVING & GRADING

18. The walls on the engineering plans have been revised to match the walls on the landscape plans. See Sheets C101, C102, C103 and C104.

19. Finished grade elevations at the building corners and transitions have been added to Sheet C103.
20. Elevations on the existing and proposed structures have been added to Sheet C103.
21. The paving specifications has been revised to conform with the city' s current standard.

SOIL EROSION AND SEDIMENT CONTROL

22. The following notes and details have been added to the plan:
  - Mulch blanket on all slopes that exceed 1:6.
  - A mud mat at the construction entrance.
  - Tree protection fence around the existing trees to be preserved.
  - Existing topography and contours within Fox Road.
  - A large note that indicates that all topsoil shall be stripped and immediately removed from the site (ie. no stockpiles).

All other outstanding items shall be addressed at the time of Final Site Plan submittal and/or prior to construction, as appropriate.

Thank you for recommending approval of this project. Please contact us if you have any further questions or comments.

Very truly yours,



Julian J. Wargo, Jr., PE

PC: J. J. Wilhour, Erickson  
Dawn Yeager, Erickson  
Tim Barnhill, HCM2 Architects  
Ken Weikal, HWLA

J:18111.Letter10

# **Z**EIMET **W** & ASSOCIATES **O**ZNIAK

Civil Engineers & Land Surveyors

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

July 5, 2018

Mr. Peter Hill, PE  
ECT  
2200 Commonwealth Blvd, #300  
Ann Arbor, MI 48105

Re: Wetland and Woodland Review for  
Preliminary Site Plan for  
Fox Run Continuing Care Center Expansion  
JSP18-19 / PSP18-0050

Dear Mr. Hill:

Thank you for recommending approval of the Preliminary Site Plan for Wetlands in your correspondence dated June 21, 2018. In response to your commentary, we offer the following:

## WETLANDS

The impacts to Wetland E-1 are illustrated on Sheet C103.1:

- Area of Existing Wetland = 6,572 sf / 0.16 acres
- Fill Volume = 23 cy
- Area of Wetland Setback = 10,556 sf / 0.24 acres
- Permanent Impact to Wetland Setback = 10,556 sf / 0.24 acres

No mitigation is offered at this time for impacts to the wetland and its associated buffer zone as a result of filling of this area for the proposed building expansion.

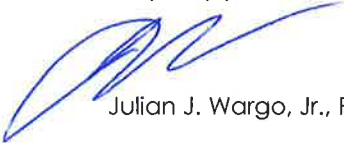
An Application for Onsite Meeting has been submitted to the MDEQ through their MiWaters website to determine if a permit is needed from their office (copy attached).

## WOODLANDS

Please refer to the response letter from Ken Weikal.

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

Very truly yours,



Julian J. Wargo, Jr., PE

Encl.

J:18111.Letter11

**Julian Wargo**

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**From:** MiWaters Support [DEQ-WRD-MiWaters@michigan.gov]  
**Sent:** Monday, July 02, 2018 1:01 PM  
**To:** jwargo@zeimetwozniak.com  
**Subject:** Application/Service Request Receipt Acknowledgement - HNF-04N0-6PS0A, Fox Run CCE, Novi

Julian Wargo,

This is to notify you that Michigan DEQ has received your submission. Details of your submission are presented below:

**Form Name: Pre-Application Meeting Request Part 301 (Inland Lakes and Streams), Part 303 (Wetlands Protection)**

**Submission Reference Number: HNF-04N0-6PS0A**

**System Receipt Date: 07/02/2018 12:43PM**

**Facility, Site, or Project: Fox Run CCE, Novi**

Additional notifications will be sent when key events are recorded or when submission processing milestones are achieved.

You can access MiWaters using the link below if you need to modify your application.

**<https://miwaters.deq.state.mi.us/miwaters/>**

This is an automated email sent by the MiWaters system



July 5, 2018

Ms. Barbara McBeth - City Planner  
City of Novi  
45175 Ten Mile Road,  
Novi, Michigan  
48375

**RE: Fox Run Care Center Expansion (JSP18-0019)  
Novi, Michigan  
Landscape Planting Plans**

Dear Ms. McBeth,

We submit the following revised plans for review, sheets L100, L201, L301, L302, L303, L501 and L502, dated 7/05/2018.

- I. General
  - a. L301 Landscape Plan - The building elevation has been revised on the north side, to extend the wall to a lower grade, thus removing the need for retaining wall terracing. One small landscape wall remains.
  - b. L302 Plant list - Plantings and calculations have been revised.
  - c. L303 Planting Details - new City standard planting details and notes have been added, as well as a photo of the west buffer.
- II. Wetlands - in response to the letter from Pete Hill / ECT dated 06/21/2018:
  - A) Wetlands - see Zeimet Wozniak comments
- III. Woodlands - in response to the letter from Pete Hill / ECT dated 06/21/2018:
  - A) There is not room around the new building for woodland replacement trees to be planted per the woodland replacement ordinance - see landscape plan L301. For the 20 required Woodland Replacement Credits, Erickson will contribute \$8000 (20 trees x \$400) into the City of Novi Tree Fund.
  - B) Woodlands - Tree inventory and removal information are shown on sheet L201.

- IV. In response to the LANDSCAPE REVIEW SUMMARY CHART – PRE-APPLICATION by Rick Meader Landscape Architect dated 6/26/2018:
- A) Landscape Plan L301 - Utilities have been darkened.
  - B) West Buffer - has been extended to the north - see small detailed plan 3/L302. Photo of west buffer and note have been added to the plan stating any dead, missing or weak trees shall be replaced to restore the opacity of the existing screening.
  - C) Loop Road Street trees - cannot be moved to 15' from the curb line due to many underground utilities in this area, but are proposed to be planted just outside this utility corridor - see L301
  - D) Multi-Family Development Landscaping.
    - a. Shrubs have been removed from the Multi-family tree calculations. Native shrubs specified for foundation plantings have been moved to the woodland replacement chart.
    - b. 87 trees are required.

Planting areas have been redesigned around the building (including the area along the north parking lot where the building wall has been lowered to grade, to not require previously proposed extensive retain walls) and tree numbers have increased to 50. All areas for tree planting have been utilized including open areas by the adjacent maintenance building - see sheet L301 and L302. Other planting areas have been utilized under previous phase's woodland replacement requirements. Erickson requests a waiver on the remaining 37 trees.
  - E) Plant list -
    - a. The courtyard plantings have been included in the Multi-family plant calculations and plant list.
    - b. Plants native to Michigan for at least 50% of the species have been moved to the woodland replacement chart
  - F) Irrigation - Irrigation plan is attached - see sheets L501, L502
  - G) Phragmites - this invasive plant occurs in the pond west of the CC building. Fox Run grounds personnel have an ongoing control program for the campus. Any plants occurring on the site for the new CC expansion will be removed with building construction.

#### SUMMARY CHART

- H) Landscape Plan provided on sheet L301, Plant list and calculations on sheet L302 and Planting details on sheet L303
- I) Plans to be sealed by Registered Landscape Architect - plans are sealed
- J) Zoning - is shown on sheet L100
- K) Existing utilities - have been darkened on the plans
- L) Snow storage area shown on sheet L301 - has been moved to the north side of the parking drive.
- M) West Buffer - has been extended to the north - see small detailed plan 3/L302. Photo of west buffer and note have been added to the plan stating any dead, missing or weak trees shall be replaced to restore the opacity of the existing screening.
- N) Retaining wall heights shown on civil plans and wall detail shown on sheet L302
- O) Street trees - cannot be moved to 15' from the curb line due to many underground utilities in this area, but are proposed to be planted just outside this utility corridor - see L301. Yellowwood tree along the road is in fair/ good condition and is a previous phase wood replacement
- P) Multi family requirements - see item "D" above
- Q) Hydrants shown with 10' radius
- R) Entry drive to parking - Clear view zone shown on sheet L301
- S) Spacing - has been added to the plant list for shrubs
- T) No transformers requiring screening are proposed on this phase
- U) LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS - sheet L301 Planting Plan includes  
  
Plantings no closer that 4' to property Line  
Plant Materials & Existing Plant Material

- V) LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS - sheet L302 Plant Lists and calculations includes

Plant lists and cost estimates

- W) LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS - sheet L303 Planting Details includes

Installation date and specs

Plant sourcing

Maintenance Statement

Approval of plant material substitutions

City of Novi Planting Details

Sincerely,

**HAGENBUCH WEIKAL LANDSCAPE ARCHITECTURE**

A handwritten signature in black ink, appearing to read "Kenneth S. Weikal", written in a cursive style.

Kenneth S. Weikal - Principal



July 5, 2018

Mr. Sterling Frazier, PE  
AECOM  
27777 Franklin Road  
Southfield, MI 48034

Re: Traffic Review for  
Preliminary Site Plan for  
Fox Run Continuing Care Center Expansion  
JSP18-19

Dear Mr. Frazier:

Thank you for recommending Preliminary Site Plan Approval for Traffic in your correspondence dated June 26, 2018.

The outstanding issues related to the internal site operations have been addressed on the site plans as follows:

1. No changes to the general traffic flow are proposed.
2. The new facility is expected to generate 40 full-time and 40 part-time new positions (this would break down to 20 ft and 20 pt per shift). Six bicycle parking spaces are adequate.
3. Sidewalks have been fully dimensioned on the plans.

Please contact us if you have any questions or comments.

Very truly yours,



Julian J. Wargo, Jr., PE

Encl.

PC: J. J. Wilhour, Erickson  
Dawn Yeager, Erickson  
Tim Barnhill, HCM2 Architects  
Ken Weikal, HWLA

J:18111.Letter13

**Z EIMET W OZNIAK**  
& ASSOCIATES

Civil Engineers & Land Surveyors

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

July 5, 2018

Mr. Kevin Pierce  
City of Novi Public Safety Administration  
45125 W. Ten Mile  
Novi, MI 48375

Re: Fire Department Review for  
Preliminary Site Plan for  
Fox Run Continuing Care Center Expansion  
JSP18-19 / PSP18-0082

Dear Mr. Pierce:

Thank you for recommending approval of the Preliminary Site Plan for Fire in your correspondence dated June 12, 2018.

It is noted on the Cover Sheet that ALL fire hydrants shall be accessible during the construction phase.

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

Very truly yours,



Julian J. Wargo, Jr., PE

Encl.

PC: J.J. Wilhour, Erickson  
Dawn Yeager, Erickson  
Tim Barnhill, Hord/Coplan/Macht  
Kenneth Weikal, HwLA

J:18111.Letter12