



PARC VISTA (FKA COVINGTON ESTATES) JSP21-47

PARC VISTA JSP21-47, (FKA COVINGTON ESTATES)

Public hearing at the request of Toll Brothers, LLC for Preliminary Site Plan with Site Condominium and Stormwater Management Plan. The subject property is in Section 31 north of Eight Mile Road and west of Garfield Road in the RA, Residential Acreage District. The applicant has received City Council approval of a Residential Unit Development (RUD) Agreement on a 54.3 acre parcel to construct 44 single-family residential units.

REQUIRED ACTION

Approval/denial of the Preliminary Site Plan with Site Condominium and Storm Water Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	9-8-22	<ul style="list-style-type: none"> ▪ Plan complies with the Ordinance except as otherwise approved in the RUD Agreement ▪ Items to be addressed on the Final Site Plan submittal
Engineering	Approval recommended	9-7-22	<ul style="list-style-type: none"> ▪ Items to be addressed on the Final Site Plan submittal
Landscaping	Approval recommended	8-19-22	<ul style="list-style-type: none"> ▪ Items to be addressed on the Final Site Plan submittal
Traffic	Approval recommended	8-31-22	<ul style="list-style-type: none"> ▪ Items to be addressed on the Final Site Plan submittal
Wetland	Approval recommended	8-19-22	<ul style="list-style-type: none"> ▪ No impacts to existing wetland
Woodland	Approval recommended	8-24-22	<ul style="list-style-type: none"> ▪ No impacts to regulated woodlands; administrative Woodland Permit approval can be granted
Fire	Approval with conditions	8-29-22	<ul style="list-style-type: none"> ▪ Items to be addressed on the Final Site Plan submittal

Motion sheet

Approval – Preliminary Site Plan

In the matter of Parc Vista, JSP21-47, motion to **approve** the Preliminary Site Plan with Site Condominium subject to and based on the following:

- a. Compliance with the terms and conditions of the approved Residential Unit Development Plan and Agreement;
- b. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those being addressed on the Final Site Plan; and
- c. *(additional conditions here if any)*

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

– AND –

Approval – Stormwater Management Plan

In the matter of Parc Vista, JSP21-47, motion to **approve** the Stormwater Management Plan subject to:

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

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

– OR –

Denial – Preliminary Site Plan

In the matter of Parc Vista, JSP21-47, motion to **deny** the Preliminary Site Plan ... *(because the plan is not in compliance with Article 3, Article 4, and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

– AND –

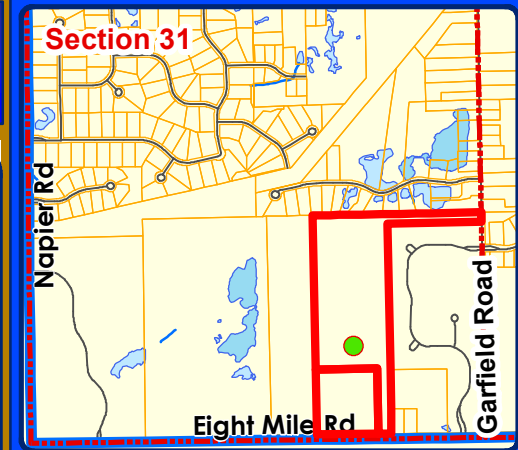
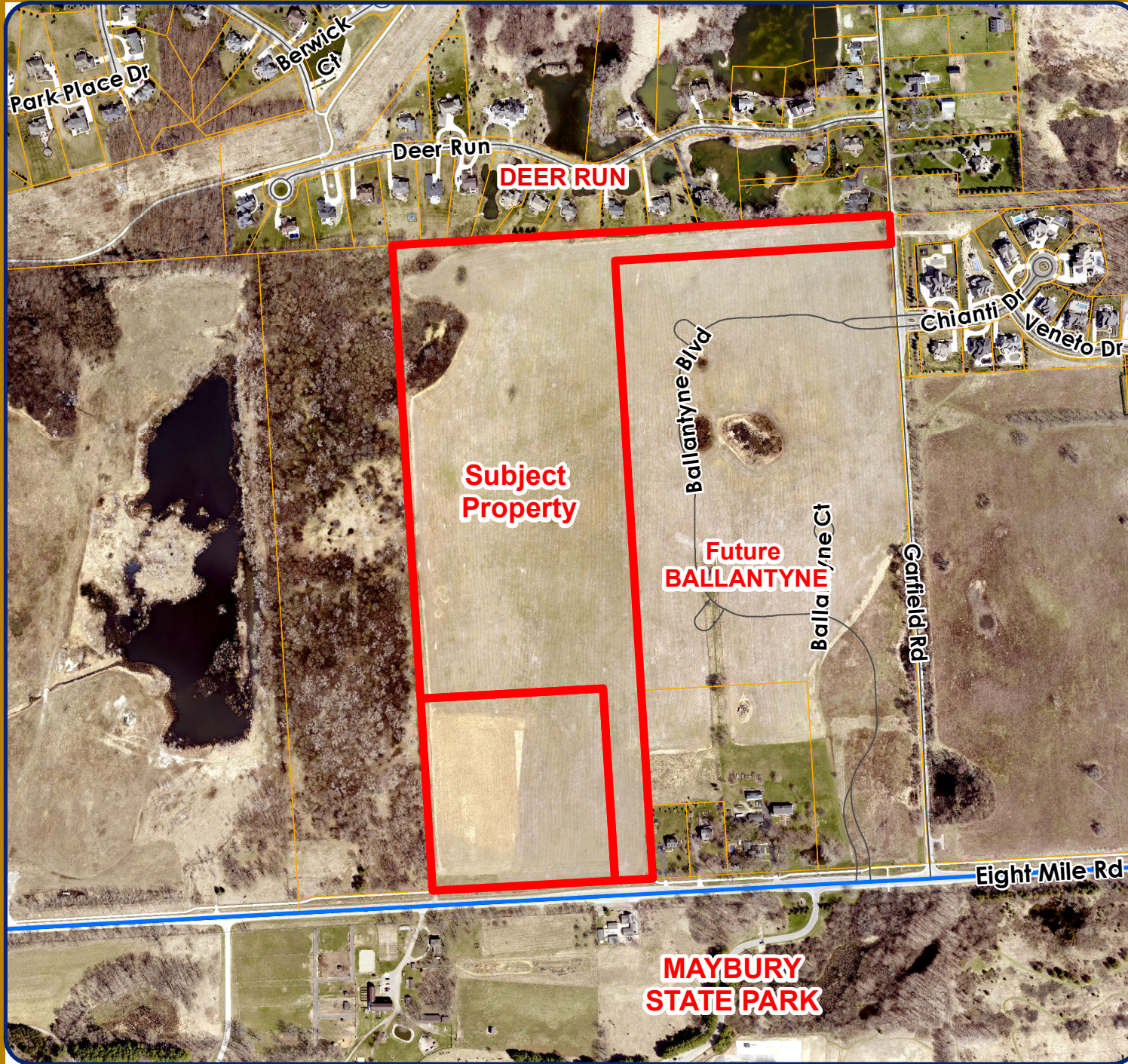
Denial – Stormwater Management Plan

In the matter of Parc Vista, JSP21-47, motion to **deny** the Stormwater Management Plan ... *(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*


Maps
Location
Zoning
Future Land Use
Natural Features


JSP21-47 COVINGTON ESTATES RUD

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: 4/6/22
Project: COVINGTON RUD
Version #: 1

0 125 250 500 750 Feet
1 inch = 576 feet

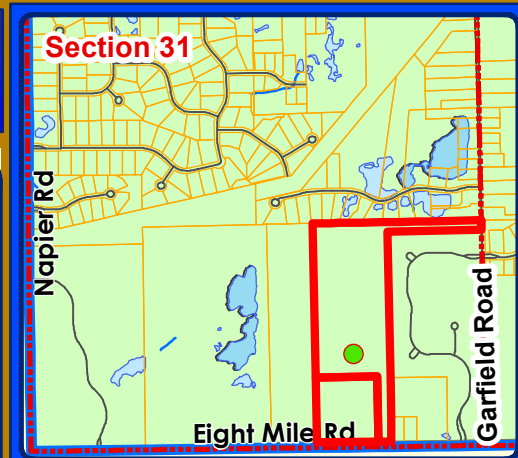
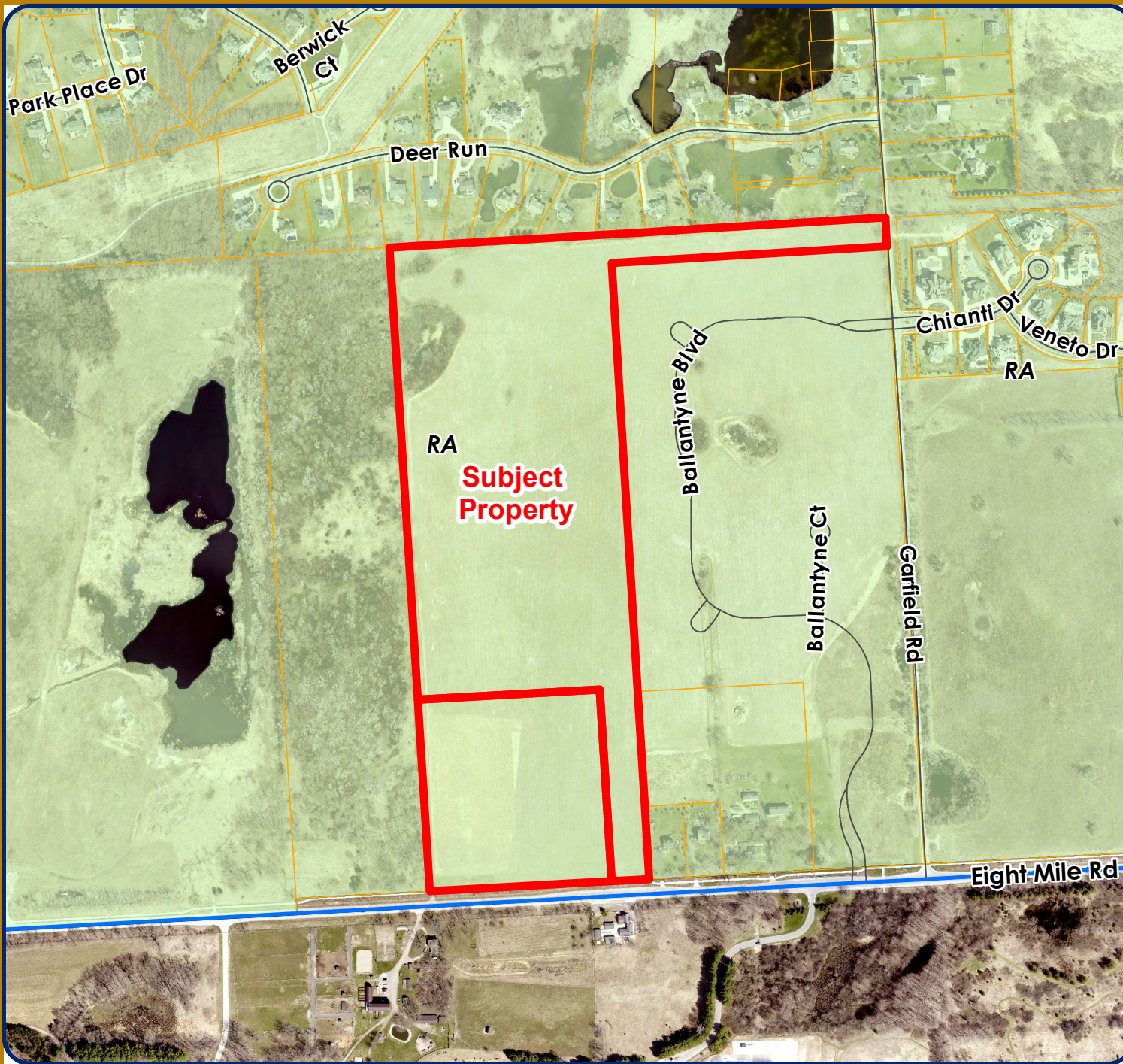


MAP INTERPRETATION NOTICE


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.

JSP21-47 COVINGTON ESTATES RUD

ZONING



LEGEND

-  R-A: Residential Acreage
-  Subject Property



City of Novi

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

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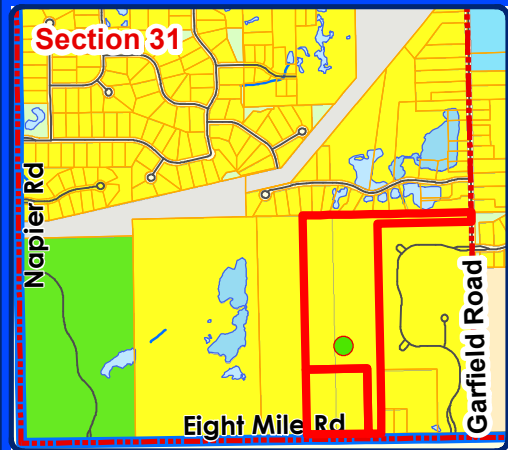
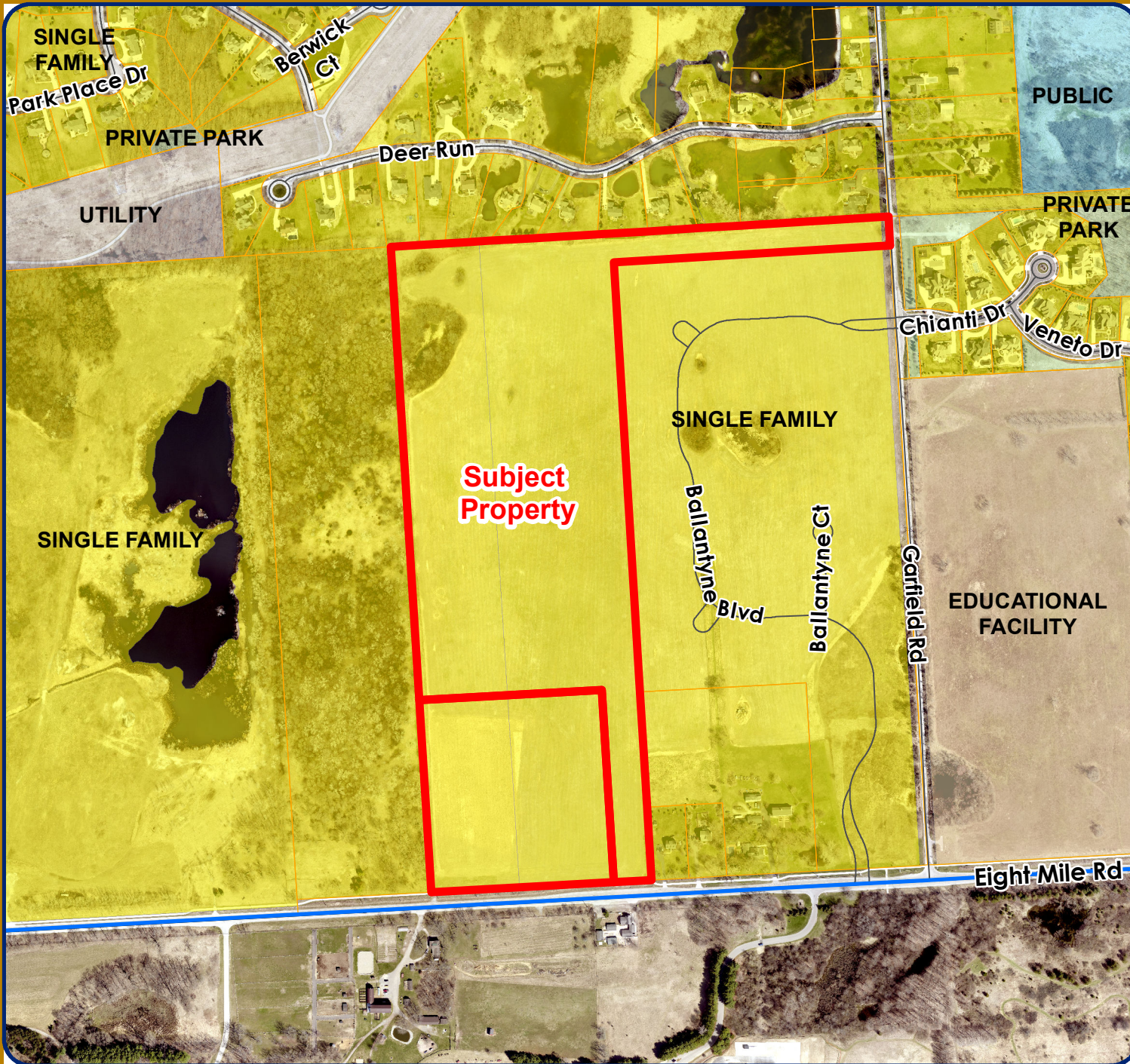


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JSP21-47 COVINGTON ESTATES RUD

FUTURE LAND USE



LEGEND

- Single Family
- Educational Facility
- Public
- Public Park
- Private Park
- Utility
- Subject Property

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

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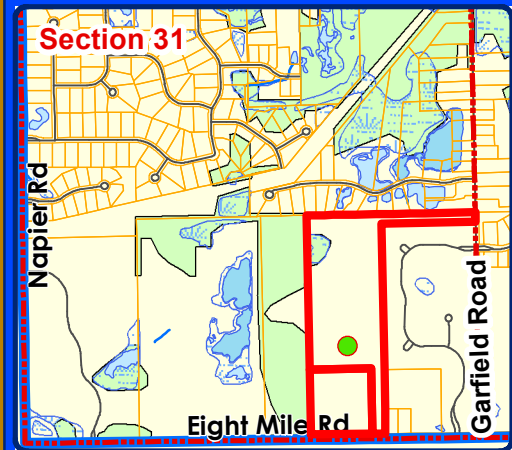
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JSP21-47 COVINGTON ESTATES RUD

NATURAL FEATURES



LEGEND

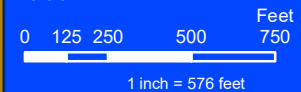
- WETLANDS
- WOODLANDS
- Subject Property



City of Novi

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

Map Author: Lindsay Bell
Date: 4/6/22
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Preliminary Site Plan

Toll Brothers

DEVELOPMENT TEAM

DEVELOPER/APPLICANT

TOLL BROTHERS
26200 TOWN CENTER DR, SUITE 200
NOVI, MICHIGAN 48240
CONTACT: SCOTT HANSEN, PE
PHONE: (248) 305-4020

ENGINEER

ATWELL LLC
311 NORTH MAIN STREET
ANN ARBOR, MICHIGAN 48104
CONTACT: MARK CRIDER, PE
PHONE: (734) 994-4000

SITE DATA

EXISTING SITE ZONING: R-1A, RESIDENTIAL ACREAGE
PROPOSED ZONING: R10, RESIDENTIAL UNIT DENSITY
PARCELS NO.: 22-31-400-011 & 012
EXISTING SITE AREA (GROSS): 54.8 ACRES
R.O.W. AREA: 0.09 ACRES
WETLAND AREA: 0.46 ACRES
EXISTING SITE AREA (NET): 54.3 ACRES (MINUS GARFIELD ROAD R.O.W.)
NO. OF SINGLE FAMILY LOTS: 44
MIN. LOT SIZE: 21,780 SQ. FT. (0.5 ACRE)
TYP. LOT SIZE: 100' x 210'
PROPOSED DENSITY: 0.8 DU/ACRE (44 UNITS/54.8 ACRES = 0.8)
MAXIMUM LOT COVERAGE: 22% (MAXIMUM OF 25%)
BUILDING SETBACKS:
FRONT: 30 FEET
SIDE: 15 FEET (40 FEET TOTAL)
REAR: 35 FEET
BUILDING SIZE:
HEIGHT: 35 FEET
STORIES: 2
FLOOR AREA PER UNIT: 3,200 TO 4,300 SF
OPEN SPACE (INCLUDES BASINS): 23.8 AC (44% OF NET SITE AREA)
USABLE OPEN SPACE* (50' WIDE): 16.4 AC
*EXCLUDES STORMWATER DETENTION BASIN, WETLANDS, AND ROAD R.O.W.

PROPOSED DEVIATIONS

* SELECT LOTS MAY HAVE HOUSING CLOSER THAN SEVENTY-FIVE (75) FEET TO PERIPHERAL PROPERTY LINE. (SECTION 3.29.2(C))

SUMMARY OF PUBLIC BENEFITS

- PROVIDES EMERGENCY ACCESS TO THE BALLANTYNE RESIDENTIAL COMMUNITY.
- PROVIDES A PEDESTRIAN CONNECTION TO THE BALLANTYNE RESIDENTIAL COMMUNITY.
- PRESERVATION OF NATURAL FEATURES.
- PEDESTRIAN SIDEWALKS AND TRAIL SYSTEMS THROUGHOUT THE COMMUNITY.
- SITE AMENITIES INCLUDING PARK BENCHES, BIKE RACKS AND HIGH QUALITY LANDSCAPING.

PROJECT NARRATIVE

PARC VISTA IS A PROPOSED 44-LOT SINGLE FAMILY SUBDIVISION LOCATED ON THE NORTH SIDE OF 8 MILE ROAD, WEST OF GARFIELD ROAD IN THE CITY OF NOVI. THE PROPERTY IS SUBJECT TO A RESIDENTIAL UNIT DEVELOPMENT (RUD) AGREEMENT APPROVED BY CITY COUNCIL ON 8/19/2022. WOODLANDS AND WETLANDS EXIST ON-SITE AND ARE PROPOSED TO BE 100 PERCENT PRESERVED. PARC VISTA WILL CONTAIN PRIVATE ROADS, WHICH BEING SERVED BY PUBLIC WATER AND SEWER. STORM WATER WILL BE MANAGED THROUGH A PRIVATE, BELOW GRADE, STORMSEWER SYSTEM AND ON-SITE RETENTION BASIN. ALL PRIVATE AND PUBLIC UTILITIES WILL BE DESIGNED TO MEET CITY STANDARDS AND SPECIFICATIONS. THE PROPERTY MAY BE DEVELOPED IN PHASES WHICH WILL BE INCORPORATED INTO THE FINAL SITE PLAN AS OUTLINED IN THE APPROVED RUD AGREEMENT.

FIRE DEPARTMENT NOTES

1. ALL FIRE HYDRANTS AND WATER MAINS SHALL BE INSTALLED AND IN SERVICE PRIOR TO ABOVE FOUNDATION BUILDING CONSTRUCTION AS EACH PHASE IS BUILT.
2. ALL ROADS SHALL BE PAVED AND CAPABLE OF SUPPORTING 35 TONS PRIOR TO CONSTRUCTION ABOVE FOUNDATION.
3. BUILDING ADDRESSES SHALL BE POSTED FACING THE STREET DURING ALL PHASES OF CONSTRUCTION. ADDRESSES SHALL BE A MINIMUM OF THREE INCHES IN HEIGHT ON A CONTRASTING BACKGROUND.
4. FIRE LANE SHALL BE POSTED WITH "TWO LANE - NO PARKING" SIGNS IN ACCORDANCE WITH ORDINANCE #85.99.02.

PRELIMINARY SITE PLAN
PARC VISTA
A SINGLE FAMILY RESIDENTIAL DEVELOPMENT
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN



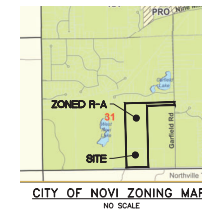
DEVELOPMENT MAP
SCALE: 1" = 400 FEET



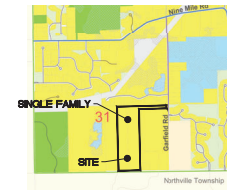
VICINITY MAP
1" = 20,000 FEET

SHEET INDEX

- 01 COVER SHEET
- 02 EXISTING CONDITIONS
- 03 LEGAL INFORMATION & TREE LIST
- 04 WOODLAND ANALYSIS PLAN
- 05 LAYOUT PLAN
- 06 UTILITY PLAN
- 07 STORM WATER MANAGEMENT PLAN
- 08 PRELIMINARY ELEVATIONS & FLOOR PLANS
- 09 DETAIL SHEET
- L-1 LANDSCAPE PLAN
- L-2 GREENBELT AND ENTRY
- L-3 LANDSCAPE DETAILS



CITY OF NOVI ZONING MAP
NO SCALE



CITY FUTURE LAND USE MAP
NO SCALE

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CITY OF NOVI'S CURRENT STANDARDS AND SPECIFICATIONS, UNLESS OTHERWISE APPROVED IN THE RUD AGREEMENT.
2. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE ROAD COMMISSION FOR OAKLAND COUNTY FOR ANY WORK WITHIN THE RIGHT-OF-WAY OF NOVI ROAD.
3. ALL PAYMENT MARKINGS, TRAFFIC CONTROL SIGNS, AND PARKING SIGNS SHALL COMPLY WITH THE DESIGN AND PLACEMENT REQUIREMENTS OF THE 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. THE CITY OF NOVI HAS NO RESPONSIBILITY TO IMPROVE OR MAINTAIN THE PRIVATE STREETS CONTAINED WITHIN OR PRIVATE STREETS PROVIDING ACCESS TO THE PROPERTY DESCRIBED IN THIS PLAN.



311
Know what's below.
Call before you dig.
THE LOCATION OF EXISTING KNOW-WHAT-BENEATH MAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE CONDUCTING WORK. ANY DAMAGES TO ALL UTILITIES WHICH MUST BE REPAIRED BY THE CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ALL DAMAGES WHICH MUST BE REPAIRED BY THE CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ALL DAMAGES WHICH MUST BE REPAIRED BY THE CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

NOTICE: CONSTRUCTION OF THIS PROJECT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER SHALL BE RESPONSIBLE TO REVIEW ANY WORK OF PROPOSED CHANGES IN THE WORK OF ANY SECRET STRUCTURES OR OF ANY OTHER WORKING.

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ANN ARBOR, MI 48104
734.994.4000

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REGISTERED PROFESSIONAL ENGINEER
ANN ARBOR, MI 48104
734.994.4000

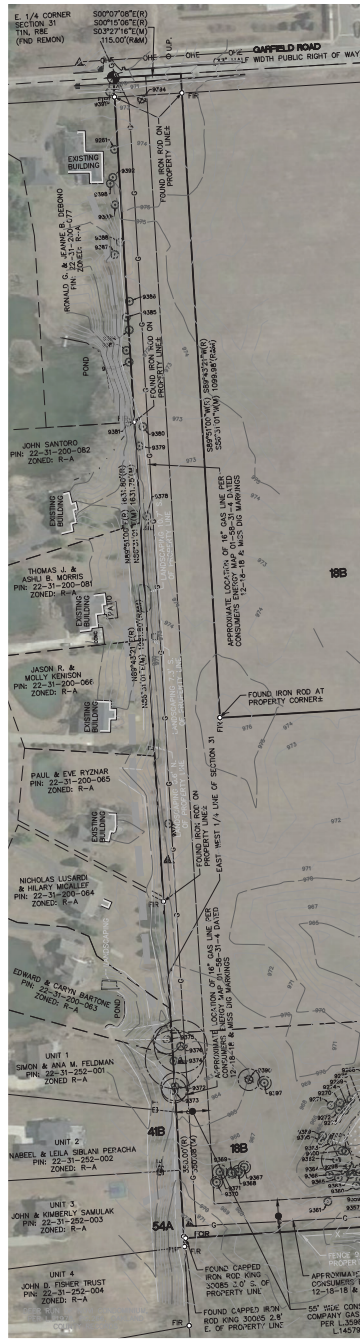
SECTION 31
TOWN 01 NORTH, RANGE 08 EAST
CITY OF NOVI
OAKLAND COUNTY, MICHIGAN

TOLL BROTHERS
PARC VISTA
PRELIMINARY SITE PLAN
COVER SHEET

DATE: AUGUST 11, 2022

REVISIONS

SCALE: 0 75 150
1" = 150 FEET
DR SK DH CR
P.M. MC
BOOK ---
JOB 21003508
SHEET NO. 01



BENCHMARK INFORMATION

SOURCE BENCHMARK:
 CITY OF NOVI BENCHMARK ID: 3233
 BEYOND THE IN WEST FACE OF POWER POLE
 180 FEET NORTH OF CENTERLINE OF 8 MILE
 ROAD AND GARFIELD ROAD
 ELEVATION: 974.31 (NAVD88)

SITE BENCHMARKS:
 BM #1: SET BEYOND THE IN UTILITY POLE IN
 NORTH RIGHT OF WAY OF 8 MILE ROAD AT
 SOUTHWEST CORNER OF SITE
 ELEVATION: 979.40 (NAVD88)
 BM #2: SET MAG NAIL IN NORTH FACE OF
 UTILITY POLE IN NORTH RIGHT OF WAY OF 8
 MILE ROAD AT SOUTHEAST CORNER OF SITE
 ELEVATION: 973.36 (NAVD88)



EXISTING CONDITION NOTES

- BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATES (NAD83), SOUTH ZONE, GROUND DISTANCES, INTERNATIONAL FEET. MEASURED BEARINGS DIFFER FROM RECORD TITLE BEARINGS VERTICAL DATUM IS BASED ON NAVD88.
- THE SITE SHOWN HEREON IS LOCATED WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO MAP NUMBERS 201250008B & 201250002OF OF THE FLOOD INSURANCE RATE MAP, EFFECTIVE DATE SEPTEMBER 29, 2006.
- WATER MAIN, STORM SEWER, SANITARY SEWER AND FRANCHISE UTILITY STRUCTURES HAVE BEEN FIELD LOCATED WHERE VISIBLE. UTILITY AND AS-BUILT MAPS HAVE BEEN REQUESTED AND SOME MAPS HAVE BEEN RECEIVED AT DATE OF THIS SURVEY. FRANCHISE UTILITY MAPS HAVE BEEN REQUESTED FROM THE APPROPRIATE FRANCHISE COMPANIES, BUT NOT ALL MAPS HAVE BEEN RECEIVED AT DATE OF SURVEY.
 NOTE: THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED.
 NOTE TO THE CLIENT, INSURER, AND LENDER - SOURCE INFORMATION FROM PLANS AND MARKINGS WILL BE COMBINED WITH OBSERVED EVIDENCE OF UTILITIES PURSUANT TO SECTION 5.4.1.1. TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY COMPLETELY, AND RELIABLY DETERMINED. IN ADDITION, IN SOME JURISDICTIONS, BIT OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE, IN WHICH CASE THE SURVEYOR SHALL NOTE ON THE PLAN OR MAP HOW THIS AFFECTED THE SURVEYOR'S ASSESSMENT OF THE LOCATION OF THE UTILITIES. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION AND/OR A PRIVATE UTILITY LOCATE REQUEST MAY BE NECESSARY.
- THE SUBJECT PROPERTY HAD NO OBSERVED PARKING STALLS AT THE DATE OF THE SURVEY.
- ZONING LETTER OR REPORT WAS NOT PROVIDED AT THE DATE OF THE SURVEY.
- SNOW AND ICE CONDITIONS EXISTED IN THE FIELD THAT MAY RESULT IN SOME PHYSICAL FEATURES NOT BEING VISIBLE AND THEREFORE MAY NOT BE LOCATED AS PART OF THIS SURVEY.
- WETLAND DELINEATED BY HNSWANDER ENVIRONMENTAL ON OCTOBER 13, 2021, CONFIRMED BY CITY'S SUB-CONSULTANT (MANNK SMITH GROUP) PER REPORT DATED DECEMBER 21, 2021.
- SOILS INFORMATION REFERENCED FROM USDA NRCS WEB SOILS SURVEY, ACCESSED 2022.

SOILS LEGEND

Map Unit Symbol	Map Unit Name	Depth to Water Table Rating (Inches)	Flood Frequency	Ponding Frequency
18B	Fox sandy loam, till plain, 2 to 6 percent slopes	>80 inches	None	None
20B	Glynwood loam, 2 to 6 percent slopes	"12 to 24"	None	None
20C	Glynwood loam, 6 to 12 percent slopes	"24 to 42"	None	None
41B	Aquepts, sandy, loamy, undulating	"0	None	Frequent
5A	Matherton sandy loam, 0 to 3 percent slopes	"12 to 24"	None	None

LEGEND

- BOUNDARY LINE
- EXIST. EASEMENT
- SECTION LINE
- BOUNDARY/PROPERTY LINE
- EXIST. TREE LINE
- EXIST. FENCE
- EXIST. 1" CONTOUR
- EXIST. 5" CONTOUR
- EXIST. WETLAND
- EXIST. WETLAND BUFFER
- EXIST. WATER MAIN
- EXIST. SANITARY
- EXIST. GAS
- EXIST. STORM
- EXIST. CULTURE
- EXIST. CATCH BASIN/INLET
- EXIST. HYDRANT
- EXIST. VALVE
- EXIST. SANITARY SEWER
- EXISTING MAILBOX
- EXISTING GUY ANCHOR
- EXISTING TELEPHONE RISER
- EXISTING HANDHOLE
- EXISTING CABLE RISER
- EXISTING ELECTRIC RISER
- EXIST. HELL
- EXIST. SOIL BOUNDARY
- EXIST. SOIL TYPE
- EXIST. TREE
- EXIST. SPECIMEN TREE

SITE INFORMATION

SITE LOCATION: SECTION 31, T.2N, R.5E, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN
 ULTIMATE RECEIVING WATER: N/A (EXIST)
 1. SITE SOILS INFORMATION: PER THE NATIONAL RESOURCES CONSERVATION SERVICE (NRCS) SOIL SURVEY, WASHTEWAM COUNTY, MICHIGAN.
 2. APPROXIMATE AREA OF DISTURBANCE: 445 ACRES

ATWELL
 SURVEYING & ENGINEERING
 1000 W. WASHINGTON ST. SUITE 100
 ANN ARBOR, MI 48106
 TEL: 734.984.0000

Know what's below.
 Call before you dig.
 THE LOCATION OF EXISTING UNDERGROUND UTILITIES, WHETHER OR NOT THEY ARE SHOWN ON ANY MAP, AND WHO HAS BEEN AUTHORIZED TO LOCATE THEM, IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BY CONDUCTING A UTILITY LOCATE BEFORE ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITIES, AND SHALL BE RESPONSIBLE FOR ANY AND ALL UNDERGROUND UTILITIES.

NOTICE: OVERLAP OF EXISTING UTILITIES IS SHOWN IN THIS PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITIES, AND SHALL BE RESPONSIBLE FOR ANY AND ALL UNDERGROUND UTILITIES.

CLIENT: TOLL BROTHERS
 PARC VISTA
 PRELIMINARY SITE PLAN
 EXISTING CONDITIONS

DATE: AUGUST 11, 2022

SCALE: 0 50 100
 1" = 100 FEET

REVISIONS:
 NO. SK. CH. CR.
 P.M. MC.
 BOOK _____
 JOB 21003508
 SHEET NO. 02

Tree Tag #	Data Code	Scientific Name	Common Name	DBH (inches)	Condition	Tree - Needs to be Replaced	Specimen - Tree -	To Be Removed
9083	ACNE	<i>Acer negundo</i>	Bovelder	14.5	Good	No	No	No
9084	ACNE	<i>Acer negundo</i>	Bovelder	19	Good	Yes	No	No
9085	ACNE	<i>Acer negundo</i>	Bovelder	12	Good	Yes	No	No
9086	ACNE	<i>Acer negundo</i>	Bovelder	14	Good	Yes	No	No
9087	ROPS	<i>Robinia pseudoacacia</i>	Black Locust	18	Good	Yes	No	No
9088	ROPS	<i>Robinia pseudoacacia</i>	Black Locust	19	Good	Yes	No	No
9089	ROPS	<i>Robinia pseudoacacia</i>	Black Locust	8.5	Good	Yes	No	No
9090	ROPS	<i>Robinia pseudoacacia</i>	Black Locust	9	Good	Yes	No	No
9091	ACNE	<i>Acer negundo</i>	Bovelder	14	Good	Fused Trunk	Yes	No
9092	ACNE	<i>Acer negundo</i>	Bovelder	8	Good	Yes	No	No
9093	ACNE	<i>Acer negundo</i>	Bovelder	11	Good	Yes	No	No
9094	ACNE	<i>Acer negundo</i>	Bovelder	9.5	Good	21: 7	Yes	No
9095	ACNE	<i>Acer negundo</i>	Bovelder	9.5	Good	Yes	No	No
9096	ACNE	<i>Acer negundo</i>	Bovelder	11	Fair	Vines	Yes	No
9097	ACNE	<i>Acer negundo</i>	Bovelder	12: 4	Good	Yes	No	No
9098	ACNE	<i>Acer negundo</i>	Bovelder	9.5	Good	Yes	No	No
9099	RHCA	<i>Rhamnus catherica</i>	Common Buckthorn	8.5	Good	Yes	No	No
9100	RHCA	<i>Rhamnus catherica</i>	Common Buckthorn	9.5	Good	Yes	No	No
9101	RHCA	<i>Rhamnus catherica</i>	Common Buckthorn	8.5	Good	Yes	No	No
9102	CADO	<i>Carya ovata</i>	Shagbark Hickory	34	Good	Yes	Yes	No
9103	RHCA	<i>Rhamnus catherica</i>	Common Buckthorn	8.5	Good	Yes	No	No
9104	ULAM	<i>Ulmus americana</i>	American Elm	8	Good	Yes	No	No
9105	JUNI	<i>Juglans nigra</i>	Black Walnut	10	Good	Yes	No	No
9106	JUNI	<i>Juglans nigra</i>	Black Walnut	8	Good	Yes	No	No
9107	JUNI	<i>Juglans nigra</i>	Black Walnut	25	Good	Yes	No	No
9267	AIAL	<i>Alibuthus altissima</i>	Tree of Heaven	8	Good	Yes	No	Yes
9268	MDAL	<i>Morus alba</i>	White Mulberry	11.5	Good	Yes	No	No
9269	JUNI	<i>Juglans nigra</i>	Black Walnut	23	Good	Yes	No	No
9270	AIAL	<i>Alibuthus altissima</i>	Tree of Heaven	8	Good	Yes	No	No
9271	AIAL	<i>Alibuthus altissima</i>	Tree of Heaven	13	Good	Yes	No	No
9272	ULAM	<i>Ulmus americana</i>	American Elm	10	Good	Yes	No	No
9273	PRSE	<i>Prunus serotina</i>	Black Cherry	18	Poor	21: 13; Trunk Rotten	Yes	No
9274	JUNI	<i>Juglans nigra</i>	Black Walnut	18.5	Good	Yes	No	No
9275	JUNI	<i>Juglans nigra</i>	Black Walnut	8	Good	Yes	No	No
9276	PRSE	<i>Prunus serotina</i>	Black Cherry	11.5	Poor	Nearly Dead	No	No
9277	RHCA	<i>Rhamnus catherica</i>	Common Buckthorn	8	Poor	21: 6; Nearly Dead	No	No
9278	CACO	<i>Carya cordiformis</i>	Bitternut Hickory	8	Good	Yes	No	No
9279	PRSE	<i>Prunus serotina</i>	Black Cherry	15.5	Poor	Dead Branches	No	No
9280	CACO	<i>Carya cordiformis</i>	Bitternut Hickory	14.5	Good	Yes	No	No
9281	CACO	<i>Carya cordiformis</i>	Bitternut Hickory	12.5	Good	Yes	No	No
9282	CACO	<i>Carya cordiformis</i>	Bitternut Hickory	8	Good	Yes	No	No
9283	PRSE	<i>Prunus serotina</i>	Black Cherry	13	Good	Yes	No	No
9284	ACSA	<i>Acer saccharinum</i>	Silver Maple	35	Good	Yes	Yes	No
9285	RHCA	<i>Rhamnus catherica</i>	Common Buckthorn	10	Good	Yes	No	No
9286	PRSE	<i>Prunus serotina</i>	Black Cherry	20	Good	Yes	No	No
9287	OLMA	<i>Quercus macrocarpa</i>	Bur Oak	12	Good	Yes	No	No
9288	ULAM	<i>Ulmus americana</i>	American Elm	11.5	Good	Yes	No	No
9289	PODE	<i>Populus deltoides</i>	Cottonwood	35	Good	Yes	No	No
9290	PODE	<i>Populus deltoides</i>	Cottonwood	28	Good	Yes	No	No
9291	PODE	<i>Populus deltoides</i>	Cottonwood	20	Dead	No	No	No
9292	JUNI	<i>Juglans nigra</i>	Black Walnut	13.5	Good	Yes	No	No
9293	JUNI	<i>Juglans nigra</i>	Black Walnut	11.5	Good	Yes	No	No
9294	ACNE	<i>Acer negundo</i>	Bovelder	9.5	Good	Yes	No	No
9295	SANI	<i>Salis nigra</i>	Black Willow	22	Good	21: 21	Yes	No
9296	JUNI	<i>Juglans nigra</i>	Black Walnut	17.5	Good	Yes	No	No
9297	JUNI	<i>Juglans nigra</i>	Black Walnut	11	Good	Yes	No	No
9298	JUNI	<i>Juglans nigra</i>	Black Walnut	16.5	Good	Yes	No	No
9299	CACO	<i>Carya cordiformis</i>	Bitternut Hickory	9.5	Good	Yes	No	No
9300	JUNI	<i>Juglans nigra</i>	Black Walnut	11	Good	Yes	No	No
9327	ACNE	<i>Acer negundo</i>	Bovelder	11	Good	21: 5	Yes	No
9328	ACNE	<i>Acer negundo</i>	Bovelder	9	Good	Yes	No	No
9329	ACNE	<i>Acer negundo</i>	Bovelder	9	Good	21: 7	Yes	No
9330	ACNE	<i>Acer negundo</i>	Bovelder	9	Good	21: 7	Yes	No
9331	ACNE	<i>Acer negundo</i>	Bovelder	8	Good	Yes	No	No
9332	ACNE	<i>Acer negundo</i>	Bovelder	12	Good	21: 5	Yes	No
9333	ACNE	<i>Acer negundo</i>	Bovelder	9	Good	21: 8	Yes	No
9334	ACNE	<i>Acer negundo</i>	Bovelder	9.5	Good	Yes	No	No
9335	ACNE	<i>Acer negundo</i>	Bovelder	16	Good	Yes	No	No
9336	ACNE	<i>Acer negundo</i>	Bovelder	10	Good	Yes	No	No

Tree Tag #	Data Code	Scientific Name	Common Name	DBH (inches)	Condition	Comments	Needs to be Replaced	Specimen - Tree -	To Be Removed
9337	ACNE	<i>Acer negundo</i>	Bovelder	12	Good		Yes	No	No
9338	ACNE	<i>Acer negundo</i>	Bovelder	15	Good		Yes	No	No
9339	ACNE	<i>Acer negundo</i>	Bovelder	12	Good	21: 6, 5	Yes	No	No
9340	ACNE	<i>Acer negundo</i>	Bovelder	12	Good	21: 11	Yes	No	No
9341	ACNE	<i>Acer negundo</i>	Bovelder	23	Good	Fused Trunk	Yes	No	No
9342	ACNE	<i>Acer negundo</i>	Bovelder	11.5	Good		Yes	No	No
9343	ACNE	<i>Acer negundo</i>	Bovelder	11	Good		Yes	No	No
9344	ACNE	<i>Acer negundo</i>	Bovelder	17	Good	21: 17	Yes	No	No
9345	ACNE	<i>Acer negundo</i>	Bovelder	13	Good	21: 12	Yes	No	No
9346	JUNI	<i>Juglans nigra</i>	Black Walnut	10.5	Good		Yes	No	No
9347	ACNE	<i>Acer negundo</i>	Bovelder	16	Good	5 Trunk (5T): 15.5, 13, 10.5, 10	Yes	No	No
9348	ACNE	<i>Acer negundo</i>	Bovelder	13	Good	21: 11	Yes	No	No
9349	PRSE	<i>Prunus serotina</i>	Black Cherry	16	Good		Yes	No	No
9350	JUNI	<i>Juglans nigra</i>	Black Walnut	11.5	Good		Yes	No	No
9351	JUNI	<i>Juglans nigra</i>	Black Walnut	15	Good		Yes	No	No
9352	JUNI	<i>Juglans nigra</i>	Black Walnut	10.5	Good		Yes	No	No
9353	JUNI	<i>Juglans nigra</i>	Black Walnut	10	Good		Yes	No	No
9354	JUNI	<i>Juglans nigra</i>	Black Walnut	17	Good		Yes	No	No
9355	JUNI	<i>Juglans nigra</i>	Black Walnut	11	Good		Yes	No	No
9356	JUNI	<i>Juglans nigra</i>	Black Walnut	9	Good		Yes	No	No
9357	JUNI	<i>Juglans nigra</i>	Black Walnut	8.5	Good		Yes	No	No
9358	JUNI	<i>Juglans nigra</i>	Black Walnut	13.5	Good		Yes	No	No
9359	JUNI	<i>Juglans nigra</i>	Black Walnut	9.5	Good		Yes	No	No
9360	JUNI	<i>Juglans nigra</i>	Black Walnut	10	Good		Yes	No	No
9361	JUNI	<i>Juglans nigra</i>	Black Walnut	8	Good	21: 4.5	Yes	No	No
9362	JUNI	<i>Juglans nigra</i>	Black Walnut	26	Good		Yes	Yes	No
9363	JUNI	<i>Juglans nigra</i>	Black Walnut	15	Good		Yes	No	No
9364	JUNI	<i>Juglans nigra</i>	Black Walnut	14.5	Good		Yes	No	No
9365	JUNI	<i>Juglans nigra</i>	Black Walnut	9	Good		Yes	No	No
9366	JUNI	<i>Juglans nigra</i>	Black Walnut	15	Good		Yes	No	No
9367	ULAM	<i>Ulmus pumila</i>	Siberian Elm	30.5	Good		Yes	No	No
9368	ROPS	<i>Robinia pseudoacacia</i>	Black Locust	11	Good	21: 10.5	Yes	No	No
9369	ACNE	<i>Acer negundo</i>	Bovelder	9	Good		Yes	No	No
9370	AIAL	<i>Alibuthus altissima</i>	Tree of Heaven	10	Good	21: 5.5	Yes	No	No
9371	PRSE	<i>Prunus serotina</i>	Black Cherry	12.5	Good		Yes	No	No
9372	CACO	<i>Carya cordiformis</i>	Bitternut Hickory	24	Good		Yes	Yes	No
9373	CACO	<i>Carya cordiformis</i>	Bitternut Hickory	23	Good	21: 20	Yes	No	No
9374	JUNI	<i>Juglans nigra</i>	Black Walnut	59	Good		Yes	Yes	No
9375	QUAL	<i>Quercus alba</i>	White Oak	24	Good		Yes	Yes	No
9376	QUAL	<i>Quercus alba</i>	White Oak	45	Good	Fused Trunk	Yes	Yes	No
9377	ULPU	<i>Ulmus pumila</i>	Siberian Elm	14	Good	4 Trunk (4T): 12, 11, 6	Yes	No	No
9378	ULAM	<i>Ulmus americana</i>	American Elm	13	Good		Yes	No	No
9379	ACNE	<i>Acer negundo</i>	Bovelder	10.5	Good		Yes	No	No
9380	ULAM	<i>Ulmus americana</i>	American Elm	8.5	Good		Yes	No	No
9381	ULAM	<i>Ulmus americana</i>	American Elm	23	Good		Yes	No	No
9382	ULRU	<i>Ulmus rubra</i>	Slippery Elm	9	Good		Yes	No	No
9383	JUNI	<i>Juglans nigra</i>	Black Walnut	23	Good	21: 11	Yes	No	No
9384	JUNI	<i>Juglans nigra</i>	Black Walnut	10.5	Good		Yes	No	No
9385	ULAM	<i>Ulmus americana</i>	American Elm	11	Good		Yes	No	No
9386	MDAL	<i>Morus alba</i>	White Mulberry	12	Good		Yes	No	No
9387	TIAM	<i>Tilia americana</i>	Basswood	11	Good	9 Trunk (9T): 10.5, 10, 10, 9.5, 5.5, 5, 4.5	Yes	No	No
9388	CAOV	<i>Carya ovata</i>	Shagbark Hickory	16	Good		Yes	No	No
9389	JUNI	<i>Juglans nigra</i>	Black Walnut	22	Good		Yes	No	No
9390	JUNI	<i>Juglans nigra</i>	Black Walnut	18.5	Good	21: 9.5	Yes	No	Yes
9391	JUNI	<i>Juglans nigra</i>	Black Walnut	20	Good		Yes	No	No
9392	QUAL	<i>Quercus alba</i>	White Oak	10	Good	21: 8.5	Yes	No	No
9393	JUNI	<i>Juglans nigra</i>	Black Walnut	14	Good		Yes	No	No
9394	ULAM	<i>Ulmus americana</i>	American Elm	9.5	Good		Yes	No	Yes
9395	AIAL	<i>Alibuthus altissima</i>	Tree of Heaven	6.5	Good		Yes	No	No
9397	JUNI	<i>Juglans nigra</i>	Black Walnut	11.5	Good	21: 10	Yes	No	No
9398	CAOV	<i>Carya ovata</i>	Shagbark Hickory	17	Good		Yes	No	No
9399	CAOV	<i>Carya ovata</i>	Shagbark Hickory	17.5	Good		Yes	No	No
9400	ACNE	<i>Acer negundo</i>	Bovelder	20	Floor	Fallen Over, Still Alive with New Growth Living	No	No	No

PARENT PARCEL LEGAL DESCRIPTIONS

PARCEL A
 COMMENCING AT THE SOUTHWEST CORNER OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOV, OAKLAND COUNTY, MICHIGAN; THENCE N89°50'04"W (RECORDED AS N89°43'33"W) 1100.00 FEET ALONG THE SOUTH LINE OF SAID SECTION AND THE CENTERLINE OF EIGHT MILE ROAD (66 FEET WIDE); THENCE N07°15'46"W (RECORDED AS N07°07'58"W) 60.00 FEET FOR A PLACE OF BEGINNING; THENCE N89°50'04"W (RECORDED AS N89°43'33"W) 116.60 FEET ALONG THE NORTH LINE OF SAID EIGHT MILE ROAD; THENCE N02°22'43"W 720.00 FEET; THENCE N89°50'04"W 760.00 FEET; THENCE N02°22'43"W (RECORDED AS N07°14'04"W) 183.88 FEET; THENCE N89°43'17"E (RECORDED AS N89°10'17"E) 181.80 FEET; THENCE S01°14'45"E (RECORDED AS S00°07'20"E) 115.00 FEET ALONG THE EAST LINE OF SAID SECTION 31 AND THE CENTERLINE OF GARFIELD ROAD (66 FEET WIDE); THENCE S89°43'17"W (RECORDED AS S89°10'17"W) 109.88 FEET; THENCE S01°14'45"E (RECORDED AS S00°07'20"E) 2460.38 FEET TO THE PLACE OF BEGINNING; BEING A PART OF THE SOUTHWEST 1/4 OF SAID SECTION 31, CONTAINING 42.00 ACRES, MORE OR LESS, BEING SUBJECT TO THE RIGHTS OF THE PUBLIC OVER THE EASTERLY 33.00 FEET THEREOF AS OCCUPIED BY GARFIELD ROAD, AND BEING SUBJECT TO OTHER EASEMENTS AND RESTRICTIONS OF RECORD, IF ANY.

PARCEL B
 COMMENCING AT THE SOUTHWEST CORNER OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOV, OAKLAND COUNTY, MICHIGAN; THENCE N89°50'04"W (RECORDED AS N89°43'33"W) 1216.65 FEET ALONG THE SOUTH LINE OF SAID SECTION AND THE CENTERLINE OF EIGHT MILE ROAD (66 FEET WIDE); THENCE N07°15'46"W (RECORDED AS N07°07'58"W) 60.00 FEET FOR A PLACE OF BEGINNING; THENCE N89°50'04"W (RECORDED AS N89°43'33"W) 116.60 FEET ALONG THE NORTH LINE OF SAID EIGHT MILE ROAD; THENCE N02°22'43"W (RECORDED AS N07°14'04"W) 720.00 FEET; THENCE S89°43'17"E (RECORDED AS S89°10'17"E) 181.80 FEET; THENCE S01°14'45"E (RECORDED AS S00°07'20"E) 115.00 FEET ALONG THE EAST LINE OF SAID SECTION 31, CONTAINING 12.74 ACRES, MORE OR LESS, BEING SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD, IF ANY.

SCHEDULE B - SECTION 2 EXCEPTIONS PER ALTA COMMITMENT FOR TITLE INSURANCE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, ISSUING OFFICE: WESTMINSTER TITLE AGENCY, INC., FILE NO.: CEN15373, EFFECTIVE DATE: MAY 02, 2018.

10. RIGHT OF WAY IN FAVOR OF CONSUMERS POWER COMPANY FOR GAS MAIN PURPOSES OVER THE SUBJECT PROPERTY AS RECORDED IN LIBER 3508, PAGE 202, OAKLAND COUNTY RECORDS. RESPONSE: COVERS SUBJECT PROPERTY AND LAND TO EAST, EASEMENT AS SHOWN HEREON.

11. TERMS AND CONDITIONS OF NOTICE OF CLAIM UNDER THE MARKETABLE RECORD TITLE ACT AS RECORDED IN INSTRUMENT RECORDED IN LIBER 14570, PAGE 885, OAKLAND COUNTY RECORDS. RESPONSE: COVERS SUBJECT PROPERTY AND ADDITIONAL LAND, EASEMENT AS SHOWN HEREON.

12. TERMS AND CONDITIONS AS RECITED IN INSTRUMENT RECORDED IN LIBER 16621, PAGE 34, AND IN LIBER 12, PAGE 10, OAKLAND COUNTY RECORDS. RESPONSE: COVERS SUBJECT PROPERTY.

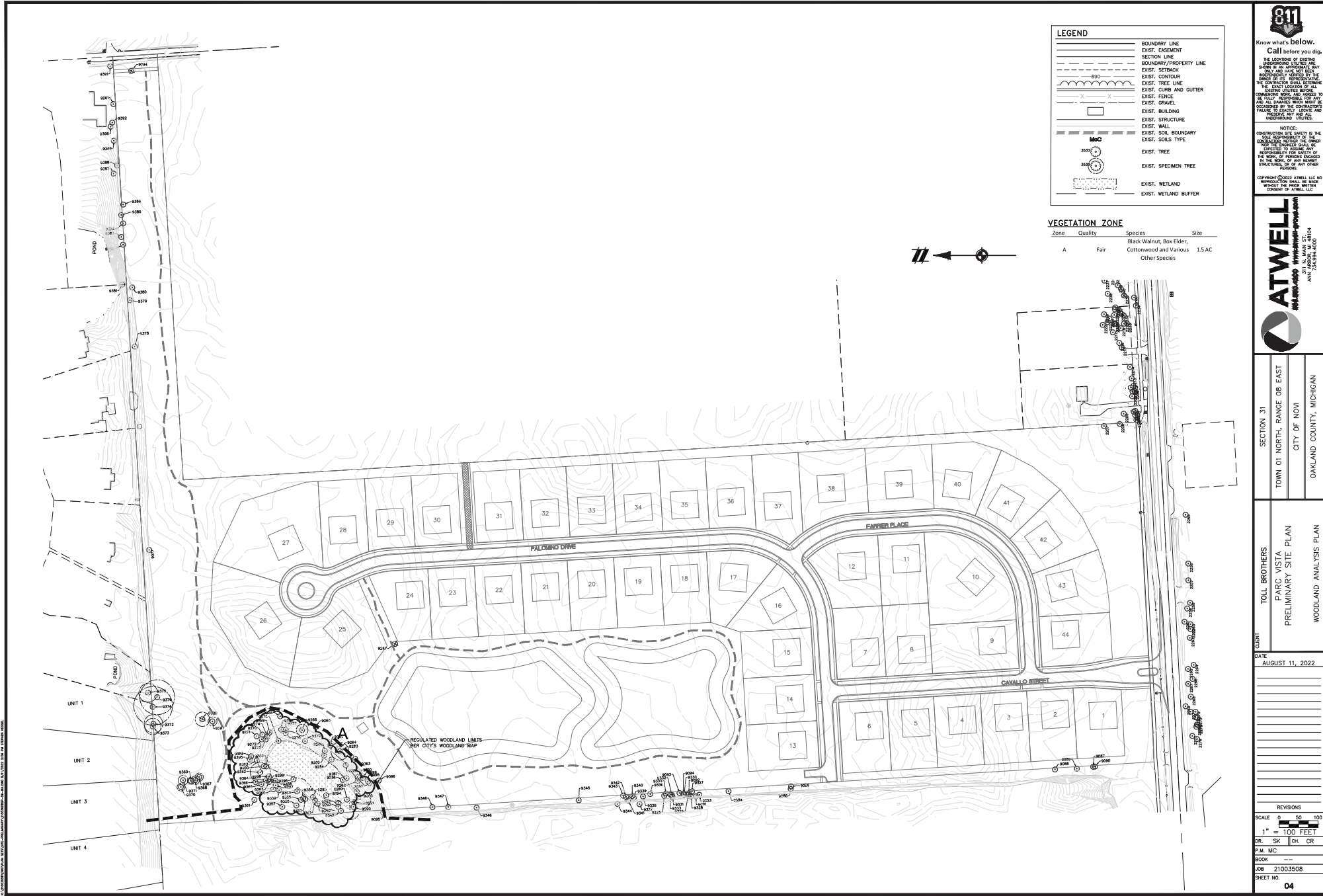
SCHEDULE C DESCRIPTION PER ALTA COMMITMENT FOR TITLE INSURANCE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, ISSUING OFFICE: WESTMINSTER TITLE AGENCY, INC., COMMITMENT NO.: 106-2100911-018, COMMENT DATE: AUGUST 21, 2021.

THE LAND IS DESCRIBED AS FOLLOWS:
 PROPERTY LOCATED IN THE CITY OF NOV, COUNTY OF OAKLAND, STATE OF MICHIGAN:

T1N, R8E, SEC 31 PART OF SE 1/4 BEG AT PT DIST N 89-55-04 W 1100 FT & N 00-15-46 W 60 FT FROM SE SEC COR, T1N N 89-55-04 W 150 FT, T1N N 00-22-42 W 784.60 FT, T1N N 89-55-04 W 726.65 FT, T1N N 00-22-42 W 192.65 FT, T1N N 89-43-21 E 189.80 FT, T1N S 00-16-0 E 115 FT, T1N S 89-43-21 W 1099.98 FT, T1N S 00-15-46 E 2460.38 FT TO BEG

T1N, R8E, SEC 31 PART OF SE 1/4 BEG AT PT DIST N 89-55-04 W 1248.88 FT & N 00-22-42 W 60 FT FROM SE SEC COR, T1N N 89-55-04 W 726.65 FT, T1N N 00-22-42 W 784.60 FT, T1N N 89-55-04 W 726.65 FT, T1N S 00-22-42 E 784.60 FT TO BEG

SCHEDULE B - SECTION 2 EXCEPTIONS PER ALTA COMMITMENT FOR TITLE INSURANCE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, ISSUING OFFICE: WESTMINSTER TITLE AGENCY, INC., COMMITMENT NO.: 106-2100



LEGEND

	BOUNDARY LINE
	EXIST. EASEMENT
	SECTION LINE
	BOUNDARY/PROPERTY LINE
	EXIST. SETBACK
	EXIST. CONTOUR
	EXIST. TREE LINE
	EXIST. CURBS AND GUTTERS
	EXIST. FENCE
	EXIST. GRAVEL
	EXIST. BUILDING
	EXIST. STRUCTURE
	EXIST. WALL
	EXIST. SOIL BOUNDARY
	EXIST. SOIL TYPE
	EXIST. TREE
	EXIST. SPECIMEN TREE
	EXIST. WETLAND
	EXIST. WETLAND BUFFER

VEGETATION ZONE

Zone	Quality	Species	Size
A	Fair	Black Walnut, Box Elder, Cottonwood and Various Other Species	1.5 AC



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Know what's below.
Call before you dig.
THE LOCATION OF UTILITIES AND THE DEPTHS OF UTILITIES ARE SHOWN ON THIS MAP. YOU ARE RESPONSIBLE FOR VERIFYING THE LOCATION OF UTILITIES BEFORE ANY EXCAVATION. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MUST BE REPAIRED BY THE CONTRACTOR. PRESERVE ANY AND ALL UTILITIES AND ALL UNDERGROUND UTILITIES.

NOTICE: CONSTRUCTION OF THIS PROJECT IS THE SOLE RESPONSIBILITY OF THE CLIENT. THE ENGINEER SHALL BE RESPONSIBLE TO ISSUE ANY AND ALL NECESSARY PERMITS AND TO VERIFY THE WORK OF PERSONS EMPLOYED IN THE WORK OF ANY SECRET STRUCTURES OR ANY OTHER PERSONS.

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SECTION 31
TOLL BROTHERS
PARC VISTA
PRELIMINARY SITE PLAN
WOODLAND ANALYSIS PLAN

TOWN 01 NORTH, RANGE 08 EAST
CITY OF NOV
OAKLAND COUNTY, MICHIGAN

CLIENT: TOLL BROTHERS
DATE: AUGUST 11, 2022

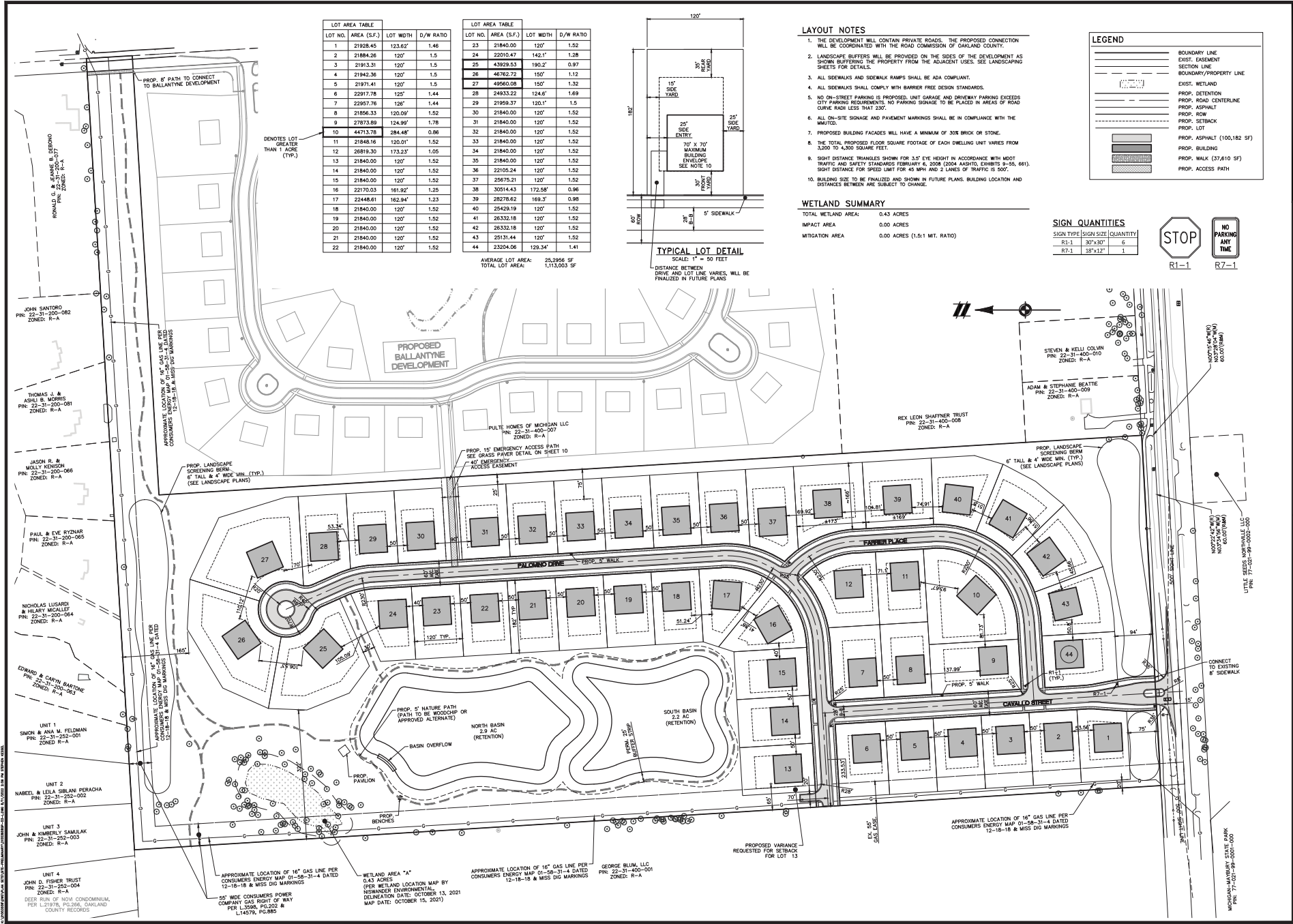
REVISIONS

NO.	DATE	BY	CHK	CR

SCALE: 0 50 100
1" = 100 FEET

JOB: 21003508
SHEET NO. 04

PRELIMINARY - NOT FOR CONSTRUCTION



ATWELL
ARCHITECTURAL & ENGINEERING
1100 W. 14TH ST., SUITE 200
ANN ARBOR, MI 48106
PH: 734.934.4000

SECTION 31
TOWN 01 NORTH, RANGE 08 EAST
CITY OF NOV
OAKLAND COUNTY, MICHIGAN
LAYOUT PLAN

CLIENT: TOLL BROTHERS
PARC VISTA
PRELIMINARY SITE PLAN

DATE: AUGUST 11, 2022

REVISIONS

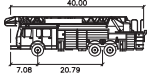
SCALE: 0 50 100
1" = 100 FEET

DR. SK. CH. CR.
P.L.M. MC.
BOOK ---
JOB 21003508
SHEET NO. 05

PRELIMINARY - NOT FOR CONSTRUCTION

WATER BASIS OF DESIGN

Number of Single Family Units:	44 Units
Residential Equivalent Units:	44 REUs
No. of Users per Unit:	3.2 persons
Total Expected Population Served:	141 persons
Average Daily Flow (per capita):	100 G.P.D.
Peaking Factor:	4.00 (Per Now Code for Population less than 500)
Average Flow:	POP * 100 = 0.0141 M.G.D.
Peak Flow:	0.0141 * 4.00 = 0.0564 M.G.D.



T-2 FIRETRUCK DETAIL
NOT TO SCALE

UTILITY NOTES

- THE DEVELOPMENT WILL BE SERVED BY PUBLIC WATER AND SANITARY SEWER. THE LOCATIONS OF THE EXISTING WATER AND SEWER AS SHOWN ARE APPROXIMATE. FIRE PROTECTION IN ACCORDANCE WITH CITY OF NOVI STANDARDS WILL BE DEPICTED ON SUBSEQUENT SUBMITTALS.
- WATERMAIN AND SANITARY SEWER SHALL BE LOCATED APPROXIMATELY 8.5' OFF THE BACK OF CURB
- IT IS ASSUMED THAT THE BALLANTYNE PROJECT DIRECTLY TO THE EAST WILL BE COMPLETED PRIOR TO THE START OF CONSTRUCTION OF THIS PROJECT.
- THE RIGHT OF WAY UTILITY PLANS WILL BE SUBMITTED IN A SEPARATE PLAN.

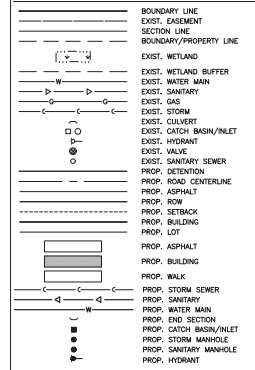
SANITARY BASIS OF DESIGN

Service Areas	On site:	54.8 Acres
	Off site:	0 Acres
	Total:	54.8 Acres
Number of Single Family Units	On site:	44 REUs
	Off site (assuming 4 REUs/acre):	0 REUs
	Total:	44 REUs
No. of Users per Unit:		3.2 persons
Total Expected Population Served:		141 persons
Average Daily Flow (per capita):		100 G.P.D.
Design Population Densities:		2.6 persons/acre
Peaking Factor:		4.00 (Per Now Code for POP less than 500)

Average Flow:	POP * 100 = 0.0141 M.G.D.
	= 9.78 G.P.M.
	= 0.0218 C.F.S.
Peak Flow:	0.0141 * 4.00 = 0.0563 M.G.D.
	= 39.11 G.P.M.
	= 0.0871 C.F.S.

Pipe Capacity:	8 in diameter	A _s = 0.349 sf
	0.40% slope	R = 0.167 ft
	0.013 Manning's 'n'	
	Manning's Capacity = 0.766 C.F.S.	
	Velocity Flowing Full = 2.20 F.P.S.	

LEGEND



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Know what's below.
The location of existing underground utilities is shown on this plan. Only those shown on this plan and who have not been independently verified by the contractor shall determine the exact location of all underground utilities. All contractors shall be responsible for the location of all utilities shown on this plan and all damages which may be caused by the contractor shall be the responsibility of the contractor. Please note that all underground utilities are shown on this plan and are not to be used for any other purpose.

NOTICE: CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES SHOWN ON THIS PLAN AND WHO HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES SHOWN ON THIS PLAN AND ALL DAMAGES WHICH MAY BE CAUSED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PLEASE NOTE THAT ALL UNDERGROUND UTILITIES ARE SHOWN ON THIS PLAN AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE.

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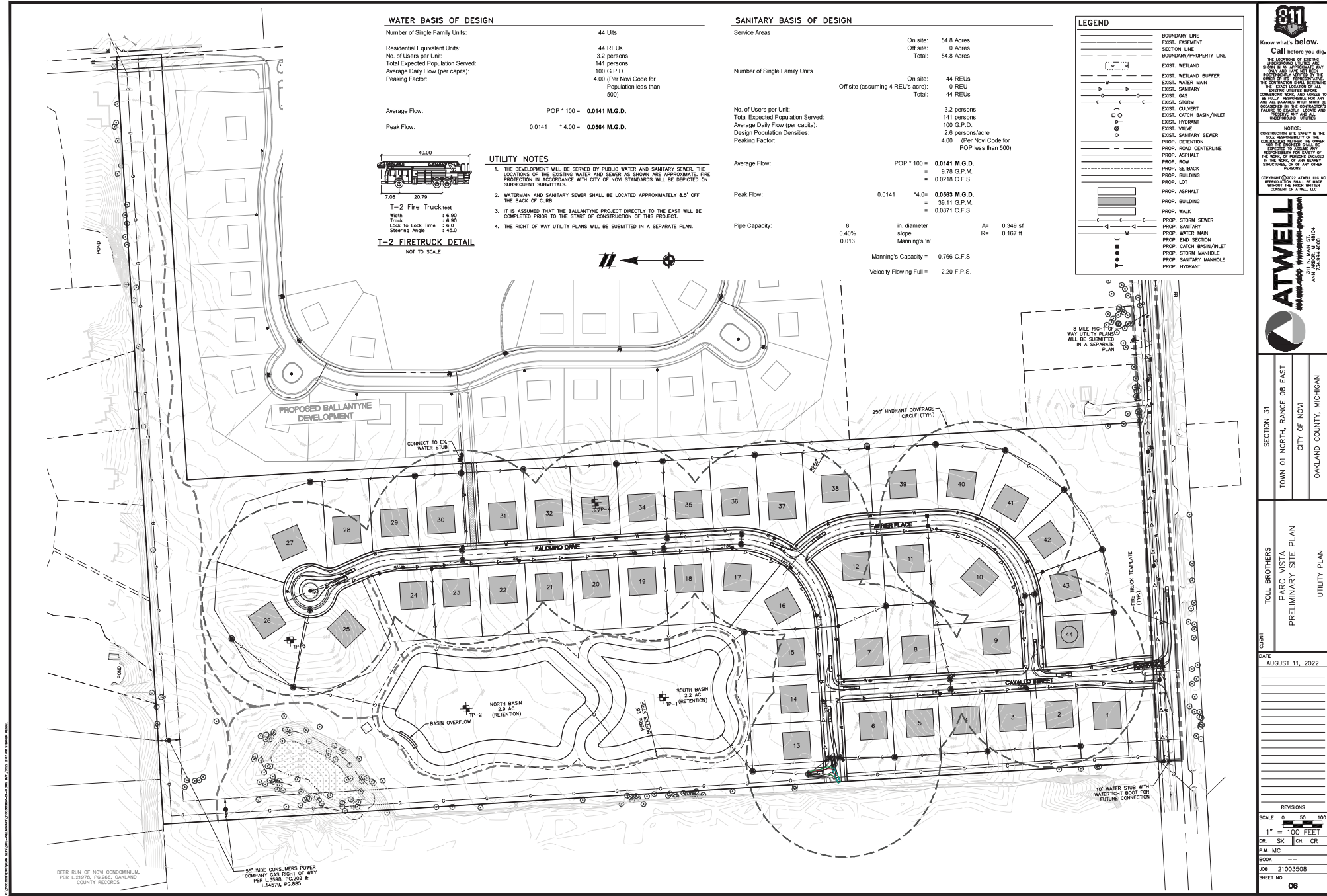


SECTION 31
TOWN OF NORTH, RANGE 08 EAST
CITY OF NOV
OAKLAND COUNTY, MICHIGAN

TOLL BROTHERS
PARC VISTA
PRELIMINARY SITE PLAN
UTILITY PLAN

CLIENT
DATE
AUGUST 11, 2022

REVISIONS
SCALE 0 50 100
1" = 100 FEET
DR. SK CH. CR
P.M. MC
BOOK ---
JOB 21003508
SHEET NO. 06



DEER RUN OF NOVH CONDOMINIUM
PER L21978, PG.366, OAKLAND
COUNTY RECORDS

54' SIDE CONSUMERS POWER
COMPANY GAS RIGHT OF WAY
PER L20596, PG.202 &
L14579, PG.885

PRELIMINARY - NOT FOR CONSTRUCTION

CONCEPTUAL STORM WATER CALCULATIONS

Stormwater Storage Volume Requirements

Area Contributing Runoff, A	=	48.53	acres
Developed Runoff Coefficient, C	=	0.60	
Total Retention Storage Required, Vt	=	2 * 16500 * a * c	
	=	960,894	c.f.
First Flush Volume (Vf) = 1815Ac	=	52,849	c.f.
Bankfull Volume (Vbf) = 5160Ac	=	150,249	c.f.

Basin Stage-Storage Calculations

Elevation	Area	h	Incr. V	Cum. V
957	171573	0	0	0
958	183391	1	177,482	177,482
959	195565	1	189,478	366,960
960	208067	1	201,831	568,791
961	220985	1	214,541	783,332
962	234231	1	227,608	1,010,940
963	247833	1	241,032	1,251,972
964	261793	1	254,813	1,506,785

Total Basin Storage = 1,010,940 cf
 Vt Elev. = 957.85
 DHV Elev. (100-yr) = 961.79
 Top of Bank Elev. = 964.00
 Freeboard = 2.21 ft
 Side slopes = 5:1

GRADING & STORM SEWER NOTES

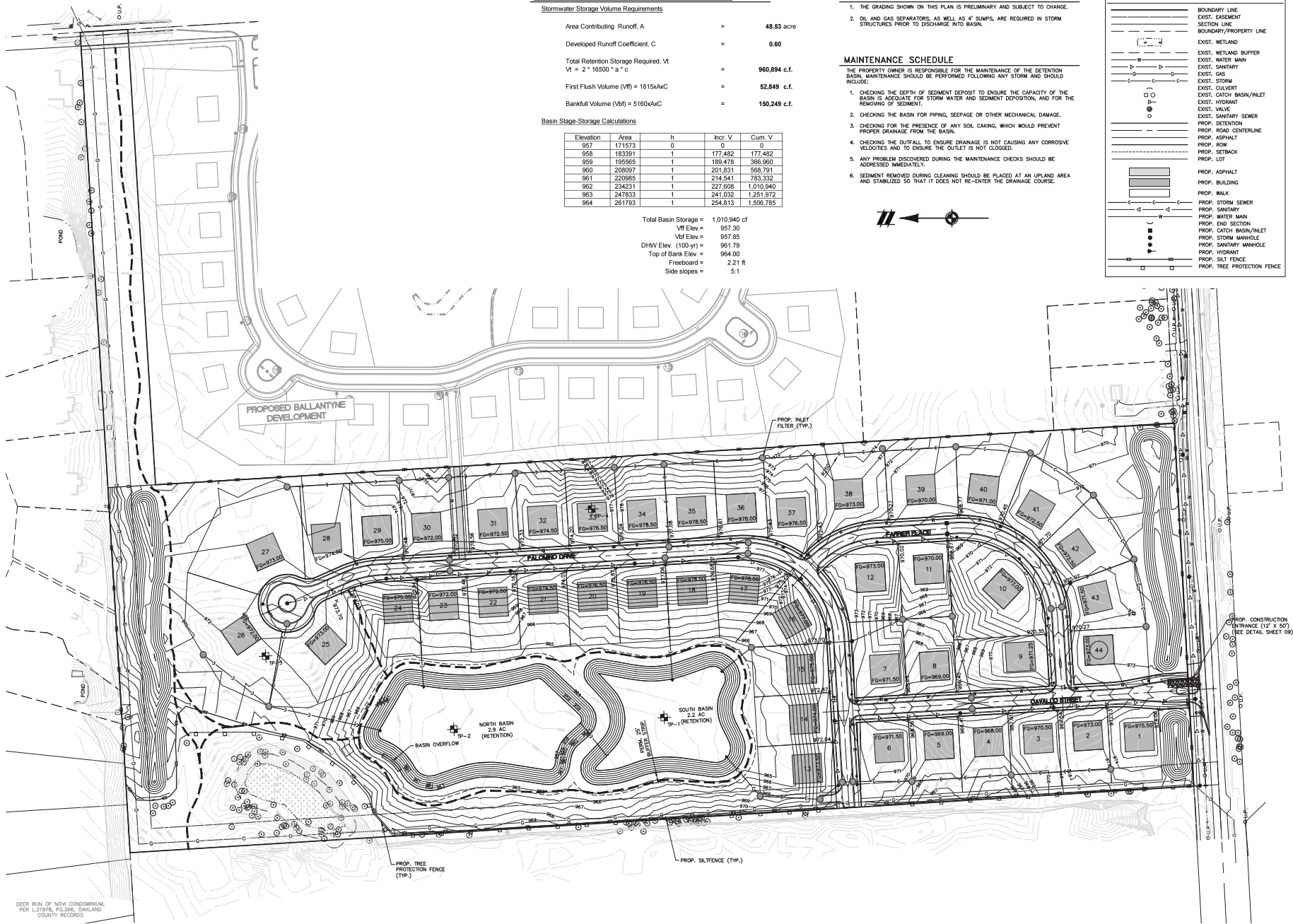
1. THE GRADING SHOWN ON THIS PLAN IS PRELIMINARY AND SUBJECT TO CHANGE.
2. OIL AND GAS SEPARATORS, AS WELL AS 4" SUMPS, ARE REQUIRED IN STORM STRUCTURES PRIOR TO DISCHARGE INTO BASIN.

MAINTENANCE SCHEDULE

- THE PROPERTY OWNER IS RESPONSIBLE FOR THE MAINTENANCE OF THE DETENTION BASIN. MAINTENANCE SHOULD BE PERFORMED FOLLOWING ANY STORM AND SHOULD INCLUDE:
1. CHECKING THE DEPTH OF SEDIMENT DEPOSIT TO ENSURE THE CAPACITY OF THE BASIN IS ADEQUATE FOR STORM WATER AND SEDIMENT DEPOSITION, AND FOR THE REMOVING OF SEDIMENT.
 2. CHECKING THE BASIN FOR PIPING, SEEPAGE OR OTHER MECHANICAL DAMAGE.
 3. CHECKING FOR THE PRESENCE OF ANY SOIL CAKING, WHICH WOULD PREVENT PROPER DRAINAGE FROM THE BASIN.
 4. CHECKING THE OUTFALL TO ENSURE DRAINAGE IS NOT CAUSING ANY CORROSIVE VELOCITIES AND TO ENSURE THE OUTFALL IS NOT CLOGGED.
 5. ANY PROBLEM DISCOVERED DURING THE MAINTENANCE CHECKS SHOULD BE ADDRESSED IMMEDIATELY.
 6. SEDIMENT REMOVED DURING CLEANING SHOULD BE PLACED AT AN UPLAND AREA AND STABILIZED SO THAT IT DOES NOT RE-ENTER THE DRAINAGE COURSE.

LEGEND

	BOUNDARY LINE
	EXIST. EASEMENT
	SECTION LINE
	BOUNDARY/PROPERTY LINE
	EXIST. WETLAND
	EXIST. WETLAND BUFFER
	EXIST. WATER MAIN
	EXIST. SANITARY
	EXIST. GAS
	EXIST. STORM
	EXIST. CULVERT
	EXIST. CATCH BASIN/INLET
	EXIST. HYDRANT
	EXIST. VALVE
	PROP. SANITARY SEWER
	PROP. DETENTION
	PROP. ROAD CENTERLINE
	PROP. ASPHALT
	PROP. ROW
	PROP. SETBACK
	PROP. LOT
	PROP. ASPHALT
	PROP. BUILDING
	PROP. WALK
	PROP. STORM SEWER
	PROP. SANITARY
	PROP. WATER MAIN
	PROP. END SECTION
	PROP. CATCH BASIN/INLET
	PROP. STORM MANHOLE
	PROP. SANITARY MANHOLE
	PROP. HYDRANT
	PROP. SILT FENCE
	PROP. TREE PROTECTION FENCE



ATWELL
 ARCHITECTURAL & ENGINEERING
 1000 W. GOLF COURSE RD., SUITE 100
 ANNE ARBOR, MI 48106
 734.964.4000

SECTION 31
 TOWN OF NORTH RANGE 08 EAST
 CITY OF NOV
 OKLAHOMA COUNTY, MICHIGAN

TOLL BROTHERS
 PARC VISTA
 PRELIMINARY SITE PLAN
 STORM WATER MANAGEMENT PLAN

DATE: AUGUST 11, 2022

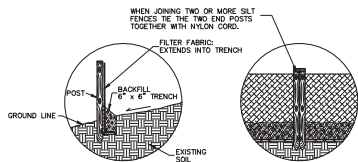
REVISIONS

NO.	DATE	DESCRIPTION

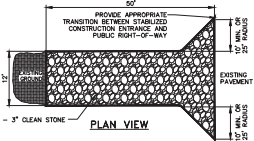
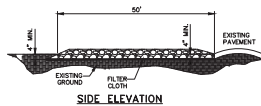
SCALE: 0 50 100
 1" = 100 FEET

DR. SK CH. CR
 P.L. MC
 BOOK
 JOB 21003508
 SHEET NO. 07

DEER RUN OF NOV CONDOMINIUM,
 PER L21978, PC366, OKLAHOMA
 COUNTY RECORDS

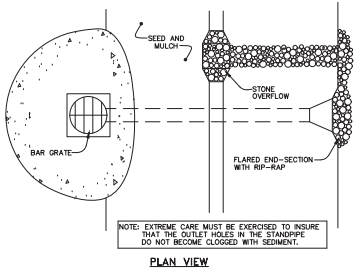
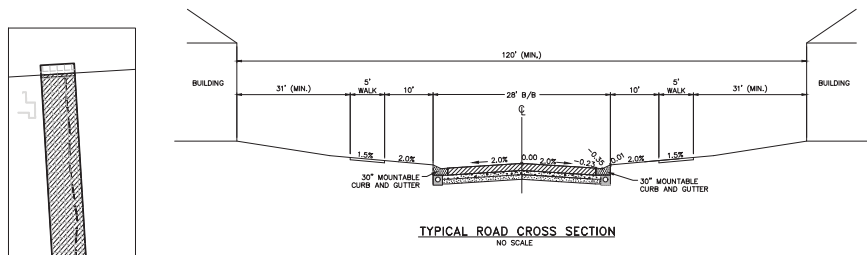
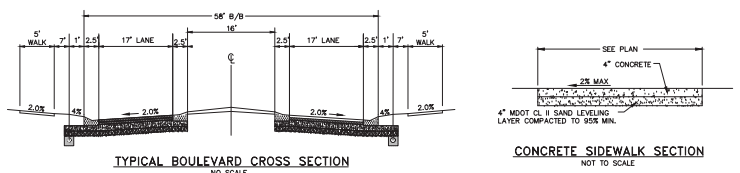
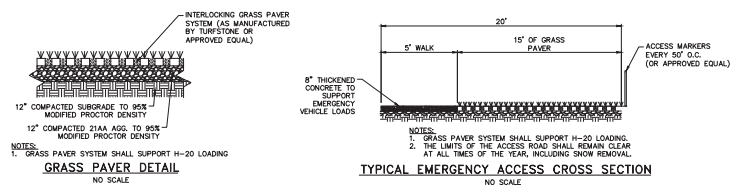
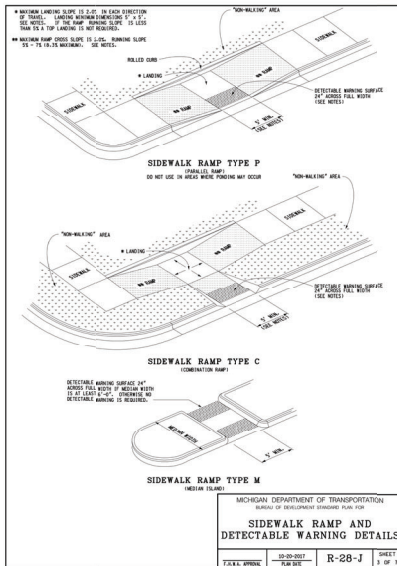


GEOTEXTILE SILT FENCE
NO SCALE

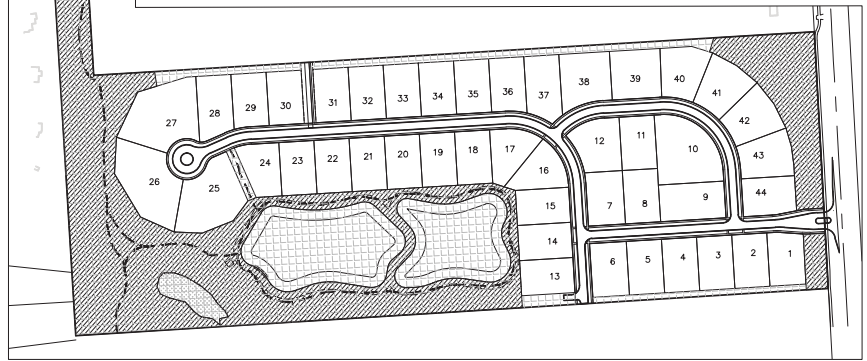
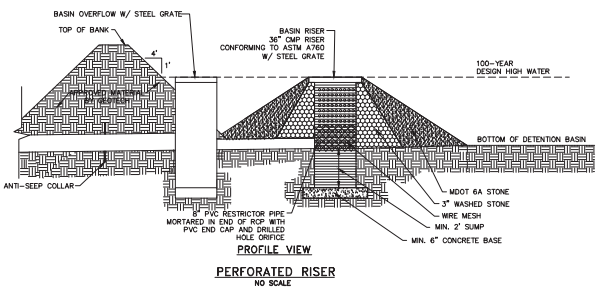


- CONSTRUCTION SPECIFICATIONS**
1. STONE - USE COARSE AGGREGATE (2 - 3 INCH STONE)
 2. LENGTH - 50' MIN.
 3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
 4. WIDTH - 12' MIN.

STABILIZED CONSTRUCTION ENTRANCE AND STONE LAYDOWN
NOT TO SCALE



NOTE: EXTREME CARE MUST BE EXERCISED TO INSURE THAT THE OUTLET HOLES IN THE STANDPIPE DO NOT BECOME CLOGGED WITH SEDIMENT.



OPEN SPACE EXHIBIT
SCALE: 1" = 200 FEET

311
Know what's below.
Call before you dig.
THE LOCATION OF EXISTING UTILITY LINES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO ANY EXCAVATION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR TO ANY EXISTING UTILITIES OR STRUCTURES AS A RESULT OF ANY EXCAVATION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES.

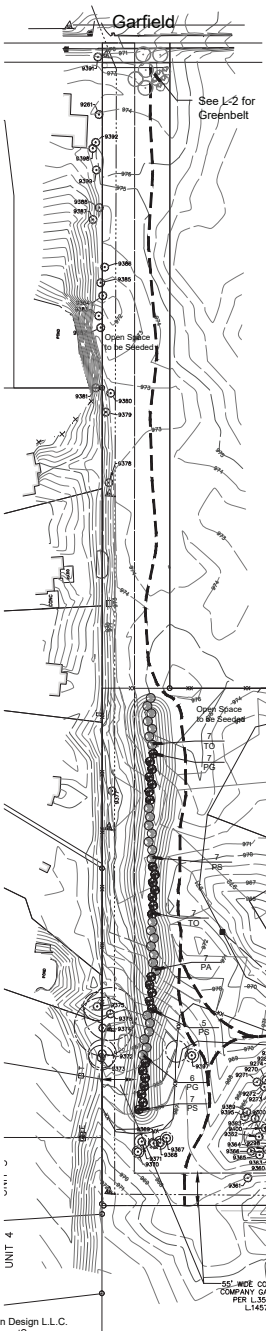
ATWELL
CORPORATION
10000 W. HAWTHORNE AVENUE
SUITE 100
DENVER, CO 80231
303.751.4000

SECTION 31
TOWN OF NORTH RANGE 08 EAST
CITY OF NOVI
OKLAND COUNTY, MICHIGAN
DETAIL SHEET

CLIENT: TOLL BROTHERS
PARC VISTA
PRELIMINARY SITE PLAN

DATE: AUGUST 11, 2022

REVISIONS
SCALE: AS NOTED
SK: SK
CH: CR
P.M.: MC
BOOK: ---
JOB: 21003508
SHEET NO. 09



Landscape Summary

Street Trees
 Street Frontage 7,170 LF
 Trees Required 204.8 Trees (7,170 / 35)
 Trees Provided 205 Trees

Woodland Replacement
 Trees Required 0 Trees - No Regulated Trees Removed

- Notes:
1. Soils Information is Found on Sheet 2.
 2. Trees Shall be Planted no Closer than 10' Utility Structure Including Hydrants and 6' from Utility Lines.
 3. Trees Shall not be Planted within 4' of Property Lines.
 4. Utility Boxes Shall be Screen per Detail on Sheet L-3.
 5. Phragmites and Japanese Knotweed are Not Present on this Site.
 6. Overhead Power Lines are Indicated on the Plan Along 8 Mile.
 7. An Irrigation Plan will be Provided for Stamping Sets.
 8. Snow Deposit will be Along the Streets Between the Curb and Sidewalk.

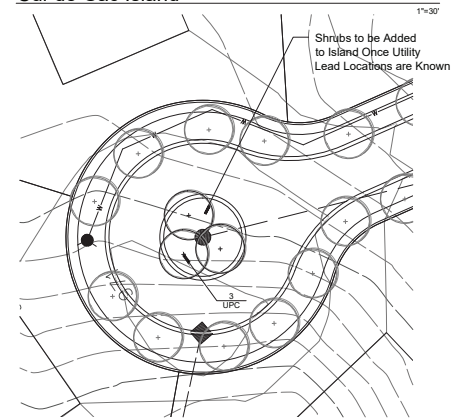
Plant List - This Sheet

Symbol	Qty	Botanical name	Common name	Caliper	spacing	tree height	price	Total	Species	Material	Native	Total
AR	18	Acer rubrum 'Outdoor Glory'	Outdoor Glory Red Maple	3.0"	as shown	8.68	\$ 400.00	\$ 7,424.00	4%	12%	1	1
AS	24	Aster multiflorus 'Queen Victoria'	Queen Victoria Royal Asters	3.0"	as shown	8.68	\$ 400.00	\$ 9,840.00	8%	12%	1	1
CD	24	Calla x clematis	Northern Hackberry	3.0"	as shown	8.68	\$ 400.00	\$ 9,840.00	8%	12%	1	1
CT	21	Crataegus mollis 'Northern Star'	Northern Hawthorn	3.0"	as shown	8.68	\$ 400.00	\$ 8,424.00	8%	12%	1	1
LT	18	Linderostrum latifolium	Tulip Tree	3.0"	as shown	8.68	\$ 400.00	\$ 7,424.00	8%	12%	1	1
PR	30	Prunella x quadrilobata 'Spectabilis'	Eschscholm London Planetree	3.0"	as shown	8.68	\$ 400.00	\$ 12,240.00	10%	12%	1	1
UP	24	Ulmus florifer	Balsam Poplar	3.0"	as shown	8.68	\$ 400.00	\$ 9,840.00	8%	12%	1	1
UP	24	Ulmus florifer	Flower Elm	3.0"	as shown	8.68	\$ 400.00	\$ 11,200.00	8%	12%	1	1
Cul-de-Sac Trees												
UPC	3	Ulmus florifer	Flower Elm	3.0"	as shown	8.68	\$ 400.00	\$ 1,200.00	8%	12%	1	1
General Plantings												
PA	7	Prunella serotina	Norway Spruce	as shown	8.68	\$ 125.00	\$ 2,275.00	\$ 2,275.00	3%	12%	1	1
PS	12	Prunella serotina	Black Hills Spruce	as shown	8.68	\$ 125.00	\$ 1,500.00	\$ 1,500.00	12%	12%	1	1
PS	18	Prunella serotina	White Pine	as shown	8.68	\$ 125.00	\$ 6,150.00	\$ 6,150.00	10%	12%	1	1
CD	14	Prunella serotina	Green Giant Arborvitae	as shown	8.68	\$ 125.00	\$ 4,850.00	\$ 4,850.00	4%	12%	1	1

Location Map



Cul-de-Sac Island

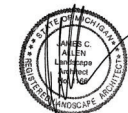


Bench



Jameson 6' Recycled Plastic Bench
 Color - Brown

Seal:



Title:

Landscape Plan

Project:

Parc Vista
 Novi, Michigan

Prepared for:

Toll Brothers
 26200 Town Center Drive, Suite 200
 Novi, Michigan 48375

Revision: Issued:

Submission February 8, 2022
 Submission July 1, 2022

Job Number:

20-010

Drawn By: Checked By:

jca jca



Sheet No.

L-1



Planning Review



PLAN REVIEW CENTER REPORT

September 8, 2022

Planning Review

Parc Vista RUD

JSP21-47

PETITIONER

Toll Brothers

REVIEW TYPE

Preliminary Site Plan

PROPERTY CHARACTERISTICS

Section	31	
Site Location	West of Garfield Road and North of Eight Mile Road (Parcels 22-31-400-011, 22-31-400-012)	
Site School	Northville Community School District	
Site Zoning	RA Residential Acreage	
Adjoining Zoning	North	RA Residential Acreage
	East	RA Residential Acreage
	West	RA Residential Acreage
	South	(Northville Township) Maybury State Park
Current Site Use	Farmland	
Adjoining Uses	North	Single Family Residential
	East	Single Family Residential (under construction)
	West	Vacant
	South	Maybury State Park
Site Size	54.3 acres	
Plan Date	August 11, 2022	

PROJECT SUMMARY

The applicant has received City Council approval of a Residential Unit Development (RUD) Agreement on a 54.3-acre site north of Eight Mile and west of Garfield Road in order to construct 44 single-family residential units. Four of the proposed units are consistent with the underlying zoning (RA) requirements. The rest are consistent with R-1 requirements. The proposed density is 0.8 units per acre consistent with the RA, Residential Acreage zoning of the site. The remainder of the site (44%) is intended to be open space.

RECOMMENDATION

Staff **recommends approval of the Preliminary Site Plan.** The Preliminary Site Plan with Site Condominium, Woodland Permit, and Stormwater Management Plan will be considered by the Planning Commission.

RUD AGREEMENT

The applicant and City Council have entered into an RUD Agreement pursuant to Section 3.29.8.A of the Zoning Ordinance, which was approved on August 8, 2022.

ORDINANCE REQUIREMENTS

This project was reviewed for compliance with the City of Novi Zoning Ordinance, Article 3 (Residential Acreage), Article 24 (Schedule of Regulations), Article 25 (General Provisions), and any other areas of the ordinance, as noted. The plans show general compliance with ordinance requirements. Please see the attached charts for information pertaining to ordinance requirements. Items in **bold** below must be addressed by the applicant.

1. RUD Intent: *As an optional form of development, the RUD allows development flexibility of various types of residential dwelling units (one-family, attached one-family cluster). It is also the intent of the RUD option to permit permanent preservation of valuable open land, fragile natural resources and rural community character that would be lost under conventional development. This is accomplished by permitting flexible lot sizes in accordance with open land preservation credits when the residential developments are located in a substantial open land setting, and through the consideration of relaxation of area, bulk, yard, dimensional and other zoning ordinance standards in order to accomplish specific planning objectives.*

This flexibility is intended to reduce the visual intensity of development; provide privacy; protect natural resources from intrusion, pollution, or impairment; protect locally important animal and plant habitats; preserve lands of unique scenic, historic, or geologic value; provide private neighborhood recreation; and protect the public health, safety, and welfare. Such flexibility will also provide for:

- *The use of land in accordance with its character and adaptability.*
- *The construction and maintenance of streets, utilities and public services in a more economical and efficient manner.*
- *The compatible design and use of neighboring properties; and*
- *The reduction of development sprawl, so as to preserve open space as undeveloped land.*

The open space to be preserved shall be shown as permanently protected in the Master Deed for the condominium development.

2. Lot Size and Area: One-family detached dwellings are subject to the minimum lot area and size requirements of the underlying district. RA zoning requires 43,560 sq. ft. lots that are a minimum of 150 feet wide. The applicant has proposed a minimum lot size of 21,793 sq. ft. and a minimum width of 120 feet. The plans indicate that a total of 23.8 acres of open space will be maintained in this development (mostly in the perimeter buffering and the detention basin area), which is about 44 percent of the net site area. There are a variety of lot sizes throughout the proposed development. Lots range from approximately 21,840 sq. ft. to 49,560 sq. ft., allowing for some variation in lot size. Most lots (31 out of 44, or 70%) fall within the 21,000-25,000 sq. ft. range, while 9% are one acre or larger (4 out of 44). **The City Council has agreed to modify lot size and width requirements for the purpose of allowing greater preservation of open space for those purposes set forth in Section 3.29.B of the Zoning Ordinance and where the RUD provides a genuine variety of lot sizes.**
3. Building Setback: One-family detached dwellings in an RUD are subject to the building setback regulations of the underlying zoning district, in this case the RA District. The RA District setbacks are listed in the attached planning review chart. The applicant has proposed reduced building setbacks consistent with the smaller proposed lot sizes consistent with the R-1 District. **City Council has agreed to grant the reduction in lot size and area noted above.**
4. Blocks & Streets (Subdivision Ordinance Section 4.01 & 4.04): The ordinance states the maximum length for all blocks shall not exceed 1,400 feet, and that streets should extend to the boundary to provide access intervals not to exceed 1,300 feet. The proposed plan has consecutive lots greater

than 1,400 feet. The project is designed such that emergency access drives align with the only available access drive to the east. The existing development to the north does not have an access point available. The street stub connection to the west is positioned in a reasonable manner to allow future development to connect to the stub. **City Council has granted the deviation required for excess length of streets and blocks.**

5. Sidewalks: There is an existing 8-foot sidewalk along Eight Mile Road. The applicant proposes an 8-foot sidewalk along their Garfield Road frontage. Five-foot sidewalks are proposed along the private internal roads. **Refer to Traffic and Engineering comments with regards to pathways within the site.**
6. Woodland/Wetland Areas: While direct impacts to protected woodland and wetland areas are not proposed, the applicant should consider installing permanent signage and/or fencing to ensure residents and maintenance personnel are aware of and observe the protected status of these areas. Within the 25-foot wetland buffer no mowing or cutting of vegetation and no dumping or application of chemicals shall be permitted. **Locations and sign details should be provided in the site plan submittal.**
7. Master Deed and By-laws: The Master Deed and By-laws must be submitted for review with the Final Site Plan submittal.
8. Lighting: City ordinances require an entrance light at all residential developments. **The applicant should show the location of a proposed entrance light in the next submittal. Once the proposed location has been approved, the applicant should contact Humna Anjum (248.735.5648) in the Engineering Division to begin the process of working with the City and DTE on the installation of the entrance light.**

Other Reviews

- Engineering Review: Engineering review recommends approval of the Preliminary Site Plan. Additional comments to be addressed with Final Site Plan submittal.
- Landscape Review: Approval of the Preliminary Site Plan is recommended, with comments detailed in the Landscape Letter to be addressed with Final Site Plan submittal.
- Wetland Review: MSG recommends approval of the Preliminary Site Plan.
- Woodland Review: DRG recommends approval of the Preliminary Site Plan and Woodland Permit.
- Traffic Review: Approval of the Preliminary Site Plan is recommended. **Comments to be addressed in response letter in to address whether deviations will be needed for sidewalk offset, driveway spacing, etc.**
- Fire Review: Conditional approval is recommended with additional comments to be addressed with Final Site Plan submittal, particularly regarding hydrant spacing. Contact the Fire Marshal for any clarifications.

PROJECT AND STREET NAMING COMMITTEE

The applicant received project name approval for Parc Vista by Toll Brothers, and street names Palomino, Cavallo, and Farrier.

NEXT STEP: PLANNING COMMISSION MEETING

This Site Plan will be scheduled to go before the Planning Commission for public hearing on **September 28, 2022**. Please provide the following via email by **September 22, 2022**:

1. Preliminary 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 necessary.
3. A color rendering of the Site Plan (optional, to be used for Planning Commission presentation).

FINAL SITE PLAN SUBMITTAL

Provided the Preliminary Site Plan is approved by the Planning Commission, please submit the following for Final Site Plan review and approval:

1. Six 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. [Non-Domestic User Survey](#) (Non-residential developments)
9. 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

After receiving Final Site Plan approval from all reviewers, 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

Stamping sets will be required for this project. After having received Electronic Stamping Set comments 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.

SITE ADDRESSING

New addresses are required for this project. The applicant should contact the Building Division for an address prior to applying for a building permit. Building permit applications cannot be processed without a correct address. The address application can be found by clicking on this [link](#).

Please contact the Ordinance Division 248.735.5678 in the Community Development Department with any specific questions regarding addressing of sites.

PRE-CONSTRUCTION MEETING

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

CHAPTER 26.5

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

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

A handwritten signature in black ink that reads "Lindsay Bell". The signature is written in a cursive, flowing style.

Lindsay Bell, AICP, Senior Planner



PLANNING REVIEW CHART: RUD Option

Review Date: September 8, 2022
Review Type: Preliminary Site Plan
Project Name: JSP21-47 PARC VISTA RUD
Plan Date: August 11, 2022
Prepared by: Lindsay Bell, Planner
Contact: E-mail: lbell@cityofnovi.org; Phone: (248) 347-0484

Bold To be addressed with the next submittal
Underline To be addressed with final site plan submittal
Bold and Underline Requires Planning Commission and / or ZBA Approval
Italics Notes to be noted

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan <i>(adopted July 26, 2017)</i>	Single Family, with master planned 0.8 maximum dwelling units per acre.	38 Unit single family residential development with RUD option	Yes	<i>City Council approved RUD agreement on 8/8/22. Site Plan approval process follows.</i>
Zoning <i>(Effective January 8, 2015)</i>	RA: Residential Acreage district	Residential Unit Development (RUD)	Yes	
Uses Permitted <i>(Sec.3.1.1)</i>	Single Family Dwellings	Single Family Dwellings with RUD	Yes	
RUD Residential Unit Development (Sec. 3.29) Height, bulk, density and area limitations (Sec. 3.1.1)				
Parcel Size <i>(Sec. 3.29.1)</i>	At least 20 contiguous acres of land under single ownership	54.8 Acres	Yes	
Perimeter Buffering <i>(Sec. 3.29.2)</i>	<ul style="list-style-type: none"> - Where the RUD abuts a one-family district, development of the land up to 330 feet shall be restricted to detached, one-family, non-clustered dwelling units. - All clustered housing dwelling units shall be at least 75 feet from any peripheral property line. 	Detached one-family, non-clustered dwelling units are proposed.	NA	
Density <i>(Sec. 3.29.3A)</i>	For RA: maximum dwelling units per net acre is 0.8	44 units/54.4 net acres = 0.8 DUA	Yes	
Additional density credit <i>(Sec 3.29.3B)</i>	<ul style="list-style-type: none"> - Watercourses and bodies of water - Quality wetlands less than 2 acres 	Applicant did not apply for additional density credit	NA	

Item	Required Code	Proposed	Meets Code	Comments				
	<ul style="list-style-type: none"> - Wetland and watercourse setback areas - Regulated woodlands - Local important plant/animal habitats - Historical buildings - Recreational areas 							
Lot Area (Sec 3.29.4) & (Sec 3.1.1)	<p>One-family detached dwellings are subject to the minimum lot area requirements of the underlying district. RA zoning requires 43,560 sq. ft. lots.</p> <p>The City Council may modify lot area requirements where such modification will result in the preservation of open space for those purposes set forth in this section 3.29.B and where the RUD will provide a genuine variety of lot sizes.</p>	<p>40 Units @ 0.5 Acres minimum (50% reduction) Consistent with R-1 requirements</p> <p>4 Units @ 1 Acre minimum Consistent with RA requirements</p>	No	The City Council agreed to modify lot area requirements				
Lot Size (Sec 3.1.1)	<p>One-family detached dwellings are subject to the minimum lot width requirements of the underlying district. RA zoning requires 150 ft. lot widths.</p>	<p>35 Units @ 120 ft minimum (20% reduction) Consistent with R-1 requirements</p> <p>9 Units @ 150 ft minimum Consistent with RA requirements</p>	No	The City Council agreed to modify lot width requirements				
Building Setbacks (Sec 3.1.1)& (Sec 3.29.5)		<table border="1"> <tr> <td>For 0.5-0.99 Acre lots</td> <td>For 1+ Acre lots</td> </tr> <tr> <td>R-1 Code</td> <td>RA Code</td> </tr> </table>	For 0.5-0.99 Acre lots	For 1+ Acre lots	R-1 Code	RA Code	No	City Council approved the reduction in lot setbacks from RA to R-1
For 0.5-0.99 Acre lots	For 1+ Acre lots							
R-1 Code	RA Code							
Front	RA: 45ft. R-1: 30 ft.	30 ft. 45 ft.						
Side	RA: 20 ft. one side, 50 ft. two sides R-1: 15 ft. one side, 40 ft. two sides	20 ft. each side;40 ft. two sides 25 ft. each side;50 ft. two sides	No					
Rear	RA: 50 ft. R-1: 35 ft.	35 ft. 50 ft.	No					

Item	Required Code	Proposed	Meets Code	Comments
Deviations from standards (Sec 3.29.6)	As part of the final approval of RUD plan, the City Council shall be authorized to grant deviations according to section 3.29.6	Reduction to lot area is proposed for most lots, and yard setbacks reductions are proposed for all lots		The City Council agreed to modify lot area requirements in order to provide for the preservation of open space for those purposes set forth in this section 3.29.B as the RUD provides a variety of lot sizes.
Maximum % of Lot Area Covered (By All Buildings) (Sec 3.1.1)	25%	22% proposed	Yes	
Minimum Floor Area (Sec 3.1.1)	1,000 Sq.ft.	3,200-4,300 sq ft. per unit indicated	Yes	<u>Details reviewed at plot plan phase</u>
Building Height (Sec 3.1.1)	35 ft. or 2.5 stories whichever is less	35 feet, 2 stories indicated	Yes	<u>Building height reviewed at plot plan phase.</u>
Frontage on a Public Street. (Sec. 5.12)	No lot or parcel of land shall be used for any purpose permitted by this Ordinance unless said lot or parcel shall front directly upon a public street, unless otherwise provided for in this Ordinance.	All units front on a proposed private road within the proposed condominium, with access to Eight Mile Road	Yes	<u>Frontage on Private road for individual lots is permitted for a Condominium development</u>
Note to District Standards (Sec 3.6)				
Area Requirements (Sec 3.6A & Sec. 2.2)	<ul style="list-style-type: none"> - Lot width shall be measured between two lines where a front setback line intersects with side setback lines. - Distance between side lot lines cannot be less than 90% between the front setback line and the main building. 	Appears to comply	Yes	
Additional Setbacks (Sec 3.6B)	NA	Single family development and no off-street parking	NA	
Exterior Side yard abutting Streets (Sec 3.6C)	NA	Side yards abutting residential districts	NA	

Item	Required Code	Proposed	Meets Code	Comments
Wetland/Water-course Setback (Sec 3.6M)	25ft. from boundary of a wetland and 25ft. from the ordinary highwater mark of a watercourse is required	No wetland or wetland buffer is contained within proposed units.	Yes	
Subdivision Ordinance				
Blocks (Subdivision Ordinance: Sec. 4.01)	<ul style="list-style-type: none"> - Maximum length for all blocks shall not exceed 1,400 ft. - Widths of blocks shall be determined by the conditions of the layout. 	Lots are laid out such that the emergency access drives and internal streets avoid creating blocks longer than 1400 ft.	No	<u>Deviation approved by City Council, 8/8/22</u>
Lots: Sizes and Shapes (Subdivision Ordinance: Sec. 4.02A)				
Lot Depth Abutting a Secondary Thoroughfare (Subdivision Ordinance: Sec. 4.02.A5)	Lots abutting a major or secondary thoroughfare must have a depth of at least 140'	Lots abutting 8 Mile are at least 180'	Yes	
Depth to Width Ratio (Subdivision Ordinance: Sec. 4.02.A6)	Single Family lots shall not exceed a 3:1 depth to width ratio	Maximum of 1.7:1 ratio is maintained	Yes	
Arrangement (Subdivision Ordinance: Sec. 4.02.B)	<ul style="list-style-type: none"> - Every lot shall front or abut on a street. - Side lot lines shall be at right angles or radial to the street lines, or as nearly as possible thereto. 	<ul style="list-style-type: none"> - All lots front on proposed streets - All lots conform to shape requirement 	Yes	
Streets (Subdivision Ordinance: Sec. 4.04)	Extend streets to boundary to provide access intervals not to exceed 1,300 ft. unless one of the following exists: <ul style="list-style-type: none"> - practical difficulties because of topographic conditions or natural features - Would create undesirable traffic patterns 	Two stub streets/Emergency access drives provided – one on east and one on west property line. Emergency access is located beyond 1300 ft. to align with the street layout in the adjacent lot.	Yes	Extension to the north is impractical as the existing subdivision has no street to connect to; likewise, along the east side of the property the emergency access point connects to the only available access point <u>Deviation approved by City Council, 8/8/22</u>
Topographic Conditions (Subdivision Ordinance Sec 4.03)				

Item	Required Code	Proposed	Meets Code	Comments
A. Flood plain	Compliance with applicable state laws and City Code Areas in a floodplain cannot be platted	Not Applicable	NA	
B. Trees and Landscaping	Compliance with Chapter 37 and Article 5 of City Zoning Code	Tree survey and Landscape Plans are provided	Yes	
C. Natural Features	To be preserved Lots cannot extend into a wetland or watercourse	Wetlands and woodland exist on Northwest corner of the site – no impacts proposed	Yes	
D. Man-made Features	To be built according to City standards	Retention ponds proposed	Yes	See Engineering Review letter for detail on SWM Plan comments
E. Open Space Areas	Any Open Space Area shall meet the following: <ul style="list-style-type: none"> - Require performance guarantee - Shall be brought to a suitable grade - Compliance with zoning ordinance - Except for wooded areas, all ground area should be top dressed with a minimum of 25% of red fescue and a maximum of 20% perennial rye. 	The open space that is provided will need to meet these standards.	Yes	
F. Non-Access Greenbelt Easements	Along rear or side property lines for reverse frontage lots	75-94 ft greenbelt between 8 Mile and rear yards of homes	Yes	
G. Zoning Boundary Screening	A non-residential development abutting a residential development would need screening	Not Applicable		
Sidewalks Requirements				
Non-Motorized Plan	No additional trails or pathways beyond those identified in the Bicycle and Pedestrian Master Plan are recommended for the subject property	5 ft. wide nature path proposed as amenity for residents	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Sidewalks within RUD <i>(Sec 3.29.12E)</i> <i>(Subdivision Ordinance: Sec. 4.05)</i>	- Shall meet the City of Novi Design and Construction Standards. - Such safety paths shall be at least five (5) feet in width along both sides of all public and private streets within the RUD. - Shall be placed 1ft. off property lines - Shall be required where necessary along retention ponds, open spaces to ensure continuity	- 5 ft. sidewalks are proposed along both sides of internal streets. - A 5' woodchip trail is proposed around the retention ponds and along the north side of the property to Garfield Rd.	Yes	
Public Sidewalks <i>(Chapter 11, Sec.11-276(b), Subdivision Ordinance: Sec. 4.05)</i>	A 8' wide public sidewalk shall be constructed along all arterial and collector roads except in industrial districts	8' sidewalk proposed along Eight Mile Road and Garfield Rd within ROW	Yes	
Other Requirements				
Development and Street Names	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	Application received	Yes	
Development/ Business Sign	Signage if proposed requires a permit.			<u>For sign permit information contact Maureen Underhill at 248-735-5602.</u>
NOTES: 1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards. 2. The section of the applicable ordinance or standard is indicated in parenthesis. Please refer to those sections in Article 3, 4 and 5 of the zoning ordinance for further details. 3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.				

Engineering Review



PLAN REVIEW CENTER REPORT

9/7/2022

Engineering Review

Parc Vista
JSP21-0047

Applicant

Toll Brothers

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: North of Eight Mile Road, west of Garfield Road.
- Site Size: approximately 55 acres
- Plan Date: 2/04/2022
- Design Engineer: Atwell Group

Project Summary

- Proposed single-family, single-phase, 44-unit residential development with site access via Eight Mile Road. Private roads proposed.
- Water main would be provided by extensions from Ballantyne's proposed stubs to the east and connection to proposed 8 Mile Utilities (part of separate site plan).
- Sanitary sewer service would be provided by connection to proposed 8 Mile Utilities (part of separate site plan).
- Storm water would be collected and conveyed to a single retention basin.

Recommendation

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

Comments:

The Preliminary Site Plan meets the general requirements of Chapter 11 of the Code of Ordinances, the Storm Water Management Ordinance, and the Engineering Design Manual with the following exceptions, which can be addressed at Final Site Plan submittal:

General

1. Provide a minimum of two ties to established section or quarter section corners.
2. Provide at least two reference benchmarks at intervals no greater than 1,200 feet. At least one referenced benchmark must be a City-established benchmark, which can be found on the City's website at this location: <https://novi.maps.arcgis.com/apps/webappviewer/index.html?id=5ce841f86197461c9f146e1330330bcf>
3. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.
4. 8 Mile Road water main and sanitary sewer extension plan should be submitted an approved before stamping set approval of Covington Estates Plan JSP21-0047.
5. **Only at the time of the printed Stamping Set submittal**, provide the City's standard detail sheets for water main (5 sheets), sanitary sewer (3 sheets), storm sewer (2 sheets), paving (2 sheets) and Boardwalks/Pathways (1 sheet). The most updated details can be found on the City's website at this location: <https://cityofnovi.org/services/public-works/engineering-division/engineering-standards-and-construction-details>
6. A right-of-way permit will be required from the City of Novi and Oakland County.
7. Provide sight distance measurements for the 8 Mile Road entrance in accordance with Figure VIII-E of the Design and Construction Standards, Chapter 11 of the City of Novi Code of Ordinances, which can be found here: https://library.municode.com/mi/novi/codes/code_of_ordinances?nodeId=PT||COOR_CH11DECOST (provided 500' required for 8 Mile Road in that area is 560' with boulevard road)
8. Show and label the master planned 43-foot half width right-of-way for Garfield Road. The dedication of the master-planned half right-of-way of 43 feet in width is requested for the project. Label the additional right-of-way width to be dedicated along Garfield as "proposed" right-of-way.
9. Provide a traffic control sign table listing the quantities of each **permanent** sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.
10. Traffic signs in the Road Commission for Oakland County (RCOC) right-of-way will be installed by RCOC.
11. Site grading shall be limited to 1V:4H (25-percent), excluding landscaping berms. Label slopes on grading plan.
12. Provide a traffic control plan for the proposed road work activity.
13. Provide a note that compacted sand backfill (MDOT sand Class II) shall be provided for all utilities within the influence of paved areas, and illustrate and label on the profiles.

14. Provide a construction materials table on the utility plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
15. Provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided, or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.
16. Where the minimum 18-inch clearance at utility crossings cannot be achieved, provide a prominent note stating the substandard clearance and that proper bedding/encasement will be determined by the inspecting engineer.
17. Provide a note stating if dewatering is anticipated or encountered during construction, then a dewatering plan must be submitted to the Engineering Division for review.
18. Generally, all proposed trees shall remain outside utility easements. Where proposed trees are required within a utility easement, the trees shall maintain a minimum 5-foot horizontal separation distance from any existing or proposed utility. All utilities shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance.
19. Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur. Light poles in a utility easement will require a License Agreement.
20. For common area irrigation systems connected to public water supplies: Install a backflow prevention Reduced Pressure Zone Assembly (RPZ) with an ASSE 1013 listing approval at each tap to the public water supply. A minimum clearance of 12-inches measured from the bottom of pressure relief valve to the finished landscaped grade shall be required. Provide a detail showing the RPZ installation setup and height above grade. If backflow preventer is to be enclosed, provide a detail of the enclosure with required drainage outlets. Show all locations on a site plan. A plumbing permit is required for the installation of the backflow preventer. Installation of the backflow preventer shall be in such a manner as to not require blowing out the system through the backflow preventer. Drain ports and blow out ports shall be included. Any deviations from these requirements must be approved through the Novi Water & Sewer Division Cross Connection Control Specialist (248-735-5661).
21. The grading and SESC sheets shall show the tree fence at least as far from the trunk as the critical root zone, defined as a circular area around a tree with a radius measured to the tree's longest dripline radius plus one (1) foot. No grading shall occur within the dripline. If the critical root zone is not fully protected, then replacements for that tree may be required.
22. **Projects looking for final site plan approval in the near future should refer to the new Oakland County stormwater standards. The new Oakland County Stormwater standards can be found here:**
<https://www.oakgov.com/water/stormwater/Pages/Stormwater-Engineering-Design-Standards.aspx>

The State of Michigan is currently reviewing the City of Novi's stormwater standards for compliance with the new County standards, and thus the City has not yet adopted the new standards. However, the City will eventually be required to adopt the new standards at any time.

Water Main

23. All water main easements shall be 20 feet wide. Revise the proposed easement accordingly.
24. A tapping sleeve, valve and well is required at the connection to the existing water main.
25. Provide water main modeling calculations demonstrating that the required water supply of 2,000 GPM will be available.
26. Provide additional valves to limit pipe runs to a maximum of 800 feet between valves.
27. Per current EGLE requirement, provide a profile for all proposed water main 8-inch and larger.
28. 6-inch hydrant leads are allowed for leads less than or equal to 25 feet in length. 8-inch leads are required for leads greater than 25 feet in length.
29. All gate valves 6" or larger shall be placed in a well with the exception of a hydrant shut off valve. A valve shall be placed in a box for water main smaller than 6".

Sanitary Sewer

30. Provide a sanitary sewer basis of design for the development on the utility plan sheet. (Calculations should use peaking factor of 4.0 and 3.2 REU).
31. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
32. Provide a note on the Utility Plan and sanitary profile stating the sanitary leads will be buried at least 5 feet deep where under the influence of pavement.
33. Provide an internal drop connection at structures, where the inlet pipe enters the manhole at an invert elevation 18 inches or greater above the invert elevation of the outlet pipe.
34. Illustrate all pipes intersecting with manholes on the sanitary profiles.
35. Relocate the sanitary sewer to go around the cul-de-sac outside the paved road. Extend the sanitary sewer so no leads cross under the cul-de-sac.

Storm Sewer

36. A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. Currently, a few pipe sections do not meet this standard. Grades shall be elevated, and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.
37. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.

38. Match the 0.80 diameter depth above invert for pipe size increases.
39. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot-deep plunge pool.
40. Provide a four-foot-deep sump and an oil/gas separator in the last storm structure prior to discharge to the retention basin.
41. Provide profiles for all storm sewer 12-inch and larger.
42. Label the 10-year HGL on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure.
43. Illustrate all pipes intersecting storm structures on the storm profiles.
44. An easement is required over the storm sewer accepting and conveying off-site drainage.
45. Provide a schedule listing the casting type, rim elevation, diameter, and invert sizes/elevations for each proposed, adjusted, or modified storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.
46. Show and label all roof conductors and show where they tie into the storm sewer.

Storm Water Management Plan

47. The Storm Water Management Plan (SWMP) for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the Engineering Design Manual.
48. An adequate maintenance access route to the basin overflow structure and any other pretreatment structures shall be provided (15 feet wide, maximum running slope of 1V:5H, maximum cross slope of 3%, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
49. As part of the Storm Drainage Facility Maintenance Easement Agreement, provide an access easement for maintenance over the storm water retention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.
50. Provide manufacturer's details and sizing calculations for the pretreatment structure(s) on the plans.
51. Provide reasoning for separating the south and north retention basin.
52. Provide supporting calculations for the runoff coefficient determination.
53. A runoff coefficient of 0.35 shall be used for all turf grass lawns (mowed lawns) and 0.95 shall be used for all impervious surfaces.

Retention Basin:

54. Stormwater retention facilities must provide sufficient storage capacity for 2 consecutive 100-year storm events.
55. Soil borings must be obtained within the location of the proposed basin and extend to a depth of 25' below the existing ground or 20 feet below the proposed retention basin bottom elevation, whichever is greater.

56. Provide 10 additional soil borings for the proposed retention basins, must meet depth requirements.
57. Label the hydrological soil group classification of the proposed retention basin area, on the plans.
58. Pretreatment shall be provided for prior to discharge into the basin.
59. One foot of freeboard shall be provided above the proposed high-water level.
60. Provide soil boring table with proposed ground and basin elevations vs ground water elevations.
61. 25' vegetative buffer shall be provided around the perimeter of the basin.
62. An overflow route from the retention basin must be provided. Elevations of surrounding features that would be impacted by the basin overflow must be indicated. Downstream drainage easements may be required for the overflow route.

Paving & Grading

63. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.
64. Sidewalks on private roadways should be located such that the outside edge of the sidewalk is a minimum of 15 feet from back of curb.
65. Revise the pathway cross-section to indicate a maximum cross-slope of 2%.
66. Provide spot elevations at the intersection of the proposed pathway with the existing pathway.
67. For Multi-family residential developments, show individual driveway tapers (standard driveway 16' wide with 3' tapers on each side) on plans to ensure no conflict with sidewalks, hydrants, street signs and etc.
68. Remove the detectable warning surfaces from the plan. These are not required based on the anticipated driveway traffic volumes.
69. Label proposed inner and outer radius of cul-de-sac (City Standard, 22' inner radius and 54' outer radius indicated in Figure VIII-F.)
70. Provide an emergency access gate at both ends of the proposed emergency access drive. The City's break-away gate detail (Figure VIII-K) can be found in Section 11-194 of the Code of Ordinances.
71. Provide a note on the plan stating that the emergency access gate is to be installed and closed prior to the issuance of the first building permit in the subdivision.
72. Detectable warning plates are required at all barrier free ramps, hazardous vehicular crossings and other areas where the sidewalk is flush with the adjacent drive or parking pavement. The barrier-free ramps shall comply with current MDOT specifications for ADA Sidewalk Ramps. Provide the latest version of the MDOT standard detail for detectable surfaces.

73. Label specific ramp locations on the plans where the detectable warning surface is to be installed.
74. Specify the product proposed and provide a detail for the detectable warning surface for barrier free ramps. The product shall be the concrete-embedded detectable warning plates, or equal, and shall be approved by the Engineering Division. Stamped concrete will not be acceptable.
75. Provide existing and proposed contours on the Grading Plan at the time of the Final Site Plan submittal.
76. Provide a note on the Grading Plan stating that the proposed pathway within the road right-of-way shall match existing grades at both ends.
77. Provide at least 3-foot of buffer distance between the sidewalk and any fixed objects, including hydrants and irrigation backflow devices. Include a note on the plan where the 3-foot separation cannot be provided.
78. The grade of the drive approach shall not exceed 2-percent within the first 25 feet of the intersection. Provide spot grades as necessary to establish this grade.
79. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
80. Soil borings along the proposed road will be required at 500-foot intervals per Section 11-195(d) of the Design and Construction Standards.
81. Per Section 26.5-35(c), a statement is required on any plan containing a private street with the following language: "City of Novi has no responsibility to improve or maintain the private streets contained within or private streets providing access to the property described in this [plan/plat]".

Soil Erosion and Sediment Control

82. A SESC permit is required. A full review has not been completed at this time. The review checklist detailing all SESC requirements is attached to this letter. Please address the comments below and submit a SESC permit application under separate cover. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>.

Off-Site Easements

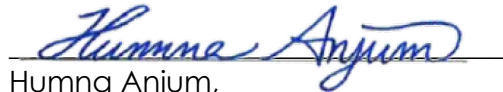
83. Any off-site utility easements anticipated must be executed **prior to final approval of the plans**. If you have not already done so, drafts of the easements and a recent title search shall be submitted to the Community Development Department as soon as possible for review and shall be approved by the Engineering Division and the City Attorney prior to executing the easements.
84. Indicate if any off-site easements will be needed.

The following must be submitted with the Final Site Plan:

85. A letter from either the applicant or the applicant's engineer must be submitted with the Stamping Set highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved. **Additionally, a statement must be provided stating that all changes to the plan have been discussed in the applicant's response letter.**
86. An itemized construction cost estimate must be submitted to the Community Development Department for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. **The estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving (square yardage), right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pre-treatment structure and restoration).

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 Humna Anjum at (248)735-5632 with any questions.



Humna Anjum,
Project Engineer

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

Landscape Review



PLAN REVIEW CENTER REPORT

August 19, 2022

Parc Vista

Preliminary Site Plan - Landscaping

Review Type

Preliminary Site Plan Landscape Review

Job

JSP21-0047

Property Characteristics

- Site Location: Eight Mile Road west of Garfield Road
- Site Acreage: 54.8 ac.
- Site Zoning: RA
- Adjacent Zoning: North, East, West: RA; South: Northville Twp
- Plan Date: 8/11/2022

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 Site Plan submittal. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review is a summary and is not intended to substitute for any Ordinance.

Recommendation

This project is **only recommended for approval for Preliminary Site Plan if the applicant can prove that there is sufficient room for all of the required interior street trees to be planted with sufficient spacing between them and the proposed underground utility lines.** The other minor revisions noted below can be addressed on the Site Plan submittal.

Ordinance Considerations

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

1. A tree survey and tree chart are provided.
2. No regulated trees will be removed.
3. **Please reconsider removing Tree #9370 as it appears that it is healthy and can be saved.**

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

The project is only adjacent to residentially-zoned property so no new screening vegetation or berms are required for this project but a large landscaped plan is provided north of the northernmost residences.

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

8 Mile Road:

1. The required berm and landscaping are provided along 8 Mile Road.
2. The number of evergreens and/or canopy trees in the greenbelt and the number of subcanopy street trees can be reduced if desired.
3. **No street trees are proposed due to utility conflicts. It appears that the previously proposed understory trees could be planted under the wires, and should be unless the RCOC forbids their planting. Please confirm why the trees were removed.**

Garfield Road

1. A landscape deviation was granted by City Council for the lack of a berm in the Garfield Road greenbelt.
2. Based on the 110 lf frontage, less the 55 foot gas line easement, 1 canopy tree and 2 subcanopy trees are required. 3 canopy trees and 5 subcanopy trees are proposed.

Subdivision Street Trees

1. Based on the street lengths, a total of 205 canopy trees are required along the interior streets and they are all provided.
2. The underground utilities must be laid out in such a way that the required spacing for the trees (4 feet behind curb and 5 feet from underground lines) can be met. It is not clear on the 100 scale drawing whether this spacing is provided.
3. **Please provide a detail clearly showing that the proposed water and sanitary line locations will allow the required street trees to be planted with sufficient spacing. If the correct spacing is not provided, the utility lines need to be shifted to provide the required spacing.**

Plant List (LDM 4, 10)

1. 16 of 25 species used (64%) are native to Michigan.
2. The tree diversity meets the standard of the Landscape Design Manual.

Planting Notations and Details (LDM 10)

Please follow the suggestions made on the landscape chart.

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

1. All required landscaping is proposed.
2. **Please add contour labeling on Sheet L-2 and move the shrubs down to the 961 elevation.**

Irrigation (LDM 10)

If an irrigation system will be used, the plan must be provided with the Final Site Plans.

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



Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – PRELIMINARY SITE PLAN

Review Date: August 19, 2022
Project Name: JSP21-0047: Parc Vista – Toll Brothers
Plan Date: August 11, 2022
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org;
 Phone: (248) 735-5621

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

LANDSCAPE DEVIATIONS GRANTED BY CITY COUNCIL ON 8/8/2022

- No greenbelt berm provided for the Garfield Road frontage.*

Please copy the above italicized text to Sheet L-1

PLEASE ADD THE CITY PROJECT NUMBER (JSP21-0047) TO THE BOTTOM RIGHT CORNER OF THE PLAN SET COVER SHEET

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (LDM (2))				
Landscape Plan <i>(Zoning Sec 5.5.2, LDM 2.e.)</i>	<ul style="list-style-type: none"> New commercial or residential developments Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. 1"=20' minimum with proper North. Variations from this scale can be approved by LA Consistent with plans throughout set 	<ul style="list-style-type: none"> Overall plan: 1"=100' Eight Mile Greenbelt and Retention pond plans: 1"=30' 	Yes	
Project Information <i>(LDM 2.d.)</i>	Name and Address	Location map is shown on Sheet L-1	Yes	
Owner/Developer Contact Information <i>(LDM 2.a.)</i>	Name, address and telephone number of the owner and developer or association	On Title Block	Yes	
Landscape Architect contact information <i>(LDM 2.b.)</i>	Name, Address and telephone number of RLA/PLA/LLA who created the plan	Allen Design	Yes	
Sealed by LA. <i>(LDM 2.g.)</i>	Requires original signature	Seal and signature	Yes	<u>Live signature will be required on stamping sets.</u>
Miss Dig Note	Show on all plan sheets	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
(800) 482-7171 (LDM.3.a.(8))				
Zoning (LDM 2.f.)	Include all adjacent zoning	On location map <ul style="list-style-type: none"> • Site: RA • Site Proposed: RA with RUD • North, East, West: RA • South: Northville Twp Maybury State Park 	Yes	
Survey information (LDM 2.c.)	<ul style="list-style-type: none"> • Legal description or boundary line survey • Existing topography 	<ul style="list-style-type: none"> • Topo & aerial on Sheet 2 • Tree chart and legal descriptions on Sheet 3 	Yes	
Existing plant material Existing woodlands or wetlands (LDM 2.e.(2))	<ul style="list-style-type: none"> • Show location type and size. Label to be saved or removed. • Plan shall state if none exists. 	<ul style="list-style-type: none"> • Tree survey is provided • Only three trees are shown on the chart as being removed • A patch of wetland is shown as being preserved • Tree protection fence line shown on Grading Plan • Fence detail on Sheet L-3 	<ul style="list-style-type: none"> • Yes • Yes • Yes • Yes • Yes 	<ol style="list-style-type: none"> 1. See Mannik & Smith and Davey Resource Group letters for detailed reviews of wetlands and woodlands 2. Please indicate on the plan view which trees will be removed. 3. The “Needs to be Replaced” and “Specimen” columns should be removed from the chart as they are unnecessary and a little confusing. 4. Please try to save tree #9390 if possible. Based on the tree chart it seems to be a healthy, desirable tree and it seems that it could be saved.
Soil types (LDM.2.r.)	<ul style="list-style-type: none"> • As determined by Soils survey of Oakland county • Show types, boundaries 	<ul style="list-style-type: none"> • 5 soil types are shown in the table but only two appear on the plan view. • No soils boundaries are shown 	No	Please show all soils on the site and the soils boundaries.
Existing and	Existing and proposed	All site	Yes	

Item	Required	Proposed	Meets Code	Comments
proposed improvements <i>(LDM 2.e.(4))</i>	buildings, easements, parking spaces, vehicular use areas, and R.O.W	improvements included on landscape plans		
Existing and proposed utilities <i>(LDM 2.e.(4))</i>	<ul style="list-style-type: none"> • Overhead and underground utilities, including hydrants • All light posts 	Utilities are provided on Sheets 6, 7 and the landscape plan	Yes, in that they are shown	<ol style="list-style-type: none"> 1. As noted before, the water and sanitary lines appear to be located such that there is not sufficient room for the required trees, especially street trees, which should be 4 feet behind the curb and sidewalk, 5 feet from underground utility lines and 10 feet from utility structures (as the note on Sheet L-1 indicates). 2. Please locate the utility lines such that the required street trees can be planted with sufficient space. 3. A detail showing the spacing allowed for the trees between the water and sanitary lines and the street curbs may help to show that sufficient space is provided. At 100 scale it's difficult to see.
Proposed grading. 2' contour minimum <i>(LDM 2.e.(1))</i>	Provide proposed contours at 2' interval	<ul style="list-style-type: none"> • Sheet 7 • On landscape plan 	Yes	<ol style="list-style-type: none"> 1. Please show the proposed contours a little darker on the landscape plan so the berms and other contours can be shown better. 2. Please label the proposed contour lines on Sheet L-2.
Snow deposit <i>(LDM.2.q.)</i>	Show snow deposit areas on plan	Note indicates snow will be deposited along drive between curb and sidewalk	Yes	

Item	Required	Proposed	Meets Code	Comments
LANDSCAPING REQUIREMENTS				
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements (LDM 1.c)	<ul style="list-style-type: none"> • Clear sight distance within parking islands • No evergreen trees 	No parking lots are proposed	Yes	
Name, type and number of ground cover (LDM 1.c.(5))	As proposed on planting islands	NA		
General (Zoning Sec 5.5.3.C.ii)				
Parking lot Islands (a, b. i)	<ul style="list-style-type: none"> • A minimum of 300 SF to qualify • 6" curbs • Islands minimum width 10' BOC to BOC 	NA		
Curbs and Parking stall reduction (c)	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	NA		
Contiguous space limit (i)	Maximum of 15 contiguous spaces	NA –no parking bays are provided.		
Plantings around Fire Hydrant (d)	<ul style="list-style-type: none"> • No plantings with mature height greater than 12' within 10 ft. of fire hydrants, manholes, catch basins or other structures. • Trees should be planted at least 5 feet from underground lines. 	As shown at 1"=100' scale, it is difficult to determine if there is sufficient space for the required street trees.	TBD	<ol style="list-style-type: none"> 1. As noted above, if the proposed utility layout doesn't provide sufficient room for the required trees and their spacing, the utilities may need to be adjusted. 2. On the utility plan, please add a dimensioned detail showing the proposed location of the utility lines relative to the sidewalk and curb to show there is sufficient room for the trees.
Landscaped area (g)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	NA		
Clear Zones (LDM 2.3.(5))	<ul style="list-style-type: none"> • 25 ft corner clearance required for internal intersections • Refer to Zoning 	The correct clear vision zones are shown for both interior roads' clear	Yes	

Item	Required	Proposed	Meets Code	Comments
	<p>Section 5.5.9 diagram below.</p> <ul style="list-style-type: none"> Use the Road Commission for Oakland County site distance rules for the 8 Mile Road entry. 	<p>vision zones and the 8 Mile Road entry.</p> <p>All trees are outside of the clear vision zones.</p>		
Berms, Walls and ROW Planting Requirements				
Berms				
<ul style="list-style-type: none"> All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours Berm should be located on lot line except in conflict with utilities. Berms should be constructed of loam with a 6" top layer of topsoil. 				
Residential Adjacent to Non-residential (Zoning Sec 5.5.3.A and LDM 1.a)				
Berm requirements (Zoning Sec 5.5.A)	Adjacent Zoning is RA	A 6-foot tall landscaped berm is proposed along the north end of the site to partially obscure the view of it from the homes to the north.	Yes	
Planting requirements (LDM 1.a.)	LDM Novi Street Tree List	NA		
Adjacent to Public Rights-of-Way (Zoning Sec 5.5.3.A and LDM 1.b)				
Cross-Section of Berms (Zoning Sec 5.5.3.B and LDM 2.j)				
Slope, height and width (Zoning Sec 5.5.3.A.v)	<ul style="list-style-type: none"> Label contour lines Maximum 33% slope Min. 4 feet crest Min 4 feet tall, variable Constructed of loam with 6" top layer of topsoil 	<ul style="list-style-type: none"> A berm varying between 4-6 feet tall is provided along 8 Mile Road A detail is provided on Sheet L-3. 	Yes	Please add a section of the screening berm similar to that for the 8 Mile Road berm.
Type of Ground Cover		<ul style="list-style-type: none"> Most of the open areas will be seeded as lawn or the detention mix. A limited area will be sod. 	Yes	<u>Please indicate the lawn seed mix to be used.</u>
Walls (LDM 2.k & Zoning Sec 5.5.3.vi)				
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	Only a wall sign is proposed.		
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer				

Item	Required	Proposed	Meets Code	Comments
ROW Landscape Screening Requirements (Sec 5.5.3.B. ii)				
Greenbelt width (2)(3) (5)	34 ft	<u>8 Mile Road:</u> • 75-94 feet <u>Garfield Road</u> • 1070 feet+	<ul style="list-style-type: none"> • Yes • Yes 	
Min. berm crest width	4 ft.	<u>8 Mile Road:</u> • 2-4 feet <u>Garfield Road</u> • None	<ul style="list-style-type: none"> • Yes • No 	A landscape waiver was granted to not provide a berm in the Garfield Road greenbelt.
Minimum berm height (9)	4 ft.	4-6 feet	Yes	
3' wall (4) (7)	NA	None		
Canopy deciduous or large evergreen trees Notes (1) (10) LDM1.d.(1)(b)	<ul style="list-style-type: none"> • 1 tree per 40 lf <u>8 Mile Road</u> <ul style="list-style-type: none"> • $(877-60)/40 = 20$ trees <u>Garfield Road</u> <ul style="list-style-type: none"> • $(110-55)/40 = 1$ tree 	<u>8 Mile Road</u> 21 canopy trees + 43 large evergreens <u>Garfield Road</u> 3 trees	<ul style="list-style-type: none"> • Yes • Yes 	If desired, the total number of trees provided along 8 Mile Road can be reduced to the requirement.
Sub-canopy deciduous trees Notes (2)(10)	<ul style="list-style-type: none"> • 1 tree per 25 lf <u>8 Mile Road</u> <ul style="list-style-type: none"> • $(877-60)/25 = 33$ trees <u>Garfield Road</u> <ul style="list-style-type: none"> • $(110-55)/25 = 2$ trees 	<u>8 Mile Road</u> 33 trees <u>Garfield Road</u> 5 trees	<ul style="list-style-type: none"> • Yes • Yes 	
Street Trees (Sec 5.5.3.f and LDM 2a and Novi Street Tree List)	<ul style="list-style-type: none"> • 1 canopy tree per 35 lf of frontage less width of clear vision zone measured halfway between ROW line and curb <u>8 Mile Road:</u> <ul style="list-style-type: none"> • $(877-98)/35 = 22$ trees <u>Garfield Road:</u> <ul style="list-style-type: none"> • $(110-55)/35 = 2$ trees <ul style="list-style-type: none"> • Interior Streets: 1 per 35 l.f. (both sides of streets) • $7170/35 = 205$ trees 	<u>8 Mile Road:</u> 0 trees <u>Garfield Road:</u> 2 trees <u>Interior streets:</u> 205 trees on conceptual plan	<ul style="list-style-type: none"> • No • Yes • Yes 	<ol style="list-style-type: none"> 1. A note indicates that utility line conflicts don't allow the 8 Mile Road street trees to be planted, but it appears that subcanopy trees could be planted beneath the power lines. 2. If the 8 Mile Road street trees are not provided due to a ruling by the RCOC, please provide a copy of their communication saying that. In that event the trees would not be required. 3. If that is not the case,

Item	Required	Proposed	Meets Code	Comments
Transformers/Utility boxes (LDM 1.e from 1 through 5)	<ul style="list-style-type: none"> A minimum of 2ft. separation between box and the plants Ground cover below 4" is allowed up to pad. No plant materials within 8 ft. from the doors 	None	TBD	<p>please provide the required trees.</p> <ol style="list-style-type: none"> When location of transformer/utility boxes are determined, show them and add landscaping per city requirements. Add provisional number of shrubs required for screening to the plant list and cost estimate.
Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)				
Planting requirements (Sec. 5.5.3.E.iv)	<ul style="list-style-type: none"> 1 canopy tree per 35lf of the rim 10 feet from the permanent water level, along the east, south and west sides of the basin. 10" to 14" tall grass along sides of basin Refer to wetland for basin mix 	<ul style="list-style-type: none"> All required shrubs are provided An acceptable seed mix is proposed. 	<ul style="list-style-type: none"> Yes Yes 	<ol style="list-style-type: none"> Please highlight the high-water contour line on the detention pond detail plan on Sheet L-2. Since it is a retention pond and not a detention pond, the shrubs should be shifted to be aligned along the 961 elevation, not at the top of the freeboard line. As agreed to, since this is a retention pond with no outlet to a stream, the trees normally required for a detention pond are not required here. Please add a note stating that the contractor shall provide proof in the form of an invoice showing the native detention pond seed mix or a photo of the seed mix bag label to the City Landscape Architect prior to placement. Also add a note stating that if an

Item	Required	Proposed	Meets Code	Comments
				<u>unacceptable seed mix is used in that area, the city reserves the right to have it killed and reseeded at the developer's expense.</u>
Phragmites and Japanese Knotweed Control (Sec 5.5.6.C)	<ul style="list-style-type: none"> Any and all populations of <i>Phragmites australis</i> and/or Japanese Knotweed on site shall be included on tree survey. Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site. 	A note indicates that no Phragmites or Japanese knotweed were found on the site.	Yes	If any Phragmites or Japanese knotweed are discovered during the course of construction, they shall be properly treated to kill them.
Woodland Replacements (Chapter 37 Woodlands Protection)				
Woodland Replacement Calculations – Required/Provided	<ul style="list-style-type: none"> Show calculations based on existing tree chart. Indicate boundary of regulated woodland on plan 	<ul style="list-style-type: none"> No regulated trees are being removed The wetland is being preserved in open space 	<ul style="list-style-type: none"> Yes Yes 	<ol style="list-style-type: none"> Please indicate and trees to be removed on Demolition Plan with x'es on trees and on the tree chart. See DRG letter for detailed review of woodlands.
Woodland Replacement Trees Proposed	<ul style="list-style-type: none"> Show clearly on plan and plant list which trees are proposed as woodland replacement trees Reforestation credit table breakdown, if applicable 	None are required		
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date (LDM 2.1. & Zoning Sec 5.5.5.B)	Provide intended date	Yes	Yes	
Maintenance & Statement of intent (LDM 2.m & Zoning Sec 5.5.6)	<ul style="list-style-type: none"> Include statement of intent to install and guarantee all materials for 2 years. Include a minimum one cultivation in June, July and August 	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
	for the 2-year warranty period.			
Plant source (LDM 2.n & LDM 3.a.(2))	Shall be northern nursery grown, No.1 grade	Yes	Yes	
Irrigation plan (LDM 2.s.)	A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans.	No		<ol style="list-style-type: none"> 1. <u>Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long- term survival to the Final Site Plans, not just the stamping sets.</u> 2. <u>An irrigation system shall meet the requirements listed at the end of this chart.</u> 3. <u>If xeriscaping is used, please provide information about plantings included.</u>
Other information (LDM 2.u)	Required by Planning Commission	NA		
Establishment period (Zoning Sec 5.5.6.B)	2 yr. Guarantee	Yes	Yes	
Approval of substitutions. (Zoning Sec 5.5.5.E)	City must approve any substitutions in writing prior to installation.	Yes	Yes	
Plant List (LDM 4) – Include all cost estimates				
Botanical and common names	At least 50% of non-woodland replacement species used (not including seed mixes) must be native to Michigan.	16 of 25 species used (64%) are native to Michigan	Yes	
Quantities and sizes		Yes	Yes	
Root type		Yes	Yes	
Botanical and common names		Yes	Yes	
Breakdown of genus/species diversity (LDM 4.)	<ul style="list-style-type: none"> • Break down proposed plantings by genus and species • Tree diversity of non-woodland replacements must adhere to Section 4 of the Landscape Design Manual. 	The tree diversity meets the requirements of LDM section 4	Yes	
Type and amount of lawn		<ul style="list-style-type: none"> • Most of site will be seeded • Sod is indicated 	Yes	<u>Please indicate the lawn seed mix to be used.</u>

Wetland Review



August 19, 2022

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

RE: Parc Vista; JSP21-0047
Wetland Review of Preliminary Site Plan
MSG Project No. N1030121

Dear Ms. Bell:

The Mannik & Smith Group, Inc. (MSG) reviewed the plan set titled *Preliminary Site Plan, Parc Vista* prepared by Atwell, LLC dated August 11, 2022 (PSP). The project site is located north of Eight Mile Road and west of Garfield Road, Parcels 50-22-31-400-011 and 50-22-31-400-012, in Section 31 (Site). The Site is primarily composed of agricultural land. The PSP depicts construction of 44 residential properties with roadways and other improvements.

Published Data

MSG reviewed The City of Novi Wetlands Maps and the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Wetlands Map Viewer for the Site. The Site contains City-regulated wetlands (Figure 1). The Site also contains wetlands as identified on National Wetland Inventory (NWI) and Michigan Resource Inventory System (MIRIS) maps (Figure 2). NWI and MIRIS wetlands are identified through interpretation of topographic data and aerial photographs by the associated governmental bodies.

MSG Wetland Boundary Verification

The PSP depicts the locations of one wetland at the Site, designated Wetland A, consisting of 0.43 acre. The previously submitted *Wetland Delineation Report, Baptist Church - Parcel # 22-31-400-011 & 012* prepared by Niswander Environmental (Niswander), dated October 2021 (Report) characterized Wetland A as a 0.43-acre emergent/forested wetland. MSG visited the Site on December 14, 2021 with Niswander and concurred with the delineation of Wetland A as depicted in the Report and as observed in the field.

MSG did not re-inspect the Site in August 2022 because Niswander's delineation flagging appeared to be appropriately placed during the December 2021 Site visit. MSG may re-inspect the Site at a later stage of the project if warranted. Selected inspection photographs from December 2021 are provided at the end of this letter.

Proposed Impacts

The project as described in the PSP appears to be outside the depicted wetland limits and the natural resources setback buffer. No proposed impacts to either Wetland A or its associated buffer are identified in the PSP.

Permits and Regulatory Status

The City of Novi Code of Ordinances, Chapter 12, Article V defines an essential wetland as meeting one or more of the criteria listed in subsections 12-174(b)(1) through (10). It is MSG's opinion Wetland A provides the functional characteristics of storm water storage capacity and wildlife habitat, and accordingly Wetland A meets the criteria for an essential wetland.



Mitigation is required per Section 12-176 of the Novi Code of Ordinances when an activity results in 0.25-acre or greater of impairment or destruction of wetland areas that are determined to be essential wetland area, two acres in size or greater, or contiguous to a lake, pond, river, or stream. Based on current information, no wetland impact is proposed so mitigation is not required.

EGLE typically regulates wetlands that are located within 500 feet of an inland lake, pond, stream, or river, and/or isolated wetlands of an area of 5 acres or more. MSG opines that Wetland A is not likely to be regulated by EGLE; however, EGLE is the final authority of the location and regulatory status of wetlands in Michigan. MSG recommends the client request a pre-application meeting with EGLE to determine the state jurisdictional status and mitigation requirements.

Based on the available information, the following wetland related items appear to be required for this project:

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Not required
Wetland Mitigation	Not required
Wetland Buffer Authorization	Not required
EGLE Wetland Permit	Likely not required
Wetland Conservation Easement	Likely not required

Comments

1. The City of Novi *Site Plan and Development Manual* requires the boundary lines of any watercourses or wetlands on the Site be clearly flagged or staked and such flagging or staking shall remain in place throughout the conduct of permit activity. MSG recommends the wetland delineation markers be maintained for reference for the duration of the project.
2. The wetland vegetative cover currently includes non-native species (e.g. reed canary grass, common buckthorn, tree of heaven). MSG recommends the applicant incorporate replacement native plantings, including trees and shrubs, in the subject property Plans as well as removal of non-native invasive species to enhance the aesthetics and natural habitat benefits of the wetland area.

MSG recommends approval of the Preliminary Site Plan for Wetlands.

Please contact the undersigned if you have any questions regarding the matters addressed in this letter.

Sincerely,

The Mannik & Smith Group, Inc.


Keegan Mackin
Environmental Scientist


Douglas Repen, CDT
Project Manager
Certified Storm Water Management Operator


John A. Freeland, PhD, PWS
Senior Scientist

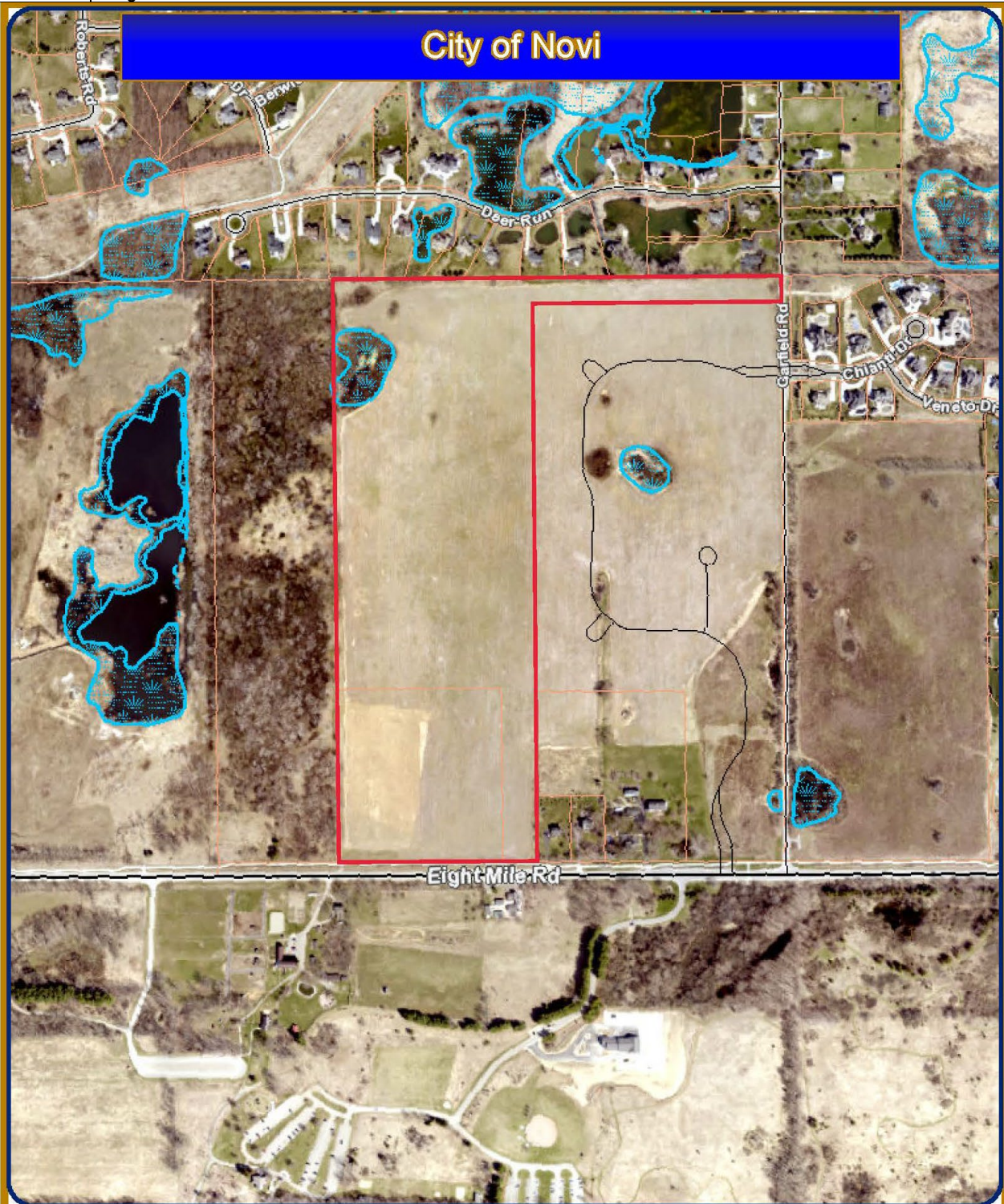
- CC: Sarah Marchioni, City of Novi Project Coordinator
Barbara McBeth, City of Novi Planner
Christian Carroll, City of Novi Planner
Madeleine Daniels, City of Novi Planner
Ben Peacock, City of Novi Planning Assistant
Rick Meader, City of Novi Landscape Architect

FIGURES



Figure 1

City of Novi Regulated Wetland Map. Approximate Site boundary is shown in red. Regulated Wetland areas are shown in blue.



MAP INFORMATION 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 available sources available to the people of the City of Novi. Boundary, measurement, 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.

0 0.0273 0.055 0.11 0.165
1 inch = 75.2 feet

Map Print Date: 11/30/2021

City of Novi
45175 Ten Mile Rd
Novi, MI 48375
cityofnovi.org



2365 Haggerty Road South, Canton, Michigan 48188
Tel: 734.397.3100 Fax: 734.397.3131

Parc Vista; JSP21-0047
Wetland Review of Preliminary Site Plan
MSG Project No. N1030121

Figure 2 | EGLE Wetlands Viewer Map. Approximate Site boundary is shown in red. Black outlines were added to wetland areas on Site for clarity.



SITE PHOTOGRAPHS





Photo 1: Overview of Wetland A and surrounding woodland, facing south (December 14, 2021)



Photo 2: View of Wetland A, facing southwest (December 14, 2021)



Photo 3: View of Wetland A and transition to upland, facing southeast (December 14, 2021)

Item	Required	Proposed	Meets Code	Comments
		at 8 Mile Road entry		
Cost estimate (LDM 2.f)	For all new plantings, mulch and sod as listed on the plan	Yes		<u>Need for Final Site Plan</u>
Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Multi-stem Tree		No	Yes	
Evergreen Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	
Other Plant Material Requirements (LDM 3)				
General Conditions (LDM 3.a)	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
Plant Materials & Existing Plant Material (LDM 3.b)	Clearly show trees to be removed and trees to be saved.	Trees to be removed not shown on plan view	Yes	
Landscape tree credit (LDM3.b.(d))	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	None		
Plant Sizes for ROW, Woodland replacement and others (LDM 3.c)	Refer to Chapter 37, LDM for more details	On plant list	Yes	
Plant size credit (LDM3.c.(2))	NA			
Prohibited plants (LDM 3.d)	No plants on City Invasive Species List	None used	Yes	
Recommended trees for planting under overhead utilities (LDM 3.e)	Label the distance from the overhead utilities			
Collected or Transplanted trees (LDM 3.f)		None		

Item	Required	Proposed	Meets Code	Comments
Nonliving Durable Material: Mulch (LDM 4)	<ul style="list-style-type: none"> • Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth • Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate. • Refer to section for additional information 	Yes	Yes	

NOTES:

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

Irrigation System Requirements

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

Woodland Review



Corporate Headquarters
295 South Water Street, Suite 300
Kent, OH 44240
800-828-8312

Local Office
3381 Lapeer Rd. West
Auburn Hills, MI 48326

To: Lindsay Bell, City of Novi Senior Planner
Community Development Department, City of Novi

From: Kerry Gray, Principal Consultant
Davey Resource Group

CC: Barbara McBeth, City Planner
Christian Carroll, City of Novi Planner
Rick Meader, City of Novi Landscape Architect
Madeleine Daniels, City of Novi Planner
Ben Peacock, City of Novi Planning Assistant
Douglas Repen, Mannik and Smith Group
Emily Hanson, Davey Resource Group

Date: August 24, 2022

RE: Parc Vista subdivision
Woodland Review #1 – JSP21-47

Davey Resource Group, Inc. (DRG) has conducted a review of the preliminary site plan for the proposed **Parc Vista subdivision** located at the northwest corner of 8 Mile and Garfield Roads (Parcel No. 55-22-31-400-011 and 012). The plan set prepared by Atwell, LLC (dated: 08/11/2022), proposes construction of a residential neighborhood with 44 single family homes. DRG reviewed the plan set for conformance with the City of Novi’s Woodland Protection Ordinance, Chapter 37. Based on our review of the preliminary site plan, and the City of Novi Official Regulated Woodlands Map, **the proposed development contains City-Regulated Woodlands** (Figure 1).

Recommendation: DRG recommends approval of the Parc Vista preliminary site plan.

The following Woodland Regulations apply to this site:

Woodland Regulation	Required
Woodland Permit (Chapter 37, Section 37-26)	YES
Tree Replacement (Chapter 37, Section 37-8) & Financial Guarantee (Chapter 26.5-5)	NO
Tree Protection (Fence) (Chapter 37, Section 37-9) & Financial Guarantee (Chapter 26.5-5)	YES
Woodland Conservation Easement (Chapter 37-30 (e))	TBD

Woodland Impacts and Required Replacements

The site contains a small area of City of Novi regulated woodlands in the northwest corner of the site. The trees and woodlands on the site are a mix of floodplain and upland species, including boxelder, black cherry, black walnut, shagbark hickory, and American elm; and invasive species including common buckthorn and tree of heaven.

The development **proposes to preserve the regulated woodland** and remove the following three non-regulated trees that are outside of the woodland.

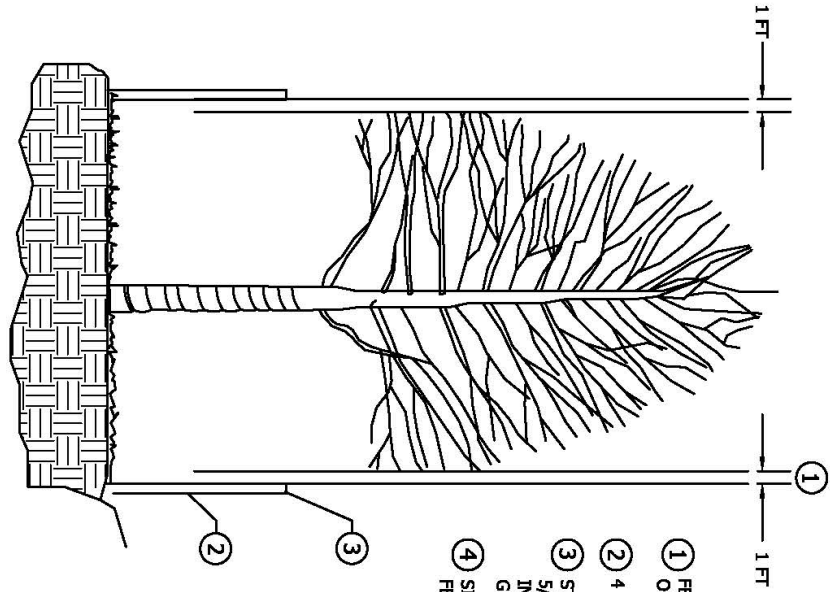
- Tree #9267 – 8” diameter - tree of heaven (*Ailanthus altissima*) - *invasive species*
- Tree #9390 – 18.5” diameter – black walnut (*Juglans nigra*) – *native species*
- Tree #9394 – 9.5” diameter – American elm (*Ulmus americana*) – *native species*

Woodland Review Comments

1. **A Woodland Use Permit may be required** to perform construction on any site containing regulated woodlands.
2. **No woodland replacements are required** because the applicant is not proposing to remove any regulated woodland trees.
 - a. If there are impacts to the critical root zone of any regulated woodland trees or they are damaged or removed during construction, a payment into the City of Novi Tree Fund at a rate of \$400 per replacement tree credit shall be required. The number of credits required would be determined based on the size of the tree(s) removed and/or damaged.
3. **Woodland Protection Fence.** Please include a tree protection fence detail in the plan set. The City of Novi’s detail has been provided below.
4. **Financial Guarantees & Maintenance Bonds.**
 - a. A **woodland fence guarantee of \$6,000 (\$5000 x 120%) is required** per Chapter 26.5-37. The financial guarantee shall be paid prior to issuance of the City of Novi Woodland Use Permit.

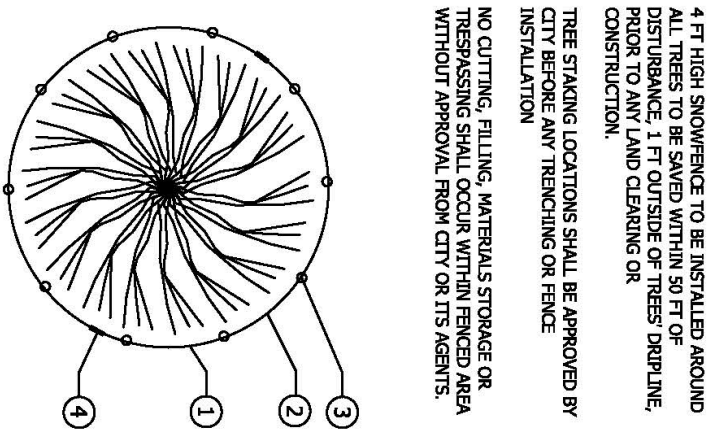


Figure 1. Parc Vista site
City of Novi Regulated Woodland Map
(Light green hatched areas are regulated woodlands)



- ① FENCE LOCATED 1 FT OUTSIDE OF DRIP LINE
- ② 4 FT HIGH SNOWFENCE
- ③ STEEL POSTS EVERY 10' 5/8" X 6-8" REBAR OR EQUAL, INSTALL POSTS 24" INTO GROUND
- ④ SIGN POSTED ON TREE FENCE EVERY 50 FT

PROTECTED AREA
 NO CUTTING, FILLING,
 MATERIALS STORAGE OR
 TRESPASSING WITHIN
 FENCED AREA



4 FT HIGH SNOWFENCE TO BE INSTALLED AROUND ALL TREES TO BE SAVED WITHIN 50 FT OF DISTURBANCE. 1 FT OUTSIDE OF TREES' DRIP LINE, PRIOR TO ANY LAND CLEARING OR CONSTRUCTION.

TREE STAKING LOCATIONS SHALL BE APPROVED BY CITY BEFORE ANY TRENCHING OR FENCE INSTALLATION

NO CUTTING, FILLING, MATERIALS STORAGE OR TRESPASSING SHALL OCCUR WITHIN FENCED AREA WITHOUT APPROVAL FROM CITY OR ITS AGENTS.

SECTION

CITY OF NOVI TREE PROTECTION DETAIL

NOT TO SCALE

PLAN

Traffic Review



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

Project name:
 JSP21-47 – Parc Vista (fka Covington Estates)
 Preliminary Site Plan Traffic Review

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

From:
 AECOM

Date:
 August 31, 2022

CC:
 Lindsay Bell, Madeleine Daniels, Victor Boron,
 Christian Carroll, Humna Anjum

Memo

Subject: JSP21-47 – Parc Vista (fka Covington Estates) Preliminary Site Plan Traffic Review

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

GENERAL COMMENTS

1. The applicant, Toll Brothers, is proposing a 44-unit development of single-family homes.
2. The development is located on the north side of Eight Mile Road, west of Garfield Road. Eight Mile Road is under the jurisdiction of Oakland County and Garfield Road is under the City of Novi.
3. The site is currently zoned RA (Residential Agerage).
4. The following traffic-related deviations may be required.
 - a. A deviation will be required for the distance between the sidewalk and back-of-curb if not revised in future plans.
5. Conditions for approval include:
 - a. Compliance with cul-de-sac measurement standards.
 - b. Sidewalk offset.

TRAFFIC IMPACTS

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

ITE Code: 210 (Single-Family Detached Housing)
 Development-specific Quantity: 44 Dwelling Units
 Zoning Change: None

Trip Generation Summary				
	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold	Above Threshold?
AM Peak-Hour Trips	35	26	100	No
PM Peak-Hour Trips	46	29	100	No
Daily (One-Directional) Trips	474	N/A	750	No

2. The City of Novi generally requires a traffic impact study/statement if the number of trips generated by the proposed development exceeds the City’s threshold of more than 750 trips per day or 100 trips per

either the AM or PM peak hour, or if the project meets other specified criteria.

Trip Impact Study Recommendation	
Type of Study:	Justification
None	-

TRAFFIC REVIEW

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

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

EXTERNAL SITE ACCESS AND OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
1	Driveway Radii O Figure IX.3	35’	Met	
2	Driveway Width O Figure IX.3	22’	Partially Met	Provide dimensions for island length and width in future plans.
3	Driveway Taper O Figure IX.11			Taper not required with expected volume.
3a	Taper length	N/A	-	
3b	Tangent	N/A	-	
4	Emergency Access O 11-194.a.19	2 access points	Met	
5	Driveway sight distance O Figure VIII-E	500’	Met	
6	Driveway spacing			
6a	Same-side O 11.216.d.1.d	Not indicated	Inconclusive	Dimension on future plans.
6b	Opposite side O 11.216.d.1.e	Not indicated	Inconclusive	Dimension on future plans.
7	External coordination (Road agency)	Not indicated	Inconclusive	Coordinate with RCOG for any work in the right of way of 8 Mile Road.
8	External Sidewalk Master Plan & EDM	Existing 8’	Met	
9	Sidewalk Ramps EDM 7.4 & R-28-J	Note for ramps to be added where needed	Inconclusive	Detail R28-J included, indicate ramp locations on site plan.
10	Any Other Comments:			

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
11	Loading zone ZO 5.4	N/A	-	
12	Trash receptacle ZO 5.4.4	N/A	-	
13	Emergency Vehicle Access	Turning movements provided	Met	
14	Maneuvering Lane ZO 5.3.2	N/A	-	
15	End islands ZO 5.3.12			
15 a	Adjacent to a travel way	N/A	-	
15 b	Internal to parking bays	N/A	-	
16	Parking spaces ZO 5.2.12	No onstreet parking	-	Additional No Parking signs should be placed throughout the development. Only 1 sign is currently proposed.
17	Adjacent parking spaces ZO 5.5.3.C.ii.j	N/A	-	
18	Parking space length ZO 5.3.2	N/A	-	
19	Parking space Width ZO 5.3.2	N/A	-	
20	Parking space front curb height ZO 5.3.2	N/A	-	
21	Accessible parking – number ADA	N/A	-	
22	Accessible parking – size ADA	N/A	-	
23	Number of Van-accessible space ADA	N/A	-	
24	Bicycle parking			
24 a	Requirement ZO 5.16.1	None required	-	
24 b	Location ZO 5.16.1	N/A	-	
24c	Clear path from Street ZO 5.16.1	N/A	-	
24 d	Height of rack ZO 5.16.5.B	N/A	-	
24 e	Other (Covered / Layout) ZO 5.16.1	N/A	-	-
25	Sidewalk – min 5' wide Master Plan	5'	Met	
26	Sidewalk ramps EDM 7.4 & R-28-J	None indicated	Not Met	Ramps should be provided where sidewalk meets roadway. These should be indicated on the site plan.
27	Sidewalk – distance back of curb EDM 7.4	Not indicated on plan, 13' and 15' shown on typical	Partially Met	Offset shown as 13' in boulevard cross-section and 15' in typical road cross section. Indicate setback on plans.
28	Cul-De-Sac O Figure VIII-F	20' inner radius, Outer radius not indicated	Not Met	22' inner radius and 54' outer radius indicated in Figure VIII-F.

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
29	EyeBrow O Figure VIII-G	N/A		
30	Minor/Major Drives ZO 5.10	Stub drive 233.53', turnaround provided of 20' wide and 56' long	Met	
31	Any Other Comments:			

SIGNING AND STRIPING				
No.	Item	Proposed	Compliance	Remarks
32	Signing: Sizes MMUTCD	Included	Met	
33	Signing table: quantities and sizes	Included	Met	Keep right (R4-7) signs could be added in the island of the boulevard. Applicant should indicate where no-parking signs are to be placed according to note 5.
34	Signs 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post MMUTCD	Not included	Not Met	
35	Signs greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post MMUTCD	Not included	Not Met	
36	Sign bottom height of 7' from final grade MMUTCD	Not included	Not Met	
37	Signing shall be placed 2' from the face of the curb or edge of the nearest sidewalk to the near edge of the sign MMUTCD	Not included	Not Met	
38	FHWA Standard Alphabet series used for all sign language MMUTCD	Not included	Not Met	
39	High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity MMUTCD	Not included	Not Met	
40	Parking space striping notes	N/A	-	
41	The international symbol for accessibility pavement markings ADA	N/A	-	
42	Crosswalk pavement marking detail	N/A	-	
43	Any Other Comments:	Any maintenance of traffic required for construction at Eight Mile Road will need to be approved by RCOC. Applicant could consider adding crosswalk markings throughout the site where sidewalk ramps are present for increased visibility.		

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

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

Sincerely,

AECOM

Memo



Patricia Thompson, PE
Traffic Engineer



Paula K. Johnson, PE
Senior Transportation Engineer



Saumil Shah, PMP
Project Manager

Fire Review



August 29, 2022

TO: Barbara McBeth - City Planner
Lindsay Bell - Plan Review Center
Christian Carroll - Plan Review Center
Madeleine Daniels – Plan Review Center
Ben Peacock – Planning Assistant

RE: Parc Vista (FKA Covington Estates)

CITY COUNCIL

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Bob Gatt

Mayor Pro Tem
Dave Staudt

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Erick W. Zinser

Assistant Chief of Police
Scott R. Baetens

Assistant Fire Chief
John B. Martin

PSP# 22-0072

PSP# 22-0015

PSP# 15-0002

Project Description:

Residential single-family development off Eight Mile and Garfield roads.

Comments:

- **All** fire hydrants **MUST** be installed and operational prior to any combustible material is brought on site. **IFC 2015 3312.1**
- **Corrected 8/29/22 KSP**-Emergency access road from the development from the east shall be 20' wide SP sheet #05.
- If grass pavers are to be installed, development shall provide "PERMANENT MARKINGS" for the edge of the access road. Permanent markings shall be approved by the Fire Marshal's office. Nothing living or easily moved or removed can be used.
- If a gate with a lock is going to be installed on the Emergency Access Road, development shall provide a Knox Lock. (www.knoxbox.com).
- In single family residential areas, hydrants shall be spaced a maximum of 500 feet apart. It is recommended that a hydrant be located at every intersection on the same corner with the street sign. This will help with locating the fire hydrants in winter when they are covered with snow. **(D.C.S. Sec. 11-68 (f)(1)b)**

Recommendation:

APPROVED WITH CONDITIONS

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

September 22, 2022



Lindsay Bell, AICP
Senior Planner
45175 West Ten Mile Road
Novi, MI 48375

RE: *Parc Vista – Preliminary Site Plan*

Thank you for providing your review and feedback for the above referenced project. We anticipate revising the plans in accordance with your review letter dated September 8, 2022. For your use, below are our responses on how we will address or plan to address each of the comments in your letter.

Planning:

1. The City Council agreed to modify lot area requirements.
Response: *Noted.*
2. The City Council agreed to modify lot width requirements.
Response: *Noted.*
3. City Council approved the reduction in lot setbacks from RA to R-1.
Response: *Noted.*
4. The City Council agreed to modify lot area requirements in order to provide for the preservation of open space for those purposes set forth in this section 3.29.B as the RUD provides a variety of lot sizes.
Response: *Noted.*
5. Details reviewed at plot plan phase.
Response: *Noted.*
6. Building height reviewed at plot plan phase.
Response: *Noted.*
7. Frontage on private road for individual lots is permitted for a Condominium development.
Response: *Noted.*
8. Deviation approved by City Council, 8/8/22.
Response: *Noted.*
9. Extension to the north is impractical as the existing subdivision has no street to connect to; likewise, along the east side of the property the emergency access point connects to the only available access point Deviation approved by City Council, 8/8/22.
Response: *Understood.*
10. See Engineering Review letter for detail on SWM Plan comments.

Response: *Understood.*

11. For sign permit information contact Maureen Underhill at 248-735-5602.

Response: *Sign permitting will be coordinated with Maureen Underhill.*

Engineering:

1. Provide a minimum of two ties to established section or quarter section corners.

Response: *Understood. Two or more section and ¼ corners have been supplied on Sheet 2 of the preliminary site plans.*

2. Provide at least two reference benchmarks at intervals no greater than 1,200 feet. At least one referenced benchmark must be a City-established benchmark.

Response: *Two benchmarks have been supplied on Sheet 2 of the preliminary site plans. The benchmark adjacent to Eight Mile Road (railroad spike in the north face of Power Pole) is a City-established benchmark (City Benchmark ID: 3142). The City ID number will be labeled on subsequent submittals.*

3. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.

Response: *A note is provided on the cover of the preliminary site plan under "General Notes".*

4. 8 Mile Road water main and sanitary sewer extension plan should be submitted and approved before stamping set approval of Covington Estates Plan JSP21-0047.

Response: *Noted.*

5. Only at the time of the printed Stamping Set submittal, provide the City's standard detail sheets for water main (5 sheets), sanitary sewer (3 sheets), storm sewer (2 sheets), paving (2 sheets) and Boardwalks/Pathways (1 sheet).

Response: *Understood.*

6. A right-of-way permit will be required from the City of Novi and Oakland County.

Response: *Understood. Right-of-way permits will be pursued during Final Site Plan approval.*

7. Provide sight distance measurements for the 8 Mile Road entrance in accordance with Figure VIII-E of the Design and Construction Standards, Chapter 11 of the City of Novi Code of Ordinances. (provided 500' required for 8 Mile Road in that area is 560' with boulevard road)

Response: *The sight lines will be adjusted from 500-feet to 560-feet, in accordance to Figure VIII-E, on subsequent plan submittals. We do not anticipate any additional concerns with this request.*

8. Show and label the master planned 43-foot half width right-of-way for Garfield Road. The dedication of the master-planned half right-of-way of 43 feet in width is requested for the project. Label the additional right-of-way width to be dedicated along Garfield as "proposed" right-of-way.

Response: *The Applicant agrees to provide the requested right-of-way to dedicate a 43-foot half width to the City.*

9. Provide a traffic control sign table listing the quantities of each permanent sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.
Response: *A traffic control sign table is included on Sheet 5. A note is provided in the "Layout Notes" on Sheet 5 stating that the signage shall comply with MMUTCD standards.*
10. Traffic signs in the Road Commission for Oakland County (RCOC) right-of-way will be installed by RCOC.
Response: *Understood.*
11. Site grading shall be limited to 1V:4H (25-percent), excluding landscaping berms. Label slopes on grading plan.
Response: *Grading slopes will be indicated on the Final Site Plans.*
12. Provide a traffic control plan for the proposed road work activity.
Response: *A traffic control plan will be provided for the construction of the entrance in the Final Site Plans. A separate plan will be provided for the roadside utility work and required work within 8 Mile Road.*
13. Provide a note that compacted sand backfill (MDOT sand Class II) shall be provided for all utilities within the influence of paved areas, and illustrate and label on the profiles.
Response: *Compacted sand backfill will be indicated on the profiles in the Final Site Plan.*
14. Provide a construction materials table on the utility plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
Response: *Construction materials tables will be provided alongside the utility profiles in the Final Site Plan.*
15. Provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided, or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.
Response: *A utility detail indicating the necessary clearances and the required bedding/encasement if the vertical clearances cannot be maintained. Vertical clearance dimensions will be provided in the profiles in the Final Site Plan.*
16. Where the minimum 18-inch clearance at utility crossings cannot be achieved, provide a prominent note stating the substandard clearance and that proper bedding/encasement will be determined by the inspecting engineer.
Response: *A note will be added to the plans as requested.*
17. Provide a note stating if dewatering is anticipated or encountered during construction, then a dewatering plan must be submitted to the Engineering Division for review.
Response: *A note will be added to the plans.*

18. Generally, all proposed trees shall remain outside utility easements. Where proposed trees are required within a utility easement, the trees shall maintain a minimum 5-foot horizontal separation distance from any existing or proposed utility. All utilities shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance.

Response: *Understood. The utilities are included in the landscaping plans.*

19. Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur. Light poles in a utility easement will require a License Agreement.

Response: *A single light pole will be provided at the entrance of the site. The location of the light pole will be shown on the Final Site Plan and will be selected to ensure no utility conflicts.*

20. For common area irrigation systems connected to public water supplies: Install a backflow prevention Reduced Pressure Zone Assembly (RPZ) with an ASSE 1013 listing approval at each tap to the public water supply. A minimum clearance of 12-inches measured from the bottom of pressure relief valve to the finished landscaped grade shall be required. Provide a detail showing the RPZ installation setup and height above grade. If backflow preventer is to be enclosed, provide a detail of the enclosure with required drainage outlets. Show all locations on a site plan. A plumbing permit is required for the installation of the backflow preventer. Installation of the backflow preventer shall be in such a manner as to not require blowing out the system through the backflow preventer. Drain ports and blow out ports shall be included. Any deviations from these requirements must be approved through the Novi Water & Sewer Division Cross Connection Control Specialist (248-735-5661).

Response: *The irrigation plan will be provided for final stamping sets and will conform to the backflow requirements.*

21. The grading and SESC sheets shall show the tree fence at least as far from the trunk as the critical root zone, defined as a circular area around a tree with a radius measured to the tree's longest dripline radius plus one (1) foot. No grading shall occur within the dripline. If the critical root zone is not fully protected, then replacements for that tree may be required.

Response: *The tree protection fence will be updated to protect the critical root zone of the preserved trees.*

22. Projects looking for Final Site Plan approval in the near future should refer to the new Oakland County stormwater standards. The new Oakland County Stormwater standards can be found here: <https://www.oakgov.com/water/stormwater/Pages/Stormwater-Engineering-Design-Standards.aspx> The State of Michigan is currently reviewing the City of Novi's stormwater standards for compliance with the new County standards, and thus the City has not yet adopted the new standards. However, the City will eventually be required to adopt the new standards at any time.

Response: *Understood.*

23. All water main easements shall be 20 feet wide. Revise the proposed easement accordingly.

Response: *Water main easements will be provided in the Final Site Plans.*

24. A tapping sleeve, valve and well is required at the connection to the existing water main.

Response: *Understood. A tapping sleeve, valve and well will be indicated in future plan submittals.*

25. Provide water main modeling calculations demonstrating that the required water supply of 2,000 GPM will be available.
Response: *Water main modeling calculations will be coordinated with the City and provided on the Final Site Plans.*
26. Provide additional valves to limit pipe runs to a maximum of 800 feet between valves.
Response: *Additional valves will be added to limit the pipe runs as requested.*
27. Per current EGLE requirement, provide a profile for all proposed water main 8-inch and larger.
Response: *Plan and profiles will be developed and provided in the Final Site Plans.*
28. 6-inch hydrant leads are allowed for leads less than or equal to 25 feet in length. 8-inch leads are required for leads greater than 25 feet in length.
Response: *Understood. The hydrant leads will be labeled and sized as required.*
29. All gate valves 6" or larger shall be placed in a well with the exception of a hydrant shut off valve. A valve shall be placed in a box for water main smaller than 6".
Response: *Understood.*
30. Provide a sanitary sewer basis of design for the development on the utility plan sheet. (Calculations should use peaking factor of 4.0 and 3.2 REU).
Response: *A sanitary basis of design has been included on Sheet 6 in the preliminary plans with the requirements as stated above.*
31. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
Response: *This note will be added to the plans.*
32. Provide a note on the Utility Plan and sanitary profile stating the sanitary leads will be buried at least 5 feet deep where under the influence of pavement.
Response: *A note will be added to the plan and profile sheets of the Final Site Plans.*
33. Provide an internal drop connection at structures, where the inlet pipe enters the manhole at an invert elevation 18 inches or greater above the invert elevation of the outlet pipe.
Response: *Internal drop connections will be provided where necessary.*
34. Illustrate all pipes intersecting with manholes on the sanitary profiles.
Response: *All pipes intersecting the sanitary sewer main will be indicated on the profiles in the Final Site Plans.*
35. Relocate the sanitary sewer to go around the cul-de-sac outside the paved road. Extend the sanitary sewer so no leads cross under the cul-de-sac.
Response: *The sanitary main and service leads will be re-routed around the cul-de-sac as requested.*

36. A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. Currently, a few pipe sections do not meet this standard. Grades shall be elevated, and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.
Response: *The storm will be further engineered and required clearances will be provided in the profiles on the Final Site Plan.*
37. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
Response: *Understood.*
38. Match the 0.80 diameter depth above invert for pipe size increases.
Response: *Understood.*
39. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot-deep plunge pool.
Response: *Understood.*
40. Provide a four-foot-deep sump and an oil/gas separator in the last storm structure prior to discharge to the retention basin.
Response: *This has been indicated in the "Grading and Storm Sewer Notes" on Sheet 7. It will also be reflected in the storm sewer profiles in the Final Site Plans.*
41. Provide profiles for all storm sewer 12-inch and larger.
Response: *Profiles will be supplied in the Final Site Plans.*
42. Label the 10-year HGL on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure.
Response: *The 10-year HGL will be included in the storm profiles on the Final Site Plans.*
43. Illustrate all pipes intersecting storm structures on the storm profiles.
Response: *All pipes intersecting the storm sewer will be indicated on the profiles in the Final Site Plans.*
44. An easement is required over the storm sewer accepting and conveying offsite drainage.
Response: *Understood.*
45. Provide a schedule listing the casting type, rim elevation, diameter, and invert sizes/elevations for each proposed, adjusted, or modified storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.
Response: *A storm sewer schedule will be provided in the Final Site Plans.*
46. Show and label all roof conductors and show where they tie into the storm sewer.
Response: *No roof connections will be made.*

47. The Storm Water Management Plan (SWMP) for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the Engineering Design Manual.
Response: *The SWMP is designed in accordance with the City Storm Water Ordinance and Chapter 5 of the Engineering Design Manual.*
48. An adequate maintenance access route to the basin overflow structure and any other pretreatment structures shall be provided (15 feet wide, maximum running slope of 1V:5H, maximum cross slope of 3%, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
Response: *The proposed maintenance route will be reviewed to ensure it does not conflict with the proposed landscaping.*
49. As part of the Storm Drainage Facility Maintenance Easement Agreement, provide an access easement for maintenance over the storm water retention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.
Response: *Understood. The requested easements will be supplied for access and maintenance to the proposed basins.*
50. Provide manufacturer's details and sizing calculations for the pretreatment structure(s) on the plans.
Response: *Manufacturer's details and specifications for the pretreatment structures will be included in the Final Site Plan, as applicable.*
51. Provide reasoning for separating the south and north retention basin.
Response: *Separation between the basins was provided to help with the overall coordination and permitting process with EGLE. The separation may end up being relocated or removed altogether following further coordination with EGLE.*
52. Provide supporting calculations for the runoff coefficient determination.
Response: *Supporting runoff coefficient calculations will be provided on subsequent submittals*
53. A runoff coefficient of 0.35 shall be used for all turf grass lawns (mowed lawns) and 0.95 shall be used for all impervious surfaces.
Response: *Noted. Supporting runoff coefficient calculations will be provided on subsequent submittals.*
54. Stormwater retention facilities must provide sufficient storage capacity for 2 consecutive 100-year storm events.
Response: *The proposed design of the retention facilities currently accounts for 2 consecutive 100-year storm events. Our calculations are included on Sheet 7 of the preliminary site plans.*
55. Soil borings must be obtained within the location of the proposed basin and extend to a depth of 25' below the existing ground or 20 feet below the proposed retention basin bottom elevation, whichever is greater.
Response: *Noted. Multiple test pits were performed by a geotechnical engineer within the bottom of the proposed retention area. The report generated by McDowell & Associates is included with this letter. Both test pits indicate that suitable soils and infiltration rates were found to be more*

than sufficient for recovery of the retention basins. We will continue to coordinate with engineering on this item during Final Site Plan approvals.

56. Provide 10 additional soil borings for the proposed retention basins, must meet depth requirements.

Response: *See response to comment #55.*

57. Label the hydrological soil group classification of the proposed retention basin area, on the plans.

Response: *Understood. Soil groups are indicated and labeled on Sheet 2 of the preliminary site plan.*

58. Pretreatment shall be provided for prior to discharge into the basin.

Response: *Pretreatment will be provided prior to discharge into the basin as requested. It is currently indicated on Sheet 7 of the preliminary site plan and will also be depicted in the profiles of the Final Site Plan.*

59. One foot of freeboard shall be provided above the proposed high-water level.

Response: *The current design includes 2.21 feet of freeboard. Please see the storm water calculations on Sheet 7 of the preliminary site plan.*

60. Provide soil boring table with proposed ground and basin elevations vs ground water elevations.

Response: *A table will be included in the Final Site Plans.*

61. 25' vegetative buffer shall be provided around the perimeter of the basin.

Response: *Understood.*

62. An overflow route from the retention basin must be provided. Elevations of surrounding features that would be impacted by the basin overflow must be indicated. Downstream drainage easements may be required for the overflow route.

Response: *The overflow route will be indicated in the next plan submission.*

63. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.

Response: *Paving materials and quantities, along with the associated standard City details, will be provided on the Final Site Plan.*

64. Sidewalks on private roadways should be located such that the outside edge of the sidewalk is a minimum of 15 feet from back of curb.

Response: *The boulevard entrance will be reevaluated to accommodate the sidewalks at 15' behind the back of curb.*

65. Revise the pathway cross-section to indicate a maximum cross-slope of 2%.

Response: *Understood. Maximum cross-slope will be indicated as 2% in the Final Site Plan.*

66. Provide spot elevations at the intersection of the proposed pathway with the existing pathway.

Response: *Noted. This level of grading detail will be provided on the Final Site Plans.*

67. For Multi-family residential developments, show individual driveway tapers (standard driveway 16' wide with 3' tapers on each side) on plans to ensure no conflict with sidewalks, hydrants, street signs and etc.
Response: *The Typical Lot Detail is shown on Sheet 5 of the preliminary site plans to provide detail of the proposed driveways. Individual driveways and tapers will be shown on the Final Site Plan.*
68. Remove the detectable warning surfaces from the plan. These are not required based on the anticipated driveway traffic volumes.
Response: *Based on a phone call with the reviewer on 9/21/2022, this comment was included in error.*
69. Label proposed inner and outer radius of cul-de-sac (City Standard, 22' inner radius and 54' outer radius indicated in Figure VIII-F.)
Response: *Radii will be labeled in plan view on subsequent submittals.*
70. Provide an emergency access gate at both ends of the proposed emergency access drive. The City's break-away gate detail (Figure VIII-K) can be found in Section 11-194 of the Code of Ordinances.
Response: *A gate will be added along the right-of-way of the emergency access path at Lexington Drive and the specified detail will be added to the plans on the Final Site Plan. The gate at the other end of the emergency access will be accommodated by the Ballantyne development to the east, as depicted on Sheet 5 of the preliminary site plans.*
71. Provide a note on the plan stating that the emergency access gate is to be installed and closed prior to the issuance of the first building permit in the subdivision.
Response: *This note will be added to the plans on subsequent submittals.*
72. Detectable warning plates are required at all barrier free ramps, hazardous vehicular crossings and other areas where the sidewalk is flush with the adjacent drive or parking pavement. The barrier-free ramps shall comply with current MDOT specifications for ADA Sidewalk Ramps. Provide the latest version of the MDOT standard detail for detectable surfaces.
Response: *Understood. Detectable warning plates will be indicated on the Final Site Plan. The MDOT detail on Sheet 9 will be updated to the latest version.*
73. Label specific ramp locations on the plans where the detectable warning surface is to be installed.
Response: *Detectable warning plates will be indicated on the Final Site Plan.*
74. Specify the product proposed and provide a detail for the detectable warning surface for barrier free ramps. The product shall be the concrete-embedded detectable warning plates, or equal, and shall be approved by the Engineering Division. Stamped concrete will not be acceptable.
Response: *A detail for the detectable warning surfaces will be provided in the Final Site Plan.*
75. Provide existing and proposed contours on the Grading Plan at the time of the Final Site Plan submittal.
Response: *Noted. These will be provided on the Final Site Plan.*

76. Provide a note on the Grading Plan stating that the proposed pathway within the road right-of-way shall match existing grades at both ends.
Response: *A note will be added to the plans on subsequent submittals. Grading details confirming this will be shown on the Final Site Plans.*
77. Provide at least 3-foot of buffer distance between the sidewalk and any fixed objects, including hydrants and irrigation backflow devices. Include a note on the plan where the 3-foot separation cannot be provided.
Response: *Noted. The hydrants are currently at least 3-feet from the back of curb. Dimensions of hydrants to the back of curb will be added to the plans for subsequent submittals.*
78. The grade of the drive approach shall not exceed 2-percent within the first 25 feet of the intersection. Provide spot grades as necessary to establish this grade.
Response: *Noted. Details confirming this will be provided on the Final Site Plans.*
79. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
Response: *Noted. This level of grading detail will be provided on the Final Site Plans.*
80. Soil borings along the proposed road will be required at 500-foot intervals per Section 11-195(d) of the Design and Construction Standards.
Response: *Noted. We will continue to coordinate with engineering on this item during Final Site Plan approvals.*
81. Per Section 26.5-35(c), a statement is required on any plan containing a private street with the following language: "City of Novi has no responsibility to improve or maintain the private streets contained within or private streets providing access to the property described in this [plan/plat]".
Response: *This note is included on the cover under the "General Notes" of the preliminary site plan.*
82. A SESC permit is required. A full review has not been completed at this time. The review checklist detailing all SESC requirements is attached to this letter. Please address the comments below and submit a SESC permit application under separate cover. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>
Response: *Understood. A SESC permit app will be submitted .*
83. Any off-site utility easements anticipated must be executed prior to final approval of the plans. If you have not already done so, drafts of the easements and a recent title search shall be submitted to the Community Development Department as soon as possible for review and shall be approved by the Engineering Division and the City Attorney prior to executing the easements.
Response: *Noted.*
84. Indicate if any off-site easements will be needed.
Response: *Any off-site easements will be indicated on the Final Site Plan and/or the off-site utility plan.*

85. A letter from either the applicant or the applicant's engineer must be submitted with the Stamping Set highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved. Additionally, a statement must be provided stating that all changes to the plan have been discussed in the applicant's response letter.

Response: *Noted.*

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

Response: *Understood. Cost opinion shall be provided.*

Landscaping:

1. A tree survey and tree chart are provided.

Response: *Noted.*

2. No regulated trees will be removed.

Response: *Agreed.*

3. Please reconsider removing Tree #9370 as it appears that it is healthy and can be saved.

Response: *Tree #9370 is currently indicated as being saved. I believe this may have been a typo and meant for #9390. We will determine if #9390 can be saved once the detailed grading is completed in the Final Site Plan.*

4. The project is only adjacent to residentially-zoned property so no new screening vegetation or berms are required for this project but a large landscaped plan is provided north of the northernmost residences.

Response: *Noted.*

5. The required berm and landscaping are provided along 8 Mile Road.

Response: *Noted.*

6. The number of evergreens and/or canopy trees in the greenbelt and the number of subcanopy street trees can be reduced if desired.

Response: *Noted. This may be considered during subsequent plan submissions.*

7. No street trees are proposed due to utility conflicts. It appears that the previously proposed understory trees could be planted under the wires, and should be unless the RCOC forbids their planting. Please confirm why the trees were removed.

Response: *Trees are required to be 5' from utility lines. The distance between the sanitary and water main ranges from 9.75' to 10'. Unfortunately, the planting area between the utility lines is a storm water swale prohibiting trees.*

8. A landscape deviation was granted by City Council for the lack of a berm in the Garfield Road greenbelt.
Response: *Understood.*
9. Based on the 110 lf frontage, less the 55-foot gas line easement, 1 canopy tree and 2 subcanopy trees are required. 3 canopy trees and 5 subcanopy trees are proposed.
Response: *Noted.*
10. Based on the street lengths, a total of 205 canopy trees are required along the interior streets and they are all provided.
Response: *Noted*
11. The underground utilities must be laid out in such a way that the required spacing for the trees (4 feet behind curb and 5 feet from underground lines) can be met. It is not clear on the 100-scale drawing whether this spacing is provided.
Response: *The required spacing will be provided in the Final Site Plans.*
12. Please provide a detail clearly showing that the proposed water and sanitary line locations will allow the required street trees to be planted with sufficient spacing. If the correct spacing is not provided, the utility lines need to be shifted to provide the required spacing.
Response: *Detail showing adequate utility spacing will be provided in the Final Site Plan.*
13. 16 of 25 species used (64%) are native to Michigan.
Response: *Understood.*
14. The tree diversity meets the standard of the Landscape Design Manual.
Response: *Noted.*
15. Please follow the suggestions made on the landscape chart.
Response: *Understood. Suggestions will be addressed prior to FSP submittal.*
16. All required landscaping is proposed.
Response: *Understood.*
17. Please add contour labeling on Sheet L-2 and move the shrubs down to the 961 elevation.
Response: *Contour labeling will be included on L-2 and shrubs will be updated accordingly 961.*
18. If an irrigation system will be used, the plan must be provided with the Final Site Plans.
Response: *An irrigation system will be proposed and a plan will be provided in the final site plan.*
19. Live signature will be required on stamping sets.
Response: *Noted.*
20. See Mannik & Smith and Davey Resource Group letters for detailed reviews of wetlands and woodlands.
Response: *Noted.*

21. Please indicate on the plan view which trees will be removed.
Response: *Trees scheduled for removal are indicated with an "X" on Sheet 4 of the preliminary site plan.*
22. The "Needs to be Replaced" and "Specimen" columns should be removed from the chart as they are unnecessary and a little confusing.
Response: *The requested columns will be removed from the tree list on Sheet 3.*
23. Please try to save tree #9390 if possible. Based on the tree chart it seems to be a healthy, desirable tree and it seems that it could be saved.
Response: *Tree #9390 has been scheduled for removal based on the berm that is provided in the rear of the site. We will look into saving this tree as the detailed grading is completed in the Final Site Plan.*
24. Please show all soils on the site and the soils boundaries.
Response: *Soils and associated soils legend are provided on Sheet 2 of the preliminary site plan. Collected soil boring information will be provided on the Final Site Plan.*
25. As noted before, the water and sanitary lines appear to be located such that there is not sufficient room for the required trees, especially street trees, which should be 4 feet behind the curb and sidewalk, 5 feet from underground utility lines and 10 feet from utility structures (as the note on Sheet L-1 indicates).
Response: *Please refer to our response in #11 of this section (page 12).*
26. Please locate the utility lines such that the required street trees can be planted with sufficient space.
Response: *Please refer to our response in #11 of this section (page 12).*
27. A detail showing the spacing allowed for the trees between the water and sanitary lines and the street curbs may help to show that sufficient space is provided. At 100 scale it's difficult to see.
Response: *Please refer to our response in #12 of this section (page 12).*
28. Please show the proposed contours a little darker on the landscape plan so the berms and other contours can be shown better.
Response: *Contours shall be darkened to improve visibility on subsequent submittals.*
29. Please label the proposed contour lines on Sheet L-2.
Response: *Contour labeling will be included on L-2.*
30. As noted above, if the proposed utility layout doesn't provide sufficient room for the required trees and their spacing, the utilities may need to be adjusted.
Response: *See responses above.*
31. On the utility plan, please add a dimensioned detail showing the proposed location of the utility lines relative to the sidewalk and curb to show there is sufficient room for the trees.
Response: *A general utility detail displaying the horizontal clearances relative to the curb, sidewalk and trees will be added to the plan on the Final Site Plan.*

32. Please add a section of the screening berm similar to that for the 8 Mile Road berm.
Response: *A berm cross section will be provided with the Final Site Plan.*
33. Please indicate the lawn seed mix to be used.
Response: *The seed mix to be used in open areas will be specified on the Final Site Plan.*
34. A landscape waiver was granted to not provide a berm in the Garfield Road greenbelt.
Response: *Noted.*
35. If desired, the total number of trees provided along 8 Mile Road can be reduced to the requirement.
Response: *Noted. This may be considered on future plan submissions.*
36. A note indicates that utility line conflicts don't allow the 8 Mile Road street trees to be planted, but it appears that subcanopy trees could be planted beneath the power lines. If the 8 Mile Road street trees are not provided due to a ruling by the RCOC, please provide a copy of their communication saying that. In that event the trees would not be required. If that is not the case, please provide the required trees.
Response: *The proposed plantings will be submitted to RCOC for their approval or denial.*
37. When location of transformer/utility boxes are determined, show them and add landscaping per city requirements.
Response: *Noted.*
38. Add provisional number of shrubs required for screening to the plant list and cost estimate.
Response: *The provisional shrubs will be added to the cost estimate with future submittals when the approximate number of cabinets are known. We currently estimate that there will be 11 transformers.*
39. Please highlight the high-water contour line on the detention pond detail plan on Sheet L-2.
Response: *The high-water contour line will be bolded for visibility on the detention pond detail plan.*
40. Since it is a retention pond and not a detention pond, the shrubs should be shifted to be aligned along the 961 elevation, not at the top of the freeboard line.
Response: *The shrubs will be shifted to align with 961 contour elevation along the retention pond.*
41. As agreed to, since this is a retention pond with no outlet to a stream, the trees normally required for a detention pond are not required here.
Response: *Noted.*
42. Please add a note stating that the contractor shall provide proof in the form of an invoice showing the native detention pond seed mix or a photo of the seed mix bag label to the City Landscape Architect prior to placement.
Response: *A note stating that the contractor shall provide an invoice and/or photo showing the native pond seed mix prior to placement will added to the landscaping plan.*

43. Also add a note stating that if an unacceptable seed mix is used in that area, the city reserves the right to have it killed and reseeded at the developer's expense.

Response: *A note will be added that if an unacceptable seed mix is used, the City reserves the right to have it killed and reseeded at the Developer's expense.*

44. If any Phragmites or Japanese knotweed are discovered during the course of construction, they shall be properly treated to kill them.

Response: *Understood.*

45. Please indicate and trees to be removed on Demolition Plan with x'es on trees and on the tree chart.

Response: *The trees scheduled for removal are indicated with an "X" on Sheet 2 of the preliminary site plans. A tree chart is supplied on Sheet 3 and the 3 trees scheduled for removal are indicated with "Yes" in the "To Be Removed" column and have a bold box around them.*

46. See DRG letter for detailed review of woodlands.

Response: *Noted.*

47. Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long- term survival to the Final Site Plans, not just the stamping sets.

Response: *An irrigation plan will be added in preparation of the Final Site Plan submittal.*

48. An irrigation system shall meet the requirements listed at the end of this chart.

Response: *Understood.*

49. If xeriscaping is used, please provide information about plantings included.

Response: *Xeriscaping is not proposed.*

50. Please indicate the lawn seed mix to be used.

Response: *The lawn seed mix will be provided in the following plan submittal.*

Wetlands:

1. The City of Novi Site Plan and Development Manual requires the boundary lines of any watercourses or wetlands on the Site be clearly flagged or staked and such flagging or staking shall remain in place throughout the conduct of permit activity. MSG recommends the wetland delineation markers be maintained for reference for the duration of the project.

Response: *Noted.*

2. The wetland vegetative cover currently includes non-native species (e.g. reed canary grass, common buckthorn, tree of heaven). MSG recommends the applicant incorporate replacement native plantings, including trees and shrubs, in the subject property Plans as well as removal of non-native invasive species to enhance the aesthetics and natural habitat benefits of the wetland area.

Response: *We do not wish to perform any work within regulated wetlands to avoid any undue impact.*

Woodland:

1. A Woodland Use Permit may be required to perform construction on any site containing regulated woodlands.
Response: *Noted.*
2. No woodland replacements are required because the applicant is not proposing to remove any regulated woodland trees.
 - a. If there are impacts to the critical root zone of any regulated woodland trees or they are damaged or removed during construction, a payment into the City of Novi Tree Fund at a rate of \$400 per replacement tree credit shall be required. The number of credits required would be determined based on the size of the tree(s) removed and/or damaged.
Response: *Noted.*
3. Woodland Protection Fence. Please include a tree protection fence detail in the plan set. The City of Novi's detail has been provided below.
Response: *A tree protection detail will be added to Final Site Plan.*
4. Financial Guarantees & Maintenance Bonds.
 - a. A woodland fence guarantee of \$6,000 (\$5000 x 120%) is required per Chapter 26.5-37. The financial guarantee shall be paid prior to issuance of the City of Novi Woodland Use Permit.
Response: *Noted.*

Traffic:

1. The applicant, Toll Brothers, is proposing a 44-unit development of single-family homes.
Response: *Understood.*
2. The development is located on the north side of Eight Mile Road, west of Garfield Road. Eight Mile Road is under the jurisdiction of Oakland County and Garfield Road is under the City of Novi.
Response: *Understood.*
3. The site is currently zoned RA (Residential Acreage).
Response: *Noted. The City Council has approved the reduction of lot sizes from RA to R-1*
4. The following traffic-related deviations may be required.
 - a. A deviation will be required for the distance between the sidewalk and back-of-curb if not revised in future plans.
Response: *Understood.*
5. Conditions for approval include:
 - a. Compliance with cul-de-sac measurement standards.
 - b. Sidewalk offset.
Response: *Understood.*

6. Provide dimensions for island length and width in future plans.
Response: *Dimensions of the divided driveway and island will be provided in the Final Site Plan.*
7. Taper not required with expected volume.
Response: *Noted.*
8. Driveway spacing (Same-side): Dimension on future plans.
Response: *Dimensioning for the adjacent drives along 8-Mile will be provided in the Final Site Plan.*
9. Driveway spacing (Opposite-side): Dimension on future plans.
Response: *Dimensioning for the adjacent drives along 8-Mile will be provided in the Final Site Plan.*
10. Coordinate with RCOC for any work in the right of way of 8 Mile Road.
Response: *Noted.*
11. Detail R28-J included, indicate ramp locations on site plan.
Response: *Ramps will be shown on the layout plan view on future plan submissions.*
12. Additional No Parking signs should be placed throughout the development. Only 1 sign is currently proposed.
Response: *Additional "No Parking" signs will be added throughout the development on the Final Site Plan.*
13. Ramps should be provided where sidewalk meets roadway. These should be indicated on the site plan.
Response: *Ramps will be shown on the layout plan view on future plan submissions.*
14. Offset shown as 13' in boulevard cross-section and 15' in typical road cross section. Indicate setback on plans.
Response: *The sidewalk distance will be adjusted along the boulevard to 15' from the back of curb on the Final Site Plan.*
15. 22' inner radius and 54' outer radius indicated in Figure VIII-F.
Response: *The radii of the cul-de-sac will be updated to 22' and 54' as requested on future submittals.*
16. Keep right (R4-7) signs could be added in the island of the boulevard. Applicant should indicate where no-parking signs are to be placed according to note 5.
Response: *Noted. These will be added to the Final Site Plan.*
17. Any maintenance of traffic required for construction at Eight Mile Road will need to be approved by RCOC. Applicant could consider adding crosswalk markings throughout the site where sidewalk ramps are present for increased visibility.
Response: *Noted. Work within the 8-Mile right-of-way will be coordinated with the RCOC. Crosswalk markings will be considered during the design of the Final Site Plan.*

Fire:

1. All fire hydrants MUST be installed and operational prior to any combustible material is brought on site. IFC 2015 3312.1
Response: *Note #1 in the "Fire Department Notes" on the cover of the plans will be updated as requested.*

2. Corrected 8/29/22 KSP-Emergency access road from the development from the east shall be 20' wide SP sheet #05.
Response: *The emergency access path currently consists of 15' wide grass paver section and 5' wide concrete walk, totaling a 20' wide path. Please see detail on Sheet 9 of the preliminary site plan.*

3. If grass pavers are to be installed, development shall provide "PERMANENT MARKINGS" for the edge of the access road. Permanent markings shall be approved by the Fire Marshal's office. Nothing living or easily moved or removed can be used.
Response: *Access road markings are indicated in the emergency access detail on Sheet 9. A note will be added indicating that the markings shall be approved by the Fire Marshal's office.*

4. If a gate with a lock is going to be installed on the Emergency Access Road, development shall provide a Knox Lock. (www.knoxbox.com).
Response: *Understood. A note will be added to the Final Site Plan.*

5. In single family residential areas, hydrants shall be spaced a maximum of 500 feet apart. It is recommended that a hydrant be located at every intersection on the same corner with the street sign. This will help with locating the fire hydrants in winter when they are covered with snow. (D.C.S. Sec. 11-68 (f)(1)b)
Response: *Hydrants have been placed such that no two shall be more than 500' apart. Hydrant locations will be reconsidered during the Final Site Plan preparation.*

Should you have any remaining questions or need anything else from us to help facilitate your review and approvals, please do not hesitate to contact me direct at (734) 308-6910.

Sincerely,

ATWELL, LLC



Mark Crider, P.E.

Project Manager – Land Development

INFILTRATION STUDY
PROPOSED BAPTIST CHURCH DEVELOPMENT
8 MILE AND GARFIELD ROADS
NOVI, MICHIGAN

TOLL BROTHERS, INC.
26200 TOWN CENTER DRIVE
SUITE 200
NOVI, MICHIGAN 48375

DECEMBER 7, 2021
BY
McDOWELL & ASSOCIATES

McDowell & Associates

Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection

21355 Hatcher Avenue • Ferndale, MI 48220

Phone: (248) 399-2066 • Fax: (248) 399-2157

www.mcdowasc.com

December 7, 2021

Toll Brothers, Inc.
26200 Town Center Drive
Suite 200
Novi, Michigan 48375

Job No. 21-444

Attention: Mr. Brian Woellmer

Subject: Infiltration Study
Proposed Baptist Church Development
8 Mile and Garfield Roads
Novi, Michigan

Dear Mr. Woellmer:

As requested, we have performed a storm water infiltration study for the subject project. Our findings and recommendations are presented below.

It is understood that a stormwater pond with an “infiltration to the ground” component is being considered for the subject project. A series of test pit excavations and field infiltration tests were performed at the location of the proposed pond to evaluate infiltration rates.

Field Work and Laboratory Testing

Four Test Pits, designated T-1 through TP-4, were excavated to depths ranging from about ten feet eight inches (10’8”) to nineteen feet one inch (19’1”) below the existing ground surface. The approximate test pit locations are shown on the accompanying Test Pit Location Plan. Descriptions of the soil and groundwater conditions encountered at each test pit location may be found on the Test Pit Log sheets which accompany this report.

Following completion of the excavations, Test Pits TP-1 and TP-2 were prepared for infiltration testing. TP-3 and TP-4 were not prepared for infiltration testing because they were not performed at the locations of a proposed stormwater management system. Infiltration test preparation consisted of excavating a soil bench adjacent to the primary test pit excavation. On the benched soil, two double ring infiltrometers with open bottoms were installed at a depth of about two inches (2”) into the soil bench. Extra care was exercised to maintain a good seal between the steel tubing and in-situ soils to prevent loss of test water. Following installation of the infiltrometers, a thin needle-punch geotextile filter was placed above the soil in the inner ring of each infiltrometer, and the pipes were filled with about five inches (5”) of potable water to initiate the “soak period”.

Once the appropriate soak period duration was maintained in each infiltrometer, the casings were refilled with potable water and the infiltration test was initiated. Throughout the course

of testing, water level readings within the inner ring of the infiltrometers were obtained and recorded at specific time intervals. It should be noted that water level readings were taken to the nearest sixteenth of an inch (1/16").

Soil descriptions and depths shown on the test pit logs are approximate indications of change from one soil type to another and are not intended to represent an area of exact geologic change or stratification.

Groundwater Conditions

Surface elevations at the test pits varied from about Elevations 964.0' to 972.7'. Groundwater was encountered In Test Pits TP-1, TP-2 and TP-3 at depths ranging from nine feet eight inches (9'8") to seventeen feet five inches (17'5") below the ground surface. Groundwater was not encountered in TP-4.

It should be recognized that the water level observations made in the test pits may not be reliable indications of the depth of the water table at the site. Water levels in granular soils fluctuate with seasonal and climatic changes as well as the amount of rainfall in the area immediately prior to the measurements. It should be expected that groundwater fluctuations could occur on a seasonal basis.

Infiltration Test Results and Recommended Infiltration Rates

Based on indications from the test pits, the site soils at the proposed pond location appear to be suitable for infiltration for the proposed stormwater management system.

After the initial soak period, average infiltration rates varied from 11.88 in./hr. to 167.83 in./hr. Considering a combined average for each test pit and a factor of safety of two, this would result in a design infiltration rate of 6.12 in./hr at TP-1 and 69.11 in./hr at TP-2 at the tested depths. The data is provided on the accompanying Infiltration Rate Computations sheet.

The results of the two infiltration tests varied significantly, presumable due to significantly more gravel content at the test depth in TP-2. Conservatively, you could consider the much lower infiltration rate obtained for TP-1. If you wish to use the higher rate, it is suggested that additional testing be performed to determine the limits of higher gravel content soil.

Conclusions

An infiltration investigation was done at the site via test pits and infiltration tests. Recommendations for infiltration rates in various areas of the site have been presented herein. Experience indicates that the actual subsoil conditions at the site could vary from those generalized on the basis of the test pits made at specific locations. McDowell & Associates should be notified if any soil variations from those described in this letter are encountered to determine their effects on the recommendations presented herein. The preliminary evaluations and recommendations presented in this letter have been formulated on the basis of reported or assumed data relating to the proposed project. Any significant change in this data in the final design plans should be brought to our attention for review and evaluation with respect to the prevailing subsoil conditions.



Test Pit Log

Test Pit #: 1

Job Number: 21-444

Date: 12/2/2021

Project: Infiltration Study - Baptist Church Development

Weather: Mostly Sunny

Location: Novi - Oakland Township, Michigan

Ground Elv.: 972.7

Soil Stratigraphy:	Pipe Installation #1
0 - 11" Moist dark brown sandy Topsoil 11" - 3'4" Moist brown sandy silty Clay with trace of pebbles 3'4" - 13'8" Moist brown fine to medium Sand with traces of silt, pebbles and occasional gravel and very moist brown clayey sand lenses 13'8" - 16'3" Moist brown fine Sand with trace of silt and occasional trace of gravel 16'3" - 17'5" Moist brown Sand & Gravel with trace of silt 17'5" - 19'1" Wet brown Sand & Gravel with trace of silt Groundwater Depth: <u>17'5"</u>	Soil Depth: <u>14'</u> Inner Pipe Dia.: <u>6"</u> Outer Pipe Dia. <u>10"</u> Embedment: <u>2"</u> Stick-up: <u>5"</u> Pipe Installation #2 Soil Depth: <u>14'</u> Inner Pipe Dia.: <u>6"</u> Outer Pipe Dia. <u>10"</u> Embedment: <u>2"</u> Stick-up: <u>5"</u> Pipe Distance: <u>2'6"</u>

Soak Period (Pipe #1)	Soak Period (Pipe #2)
Start Date: <u>11/30/2021</u> Notes: _____ Time: <u>12min 13 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>17 min 09 sec</u> Water Drop: <u>4.00</u> inches Notes: _____	Start Date: <u>11/30/2021</u> Notes: _____ Time: <u>13 min 50 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>18 min 02 sec</u> Water Drop: <u>4.00</u> inches Notes: _____

Test Period (Pipe #1)	Test Period (Pipe #2)
Time: <u>10 min</u> Water Drop: <u>2.25</u> inches Notes: _____ Time: <u>10 min</u> Water Drop: <u>2.19</u> inches Notes: _____ Time: <u>10 min</u> Water Drop: <u>2.16</u> inches Notes: _____ Time: <u>10 min</u> Water Drop: <u>2.06</u> inches Notes: _____ Time: <u>10 min</u> Water Drop: <u>2.00</u> inches Notes: <u>Average of last 4 readings = 2.10"</u> _____	Time: <u>10 min</u> Water Drop: <u>2.19</u> inches Notes: _____ Time: <u>10 min</u> Water Drop: <u>2.06</u> inches Notes: _____ Time: <u>10 min</u> Water Drop: <u>2.00</u> inches Notes: _____ Time: <u>10 min</u> Water Drop: <u>1.94</u> inches Notes: _____ Time: <u>10 min</u> Water Drop: <u>1.90</u> inches Notes: <u>Average of last 4 readings = 1.98"</u> _____



Test Pit Log

Test Pit #: 2

Job Number: 21-444

Date: 12/2/2021

Project: Infiltration Study - Baptist Church Development

Weather: Mostly Sunny

Location: Novi - Oakland Township, Michigan

Ground Elv.: 968.8

Soil Stratigraphy:	Pipe Installation #1
0 - 1'2" Moist dark brown sandy Topsoil 1'2" - 3'5" Moist brown sandy silty Clay with trace of pebbles 3'5" - 9'9" Moist brown gravelly fine to medium Sand with trace of silt and layers of sand and gravel 9'9" - 12'4" Moist brown gravelly Sand with traces of silt, occasional cobbles and moist brown clayey fine sand lenses 12'4" - 16'1" Wet brown Sand & Gravel with trace of silt Groundwater Depth: <u>12'4"</u>	Soil Depth: <u>8'10"</u> Inner Pipe Dia.: <u>6"</u> Outer Pipe Dia. <u>10"</u> Embedment: <u>2"</u> Stick-up: <u>5"</u>
	Pipe Installation #2
	Soil Depth: <u>8'10"</u> Inner Pipe Dia.: <u>6"</u> Outer Pipe Dia. <u>10"</u> Embedment: <u>2"</u> Stick-up: <u>5"</u>
	Pipe Distance: <u>4'</u>

Soak Period (Pipe #1)	Soak Period (Pipe #2)
Start Date: <u>11/30/2021</u> Notes: _____ Time: <u>1 min 13 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>1 min 18 sec</u> Water Drop: <u>4.00</u> inches Notes: _____	Start Date: <u>11/30/2021</u> Notes: _____ Time: <u>1 min 43 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>1 min 50 sec</u> Water Drop: <u>4.00</u> inches Notes: _____

Test Period (Pipe #1)	Test Period (Pipe #2)
Time: <u>1 min 20 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>1 min 23 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>1 min 25 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>1 min 27 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>1 min 28 sec</u> Water Drop: <u>4.00</u> inches Notes: <u>Average of last 4 readings = 1.43 min</u> _____	Time: <u>2 min 01 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>2 min 07 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>2 min 10 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>2 min 14 sec</u> Water Drop: <u>4.00</u> inches Notes: _____ Time: <u>2 min 19 sec</u> Water Drop: <u>4.00</u> inches Notes: <u>Average of last 4 readings = 2.21 min</u> _____

TEST PIT LOG REPORT

PROJECT: Baptist Church Development

REPORT NO.: _____

LOCATION: Novi, Michigan

OUR JOB NO.: 21-444

CLIENT: Toll Brothers

ELEVATION: 968.90



WEATHER: Cloudy

TEMPERATURE RANGE: 30° - 39° °F

DATE: 11/30/2021

TIME: 11:30 PM

TEST PIT NO.: 4

DEPTH	SOIL	DEPTH	SOIL DESCRIPTION	Soil Strength
1'		1'3"	Moist dark brown sandy TOPSOIL	
2'		2'8"	Moist brown sandy silty Clay with trace of pebbles	
3'				
4'				
5'				
6'				
7'				
8'				
9'				
10'				
11'		10'8"	Moist brown gravelly Sand with trace of silt and moist brown clayey sand lenses	
12'				
13'				
14'				
15'				
16'				
17'				
18'				
19'				
20'				

Groundwater was not encountered .

TEST PIT LOG REPORT

PROJECT: Baptist Church Development

REPORT NO.: _____

LOCATION: Novi, Michigan

OUR JOB NO.: 21-444

CLIENT: Toll Brothers

ELEVATION: 964.00




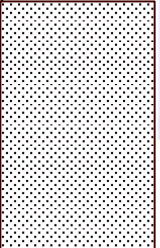

WEATHER: Cloudy

TEMPERATURE RANGE: 30° - 39° °F

DATE: 11/30/2021

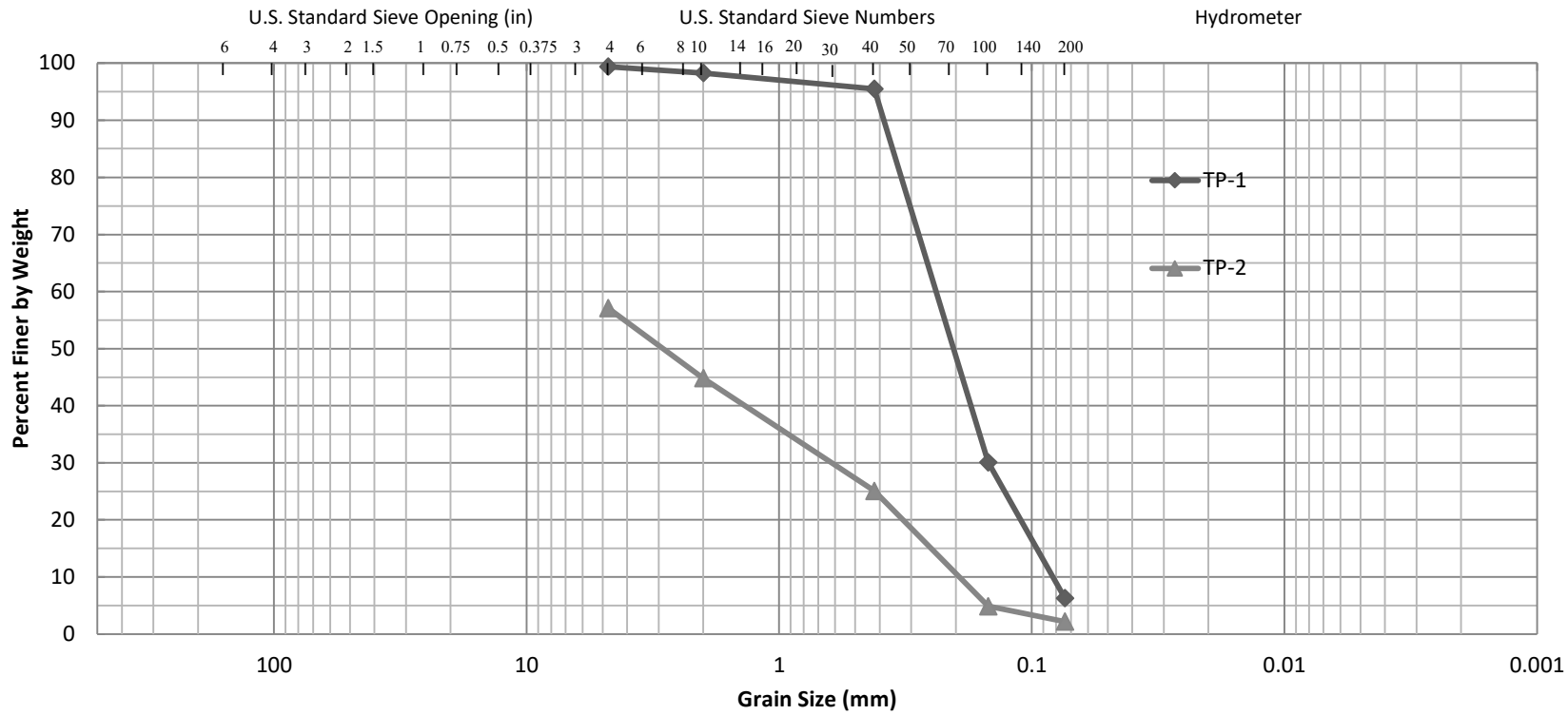
TIME: 11:30 PM

TEST PIT NO.: 3

DEPTH	SOIL	DEPTH	SOIL DESCRIPTION	Soil Strength
1'		1'2"	Moist dark brown sandy TOPSOIL	
2'				
3'				
4'		3'8"	Moist brown sandy silty Clay with trace of pebbles	
5'				
6'				
7'				
8'			Moist brown gravelly Sand with trace of silt and moist brown clayey sand lenses	
9'				
10'		9'8"		
11'		10'7"	Wet brown gravelly Sand with trace of silt and wet brown clayey sand lenses	
12'				
13'				
14'				
15'				
16'				
17'				
18'				
19'				
20'				

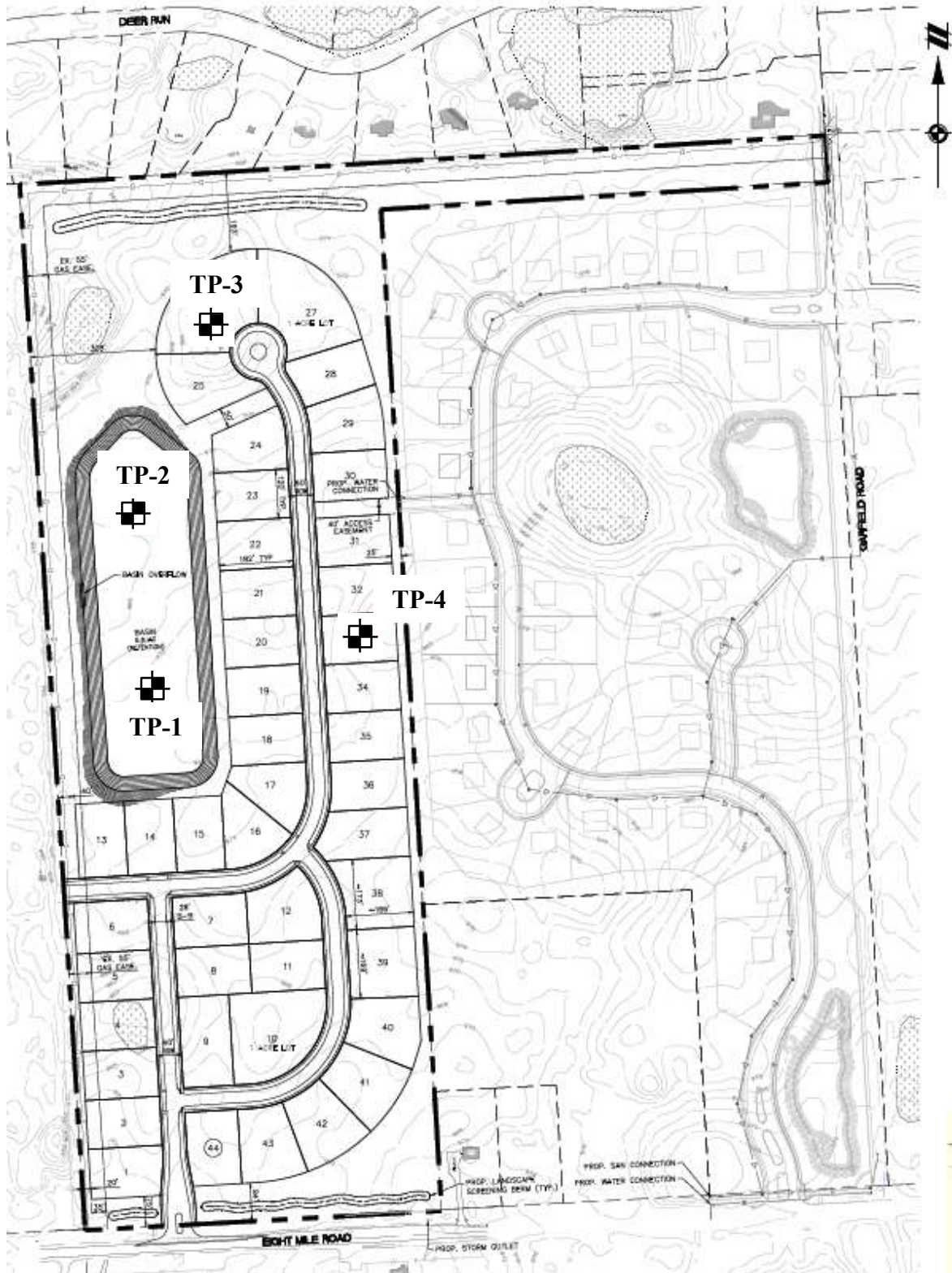
Groundwater was encountered at 9'8".

Gradation Curves




Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

Test Pit #	Depth	Classification	Nat wc %	Infiltration Study Baptist Church Development 8 Mile and Garfield Roads Novi, Michigan M&A Job No. 21-444
1	14'	Moist brown fine Sand with trace of silt	7.5	
2	8'10"	Moist brown Sand & Gravel with trace of silt	3.7	



Base Drawing prepared by ATWELL

LEGEND

 Test Pit Locations, 1, through 4:
Witnessed by McDowell & Associates



McDowell & Associates
21355 Hatcher Avenue
Ferndale, Michigan 48220
Phone: (248) 399-2066
Fax: (248) 399-2157

Test Pits Location Plan

Job No. 21-444



Job No. 21-444
 Infiltration Study - Baptist Church Development
 Novi, Michigan

Infiltration Rate Computations									
Test Pit No.	Infiltrometer #1			Infiltrometer #2			Combined Average Rate per Test Pit (in/hr)	Safety Factor	Design Infiltration Rate per Test Pit (in/hr)
	Average Percolation (inches)	Percolation Time (Minutes)	Average Percolation Rate (inches/hour)	Average Percolation (inches)	Percolation Time (Minutes)	Average Percolation Rate (inches/hour)			
1	2.10	10.00	12.60	1.98	10.00	11.88	12.24	2	6.12
2	4.00	1.43	167.83	4.00	2.21	108.60	138.21	2	69.11

RUD Agreement and Plan

**STATE OF MICHIGAN
COUNTY OF OAKLAND
CITY OF NOVI**

**PARC VISTA BY TOLL BROTHERS
RESIDENTIAL UNIT DEVELOPMENT (RUD) AGREEMENT**

THIS AGREEMENT FOR RESIDENTIAL UNIT DEVELOPMENT (referred to herein as the "Agreement") made effective the 1 day of AUGUST, 2022, by and between the CITY OF NOVI, Oakland County, Michigan, herein called the "City", 45175 Ten Mile, Novi, Michigan, 48175, and Toll Northeast V Corp., a Delaware Corporation, whose registered office address is 26200 Town Center Drive, Suite 200, Novi, MI 48375, and its successors and assigns, herein called the "Developer."

RECITATIONS

A. Developer is the developer and prospective purchaser of real property (the "Property") within the City proposed for development as a residential site condominium community to be known as "Parc Vista" (generally referred to hereafter as the "Project"). The legal description of the Property is attached as **Exhibit A**. First Baptist Church of Northville, is the current owner of the property and has consented to the recording of this Agreement with respect to the Property.

B. Developer is pursuing approval of the Project as a Residential Unit Development ("RUD") pursuant to Section 3.29 of the City of Novi Zoning Ordinance, Residential Unit Development (the "RUD Ordinance"). The intent of the RUD Ordinance is to permit an optional means of development flexibility in the RA district and in the R-1 through R-4 districts, which allows a mixture of various types of residential dwelling units (one-family, attached one-family cluster). It is further the intent of this Section to permit permanent preservation of valuable open land, fragile natural resources, and rural community character that would be lost under conventional development. Final approval of Developer's RUD Plan, attached as **Exhibit B**, has been tentatively approved pursuant to the RUD Ordinance, subject to certain terms and conditions, by the City Council, following recommendation by the Planning Commission.

C. Section 3.29.9 contemplates the preparation of a contract setting forth the conditions upon which the approval of the final RUD Plan has been granted, which in turn serves as the basis for site plan approval, and thereafter for the development, use, and maintenance of the Project. City Council approval of the contract is required, and the contract is to incorporate and attach an RUD plan.

D. Set forth below are the terms and conditions of the contract for the Project, which is to

be recorded with the Register of Deeds for the County of Oakland following execution by the parties.

E. Developer will organize and create a Michigan non-profit corporation to administer the affairs of the condominium project in accordance with Act 78, P.A. 1978, as amended, to be known as the "Parc Vista Homeowners Association," hereinafter called the "Association." The Association shall be subject to all of the terms of this Agreement.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

I. GENERAL PROJECT DESCRIPTION

The Project consists of 54.3 acres, north of Eight Mile Road and west of Garfield Road for the construction of 44 single-family residential units, 4 of which units are consistent with the underlying zoning (RA) requirements, with the remainder being consistent with R-1 requirements. The proposed density does not exceed the density permitted in the underlying zoning district at 0.8 units per acre, which is consistent with the RA, Residential Acreage zoning of the Property. The remainder of the site (44% or 24.3 acres of open space) is intended to be passive and active open space for the benefit of the Property condominium unit owners. The Project, including the preserved open space, will be established as a site condominium, designed to fit and complement character of the existing and surrounding neighborhoods, together with Property infrastructure improvements (potable water, sanitary sewer, storm sewer). Each of the home sites will be referred to in this Agreement as a "unit." The Project provides benefits from the preservation and creation of open space and the establishment of proposed pathway and sidewalk network, parks and recreation areas that would not occur with conventional residential development.

II. EFFECT OF RUD AGREEMENT

A. This Agreement consists of this text, along with the attached and incorporated Final RUD Plan, consisting of Site Plan dated 7/27/2022 Boundary and Topographical Survey dated 7/27/22 and Landscape Plan dated 7/1/2022 (full-sized original of the Final RUD Plan on file in the City Clerk's office), and all conditions and requirements made part of the approved Final RUD Plan. This Agreement is intended to serve as the contract contemplated under Section 3.29.9 of the Zoning Ordinance, and establishes the fundamental terms and provisions of subsequent final approval, construction, use, and maintenance of the Project. The preliminary site plan for the Project submitted for Planning Commission approval shall substantially conform to the Final RUD Plan, subject to and in accordance with the text of this Agreement, and as contemplated by Section 35-135.G of the Zoning Ordinance.

B. Approval of this Agreement authorizes Developer to pursue approval of a site plan in accordance with Section 3.29.20.C of the Zoning Ordinance, as amended, and any and all other applicable laws, ordinances and regulations, and with this Agreement and any conditions imposed with its approval. Developer shall develop the Land in accordance with all applicable laws and regulations, and with all applicable ordinances, including all applicable setback requirements of the Zoning Ordinance with respect to R-1 Zoning District, except as expressly authorized herein or as shown on the Final RUD Plan. The Final RUD Plan is acknowledged by both the City and Developer to be a conceptual plan for the purpose of depicting the general area contemplated

for development. Some deviations from the provisions of the City's ordinances, rules, or regulations that are depicted in the Final RUD Plan are approved by virtue of this Agreement; however, except as to such specific deviations enumerated herein, the Developer's right to develop the 44 single-family residential units under the requirements of the Final RUD Plan shall be subject to and in accordance with all applications, reviews, approvals, permits, and authorizations required under applicable laws, ordinances, and regulations, including, but not limited to, site plan approval, storm water management plan approval, landscape approval, and engineering plan approval, except as expressly provided in this Agreement. In addition to any other ordinance requirements, Developer shall comply with all applicable ordinances for storm water and soil erosion requirements and measures throughout the Property during the design and construction phases, and subsequent use, of the Project contemplated in the Final RUD Plan. Developer shall comply with all conditions listed in the staff and consultant review letters not inconsistent with the terms of this Agreement.

C. This Agreement shall be binding upon and benefit the City and Developer, as well as their respective successors, assigns, and transferees, and shall run with the land.

D. Physical development of the Project shall be in accordance with the final site plan, and shall not be commenced until after the final site plan has been approved by the City, subject to and in accordance with applicable procedures.

E. The City shall require Developer to provide performance and financial guarantees for the completion of the improvements, including, without limitation, sidewalk improvements, paving improvements, utility improvements, and landscaping improvements and tree planting activities. Such financial guarantees shall cover the Property improvements as determined by the City in accordance with applicable City Ordinances and customary practice. Such financial guarantees may include cash deposits or letters of credit as allowed by the current provisions of the City's Code of Ordinances as determined by the City. Deposit and administration of financial guarantees shall be subject to the requirements and conditions of Chapter 26.5 of the City of Novi Code and any other related rules or regulations. Any deviations or requests for relief from this provision shall be considered by City Council as a deviation from Chapter 26.5, and will not require an amendment to the Final RUD Agreement or RUD Plan if approved by the City Council.

III. USES PERMITTED

Uses permitted within the Project shall consist of single-family, detached residences, located on site condominium units or lots as shown on the Final RUD Plan, subject to the terms of this Agreement, and in accordance with the approved final site plan.

The underlying zoning of the Property is RA, Residential Acreage. In accordance with the Final RUD Plan, the single-family homes shall be situated on lots generally conforming with the R-1, Residential District, regulations of the Zoning Ordinance as provided in the Final RUD Plan and this Agreement. All development and use of the Property shall be in accordance with this Agreement, applicable laws, regulations, and ordinances not inconsistent with this Agreement.

IV. DENSITY

The Project shall consist of 44 residential units. The proposed density is 0.8 units per acre consistent with the RA, Residential Acreage zoning of the Property.

V. LOT AREA AND LOCATION

Reduction in allowable lot sizes is conditioned upon providing the lot configuration shown in the Final RUD Plan and in accordance with the approved final site plan. Minimum lot area shall be approximately 21,780 sq. ft. with a minimum width of 120 ft., which is a deviation from the 1 Acre lot area and width of 150 ft. required by the Zoning Ordinance.

VI. YARD SETBACKS/ENCROACHMENTS

Yard setbacks and lots shall conform to the R-1 regulations. The Project has been granted a variance from Section 3.29.2 to permit one unit on the west side of the Property to be located up to 65 feet from the peripheral property line rather than the 75 feet required.

VII. TRAFFIC CIRCULATION/PRIVATE ROADS

The streets within the Project shall remain private. Boulevard access from Eight Mile Road shall be provided substantially as shown on the RUD Plan, and in accordance with the approved final site plan. The entrance to Parc Vista will connect to internal roadways and cul-de-sac substantially as shown on the RUD Plan, and in accordance with the approved final site plan. The internal streets shall be designed as local residential streets with 60-foot rights-of-way. No residence shall have direct driveway access from or to Eight Mile Road.

Traffic calming features have been planned and designed into the Project by the utilization of curvilinear streets, and by avoiding "straightaway" street design. Further consideration shall be given to the use of additional traffic-control devices to be determined by the City during final site plan review, and also following construction, drawing upon experiences as they occur in the use of the Project.

A deviation from City Ordinance standards set forth in Section 11-194(a)(7) of the City of Novi Code has been granted to allow the Project to exceed the maximum length for all blocks 1,400 feet, and to allow streets to extend to the boundary to provide access intervals exceeding 1,300 feet. A variance from Appendix C Section 4.04(A) (1) of Novi City Code has also been granted for not providing a stub street to the subdivision boundary. Emergency access drives shall align with the only available access drive to the east. The existing development to the north does not have an access point available. The street stub connection to the west is positioned in a reasonable manner to allow future development to connect to the stub. The Emergency Access Connections shall be constructed in accordance with the City of Novi standard detail plan for "Emergency Access Drive" as approved by the City Engineer and in accordance with the approved Engineering Plans dated _____.

Developer shall grant the necessary Emergency Access Easements to allow police, fire and all other emergency service providers to access the Emergency Access Drives as needed for ingress

to and from the Project. The Emergency Access Easements shall be included within the Master Deed for the Project in a form acceptable to the City of Novi. All keys or codes to access the gated entry shall be provided to the Fire Department, and final design of the gated entranceway will be approved with the Final Site Plan.

All road improvements shall be in accordance with the design and construction standards of the City at the time of final Site Plan approval.

VIII OPEN SPACE

The preservation of open space is a primary consideration of the project design. Approximately 23.8 acres or 44 percent of the Property, shall be dedicated to open space, including wetland areas, woodland areas, storm water basins, parks and other internal green space areas. The areas of open space shall be substantially as shown on the RUD Plan, and in accordance with the approved final site plan. The majority of the preserved open space acres will be available to residents for passive and active recreation. 1.5 acres (3 percent of the Property) is preserved woodland/wetland area, 7.7 acres (13 percent of the Property) is the stormwater detention facility and buffers to adjoining properties on the east and west. The remaining 15.6 acres (35 percent of the Property) of remaining area will be reserved usable open space for the residents of the Project. All such areas shall be constructed and maintained by Developer and/ after transition of control, the Association.

The open space shall be permanently preserved as required by Section 3.29.10.C of the RUD Ordinance. Developer shall provide a schedule for the completion of portions of the open space so that it coincides with completion of residential units. The mechanism to assure the permanent preservation and maintenance of open space areas, RUD amenities and common areas shall be referenced in the Master Deed and shall be subject to review and approval by the City Attorney as provided in Article XV below. The mechanism shall permit, in the event of the failure of the Property owners to preserve and maintain areas, the City to perform maintenance and preservation functions and to assess the cost of such performance to the Property owners.

IX. PEDESTRIAN CIRCULATION

Developer will construct an 8-foot sidewalk along the Eight Mile Road and Garfield Road frontage of the Property. Five-foot sidewalks will be constructed along both sides of internal streets.

A proposed 0.9-mile walking trail, with natural features, benches and a pavilion structure with seating, shall be provided and maintained within the open space to provide active recreation for the residents. The trail will remain unpaved and be constructed of compacted fine grade stone. The Developer shall have the option to upgrade the path material to a paved surface during preliminary or final site plan. The pathway will connect to Garfield Road, and will encourage further active pedestrian and bicycle recreation and enable a larger pathway loop. The proposed pathway will connect with the existing and planned pathways on Garfield Road, particularly as Ballantyne is developed a public sidewalk is being built along the west side of Garfield Road. Pedestrian connections to the adjacent properties shall be provided as shown on the RUD Plan. Walking trail and pedestrian connections ("Pedestrian Improvements") shall be constructed prior to the issuance of the first certificate of occupancy, which includes the model homes.

X. NATURAL RESOURCE PRESERVATION

A. Wetlands

The existing wetland areas on the Property, comprising approximately 0.43 acres, shall be preserved, as shown on the RUD Plan, as part of the overall "open space," as set forth in Section IX, above.

Any disturbance and/or restoration of the wetland area shall be undertaken in accordance with applicable laws and ordinances, the approved final RUD Plan and any wetland permit issued for the Project, as may be required.

B. Woodlands

Regulated woodlands are located in the northwest portion of the Property around and within existing wetlands. Woodland Replacement credits will be provided as required in accordance with the City's Woodlands Ordinance for any regulated trees to be removed. The Developer is required to provide preservation/conservation easements for any areas of remaining woodland and any areas containing woodland replacement trees, if applicable, in accordance with the preservation requirements set forth in the City's Woodland Ordinance, as amended.

A tree planting and fence maintenance financial guarantee, along with woodlands inspection fees, shall be paid, with the amounts to be determined at the time of the Final Woodlands Engineering Review. Approved protective fencing shall be established prior to construction of subdivision improvements, including any clearing or grubbing.

XI. ON AND OFF-SITE IMPROVEMENTS

It is understood that certain on-site and off-site (if any) infrastructure improvements may be required for the Project, to be set forth in the final site plan and engineering plans, including improvements for storm water management, sanitary sewer, and public water, and that Developer shall be solely responsible for all costs and expenses of and associated with such improvements. The City has no obligation to construct or provide in any way for such improvements, and the City has made no guarantees, assurances, or representations with regard to the viability of any such improvements. All off-site easements required for the construction of Project improvements shall be submitted in draft form at the time of final site plan submittal. All off-site easements must be, (1) in final format; (2) executed by all required property owners; and, (3) submitted to and approved by the City prior to the issuance of final stamping sets of the final approved site plans.

XII. STORM WATER MANAGEMENT

Storm water shall be retained on the Property in a manner to be approved by the City as part of final site plan review. Subject to Developer securing the appropriate easements at its sole cost

and expense, and subject to appropriate review and approval, storm water would be collected by a single storm sewer collection system and retained in two on-site retention ponds. The storm water and drainage conveyance facilities shall be designed and constructed by Developer, and approved and inspected by the City, in accordance with the approved final site plan, and all applicable City, County of Oakland, and State of Michigan ordinances, codes, regulations and laws. The drainage conveyance facilities, which shall constitute a part of the overall storm water management system for the Project, shall be operated and maintained on a permanent basis by the Developer until the transition of control to the Association and the Association thereafter, in accordance with the terms and conditions of applicable City ordinance and the approved final site plan.

XIII. WATER AND SANITARY SEWER

Developer shall construct sanitary sewer and water main by connecting to extensions from Ballantyne's proposed stubs to the east. Developer shall, at its sole expense, construct and install improvements and/or connections tying into the municipal water and sewage systems. Such improvements shall be designed and constructed in accordance with the Final RUD Plan and the approved final site plan, and all applicable City, State and County standards, codes, regulations, ordinances, and laws, including the requirements of the City engineer.

All water and sanitary sewer service facilities necessary to serve the Project, including any on-site and off-site facilities, extensions, and easements to reach the area to be served, shall be provided by and at the sole expense of Developer, and shall be completed, approved, dedicated to, and accepted by the City in accordance with applicable laws and ordinances. Prior to connecting to the City's public water and/or sanitary sewage disposal systems, the Developer and/or the ultimate unit owner shall pay all applicable availability fees, as well as the "user connection" fees or "tap" fees required to "tap-in" to the City's public water and sanitary sewer system. This amount is set by Ordinance, as amended from time to time, and is subject to increase on an annual basis.

XIV. MECHANISM FOR PRESERVATION, REGULATION, MAINTENANCE AND FINANCE OF COMMON ELEMENTS, AREAS, AND IMPROVEMENTS

As part of final site plan review and approval, Developer shall submit to the City proposed covenants, restrictions, including, but not limited to covenants and restrictions requiring permanent preservation and maintenance of open space, woodland and wetland areas, which shall be incorporated into the master deed and by-laws to be recorded for Parc Vista. Before submitting the Master Deed to the City for approval, Developer shall create the Association referred to herein.

The Master Deed shall be subject to review and approval by the City Attorney as part of final site plan approval.

The Master Deed shall obligate the Developer, until the Association becomes responsible for the maintenance of the common elements under the Master Deed, and then all future successor owners of lots or units within the Project and the Association, to maintain, repair and preserve common areas, pathways, landscaping, signage, storm drainage, private roads, sidewalks, and

any other common elements and improvements in and for Parc Vista. Such maintenance, repair, and preservation shall be to a high standard of care.

The Master Deed shall additionally provide that, in the event Developer or successor owners of the Property and/or the Association shall at any time fail to carry out one or more responsibilities or obligations relative to maintenance, repair, and/or preservation, the City shall have the right to serve written notice upon Developer or successor owners (through the Association), setting forth the deficiencies in maintenance, repair and/or preservation. The notice may also set forth a demand that such deficiencies be cured within a stated reasonable period of time, and further state a date, time and place of hearing before the City Council or other board, body or official delegated by the City Council, for the purpose of allowing Developer or successor owners to be heard as to why the City should not proceed with the maintenance, repairs and/or preservation which had not been undertaken. At the hearing, the City may take action to extend the time for curing the deficiencies, and the date of the hearing may itself be extended and/or continued to a date certain. If, following the hearing, the City shall determine that the maintenance, repairs and/or preservation have not been completed within the time specified in the notice, as such time may have been extended by the City, the City shall thereupon have the power and authority, but not the obligation, to enter upon the Property, or cause its agents and/or contractors to enter upon the Property, and perform such maintenance, repairs and/or preservation as found by the City to be appropriate. The cost and expense of making and financing such maintenance, repairs and/or preservation, including the cost of all notices and hearing, including reasonable attorneys' fees, plus a reasonable administrative fee, shall be paid by Developer until the Association becomes responsible for the maintenance of the common elements under the Master Deed, and then the successor owners and the Association, and such amounts shall constitute a lien on all taxable portions of the Property. The City may require the payment of such monies prior to the commencement of any work.

If such costs and expenses have not been paid within thirty (30) days of a billing to Developer until the Association becomes responsible for the maintenance of the common elements under the Master Deed, or successor owners, through the Association, all unpaid amounts may be placed on the delinquent tax roll of the City as regards the taxable portions of the Property (allocated among the several units or lots), and shall accrue interest and penalties, and shall be collected in the manner made and provided for the collection of delinquent real property taxes in the City. In the discretion of the City, such costs and expenses may also be collected by suit initiated against Developer until the Association becomes responsible for the maintenance of the common elements under the Master Deed, and then successor owners and the Association, and in such event, Developer until the Association becomes responsible for the maintenance of the common elements under the Master Deed, the successor owners and the Association, as the case may be, shall pay all Court costs and reasonable attorneys' fees incurred by the City in connection with such suit if the City obtains relief in such action.

Any failure or delay by the City to enforce any provision of the Master Deed shall in no event be deemed or construed, or otherwise relied upon, as a waiver or estoppel of the right to eventually pursue and insist upon strict enforcement.

In all instances in which the City is authorized to pursue maintenance, repairs and/or preservation, as provided above, the City and its agents and contractors, shall be permitted, and are hereby granted authority, to enter upon all portions of the Property reasonably necessary

or appropriate for the purpose of inspecting and/or completing the respective work.

XV. LANDSCAPING AND SIGNAGE

Landscaping and signage shall be provided as set forth in the Final RUD Plan, and in accordance with the approved final site plan. The City has granted a landscape waiver from Section 5.5.3.B.ii requirement of a landscaped berm along Garfield Road. The Developer reserves the right to modify the entry monument signage at its discretion during preliminary and final site plan review. Signage has not been reviewed for compliance with Novi Sign Ordinance. Review and modification to comply with the Ordinance will be required.

XVI. PHASING

The Project is planned to be developed in a single phase. Should the Developer choose to develop the Property in phases, a phasing plan shall be incorporated into and reviewed as part of the Final Site Plan.

XVII. GENERAL PROVISIONS

A. The Zoning Board of Appeals shall have no jurisdiction over the approval of the RUD or this Agreement or the application of this Agreement. Upon completion of the Project, the Board of Appeals may exercise jurisdiction over the Property in accordance with its authority under the Zoning Ordinance, in a manner not inconsistent with this Agreement.

B. Except as may be specifically modified by this Agreement, the City Code and all applicable regulations of the City shall apply to the Property. Any substantial violation of the City Code by Developer and/or any successor owners or occupants with respect to the Property shall be deemed a breach of this Agreement, as well as a violation of the City Code.

C. Developer shall be responsible to pay all application and review fees as and when required under the City Ordinances, including but not limited to planning, engineering, legal, and any consultant fees in connection with the review and approval of the Project. Such amounts shall be due upon invoice, and failure to pay amounts owed shall entitle the City to cease review, approval, and/or issuance of permits.

D. Nothing in this Agreement shall prevent the City from exercising its regulatory and other authority with respect to the Property and the Project in a manner consistent with the Final RUD Plan and this Agreement. Where there is a question with regard to applicable regulations for a particular aspect of the Project, or with regard to clarification, interpretation, or definition of terms or regulations, and there are no apparent express provisions of the Final RUD Plan and this Agreement which apply, the City, in the reasonable exercise of its discretion, shall determine the regulations of the City's Zoning Ordinance, as that Ordinance may have been amended, or other City Ordinances that shall be applicable, provided that such determination is not inconsistent with the nature and intent of the RUD Documents and does not change or eliminate any development right authorized by the RUD documents. In the event of a conflict or inconsistency between two

or more provisions of the Final RUD Plan and/or this Agreement, or between such documents and applicable City ordinances, the Final RUD Plan and/or this Agreement, shall apply.

E. A breach of this Agreement shall constitute a nuisance per se which shall be abated. Developer and the City therefore agree that, in the event of a breach of this Agreement by Developer or the successor owners or the Association, the City, in addition to any other relief to which it may be entitled at law or in equity, shall be entitled under this Agreement to relief in the form of specific performance and an order of the court requiring abatement of the nuisance per se. In the event of a breach of this Agreement, the City may notify Developer or the successor owners or the Association of the occurrence of the breach and issue a written notice requiring the breach be cured within thirty (30) days; provided, however, that if the breach, by its nature, cannot be cured within thirty (30) days, Developer or the successor owners or the Association shall not be in the breach hereunder if Developer or the successor owners or the Association, as the case may be, commences the cure within the thirty (30) day period and diligently pursues the cure to completion. Failure to comply with such notice shall, in addition to any other relief to which the City may be entitled in equity or at law, render Developer or the successor owners or the Association as the case may be liable to the City in any suit for enforcement for actual costs incurred by the City including, but not limited to, attorneys' fees, expert witness fees and the like.

F. This Agreement may not be amended except in writing signed by the parties and recorded in the same manner as this Agreement. In the event Developer desires to propose an amendment, an application shall be made to the City's Community Development Department, which shall process the application in accordance with the procedures set forth in the Zoning Ordinance.

G. Both parties understand and agree that if any part, term, or provision of this Agreement is held by a court of competent jurisdiction, and as a final enforceable judgment, to be illegal or in conflict with any law of the State of Michigan or the United States, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular part, term, or provisions held to be invalid.

H. The Agreement shall be governed by the laws of the State of Michigan, both as to interpretation and performance. Any and all suits for any and every breach of this Agreement may be instituted and maintained in any court of competent jurisdiction in the County of Oakland, State of Michigan.

I. No waiver of any breach of this Agreement shall be held to be a waiver of any other or subsequent breach. A delay in enforcement of any provision of this Agreement shall not be construed as a waiver or estoppel of the City's right to eventually enforce, or take action to enforce, the terms of this Agreement. All remedies afforded in this Agreement shall be taken and construed as cumulative; that is, all remedies afforded in this Agreement are in addition to every other remedy provided by law.

J. The signers of this Agreement warrant and represent that they have the authority to sign this Agreement on behalf of their respective principals and the authority to bind each party to this

Agreement according to its terms. Further, each of the parties represents that the execution of this Agreement has been duly authorized and is binding on such parties.

K. This Agreement shall run with the Property and bind the parties, their heirs, successors, and assigns. This Agreement shall be recorded in the Oakland County Register of Deeds by the City. The parties acknowledge that the Property is subject to changes in ownership and/or control at any time, but that heirs, successors, and assigns shall take their interest subject to the terms of this Agreement, and all references to "Developer " in this Agreement shall also include all heirs, successors, and assigns of Developer. The parties also acknowledge that the members of the City Council and/or the City Administration and/or its departments may change, but the City shall nonetheless remain bound by this Agreement.

L. Developer has negotiated with the City the terms of the Final RUD Plan and this Agreement, and such documentation represents the product of the joint efforts and mutual agreements of Developer and the City.

M. Developer and the City agree that this Agreement and its terms, conditions, and requirements are lawful and consistent with the intent and provisions of local ordinances, state and federal law, and the Constitutions of the State of Michigan and the United States of America. Developer has offered and agreed to proceed with the undertakings and obligations as set forth in this Agreement in order to protect the public health, safety, and welfare and provide material advantages and development options for the Developer, all of which undertakings and obligations Developer and the City agree are necessary in order to ensure public health, safety, and welfare, to ensure compatibility with adjacent uses of land, to promote use of the Property in a socially, environmentally, and economically desirable manner, and to achieve other reasonable and legitimate objectives of the City and Developer, as authorized under applicable City ordinances and the Michigan Zoning Enabling Act, MCL 125.3101, *et seq.*, as amended. Developer fully accepts and agrees to the final terms, conditions, requirements, and obligations of this Agreement, and Developer shall not be permitted in the future to claim that the effect of this Agreement results in an unreasonable limitation upon use of all or any portion of the Property, or to claim that enforcement of this Agreement causes an inverse condemnation or taking of all or any portion of such property. It is further agreed and acknowledged that the terms, conditions, obligations, and requirements of this Agreement are clearly and substantially related to the burdens to be created by the Project and use of the Property under the approved Final RUD Plan, and are, without exception, clearly and substantially related to the City's legitimate interests in protecting the public health, safety and general welfare.

N. Developer acknowledges that, at the time of the execution of this Agreement, Developer has not yet obtained site plan and engineering approvals for the Project. Developer acknowledges that the Planning Commission and Engineering Consultant may impose additional conditions other than those contained in this Agreement during site plan reviews and approvals as authorized by law; provided, however, that such conditions shall not be inconsistent with the Final RUD Plan or documents and shall not change or eliminate any development right authorized thereby. Such conditions shall be incorporated into and made a part of this Agreement, and shall be enforceable against Developer.

O. None of the terms or provisions of this Agreement shall be deemed to create a partnership or joint venture between Developer and the City.

P. The recitals contained in this Agreement and all exhibits attached to this Agreement and referred to herein shall for all purposes be deemed to be incorporated in this Agreement by this reference and made a part of this Agreement.

Q. This Agreement is intended as the complete integration of all understandings between the parties related to the subject matter herein. No prior contemporaneous addition, deletion, or other amendment shall have any force or effect whatsoever, unless embodied herein in writing. No subsequent notation, renewal, addition, deletion or other amendment shall have any force or effect unless embodied in a written amendatory or other agreement executed by the parties required herein, other than additional conditions which may be attached to site plan approvals as stated above.

R. The parties intend that this Agreement shall create no third-party beneficiary interest except for an assignment pursuant to this Agreement. The parties are not presently aware of any actions by them or any of their authorized representatives which would form the basis for interpretation construing a different intent and in any event expressly disclaim any such acts or actions, particularly in view of the integration of this Agreement.

S. Both parties acknowledge and agree that they have had the opportunity to have the Final RUD Plan, and this Agreement, reviewed by legal counsel.

T. Notwithstanding the foregoing, Developer retains the right at any time prior to commencement of construction of the improvements contemplated by the Final RUD Plan and this Agreement to terminate the RUD subject to and in accordance with the requirements of the Zoning Ordinance applicable to such a termination.

U. . In accordance with Chapter 26.5 of the City of Novi Code of Ordinances, after completion, inspection, and approval of public utilities, including water main and sanitary sewer systems serving the site, the city engineer may issue a "ready for use" letter. The department may then issue building permits for model homes (no more than four (4), or twenty (20) percent of the number of total homes in the development, whichever is fewer).

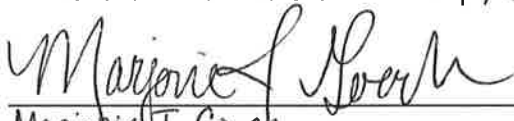
**Toll Northeast V Corp.
a Delaware Corporation**

STATE OF Michigan)
COUNTY OF Oakland) SS

By: 
Alexander Martin, Division President

The foregoing instrument as acknowledged before me on this 1 day of August, 2022, by Alexander Martin the Division President of Toll Northeast V Corp., a Delaware Corporation, on behalf of the company.

MARJORIE J. GOOCH
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF GENESEE
My Commission Expires 3/8/2026
Acting in the County of Oakland


Marjorie J. Gooch
Notary Public, Genesee County,
Acting in Oakland County, MI
My Commission Expires: 3/8/2026

CONSENT TO AGREEMENT

The undersigned Property owner, First Baptist Church of Northville, whose address is 217 N Wing St, Northville, MI 48167, joins in and consents to the execution and recording at the Oakland County Register of Deeds of the foregoing Agreement and agrees to be bound by, and the Property shall be subject to, the terms of the foregoing Agreement.

Dated: 07/27, 2022

First Baptist Church of Northville.

Jonathan A Wilkes
Jonathan Wilkes

STATE OF MICHIGAN)
) ss
COUNTY OF OAKLAND)

On this 27th day of July, 2022, before me appeared Jonathan Wilkes, who states that he has signed this document of his own free will.

Taya Armstrong
Notary Public

Wayne County, Michigan

Acting in Wayne County, Michigan

My Commission Expires: 04/25/2028

TAYA ARMSTRONG
NOTARY PUBLIC, STATE OF MI
COUNTY OF WAYNE
MY COMMISSION EXPIRES Apr 25, 2028
ACTING IN COUNTY OF Wayne

Drafted by:
Elizabeth K. Saarela
27555 Executive Drive, Suite 250
Farmington Hills, MI 48331-3550

And when recorded return to:
Cortney Hanson, City Clerk
City of Novi
45175 Ten Mile Road
Novi, MI 48375

Exhibit A

Legal Description of the Property

DESCRIPTION OF A 54.829 ACRE PARCEL OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN:

COMMENCING AT THE SOUTHEAST CORNER OF SECTION 31, TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN; THENCE S86°52'38"W (RECORDED AS N89°46'33"W AND N89°55'04"W) 1100.00 FEET ALONG THE SOUTH LINE OF SAID SECTION 31, LYING IN EIGHT MILE ROAD (60 FOOT HALF WIDTH); THENCE N03°28'04"W (RECORDED AS N00°15'46"W) 60.00 FEET FOR A PLACE OF BEGINNING; THENCE S86°52'38"W (RECORDED AS N89°55'04"W) 876.65 FEET ALONG THE NORTH RIGHT OF WAY LINE OF SAID EIGHT MILE ROAD; THENCE N03°35'00"W (RECORDED AS N00°22'42"W AND N00°14'04"W) 2569.89 FEET; THENCE N86°31'01"E (RECORDED AS N89°43'21"E AND N89°51'00"E) 1981.80 FEET ALONG THE EAST-WEST 1/4 LINE OF SAID SECTION 31, ALSO BEING THE SOUTHERLY LINE OF DEER RUN OF NOVI CONDOMINIUM, OAKLAND COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 1303, AS RECORDED IN LIBER 21978, PAGE 266, OAKLAND COUNTY RECORDS, AND ITS EASTERLY EXTENSION THEREOF; THENCE S03°27'16"E (RECORDED AS S00°07'08"E AND S00°15'06"E) 115.00 FEET ALONG THE EAST LINE OF SAID SECTION 31, LYING IN GARFIELD ROAD (33 FOOT HALF WIDTH); THENCE S86°31'01"W (RECORDED AS S89°51'00"W AND S89°43'21"W) 1099.98 FEET; THENCE S03°28'06"E (RECORDED AS S00°15'46"E AND S00°07'08"E) 2460.39 FEET (RECORDED AS 2460.38 FEET) TO THE PLACE OF BEGINNING, CONTAINING 54.829 ACRES OF LAND, MORE OR LESS, BEING SUBJECT TO THE RIGHTS OF THE PUBLIC OVER THE EAST 33 FEET THEREOF AS OCCUPIED BY SAID GARFIELD ROAD, ALSO BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

Exhibit B
Final RUD Plan

RESIDENTIAL UNIT DEVELOPMENT PLAN

PARC VISTA BY TOLL BROTHERS

A SINGLE FAMILY RESIDENTIAL DEVELOPMENT CITY OF NOWI, OAKLAND COUNTY, MICHIGAN



DEVELOPMENT TEAM

DEVELOPER/APPLICANT
 TOLL BROTHERS
 2000 W. WOODS DRIVE, SUITE 200
 ANN ARBOR, MI 48106
 CONTACT: TOLL BROTHERS
 PHONE: (734) 262-4222

ENGINEER
 TOLL BROTHERS
 2000 W. WOODS DRIVE, SUITE 200
 ANN ARBOR, MI 48106
 CONTACT: TOLL BROTHERS
 PHONE: (734) 262-4222

SITE DATA

EXISTING ZONING: R10, RESIDENTIAL, SINGLE-FAMILY
 PARCELS: 282-81-402-011 & 012
 EXISTING SITE AREA (GROSS): 54.8 ACRES
 EXISTING SITE AREA (NET): 0.98 ACRES
 EXISTING SITE AREA (NET): 54.3 ACRES (JULIUS GARFIELD SOND & O.)
 NO. OF SINGLE FAMILY LOTS: 44
 NO. OF LOTS: 100
 LOT SIZE: 100' W X 210'
 MINIMUM LOT COVERAGE: 27% (MINIMUM OF 25%)
 BUILDING SETBACKS: FRONT: 30 FEET (40 FEET TOTAL), REAR: 30 FEET, SIDE: 30 FEET
 BUILDING SIZE: 2,000 TO 4,300 SF
 FLOOR AREA PER UNIT: 124 AC (148% OF NET SITE AREA)
 DENSITY PER ACRE: 124 AC (148% OF NET SITE AREA)
 TOTALS INCLUDES: 20% OVERHEAD SYSTEMS, BARRIERS, WETLANDS, AND OTHER E.S.'S

PROPOSED DEVIATIONS

- SEVERAL LOTS MAY HAVE OVERHEAD CABLES THAN SECURITY-FIRE (PM) FEET TO CONFORMANCE, PROPERTY AND DISTANCE TABLES

SUMMARY OF PUBLIC BENEFITS

- PROVIDES A RESIDENTIAL DEVELOPMENT TO THE BLANKET RESIDENTIAL COMMUNITY.
- PROVIDES A RESIDENTIAL DEVELOPMENT TO THE BLANKET RESIDENTIAL COMMUNITY.
- PROVIDES A RESIDENTIAL DEVELOPMENT TO THE BLANKET RESIDENTIAL COMMUNITY.
- PROVIDES A RESIDENTIAL DEVELOPMENT TO THE BLANKET RESIDENTIAL COMMUNITY.
- PROVIDES A RESIDENTIAL DEVELOPMENT TO THE BLANKET RESIDENTIAL COMMUNITY.

PROJECT NARRATIVE

THE DEVELOPMENT IS A PROPOSED SINGLE-FAMILY RESIDENTIAL COMMUNITY LOCATED ON AN APPROXIMATELY 5.4-ACRE SITE IN THE CITY OF NOWI, OAKLAND COUNTY, MICHIGAN. THE DEVELOPMENT WILL CONSIST OF 44 SINGLE-FAMILY LOTS, A WALKING TRAIL, AND A PLAYGROUND. THE DEVELOPMENT IS PLANNED TO BE CONSTRUCTED IN ONE PHASE BEGINNING IN SUMMER OF 2023.

FIRE DEPARTMENT NOTES

- ALL FIRE TREATMENT AND WATER SUPPLY SHALL BE PROVIDED AND IN SERVICE FROM THE COMMUNITY WATER MAINS.
- ALL LOTS SHALL BE PAID AND CAPABLE OF SUPPORTING 35 TONS PER LOT.
- CONSTRUCTION SHALL BE PAID AND CAPABLE OF SUPPORTING 35 TONS PER LOT.
- CONTRACTING BACKGROUND.
- CONTRACTING BACKGROUND.



DEVELOPMENT MAP
SCALE: 1" = 200' (FEET)



SITE INDEX
1" = 200' (FEET)

- SHEET INDEX**
- 01 COVER SHEET
 - 02 EXISTING CONDITIONS
 - 03 TREE LIST
 - 04 MODELING ANALYSIS PLAN
 - 05 LAYOUT PLAN
 - 06 CONCEPTUAL LANDSCAPE PLAN
 - 07 STORM WATER MANAGEMENT PLAN
 - 08 PRELIMINARY UTILITIES & FLOOD PLANS
 - 09 LANDSCAPE PLAN
 - 10-13 SECONDARY AND TERTIARY LANDSCAPE DETAILS



CITY OF NOWI ZONING MAP
NO SCALE



CITY FUTURE LAND USE MAP
NO SCALE

GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN THE PWD AND CONTRACT.
- THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE STATE COMMISSION FOR OAKLAND COUNTY FOR ANY AND ALL PLACEMENT WORKS, SERVICE CONTROL, SIGNAGE AND PARKING SIGNS SHALL COMPLY WITH THE DESIGN AND PLACEMENT REQUIREMENTS OF THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN THE PWD AND CONTRACT.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN THE PWD AND CONTRACT.



811
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 www.michigan.gov/811

ATWELL
 866.540.4300
 311 N. MAIN STREET
 ANN ARBOR, MI 48106
 www.atwell-engineers.com

SECTION 31
 TOWN 01 NORTH, RANGE 08 EAST
 CITY OF NOWI
 OAKLAND COUNTY, MICHIGAN

TOLL BROTHERS
 PARC VISTA BY TOLL BROTHERS
 RESIDENTIAL UNIT DEVELOPMENT PLAN
 COVER SHEET

DATE: FEBRUARY 04, 2022
 2022-02-04 09:57
 8022-02-26 09:57
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 SCALE: 1" = 200' FEET
 SHEET NO. 01

LEGEND

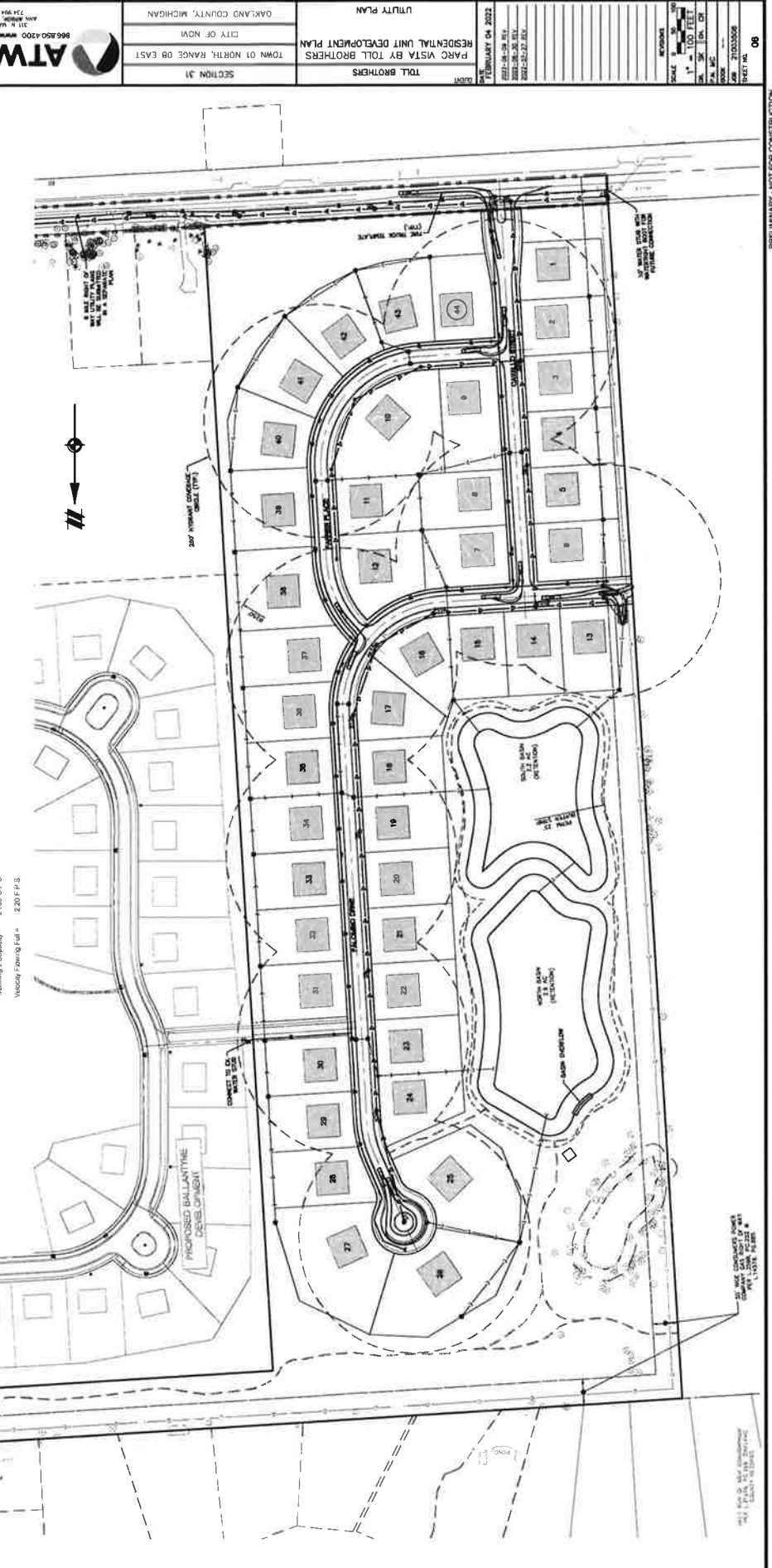
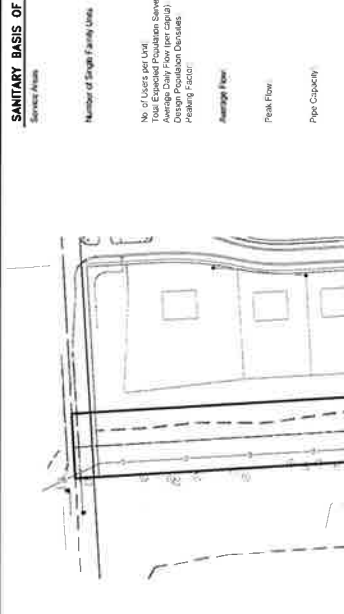
PROPOSED UTILITY	PROPOSED 12" WATER MAIN
PROPOSED 12" WATER MAIN	PROPOSED 12" SANITARY SEWER
PROPOSED 12" SANITARY SEWER	PROPOSED 12" GAS
PROPOSED 12" GAS	PROPOSED 12" FIBER OPTIC
PROPOSED 12" FIBER OPTIC	PROPOSED 12" CABLE TV
PROPOSED 12" CABLE TV	PROPOSED 12" TELEPHONE
PROPOSED 12" TELEPHONE	PROPOSED 12" POWER
PROPOSED 12" POWER	PROPOSED 12" LIGHTNING PROTECTION
PROPOSED 12" LIGHTNING PROTECTION	PROPOSED 12" RAINWATER HARVESTING
PROPOSED 12" RAINWATER HARVESTING	PROPOSED 12" SLOTTED DRAINAGE
PROPOSED 12" SLOTTED DRAINAGE	PROPOSED 12" CURB
PROPOSED 12" CURB	PROPOSED 12" SIDEWALK
PROPOSED 12" SIDEWALK	PROPOSED 12" DRIVEWAY
PROPOSED 12" DRIVEWAY	PROPOSED 12" PAVEMENT
PROPOSED 12" PAVEMENT	PROPOSED 12" LANDSCAPE
PROPOSED 12" LANDSCAPE	PROPOSED 12" TREES
PROPOSED 12" TREES	PROPOSED 12" SHRUBS
PROPOSED 12" SHRUBS	PROPOSED 12" GRASS
PROPOSED 12" GRASS	PROPOSED 12" ROCK
PROPOSED 12" ROCK	PROPOSED 12" SAND
PROPOSED 12" SAND	PROPOSED 12" GRAVEL
PROPOSED 12" GRAVEL	PROPOSED 12" ASPHALT
PROPOSED 12" ASPHALT	PROPOSED 12" CONCRETE
PROPOSED 12" CONCRETE	PROPOSED 12" BRICK
PROPOSED 12" BRICK	PROPOSED 12" TILE
PROPOSED 12" TILE	PROPOSED 12" STONE
PROPOSED 12" STONE	PROPOSED 12" PLASTER
PROPOSED 12" PLASTER	PROPOSED 12" GYPSUM
PROPOSED 12" GYPSUM	PROPOSED 12" MORTAR
PROPOSED 12" MORTAR	PROPOSED 12" PAINT
PROPOSED 12" PAINT	PROPOSED 12" STAIN
PROPOSED 12" STAIN	PROPOSED 12" VARNISH
PROPOSED 12" VARNISH	PROPOSED 12" POLISH
PROPOSED 12" POLISH	PROPOSED 12" WAX
PROPOSED 12" WAX	PROPOSED 12" OIL
PROPOSED 12" OIL	PROPOSED 12" GREASE
PROPOSED 12" GREASE	PROPOSED 12" SOAP
PROPOSED 12" SOAP	PROPOSED 12" DETERGENT
PROPOSED 12" DETERGENT	PROPOSED 12" BLEACH
PROPOSED 12" BLEACH	PROPOSED 12" DISINFECTANT
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PROPOSED 12" ANTI-PARASITIC	PROPOSED 12" ANTI-CANCER
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PROPOSED 12" ANTI-AGING	PROPOSED 12" ANTI-DEMENTIA
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PROPOSED 12" ANTI-TAU	PROPOSED 12" ANTI-UPSILON
PROPOSED 12" ANTI-UPSILON	PROPOSED 12" ANTI-PHI
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PROPOSED 12" ANTI-PHY	PROPOSED 12" ANTI-PSY
PROPOSED 12" ANTI-PSY	PROPOSED 12" ANTI-OMEGA

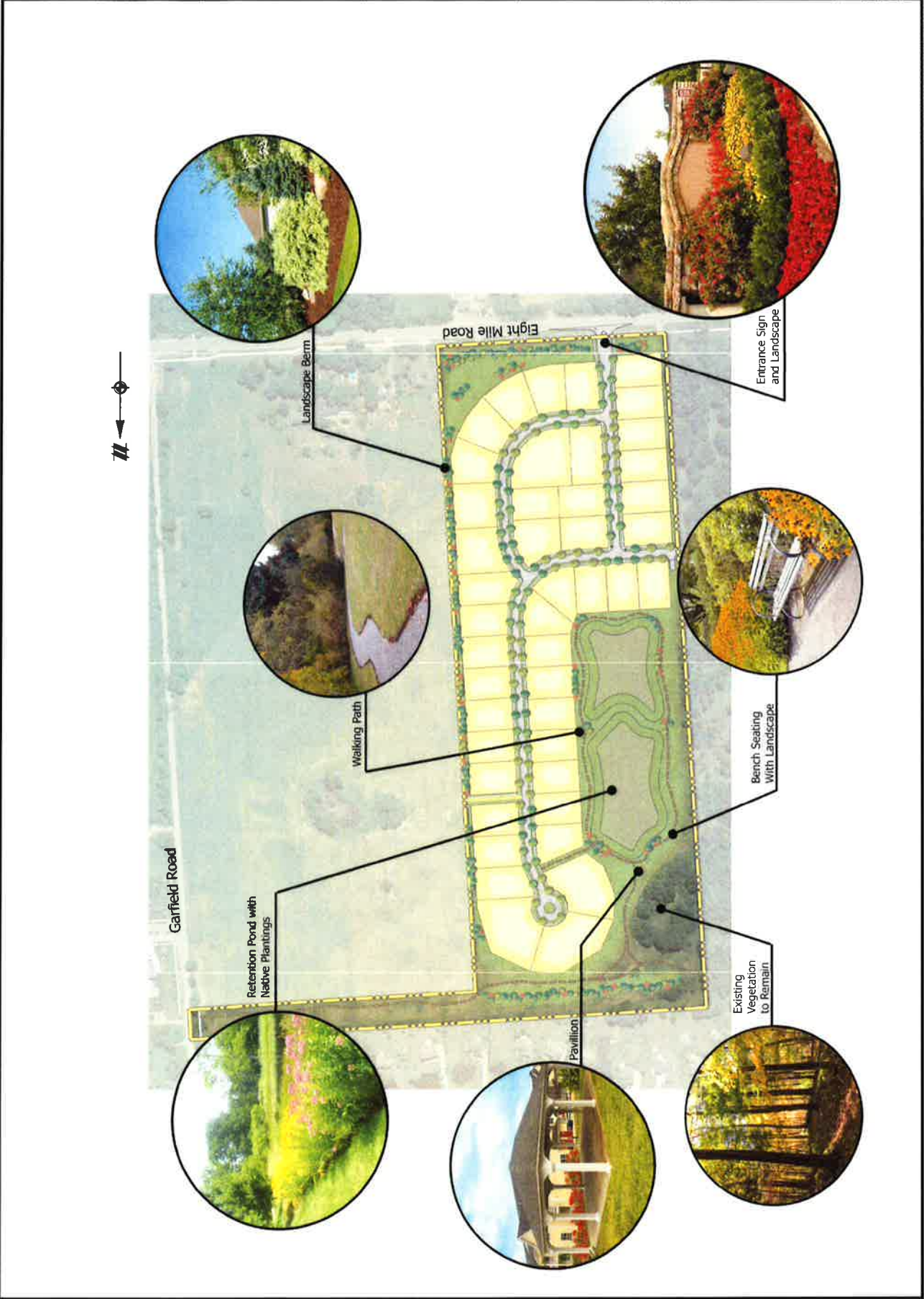
- UTILITY NOTES**
1. THE OCCUPANCY WILL BE SERVED BY PUBLIC WATER AND SANITARY SEWER. THE OCCUPANCY WILL BE SERVED BY PUBLIC WATER AND SANITARY SEWER. THE OCCUPANCY WILL BE SERVED BY PUBLIC WATER AND SANITARY SEWER. THE OCCUPANCY WILL BE SERVED BY PUBLIC WATER AND SANITARY SEWER.
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 3. IT IS ASSUMED THAT THE BALDWIN PROJECT SUBJECT TO THIS PLAN WILL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF NOVA STANDARDS AS SET FORTH IN THE CITY OF NOVA SUBMITTALS.
 4. THE RIGHT OF WAY UTILITY POINTS WILL BE SUBMITTED IN A SEPARATE PLAN.



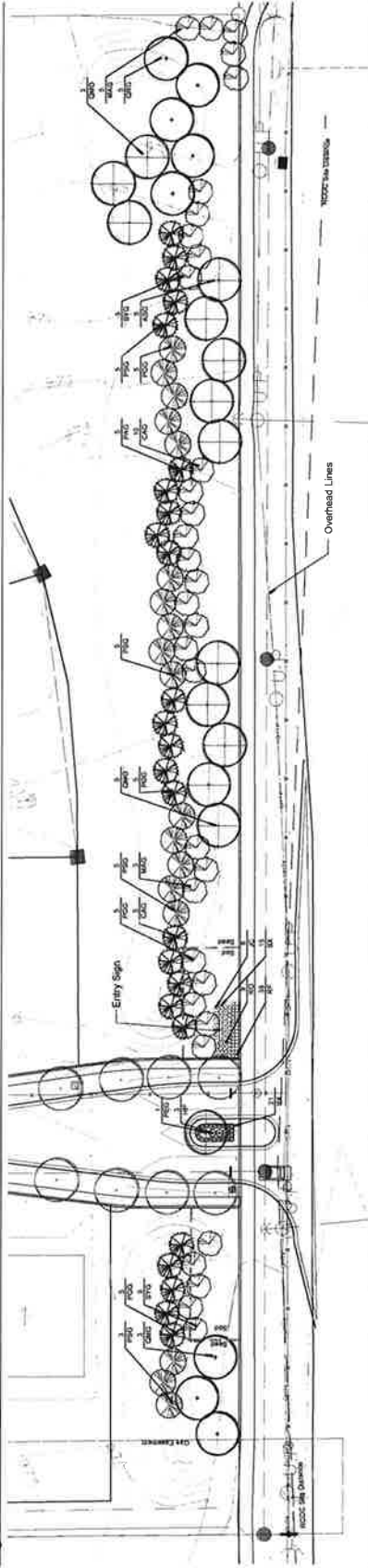
WATER BASIS OF DESIGN

City Code: 54.8 Water
City Code: 54.8 Sewer
City Code: 54.8 Gas
City Code: 54.8 Cable TV
City Code: 54.8 Telephone
City Code: 54.8 Power
City Code: 54.8 Lightning Protection
City Code: 54.8 Rainwater Harvesting
City Code: 54.8 Slotted Drainage
City Code: 54.8 Curb
City Code: 54.8 Sidewalk
City Code: 54.8 Driveway
City Code: 54.8 Pavement
City Code: 54.8 Landscape
City Code: 54.8 Trees
City Code: 54.8 Shrubs
City Code: 54.8 Grass
City Code: 54.8 Rock
City Code: 54.8 Sand
City Code: 54.8 Gravel
City Code: 54.8 Asphalt
City Code: 54.8 Concrete
City Code: 54.8 Brick
City Code: 54.8 Tile
City Code: 54.8 Stone
City Code: 54.8 Plaster
City Code: 54.8 Gypsum
City Code: 54.8 Mortar
City Code: 54.8 Paint
City Code: 54.8 Stain
City Code: 54.8 Varnish
City Code: 54.8 Polish
City Code: 54.8 Wax
City Code: 54.8 Oil
City Code: 54.8 Grease
City Code: 54.8 Soap
City Code: 54.8 Detergent
City Code: 54.8 Bleach
City Code: 54.8 Disinfectant
City Code: 54.8 Antiseptic
City Code: 54.8 Anti-Biotic
City Code: 54.8 Anti-Viral
City Code: 54.8 Anti-Fungal
City Code: 54.8 Anti-Parasitic
City Code: 54.8 Anti-Cancer
City Code: 54.8 Anti-Aging
City Code: 54.8 Anti-Dementia
City Code: 54.8 Anti-Alzheimer
City Code: 54.8 Anti-Parkinson
City Code: 54.8 Anti-Huntington
City Code: 54.8 Anti-Tau
City Code: 54.8 Anti-Beta
City Code: 54.8 Anti-Alpha
City Code: 54.8 Anti-Gamma
City Code: 54.8 Anti-Delta
City Code: 54.8 Anti-Epsilon
City Code: 54.8 Anti-Zeta
City Code: 54.8 Anti-Theta
City Code: 54.8 Anti-Iota
City Code: 54.8 Anti-Kappa
City Code: 54.8 Anti-Lambda
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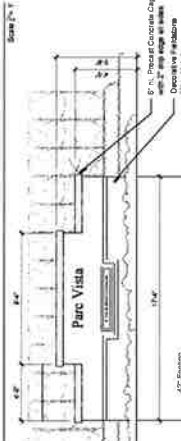
Eight Mile Greenbelt



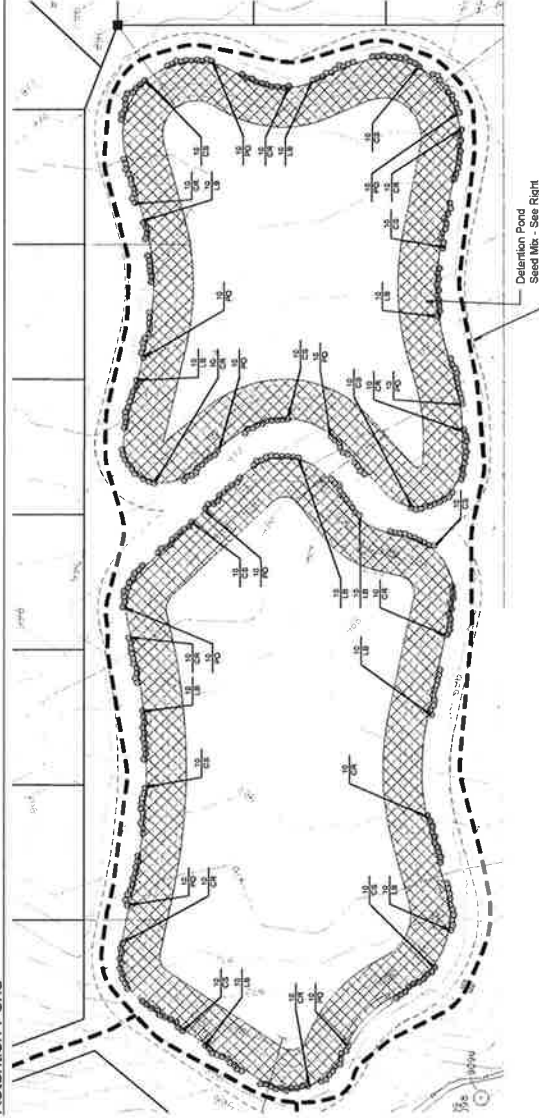
Plant List - This Sheet

Code	Plant Name	Quantity	Notes
100	Maple	100	100' x 100'
101	Oak	100	100' x 100'
102	Red Maple	100	100' x 100'
103	White Oak	100	100' x 100'
104	Black Oak	100	100' x 100'
105	Red Oak	100	100' x 100'
106	White Pine	100	100' x 100'
107	Black Pine	100	100' x 100'
108	Red Pine	100	100' x 100'
109	White Birch	100	100' x 100'
110	Black Birch	100	100' x 100'
111	Red Birch	100	100' x 100'
112	White Spruce	100	100' x 100'
113	Black Spruce	100	100' x 100'
114	Red Spruce	100	100' x 100'
115	White Fir	100	100' x 100'
116	Black Fir	100	100' x 100'
117	Red Fir	100	100' x 100'
118	White Cedar	100	100' x 100'
119	Black Cedar	100	100' x 100'
120	Red Cedar	100	100' x 100'

Entry Sign



Retention Pond



Landscape Summary

Category	Item	Quantity	Notes
Greenbelt Plantings	8771 L	60 L	
	60 L	60 L	
	Net Forage	20 L	Tree (817 / 40)
	Sub-Canopy	21 Trees	Tree (817 / 25)
Garfield	115 L	115 L	
	115 L	115 L	
	Net Forage	48 Trees	Tree (115 / 25)
	Sub-Canopy	5 Trees	Tree (115 / 25)
Retention Pond	6771 L	6771 L	
	6771 L	6771 L	
	Net Forage	22 Trees	Tree (79 / 35)
	Sub-Canopy	1 Trees	Tree (79 / 35)
Garfield	115 L	115 L	
	115 L	115 L	
	Net Forage	15 Trees	Tree (65 / 25)
	Sub-Canopy	2 Trees	Tree (65 / 25)
Retention Pond	6771 L	6771 L	
	6771 L	6771 L	
	Net Forage	2 Trees	Tree (65 / 25)
	Sub-Canopy	1 Trees	Tree (65 / 25)



Seal:



Title: **Greenbelt and Entry**

Project: **Parc Vista**
 Novi, Michigan

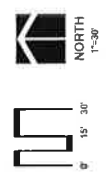
Prepared for: **To: Bobra**
 24000 Town Center Drive, Suite 200
 Novi, Michigan 48375

Revision: **Issued:**
 February 8, 2022
 July 1, 2022

963 L
 674 L (893 x 70%)
 675 L (70%)

Job Number: **2021-08**

Drawn By: **Checked By:**



Sheet No.

L-2



