AGENDA
PLANNING COMMISSION PUBLIC HEARING/REGULAR MEETING
CITY OF FARMINGTON HILLS
AUGUST 21, 2025 @ 7:30 P.M.
FARMINGTON HILLS CITY HALL – CITY COUNCIL CHAMBER
31555 W. ELEVEN MILE ROAD, FARMINGTON HILLS, MICHIGAN 48336
Cable TV: Spectrum – Channel 203; AT&T – Channel 99
YouTube Channel: https://www.youtube.com/user/FHChannel8
www.fhgov.com (248) 871-2540

1. Call Meeting to Order
2. Roll Call
3. Approval of Agenda

4. Regular Meeting

A. SITE PLAN 57-5-2025

LOCATION:	31015 Grand River Ave.
PARCEL I.D.:	22-23-35-101-005
PROPOSAL:	New or used car salesroom, showroom or office when the main use is carried on within a building with open air display of vehicles as accessory in B-3, General Business District
ACTION REQUESTED:	Site Plan approval
APPLICANT:	Designhaus Architecture
OWNER:	Toyco Collision LLC

B. SITE PLAN 59-7-2025

LOCATION:	33474 Eight Mile Rd.
PARCEL I.D.:	22-23-33-477-022
PROPOSAL:	Construct a new medical dentistry office building on a vacant lot in B-3, General Business District
ACTION REQUESTED:	Site Plan approval
APPLICANT:	Iden Kalabat
OWNER:	HK Holdings, LLC

C. PLANNED UNIT DEVELOPMENT QUALIFICATION 1, 2025

LOCATION:	30275 Thirteen Mile Rd.
PARCEL I.D.:	22-23-11-126-027
PROPOSAL:	Construct six (6) new ranch-style, attached dwelling units in OS-1, Office Service District
ACTION REQUESTED:	Planning Commission approval
APPLICANT:	Schafer Development, LLC
OWNER:	Metropolitan Detroit Baptist Manor

D. CLUSTER SITE PLAN 54-4-2025

LOCATION:	South side of Folsom Road, between Parker Avenue and Lundy Drive,
PARCEL I.D.:	22-23-34-252-019, 020, 021, 022, 023, 024, 025, 026, 027, 028, 030, 031, 032, 033, 034, and 043
PROPOSAL:	Construct thirty-three (33) single-family detached units within RA-3, One Family Residential District
ACTION REQUESTED:	Set for Planning Commission Public Hearing

APPLICANT:	Forest at Riverwalk Development, LLC
OWNER:	Forest at Riverwalk Development, LLC

E. AMEND PLANNED UNIT DEVELOPMENT 2, 2023, INCLUDING SITE PLAN 67-9-2023

LOCATION:	30825 and 31361 Orchard Lake Road
PARCEL I.D.:	22-23-03-226-027 and 028
PROPOSAL:	Redevelop shopping center in B-2, Community Business Zoning District
ACTION REQUESTED:	Set for Planning Commission Public Hearing
APPLICANT:	Frank Jarbou (formerly Timothy Collier)
OWNER:	Hunter's Square Development, LLC

F. AMEND PLANNED UNIT DEVELOPMENT 4, 2000

LOCATION:	32555 Northwestern Hwy
PARCEL I.D.:	22-23-02-176-068
PROPOSAL:	Use existing building as a catering kitchen, storage, and private event space with new addition and changes to landscape features in B-3, General Business District and RA-4, One-Family Residential District.
ACTION REQUESTED:	Set for Planning Commission Public Hearing
APPLICANT:	Zack Sklar
OWNER:	CEC Farmington, LLC

G. ZONING TEXT AMENDMENT 1, 2025

CHAPTER OF CODE:	34, Zoning Ordinance
PROPOSED AMENDMENT:	Amend Zoning Ordinance to add new definitions and Public Art requirements
ACTION REQUESTED:	Set for Planning Commission Public Hearing
SECTION:	Amend section 34-2.2 and add Section 34.5.20

5. Approval of Minutes July 17, 2025, Regular Meeting

6. Public Comment
7. Commissioner/Staff Comments
8. Adjournment

Respectfully Submitted,

Kristen Aspinall, Planning Commission Secretary

Staff Contact:

Diane Mulville-Friel
Interim City Planner
Planning and Community Development Department
(248) 871-2540
dmulville-friel@fhgov.com

NOTE: Anyone planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) is asked to contact the City Clerk's Office at (248) 871-2410 at least two (2) business days prior to the meeting, wherein arrangements/accommodations will be made. Thank you.

August 7, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Site Plan Review

Case:	SP 57-5-2025
Site:	31015 Grand River Ave
Applicant:	Helen Colston
Plan Date:	05/08/2025 (Revised 07/09/2025)
Zoning:	B-3 General Business District

We have completed a review of the application for site plan approval and a summary of our findings is below. Items in **bold** require specific action. Items in *italics* can be addressed administratively.



SUMMARY OF FINDINGS

Findings requiring administrative corrections:

- The site data chart on Sheet AS1.1 incorrectly identifies this application as a proposed PUD. A PUD application was not submitted. This error should be corrected. The applicant shall provide dimensions for landscaped areas to determine compliance with the front yard open space requirement.
- Both frontages include a landscape area, but the extent of the landscape area is not labeled and appears to be smaller than 10'. This is an existing condition. Update to include labels.
- A dumpster meeting the requirements of 34-5.1.3.D is required.
- A floor plan is required to determine parking calculations and review compliance.
- It should be noted that the proposed arrangement of parking is disjointed, resulted in a fractured circulation pattern. This is especially notable in the rear at the angled parking. This may be acceptable if these spaces are not intended for public use, but this is unclear from the information presented.
- Insufficient maneuvering between westernmost access point and parking spaces (not labeled)
- Maneuvering appears insufficient between parking and building along the frontage.
- Parking spaces vary in size and dimensions are not labeled. In many circumstances parking spaces do not meet the dimensional requirements of the ordinance.
- 4 barrier free spaces are required, including one van accessible space. Only one was provided.
- Corner clearance triangles should be indicated on the plan. The building canopy appears to potentially conflict with the driveway clearance area, but this is an existing condition.
- The applicant shall label the species information for all landscaping used towards the planting requirements on the landscape plan on sheet AS1.1 that aligns with the inventory provided.
- The paved area was not provided to determine whether existing plantings are compliant.
- The westernmost block of parking facing Grand River is insufficiently screened.
- A hedge wall of shrubs was not included in the planter box
- Notes regarding lighting and operating hours must be added in accordance with item 14 in this report
- The height of light poles was not provided.
- Building elevation photometrics are required demonstrating illumination of building wall
- The average to minimum illumination ratio was not provided
- No pedestrian connections to the public sidewalk are proposed at this time and should be added.

Findings requiring additional action:

- The Planning Commission shall verify whether any display vehicles are proposed on the lot.
- The Planning Commission shall consider whether the front yard open space may remain nonconforming. It should be noted that there is front yard open space in the right-of-way that does not belong to the property.
- The parking setback is less than 10' from the property line, but this is an existing condition. The PC may wish to discuss whether this nonconforming characteristic may remain. It should be noted that there is front yard open space in the right-of-way that does not belong to the property.

- The illumination exceeds 0.3 fc at the driveway. The Planning Commission may modify the maximum light level at the property line if deemed necessary to protect public safety. Total hardscape needed to calculate maximum lumens was not provided.

Existing Conditions

1. **Zoning.** The parcel is zoned B-3 General Business District. *Note: the site data chart on Sheet AS1.1 incorrectly identifies this application as a proposed PUD. A PUD application was not submitted. This error should be corrected.*
2. **Existing site.** The site is approximately 3.54 acres and is a triangle-shaped lot at the at the northwest corner of Orchard Lake Road and Grand River Avenue. It is developed with a 18,738 SF 1-story building and associated parking.
3. **Adjacent properties.**

Direction	Zoning	Land Use	Future Land Use Category
North	City of Farmington	Retail	-
East	B-3	Vacant	Grand River Corridor
South	-	M-5	-
West	RC-3	Vacant	M-5



4. **Site configuration and access.** The plan proposes to maintain two existing curb cuts on Grand River Avenue and one existing curb cut on Orchard Lake Road. The easternmost curb cut on Grand River Avenue is proposed to be closed.

Site Plan & Use:

1. **Proposed.** The applicant is proposing to renovate an existing building to function as New/Used Car Sales,. The plans include an updated paved parking area. The application states that this is for online sales and the plans do not show the location of any outdoor display vehicles. **The planning commission shall verify whether any display vehicles are proposed on the lot.**

   "New or used motor vehicle salesroom, showroom or office when the principal use is carried on within a building and open air display of vehicles is accessory" is designated as a principal permitted use in the B-3 Zoning District.

2. **Dimensional Standards (B-3 district).**

   Note: Setbacks should be identified on plans.

Item	Required	Proposed/Comments
Front Yard Setback (34-3.1.25.E.)	25ft ft min.	15'11" to building; additional overhang in setback - Existing nonconformity
Front yard open space (34-3.1.25.E)	50% Required	**This is an existing nonconformity. The planning commission may wish to discuss whether this nonconforming characteristic shall remain.** *The applicant shall provide dimensions for landscaped areas. It should be noted that there is front yard open space in the right-of-way that does not belong to the property.*
Yard landscaping (34-3.5.2.A)	For all uses except one-family detached residential units, landscaping of all yards abutting a street shall be provided	See landscaping comments below.
Setback adjacent to Side Street (34-3.1.25.E.)	25 ft min.	75'61"
Side yard setback (34-3.1.25.E.)	10 ft min.	80'3"
Rear yard setback (34-3.1.25.E.)	20 ft min.	Exceeds 20' (no measuring line)
Building Height (34-3.1.25.E.)	50 ft/3 stories max	Not provided/ no change
Parking Setback (34-3.5.J)	10 feet required	**Less than 10' provided; existing condition. PC may**

		wish to discuss whether this nonconforming characteristic may remain.
Loading space (34-3.5.2.N)	1,401-20,000 SF: 1 space required	Compliant
Rooftop equipment (34-3.5.2.U.)	Rooftop equipment shall be screened in accordance with Section 34-5.17.	Compliant; ground-mounted
Landscape area abutting street or freeway (34-3.5.2.V.)	A landscaped area not less than ten (10) feet deep	*Both frontages include a landscape area, but the extent of the landscape area is not labeled and appears to be smaller than 10'. Existing condition.*

3. **Applicable Use Standards for B-3 (34-3.11).**
    1. Marginal access drives: This site is not connected to a marginal access drive. It is an existing condition.
4. **Dumpster (34-5.1.3.D).** None provided. *Dumpster required.*

Mechanical Equipment (34-5.1.4.D). Any new mechanical equipment must be properly located and screened. *Compliant; ground-mounted*

5. **Minimum parking (34-5.2.11.D.iii).**

Use	Square Footage	Requirement	Provided
Motor vehicle sales and service	Floor plan not provided Total building is 18,738 sf	One (1) for each one hundred (100) square feet of usable floor space of sales room	88 spaces proposed. No changes from existing parking lot. *Floor plan required to determine parking calculations and review compliance.*

6. **Off-street parking dimensions (34-5.3.3.A & B.).** *In addition to the comments below, it should be noted that the proposed arrangement of parking is disjointed, resulting in a fractured circulation pattern. This is especially notable in the rear at the angled parking. This may be acceptable if these spaces are not intended for public use, but this is unclear from the information presented.*

Item	Required	Proposed/Comments
Maneuvering lane width	75- 90 degree angle- 20 ft.	*Not labeled -Insufficient maneuvering between westernmost access*

		point and parking spaces *-Maneuvering appears insufficient between parking and building along the frontage.*
	54 to 74 degree angle- 15 ft	*Not Labeled.*
Parking space width	75 to 90 degree angle- 9 ft.	*Not labeled, varies*
	54 to 74 degree angle- 8 ft 6 in	
Parking space length	20 ft (may include 2' overhang)	*Not labeled, varies*

7. **Barrier Free Parking.** One space proposed (not van accessible). *4 spaces are required, including one van accessible space.*
8. **Acceleration-Deceleration-Passing Lanes (34-5.6.2.)** Driveways providing ingress and egress to all three-lane paved major or secondary thoroughfares shall be provided with paved acceleration and deceleration lanes. If in the opinion of the director of public services no useful purpose would be served or if unusual difficulty would be encountered by reason of grade changes, intersections, bridges, or other land restrictions, the director may waive or modify the requirements of this section. Potential lanes are shown on SP-03. *We defer to engineering to address this issue.*
9. **Corner Clearance (34-5.10)**. No change to the existing. *Corner clearance triangles should be indicated on the plan. The building canopy appears to potentially conflict with the driveway clearance area, but this is an existing condition.*
10. **Landscape Development (34-5.14).**

Item	Required			Proposed/Comments
Landscape plan required (34-5.14.b.)	A detailed plan with information on existing and proposed trees			*The applicant shall label the species information for all landscaping used towards the planting requirements on the landscape plan on sheet AS1.1 that aligns with the inventory provided. The paved area was not provided to determine whether existing plantings are compliant.*
Minimum distance from the property line (34-5.14.C.ii)	4 ft from the property line for trees and large shrubs			No changes to landscaping proposed
Minimum size and spacing requirements (34-5.14.F)	**Size**	**Center to center distance (max)**		No changes to landscaping proposed
	(Height/width)	**groupings**	**rows**	
• Evergreen Trees	8 ft. height	20 ft.	12 ft.	-

• Narrow Evergreen Trees	5 ft. height	10 ft.	5 ft.	-
• Large Shrubs	30 in. height	10 ft.	5 ft.	-
• Small Shrubs	24 in. width	4 ft.	4 ft.	-
• Large Deciduous	3 in. caliper	30 ft.	-	-
• Small deciduous trees	2 in. caliper	15 ft.	-	-
• Hedge shrubs	24 in. height	3 ft.	3 ft.	-
Canopy Trees	Shall be large deciduous. PC may permit large evergreens			Site includes a mix of existing tree species
Minimum number of parking lot trees (34-5.14.4.C)	1 per every 2,800 square feet of paved surface area			*Paved area not provided. No additional landscaping proposed.*
Parking lot screening from public thoroughfare (34-5.14.5)	A planted hedge of small shrubs, or A masonry wall or berm of 2 feet high			*Although there is a planter box along the perimeter of the site, shrubs were not provided on the plans. Furthermore, this does not extend to the westernmost parking area.*
Wall or Berm (34-5.15)	Required when abutting a residential district. (See 34-5.15)			No abutting residential.
Tree replacement (34-5.18)	No trees proposed for removal.			N/A

11. **Lighting.**

Operation hours (34-5.16.3.B.v.). *The following notes must be added to or addressed on the plan; it is unclear from the existing plans whether these standards are met. The applicant should clarify as to how these standards are met.*

i. Exterior lighting shall not operate during daylight hours.

ii. Building façade and landscape lighting shall be turned off between midnight or one hour after close of business, whichever is later, and 6:00am or opening, whichever is earlier.

iii. All other exterior lighting shall be reduced to no greater than 70% of maximum from midnight or one hour after close of business, whichever is later, and 6:00am or opening, whichever is earlier.

iv. Use of occupancy sensors to turn off or reduce lighting within 15 minutes of zero occupancy is recommended.

a. Illumination Levels

Item	Required	Proposed/Comments
Maximum height (34-5.16.3.A.)	30 feet maximum	*Not provided*
Building Lighting (34-5.16.3.A. iii.)	Specifications for all existing and proposed lighting,	*Height of fixtures and hours of operation not provided. Building*

Item	Required	Proposed/Comments
	elevation drawings showing fixtures and portions of wall to be illuminated	*elevation photometrics not shown.*
Average to minimum illumination ratio (34-5.16.3.C)	4:1	*Not provided*
Maximum illumination at the property line	0.3 fc	**Exceeds .3 fc at the driveway. The Planning Commission may modify the maximum light level at the property line if deemed necessary to protect public safety.**
Illumination Levels-Hardscape areas (e.g., parking areas, sidewalks)	2.5 lumens per sq ft of hardscape area maximum	*Total hardscape not provided*
Illumination Levels Building Entrances – within 20 ft of door	2,000 lumens per door maximum	Compliant

12. **Additional lighting standards for sites abutting a residential district (Sec. 34-5.16.3.B.iii.)**

    a. **Pedestrian Connection (Sec. 34-5.19).** *No pedestrian connections to the public sidewalk are proposed at this time.*

We are available to answer questions.

Respectfully,
Giffels Webster

Joe Tangari, AICP
Principal Planner

Julia Upfal, AICP
Senior Planner

FARMINGTON HILLS Michigan

DEPARTMENT OF PUBLIC SERVICES
JACB RUSHLOW, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: July 28, 2025

TO: Charmaine Kettler-Schmult, Director of Community Services

FROM: James Cubera, City Engineer

SUBJECT: REVISED Huntington Auto Group New or Used Car Salesroom
SA #: 57-05-2025
PJ #: 35-25-126
31015 Grand River Avenue
22-23-35-101-005

This office has performed a preliminary review of the above referenced revised site plan submitted to the Engineering Division by the Planning Department on July 23, 2025. Our preliminary comments remain as called out in our memo dated June 18, 2025, with the following notations:

1. The plan now shows clearly the removal of the east driveway. This is appropriate.

2. The plan now shows the sidewalk extension on Orchard Lake Road from Grand River Avenue to the Orchard Lake Road curb cut. This also is appropriate.

3. The plans need to identify the onsite water service.

4. If the existing sanitary sewer lead is being considered for re-use it must be televised, and any infiltration/inflow issues or deficiencies must be corrected prior to any construction or occupancy permit being issued. The video of this televising also needs to be provided to the City for review.

5. The plan implies the use of the existing parking lot “as is”. A 6” storm sewer is identified onsite discharging to the west. It must be televised and any deficiencies corrected. The video of this piped system needs to be provided to the City for review. In addition, the outlet must be verified as being free and clear, non-erodible and operational.

6. It is suggested that the proponent and their engineer meet with the City engineering staff in person or virtually to discuss this site in further detail.

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FIRE

FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

Date: July 29, 2025

To: Planning Commission

From: Dennis Firment, Staff Lieutenant

Subject: SP 57-5-2025 (31015 Grand River)

The Fire Department has no objection to approval contingent upon compliance with the following:

1. Chapter 12-11(1) Site Access; site must be designed to accommodate fire apparatus with a fifty-foot (50') turning radius.

2. Chapter 12-11 (2) Hydrant Coverage.

3. Fire lanes shall be maintained and strictly enforced.

4. Building shall comply with the International Fire Code, Michigan Building Code, NFPA Standards, and State regulatory requirements.

5. The minimum clearance between the finished roadway surface and any overhead obstruction shall be thirteen feet, six inches (13′6″).

6. Security gates shall have an approved means of emergency operation in accordance with the International Fire Code.

7. Final Occupancy inspection dated 1/15/2021 identified multiple safety violations. Previous tenant was never granted Certificated of Occupancy. Fire Department recommendation for Certificate of Occupancy will be contingent upon these items being resolved.

Dennis Firment, Staff Lieutenant

DF/al

SP 5.1.5.2025

Received
JUN 02 2025
City of Farmington Hills
Planning Dept.

HUNTINGTON AUTO GROUP

31015 GRAND RIVER AVE.
FARMINGTON HILLS, MI 48336

STATEMENT OF SELECTED DESIGN PROFESSIONAL

THESE CONSTRUCTION DOCUMENTS WERE PREPARED FOR COMPLIANCE WITH THE MICHIGAN CONSTRUCTION CODES IN EFFECT AT THE TIME OF PERMIT SUBMITTAL. ALL ENGINEERS, CONTRACTORS AND SUPPLIERS INVOLVED WITH THIS PROJECT SHALL COMPLY WITH THE SAME CODES ISSUED AND APPROVED CODE MODIFICATIONS AND/OR MUNICIPAL CONSTRUCTION BOARDS OF APPEALS RULINGS AND WHENEVER REQUIRED SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS CLEARLY DESCRIBING COMPLIANCE TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR REVIEW AND APPROVAL.

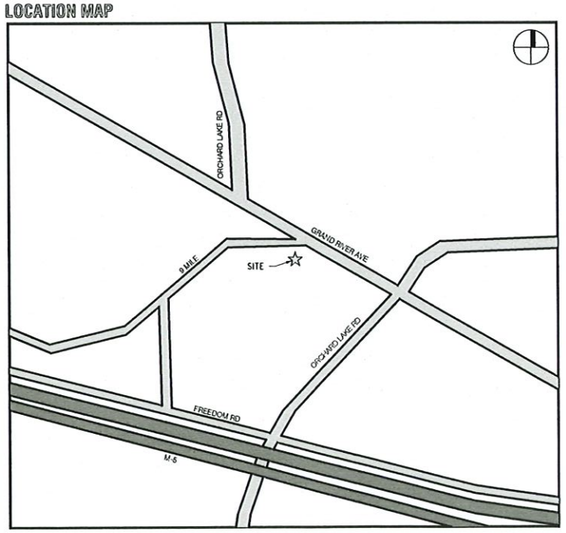
REGISTERED DESIGN PROFESSIONAL IN CHARGE:
PETER STUHLREYER, A.I.A.
MICHIGAN IDENTIFICATION # 44668
DESIGNHAUS ARCHITECTURE

PROJECT TEAM

OWNER
HELEN COLSTON
HUNTINGTON AUTO GROUP
HUNTINGTONAUTOGROUP@GMAIL.COM

ARCHITECT
DESIGNHAUS ARCHITECTURE
3300 AUBURN RD.
AUBURN HILLS, MI 48326
T: 248 601 4422
F: 248 453 5654
PROJECT MANAGER: HUNTER GALBRAITH
PROJECT ARCHITECT:
PETER STUHLREYER, A.I.A

LOCATION MAP



INDEX OF DRAWINGS

SHEET NO:	DRAWING NAME	25.05.08 SITE PLAN REVIEW
GENERAL		
G1.1	Title Sheet & Index	☐
SITE & LANDSCAPE		
1of1	Survey	☐
1of1	Site Photometric	☐
AS1.1	Architectural Site Plan	☐
AS1.2	Tree Plan	☐

SHEET NO:	DRAWING NAME	25.05.08 SITE PLAN REVIEW

DESIGNHAUS ARCHITECTURE EST 1998
3300 AUBURN RD. SUITE 300
AUBURN HILLS, MI 48326
T:248.601.4422 F:248.453.5854
WWW.DESIGNHAUS.COM
INFO@DESIGNHAUS.COM

ISSUANCE	DATE
SITE PLAN REVIEW	25.05.08

PETER M. STUHLREYER ARCHITECT

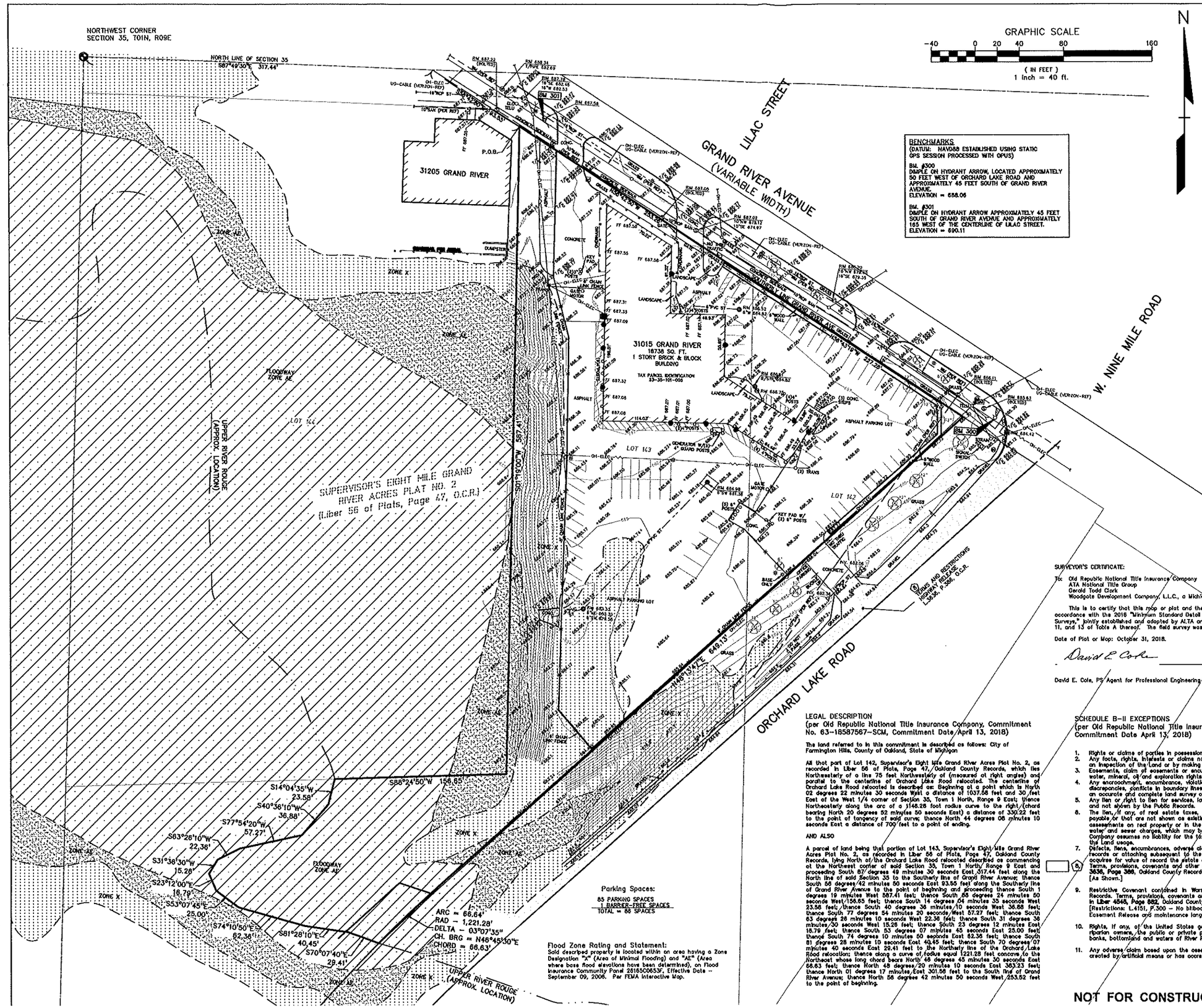
HUNTINGTON AUTO GROUP
31015 GRAND RIVER AVE.
FARMINGTON HILLS, MI 48336

Title Sheet & Index

025060

G1.1

G1.1 Title Sheet & Index.dwg
5/7/2025
Designhaus

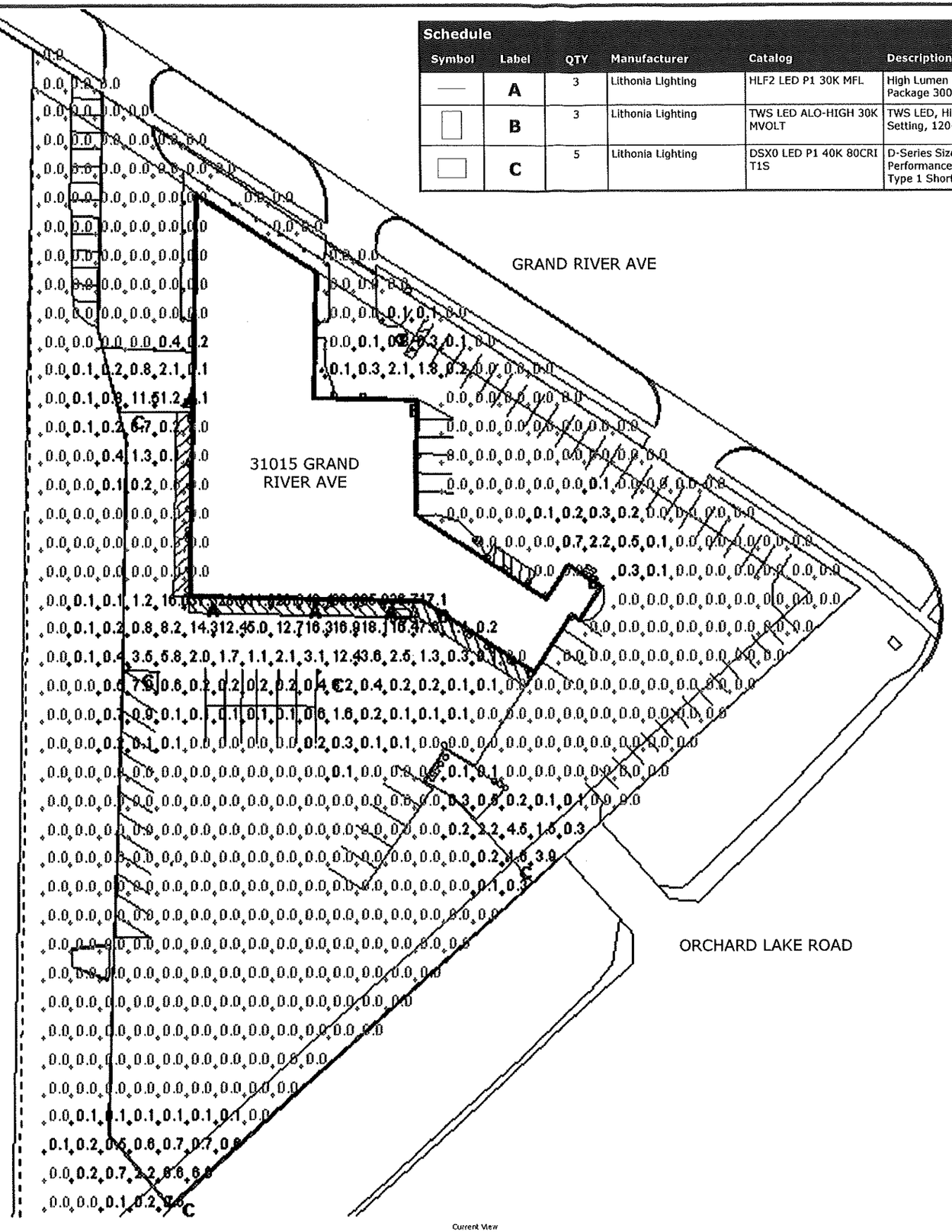

NORTHWEST CORNER
SECTION 35, T01N, R09E
NORTH LINE OF SECTION 35
S87°49'50"E 317.44'
GRAPHIC SCALE
-40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.
N
LILAC STREET
GRAND RIVER AVENUE
(VARIABLE WIDTH)
W. NINE MILE ROAD
ORCHARD LAKE ROAD
31205 GRAND RIVER
P.O.B.
31015 GRAND RIVER
18738 SQ. FT.
1 STORY BRICK & BLOCK
BUILDING
TAX PARCEL IDENTIFICATION
23-35-101-005
BENCHMARKS
(DATUM: NAVD88 ESTABLISHED USING STATIC
GPS SESSION PROCESSED WITH OPUS)
BM #300
DIMPLE ON HYDRANT ARROW, LOCATED APPROXIMATELY
50 FEET WEST OF ORCHARD LAKE ROAD AND
APPROXIMATELY 45 FEET SOUTH OF GRAND RIVER
AVENUE.
ELEVATION = 658.06
BM. #301
DIMPLE ON HYDRANT ARROW APPROXIMATELY 45 FEET
SOUTH OF GRAND RIVER AVENUE AND APPROXIMATELY
165 WEST OF THE CENTERLINE OF LILAC STREET.
ELEVATION = 690.11
SUPERVISOR'S EIGHT MILE GRAND
RIVER ACRES PLAT NO. 2
(Liber 56 of Plats, Page 47, O.C.R.)
ZONE AE
ZONE X
FLOODWAY
ZONE AE
UPPER RIVER ROUGE
(APPROX. LOCATION)
LOT 144
LOT 143
LOT 142
S14°04'35"W 23.58'
S40°36'10"W 36.88'
S77°54'20"W 57.27'
S63°28'10"W 22.36'
S31°36'30"W 15.28'
S23°12'00"E 16.79'
S53°07'45"E 25.00'
S74°10'50"E 82.36'
S81°28'10"E 40.45'
S70°07'40"E 29.41'
S88°24'50"W 156.65'
N48°10'47"E 649.13' CALC
ARC = 66.64'
RAD = 1,221.28'
DELTA = 03°07'35"
CH. BRG = N46°45'30"E
CHORD = 66.63'
Parking Spaces:
85 PARKING SPACES
1 BARRIER-FREE SPACES
TOTAL = 86 SPACES
Flood Zone Rating and Statement:
Said described property is located within an area having a Zone Designation "X" (Area of Minimal Flooding) and "AE" (Area where base flood elevations have been determined), on Flood Insurance Community Panel 26125C0653F, Effective Date -- September 09, 2006. Per FEMA Interactive Map.
ASPHALT PARKING LOT
CONCRETE
ASPHALT
LANDSCAPE
GRASS
GRAVEL
BUILDING
TERMS AND RESTRICTIONS
LIBER 4545, P.582, O.C.R.
LOCATION MAP - NOT TO SCALE
MOONEY ST.
ORCHARD LAKE RD.
ASTOR ST.
VIOLET ST.
LILAC ST.
FLORAL ST.
HAWTHORNE ST.
GRAND RIVER AVE.
WEST 9 MILE RD.
SITE
CORA AVE.
HAYNES RD.
FOLSOM RD.
FREEDOM RD.
M-05
LEGEND
IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED
EXISTING
ELEC., PHONE OR CABLE TV R/A LINE, POLE & R/A WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE R/A CABLE, PEDESTAL & MANHOLE
ELECTRIC R/A CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
INLAND, BOUND & BEEHIVE CATCH BASIN, YARD DRAIN
POST INDICATOR VALVE
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE BR/STOP
TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION
CONTOUR LINE
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONC.
CONCRETE
ASPH.
ASPHALT
GRAVEL
GRAVEL SHOULDER
WETLAND
REFERENCE DRAWINGS
WATER MAIN FARMINGTON HILLS MAP
SANITARY SEWER FARMINGTON HILLS MAP
STORM SEWER XXXXXXXXXXX
COMBINED SEWER XXXXXXXXXXX
ELECTRIC XXXXXXXXXX
TELEPHONE AT&T MAP
GAS CONSUMERS GAS MAP
PETROLEUM XXXXXXXXXX
CATV XXXXXXXXXX
FLOOD PLAIN XXXXXXXXXX
OTHER ROAD COMMISSION FOR OAKLAND COUNTY
OTHER XXXXXXXXXX
OTHER XXXXXXXXXX
SURVEYOR'S CERTIFICATE:
To: Old Republic National Title Insurance Company
ATA National Title Group
Gerald Todd Clark
Woodgate Development Company, L.L.C., a Michigan limited liability company
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 "Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys," jointly established and adopted by ALTA and NSPS, and includes Items 2, 3, 4, 7(a), 8, 9, 11, and 13 of Table A thereof. The field survey was completed on October 10, 2018.
Date of Plat or Map: October 31, 2018.
David E. Cole
David E. Cole, PS Agent for Professional Engineering Associates, Inc. MI. P.S. No. 32334
STATE OF MICHIGAN
DAVID EDWIN COLE
PROFESSIONAL SURVEYOR
NO. 32334
LICENSED PROFESSIONAL SURVEYOR
LEGAL DESCRIPTION
(per Old Republic National Title Insurance Company, Commitment No. 63-18587567-SCM, Commitment Date April 13, 2018)
The land referred to in this commitment is described as follows: City of Farmington Hills, County of Oakland, State of Michigan
All that part of Lot 142, Supervisor's Eight Mile Grand River Acres Plat No. 2, as recorded in Liber 56 of Plats, Page 47, Oakland County Records, which lies Northeasterly of a line 75 feet Northeasterly of (measured at right angles) and parallel to the centerline of Orchard Lake Road relocated. The centerline of Orchard Lake Road relocated is described as: Beginning at a point which is North 02 degrees 22 minutes 30 seconds West a distance of 1037.68 feet and 30 feet East of the West 1/4 corner of Section 35, Town 1 North, Range 9 East; thence Northeasterly along the arc of a 1146.28 foot radius curve to the right, (chord bearing North 20 degree 52 minutes 50 seconds East) a distance of 330.22 feet to the point of tangency of said curve; thence North 44 degrees 08 minutes 10 seconds East a distance of 700 feet to a point of ending.
AND ALSO
A parcel of land being that portion of Lot 143, Supervisor's Eight Mile Grand River Acres Plat No. 2, as recorded in Liber 56 of Plats, Page 47, Oakland County Records, lying North of the Orchard Lake Road relocated described as commencing at the Northwest corner of said Section 35, Town 1 North, Range 9 East and proceeding South 87 degrees 49 minutes 30 seconds East, 317.44 feet along the North line of said Section 35 to the Southerly line of Grand River Avenue; thence South 56 degrees 42 minutes 50 seconds East 93.55 feet along the Southerly line of Grand River Avenue to the point of beginning and proceeding thence South 1 degree 19 minutes West 587.41 feet; thence South 88 degrees 24 minutes 50 seconds West 156.65 feet; thence South 14 degrees 04 minutes 35 seconds West 23.58 feet; thence South 40 degrees 36 minutes 10 seconds West 36.88 feet; thence South 77 degrees 54 minutes 20 seconds West 57.27 feet; thence South 63 degrees 28 minutes 10 seconds West 22.36 feet; thence South 31 degrees 36 minutes 30 seconds West 15.28 feet; thence South 23 degrees 12 minutes East 16.79 feet; thence South 53 degrees 07 minutes 45 seconds East 25.00 feet; thence South 74 degrees 10 minutes 50 seconds East 82.36 feet; thence South 81 degrees 28 minutes 10 seconds East 40.45 feet; thence South 70 degrees 07 minutes 40 seconds East 29.41 feet to the Northerly line of the Orchard Lake Road relocation; thence along a curve of radius equal 1221.28 feet concave to the Northeast whose long chord bears North 48 degree 45 minutes 30 seconds East 66.63 feet; thence North 46 degrees 20 minutes 10 seconds East 383.23 feet; thence North 01 degree 17 minutes East 301.56 feet to the South line of Grand River Avenue; thence North 56 degree 42 minutes 50 seconds West 253.52 feet to the point of beginning.
SCHEDULE B-II EXCEPTIONS
(per Old Republic National Title Insurance Company, Commitment No. 63-18587567-SCM, Commitment Date April 13, 2018)
1. Rights or claims of parties in possession not shown by the Public Records.
2. Any facts, rights, interests or claims not shown by the Public Records but that could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof of the Land.
3. Easements, claim of easements or encumbrances that are not shown in the Public Records and existing water, mineral, oil and exploration rights.
4. Any encroachments, encumbrance, violation, variation, or adverse circumstance affecting the Title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the Land, and that are not shown in the Public Records.
5. Any lien or right to lien for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the Public Records.
6. The lien, if any, of real estate taxes, assessments, and/or water and sewer charges, not yet due and payable, or that are not shown as existing liens in the records of any taxing authority that levies taxes or assessments on real property or in the Public Records; including the lien for taxes, assessments, and/or water and sewer charges, which may be added to the tax rolls or tax bill after the effective date. The Company assumes no liability for the tax increases occasioned by the retroactive revaluation or changes in the Land usage.
7. Defects, liens, encumbrances, adverse claims or other matters, if any created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the Proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this commitment.
8. Terms, provisions, covenants and other matters contained in Highway Easement Release recorded in Liber 3636, Page 388, Oakland County Records. [As Shown.]
9. Restrictive Covenant contained in Warranty Deed recorded in Liber 4181, Page 300, Oakland County Records. Terms, provisions, covenants and other matters contained in Highway Easement Release recorded in Liber 4545, Page 582, Oakland County Records. [Restrictions: L.4151, P.300 - No billboards, signboards or advertising devices..., L.4545, P.682 - Highway Easement Release and maintenance language. Not Shown.]
10. Rights, if any, of the United States government, the State of Michigan, any other governmental entity, riparian owners, the public or private persons existing in or with respect to the present and past bed, banks, bottomland and waters of River Rouge.
11. Any adverse claim based upon the assertion that some portion of the Land is bottom land or has been created by artificial means or has accreted to such portion so created.
NOT FOR CONSTRUCTION
XREF: S:\PROJECTS\2018\2018340\DWG\TS000-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018340\DWG\CONSTRUCTION\T-BASE-TS000.DWG
XREF: S:\PROJECTS\2018\2018340\DWG\CONSTRUCTION\T-TTR-TS000.DWG
REVISIONS
NO. BY CHK DESCRIPTION DATE
CAUTION!!!
THE LOCATIONS AND/OR ELEVATIONS OF EXISTING UTILITIES AND/OR STRUCTURES SHOWN ON THIS DRAWING ARE APPROXIMATE. NO GUARANTEE IS EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.
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MY SPACE SELF STORAGE
979 SOUTH OLD US HIGHWAY 23
BRIGHTON, MICHIGAN 48114
ALTA/NSPS LAND TITLE SURVEY
31015 GRAND RIVER
PART OF THE NW 1/4 OF SECTION 35 T. 01 N., R. 09 E.,
CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN
DES. XXX DR. XXX SUR. TDS P.M. RLS
S:\PROJECTS\2018\2018340\ALTA\T-TS000-ALTA.DWG
ORIGINAL ISSUE DATE:
OCTOBER 31, 2018
PEA JOB NO. 2018-340
SCALE: 1" = 40'
DRAWING NUMBER:
ALTA

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	A	3	Lithonia Lighting	HLF2 LED P1 30K MFL	High Lumen Floodlight Size 2 P1 Lumen Package 3000K CCT Type MFL Distribution	1	Absolute	1	326.7303
	B	3	Lithonia Lighting	TWS LED ALO-HIGH 30K MVOLT	TWS LED, High Lumen Setting, 3000K Setting, 120-277V	1	2322	1	16.6
	C	5	Lithonia Lighting	DSX0 LED P1 40K 80CRI T1S	D-Series Size 0 Area Luminaire P1 Performance Package 4000K CCT 80 CRI Type 1 Short	1	4691	1	33.21

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	1.0 fc	42.4 fc	0.0 fc	N/A	N/A



Current View

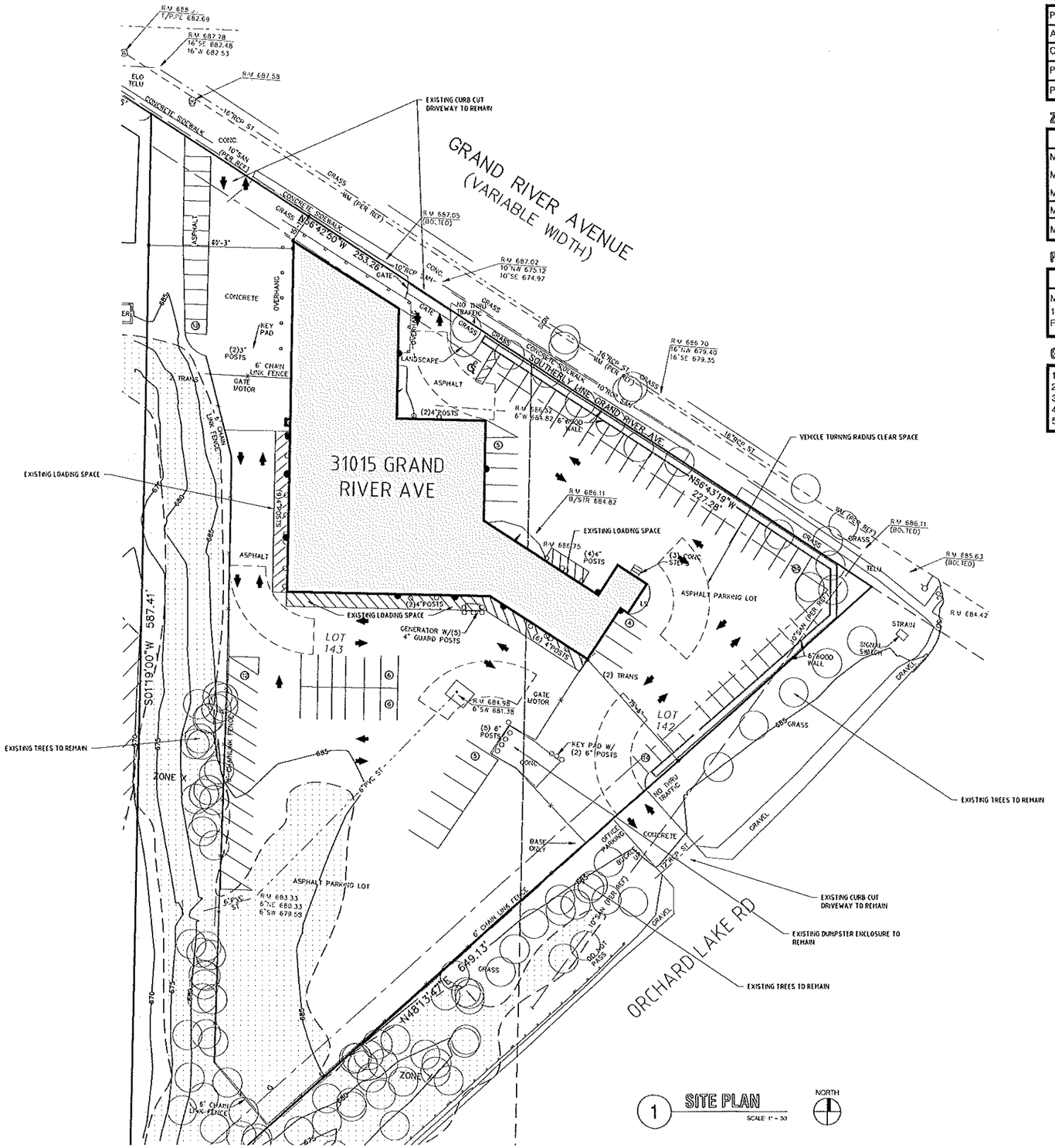
Note

1. ALL FIXTURES SPECS AND FIXTURE LOCATION ARE ESTIMATED

2. ANY FIXTURE THAT IS DEEMED NOT CODE COMPLIANT SHALL BE RETROFITTED TO MEET LOCAL STANDARD.

31015 Grand River Ave
Farmington Hills, MI 48336

Date
05/07/2025
Scale
Not to Scale



SITE DATA

Parcel I.D.	23-35-101-002
Address	31015 Grand River Ave, City of Farmington Hills MI
Current Zoning	B-3 General Business District
Proposed Zoning	Planned Unit Development
Parcel Area	3.54 Acres

ZONING SCHEDULE OF REGULATIONS

Regulation	EXISTING
Minimum Front Yard Setback	15'-11" & 75'-6" EXISTING (NO CHANGE)
Minimum Side Yard Setback	80'-3"
Minimum Rear Yard Setback	N/A
Minimum Front Yard Open Space	EXISTING (NO CHANGE)
Maximum Building Height	EXISTING (NO CHANGE)

PARKING AND LOADING REQUIREMENTS

Regulation	EXISTING
MOTOR VEHICLE SALES & SERVICE 1 SPACE PER 100 SF OF USEABLE FLOOR SPACE OF SHOWROOM	68 EXISTING PARKING SPACES (NO CHANGE)

GENERAL NOTES

1. NO WORK IS PROPOSED WITHIN THE 100 YEAR FLOODPLAIN.
2. NO EXISTING TREES TO BE REMOVED.
3. NO CHANGES TO EXISTING BUILDING FOOTPRINT.
4. NO CHANGE TO EXISTING SITE COVERAGE.
5. NO CHANGE TO EXISTING SITE LIGHTING.

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SITE PLAN REVIEW	25.05.08
ISSUANCE	DATE

FEDERAL STD SURVEYOR ASSOC

HUNTINGTON AUTO GROUP
31015 GRAND RIVER AVE.
FARMINGTON HILLS, MI 48336

Architectural Site Plan

025060

AS1.1

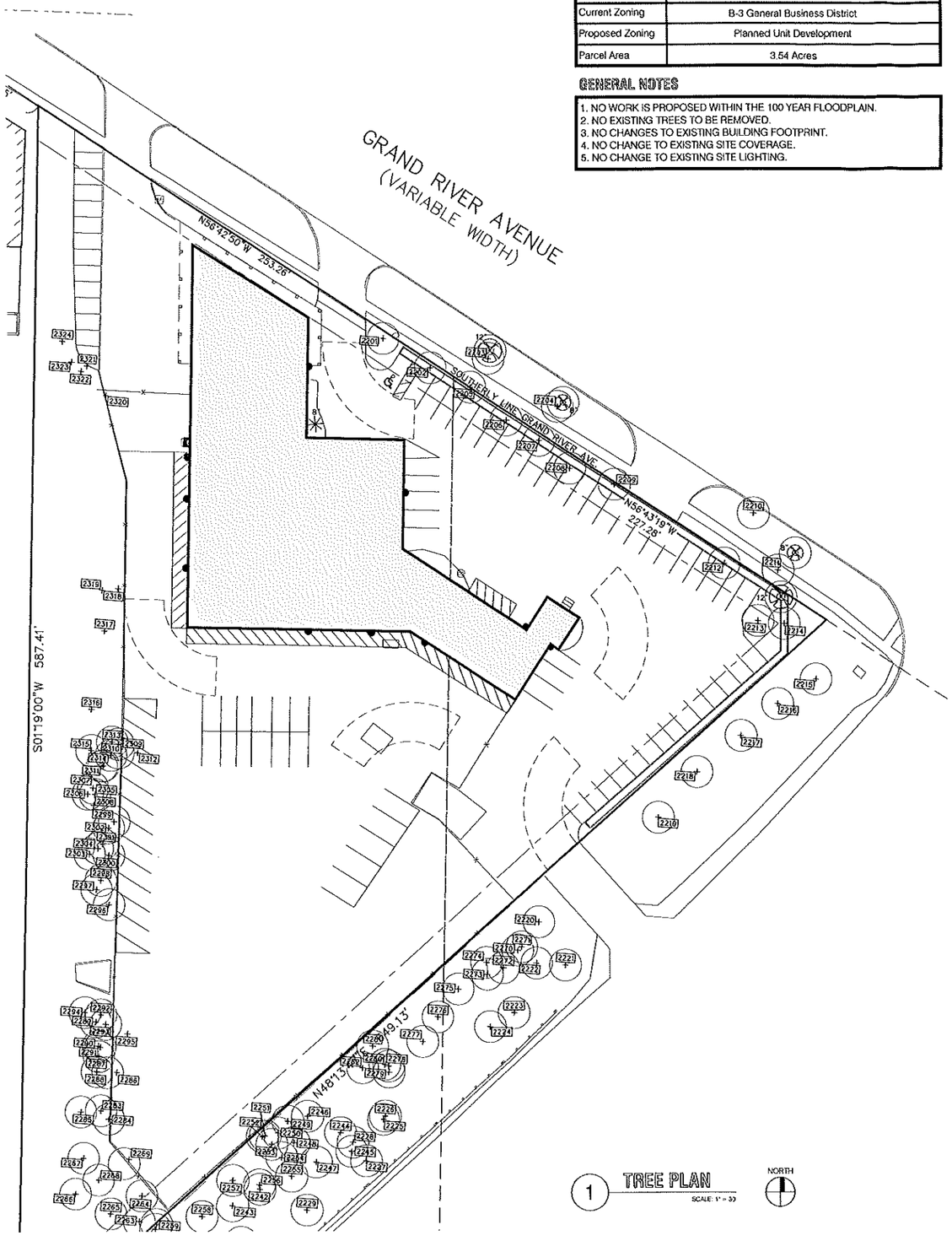
AS1.1 Architectural Site Plan.dwg
5/7/2025
Designhaus

SITE DATA

Parcel I.D.	23-35-101-002
Address	31015 Grand River Ave, City of Farmington Hills MI
Current Zoning	B-3 General Business District
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Parcel Area	3.54 Acres

GENERAL NOTES

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4. NO CHANGE TO EXISTING SITE COVERAGE.
5. NO CHANGE TO EXISTING SITE LIGHTING.



1 TREE PLAN
SCALE: 1" = 30'
NORTH

TREE INVENTORY

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME
2201	DF	10	Douglas Fir	Pseudotsuga menziesii
2202	BP	10	Bradford Pear	Pyrus calleryana
2203	HL	12	Honeylocust	Gleditsia triacanthos
2204	HL	10	Honeylocust	Gleditsia triacanthos
2205	BP	7	Bradford Pear	Pyrus calleryana
2206	BP	7	Bradford Pear	Pyrus calleryana
2207	BP	8	Bradford Pear	Pyrus calleryana
2208	BP	6	Bradford Pear	Pyrus calleryana
2209	BP	8	Bradford Pear	Pyrus calleryana
2210	HL	9	Honeylocust	Gleditsia triacanthos
2211	HL	9	Honeylocust	Gleditsia triacanthos
2212	BP	11	Bradford Pear	Pyrus calleryana
2213	BP	13	Bradford Pear	Pyrus calleryana
2214	BP	11	Bradford Pear	Pyrus calleryana
2215	B	15	Basswood	Tilia americana
2216	B	13	Basswood	Tilia americana
2217	B	12	Basswood	Tilia americana
2218	B	13	Basswood	Tilia americana
2219	B	13	Basswood	Tilia americana
2220	BL	9	Black Locust	Robinia pseudoacacia
2221	B	10	Basswood	Tilia americana
2222	BL	9	Black Locust	Robinia pseudoacacia
2223	B	10	Basswood	Tilia americana
2224	B	10	Basswood	Tilia americana
2225	EE	6	Siberian Elm	Ulmus pumila
2226	EE	6	Siberian Elm	Ulmus pumila
2227	EE	9	Siberian Elm	Ulmus pumila
2228	BW	8	Black Walnut	Juglans nigra
2229	CA	9	Crab Apple	Malus coronaria
2230	NM	10	Norway Maple	Acer platanoides
2231	E	10	American Elm	Ulmus americana
2232	NM	7	Norway Maple	Acer platanoides
2233	E	12	American Elm	Ulmus americana
2234	E	19	American Elm	Ulmus americana
2235	E	7	American Elm	Ulmus americana
2236	CT	15	Cottonwood	Populus deltoides
2237	E	8	American Elm	Ulmus americana
2238	E	8	American Elm	Ulmus americana
2239	SU	10	Sugar Maple	Acer saccharum
2240	E	8	American Elm	Ulmus americana
2241	BL	9	Black Locust	Robinia pseudoacacia
2242	BL	9	Black Locust	Robinia pseudoacacia
2243	SU	7	Sugar Maple	Acer saccharum
2244	E	8	American Elm	Ulmus americana
2245	BC	6	Wild Black Cherry	Prunus serotina
2246	CA	6	Crab Apple	Malus coronaria
2247	EE	7	Siberian Elm	Ulmus pumila
2248	BC	6	Wild Black Cherry	Prunus serotina
2249	BL	9	Black Locust	Robinia pseudoacacia
2250	BW	6	Black Walnut	Juglans nigra
2251	EE	14	Siberian Elm	Ulmus pumila
2252	BL	10	Black Locust	Robinia pseudoacacia
2253	NM	6	Norway Maple	Acer platanoides
2254	BL	11	Black Locust	Robinia pseudoacacia
2255	E	6	American Elm	Ulmus americana
2256	BL	15	Black Locust	Robinia pseudoacacia
2257	S	12	Sycamore	Platanus occidentalis
2258	SU	6	Sugar Maple	Acer saccharum
2259	S	7	Sycamore	Platanus occidentalis
2260	BL	13	Black Locust	Robinia pseudoacacia
2261	EE	7	Siberian Elm	Ulmus pumila
2262	BL	22	Black Locust	Robinia pseudoacacia
2263	NM	7	Norway Maple	Acer platanoides
2264	E	8	American Elm	Ulmus americana
2265	E	7	American Elm	Ulmus americana
2266	E	10	American Elm	Ulmus americana
2267	E	10	American Elm	Ulmus americana
2268	S	15	Sycamore	Platanus occidentalis
2269	NM	7	Norway Maple	Acer platanoides
2270	S	7	Sycamore	Platanus occidentalis
2271	BL	7	Black Locust	Robinia pseudoacacia
2272	S	7	Sycamore	Platanus occidentalis
2273	BL	6	Black Locust	Robinia pseudoacacia
2274	BL	10	Black Locust	Robinia pseudoacacia
2275	EE	7	Siberian Elm	Ulmus pumila
2276	BL	10	Black Locust	Robinia pseudoacacia
2277	BL	8	Black Locust	Robinia pseudoacacia
2278	BL	7	Black Locust	Robinia pseudoacacia
2279	BL	6	Black Locust	Robinia pseudoacacia
2280	BL	11	Black Locust	Robinia pseudoacacia
2281	BL	6	Black Locust	Robinia pseudoacacia
2282	BL	7	Black Locust	Robinia pseudoacacia
2283	E	13	American Elm	Ulmus americana
2284	BL	12	Black Locust	Robinia pseudoacacia
2285	E	7	American Elm	Ulmus americana
2286	E	9	American Elm	Ulmus americana
2287	BL	15	Black Locust	Robinia pseudoacacia
2288	BX	8	Box elder	Acer negundo
2289	BL	8	Black Locust	Robinia pseudoacacia
2290	E	10	American Elm	Ulmus americana
2291	E	16	American Elm	Ulmus americana
2292	BL	10	Black Locust	Robinia pseudoacacia
2293	S	6	Sycamore	Platanus occidentalis
2294	BL	12	Black Locust	Robinia pseudoacacia
2295	BL	15	Black Locust	Robinia pseudoacacia
2296	EE	10	Siberian Elm	Ulmus pumila
2297	BL	12	Black Locust	Robinia pseudoacacia
2298	BL	9	Black Locust	Robinia pseudoacacia
2299	NM	6	Norway Maple	Acer platanoides
2300	NM	11	Norway Maple	Acer platanoides
2301	S	8	Sycamore	Platanus occidentalis
2302	E	6	American Elm	Ulmus americana
2303	BL	11	Black Locust	Robinia pseudoacacia
2304	BL	11	Black Locust	Robinia pseudoacacia
2305	CT	13	Cottonwood	Populus deltoides
2306	E	6	American Elm	Ulmus americana
2307	CT	18	Cottonwood	Populus deltoides
2308	E	6	American Elm	Ulmus americana
2309	CT	9	Cottonwood	Populus deltoides
2310	E	6	American Elm	Ulmus americana
2311	E	6	American Elm	Ulmus americana
2312	E	7	American Elm	Ulmus americana
2313	E	8	American Elm	Ulmus americana
2314	CT	15	Cottonwood	Populus deltoides
2315	CT	13	Cottonwood	Populus deltoides
2316	CT	7	Cottonwood	Populus deltoides
2317	BL	6	Black Locust	Robinia pseudoacacia
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2321	BL	7	Black Locust	Robinia pseudoacacia
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SITE PLAN REVIEW	25.05.08
ISSUANCE	DATE

HUNTINGTON AUTO GROUP
31015 GRAND RIVER AVE.
FARMINGTON HILLS, MI 48336
Tree Plan

025060

AS1.2

AS1.2 Tree Plan.dwg
5/7/2025
Designhaus

July 29, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Site Plan Review

Case:	59-7-2025
Site:	33474 Eight Mile Rd (22-23-33-477-022)
Applicant:	Iden Kalabat
Plan Date:	7/1/2025
Zoning:	B-3 General Business

We have reviewed the application for site plan approval and a summary of our findings is below. Items in **bold** require specific action. Items in *italics* can be addressed administratively.



SUMMARY OF FINDINGS

Summary of Proposal. The applicant proposes to construct a new 7,163-square-foot medical office building to accommodate a dentistry practice. The site would have access to 8 Mile Road via a continuation of the marginal access drives already present on the neighboring properties; there will be no new driveway directly to 8 Mile.

Existing Conditions

1. **Zoning.** The site is 39,779 square feet (0.9 acres) and zoned B-3.
2. **Existing site.** The site is currently vacant.
3. **Adjacent properties.**

Direction	Zoning	Land Use
North	RA-3	Single Family
South	Commercial (Livonia)	Commercial
East	OS-2	Office
West	OS-2	Office

4. **Existing site configuration and access.** The site currently has no development. There is one old curb cut, but this will be eliminated.

Site Plan & Use:

1. **Use.** A medical office is a permitted use in the OS-2 district.
2. **Proposed site configuration and access.** The plans place the building at the rear of the site, with parking in front. There is no driveway onto 8 Mile Road; rather, the site is accessed from the marginal access drive on the neighboring properties.
3. **Dimensional Standards (OS-2 district).** See footnotes after the table for remarks on compliance issues.

Item	Required	Proposed/Comments
Standards of Sec. 34-3.1.25.E		
Min. lot size	None specified	0.9 Acres
Min. lot width	None specified	151.25 ft
Front Setback (south)	120 ft	168.75 ft
Rear Setback (north)	20 ft	20 ft
Side Setback (west)	10 ft	15 ft, 5 in
Side Setback (east)	10 ft	30 ft, 7 in
Building Height	34 feet/2 stories	**Not provided**/1 story[1]
Front Yard Open Space	10%	**Not provided**; scaled measurements indicate compliance
Other dimensional standards		
Yard landscaping (34-3.5.2.A)	For all uses except one-family detached residential units, landscaping of all yards abutting a street shall be provided	See landscaping comments below.

Item	Required	Proposed/Comments
Minimum parking setback (34-3.5.2.J)	10 feet	Compliant
Loading space (34-5.4)	180 sq ft	180 sq ft = one parking space
Rooftop equipment (34-3.5.2.U.)	Rooftop equipment shall be screened in accordance with Section 34-5.17.	*The appears to be no rooftop equipment; A/C units in rear yard*
Landscape area abutting street or freeway (34-3.5.2.V.)	A landscaped area not less than ten (10) feet deep	6-foot landscape beds provided north of marginal access drive

1. *The height is clearly compliant, but the actual number is still needed.*

4. **OS-2 Required Conditions (34-3.9).** All relevant standards of Section 3.9 pertaining to the OS-2 district

5. **Marginal Access Drive. (34-3.22).** The applicant provides a marginal access drive between this site and the neighboring sites to the east and west. These are the site's access points.

6. **Pedestrian Access. (34-3.24/34-5.19).** Pedestrian access is provided between the 8 Mile sidewalk and building, including a marked crosswalk across the marginal access drive.

7. **Off Street Parking Requirements (34-5.2)**

Requirement	Calculations	Provided
Medical Office: 1 space/135 sq ft for the first 5,000 sq ft; 1 space/175 sq ft for all sq ft over 5,000 sq ft	7,163 sq ft gross x 0.8 = 5,730.4 5,000/135 = 37 730/175 = 4 Total 41 required spaces	50 spaces*
Barrier-free spaces	2 spaces	2 spaces / 2 van

***The applicant's parking calculation is based on gross floor area; this calculation has been based on an approximate usable floor area referenced from the floor plans.**

8. **Off-street parking dimensions (34-5.3.3.A & B.).**

Item	Required	Proposed/Comments
Maneuvering lane width	20 ft (90 degree person)	22 ft
Parking space width	9 ft	9 ft
Parking space length	20 ft. for minimum required (May include a maximum two-foot unobstructed vehicle overhang area at the front of the parking space.)	18 ft w/ 2-ft overhang
Screening	The off-street parking lot shall be provided with screening as required by Section 34-5.15	See landscaping comments below
Dead-End Aisles	Dead-end off-street parking aisles are discouraged, especially in connection with business uses.	No dead-end aisles

9. **Off-Street Loading (34-5.4).** 180 square feet of loading space is required (i.e. one parking space); our calculations show 9 excess parking spaces, one of which could be marked for loading.

10. **Acceleration-Deceleration-Passing Lanes (34-5.6.2.)** While we generally defer to engineering on this issue, it should be noted that the site includes no direct driveway to 8 Mile Rd.

11. **Dumpster Enclosure (34-5.1.2.D).** A compliant dumpster enclosure is shown on Sheet C3.1.

Item	Required	Proposed/Comments
Location	Rear yard or interior side yard	Interior side yard
Screening	Permanent building wall or earth mound not less than 6 feet or 1 foot above the enclosed dumpster whichever is greater	Compliant
Setback	20 feet from any residential property and far as practicable from adjoining residential district	Compliant

12. **Site Landscaping (34-5.14).** The species diversity of the chosen trees is strong.

Item	Required			Proposed/Comments
Minimum distance from the property line (34-5.14.C.ii)	4 ft from the property line for trees and large shrubs			Compliant
Minimum parking lot island area	Minimum of 180 square feet; 3 feet minimum radius at the trunk of the tree			Compliant
Cost estimate	Not required			--
Minimum size and spacing requirements at planting (34-5.14.F)	**Size**	**Center to center distance (max)**		
	(Height/width)	**groupings**	**rows**	
• Evergreen Trees	8 ft. height	20 ft.	12 ft.	N/A
• Narrow Evergreen Trees	5 ft. height	10 ft.	5 ft.	N/A
• Large Shrubs	30 in. height	10 ft.	5 ft.	N/A
• Small Shrubs	24 in. width	4 ft.	4 ft.	N/A
• Large Deciduous	3 in. caliper	30 ft.	-	Compliant
• Small deciduous trees	2 in. caliper	15 ft.	-	N/A
• Hedge shrubs	24 in. height	3 ft.	3 ft.	Compliant
Canopy Trees	Shall be large deciduous. PC may permit large evergreens			Large deciduous provided
Minimum number of parking lot trees (34-5.14.4.C)	1 per every 2,800 square feet of paved surface area: 19,059 SF of Pavement = 7 trees			8 canopy trees provided
Parking lot screening from public thoroughfare (34-5.14.5)	A planted hedge of small shrubs, or A masonry wall or berm of 2 feet high			Hedge is provided
Wall or Berm (34-5.15)	Required when adjacent to residential			6-foot masonry wall provided

Item	Required	Proposed/Comments
Tree replacement (34-5.18)	See below	See below

13. **Tree Replacement (34-5.18)**. Tree replacement calculations appear to have been done incorrectly. We count 28 caliper inches of landmark tree being removed, to be replaced by 3-inch caliper trees at 25% of the removed dbh. 28 x 0.25 = 7 inches, or 3 required replacements. We count 17 regulated trees removed, with a required 1:1 replacement. So, a total of 20 replacement trees are required. **Both tables of trees on Sheet C2.0 seem to be incorrect, or at least neither one correlates to the tree survey. Calculations should be revised per Section 34-5.18. 18 labeled replacements, plus 33 arborvitae are provided; the arborvitae are labeled as replacements as well. Generally, these would not be considered replacement trees, and we recommend adding two replacements behind the building.**

14. **Lighting (Section 34-5.16).**

    i. **Operation hours (34-5.16.3.B.v.)** *Notes regarding compliance with these standards should be included on the photometric plan*.

    ii. **Illumination Levels.** The fixtures appear to meet cutoff requirements.

Item	Required	Proposed/Comments
Maximum height (34-5.16.3.A.)	30 feet maximum	24 ft.
Building Lighting (34-5.16.3.A. iii.)	Relevant building elevation drawings showing all fixtures and the portions of the walls to be illuminated	*Elevations show sconces but not wall packs*
Average to minimum illumination ratio (34-5.16.3.C)	4:1	2.9:1
Maximum illumination at the property line	0.3 fc	Appears compliant; verify area near dumpster enclosure
Illumination Levels-Hardscape areas (e.g., parking areas, sidewalks)	1.5 lumens per sq ft of hardscape area 30,067.53 sf of hardscape= 45,101 lumens	Compliant
Illumination Levels Building Entrances – within 20 ft of door	2,000 lumens per door	935 lumens

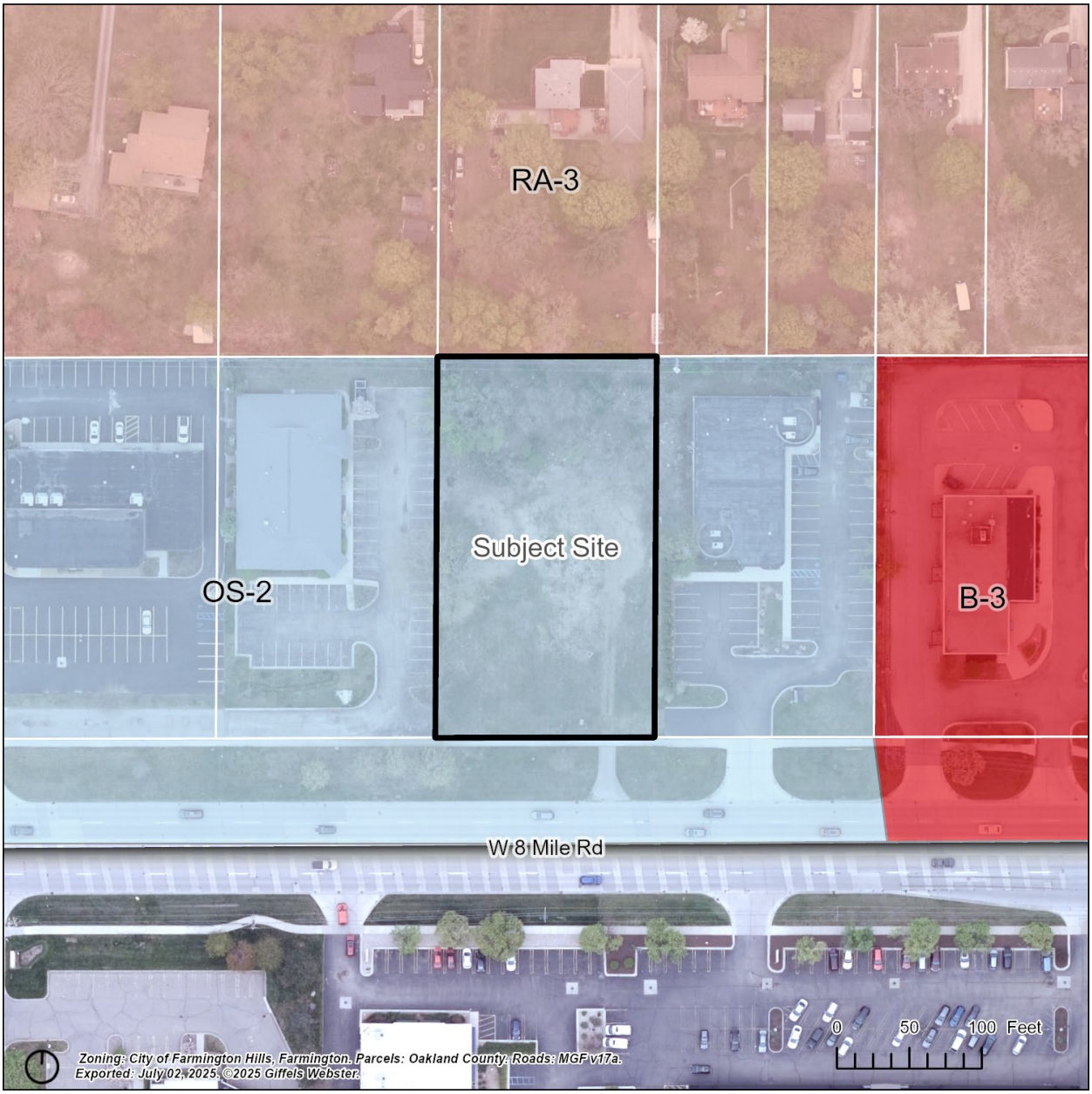
We are available to answer questions.

Respectfully,
Giffels Webster

Joe Tangari, AICP
Principal Planner

Julia Upfal, AICP
Senior Planner

Zoning


RA-3
Subject Site
OS-2
B-3
W 8 Mile Rd
0
50
100 Feet
Zoning: City of Farmington Hills, Farmington. Parcels: Oakland County. Roads: MGF v17a.
Exported: July 02, 2025. ©2025 Giffels Webster.

FARMINGTON HILLS Michigan

DEPARTMENT OF PUBLIC SERVICES
KAREN MONDORA, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: July 17, 2025

TO: Eric Perdonik City Planner
FROM: James Cubera, City Engineer

SUBJECT: SP 59-07-2025
Farmington Smiles
33474 West Eight Mile Road
22-23-33-477-022, PJ#33-25-57

This office has performed a preliminary review of the above referenced site plan submitted to the Planning Department on July 2, 2025. Our preliminary comments are as follows:

1. An 8-inch water main exists along the north side of Eight Mile Road across the frontage of this site. It is available for service. A schematic of a waterline connection is identified, and the proponent shows hydrant coverage. This coverage needs to be accepted by the Fire Department.

2. An 8" public sanitary sewer exists along the majority of the Eight Mile Road frontage of the site. It is available for service. A connection is schematically identified. This is appropriate. We note too that a 30" Interceptor also runs along the Eight Mile Road frontage, and it is not available for service. Regarding the 8" sewer that is being connected to the existing easement on it must be identified. If not in existence a new one must be provided.

3. A 5-foot-wide sidewalk currently exists along the Eight Mile Road frontage of this site. Therefore, no additional sidewalk requirements will be in effect.

4. The site proposes access to Eight Mile Road through a marginal access road. This is appropriate. Proper easements for it must be provided.

5. Stormwater detention, discharge restriction and stormwater quality improvements are required. This site plan proposes using underground storage along the west side of the site with a pretreatment structure. Calculations are shown on sheet C5.1. These will be reviewed during the construction review.

   Note that the City adopted the WRC stormwater standards. These are relatively new requirements that may impact on the stormwater quality unit proposed as well as the detention/restriction system in general. Attached are additional comments from our Environmental Engineer. Any questions regarding these comments should be referred to Tyler Sonaga at 248-871-2533.

Additionally, Eight Mile Road is under the jurisdiction of the Wayne County Road Commission. Any work in the ROW including storm sewer taps will subject the proponent to obtain a permit from that organization.

6. It is suggested that the proponent and their engineer meet with the City Engineering staff to discuss this site in further detail. This can be done virtually or in person.

FIRE

FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

Date: July 14, 2025

To: Planning Commission

From: Jason Baloga, Fire Marshal

Subject: Site Plan Review 59-7-2025 (33474 Eight Mile)

The Fire Department has completed its review of the submitted plans and found the following does not meet Fire department site plan review and design standards Chapter 12 Section 12-11.

1. Site access:
    a. Sites must be designed to accommodate fire apparatus with a fifty-foot radius.
    b. Unless specifically approved otherwise, paved access for fire department apparatus shall be provided on at least two (2) sides of all buildings or fifty (50) percent of the perimeter, whichever is more.

2. Hydrants:
    All points on the exterior of the building shall be no further than two hundred fifty (250) feet from a hydrant. Distances shall be measured as the hose lies, not a direct straight line.

Once the above has been adhered to, the Fire Department will have no objection to recommending approval.

Jason Baloga, Fire Marshal

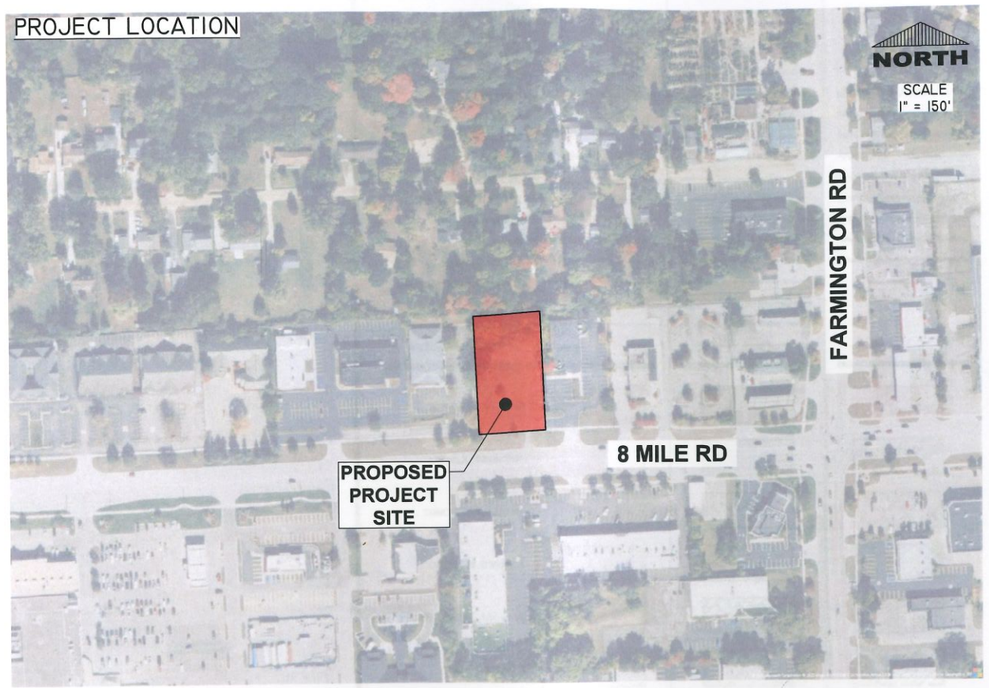
JB/al

FARMINGTON SMILE NEW DENTAL OFFICE

SITE PLAN APPROVAL

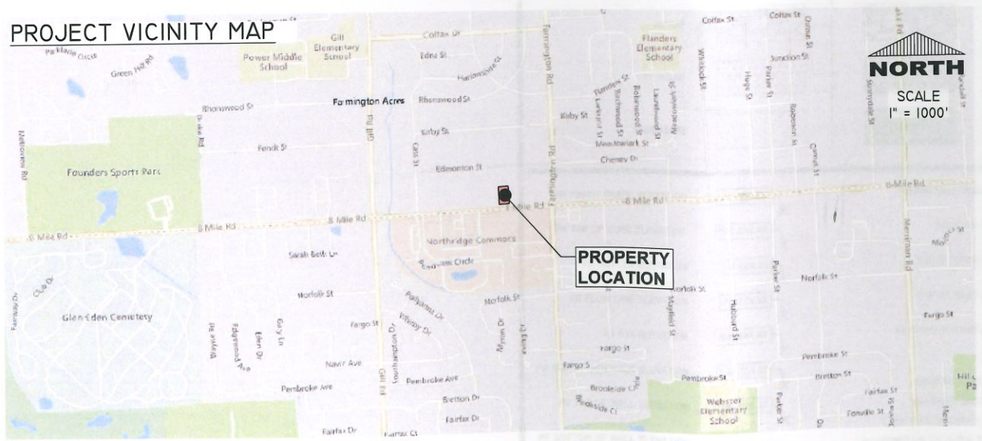
PREPARED FOR

CYPRESS CROWN LLC



SHEET INDEX	
Sheet Number	**Sheet Title**
C0.0	TITLESHEET
C0.1	GENERAL NOTES AND LEGEND
C1.0	TOPOGRAPHIC AND BOUNDARY SURVEY PLAN
A-1.1	FLOOR PLAN
A-2.1	EXTERIOR ELEVATION
A-2.2	EXTERIOR ELEVATION
A-9.1	PRESPECTIVES
C2.0	DEMOLITION PLAN
C2.1	TREE REMOVAL TABLE
C3.0	SITE PLAN
C3.1	SITE DETAILS
C3.2	VEHICLE TURNING MOVEMENT PLAN
C4.0	GRADING PLAN
C5.0	UTILITY PLAN
C5.1	STORMWATER PROFILES AND DETAILS
C5.2	UTILITY PROFILES
1 OF 1	STORM DRAIN NOTES AND DETAILS (2)
1 OF 2	SANITARY SEWER DETAILS AND NOTES
2 OF 2	SANITARY SEWER DETAILS AND NOTES
1 OF 7	WATER MAIN STANDARD DETAILS
2 OF 7	WATER MAIN STANDARD DETAILS
3 OF 7	WATER MAIN STANDARD DETAILS
C6.0	SOIL EROSION AND SEMENT CONTROL PLAN
C6.1	SESC DETAILS
C7.0	PHOTOMETRIC PLAN
L1.0	LANDSCAPE PLAN

PROJECT VICINITY MAP



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NICKREID7@GMAIL.COM
(734) 891-6766

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ARCHITECT

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31333 SOUTHFIELD RD. SUITE 250
BEVERLY HILLS, MI 48025
NATHAN KURMAS
NATHAN@KALABAT.COM
248-600-8707

SP 59-7-2025

Received
JUL 02 2025
City of Farmington Hills
Planning Dept.

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CIVIL ENGINEERING & SITE DEVELOPMENT

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CONSULTANTS:

SEAL:

STATE OF MICHIGAN
IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	SITE PLAN APROVAL	7-1-2025
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CLIENT:
CYPRESS CROWN LLC
24001 ORCHARD LAKE RD #160
FARMINGTON HILLS, MI 48336

PROJECT:
FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:
TITLESHEET

SHEET NUMBER:
C0.0

PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

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LEGEND

	EXISTING	PROPOSED	DEMO/REMOVAL
SUBJECT PROPERTY LINE			
ADJACENT PROPERTY LINE			
BOUNDARY LOT LINE			
BUILDING SETBACK LINE			
ROAD CENTERLINE			
EASEMENT LINE			
RIGHT OF WAY LINE			
FLOWLINE			
CURB & GUTTER			
WOOD FENCE LINE			
CHAINLINK FENCE LINE	X X	X X	
DECORATIVE FENCE LINE			
WETLAND LINE			
NATURAL FEATURE SETBACK LINE			
MAJOR CONTOUR LINE	XXX	XXX	
MINOR CONTOUR LINE	XXX	XXX	
STORM PIPE	ST ST	ST ST	
SANITARY SEWER	SAN SAN	SAN SAN	
WATER LINE	W W	W W	
GAS LINE	GAS GAS	GAS GAS	
OVERHEAD LINE	OH OH	OH OH	
UG ELECTRIC LINE	E E	E E	
COMBINED SEWER	COMB COMB	COMB COMB	
UG TELE LINE	UGT UGT	UGT UGT	
UG FIBER OPTIC LINE	FO FO	FO FO	
DRAINAGE AREA BOUNDARY			
SILT FENCE			
WATER EDGE LINE			
BUILDING OVERHANG LINE			
RET./MASONRY SCREEN WALL			
BUILDING			
ASPHALT PAVEMENT			
CONCRETE PAVEMENT			
CONCRETE SIDEWALK			
DECORATIVE SIDEWALK			
PARKING STRIPING			
GRAVEL			
RIPRAP			
WETLAND			
LANDSCAPE			

PR FINISH GRADE ELEVATION	FG XXX.XX
PR TOP OF CURB ELEVATION	T/C XXX.XX
PR GUTTER ELEVATION	G XXX.XX
PR FLOW LINE ELEVATION	FL XXX.XX
PR RIM ELEVATION	RIM XXX.XX
PR TOP OF SIDEWALK ELEVATION	T/W XXX.XX
PR TOP OF WALL ELEVATION	TOW XXX.XX
PR BOTTOM OF WALL ELEVATION	BOW XXX.XX
MATCH EXISTING ELEVATION	XXX.X ME
EXISTING ELEVATION	EX XXX.X
TOP OF BERM ELEVATION	TOB XXX.X
TOP OF POND ELEVATION	TOP XXX.X
BOTTOM OF POND ELEVATION	BOP XXX.X
X.X FOOT CANDLE ISOLINE	
X.X FOOT CANDLE ISOLINE	
ILLUMINATION LESS THAN X.X FC	0.1
ILLUMINATION GREATER THAN X.X FC	1.0

LEGEND

	EXISTING	PROPOSED	DEMO/REMOVAL
BOLLARD			
WHEEL STOP			
CATCH BASIN			
YARD DRAIN			
STORM MANHOLE			
SUMP			
FLARED END SECTION			
DOWNSPOUT			
SANITARY MANHOLE			
SANITARY CLEANOUT			
GAS MARKER			
GAS METER			
GATE VALVE IN WELL			
GATE VALVE IN BOX			
FIRE HYDRANT			
UTILITY POLE			
ELECTRIC METER			
TRANSFORMER			
TRAFFIC LIGHTS			
TELE RISER			
TELE MANHOLE			
GENERATOR			
CABLE TV RISER			
SATELLITE DISH			
ELECTRIC MANHOLE			
AIR CONDITIONER			
POLE MOUNTED AREA LIGHT			
WALL MOUNTED AREA LIGHT			
WALL PACK			
CANOPY LIGHT			
WALL MOUNT DECORATIVE SCONCE			
DECIDUOUS TREE			
EVERGREEN TREE			
ORNAMENTAL TREE			
SHRUB			
PERENNIAL			

ABBREVIATIONS

@	AT	LT	LEFT
ABAN	ABANDONED	MH	MANHOLE
APPROX	APPROXIMATE	MTR	METER
B/C, BC	BACK OF CURB	NTS	NOT TO SCALE
BM	BENCHMARK	OH	OVERHEAD POWER LINE
BR	BACK OF RAMP	℄, PL	PROPERTY LINE
CTV,	CABLE TELEVISION	PR, PROP	PROPOSED
℄, CL	CENTERLINE	R	RADIUS
CONC	CONCRETE	RCCO	RIGHT CORNER CUT-OFF
DA	DRAINAGE AREA	RCP	REINFORCED CONCRETE PIPE
DB	DETENTION BASIN	RT	RIGHT
DIA.	DIAMETER	RET.	RETAINING
D.I.	DUCTILE IRON PIPE	R/W, R.O.W.	RIGHT OF WAY
DW, DWY	DRIVEWAY	STRM	STORM DRAIN
DWG	DRAWING	SF	SQUARE FOOT
EA	EACH	SAN	SANITARY SEWER
EASE.	EASEMENT	STA	STATION
ELEC	ELECTRIC	STD	STANDARD
ELEV	ELEVATION	S/W	SIDEWALK
EX	EXISTING	SY	SQUARE YARD
FC	FACE OF CURB	TELE	TELEPHONE
FD	FOUND	TC	TOP OF CURB
FES	FLARED END SECTION	TCE	TEMP. CONSTRUCTION EASEMENT
FG	FINISHED GRADE	TEMP.	TEMPORARY
FH, HYD	FIRE HYDRANT	TYP	TYPICAL
FT	FOOT, FEET	WATR	WATER LINE
GM	GAS METER	WC	WHEEL CHAIR
GV	GAS VALVE	WM	WATER METER
GW	GUY WIRE	WV	WATER VALVE
HDPE	HIGH DENSITY POLYETHYLENE	W/	WITH
INT	INTERSECTION		
INV	INVERT		
L	LENGTH		
LCCO	LEFT CORNER CUT-OFF		
LF	LINEAL FOOT, LINEAR FEET		

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CONSULTANTS

SEAL:

STATE OF MICHIGAN
IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
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CLIENT:

CYPRESS CROWN LLC
24001 ORCHARD LAKE RD
#160
FARMINGTON HILLS, MI 48336

PROJECT:

FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:

GENERAL NOTES AND LEGEND

SHEET NUMBER:

C0.1

PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

NORTH

FLOODPLAIN NOTE:
ACCORDING TO THE NATIONAL FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 26125C0634E DATED SEPT. 29, 2006 THE SUBJECT PARCEL IS LOCATED IN ZONES "X" WHICH IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

LEGAL DESCRIPTION:
Land situated in the City of Farmington Hills, County of Oakland, State of Michigan, described as follows:

Lot 78, Farmington Acres Subdivision, according to the plat thereof, as recorded in Liber 21 of Plats, Page 10, Oakland County Records.

Easement Parcel:
Together with easement(s) for access as created, limited and defined in Marginal Access Easement(s) recorded in Liber 9380, page 656, Liber 10256, page 516, Liber 10323, page 196, Liber 10709, page 475, Liber 11217, page 54, Liber 15747, page 666 and Liber 34379, page 752.

NOTES:

BASIS OF BEARING: SET TO MATCH THE PLATTED BEARINGS AND DISTANCE

(M) FIELD MEASURED BEARINGS AND DISTANCES NECESSARY TO FORCE CLOSURE
(R) RECORDED BEARINGS AND DISTANCES PER SUBDIVISION PLAT.

TABLE 'A'
10.(a) NO DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES WERE OBSERVED DURING THIS SURVEY.

15. PHOTOGRAPHIC MAPPING WAS USED TO ESTABLISH FEATURES SHOWN ON ADJOINING PROPERTIES (I.E. BUILDINGS, PARKING AREAS, DRIVEWAYS)

16. NO EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WERE OBSERVED AT THE TIME OF THIS SURVEY.

18. NO WETLAND DELINEATION OR VISIBLE WETLANDS WERE OBSERVED AT THE TIME OF THIS SURVEY.

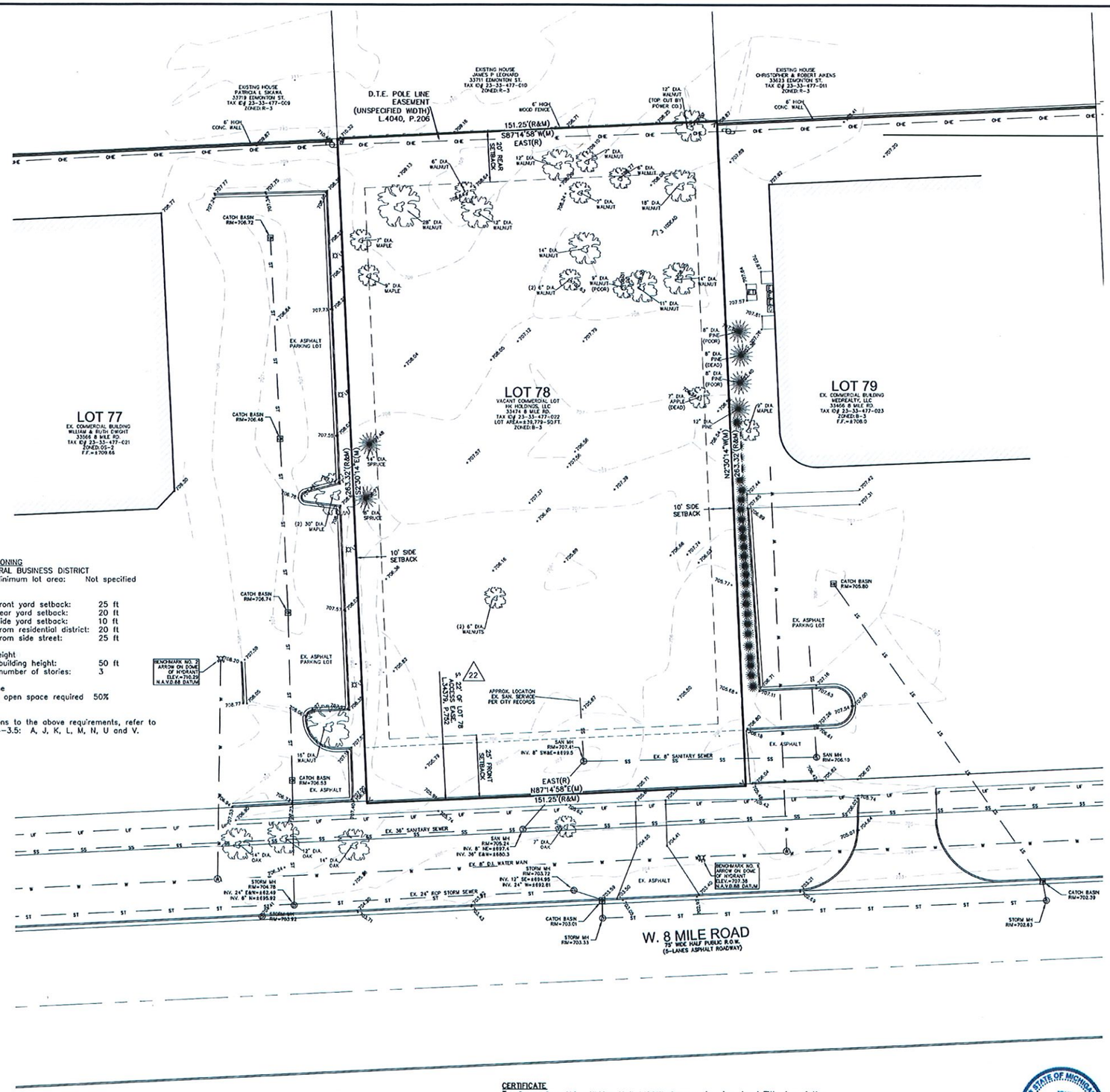
19. NO PLOTTABLE OFFSITE EASEMENTS ARE LISTED IN THE TITLE COMMITMENT.

ENCROACHMENTS – NONE

SURVEYOR'S NOTES

PERTAINING TO AMERICAN LAND TITLE ASSOCIATION, COMMITMENT FOR TITLE INSURANCE FILE NO. TC13-118200 EFFECTIVE DATE: APRIL 7, 2025

REFERENCE NUMBER	DESCRIPTION RECORDING REFERENCE	STATUS ON PLAT	
11	Covenants, conditions and restrictions and other provisions as contained in instrument Liber 863, Page 545	NOT PLOTTED	AFFECTS PARCEL
12	Subject to the easements, restrictions and reservations contained in the Farmington Acres Subdivision Plat Liber 21, Page(s) 10	PLOTTED	AFFECTS PARCEL
21	Pole Line Permit The Detroit Edison Company Liber 4340, page 208	PLOTTED	AFFECTS PARCEL
22	Marginal Access Easement Liber 9380, page 656; Liber 10256, page 516, Liber 10323, page 196, Liber 10709, page 475, Liber 11217, page 54, Liber 15747, page 666, Liber 34379, page 752	PLOTTED	AFFECTS PARCEL
23	Memorandum of Agreement Green Sunrise Products LLC, Liber 59329, page 527	NOT PLOTTED	AFFECTS PARCEL
24	Rights of Tenant, Green Sunrise Products LLC, Memorandum of Lease Agreement Liber 59532, page 217	NOT PLOTTED	AFFECTS PARCEL



EXISTING ZONING
B-3 GENERAL BUSINESS DISTRICT
Lot Size Minimum lot area: Not specified

Setbacks
Minimum front yard setback: 25 ft
Minimum rear yard setback: 20 ft
Minimum side yard setback: 10 ft
Minimum from residential district: 20 ft
Minimum from side street: 25 ft

Building Height
Maximum building height: 50 ft
Maximum number of stories: 3

Open Space
Front yard open space required 50%

NOTES
For additions to the above requirements, refer to Section 34-3.5: A, J, K, L, M, N, U and V.

LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
× 656.5	EX. SPOT ELEVATION	OHC	EX. OVERHEAD CABLE
	EX. CONTOUR	OHF	EX. OVERHEAD FIBER
	EX. DITCH	OHE	EX. OVERHEAD ELECTRIC
	EX. GRAVEL	UC	EX. UNDERGROUND CABLE
	EX. WATER MAIN		EX. COMMUNICATION RISER
	EX. WATER VALVE		EX. COMMUNICATION HANDHOLE
	EX. HYDRANT		EX. UTILITY POLE
	EX. WATER MANHOLE		EX. GUY ANCHOR
	EX. WATER GV		EX. SIGNAL POLE
	EX. WATER METER		EX. LIGHT POLE
	EX. STORM SEWER		EX. GROUND LIGHT
	EX. STORM INLET/CATCH BASIN		EX. DOUBLE LIGHT POLE
	EX. ROUND STORM CATCH BASIN		EX. SINGLE POLE SIGN
	EX. STORM MANHOLE		EX. DOUBLE POLE SIGN
	EX. STORM END SECTION		EX. MAILBOX
	EX. SANITARY SEWER		EX. FLAGPOLE
	EX. SANITARY MANHOLE		EX. SPEAKER
	EX. CLEAN OUT		EX. UNKNOWN MANHOLE
	EX. SANITARY VENT		EX. COMBO MANHOLE
	EX. UNDERGROUND GAS		EX. SECTION LINE
	EX. GAS VALVE		EX. PARCELS
	EX. GAS METER		EX. EASEMENT
	EX. UNDERGROUND TELEPHONE		EX. CENTERLINE
	EX. TELEPHONE MANHOLE		EX. WETLAND LIMITS
	EX. TELEPHONE RISER		EX. CURB/PAVEMENT
	EX. TELEPHONE HANDHOLE		EX. FENCE
	EX. UNDERGROUND ELECTRIC		EX. GUARDRAIL
	EX. ELECTRIC MANHOLE		FOUND IRON
	EX. ELECTRIC RISER		FOUND RR SPIKE
	EX. ELECTRIC HANDHOLE		FOUND PK NAIL
	EX. ELECTRIC TRANSFORMER		FOUND CONC. MONUMENT
	EX. ELECTRIC METER		SET IRON ROD
	EX. GENERATOR		SET MAG NAIL
	EX. ASPHALT		SECTION CORNER
	EX. CONCRETE		POST
	EX. GRAVEL		BOLLARD
	EX. TREELINE	(R)	RECORDED BEARING
	EX. WATER MARKER	(M)	MEASURED BEARING
	EX. GAS MARKER		EX. TREE
	EX. COMM. MARKER		DEMO TREE
	EX. TELE. MARKER		
	EX. FIBER MARKER		
	EX. MEDIA MARKER		

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

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THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

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

CERTIFICATE
To: Cypress Crown LLC, a Michigan Limited Liability Company, American Land Title Association. This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS and includes Items 1, 2, 3, 4, 5, 6(a), 7(a), 7(b)(1), 7(c), 8, 9, 10, 11, 13, 14, 15, 16, 18, and 19 of Table A thereof. The field work was completed on May 6, 2025. Date of Plat or Map: May. 20, 2025.

John Blanchard, Professional Surveyor
P.S#4001027446

STATE OF MICHIGAN · JOHN S. BLANCHARD · License No. 4001027446 · PROFESSIONAL SURVEYOR

Z:\KALABAT\133474 8 MILE RD - FARMINGTON\BASE-SV.DWG

Civil Engineering · Landscape Architecture · Land Surveying · Construction Services
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Engineering & Surveying
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South Lyon, MI 48178
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REVISIONS

CLIENT:
KALABAT ENGINEERING / JSK DESIGN GROUP
31333 SOUTHFIELD RD. SUITE 250
BEVERLY HILLS, MICHIGAN 48025

TOPOGRAPHIC AND ALTA NSPS LAND TITLE SURVEY
33474 8 MILE ROAD

These documents are instruments of service in respect of the Project and, regardless of whether the Project is executed, Diffin Engineering & Surveying (DES) for the specific purpose intended will be at Users sole risk and without liability or legal exposure to DES. User shall indemnify, and hold harmless DES from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom. Any such use or reuse or adaptation will entitle DES to further compensation at rates to be agreed upon by User and DES.

SECTION 33
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

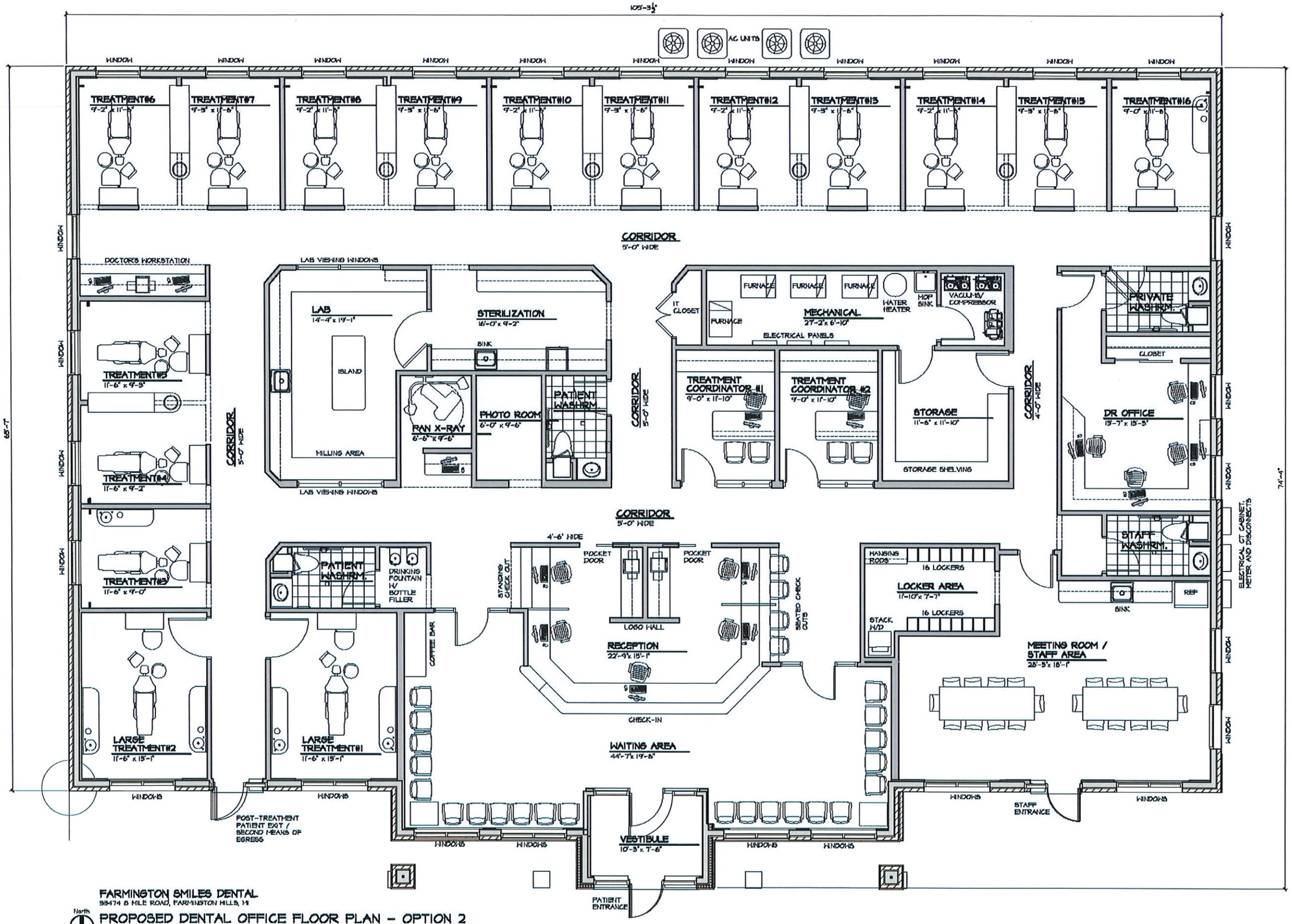
DATE: 5-20-25
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P.E.: MD
1" = 20'
Job No.: 250509
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ARCHITECTURAL ENGINEERING

31333 Southfield Road
Suite 250
Beverly Hills, MI 48025
Ph 248.600.8707
F 248.594.5919

NO	DESCRIPTION	DATE
1	SPA	7-1-25



FARMINGTON SMILES DENTAL
33474 8 MILE ROAD, FARMINGTON HILLS, MI

North

PROPOSED DENTAL OFFICE FLOOR PLAN – OPTION 2

SCALE: 1/4" = 1'-0"
JUNE 29, 2025

AREA = 7,169 SF

SEAL:

STATE OF MICHIGAN
NATHAN A KURMAS
ARCHITECT
No. 1301055493
LICENSED ARCHITECT

PROJECT:

FARMINGTON SMILES DENTAL

33474 EIGHT MILE ROAD
FARMINGTON HILLS, MI 48334

CLIENT:

DR. NICK RIED

33474 EIGHT MILE RD
FARMINGTON HILLS, MI 48334

SHEET TITLE:

FLOOR PLAN

SHEET NUMBER:

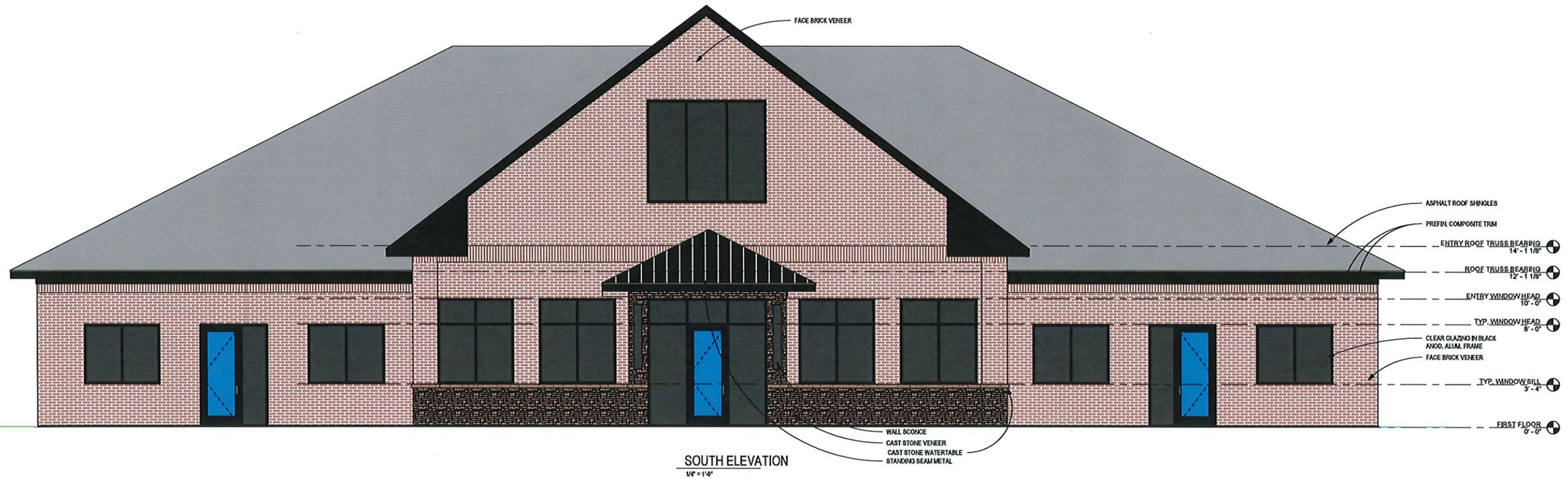
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PROJECT NO: M025-108
DRAWN BY: BC
CHECKED BY: NK

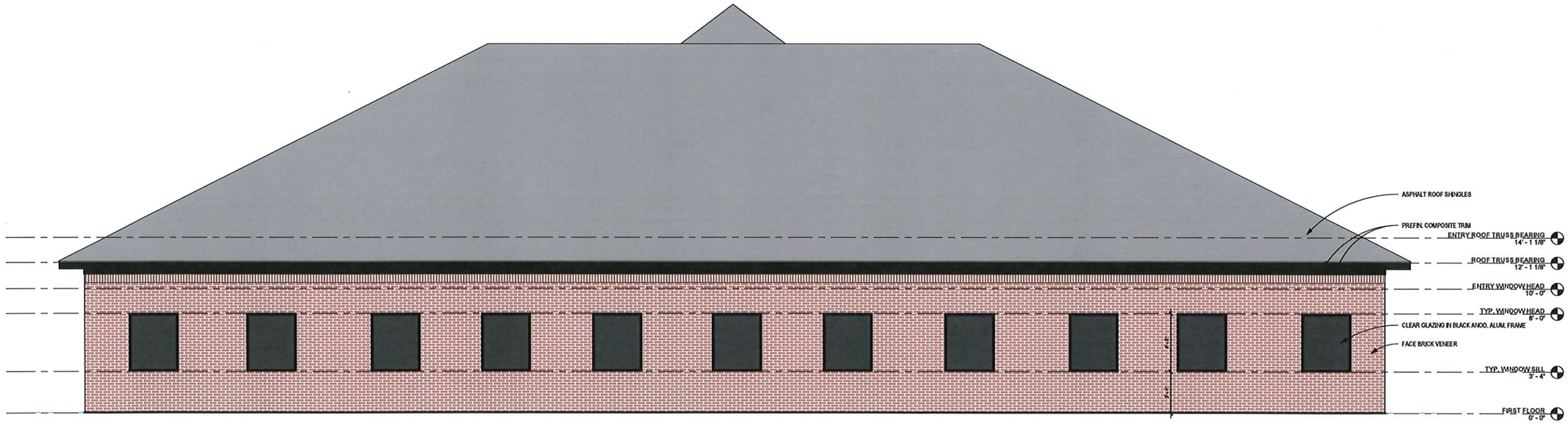
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SOUTH ELEVATION
1/4" = 1'-0"



NORTH ELEVATION
1/4" = 1'-0"

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NO	DESCRIPTION	DATE
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SEAL:

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NATHAN A KURMAS
ARCHITECT
No. 1301055493
LICENSED ARCHITECT

PROJECT:

FARMINGTON SMILES DENTAL

33474 EIGHT MILE ROAD
FARMINGTON HILLS, MI 48334

CLIENT:

DR. NICK RIED

33474 EIGHT MILE RD
FARMINGTON HILLS, MI 48334

SHEET TITLE:

EXTERIOR ELEVATIONS

SHEET NUMBER:

A-2.1

PROJECT NO:	MD25-108
DRAWN BY:	NK
CHECKED BY:	NK

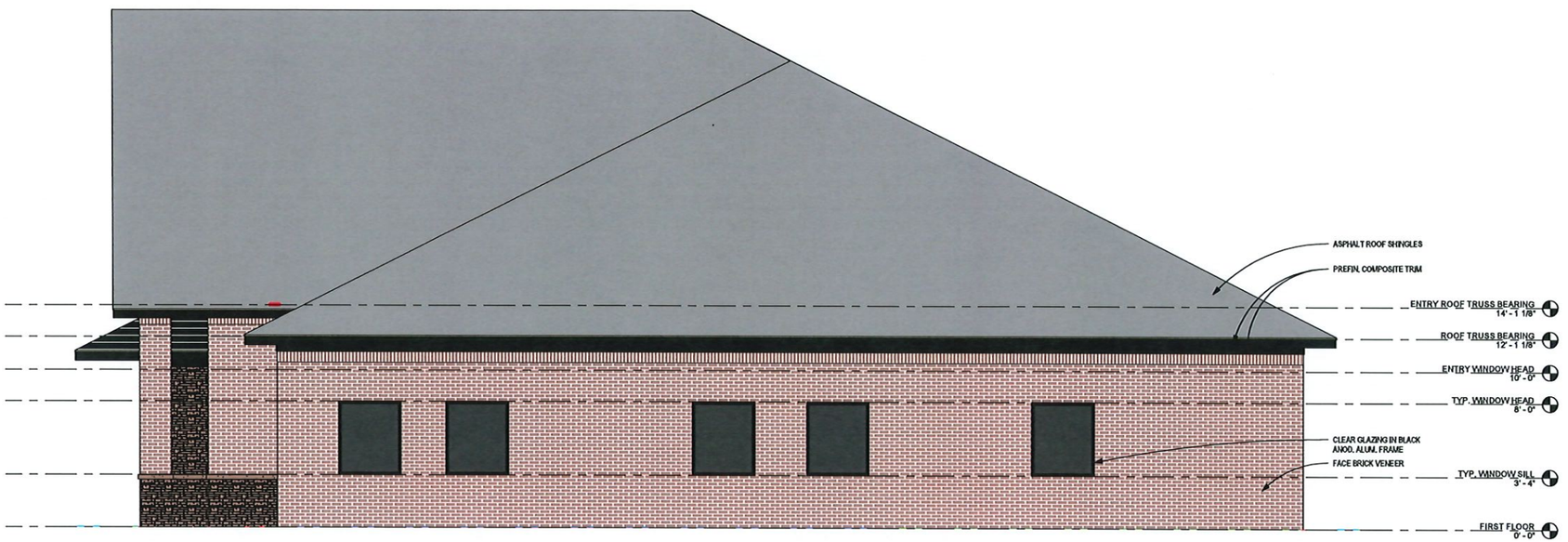
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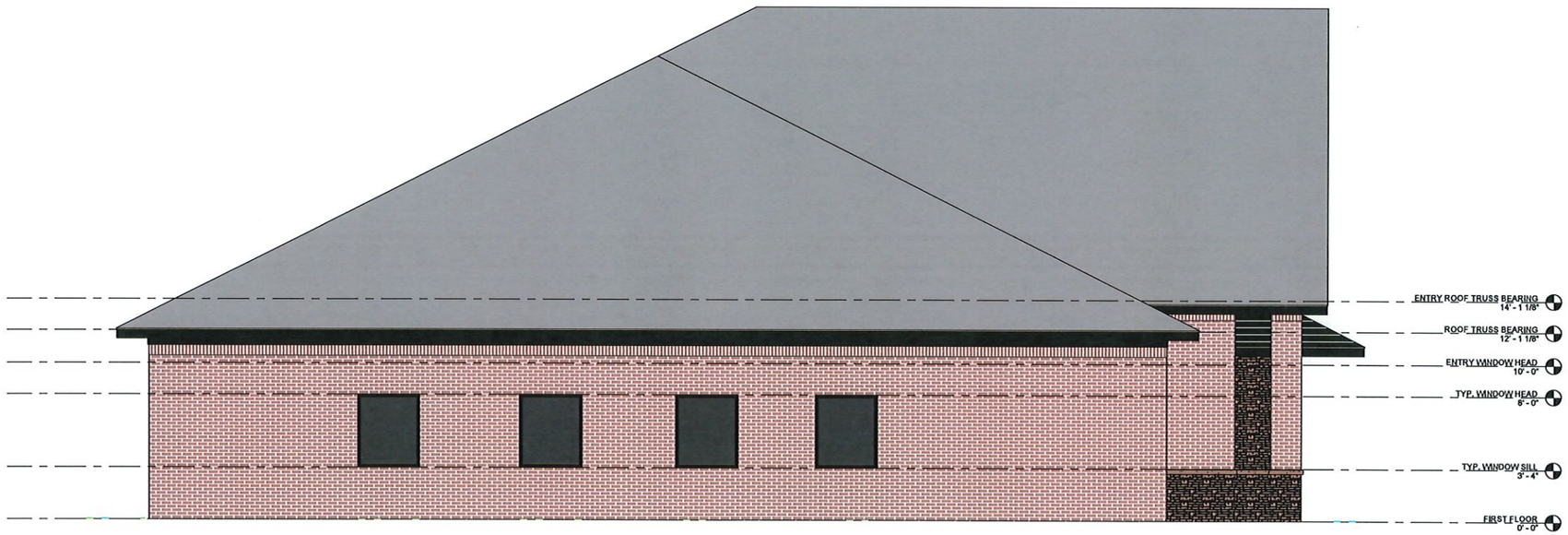
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NO	DESCRIPTION	DATE
1	SPA	7-1-25



EAST ELEVATION
1/4" = 1'-0"



WEST ELEVATION
1/4" = 1'-0"

SEAL:

STATE OF MICHIGAN
NATHAN A KURMAS
ARCHITECT
No. 1301054493
LICENSED ARCHITECT

PROJECT:

FARMINGTON SMILES DENTAL

33474 EIGHT MILE ROAD
FARMINGTON HILLS, MI 48334

CLIENT:

DR. NICK RIED

33474 EIGHT MILE RD
FARMINGTON HILLS, MI 48334

SHEET TITLE:

EXTERIOR ELEVATIONS

SHEET NUMBER:

A-2.2

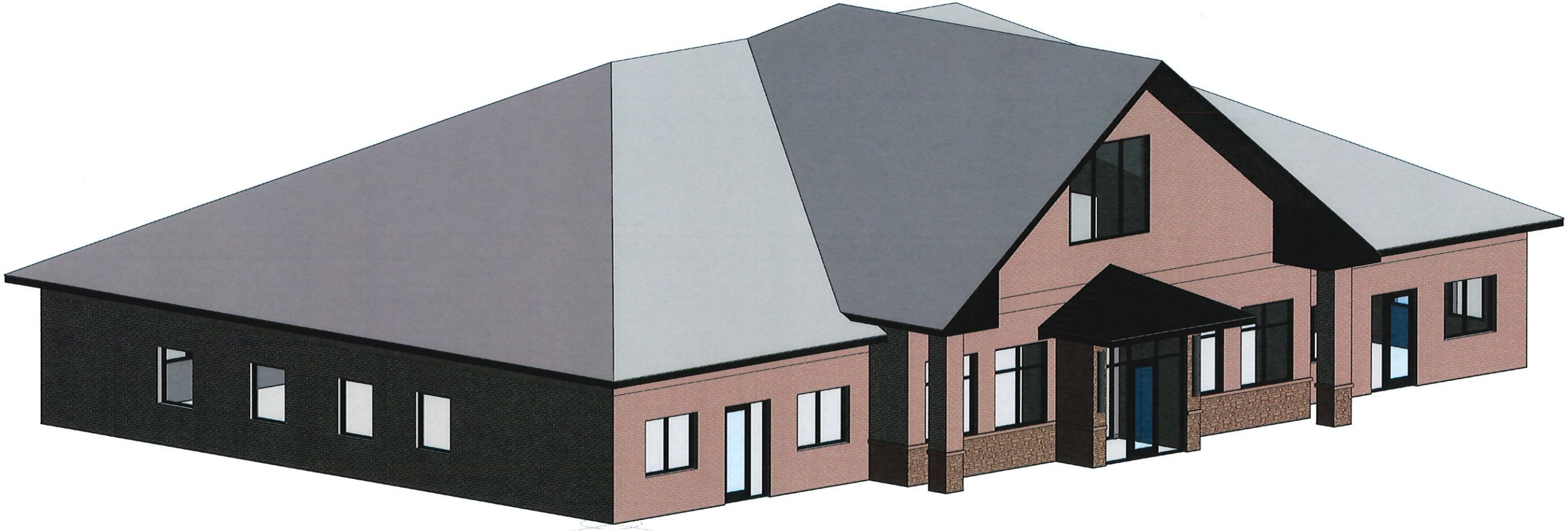
PROJECT NO:	MD25-108
DRAWN BY:	NK
CHECKED BY:	NK

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PROJECT:

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33474 EIGHT MILE ROAD
FARMINGTON HILLS, MI 48334

CLIENT:

DR. NICK RIED

33474 EIGHT MILE RD
FARMINGTON HILLS, MI 48334

SHEET TITLE:

PERSPECTIVES

SHEET NUMBER:

A-9.1

PROJECT NO:	MD25-108
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CHECKED BY:	NK

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TREES TO BE REPLACED

PROTECTED TREES

TREE#	COMMON NAME	DIA.	SAVE/REMOVE
1	WALNUT	6	REMOVE
2	WALNUT	6	REMOVE
3	SPRUCE	8	REMOVE
6	WALNUT	14	REMOVE
7	WALNUT	11	REMOVE
8	WALNUT	9	REMOVE
9	WALNUT	6	REMOVE
10	WALNUT	6	REMOVE
11	WALNUT	14	REMOVE
12	WALNUT	18	REMOVE
13	WALNUT	6	REMOVE
14	WALNUT	7	REMOVE
15	WALNUT	7	REMOVE
16	WALNUT	12	REMOVE
17	WALNUT	6	REMOVE
18	WALNUT	12	REMOVE
19	MAPLE	9	REMOVE
21	MAPLE	7	REMOVE
	TOTAL DBH	164	

#	DBH (Caliper Inch)	Species	SAVE/ REMOVE/ RELOCATE	PROTECTED/ LANDMARK	REPLACEMENT CALIPER
1	6	WALNUT	REMOVE	PROTECTED	6
2	6	WALNUT	REMOVE	PROTECTED	6
3	8	SPRUCE	REMOVE	PROTECTED	8
4	14	SPRUCE	SAVE	PROTECTED	0
5	7	APPLE	REMOVE	DEAD	0
6	14	WALNUT	REMOVE	PROTECTED	14
7	11	WALNUT	REMOVE	PROTECTED	11
8	9	WALNUT	REMOVE	PROTECTED	9
9	6	WALNUT	REMOVE	PROTECTED	6
10	6	WALNUT	REMOVE	PROTECTED	6
11	14	WALNUT	REMOVE	PROTECTED	14
12	18	WALNUT	REMOVE	PROTECTED	18
13	6	WALNUT	REMOVE	PROTECTED	6
14	7	WALNUT	REMOVE	PROTECTED	7
15	7	WALNUT	REMOVE	PROTECTED	7
16	12	WALNUT	REMOVE	PROTECTED	12
17	6	WALNUT	REMOVE	PROTECTED	6
18	12	WALNUT	REMOVE	PROTECTED	12
19	9	MAPLE	REMOVE	PROTECTED	9
20	28	WALNUT	REMOVE	LANDMARK	7
21	7	MAPLE	REMOVE	PROTECTED	7
22	12	WALNUT	SAVE	PROTECTED	0
Total					171

SUMMARY OF TREES TO BE REPLACED

Tree Type	*Total Removed DBH (Inches)*	*Total Replaced DBH (Inches)*
Protected Trees	164	164
Landmark Trees	28	7
Total	192	171

NOTES

1. AS A CONDITION OF GRANTING A TREE PERMIT, THE APPLICANT WILL BE REQUIRED TO REPLACE TREES BEING REMOVED HAVING SIX (6) INCHES OR MORE DBH.
2. THE PERMIT GRANTEE SHALL EITHER RELOCATE TREES OR REPLACE TREES ON A ONE-TO-ONE BASIS. ALL REPLACEMENT TREES SHALL MEASURE THREE-INCH CALIPER FOR DECIDUOUS TREES, TEN-FOOT HEIGHT FOR EVERGREEN TREES, OR GREATER.
3. WHEN LANDMARK TREES ARE PERMITTED TO BE REMOVED, REPLACEMENT TREES SHALL BE PROVIDED TO A MINIMUM OF TWENTY-FIVE (25) PERCENT OF DBH REMOVED, MEASURED INDIVIDUALLY OR CUMULATIVELY.
4. IF TREES INTENDED TO BE SAVED ARE DAMAGED OR REMOVED DURING CONSTRUCTION, THEY MUST BE REPLACED WITH MINIMUM FIVE-INCH CALIPER TREES. LANDMARK TREES MUST BE REPLACED AT ONE HUNDRED (100) PERCENT DBH WITH FIVE-INCH CALIPER STOCK.
5. ALL TREES RELOCATED OR PLANTED AS REPLACEMENTS SHALL EXHIBIT A NORMAL LIVE GROWTH CYCLE TO COMPLY WITH SUBSECTION 34-5.14.4.
6. REPLACEMENT TREES MUST BE PLANTED AND SUPPORTED BEFORE FINAL OCCUPANCY; MINIMUM 4' FROM PROPERTY LINES AND 10' FROM UTILITIES.

TYPES

L - LANDMARK

L - LANDMARK: ACCORDING TO SEC. (34-5.18.10) ALL TREES TWENTY-FOUR (24) INCHES DBH OR GREATER ARE CONSIDERED LANDMARK TREES.

P - PROTECTED

P - PROTECTED : ALL TREES 6 INCHES DBH OR GREATER (AND UNDER 24 INCHES), EXCLUDING INVASIVE SPECIES.

LANDMARK TREES

TREE #	COMMON NAME	DIA.	SAVE/REEMOVE
20	WALNUT	28	REMOVE
	TOTAL DBH	28	

REPLACEMENT CRITERIA:

PROTECTED TREES @ 100%	= 164 DBH X 1.0 = 164 INCHES
REPLACEMENT CALIPER	= 164
LANDMARK TREES @ 25%	= 28 X 0.25 = 7 INCHES
REPLACEMENT CALIPER	= 7
TOTAL REPLACEMENT CALIPER	=171

KEY NOTES

1. REMOVE ASPHALT PAVEMENT
2. REMOVE PROTECTED TREES
3. REMOVE LANDMARK TREE
4. SAW CUT AND REMOVE CURB AND GUTTER

BENCHMARK

SITE BENCHMARK NO. 1
SET BENCHMARK ON EX WATER HYDRANT
ELEV. = 707.38 NAVD88

SITE BENCHMARK NO. 2
SET BENCHMARK ON EX WATER HYDRANT
ELEV= 710.29 NAVD88

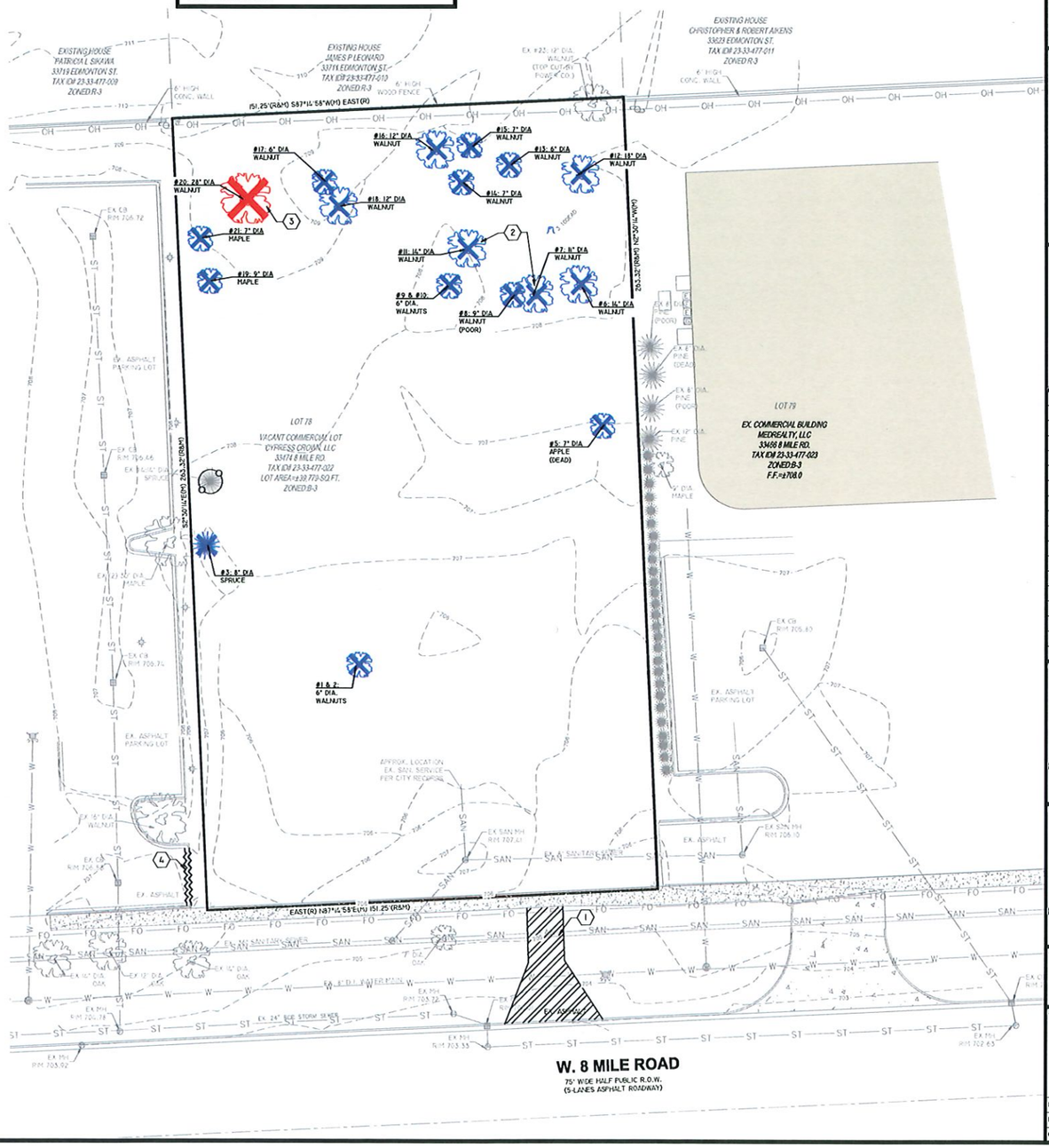
KEY NOTES

DEMO PROTECTED TREE

DEMO LANDMARK TREE

DEMO ASPHALT PAVEMENT

DEMO EX. CURB & GUTTER



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CONSULTANTS:

SEAL:
IDEN KALABAT ENGINEER No. 6201062804
STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	SITE PLAN APROVAL	7-1-2025

CLIENT:
CYPRESS CROWN LLC
24001 ORCHARD LAKE RD #160
FARMINGTON HILLS, MI 48336

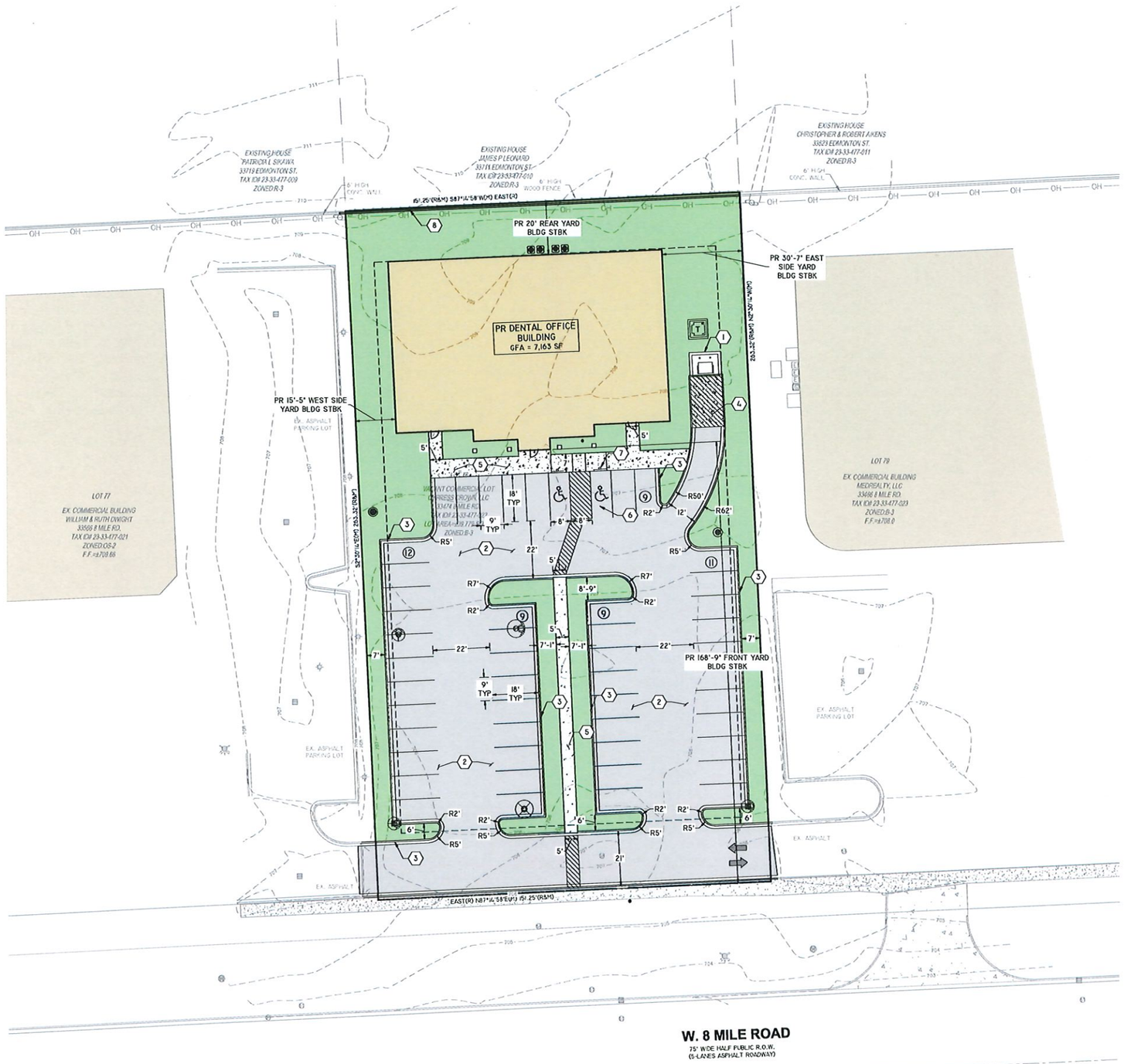
PROJECT:
FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:
DEMOLITION PLAN

SHEET NUMBER:
C2.0

PROJECT NUMBER: MD25-108
DRAWN BY: S. SALMAN
CHECKED BY: I. KALABAT

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NORTH

20 10 0 20 40

DRAWING SCALE: 1"=20'

SITE DATA

LAND AREA:	0.91 ACRES (39826.78 S.F.)
CURRENT ZONING:	B-3
PROPOSED ZONING:	B-3
PROPOSED USE:	DENTAL OFFICE
BUILDING HEIGHT:	1 STORY

BUILDING SETBACKS:	REQUIRED	PROVIDED
FRONT SETBACK	25'	168-9
REAR SETBACK	20'	20'
WEST SIDE YARD SETBACK	10'	15'-5
EAST SIDE YARD SETBACK	10'	30'-7

PARKING REQUIREMENTS:	REQUIRED	PROVIDED
PROFESSIONAL OFFICE (GFA/UFA - 6,500 S.F.) 1 PER 135 S.F. FOR THE FIRST (5,000 GFA/UFA)	37	
1 PER 175 S.F. FOR THE EXCESS (2,500 GFA/UFA)	13	
TOTAL	50	50
ACCESSIBLE PARKING - CAR	2	2

KEY NOTES

1. CONSTRUCT DUMPSTER ENCLOSURE PER DETAIL 'A' OF SHEET C3.1
2. CONSTRUCT STANDARD DUTY ASPHALT PAVEMENT PER DETAIL 'B' OF SHEET C3.1
3. CONSTRUCT CURB AND GUTTER PER DETAIL 'C' OF SHEET C3.1
4. CONSTRUCT 8" CONCRETE PAVEMENT PER DETAIL 'D' OF SHEET C3.1
5. CONSTRUCT INTEGRAL CONCRETE CURB/WALK PER DETAIL 'E' OF SHEET C3.1
6. INSTALL ADA ACCESSIBLE PARKING PAVEMENT MARKINGS AND STRIPING PER DETAIL 'F' OF SHEET C3.1
7. INSTALL HANDICAP PARKING AND VAN ACCESSIBLE SIGN PER DETAIL 'G' OF SHEET C3.1
8. CONSTRUCT 6" CONCRETE OF MASONRY SCREEN WALL PER DETAIL 'H' OF SHEET C3.1

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iden@kalabat.com

CONSULTANTS:

SEAL:

STATE OF MICHIGAN
IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	SITE PLAN APROVAL	7-1-2025
2		
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CLIENT:

CYPRESS CROWN LLC
24001 ORCHARD LAKE RD
#160
FARMINGTON HILLS, MI 48336

PROJECT:

FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:

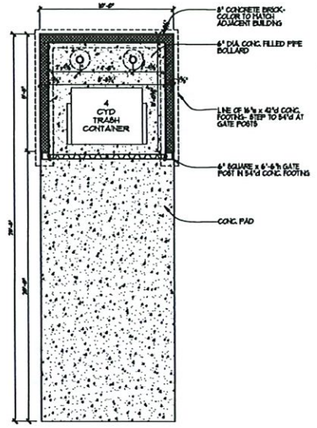
SITE PLAN

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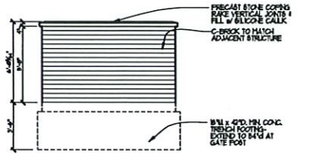
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PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

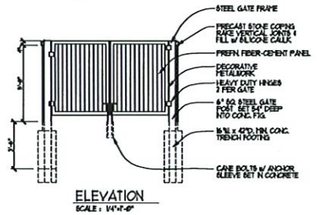
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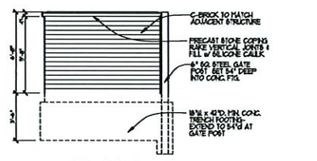
PLAN
SCALE: 1/4"=1'-0"



ELEVATION
SCALE: 1/4"=1'-0"

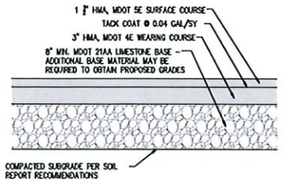


ELEVATION
SCALE: 1/4"=1'-0"



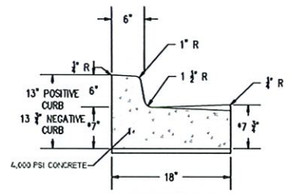
ELEVATION
SCALE: 1/4"=1'-0"

A C3.1 REFUSE ENCLOSURE
SCALE: N.T.S



NOTES:
PAVING CONTRACTOR TO SUBMIT HMA PAVEMENT MIX SELECTION TO DESIGN ENGINEER OR MUNICIPAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

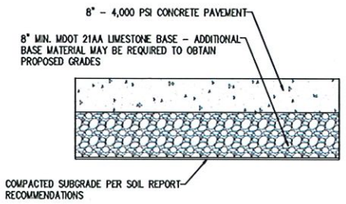
B C3.1 STANDARD DUTY ASPHALT PAVEMENT SECTION
SCALE: N.T.S.



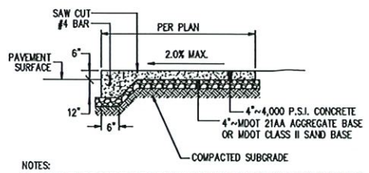
* DIMENSIONS REVERSED FOR NEGATIVE SLOPED CURB

NOTE: EXPANSION JOINTS REQUIRED AT 100' MAXIMUM SPACING OR AT ALL BUT JOINTS TO EXISTING CONCRETE, CURB RETURNS OR AS DIRECTED BY THE ENGINEER

C C3.1 CONCRETE CURB AND GUTTER
SCALE: N.T.S.

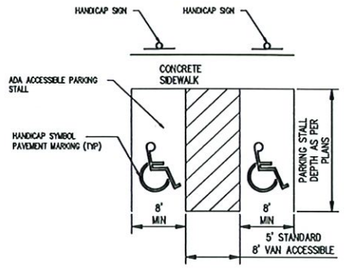


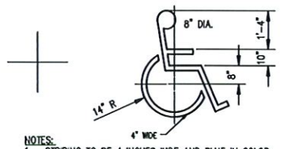
D C3.1 8" CONCRETE PAVEMENT
SCALE: N.T.S.



NOTES:
1. WALK TO BE DIVIDED INTO EQUALLY SPACED BLOCKS AT APPROXIMATELY 8' INTERVALS. EXPANSION JOINT FILLER 1/2" THICK SHALL BE INSTALLED BETWEEN WALK AND ANY FIXED STRUCTURE EXTENDING FOR THE FULL DEPTH OF THE SIDEWALK. THE EXPANSION JOINT FILLER SHALL BE 1" THICK WHERE WALK IS INSTALLED AGAINST BACK OF CURB.
2. CONCRETE THICKNESS TO BE INCREASED TO 6-INCHES THROUGH ALL DRIVE APRONS.
3. MDOT 21AA AGGREGATE BASE THICKNESS TO BE INCREASED TO 6-INCHES THROUGH ALL DRIVE APRONS.

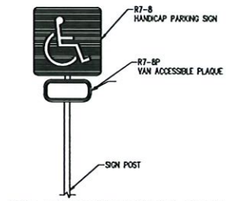
E C3.1 TYPICAL INTEGRAL CURB/WALK DETAIL
SCALE: N.T.S.





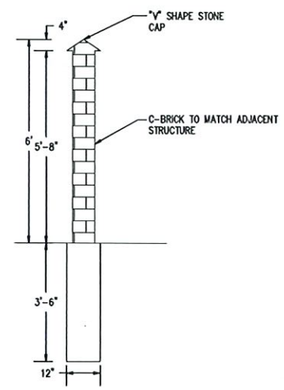
NOTES:
1. STRIPING TO BE 4 INCHES WIDE AND BLUE IN COLOR.
2. HANDICAP SIGNS TO BE PLACED IN THE NEAREST GRASS AREA ACROSS CONCRETE WALKS FOR SPACES THAT ABUT WALKS. HANDICAP SIGNS TO BE BOLLARD MOUNTED AND PLACED AT HEAD OF SPACE FOR SPACES THAT DO NOT ABUT WALKS.
3. STALL AND AISLE WIDTHS ARE TYPICAL UNLESS OTHERWISE STATED ON PLAN.

F C3.1 ADA ACCESSIBLE PARKING STRIPING DETAIL
SCALE: N.T.S.



NOTE: HANDICAP PARKING SIGN SHALL CONFORM WITH THE CURRENT STATE AND LOCAL CODES AND REGULATIONS

G C3.1 HANDICAP PARKING AND VAN ACCESSIBLE SIGN
SCALE: N.T.S.



H C3.1 MASONRY SCREEN WALL
SCALE: N.T.S

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CLIENT:
CYPRESS CROWN LLC
24001 ORCHARD LAKE RD
#160
FARMINGTON HILLS, MI 48336

PROJECT:
FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

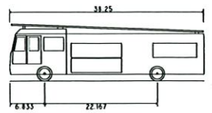
SHEET TITLE:
SITE DETAILS

SHEET NUMBER:
C3.1

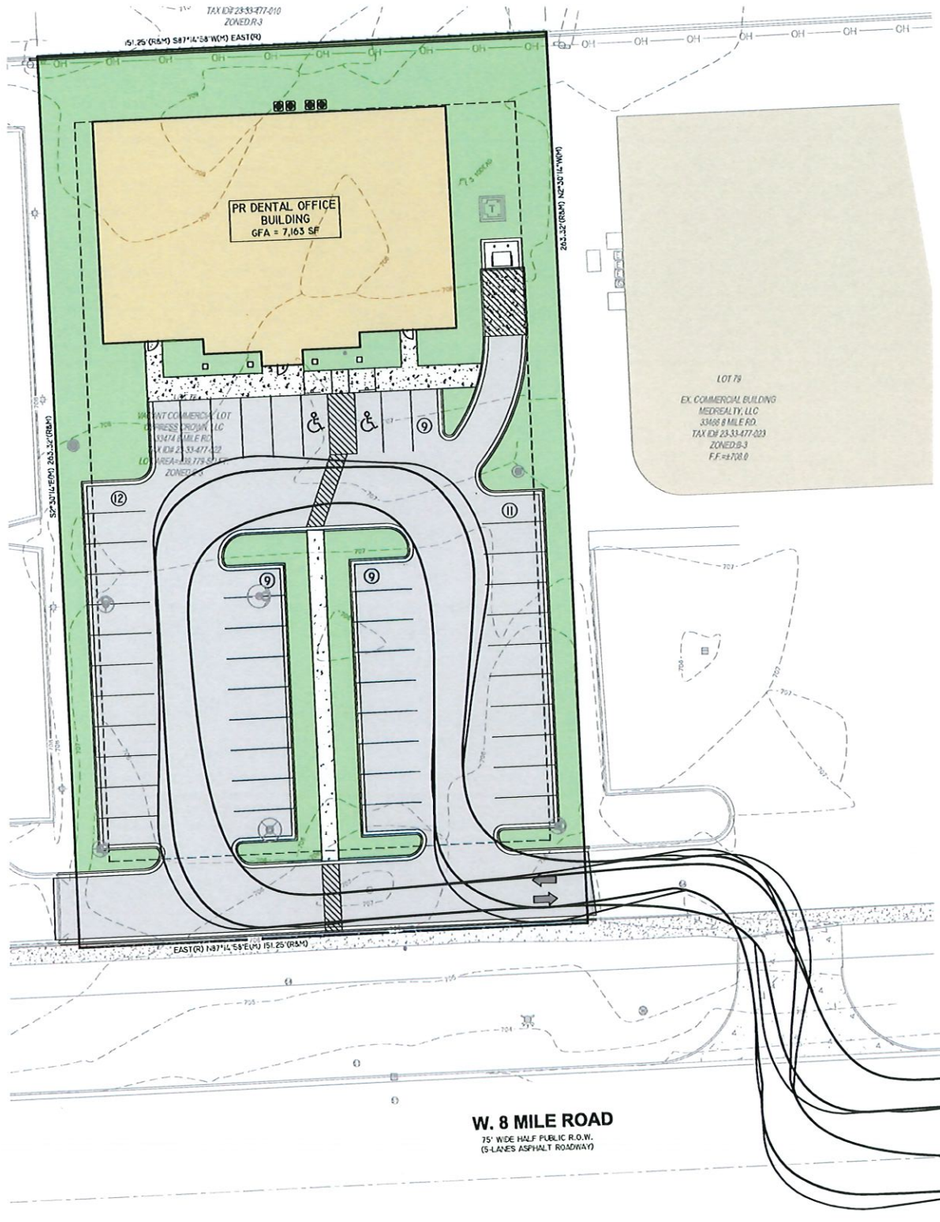
PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

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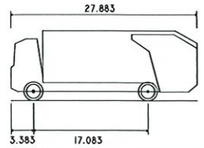
FIRE TRUCK TURNING MOVEMENT



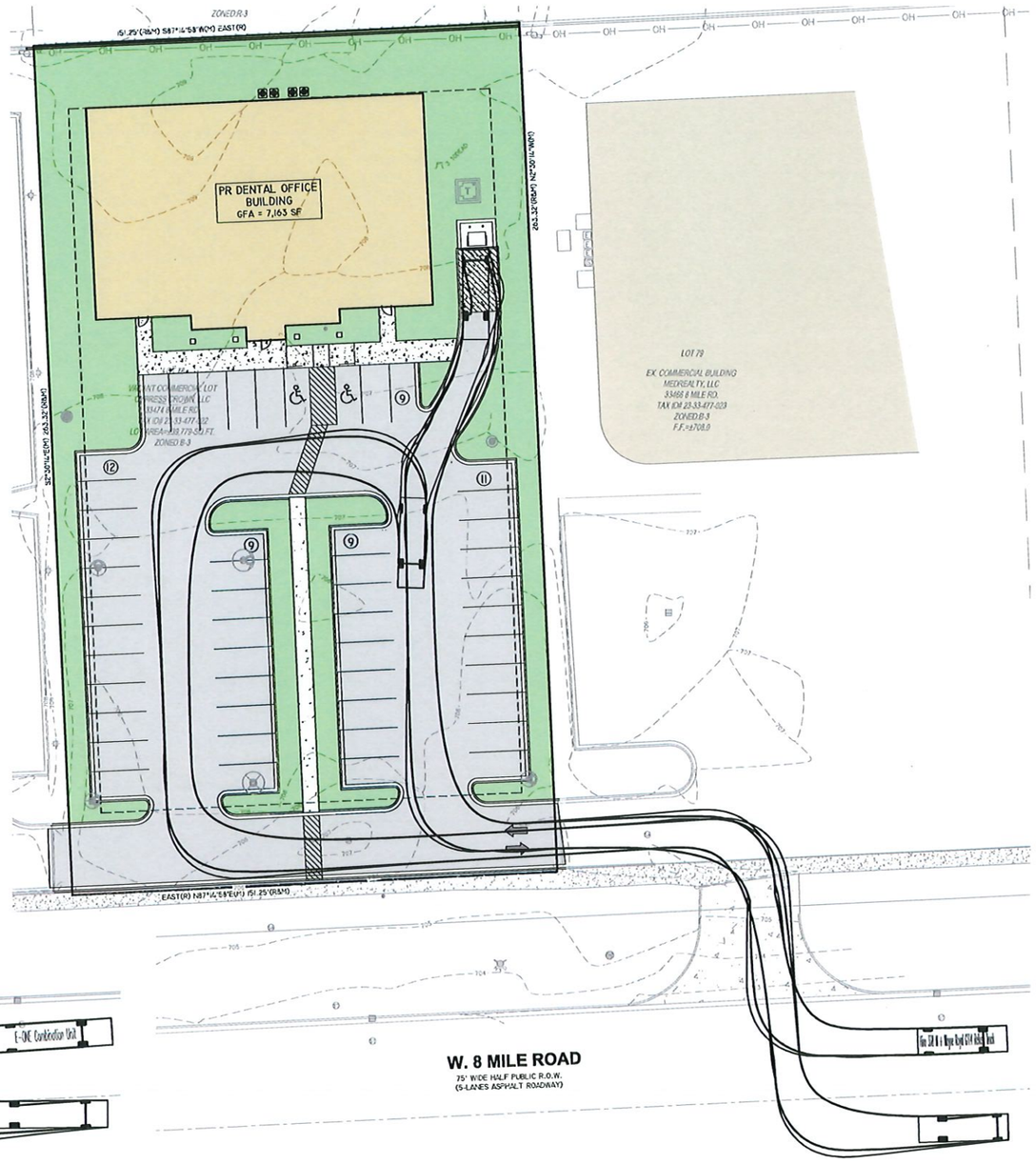
E-ONE Combination Unit	
Overall Length	38.250FT
Overall Width	8.333FT
Overall Body Height	11.250FT
Min Body Ground Clearance	1.393FT
Track Width	8.333FT
Lock-to-Lock time	6.00S
Max Wheel Angle	45.00°



DUMPSTER TRUCK TURNING MOVEMENT



Hino 338 M + Wayne Royal GT14 Refuse Truck	
Overall Length	27.883FT
Overall Width	8.042FT
Overall Body Height	10.488FT
Min Body Ground Clearance	1.318FT
Track Width	8.042FT
Lock-to-Lock time	6.00S
Curb to Curb Turning Radius	27.400FT



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31333 Southfield Road Suite 250
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iden@kalabat.com

CONSULTANTS:

SEAL:

IDEN KALABAT ENGINEER No. 6201062804
STATE OF MICHIGAN · LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	SITE PLAN APROVAL	7-1-2025
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CLIENT:

CYPRESS CROWN LLC
24001 ORCHARD LAKE RD
#160
FARMINGTON HILLS, MI 48336

PROJECT:

FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:

VEHICLE TURNING MOVEMENT PLAN

SHEET NUMBER:

C3.2

PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

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NORTH

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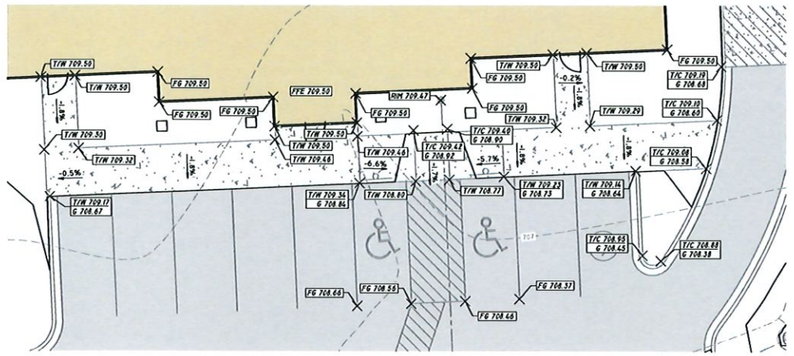
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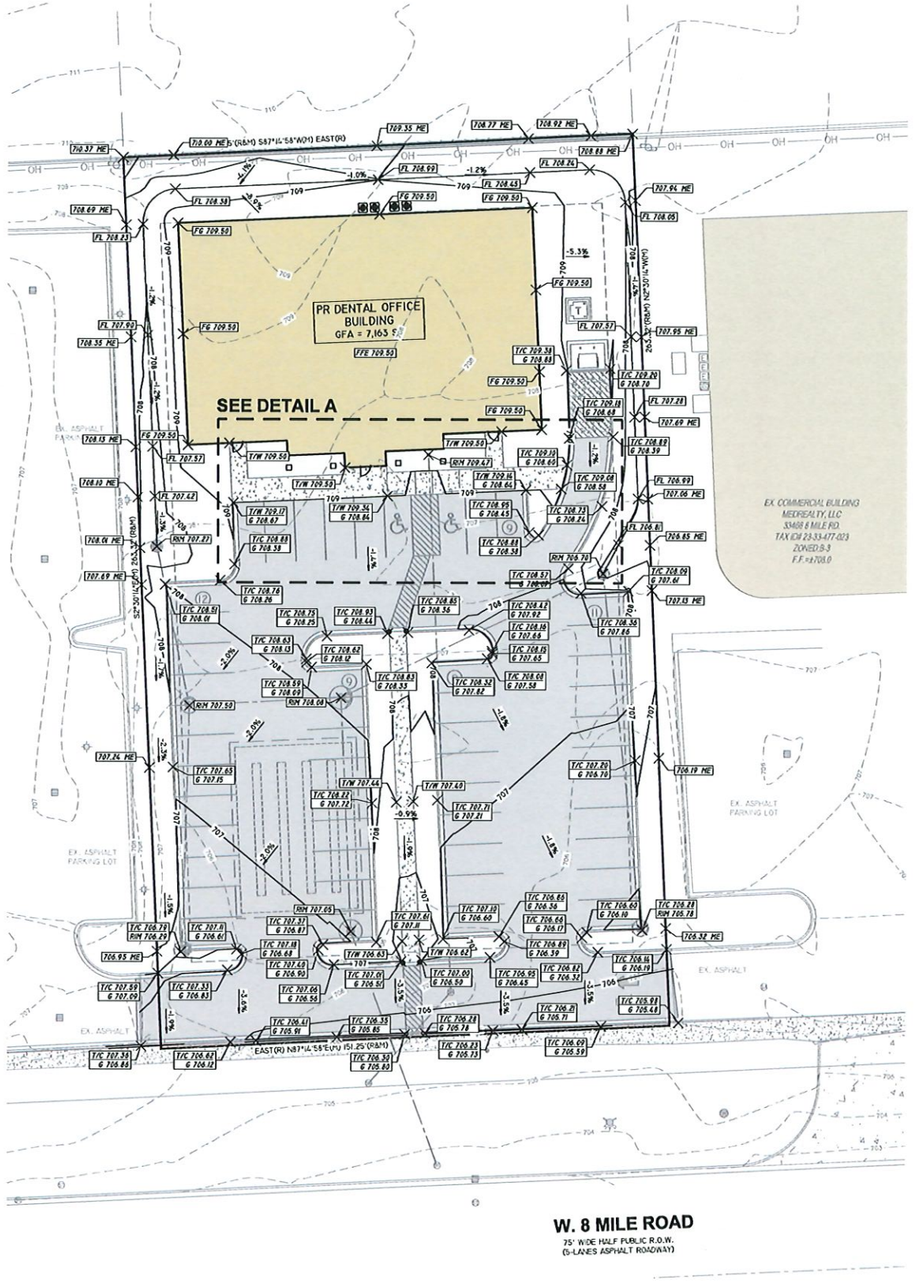
NORTH

10 05 0 10 20

DRAWING SCALE: 1"=10'

GRADING DETAIL A





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SHEET TITLE:

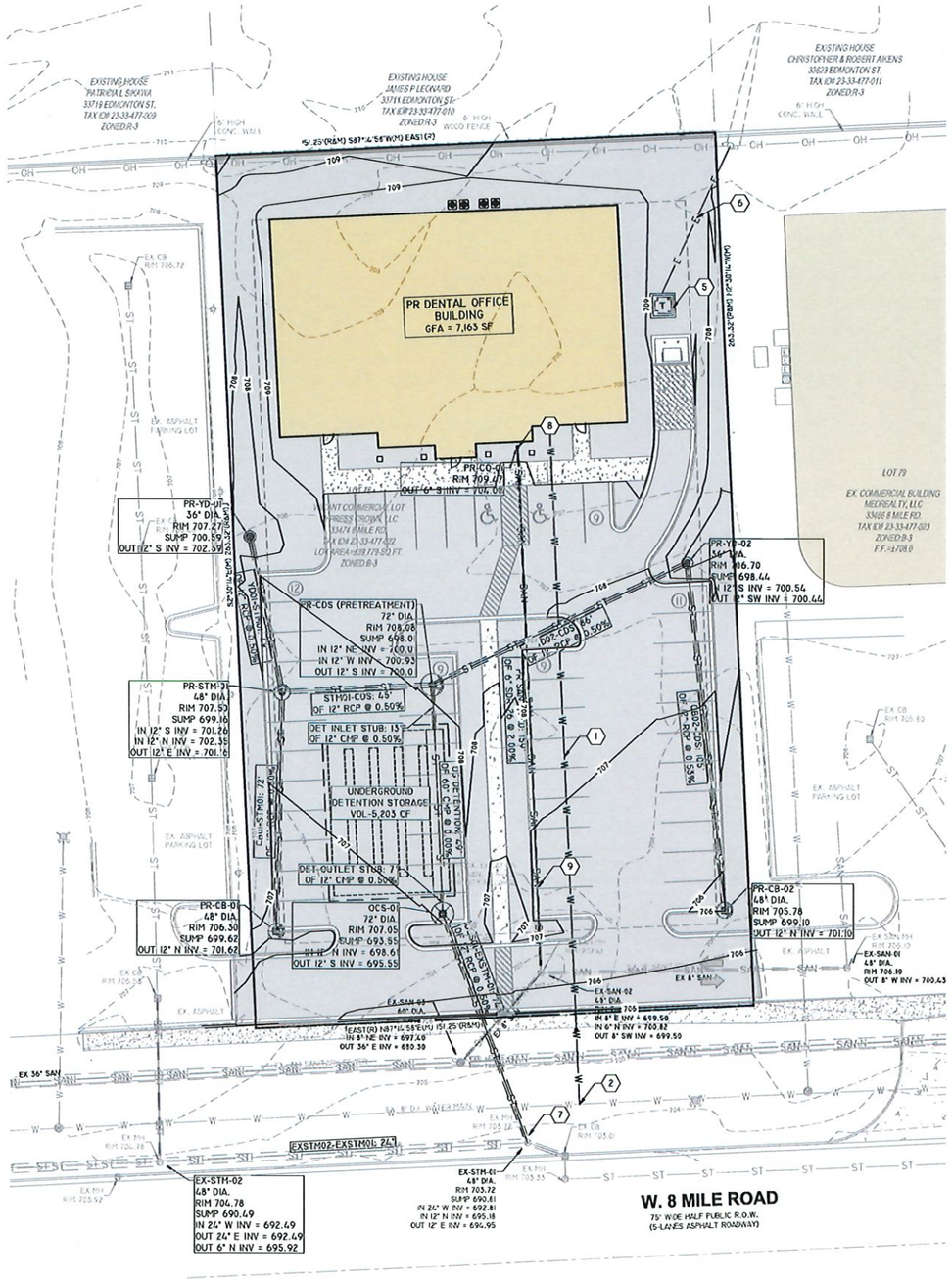
GRADING PLAN

SHEET NUMBER:

C4.0

PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

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NORTH

20 10 0 20 40

DRAWING SCALE: 1"=20'

KEY NOTES

1. INSTALL 1 ½" TYPE K COPPER WATER SERVICE LEAD PER CITY OF FARMINGTON HILLS ENGINEERING STANDARDS
2. INSTALL TAPPING SLEEVE AND CONNECT TO EXISTING WATER MAIN PER CITY OF FARMINGTON HILLS ENGINEERING STANDARDS
3. INSTALL 6" SDR 26 PVC SANITARY SEWER LEAD PER CITY OF FARMINGTON HILLS ENGINEERING STANDARDS
4. CONNECT TO EXISTING SANITARY SEWER LEAD
5. PROPOSED TRANSFORMER LOCATION
6. PROPOSED UNDERGROUND ELECTRIC SERVICE LINE (BY OTHERS)
7. CONNECT STORM WATER OUTLET TO EXISTING STORM MANHOLE PER CITY OF FARMINGTON HILLS ENGINEERING STANDARDS
8. INSTALL SANITARY SEWER CLEAN OUT PER CITY OF FARMINGTON HILLS ENGINEERING STANDARDS

NOTES

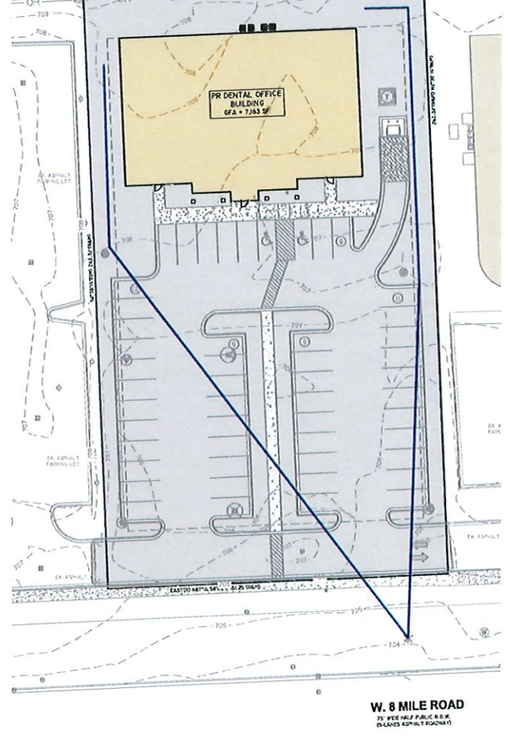
1. PROVIDE MINIMUM OF 18" VERTICAL CLEARANCE AT ALL UTILITY CROSSINGS.
2. ALL PROPOSED UTILITY CONSTRUCTION TO BE CARRIED OUT PER CITY OF FARMINGTON HILLS ENGINEERING STANDARDS.

NORTH

30 15 0 30 60

DRAWING SCALE: 1"=30'

FIRE HYDRANT COVERAGE (300' HOSE LENGTH)



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24001 ORCHARD LAKE RD
#160
FARMINGTON HILLS, MI 48336

PROJECT:

FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:

UTILITY PLAN

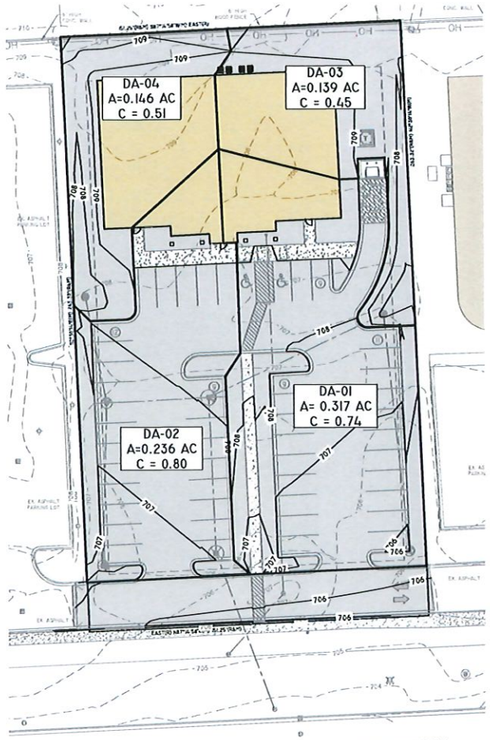
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PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

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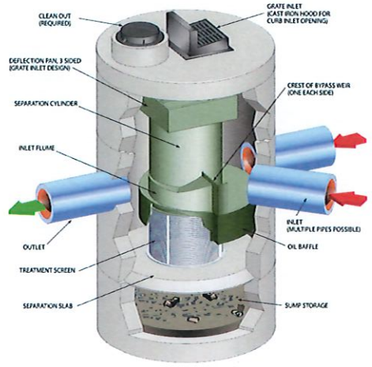
DRAINAGE AREAS



STORM WATER DETENTION CALCULATIONS

REQUIRED DETENTION BASIN VOLUME		
Description	Value	Unit
Contributing area (A)	0.838	acres
Post-development runoff coefficient (C)	0.669	
Time of concrentration for the development (T_c)	10.00	min
100-year peak rainfall intensity (I_{100})	7.435	in/hour
Allowable release rate (Q_{allow})	1.142	ft^3/acre
Allowable 100-year post development peak flow rate (Q_{100A})	0.957	ft^3/s
Post-development 100-year runoff volume (V_{100})	10,644	ft^3
100-year post-development peak inflow rate ($Q_{100 IN}$)	4.168	ft^3/s
Storage curve factor (R)	0.427	
$V_{100} \times R$	4,542	ft^3
Required CPVC volume (V_{CPVR})	2,035	ft^3
Provided CPVC volume (V_{CPVP})	0	ft^3
$V_{100} \times R - V_{CPVP}$	4,542	
Required Extended Detention Volume (V_{ED})	3,867	ft^3
Required 100-yr detention volume (V_{100})	4,542	ft^3
Total 100-yr detention volume provided	5,203	ft^3

PRE-TREATMENT STRUCTURE



PRE-TREATMENT STRUCTURE
SCALE: N.T.S.

RUN-OFF CO-EFFICIENT CALCULATIONS

DRAINAGE AREA - 01				
Land cover	C	Area	C x Area	Unit
Asphalt	0.90	7991.92	7192.73	
Concrete	0.90	1274.20	1146.78	
Roof	0.90	1449.54	1304.59	
Green Space	0.20	3100.98	620.20	
		∑ (C x Area)	10264.29	
		∑ (Area)	13816.64	ft^2
		∑ (Area)	0.317	acres
Weighted run-off co-efficient (C)			0.74	

DRAINAGE AREA - 02				
Land cover	C	Area	C x Area	Unit
Asphalt	0.90	7627.73	6864.96	
Concrete	0.90	399.56	359.60	
Roof	0.90	786.46	707.81	
Green Space	0.20	1486.52	297.30	
		∑ (C x Area)	8229.67	
		∑ (Area)	10300.26	ft^2
		∑ (Area)	0.236	acres
Weighted run-off co-efficient (C)			0.80	

DRAINAGE AREA - 03				
Land cover	C	Area	C x Area	Unit
Asphalt	0.90	0.00	0.00	
Concrete	0.90	0.00	0.00	
Roof	0.90	2144.34	1929.90	
Green Space	0.20	3897.82	779.56	
		∑ (C x Area)	2709.47	
		∑ (Area)	6042.15	ft^2
		∑ (Area)	0.139	acres
Weighted run-off co-efficient (C)			0.45	

DRAINAGE AREA - 04				
Land cover	C	Area	C x Area	Unit
Asphalt	0.90	0.00	0.00	
Concrete	0.90	0.00	0.00	
Roof	0.90	2781.32	2503.19	
Green Space	0.20	3575.92	715.18	
		∑ (C x Area)	3218.37	
		∑ (Area)	6357.24	ft^2
		∑ (Area)	0.146	acres
Weighted run-off co-efficient (C)			0.51	

DRAINAGE AREA - TOTAL				
Land cover	C	Area	C x Area	Unit
Asphalt	0.90	15,620	14057.68	
Concrete	0.90	1,674	1506.38	
Roof	0.90	7,162	6445.49	
Green Space	0.20	12,061	2412.25	
∑ (C x Area)			24421.80	
∑ (Area)			36516.29	ft^2
∑ (Area)			0.84	acres
Weighted run-off co-efficient (C)			0.669	

DETENTION BASING CALCULATIONS

DYODS™
Design Your Own Detention System

CONTECH CMP DETENTION SYSTEMS

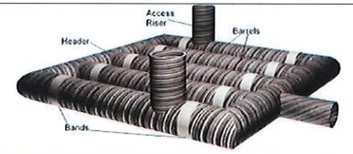
CONTECH CONSTRUCTION PRODUCTS INC.

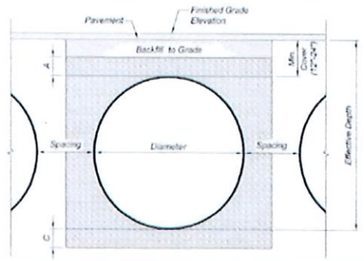
For design assistance, drawings, and pricing send completed worksheet to:
dyods@contech-cpi.com

Project Summary		
Date:		
Project Name:		
City / County:		
State:		
Designed By:		
Company:		Enter Information in Blue Cells
Telephone:		
Corrugated Metal Pipe Calculator		
Storage Volume Required (cf)	5,141	
Limiting Width (ft):	38.00	
Invert Depth Below Asphalt (ft):	=	
Solid or Perforated Pipe:	Solid	
Shape Or Diameter (in)	60	19.63 ft^2 Pipe Area
Number Of Headers:	2	
Spacing between Barrels (ft):	2.50	
Stone Width Around Perimeter of System (ft)	1.5	
Depth A: Porous Stone Above Pipe (in)	0	
Depth C: Porous Stone Below Pipe (in)	0	
Stone Porosity (0 to 40%)	40	

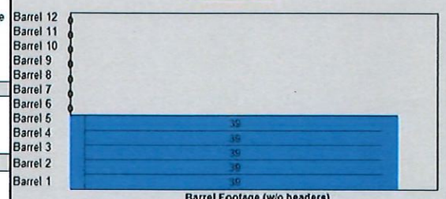
System Sizing			
Pipe Storage:	5,203	cf	
Porous Stone Storage:	0	cf	
Total Storage Provided:	5,203	cf	101.2% Of Required Storage
Number of Barrels:	5	barrels	
Length per Barrel	39.0	ft	
Length Per Header:	35.0	ft	
Rectangular Footprint (W x L):	38. ft x 52. ft		
CONTECH Materials			
Total CMP Footage:	265	ft	
Approximate Total Pieces:	14	pcs	
Approximate Coupling Bands:	17	bands	
Approximate Truckloads:	4	trucks	
Construction Quantities**			
Total Excavation:	#VALUE!	cy	
Porous Stone Backfill For Storage:	0	cy stone	
Backfill to Grade Excluding Stone:	#VALUE!	cy fill	

***Construction quantities are approximate and should be verified upon final design*





System Layout



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24001 ORCHARD LAKE RD
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PROJECT:
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33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:
STORMWATER PROFILES AND DETAILS

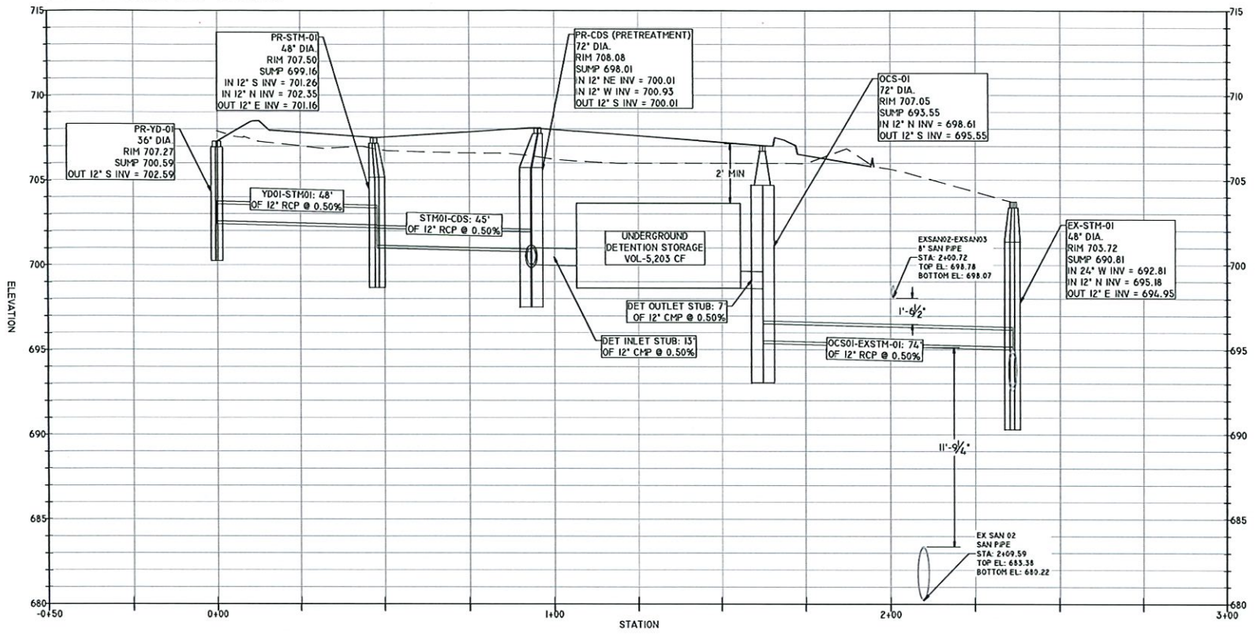
SHEET NUMBER:
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PROJECT NUMBER: MD25-108
DRAWN BY: S. SALMAN
CHECKED BY: I. KALABAT

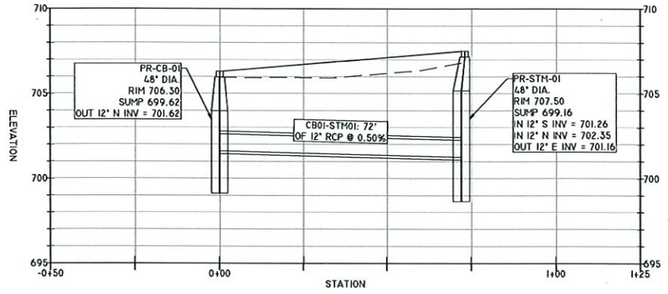
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PROPOSED STORM SEWER PROFILE

STORM PROFILE: YD01 - EXSTM01

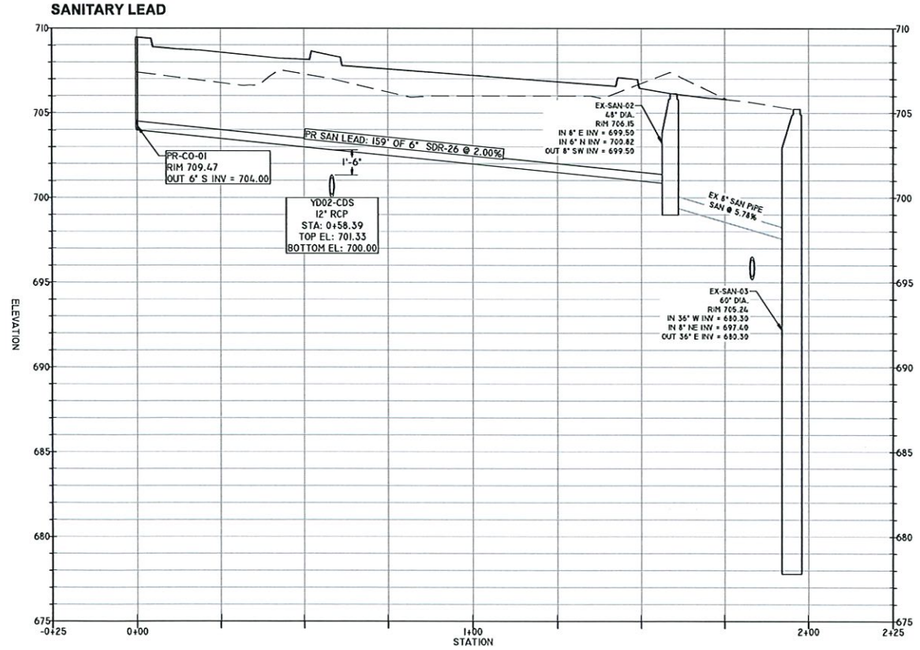


STORM PROFILE: CB01 - STM01

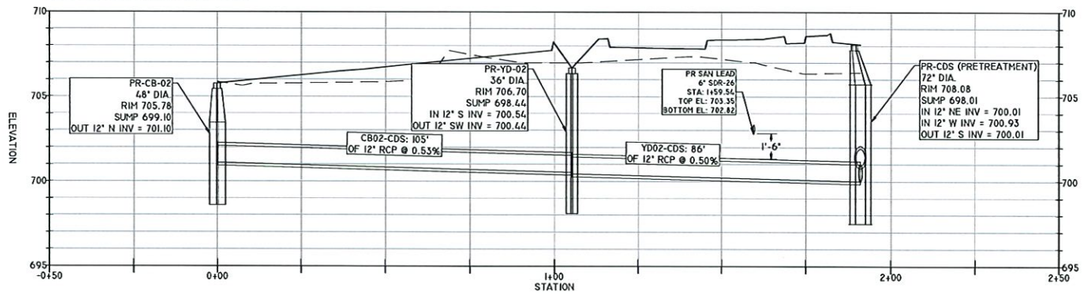


PROPOSED SANITARY SEWER PROFILE

SANITARY LEAD



STORM PROFILE: CB02 - CDS



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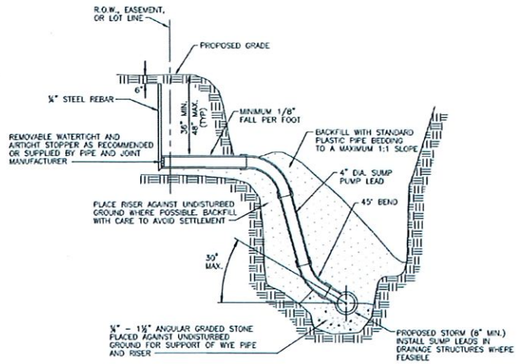
UTILITY PROFILES

SHEET NUMBER:

C5.2

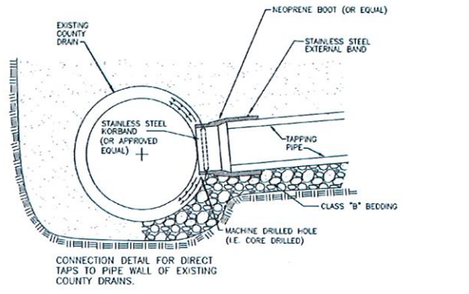
PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

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HOUSE LEAD DETAIL FOR 4" DIA. PLASTIC SUMP PUMP LEADS

NO SCALE

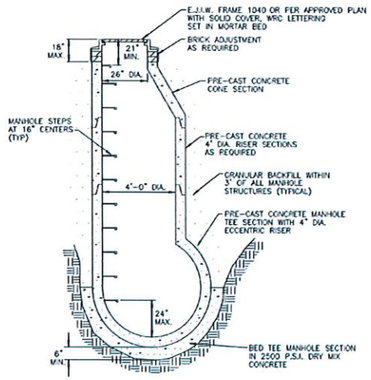


CONNECTION DETAIL FOR DIRECT TAPS TO PIPE WALL OF EXISTING COUNTY DRAINS.

KOR-N-TEE TAP (OR APPROVED EQUAL)

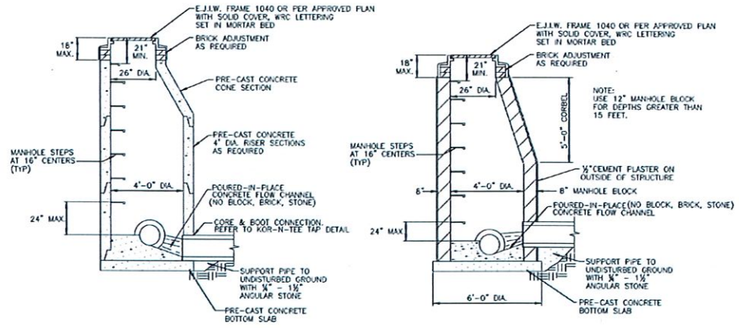
NO SCALE

- For non-concrete to concrete taps.
- Use link-seal, A-lock or approved equal for concrete to concrete taps.



PRE-CAST TEE MANHOLE DETAIL

NO SCALE

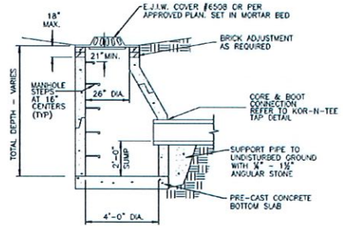


PRE-CAST MANHOLE

BLOCK MANHOLE (PRIOR APPROVAL ONLY)

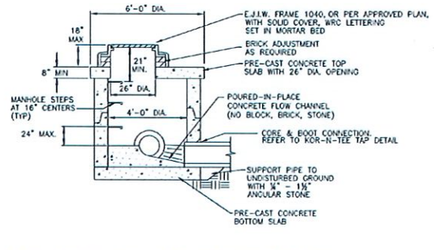
STANDARD MANHOLE DETAILS

NO SCALE



PRE-CAST CATCH BASIN DETAIL

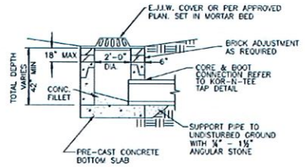
NO SCALE



PRE-CAST LOW HEAD MANHOLE DETAIL

NO SCALE

(PRIOR APPROVAL ONLY)



PRE-CAST INLET DETAIL

NO SCALE

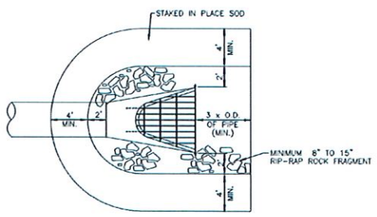
GENERAL NOTES

1. Type and class of pipe shall be as specified on plans.
2. Class "B" bedding shall be used throughout, unless otherwise specified on the plan.
3. All end sections 18" and larger shall be provided with a bar screen unless otherwise approved.
4. Standard rip-rap shall be 8"-15" fragmented rock, heavy rip-rap shall be 16"-24" fragmented rock. (No Broken Concrete)
5. MANHOLE REQUIREMENTS:
   - All new catch basins, inlets, and manholes are to be manufactured to ASTM C-478 specifications.
   - All new catch basins, inlets, and manholes shall have WRC approved flexible, watertight seals where pipes pass through walls. Manholes shall be of precast sections with modified groove tongue and rubber gasket type joints. Pre cast manhole cone sections shall be WRC approved modified eccentric cone type.
   - Tops through manhole joints or cone sections are prohibited unless otherwise approved.
   - Manhole steps to be plastic coated steel meeting the requirements in ASTM D 2146, Type II, Grade 49108, MA. Industries P.S.I. Polypropylene, (or approved equal). Steps to be installed during manhole manufacture. Place at 16" centers 45° from centerline of sewer.
   - Cone section with modified groove tongue joints and with stud inserts cast in place. Top to have flush surface.
   - ASTM C-478 riser section with modified groove tongue joints.
   - Res-seal, link-seal, press wedge II, or kor-n-seal boot (with stainless steel korband) flexible rubber manhole joints. (or approved equal).
   - The inside joints of manholes, catch basins, and pipe sizes over 42" and larger in diameter shall be pointed up with mortar upon completion of backfilling.
6. CONCRETE PIPE REQUIREMENTS:
   - Concrete pipe to be per ASTM C76 standards.
   - It will be required to TV all pipe 30 days after installation
   - The contractor shall provide reinforced concrete pipe as specified on the plans.
   - All reinforced concrete pipe shall have modified grooved tongue joints with o-ring type rubber gasket, per A.S.T.M. specifications C443.
   - The inside joints of manholes, catch basins, and pipe sizes over 42" and larger in diameter shall be pointed up with mortar upon completion of backfilling.
7. SUMP PUMP LEAD REQUIREMENTS:
   - All sump pump leads connected to a County Drain pipe shall be pre-manufactured.
   - Sump pump leads connected to a manhole shall be cored and booted. Refer to Kor-N-Tee Tap Detail.
   - Sump pump mains and leads shall be ABS (truss and solid wall), PVC (truss, solid wall , A2000), ADS N-12 WT with premium joints.
   - Ends of all 4" sump pump leads shall be temporarily capped and their location stacked, witnessed and recorded.
   - All sump pump leads to be taken to the property line, easement line or as indicated on the plan.
   - Sump pump mains must have a cleanout with a minimum inside diameter of 24" and be constructed at changes of alignment, ends of sump pump mains or as indicated on the plan.
8. RESTORATION REQUIREMENTS:

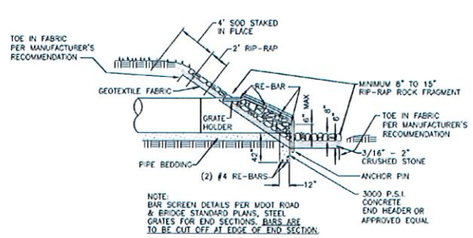
   All disturbed area within the County Drain right-of-way shall be restored as follows:
   - Under roads, sidewalks, driveways and parking areas, backfill material shall be placed loosely into trenches in six (6) inch layers with each layer compacted to not less than 95% of maximum dry density as determined by the ASTM D 1557 Compaction Standard (modified proctor compaction test). All other areas shall have each layer compacted to not less than 90% of maximum dry density.
   - Finish subgrade
   - Place 3" thickness clean topsoil acceptable to the engineer to attain finished grade. Topsoil must not be contaminated and may not be a mixture of natural underlying soils, subbase materials, or other materials. It must consist of natural loam, sandy loam, silty loam or clay loam humus-bearing soil adapted to the sustenance of plant life. Topsoil must be neither excessively acidic nor excessively alkaline. It must be of mineral origin, exclusive of any peat or muck.
   - Apply seed and fertilizer as follows:*

Location	Seeding Requirements	Fertilizer Requirement
Slopes and Ditch, Banks, Etc.	M.D.O.T. "Roadside Mix" Turf Seed Mixture TQM (10% Kentucky Blue, 20% Perennial Rye, 30% Hard Fescue, 40% Creeping Red Fescue) applied at 220 lb/acre	M.D.O.T. Seeding and Sodding Fertilizers, Class A
Other Areas	M.D.O.T. "Roadside Mix" Turf Seed Mixture THM (30% Kentucky Blue, 20% Perennial Rye, 50% Creeping Red Fescue) applied at 220 lb/acre	M.D.O.T. Seeding and Sodding Fertilizers, Class A

   * Sod is required in maintained lawn areas. Refer to WRC General Specifications for additional requirements and information.
   - apply straw or marsh hay mulch in an air-dry condition to all seeded areas over the surface to a uniform thickness at 2 tons/acre.
   - mulch shall be anchored in place with biodegradable netting, not larger than 1¾" by 2" nor smaller than ¾" by ¾".
   - The contractor shall be responsible to insure the growth of all seeded areas, and shall re-seed as necessary to accomplish this.
9. The Storm Drain Notes and Details Sheet shall be a supplement to WRC Standards and Specifications, which are available on the WRC website (www.oakgov.com/water).



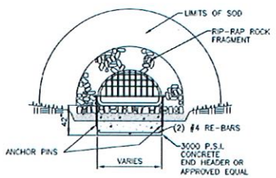
PLAN VIEW



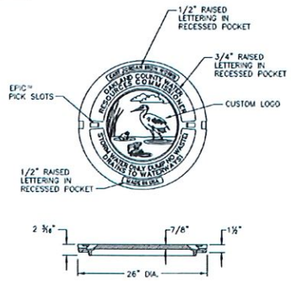
PROFILE VIEW

END SECTION AND BAR SCREEN DETAIL

NO SCALE



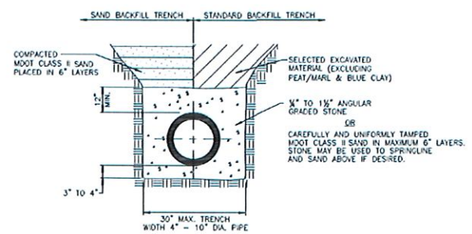
END VIEW



EAST JORDAN IRON WORKS OR APPROVED EQUAL
HEAVY DUTY MATERIAL ASTM A48 CL.35B
CATALOG NO. 1040A
PATTERN NO. 1040A, PRODUCT NO. 104718 OAKCOSTD
2" HIGH RAISED LETTERS, 1" WIDE RAISED LETTERS
ALL IN RECESSED POCKET.

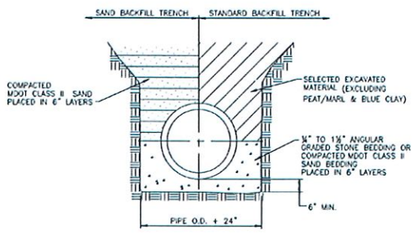
LETTERED MANHOLE COVER FOR WRC

NO SCALE



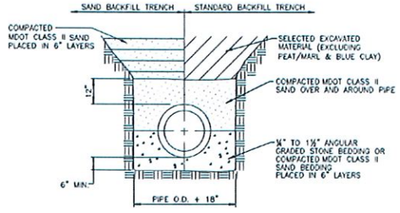
ABS (TRUSS AND SOLID WALL), PVC (TRUSS, SOLID WALL, A2000), ADS N-12 WT PIPE BEDDING DETAIL

NO SCALE



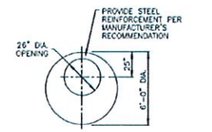
CLASS "B" BEDDING TRENCH DETAIL FOR 27" DIAMETER AND LARGER CONCRETE PIPE

NO SCALE



CLASS "B" BEDDING TRENCH DETAIL FOR 24" DIAMETER AND SMALLER CONCRETE PIPE

NO SCALE



PRECAST CONCRETE TOP SLAB DETAIL

STORM DRAIN NOTES AND DETAILS

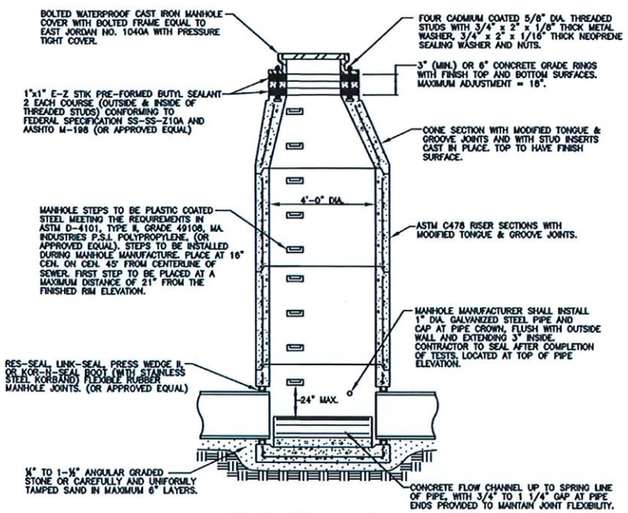
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1	SJ	5-1-08	ENGINEERS DETAIL CHANGES - NEW LOGO
2	SJ	06/2010	REVISION PER STANDARDS COMMITTEE
3	SJ	02/2015	REVISED MH CASTOR DETAIL
4	RA	09/2016	REVISED CURRENT NOTES

ORIG. DATE:	05/05/97
SCALE:	NONE
DESIGNED BY:	WRC
DRAWN BY:	Mapping

WRC WATER RESOURCES COMMISSIONER Jim Nash

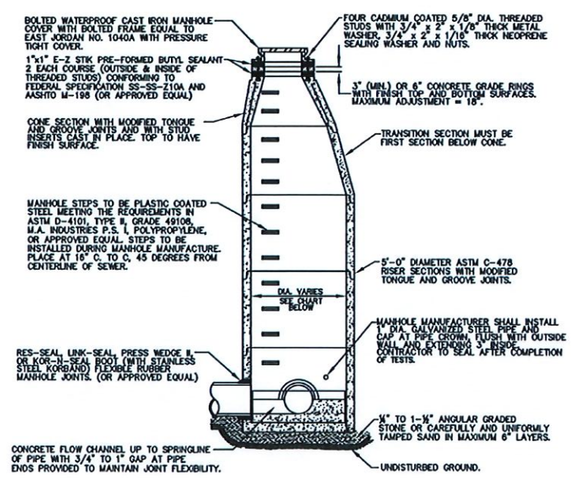
ONE PUBLIC WORKS DRIVE, BLDG 95 WEST WATERFORD, MICHIGAN 48328-1907

SHEET NO.: 1 of 1



STANDARD MANHOLE

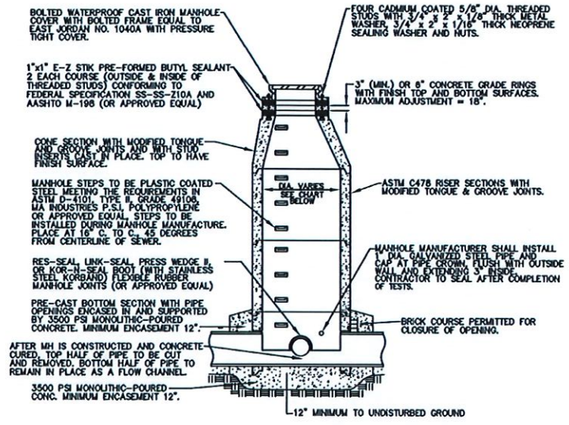
MAX. PIPE SIZE FOR STRAIGHT THRU INSTALLATION	MAX. PIPE SIZE FOR RIGHT ANGLE INSTALLATION
24"	18"



STANDARD OVERSIZED MANHOLE

MANHOLE SIZING CHART

MANHOLE DIAMETER	MAX. PIPE SIZE FOR STRAIGHT THRU INST.	MAX. PIPE SIZE FOR RIGHT ANGLE INST.
5'	36"	24"
6'	42"	36"
7'	60"	42"



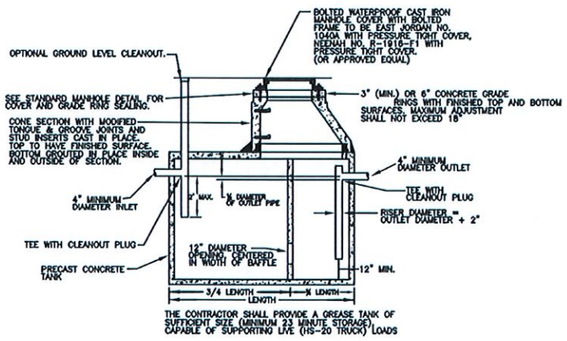
MANHOLE CONSTRUCTED OVER EXISTING SEWER

MANHOLE SIZING CHART

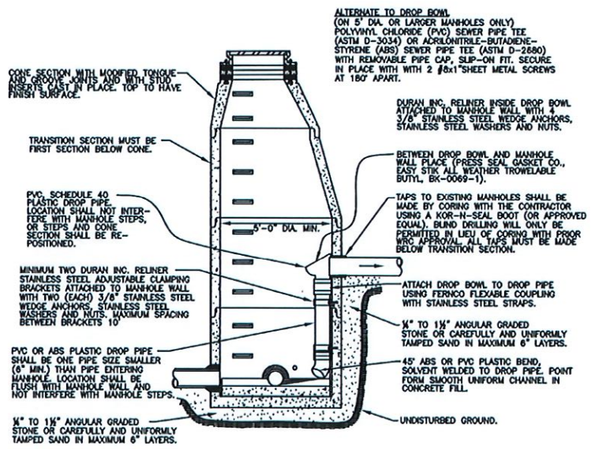
MANHOLE DIAMETER	MAX. PIPE SIZE FOR STRAIGHT THRU INST.
4'	24"
5'	36"
6'	42"
7'	60"

SANITARY SEWER CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE LOCAL UNIT OF GOVERNMENT AND THE WATER RESOURCES COMMISSIONER (WRC). ALL SANITARY SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY A STATE OF MICHIGAN LICENSED PROFESSIONAL ENGINEER PROVIDED BY, OR CAUSED TO BE PROVIDED BY, THE LOCAL UNIT OF GOVERNMENT.
2. AT ALL CONNECTIONS TO WRC SEWERS OF EXTENSIONS, AND BEFORE START OF CONSTRUCTION, THE CONTRACTOR MUST OBTAIN A SEWER INSPECTION PERMIT ISSUED BY WRC. GRAVITY SEWER PERMIT CHANGES ARE $250 FOR EACH CONNECTION PLUS $25 FOR EACH MANHOLE CONSTRUCTED. PRESSURE SEWER PERMIT CHARGES ARE $250 PER 2,460 L.F. OF FORCE MAIN WITH A MINIMUM PERMIT FEE OF $250. FAILURE TO PASS ANY TEST SEGMENT WILL RESULT IN AN ADDITIONAL CHARGE TO THE CONTRACTOR FOR EACH RETEST, IN ACCORDANCE WITH THE ABOVE PRICE SCHEDULE. THE CONTRACTOR SHALL ALSO HAVE POSTED WITH WRC A $5,000 SURETY BOND AND $500 CASH DEPOSIT. THE CONTRACTOR SHALL NOTIFY THE LOCAL UNIT OF GOVERNMENT AND WRC (248-858-1105) 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. FINAL ACCEPTANCE TESTS MUST BE WITNESSED BY COUNTY PERSONNEL AND MUST BE SCHEDULED BY MUNICIPALITY OR IT'S CONSULTANT IN ADVANCE WITH 24 HOUR NOTICE AT 248-858-1105.
3. NO SEWER INSTALLATION SHALL HAVE AN INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE IN A 24 HOUR PERIOD, AND NO SINGLE RUN OF SEWER BETWEEN MANHOLES SHALL EXCEED 100 GALLONS PER INCH DIAMETER PER MILE. AIR TESTS IN LIEU OF INFILTRATION TESTS SHALL BE AS SPECIFIED IN THE WATER RESOURCES COMMISSIONER STANDARDS. ONLY PIPE AND PIPE JOINTS APPROVED BY WRC MAY BE USED FOR SANITARY SEWER CONSTRUCTION.
4. LOCATED IN THE FIRST MANHOLE UPSTREAM FROM THE POINT OF ALL CONNECTIONS TO AN EXISTING WRC SEWER, OR EXTENSION THERETO, A TEMPORARY 12-INCH DEEP SUMP SHALL BE PROVIDED IN THE FIRST MANHOLE ABOVE THE CONNECTION WHICH WILL BE FILLED IN AFTER SUCCESSFUL COMPLETION OF ANY ACCEPTANCE TEST UP TO THE STANDARD FILLET PROVIDED FOR THE FLOW CHANNEL. A WATERTIGHT BULKHEAD SHALL BE PROVIDED ON THE DOWNSTREAM SIDE OF THE SUMP MANHOLE.
5. AT ALL TIMES WHEN LAYING OF NEW PIPE IS NOT ACTUALLY IN PROGRESS, THE UPSTREAM OPEN END OF THE PIPE SHALL BE CLOSED BY TEMPORARY WATERTIGHT PLUGS OR BY OTHER APPROVED MEANS. IF WATER IS IN THE TRENCH WHEN WORK IS RESUMED, THE PLUG SHALL NOT BE REMOVED UNTIL THE DANGER OF WATER ENTERING THE PIPE HAS PASSED.
6. ALL BUILDING LEADS AND RISERS SHALL BE SIX INCH SDR 23.5 ABS PIPE WITH CHEMICALLY FUSED JOINTS OR AN APPROVED EQUAL PIPE AND JOINT. BUILDING LEADS TO BE FURNISHED WITH REMOVABLE AIRTIGHT AND WATERTIGHT STOPPERS.
7. ALL RIGID SEWER PIPE SHALL BE INSTALLED IN CLASS "B" BEDDING OR BETTER. ALL FLEXIBLE, SEMI-FLEXIBLE, OR COMPOSITE SEWER PIPE SHALL BE INSTALLED IN CONFORMANCE TO WRC SPECIFICATIONS.
8. ALL NEW MANHOLES SHALL HAVE WRC APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH WALLS. MANHOLES SHALL BE OF PRE CAST SECTIONS WITH MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS. PRE CAST MANHOLE CONE SECTIONS SHALL BE WRC APPROVED MODIFIED ECCENTRIC CONE TYPE. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS.
9. AT ALL CONNECTIONS TO MANHOLES ON WRC SEWERS, OR EXTENSIONS THERETO, DROP CONNECTIONS WILL BE REQUIRED WHEN THE DIFFERENCE IN INVERT ELEVATIONS EXCEEDS 18 INCHES.
10. TAPS TO EXISTING MANHOLES SHALL BE MADE BY CORING. THE CONTRACTOR SHALL PLACE A KOR-N-SEAL BOOT (OR WRC APPROVED EQUAL) AFTER CORING IS COMPLETED. BLIND DRILLING WILL ONLY BE PERMITTED IN LIEU OF CORING WITH PRIOR WRC APPROVAL.
11. MANHOLES CONSTRUCTED DIRECTLY ON WRC SEWERS SHALL BE PROVIDED WITH COVERS READING "WATER RESOURCES COMMISSIONER-SANITARY" IN RAISED LETTERS.
12. NO GROUND WATER, STORM WATER, CONSTRUCTION WATER, DOWN SPOUT DRAINAGE OR WEEP TILE DRAINAGE SHALL BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION.
13. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL TELEPHONE MISS DIG (800-482-7171) FOR THE LOCATION OF UNDERGROUND PIPELINE AND CABLE FACILITIES AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK.
14. AN 18 INCH MINIMUM VERTICAL SEPARATION AND A 10 FOOT MINIMUM HORIZONTAL SEPARATION MUST BE MAINTAINED BETWEEN SANITARY SEWER AND WATER MAIN.
15. NEW MANHOLES BUILT OVER AN EXISTING SANITARY SEWER SHALL HAVE MONOLITHIC POURED BOTTOMS.
16. IF THE STRUCTURE FALLS WITHIN THE ROADBED OF A GRAVEL ROAD OR WITHIN THE UNPAVED SHOULDER OF A PAVED ROAD, THE COVER SHALL BE SIX (6") INCHES BELOW THE FINISHED GRAVEL SURFACE.



DOUBLE-COMPARTMENT GREASE INTERCEPTOR TANK FOR OUTLET PIPE BURIAL 42" AND DEEPER



INTERIOR DROP CONNECTION

REVISION BLOCK			
Parcel Base / Source Date: N/A			
Rev. No.:	Rev. By:	Rev. Date:	Description:
1	DS	3-23-11	REMOVED STANDARD MONITORING MANHOLE
2	KB	6-21-19	ADDED NOTE "REQUIRES ADVANCED APPROVAL BY WRC" AND UPDATE PHONE # IN NOTE #2
3	KB	7-22-20	UPDATED MH STEPS TO ASTM D-4101
4	KB	9-27-21	REMOVED EXTERIOR DROP CONNECTION DETAIL

SANITARY SEWER DETAILS AND NOTES

ORIG. DATE:	08/21/02
SCALE:	NO SCALE
DESIGNED BY:	WRC
DRAWN BY:	WRC Mapping

WRC WATER RESOURCES COMMISSIONER Jim Nash

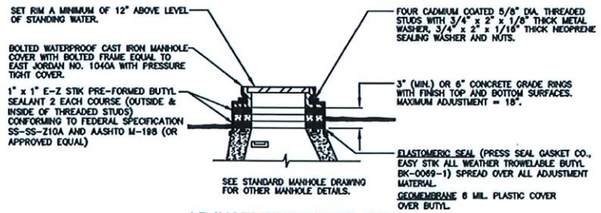
ONE PUBLIC WORKS DRIVE, BLDG 95 WEST
WATERFORD, MICHIGAN
48328-1907

SHEET NO.: 1 of 2

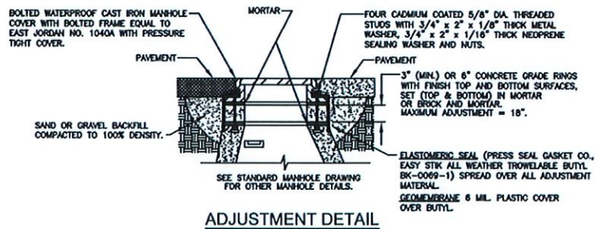
Plotted: 08/Dec/21
File Location: J:\Data\Engineering\Detail Sheets\Standard Details\Sanitary\Sanitary Sewer Details.dwg

MANHOLE RIM ADJUSTMENT CHART

MANHOLE LOCATION	SET RIM ELEVATION
OPEN	12" ABOVE FINISH GRADE
FLOOD PLAIN	1'-2" ABOVE STANDING WATER
GRAVEL ROAD / SHOULDER	6" BELOW FINISH GRADE
PAVEMENT / GREENBELT	FLUSH WITH FINISH GRADE



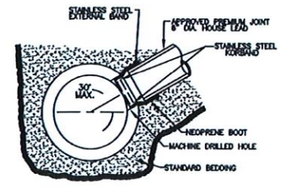
ADJUSTMENT DETAIL FOR
MANHOLE TOPS WITHIN FLOOD PRONE AREAS



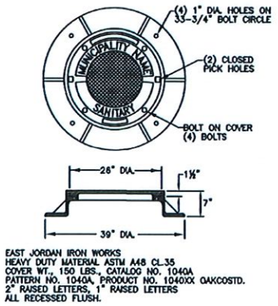
ADJUSTMENT DETAIL
MANHOLE TOPS WITHIN PAVEMENT AREAS

WATER RESOURCES COMMISSIONER
GRAVITY BUILDING LEAD REQUIREMENTS AND DETAILS

1. ALL BUILDING LEAD WORK MUST BE PERFORMED UNDER WATER RESOURCES COMMISSIONER (WRC) AND/OR LOCAL UNIT OF GOVERNMENT INSPECTION.
2. FOR ALL WRC-OPERATED SYSTEMS, CALL 248-858-1110 24-HOURS IN ADVANCE OR WORK TO SCHEDULE INSPECTION.
3. NO SANITARY SEWER MAY BE USED AS A CLEANOUT OF DEWATERING OUTLET.
4. WHERE AN EXISTING BUILDING LEAD IS BEING EXTENDED, DISSIMILAR TYPES AND SIZES OF PIPE SHALL BE JOINED USING AN WRC APPROVED ADAPTER.
5. APPROVED BUILDING LEAD PIPE FOR GRAVITY SEWER LEADS:
   A. ABS PLASTIC, ASTM D2751, SDR 23.5.
   B. PVC PLASTIC, ASTM D3034, SDR 23.5 OR ASTM D2665, SCHEDULE 40.
   C. DUCTILE IRON PIPE, AMERICAN WATER WORKS ASSOCIATION (AWWA) C-104/A21.4, CLASS 54. JOINTS SHALL BE SUPER BELL TITE, TYTON, TY-SEAL, MULTI-TITE, DUAL-TITE, OR VERI-TITE.
   D. ANY DEVIATIONS FROM SPECIFIED ABOVE REQUIRE APPROVAL BY WRC.
6. ALLOWABLE TYPES OF SEWER PIPE ADAPTERS:
   A. FERNCO ADAPTER/REDUCER DONUTS.
   B. FERNCO FLEXIBLE COUPLING.
   C. MISSION CLAY BAND-SEAL COUPLING.
   D. SMITH-BLAIR STAINLESS STEEL REPAIR CLAMP.
   E. HURON-CLINTON O-RING ADAPTER.
   F. HAMILTON-KENT GEAR GRIP ADAPTER.
   G. PLANT FABRICATED JOINT CONVERSION PIPE.

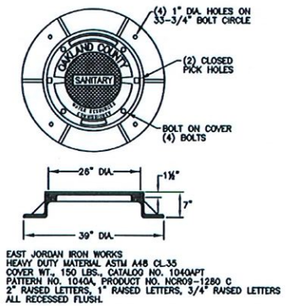


KOR-N-TEE TAP FOR CONCRETE PIPE



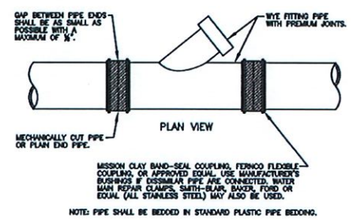
EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040A
PATTERN NO. 1040A, PRODUCT NO. 1040XX OAKCOSTD.
2" RAISED LETTERS, 1" RAISED LETTERS
ALL RECESSED FLUSH.

LOCAL MUNICIPALITIES MANHOLE COVER

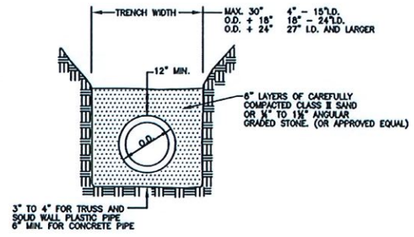


EAST JORDAN IRON WORKS
HEAVY DUTY MATERIAL ASTM A48 CL.35
COVER WT., 150 LBS., CATALOG NO. 1040APT
PATTERN NO. 1040A, PRODUCT NO. NCR09-1280 C
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ALL RECESSED FLUSH.

W.R.C. LETTERED MANHOLE COVER

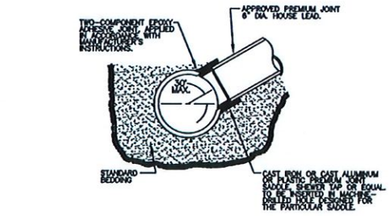


WYE PIPE INSERTION WITH FLEXIBLE COUPLINGS
(RIGID PIPE)



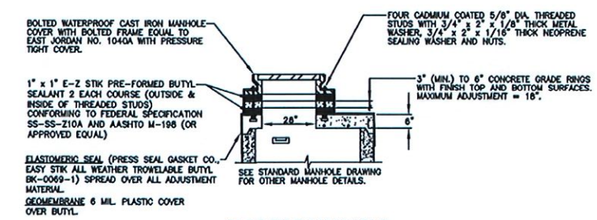
NOTE:
APPROVAL MAY BE GIVEN TO ALTERNATE MATERIALS AND METHODS TO ACHIEVE CLASS B BEDDING.

STANDARD BEDDING
(CLASS B)

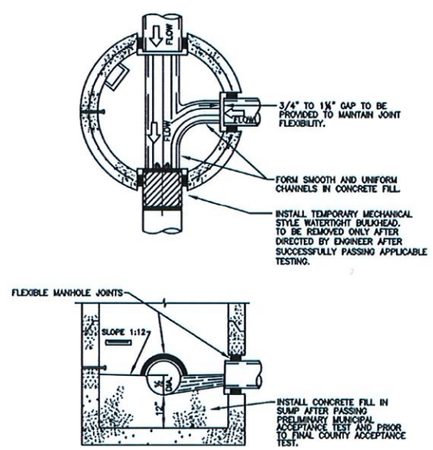


NOTE: SURFACE OF MAIN SEWER SHALL BE CLEANED WITH AN ABRASIVE GRINDER PRIOR TO EPOXY APPLICATION. DUE TO VARIATION OF SET-UP TIME OF EPOXY ADHESIVE WITH TEMPERATURE, ANCHOR STRAPS SHALL BE USED TO SECURE SADDLE IN POSITION IN COLD WEATHER OR WHENEVER WORK IS TO PROCEED PRIOR TO COMPLETE CURE OF EPOXY.

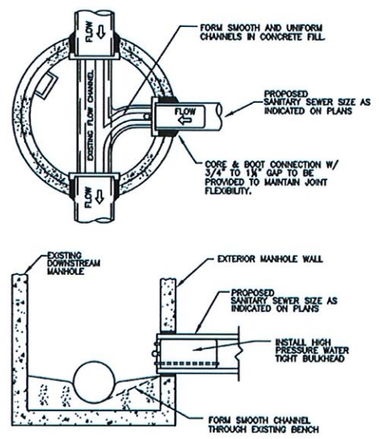
SEWER TAP-ALL SIZES OF MAIN SEWER PIPES
VITRIFIED CLAY



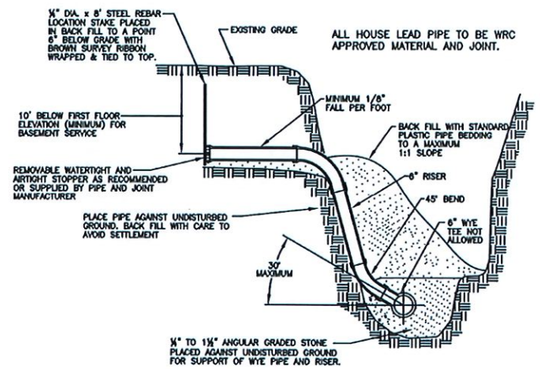
FLAT TOP MANHOLE



SUMP MANHOLE FOR TESTING,
CLEANING AND DEWATERING



TESTING BULKHEAD WITH PIPE TAP



HOUSE LEAD DETAIL

REVISION BLOCK			
Parcel Base / Source Date: N/A			
Rev. No.:	Rev. By:	Rev. Date:	Description:
1	DS	06/28/06	ADDED TESTING BULKHEAD WITH PIPE TAP DETAIL
2	tc	05/26/09	MOVED DETAILS FROM SHEET 1 ONTO SHEET 2
3	tc	07/14/09	STANDARDS COMMITTEE APPROVAL FOR DETAIL CHANGES
4	DS	02/03/14	REPLACE/UPDATE OCDC WITH WRC FOR THE MANHOLE COVER DETAIL

SANITARY SEWER DETAILS AND NOTES

ORIG. DATE:	05-09-03
SCALE:	NO SCALE
DESIGNED BY:	MWD
DRAWN BY:	Mapping Staff

WRC WATER RESOURCES COMMISSIONER
Jim Nash

ONE PUBLIC WORKS DRIVE, BLDG 95 WEST
WATERFORD, MICHIGAN
48328-1907

SHEET NO.: 2 of 2

GENERAL NOTES

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE WATER RESOURCES COMMISSIONER'S OFFICE AND/OR THE LOCAL MUNICIPALITY.
2. THE CONTRACTOR SHALL OBTAIN AN WATER RESOURCES COMMISSIONER'S OFFICE WATER INSPECTION PERMIT PRIOR TO THE START OF CONSTRUCTION. SEE CORRESPONDING WATER MAIN CONSTRUCTION PERMIT REQUEST LETTER FOR COST OF THE PERMIT.
3. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE SCHEDULED BY THE LOCAL MUNICIPAL ENGINEER. THOSE IN ATTENDANCE SHALL INCLUDE 1) LOCAL MUNICIPAL ENGINEER, 2) DESIGN ENGINEER, 3) OWNER/DEVELOPER, 4) ROAD COMMISSION FOR OAKLAND COUNTY, 5) OAKLAND COUNTY WATER RESOURCES COMMISSIONER'S OFFICE (WATER, SEWER AND STORM DIVISIONS) AND 6) ALL UTILITY COMPANIES. CONTRACTOR SHALL PROVIDE MATERIALS LISTING FOR APPROVAL BY MUNICIPAL ENGINEER AND OCWRC.
4. CONTRACTOR MUST CONTACT MISS DIG (1-800-482-7171) THREE WORKING DAYS BEFORE THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED BEFORE CONSTRUCTION STARTS.
5. ALL NECESSARY EASEMENTS FOR WATER MAINS SHALL BE PROVIDED IN THE NAME OF THE OWNER OF THE WATER MAIN PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM FOR OPERATION.
6. ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF FIVE AND ONE-HALF (5-1/2) FEET BELOW FINISHED GRADES INCLUDING OPEN DRAINAGE COURSES.
7. ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT OR DRIVEWAYS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT
8. WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN TWELVE (12) INCH COMPACTED LAYERS TO THE UNDERSIDE OF THE HIGHER UTILITY.
9. WHERE WATER MAINS MUST DIP TO PASS UNDER OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH AND SHALL BE CONSTRUCTED WITH ELEVEN AND ONE-QUARTER (11-1/4) DEGREE VERTICAL BENDS, PROPERLY ANCHORED. BENDS GREATER THAN 11-1/4° MUST HAVE RODS RESTRAINTS.
10. ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE MANUFACTURED TO CONFORM WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, EXCEPT WALL THICKNESS SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C 443, STANDARD SPECIFICATION FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.
11. CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON SHEET 2 (i.e. 2'-0" BETWEEN GATE WELL WALL & CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATEWELL OPENING. FAILURE TO DO SO WILL REQUIRE CONTRACTOR TO CORRECT AT HIS EXPENSE.
12. ALL CROSS-CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE LOCAL PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE WATER RESOURCES COMMISSIONER'S OFFICE OPERATION AND MAINTENANCE DIVISION AND THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES AND ENERGY, DIVISION OF DRINKING WATER AND ENVIRONMENTAL HEALTH DIVISION
13. ALL WATER SERVICE CONNECTIONS TWO (2) INCHES AND SMALLER SHALL BE MADE BY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION AFTER WATER MAIN ACCEPTANCE AND APPLICABLE TAP PERMITS ARE OBTAINED.
14. ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM, AS INDICATED IN PLANS AND SPECIFICATIONS, IS APPROVED BY WATER RESOURCES COMMISSIONER'S OFFICE AND THE LOCAL MUNICIPALITY.
15. ALL STEEL AND IRON MATERIAL AND PRODUCTS FOR PERMANENT INCORPORATION INTO THE WORK SHELL MEET BUY AMERICA REQUIREMENT, FEDERAL CODE OF REGULATIONS SECTION 635.410

WATER MAIN MATERIALS NOTES

1. WATER SUPPLY SYSTEM PIPING (3-INCH & LARGER) SHALL BE DUCTILE IRON OR HIGH DENSITY POLYETHYLENE (HDPE) UNLESS OTHERWISE APPROVED BY THE LOCAL COMMUNITY.
2. DUCTILE IRON PIPE SHALL BE CLASS 54 FOR SIZES THREE (3) INCH THROUGH EIGHTEEN (18) INCH, CLASS 55 FOR TWENTY (20) INCH, AND CLASS 56 FOR TWENTY-FOUR (24) INCH AND LARGER. (ABBREVIATED "D.I." IN DETAILS AND ON THIS SHEET).
3. PIPES OF SIZES LARGER THAN TWENTY-FOUR (24) INCHES IN NOMINAL DIAMETER SHALL MEET ALL THE REQUIREMENTS OF THE CURRENT AWWA C100 FOR DUCTILE IRON WATER PIPE.
4. THE DUCTILE IRON PIPE TO BE FURNISHED AND DELIVERED UNDER THIS SPECIFICATION SHALL MEET ALL THE REQUIREMENTS OF THE CURRENT AWWA C151 (ANSI A21.5), EXCEPT AS OTHERWISE SPECIFIED HEREIN. PIPE SHALL BE DOUBLE CEMENT-LINED AND SEAL COATED WITH AN APPROVED BITUMINOUS SEAL COAT IN ACCORDANCE WITH AWWA C104 (ANSI A21.4).
5. REFER TO SHEET 5 FOR HDPE MATERIAL REQUIREMENTS.
6. MECHANICAL AND SLIP-ON JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C111 (ANSI A21.11).
7. FLANGE JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C110 (ANSI A21.10).
8. FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE IRON OR CAST IRON AND SHALL MEET REQUIREMENTS OF AWWA C110 (ANSI A21.10) OR AWWA C153 (ANSI A21.53). DUCTILE IRON FITTINGS SHALL BE RATED FOR 350 PSI, PIPE SIZES TWENTY-FOUR (24) INCH DIAMETER AND LESS AND 250 PSI FOR PIPE SIZES OVER TWENTY-FOUR (24) INCH DIAMETER. DUCTILE IRON FLANGE FITTINGS SHALL BE RATED FOR 250 PSI FOR ALL PIPE DIAMETERS.
9. INSTALL BRASS WEDGES AT ALL PUSH ON JOINTS IN DUCTILE IRON PIPE INSTALLATIONS. TWO (2) WEDGES PER JOINT FOR PIPES 12 INCH IN DIAMETER AND LESS, FOUR WEDGES PER JOINT FOR PIPES GREATER THAN 12 INCHES IN DIAMETER.
10. ALL WATER MAINS SHALL BE DESIGNED FOR 150 PSI MINIMUM WORKING PRESSURE.
11. ALL BURIED BOLTS, NUTS, AND WASHERS SHALL BE AWWA C111 LOW ALLOY STEEL COATED WITH A MINIMUM OF TWO (2) COATS OF FLUOROPOLYMER EPOXY COATING AND HEAT CURED (COR-BLUE OR APPROVED EQUAL) AND POLY-WRAPPED WHEN SPECIFIED.
12. ALL BURIED BOLTS, NUTS, AND WASHERS FOR ALL FLANGED CONNECTIONS SHALL BE STAINLESS STEEL (ASTM A320, GRADE B8M) AND HAVE A NEVER SEIZE TYPE COMPOUND APPLIED TO THE THREADS PRIOR TO INSTALLATION.
13. CORPORATION STOPS USED FOR INSERTION INTO MAINS SHALL BE MUELLER TYPE H-15000, FORD METER BOX FB-1000-X-Q-NL OR FORD METER BOX FB1000-4-Q-NL. ALL STOPS SHALL HAVE BRONZE CAST BODIES, KEYS, STEM WASHERS AND NUTS. INLET THREADS SHALL CONFORM TO THE LATEST VERSION OF AWWA C800.
14. TEMPORARY CONNECTIONS, WHICH MAY BE MADE FOR CHLORINATING AND FLUSHING PURPOSES, SHALL INCLUDE A TESTABLE REDUCE PRESSURE ZONE (RPZ) VALVE WITH CURRENT CERTIFICATION.

VALVE AND SLEEVE NOTES

1. GATE VALVES, SIZES THREE (3) INCH THROUGH SIXTEEN (16) INCH AND TAPPING VALVES SHALL BE LOCAL MUNICIPAL STANDARD AS DETAILED WITH NON-RISING STEM.
2. ALL IN LINE GATE VALVES THREE (3) INCH AND LARGER SHALL BE IN WELLS AS DETAILED. SPECIFICATIONS SHALL INCLUDE THE DIRECTION OF OPERATION OF ALL VALVES.
3. ALL GATE WELL COVERS SHALL BE LOCAL MUNICIPAL STANDARD AS DETAILED.
4. ALL GATE VALVES WITH OPERATING NUTS AT A DISTANCE GREATER THAN FIVE (5) FEET BELOW GROUND SURFACE SHALL BE PROVIDED WITH A STAINLESS STEEL EXTENSION STEM. THE LENGTH OF THE EXTENSION STEM SHALL REACH WITHIN FIVE (5) FEET FROM THE GROUND SURFACE. WHEN AN EXTENSION STEM IS USED, IT SHALL BE HELD IN PLACE BY A STAINLESS STEEL EXTENSION STEM GUIDE SUITABLY FASTENED TO THE WALL OF THE GATE WELL. THE EXTENSION STEM SHALL BE MECHANICALLY ATTACHED TO THE OPERATING NUT. DETAILS OF THE EXTENSION SYSTEM AND THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
5. TAPPING VALVES SHALL BE AWWA C515 FL X MJ AS MANUFACTURED BY EJ WITH RESILIENT SEATED GATE VALVES AS APPROVED BY LOCAL MUNICIPALITY.
6. TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL (BODY, FLANGE AND HARDWARE), MANUFACTURED BY ROMAC INDUSTRIES SST; JCM 432; SMITH-BLAIR 663/665 OR APPROVED EQUAL BY THE WATER RESOURCES COMMISSIONER'S OFFICE.

HYDRANT REQUIREMENTS

1. ALL HYDRANTS SHALL BE CONSTRUCTED WITH A SIX (6) INCH COMPANION GATE VALVE IN A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX, WHICH SHALL INCLUDE A FIVE AND ONE-QUARTER (5-1/4) INCH SCREW SHAFT. VALVE BOXES SHALL BE SERIES 6860 AS MANUFACTURED BY TYLER PIPE, EJ VALVE BOX NO. 8560 OR APPROVED EQUAL.
2. ALL HYDRANTS SHALL BE EJ 5BR250 TRAFFIC MODEL, OR APPROVED EQUAL WITH A MINIMUM OF 6'-0" DEPTH OF BURY UNLESS OTHERWISE INDICATED. SELF-DRAINING HYDRANTS SHALL NOT BE USED. ALL HYDRANTS SHALL BE LOCAL MUNICIPAL STANDARD AS DETAILED. HYDRANTS SHALL HAVE BREAKAWAY FLANGE.
3. ALL HYDRANTS SHALL BE PAINTED RED ABOVE GROUND AND BLACK BELOW GROUND WITH A FINISH COAT OF GLAMORTEX 501 ENAMEL, COLOR 314 VERMILLION OR APPROVED EQUAL. HYDRANT CAP SHALL BE PAINTED SAME COLOR AS THE HYDRANT. FOR PONTIAC: YELLOW RUST-OLEUM #7543 SAFETY YELLOW.

ACCEPTANCE OF NEW WATER MAINS

1. PRIOR TO WATER MAIN ACCEPTANCE THE FOLLOWING CONDITIONS MUST BE MET:
   - 1.1. PRESSURE TESTING AND BACTERIA TESTING MUST BE COMPLETED IN ACCORDANCE WITH THE WATER RESOURCES COMMISSIONER'S OFFICE REQUIREMENTS
   - 1.2. ALL EASEMENT AND RIGHT-OF-WAY ACQUISITION MUST BE ACCEPTED BY THE WATER RESOURCES COMMISSIONER'S OFFICE, RIGHT-OF-WAY DIVISION
   - 1.3. THE LOCAL MUNICIPALITY MUST BE PROVIDED WITH THE BILL OF SALE
   - 1.4. ALL "RECORD DRAWINGS" MUST BE ACCEPTED AND APPROVED BY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION. THE WATER RESOURCES COMMISSIONER'S OFFICE AND LOCAL ENGINEER MUST WITNESS THE CONNECTION OF THE WATER MAIN TO THE EXISTING WATER MAIN, AFTER WHICH RESIDENTIAL AND COMMERCIAL TAPS WILL BE ALLOWED.
2. THE CONTRACTOR SHALL NOTIFY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION THROUGH THE LOCAL ENGINEER FOR NEW CONSTRUCTION TAP, PRESSURE TESTING, BACTERIOLOGICAL SAMPLING, CONNECTIONS TO EXISTING WATER MAIN AND FINAL FIELD REVIEW. A SEVENTY-TWO (72) HOUR ADVANCE NOTICE IS REQUIRED.
3. THE CONTRACTOR SHALL DISINFECT AND PRESSURE TEST ALL NEW WATER MAIN CONSTRUCTION PURSUANT TO THE CURRENT STANDARDS SPECIFIED BY THE WATER RESOURCES COMMISSIONER'S OFFICE.
4. HYDROSTATIC TESTING FOR DUCTILE IRON WATER MAIN SHALL BE COMPLETED IN ACCORDANCE WITH ANSI/AWWA C600, SEC 5.2. THE SPECIFIED TEST PRESSURE IS 150 PSI OR 1.5 TIMES THE MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) OF THE TEST SECTION, WHICHEVER IS GREATER. THE TEST METHOD IS GENERALLY SUMMARIZED AS FOLLOWS:
   - 4.1. SLOWLY FILL PIPELINE WITH WATER, VENTING ENTRAPPED AIR AS NECESSARY.
   - 4.2. REPAIR ANY VISIBLE LEAKS THAT OCCUR DURING FILLING OR AT ANY POINT DURING THE TEST.
   - 4.3. GRADUALLY APPLY PRESSURE UP TO THE SPECIFIED WORKING PRESSURE USING A SUITABLE PUMP CONNECTED TO THE PIPELINE, BLEEDING TRAPPED AIR, AND ADDING WATER AS NECESSARY UNTIL A STABLE PRESSURE IS HELD.
   - 4.4. HYDROSTATIC TEST BEGINS AFTER THE PIPELINE IS STABILIZED AT THE WORKING PRESSURE BY INCREASING THE PRESSURE UP TO THE SPECIFIED TEST PRESSURE AND HOLD IT WITHIN PLUS/MINUS 5 PSI FOR THE DURATION OF THE TEST, OR A MINIMUM OF TWO HOURS.
   - 4.5. CAREFULLY RECORD THE AMOUNT OF MAKEUP WATER ADDED DURING THE TEST. THE HYDROSTATIC TEST PASSES IF THE AMOUNT OF MAKEUP WATER DOES NOT EXCEED THE TESTING ALLOWANCE.
   - 4.6. IF THE TESTING ALLOWANCE IS EXCEEDED, LOCATE AND REPAIR ANY LEAKS AND REPEAT TEST.
5. REFER TO SHEET 5 FOR HYDROSTATIC TESTING REQUIREMENTS FOR HDPE PIPE.
6. PRESSURE TESTING AGAINST VALVES PHYSICALLY CONNECTED TO AN EXISTING WATER SUPPLY SYSTEM IS STRICTLY PROHIBITED.
7. WHERE CONTRACTOR SUPPLIED GAUGES ARE REQUIRED, MINIMUM SIZE SHALL BE 3½" DIAMETER OR LARGER GRADUATED IN ONE (1) OR TWO (2) POUND INCREMENTS FROM 1 TO 160 P.S.I. OR HIGHER.
8. PRESSURE TESTING AND BACTERIA TESTING MUST BE SUCCESSFULLY COMPLETED PRIOR TO CONNECTING TO THE EXISTING WATER SUPPLY SYSTEM.

WATER RESOURCES COMMISSIONER WATER SYSTEM STANDARDS – GATE VALVES

COMMUNITY	DIRECTION TO OPEN	VALVE TYPE: STD. GATE VALVE	VALVE TYPE: TAPPING VALVE
BINGHAM FARMS	RIGHT	C515	C515
BLOOMFIELD HILLS	RIGHT	C515	C515
COMMERCE TOWNSHIP	LEFT	C515	C515
FARMINGTON HILLS	RIGHT	C515	C515
HIGHLAND TOWNSHIP	LEFT	C515	C515
KEEGO HARBOR	RIGHT	C515	C515
OAKLAND TOWNSHIP	LEFT	C515	C515
ORCHARD LAKE VILLAGE	LEFT	C515	C515
OXFORD TOWNSHIP	LEFT	C515	C515
PLEASANT RIDGE	RIGHT	C515	C515
PONTIAC	LEFT	C515	C515
ROYAL OAK TOWNSHIP	RIGHT	C515	C515
SPRINGFIELD TOWNSHIP	LEFT	C515	C515
SYLVAN LAKE	RIGHT	C515	C515
WALLED LAKE	LEFT	C515	C515

1.) C515 RESILIENT SEATED GATE VALVE – MANUFACTURED BY U.S. PIPE, MUELLER, EAST JORDAN IRON WORKS, AMERICAN FLOW CONTROL OR APPROVED EQUAL.

FIRE HYDRANT NOZZLE SIZE AND THREAD SPECIFICATIONS

CVT	PUMPER NOZZLE	HOSE NOZZLE	OPERATING NUT	DEPTH OF BURY	STYLE	MODEL #
BINGHAM FARMS	(1) – 4"-STORZ	(2) – 2-1/2"-DFD	1-1/2"	5'-6"	5BR250	54831D
BLOOMFIELD HILLS	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/8"	6'-0"	5BR250	558250
COMMERCE TWP/ WOLVERINE LAKE	(1) – 5"-STORZ	(2) – 2-1/2"-NST	1-1/2"	5'-6"	5BR250	549130
FARMINGTON HILLS	(1) – 3-3/4"-DFD	(2) – 2-1/2"-NST	1-1/8"	5'-6"	5BR250	543290
HIGHLAND TWP	(1) – 5"-STORZ	(2) – 2-1/2"-NST	1-1/2"	5'-6"	5BR250	549130
KEEGO HARBOR	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/8"	5'-6"	5BR250	548260
OAKLAND TWP	(1) – 4"-STORZ	(2) – 2-1/2"-DFD	1-1/2"	5'-6"	5BR250	54831D
ORCHARD LAKE	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/8"	6'-0"	5BR250	558250
OXFORD TWP	(1) – 5"-STORZ (1) – 4-1/2"-NST		1-1/2"	6'-0"	5BR250	556010
PLEASANT RIDGE	(1) – 3-3/4"-DFD (1) – 5"-STORZ		1-1/8"	5'-6"	5BR250	549490
PONTIAC	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/2"	6'-0"	5BR250	55822D
ROYAL OAK TWP	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/8"	5'-6"	5BR250	548260
SPRINGFIELD TWP	(1) – 5"-STORZ	(2) – 2-1/2"-NST	1-1/2"	5'-6"	5BR250	549130
SYLVAN LAKE	(1) – 3-3/4-DFD	(2) – 2-1/2"-NST	1-1/2"	6'-0"	5BR250	55827D
WALLED LAKE	(1) – 4-1/2-NST	(2) – 2-1/2"-NST	1-1/8"	5'-6"	5BR250	54534D

1. D.F.D. – DETROIT FIRE DEPARTMENT THREAD
2. N.S.T. – NATIONAL STANDARD THREAD
3. STORZ NOZZLES SHALL BE COMPATIBLE WITH STORZ COUPLED LARGE DIAMETER FIRE HOSE. NOZZLES SHOULD BE MADE OF "LEAD FREE" BRASS OR ALUMINUM, AS APPROVED BY LOCAL CITY, VILLAGE OR TOWNSHIP. THE NOZZLE SHALL BE AN INTEGRAL PART OF THE HYDRANT, RESISTANT TO TAMPER AND REMOVAL. ENGAGEMENT LUGS SHALL BE ON THE NOZZLE AND CAP TO PREVENT FAILURE UNDER HIGH PRESSURE. NOZZLE AND CAP SHALL MEET AWWA C502 SPECIFICATIONS. NOZZLE SHALL BE COMPATIBLE WITH HOSE LOCK TO PREVENT HOSE FROM DISCONNECTING WHILE IN USE.

WATER RESOURCES COMMISSIONER'S OFFICE WATER SYSTEMS OPERATIONS AND MAINTENANCE DIVISION RECORD DRAWING SPECIFICATIONS

IN AREAS WHERE WATER SYSTEMS ARE OPERATED AND MAINTAINED BY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION, FINAL ACCEPTANCE OF THE WATER SYSTEM MUST BE RENDERED BY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION, BEFORE THE SYSTEM CAN BE USED FOR THE SERVICE INTENDED.

ONE ITEM REQUIRED FOR FINAL ACCEPTANCE SHALL BE THE SUBMISSION OF RECORD DRAWINGS TO THE WATER RESOURCES COMMISSIONER, OPERATIONS AND MAINTENANCE DIVISION, BY THE DESIGN ENGINEER. RECORD DRAWINGS SHALL BE DEFINED AS AND CONTAIN THE FOLLOWING INFORMATION:

1. THE DESIGN ENGINEER SHALL FURNISH "RECORD DRAWINGS" WATER MAIN PLANS UPON JOB COMPLETION. "RECORD DRAWINGS" SHALL BE FORWARDED TO THE WATER RESOURCES COMMISSIONER BY THE LOCAL MUNICIPAL ENGINEER AFTER THEIR REVIEW AND APPROVAL.
2. THE COVER SHEET SHALL BE SIGNED AND SEALED BY THE PROJECT DESIGN ENGINEER AND INCLUDE THE FOLLOWING CERTIFICATION STATEMENT:

> I HEREBY CERTIFY THAT OUR FIRM HAS PREPARED THESE RECORD DRAWINGS OF THE IMPROVEMENTS AS CONSTRUCTED, AND THAT TO THE BEST OF MY KNOWLEDGE THOSE IMPROVEMENTS NOTED AS "RECORD DRAWINGS" WERE CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS; AND ALSO THAT THE WATER MAIN AND STRUCTURES, AS CONSTRUCTED, LIE WITHIN THE EASEMENT DESCRIPTIONS REQUIRED BY THE WATER RESOURCES COMMISSIONER'S OFFICE.
>
> _____ (COMPANY NAME)
>
> _____ (ENGINEER'S SIGNATURE)
>
> PROFESSIONAL ENGINEER NO. _____
>
> ENGINEER SEAL

3. THE MINIMUM SCALE SHALL BE ONE (1) INCH EQUALS FIFTY (50) FEET.
4. THE SIZE, LENGTH, CLASS AND MANUFACTURER OF PIPE INSTALLED SHALL BE INDICATED.
5. THE SIZE, BRAND AND MODEL NUMBERS OF ALL VALVES AND HYDRANTS INSTALLED SHALL BE INDICATED.
6. A TOTAL RECORD DRAWING QUANTITY LIST SHALL BE INCLUDED, AS WELL AS A RECORD DRAWING QUANTITY LIST ON EACH INDIVIDUAL SHEET.
7. THE LOCATIONS SHALL BE SHOWN ON THE PLANS WITH AN ACCURACY OF ONE (1) FOOT.
8. THE OFFSET OF THE WATER MAIN FROM PROPERTY LINES SHALL BE INDICATED.
9. ALL GATE VALVE WELLS, HYDRANTS AND ALL WATER SYSTEM APPURTENANCES SHALL BE LOCATED FROM THE NEAREST PROPERTY CORNER.
10. ALL UNDERGROUND APPURTENANCES, SUCH AS GATE VALVE WELLS, METER PITS, PRESSURE REDUCING VALVE PITS, ETC. SHALL BE LOCATED FROM THE NEAREST HYDRANT THAT IS CONNECTED TO THE SAME WATER MAIN AS THE APPURTENANCE.
11. THE LOCATION, SIZE, BRAND AND MODEL NUMBER OF EVERY RESTRAINED JOINT SHALL BE NOTED.
12. THE ACCURATE LOCATION OF ALL UTILITY CROSSINGS WHERE THE RECOMMENDED SEPARATION, VERTICALLY OR HORIZONTALLY, IS LESS THAN THE TEN STATE STANDARDS SHALL BE NOTED.
13. WATER MAINS 12" AND LARGER IN DIAMETER SHALL BE DRAWN IN PROFILE VIEW IN ADDITION TO PLAN VIEW ON THE CONSTRUCTION PLANS.

WATER MAIN STANDARD DETAILS

REVISION BLOCK			
Date Entered / Entered Date: N/A			
Rev No.:	Rev By:	Rev. Date:	Description:
1	WRC	09/21/23	GENERAL UPDATE
2	KR	01/22/24	ADD PRC AND BLOWOFF TO TABLES
3	KR	05/10/24	UPDATE BRY HYDRANT SPECS
4	KR	07/11/24	UPDATE BOT HYDRANT SPECS

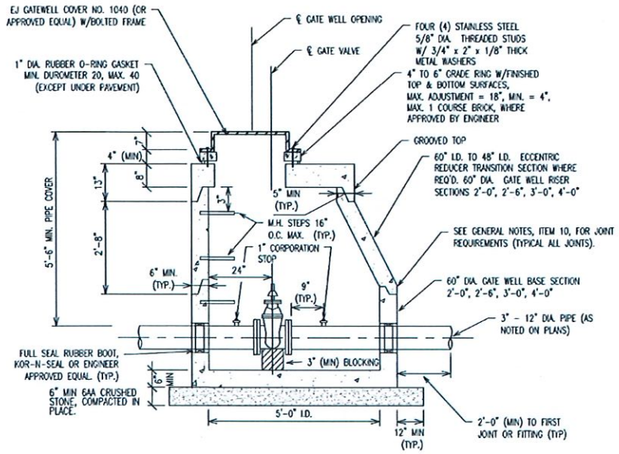
ORIG. DATE:	01/01/01
SCALE:	NONE
DESIGNED BY:	WRC
DRAWN BY:	WRC Mapping

WRC WATER RESOURCES COMMISSIONER Jim Nash

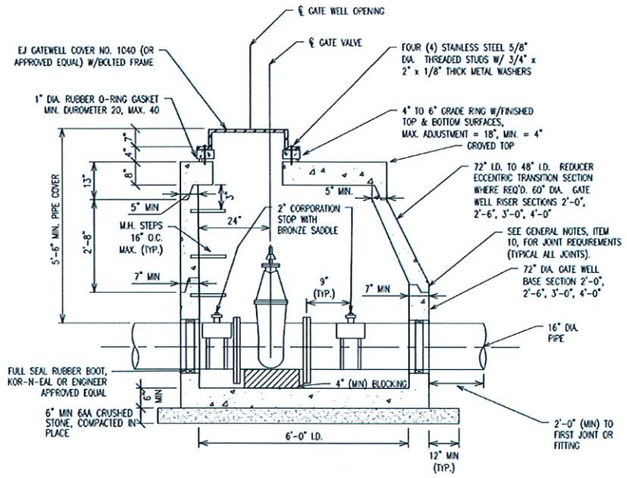
ONE PUBLIC WORKS DRIVE, BLDG 95 WEST WATERFORD, MICHIGAN 48328-1907

SHEET NO.: 1 of 7

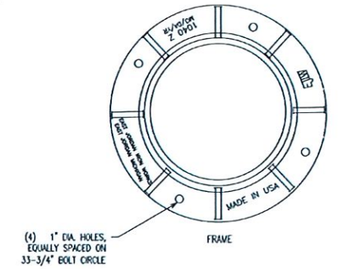
GATE VALVE & WELL DETAILS

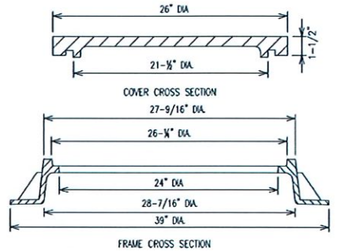


3" THRU 12" GATE WELL

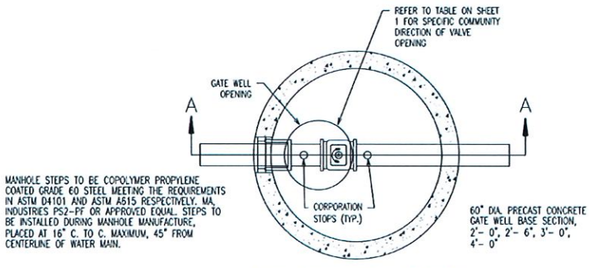


16" GATE WELL

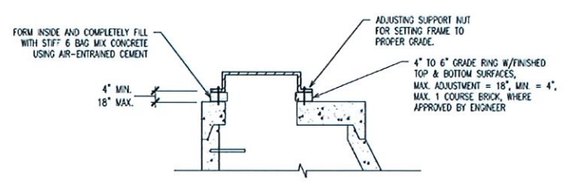




FRAME

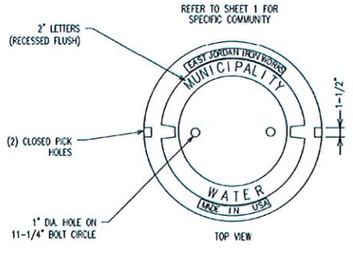


PLAN GATE WELL TYPICAL

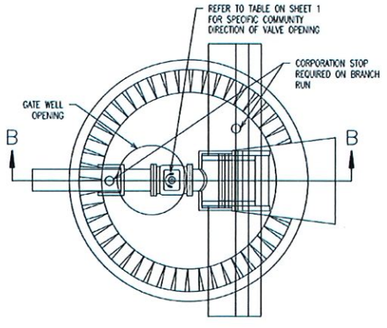


GATE WELL TOPS WITHIN PAVEMENT AREAS

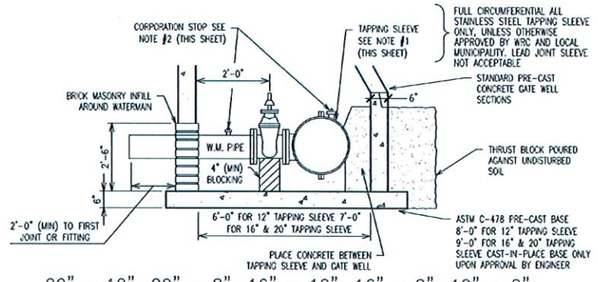
RUBBER O'RINGS SHALL NOT BE USED IN PAVEMENT



LETTERING LAYOUT FOR GATEWELL COVERS



PLAN TAPPING SLEEVE
VALVE & WELL (TYPICAL)



20" x 12", 20" x 8", 16" x 12", 16" x 8", 12" x 8"

TAPPING SLEEVE, VALVE & WELL

NOTES:
1. REFER TO NOTE 7 OF "VALVE AND SLEEVE NOTES" ON SHEET 1.
2. FOR PIPE SMALLER THAN 16" USE 1" CORPORATION STOP, FOR 16" PIPE OR LARGER USE 2" CORPORATION STOP WITH BRONZE SADDLE.
3. WRC DOES NOT RECOMMEND SIZE ON SIZE TAPPING.

WATER MAIN
STANDARD DETAILS

REVISION BLOCK
Data Source / Source Date: N/A

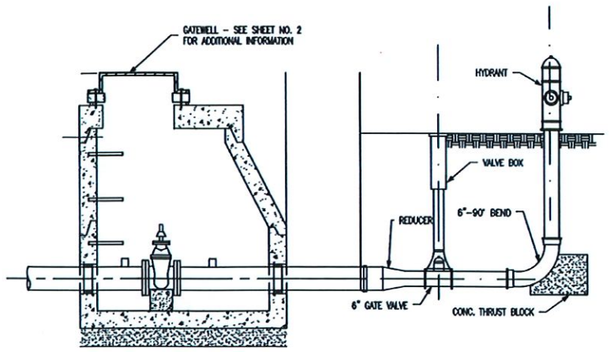
Rev. No.	Rev. By:	Rev. Date:	Description:
1	DL	4/23/15	FINAL CHANGES TO GATE VALVE STANDARDS PER PAINT SPECIFICATIONS AND PIPE CLASS UPDATES
2	DL	4/14/17	UPDATE TO DIRECTION TO OPEN (CLOCKWISE, TO RIGHT) FROM RIGHT TO LEFT
3	KB	02/14/18	MINOR UPDATES (LAYER)
4	WRC	05/15/20	GENERAL UPDATE

ORIG. DATE: 01/01/01
SCALE: NONE
DESIGNED BY: WRC
DRAWN BY: WRC Mapping

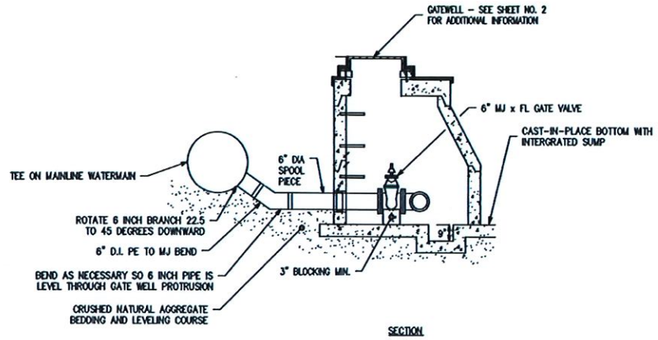
WRC WATER RESOURCES COMMISSIONER Jim Nash

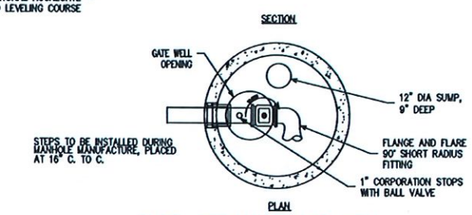
ONE PUBLIC WORKS DRIVE, BLDG 95 WEST
WATERFORD, MICHIGAN
48328-1907

SHEET NO.: 2 of 7

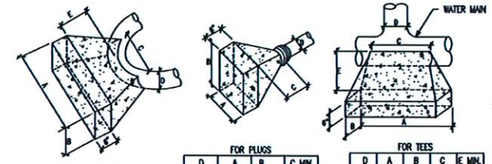


DEAD END BLOWOFF CONNECTION





BLOW–OFF VALVE AND WELL



FOR 90° BENDS OR SMALLER

D	A	B	C	E MIN.
20"	8'	6.5'	3.5'	2.5'
16"	6'	4'	2.5'	2'
12"	4'	3'	2'	1.75'
10"	3'	3'	2'	1.75'
8"	3'	2'	2'	1.5'
6"	2'	1.5'	2'	1.25'

FOR PLUGS

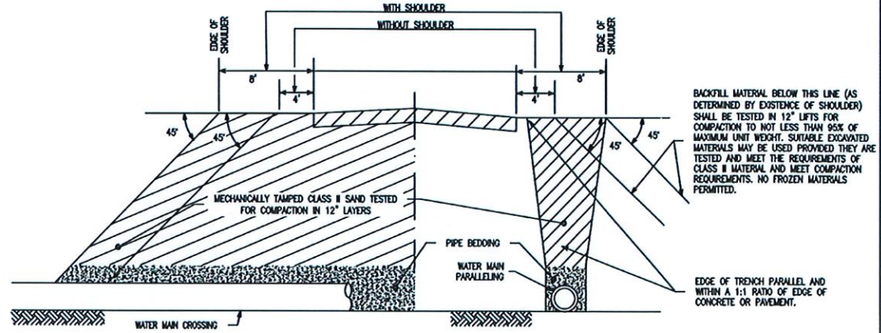
D	A	B	C MIN.
20"	7'	5'	2.5'
16"	4'-10"	4'-10"	2'
12"	4'-4"	3'	1'-9"
10"	3'	2'	1'-6"
8"	2'-10"	2'-8"	1'-6"
6"	1'-8"	1'-8"	3"

FOR TEES

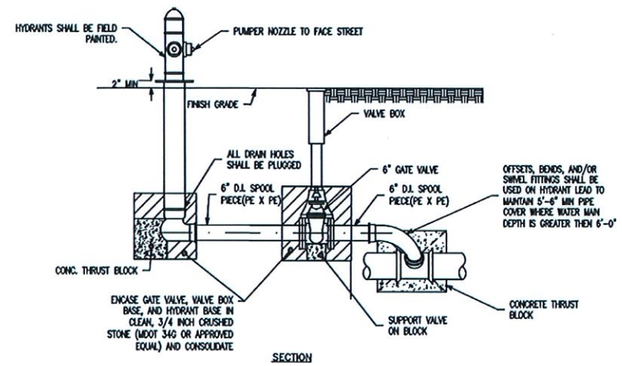
D	A	B	C	E MIN.
20"	6.5'	4.5'	3.5'	3'
16"	4'-8"	4'-8"	2.5'	2.75'
12"	4'	3'	2.5'	2.5'
10"	3'	2'	2'	2.25'
8"	2'-8"	2'	2'	2.25'
6"	2'	2'	2'	2.25'

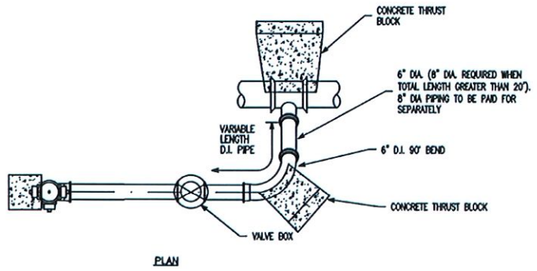
THRUST BLOCK DETAILS

NOTE:
1. 3000 PSI CONCRETE TO BE USED. THRUST BLOCK TO ABUT & REST AGAINST UNDISTURBED SOIL OR EARTH COMPACTED TO 95% MODIFIED PROCTER.



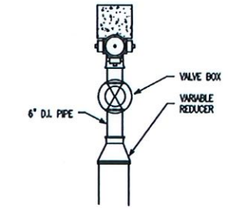
MINIMUM BACKFILL UNDER OR NEAR PAVEMENT



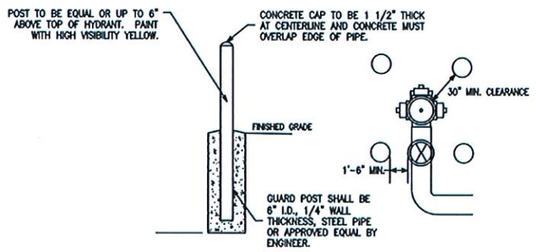


6" HYDRANT SIDE OUTLET

NOTES:
1. HYDRANT EXTENSIONS BETWEEN THE STANDPIPE LOWER SECTION & STANDPIPE UPPER ARE LIMITED TO 18 INCHES
2. ALL HYDRANTS COMPANION VALVES, BENDS, AND TEES TO BE FULLY RESTRAINED BY MECHANICAL JOINT RESTRAINT SYSTEM FITTINGS (MEGA–LUG OR APPROVED EQUAL).
3. THRUST BLOCKS ARE REQUIRED AT ALL TEES, BENDS AND ENDS.
4. ALL HARDWARE (BOLTS, NUTS, WASHERS, ETC.) FOR HYDRANT ASSEMBLIES SHALL BE COR–BLUE OR APPROVED EQUAL.

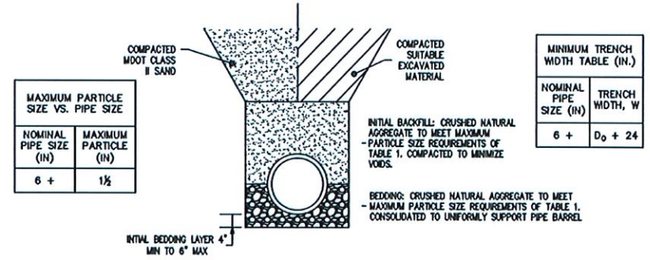


PLAN 6" HYDRANT WATER MAIN END



GUARD POST

NOTES:
1. GUARD POST SHALL NOT INTERFERE WITH HYDRANT OPERATION
2. TO BE INSTALLED IN ALL PAVED AREAS PARKING LOTS, PARKS, PLAZAS, ETC. (NOT RIGHT–OF–WAYS)SPACE WHERE VEHICLE EQUIPMENT DAMAGE TO HYDRANT IS POSSIBLE.



MAXIMUM PARTICLE SIZE VS. PIPE SIZE	
NOMINAL PIPE SIZE (IN)	MAXIMUM PARTICLE (IN)
6 +	1½

MINIMUM TRENCH WIDTH TABLE (IN.)	
NOMINAL PIPE SIZE (IN)	TRENCH WIDTH, W
6 +	D_0 + 24

DUCTILE IRON PIPE TRENCH DETAIL

NOTES:
1. DUCTILE IRON PIPE IS CONSIDERED A FLEXIBLE PIPE THAT WHEN INSTALLED UNDERGROUND IS DESIGNED TO DEFLECT UNDER LOAD.
2. DO NOT COMPACT INNER BEDDING OF INITIAL BEDDING LAYER.
3. CAREFULLY EXCAVATE BELL OR COUPLING HOLES FROM THE INITIAL BEDDING LAYER.
4. SHOVEL SLICE BEDDING MATERIAL IN THE HAUNCH AREA ALONG THE BOTTOM CIRCUMFERENCE OF THE PIPE TO CONSOLIDATE BEDDING AND UNIFORMLY SUPPORT THE PIPE BARREL.
5. COMPACT INITIAL BACKFILL MATERIALS IN LIFTS NOT EXCEEDING 6 INCHES BY HAND TAMPING AROUND AND DIRECTLY ABOVE PIPE TO MINIMIZE VOIDS.
6. DO NOT USE MECHANICAL COMPACTION EQUIPMENT DURING INITIAL BACKFILL OPERATIONS UNTIL MATERIAL HAS BEEN BROUGHT TO 12 INCHES ABOVE THE TOP OF PIPE BARREL.
7. COMPACT SAND BACKFILL AND STANDARD TRENCHES OUTSIDE OF PIPE ZONE TO NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT IN LIFTS NOT EXCEEDING 12 INCHES.
8. FOR MINIMUM TRENCH WIDTHS, REFER TO TABLE 2, MAXIMUM TRENCH WIDTH = D_0 + 20, UNLESS MINIMUM TRENCH WIDTH IS GREATER.
9. IF THE PIPE IS LOCATED BENEATH THE GROUND WATER TABLE, THE PIPE ZONE SHALL BE WRAPPED IN A GEOTEXTILE SEPARATOR TO MINIMIZE MIGRATION OF SOIL INTO THE PIPE ZONE.

WATER MAIN
STANDARD DETAILS

REVISION BLOCK
Data Source / Source Date: N/A

Rev / Rev. No.:	By:	Rev. Date	Description
1	DS	11/21/14	PROPOSED CHANGE TO DELETE REFERENCE TO DUCTILE SLEEVE MANUFACTURER
2	DL	03/31/14	FINAL CHANGE TO DELETE REFERENCE TO DUCTILE SLEEVE MANUFACTURER
3	KB	02/14/18	REVISIONS PER D. APPEL
4	MHC	06/12/20	GENERAL UPDATES

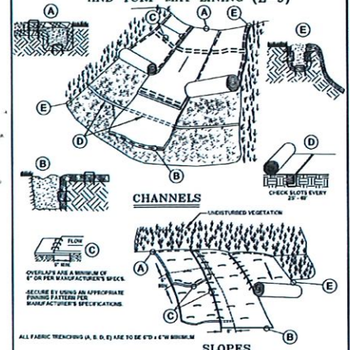
ORIG. DATE: 01/01/01
SCALE: NONE
DESIGNED BY: WRC
DRAWN BY: WRC Mapping

WRC WATER RESOURCES COMMISSIONER Jim Nash

ONE PUBLIC WORKS DRIVE, BLDG 95 WEST
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48328-1907

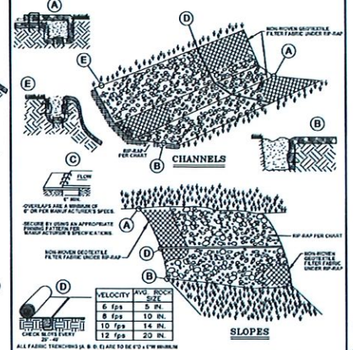
SHEET NO.: 3 of 7

EROSION CONTROL BLANKETS AND TURF MAT LINING (E-9)



DEPENDING ON THE VELOCITY, SLOPE, SOILS, USE PROPER BLANKET OR TURF MAT LINING PER MANUFACTURER'S SPECIFICATIONS TO HANDLE THE SHEER STRESSES OF THE SLOPE/CHANNEL.

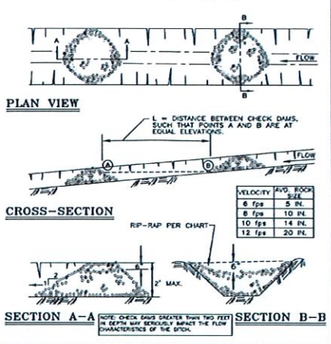
RIP-RAP: CHANNELS AND SLOPES (E-10)



VELOCITY	AVG. ROCK SIZE
6 fps	8 IN.
8 fps	10 IN.
10 fps	14 IN.
12 fps	20 IN.

DEPENDING ON THE VELOCITY, SLOPE AND SOILS, USE THE PROPER SIZED RIP-RAP AND NON-WOVEN GEOTEXTILE FABRIC TO HANDLE THE SHEER STRESS OF THE SLOPE/CHANNEL.

CHECK DAMS (E-3)



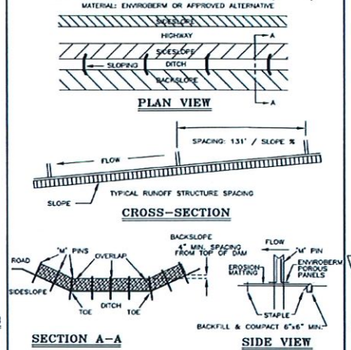
VELOCITY	AVG. ROCK SIZE
6 fps	8 IN.
8 fps	10 IN.
10 fps	14 IN.
12 fps	20 IN.

NOTE: CHECK DAMS GREATER THAN TWO FEET IN DEPTH MAY SERIOUSLY IMPACT THE FLOW CHARACTERISTICS OF THE DITCH.

DEPENDING ON THE VELOCITY, SLOPE AND SOILS, USE THE PROPER SIZED RIP-RAP TO HANDLE THE SHEER STRESS OF THE SLOPE/CHANNEL.
-FOR SLOPE AND/OR CHANNEL PROTECTION SEE OTHER BMP'S ON THIS SHEET OR IN THE WRC SOIL EROSION MANUAL.

CHECK DAMS ALTERNATIVE "A" (E-3A)

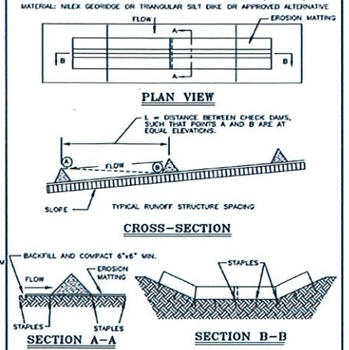
MATERIAL: ENVIROBERM OR APPROVED ALTERNATIVE



-FOR SLOPE AND/OR CHANNEL PROTECTION SEE OTHER BMP'S ON THIS SHEET OR IN THE WRC SOIL EROSION MANUAL.

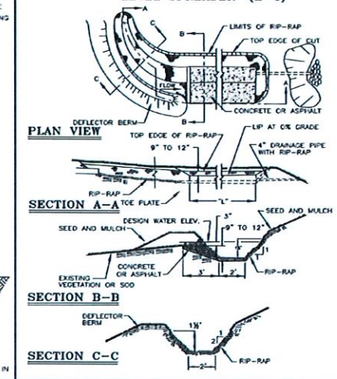
CHECK DAMS ALTERNATIVE "B" (E-3B)

MATERIAL: NILEX GEORIDGE OR TRIANGULAR SILT DIKE OR APPROVED ALTERNATIVE

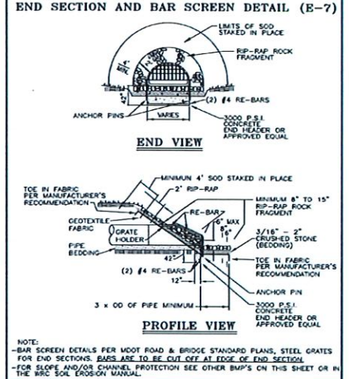


-FOR SLOPE AND/OR CHANNEL PROTECTION SEE OTHER BMP'S ON THIS SHEET OR IN THE WRC SOIL EROSION MANUAL.

LEVEL SPREADER (E-4)



RIP-RAP, END SECTION AND BAR SCREEN DETAIL (E-7)

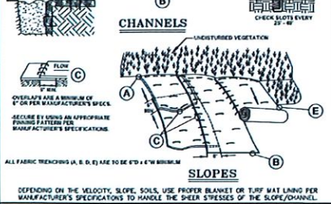


NOTE:
-BAR SCREEN DETAILS PER MOOT ROAD & BRIDGE STANDARD PLANS, STEEL GRATES FOR END SECTIONS. BARS ARE TO BE CUT OFF AT EDGE OF END SECTION.
-FOR SLOPE AND/OR CHANNEL PROTECTION SEE OTHER BMP'S ON THIS SHEET OR IN THE WRC SOIL EROSION MANUAL.

VEGETATIVE BUFFER ZONE (SP-1)

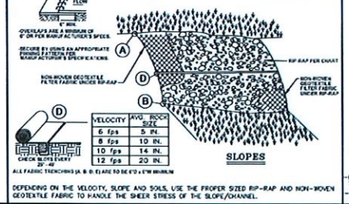
THE GRAPH SHOWN BELOW IS USED TO DETERMINE THE ADEQUACY OF AN EXISTING VEGETATIVE BUFFER ZONE FOR USE AS A SEDIMENT FILTER. THIS GRAPH IS ONLY APPLICABLE IF THE VEGETATION IS SOD DENSE AND AT LEAST 1" IN LENGTH OVER EVERY SQUARE FOOT OF DISTURBED SOIL. AN AREA COVERED WITH WEEDS, OR BUSHES AND TREES WITHOUT A GOOD GROUND COVER IS NOT ACCEPTABLE.

EXAMPLE



SILT FENCE (SP-2)

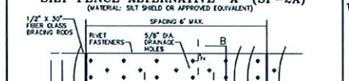
MATERIAL: AMOCO PRO FEX 2130 OR APPROVED EQUIVALENT)



SILT FENCE ALTERNATIVE "A" (SP-2A)

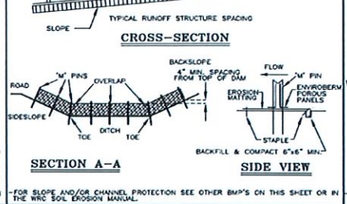
(MATERIAL: SILT SHIELD OR APPROVED EQUIVALENT)

2% GRADE MAXIMUM SLOPE



WINTER/FROZEN GROUND SILT FENCE (SP-2W)

(MATERIAL: AMOCO PRO FEX 2130 OR APPROVED EQUIVALENT)



RYCB INLET FILTER (SI-3)

NOTE: MATERIAL IS NOT SILT FENCE MATERIAL

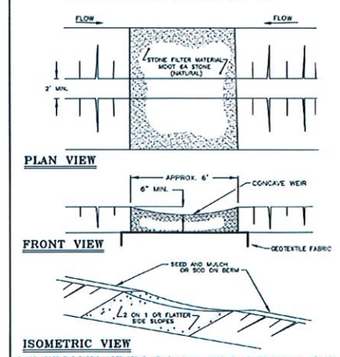
RYCB INLET FILTER ALTERNATIVE "A" (SI-3A)

RYCB INLET FILTER ALTERNATIVE "B" (SI-3B)

MATERIAL: SILT SAVER OR APPROVED ALTERNATIVE

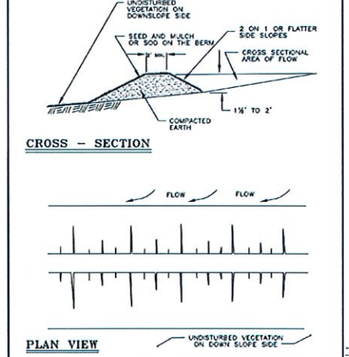
(NOTE: NO PIT REQUIRED WHEN FRAME AND COVER OR GRATE AND COVER ARE IN PLACE.)

EARTH DIVERSION BERM WITH STONE OUTLET FILTER (SP-4)

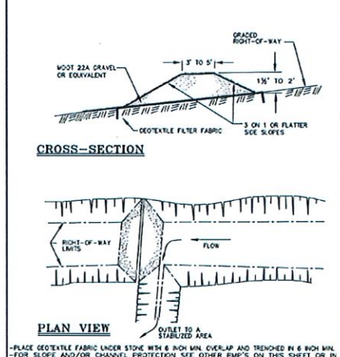


-PLACE GEOTEXTILE FABRIC UNDER STONE WITH 6 INCH MIN. OVERLAP AND TRENCHED IN 6 INCH MIN.

EARTH DIVERSION BERM (E-2)



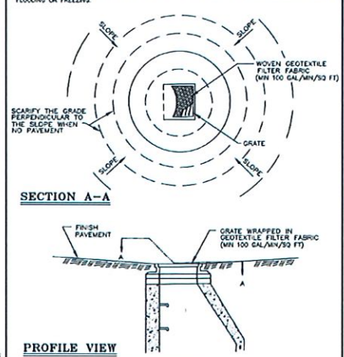
GRAVEL INTERCEPTOR DIKE (SP-6)



-PLACE GEOTEXTILE FABRIC UNDER STONE WITH 6 INCH MIN. OVERLAP AND TRENCHED IN 6 INCH MIN.
-FOR SLOPE AND/OR CHANNEL PROTECTION SEE OTHER BMP'S ON THIS SHEET OR IN THE WRC SOIL EROSION MANUAL.

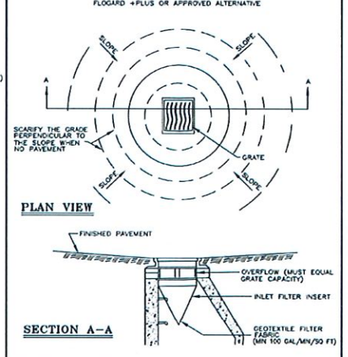
LOW POINT INLET FILTER (SI-2)

ALTERNATIVE INLET FILTER MUST BE USED IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING.

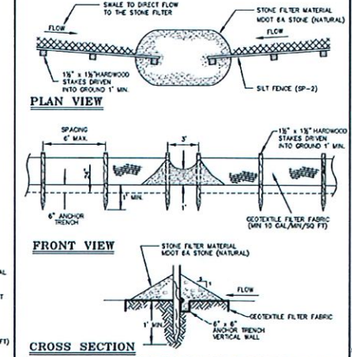


LOW POINT INLET FILTER ALT. "A" (SI-2A)

MATERIAL: CATCH-ALL, ULTRA-URBAN FILTERS, FLOGARD +PLUS OR APPROVED ALTERNATIVE

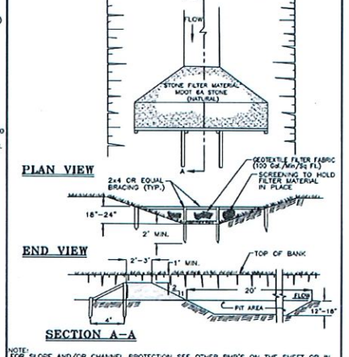


SILT FENCE GRAVEL FILTER (SP-3)



-PLACE GEOTEXTILE FABRIC UNDER STONE WITH 6 INCH MIN. OVERLAP AND TRENCHED IN 6 INCH MIN.

DITCH SEDIMENT TRAP (SO-4)

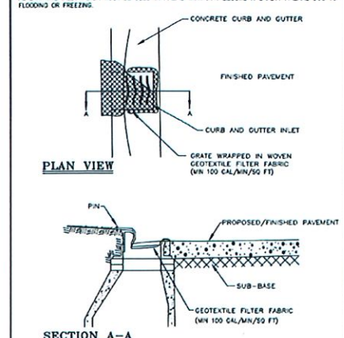


NOTE:
-FOR SLOPE AND/OR CHANNEL PROTECTION SEE OTHER BMP'S ON THE SHEET OR IN THE WRC SOIL EROSION MANUAL.

CURB AND GUTTER INLET FILTER (SI-4)

(BEFORE AND AFTER PAVING)

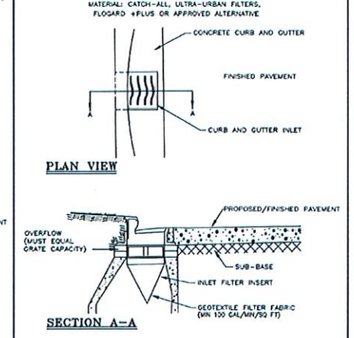
ALTERNATIVE INLET FILTER MUST BE USED IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING.



CURB AND GUTTER INLET FILTER ALTERNATIVE "A" (SI-4A)

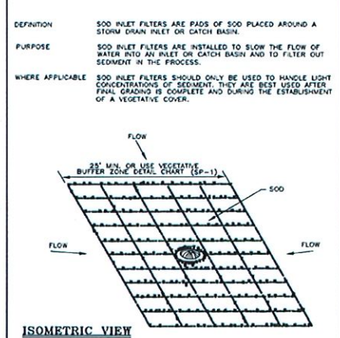
(BEFORE AND AFTER PAVING)

MATERIAL: CATCH-ALL, ULTRA-URBAN FILTERS, FLOGARD +PLUS OR APPROVED ALTERNATIVE

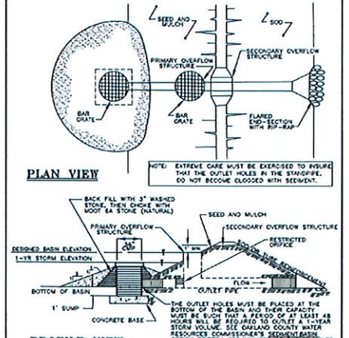


SOD INLET FILTER (SI-1)

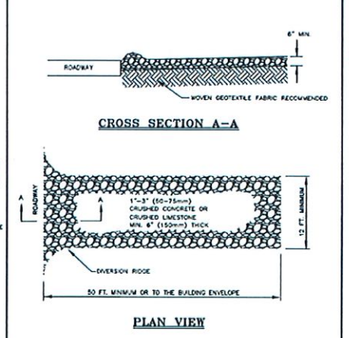
DEFINITION	SOD INLET FILTERS ARE PADS OF SOD PLACED AROUND A STORM DRAIN INLET OR CATCH BASIN.
PURPOSE	SOD INLET FILTERS ARE INSTALLED TO SLOW THE FLOW OF WATER INTO AN INLET OR CATCH BASIN AND TO FILTER OUT SEDIMENT IN THE PROCESS.
WHERE APPLICABLE	SOD INLET FILTERS SHOULD ONLY BE USED TO HANDLE LIGHT CONCENTRATIONS OF SEDIMENT. THEY ARE BEST USED AFTER FINAL GRADING IS COMPLETE AND DURING THE ESTABLISHMENT OF A VEGETATIVE COVER.



TEMPORARY DETENTION BASIN OUTLET STONE FILTER (SO-2)

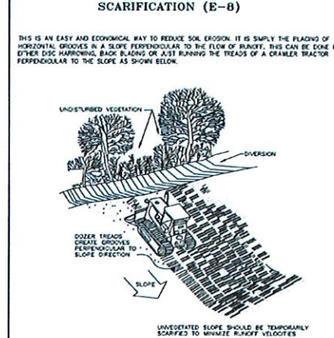


TEMPORARY STONE ACCESS DRIVE (SP-9)



SURFACE ROUGHENING AND SCARIFICATION (E-8)

THIS IS AN EASY AND ECONOMICAL WAY TO REDUCE SOIL EROSION. IT IS SIMPLY THE FORMING OF HORIZONTAL GROOVES IN A SLOPE PERPENDICULAR TO THE FLOW OF RUNOFF. THIS CAN BE DONE BY EITHER DISC HARROWING, BACK BLADING OR JUST RUNNING THE TREADS OF A CRAWLER TRACTOR PERPENDICULAR TO THE SLOPE AS SHOWN BELOW.



UNVEGETATED SLOPE SHOULD BE TEMPORARILY SCARIFIED TO MINIMIZE RUNOFF VELOCITIES

NOTE:

WHILE PERFORMING WORK INVOLVING GROUNDS MAINTENANCE AND/OR THE CONSTRUCTION/MAINTENANCE OF ANY INFRASTRUCTURE, INCLUDING ROADS, WATER MAINS, SANITARY SEWERS, STORM DRAINS AND STORM WATER BEST MANAGEMENT PRACTICES (BMPS), CONTRACTORS SHALL MINIMIZE POLLUTION FROM STORM WATER RUNOFF THAT CAN AFFECT WATER QUALITY RELATED TO WORK ACTIVITIES. POLLUTANTS THAT COULD IMPAIR WATER QUALITY MAY INCLUDE FUEL, GREASE AND OIL, NUTRIENTS, BACTERIA AND PATHOGENS, LITTER AND DEBRIS, AND SOIL EROSION AND SEDIMENTATION. APPLICABLE BMPS SHALL BE IMPLEMENTED BY THE CONTRACTOR TO THE MAXIMUM EXTENT PRACTICABLE TO PROTECT WATER QUALITY AND WILDLIFE HABITAT.

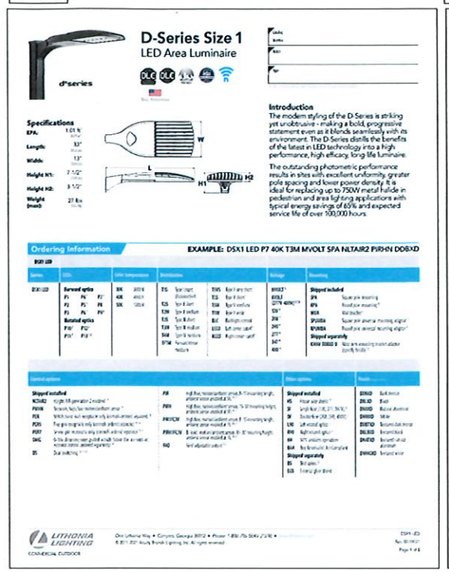
SOIL EROSION AND SEDIMENTATION CONTROL DETAILS

REVISION BLOCK			
Initial Submittal Date: N/A			
No.	By	Date	Description
1	JS	3/2/07	PROPOSED DETAIL REVISIONS
2	JS	4/2/07	CLARIFIED CONSTRUCTION APPLICATION, NAME CHANGES
3	DS	3/31/11	SILT FENCE ALTERNATIVE & INSTALL OF ZIP SCREED
4	DS	4/8/13	CLARIFIED CONSTRUCTION APPLICATION, NOTE CHANGES

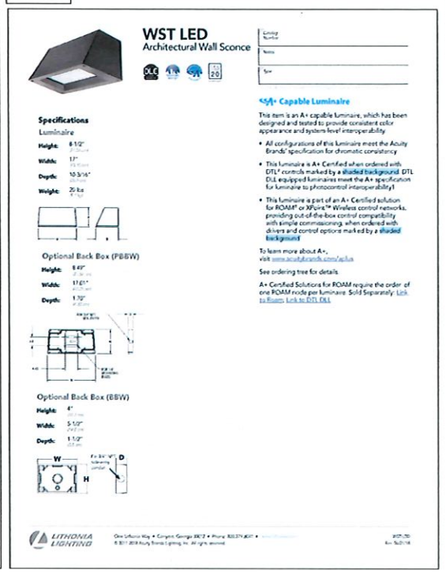
ORIG. DATE:	01/01/01	WRC WATER RESOURCES COMMISSIONER Jim Nash	ONE PUBLIC WORKS DRIVE, BLDG 95 WEST WATERFORD, MICHIGAN 48328-1907
SCALE:	NONE		
DESIGNED BY:	WRC		
DRAWN BY:	Mapping		SHEET NO.: 1 of 1

LUMINAIRE DETAILS

AL1

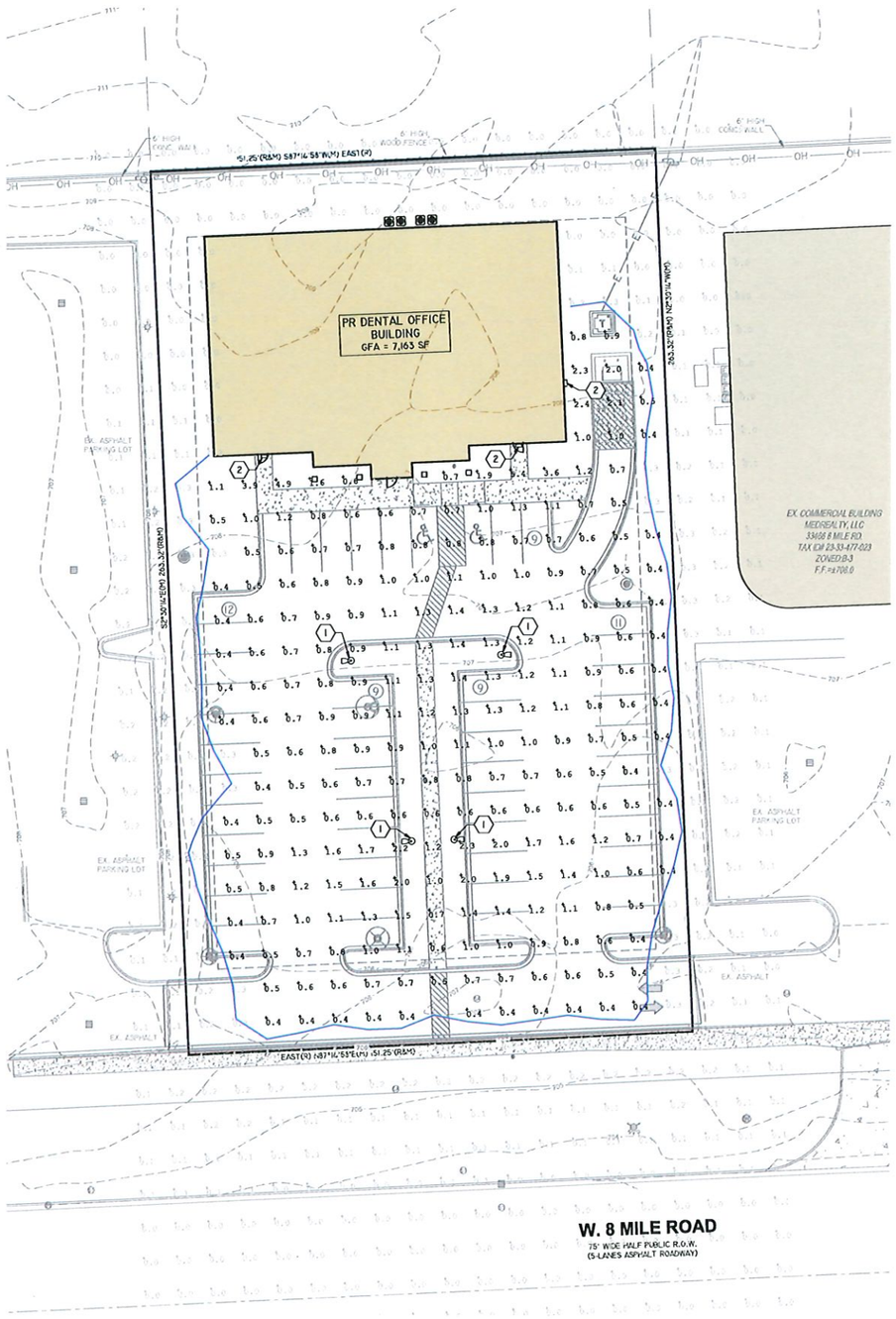


WP1



LUMINAIRE SCHEDULE

LABEL	QTY	MOUNT HEIGHT (FT)	MANUFACTURER	MODEL #	DESCRIPTION	LUMINAIRE LUMENS	LUMINAIRE WATTS	ARRANGEMENT
AL1	4	24	LITHONIA	DSXI LED P1 50K T5M MVOLT GI	POLE MOUNTED AREA LUMINAIRE	4,303	54	SINGLE
WP1	3	12	LITHONIA	WST LED P1 50K VW MVOLT	WALL PACK	1,659	12	SINGLE



NORTH

20 10 0 20 40

DRAWING SCALE: 1"=20'

KEY NOTES

1. INSTALL POLE MOUNTED AREA LUMINAIRE (AL1)
2. INSTALL WALL PACK (WP1)

ILLUMINATION STATISTICS

AREA	REQUIREMENT	PROVIDED
HARDSCAPED AREAS	MAX AVG/MIN RATIO = 4	AVG/MIN RATIO = 2.9
BUILDING ENTRANCES	MAX ILLUMINATION = 2,000 LUMENS PER DOOR	MAX ILLUMINATION = 953 LUMENS PER DOOR

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iden@kalabat.com

CONSULTANTS:

SEAL:

STATE OF MICHIGAN
IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	SITE PLAN APROVAL	7-1-2025
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CLIENT:

CYPRESS CROWN LLC
24001 ORCHARD LAKE RD
#160
FARMINGTON HILLS, MI 48336

PROJECT:

FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:

PHOTOMETRIC PLAN

SHEET NUMBER:

C7.0

PROJECT NUMBER:	MD25-108
DRAWN BY:	S. SALMAN
CHECKED BY:	I. KALABAT

g:\My Drive\hcg engineering_client projects\kalabat engineering\md25-108_dr nick reid - 8 mile ground upsite plans\MD25-108_SHT-PHMT.dwg - Last printed 7/1/2025 6:18 PM

LANDSCAPE REQUIREMENT SUMMARY		
DESCRIPTION	REQUIRED	PROVIDED
CANOPY TREES 1 LARGE DECIDUOUS TREE PER 2,800 SF OF PAVED AREA	19,059 / 2,800 = 6.8 = 7 EA	7 LARGE DECIDUOUS TREES
TREES NEAR SCREEN WALL	DECIDUOUS TREES	DECIDUOUS TREES
PARKING LOT SEPARATION	HEDGE OF SMALL SHRUBS	27 SMALL SHRUBS
TREE REPLACEMENT 8' EVERGREEN = 3" CALIPER 6' EVERGREEN = 2" CALIPER	171 CALIPER INCHES	18- 2" CALIPER =156 6- 3" CALIPER =18 TOTAL =174

PLANT MATERIAL LIST				
KEY	QTY	BOTANICAL NAME	COMMON NAME	MIN. SIZE
		LARGE AND SMALL DECIDUOUS TREES		
AF	8	ACER X FREEMANII 'JEFFERSRED'	AUTUMN BLAZE RED MAPLE	3" CALIPER
CF	12	CORNUS FOLRIDA	WHITE FLOWERING DOGWOOD	2" CALIPER
		SHRUBS		
BMJ	28	BUXUS MICROPHYLLA JAPONICA 'WINTER GEM'	WINTERGEM BOXWOOD	3 GAL.
		LARGE AND SMALL EVERGREEN		
PA	6	PICEA ABIES	NORWAY SPRUCE	8' HIGH
TO	73	THUJA OCCIDENTALS 'TECHNY'	MISSION ARBORVITAE	6' HIGH

GENERAL LANDSCAPE PLANTING NOTES

1. THE CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY ON ALL PLANTS AND VEGETATION PROPOSED ON THE LANDSCAPING PLAN. ANY TREES, SHRUBS, GROUND COVER OR OTHER VEGETATION PLANTED AS PART OF THIS PROJECT THAT DO NOT SURVIVE ONE YEAR FROM PLANTING SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL PERTINENT UTILITY COMPANIES THREE WORKING DAYS IN ADVANCE OF ANY DIGGING. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF ANY UTILITIES.

3. REFER TO THE LANDSCAPE SCHEMATIC PLAN FOR ADDITIONAL NOTES. LANDSCAPE IMPROVEMENTS SHALL CONFORM TO THE LATEST EDITION OF CDOT CONSTRUCTION.

4. ALL PLANTING MATERIALS SHALL BE PLANTED PER CDOT SPECIFICATIONS. EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE BROKEN, LOW HANGING AND OTHER UNDESIRABLE GROWTH TO ENSURE HEALTHY AND SYMMETRICAL NEW GROWTH.

5. PLANTING BEDS: ONE MONTH BEFORE CULTIVATION AND AFTER DAYTIME TEMPERATURES HAVE WARMED TO 65° CONSISTENTLY, TREAT ALL PLANTING BEDS THAT ARE TO BE DEVELOPED IN AREAS OF EXISTING TURF WITH PRE-EMERGENT AND POST-EMERGENT TYPE HERBICIDES. USE A STATE-LICENSED PESTICIDE APPLICATOR TO APPLY THE HERBICIDE. REPEAT HERBICIDE APPLICATION TWO WEEKS LATER AND UNTIL ALL HERBACEOUS MATERIALS HAVE BEEN KILLED, BEFORE PLANTING. TOP DRESS ALL PLANTING BEDS WITH A MINIMUM OF 6 INCHES OF BACKFILL MIX, THEN CULTIVATE PLANTING AREA TO A DEPTH OF 6 INCHES USING A PLOW, DISC, OR ROTO-TILLER.

6. BACKFILL MIX: FOR ALL PLANTINGS, USE BACKFILL MIX CONSISTING OF THE FOLLOWING:
A. ONE PART EXCAVATED SOIL.
B. ONE PART EPA RATED CLASS IV COMPOST.
C. A SLOW RELEASE COMMERCIAL FERTILIZER (10-10-10 OR EQUAL) ADDED AT A RATE OF 5 POUNDS PER CUBIC YARD TO THE BACKFILL MIX.
D. IF SOIL AREAS ARE OF HIGH PH (GREATER THAN 6.5), APPLY 125 POUNDS OF ELEMENTAL SULFUR PER CUBIC YARD OF BACKFILL MIX.
NOTE: CONTRACTOR SHALL SUPPLY A DETAILED SOIL ANALYSIS PRIOR TO ALL PLANT BED PREPARATION. ANALYSIS SHALL INDICATE SOIL PH, TEXTURE, MAJOR NUTRIENTS, SALTS, ETC. SOIL ANALYSIS SHALL BE FROM A REPUTABLE, INDEPENDENT LAB. SOIL AMENDMENTS SHALL BE INCORPORATED INTO BACKFILL/PLANT MIX AS RECOMMENDED BY THE INDEPENDENT LAB.

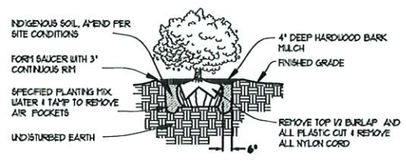
7. MULCH: SMOOTH AND SHAPE THE BACKFILL MIX TO FORM A SHALLOW BASIN SLIGHTLY LARGER THAN THE PLANTING HOLE. MULCH ALL PLANTING AREAS WITH A LAYER OF FINELY SHREDDED HARDWOOD BARK OF UNIFORM TEXTURE & SIZE. USE SHREDDED HARDWOOD BARK AGED MIN. ONE YEAR, RAKE AND SMOOTH THE ENTIRE AREA OF THE PLANTING BEDS, MULCH TO A DEPTH OF 3 INCHES. AFTER MULCHING AND BEFORE WATERING, ADD A SLOW RELEASE COMMERCIAL FERTILIZER (12-12-12 OR EQUAL) IN GRANULAR FORM, TO THE TOP OF THE MULCH AT A RATE OF 5 POUNDS PER 1000 SQUARE FEET. DO NOT ALLOW FERTILIZER TO CONTACT THE STEMS, BRANCHES, ROOTS OR LEAVES.

8. PERIOD OF ESTABLISHMENT: BEFORE FINAL INSPECTION, PLACE ALL PLANTS AND CARE FOR THEM FOR A PERIOD OF ESTABLISHMENT. THE PERIOD OF ESTABLISHMENT BEGINS IMMEDIATELY UPON COMPLETION OF THE PLANTING OPERATIONS AND CONTINUES UNTIL OCTOBER 1. THE MINIMUM PERIOD OF ESTABLISHMENT IS ONE GROWING SEASON, JUNE 1 THROUGH OCTOBER 1. DURING THE PERIOD OF ESTABLISHMENT, FOLLOW STANDARD HORTICULTURAL PRACTICES TO ENSURE THE VIGOR AND GROWTH OF THE TRANSPLANTED MATERIAL. WATER, REMULCH, RESTAKE, GUY, AND CULTIVATE AS NECESSARY. PERFORM AT LEAST TWO WEEDING AND MOWING PROGRAMS (AROUND TREES, GUY STAKES, SHRUBS, AND BED EDGES) OF SUCH INTENSITY AS TO COMPLETELY KILL THE PLANTED AND MULCHED AREAS OF WEEDS AND GRASSES. BEGIN THE FIRST PROGRAM ON OR ABOUT JUNE 15 AND THE SECOND APPROXIMATELY 8 WEEKS LATER, ON OR ABOUT AUGUST 15. THE ENGINEER WILL INSPECT THE PLANTING AND SUPPLY THE CONTRACTOR WITH A LIST OF MISSING AND DEAD PLANTS AND THOSE THAT HAVE DIED BACK BEYOND NORMAL PRUNING LINES. REPLANT AS REQUIRED ACCORDING TO THE SPECIFICATIONS OF THE ORIGINAL MATERIAL. REPLACEMENT PLANTS ARE SUBJECT TO A NEW PERIOD OF ESTABLISHMENT. IMMEDIATELY REPLACE PLANTS PLANTED INITIALLY IN THE FALL THAT HAVE DIED BEFORE THE SPRING PLANTING SEASON. CARE FOR THE REPLACEMENT PLANTS DURING THE NEW ESTABLISHMENT PERIOD.

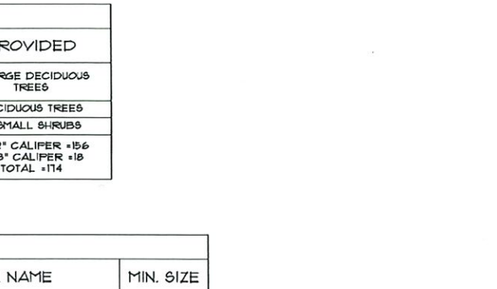
9. RESTORATION OF DISTURBED AREAS:
ALL DISTURBED AREAS NOT COVERED BY BUILDING, PAVEMENT OR LANDSCAPE PLANTING BEDS SHALL BE SHALL BE PREPARED FOR GRASS SEED AND SEEDED. LOOSEN RUTS AND WORK THE SOIL AREAS TO A MINIMUM OF 6" DEEP PRIOR TO FINE GRADING AND SEEDING WORK. AREAS TO RECEIVE GRASS SEED SHALL HAVE A MIN. 4" TOPSOIL PLACED, SEEDED AND A STRAW MULCH BLANKET COVER PLACED OVER THE SEEDED AREAS PER CDOT SPECIFICATIONS.

10. LANDSCAPE TREES, SHRUBS AND PERENNIAL WATERING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, DELIVERING, APPLYING, MEASURING AND SCHEDULING A SUFFICIENT AMOUNT OF WATER NECESSARY TO KEEP EACH PLANT IN A HEALTHY GROWING CONDITION THROUGHOUT THE PERIOD OF ESTABLISHMENT. THE CONTRACTOR SHALL APPLY 1" OF WATER PER WEEK TO ALL NEW PLANTS. THE CONTRACTOR SHALL INSTALL & MAINTAIN SUPPLEMENTAL DRIP WATERING TREE BAGS (MIGH AS 20 GALLON TREE GATOR WATER BAGS) TO PROVIDE ADEQUATE SLOW RELEASE OF WATER. WATER BAGS SHALL BE REMOVED AT THE END OF THE SECOND GROWING SEASON.

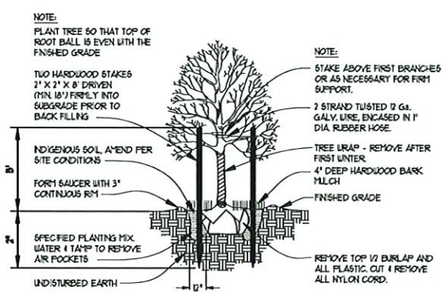
11. TURF GROUNDCOVER (SODDING, SEEDING AND SEED MULCHING)
ALL SEEDING INSTALLATION SHALL CONFORM TO CDOT SPECIFICATIONS. SEED AT 6 LBS/1000 SF WITH THE FOLLOWING SEED MIXTURE:
TITAN TALL-TYPE TURF FESCUE 10%
6R 4100 PERENNIAL RYEGRASS 20%
MERIT KENTUCKY BLUEGRASS 10%



SHRUB PLANTING DETAIL
SCALE: NTS



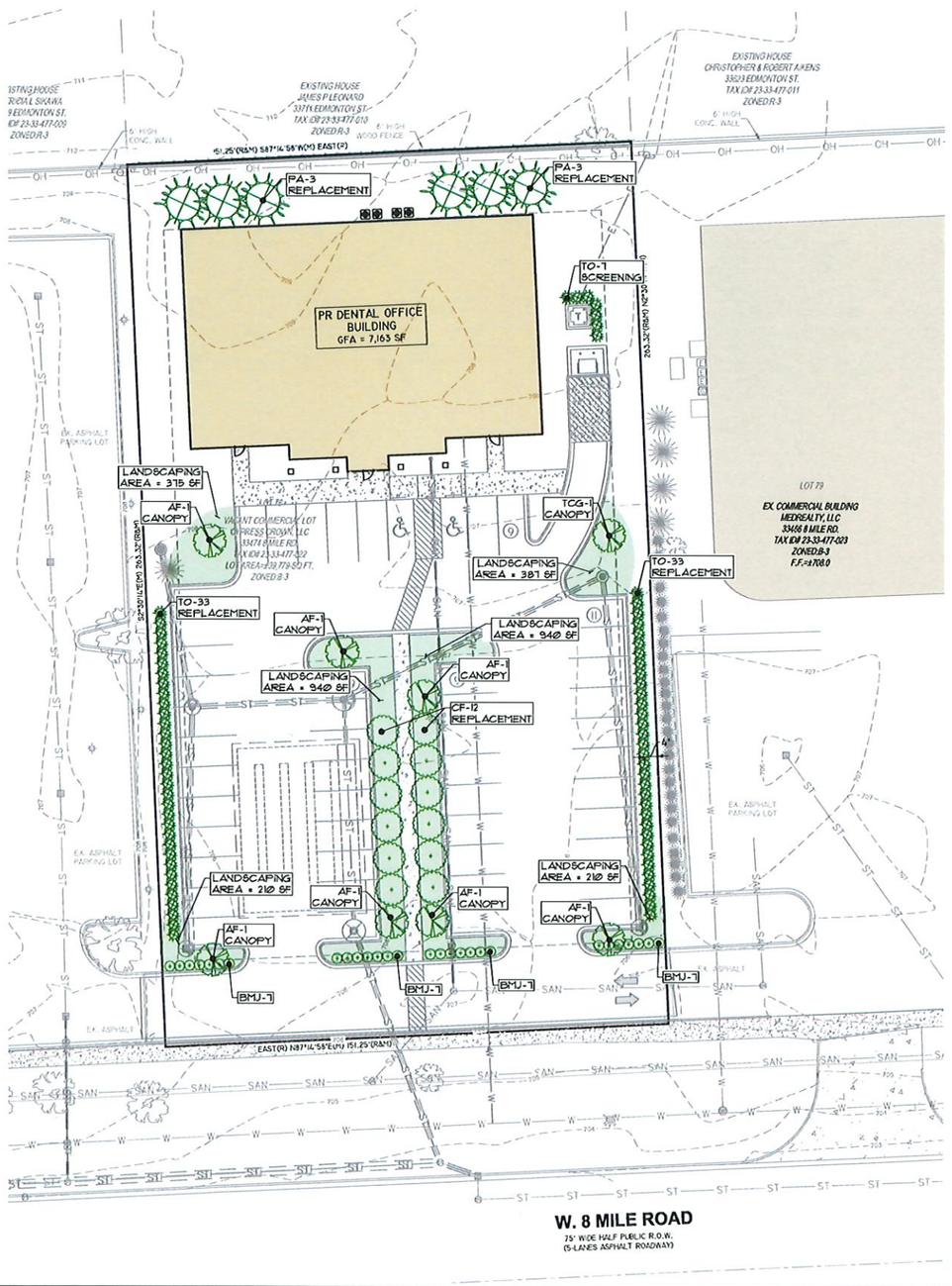
EVERGREEN TREE PLANTING DETAIL
SCALE: NTS



DECIDUOUS TREE PLANTING DETAIL
SCALE: NTS

NOTES

- A TREE PERMIT MUST BE OBTAINED FROM THE PLANNING OFFICE PRIOR TO ALL TREE REMOVAL ACTIVITY INVOLVING TREES SIX INCHES (6") OR MORE DBH IN ACCORDANCE WITH THE CITY OF FARMINGTON HILLS ZONING CHAPTER 34-553
- TREES MUST BE PLANTED NO CLOSER THAN SIX FEET (6') TO PUBLIC UTILITY
- ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON APPROVED PLANS WILL BE REQUIRED THROUGH THE LIFE OF THE PROJECT AND MUST BE REPLACED IF REMOVED OR DEAD
- 4 FOOT (4') HIGH WOOD SNOW FENCING OR OTHER RIGID MATERIAL IS TO BE ERECTED AROUND THE DRIP LINE OF ALL TREES TO BE SAVED IN ACCORDANCE WITH THE CITY OF FARMINGTON HILL ZONING ORDINANCE CHAPTER 34-553
- REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMAN STANDARDS AND BE:
  a. NURSERY GROWN
  b. STATE DEPARTMENT OF AGRICULTURE INSPECTED
  c. NO. 1 GRADE WITH STRAIGHT UNSCARRED TRUNK AND WELL DEVELOPED UNIFORM CROWN (PARK GRADE TREES WILL NOT BE ACCEPTED).
  d. PLANTED PER CITY OF FARMINGTON HILLS DETAILS AND SPECIFICATIONS AND IN ACCORDANCE WITH CITY OF FARMINGTON HILLS CHAPTER 34-553
  e. GUARANTEED FOR ONE YEAR
  f. REPLACEMENT TREES SHALL HAVE SHADE POTENTIAL AND OTHER CHARACTERISTICS COMPARABLE TO THE TREES PROPOSED FOR REMOVAL



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IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
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CLIENT:
CYPRESS CROWN LLC
24001 ORCHARD LAKE RD
#160
FARMINGTON HILLS, MI 48336

PROJECT:
FARMINGTON SMILES NEW DENTAL OFFICE
33474 8 MILE ROAD
FARMINGTON HILLS, MI 48335

SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
L1.0

PROJECT NUMBER: MD25-108
DRAWN BY: B. SALMAN
CHECKED BY: I. KALABAT

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Date: June 30, 2025

To: City of Farmington Hills, Planning Office

From: Schafer Development, LLC

CC: Qualification for PUD Option – Baptist Manor Property

Introduction

Schafer Development, LLC respectfully requests that the City of Farmington Hills consider this application for a Planned Unit Development ("PUD") for an undeveloped, vacant land parcel located on the Baptist Manor Campus at 30275 W. 13 Mile Road (the "Subject Property"). This submittal is made in accordance with the PUD Qualification requirements and includes:

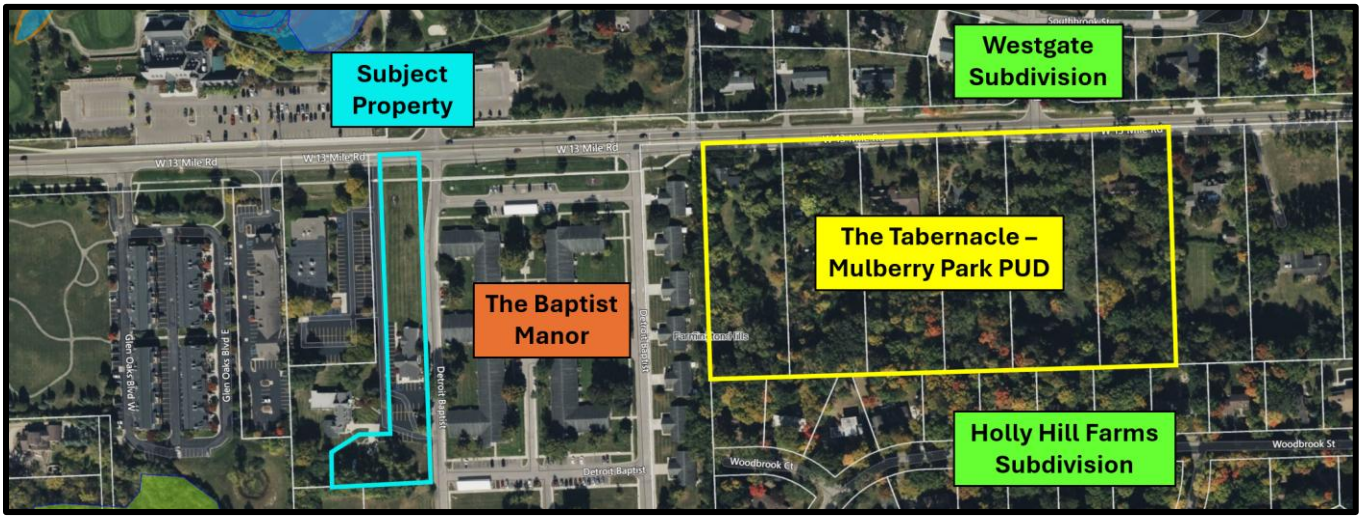
- Eight (8) 24" x 36" copies of the Schematic Land Use Plan
- Fifteen (15) 11" x 17" reduced copies of the Schematic Land Use Plan
- One (1) electronic version of the plan (PDF) emailed to the Planning Office
- Proof of Ownership, including the Warranty Deed and Oakland County GIS documentation

---

Location, Ownership, and Authorization

The Subject Property is situated on the south side of 13 Mile Road, west of Middlebelt Road, and directly west of the existing Baptist Manor Campus. It encompasses 1.64 acres and is owned by Detroit Baptist Manor (the "Owner"). Schafer Development, LLC (the "Developer") is acting as the development representative.

- **Address:** 30275 W. 13 Mile Road
- **Parcel I.D. #**: 22-23-11-126-027



Schafer development

Project Context & Purpose

The Owner and Developer are jointly advancing *The Tabernacle – Mulberry Park PUD*, located immediately east of the Subject Property. That project received:

- **PUD Qualification Approval:** April 18, 2024
- **Planning Commission Approval:** November 21, 2024
- **City Council Hearing Scheduled:** August 11, 2025

To facilitate a new roadway connection from *The Tabernacle – Mulberry Park PUD* to the signalized intersection at 13 Mile and Detroit Baptist Drive, existing ranch duplex units fronting 13 Mile (30133 – 30137 Detroit Baptist Drive) will be removed. As a result, this application proposes construction of a new 6-plex building on the Subject Property to accommodate displaced residents. The new structure will mirror the ranch duplex product planned for *The Tabernacle* and provide vital housing continuity during phased construction.

Concept Plan



Proposed Ranch Product

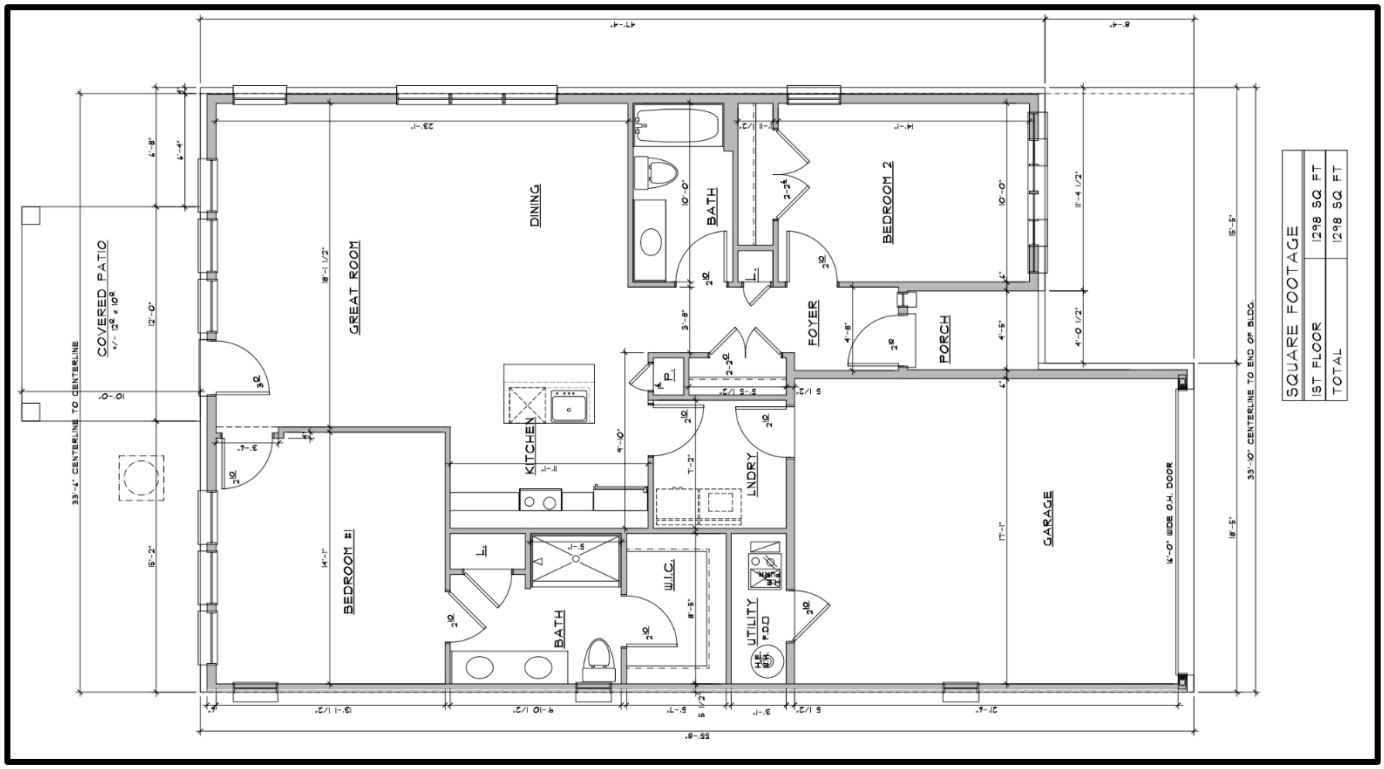
- **Product Type:** Age-restricted (55+) single-story ranch residences in a 6-unit configuration
- **Unit Features:** 2 bedrooms, 2 bathrooms, 2-car-attached garage
- **Approximate Unit Size:** 1,298 square feet

This thoughtfully designed ranch product ensures compatibility with adjacent uses while supporting the operational needs of the Baptist Manor Campus.

Proposed Ranch Rendering



Proposed Ranch Floor Plan



Compliance with PUD Qualification Criteria (Sec. 34-3.20.2.E)

Schafer Development submits this project meets the following three (3) PUD objectives:

2.E. The Planned Unit Development must meet, as a minimum, one of the following objectives of the city:

i. To permanently preserve open space or natural features because of their exceptional characteristics or because they can provide a permanent transition or buffer between land uses.

- **Response:** The Subject Property provides a permanent and effective transition between the more intense OS-1 zoning to the west and RC-1 zoning to the east. Additionally, as part of *The Tabernacle – Mulberry Park PUD*, 38 off-site replacement trees will be planted along the 13 Mile frontage of the existing Baptist Manor campus, strengthening the landscape buffer and enhancing visual continuity.

iii. To provide alternative uses for parcels which can provide transition buffers to residential areas.

- **Response:** The proposed ranch-style 6-plex offers a modernized and effective buffer between the higher-intensity office and commercial uses to the west and multi-family residential neighborhoods to the east and northeast. The project contributes to a cohesive and revitalized streetscape while also serving a critical operational function by housing residents displaced during phased redevelopment of the campus.

iv. To foster the aesthetic appearance of the city through quality building design and site development, the provision of trees and landscaping beyond minimum requirements; the preservation of unique and/or historic sites or structures; and the provision of open space or other desirable features of a site beyond minimum requirements.

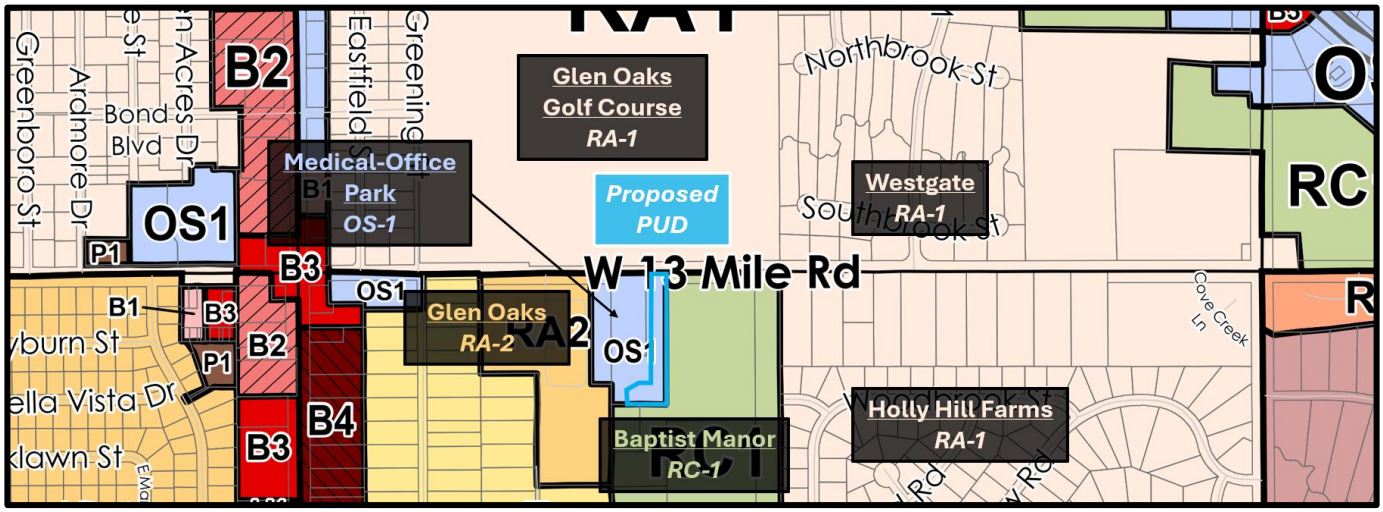
- **Response:** This proposal advances the City's aesthetic goals by incorporating high-quality ranch architecture tailored to active adults and empty-nesters looking to downsize and age in place. The 6-plex building enhances the visual character of the 13 Mile frontage. Coupled with 38 new trees to be planted along the Subject Property and existing Baptist Manor campus frontage, the project promotes an attractive, walkable corridor that aligns with the City's planning vision.

Zoning & Master Plan Context

- **Zoning:** OS-1 (Office Service District)
- **Master Plan Designation:** Multi-Family Residential
- **Surrounding Land Uses:**

Direction	Use	Zoning	Future Land Use
North	Glen Oaks Golf Course	RA-1	Institutional
East	Baptist Manor	RC-1	Multi-Family Residential
South	Baptist Manor	RC-1	Multi-Family Residential
West	Medical-Office Suites	OS-1	Multi-Family Residential

Zoning Map (06.2023)



The area to the west of the Subject Property includes a mix of more intense office, business, and commercial uses, along with multi-family and conventional residential developments situated between the site and the commercial corridor along Orchard Lake Road. Moving east toward Middlebelt Road, the land use pattern transitions to residential neighborhoods, including the proposed *The Tabernacle – Mulberry Park PUD*, which features a mix of attached ranch-style units and townhomes. Beyond that, the area further transitions into lower-intensity single-family subdivisions. The proposed 6-plex housing type provides a logical and much-needed transitional form that bridges these varying land use intensities in a compatible and context-sensitive manner.

Conclusion

We thank you in advance for your consideration of the Qualification for PUD Option Application. Schafer Development has a longstanding history within the City, and we look forward to working on another development opportunity within the community!

Sincerely,

The Schafer Development Team

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E: steve@schafer-dev.com

Spencer Schafer
P: (248) 914-7499
E: spencer@schafer-dev.com

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P: (248) 660-4454
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31400 Northwestern Highway, Suite H, Farmington Hills, MI 48334

July 24, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

PUD Qualification Review

Case:	PUD Q1, 2025
Site:	30275 W 13 Mile (Parcel ID 22-23-11-201-004, -005, -006)
Applicant:	Schafer Development, LLC
Application Date:	6/30/2025
Zoning:	OS-1 Office

We have completed a review of the application for PUD Qualification referenced above and a summary of our findings is below. Items in **bold** require specific action by the Applicant. Items in *italics* can be addressed administratively.



SUMMARY OF FINDINGS

Existing Conditions

1. **Zoning.** The site is currently zoned OS-1 Office Service District.
2. **Existing site.** The site is 1.64 acres and occupied by an office, which is proposed to remain. The site has no wetlands or other notable natural features. The northern portion of the lot is a large, open lawn.
3. **Adjacent Properties.**

Direction	Zoning	Land Use
North	RA-1	Golf course
East	RC-1	Baptist Manor senior housing
South	RC-1	Baptist Manor senior housing
West	OS-1	Offices

4. **Site configuration and access.** The site is proposed to be accessed from a single driveway to 13 Mile Rd.

Project Summary

The applicant proposes a six new ranch-style attached dwelling units to be built in the lawn area on the northern part of the site. These units would serve as replacements for the units being removed to accommodate a connection to the Tabernacle condo development, which is pending PUD approval at City Council as of the time of this letter.

PUD Qualification

Under Section 34-3.20.2, the Planning Commission may make a determination that the site qualifies for a PUD based on the following criteria and procedures.

Criteria for qualifications. In order for a zoning lot to qualify for the Planned Unit Development option, the zoning lot shall either be located within an overlay district or other area designated in this chapter as qualifying for the PUD option, or it must be demonstrated that all of the following criteria will be met as to the zoning lot:

A. The PUD option may be effectuated in any zoning district.
B. The use of this option shall not be for the sole purpose of avoiding the applicable zoning requirements. Any permission given for any activity or building or use not normally permitted shall result in an improvement to the public health, safety and welfare in the area affected. *The proposed use—townhouses—is not permitted in the OS-1 district. However, this proposed use may be considered as a deviation from the ordinance as a part of the PUD. Density is well within the limits of the RC-1 district.*

C. The PUD shall not be utilized in situations where the same land use objectives can be accomplished by the application of conventional zoning provisions or standards. Problems or constraints presented by applicable zoning provisions shall be identified in the PUD application.

Asserted financial problems shall be substantiated with appraisals of the property as currently regulated and as proposed to be regulated.
The applicant is proposing density consistent with the RC-1 district. The primary difference between the proposal and the RC-1 district, from a land use perspective, is that the units will continue to share a site with an office use. The plans included with the request for qualification are very general and conceptual, but it appears that the applicant may ultimately request some relief from the OS-1 setback requirements as well.

D. The Planned Unit Development option may be effectuated only when the proposed land use will not materially add service and facility loads beyond those contemplated in the Future Land Use Plan unless the proponent can demonstrate to the sole satisfaction of the city that such added loads will be accommodated or mitigated by the proponent as part of the Planned Unit Development.
The six units proposed on this site in part replace units that will be removed on the site's east side if the PUD including Tabernacle receives Council approval. It appears that a minimum of two units will be removed, and there may be a net increase of 2-4 units in the Baptist Manor complex; in any event, this modest increase in the number of units in the complex would have a lower overall effect on traffic and services than a new office development.

E. The Planned Unit Development must meet, as a minimum, one of the following objectives of the city. The applicant has provided responses to three of the PUD objectives, in bold below.

   i. **To permanently preserve open space or natural features because of their exceptional characteristics or because they can provide a permanent transition or buffer between land uses.**
   The applicant's response indicates that the developer believes this site can provide an overall transition from commercial and office development to the east and the multi-family senior housing to the west, of which the new units would be part; 38 of the off-site trees from the PUD including Tabernacle would be planted here. We do note, however, that the site itself has essentially no natural features at present; open space that remains after these units are built would be characterized by its intentional design.

   ii. To permanently establish land use patterns which are compatible or which will protect existing or planned uses.

   iii. To accept dedication or set aside open space areas in perpetuity.

   iv. **To provide alternative uses for parcels which can provide transition buffers to residential areas.**
   The applicant's response echoes the response to item i above, with a focus on the development itself and its relationship to the existing Baptist Manor development.

v. To guarantee the provision of a public improvement which could not otherwise be required that would further the public health, safety, or welfare, protect existing or future uses from the impact of a proposed use, or alleviate an existing or potential problem relating to public facilities.

vi. To promote the goals and objectives of the Master Plan for Land Use.

vii. **To foster the aesthetic appearance of the city through quality building design and site development, the provision of trees and landscaping beyond minimum requirements; the preservation of unique and/or historic sites or structures; and the provision of open space or other desirable features of a site beyond minimum requirements.**
The applicant's response cites high-quality architecture and extensive landscaping as ways this development will meet this criterion

viii. To bring about redevelopment of sites where an orderly change of use is determined to be desirable.

Though only one objective must be met by the plan, the applicant's narrative addresses objectives i, ii, and vii.

F. The PUD shall not be allowed solely as a means of increasing density or as a substitute for a variance request; such objectives should be pursued through the normal zoning process by requesting a zoning change or variance.
The applicant is not requesting higher density; it is essentially a request to partially downzone the property to residential from a non-residential designation. Given that the proposed use is not permitted in the underlying district, it appears that the request is not made solely to avoid a variance.

Conceptual Site Plan & Use:

1. **Summary of Proposed Use.** The applicant has submitted a very general conceptual site plan with its PUD narrative. The plan proposes 6 attached dwelling units. They would be accessed from the Baptist Manor side, rather than the driveway that provides access to the existing office that is already at the site's southern end. Units would be 55+ like the rest of Baptist Manor, with two bedrooms and an attached two-car garage.
2. **Density.** The parcel is approximately 71,438 square feet. Density is determined by the number of rooms. To determine the number of rooms, the following standard (Section 34-3.5.2.F.) is applied:

   Two-bedroom unit: 3 rooms

   The applicant proposes 6 units (all two-bedroom units) with a total of 18 rooms, based on the standard above. The following densities are permitted under conventional zoning:

District	Lot Area/sq ft	Rooms permitted
RC-1	1,900	37 rooms

RC-2	1,400	51 rooms
RC-3	1,050	68 rooms

The proposed density is consistent with the neighboring RC-1 district.

3. **Master Plan.** The master plan's Future Land Use map designates this site as Multiple Family Residential, and the residential density map designates it as High Density. It is not part of any special planning areas.

4. **Dimensional Standards of the RA-1 district (34-3.1.4.E).** The applicant will likely seek relief from the setbacks of the OS-1 district, though needed deviations have not been specified at this point.

Standard	OS-1 Requirement	Proposed (Concept #1)
Lot Size	N/A	1.64 acres
Lot width	N/A	85 feet
Lot coverage	N/A	Not specified on plans
Front setback	40 ft	
Rear setback	20 ft	
Side setback (east)	10 ft	
Side setback (west)	10 ft	
Building height	Max. 34 ft/two stories	

5. **Parking.** The applicant has proposed garage parking consistent with the requirements for 3-bedroom multi-family units.

Standard	Required Parking	Proposed
Three BR Unit	2 spaces/unit	Each proposed townhouse unit includes a single-car garage and 22' driveway strip; 22 feet may not be enough to accommodate modern vehicles without obstructing the sidewalk.

6. **Circulation.** Access is from an existing driveway into Baptist Manor.

7. **Landscaping (34-5.14) and Screening (34-5.14)**. An area designated as recreation/open space should be provided as a part of the schematic landscape plan required at final PUD determination.

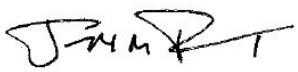
8. **Relief Sought from Ordinance Standards**

   a. Permit multi-family at RC-1 density.

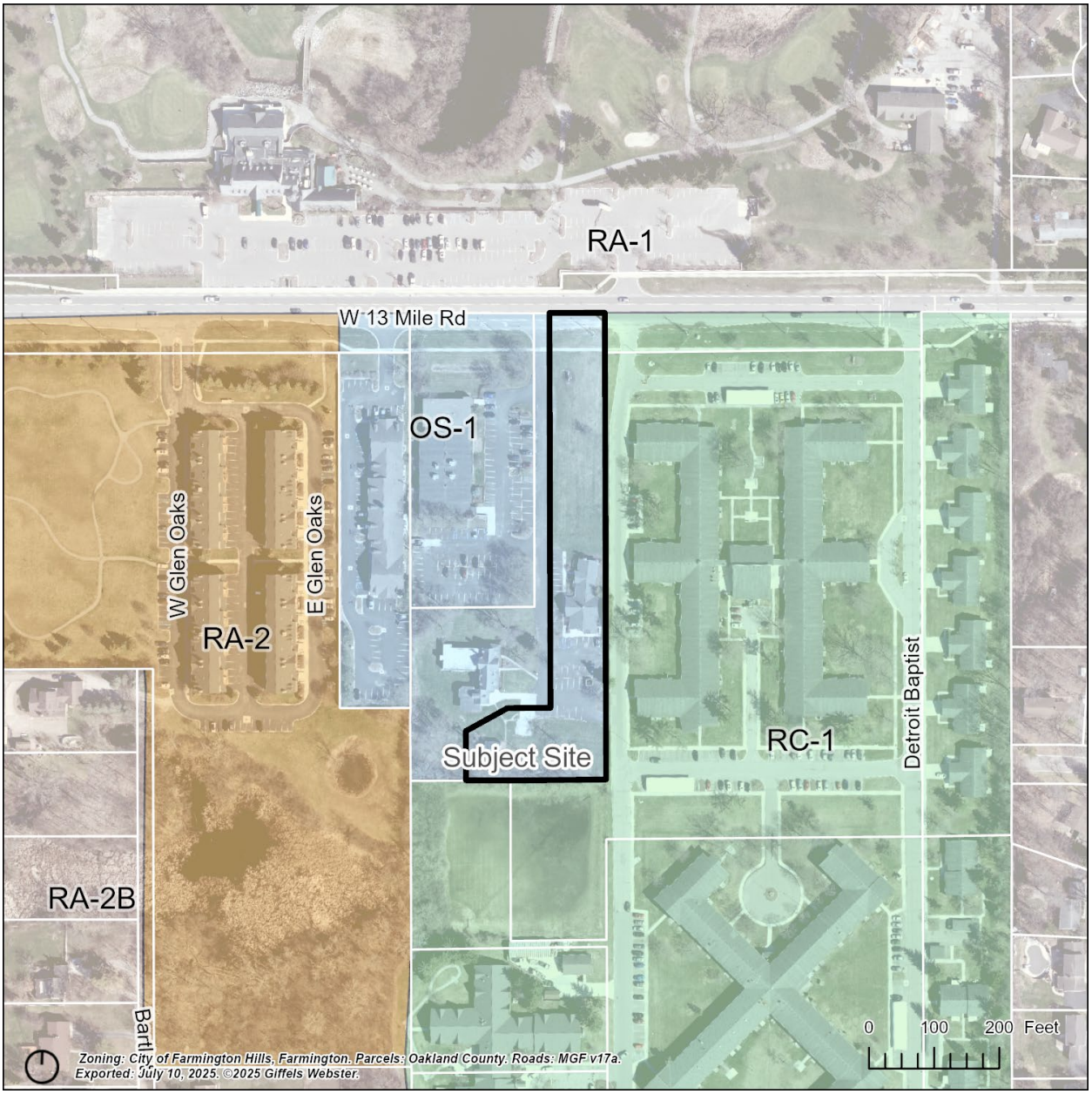
   b. Other deviations unclear at present.

We are available to answer questions.

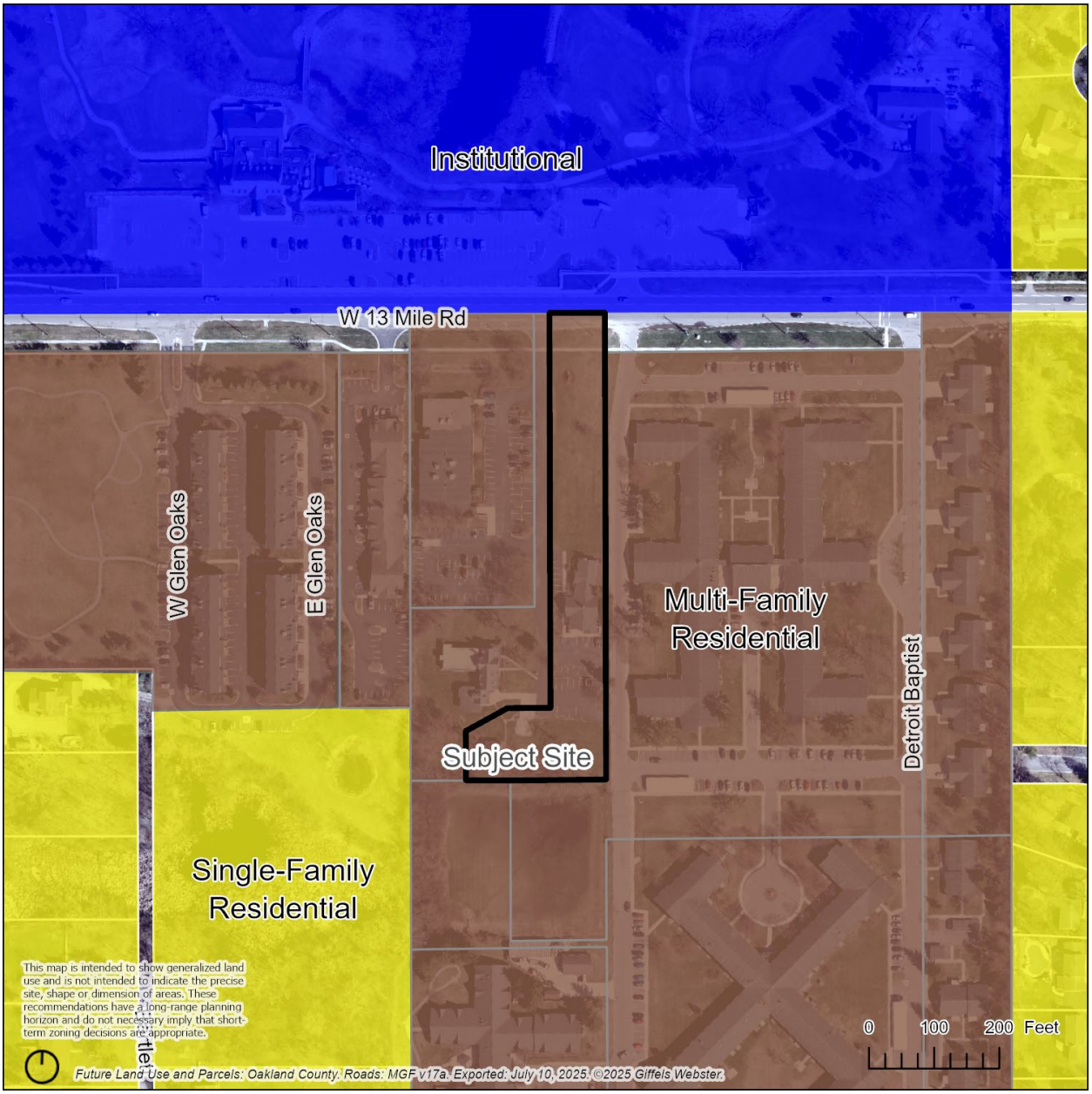
Respectfully,
Giffels Webster



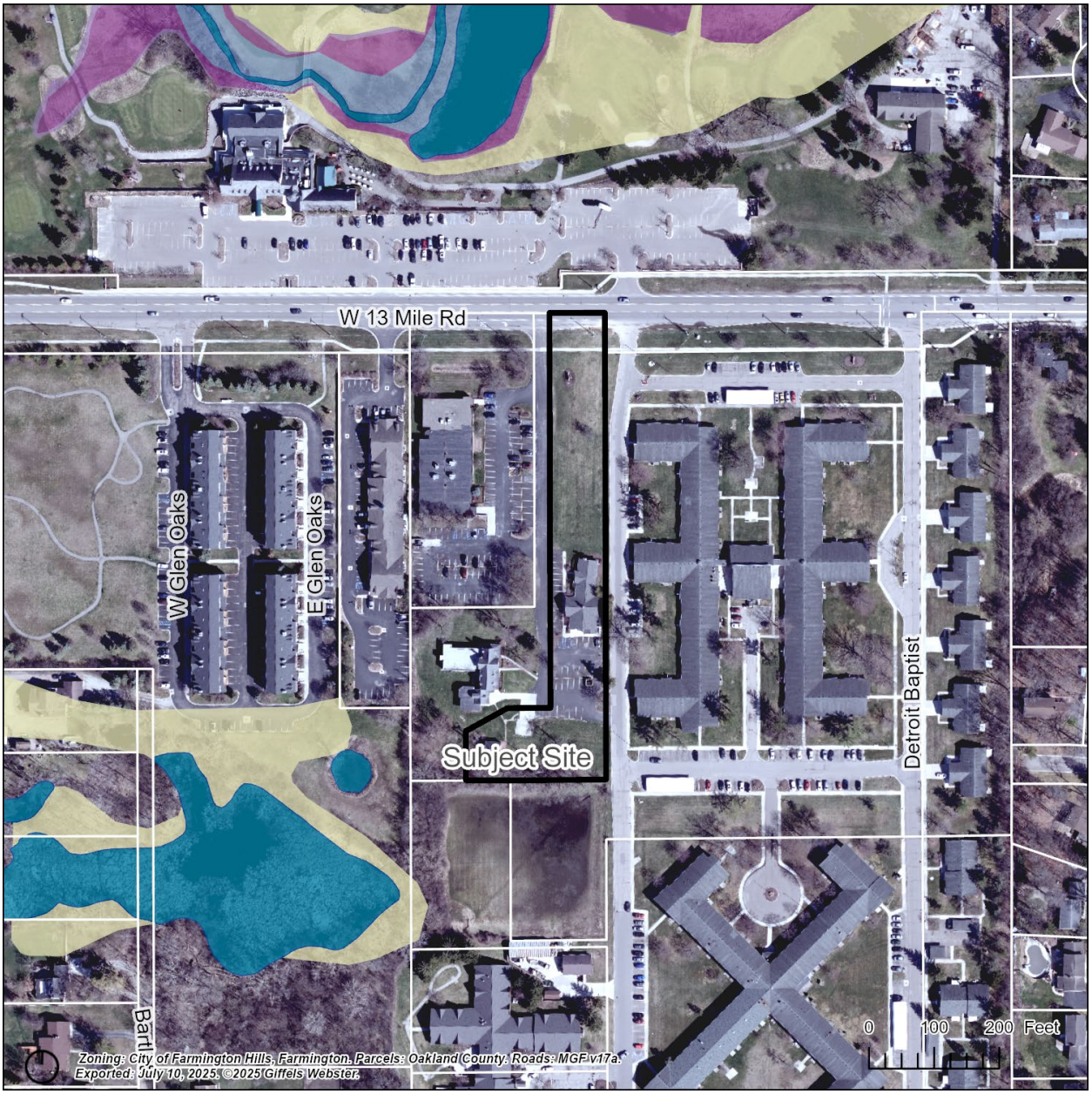
Joe Tangari, AICP
Principal Planner



Current zoning



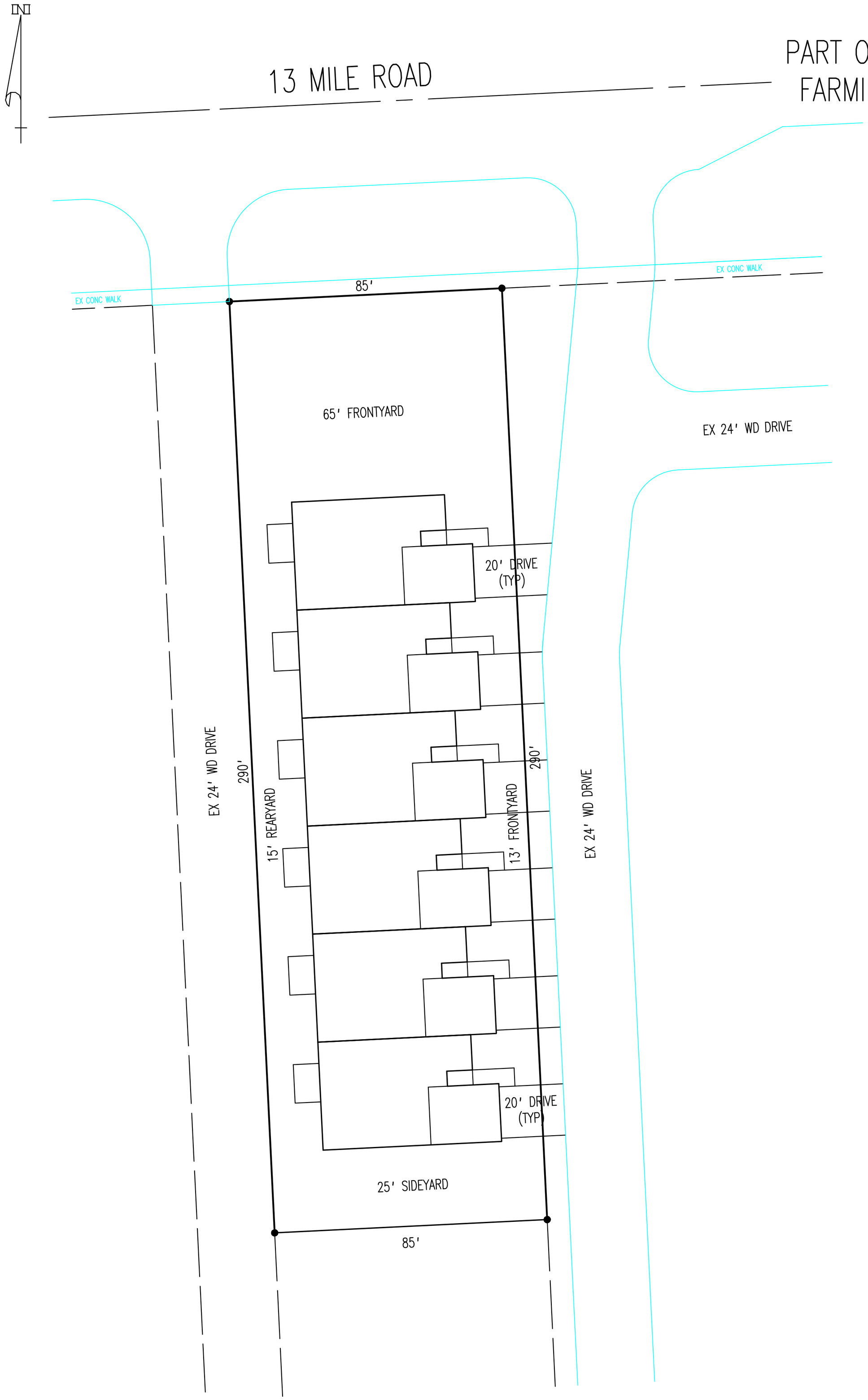
Master Plan designations for this area. See discussion above.


W 13 Mile Rd
W Glen Oaks
E Glen Oaks
Subject Site
Detroit Baptist
Bartl
0
100
200
Feet
Zoning: City of Farmington Hills, Farmington. Parcels: Oakland County. Roads: MGF v17a.
Exported: July 10, 2025. ©2025 Giffels Webster.

Wetland map

SCALE 1" = 20'

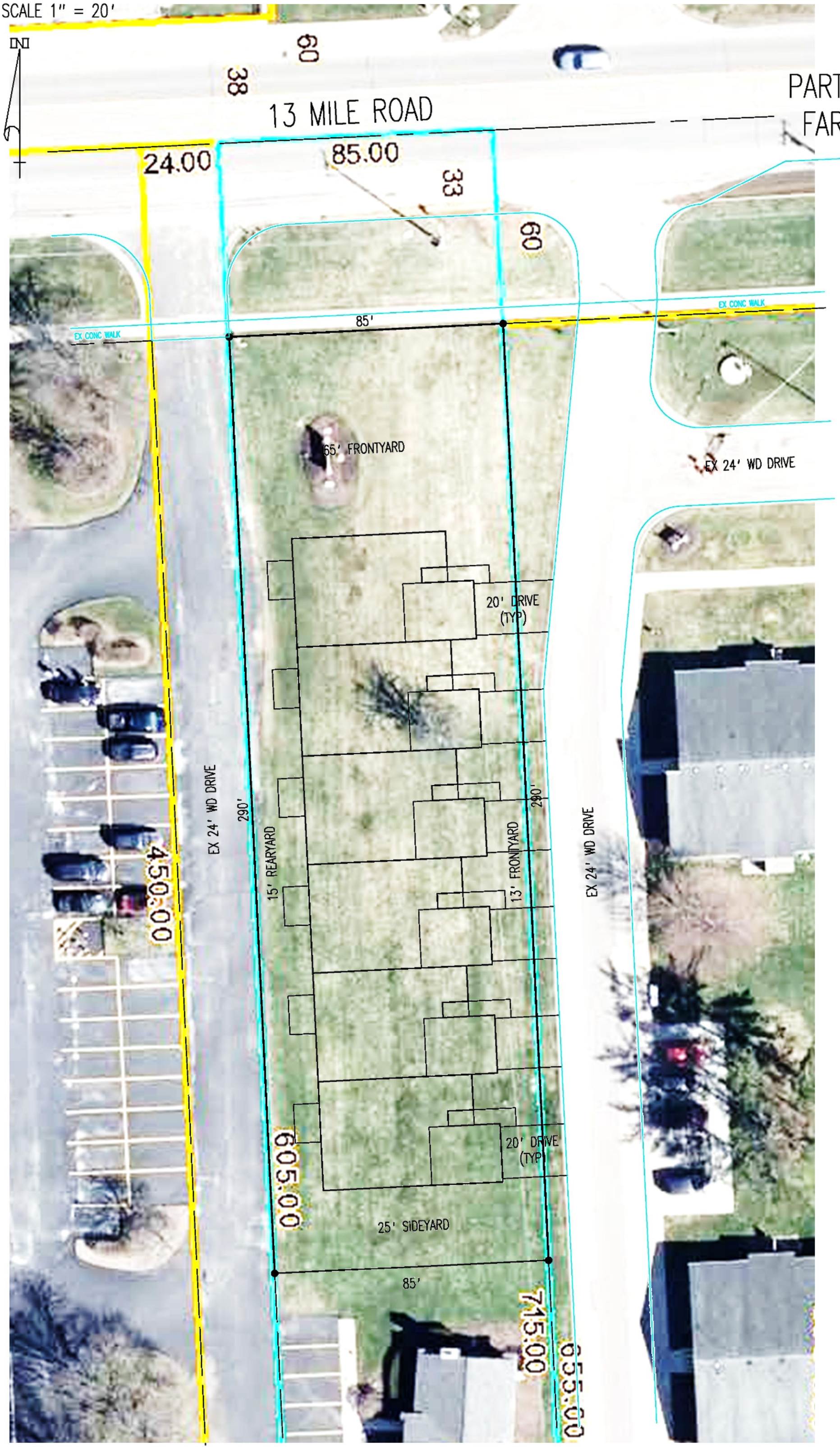
CONCEPT PLAN
FOR
PART OF 30275 13 MILE
FARMINGTON HILLS, MI



06-20-25 2591-02

SCALE 1" = 20'

CONCEPT PLAN
FOR
PART OF 30275 13 MILE
FARMINGTON HILLS, MI



06-20-25 2591-02

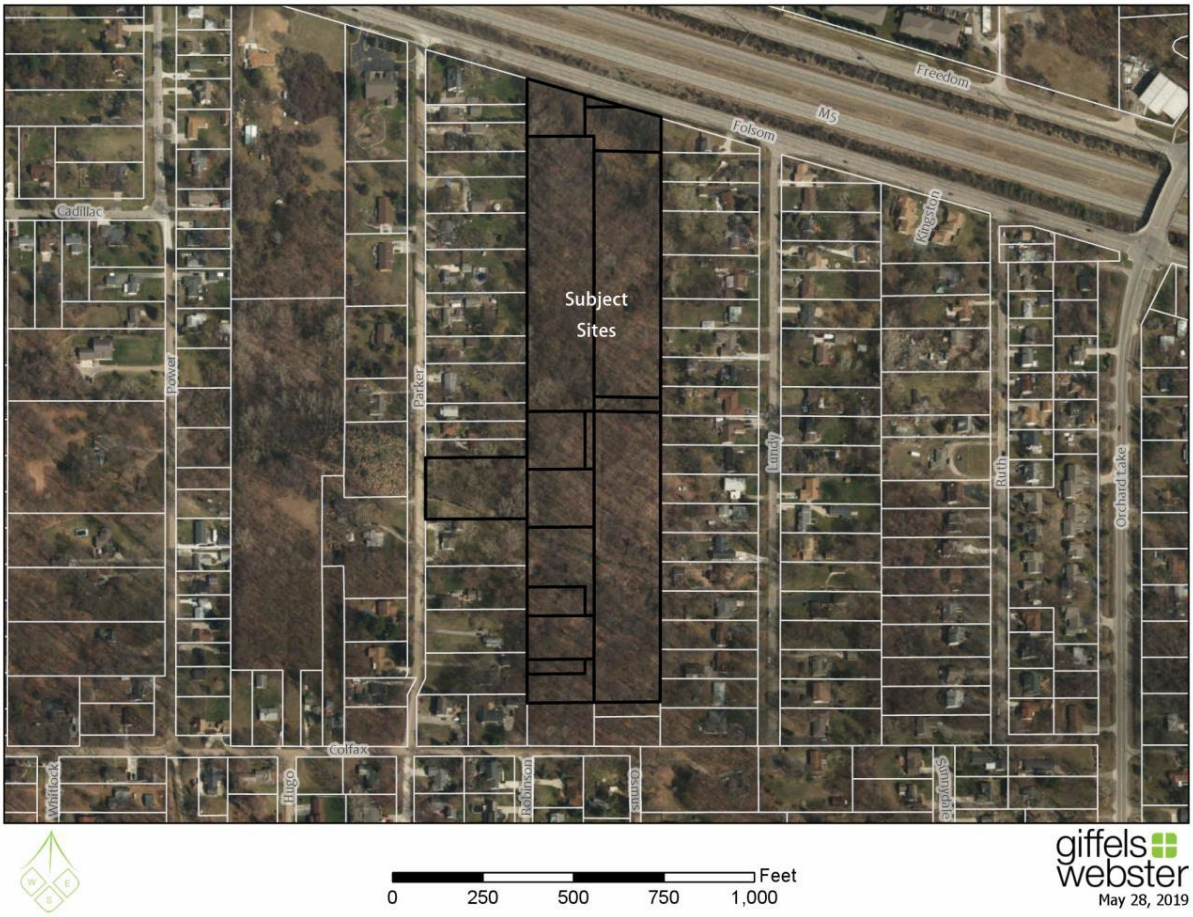
July 22, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Cluster Site Plan

Case:	54-4-2025
Site:	Vacant Folsom Rd; 16.3 acres (all or parts of 16 parcels)
Applicant:	Forest at Riverwalk Development
Plan Date:	2/25/2024 (updated 6/12/20250
Zoning:	RA-3 Single Family

We have completed a review of the application for cluster site plan approval referenced above and a summary of our findings is below. Items in **bold** require specific action by the Applicant.



SUMMARY OF FINDINGS

Existing Conditions

1. **Zoning.** The parcel is zoned RA-3 Single Family Residential.
2. **Existing site.** The subject property is located south of M-5 between Farmington Road and Orchard Lake Road. The property runs from M-5 south to Colfax Road, which is 8 ½ Mile. The existing site is entirely undeveloped and heavily wooded, with several areas of wetland. It consists of all or part of 16 separate parcels. Generally, it is a trapezoid connecting Folsom to Colfax, though one small portion juts westward and fronts on Parker Street, and the lots connecting the site to Colfax are kept as outlots and not part of the proposed cluster. The total acreage of the site is 16.29 acres. 2.47 acres is right-of-way, leaving 13.83 net acres.
3. **Adjacent properties.**

Direction	Zoning	Land Use
North	M-5	M-5
East	RA-3	Single Family Homes
South	RA-3	Single Family Homes
West	RA-3	Single Family Homes

4. **Site configuration and access.** The site is accessible from Folsom Road and Parker St.

Cluster Qualification:

This plan received a preliminary determination that it qualifies for a one-family cluster under item 2.A.i. at the February 15, 2025, Planning Commission meeting.

MOTION by Aspinall, support by Stimson, to make a preliminary determination that One-Family Cluster Option 1, 2023, dated October 13, 2023, submitted by Forest at Riverwalk Development, LLC, meets the following qualification standards as set forth in Section 34- 3.17.2.B. of the Zoning Ordinance: ii, vi, and viii; permitting a maximum density of 2.6 units per acre, and that it be made clear to the applicant that final granting of the One-Family Cluster Option is dependent upon a site plan to be approved by the City Council following review and recommendation by the Planning Commission.

Under Section 34-3.17 One Family Cluster Option, the Planning Commission may make a determination that the site qualifies for a One Family Cluster based on the following criteria and procedures.

2. Conditions for qualification:
   A. Qualification for the cluster option shall be based on two (2) findings by the planning commission with final density dependent upon whether or not the site qualifies under both findings:
      i. **First, the planning commission shall find that the parcel will qualify for the cluster development option as defined in Section 34-3.17.2.B.i-viii. Development would be at the single family densities permitted in subsection 34-3.17.3.A. This finding must be made in all cases.**
      Section 34-3.17.2.B.i-viii is addressed below. Section 34-3.17.3.A permits 2.6 units per acre for a One Family Cluster in the RA-3 district under this item.
      ii. Second, the planning commission may additionally find that the parcel is located in a transition area or is impacted by nonresidential uses or traffic on major or secondary thoroughfares or other similar conditions. If the planning commission makes such a finding, it may permit an increase in density up to the maximum densities established in subsection 34-3.17.3.B.

Under standard i. above, 42 units are available on 16.3 acres. Standard ii. would permit up to 63 units. The plans at the time showed 38 units and have been revised down to 33 units.

Section 34-3.17.2.B.i-viii. "The planning commission may approve the clustering or attaching of buildings on parcels of land under single ownership and control which, in the opinion of the planning commission, have characteristics that would make sound physical development under the normal subdivision approach impractical because of parcel size, shape or dimension or because the site is located in a transitional use area or the site has natural characteristics which are worth preserving or which make platting difficult. In approving a parcel for cluster development, the planning commission shall find at least one of the following conditions to exist:"

i. The parcel to be developed has frontage on a major or secondary thoroughfare and is generally parallel to such thoroughfare and is of shallow depth as measured from the thoroughfare.
ii. The parcel has frontage on a major or secondary thoroughfare and is of a narrow width, as measured along the thoroughfare, which makes platting difficult.
iii. The parcel is shaped in such a way that the angles formed by its boundaries make a subdivision difficult to achieve and the parcel has frontage on a major or secondary thoroughfare.
iv. A substantial portion of the parcel's perimeter is bordered by a major thoroughfare which would result in a substantial proportion of the lots of the development abutting the major thoroughfare.
v. A substantial portion of the parcel's perimeter is bordered by land that is located in other than an RA district or is developed for a use other than single-family homes.
vi. The parcel contains a floodplain or poor soil conditions which result in a substantial portion of the total area of the parcel being unbuildable.
vii. The parcel contains natural land forms which are so arranged that the change of elevation within the site includes slopes in excess of ten (10) percent between these elevations. These elevation changes and slopes shall appear as the typical feature of the site rather than the exceptional or infrequent features of the site. The topography is such that achieving road grades of less than that permitted by the city would be impossible unless the site were mass graded. The providing of one-family clusters will, in the opinion of the planning commission, allow a greater preservation of the natural setting.
viii. The parcel contains natural assets which would be preserved through the use of cluster development. Such assets may include natural stands of large trees, land which serves as a natural habitat for wildlife, unusual topographic features or other natural assets which should be preserved.

We have bolded the items of this subsection that the PC cited in its qualification motion.

Cluster Site Plan:

1. **Summary of Plan.** A concept plan showing 38 lots was submitted at qualification; this number has since been decreased to 33 units, which is permitted on 16.3 acres under the cluster option. The plan shows road connections to Folsom Road and Parker Street. A large area of wetland is shown at the southern end of the property; the lots have been configured to generally avoid containing wetland.
2. **Master Plan.** The property is designated Single Family Residential on the Future Land Use Map. It does not fall into any Special Residential Planning Areas, nor any other special study areas. Surrounding properties have the same designation.
3. **Residential Densities Map.** The residential densities map designates this land as medium density. This category includes the RA-3 and RA-4 districts.

4. **Dimensional Standards.** The cluster option allows the dimensional standards of the district to be waived. This table compares the proposal to district standards

Standard	Required in RA-3 (standard)	Proposed
Front Setback	30 ft	25 ft
Side Setback	8 ft least side/20 ft total	5 ft least side/10 ft total
Rear Setback	35 ft	35 ft
Building Height	25 ft	Not addressed on plans
Min Lot Size	12,500 sq ft (avg 10,000 sq ft)	Smallest: 7,795 sq ft; typical: 8,470 sq ft
Min Lot Width	80 ft	Typical is approx. 55 ft

5. **Separation Standards.** Per Section 34-3.17.4.B., "Spacing between groups of attached buildings or between groups of four (4) unattached buildings shall be equal to at least twenty (20) feet in an RA-3 district, measured between the nearest points of adjacent buildings." The plan meets this standard with increased side setbacks on lots 4 and 5.
6. **Cluster Standards.** Cluster developments must meet the design standards of subsection 34-3.17.4.
    a. Garages must be set back 20 feet. *All lots have a minimum front setback of 25 feet.*
    b. The side of a cluster facing a major or secondary thoroughfare must be set back 25 feet. *This standard is met.*
    c. No building may be placed within 25 feet of any property line. *This standard is met.*
    d. 15% of the development must be set aside as open space. *This standard is met.*
    e. If it has not already been provided, the applicant must provide a copy of the EGLE permit allowing impacts to wetlands on Lots 13, 14, 19, 20, and 21.
7. **Lighting.** No general lighting of the site or street appears to be proposed.
8. **Superimposed aerial.** During cluster qualification, the planning commission cited standards 34-3.17.2.B.ii., vi, and viii. Per Section 34-3.17.5.C.iii, parcels qualifying under items vi and viii **are required** to submit a sheet superimposing the plan on an aerial image. A superimposed aerial was provided.

Tree Removal (Section 5.18)

The site contains 1,489 trees, 629 of which are proposed to be removed, per the Landscape Plan. This includes 86 landmark trees, totaling 2144.1 inches. **The tree inventory table appears to have some minor discrepancies which shall be corrected and plantings should be updated to meet the correct requirements. The table indicates the removal of 637 trees, including 86 landmark trees totaling 2122.5 inches. There is a discrepancy of 8 non-landmark trees.**

Landscaping

1. **Street Trees.** 45 street trees are proposed. Street tree requirements are met.
2. **Cost Estimate.** A cost estimate has been provided. *The cost estimate must be submitted prior to final review, per Section 3.17.5.C.iv.a.*
3. **Buffering / Transition Area.** A buffer is required adjacent to one-family districts.

The type of buffer will be impacted by whether the cluster units are detached or attached. Per the Zoning Ordinance, "in order to provide an orderly transition of density, where the parcel proposed for use as a cluster development abuts a one-family residential district, the planning commission shall determine that the abutting one-family district is effectively buffered by means of one of the following within the cluster development:

i. Single-family lots subject to the standards of Section 34-3.1 of this chapter;
ii. Detached buildings with setbacks as required by Section 34-3.1 of this chapter for the applicable residential district;
iii. Open or recreation space;
iv. Changes in topography which provide an effective buffer;
v. A major or secondary thoroughfare;
vi. Some other similar means of providing a transition.

As noted above, a buffer is required adjacent to one-family districts. **The applicant should clearly identify which method they are proposing for consideration as a transition. The Planning Commission should review this method and determine if it satisfies the criteria listed above.** All surrounding development is single-family housing. The applicant proposes to plant all 100 replacement trees (apart from 6) along the rear property lines of the lots backing up to neighboring residential properties.

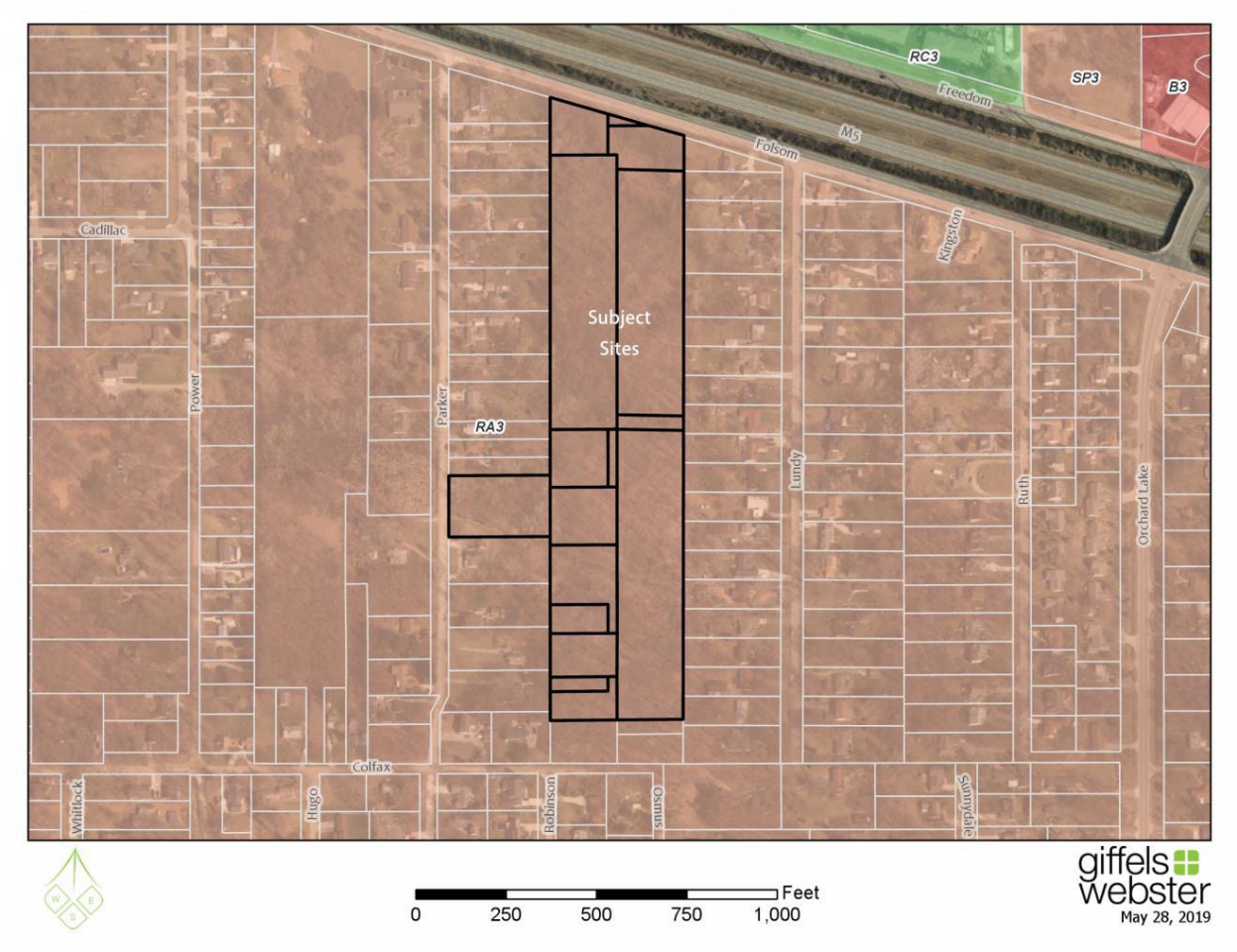
We are available to answer questions.

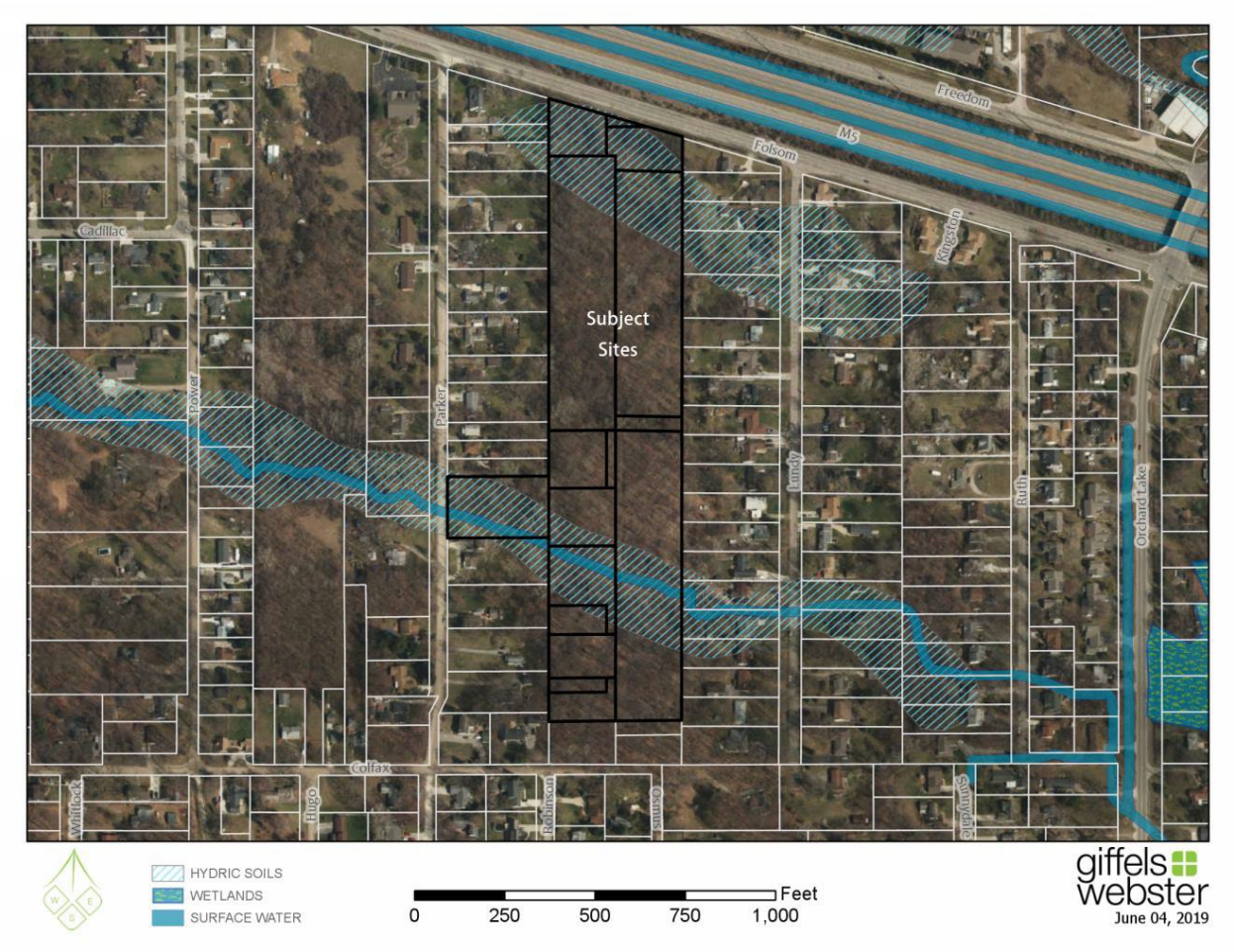
Respectfully,
Giffels Webster

Joe Tangari, AICP
Principal Planner

Julia Upfal, AICP
Senior Planner

Zoning


RC3
SP3
B3
Freedom
M5
Folsom
Kingston
Cadillac
Subject
Sites
Power
Parker
RA3
Lundy
Ruth
Orchard Lake
Colfax
Whitlock
Hugo
Robinson
Osmus
Sunnydale
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500
750
1,000
Feet
giffels
webster
May 28, 2019


Freedom
M-5
Folsom
Kingston
Cadillac
Subject Sites
Power
Parker
Lundy
Ruth
Orchard Lake
Colfax
Whitlock
Hugo
Robinson
Osmun
Sunnydale
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June 04, 2019

DEPARTMENT OF PUBLIC SERVICES
KAREN MONDORA, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: July 24, 2025

TO: Erik Perdonik

FROM: James Cubera, City Engineer

SUBJECT: REVISED Cluster Site Plan 54-04-2025
The Forest at Riverwalk
Part of N.E. ¼ of Section 34
PJ#34-19-58, 22-23-34-252-019-036 & 043

This office has performed a preliminary review of the above referenced site plan submitted to the Planning Department on July 09, 2025. Our preliminary comments remain as per our memo of April 17, 2025. We note that many of them have been addressed. We have the following updated comments.

1) An eight-inch watermain extension and loop from the 8" watermain at the corner of Osmus Avenue and Colfax Street to the 8" watermain on Lundy Drive should strongly be considered. Also, although the easement is only 30 feet wide the sanitary sewer extension must be placed such that it allows for enough offset for this watermain installation within this easement. A directionally drilled watermain in this area would be appropriate.

2) It is strongly suggested that the sanitary sewer on Colfax Street be extended to service any future lot split resultant parcels.

3) The submitted storm water detention, restriction and stormwater quality "submitted sheet" will be reviewed during construction review.

4) The curb cut to Parker Avenue appears to encroach on private property within the development. This encroachment needs to be eliminated.

5) It is suggested that the 30-foot additional ROW on the Colfax Street frontage of the original properties involved in this development be dedicated at this time.

6) It appears that this development may involve a parcel split of some sort in order to meet the proposed development property lines. If this is the case, then the requirements of the lot split ordinance will also take effect. Sewer and water extensions required by it will be necessitated as well as the Colfax Street ROW dedication. The paving of Colfax Street will also have to be addressed if a lot split becomes apparent in order to meet the proposed property lines of this development.

FIRE

FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

Date: July 25, 2025

To: Planning Commission

From: Jason Baloga, Fire Marshal

Subject: Revised Cluster Site Plan 54-4-2025 (Folsom btw Parker & Lundy Road)

The Fire Department will have no objection to approval contingent upon compliance with the following requirements:

1. Hydrant Coverage Chapter 12 Section 12-11(2); hydrants shall be spaced 500ft. apart in single-residential areas. This will be discussed further during Engineering review.

2. Site Access Chapter 12 Section 12-11 (1); site shall accommodate fire apparatus with a fifty-foot (50') turning radius and shall be measured to the centerline of the roadway. This will be verified during Engineering review.

Jason Baloga, Fire Marshal

JB/al

THE FOREST AT RIVERWALK

PART OF THE NORTHEAST 1/4 OF SECTION 34
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN

50 25 0 50 100 150
SCALE IN FEET 1" = 50'

Cluster SP 54-4-2025

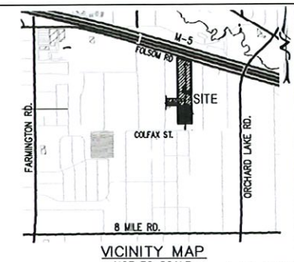
PROPERTY DESCRIPTION:

COMMENCING AT THE EAST ¼ CORNER OF SECTION 34, TOWN 1 NORTH, RANGE 9 EAST; THENCE ALONG THE EAST AND WEST ¼ LINE OF SAID SECTION 34 S89°51'30"W 1267.44 FEET TO THE SOUTHWEST CORNER OF "FARMINGTON VIEW SUBDIVISION" AS RECORDED IN LIBER 63 OF PLATS, PAGE 2, OAKLAND COUNTY RECORDS, THENCE CONTINUING ALONG SAID EAST AND WEST ¼ LINE S89°51'30"W 368.85 FEET TO THE SOUTHEAST CORNER OF "SUPERVISOR'S SUBDIVISION NO. 6, OF THE J.D. PARKER'S ALLOTMENT" AS RECORDED IN LIBER 58 OF PLATS, PAGE 14, OAKLAND COUNTY RECORDS; THENCE ALONG THE EAST LINE OF SAID SUBDIVISION N00°03'03"E 166.00 FEET TO THE POINT OF BEGINNING, THENCE CONTINUING ALONG SAID LINE N00°03'03"E 463.81 FEET TO THE SOUTH LINE OF THE NORTH 170 FEET OF LOT 126 OF SAID SUPERVISOR'S SUBDIVISION NO. 6; THENCE ALONG SAID LINE S89°51'43"W 279.81 FEET TO THE EAST LINE OF PARKER STREET (50 FEET WIDE); THENCE ALONG SAID LINE N00°04'16"E 170.00 FEET TO THE NORTH LINE OF SAID LOT 126; THENCE ALONG SAID LINE N89°51'43"E 279.75 FEET TO THE EAST LINE OF SAID SUPERVISOR'S SUBDIVISION NO. 6; THENCE ALONG SAID LINE N00°03'03"E 1045.57 FEET TO THE SOUTH LINE OF FOLSOM ROAD (WIDTH VARIES); THENCE ALONG SAID LINE S73°36'50"E 385.04 FEET TO THE WEST LINE OF SAID "FARMINGTON VIEW SUBDIVISION"; THENCE ALONG SAID LINE S00°04'20"W 1569.85 FEET; THENCE S89°51'30"W 368.91 TO THE POINT OF BEGINNING CONTAINING 14.8621 ACRES OF LAND AND BEING SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD AS THEY MAY AFFECT SAID LAND.

SITE DATA

	EXISTING	PROPOSED
ZONING:	RA-3	RA-3, CLUSTER OPTION
MINIMUM LOT AREA	10,000 SF	6,600 SF
MINIMUM AVERAGE PER SUBDIVISION	12,500 SF	8,857 SF
MINIMUM LOT WIDTH	80 FT.	55 FT.
LOT COVERAGE	35% MAX.	35% MAX.
MINIMUM YARD SETBACKS:		
FRONT:	30 FT.	25 FT.
REAR:	35 FT.	35 FT.
SIDE:	8' ONE SIDE 20' TOTAL TWO	5' ONE SIDE 10' TOTAL TWO

SITE AREA	14.8621 ACRES
UNITS PROPOSED	33 UNITS
DENSITY	2.22 UNITS/ACRE
OPEN SPACE	6.22 ACRES 6.22 / 14.8621 = .419 ~ 41.9%



VICINITY MAP
NOT TO SCALE

E. 1/4 CORNER SEC. 34, T.1N., R.9E.

FARMINGTON VIEW SUBDIVISION
L. 63, P. 2, O.C.R.

S00°04'20"W 1569.85'

FOLSOM ROAD

S73°36'50"E 385.04'

OPEN SPACE 2: 0.1094 AC

OPEN SPACE 1: 0.1142 AC

OPEN SPACE 4: 0.3902 AC

OPEN SPACE 3 (CONT.): 5.6092 AC

S89°51'30"W 368.91'

S89°51'30"W 1267.44'

E.&W. 1/4 LINE OF SECTION 34

COLFAX ST.

N00°03'03"E 1045.57'

SUPERVISOR'S SUBDIVISION NO. 6
L. 58, P. 14, O.C.R.

N89°51'43"E 279.75'

S89°51'43"W 279.81'

N00°04'16"E 170.00'

PARKER ST.

N00°03'03"E 463.81'

N00°03'03"E 166.00'

SUPERVISOR'S SU
L. 58, P.

REGULATED WETLAND

WETLAND IMPACT AREA — WETLAND IMPACT AREA = 0.5870 ACRES

SHEET INDEX:

01	SITE PLAN
02	EXISTING CONDITIONS
03	UTILITY PLAN
04	OFF-SITE UTILITY PLAN
05	SITE GRADING PLAN

ATTACHMENTS:

LANDSCAPE PLANS:

L-1	LANDSCAPE PLANTING PLAN
L-2	LANDSCAPE NOTES & DETAILS

TREE SURVEY:

TR01	TREE SURVEY
TR02	TREE SURVEY
TR03	TREE LIST
TR04	TREE LIST
TR05	TREE LIST
TR06	TREE LIST
TR07	TREE LIST

STATE OF MICHIGAN
EVAN M. PRIEST
LICENSE NO. 6201048650
Professional Engineer

CENTER OF SEC. 34, T.1N., R.9E.

Received
APR 02 2025
City of Farmington Hills
Planning Dept.

PROPRIETOR
MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

DATE: 02-25-2025
PM: EMP
ENG: EMP
SURV: AGS
DES: ASB
DWG:
VDATUM:U.S.C. & G.S.
SCALE: 1" = 50'
JOB NO. 2023.02
STATUS:

ENGINEERS-SURVEYORS
MLP AND ASSOCIATES, INC.
Michael L. Priest & Associates, Inc.
40655 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
fax: (734) 459-2585

SITE PLAN

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON FHILLS, , OAKLAND COUNTY, MICHIGAN

SHEET 01

NORTHEAST CORNER
SECTION 34
T.1N., R.9E.
I-11, L.16848, P.772

EAST 1/4 CORNER
SECTION 34
T.1N., R.9E.
I-12, L.16848, P.773

N

1538.97'

FARMINGTON VIEW SUBDIVISION
L. 63, P. 2, O.C.R.

S00°04'20"W 1569.85'

B.M. #1

B.M. #2

COLSOM ROAD

S0°36'20"E 1148.02'

N00°03'03"E 1045.57'

SUPERVISOR'S SUBDIVISION NO. 6
L. 58, P. 14, O.C.R.

279.79'

N89°51'43"E

S89°51'43"W 279.81'

N00°04'16"E 70.00'

PARKER ST.

EX. 8"-AC WM

S89°51'30"W 368.91'

EX. 8"-AC WM

N00°03'03"E 463.81'

SUPERVISOR'S SUBDIVISION NO. 6
L. 58, P. 14, O.C.R.

COLFAX ST.

EXISTING CONDITIONS

CENTER 1/4 CORNER
SECTION 34
T.1N., R.9E.
H-12, L.55395, P.116

BENCHMARKS:

B.M. #1 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 2ND EAST OF PARKER AT NORTHEAST CORNER OF SITE: ELEV: 692.64

B.M. #2 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 1ST EAST OF PARKER AT NORTHWEST CORNER OF SITE: ELEV: 699.49

B.M. #3 HYDRANT ARROW AT SOUTHWEST CORNER OF OSMUS AND COLFAX: ELEV: 696.48

TOPOGRAPHIC SURVEY DISCLAIMER:

EXISTING ELEVATIONS SHOWN WERE PROVIDED BY OWNER. MLP & ASSOC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS OR OMISSIONS RESULTING FROM SURVEY INACCURACIES.

LEGEND:

- PROPERTY BOUNDARY
- PARCEL LINES
- OFF-SITE PARCEL LINES
- EXISTING SANITARY
- EXISTING STORM
- EXISTING WATER MAIN
- EX. OVERHEAD WIRE (OHW)
- EX. GAS (GAS)
- CATCH BASIN
- MANHOLE
- GATE VALVE
- HYDRANT
- EXISTING WETLANDS STATE REGULATED
- EXISTING WETLANDS NOT STATE REGULATED

60 30 0 60 120 180
SCALE IN FEET 1" = 60'

PROPRIETOR
MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD.
SUITE 200
FARMINGTON HILLS, MI 48334

DATE: 02-25-2025
DWG: EXP
CHKD: EMP
SURV: ALC
FIELD: RM
DWG: 23-02 EX
FEATURES S. & U.S.
SCALE: 1" = 60'

JOB NO 2023.02

STATUS:

ENGINEERS · SURVEYORS
MLP
AND ASSOCIATES, INC.
Michael L. Priest & Associates, Inc.
40655 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
fax: (734) 459-2585

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON FHILLS, , OAKLAND COUNTY, MICHIGAN

SHEET
02

FARMINGTON VIEW SUBDIVISION
L. 63, P. 2, O.C.R.

FOLSOM ROAD

B.M. #1

SUPERVISOR'S SUBDIVISION NO. 6
L. 58, P. 14, O.C.R.

SUPERVISOR
L. 58

PARKER ST.
(50' WD)

UTILITY PLAN

BENCHMARKS:

B.M. #1 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 2ND EAST OF PARKER AT NORTHEAST CORNER OF SITE. ELEV: 692.64

B.M. #2 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 1ST EAST OF PARKER AT NORTHWEST CORNER OF SITE: ELEV: 699.49

B.M. #3 HYDRANT ARROW AT SOUTHWEST CORNER OF OSMUS AND COLFAX: ELEV: 696.48

Know what's below. Call before you dig.

LEGEND:

PROPERTY BOUNDARY		MANHOLE	
PARCEL LINE		HYDRANT	
OFF-SITE PARCEL		GATE VALVE	
EX. SANITARY SEWER		CATCH BASIN	
PR. SANITARY SEWER			
EX. STORM SEWER			
PR. STORM SEWER			
EX. WATER MAIN			
PR. WATER MAIN			
REG. WETLANDS			

40 20 0 40 80 120
SCALE IN FEET 1" = 40'

DATE: 02-25-2025
PM: LMP
ENG: LMP
SURV: AJC
CAD: AJH
FIELD: JWS, DJS, LTR
VERTICAL DATUM: N.G.V.D.
SCALE: 1" = 40'

PROPRIETOR
MR. STUART MICHAELSON
MICHAEL KRE HOMES DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

STATUS:

JOB NO. 2023.02

ENGINEERS . SURVEYORS
MLP AND ASSOCIATES, INC.
Michael L. Priest & Associates, Inc.
40655 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
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THE FOREST AT RIVERWALK
SITE PLAN
PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON FHILLS, , OAKLAND COUNTY, MICHIGAN

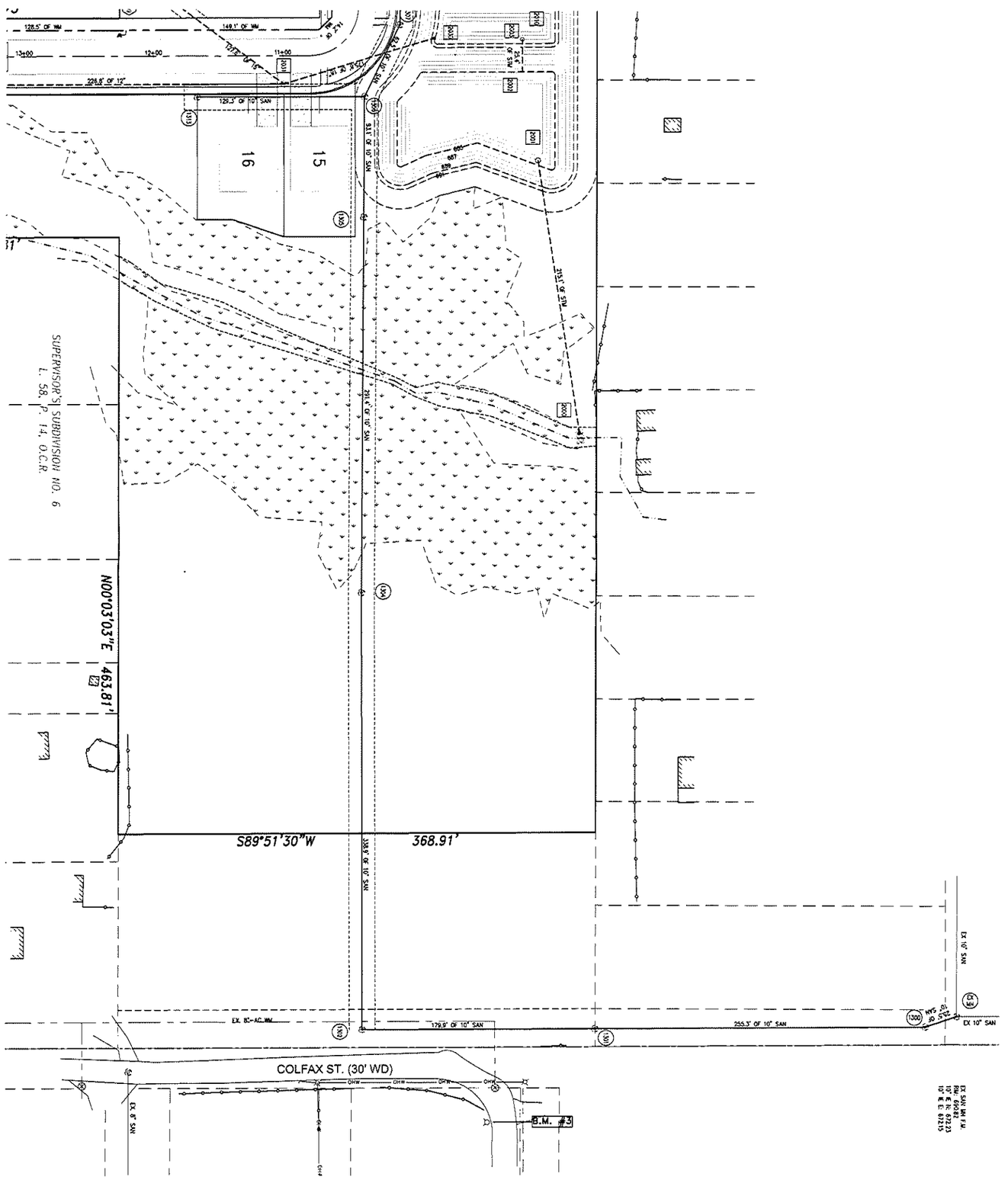
SHEET 03

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

BENCHMARKS:
B.M. #1 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 2ND EAST OF PARKER AT NORTHEAST CORNER OF SITE: ELEV: 692.64
B.M. #2 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 1ST EAST OF PARKER AT NORTHWEST CORNER OF SITE: ELEV: 699.49
B.M. #3 HYDRANT ARROW AT SOUTHWEST CORNER OF OSMUS AND COLFAX: ELEV: 696.48

LEGEND:

PROPERTY BOUNDARY	
PARCEL LINE	
OFF-SITE PARCEL	
EX. SANITARY SEWER	MANHOLE
PR. SANITARY LEAD	HYDRANT
EX. STORM SEWER	GATE VALVE
PR. STORM SEWER	
EX. WATER MAIN	
PR. WATER MAIN	CATCH BASIN
REG. WETLANDS	



SCALE IN FEET
40 20 0 40 80 120
1" = 40'

OFF-SITE UTILITY PLAN

SHEET 04

THE FOREST AT RIVERWALK
SITE PLAN
PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON FHILLS, , OAKLAND COUNTY, MICHIGAN

ENGINEERS • SURVEYORS
MLP AND ASSOCIATES, INC.
Michael L. Priest & Associates, Inc.
40655 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
fax: (734) 459-2585

STATUS:
JOB NO. 2023.02
DATE: 02-25-2025
PM: LMP
ENG: LMP
SURV: ALC
CAD: ADH
DWG: SP-03 UTIL
VOATUM:U.S.C. & G.S.
SCALE: ####

PROPRIETOR
MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

FARMINGTON VIEW SUBDIVISION
L. 63, P. 2, O.C.R.

SUPERVISOR'S SUBDIVISION NO. 6
L. 58, P. 14, O.C.R.

FOLSOM ROAD

OPEN SPACE 2: 0.1094 AC

OPEN SPACE 1: 0.1142 AC

OPEN SPACE 4: 0.3902 AC

LIMITS OF DISTURBANCE

OPEN SPACE 3 (CONT.): 5.6092 AC

PARKER ST.

B.M. #1

B.M. #2

B.M. #3

LEGEND:

PROPERTY BOUNDARY	MANHOLE
PARCEL LINE	HYDRANT
OFF-SITE PARCEL	GATE VALVE
EX. SANITARY SEWER	CATCH BASIN
PR. SANITARY LEAD	
EX. STORM SEWER	
PR. STORM SEWER	
EX. WATER MAIN	
PR. WATER MAIN	

BENCHMARKS:

B.M. #1 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 2ND EAST OF PARKER AT NORTHEAST CORNER OF SITE: ELEV: 692.64

B.M. #2 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 1ST EAST OF PARKER AT NORTHWEST CORNER OF SITE: ELEV: 699.49

B.M. #3 HYDRANT ARROW AT SOUTHWEST CORNER OF OSMUS AND COLFAX: ELEV: 696.48

Know what's below. Call before you dig.

40 20 0 40 80 120
SCALE IN FEET 1" = 40'

PROPRIETOR
MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

DATE: 02-25-2025
PM: EMP
ENG: EMP
SURV: AGS
CAD: AGS
DWG: SP-04.GP
DATUM:U.S.C. & G.S.
SCALE: 1" = 40'

JOB NO. 2023.02

STATUS:

ENGINEERS - SURVEYORS
MLP AND ASSOCIATES, INC.
Michael L. Priest & Associates, Inc.
40855 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
fax: (734) 459-2585

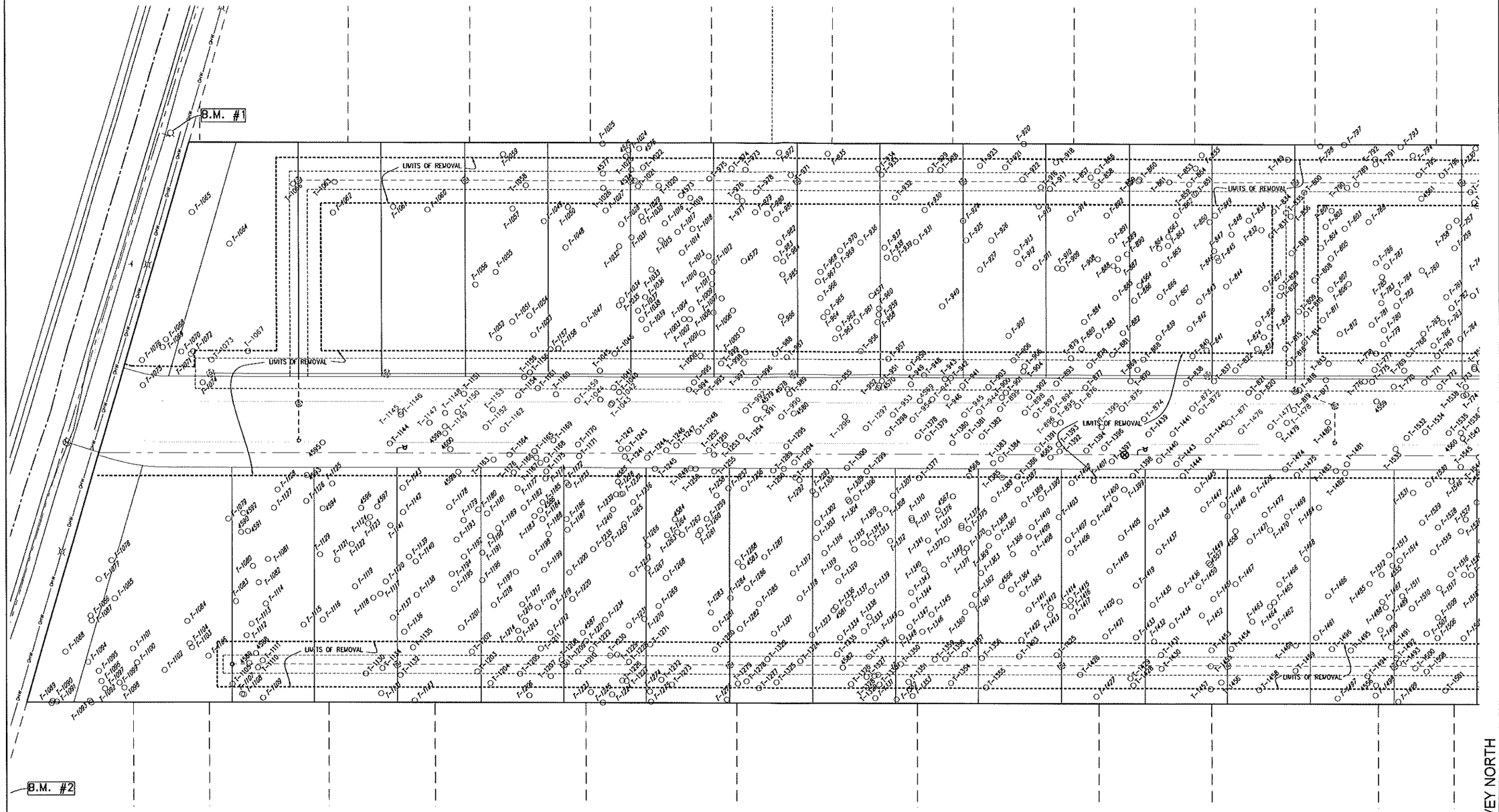
CONCEPTUAL GRADING PLAN

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON FHILLS, , OAKLAND COUNTY, MICHIGAN

SHEET 05



TREE SURVEY NORTH

TREE SURVEY DISCLAIMER:
EXISTING TREE LOCATIONS SHOWN WERE PROVIDED BY OWNER. MLP & ASSOC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS OR OMISSIONS RESULTING FROM SURVEY INACCURACIES.

BENCHMARKS:

B.M. #1 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 2ND EAST OF PARKER AT NORTHEAST CORNER OF SITE: ELEV: 692.64

B.M. #2 HYDRANT ARROW ON SOUTH SIDE OF FOLSOM, 1ST EAST OF PARKER AT NORTHWEST CORNER OF SITE: ELEV: 699.49

B.M. #3 HYDRANT ARROW AT SOUTHWEST CORNER OF OSMUS AND COLFAX: ELEV: 696.48

LEGEND:

TREE & TAG NO. T-458

SHEET INDEX:

TR01 TREE SURVEY NORTH
TR02 TREE SURVEY SOUTH
TR03 TREE LIST
TR04 TREE LIST
TR05 TREE LIST
TR06 TREE LIST
TR07 TREE LIST

PROPRIETOR

MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31135 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

DATE: 02-25-2025
DRAWN BY:
ENG. EMP
SURV. ALC
CAD. AGH
CHECKED BY: MLP
VOLUME: S.C. & C.S.
SCALE: 1" = 30'

STATUS:

JOB NO. 2023.02

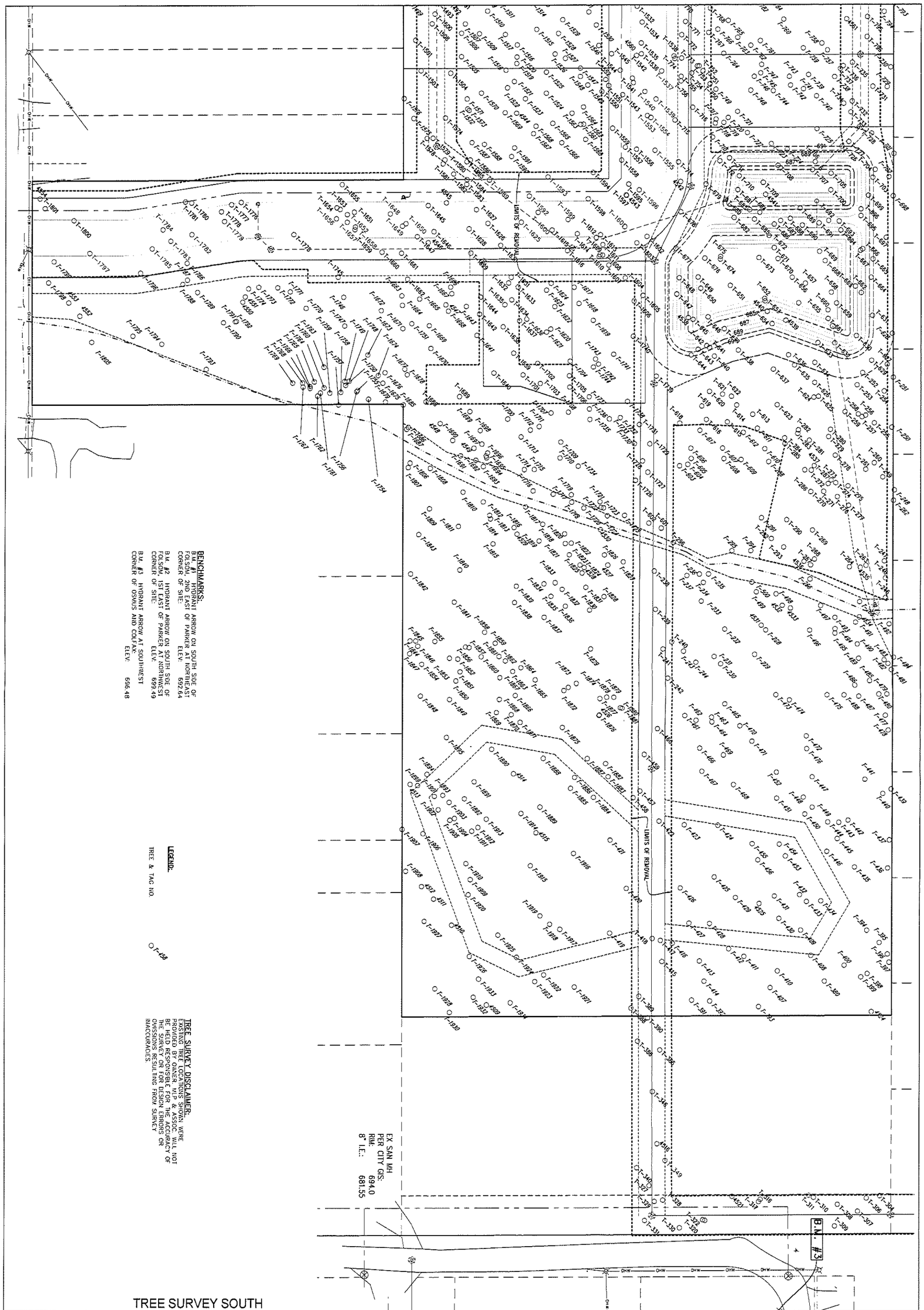
ENGINEERS, SURVEYORS AND ASSOCIATES, INC.
MLP
Michael L. Priest & Associates, Inc.
40655 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
fax: (734) 459-2585

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON FHILLS, , OAKLAND COUNTY, MICHIGAN

SHEET
TR01



TREE SURVEY SOUTH

SHEET TR02

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON FHILLS, , OAKLAND COUNTY, MICHIGAN

ENGINEERS . SURVEYORS
MLP AND ASSOCIATES, INC.
Michael L. Priest & Associates, Inc.
40655 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
fax: (734) 459-2585

STATUS:

JOB NO. 2023.02

DATE: 02-25-2025
PM: EMP
ENG: EMP
SURV: AEC
CAD: ADB
DWG: SP-00 TREES
VDATUM,U.S.C. & G.S.
SCALE: ####

PROPRIETOR
MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

Tag	Remov	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
228		Ulmus americana	American Elm	9		
229		Acer negundo	Box-elder	10	30	
230		Acer rubrum	Red Maple	7	30	
231		Acer rubrum	Red Maple	9	30	
232		Acer rubrum	Red Maple	14	30	
233		Quercus macrocarpa	Bur Oak	21	30	X
234		Acer saccharum	Sugar Maple	12	30	
235		Acer saccharum	Sugar Maple	11	22	
236		Acer saccharum	Sugar Maple	8	30	
237		Acer saccharum	Sugar Maple	7	30	
238	X	Acer saccharum	Sugar Maple	12	30	
239	X	Acer rubrum	Red Maple	14	30	
240	X	Acer negundo	Box-elder	15	30	
241	X	Carya ovata	Shagbark Hickory	8	30	
242	X	Carya ovata	Shagbark Hickory	7	30	
243		Carya ovata	Shagbark Hickory	11	30	
244		Carya ovata	Shagbark Hickory	9	30	
245	X	Quercus macrocarpa	Bur Oak	25	30	X
246	X	Quercus macrocarpa	Bur Oak	34	30	X
247	X	Tilia americana	American Basswood	15	30	
248		Carya ovata	Shagbark Hickory	18	30	X
249	X	Acer saccharum	Sugar Maple	14	30	
250		Acer saccharum	Sugar Maple	11	22	
251		Quercus alba	Northern White Oak	13	30	
252	X	Prunus serotina	Black Cherry	12	30	
253	X	Acer saccharum	Sugar Maple	15	30	
254	X	Acer saccharum	Sugar Maple	8	30	
255	X	Acer saccharum	Sugar Maple	7	30	
256	X	Acer saccharum	Sugar Maple	8	30	
257	X	Acer saccharum	Sugar Maple	15	30	
258	X	Acer saccharum	Sugar Maple	9	30	
259	X	Acer saccharum	Sugar Maple	17	30	
260	X	Acer saccharum	Sugar Maple	7	30	
261	X	Acer saccharum	Sugar Maple	7	30	
262		Acer saccharum	Sugar Maple	8	30	
263	X	Acer saccharum	Sugar Maple	8	30	
264	X	Acer saccharum	Sugar Maple	8	30	
265		Acer saccharum	Sugar Maple	8	30	
266		Acer saccharum	Sugar Maple	8	9	
267	X	Acer saccharum	Sugar Maple	12	30	
268	X	Acer saccharum	Sugar Maple	11	30	
269	X	Acer saccharum	Sugar Maple	14	30	
270	X	Acer saccharum	Sugar Maple	11	30	
271	X	Fagus grandifolia	American Beech	11	30	
272	X	Acer saccharum	Sugar Maple	10	30	
273	X	Acer saccharum	Sugar Maple	7	30	
274	X	Acer rubrum	Red Maple	13	30	
275	X	Liriodendron tulipifera	Tulip Tree	13	30	
276	X	Acer saccharinum	Silver Maple	9	20	
277	X	Acer saccharinum	Silver Maple	8	30	
278	X	Acer saccharum	Sugar Maple	8	30	
279	X	Acer saccharum	Sugar Maple	16	30	
280	X	Acer saccharum	Sugar Maple	7	30	
281	X	Acer saccharum	Sugar Maple	13	30	
282	X	Acer rubrum	Red Maple	14	30	
283	X	Acer rubrum	Red Maple	12	30	
284	X	Acer rubrum	Red Maple	11	30	
285	X	Acer rubrum	Red Maple	10	30	
286	X	Acer rubrum	Red Maple	22	30	X
287	X	Acer rubrum	Red Maple	17	30	
288		Acer rubrum	Red Maple	11	30	
290	X	Acer rubrum	Red Maple	8	30	
291		Acer rubrum	Red Maple	14	30	
292	X	Ulmus americana	American Elm	16	30	
293	X	Acer saccharum	Sugar Maple	13	30	
294		Ulmus americana	American Elm	15	30	
295		Acer saccharum	Sugar Maple	12	26	
296	X	Acer saccharum	Sugar Maple	7	30	
304	X	Acer rubrum	Red Maple	9	30	
306	X	Acer saccharum	Sugar Maple	7	30	
307	X	Acer saccharum	Sugar Maple	9	30	
308	X	Acer saccharum	Sugar Maple	8	30	
309	X	Fagus grandifolia	American Beech	34	21	X
310	X	Prunus serotina	Black Cherry	22	30	X
311	X	Acer saccharum	Sugar Maple	9	30	
316	X	Quercus rubra	Northern Red Oak	30	30	X
317	X	Acer rubrum	Red Maple	8	30	
320	X	Fagus grandifolia	American Beech	9	30	
322	X	Acer rubrum	Red Maple	11	30	
327	X	Fagus grandifolia	American Beech	10	30	
328	X	Acer rubrum	Red Maple	17	30	
329	X	Fagus grandifolia	American Beech	9	30	
330	X	Acer rubrum	Red Maple	29	30	X
331	X	Fagus grandifolia	American Beech	15	30	
340	X	Acer rubrum	Red Maple	10	30	
346	X	Fagus grandifolia	American Beech	24	30	X
349	X	Acer saccharum	Sugar Maple	12	30	

Tag	Remov	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
380		Fagus grandifolia	American Beech	21	30	X
385	X	Acer saccharum	Sugar Maple	12	30	
386	X	Acer saccharum	Sugar Maple	8	30	
388	X	Fagus grandifolia	American Beech	22	23	X
389	X	Fagus grandifolia	American Beech	23	30	X
390	X	Fagus grandifolia	American Beech	31	30	X
391		Acer saccharum	Sugar Maple	9	30	
392		Fagus grandifolia	American Beech	16	30	
393		Acer rubrum	Red Maple	20	30	X
394		Acer saccharum	Sugar Maple	7	30	
395		Fagus grandifolia	American Beech	23	30	X
396		Fagus grandifolia	American Beech	21	30	X
397		Fagus grandifolia	American Beech	17	30	
398		Fagus grandifolia	American Beech	7	30	
399		Fagus grandifolia	American Beech	27	23	X
400		Fagus grandifolia	American Beech	24	30	X
407		Acer rubrum	Red Maple	33	30	X
408		Fagus grandifolia	American Beech	25	30	X
409		Ostrya virginiana	Eastern Hop-Hornbeam	8	30	
410		Acer saccharum	Sugar Maple	18	30	
411		Prunus serotina	Black Cherry	17		
412		Fagus grandifolia	American Beech	12	30	
413		Fagus grandifolia	American Beech	8	30	
414		Fagus grandifolia	American Beech	7	30	
415	X	Fagus grandifolia	American Beech	7	30	
416		Fagus grandifolia	American Beech	9	30	
417	X	Quercus rubra	Northern Red Oak	9	30	
418	X	Acer saccharum	Sugar Maple	23	30	X
419		Acer saccharum	Sugar Maple	25	30	X
420		Fagus grandifolia	American Beech	26	30	X
421		Acer saccharum	Sugar Maple	32	30	X
422	X	Acer rubrum	Red Maple	7	30	
423		Fagus grandifolia	American Beech	28	15	X
424		Acer saccharum	Sugar Maple	9	30	
425		Acer saccharum	Sugar Maple	32	30	X
426		Acer saccharum	Sugar Maple	27	30	X
427		Acer saccharum	Sugar Maple	27	30	X
428		Prunus serotina	Black Cherry	12	30	
429		Acer saccharum	Sugar Maple	25	30	X
430		Acer saccharum	Sugar Maple	10	30	
431		Acer saccharum	Sugar Maple	7	30	
432		Ostrya virginiana	Eastern Hop-Hornbeam	7	30	
433		Acer saccharum	Sugar Maple	10	30	
434		Acer saccharum	Sugar Maple	11	30	
435		Acer saccharum	Sugar Maple	27	30	X
436		Fagus grandifolia	American Beech	31	30	X
437		Fagus grandifolia	American Beech	23	11	X
439		Acer saccharum	Sugar Maple	9	30	
440		Acer saccharum	Sugar Maple	9	30	
441		Acer saccharum	Sugar Maple	8	30	
442		Acer saccharum	Sugar Maple	11	30	
443		Acer rubrum	Red Maple	17	30	
444		Quercus rubra	Northern Red Oak	32	30	X
445		Fagus grandifolia	American Beech	10	30	
446		Acer saccharum	Sugar Maple	8	30	
447		Acer saccharum	Sugar Maple	11	30	
448		Acer saccharum	Sugar Maple	7	30	
449		Prunus serotina	Black Cherry	18	30	X
450		Fagus grandifolia	American Beech	9	30	
451		Ulmus americana	American Elm	10	30	
452		Acer saccharum	Sugar Maple	7	30	
453		Acer saccharum	Sugar Maple	25	30	X
454		Acer saccharum	Sugar Maple	28	30	X
455		Acer saccharum	Sugar Maple	29	30	X
456		Acer saccharum	Sugar Maple	8	30	
457	X	Acer rubrum	Red Maple	10	30	
458	X	Acer rubrum	Red Maple	11	30	
459	X	Fagus grandifolia	American Beech	26	30	X
460	X	Acer rubrum	Red Maple	35	30	X
461		Acer rubrum	Red Maple	8	30	
462		Acer saccharum	Sugar Maple	9	30	
463		Acer rubrum	Red Maple	13	30	
464		Acer rubrum	Red Maple	9	30	
465		Acer rubrum	Red Maple	15	30	
466		Acer saccharum	Sugar Maple	28	30	X
467		Acer saccharum	Sugar Maple	30	30	X
468		Acer saccharum	Sugar Maple	30	30	X
469		Acer rubrum	Red Maple	8	30	
470		Acer saccharum	Sugar Maple	7	30	

Tag	Remov	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
471		Acer rubrum	Red Maple	23	30	X
472		Acer rubrum	Red Maple	14	30	
473		Acer rubrum	Red Maple	7	30	
474		Acer rubrum	Red Maple	8	30	
475		Carya ovata	Shagbark Hickory	8	30	
476		Tilia americana	American Basswood	22		
477		Tilia americana	American Basswood	9	30	
478		Tilia americana	American Basswood	10	30	
479		Carya ovata	Shagbark Hickory	8	30	
480		Carya ovata	Shagbark Hickory	25	30	X
481		Carya ovata	Shagbark Hickory	8	30	
482		Quercus bicolor	Swamp White Oak	13	30	
483		Quercus bicolor	Swamp White Oak	8	30	
484		Tilia americana	American Basswood	11	30	
485		Quercus bicolor	Swamp White Oak	11	30	
486		Tilia americana	American Basswood	12		
487		Carya ovata	Shagbark Hickory	10	30	
488		Tilia americana	American Basswood	7	30	
489		Tilia americana	American Basswood	11	30	
490		Quercus macrocarpa	Bur Oak	16	30	
491		Acer saccharum	Sugar Maple	7	30	
492		Acer saccharum	Sugar Maple	8	25	
493		Tilia americana	American Basswood	11	30	
494		Tilia americana	American Basswood	13	30	
495		Quercus macrocarpa	Bur Oak	23	30	X
496		Acer saccharum	Sugar Maple	8	30	
497		Acer saccharum	Sugar Maple	9	30	
498		Quercus rubra	Northern Red Oak	21	30	X
499		Acer saccharum	Sugar Maple	7	30	
500		Acer saccharum	Sugar Maple	8	30	
601	X	Acer saccharum	Sugar Maple	9	12	
602	X	Acer saccharum	Sugar Maple	10	23	
603		Acer saccharum	Sugar Maple	8	30	
604		Acer saccharum	Sugar Maple	10	15	
605		Acer saccharum	Sugar Maple	8	30	
606		Acer saccharum	Sugar Maple	10	30	
607		Acer rubrum	Red Maple	10	30	
608		Acer rubrum	Red Maple	12	30	
609		Acer rubrum	Red Maple	24	30	X
610		Acer rubrum	Red Maple	7	30	
611		Acer rubrum	Red Maple	9	30	
612		Acer rubrum	Red Maple	13	30	
613	X	Acer rubrum	Red Maple	15	30	
614	X	Acer rubrum	Red Maple	18	30	
615	X	Acer rubrum	Red Maple	17	30	
616	X	Acer rubrum	Red Maple	13	30	
617		Acer saccharum	Sugar Maple	9	30	
618	X	Acer rubrum	Red Maple	36	23	X
619	X	Ulmus americana	American Elm	8	30	
620	X	Prunus serotina	Black Cherry	21	30	X
621	X	Acer rubrum	Red Maple	19	30	X
622	X	Acer rubrum	Red Maple	9	30	
623	X	Acer rubrum	Red Maple	18	30	X
624	X	Acer saccharum	Sugar Maple	14	30	
625	X	Acer saccharum	Sugar Maple	14	30	
626	X	Acer saccharum	Sugar Maple	13	30	
627	X	Quercus macrocarpa	Bur Oak	20	30	X
628		Prunus serotina	Black Cherry	25	30	X
629	X	Acer saccharum	Sugar Maple	12	30	
630	X	Acer saccharinum	Silver Maple	29	30	X
631	X	Acer saccharinum	Silver Maple	16	30	
632	X	Acer saccharum	Sugar Maple	14	30	
633	X	Acer saccharum	Sugar Maple	12	30	
634	X	Acer rubrum	Red Maple	23	30	X
635	X	Acer saccharum	Sugar Maple	8	30	
636	X	Acer saccharum	Sugar Maple	16	30	
637	X	Acer saccharum	Sugar Maple	16	30	
638	X	Prunus serotina	Black Cherry	25	30	X
639	X	Acer rubrum	Red Maple	13	30	
640	X	Acer rubrum	Red Maple	9	30	
641	X	Acer rubrum	Red Maple	7	30	
642	X	Acer rubrum	Red Maple	7	30	
643	X	Acer rubrum	Red Maple	13	30	
644	X	Prunus serotina	Black Cherry	9	30	
645	X	Prunus serotina	Black Cherry	20	30	X
646	X	Acer saccharum	Sugar Maple	12	30	
647	X	Prunus serotina	Black Cherry	18	30	X
648	X	Acer rubrum	Red Maple	20	30	X
649	X	Prunus serotina	Black Cherry	13	30	
650	X	Prunus serotina	Black Cherry	14	30	
651	X	Acer rubrum	Red Maple	13	30	
652	X	Acer rubrum	Red Maple	15	30	
653	X	Prunus serotina	Black Cherry	13	30	
654	X	Acer saccharum	Sugar Maple	15	30	
655	X	Prunus serotina	Black Cherry	8	30	
656	X	Acer saccharum	Sugar Maple	11	30	
657	X	Acer rubrum	Red Maple	31	30	X
658	X	Acer rubrum	Red Maple	12	30	
659	X	Acer rubrum	Red Maple	12	30	
660	X	Acer rubrum	Red Maple	14	30	
661	X	Acer rubrum	Red Maple	15	30	
662	X	Acer rubrum	Red Maple	7	30	
663	X	Acer rubrum	Red Maple	12	30	
664	X	Prunus serotina	Black Cherry	8	30	
665	X	Acer saccharum	Sugar Maple	17	30	
666	X	Acer saccharum	Sugar Maple	10	30	
667	X	Acer saccharum	Sugar Maple	16	30	
668	X	Acer rubrum	Red Maple	24	30	X
669	X	Acer saccharum	Sugar Maple	17	16	

Tag	Remov	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
670	X	Acer rubrum	Red Maple	12	15	
671	X	Acer rubrum	Red Maple	31	30	X
672	X	Prunus serotina	Black Cherry	8	30	
673	X	Prunus serotina	Black Cherry	13	30	
674	X	Acer rubrum	Red Maple	19	21	X
675	X	Acer rubrum	Red Maple	19	30	X
676	X	Acer rubrum	Red Maple	18	30	
677	X	Acer rubrum	Red Maple	9	30	
678	X	Acer rubrum	Red Maple	19	30	X
679	X	Acer rubrum	Red Maple	8	30	
680	X	Prunus serotina	Black Cherry	14	30	
681	X	Prunus serotina	Black Cherry	7	30	
682	X	Prunus serotina	Black Cherry	14	30	
683	X	Acer saccharum	Sugar Maple	15	30	
684	X	Prunus serotina	Black Cherry	11	30	
685	X	Acer rubrum	Red Maple	9	30	
686	X	Prunus serotina	Black Cherry	11	30	
687	X	Acer saccharum	Sugar Maple	11	30	
688	X	Acer rubrum	Red Maple	21	30	X
689	X	Acer saccharum	Sugar Maple	16	30	
690	X	Prunus serotina	Black Cherry	12	30	
691	X	Acer saccharum	Sugar Maple	7	30	
692	X	Acer saccharum	Sugar Maple	10	30	
693	X	Acer rubrum	Red Maple	22	30	X
694	X	Acer saccharum	Sugar Maple	9		
695	X	Acer rubrum	Red Maple	15	30	
696	X	Prunus serotina	Black Cherry	15	30	
697	X	Prunus serotina	Black Cherry	18	30	
698		Prunus serotina	Black Cherry	23	30	X
699	X	Prunus serotina	Black Cherry	14	30	
700	X	Prunus serotina	Black Cherry	16	30	
701		Prunus serotina	Black Cherry	18	30	
702		Acer saccharum	Sugar Maple	7	30	
703	X	Acer saccharum	Sugar Maple	10	30	
704	X	Prunus serotina	Black Cherry	10	30	
705	X	Acer rubrum	Red Maple	30	30	X
706	X	Prunus serotina	Black Cherry	12	30	
707	X	Prunus serotina	Black Cherry	9	30	
708	X	Prunus serotina	Black Cherry	16	30	
709	X	Acer saccharum	Sugar Maple	18	30	
710	X	Prunus serotina	Black Cherry	14	30	
711	X	Prunus serotina	Black Cherry	11	30	
712	X	Prunus serotina	Black Cherry	14	30	
713		Acer rubrum	Red Maple	8	30	
714	X	Prunus serotina	Black Cherry	15	30	
715	X	Acer rubrum	Red Maple	10	30	
716	X	Acer rubrum	Red Maple	7	30	
717		Quercus rubra	Northern Red Oak	11	30	
718		Quercus rubra	Northern Red Oak	10	30	
719		Prunus serotina	Black Cherry	15	30	
720		Prunus serotina	Black Cherry	9	30	
721		Acer rubrum	Red Maple	20	30	X
722		Acer rubrum	Red Maple	13	30	
723		Acer rubrum	Red Maple	13	30	
724		Acer rubrum	Red Maple	13	30	
725		Acer saccharum	Sugar Maple	19	30	X
726	X	Prunus serotina	Black Cherry	9	30	
727	X	Prunus serotina	Black Cherry	14	30	
728	X	Acer rubrum	Red Maple	8	30	
729		Acer rubrum	Red Maple	15	30	
730		Acer saccharum	Sugar Maple	15	30	
731	X	Acer saccharum	Sugar Maple	8	30	
732	X	Prunus serotina	Black Cherry	8	30	
733	X	Prunus serotina	Black Cherry	11	30	
734	X	Acer saccharum	Sugar Maple	9	30	
735	X	Ulmus americana	American Elm	10	30	
736	X	Acer rubrum	Red Maple	14	30	
737	X	Acer rubrum	Red Maple	12	30	
738		Acer rubrum	Red Maple	13	30	
739		Prunus serotina	Black Cherry	7	30	
740		Prunus serotina	Black Cherry	17	30	
741		Acer rubrum	Red Maple	12	30	
742		Acer rubrum	Red Maple	10	30	
743		Prunus serotina	Black Cherry	11	30	
744		Prunus serotina	Black Cherry	12	30	
745		Acer rubrum	Red Maple	11	30	
746		Acer rubrum	Red Maple	7	30	
747		Acer rubrum	Red Maple	13	30	
748		Prunus serotina	Black Cherry	8	30	
749		Prunus serotina	Black Cherry	7	30	
750	X	Acer rubrum	Red Maple	8	30	
751	X	Prunus serotina	Black Cherry	8	30	
752	X	Acer rubrum	Red Maple	12	30	
753	X	Acer saccharum	Sugar Maple	11	30	
754	X	Acer saccharum	Sugar Maple	7	30	
755	X	Prunus serotina	Black Cherry	12	30	
756	X	Acer rubrum	Red Maple	11	30	
757		Ulmus americana	American Elm	20	30	
758		Ulmus americana	American Elm	8	30	
759		Ulmus americana	American Elm	8	30	
760		Tilia americana	American Basswood	14	30	
761		Acer rubrum	Red Maple	17	30	
762		Acer rubrum	Red Maple	20	30	X
763		Acer rubrum	Red Maple	11	30	
764		Acer saccharum	Sugar Maple	10	30	
765		Populus deltoides	Eastern Cottonwood	15	30	
766		Acer rubrum	Red Maple	10	30	
767	X	Acer rubrum	Red Maple	9	30	
768	X	Tilia americana	American Basswood	14	30	
769	X	Tilia americana	American Basswood	13	30	

Michael L. Priest & Associates, Inc.
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phone: (734) 459-8560
fax: (734) 459-2585

PROPRIETOR
MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

DATE: 02-25-2025
PM: EMP
ENG: EMP
SURV: AEC
CAD: ADB
DWG: 2023.02 TREES
VDATUM: U.S.C. & G.S.
SCALE: ####

STATUS:

JOB NO. 2023.02

ENGINEERS · SURVEYORS
MLP
AND ASSOCIATES, INC.

TREE LIST

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON FHILLS, , OAKLAND COUNTY, MICHIGAN

SHEET
TR03

Tag	Remov	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
770	X	Tilia americana	American Basswood	15	30	
771	X	Acer rubrum	Red Maple	17	30	
772	X	Acer rubrum	Red Maple	15	30	
773	X	Acer rubrum	Red Maple	12	30	
774	X					
775	X	Acer rubrum	Red Maple	8	30	
776	X	Acer rubrum	Red Maple	20	30	X
777	X	Tilia americana	American Basswood	14	30	
778	X	Acer rubrum	Red Maple	13	30	
779		Acer rubrum	Red Maple	11	30	
780		Tilia americana	American Basswood	11	30	
781		Tilia americana	American Basswood	8	30	
782		Acer rubrum	Red Maple	12	30	
783		Tilia americana	American Basswood	9	30	
784		Acer rubrum	Red Maple	16	30	
785		Ulmus americana	American Elm	14	30	
786		Ulmus americana	American Elm	8	30	
787		Tilia americana	American Basswood	9	30	
788		Acer rubrum	Red Maple	10	30	
789	X	Acer rubrum	Red Maple	9	30	
790	X	Acer rubrum	Red Maple	14	30	
791	X	Tilia americana	American Basswood	12	30	
792	X	Acer saccharum	Sugar Maple	8	30	
793		Morus alba	White Mulberry	9	30	
794		Acer rubrum	Red Maple	10	30	
795	X	Ulmus americana	American Elm	15	30	
796	X	Acer rubrum	Red Maple	17	30	
797		Acer rubrum	Red Maple	10	30	
798		Prunus serotina	Black Cherry	17	30	
799	X	Acer rubrum	Red Maple	34	30	X
800	X	Acer rubrum	Red Maple	12	30	
801		Acer rubrum	Red Maple	11	30	
802		Acer rubrum	Red Maple	10	30	
803		Acer rubrum	Red Maple	8	30	
804		Acer rubrum	Red Maple	9	30	
805		Acer rubrum	Red Maple	11	30	
806		Tilia americana	American Basswood	10	30	
807		Tilia americana	American Basswood	13	30	
808	X	Acer rubrum	Red Maple	28	30	X
809	X	Acer rubrum	Red Maple	21	30	X
810	X	Fagus grandifolia	American Beech	14	30	
811		Acer rubrum	Red Maple	11	30	
812		Acer rubrum	Red Maple	13	30	
813	X	Acer rubrum	Red Maple	13	30	
814	X	Acer rubrum	Red Maple	11	15	
815	X	Acer rubrum	Red Maple	18	30	X
816	X	Acer rubrum	Red Maple	9	30	
817	X	Acer rubrum	Red Maple	10	30	
818	X	Acer rubrum	Red Maple	7	30	
819	X	Acer rubrum	Red Maple	8	30	
820	X	Acer rubrum	Red Maple	10	30	
821	X	Acer rubrum	Red Maple	18	30	X
822	X	Prunus serotina	Black Cherry	12	10	
823		Acer rubrum	Red Maple	21	30	X
824		Acer rubrum	Red Maple	11	30	
825		Acer rubrum	Red Maple	11	30	
826		Acer rubrum	Red Maple	7	30	
827		Acer rubrum	Red Maple	12	30	
828	X	Prunus serotina	Black Cherry	12	30	
829	X	Prunus serotina	Black Cherry	9	30	
830	X	Acer rubrum	Red Maple	13	30	
831	X	Quercus rubra	Northern Red Oak	17	30	X
832		Acer rubrum	Red Maple	15	30	
833		Prunus serotina	Black Cherry	9	30	
834	X	Acer saccharum	Sugar Maple	16	30	
835	X	Prunus serotina	Black Cherry	13	30	
836	X	Prunus serotina	Black Cherry	7	30	
837	X	Acer rubrum	Red Maple	14	30	
838	X	Prunus serotina	Black Cherry	7	30	
839		Acer rubrum	Red Maple	25	30	X
840	X	Prunus serotina	Black Cherry	8	20	
841		Acer rubrum	Red Maple	19	30	X
842		Prunus serotina	Black Cherry	15	30	
843		Acer rubrum	Red Maple	12	30	
844		Prunus serotina	Black Cherry	16	11	
845		Prunus serotina	Black Cherry	9	30	
846		Prunus serotina	Black Cherry	7	30	
847		Acer rubrum	Red Maple	16	30	
848		Prunus serotina	Black Cherry	12	30	
849		Prunus serotina	Black Cherry	10	30	
850		Prunus serotina	Black Cherry	12	30	
851	X	Prunus serotina	Black Cherry	13	30	
852	X	Acer rubrum	Red Maple	14	30	
853	X	Prunus serotina	Black Cherry	15	30	
854	X	Prunus serotina	Black Cherry	10	30	
855		Acer rubrum	Red Maple	13	30	
856	X	Quercus macrocarpa	Bur Oak	9	30	
857	X	Acer saccharum	Sugar Maple	8	30	
858	X	Quercus alba	Northern White Oak	10	30	
859	X	Acer rubrum	Red Maple	17	30	
860	X	Prunus serotina	Black Cherry	12	30	
861	X	Prunus serotina	Black Cherry	11	30	
862		Prunus serotina	Black Cherry	8	30	
863		Acer rubrum	Red Maple	11	30	
864		Acer rubrum	Red Maple	15	30	
865		Acer rubrum	Red Maple	9	21	
866		Acer rubrum	Red Maple	9	30	
867		Prunus serotina	Black Cherry	14	30	
868	X	Acer saccharum	Sugar Maple	12	30	
869	X	Acer rubrum	Red Maple	12	30	

Tag	Remov	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
870	X	Ulmus americana	American Elm	18	30	
871	X	Acer rubrum	Red Maple	9	30	
872	X	Acer rubrum	Red Maple	14	30	
873	X	Acer rubrum	Red Maple	17	30	
874	X	Prunus serotina	Black Cherry	7	30	
875	X	Acer rubrum	Red Maple	15	30	
876	X	Acer rubrum	Red Maple	13	30	
877	X	Acer rubrum	Red Maple	13	30	
878	X	Acer saccharum	Sugar Maple	9	30	
879	X	Prunus serotina	Black Cherry	9	30	
880		Acer rubrum	Red Maple	15	30	
881	X	Prunus serotina	Black Cherry	18	28	X
882		Acer saccharum	Sugar Maple	11	30	
883		Prunus serotina	Black Cherry	18	30	X
884		Acer rubrum	Red Maple	8	30	
885		Acer rubrum	Red Maple	9	30	
886		Acer rubrum	Red Maple	13	30	
887		Acer rubrum	Red Maple	11	30	
888		Acer rubrum	Red Maple	11	30	
889		Acer rubrum	Red Maple	13	30	
890		Acer rubrum	Red Maple	13	30	
891		Acer rubrum	Red Maple	11	30	
892		Acer rubrum	Red Maple	8	30	
893	X	Acer rubrum	Red Maple	25	30	X
894	X	Prunus serotina	Black Cherry	6	30	
895	X	Acer rubrum	Red Maple	13	30	
896	X	Prunus serotina	Black Cherry	9	30	
897	X	Acer rubrum	Red Maple	11	30	
898	X	Acer rubrum	Red Maple	12	30	
899	X	Acer rubrum	Red Maple	9	30	
900	X	Populus tremuloides	Quaking Aspen	11	26	
901	X	Prunus serotina	Black Cherry	9	30	
902	X	Prunus serotina	Black Cherry	8	30	
903	X	Acer rubrum	Red Maple	12	30	
904	X	Acer rubrum	Red Maple	12	30	
905	X	Prunus serotina	Black Cherry	18	30	
906	X	Acer rubrum	Red Maple	16	30	
907		Prunus serotina	Black Cherry	8		
908		Prunus serotina	Black Cherry	13	30	
909		Acer rubrum	Red Maple	17	30	
910		Quercus alba	Northern White Oak	14	30	
911		Acer rubrum	Red Maple	8	30	
912		Prunus serotina	Black Cherry	13	30	
913		Prunus serotina	Black Cherry	9	30	
914		Prunus serotina	Black Cherry	16	30	
915		Acer rubrum	Red Maple	12	30	
916	X	Prunus serotina	Black Cherry	9	19	
917	X	Acer saccharum	Sugar Maple	8	30	
918	X	Prunus serotina	Black Cherry	12	30	
920		Prunus serotina	Black Cherry	11	30	
921	X	Prunus serotina	Black Cherry	16	30	
922	X	Prunus serotina	Black Cherry	11	30	
923	X	Quercus velutina	Eastern Black Oak	18	30	
924		Prunus serotina	Black Cherry	10		
925		Prunus serotina	Black Cherry	15	13	
926		Quercus alba	Northern White Oak	16	27	X
927		Prunus serotina	Black Cherry	9	25	
928	X	Acer rubrum	Red Maple	8	30	
929	X	Prunus serotina	Black Cherry	11	30	
930		Prunus serotina	Black Cherry	10	30	
931		Prunus serotina	Black Cherry	11	30	
932	X	Prunus serotina	Black Cherry	15	30	
933	X	Prunus serotina	Black Cherry	7	30	
934	X	Prunus serotina	Black Cherry	10	30	
935		Acer rubrum	Red Maple	13	30	
936		Prunus serotina	Black Cherry	8	30	
937		Quercus rubra	Northern Red Oak	7	30	
938		Prunus serotina	Black Cherry	8	30	
939		Malus pumila	Apple Tree	9	26	
940		Malus pumila	Apple Tree	10	22	
941	X	Quercus alba	Northern White Oak	15	30	
942	X	Acer rubrum	Red Maple	11	30	
943	X	Acer rubrum	Red Maple	10	30	
944	X	Acer rubrum	Red Maple	9	30	
945	X	Acer rubrum	Red Maple	14	30	
946	X	Acer rubrum	Red Maple	11	30	
947	X	Prunus serotina	Black Cherry	7		
948	X	Prunus serotina	Black Cherry	11	30	
949	X	Acer rubrum	Red Maple	15	30	
950	X	Acer rubrum	Red Maple	8	30	
951	X	Acer rubrum	Red Maple	10	30	
952	X	Acer rubrum	Red Maple	26	30	X
953	X	Acer rubrum	Red Maple	14	30	
954	X	Acer rubrum	Red Maple	22	30	X
955	X	Populus deltoides	Eastern Cottonwood	31	30	X
956	X	Acer rubrum	Red Maple	8	30	
957	X	Prunus serotina	Black Cherry	8	30	
958		Prunus serotina	Black Cherry	9	30	
959		Acer rubrum	Red Maple	12	30	
960		Prunus serotina	Black Cherry	16	30	
961		Acer rubrum	Red Maple	15	30	
962		Acer rubrum	Red Maple	16	30	
963		Acer rubrum	Red Maple	8	30	
964		Acer rubrum	Red Maple	15	30	
965		Acer rubrum	Red Maple	17	30	
966		Acer rubrum	Red Maple	7	30	
967		Acer saccharum	Sugar Maple	13	30	
968		Prunus serotina	Black Cherry	12	30	
969		Acer rubrum	Red Maple	12	30	

Tag	Remov	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
970		Acer saccharum	Sugar Maple	9	30	
971	X	Prunus serotina	Black Cherry	9	30	
972		Populus deltoides	Eastern Cottonwood	24	30	
973	X	Acer rubrum	Red Maple	22	30	X
974	X	Acer saccharum	Sugar Maple	7	30	
975	X	Acer rubrum	Red Maple	13	30	
976	X	Acer rubrum	Red Maple	8	30	
977	X	Prunus serotina	Black Cherry	10	30	
978	X	Amelanchier arborea	Downy Serviceberry	7	30	
979		Prunus serotina	Black Cherry	15	30	
980		Prunus serotina	Black Cherry	9	30	
981		Prunus serotina	Black Cherry	25	30	X
982		Acer rubrum	Red Maple	7	30	
983		Acer rubrum	Red Maple	28	30	X
984		Acer rubrum	Red Maple	14	30	
985		Acer rubrum	Red Maple	7	30	
986		Ulmus americana	American Elm	13	30	
987	X	Acer rubrum	Red Maple	17	30	
988	X	Acer rubrum	Red Maple	25	30	X
989	X	Populus deltoides	Eastern Cottonwood	12	30	
990	X	Acer rubrum	Red Maple	10	30	
991	X	Populus deltoides	Eastern Cottonwood	14	30	
992	X	Acer rubrum	Red Maple	18	30	
993	X	Prunus serotina	Black Cherry	12	30	
994	X	Acer rubrum	Red Maple	10	30	
995	X	Acer rubrum	Red Maple	30	30	X
996	X	Acer rubrum	Red Maple	15	7	
997	X	Acer rubrum	Red Maple	15	30	
998	X	Acer rubrum	Red Maple	17	30	
999	X	Acer rubrum	Red Maple	10	30	
1000	X	Prunus serotina	Black Cherry	8	30	
1001		Acer rubrum	Red Maple	10	30	
1002		Prunus serotina	Black Cherry	9	30	
1003		Prunus serotina	Black Cherry	10	30	
1004		Prunus serotina	Black Cherry	10	30	
1005		Acer rubrum	Red Maple	11	30	
1006		Acer rubrum	Red Maple	13	15	
1007		Acer rubrum	Red Maple	12	30	
1008		Acer rubrum	Red Maple	8	30	
1009		Ulmus americana	American Elm	9	30	
1010		Acer rubrum	Red Maple	17	30	
1011		Acer rubrum	Red Maple	16	30	
1012		Acer rubrum	Red Maple	11	30	
1013		Prunus serotina	Black Cherry	10	30	
1014		Acer rubrum	Red Maple	12	30	
1015		Acer rubrum	Red Maple	11	30	
1016		Acer rubrum	Red Maple	12	30	
1017		Acer rubrum	Red Maple	12	30	
1018		Acer rubrum	Red Maple	13	30	
1019	X	Acer rubrum	Red Maple	9	30	
1020	X	Acer rubrum	Red Maple	17	30	
1021	X	Ulmus americana	American Elm	8	30	
1022	X	Ulmus americana	American Elm	8	30	
1023	X	Acer rubrum	Red Maple	10	30	
1024		Ulmus americana	American Elm	8	13	
1025		Acer rubrum	Red Maple	10	30	
1026	X	Acer saccharinum	Silver Maple	18	30	
1027		Acer saccharinum	Silver Maple	29	30	X
1028		Acer saccharinum	Silver Maple	7	30	
1029		Acer rubrum	Red Maple	7	30	
1030		Acer rubrum	Red Maple	8	30	
1031		Acer rubrum	Red Maple	7	30	
1032		Liriodendron tulipifera	Tulip Tree	16	30	
1033		Acer rubrum	Red Maple	9	30	
1034		Acer rubrum	Red Maple	20	30	X
1035		Ulmus americana	American Elm	13		
1036		Acer rubrum	Red Maple	12	30	
1037		Prunus serotina	Black Cherry	8	30	
1038		Acer rubrum	Red Maple	12	30	
1039		Acer rubrum	Red Maple	12	30	
1040	X	Prunus serotina	Black Cherry	7	30	
1041	X	Acer rubrum	Red Maple	11	30	
1042	X	Acer rubrum	Red Maple	13	30	
1043	X	Acer rubrum	Red Maple	12	30	
1044	X	Acer rubrum	Red Maple	12	30	
1045	X	Acer rubrum	Red Maple	7	30	
1046	X	Prunus serotina	Black Cherry	11		
1047		Acer saccharum	Sugar Maple	11	30	
1048		Ulmus americana	American Elm	13	30	
1049		Acer rubrum	Red Maple	13	30	
1050		Ulmus americana	American Elm	9	30	
1051		Ulmus americana	American Elm	10	30	
1052		Acer rubrum	Red Maple	17	30	
1053		Acer rubrum	Red Maple	10	30	
1054		Populus tremuloides	Quaking Aspen	9		
1055		Fraxinus pennsylvanic	Green Ash	10		
1056		Acer rubrum	Red Maple	11	30	
1057		Acer rubrum	Red Maple	16	30	
1058	X	Acer rubrum	Red Maple	14	26	
1059		Acer negundo	Box-elder	14	26	
1060		Acer negundo	Box-elder	7	30	
1061		Salix amygdaloides	Peach-Leaf Willow	30	30	X
1062		Acer saccharinum	Silver Maple	8	30	
1063	X	Acer saccharinum	Silver Maple	12	30	
1064		Acer saccharinum	Silver Maple	7	30	
1065		Ulmus americana	American Elm	7	30	
1066	X	Ulmus americana	American Elm	10	30	
1067	X	Ulmus americana	American Elm	8	30	
1068		Salix amygdaloides	Peach-Leaf Willow	10	30	

Tag	Remov	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
1069		Salix amygdaloides	Peach-Leaf Willow	14	30	
1070		Salix amygdaloides	Peach-Leaf Willow	9	30	
1071		Salix amygdaloides	Peach-Leaf Willow	10	30	
1072		Salix amygdaloides	Peach-Leaf Willow	9	30	
1073	X	Tilia americana	American Basswood	9	30	
1074		Ulmus americana	American Elm	8	30	
1075		Ulmus americana	American Elm	8	30	
1076		Ulmus americana	American Elm	7	30	
1077		Ulmus americana	American Elm	10	30	
1078		Fraxinus pennsylvanic	Green Ash	17		
1079		Acer saccharinum	Silver Maple	28	30	X
1080		Acer negundo	Box-elder	17	30	
1081		Ulmus americana	American Elm	8	30	
1082		Ulmus americana	American Elm	8	30	
1083		Ulmus americana	American Elm	9	30	
1084		Ulmus americana	American Elm	18	30	
1085		Ulmus americana	American Elm	9		
1086		Ulmus americana	American Elm	12	30	
1087		Ulmus americana	American Elm	7	30	
1088		Ulmus americana	American Elm	9		
1089		Ulmus americana	American Elm	12	30	
1090		Ulmus americana	American Elm	10	30	
1091		Acer negundo	Box-elder	9	30	
1092		Ulmus americana	American Elm	8	30	
1093		Ulmus americana	American Elm	11	30	
1094		Acer negundo	Box-elder	7	30	
1095		Acer negundo	Box-elder	8	30	
1096		Ulmus americana	American Elm	15	30	
1097		Acer negundo	Box-elder	18	30	
1098		Acer negundo	Box-elder	14	30	
1099		Acer negundo	Box-elder	16	30	
1100		Ulmus americana	American Elm	13	30	
1101		Ulmus americana	American Elm	11	30	
1102		Acer negundo	Box-elder	16	30	
1103		Acer negundo	Box-elder	24	30	X
1104		Ulmus americana	American Elm	7	30	
1105	X	Acer negundo	Box-elder	15	26	
1106		Acer negundo	Box-elder	14		
1107		Morus alba	White Mulberry	9	30	
1108		Morus alba	White Mulberry	8	30	
1109		Acer negundo	Box-elder	21	30	
1110	X	Acer negundo	Box-elder	22	30	
1111	X	Acer negundo	Box-elder	19	30	
1112		Acer negundo	Box-elder	17	30	
1113		Acer negundo	Box-elder	15	30	
1114		Ulmus americana	American Elm	7	30	
1115		Prunus serotina	Black Cherry	18		
1116		Acer saccharum	Sugar Maple	19	30	X
1117		Acer rubrum	Red Maple	17	30	
1118		Acer rubrum	Red Maple	13	30	
1119		Acer rubrum	Red Maple	15	30	
1120		Acer rubrum	Red Maple	13	30	
1121		Acer saccharum	Sugar Maple	16	30	
1122		Acer rubrum	Red Maple	10	30	
1123		Acer rubrum	Red Maple	13	30	
1124		Acer rubrum	Red Maple	8	30	
1125		Ulmus americana	American Elm	9	30	
1126		Ulmus americana	American Elm	9	30	
1127		Ulmus americana	American Elm	8	30	
1128		Ulmus americana	American Elm	8	30	
1129		Acer rubrum	Red Maple	23	30	X
1130	X	Acer negundo	Box-elder	14	26	
1131		Prunus serotina	Black Cherry	19		
1132	X	Juglans nigra	Black Walnut	17	30	
1133		Acer rubrum	Red Maple	9	16	
1134	X	Prunus serotina	Black Cherry	10	28	
1135	X	Ulmus americana	American Elm	8	24	
1136		Acer rubrum	Red Maple	9	30	
1137		Prunus serotina	Black Cherry	14	26	
1138		Acer saccharum	Sugar Maple	11	30	
1139		Acer rubrum	Red Maple	22	30	X
1140		Acer rubrum	Red Maple	15	30	
1141		Acer rubrum	Red Maple	14	30	
1142		Acer rubrum	Red Maple	9	30	
1143		Acer rubrum	Red Maple	23	30	X
1144	X	Ulmus americana	American Elm	8		
1145	X	Populus tremuloides	Quaking Aspen	13		
1146	X	Populus tremuloides	Quaking Aspen	9		
1147	X	Acer rubrum	Red Maple	9	30	
1148	X	Acer rubrum	Red Maple	8	30	
1149	X	Populus tremuloides	Quaking Aspen	14	30	
1150	X	Acer rubrum	Red Maple	8		
1151	X	Acer rubrum	Red Maple	10	30	
1152	X	Acer rubrum	Red Maple	19	30	X
1153	X	Prunus serotina	Black Cherry	12		
1154	X	Acer rubrum	Red Maple	10	30	
1155	X	Acer rubrum	Red Maple	11	30	
1156	X	Acer rubrum	Red Maple	8	30	
1157		Acer rubrum	Red Maple	8	30	
1158		Ulmus americana	American Elm	8	21	
1159		Acer rubrum	Red Maple	12	30	
1160	X	Acer rubrum	Red Maple	15	30	
1161	X	Acer rubrum	Red Maple	7	30	
1162	X	Populus tremuloides	Quaking Aspen	8	30	
1163	X	Acer rubrum	Red Maple	19	30	X
1164	X	Acer rubrum	Red Maple	12	30	
1165	X	Ulmus americana	American Elm	10	30	
1166	X	Acer rubrum	Red Maple	10	30	
1167	X	Acer rubrum	Red Maple	10	30	
1168	X	Prunus serotina	Black Cherry	10	30	

PROPRIETOR

MR. STUART MICHELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

DATE: 02-25-2025
DRAWN: EMP
ENG: EMP
SURV: AEC
CAD: ADB
CHKD: SGS 25 TREES
VERTICAL D.C. & C.S.
SCALE: ####

JOB NO. 2023.02

STATUS:

Michael L. Priest & Associates, Inc.
40655 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
fax: (734) 459-2585

ENGINEERS . SURVEYORS
MLP
AND ASSOCIATES, INC.

TREE LIST

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON HILLS, , OAKLAND COUNTY, MICHIGAN

SHEET
TR04

Tree	Remove	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
1169	X	Acer rubrum	Red Maple	9	14	
1170	X	Prunus serotina	Black Cherry	13	30	
1171	X	Acer rubrum	Red Maple	10	30	
1172		Prunus serotina	Black Cherry	10	30	
1173		Acer rubrum	Red Maple	8	30	
1174		Acer rubrum	Red Maple	7	30	
1175	X	Acer rubrum	Red Maple	10	30	
1176	X	Ulmus americana	American Elm	9	30	
1177		Acer rubrum	Red Maple	11	30	
1178		Acer rubrum	Red Maple	10	30	
1179		Acer rubrum	Red Maple	9	30	
1180		Acer rubrum	Red Maple	13	30	
1181		Acer rubrum	Red Maple	11	30	
1182		Acer rubrum	Red Maple	9	30	
1183		Prunus serotina	Black Cherry	12		
1184		Acer rubrum	Red Maple	9	30	
1185		Prunus serotina	Black Cherry	10	30	
1186		Acer rubrum	Red Maple	8	30	
1187		Prunus serotina	Black Cherry	9	30	
1188		Liriodendron tulipifera	Tulip Tree	24	30	X
1189		Acer rubrum	Red Maple	20	16	X
1190		Acer rubrum	Red Maple	10	30	
1191		Acer rubrum	Red Maple	10	30	
1192		Acer rubrum	Red Maple	13	30	
1193		Acer rubrum	Red Maple	9	30	
1194		Acer rubrum	Red Maple	8	30	
1195		Acer rubrum	Red Maple	10	30	
1196		Acer rubrum	Red Maple	16	30	
1197		Prunus serotina	Black Cherry	17	30	
1198		Acer rubrum	Red Maple	7	30	
1199		Acer rubrum	Red Maple	8	30	
1200		Acer rubrum	Red Maple	12	30	
1201		Acer rubrum	Red Maple	19	30	X
1202	X	Prunus serotina	Black Cherry	14		
1203	X	Acer rubrum	Red Maple	17	30	
1204	X	Acer negundo	Box-elder	17	26	
1205	X	Prunus serotina	Black Cherry	12	30	
1206		Prunus serotina	Black Cherry	14		
1207	X	Prunus serotina	Black Cherry	16	16	
1208	X	Juglans nigra	Black Walnut	8	30	
1209	X	Prunus serotina	Black Cherry	14		
1210	X	Prunus serotina	Black Cherry	16	16	
1211	X	Juglans nigra	Black Walnut	7	30	
1212		Prunus serotina	Black Cherry	10	10	
1213		Prunus serotina	Black Cherry	11	10	
1214		Acer rubrum	Red Maple	16	30	
1215		Acer rubrum	Red Maple	15	16	
1216		Acer rubrum	Red Maple	7	30	
1217		Prunus serotina	Black Cherry	9	30	
1218		Acer saccharum	Sugar Maple	18	30	
1219		Prunus serotina	Black Cherry	8	30	
1220		Prunus serotina	Black Cherry	13	30	
1221		Prunus serotina	Black Cherry	12	30	
1222	X	Acer rubrum	Red Maple	9	30	
1223		Acer negundo	Box-elder	14	26	
1224		Acer rubrum	Red Maple	9	30	
1225		Acer negundo	Box-elder	10	26	
1226	X	Acer rubrum	Red Maple	10	30	
1227	X	Acer rubrum	Red Maple	19	30	X
1228	X	Acer rubrum	Red Maple	14	30	
1229	X	Prunus serotina	Black Cherry	12		
1230	X	Acer rubrum	Red Maple	13	30	
1231		Ulmus americana	American Elm	12	30	
1232		Ulmus americana	American Elm	16	30	
1233		Acer rubrum	Red Maple	10	30	
1234		Acer rubrum	Red Maple	10	30	
1235		Prunus serotina	Black Cherry	8		
1236		Prunus serotina	Black Cherry	11	30	
1237		Prunus serotina	Black Cherry	12	30	
1238		Acer saccharum	Sugar Maple	15	30	
1239		Acer rubrum	Red Maple	16	30	
1240		Acer rubrum	Red Maple	10	30	
1241	X	Prunus serotina	Black Cherry	9	30	
1242	X	Acer rubrum	Red Maple	9	30	
1243	X	Prunus serotina	Black Cherry	11	30	
1244	X	Prunus serotina	Black Cherry	8		
1245	X	Acer rubrum	Red Maple	12	30	
1246	X	Acer rubrum	Red Maple	12	30	
1247	X	Prunus serotina	Black Cherry	12	30	
1248	X	Populus grandidentata	Big-Tooth Aspen	14	30	
1249	X	Populus tremuloides	Quaking Aspen	12	30	
1250	X	Populus tremuloides	Quaking Aspen	12	30	
1251	X	Prunus serotina	Black Cherry	11	30	
1252	X	Populus grandidentata	Big-Tooth Aspen	14	30	
1253	X	Populus grandidentata	Big-Tooth Aspen	12	30	
1254	X	Acer rubrum	Red Maple	17	30	
1255	X	Populus grandidentata	Big-Tooth Aspen	12		
1256		Acer rubrum	Red Maple	23	30	X
1257		Acer rubrum	Red Maple	13	30	
1258		Prunus serotina	Black Cherry	10	30	
1259		Acer rubrum	Red Maple	14	30	
1260		Acer rubrum	Red Maple	8	30	
1261		Acer rubrum	Red Maple	8	30	
1262		Acer rubrum	Red Maple	16	30	
1263		Ulmus americana	American Elm	18	13	
1264		Acer rubrum	Red Maple	7	30	
1265		Prunus serotina	Black Cherry	7	30	
1266		Prunus serotina	Black Cherry	13	30	
1267		Acer rubrum	Red Maple	7	30	
1268		Acer rubrum	Red Maple	10	30	
1269		Acer rubrum	Red Maple	14	30	
1270		Acer rubrum	Red Maple	13	30	
1271	X	Acer rubrum	Red Maple	14	30	
1272	X	Acer negundo	Box-elder	14	30	
1273	X	Acer negundo	Box-elder	8	21	
1274		Acer negundo	Box-elder	11	21	
1275		Ulmus americana	American Elm	15		
1276		Acer negundo	Box-elder	8	30	
1277	X	Ulmus americana	American Elm	29	30	X
1278	X	Prunus serotina	Black Cherry	9	24	
1279	X	Prunus serotina	Black Cherry	12		
1280	X	Juglans nigra	Black Walnut	19	30	
1281		Ulmus americana	American Elm	10	30	
1282		Ulmus americana	American Elm	17	30	
1283		Juglans nigra	Black Walnut	19	30	
1284		Ulmus americana	American Elm	8	30	
1285		Acer rubrum	Red Maple	8	30	
1286		Acer rubrum	Red Maple	20	30	X
1287		Acer rubrum	Red Maple	18	30	X
1288		Acer rubrum	Red Maple	18	30	X
1289	X	Prunus serotina	Black Cherry	10	30	
1290	X	Acer rubrum	Red Maple	11	30	
1291	X	Acer rubrum	Red Maple	16	30	
1292		Ulmus americana	American Elm	8	30	
1293		Acer rubrum	Red Maple	27	30	X
1294	X	Ulmus americana	American Elm	8	30	
1295	X	Acer rubrum	Red Maple	14	30	
1296	X	Acer rubrum	Red Maple	9	30	
1297	X	Acer rubrum	Red Maple	8	30	
1298	X	Acer rubrum	Red Maple	13	30	
1299	X	Acer rubrum	Red Maple	9	30	
1300	X	Acer rubrum	Red Maple	17	30	
1301		Ulmus americana	American Elm	10		
1302		Acer rubrum	Red Maple	15	30	
1303		Acer rubrum	Red Maple	14	30	
1304		Populus deltoides	Eastern Cottonwood	15	30	
1305		Prunus serotina	Black Cherry	11	30	
1306		Populus deltoides	Eastern Cottonwood	14	30	
1307		Acer rubrum	Red Maple	9	30	
1308		Acer rubrum	Red Maple	14	16	
1309		Acer rubrum	Red Maple	11	30	
1310		Acer rubrum	Red Maple	20	30	X
1311		Acer rubrum	Red Maple	18	30	
1312		Acer rubrum	Red Maple	7	30	
1313		Prunus serotina	Black Cherry	12	30	
1314		Acer rubrum	Red Maple	11	30	
1315		Acer rubrum	Red Maple	12	30	
1316		Ulmus americana	American Elm	6	13	
1317		Fagus grandifolia	American Beech	14	30	
1318		Prunus serotina	Black Cherry	14	30	
1319		Prunus serotina	Black Cherry	23	30	X
1320		Acer rubrum	Red Maple	13	30	
1321		Prunus serotina	Black Cherry	10	30	
1322	X	Acer rubrum	Red Maple	34	15	X
1323		Prunus serotina	Black Cherry	16	30	
1324	X	Acer rubrum	Red Maple	10	30	
1325	X	Ulmus americana	American Elm	8	13	
1326	X	Acer rubrum	Red Maple	8	30	
1327	X	Prunus serotina	Black Cherry	15	30	
1328	X	Acer rubrum	Red Maple	11	30	
1329	X	Acer rubrum	Red Maple	11	30	
1330	X	Acer saccharum	Sugar Maple	7	30	
1331		Acer saccharum	Sugar Maple	10	30	
1332	X	Ulmus americana	American Elm	19	30	
1333		Acer rubrum	Red Maple	13	30	
1334		Acer rubrum	Red Maple	18	30	
1335	X	Prunus serotina	Black Cherry	13	30	
1336		Acer rubrum	Red Maple	10	30	
1337		Fagus grandifolia	American Beech	13	30	
1338		Prunus serotina	Black Cherry	8	30	
1339		Acer rubrum	Red Maple	23	20	X
1340		Acer rubrum	Red Maple	14	30	
1341		Ulmus americana	American Elm	8		
1342		Acer rubrum	Red Maple	9	30	
1343		Acer rubrum	Red Maple	8	30	
1344		Acer rubrum	Red Maple	13	30	
1345		Acer rubrum	Red Maple	16	30	
1346		Acer rubrum	Red Maple	15	30	
1347		Acer rubrum	Red Maple	14	30	
1348		Ulmus americana	American Elm	9		
1349		Acer rubrum	Red Maple	9	30	
1350	X	Prunus serotina	Black Cherry	20	15	X
1351	X	Acer rubrum	Red Maple	11	30	
1352		Prunus serotina	Black Cherry	26	30	X
1353		Acer rubrum	Red Maple	8		
1354	X	Acer rubrum	Red Maple	8	30	
1355	X	Acer saccharum	Sugar Maple	7	30	
1356	X	Acer rubrum	Red Maple	8	30	
1357	X	Ulmus americana	American Elm	13		
1358	X	Ulmus americana	American Elm	20	7	
1359	X	Prunus serotina	Black Cherry	8	30	
1360		Acer rubrum	Red Maple	10	30	
1361		Acer rubrum	Red Maple	16	30	
1362		Acer rubrum	Red Maple	11	30	
1363		Acer rubrum	Red Maple	9	30	
1364		Acer rubrum	Red Maple	8	30	
1365		Acer rubrum	Red Maple	8		
1366		Acer rubrum	Red Maple	7	30	
1367		Acer rubrum	Red Maple	25	30	X
1368		Acer rubrum	Red Maple	10	30	
1369		Acer rubrum	Red Maple	7	20	
1370		Acer rubrum	Red Maple	12	30	
1371		Acer rubrum	Red Maple	11	30	
1372		Acer rubrum	Red Maple	10	30	
1373		Acer rubrum	Red Maple	11	30	
1374		Acer rubrum	Red Maple	14		
1375		Acer rubrum	Red Maple	12	30	
1376		Acer rubrum	Red Maple	24	30	X
1377	X	Liriodendron tulipifera	Tulip Tree	26	16	X
1378	X	Acer rubrum	Red Maple	12	30	
1379	X	Acer rubrum	Red Maple	11	30	
1380	X	Acer rubrum	Red Maple	13	30	
1381	X	Ulmus americana	American Elm	12	30	
1382	X	Prunus serotina	Black Cherry	7		
1383	X	Acer rubrum	Red Maple	8	30	
1384	X	Liriodendron tulipifera	Tulip Tree	19	30	X
1385	X	Acer rubrum	Red Maple	11	30	
1386	X	Ulmus americana	American Elm	11	30	
1387		Acer rubrum	Red Maple	12	30	
1388		Acer rubrum	Red Maple	14	30	
1389		Acer rubrum	Red Maple	18	30	
1390		Acer rubrum	Red Maple	11	30	
1391	X	Acer rubrum	Red Maple	19	30	X
1392	X	Acer rubrum	Red Maple	8	30	
1393	X	Acer rubrum	Red Maple	7	30	
1394	X	Acer rubrum	Red Maple	11	30	
1395	X	Prunus serotina	Black Cherry	11	30	
1396	X	Acer rubrum	Red Maple	17	30	
1397	X	Acer rubrum	Red Maple	12	30	
1398	X	Acer rubrum	Red Maple	8	30	
1399		Acer rubrum	Red Maple	15	30	
1400		Acer rubrum	Red Maple	10	30	
1401		Acer rubrum	Red Maple	12	30	
1402		Ulmus americana	American Elm	12		
1403		Ulmus americana	American Elm	15	30	
1404		Acer rubrum	Red Maple	41	30	X
1405		Acer rubrum	Red Maple	10	26	
1406		Ulmus americana	American Elm	10	30	
1407		Juglans nigra	Black Walnut	15	30	
1408		Acer rubrum	Red Maple	9	30	
1409		Acer rubrum	Red Maple	10	30	
1410		Acer rubrum	Red Maple	8	30	
1411		Acer rubrum	Red Maple	33	30	X
1412		Acer rubrum	Red Maple	11	30	
1413		Acer rubrum	Red Maple	16	30	
1414		Acer rubrum	Red Maple	14	30	
1415		Acer rubrum	Red Maple	7	30	
1416		Acer rubrum	Red Maple	7	18	
1417		Acer rubrum	Red Maple	8	30	
1418		Juglans nigra	Black Walnut	14	30	
1419		Acer rubrum	Red Maple	15	30	
1420		Acer rubrum	Red Maple	10	15	
1421		Acer rubrum	Red Maple	30	30	X
1422		Acer rubrum	Red Maple	34	30	X
1423	X	Ulmus americana	American Elm	13	30	
1425	X	Acer negundo	Box-elder	9	26	
1426	X	Acer negundo	Box-elder	7	26	
1427		Juglans nigra	Black Walnut	9	30	
1428	X	Carya ovata	Shagbark Hickory	10	30	
1429	X	Ulmus americana	American Elm	13	30	
1430	X	Ulmus americana	American Elm	10		
1431	X	Acer rubrum	Red Maple	9	30	
1432		Acer rubrum	Red Maple	12	30	
1433		Acer rubrum	Red Maple	11	30	
1434		Ulmus americana	American Elm	10	30	
1435		Acer rubrum	Red Maple	11	30	
1436		Acer rubrum	Red Maple	7	30	
1437		Acer rubrum	Red Maple	10	30	
1438		Acer rubrum	Red Maple	20	30	X
1439	X	Acer rubrum	Red Maple	12	30	
1440	X	Acer rubrum	Red Maple	13	30	
1441	X	Acer rubrum	Red Maple	17	30	
1442	X	Acer rubrum	Red Maple	31	30	X
1443	X	Acer rubrum	Red Maple	14	30	
1444	X	Acer rubrum	Red Maple	12	30	
1445		Ulmus americana	American Elm	10		
1446		Populus deltoides	Eastern Cottonwood	11		
1447		Acer rubrum	Red Maple	9	30	
1448		Acer rubrum	Red Maple	7	30	
1449		Acer rubrum	Red Maple	35	30	X
1450		Ulmus americana	American Elm	9		
1451		Ulmus americana	American Elm	7	30	
1452		Salix amygdaloides	Peach-Leaf Willow	41	30	X
1453	X	Ulmus americana	American Elm	10	30	
1454	X	Juglans nigra	Black Walnut	8.9	30	
1455	X	Juglans nigra	Black Walnut	13.6	9	
1456	X	Acer negundo	Box-elder	14.8	30	
1457	X	Ulmus americana	American Elm	8	30	
1458	X	Carya ovata	Shagbark Hickory	10.9	30	
1459	X	Carya ovata	Shagbark Hickory	9	30	
1460	X	Ulmus americana	American Elm	13.5	30	
1461		Carya ovata	Shagbark Hickory	9.3	30	
1462		Ulmus americana	American Elm	8.1	30	
1463		Ulmus americana	American Elm	7.5	30	
1464		Salix amygdaloides	Peach-Leaf Willow	39.1	30	X
1465		Salix amygdaloides	Peach-Leaf Willow	36.3	30	X
1466		Ulmus americana	American Elm	7.7	30	
1467		Ulmus americana	American Elm	9.5		
1468		Acer rubrum	Red Maple	22.1	30	X
1469		Acer rubrum	Red Maple	22.5	30	X
1470		Acer rubrum	Red Maple	8.2	30	
1471		Ulmus americana	American Elm	7.2	30	
1472		Acer rubrum	Red Maple	10.5	30	
1473		Acer rubrum	Red Maple	10.1	30	
1474	X	Acer rubrum	Red Maple	16.9	30	
1475	X	Acer rubrum	Red Maple	9.8	30	
1476	X	Ulmus americana	American Elm	12	30	
1477	X	Acer rubrum	Red Maple	21.3	30	X
1478	X	Acer rubrum	Red Maple	9.2	30	
1479	X	Acer rubrum	Red Maple	7	30	
1480	X	Acer rubrum	Red Maple	12.1	30	
1481	X	Ulmus americana	American Elm	9		
1482	X	Ulmus americana	American Elm	8.1	30	
1483	X	Rhamnus cathartica	European Buckthorn	7.1	30	
1484		Acer rubrum	Red Maple	13.9	30	
1485		Carya ovata	Shagbark Hickory	7.9	30	
1486		Tilia americana	American Basswood	16.1	30	
1487		Acer saccharum	Sugar Maple	6.5	30	
1488		Acer rubrum	Red Maple	13.2	30	
1489		Acer rubrum	Red Maple	9.6	30	
1490		Acer rubrum	Red Maple	9.8	30	
1491	X	Acer saccharum	Sugar Maple	11.1	30	
1492	X	Carya ovata	Shagbark Hickory	8.2	30	
1493	X	Carya ovata	Shagbark Hickory	7.1	30	
1494	X	Populus deltoides	Eastern Cottonwood	58.5	30	X
1495	X	Acer rubrum	Red Maple	17.4	30	
1496	X	Ulmus americana	American Elm	15.5	30	
1497		Acer negundo	Box-elder	11.3	30	
1498		Acer platanoides	Norway Maple	17.2	30	
1499		Prunus serotina	Black Cherry	12.9	26	
1500	X	Ulmus americana	American Elm	11.6	30	
1501	X	Ulmus americana	American Elm	9.3	30	
1503	X	Prunus serotina	Black Cherry	13		
1504	X	Acer rubrum	Red Maple	11	30	
1505		Acer rubrum	Red Maple	10.3	30	
1506		Ulmus americana	American Elm	10.5	30	
1507		Prunus serotina	Black Cherry	11.9	28	
1508	X	Ulmus americana	American Elm	7	30	
1509		Acer rubrum	Red Maple	7.5	30	
1510		Acer rubrum	Red Maple	7.6	30	
1511		Acer rubrum	Red Maple	11.1	30	
1512		Acer saccharum	Sugar Maple	6.5	30	
1513		Carya ovata	Shagbark Hickory	9.5	30	
1514		Acer rubrum	Red Maple	16.7	30	
1515		Acer rubrum	Red Maple	25.5	30	X
1516		Acer rubrum	Red Maple	35.9	30	X
1517		Acer rubrum	Red Maple	10.8	30	
1518		Acer rubrum	Red Maple	7	30	
1519		Acer rubrum	Red Maple	6.7	30	
1520		Acer rubrum	Red Maple	9.9	30	
1521		Acer rubrum	Red Maple	8.8	30	
1522		Prunus serotina	Black Cherry	7.6	30	
1523		Prunus serotina	Black Cherry	12.4	30	
1524		Prunus serotina	Black Cherry	17.8	30	
1525		Acer rubrum	Red Maple	8.9	30	
1526		Acer rubrum	Red Maple	11.8	30	
1527		Acer rubrum	Red Maple	9.3	30	
1528		Acer rubrum	Red Maple	10.3	30	
1529		Acer rubrum	Red Maple	11.3	30	
1530		Acer rubrum	Red Maple	14.8	30	
1531		Quercus rubra	Northern Red Oak	12.7	30	
1532	X	Populus deltoides	Eastern Cottonwood	31.5	30	X
1533	X	Acer rubrum	Red Maple	17.7	30	
1534	X	Acer rubrum	Red Maple	9.5	30	
1535	X	Acer rubrum	Red Maple	12.8	30	
1536	X	Acer rubrum	Red Maple	13.4	30	
1537	X	Acer rubrum	Red Maple	14.5	30	
1538	X	Acer rubrum	Red Maple	11.6	30	
1539	X	Acer rubrum	Red Maple	9	30	
1540	X	Acer rubrum	Red Maple	9.8	30	
1541	X	Acer rubrum	Red Maple	13	30	
1542	X	Prunus serotina	Black Cherry	8.5	30	
1543	X	Acer saccharum	Sugar Maple	8.2	30	
1544	X	Prunus serotina	Black Cherry	14	30	
1545	X	Acer rubrum	Red Maple	11.1	30	
1546		Prunus serotina	Black Cherry	6.8	30	
1547		Ulmus americana	American Elm	13.8	30	
1548		Prunus serotina	Black Cherry	13.9	30	
1549		Prunus serotina	Black Cherry	9	30	
1550	X	Acer rubrum	Red Maple	10.5	30	
1551	X	Acer rubrum	Red Maple	8.5	30	
1552	X	Acer rubrum	Red Maple	8	30	
1553	X	Liriodendron tulipifera	Tulip Tree	15.5	30	
1554	X	Acer rubrum	Red Maple	12.4	30	
1555	X	Prunus serotina	Black Cherry	17.5	30	
1556	X	Prunus serotina	Black Cherry	13.3	30	
1557	X	Acer rubrum	Red Maple	33.7	30	X
1558	X	Acer rubrum	Red Maple	11.4	30	
1559	X	Acer rubrum	Red Maple	13.3	30	
1560		Prunus serotina	Black Cherry	8.4	30	
1561		Prunus serotina	Black Cherry	10.7	30	
1562		Acer rubrum	Red Maple	9.6	30	
1563		Acer rubrum	Red Maple	9.2	30	
1564		Acer rubrum	Red Maple	8.6	30	
1565		Acer rubrum	Red Maple	7.4	30	
1566		Acer rubrum	Red Maple	7.4	30	
1567		Prunus serotina	Black Cherry	7.2	30	
1568		Acer saccharum	Sugar Maple	13.3	30	

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ENGINEERS, SURVEYORS
MLP
AND ASSOCIATES, INC.

STATUS:

JOB NO. 2023.02

DATE: 02-25-2025
PM: EMP
ENG: EMP
SURV: AEC
CAD: AGB
CHKD: SOD - TREES
VDATUM: U.S.C. & G.S.
SCALE: ####

PROPRIETOR
MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

TREE LIST

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON HILLS, , OAKLAND COUNTY, MICHIGAN

SHEET
TR05

Tree #	Remove	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
1569		Ulmus americana	American Elm	8.6	30	
1570		Prunus serotina	Black Cherry	11.6	28	
1571		Acer rubrum	Red Maple	33.3	30	X
1572		Prunus serotina	Black Cherry	13.8	30	
1573		Acer rubrum	Red Maple	7.4	30	
1574	X	Fagus grandifolia	American Beech	7.7	30	
1575		Ulmus americana	American Elm	9.1	11	
1576		Prunus serotina	Black Cherry	14	30	
1578	X	Sassafras albidum	Sassafras	10.5	30	
1579	X	Sassafras albidum	Sassafras	11.8	30	
1580	X	Prunus serotina	Black Cherry	6.8		
1581	X	Acer rubrum	Red Maple	16.5	30	
1582	X	Fagus grandifolia	American Beech	6.5	30	
1583	X	Acer rubrum	Red Maple	18.9	30	X
1584	X	Prunus serotina	Black Cherry	11.4	30	
1585	X	Prunus serotina	Black Cherry	14.7	30	
1586		Fagus grandifolia	American Beech	11.8	30	
1587		Fagus grandifolia	American Beech	7.9	30	
1588		Acer rubrum	Red Maple	15.4	30	
1589	X	Acer rubrum	Red Maple	8.6	30	
1590		Populus deltoides	Eastern Cottonwood	25.5	30	X
1591		Prunus serotina	Black Cherry	10.9	30	
1592	X	Acer rubrum	Red Maple	22.1	30	X
1593	X	Acer rubrum	Red Maple	35.3	30	X
1594	X	Acer rubrum	Red Maple	8	30	
1595	X	Acer rubrum	Red Maple	14.8	30	
1596	X	Prunus serotina	Black Cherry	10.2	30	
1597	X	Acer rubrum	Red Maple	8.6	30	
1598	X	Acer saccharum	Sugar Maple	16	30	
1599	X	Acer rubrum	Red Maple	18.2	30	X
1600	X	Acer rubrum	Red Maple	7.9	30	
1601	X	Prunus serotina	Black Cherry	11.3	30	
1602	X	Liriodendron tulipifera	Tulip Tree	16.9	30	
1603	X	Acer rubrum	Red Maple	11.8	30	
1604	X	Prunus serotina	Black Cherry	12.8	30	
1605	X	Prunus serotina	Black Cherry	23.9	30	X
1606	X	Acer rubrum	Red Maple	7	30	
1607	X	Acer saccharum	Sugar Maple	7	30	
1608	X	Prunus serotina	Black Cherry	11	30	
1609	X	Prunus serotina	Black Cherry	11.5	30	
1610	X	Prunus serotina	Black Cherry	12.2	30	
1611	X	Acer rubrum	Red Maple	27.9	30	X
1612	X	Prunus serotina	Black Cherry	8.4	30	
1613	X	Acer rubrum	Red Maple	15	30	
1614	X	Prunus serotina	Black Cherry	14.8	30	
1615	X	Acer rubrum	Red Maple	18.4	30	X
1616	X	Acer saccharum	Sugar Maple	9.4	30	
1617		Prunus serotina	Black Cherry	10.1	30	
1618		Acer saccharum	Sugar Maple	10.8	30	
1619		Acer saccharum	Sugar Maple	17	30	
1620		Acer rubrum	Red Maple	10.3	30	
1621		Prunus serotina	Black Cherry	17.3	30	
1622		Acer rubrum	Red Maple	19.5	30	X
1623		Acer rubrum	Red Maple	12.8	30	
1624		Acer rubrum	Red Maple	7.4	30	
1625	X	Prunus serotina	Black Cherry	16.5	30	
1626	X	Prunus serotina	Black Cherry	17.3	30	
1627	X	Acer rubrum	Red Maple	17.3	30	
1628	X	Acer rubrum	Red Maple	28.8	30	X
1629	X	Acer rubrum	Red Maple	34.5	30	X
1630	X	Acer rubrum	Red Maple	28.4	30	X
1631	X	Acer saccharum	Sugar Maple	18	30	X
1632	X	Prunus serotina	Black Cherry	13	30	
1633	X	Acer saccharum	Sugar Maple	11.5	30	
1634	X	Prunus serotina	Black Cherry	13.3	30	
1635	X	Acer rubrum	Red Maple	17	30	
1636		Prunus serotina	Black Cherry	10	30	
1637	X	Prunus serotina	Black Cherry	12	30	
1638	X	Acer rubrum	Red Maple	10.4	30	
1639	X	Acer saccharinum	Silver Maple	22.8	30	X
1640	X	Ulmus americana	American Elm	7.6	30	
1641		Acer saccharum	Sugar Maple	8.1		
1642	X	Acer saccharum	Sugar Maple	7.2	30	
1643		Acer rubrum	Red Maple	9.9	30	
1644	X	Liriodendron tulipifera	Tulip Tree	13.9	30	
1645	X	Acer rubrum	Red Maple	8.2	30	
1646	X	Acer rubrum	Red Maple	19.2	30	X
1647	X	Acer rubrum	Red Maple	15.3	30	
1648	X	Ulmus americana	American Elm	7.3	30	
1649	X	Acer rubrum	Red Maple	30.3	30	X
1650	X	Acer saccharum	Sugar Maple	12.1	30	
1651	X	Populus deltoides	Eastern Cottonwood	20	30	
1652	X	Populus deltoides	Eastern Cottonwood	15.8	30	
1653	X	Populus deltoides	Eastern Cottonwood	8.8	30	
1654	X	Populus deltoides	Eastern Cottonwood	8.6	30	
1655	X	Malus pumila	Apple Tree	12.3	20	
1656	X	Populus deltoides	Eastern Cottonwood	15.3	30	
1657	X	Acer rubrum	Red Maple	16.9	30	
1658	X	Populus deltoides	Eastern Cottonwood	9.4	30	
1659	X	Malus pumila	Apple Tree	6.8	30	
1660	X	Populus deltoides	Eastern Cottonwood	23.9	30	
1661	X	Acer rubrum	Red Maple	8.1	30	
1662	X	Ulmus americana	American Elm	10.2	30	
1663		Acer rubrum	Red Maple	11.1	30	
1664		Acer saccharum	Sugar Maple	8.8	30	
1665		Acer saccharum	Sugar Maple	10.1	30	
1666		Acer rubrum	Red Maple	8.7	30	
1667		Acer rubrum	Red Maple	9.7	30	
1668		Acer rubrum	Red Maple	9	30	
1669		Acer rubrum	Red Maple	9.2	30	

Tree #	Remove	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
1670		Tilia americana	American Basswood	8.6	30	
1671		Carya ovata	Shagbark Hickory	11.2	30	
1672		Populus deltoides	Eastern Cottonwood	17.3	30	
1673		Populus deltoides	Eastern Cottonwood	12.7	12	
1674		Populus deltoides	Eastern Cottonwood	18	30	
1675		Populus deltoides	Eastern Cottonwood	7	9	
1676		Populus deltoides	Eastern Cottonwood	8.2	30	
1677		Ulmus americana	American Elm	11.3	30	
1678		Carya ovata	Shagbark Hickory	9.2	30	
1679		Populus deltoides	Eastern Cottonwood	17.2	30	
1685		Carya ovata	Shagbark Hickory	7.1	30	
1686		Acer saccharum	Sugar Maple	9	30	
1687		Carya ovata	Shagbark Hickory	12.2	30	
1688	X	Ulmus americana	American Elm	11	30	
1689	X	Carya ovata	Shagbark Hickory	9.5	30	
1690		Acer saccharum	Sugar Maple	11.8	30	
1691		Carya ovata	Shagbark Hickory	10.3	30	
1692		Carya ovata	Shagbark Hickory	12.6	30	
1693		Carya ovata	Shagbark Hickory	13.6	30	
1694		Ulmus americana	American Elm	8.6	30	
1695		Ulmus americana	American Elm	7.5	30	
1696		Carya ovata	Shagbark Hickory	6.6	30	
1697		Carya ovata	Shagbark Hickory	8.8	30	
1698		Tilia americana	American Basswood	10	30	
1699		Acer saccharinum	Silver Maple	17.2	30	
1700		Acer saccharinum	Silver Maple	18.3	30	X
1701	X	Acer saccharinum	Silver Maple	8	30	
1702	X	Acer saccharinum	Silver Maple	9.4	23	
1703	X	Acer saccharinum	Silver Maple	33.5	30	X
1704		Acer saccharum	Sugar Maple	7	30	
1705	X	Prunus serotina	Black Cherry	10.7	30	
1706	X	Acer saccharinum	Silver Maple	17.3	30	
1707		Acer saccharinum	Silver Maple	17.5	30	
1708		Acer saccharum	Sugar Maple	15.6	30	
1709		Carya ovata	Shagbark Hickory	8.8	30	
1710		Carya ovata	Shagbark Hickory	14.3	30	
1711		Carya ovata	Shagbark Hickory	7.4	30	
1712		Ulmus americana	American Elm	12	30	
1713		Carya ovata	Shagbark Hickory	8.2	30	
1714		Quercus macrocarpa	Bur Oak	15.1	30	
1715		Acer saccharum	Sugar Maple	6.7	30	
1716		Carya ovata	Shagbark Hickory	27	30	X
1717		Acer saccharum	Sugar Maple	9.8	30	
1718		Acer saccharum	Sugar Maple	9.6	30	
1719		Acer saccharum	Sugar Maple	7.2	30	
1720		Carya ovata	Shagbark Hickory	7.3	30	
1721		Acer saccharum	Sugar Maple	7.6	30	
1722		Tilia americana	American Basswood	14.1	30	
1723		Acer saccharum	Sugar Maple	10.8	30	
1724		Carya ovata	Shagbark Hickory	10.3	30	
1725		Acer saccharum	Sugar Maple	12.4	30	
1726	X	Carya ovata	Shagbark Hickory	13.7	30	
1727	X	Acer saccharum	Sugar Maple	7.1	30	
1728	X	Acer saccharum	Sugar Maple	7.6	30	
1729	X	Acer saccharum	Sugar Maple	7.9	30	
1730		Acer rubrum	Red Maple	15.7	30	
1731	X	Prunus serotina	Black Cherry	18.3	30	X
1732		Acer saccharum	Sugar Maple	19	22	X
1733		Prunus serotina	Black Cherry	6.9	24	
1734		Carya ovata	Shagbark Hickory	8.8	30	
1735		Acer saccharinum	Silver Maple	10.3	30	
1736		Populus deltoides	Eastern Cottonwood	27	30	X
1737		Acer saccharum	Sugar Maple	7	23	
1738		Acer saccharum	Sugar Maple	19	30	X
1739	X	Acer rubrum	Red Maple	19	30	X
1740	X	Acer rubrum	Red Maple	13	30	
1741		Prunus serotina	Black Cherry	18	14	
1742		Fraxinus pennsylvanica	Green Ash	18		
1743		Acer saccharum	Sugar Maple	10	30	
1744		Acer saccharinum	Silver Maple	22	30	X
1745	X	Acer saccharinum	Silver Maple	8	30	
1746		Ulmus americana	American Elm	8	30	
1747		Populus deltoides	Eastern Cottonwood	24	30	
1748		Populus deltoides	Eastern Cottonwood	12	30	
1749		Populus deltoides	Eastern Cottonwood	16	30	
1750		Populus deltoides	Eastern Cottonwood	8	30	
1751		Acer rubrum	Red Maple	8	30	
1754		Populus deltoides	Eastern Cottonwood	15	30	
1755		Populus deltoides	Eastern Cottonwood	14	30	
1756		Populus deltoides	Eastern Cottonwood	10	30	
1757		Populus deltoides	Eastern Cottonwood	13	30	
1758		Populus deltoides	Eastern Cottonwood	8	30	
1759		Populus deltoides	Eastern Cottonwood	8	30	
1760		Populus deltoides	Eastern Cottonwood	15	30	
1761		Populus deltoides	Eastern Cottonwood	16	30	
1762		Rhamnus cathartica	European Buckthorn	9	30	
1763		Acer rubrum	Red Maple	9	30	
1764		Populus deltoides	Eastern Cottonwood	8	30	
1765		Populus deltoides	Eastern Cottonwood	16	30	
1766		Populus deltoides	Eastern Cottonwood	7	30	
1767		Populus deltoides	Eastern Cottonwood	8	30	
1768		Populus deltoides	Eastern Cottonwood	15	30	
1769		Populus deltoides	Eastern Cottonwood	13	30	
1770		Fraxinus pennsylvanica	Green Ash	7	6	
1771		Salix amygdaloides	Peach-Leaf Willow	11	26	
1772		Acer negundo	Box-elder	7	28	
1773		Salix amygdaloides	Peach-Leaf Willow	9	30	
1774		Salix amygdaloides	Peach-Leaf Willow	14	30	
1775	X	Acer saccharinum	Silver Maple	22	30	X

Tree #	Remove	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
1776	X	Populus deltoides	Eastern Cottonwood	31	30	X
1777	X	Populus deltoides	Eastern Cottonwood	27	30	X
1778	X	Acer negundo	Box-elder	9	30	
1779	X	Salix amygdaloides	Peach-Leaf Willow	19	30	
1780	X	Salix amygdaloides	Peach-Leaf Willow	13	30	
1781	X	Salix amygdaloides	Peach-Leaf Willow	14	30	
1782	X	Acer saccharinum	Silver Maple	10	30	
1783	X	Robinia pseudoacacia	Black Locust	9	30	
1784	X	Acer negundo	Box-elder	7	30	
1785	X	Robinia pseudoacacia	Black Locust	19	30	
1786		Acer negundo	Box-elder	8	30	
1787		Salix amygdaloides	Peach-Leaf Willow	19	30	
1788		Ulmus pumila	Siberian Elm	8	30	
1789		Acer negundo	Box-elder	7	30	
1790		Salix amygdaloides	Peach-Leaf Willow	19	30	
1791		Acer negundo	Box-elder	12	30	
1792		Salix amygdaloides	Peach-Leaf Willow	8	28	
1793		Populus deltoides	Eastern Cottonwood	29	30	X
1794		Acer negundo	Box-elder	8	30	
1795		Fraxinus pennsylvanica	Green Ash	7	30	
1796		Ulmus pumila	Siberian Elm	19	30	
1797	X	Acer saccharinum	Silver Maple	7	30	
1798		Ulmus pumila	Siberian Elm	7	30	
1799		Salix amygdaloides	Peach-Leaf Willow	18	26	
1800	X	Salix amygdaloides	Peach-Leaf Willow	11	26	
1801	X	Populus deltoides	Eastern Cottonwood	29	30	X
1805		Acer negundo	Box-elder	10	30	
1806		Carya ovata	Shagbark Hickory	16	30	
1807		Tilia americana	American Basswood	9	30	
1808		Acer saccharum	Sugar Maple	14	30	
1809		Acer saccharum	Sugar Maple	9	30	
1810		Acer saccharum	Sugar Maple	21	30	X
1811		Acer saccharum	Sugar Maple	14	30	
1812		Acer saccharum	Sugar Maple	12	30	
1813		Acer saccharum	Sugar Maple	11	30	
1814		Acer saccharum	Sugar Maple	10	30	
1815		Acer saccharum	Sugar Maple	13	30	
1816		Acer saccharum	Sugar Maple	8	30	
1817		Carya ovata	Shagbark Hickory	15	30	
1818		Carya ovata	Shagbark Hickory	16	30	
1819		Acer saccharum	Sugar Maple	7	30	
1820		Quercus bicolor	Swamp White Oak	11	30	
1821		Acer saccharum	Sugar Maple	7	30	
1822		Acer saccharum	Sugar Maple	11	30	
1823		Acer saccharum	Sugar Maple	11	30	
1824		Carya ovata	Shagbark Hickory	12	30	
1825		Carya ovata	Shagbark Hickory	16	30	
1826		Acer saccharum	Sugar Maple	14	30	
1827		Acer saccharum	Sugar Maple	8	30	
1828		Acer saccharum	Sugar Maple	8	30	
1829		Quercus macrocarpa	Bur Oak	35	30	X
1830		Quercus bicolor	Swamp White Oak	8	30	
1831		Tilia americana	American Basswood	13	30	
1832		Quercus bicolor	Swamp White Oak	12	30	
1833		Quercus bicolor	Swamp White Oak	17	30	
1834		Ulmus americana	American Elm	10	30	
1835		Ulmus americana	American Elm	11	30	
1836		Carya ovata	Shagbark Hickory	11	30	
1837		Quercus bicolor	Swamp White Oak	10	30	
1838		Carya ovata	Shagbark Hickory	7	30	
1839		Ulmus americana	American Elm	10	30	
1840		Carya ovata	Shagbark Hickory	13	30	
1841		Acer rubrum	Red Maple	9	30	
1842		Acer rubrum	Red Maple	12	30	
1843		Ulmus americana	American Elm	18	30	
1844		Acer rubrum	Red Maple	12		
1845		Acer rubrum	Red Maple	8	30	
1846		Acer rubrum	Red Maple	16	30	
1847		Acer saccharum	Sugar Maple	7	30	
1848		Acer saccharum	Sugar Maple	22	30	X
1849		Acer saccharum	Sugar Maple	30	23	X
1850		Acer saccharum	Sugar Maple	9	30	
1851		Prunus serotina	Black Cherry	24	30	X
1852		Prunus serotina	Black Cherry	23	21	X
1853		Acer saccharum	Sugar Maple	8	30	
1854		Acer rubrum	Red Maple	7	30	
1855		Acer saccharum	Sugar Maple	12	30	
1856		Acer saccharum	Sugar Maple	9	30	
1857		Acer saccharum	Sugar Maple	8	30	
1858		Acer saccharum	Sugar Maple	11	30	
1859		Acer saccharum	Sugar Maple	9	30	
1860		Acer saccharum	Sugar Maple	7	30	
1861		Acer saccharum	Sugar Maple	8	30	
1862		Acer rubrum	Red Maple	20	30	X
1863		Acer saccharum	Sugar Maple	9	30	
1864		Acer saccharum	Sugar Maple	19	30	X
1865		Celtis occidentalis	Common Hackberry	14	30	
1866		Acer saccharum	Sugar Maple	8	30	
1867		Acer rubrum	Red Maple	16	30	
1868		Acer rubrum	Red Maple	15	30	
1869		Prunus serotina	Black Cherry	20	30	X
1870		Acer saccharum	Sugar Maple	11	30	
1871		Fagus grandifolia	American Beech	30	30	X
1872		Acer saccharum	Sugar Maple	8	30	
1873		Acer rubrum	Red Maple	15	30	
1874		Acer saccharum	Sugar Maple	9	30	
1875		Fagus grandifolia	American Beech	23	30	X
1876		Acer saccharum	Sugar Maple	26	30	X
1877		Acer saccharum	Sugar Maple	9	30	

Tree #	Remove	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
1879		Acer rubrum	Red Maple	17	30	
1880		Acer rubrum	Red Maple	12	30	
1881		Acer saccharum	Sugar Maple	7	30	
1882		Acer rubrum	Red Maple	9	30	
1883		Acer saccharum	Sugar Maple	8	30	
1884		Acer rubrum	Red Maple	14	30	
1885		Acer saccharum	Sugar Maple	12	30	
1886		Carya ovata	Shagbark Hickory	11	30	
1887		Acer saccharum	Sugar Maple	7	30	
1888		Fagus grandifolia	American Beech	32	30	X
1889		Prunus serotina	Black Cherry	11	13	
1890		Acer saccharum	Sugar Maple	8	30	
1891		Prunus serotina	Black Cherry	12	30	
1892		Acer saccharum	Sugar Maple	9	30	
1893		Prunus serotina	Black Cherry	18	30	X
1894		Prunus serotina	Black Cherry	13	30	
1895		Acer saccharum	Sugar Maple	40	30	X
1899		Acer saccharum	Sugar Maple	7	30	
1901		Acer saccharum	Sugar Maple	7	30	
1902		Prunus serotina	Black Cherry	11	30	
1903		Acer saccharum	Sugar Maple	7	30	
1904		Prunus serotina	Black Cherry	18	30	X
1905		Prunus serotina	Black Cherry	18	30	X
1906		Acer saccharum	Sugar Maple	17	30	
1907		Acer saccharum	Sugar Maple	9	30	
1908		Ulmus americana	American Elm	16	30	
1909		Prunus serotina	Black Cherry	25	30	X
1910		Acer rubrum	Red Maple	12	30	
1911		Prunus serotina	Black Cherry	8	30	
1912		Prunus serotina	Black Cherry	17	30	
1913		Acer saccharum	Sugar Maple	8	30	
1914		Acer saccharum	Sugar Maple	28		
1915		Acer saccharum	Sugar Maple	10	30	
1916		Acer saccharum	Sugar Maple	44	30	X
1917		Fagus grandifolia	American Beech	29	30	X
1918		Fagus grandifolia	American Beech	18	30	
1919		Fagus grandifolia	American Beech	18	30	
1920		Acer saccharum	Sugar Maple	7	30	
1921		Acer saccharum	Sugar Maple	30	30	X
1922		Fagus grandifolia	American Beech	24	30	X
1923		Fagus grandifolia	American Beech	7	30	
1924		Acer rubrum	Red Maple	14	30	
1925		Fagus grandifolia	American Beech	26	30	X
1926		Acer saccharum	Sugar Maple	8	30	
1927		Acer saccharum	Sugar Maple	38	30	X
1928		Fagus grandifolia	American Beech	33	30	X
1930		Prunus serotina	Black Cherry	14	30	
1932		Prunus serotina	Black Cherry	17	30	
1933		Acer saccharum	Sugar Maple	12	30	
1934		Acer saccharum	Sugar Maple	7	30	
4509		Acer saccharum	Sugar Maple	7	30	
4510		Acer saccharum	Sugar Maple	6	30	
4511		Acer saccharum	Sugar Maple	6	30	
4512		Acer saccharum	Sugar Maple	7	30	
4513		Acer saccharum	Sugar Maple	7	30	
4514		Ostrya virginiana	Eastern Hop-Hornbeam	7	30	
4515		Acer saccharum	Sugar Maple	7	30	
4516	X	Fagus grandifolia	American Beech	7	30	
4521	X	Acer saccharum	Sugar Maple	7	30	
4524		Acer saccharum	Sugar Maple	7	30	
4525		Acer saccharum	Sugar Maple	6	30	
4526		Fagus grandifolia	American Beech	6	30	
4527		Acer saccharum	Sugar Maple	7	17	
4528		Acer saccharum	Sugar Maple	6	30	
4529		Acer saccharum	Sugar Maple	7	30	
4530		Acer saccharum	Sugar Maple	7	30	
4531		Acer rubrum	Red Maple	7	30	
4532		Acer saccharum	Sugar Maple	6	30	
4533		Acer saccharum	Sugar Maple	6	30	
4534		Acer saccharum	Sugar Maple	7	30	
4535	X	Acer saccharum	Sugar Maple	6	30	
4536	X	Acer saccharum	Sugar Maple	7	30	
4537	X	Acer saccharum	Sugar Maple	8	30	
4538	X	Acer rubrum	Red Maple	7	30	
4539	X	Acer rubrum	Red Maple	7	30	
4540	X	Acer saccharum	Sugar Maple	7	30	
4541	X	Acer rubrum	Red Maple	18	30	X
4542	X	Acer rubrum	Red Maple	6	30	
4543	X	Acer rubrum	Red Maple	6	30	
4544		Prunus serotina	Black Cherry	6	30	
4545	X	Acer rubrum	Red Maple	7	30	
4546	X	Acer rubrum	Red Maple	6	30	
4547		Carya ovata	Shagbark Hickory	6	30	
4548		Acer saccharum	Sugar Maple	6	30	
4549		Acer saccharum	Sugar Maple	6	30	
4550		Fraxinus pennsylvanica	Green Ash	7	13	
4551		Acer rubrum	Red Maple	7	30	
4552		Fraxinus pennsylvanica	Green Ash	7	30	
4553		Fraxinus pennsylvanica	Green Ash	6	30	
4554	X	Salix amygdaloides	Peach-Leaf Willow	7	30	
4555		Acer rubrum	Red Maple	7	30	
4556	X	Acer saccharum	Sugar Maple	7	30	
4557		Ulmus americana	American Elm	8	30	
4558		Acer rubrum	Red Maple	6	30	
4559	X	Ulmus americana	American Elm	6	30	
4560	X	Ulmus americana	American Elm	6	30	
4561	X	Acer rubrum	Red Maple	10	30	
4563		Acer rubrum	Red Maple	6	30	
4564		Acer rubrum	Red Maple	7	30	

DATE: 02-25-2025
PM: LMP
ENG: LMP
SURV: AEC
CAD: ADB
CHK: MICHAELSON, TREES
VDATUM:U.S.C. & G.S.
SCALE: ####

STATUS: PROPRIETOR

JOB NO. 2023.02

MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
30435 THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334

ENGINEERS · SURVEYORS
MLP AND ASSOCIATES, INC.
Michael L. Priest & Associates, Inc.
40655 Koppernick Road, Canton, MI 48187
phone: (734) 459-8560
fax: (734) 459-2585

TREE LIST

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON HILLS, , OAKLAND COUNTY, MICHIGAN

SHEET
TR06

Tag	Remove	Scientific Name	Common Name	DBH	Tree Health/ Condition Score	Landmark Tree
4565	X	Acer rubrum	Red Maple	21	30	X
4566		Acer rubrum	Red Maple	6	30	
4567		Prunus serotina	Black Cherry	14	21	
4568	X	Acer rubrum	Red Maple	11	30	
4569	X	Prunus serotina	Black Cherry	7	26	
4570	X	Prunus serotina	Black Cherry	7	28	
4571		Acer rubrum	Red Maple	7	30	
4572		Acer rubrum	Red Maple	17	30	
4573	X	Ulmus americana	American Elm	6	30	
4574	X	Ulmus americana	American Elm	7	30	
4575		Acer rubrum	Red Maple	6	30	
4576		Ulmus americana	American Elm	7	30	
4577	X	Ulmus americana	American Elm	6	30	
4578	X	Prunus serotina	Black Cherry	7	30	
4579	X	Prunus serotina	Black Cherry	7	30	
4580	X	Quercus macrocarpa	Bur Oak	7	30	
4581		Acer rubrum	Red Maple	6	30	
4582	X	Acer rubrum	Red Maple	6	30	
4583		Ulmus americana	American Elm	6	30	
4584		Ulmus americana	American Elm	6	30	
4585		Acer rubrum	Red Maple	7	30	
4586		Acer rubrum	Red Maple	7	30	
4587		Acer rubrum	Red Maple	6	30	
4588	X	Ulmus americana	American Elm	6	24	
4589	X	Acer negundo	Box-elder	14	17	
4590		Ulmus americana	American Elm	7	30	
4591		Ulmus americana	American Elm	6	30	
4592		Ulmus americana	American Elm	7	30	
4593	X	Ulmus americana	American Elm	7	30	
4594		Acer rubrum	Red Maple	6	30	
4595	X	Ulmus americana	American Elm	7	30	
4596		Acer rubrum	Red Maple	6	30	
4597		Acer rubrum	Red Maple	6	30	
4598	X	Acer rubrum	Red Maple	6	30	
4599	X	Acer rubrum	Red Maple	8	30	
4600	X	Acer rubrum	Red Maple	8	30	

TREE LIST

THE FOREST AT RIVERWALK

SITE PLAN

PART OF THE N.E. 1/4 OF SECTION 34, T.1N., R.9E.
CITY OF FARMINGTON HILLS, , OAKLAND COUNTY, MICHIGAN

SHEET
TR07

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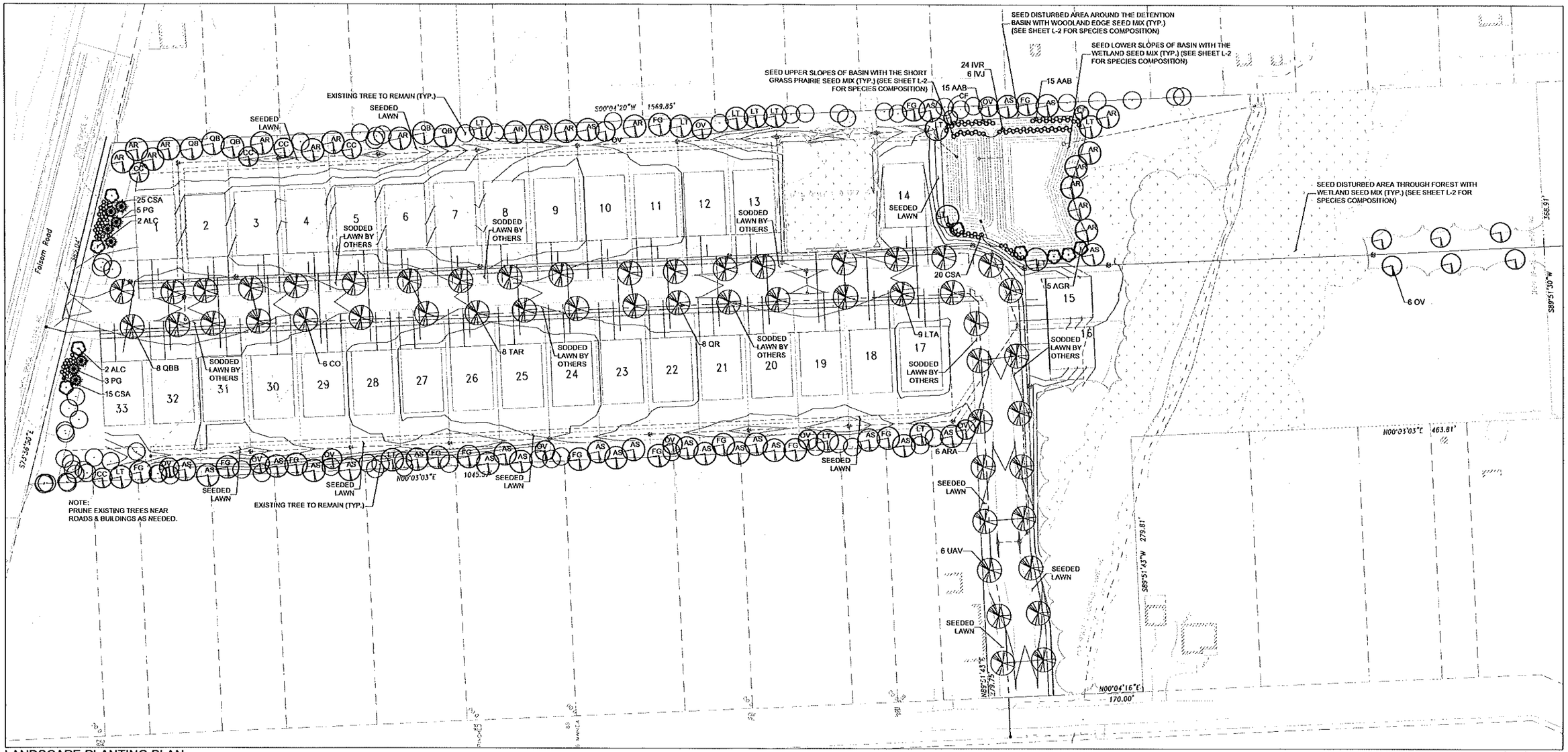
STATUS:

JOB NO. 2023.02

DATE: 02-25-2025
PM: LMP
ENG: MLP
SURV: AEC
CAD: ADH
DES: TKL
DRG: SMT
CHK: MLP
SCALE: ####

PROPRIETOR

MR. STUART MICHAELSON
WINDMILL KRE NEW DEVELOPMENTS
31333 W. THIRTEEN MILE ROAD,
SUITE 200
FARMINGTON HILLS, MI 48334



LANDSCAPE PLANTING PLAN scale: 1" = 50'

PLANT LIST

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE
LANDSCAPING ADJACENT TO ROADS - FARMINGTON ROAD				
ALC	4	*Amelanchier laevis 'Cumulus'*	Cumulus Allegheny Serviceberry	2" cal. B&B
CSA	40	*Cornus sericea 'Arctic Fire'*	Arctic Fire Red Twig Dogwood	24" ht., 3 gal. pot
PG	8	*Picea glauca*	White Spruce	8' ht. B&B
STREET TREES				
ARA	6	*Acer rubrum 'Autumn Flame'*	Autumn Flame Red Maple	3" cal. B&B
CO	6	*Celtis occidentalis*	Northern Hackberry	3" cal. B&B
LTA	9	*Liriodendron tulipifera 'Arnold'*	Arnold Tuliptree	3" cal. B&B
QBB	8	*Quercus bicolor 'Beacon'*	Beacon Swamp White Oak	3" cal. B&B
QR	8	*Quercus rubra*	Red Oak	3" cal. B&B
TAR	8	*Tilia americana 'Redmond'*	Redmond American Linden	3" cal. B&B
REPLACEMENT TREES				
AGR	5	*Amelanchier x grandiflora 'Robin Hill'*	Robin Hill Apple Serviceberry	2" cal. B&B
AR	17	*Acer rubrum*	Red Maple	3" cal. B&B
AS	26	*Acer saccharum 'Legacy'*	Legacy Sugar Maple	3" cal. B&B
CC	5	*Carpinus caroliniana*	American Hornbeam	3" cal. B&B
CF	2	*Cornus florida*	Flowering Dogwood	2" cal. B&B
FG	13	*Fagus grandifolia*	American Beech	3" cal. B&B
LT	12	*Liriodendron tulipifera*	Tuliptree	3" cal. B&B
OV	15	*Ostrya virginiana*	American Hophornbeam	3" cal. B&B
QB	5	*Quercus bicolor*	Swamp White Oak	3" cal. B&B
DETENTION POND PLANTINGS				
AAB	30	*Aronia arbutifolia 'Brilliantissima'*	Brilliantissima Red Chokeberry	30" ht., 5 gal. pot
CSA	20	*Cornus sericea 'Arctic Fire'*	Arctic Fire Red Twig Dogwood	24" ht., 3 gal. pot
IVJ	6	*Ilex verticillata 'Jim Dandy'*	Jim Dandy Winterberry	30" ht., 5 gal. pot
IVR	24	*Ilex verticillata 'Red Sprite'*	Red Sprite Winterberry	30" ht., 5 gal. pot

TREE REPLACEMENT CALCULATIONS

Total Number of Trees on Site:	1,489
Total Number of Trees to be Removed:	629
Total Number of Replacement Trees to be Planted on Site:	100

LEGEND

- PROPOSED GREENBELT TREE
- PROPOSED STREET TREE
- PROPOSED REPLACEMENT TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED WETLAND SEED MIX
- PROPOSED CUSTOM SHORT GRASS SEED MIX
- *EXISTING TREES TO BE PRESERVED*

NOTE:
* See Sheet L-2: LANDSCAPE NOTES & DETAILS for landscape development notes, landscape planting details, landscape construction details, detention pond seeding notes, seed mix compositions, and pruning detail.

50' 0' 50' 100' 150'
scale: 1" = 50'

date: January 16, 2024
revised:
03-03-2025 Revise for site plan changes.

Know what's below. Call before you dig.

LANDSCAPE PLAN FOR:
Michael L. Priest
& Associates, Inc.
40655 Koppernick
Canton, Michigan 48187
(734) 459-8560

PROJECT LOCATION:
The Forest at Riverwalk
South Side of Folsom Road
between Farmington Road
& Orchard Lake Road
Farmington Hills,
Michigan

LANDSCAPE PLAN BY:
Nagy Devlin Land Design
31736 West Chicago Ave.
Livonia, Michigan 48150
(734) 634 9208

STATE OF MICHIGAN · J. BRIAN DEVLIN · 901162 · REGISTERED LANDSCAPE ARCHITECT

L-1: LANDSCAPE PLANTING PLAN

* Base data provided by Michael L. Priest & Associates, Inc.

LANDSCAPE DEVELOPMENT NOTES:

PLANTING

1. Installation of all plant material shall be in accordance with the latest edition of the *American Association of Nurserymen Standards for Nursery Stock* and with the specifications set forth by the City of Farmington Hills, Michigan.
2. The plant materials shall conform to the type stated on the plant list. Sizes shall be the minimum stated on the plant list or larger. All measurements shall be in accordance with the latest edition of the *American Association of Nurserymen Standards for Nursery Stock*.
3. The plant material shall be nursery grown and inspected by the Owner's representative before planting. The Owner's representative reserves the right to reject any plant material at any time.
4. Plants designated "B&B" shall be balled and burlapped with firm balls of earth.
5. Dig shrub pits one foot (1') larger than the shrub rootball, tree pits three (3) times the width of the tree rootball and backfill with one (1) part topsoil and one (1) part soil from excavated pit. Plant trees and shrubs at the same grade level at which they were planted at the nursery. If wet, clay soils are evident, plant trees and shrubs slightly higher.
6. The Contractor is responsible for planting the materials at the correct grades and spacing. The plants shall be oriented to give the best appearance.
7. When the plant has been properly set, the pit shall be backfilled with the topsoil mixture, gradually filling, patting, and settling with water.
8. Trees in lawn areas to have a four foot (4') circle of mulch, four inches (4') deep, and three inches (3") away from the trunk. Shrub beds are to be mulched with shredded bark mulch to a minimum depth of three inches (3"). Only natural color shredded hardwood bark mulch will be accepted.
9. Remove all twine, wire, and burlap from the top one third (1/3) of tree and shrub root balls and from tree trunks. Remove all non-biodegradable material such as plastic or nylon completely from branches and stems.
10. All plant materials shall be pruned and injuries repaired. The amount of pruning shall be limited to the removal of dead or injured limbs and to compensate for the loss of roots from transplanting. Cuts should be flush, leaving no stubs. Do not use tree paint on freshly cut wounds. Shrubs along the site perimeter and in the detention pond shall be allowed to grow together in a natural form.
11. Organic, friable topsoil shall be evenly distributed and fine graded over all areas to receive lawns at uniform depth of four inches (4") after settlement.
12. All plantings shall be completed within three (3) months, and no later than November 30, from the date of issuance of a certificate of occupancy if such certificate is issued during the April 1 thru September 30 period; if the certificate is issued during the October 1 thru March 31 period, the planting shall be completed no later than the ensuing May 31; plantings shall thereafter be reasonably maintained, including permanence and health of plant materials to provide a screen to abutting properties and including the absence of weeds and refuse.
13. Plant trees and shrubs no closer than the following minimum distances from sidewalks, curbs, and parking stalls:
    a. Shade/Canopy Trees — Five feet (5')
    b. Ornamental/Flowering Trees — Four feet (4')
    c. Evergreen Trees — Five feet (5')
    d. Evergreen/Flowering Shrubs — Four feet (4').
14. Backfill directly behind all curbs and along sidewalks and compact to the to of curbs or walk to support vehicle and pedestrian weight without settling.
15. All landscape areas, especially parking lot islands and landscape beds next to buildings shall be excavated of all building materials and poor soils to a depth of twelve inches to eighteen inches (12"-18") and backfilled with good, medium-textured planting soil (loam or light yellow clay loam). Add four inches to six inches (4"-6") of topsoil over the fill material and crown a minimum of six inches (6") above the top of curbs and/or walks after earth settling unless otherwise noted on the landscape plan.
16. Conversion of all asphalt and gravel areas to landscape planting beds shall be done in the following manner: a. Remove all asphalt, gravel, and compacted earth to a depth of six inches to eighteen inches (6"-18") depending on the depth of the sub base and dispose of off site; b. Call the City for an inspection prior to backfilling; c. Replace excavated material with good, medium-textured planting soil (loam or light yellow clay loam) to a minimum of two inches (2") above the top of the curb and sidewalk, add four inches to six inches (4"-6") of topsoil and crown to a minimum of six inches (6") above the adjacent curb and walk after earth settling, unless otherwise noted on the landscape plan.
    If conversion from asphalt to landscape occurs in or between an existing landscape area(s), replace excavated material from four inches to six inches (4"-6") below adjacent existing grade with good, medium-textured planting soil (loam or light yellow clay loam) and add four inches to six inches (4"-6") of topsoil to meet existing grades after earth settling.
17. Edging, where specified, shall consist of Perma-loc aluminum edging or approved equivalent.

MATERIAL

1. Plants shall not be located within four feet (4') of the property line.
2. Required landscape material shall satisfy the criteria of the American Association of Nurserymen Standards for Nursery Stock and be:
    a. Nursery grown; b. State Department of Agriculture inspected; c. No. 1 grade material with a straight, unscarred trunk, and well-developed uniform crown (park grade trees will not be accepted); d. Staked, wrapped, watered, and mulched in accordance with the City of Farmington Hills Chapter 34-553; and e. Guaranteed for one (1) year.
3. Topsoil shall be friable, fertile soil of clayloam character containing at least five percent (5%) but not more than twenty percent (20%) by weight of organic matter with a pH range between 6.0 and 7.0. The topsoil shall be free from clay lumps, coarse sand, plant roots, sticks, and other foreign materials.
4. The seed mixture shall consist of the following types and proportions: Kentucky Blue Grass blend "Baron/Sheri/Adelphi" @ sixty percent (60%), Chewing Fescue @ twenty-five percent (25%), Creeping Red Fescue @ ten percent (10%), and Perennial Rye Grass @ five percent (5%). Weed content shall not exceed one percent (1%). The mix shall be applied at a rate of 200 pounds per acre.
5. Sod shall be two (2) year old "Baron/Sheri/Adelphi" Kentucky Blue Grass blend grown in a sod nursery on loam soil.
6. Callery Pear (*Pyrus calleryana*) and Norway Maple (*Acer platanoides*) shall not be substituted for any tree species in the plant list. Contact the Landscape Architect for acceptable plant substitutions.

GENERAL

1. Do not plant deciduous or evergreen trees directly over utility lines or under overhead wires. Maintain a six foot (6') distance from the centerline of utilities and twenty feet (20') from the centerline of overhead wires for planting holes. Call MISS DIG forty-eight (48) hours prior to landscape construction for field location of utility lines.
2. The Contractor agrees to guarantee all plant material for a period of one (1) year. At that time, the Owner's representative reserves the right for a final inspection. Plant material with twenty-five percent (25%) die back, as determined by the Owner's representative shall be replaced. This guarantee includes the furnishing of new plants, labor, and materials. These new plants shall also be guaranteed for a period of one (1) year.
3. The work shall consist of providing all necessary materials, labor, equipment, tools, and supervision required for the completion as indicated on the drawings.
4. All landscape areas shall be irrigated by an automatic underground irrigation system. Lawns and shrub/landscape areas shall be watered by separate zones to minimize overwatering.
5. All written dimensions override scale dimensions on the plans.
6. Report all changes, substitutions, or deletions to the Owner's representative.
7. All bidders must inspect the site and report any discrepancies to the Owner's representative.
8. All specifications are subject to change due to existing conditions.
9. The Owner's representative reserves the right to approve all plant material.

MAINTENANCE

1. The Owner of the landscaping shall perpetually maintain such landscaping in good condition so as to present a healthy, neat, and orderly appearance, free from refuse and debris.
2. The Owner shall conduct a seasonal landscape maintenance program including regular lawn cutting (at least once per week during the growing season), pruning at appropriate times, watering, and snow removal during winter.
3. The Contractor is responsible for watering and maintenance of all seed areas until a minimum of ninety percent (90%) coverage, as determined by the Owner's representative.
4. All diseased and/or dead material shall be removed within sixty (60) days following notification and shall be replaced within the next appropriate planting season or within one (1) year, whichever comes first.
5. Any debris such as lawn clippings, fallen leaves, fallen limbs, and litter shall be removed from the site on a weekly basis at the appropriate season.
6. All planting beds shall be maintained by removing weeds, fertilizing, and replenishing mulch as needed.
7. Annual beds shall be kept free of weeds and mulched with sphagnum peat of a neutral pH as needed. Perennial beds shall be kept free of weeds and mulched with fine textured shredded bark as needed. Cut spent flower stalks from perennial plants at regular intervals.

DETENTION POND LANDSCAPE DEVELOPMENT NOTES:

DETENTION POND PLANTING NOTES:

1. Follow the Supplier's recommended procedures for bed preparation, installation, and soil erosion control measures of the proposed seeded areas. After the plants germinate and begin to grow follow the maintenance guidelines included on this sheet.
2. Rotolill four inches (4") of compost or topsoil into the top six inches (6") of the surface of the DETENTION POND. (Compost may be obtained from the municipal facility at Six Mile and Ridge Roads. Call Onyx Environmental at 248 305-8377 or 248 349-7230 for hours of operation and general information.)
3. Provide a cover crop of annual rye at a rate of ten pounds (10#) per acre and seed oats at a rate of thirty pounds (30#) per acre over the entire area to be seeded.
4. Maintain the bioswale area with the following actions: establish a regular weeding regimen, water as needed, provide erosion control blanket on the side slopes, provide a cut edge bed, cut back flowering plants at appropriate times, thin perennials after establishment as needed, replace plants that are diseased or dead, and remove litter and debris.

MAINTENANCE OF THE DETENTION POND AREA

1. ESTABLISHMENT: During the first growing season, the native seed areas should be mowed two (2) to four (4) times to a height of four inches to six inches (4"-6") when the plants reach a height of ten inches to twelve inches (10"-12"). Hand pulling may be needed to control unwanted weed populations. If a mower cannot be set high enough, a string trimmer can be used. During the second growing season, the native seed areas should be mowed a few times to a height of about eight inches (8"), when the plants reach a height of ten inches to eighteen inches (10"-18"). Hand pulling may be needed to control unwanted weed populations. By the second growing season it should be apparent if some areas need reseeding. Long term management includes mowing and hand pulling of weeds. The native planting may be mowed to a short height and the clippings removed in the early Spring before birds begin nesting.
2. WATERING: Watering should be performed as needed. During the establishment period after the initial planting, watering is very important and should be conducted every two to three (2-3) days. The initial planting should be checked regularly for appropriate moisture availability. Two (2) methods for determining adequate moisture levels include the following: a.) if the plants will during the day when the temperature is at its highest, but revive during the night, then watering is not necessary, and b.) by testing the soil moisture at a depth of four inches (4") by inserting a small rod into the soil. If the rod is wet, then the soil is moist at a depth of four inches (4") and watering is not necessary.
3. EROSION CONTROL: Provide an erosion control blanket on the side slopes of the seeded areas of the detention pond. The erosion control blanket shall be pegged in place.
4. EDGING: The edge of the detention pond should be maintained to avoid grass growing into the detention pond area. The edge can be maintained with a V-notch cut edge. The channel should be maintained at four inches (4") or greater and renewed every six to eight (6-8) weeks.
5. CUTTING BACK: Tall wildflowers should be cut back by one-third. Early flowering plants can be cut back in late June or early July and late flowering plants in late October.
6. THINNING: After the detention pond has become established and thriving, it may be necessary to thin perennials by dividing individual plants in Spring or Fall.
7. REPLACEMENT: Any plants that die or become diseased should be replaced. Plant health should be checked regularly with replanted material occurring in the Spring or Fall.
8. REMOVAL OF LITTER AND DEBRIS: Litter, trash, and debris should be removed on a regular basis to insure that inlets remain free flowing and to keep the area in a neat and attractive appearance.
9. INORGANIC APPLICATIONS: In general, detention pond sloped areas do not need fertilization as nutrients from surrounding areas is usually at an elevated level. If soil fertility appears to be an issue, the soil should be tested and appropriate actions taken based on the results. Insecticides, herbicides, fungicides, and rodenticides should not be used in the detention pond area. If a plant is diseased or infested with insects, it should simply be removed and replaced.

SEED MIX COMPOSITIONS

WETLAND SEED MIX
MICHIGAN WILDFLOWER FARM
A composition of wildflowers, sedges, and grasses.
Application rate: 3 oz. per 1000sq. ft. or 7 lbs. per acre

BOTANICAL NAME	COMMON NAME
Wildflowers	
Asclepias incarnata	Swamp Milkweed
Aster novae-angliae	New England Aster
Aster puniceus	Swamp Aster
Aster umbellatus	Flat-Top Aster
Eupatorium maculatum	Joe-Pye Weed
Eupatorium perfoliatum	Boneset
Euthamia graminifolia	Grassleaved Goldenrod
Liatris spicata	Marsh Blazing Star
Pedicularis lanceolata	Swamp Betony
Rudbeckia subtomentosa	Black-Eyed Susan
Silphium perfoliatum	Cupplant
Silphium terebinthinaceum	Prairie Dock
Solidago patula	Swamp Goldenrod
Solidago riddellii	Riddell's Goldenrod
Verbena hastata	Blue Vervain
Vernonia missurica	Ironweed
Veronicastrum virginicum	Culver's Root
Sedges/Grasses	
Andropogon scoparius	Little Bluestem
Carex crinita	Fringed Sedge
Carex stricta	Tussock Sedge
Scirpus cyperinus	Wool Grass

WETLAND SEED MIX

WOODLAND EDGE MIX
MICHIGAN WILDFLOWER FARM
Thirty-five percent (35%) Forbs Sixty-five percent (65%) Grass
Seeding Rate: 5 oz. per 1000 sq.ft. or 10 lbs. per acre

BOTANICAL NAME	COMMON NAME
Forbs	
Achillea millefolium	Yarrow
Allium cernuum	Nodding Wild Onion
Aquilegia canadensis	Wild Columbine
Asclepias syriaca	Common Milkweed
Asclepias tuberosa	Butterflyweed
Desmodium canadense	Showy Tick-Trefoil
Eupatorium rugosum	Snakeroot
Monarda fistulosa	Wild Bergamot
Penstemon digitalis	Foxglove Beardtongue
Penstemon hirsutus	Hairy Beardtongue
Rudbeckia hirta	Black-Eyed Susan
Rudbeckia triloba	Three-Lobed Coneflower
Solidago rigida	Stiff Goldenrod
Symphyotrichum novae-angliae	New England Aster
Symphyotrichum oolentangiensis	Prairie Heart-Leaved Aster
Thalictrum dioicum	Early Meadow Rue
Thalictrum dasycarpum	Purple Meadow Rue
Grasses	
Elymus canadensis	Canada Wild Rye
Elymus hystrix	Bottlebrush Grass
Koeleria cristata	June Grass
Schizachyrium scoparius	Little Bluestem

CUSTOM SHORT GRASS PRAIRIE SEED MIX
MICHIGAN WILDFLOWER FARM
Fifty percent (50%) Forbs/Fifty percent (50%) Grass.
Application rate: 5 oz. per 1000 sq. ft or 10 lbs. per acre

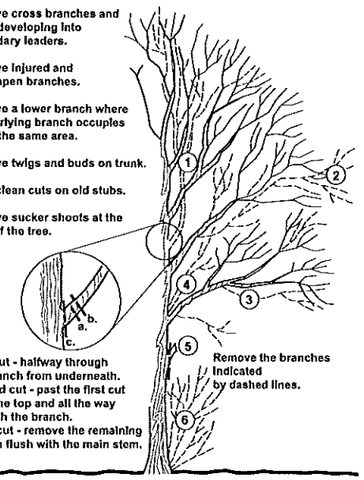
BOTANICAL NAME	COMMON NAME
Wildflowers	
Achillea millefolium	Yarrow
Aquilegia canadensis	Wild Columbine
Asclepias tuberosa	Butterflyweed
Aster laevis	Smooth Aster
Coreopsis lanceolata	Sand Tickseed
Echinacea purpurea	Purple Coneflower
Kuhnia eupatoroides	False Boneset
Monarda fistulosa	Bergamot
Penstemon digitalis	Foxglove Beardtongue
Rudbeckia hirta	Black-Eyed Susan
Solidago speciosa	Showy Goldenrod
Sedges/Grasses	
Schizachyrium scoparius	Little Bluestem
Bouteloua curtipendula	Side Oats Grama
Koeleria pyramidata	June Grass*
Sporobolus heterolepsis	Prairie Dropseed*

* Supplier to add these species to the mix.

CUSTOM SHORT GRASS SEED MIX

MICHIGAN WILDFLOWER FARM
11770 Cutler Road
Portland, Michigan 48875-9452
Phone: (517) 647-6010
Fax: (517) 647 6072

1. Remove cross branches and those developing into secondary leaders.
2. Remove injured and misshapen branches.
3. Remove a lower branch where an overlying branch occupies about the same area.
4. Remove twigs and buds on trunk.
5. Make clean cuts on old stubs.
6. Remove sucker shoots at the base of the tree.

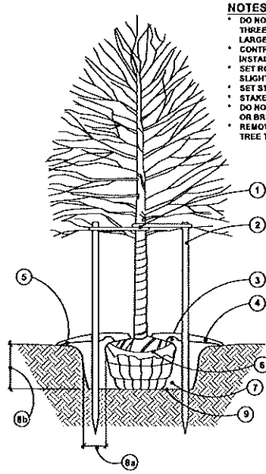


a. First cut - halfway through the branch from underneath.
b. Second cut - past the first cut from the top and all the way through the branch.
c. Third cut - remove the remaining branch flush with the main stem.

Remove the branches indicated by dashed lines.

PRUNING DETAIL — not to scale

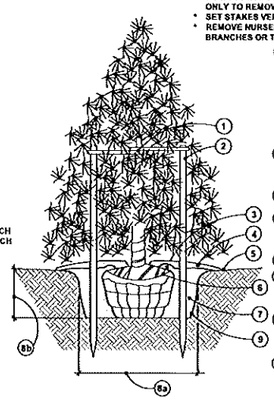
NOTES:
* DO NOT STAKE TREES UNLESS IN HEAVY CLAY SOIL, WINDY CONDITIONS, THREE INCHES (3") CALIPER OR GREATER DIAMETER TREE TRUNK OR LARGE CROWN.
* CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PIT PRIOR TO INSTALLATION.
* SET ROOTBALL WITH TRUNK FLAIR VISIBLE, LEVEL TO GRADE OR SLIGHTLY ABOVE FINISH GRADE IF IN CLAY.
* SET STAKES VERTICAL & EVENLY SPACED.
* STAKES OR GUYS TO BE SECURED ABOVE THE FIRST BRANCH.
* DO NOT PRUNE TERMINAL LEADER OR BRANCH TIPS. PRUNE ONLY DEAD OR BROKEN BRANCHES ONLY. REMOVE ANY SUCKERS FROM BASE.
* REMOVE NURSERY APPLIED TREE WRAP, TAPE, OR STRING FROM THE TREE TRUNK AND CROWN. REMOVE ANY TAGS OR LABELS.



1. STAKE TREE JUST BELOW THE FIRST BRANCH USING TWO INCH TO THREE INCH (2"-3") WIDE BELT-LIKE MATERIAL OF NYLON, PLASTIC, OR OTHER ACCEPTABLE MATERIAL. (DO NOT USE WIRE THROUGH A HOSE TO GUY TREES.) TWO (2) BELT STRAPS PER TREE ON OPPOSITES SIDES OF THE TREE. MAKE CONNECTION FROM TREE TO STAKE HORIZONTALLY. LOOSELY STAKE TREE TRUNK TO ALLOW FOR TRUNK FLEXING. REMOVE ALL STAKING MATERIALS AFTER ONE (1) YEAR.
2. 2 x 2 HARDWOOD STAKES. POSITION SIX INCHES TO EIGHT INCHES (6"-8") OUTSIDE OF ROOTBALL AND EXTEND EIGHTEEN INCHES (18") BELOW TREE PIT INTO UNDISTURBED SOIL.
3. FOUR INCH (4") HIGH EARTH SAUCER ON INSIDE EDGE OF ROOTBALL.
4. SHREDDED BARK MULCH OF A NATURAL COLOR AT TWO INCH TO THREE INCH (2"- 3") MINIMUM DEPTH. LEAVE A THREE INCH (3") CIRCLE OF BARE SOIL AT THE BASE OF THE TREE.
5. FINISH GRADE SLOPED AWAY FROM TREE.
6. FOLD DOWN OR PULL BACK STRING, BURLAP, OR PLASTIC TO EXPOSE THE TOP HALF OF THE ROOTBALL. REMOVE ALL NON-BIODEGRADABLE MATERIALS. DO NOT REMOVE SOIL FROM ROOTBALL.
7. DO NOT AMEND SOIL UNLESS PLANTING IN POOR OR SEVERELY DISTURBED SOIL OR RUBBLE. USE WATER TO SETTLE SOIL & REMOVE AIR POCKETS AND FIRMLY SET TREE. GENTLY TAMP IF NEEDED.
8. a. TOP OF HOLE WIDTH EQUALS THREE TIMES THE WIDTH OF ROOTBALL. MINIMUM AT THE BASE TWELVE INCHES (12") FROM ROOTBALL.
   b. HOLE DEPTH EQUALS HEIGHT OF ROOTBALL.
9. BREAK UP (SCARIFY) SIDES OF PLANTING HOLE. LEAVE BOTTOM OF PIT FIRM.

DECIDUOUS TREE

NOTES:
* STAKE ALL EVERGREEN TREES UNDER TWELVE FEET (12') HIGH. GUY ALL EVERGREEN TREES TWELVE FEET (12') HIGH AND OVER.
* CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PIT PRIOR TO INSTALLATION. CENTER ROOTBALL IN THE PLANTING HOLE. SET ROOTBALL LEVEL TO GRADE OR SLIGHTLY ABOVE IF IN CLAY.
* DO NOT PRUNE TERMINAL LEADER OR BRANCH TIPS. PRUNE ONLY TO REMOVE DEAD OR BROKEN BRANCHES.
* SET STAKES VERTICAL AND OPPOSITE EACH OTHER.
* REMOVE NURSERY APPLIED TAPE OR STRING FROM TREE BRANCHES OR TRUNK. REMOVE ANY TAGS OR LABELS.

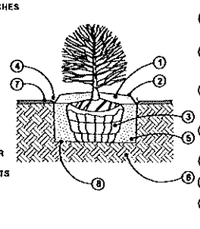


1. STAKE TREE AS INDICATED USING TWO INCH TO THREE INCH (2"-3") WIDE BELT-LIKE MATERIAL OF NYLON, PLASTIC, OR OTHER ACCEPTABLE MATERIAL. (NO WIRE OR HOSE TO BE USED TO GUY TREES.) TWO (2) BELT STRAPS PER TREE ON OPPOSITES SIDES OF THE TREE. MAKE CONNECTION FROM TREE TO STAKE HORIZONTALLY. LOOSELY STAKE TREE TRUNK TO ALLOW FOR TRUNK FLEXING. REMOVE ALL STAKING MATERIALS AFTER ONE (1) YEAR.
2. 2 x 2 HARDWOOD STAKES OR APPROVED EQUIVALENT POSITIONED SIX INCHES TO EIGHT INCHES (6"-8") OUTSIDE OF ROOTBALL AND EXTEND EIGHTEEN INCHES (18") BELOW TREE PIT INTO UNDISTURBED SOIL.
3. FOUR INCH (4") HIGH EARTH SAUCER ON INSIDE EDGE OF ROOTBALL.
4. SHREDDED BARK MULCH OF A NATURAL COLOR AT TWO INCH TO THREE INCH (2"- 3") MINIMUM DEPTH. LEAVE A THREE INCH (3") CIRCLE OF BARE SOIL AT THE BASE OF THE TREE.
5. FINISH GRADE SLOPED AWAY FROM TREE.
6. FOLD DOWN OR PULL BACK STRING, BURLAP, OR PLASTIC EXPOSING THE TOP HALF OF ROOTBALL. REMOVE ALL NON-BIODEGRADABLE MATERIALS. DO NOT REMOVE SOIL FROM ROOTBALL.
7. DO NOT AMEND SOIL UNLESS PLANTING IN POOR OR SEVERELY DISTURBED SOIL OR BUILDING RUBBLE. USE WATER TO SETTLE SOIL & REMOVE AIR POCKETS AND FIRMLY SET TREE. GENTLY TAMP IF NEEDED.
8. a. TOP OF HOLE WIDTH EQUALS THREE TIMES THE WIDTH OF ROOTBALL. MINIMUM AT THE BASE TWELVE INCHES (12") FROM ROOTBALL.
   b. HOLE DEPTH EQUALS HEIGHT OF ROOTBALL.
9. BREAK UP (SCARIFY) SIDES OF PLANTING HOLE. LEAVE BOTTOM OF PLANTING HOLE FIRM.

EVERGREEN TREE

GENERAL NOTES FOR ALL PLANTINGS:
* DO NOT CUT CENTRAL LEADER.
* REMOVE ALL TAGS, STRINGS, PLASTICS, AND ANY OTHER NON-BIODEGRADABLE MATERIALS (EXCEPT LABEL FOR PLANT NAME) FROM PLANT STEMS OR CROWN WHICH ARE UNSIGHTLY OR COULD CAUSE GIRDLING.
* PLANTS SHALL BEAR THE SAME RELATION TO FINISH GRADE AS IT BORE TO THE PREVIOUS GRADE IN THE NURSERY. SET THE BASE OF THE PLANT SLIGHTLY HIGHER THAN EXISTING GRADE IF PLANTING IN CLAY SOILS.
* CENTER THE ROOTBALL IN THE PLANTING HOLE. LEAVE THE BOTTOM OF THE PLANTING HOLE FIRM. USE WATER TO SETTLE THE PLANTING MIX AND REMOVE ANY AIR POCKETS AND FIRMLY SET THE TREE OR SHRUB. GENTLY TAMP IF NEEDED.

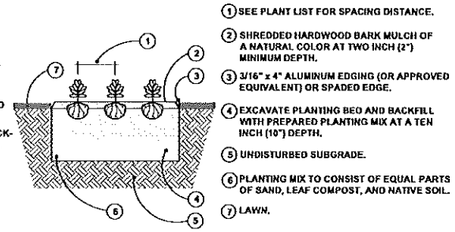
NOTE:
* CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PIT PRIOR TO INSTALLATION.



1. SHREDDED BARK MULCH AT THREE INCH (3") MINIMUM DEPTH. MULCH SHALL BE NATURAL IN COLOR.
2. FORM A SAUCER WITH MULCH AND SOIL AROUND SHRUB BED.
3. CUT AND REMOVE BURLAP AND BINDINGS FROM THE TOP ONE-THIRD (1/3) OF THE ROOTBALL.
4. 3/16" x 4" ALUMINUM EDGING (OR APPROVED EQUIVALENT) OR SPADED EDGE.
5. EXCAVATE PLANTING HOLE AND BACK-FILL WITH PREPARED PLANTING MIX.
6. UNDISTURBED SUBGRADE.
7. LAWN.
8. SCARIFY SUBGRADE.

SHRUB

NOTE:
* CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PIT PRIOR TO INSTALLATION.
* PERENNIALS TO BE PLANTED UP TO THE EDGE OF THE SAUCER AROUND A TREE OR SHRUB BED.



1. SEE PLANT LIST FOR SPACING DISTANCE.
2. SHREDDED HARDWOOD BARK MULCH OF A NATURAL COLOR AT TWO INCH (2") MINIMUM DEPTH.
3. 3/16" x 4" ALUMINUM EDGING (OR APPROVED EQUIVALENT) OR SPADED EDGE.
4. EXCAVATE PLANTING BED AND BACKFILL WITH PREPARED PLANTING MIX AT A TEN INCH (10") DEPTH.
5. UNDISTURBED SUBGRADE.
6. PLANTING MIX TO CONSIST OF EQUAL PARTS OF SAND, LEAF COMPOST, AND NATIVE SOIL.
7. LAWN.

ANNUAL / PERENNIAL / GROUNDCOVER

LANDSCAPE PLANTING DETAILS — not to scale

NOTES:
* See Sheet LP - 1: LANDSCAPE PLAN for proposed plantings, tree replacement calculations, plant list, and legend.

date: January 16, 2024
revised:
03-03-2025

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

LANDSCAPE PLAN FOR:
Michael L. Priest
& Associates, Inc.
40655 Koppernick
Canton, Michigan 48187
(734) 459-8560

PROJECT LOCATION:
The Forest at Riverwalk
South Side of Folsom Road
between Farmington Road
& Orchard Lake Road
Farmington Hills,
Michigan

LANDSCAPE PLAN BY:
Nagy Devlin Land Design
31736 West Chicago Ave.
Livonia, Michigan 48150
(734) 634 9208

STATE OF MICHIGAN — J. BRIAN DEVLIN — NO. 1303 — REGISTERED LANDSCAPE ARCHITECT

L - 2: LANDSCAPE NOTES & DETAILS

* Base data provided by Michael L. Priest & Associates, Inc.

August 11, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

PUD Amendment

Case:	PUD 2, 2023/65-8-2023
Site:	30825 and 31361 Orchard Lake Road (Parcel ID 22-23-03-226-028 & -027)
Applicant:	Timothy Collier
Plan Date:	Approved 5/31/2024; Revised 7/14/2025
Zoning:	B-2 Community Business

We have completed a review of the application for PUD, site plan, and landscape plan approval referenced above and a summary of our findings is below. Items in **bold** require specific action by the Applicant. Items in *italics* can be addressed administratively.



Project Summary – Changes to Approved PUD

The applicant proposes reconfiguration of an existing large shopping center, including a revamp of several larger tenant units, the addition of outlots, and some accompanying changes to the parking lot. The use will remain solely commercial. This is an amendment to an approved PUD. The portions of the site plan that have changed are follows:

1. A 503 sf addition to the building on the south side of the property for a cooler to accommodate the relocation of Buffalo Wild Wings. This addition results in an additional 13.85' of building that projects into the southern side yard setback.
2. In the southeast corner of the site, 82 parking spaces previously labeled as "landbanked parking within greenbelt" are now presented as parking spaces to be constructed, with no greenbelt. Identification of the condominium unit boundary lines described in the PUD agreement
3. The northernmost tenant space (E) has been altered to place its loading docks indoors, rather than reserving an outdoor loading space behind the building.
4. The next two tenant spaces (D-1 and D-2) have minimal changes to the layout in the rear.
5. The third tenant space (C-2) has been reduced in size, and the loading dock configuration now matches that of the two spaces to the north. A dumpster enclosure has been added abutting the loading dock, and the tenant space to the north's dumpster enclosure has been reduced from a double enclosure to a single enclosure.
6. There is now a fourth tenant space (C-1), and the area between the redeveloped buildings and the buildings to remain unaltered has been eliminated; parking between the buildings has been reconfigured from one row into a small double-row lot behind the building.
7. Other minor changes:
    a. Pavement replacement extents due to additional detention, per engineering (does not affect layout)
    b. Pavement replacement modifications due to new electrical lines (does not affect layout).

In addition, since approval of the plans, the City of Farmington Hills adopted a new Master Plan.

Existing Conditions

1. **Zoning.** The site is currently zoned B-2 Community Business.
2. **Existing site.** The site is 28.82 acres and developed with the Hunter's Square shopping center. The site has no wetlands or other notable natural features apart from trees.
3. **Adjacent Properties.**

Direction	Zoning	Land Use
North	B-2/ West Bloomfield Commercial	Commercial
RA-1	B-3/B-2	Commercial
South	RC-2	Multi-Family
West	RC-2	Multi-Family

4. **Site configuration and access.** The site is accessed from five driveways onto Orchard Lake Road, with an additional access point to 14 Mile Road via an easement over a neighboring property.

PUD Qualification

Under Section 34-3.20.2, the Planning Commission may make a determination that the site qualifies for a PUD based on the following criteria and procedures. On August 17, 2024 the Planning Commission approved the following motion:

"MOTION by Brickner, support by Varga, that the Planning Commission makes a preliminary finding that PUD 2, 2023, received July 18, 2023, submitted by Timothy Collier, qualifies for the Planned Unit Development Option under Section 34-3.20.2.A through D. of the Zoning Chapter. It is further determined that the proposal meets at least one of the objectives as outlined in Section 34- 3.20.2.E.i. thru viii., specifically objectives i, ii, v, vi, vii., and that it be made clear to the applicant that final granting of the PUD plan and contract requires approval by City Council, after recommendation by the Planning Commission"

It should be noted that there was a reduction in landscaping on the southwestern side of the site; the landscaping areas were a consideration in the original qualification and consideration of community benefits. With that, this portion of the site was always proposed for landbanked parking.

Final determination.

The Planning Commission held a public hearing on the final PUD plan on November 16, 2023. Per Section 34-3.20.5.B, the following must be submitted when seeking final determination of PUD qualification:

a. A boundary survey of the exact acreage being requested done by a registered land surveyor or civil engineer (scale not smaller than one inch equals one hundred (100) feet).	√
b. A topographic map of the entire area at a contour interval of not more than two (2) feet. This map shall indicate all major stands of trees, bodies of water, wetlands and unbuildable areas (scale: not smaller than one inch equals one hundred (100) feet).	√
c. A proposed land use plan indicating the following at a scale no smaller than one inch equals one hundred (100) feet (1" = 100'):	√
(1) Land use areas represented by the zoning districts enumerated in Section 34-3.1.1 through Section 34-3.1.30 of this chapter.	√
(2) Vehicular circulation including major drives and location of vehicular access. Preliminary proposals as to cross sections and as to public or private streets shall be made.	√
(3) Transition treatment, including minimum building setbacks to land adjoining the PUD and between different land use areas within the PUD.	√
(4) The general location of nonresidential buildings and parking areas, estimated floor areas, building coverage and number of stories or height.	√
(5) The general location of residential unit types and densities and lot sizes by area.	√

(6) A tree location survey as set forth in Section 34-5.18, Tree Protection, Removal and Replacement.	√
(7) The location of all wetlands, water and watercourses and proposed water detention areas.	√
(8) The boundaries of open space areas that are to be preserved and reserved and an indication of the proposed ownership thereof.	√
(9) A schematic landscape treatment plan for open space areas, streets and border/transition areas to adjoining properties.	√
d. A preliminary grading plan, indicating the extent of grading and delineating any areas which are not to be graded or disturbed.	√
e. An indication of the contemplated water distribution, storm and sanitary sewer plan.	√
f. A written statement explaining in detail the full intent of the applicant, indicating the type of dwelling units or uses contemplated and resultant population, floor area, parking and supporting documentation, including the intended schedule of development.	√

The PUD plan was **approved** by Farmington Hills City Council on February 12, 2023 with the following motion:

MOTION by Bridges, support by Boleware, that the City Council of Farmington Hills hereby approves the application for approval of PUD Plan 2, 2023, including granting Site Plan 67-9-2023, dated September 15, 2023, as revised, subject to the following conditions:

(1) Any conditions and requirements of the Planning Commission's November 16, 2023, motion recommending approval of the PUD plan and Giffels Webster's review shall be complied with or addressed to the satisfaction of the Planning and Community Development Department

(2) Any conditions and requirements stated in the reviews of the City Engineer and City Fire Marshal shall be complied with or addressed to the satisfaction of the City Engineer and Fire Marshall;

(3) Proponents must work with the City Manager's Office and Planning and Community Development Department to approve funding for public art to be installed on site or adjacent thereto;

PUD Agreement

As of this writing, there is no final PUD agreement governing this property, as no final agreement between the applicant and city has been signed. Elements of this plan that change approved deviations from ordinance standards will have to be approved by City Council and reflected in a final PUD agreement. This is summarized at the end of this letter.

Site Plan & Use:

1. **Summary of Proposed Use.** The applicant has submitted a site plan. The plan proposes four new "Major" tenant spaces for uses consistent with a commercial shopping center with corresponding site improvements. The tenant spaces, comprising 159,564 square feet, will replace a single structure that includes 190,155 square feet of space. The plans also propose four new outlots along Orchard Lake Road, one of which includes a drive-in business. Four existing buildings are to be maintained in their current condition. The total floor area of the site with the proposed improvements will be 353,217 square feet, an overall reduction of 7,264 square feet.

   Uses in a shopping center are consistent with principal permitted uses listed in the B-2 District, including retail businesses, personal service establishments which perform services on the premises, fast food or carry out restaurants, and sit-down restaurants. However, drive-in businesses, or establishments that serve patrons while in a motor vehicle, are not permitted in the B-2 District. Beyond what is permitted in the B-2 district, the City Council approved the following additional uses as a part of the original PUD approval.

   - Drive-in restaurant
   - Pharmacy pick-up window
   - Sidewalk sales
   - Indoor recreation facilities
   - Veterinary hospital or clinic

2. **Density.** The plans include 353,217 square feet of floor area. The lot size is 1,241,024 square feet (net). The lot coverage is 28.5%.

3. **Master Plan.** The 2009 Future Land Use Map in the City of Farmington Hills Master Plan for Future Land Use designated this site as Shopping Center Type Business. This classification was used in the original consideration of the PUD request. However, this amendment should be consistent with the current Master Plan, adopted January 2024. The new Master Plan identified this site as "Commercial." Areas identified as "Commercial" are intended to be compatible with the B-1, B-2, B-3 and B-4 Zoning districts.

   Across the street from the site, the City established a new 14 Mile Mixed Use Future Land Use District, which may include a mix of commercial and residential uses, as well as enhancements for greater pedestrian and non-motorized access.

4. **Dimensional Standards of the B-2 District (34-3.1.24.E). The following setback relief was granted to the applicant. This request includes additional relief for the south side setback, as described below.** *Note: The 503 sf addition should be added to the total size of the southern existing building, the total square footage was unchanged from previous submittals of these plans.*

   a. 34-3.1.24.E- Setback relief for front setback (reduction from 75' to 58.49')
   b. 34-3.1.24.E- Setback relief for rear setback (reduction from 75' to 69.33' **REVISED: reduction from 75' to 69.59')**
   c. 34-3.1.24.E- Setback relief for south side setback (reduction from 75' to 74.88'—existing setback **REVISED: reduction from 75' to 61.03'- *it should be clear that if this relief is granted, relief should only apply to the minor building addition and not the entire side yard)***

d. 34-3.5.2.E- Relief from parking setback (SE corner of site) (reduction from 10' to 4.96'—existing setback)

Standard	B-2 Requirement	Proposed
Lot Size	Not Specified	28.85 acres (gross)/ 28.49 acres (net)
Lot width	Not Specified	Not Specified
Lot coverage	Not Specified	28.5%[3]
Front setback	75 ft	**58.49 ft**
Rear setback[1]	75 ft	**69.59 ft**
Side setback (north)	20 ft	83.24 ft
Side setback (south)[2]	75 ft	**61.03 ft**
Building height	50 ft/ 3 stories	33.375 ft
Front Yard Open Space	20% of Front Yard, or 15'	37%

Footnotes:

[1]The rear setback for the B-2 District is 20 feet; however, when adjacent to residential, the required setback is 75 feet.

[2]The side yard setback for the B-2 District is 20 feet; however, when adjacent to residential, the required setback is 75 feet.

[3]*The total sf of buildings is 354,984.*

5. **Notes to Schedule of Regulations (34-35)**

   a. Landscaping for all yards abutting a street shall be provided.

   j. Parking in the front yard setback. Parking may be permitted in the front yard setback provided that the parking is set back not less than 10 feet and an area within the front yard, including that 10', remains as lawn or landscaped area which is equal to the specified percentage of the area of the required front yard setback. *This standard is met, except in the southeastern portion of the site, where the existing nonconforming setback will remain (this is included in the list of requested relief from ordinance standards).*

   n. See the loading/unloading requirements of Section 34-5.4. *See comments below on loading/ unloading.*

   o. Rooftop equipment shall be screened in accordance with Section 34-5.17. *See comments below on rooftop equipment.*

   v. Required landscaped area. In any yard abutting a street or freeway, a landscaped area not less than 10 feet deep and abutting the street or freeway shall be provided in the setback. All proposed improvements appear compliant with this standard, but existing parking on the southeast corner of the site does not. *In all areas of the site where changes are proposed, this standard is met. Areas in the southeastern portion of the site that are currently nonconforming with this standard are not proposed to change.*

6. **B-2 and B-4 District Required Conditions (34-3.10).** The uses in the B-2 District shall require review and approval of the site plan by the planning commission. The conceptual PUD plans do not indicate the types of uses included as proposed tenants. *The City Council approved the original PUD application with the following uses which are not typically permitted in the B-2 District. This amendment does not include any changes to the uses listed.*

   - *Drive-in restaurant*

- *Pharmacy pick-up window*
- *Sidewalk sales*
- *Indoor recreation facilities*
- *Veterinary hospital or clinic*

7. **Pedestrian Access. (34-3.24).** Pedestrian access-ways are required between public sidewalks and principal building entrances, principal building entrances and off-street parking lots, and between uses on abutting parcels.
    - *The site plans show where pedestrian access is proposed to be included.*
    - *Pedestrian access is included along the frontage of the proposed "Major" buildings, as well as the North side of Major Building E.*
    - *Pedestrian access between the rear parking and loading areas and the main parking lot that was previously located between the existing 35,950 SF Building and proposed Major-C was eliminated in the revised set of plans.*
    - *Marked crossings are provided between the "Major" buildings and parking areas.*
    - *Outlots D, E, and F include paved pedestrian access along all frontages, marked crossings to the parking lot, and connections to the sidewalk on Orchard Lake Road.*
    - *No pedestrian improvements are considered for portions of the site where existing structures are maintained as-is, except for enhanced crosswalk striping.*
    - *Sidewalks are included in the right-of-way on Orchard Lake Road and Fourteen Mile, but no sidewalks are included along Hunter Lane. This is an existing condition and no changes are proposed to the buildings or parking areas adjacent to Hunter Lane.*
8. **Fast food or Carry-out Restaurants (34-4.27).** The ordinance requires that all fast food or carry out restaurants in the B-2 District are located in a building which includes at least one other principal use. *The structure for the drive-in restaurant is intended for up to four tenants and meets this standard.*
9. **Drive-in Restaurants (4.35).** The use standards for drive-in restaurants are specific to the B-3 and LI-1 district, where drive-in restaurants are allowed to be located. *However, since the applicant has included a drive-in as a part of a PUD application, the commission and City Council reviewed and considered these standards as part of this PUD review.*

    The drive-in standards include the following requirements. (The plans do not comply with the regulations listed under a. and d.).

    a. Drive-in restaurants shall provide a building setback of at least 60 feet from any street right-of-way. Signs and other structures shall provide setbacks required in Section 34-3.1.

    The plans propose the drive-in restaurant to be located 58.92' from the Right-of-Way, within the front yard setback and less than 60' from the Right-of-Way.) The Planning Commission and City Council accepted this relief during the original PUD review, however the deviation has changed slightly from 58.59' to 58.92'. This means that it is closer to compliance than previous plans.

    b. No space set aside for the stacking of vehicles waiting to be served from a drive-in window shall be closer than thirty-five (35) feet to any adjacent residential zoning lot, except when such lot is occupied by use other than residential.

The proposed drive-in restaurant is not within 35' of adjacent residential.

c. The zoning lot occupied by such use shall not abut an RA District unless the district is separated from the lot by a major or secondary thoroughfare.

The subject site is not abutting any property zoned RA.

d. Vehicular access drives to a drive-in restaurant shall be located at least sixty (60) feet from the Right-of-Way of any Intersecting street.

Vehicular access drives are less than 60' from the right-of-way. The Planning Commission and City Council accepted this relief during the original PUD review

10. **Off Street Parking (34-5.2)** The applicant has not submitted detailed floor plans, and instead estimated usable floor area as 75% of the total floor area of the development. Based on the Usable Floor Area provided by the applicant, the proposed parking does not meet the parking requirements for a Commercial Shopping Center use. *The usable floor area was modified as a part of this amendment request. The total floor area used in the parking calculations is inconsistent with the floor area shown on the plans. The applicant should revise the parking calculations in accordance with the correct usable floor area. Total SF= 354,563 UFA= 266,238*

Standard	Required Parking	Proposed
Commercial Shopping Center- First 15,000 SF	1 Space/ 150 SF UFA	15,000SF/150 SF= 100 Spaces
Commercial Shopping Center- Next 15,0001-100,000 SF	1 space/ 175 SF UFA	84,999/175= 486 Spaces
Commercial Shopping Center- UFA in excess of 100,001 SF	1 space/ 200 SF UFA	166,238/200= 831 Spaces
Total	1,417 Spaces	***1,401 Spaces*** ***The applicant did not count the addition of 2 new spaces west of Existing Building*** ***Although the plan notes describe 18 land-banked spaces, these are not identified on the plans.*** ***The plan provides 9 fewer spaces than before, requiring a different deviation.***

11. **Parking requirements for Drive-In uses. (34.-5.2.12).** *The plans include a proposed vehicle drive lane for waiting and stacking in the front yard of the drive-in use, but vehicle drive lanes for waiting and stacking are not allowed to be located in a front yard. The applicant was granted approval of this arrangement as part of the PUD agreement.*

12. **Off-Street Parking Space Layout, Standards, Construction, and Maintenance (34-5.3)**. The applicant included the following minimum parking space layout dimensions. *Parking space dimensions shall be labeled on the plans. Previous plans had the dimensions and showed compliance.*

34-5.3.3.A Minimum Off Street Parking Dimensions		
	Required	Provided
Maneuvering Lane Width	20 ft	20 ft
Parking Space Width	9 ft	9 ft
Parking Space Length	20 ft*	20 ft
*May include a maximum 2' unobstructed vehicle overhand area at the front of the parking space		

13. **Off-Street Loading and Unloading (34-5.4).** The applicant provides 15 loading spaces on the plans, including 4 temporary off-hours spaces to serve the outlots. The B-2 loading calculation is derived from total building frontage as follows:

	Frontage	**Total SF of Loading**
Major Building C-1	101.98	1,019.80
Major Building C-2	120.33	1,203.30
Major Building D-1	120.33	1,203.30
Major Building D-2	119.83	1,198.30
Major Building E	241.09	2,410.90
Outlot D	98.67	986.70
Outlot E	93.00	930.00
Outlot F	98.33	983.30
Outlot G	113.00	1,130.00
Total	1,106.56	11,065.60
Number of Loading Spaces at 500 SF/ Loading Space		22 Spaces

The applicant provided the incorrect calculation and this number should be revised. Although the original approval included a reduction from 20 to 15 loading spaces, the changes in usable floor area require reconsideration of this relief. In the updated plans, there appears to be 15 loading spaces (although this was labeled as 17 in the site data chart). 4 spaces are after-hours only loading spaces serving the outlots. This requires a reduction from 22 spaces to 15 spaces.

14. **Landscaping (34-5.14) and Screening (34-5.15)**. On portions of the site that are proposed to change, proposed landscaping meets or exceeds ordinance requirements. The untouched portion of the site will continue to be nonconforming.

15. **Exterior Lighting (34-5.16)**. The applicant provided ten different fixture types, including four different luminaires. All fixtures are mounted at a mounting height that is below (or meets) the 30' height requirement. The plan notes that lights within 50 feet of residential property will be fitted with house-side shielding refractors, and that all fixtures will be mounted at the 90-degree cut-off angle.

    On portions of the site not proposed for redevelopment, the applicant is not proposing to change any lighting, but has shown that lighting on the plans.

    Proposed lighting exceeds the required 4:1 uniformity ratio, but the previously approved plans were more noncompliant than as proposed.

    The site includes 1,620,504 lumens (excluding entrance lighting) for 209,018 SF of pavement area. The maximum illumination is 2.5 lumens per sf of pavement area and these plans result in 7.75 lumens per.

    Lighting exceeds .3 footcandles at the property line in many locations, including along the western boundary adjacent to multi-family residential. This is a revision from the previously approved plans.

16. **Rooftop Screening (34-5.17).** Screening of rooftop equipment is required where any is provided. Mechanical equipment on the ground shall be screened per Section 34-5.1.4.D. The applicant's response letter indicates that all mechanical equipment will be screened per ordinance requirements.

17. **Tree Removal (34-5.18)**. A tree inventory was provided as required and appears to be accurate, with replacement calculations indicating that 35 standard trees will be replaced on a 1:1 basis, and no landmark trees will be removed from the site.

18. **Pedestrian access and connectivity from public rights of way (34-5.19).** Pedestrian access across the site is generally improved by the plan.

19. **Dumpster Enclosures. (34-5.1.3).** The applicant has provided several new dumpster enclosures. There is one behind Major Building E, one with each truckwell behind Major Buildings D-1 and D-2 and C-2, several enclosures and an exterior smoking shelter along the rear access lane behind Building E, one behind the drive-in lane near Outlot G, and one between the primary access drive and Outlot D. The dumpster enclosure proposed near outlot G is located in the front yard setback, which is not allowed. *The City Council approved the front yard dumpster location as a part of the PUD approval.*

20. **Relief Previously Approved by City Council, with Changes in Bold Green and strikethroughs.**

    a. 34-3.1.24- Permit uses not permitted in the B-2 district:
        - Drive-in restaurant
        - Pharmacy pick-up window
        - Sidewalk sales
        - Indoor recreation facilities
        - Veterinary hospital or clinic
    b. 34-3.1.24.E- Setback relief for front setback (reduction from 75' to 58.49')
    c. 34-3.1.24.E- Setback relief for rear setback (reduction from 75' to ~~69.33'~~) **now 69.59'**
    d. 34-3.1.24.E- Setback relief for south side setback (reduction from 75' to 74.88'—existing setback), **with additional relief for 503-sq-ft freezer to encroach within 61.03 feet**

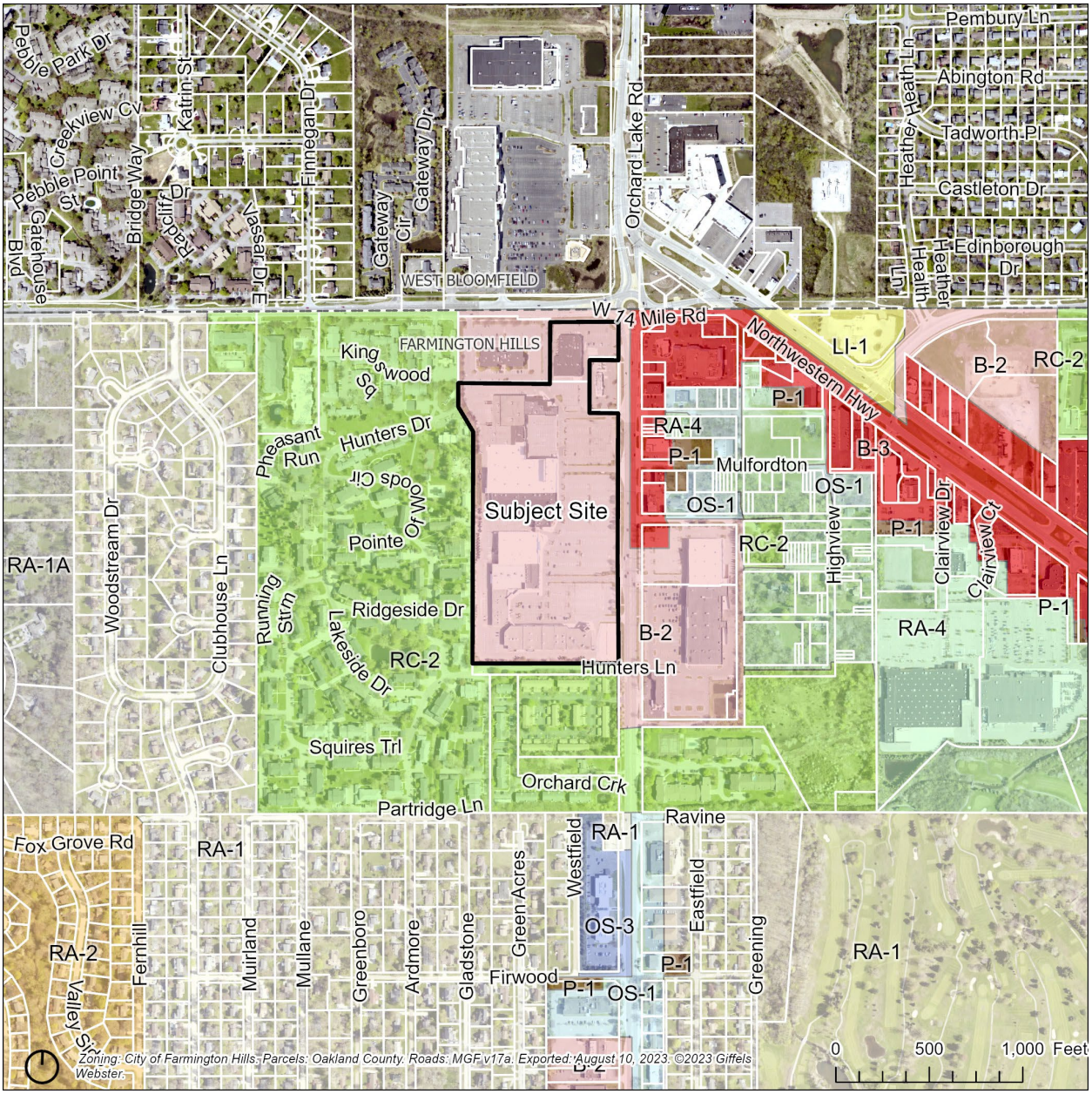
e. 34-3.5.2.E- Relief from parking setback (reduction from 10' to 4.96'—existing setback)
f. 34-4.35- Relief from requirement that a drive-in use be set back a minimum of 60 feet from the right-of-way (building is set back ~~58.59 ft~~ **58.92 ft**, and the drive-through lane is about 25 ft from the front property line)
g. 34-5.2.12- Stacking/waiting lane for drive-in located in front yard
h. 34-5.1.3- Dumpster enclosure located in front yard setback
i. 34-5.4- Relief from loading space requirements (reduction from ~~20~~ **22** to 15)
j. 34-5.5.5.A- Relief from nonconforming sign standards to allow re-use/re-location of currently existing nonconforming signs
k. 34-5.5.3.B.ii.a(2)- Relief from wall sign standards to allow more signs than permitted (increase from 2 to 5 on the Meijer storefront)
l. **Relief from parking requirements to permit 1,401 spaces in lieu of the required 1,417**

We are available to answer questions.

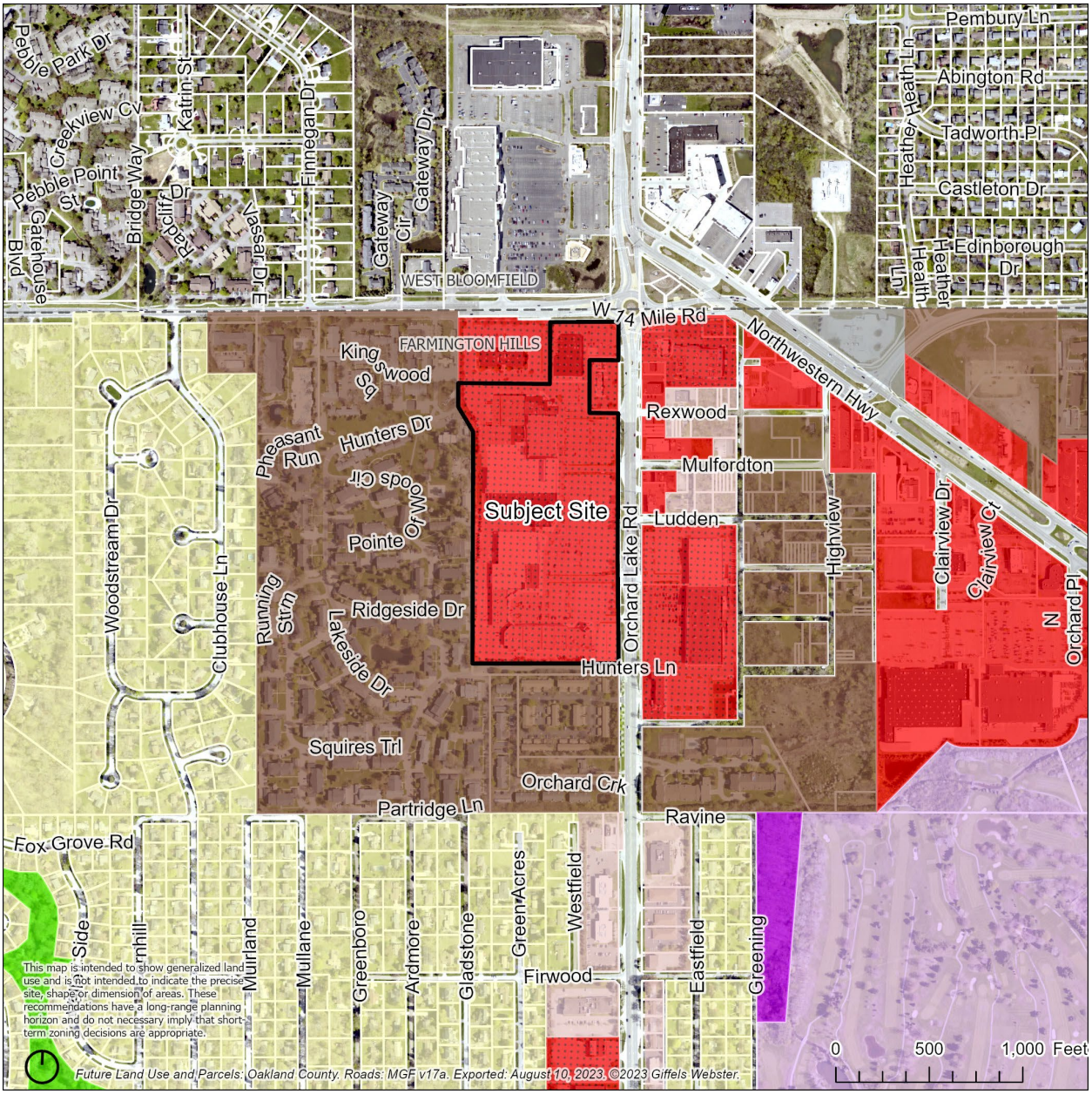
Respectfully,
Giffels Webster

Joe Tangari, AICP
Principal Planner

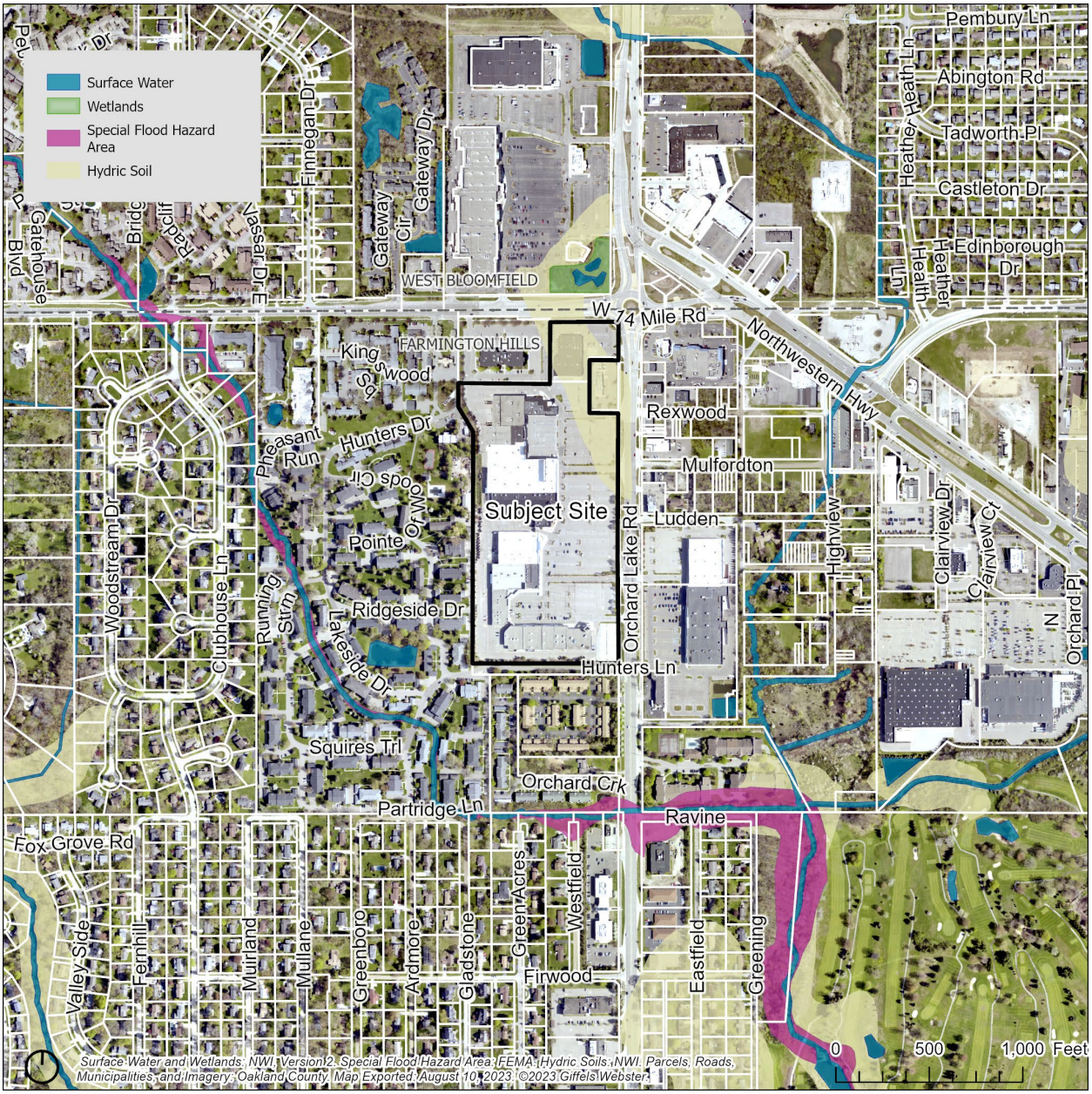
Julia Upfal, AICP
Senior Planner



Current zoning



Master Plan designations for this area. See discussion above.


Surface Water
Wetlands
Special Flood Hazard Area
Hydric Soil
Subject Site
W 14 Mile Rd
Northwestern Hwy
Orchard Lake Rd
FARMINGTON HILLS
WEST BLOOMFIELD
Rexwood
Mulfordton
Ludden
Hunters Ln
Ridgeside Dr
Squires Trl
Partridge Ln
Orchard Crk
Ravine
Fox Grove Rd
Firwood
Pembury Ln
Abington Rd
Tadworth Pl
Castleton Dr
Edinborough Dr
Heather Heath Ln
Heath Ln
Heather Ln
Highview
Clairview Dr
Clairview Ct
N Orchard Pl
Einnegan Dr
Gateway Dr
Gateway Cir
Gatehouse Blvd
Vassar Dr
King's Wood
Pheasant Run
Hunters Dr
Woodstream Dr
Clubhouse Ln
Running Stm
Lakeside Dr
Valley Side
Fernhill
Muirland
Mullane
Greenboro
Ardmore
Gladstone
Green Acres
Westfield
Eastfield
Greening
0
500
1,000 Feet
Surface Water and Wetlands: NWI, Version2. Special Flood Hazard Area: FEMA. Hydric Soils: NWI. Parcels, Roads, Municipalities, and Imagery: Oakland County. Map Exported: August 10, 2023. ©2023 GiffelsWebster

Wetland map

DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: August 8, 2025

TO: Charmaine Kettler-Schmult, Director of Planning & Community Development

FROM: James Cubera, Engineering

SUBJECT: Hunter's Square Redevelopment
REVISED PUD Plan 2, 2023
PJ#: 3-23-77
SP #67-9-2023
22-23-03-226-027 & 028

This office has performed a preliminary review of the above referenced revised PUD plans submitted to the Planning Department on July 23, 2025. Our preliminary comments remain as per our memo of June 20, 2024, with the following notations.

1. We note that preliminarily many of our comments from our memo of June 20, 2024, appear to have been addressed.

2. The plan now shows a new building for Building C-1 connecting to the existing building to the south. It eliminates the aisleway that extends to the back of the building complex and will necessitate the relocation of an existing public sanitary sewer and will require a public utility vacation. The proponent must identify the new route of the sewer and plan for an easement vacation.

3. With the previous plan the Engineering Division was willing to defer the installation of some stormwater treatment measures until the next phase was redeveloped. This additional building expansion constitutes that redevelopment work and all storm water quality improvements must be installed as part of this site plan.

FIRE
FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

Date: August 7, 2025

To: Planning Commission

From: Jason Baloga, Fire Marshal

Subject: 4th Revised PUD 2-2023; SP# 67-9-2023 (Hunter's Square Development)

The Fire Department has no objection to approval contingent upon compliance with the following requirements:

1. Hydrant coverage shall be in accordance with Chapter 12 Section 12-11(2) of the City Code. This ordinance was discussed with the proponent and clarification was provided that distance is measured as fire hose is laid from an apparatus.
    a. Chapter 12 Section 12-11(2) e. In those occupancies which have a fire suppression system with a fire department connection, the maximum distance between the connection and the closest hydrant shall not exceed one hundred fifty (150) feet.
    b. The FDC shall be a 5" Storz with a 30-degree downturn.

2. Buildings shall adhere to the Michigan Building Code and International Fire Code requirements.

3. Fire Suppression shall be designed and installed according to NFPA 13. Individual Isolation valves and flow switches shall be provided for each individual tenant. It appears that the individual buildings along Orchard Lake Road will have fire suppression.

4. There has been a reduction in drive width in the rear to 24'. Please increase the width to 26' according to IFC Aeriel Fire Apparatus Access Road Requirements.

5. The site must be designed to accommodate fire apparatus with a fifty-foot turning radius in accordance with Chapter 12, Section 12-11(1){a} of the City Code.

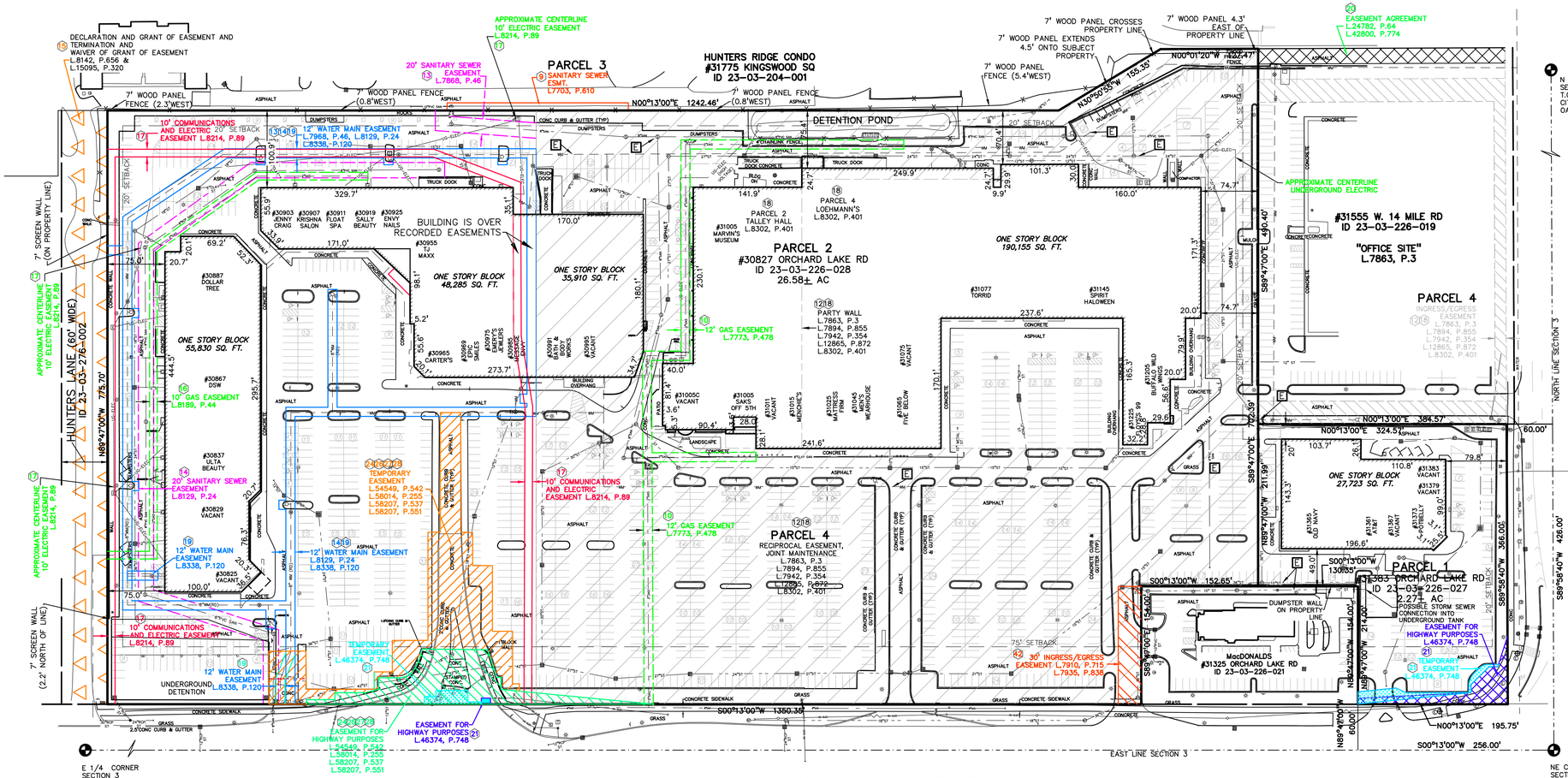
6. Emergency Responder Radio system shall be required if signal is not adequate.

7. Fire lanes shall be posted and strictly enforced. Existing faded signs shall be replaced.

8. The building(s) and site shall be maintained in accordance with minimum Fire Prevention Code requirements.

Jason Baloga, Fire Marshal

31455 West Eleven Mile Road • Farmington Hills MI 48336
Administration • 248.871.2800 Phone 248.871.2801 Fax Fire Prevention • 248.871.2820 Phone


PARCEL 3
SANITARY SEWER ESMT.
L.7703, P.610
HUNTERS RIDGE CONDO
#31775 KINGSWOOD SQ
ID 23-03-204-001
DETENTION POND
PARCEL 2
#30827 ORCHARD LAKE RD
ID 23-03-226-028
26.58± AC
ONE STORY BLOCK
190,155 SQ. FT.
BUILDING IS OVER RECORDED EASEMENTS
ONE STORY BLOCK
55,830 SQ. FT.
ONE STORY BLOCK
48,285 SQ. FT.
ONE STORY BLOCK
35,910 SQ. FT.
PARCEL 4
RECIPROCAL EASEMENT, JOINT MAINTENANCE
L.7863, P.3
L.7894, P.855
L.7942, P.354
L.12865, P.872
L.8302, P.401
PARCEL 4
INGRESS/EGRESS EASEMENT
L.7863, P.3
L.7894, P.855
L.7942, P.354
L.12865, P.872
L.8302, P.401
#31555 W. 14 MILE RD
ID 23-03-226-019
"OFFICE SITE"
L.7863, P.3
ONE STORY BLOCK
27,723 SQ. FT.
PARCEL 1
#31383 ORCHARD LAKE RD
ID 23-03-226-027
2.27± AC
MacDONALD'S
#31325 ORCHARD LAKE RD
ID 23-03-226-021
HUNTERS LANE (60' WIDE)
ID 23-03-276-002
FOURTEEN MILE ROAD
(WIDTH VARIES-PUBLIC)
ORCHARD LAKE ROAD
(120' WIDE-PUBLIC)
N 1/4 CORNER
SECTION 3
T.01N., R.09E
CITY OF FARMINGTON HILLS
OAKLAND CO., MI
E 1/4 CORNER
SECTION 3
T.01N., R.09E
CITY OF FARMINGTON HILLS
OAKLAND CO., MI
NE CORNER
SECTION 3
T.01N., R.09E
CITY OF FARMINGTON HILLS
OAKLAND CO., MI
EAST LINE SECTION 3
NORTH LINE SECTION 3
12' WATER MAIN EASEMENT L.7968, P.46, L.8129, P.24 L.8338, P.120
10' COMMUNICATIONS AND ELECTRIC EASEMENT L.8214, P.89
20' SANITARY SEWER EASEMENT L.7868, P.46
12' GAS EASEMENT L.7773, P.478
TEMPORARY EASEMENT L.54549, P.542 L.58014, P.255 L.58207, P.537 L.58207, P.551
EASEMENT FOR HIGHWAY PURPOSES L.46374, P.748
30' INGRESS/EGRESS EASEMENT L.7910, P.715 L.7935, P.838
EASEMENT AGREEMENT L.24782, P.64 L.42800, P.774
APPROXIMATE CENTERLINE UNDERGROUND ELECTRIC
APPROXIMATE CENTERLINE 10' ELECTRIC EASEMENT L.8214, P.89
7' SCREEN WALL (ON PROPERTY LINE)
7' SCREEN WALL (2.2' NORTH OF LINE)
DECLARATION AND GRANT OF EASEMENT AND TERMINATION AND WAIVER OF GRANT OF EASEMENT L.8142, P.656 & L.15095, P.320
7' WOOD PANEL FENCE (2.3'WEST)
7' WOOD PANEL FENCE (0.8'WEST)
7' WOOD PANEL FENCE (5.4'WEST)
7' WOOD PANEL CROSSES PROPERTY LINE
7' WOOD PANEL EXTENDS 4.5' ONTO SUBJECT PROPERTY
7' WOOD PANEL 4.3' EAST OF PROPERTY LINE
N00°13'00"E 1242.46'
N00°01'20"W 1202.47'
N30°50'55"W 1555.35'
S00°13'00"W 1350.38'
S00°13'00"W 152.65'
N00°13'00"E 384.57'
N00°13'00"E 324.57'
N00°13'00"E 195.75'
S00°13'00"W 256.00'
S89°47'00"E 490.40'
S89°47'00"E 702.99'
S89°47'00"E 211.99'
S89°58'40"W 428.00'
S89°58'40"W 366.00'
N89°47'00"W 775.70'
N89°47'00"W 214.00'
N89°47'00"W 600.00'
S00°13'00"W 154.00'
S00°13'00"W 130.55'
DUMPSTER WALL ON PROPERTY LINE
UNDERGROUND DETENTION
CONC. CURB & GUTTER (TYP)
20' SETBACK
75' SETBACK
249.9'
141.9'
101.3'
160.0'
237.6'
241.6'
273.7'
329.7'
171.0'
170.0'
180.1'
230.1'
170.1'
165.3'
110.8'
196.6'
103.7'
143.7'
79.8'
74.7'
69.2'
52.3'
100.0'
76.3'
444.5'
295.7'
98.1'
35.1'
100.3'
60.0'
40.0'
90.4'
28.0'
32.2'
29.6'
56.6'
79.9'
20.0'
24.7'
29.9'
9.9'
30.0'
49.0'
154.00'
#30903 JENNY CRAIG
#30907 KRISHNA SALON
#30911 FLOAT SPA
#30919 SALLY BEAUTY
#30925 ENVY NAILS
#30955 T-J MAXX
#30887 DOLLAR TREE
#30867 DSW
#30837 ULTA BEAUTY
#30829 VACANT
#30825 VACANT
#30965 CARTER'S
#30969 EPIC
#30975 EMERY'S ENERGY WORKS
#30985 SERVICE MASTER
#30991 BATH & BODY WORKS
#30995 VACANT
#31005 MARVIN'S MUSEUM
#31005C VACANT
#31005 SAKS OFF 5TH
#31011 ANN TAYLOR
#31015 MADEWELL
#31022 SS FIRM
#31045 WEARHOUSE
#31065 FIVE BELOW
#31075 VACANT
#31077 TORRID
#31145 SPIRIT HALOWEEN
#31205 BUFFALO WILD WINGS
#31225 VACANT
#31355 OLD NAVY
#31361 AMC
#31367 VACANT
#31373 VACANT
#31379 VACANT
#31383 VACANT
#31325 ORCHARD LAKE RD
ID 23-03-226-021
POSSIBLE STORM SEWER CONNECTION INTO UNDERGROUND TANK
EASEMENT FOR HIGHWAY PURPOSES L.46374, P.748
TEMPORARY EASEMENT L.46374, P.748
BUILDING IS OVER RECORDED EASEMENTS
TRUCK DOOK
TRUCK DOCK
CONCRETE WALL
CONCRETE CURB & GUTTER (TYP)
CONCRETE SIDEWALK
GRASS
ASPHALT
CONCRETE
DUMPSTERS
TRUCK DOCK CONCRETE
RAISED CONCRETE
LANDSCAPE
BUILDING OVERHANG
CHAINLINK FENCE
UNDERGROUND ELECTRIC
SIGN
MULCH
COMPACTOR
WALL
CONC. CURB & GUTTER (TYP)
STAMPED CONC.
BLOCK WALL
CONC. CURB & GUTTER (TYP)
CONCRETE CURB & GUTTER (TYP)
CONCRETE CURB & GUTTER (TYP)
CONCRETE

LEGAL DESCRIPTION

(Per First American Title Insurance Company Commitment No. NCS–1187589–CLE, Revision No. 2 Commitment Date July 24, 2023)

Land situated in the City of Farmington Hills, County of Oakland, State of Michigan, described as:

PARCEL 1:
A parcel of land being situated in the Northeast 1/4 of Section 3, Town 1 North, Range 9 East, City of Farmington Hills, Oakland County, Michigan, being more particularly described as follows: Commencing at the Northeast corner of said Section 3 and proceeding thence along the East line of said Section 3, and the centerline of Orchard Lake Road (120 feet wide) South 00 degrees 13 minutes 00 seconds West 256.00 feet; thence North 89 degrees 47 minutes 00 seconds West 60.00 feet to the POINT OF BEGINNING; thence continuing North 89 degrees 47 minutes 00 seconds West 154.00 feet; thence South 00 degrees 13 minutes 00 seconds West 130.35 feet; thence North 89 degrees 47 minutes 00 seconds West 211.99 feet; thence North 00 degrees 13 minutes 00 seconds East 324.57 feet to the South line of Fourteen Mile Road (width varies); thence along said South line North 89 degrees 58 minutes 40 seconds East 366.00 feet to the West line of said Orchard Lake Road; thence along said West line South 00 degrees 13 minutes 00 seconds West 195.75 feet to the POINT OF BEGINNING.

PARCEL 2:
A parcel of land being situated in the Northeast 1/4 of Section 3, Town 1 North, Range 9 East, City of Farmington Hills, Oakland County, Michigan, being more particularly described as follows: Commencing at the Northeast corner of said Section 3 and proceeding thence along the East line of said Section 3, and the centerline of Orchard Lake Road (120 feet wide) South 00 degrees 13 minutes 00 seconds West 256.00 feet; thence North 89 degrees 47 minutes 00 seconds West 214.00 feet; thence South 00 degrees 13 minutes 00 seconds West 130.35 feet to the POINT OF BEGINNING; thence continuing South 00 degrees 13 minutes 00 seconds West 152.65 feet; thence South 89 degrees 47 minutes 00 seconds East 154.00 feet to the West line of Orchard Lake Road; thence South 00 degrees 13 minutes 00 seconds West 1350.35 feet; thence North 89 degrees 47 minutes 00 seconds West 775.70 feet; thence North 00 degrees 13 minutes 00 seconds East 1242.46 feet; thence North 30 degrees 50 minutes 55 seconds West 155.35 feet; thence North 00 degrees 01 minutes 20 seconds West 127.47 feet; thence South 89 degrees 47 minutes 00 seconds East 702.39 feet to the POINT OF BEGINNING.

PARCEL 3:
Nonexclusive easement for the benefit of a portion of Parcel 2 as defined and described in Easement Agreement recorded as Liber 7703, Page 610 of Official Records. [Same as Schedule B–II Exception Item 9 (L.7703, P.610)]

PARCEL 4:
Nonexclusive easements for the benefit of a portion of Parcel 2 as defined and described in Reciprocal Easement, Joint Maintenance and Party Wall Agreement recorded as Liber 7863, Page 3, as affected by First Amendment to Reciprocal Easement, Joint Maintenance and Party Wall Agreement recorded in Liber 7894, Page 855, as affected by Second Amendment to Reciprocal Easement, Joint Maintenance and Party Wall Agreement recorded in Liber 7942, Page 354 and as affected by Amended and Restated Reciprocal Easement, Joint Maintenance and Party Wall Agreement recorded in Liber 12865, Page 872 of Official Records. [Same as Schedule B–II Exceptions Item 12 (L.7863, P.3, L.7894, P.855, L.7942, P.354, L.12865, P.872) and Item 18 (L.8302, P.401)]

SCHEDULE B–II EXCEPTIONS

(Per First American Title Insurance Company Commitment No. NCS–1187589–CLE, Revision No. 2, Commitment Date July 24, 2023)

Items 1–6 and 30–41 are not plottable or survey items.

7 The terms and provisions contained in the document entitled "Warranty Deed" recorded as Liber 5995, Page 131 and Warranty Deed recorded as Liber 6060, Page 774 of Official Records. as affected by Affidavit recorded in Liber 16374, Page 4, Oakland County Records. [AS PLOTTED]

8 The terms, provisions and easement(s) contained in the document entitled "Right of Way" recorded as Liber 6612, Page 267 of Official Records. [THE 60 FOOT EASEMENT LIES ENTIRELY WITHIN THE FOURTEEN MILE ROAD RIGHT OF WAY]

9 The terms, provisions and easement(s) contained in the document entitled "Easement Agreement" recorded as Liber 7703, Page 610 of Official Records. [AS PLOTTED. EASEMENT IS ENTIRELY ON THE ADJACENT PROPERTY]

10 The terms, provisions and easement(s) contained in the document entitled "Easement" recorded as Liber 7773, Page 478 of Official Records. [AS PLOTTED]

11 The terms, provisions and easement(s) contained in the document entitled "Letter of Acknowledgement" recorded as Liber 7775, Page 470 of Official Records. [AFFECTS ALL OF THE SUBJECT PROPERTY]

12 The terms, provisions and easement(s) contained in the document entitled "Reciprocal Easement, Joint Maintenance and Party Wall Agreement" recorded as Liber 7863, Page 3; First Amendment to Reciprocal Easement, Joint Maintenance and Party Wall Agreement recorded in Liber 7894, Page 855; Second Amendment to Reciprocal Easement, Joint Maintenance and Party Wall Agreement recorded in Liber 7942, Page 354 and Amended and Restated Reciprocal Easement, Joint Maintenance and Party Wall Agreement recorded in Liber 12865, Page 872 of Official Records. [AS PLOTTED]

13 The terms, provisions and easement(s) contained in the document entitled "Declaration and Grant of Easement" recorded as Liber 7968, Page 46 of Official Records. [AS PLOTTED]

14 The terms, provisions and easement(s) contained in the document entitled "Easement" recorded as Liber 8129, Page 24 of Official Records. [AS PLOTTED]

15 The terms, provisions and easement(s) contained in the document entitled "Declaration and Grant of Easement" recorded as Liber 8142, Page 656 of Official Records. as affected by Termination and Waiver of Declaration and Grant of Easement recorded in Liber 15095, Page 320, Oakland County Records. [AS PLOTTED]

16 The terms, provisions and easement(s) contained in the document entitled "Easement" recorded as Liber 8189, Page 44 of Official Records. [AS PLOTTED]

17 The terms, provisions and easement(s) contained in the document entitled "Joint Underground Easement" recorded as Liber 8214, Page 89 of Official Records. [AS PLOTTED]

18 The terms, provisions and easement(s) contained in the document entitled "Agreement" recorded as Liber 8302, Page 401 of Official Records. [AS PLOTTED]

19 The terms, provisions and easement(s) contained in the document entitled "Easement" recorded as Liber 8338, Page 120 of Official Records. [AS PLOTTED]

20 The terms, provisions and easement(s) contained in the document entitled "Easement" recorded as Liber 24782, Page 64 of Official Records. as affected by Easement Agreement recorded in Liber 42800, Page 774, Oakland County Records. [AS PLOTTED]

21 The terms, provisions and easement(s) contained in the document entitled "Declaration of Taking" recorded as Liber 46374, Page 748 of Official Records. [AS PLOTTED]

22 The terms, provisions and easement(s) contained in the document entitled "Easement Agreement" recorded as Liber 50891, Page 506 of Official Records. [AFFECTS ALL OF THE SUBJECT PROPERTY. NO EXACT LOCATION DESCRIBED]

23 The terms, provisions and easement(s) contained in the document entitled "Easement Agreement" recorded as Liber 50891, Page 562 of Official Records. [AFFECTS ALL OF THE SUBJECT PROPERTY. NO EXACT LOCATION DESCRIBED]

24 The terms, provisions and easement(s) contained in the document entitled "Declaration of Taking" recorded as Liber 54549, Page 542 of Official Records. [AS PLOTTED]

25 The terms, provisions and easement(s) contained in the document entitled "Declaration of Reciprocal Easement" recorded as Liber 57045, Page 885 of Official Records. [AFFECTS ALL OF THE SUBJECT PARCELS A AND B]

26 The terms, provisions and easement(s) contained in the document entitled "Order Regarding Surrender of Possession and Vesting Title of Property in the Road Commission, and Disbursement of Estimated Just Compensation" recorded as Liber 58014, Page 255 of Official Records. [AS PLOTTED]

27 The terms, provisions and easement(s) contained in the document entitled "Consent Judgment as to Defendant Consumers Energy Company Only" recorded as Liber 58207, Page 537 of Official Records. [AS PLOTTED]

28 The terms, provisions and easement(s) contained in the document entitled "Consent Judgment as to Defendants Michigan Bell Telephone Company and AT&T Only" recorded as Liber 58207, Page 551 of Official Records. [AS PLOTTED]

29 The terms, provisions and easement(s) contained in the document entitled "Stipulated Final Order and Judgment" recorded as Liber 58610, Page 373 of Official Records. [AFFECTS ALL OF THE SUBJECT PARCELS 1 AND 2]

42 The terms, provisions and easement(s) contained in the document entitled "Warranty Deed" recorded as Liber 7910, Page 715 and Quit Claim Deed recorded in Liber 7935, Page 838 of Official Records.

PEA GROUP
t: 844.813.2949
www.peagroup.com

NORTH

NO SCALE

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

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

CLIENT
KIMCO REALTY
500 N. BROADWAY, STE 201
JERICO, MY 11753

PROJECT TITLE
HUNTERS SQUARE
30825 ORCHARD LAKE ROAD
FARMINGTON HILLS, MICHIGAN

REVISIONS

REVISED FOR COMMITMENT NCS-1187589-CLE	8-22-23
REVISED FOR COMMENTS, COMMITMENTS NCS-1187589-CLE, REV 1	11-30-23
REVISED FOR COMMENTS, COMMITMENTS NCS-1187589-CLE, REV 2	1-5-24
REVISED FOR COMMENTS,	2-28-24

ORIGINAL ISSUE DATE:
AUGUST 8, 2023

DRAWING TITLE
ALTA/NSPS LAND TITLE SURVEY

PEA JOB NO.	22-0256
P.M.	GWC
DN.	GWC
DES.	XXX

DRAWING NUMBER:
2 OF 2

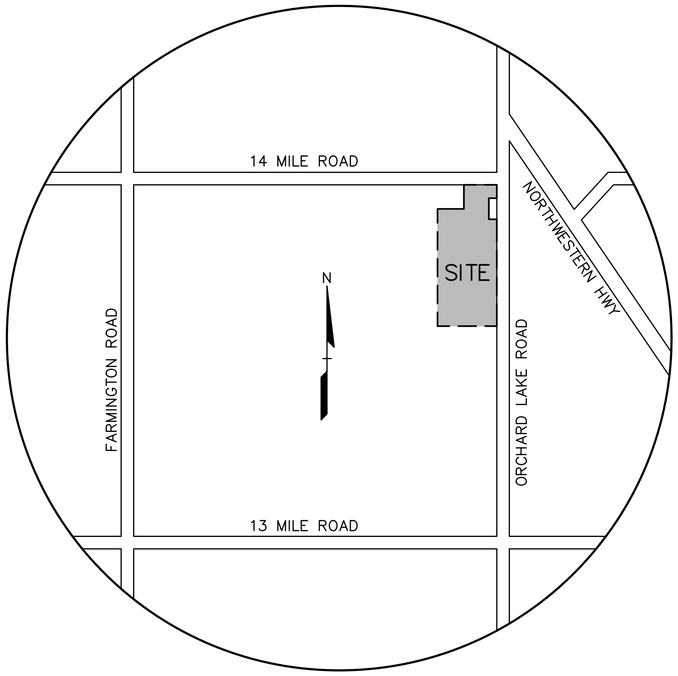
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PUD AND SITE PLAN SUBMITTAL FOR

HUNTER'S SQUARE REDEVELOPMENT

ORCHARD LAKE ROAD AT 14 MILE ROAD

CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN



LOCATION MAP
NO SCALE

INDEX OF DRAWINGS:

	COVER SHEET
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C-1.0B	FIRE TRUCK CIRCULATION PLAN
C-1.0C	OVERALL COMMUNITY DEVELOPMENT PLAN
C-1.0D	TRAFFIC CIRCULATION PLAN
C-1.0E	PROPOSED CONDOMINIUM LOT PLAN
C-2.1	TOPOGRAPHIC SURVEY - SHEET 1
C-2.2	TOPOGRAPHIC SURVEY - SHEET 2
C-2.3	TOPOGRAPHIC SURVEY - SHEET 3
C-2.4	TOPOGRAPHIC SURVEY - SHEET 4
C-2.5	TOPOGRAPHIC SURVEY - SHEET 5
C-2.6	TOPOGRAPHIC SURVEY - SHEET 6
C-2.7	EXISTING TREE LIST - SHEET 1
C-2.8	EXISTING TREE LIST - SHEET 2
C-7.0	OVERALL UTILITY PLAN
C-7.1	PRELIMINARY GRADING AND UTILITY PLAN - SHEET 1
C-7.2	PRELIMINARY GRADING AND UTILITY PLAN - SHEET 2
C-7.3	PRELIMINARY GRADING AND UTILITY PLAN - SHEET 3
C-7.4	PRELIMINARY GRADING AND UTILITY PLAN - SHEET 4
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C-12.0	OVERALL DRAINAGE MAP
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L-2.0	LANDSCAPE DETAILS
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T-1.1	TREE PRESERVATION PLAN - SW
T-1.2	TREE PRESERVATION PLAN - NW
T-1.3	TREE PRESERVATION PLAN - SE
T-1.4	TREE PRESERVATION PLAN - NE
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PH-1	PHOTOMETRIC SITE PLAN
PH-2	LIGHTING DETAILS

ARCHITECTURAL PLANS:

DET-1:	ARCHITECTURAL SITE DETAILS
A-1:	MAJOR C, D-1, D-2 CONCEPTUAL FLOOR PLAN
A-2:	MAJOR C, D-1, D-2 CONCEPTUAL BUILDING ELEVATIONS
A-3:	MAJOR E PRELIMINARY FLOOR PLAN
A-4.1:	MAJOR E SIGNAGE DETAILS
A-4.2:	MAJOR E BUILDING ELEVATIONS AND 3D VIEWS
A-4.3:	MAJOR E EVENING AND PHARMACY 3D VIEWS
A-5:	OUTLOT D CONCEPTUAL FLOOR PLAN
A-6:	OUTLOT D CONCEPTUAL BUILDING ELEVATIONS
A-7:	OUTLOT E CONCEPTUAL FLOOR PLAN
A-8:	OUTLOT E CONCEPTUAL BUILDING ELEVATIONS
A-9:	OUTLOT F CONCEPTUAL FLOOR PLAN
A-10:	OUTLOT F CONCEPTUAL BUILDING ELEVATIONS
A-11:	OUTLOT G CONCEPTUAL FLOOR PLAN
A-12:	OUTLOT G CONCEPTUAL BUILDING ELEVATIONS

DEVELOPER:

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MICHIGAN, 48067
CONTACT: TRAVIS SOKANA
PHONE: (248) 465-0200
EMAIL: TSOKANA@SYMMETRYMGMT.COM

ARCHITECT:

COLLIERS ENGINEERING AND DESIGN
20700 CIVIC CENTER DRIVE, SUITE #170
SOUTHFIELD, MICHIGAN, 48076
CONTACT: KRISTEN LARK
PHONE: (248) 540-7700
EMAIL: KRISTEN.LARK@COLLIERSENG.COM

CIVIL ENGINEER:

PEA GROUP
58105 VAN DYKE ROAD
WASHINGTON, MICHIGAN, 48094
CONTACT: RACHEL L. SMITH, PE
PHONE: (248) 821-9206
EMAIL: RACHEL.SMITH@PEAGROUP.COM

LANDSCAPE ARCHITECT:

PEA GROUP
7927 NEMCO WAY, SUITE #155
BRIGHTON, MICHIGAN, 48116
CONTACT: JANET EVANS, PLA
PHONE: (517) 546-8583
EMAIL: JEVANS@PEAGROUP.COM

PEA GROUP
t: 844.813.2949
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STATE OF MICHIGAN · RACHEL L SMITH · LICENSED PROFESSIONAL ENGINEER · 6201048628

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

KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
COVER SHEET - HUNTER'S SQUARE REDEVELOPMENT

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
COVER

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\22-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\C-0\[COVER-22256(PH-2).dwg PLOT DATE: 7/15/2025 BY: Kyle Miller DVIEW TIMES: 9:04:57 AM

BENCHMARKS:
(GPS DERIVED - NAVD88)

BM #300
DIMPLE ON ARROW ON HYDRANT AND ±109' DIRECTLY NORTHEASTERLY FROM NORTHEAST BUILDING CORNER STORE BUY BUY BABY.
ELEV.- 877.55

BM #301
DIMPLE ON ARROW ON HYDRANT AND ±39' DIRECTLY WEST FROM SOUTHWEST BUILDING CORNER AT SOUTHWEST CORNER OF SITE.
ELEV.- 874.61

BM #302
LIGHT POLE BASE IN SHOPPING MALL ±180' DIRECTLY SOUTH FROM McDONALDS RESTUARANT
ELEV.- 875.56

FLOODPLAIN NOTE:
BY GRAPHIC PLOTTING, THE SUBJECT PARCEL IS IN "AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN." (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP PANEL NUMBER26125C0513F EFFECTIVE SEPTEMBER 29, 2006.

LEGAL DESCRIPTIONS:

PARCEL 23-03-226-028
A PARCEL OF LAND BEING SITUATED IN THE NORTHEAST 1/4 OF SECTION 3, TOWN 1 NORTH, RANGE 9 EAST, CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3 AND PROCEEDING THENCE ALONG THE EAST LINE OF SAID SECTION 3, AND THE CENTERLINE OF ORCHARD LAKE ROAD (120 FEET WIDE) SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST 256.00 FEET; THENCE NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST, 214.00 FEET; THENCE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST, 130.35 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST, 152.65 FEET; THENCE SOUTH 89 DEGREES 47 MINUTES 00 SECONDS EAST, 154.00 FEET TO THE WEST LINE OF ORCHARD LAKE ROAD; THENCE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST, 1350.35 FEET; THENCE NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST, 775.70 FEET; THENCE NORTH 00 DEGREES 13 MINUTES 00 SECONDS EAST, 1242.46 FEET; THENCE NORTH 30 DEGREES 50 MINUTES 55 SECONDS WEST 155.35 FEET; THENCE NORTH 00 DEGREES 01 MINUTES 20 SECONDS WEST 127.47 FEET; THENCE SOUTH 89 DEGREES 47 MINUTES 00 SECONDS EAST 702.39 FEET TO THE POINT OF BEGINNING. CONTAINING ±26.58 ACRES

PARCEL 23-03-226-027
A PARCEL OF LAND BEING SITUATED IN THE NORTHEAST 1/4 OF SECTION 3, TOWN 1 NORTH, RANGE 9 EAST, CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3 AND PROCEEDING THENCE ALONG THE EAST LINE OF SAID SECTION 3, AND THE CENTERLINE OF ORCHARD LAKE ROAD (120 FEET WIDE) SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST 256.00 FEET; THENCE NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST 60.00 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST 154.00 FEET; THENCE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST 130.35 FEET; THENCE NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST 211.99 FEET; THENCE NORTH 00 DEGREES 13 MINUTES 00 SECONDS EAST 324.57 FEET TO THE SOUTH LINE OF FOURTEEN MILE ROAD (WIDTH VARIES); THENCE ALONG SAID SOUTH LINE NORTH 89 DEGREES 58 MINUTES 40 SECONDS EAST 366.00 FEET TO THE WEST LINE OF SAID ORCHARD LAKE ROAD; THENCE ALONG SAID WEST LINE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST 195.75 FEET TO THE POINT OF BEGINNING. CONTAINING ±2.27 ACRES

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN CASTING/COVER OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. 'NO PARKING–FIRE LANE' SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AS DIRECTED BY THE FIRE OFFICIAL.
3. REFER TO NOTES AND DETAILS SHEET FOR ON–SITE PAVING DETAILS.
4. REFER TO LATEST EDITION OF MDOT R–28 STANDARD PLAN FOR SIDEWALK RAMP DETAILS.

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, MDOT AND MUNICIPALITY STANDARDS AND REGULATIONS.
2. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
4. ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL CITY INSPECTION FEES.
5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
6. CONTRACTOR SHALL VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE–DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
7. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS–OF–WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
8. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, CITY AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
10. THE USE OF CRUSHED CONCRETE IS PROHIBITED ON THE PROJECT WITHIN 100 FEET OF ANY WATER COURSE (STREAM, RIVER, COUNTY DRAIN, ETC.) AND LAKE, REGARDLESS OF THE APPLICATION OR LOCATION OF THE WATER COURSE OR LAKE RELATIVE TO THE PROJECT LIMITS.
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

APPROVED ORDINANCE DEVIATIONS:

APPROVED ALLOWED USE DEVIATIONS
•DRIVE–IN RESTAURANT
•PHARMACY PICKUP
•OUTDOOR SIDEWALK SALES
•INDOOR RECREATIONAL ACTIVITIES
•VETERINARY HOSPITAL OR CLINIC

REQUIRED OVERALL DEVELOPMENT SETBACK DEVIATIONS
•REAR SETBACK DEVIATION FOR MAJOR BLDG (69.59' PROPOSED/75' REQUIRED)
•FRONT SETBACK DEVIATION FOR OUTLOT BLDG (58.49' PROPOSED/75' REQUIRED)
•SIDE SETBACK DEVIATION FOR BUILDING ADDITION (61.03' PROPOSED/75' REQUIRED)
•PARKING SETBACK DEVIATION FOR EXISTING S.E. LOT (4.96' EXISTING, 10' REQUIRED)
REFER TO SHEET C–1.0E FOR INTERNAL CONDO UNIT SETBACK DEVIATIONS

APPROVED FRONT YARD DEVIATIONS
•VISUALLY SCREENED DRIVE–THROUGH IN FRONT YARD WITH 10 STACKING SPACES TO MEET ORDINANCE (OUTLOT 'G')

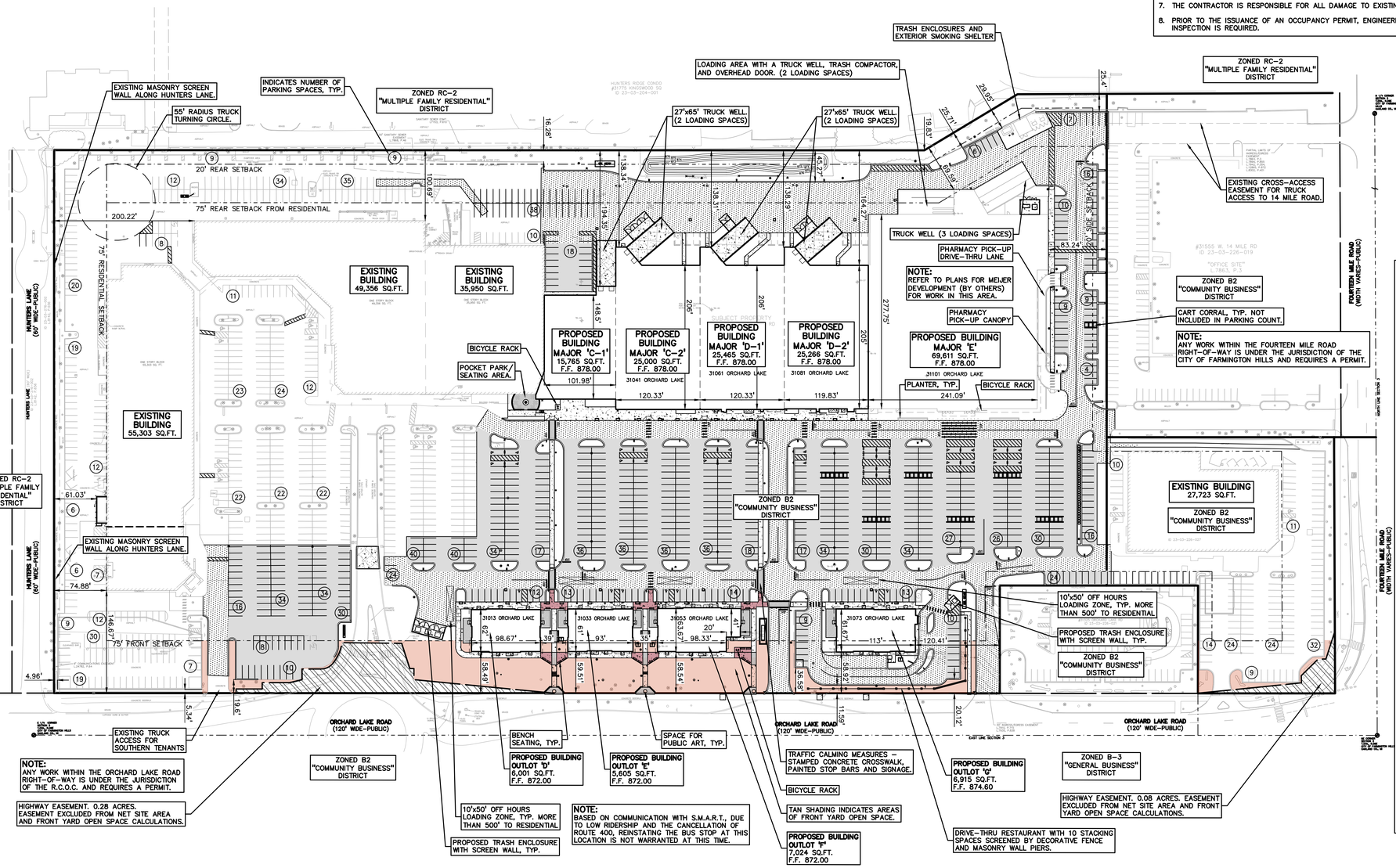
APPROVED SIGNAGE DEVIATIONS
•ADDITIONAL FACADE SIGNS ON MAJOR 'E' (5 PROPOSED/2 MAX ALLOWED)
•REUSE AND RELOCATE EXISTING NON–CONFORMING SIGNAGE

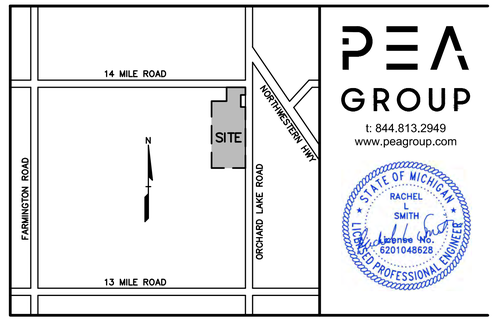
REQUIRED LOADING SPACE DEVIATIONS
•REDUCED LOADING SPACES BY 3 (17 PROPOSED/20 REQUIRED)

CITY OF FARMINGTON HILLS STANDARD NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. NOTIFY THE CITY OF FARMINGTON HILLS ENGINEERING DIVISION AT 248.871.2560 A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. ALL CONSTRUCTION MUST BE CONFORMING TO THE CURRENT STANDARDS AND SPECIFICATIONS ADOPTED BY THE CITY OF FARMINGTON HILLS.
3. UTILITIES TO BE UNDERGROUND.
4. CALL MISS DIG 1.800.647.7344 A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
5. ALL SOIL EROSION AND SILT MUST BE CONTROLLED AND CONTAINED ON SITE.
6. ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED, SHALL BE BACKFILLED AND COMPACTED WITH SAND (CLASS II MDOT).
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
8. PRIOR TO THE ISSUANCE OF AN OCCUPANCY PERMIT, ENGINEERING SITE INSPECTION IS REQUIRED.





LEGEND

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

NORTH

EXISTING		PROPOSED
—OH—ELEC—	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
—UG—CATV—	UNDERGROUND CABLE TV, CATV PEDESTAL	
—UG—PHONE—	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
—UG—ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	—UG—ELEC—
GAS	GAS MAIN, VALVE & GAS LINE MARKER	GAS
W	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	W
S	SANITARY SEWER, CLEANOUT & MANHOLE	S
ST	STORM SEWER, CLEANOUT & MANHOLE	ST
T.D.	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	T.D.
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
	UNIDENTIFIED STRUCTURE	
×SHED	SPOT ELEVATION	671.21
670	CONTOUR LINE	671
	FENCE	
	GUARD RAIL	
	STREET LIGHT	
	SIGN	
CONC.	CONCRETE	STD DUTY / HEAVY DUTY / R.O.W. ONLY
ASPH.	ASPHALT	STD DUTY / HEAVY DUTY / DEEP STRENGTH

0 40 80 160
SCALE: 1" = 80'

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

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

KEY MAP

REFERENCE DRAWINGS

WATER MAIN	TRANSMISSION MAP 4Y, GLWA, APRIL 2019
WATER MAIN	TRANSMISSION MAP 5Y, GLWA, MARCH 2007
ELECTRIC	LOCATION MAP 262-374, DTE, JUNE 2023
GAS	TRANSMISSION MAP, CONSUMERS ENERGY, 01-59-03-1
OTHER	HUNTER SQUARE LAND TITLE SURVEY, PEA GROUP #21-0052, MARCH 2021.
OTHER	LOEHMANN'S AT HUNTERS SQUARE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., AUGUST 1981, UPDATED 1989
OTHER	ORCHARD PLACE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., ISSUED FEBRUARY 1983, UPDATED MAY 2005
OTHER	HUNTERS SQUARE PARKING LOT AND DRIVEWAY RENOVATIONS AS BUILTS, ORCHARD, HILTZ & McCLIMENT, INC., ISSUED SEPTEMBER 1993, UPDATED MAY 2005
OTHER	ORCHARD PLACE REHABILITATION PROJECT AS BUILTS, OHM CONSULTING ENGINEERS, ISSUED OCTOBER 1995, UPDATED DECEMBER 2005
OTHER	HUNTERS SQUARE/BUILDING "F": OHM CONSULTING ENGINEERS, DECEMBER 2004
OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD. HRC INC, OCTOBER 2019

SITE DATA TABLE:

SITE AREA: 28.85 ACRES (1,256,706 S.F.) GROSS
28.49 ACRES (1,241,024 S.F.) NET
ZONING: B–2 (COMMUNITY BUSINESS DISTRICT) PROPOSED PUD
PROPOSED USE: COMMERCIAL SHOPPING CENTER (1,241,024 S.F.)
PROPOSED ADDITIONAL USES: DRIVE–IN RESTAURANT, INDOOR RECREATIONAL FACILITIES, SIDEWALK SALES, PHARMACY PICK–UP, ELECTRIC VEHICLE INFRASTRUCTURE, VETERINARY HOSPITAL OR CLINIC

BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 50 FEET (3 STORIES)
PROPOSED BUILDING HEIGHT = 1 STORY

PROPOSED BUILDING FOOTPRINT AREA = 354,984 S.F.

PROPOSED BUILDING LOT COVERAGE = 354,984 S.F. / 1,241,024 S.F. = 28.6%
(TOTAL EX. BUILDING AREA = 358,487 S.F. DEVELOPMENT REDUCES AREA BY 3,503.)

SETBACK REQUIREMENTS:	REQUIRED:	PROPOSED:
FRONT (EAST):	75'	58.49' •
SIDE (SOUTH):	75'	61.03' (BUILDING ADDITION)
SIDE (NORTH):	20'	83.24'
REAR (WEST):	75'	69.59' (EXISTING: 60.78') •

PARKING CALCULATIONS:
USEABLE FLOOR AREA (75% OF GROSS FLOOR AREA) = 354,984 S.F.x0.75 = 266,238 S.F.

COMMERCIAL SHOPPING CENTER
1 SPACE PER 150 S.F. USABLE AREA UP TO 15,000 S.F. = 15,000 S.F. / 150 S.F. = 100 SPACES

1 SPACE PER 175 S.F. USABLE AREA FROM 15,001 S.F. TO 100,000 S.F. USABLE AREA = 85,000 S.F. / 175 S.F. = 485.7 = 486 SPACES

1 SPACE PER 200 S.F. USABLE AREA IN EXCESS OF 100,001 S.F. = (266,238 S.F. – 100,001 S.F.) / 200 S.F. = 166,237 S.F. / 200 S.F. = 831 SPACES

TOTAL REQUIRED PARKING = 100 + 486 + 828 = 1,417 SPACES

PROPOSED PARKING SPACES = 1,399 SPACES INC. 49 H/C SPACES
LAND–BANKED PARKING SPACES = 18 SPACES
TOTAL PROVIDED PARKING SPACES = 1417 SPACES INC. 49 H/C SPACES

PARKING RATIO = 1,417 SPACES/354,984 GROSS FLOOR AREA = 3.99 SPACES/1000 S.F.

LOADING CALCULATIONS:
LOADING REQUIRED = 10 S.F. OF LOADING AREA PER FOOT OF BUILDING FRONTAGE
1 LOADING SPACE IS 500 S.F.

BUILDING:	FRONTAGE:	FORMULA:	REQUIRED:	PROVIDED:
MAJOR 'C–1'	101.98'	(101.98x10)/500	= 2.0 (2)	2
MAJOR 'C–2'	120.33'	(120.33x10)/500	= 2.4 (2)	2
MAJOR 'D–1'	120.33'	(120.33x10)/500	= 2.4 (2)	2
MAJOR 'D–2'	119.83'	(119.83x10)/500	= 2.4 (2)	2
MAJOR 'E'	241.09'	(241.09x10)/500	= 4.8 (5)	5
OUTLOT 'D'	98.67'	(98.67x10)/500	= 2.0 (2)	1
OUTLOT 'E'	93'	(93x10)/500	= 1.9 (2)	1
OUTLOT 'F'	98.33'	(98.33x10)/500	= 2.0 (2)	1
OUTLOT 'G'	113'	(113x10)/500	= 2.3 (2)	1
		TOTAL = 20		17•

OPEN SPACE:
MINIMUM FRONT YARD OPEN SPACE REQUIRED = 20%
PROVIDED FRONT YARD OPEN SPACE = 37,585 S.F. / 100,333 S.F. = 37%

SITE SOILS INFORMATION:
ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR OAKLAND COUNTY DATED AUGUST 22, 2023, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:

SANDY LOAM, LOAMY SAND, LOAMS, FINE SAND, UDIPSAMMENTS, URBAN LAND

PEA GROUP
t: 844.813.2949
www.peagroup.com
STATE OF MICHIGAN RACHEL L SMITH License No. 6201048628 REGISTERED PROFESSIONAL ENGINEER

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI. 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS

1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

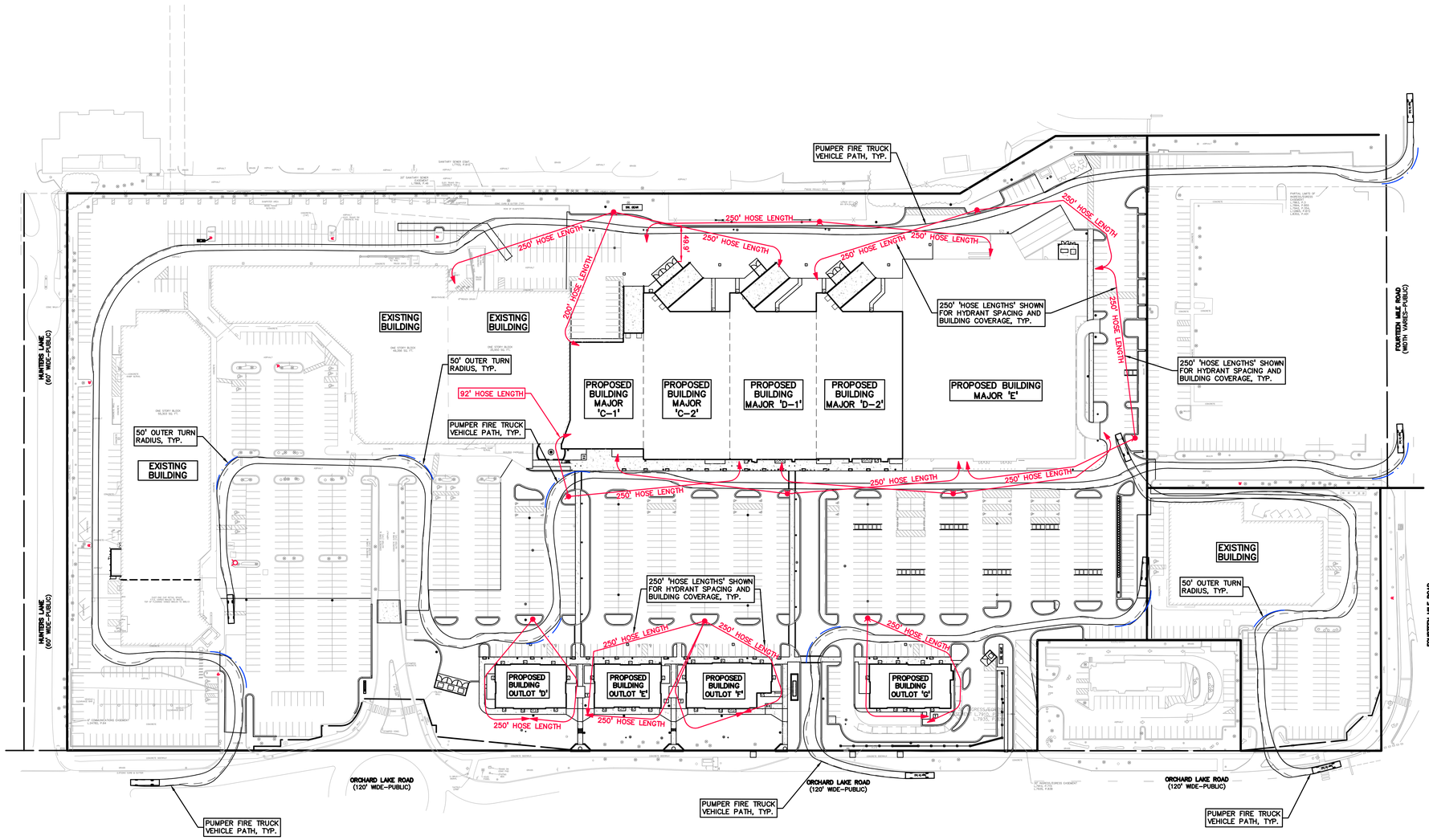
DRAWING TITLE
OVERALL SITE PLAN

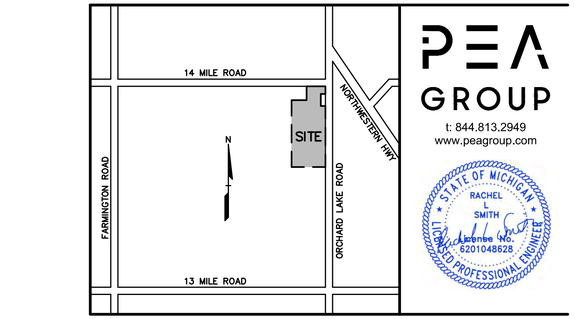
PEA JOB NO. 22-0256
P.M. RLS
DN. KM
DES. PB

DRAWING NUMBER:
C-1.0A

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\22-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE 1 REDEVELOPMENT\SITE PLAN\C-1.0A\OVERALL-22025606-21.dwg PLOT DATE: 7/14/2025 BY: Isaac Miller DWG TIMES: 9:24:52 AM





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STATE OF MICHIGAN
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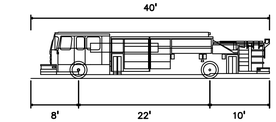
LEGEND

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

EXISTING	PROPOSED	
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—UG—CATV—		UNDERGROUND CABLE TV, CATV PEDESTAL
UG—PHONE—		TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
—UG—ELEC—	—UG—ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
		GAS MAIN, VALVE & GAS LINE MARKER
		WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
	C.O.	SANITARY SEWER, CLEANOUT & MANHOLE
	C.O.	STORM SEWER, CLEANOUT & MANHOLE
Y.D.	Y.D.	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
		WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
M T E		MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
?		UNIDENTIFIED STRUCTURE
+T.O.S. 671	671.21	SPOT ELEVATION
670	671	CONTOUR LINE
		FENCE
		GUARD RAIL
		STREET LIGHT
		SIGN
CONC.	STD DUTY / HEAVY DUTY / R.O.W.	CONCRETE
ASPH.	STD DUTY / HEAVY DUTY / DEEP STRENGTH	ASPHALT

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Pumper Fire Truck	
Overall Length	40.000ft
Overall Width	8.167ft
Overall Body Height	7.745ft
Min Body Ground Clearance	0.656ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Max Wheel Angle	45.00°

FARMINGTON HILLS FIRE DEPT. NOTES:

1. ALL POINTS ON THE PROPOSED BUILDINGS ARE WITHIN 250 FEET OF A FIRE HYDRANT.
2. FIRE DEPT. CONNECTION (FDC) SHALL BE A 5" STORZ WITH A 30° DOWNSTURN LOCATED WITHIN 150 FEET.
3. FIRE SUPPRESSION SHALL BE DESIGNED AND INSTALLED ACCORDING TO NFPA 13. INDIVIDUAL ISOLATION VALVES AND FLOW SWITCHES SHALL BE PROVIDED FOR EACH INDIVIDUAL TENANT.
4. ALL FIRE LANES CAN ACCOMMODATE A PUMPER FIRE TRUCK WITH A 50' OUTER TURN RADIUS.
5. THE BUILDINGS AND SITE SHALL BE MAINTAINED IN ACCORDANCE WITH MINIMUM FIRE PREVENTION CODE REQUIREMENTS.

LEGEND:

50' FIRE TRUCK OUTER TURNING RADIUS

250' HOSE LENGTHS FOR HYDRANT COVERAGE

NORTH

0 40 80 160
SCALE: 1" = 80'

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

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KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
FIRE TRUCK CIRCULATION PLAN

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

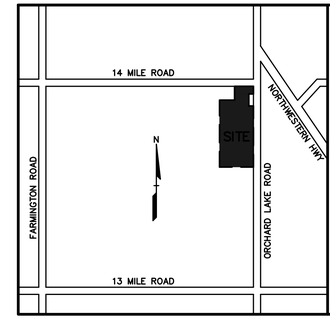
DRAWING NUMBER:
C-1.0B

NOT FOR CONSTRUCTION

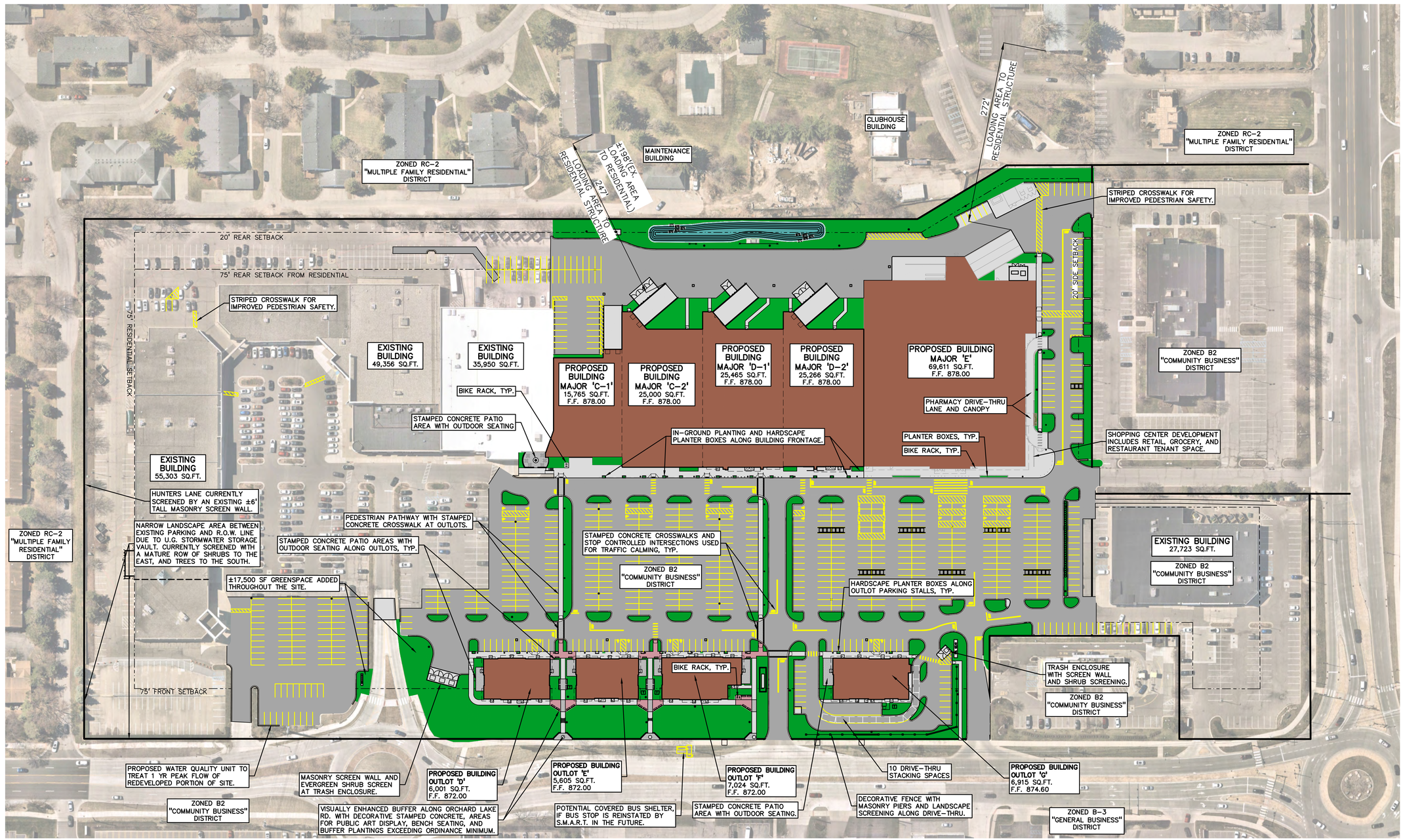
S:\PROJECTS\2022\22-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE III REDEVELOPMENT\SITE PLAN\C-1.0B.DWG PLOT DATE: 7/14/2025 BY: Isaac Miller DWEW TWEST: 93345*25*DW

PROPOSED COMMUNITY BENEFITS LIST:

1. SPACES FOR PUBLIC ARTWORK
2. REDUCTION OF ON SITE PAVED AREAS
3. ADDITION OF PEDESTRIAN PATHWAYS
4. TRAFFIC CALMING MEASURES TO INCREASE PEDESTRIAN SAFETY
5. DIVERSITY OF ON-SITE USES INCLUDING RETAIL, GROCERY, RESTAURANTS, OFFICE SPACE AND ENTERTAINMENT
6. ENHANCEMENT OF EXISTING LANDSCAPE BUFFER ADJACENT TO RESIDENTIAL PROPERTY TO THE WEST.
7. ENHANCEMENT OF LANDSCAPE BUFFER ALONG ORCHARD LAKE ROAD
8. ADDITIONAL SHRUBBERY AND PERENNIAL LANDSCAPE ENHANCEMENTS IN PARKING LOT
9. OUTDOOR PLAZA AREAS WITH BENCH SEATING
10. ADDITIONAL STORMWATER QUALITY MEASURES AND DETENTION STORAGE CAPACITY.
11. DEFERRED/FUTURE COVERED BUS STOP IF S.M.A.R.T. REINSTATES THE BUS LINE.
12. A REDUCTION OF 417 PARKING SPACES, AND THE RESULTANT LOSS OF PAVEMENT.



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STATE OF MICHIGAN
RACHEL L SMITH
LICENSED PROFESSIONAL ENGINEER
License No. 6201048628



NORTH

0 35 70 140
SCALE: 1" = 70'

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

CAUTION!!
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KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

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ORIGINAL ISSUE DATE:
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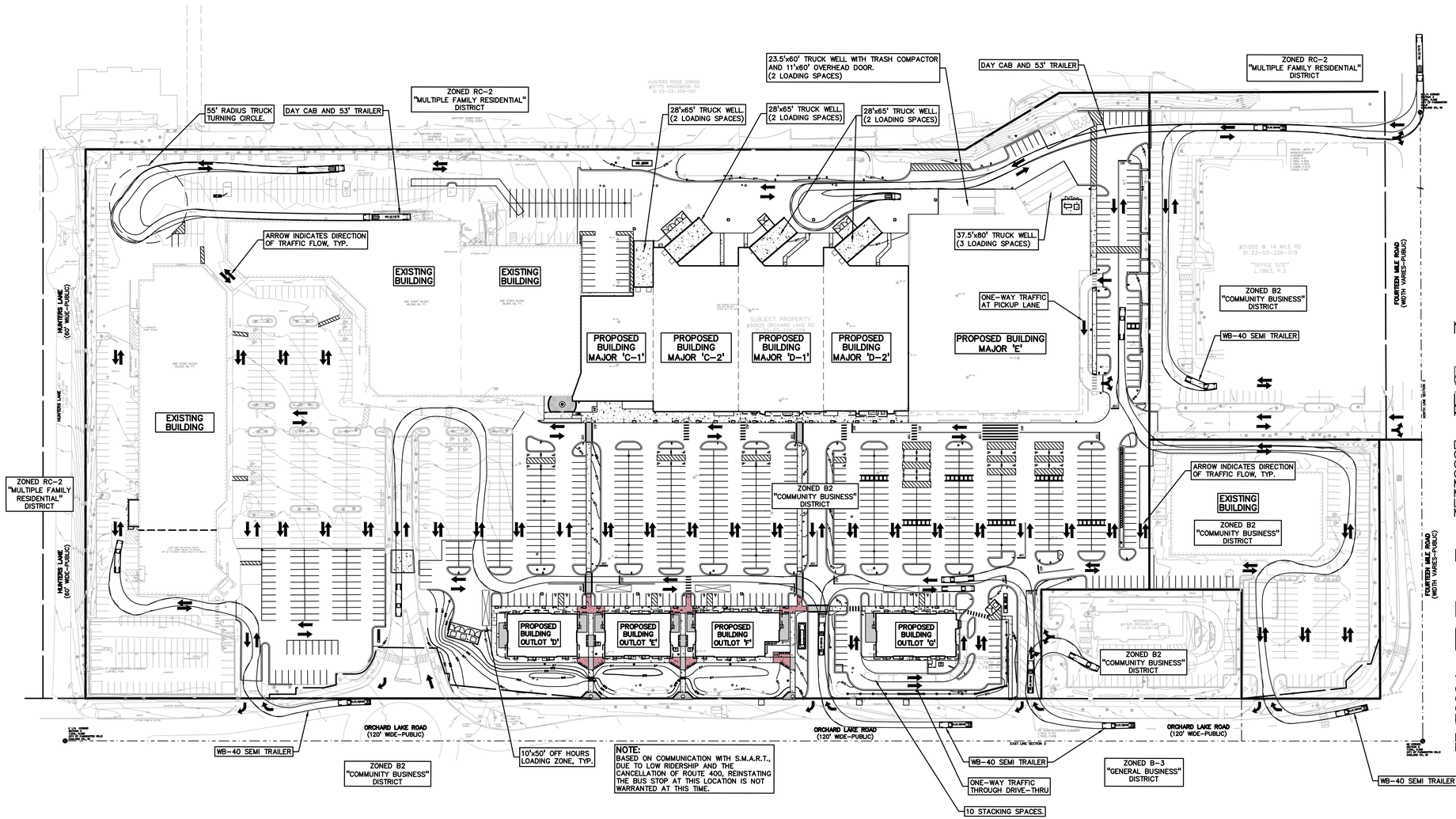
DRAWING TITLE
OVERALL COMMUNITY BENEFIT PLAN

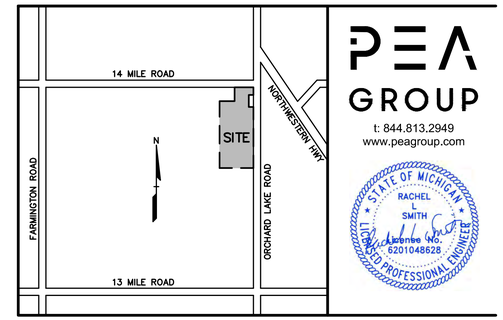
PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-1.0C

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\22-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\C-1.0C\NORA_-_22025[PH-2].dwg PLOT DATE: 7/14/2025 BY: Isaac Miller DVIEW TWEI: 9:945*25*CW





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STATE OF MICHIGAN
RACHEL L SMITH
LICENSED PROFESSIONAL ENGINEER
License No. 6201048628

LEGEND

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

EXISTING		PROPOSED
—OH—ELEC—W—O—	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
—UG—CATV—	UNDERGROUND CABLE TV, CATV PEDESTAL	
—UG—PHONE—	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
—UG—ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	—UG—ELEC—
	GAS MAIN, VALVE & GAS LINE MARKER	
	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	C.O.
	SANITARY SEWER, CLEANOUT & MANHOLE	C.O.
	STORM SEWER, CLEANOUT & MANHOLE	
Y.D.	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	Y.D.
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
	UNIDENTIFIED STRUCTURE	
×SHED	SPOT ELEVATION	×871.21
670	CONTOUR LINE	671
	FENCE	
	GUARD RAIL	
	STREET LIGHT	
	SIGN	
CONC.	CONCRETE	STD DUTY / HEAVY DUTY / R.O.W.
ASPH.	ASPHALT	STD DUTY / HEAVY DUTY / DEEP STRENGTH

NORTH

0 40 80 160
SCALE: 1" = 80'

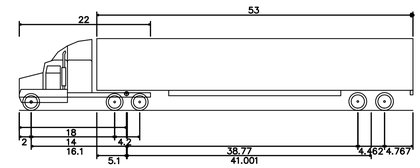
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KEY MAP

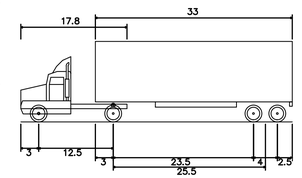
REFERENCE DRAWINGS

WATER MAIN	TRANSMISSION MAP 4Y, GLWA, APRIL 2019
WATER MAIN	TRANSMISSION MAP 5Y, GLWA, MARCH 2007
ELECTRIC	LOCATION MAP 262-374, DTE, JUNE 2023
GAS	TRANSMISSION MAP, CONSUMERS ENERGY, 01-59-03-1
OTHER	HUNTER SQUARE LAND TITLE SURVEY, PEA GROUP #21-0052, MARCH 2021.
OTHER	LOEHMANN'S AT HUNTERS SQUARE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., AUGUST 1981, UPDATED 1989
OTHER	ORCHARD PLACE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., ISSUED FEBRUARY 1983, UPDATED MAY 2005
OTHER	HUNTERS SQUARE PARKING LOT AND DRIVEWAY RENOVATIONS AS BUILTS, ORCHARD, HILTZ, & McCLIMENT, INC., ISSUED SEPTEMBER 1993, UPDATED MAY 2005
OTHER	ORCHARD PLACE REHABILITATION PROJECT AS BUILTS, OHM CONSULTING ENGINEERS, ISSUED OCTOBER 1995, UPDATED DECEMBER 2005
OTHER	HUNTERS SQUARE/BUILDING "F": OHM CONSULTING ENGINEERS, DECEMBER 2004
OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD, HRC INC, OCTOBER 2019



Day Cab & 53ft Trailer

Overall Length	66.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	4.00s
Max Wheel Angle	35.00°



WB-40 - Intermediate Semi-Trailer

Overall Length	45.499ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Track Width	8.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	20.30°

CLIENT

SYMMETRY MANAGEMENT
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PROJECT TITLE

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FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
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ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

TRAFFIC CIRCULATION PLAN

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-1.0D

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\22-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\C-1.0D TRUCK-20250624.dwg PLOT DATE: 7/14/2025 BY: Isaac Miller (VIEW TWIST: 90.0457°CW

LEGAL DESCRIPTIONS:

PARCEL 23-03-226-028

A PARCEL OF LAND BEING SITUATED IN THE NORTHEAST 1/4 OF SECTION 3, TOWN 1 NORTH, RANGE 9 EAST, CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3 AND PROCEEDING THENCE ALONG THE EAST LINE OF SAID SECTION 3, AND THE CENTERLINE OF ORCHARD LAKE ROAD (120 FEET WIDE) SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST 256.00 FEET; THENCE NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST, 214.00 FEET; THENCE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST, 130.35 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST, 152.65 FEET; THENCE SOUTH 89 DEGREES 47 MINUTES 00 SECONDS EAST, 154.00 FEET TO THE WEST LINE OF ORCHARD LAKE ROAD; THENCE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST, 1350.35 FEET; THENCE NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST, 775.70 FEET; THENCE NORTH 00 DEGREES 13 MINUTES 00 SECONDS EAST, 1242.46 FEET; THENCE NORTH 30 DEGREES 50 MINUTES 55 SECONDS WEST 155.35 FEET; THENCE NORTH 00 DEGREES 01 MINUTES 20 SECONDS WEST 127.47 FEET; THENCE SOUTH 89 DEGREES 47 MINUTES 00 SECONDS EAST 702.39 FEET TO THE POINT OF BEGINNING. CONTAINING ±26.58 ACRES

PARCEL 23-03-226-027

A PARCEL OF LAND BEING SITUATED IN THE NORTHEAST 1/4 OF SECTION 3, TOWN 1 NORTH, RANGE 9 EAST, CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 3 AND PROCEEDING THENCE ALONG THE EAST LINE OF SAID SECTION 3, AND THE CENTERLINE OF ORCHARD LAKE ROAD (120 FEET WIDE) SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST 256.00 FEET; THENCE NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST 60.00 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST 154.00 FEET; THENCE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST 130.35 FEET; THENCE NORTH 89 DEGREES 47 MINUTES 00 SECONDS WEST 211.99 FEET; THENCE NORTH 00 DEGREES 13 MINUTES 00 SECONDS EAST 324.57 FEET TO THE SOUTH LINE OF FOURTEEN MILE ROAD (WIDTH VARIES); THENCE ALONG SAID SOUTH LINE NORTH 89 DEGREES 58 MINUTES 40 SECONDS EAST 366.00 FEET TO THE WEST LINE OF SAID ORCHARD LAKE ROAD; THENCE ALONG SAID WEST LINE SOUTH 00 DEGREES 13 MINUTES 00 SECONDS WEST 195.75 FEET TO THE POINT OF BEGINNING. CONTAINING ±2.27 ACRES

CONDO PARCEL SETBACK DEVIATIONS:

CONDO PARCEL 1:
- REAR YARD (WEST) SETBACK TO RESIDENTIAL AT MAJOR 'E' (69.59' PROPOSED/75' REQUIRED)
- SIDE YARD (SOUTH) SETBACK FOR MAJOR 'E' (0' PROPOSED/20' REQUIRED)

CONDO PARCEL 2:
- SIDE YARD (NORTH AND SOUTH) SETBACK FOR MAJOR 'D-2' (0' PROPOSED/20' REQUIRED)

CONDO PARCEL 3:
- SIDE YARD (NORTH AND SOUTH) SETBACK FOR MAJOR 'D-1' (0' PROPOSED/20' REQUIRED)

CONDO PARCEL 4:
- SIDE YARD (NORTH AND SOUTH) SETBACK FOR MAJOR 'C-1 AND C-2' (0' PROP./20' REQ.)

CONDO PARCEL 5:
- FRONT YARD (EAST) SETBACK FOR OUTLOT 'D' (58.49' PROPOSED/75' REQUIRED)
- SIDE YARD (NORTH) SETBACK FOR OUTLOT 'D' (19.46' PROPOSED/20' REQUIRED)

CONDO PARCEL 6:
- FRONT YARD (EAST) SETBACK FOR OUTLOT 'E' (59.51' PROPOSED/75' REQUIRED)
- SIDE YARD (NORTH) SETBACK FOR OUTLOT 'E' (17.17' PROPOSED/20' REQUIRED)
- SIDE YARD (SOUTH) SETBACK FOR OUTLOT 'E' (18.88' PROPOSED/20' REQUIRED)

CONDO PARCEL 7:
- FRONT YARD (EAST) SETBACK FOR OUTLOT 'F' (58.54' PROPOSED/75' REQUIRED)
- SIDE YARD (SOUTH) SETBACK FOR OUTLOT 'F' (17.17' PROPOSED/20' REQUIRED)

CONDO PARCEL 8:
- FRONT YARD (EAST) SETBACK FOR OUTLOT 'G' (58.92' PROPOSED/75' REQUIRED)
- DUMPSTER IN FRONT YARD AT OUTLOT 'G'
- DRIVE-THRU IN FRONT YARD AT OUTLOT 'G' (BUILDING SETBACK 58.92')

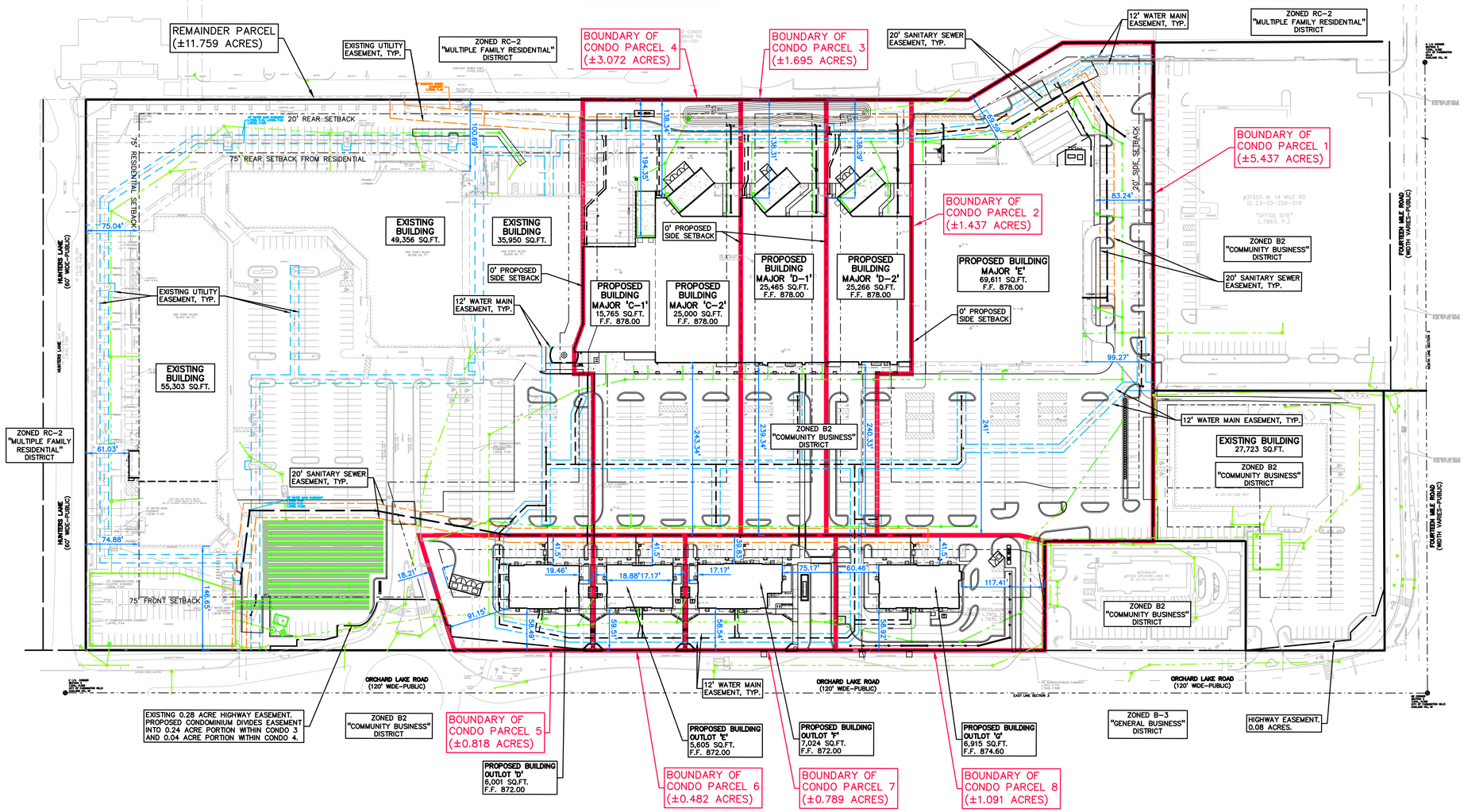
REMAINDER PARCEL:
- SIDE YARD (SOUTH) SETBACK FOR PROPOSED BUILDING (61.03' EXISTING/75' REQUIRED)
- SIDE YARD (NORTH) SETBACK FOR EXISTING BUILDING (0' PROPOSED/20' REQUIRED)

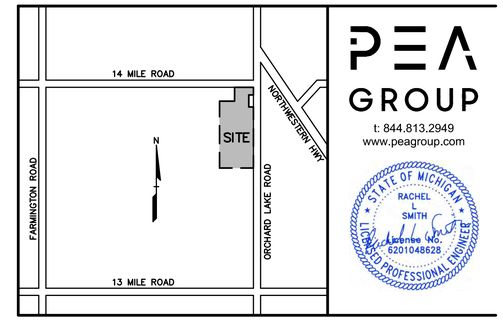
NOTE:
A CONDOMINIUM APPLICATION WILL BE SUBMITTED AT A LATER DATE. CROSS-ACCESS, SHARED PARKING, DRAINAGE AND UTILITY EASEMENT AGREEMENTS WILL BE PROVIDED AS APPROPRIATE FOR ALL AFFECTED AREAS.

CONDO SETBACKS

Note: Condo boundaries are subject to change. Setback dimensions could change based on building design changes.

	REQUIRED	PROPOSED	NOTES
CONDO PARCEL 1 (Major E)			
Front Setback (East/Orchard Lake)	75'	241'	Store front to a proposed internal condo line
Side Setback (North/14 Mile)	20'	83.24'	Store front to an existing property line
Side Setback (South)	20'	0'	Internal condo line at proposed building demise wall
Rear Setback (West/Residential)	75' (Residential)	69.59'	5.41' below minimum requirement
CONDO PARCEL 2 (Major D-2)			
Front Setback (East/Orchard Lake)	75'	240.33'	Store front to a proposed internal condo line
Side Setback (North/14 Mile)	20'	0'	Internal condo line at proposed building demise wall
Side Setback (South)	20'	0'	Internal condo line at proposed building demise wall
Rear Setback (West/Residential)	75' (Residential)	138.29'	Building line to residential property line
CONDO PARCEL 3 (Major D-1)			
Front Setback (East/Orchard Lake)	75'	239.34'	Store front to a proposed internal condo line
Side Setback (North)	20'	0'	Internal condo line at proposed building wall
Side Setback (South)	20'	0'	Internal condo line at proposed building wall
Rear Setback (West/Residential)	75' (Residential)	138.31'	Building line to residential property line
CONDO PARCEL 4 (Outlots C-1 C-2)			
Front Setback (East/Orchard Lake)	75'	243.34'	Store front to a proposed internal condo line
Side Setback (North)	20'	0'	Internal condo line at proposed building wall
Side Setback (South)	20'	0'	Internal condo line at existing building wall
Rear Setback (West)	20'	138.34'	Building line to residential property line
CONDO PARCEL 5 (Outlot D)			
Front Setback (East/Orchard Lake)	75'	58.49'	16.51' below minimum requirement
Side Setback (North)	20'	19.46'	Store front to a proposed internal condo line
Side Setback (South)	20'	91.15'	Store front to a proposed internal condo line
Rear Setback (West)	20'	41.50'	Store front to a proposed internal condo line
CONDO PARCEL 6 (Outlot E)			
Front Setback (East/Orchard Lake)	75'	59.51'	15.49' below minimum requirement
Side Setback (North)	20'	17.17'	Store front to a proposed internal condo line
Side Setback (South)	20'	18.88'	Store front to a proposed internal condo line
Rear Setback (West)	20'	41.50'	Store front to a proposed internal condo line
CONDO PARCEL 7 (Outlot F)			
Front Setback (East/Orchard Lake)	75'	58.54'	16.46' below minimum requirement
Side Setback (North)	20'	75.17'	Store front to a proposed internal condo line
Side Setback (South)	20'	17.17'	Store front to a proposed internal condo line
Rear Setback (West)	20'	39.83'	Store front to a proposed internal condo line
CONDO PARCEL 8 (Outlot G)			
Front Setback (East/Orchard Lake)	75'	58.92'	16.08' below minimum requirement
Side Setback (North/McDonalds)	20'	117.41'	Store front to an existing property line
Side Setback (South)	20'	60.46'	Store front to a proposed internal condo line
Rear Setback (West)	20'	41.50'	Store front to a proposed internal condo line
REMAINDER PARCEL (Existing South)			
Front Setback (East/Orchard Lake)	75'	146.65'	Existing store front to existing property line
Side Setback (North)	20'	0'	Internal condo line at existing building wall
Side Setback (South/Residential)	75' (Residential)	61.03'	Proposed building to existing property line
Rear Setback (West/Residential)	75' (Residential)	100.69'	Existing building to existing property line





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LEGEND

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

EXISTING	PROPOSED	
—OH—ELEC—V—O—		ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
—UG—CATV—		UNDERGROUND CABLE TV, CATV PEDESTAL
—UG—PHONE—		TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
—UG—ELEC—	—UG—ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
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		SANITARY SEWER, CLEANOUT & MANHOLE
		STORM SEWER, CLEANOUT & MANHOLE
		SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
		WATER VALVE BOX-HYDRANT VALVE BOX, SERVICE SHUTOFF
		MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
		UNIDENTIFIED STRUCTURE
x 598.91	671.21	SPOT ELEVATION
670	671	CONTOUR LINE
		FENCE
		GUARD RAIL
		STREET LIGHT
		SIGN
CONC.		CONCRETE
ASPH.		ASPHALT

NORTH

0 40 80 160
SCALE: 1" = 80'

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KEY MAP

REFERENCE DRAWINGS

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WATER MAIN	TRANSMISSION MAP 5Y, GLWA, MARCH 2007
ELECTRIC	LOCATION MAP 262-374, DTE, JUNE 2023
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OTHER	ORCHARD PLACE REHABILITATION PROJECT AS BUILTS, OHM CONSULTING ENGINEERS, ISSUED OCTOBER 1995, UPDATED DECEMBER 2005
OTHER	HUNTERS SQUARE/BUILDING "F", OHM CONSULTING ENGINEERS, DECEMBER 2004
OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD, HRC INC, OCTOBER 2019

CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI. 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
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ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

PROPOSED CONDOMINIUM LOT PLAN

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:

NOT FOR CONSTRUCTION **C-1.0E**

S:\PROJECTS\2022\22-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\C-1.0E CONDO-22-0256(PH-2).dwg PLOT DATE: 7/14/2025 BY: Isaac Miller DWG TMPLT: SQUAST25"ON

BENCHMARKS:
(GPS DERIVED - NAVD88)

BM #300
DIMPLE ON ARROW ON HYDRANT AND ±109' DIRECTLY NORTHEASTERLY FROM NORTHEAST BUILDING CORNER STORE BUY BUY BABY.
ELEV.- 877.55

BM #301
DIMPLE ON ARROW ON HYDRANT AND ±39' DIRECTLY WEST FROM SOUTHWEST BUILDING CORNER AT SOUTHWEST CORNER OF SITE.
ELEV.- 874.61

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LIGHT POLE BASE IN SHOPPING MALL ±180' DIRECTLY SOUTH FROM McDONALDS RESTUARANT
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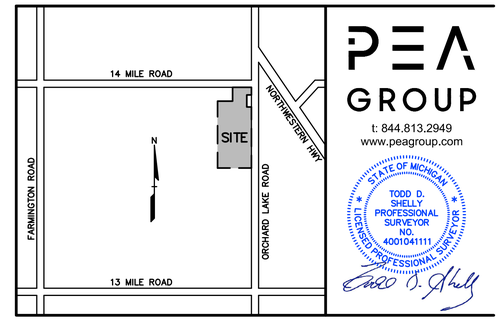
LEGAL DESCRIPTIONS:

PARCEL 23-03-226-028

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TODD D. SHELLY
PROFESSIONAL SURVEYOR
NO. 4001041111
LICENSED PROFESSIONAL SURVEYOR

LEGEND

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- NAIL FOUND
- NAIL & CAP SET
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KEY MAP



SITE SHEET KEY MAP

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CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
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FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
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2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

TOPOGRAPHIC SURVEY - SHEET 1

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-2.1

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\22022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\(C-2.1)TOPO-220256(Ph-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller OWEN TWO: 93345*25*CW

BENCHMARKS:
(GPS DERIVED - NAVD88)

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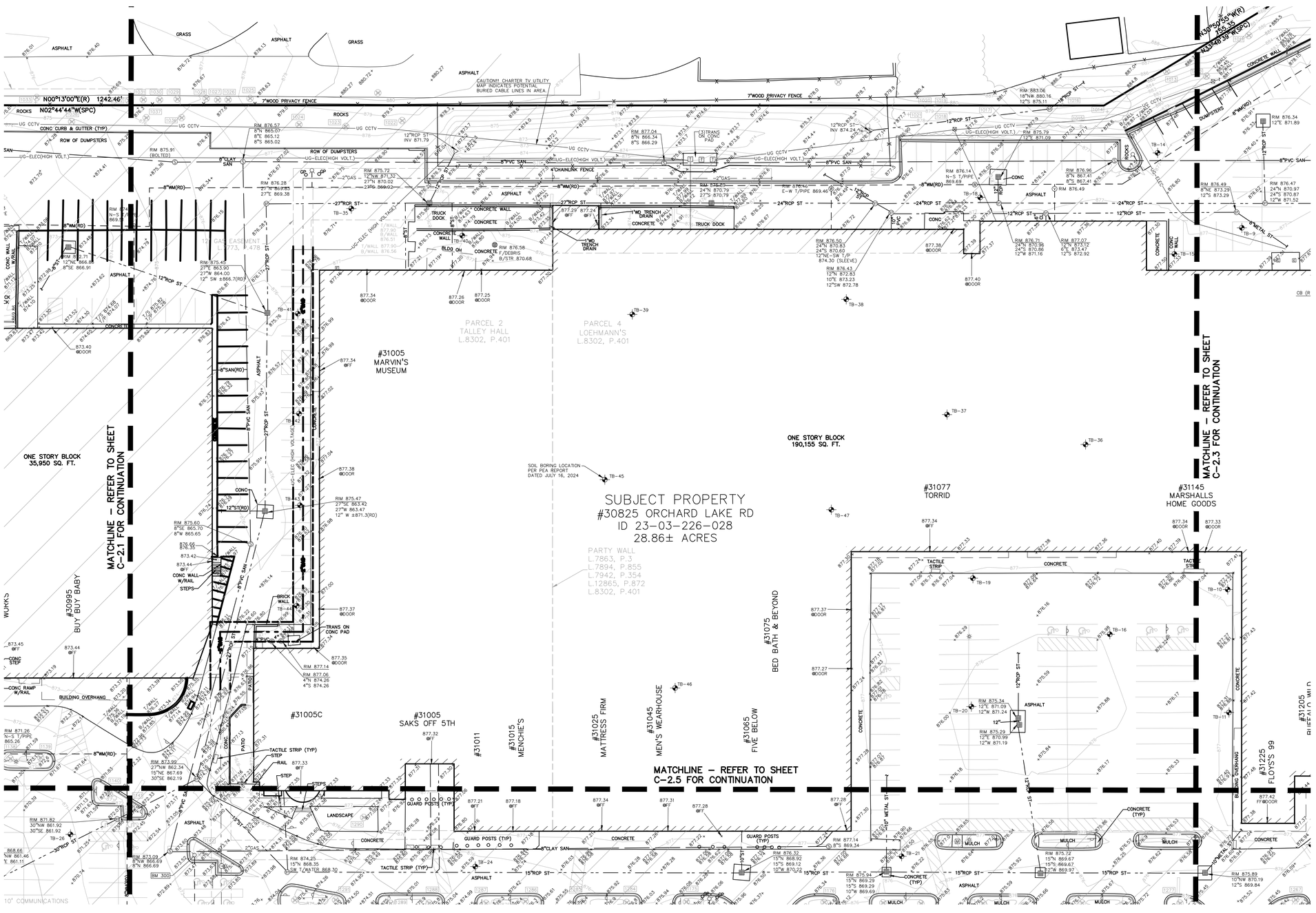
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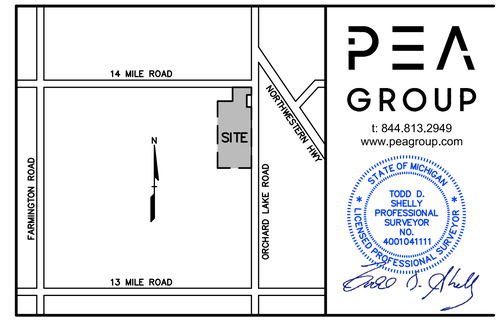
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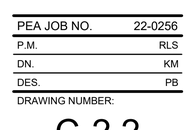
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PROJECT TITLE

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ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

TOPOGRAPHIC SURVEY - SHEET 2

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:

C-2.2

NOT FOR CONSTRUCTION

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STATE OF MICHIGAN
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S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\(C-2.1)TOPO-(2022256(Ph-2).dwg PLOT DATE: 7/14/2025 BY:Kyle Miller DWEW TWD: 932457'57'W

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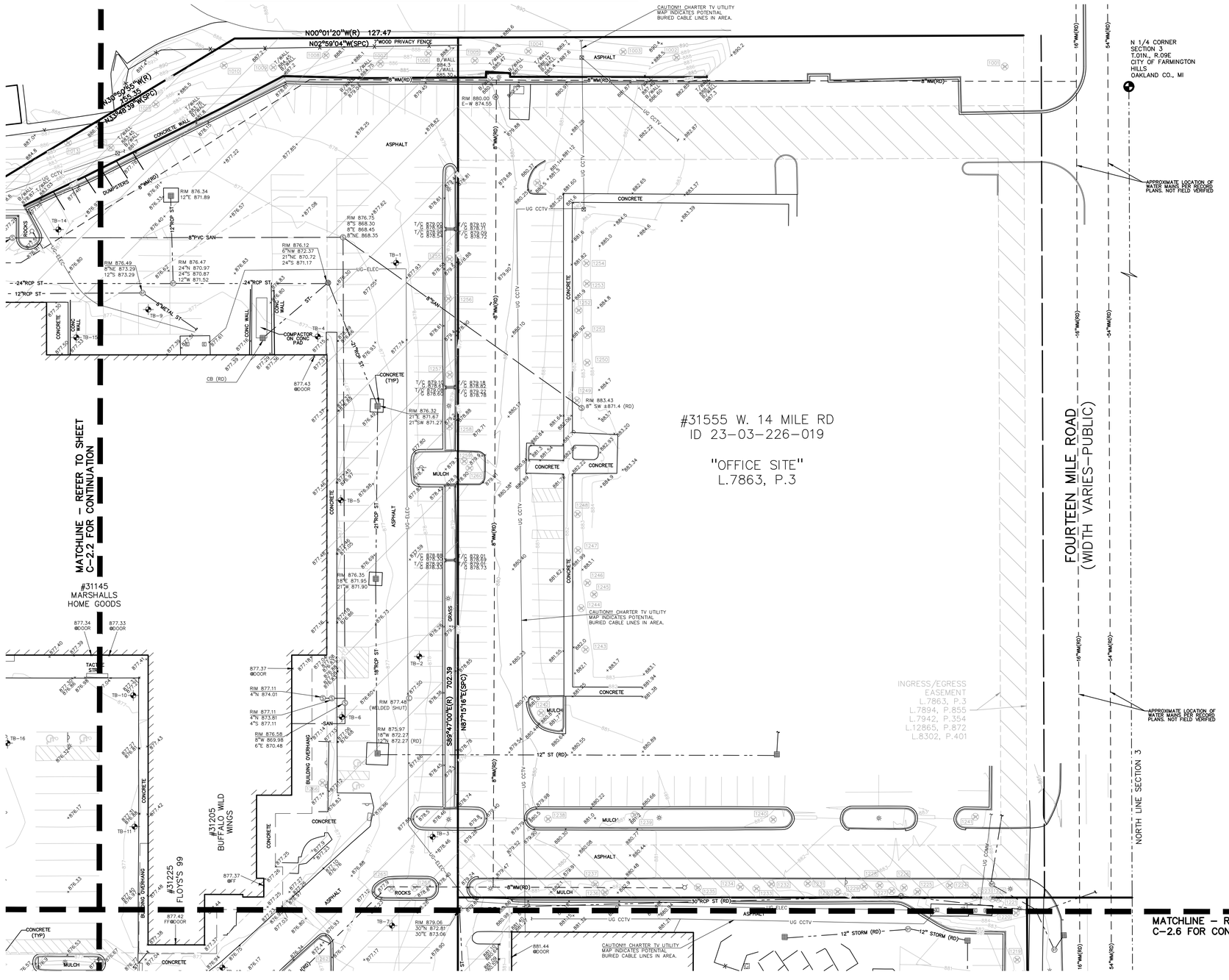
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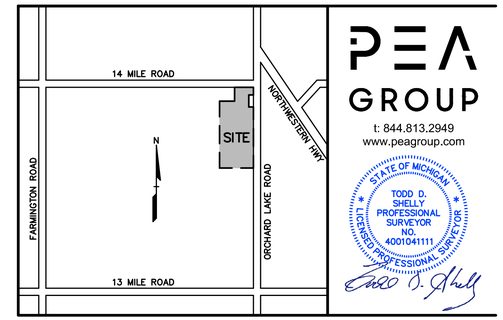
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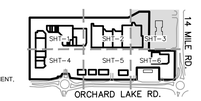
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KEY MAP



SITE SHEET KEY MAP

CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

TOPOGRAPHIC SURVEY - SHEET 3

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:

C-2.3

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\UC-2.1(TOPO-2202256(PH-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DWEN TWEI: 93345*25*TW

BENCHMARKS:
(GPS DERIVED - NAVD88)

BM #300
DIMPLE ON ARROW ON HYDRANT AND ±109' DIRECTLY NORTHEASTERLY FROM NORTHEAST BUILDING CORNER STORE BUY BUY BABY.
ELEV.- 877.55

BM #301
DIMPLE ON ARROW ON HYDRANT AND ±39' DIRECTLY WEST FROM SOUTHWEST BUILDING CORNER AT SOUTHWEST CORNER OF SITE.
ELEV.- 874.61

BM #302
LIGHT POLE BASE IN SHOPPING MALL ±180' DIRECTLY SOUTH FROM McDONALDS RESTUARANT
ELEV.- 875.56

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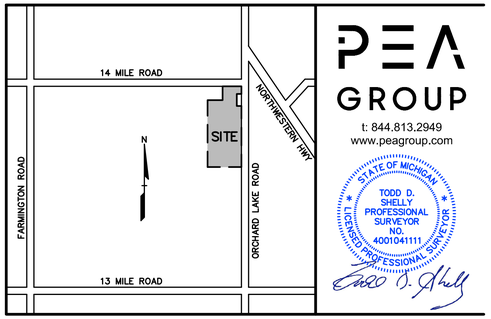
LEGAL DESCRIPTIONS:

PARCEL 23-03-226-028

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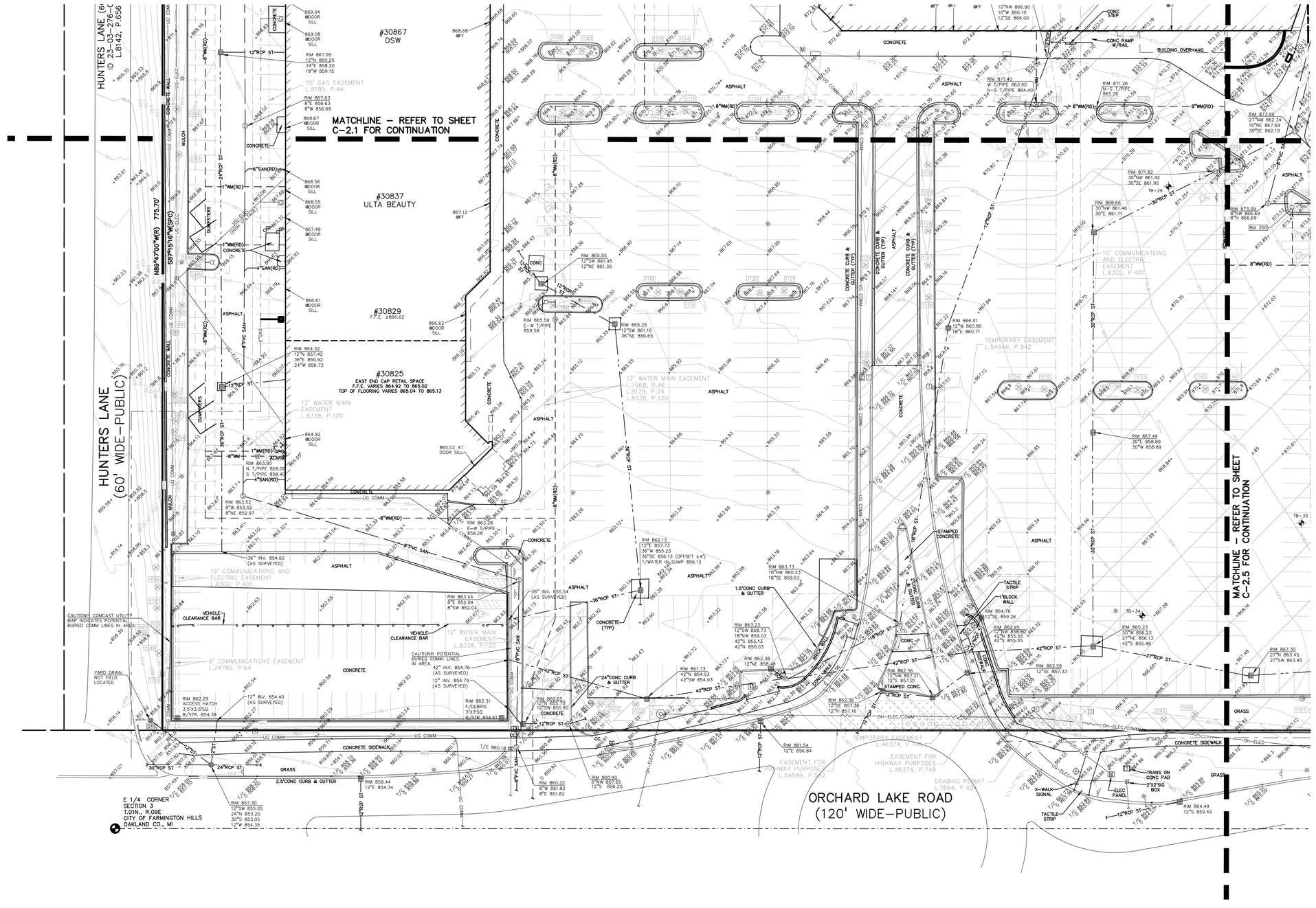
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STATE OF MICHIGAN
TODD D. SHELLY
PROFESSIONAL SURVEYOR
NO. 4001041111
LICENSED PROFESSIONAL SURVEYOR



LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
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NORTH

0 15 30 60
SCALE: 1" = 30'

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ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
TOPOGRAPHIC SURVEY - SHEET 4

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-2.4

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\CIVIL\PHASE II REDEVELOPMENT\SITE PLAN\(C-2.1)TOPO-2022(REV-2).dwg PLOT DATE: 7/14/2025 BY:Kyle Milne DVIEW TWIST: 93.4452°CW

BENCHMARKS:
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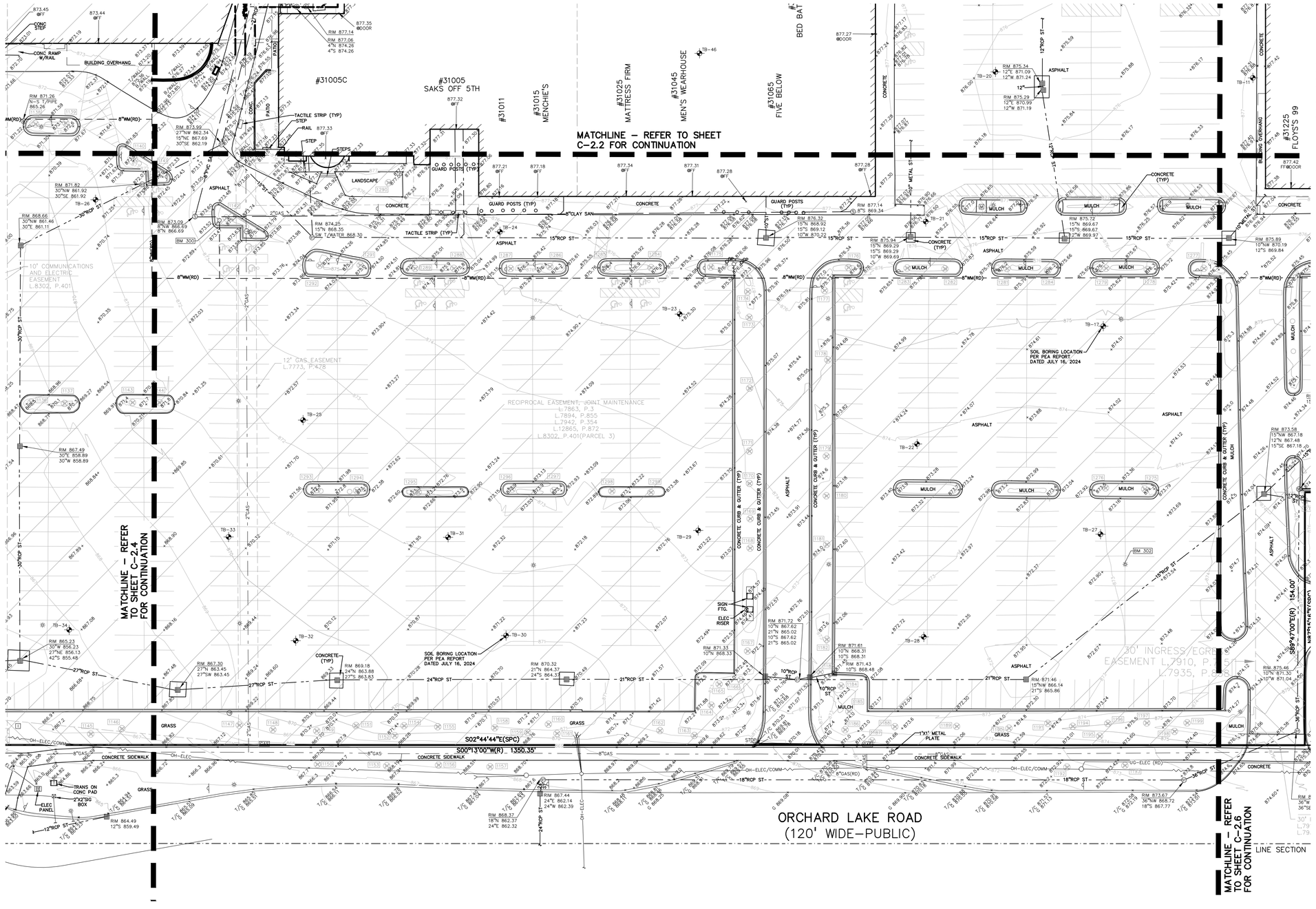
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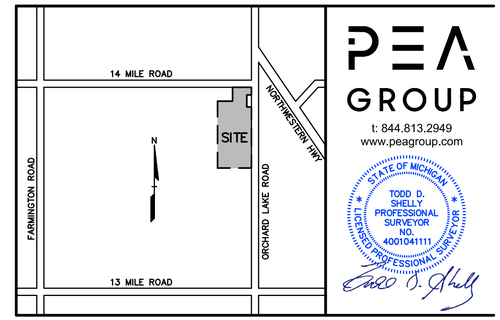
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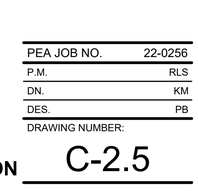
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TOPOGRAPHIC SURVEY - SHEET 5

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P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:

NOT FOR CONSTRUCTION

C-2.5

S:\PROJECTS\2022\22-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\C-2.1(TOPO-220256(Ph-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DWEW TWST: 92445*25*W

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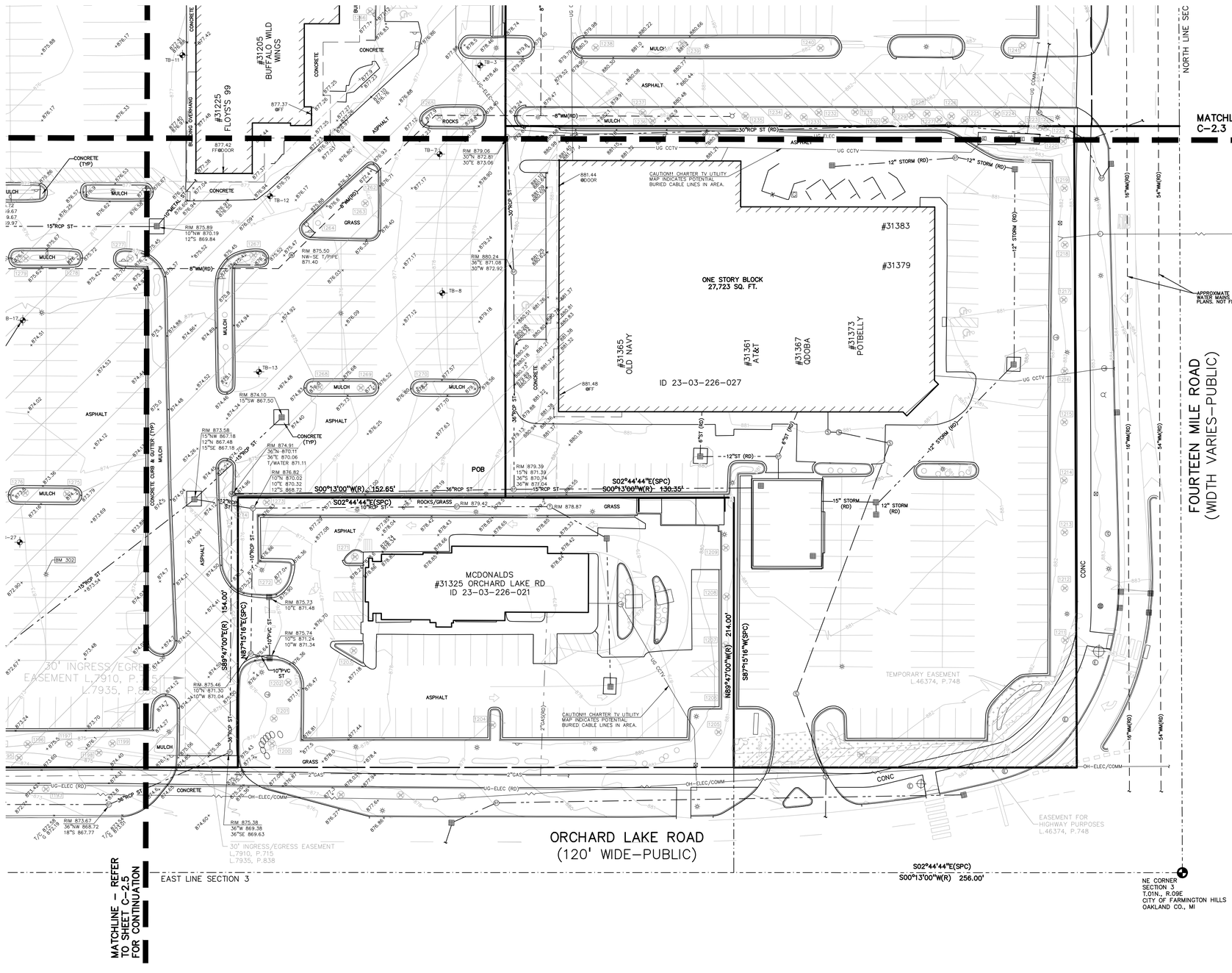
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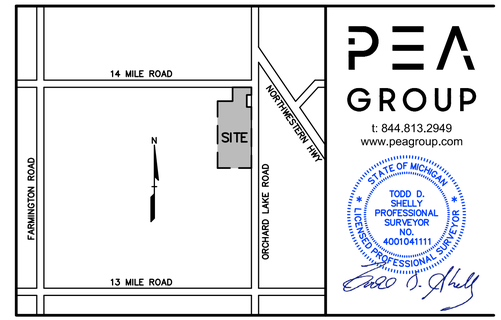
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TODD D. SHELLY
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ELECTRIC	LOCATION MAP 262-374, DTE, JUNE 2023
GAS	TRANSMISSION MAP, CONSUMERS ENERGY, 01-59-03-1
OTHER	HUNTER SQUARE LAND TITLE SURVEY, PEA GROUP #21-0052, MARCH 2021.
OTHER	LOEHMANN'S AT HUNTERS SQUARE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., AUGUST 1981, UPDATED 1989
OTHER	ORCHARD PLACE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., ISSUED FEBRUARY 1983, UPDATED MAY 2005
OTHER	HUNTERS SQUARE PARKING LOT AND DRIVEWAY RENOVATIONS AS BUILTS, ORCHARD, HILTZ & McCLIMENT, INC., ISSUED SEPTEMBER 1993, UPDATED MAY 2005
OTHER	ORCHARD PLACE REHABILITATION PROJECT AS BUILTS, OHM CONSULTING ENGINEERS, ISSUED OCTOBER 1995, UPDATED DECEMBER 2005
OTHER	HUNTERS SQUARE/BUILDING "F", OHM CONSULTING ENGINEERS, DECEMBER 2004
OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD, HRC INC, OCTOBER 2019

CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

TOPOGRAPHIC SURVEY - SHEET 6

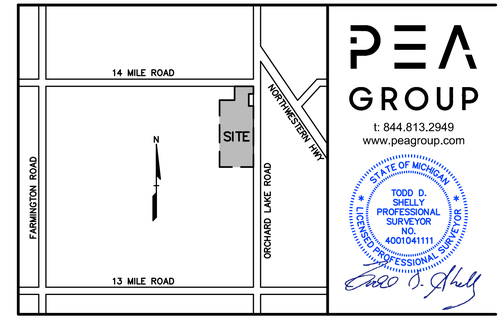
PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-2.6

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\COMPHASE II REDEVELOPMENT\SITE PLANS\[C-2.1]TOPO-2022056(PH-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DVIEW TWIST: 93.4452°CW

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	NOTES/Extra Trunk DBH	CONDITION/ FACTOR						OVERALL RANK
						trunk	growth rate	structure	insects/ diseases	crown dev	life exp.	
1001	NM	18	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1002	NM	14	Norway Maple	Acer platanoides		4	5	4	5	5	3	26
1003	NM	15	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1004	NM	14	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1005	NM	11	Norway Maple	Acer platanoides		4	5	5	5	4	3	26
1006	NM	14	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1007	NM	11	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1008	NM	13	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1009	NM	14	Norway Maple	Acer platanoides		5	5	4	5	4	3	26
1010	NM	15	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1011	NM	16	Norway Maple	Acer platanoides		5	4	4	5	4	3	25
1012	NM	15	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1013	NM	15	Norway Maple	Acer platanoides		4	4	4	4	5	3	24
1014	NM	13	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1015	NM	13	Norway Maple	Acer platanoides		4	3	3	5	4	3	22
1016	NM	18	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1017	TH	8	Thornapple/Hawthorne	Crataegus spp.		5	5	5	5	5	3	28
1018	NM	11	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1019	RP	17	Red Pine	Pinus resinosa		5	4	3	5	4	3	24
1020	RP	14	Red Pine	Pinus resinosa		4	3	3	5	4	3	22
1021	RM	12	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1022	RM	6	Red Maple	Acer rubrum		2	2	2	2	2	3	13
1023	RM	12	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1024	RM	12	Red Maple	Acer rubrum		3	3	3	3	3	3	18
1025	SU	14	Sugar Maple	Acer saccharum		5	5	4	5	5	3	27
1026	SU	5	Sugar Maple	Acer saccharum	x1 4	5	5	5	5	5	3	28
1027	SU	13	Sugar Maple	Acer saccharum		3	3	3	4	2	3	18
1028	SU	10	Sugar Maple	Acer saccharum		5	5	5	5	5	3	28
1029	SU	8	Sugar Maple	Acer saccharum		5	5	5	5	4	3	27
1030	SU	10	Sugar Maple	Acer saccharum		5	4	4	5	5	3	26
1031	SU	9	Sugar Maple	Acer saccharum		5	5	5	5	5	3	28
1032	SU	9	Sugar Maple	Acer saccharum		5	5	5	5	5	3	28
1033	SU	14	Sugar Maple	Acer saccharum		5	5	5	5	5	3	28
1034	SU	12	Sugar Maple	Acer saccharum		5	5	4	5	4	3	26
1035	SU	12	Sugar Maple	Acer saccharum		5	5	5	5	5	3	28
1036	SU	6	Sugar Maple	Acer saccharum		5	5	5	5	5	3	28
1037	SU	5	Sugar Maple	Acer saccharum		5	5	5	5	4	3	27
1038	SU	4	Sugar Maple	Acer saccharum		4	5	5	5	5	3	27
1039	S	10	Sycamore	Platanus occidentalis		5	5	5	5	5	3	28
1040	S	13	Sycamore	Platanus occidentalis		5	5	5	5	5	3	28
1041	TH	9	Thornapple/Hawthorne	Crataegus spp.		5	5	5	5	5	3	28
1042	S	13	Sycamore	Platanus occidentalis		5	5	5	5	5	3	28
1043	RC	7	Red Cedar	Juniperus virginiana	x1 5	5	5	5	5	5	3	28
1044	BP	3	Bradford Pear	Pyrus calleryana	x3 2,2,2	5	5	5	5	5	3	28
1045	RC	9	Red Cedar	Juniperus virginiana		4	5	5	5	5	3	27
1046	RC	5	Red Cedar	Juniperus virginiana	x2 4,2	5	5	5	5	5	3	28
1047	BP	5	Bradford Pear	Pyrus calleryana		5	4	4	5	4	3	25
1048	SU	12	Sugar Maple	Acer saccharum		5	5	5	5	5	4	29
1049	SU	12	Sugar Maple	Acer saccharum		5	5	5	5	5	3	28
1050	SM	15	Silver Maple	Acer saccharinum		5	5	5	5	5	3	28
1051	SM	16	Silver Maple	Acer saccharinum		5	5	5	5	5	3	28
1052	SM	14	Silver Maple	Acer saccharinum		5	5	5	5	5	5	30
1053	SM	17	Silver Maple	Acer saccharinum		5	5	5	5	5	3	28
1054	SM	17	Silver Maple	Acer saccharinum		5	5	5	5	5	5	30
1055	SM	26	Silver Maple	Acer saccharinum		5	5	5	5	5	5	30
1056	SM	20	Silver Maple	Acer saccharinum		5	5	5	5	5	3	28
1057	JZ	14	Japanese zelkova	Zelkova serrata		5	5	4	5	5	3	27
1058	RC	5	Red Cedar	Juniperus virginiana	x2 4,3	5	5	5	5	5	3	28
1059	BP	9	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1060	RC	5	Red Cedar	Juniperus virginiana	x1 4	5	5	5	5	5	3	28
1061	RC	6	Red Cedar	Juniperus virginiana	x1 5	5	5	5	5	5	3	28
1062	S	5	Sycamore	Platanus occidentalis	x1 3	5	5	5	5	5	3	28
1063	RC	3	Red Cedar	Juniperus virginiana	x4 3, 2,2,2	5	5	5	5	5	3	28
1064	CT	24	Cottonwood	Populus deltoides		5	5	5	5	4	3	27
1065	RC	7	Red Cedar	Juniperus virginiana	x5, 3,3,3,2,2	5	5	5	5	5	3	28
1066	BS	11	Blue Spruce	Picea pungens		5	4	4	5	4	3	25
1067	CT	52	Cottonwood	Populus deltoides		5	5	5	5	5	3	28
1068	BS	11	Blue Spruce	Picea pungens		5	5	5	4	5	3	27
1069	BS	12	Blue Spruce	Picea pungens			5	5	4	5	3	22
1070	BS	6	Blue Spruce	Picea pungens		3	3	2	3	1	3	15
1071	BS	12	Blue Spruce	Picea pungens		5	5	5	4	4	3	26
1072	TH	5	Thornapple/Hawthorne	Crataegus spp.		4	5	4	5	3	3	24
1073	BS	11	Blue Spruce	Picea pungens		5	4	4	4	4	3	24
1074	BS	12	Blue Spruce	Picea pungens		4	4	5	5	4	3	25
1075	BS	11	Blue Spruce	Picea pungens		4	5	5	4	5	3	26
1076	BS	9	Blue Spruce	Picea pungens		4	5	4	4	4	3	24
1077	BS	o	Blue Spruce	Picea pungens		4	4	4	4	4	3	23
1078	BS	13	Blue Spruce	Picea pungens		5	5	4	4	4	3	25
1079	S	11	Sycamore	Platanus occidentalis		5	5	5	5	5	3	28
1080	RP	8	Red Pine	Pinus resinosa		5	4	4	5	3	3	24
1081	RP	9	Red Pine	Pinus resinosa		4	4	4	5	3	3	23
1082	JZ	13	Japanese zelkova	Zelkova serrata		5	5	5	5	5	3	28
1083	CA	5	Crab Apple	Malus coronaria	x2 3,2	3	3	3	5	2	3	19
1084	TH	9	Thornapple/Hawthorne	Crataegus spp.		5	5	4	5	4	3	26
1085	JZ	15	Japanese zelkova	Zelkova serrata		5	5	5	5	4	3	27
1086	BP	9	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1087	JZ	16	Japanese zelkova	Zelkova serrata		5	5	5	5	4	3	27
1088	GA	6	Green Ash	Fraxinus pennsylvanica		2	2	2	2	2	3	13
1089	CA	3	Crab Apple	Malus coronaria		2	2	2	2	2	3	13
1090	TH	7	Thornapple/Hawthorne	Crataegus spp.		5	4	4	5	4	3	25
1091	RP	17	Red Pine	Pinus resinosa		5	4	4	5	4	3	25
1092	BP	7	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1093	RP	15	Red Pine	Pinus resinosa		5	5	5	5	4	3	27
1094	RP	6	Red Pine	Pinus resinosa		5	4	4	5	3	3	24
1095	BS	13	Blue Spruce	Picea pungens		5	5	5	5	5	3	28
1096	BS	8	Blue Spruce	Picea pungens		5	5	5	5	5	3	28
1097	BS	9	Blue Spruce	Picea pungens		5	5	5	5	5	3	28
1098	BS	12	Blue Spruce	Picea pungens		5	5	5	5	5	3	28
1099	WS	6	White Spruce	Picea glauca		5	5	5	5	5	3	28
1100	BS	12	Blue Spruce	Picea pungens		5	5	5	5	5	3	28
1101	CA	6	Crab Apple	Malus coronaria	x3 6,6,5	5	5	5	5	4	3	27
1102	AP	5	Domestic Apple	Malus sylvestris		5	4	3	5	3	3	23
1103	NM	13	Norway Maple	Acer platanoides		4	4	5	5	4	3	25
1104	BP	6	Bradford Pear	Pyrus calleryana		5	4	4	5	4	3	25
1105	BP	4	Bradford Pear	Pyrus calleryana		5	4	4	5	3	3	24
1106	HL	5	Honeylocust	Gleditsia triacanthos		5	5	4	5	3	3	25
1107	HL	5	Honeylocust	Gleditsia triacanthos		5	5	5	4	4	3	26
1108	HL	5	Honeylocust	Gleditsia triacanthos		4	5	5	5	4	3	26
1109	HL	4	Honeylocust	Gleditsia triacanthos		5	5	5	5	3	3	26
1110	BP	5	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1111	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	5	4	5	29
1112	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	5	5	3	28
1113	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	5	5	3	28
1114	HL	5	Honeylocust	Gleditsia triacanthos		5	5	5	5	4	3	27
1115	HL	6	Honeylocust	Gleditsia triacanthos		5	5	5	5	5	3	28
1116	HL	5	Honeylocust	Gleditsia triacanthos		5	4	5	5	4	3	26
1117	HL	7	Honeylocust	Gleditsia triacanthos		5	5	5	5	4	3	27
1118	HL	6	Honeylocust	Gleditsia triacanthos		5	5	5	5	4	3	27
1119	HL	5	Honeylocust	Gleditsia triacanthos		5	5	5	5	4	3	27
1120	HL	6	Honeylocust	Gleditsia triacanthos		5	5	4	5	4	3	26
1121	HL	6	Honeylocust	Gleditsia triacanthos		5	5	5	5	4	3	27
1122	HL	5	Honeylocust	Gleditsia triacanthos		5	4	4	5	4	3	25
1123	HL	5	Honeylocust	Gleditsia triacanthos		5	5	5	5	4	3	27
1124	LL	8	Littleleaf Linden	Tilia cordata		5	5	4	5	4	2	25
1125	LL	6	Littleleaf Linden	Tilia cordata		5	4	4	5	3	3	24
1126	LL	7	Littleleaf Linden	Tilia cordata		5	4	4	5	3	3	24
1127	LL	7	Littleleaf Linden	Tilia cordata		4	4	4	5	3	3	23
1128	LL	8	Littleleaf Linden	Tilia cordata		5	4	4	5	4	3	25
1129	LL	7	Littleleaf Linden	Tilia cordata		5	5	4	5	3	3	25
1130	LL	8	Littleleaf Linden	Tilia cordata		5	5	5	5	4	3	27
1131	LL	8	Littleleaf Linden	Tilia cordata		5	4	4	5	4	3	25
1132	HL	5	Honeylocust	Gleditsia triacanthos		3	4	4	3	4	3	21
1133	HL	5	Honeylocust	Gleditsia triacanthos		5	4	4	5	3	3	24
1134	HL	6	Honeylocust	Gleditsia triacanthos		4	5	5	5	4	3	26
1135	HL	4	Honeylocust	Gleditsia triacanthos		5	4	3	5	3	3	23
1136	HL	5	Honeylocust	Gleditsia triacanthos		5	5	4	5	4	3	26
1137	HL	5	Honeylocust	Gleditsia triacanthos		4	4	5	5	4	3	25
1138	HL	5	Honeylocust	Gleditsia triacanthos		5	5	4	5	4	3	26
1139	HL	9	Honeylocust	Gleditsia triacanthos		5	5	4	5	5	3	27
1140	HL	5	Honeylocust	Gleditsia triacanthos		5	5	4	5	4	3	26
1141	HL	6	Honeylocust	Gleditsia triacanthos		5	5	4	5	4	3	26
1142	HL	8	Honeylocust	Gleditsia triacanthos		5	5	5	5	5	3	28
1143	HL	6	Honeylocust	Gleditsia triacanthos		5	4	4	5	4	3	25
1144	HL	5	Honeylocust	Gleditsia triacanthos		4	4	3	5	3	3	22
1145	RM	6	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1146	RM	5	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1147	RM	6	Red Maple	Acer rubrum		5	5	5	5	4	3	27
1148	NM	14	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1149	NM	11	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1150	JZ	15	Japanese zelkova	Zelkova serrata		5	5	4	5	4	3	26
1151	BP	5	Bradford Pear	Pyrus calleryana		5	5	5	5	5	3	28
1152	RM	6	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1153	JZ	12	Japanese zelkova	Zelkova serrata		5	5	5	5	4	3	27
1154	RM	5	Red Maple	Acer rubrum		5	5	5	5	4	3	27
1155	RM	6	Red Maple	Acer rubrum		5	5	5	5	4	3	27
1156	JZ	13	Japanese zelkova	Zelkova serrata		5	5	5	5	4	3	27
1157	JZ	13	Japanese zelkova	Zelkova serrata		5	5	5	5	4	3	27
1158	NM	12	Norway Maple	Acer platanoides		5	4	4	5	3	3	24
1159	NM	14	Norway Maple	Acer platanoides		4	5	5	5	5	3	27
1160	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1161	RM	3	Red Maple	Acer rubrum	DEAD							
1162	RM	4	Red Maple	Acer rubrum		5	5	5	5	4	3	27
1163	NM	13	Norway Maple	Acer platanoides		4	4	4	4	4	3	23
1164	CA	6	Crab Apple	Malus coronaria		5	5	5	5	5	3	28
1165	CA	7	Crab Apple	Malus coronaria		5	5	5	5	5	3	28
1166	CA	5	Crab Apple	Malus coronaria		5	5	5	5	4	3	27
1167	NM	7	Norway Maple	Acer platanoides		4	5	5	5	5	3	27
1168	NM	6	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1169	NM	5	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1170	NM	7	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1171	NM	6	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1172	NM	7	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1173	NM	7	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1174	NM	7	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1175	BP	3	Bradford Pear	Pyrus calleryana		5	4	5	5	4	3	26
1176	BP	3	Bradford Pear	Pyrus calleryana		5	5	4	5	3	3	25
1177	BP	4	Bradford Pear	Pyrus calleryana		5	4	5	4	4	3	25
1178	NM	5	Norway Maple	Acer platanoides		5	5	4	5	4	3	26
1179	NM	5	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1180	NM	4	Norway Maple	Acer platanoides		5	5	5	5	3	3	26
1181	NM	6	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1182	NM	6	Norway Maple	Acer platanoides		4	5	5	5	4	3	26
1183	CA	3	Crab Apple	Malus coronaria		5	5	4	5	3	3	25
1184	CA	5	Crab Apple	Malus coronaria		4	4	4	5	4	3	24
1185	CA	4	Crab Apple	Malus coronaria		5	5	5	5	4	3	27
1186	NM	14	Norway Maple	Acer platanoides		4	4	4	4	3	3	22
1187	NM	7	Norway Maple	Acer platanoides	Dead							
1188	RM	3	Red Maple	Acer rubrum		5	4	4	4	4	3	24
1189	NM	7	Norway Maple	Acer platanoides		3	3	3	3	1	3	16
1190	NM	12	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1191	NM	8	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1192	JZ	12	Japanese zelkova	Zelkova serrata		5	5	5	5	5	3	28
1193	BP	7	Bradford Pear	Pyrus calleryana		5	5	5	5	5	3	28
1194	JZ	7	Japanese zelkova	Zelkova serrata		5	5	5	5	4	3	27
1195	NM	8	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1196	NM	6	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1197	NM	12	Norway Maple	Acer platanoides		5	5	5	5	3	3	26
1198	NM	13	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1199	NM	8	Norway Maple	Acer platanoides		5	5	5	5	3	3	26



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STATE OF MICHIGAN
TODD D. SHELLY
PROFESSIONAL SURVEYOR
NO. 40010411111
LICENSED PROFESSIONAL SURVEYOR

LEGEND

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

EXISTING

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

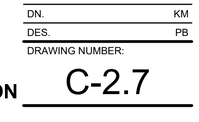
NORTH

0 15 30 60
SCALE: 1" = 30'

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

CAUTION!!
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KEY MAP



SITE SHEET KEY MAP

REFERENCE DRAWINGS

WATER MAIN	TRANSMISSION MAP 4Y, GLWA, APRIL 2019
WATER MAIN	TRANSMISSION MAP 5Y, GLWA, MARCH 2007
ELECTRIC	LOCATION MAP 262-374, DTE, JUNE 2023
GAS	TRANSMISSION MAP, CONSUMERS ENERGY, 01-59-03-1
OTHER	HUNTER SQUARE LAND TITLE SURVEY, PEA GROUP #21-0052, MARCH 2021.
OTHER	LOEHMANN'S AT HUNTERS SQUARE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., AUGUST 1981, UPDATED 1989
OTHER	ORCHARD PLACE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., ISSUED FEBRUARY 1983, UPDATED MAY 2005
OTHER	HUNTERS SQUARE PARKING LOT AND DRIVEWAY RENOVATIONS AS BUILTS, ORCHARD, HILTZ & McCLIMENT, INC., ISSUED SEPTEMBER 1993, UPDATED MAY 2005
OTHER	ORCHARD PLACE REHABILITATION PROJECT AS BUILTS, OHM CONSULTING ENGINEERS, ISSUED OCTOBER 1995, UPDATED DECEMBER 2005
OTHER	HUNTERS SQUARE/BUILDING "F", OHM CONSULTING ENGINEERS, DECEMBER 2004
OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD, HRC INC, OCTOBER 2019

CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

EXISTING TREE LIST - SHEET 1

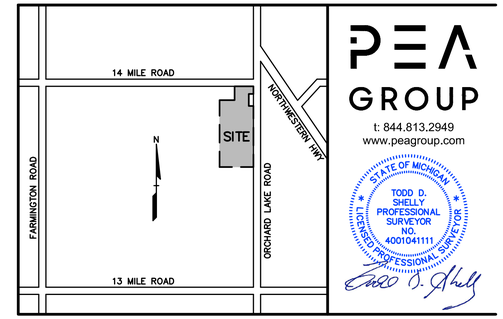
PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:

NOT FOR CONSTRUCTION C-2.7

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\C-2.1(TOPO-2202566(Ph-2).dwg PLOT DATE: 7/14/2025 BY:Kyle Miller DWEW TWST: 93945*25*W

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	NOTES/Extra Trunk DBH	CONDITION/ FACTOR						OVERALL RANK
						trunk	growth rate	structure	insects/ diseases	crown dev	life exp.	
1200	CA	4	Crab Apple	Malus coronaria		2	2	2	4	2	3	15
1201	CA	7	Crab Apple	Malus coronaria		5	5	5	5	5	3	28
1202	NM	12	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1203	CA	6	Crab Apple	Malus coronaria		4	4	4	5	4	3	24
1204	NM	13	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1205	NS	12	Norway Spruce	Picea abies		4	5	4	4	3	3	23
1206	LL	10	Littleleaf Linden	Tilia cordata		5	5	4	5	4	3	26
1207	LL	9	Littleleaf Linden	Tilia cordata		5	5	5	5	4	3	27
1208	LL	7	Littleleaf Linden	Tilia cordata		5	5	5	5	4	3	27
1209	LL	9	Littleleaf Linden	Tilia cordata		5	4	4	5	4	3	25
1210	BP	5	Bradford Pear	Pyrus calleryana		5	4	4	5	4	3	25
1211	RM	5	Red Maple	Acer rubrum		5	5	5	5	4	3	27
1212	RM	6	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1213	RM	5	Red Maple	Acer rubrum		4	5	5	5	4	3	26
1214	RM	8	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1215	RM	4	Red Maple	Acer rubrum		5	5	5	5	4	3	27
1216	RM	5	Red Maple	Acer rubrum		5	5	5	5	4	3	27
1217	RM	5	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1218	RM	4	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1219	RM	6	Red Maple	Acer rubrum		5	5	5	5	5	3	28
1220	RC	5	Red Cedar	Juniperus virginiana	x3 4, 2, 1	5	5	5	5	5	3	28
1221	RC	4	Red Cedar	Juniperus virginiana	x2 1,1	5	5	5	5	5	3	28
1222	RC	4	Red Cedar	Juniperus virginiana	x2 2.2	5	5	5	5	5	3	28
1223	RC	3	Red Cedar	Juniperus virginiana	x1 2	5	5	5	5	5	3	28
1224	RP	14	Red Pine	Pinus resinosa		3	4	4	2	3	3	19
1225	RP	12	Red Pine	Pinus resinosa		5	5	5	5	5	3	28
1226	RP	12	Red Pine	Pinus resinosa		5	5	5	5	4	3	27
1227	RP	11	Red Pine	Pinus resinosa		5	5	4	5	4	3	26
1228	BP	5	Bradford Pear	Pyrus calleryana	x1 4	4	5	4	5	4	3	25
1229	BP	10	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1230	RP	9	Red Pine	Pinus resinosa		5	5	4	5	4	3	26
1231	RP	9	Red Pine	Pinus resinosa		5	5	5	5	5	3	28
1232	BP	11	Bradford Pear	Pyrus calleryana		4	5	5	5	4	3	26
1233	BP	10	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1234	BP	12	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1235	RP	10	Red Pine	Pinus resinosa		5	4	5	4	4	3	25
1236	BP	11	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1237	BP	13	Bradford Pear	Pyrus calleryana		4	5	4	5	4	3	25
1238	HL	4	Honeylocust	Gleditsia triacanthos		5	5	5	5	5	5	30
1239	HL	4	Honeylocust	Gleditsia triacanthos		5	5	5	5	4	3	27
1240	HL	4	Honeylocust	Gleditsia triacanthos		5	5	5	5	5	3	28
1241	NM	9	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1242	CA	7	Crab Apple	Malus coronaria	x2 7,5	5	5	5	5	5	4	29
1243	RB	5	River Birch	Betula nigra	x2 5,3		5	5	5	5	5	25
1244	SB	2	Service Berry	Amelanchier arborea	x9 2,2,2,2,2, 1.1,1,1	5	5	5	5	5	5	30
1245	SB	3	Service Berry	Amelanchier arborea	x10 2,2,1,1,1,1.1,1,1,1	4	5	5	5	5	5	29
1246	SB	2	Service Berry	Amelanchier arborea	x6 2,2,2,2,1,1	5	5	4	5	5	3	27
1247	RB	3	River Birch	Betula nigra	x2 3,2	5	5	5	5	5	3	28
1248	NM	16	Norway Maple	Acer platanoides		4	5	5	5	4	3	26
1249	NM	13	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1250	NM	13	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1251	RB	3	River Birch	Betula nigra	x2 2.2	5	5	5	5	5	3	28
1252	RB	3	River Birch	Betula nigra	x2 3,2	5	5	5	5	5	3	28
1253	RB	4	River Birch	Betula nigra	x1 3	5	5	5	5	5	5	30
1254	NM	17	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1255	RM	5	Red Maple	Acer rubrum	DEAD							
1256	RM	5	Red Maple	Acer rubrum	DEAD							
1257	RM	5	Red Maple	Acer rubrum	DEAD							
1258	RM	3	Red Maple	Acer rubrum	DEAD							
1259	RP	10	Red Pine	Pinus resinosa		5	4	4	5	3	3	24
1260	RP	10	Red Pine	Pinus resinosa		5	5	5	5	4	3	27
1261	HL	6	Honeylocust	Gleditsia triacanthos		5	5	5	5	4	3	27
1262	HL	6	Honeylocust	Gleditsia triacanthos		5	5	5	5	5	3	28
1263	NM	8	Norway Maple	Acer platanoides		5	5	5	5	4	3	27
1264	HL	7	Honeylocust	Gleditsia triacanthos		5	5	5	5	5	3	28
1265	RB	2	River Birch	Betula nigra	x1	5	5	5	5	5	3	28
1266	RB	3	River Birch	Betula nigra	x4 2.2.2.1	5	5	5	5	5	3	28
1267	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1268	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1269	BP	4	Bradford Pear	Pyrus calleryana		4	4	4	5	3	3	23
1270	BP	4	Bradford Pear	Pyrus calleryana		5	5	4	5	4	3	26
1271	CA	6	Crab Apple	Malus coronaria		4	4	4	4	4	3	23
1272	NM	13	Norway Maple	Acer platanoides		5	5	5	5	5	3	28
1273	WS	9	White Spruce	Picea glauca		4	4	4	5	3	3	23
1274	NM	12	Norway Maple	Acer platanoides		4	4	5	5	4	3	25
1275	HL	6	Honeylocust	Gleditsia triacanthos		3	3	3	3	3	3	18
1276	HL	5	Honeylocust	Gleditsia triacanthos		3	3	3	4	3	3	19
1277	BP	4	Bradford Pear	Pyrus calleryana		5	5	4	5	4	3	26
1278	BP	5	Bradford Pear	Pyrus calleryana		5	5	4	5	4	3	26
1279	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	4	4	3	26
1280	BP	4	Bradford Pear	Pyrus calleryana		4	4	4	5	5	3	25
1281	BP	3	Bradford Pear	Pyrus calleryana		5	4	4	5	4	3	25
1282	BP	4	Bradford Pear	Pyrus calleryana		5	4	4	4	4	3	24
1283	BP	4	Bradford Pear	Pyrus calleryana		5	4	4	5	4	3	25
1284	BP	4	Bradford Pear	Pyrus calleryana		5	5	4	5	4	3	26
1285	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1286	BP	5	Bradford Pear	Pyrus calleryana		5	4	4	5	4	3	25
1287	BP	4	Bradford Pear	Pyrus calleryana		4	5	4	5	4	3	25
1288	BP	4	Bradford Pear	Pyrus calleryana	x1 4	5	5	5	5	4	3	27
1289	BP	3	Bradford Pear	Pyrus calleryana		5	4	4	5	3	3	24
1290	CA	4	Crab Apple	Malus coronaria		5	5	5	5	5	3	28
1291	BP	5	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1292	BP	4	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1293	BP	2	Bradford Pear	Pyrus calleryana		5	4	4	5	4	3	25
1294	BP	3	Bradford Pear	Pyrus calleryana		5	5	5	5	4	3	27
1295	BP	3	Bradford Pear	Pyrus calleryana		5	4	4	5	3	3	24
1296	BP	3	Bradford Pear	Pyrus calleryana		5	4	4	5	4	3	25
1297	BP	3	Bradford Pear	Pyrus calleryana		5	5	4	5	4	3	26
1298	BP	2	Bradford Pear	Pyrus calleryana	DEAD							
1299	BP	3	Bradford Pear	Pyrus calleryana	DEAD							



LEGEND

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

EXISTING

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

REFERENCE DRAWINGS

WATER MAIN	TRANSMISSION MAP 4Y, GLWA, APRIL 2019
WATER MAIN	TRANSMISSION MAP 5Y, GLWA, MARCH 2007
ELECTRIC	LOCATION MAP 262-374, DTE, JUNE 2023
GAS	TRANSMISSION MAP, CONSUMERS ENERGY, 01-59-03-1
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OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD, HRC INC. OCTOBER 2019

NORTH

0 15 30 60

SCALE: 1" = 30'

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KEY MAP



SITE SHEET KEY MAP

CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI. 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

EXISTING TREE LIST - SHEET 2

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:

NOT FOR CONSTRUCTION

C-2.8

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\(c-2.1)TOPO- 220256(Pln-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DWEW TWST: 92x457"25"DW

BENCHMARKS:
(GPS DERIVED - NAVD88)

BM #300
DIMPLE ON ARROW ON HYDRANT AND ±109' DIRECTLY NORTHEASTERLY FROM NORTHEAST BUILDING CORNER STORE BUY BUY BABY.
ELEV.- 877.55

BM #301
DIMPLE ON ARROW ON HYDRANT AND ±39' DIRECTLY WEST FROM SOUTHWEST BUILDING CORNER AT SOUTHWEST CORNER OF SITE.
ELEV.- 874.61

BM #302
LIGHT POLE BASE IN SHOPPING MALL ±180' DIRECTLY SOUTH FROM McDONALDS RESTUARANT
ELEV.- 875.56

FLOODPLAIN NOTE:
BY GRAPHIC PLOTTING, THE SUBJECT PARCEL IS IN "AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN." (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP PANEL NUMBER26125C0513F EFFECTIVE SEPTEMBER 29, 2006.

GENERAL UTILITY NOTES:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF FARMINGTON HILLS AND OAKLAND COUNTY.
2. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
3. WHERE EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OUT.
4. THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING UTILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE DESIGN ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY UTILITIES.
5. THE CONTRACTOR SHALL COORDINATE TO ENSURE ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED FOR THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, IRRIGATION, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT AND LANDSCAPING.
6. PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.
7. CONTRACTOR SHALL INSPECT ALL EXISTING PUBLIC STORM SEWER, SANITARY SEWER AND WATER MAIN STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION AND WITH THE GOVERNING AGENCY INSPECTOR PRIOR TO ESTABLISHING FINAL GRADE. NOTIFY THE ENGINEER, OWNER/DEVELOPER, AND GOVERNING AGENCY IF STRUCTURE IS DEEMED TO BE STRUCTURALLY UNSOUND AND/OR IN NEED OF REPAIR.
8. ALL CATCH BASINS, SEWER MANHOLES, INLETS, GATE WELLS, OUTLET CONTROL STRUCTURES, ETC. ARE DRAWN SO THAT THE CORRECT STRUCTURE LOCATION CAN BE STAKED ASSUMING THE INSERTION POINT OF THE CAD BLOCK REPRESENTS THE CENTER OF THE CASTING/COVER, NOT THE CENTER OF THE UTILITY STRUCTURE (THE CASTING AND THE STRUCTURE WILL HAVE DIFFERENT CENTERS IF ECCENTRIC CONES ARE USED IN CONSTRUCTION). IF UTILITY STRUCTURES ARE STAKED BY A SURVEYOR OTHER THAN PEA GROUP, THIS MUST BE TAKEN INTO ACCOUNT. PEA GROUP WILL NOT BE RESPONSIBLE FOR STAKING BY A THIRD PARTY.

STORM SEWER NOTES:

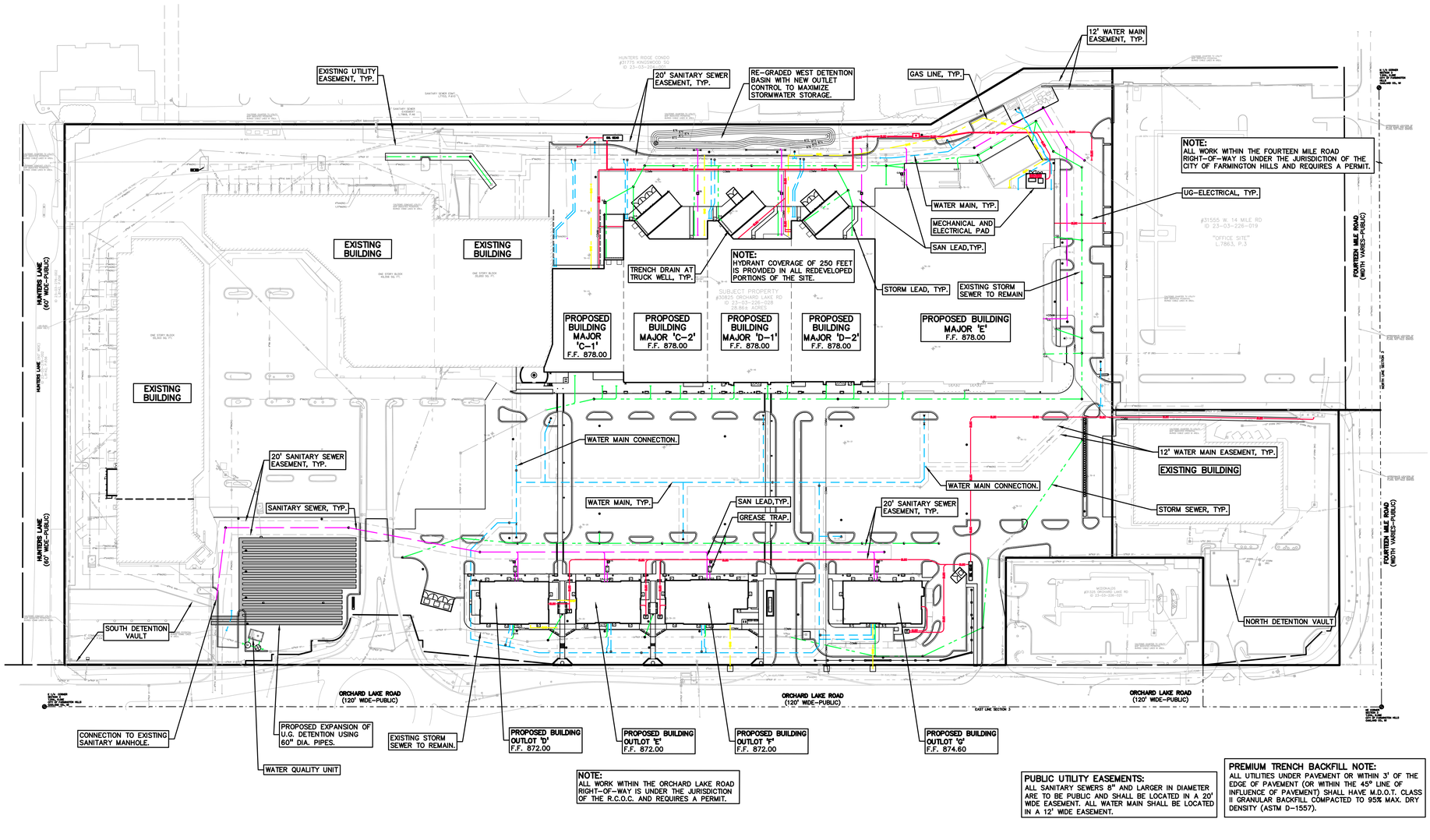
1. ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE EITHER REINFORCED CONCRETE PIPE (RCP C-76) CLASS IV WITH MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS, OR POLYPROPYLENE DUAL-WALL CORRUGATED SMOOTH-LINED PIPE (A.D.S. HIGH-PERFORMANCE STORM PIPE), AS NOTED ON THE PLANS UNLESS SPECIFIED OTHERWISE (ASTM C-443). ALL JOINTS FOR HP-STORM PIPE SHALL BE EXTENDED BELL AND SPIGOT MEETING ASTM D-3212.
2. ALL STORM SEWER LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
3. ALL STORM SEWER 10" OR LESS AND/OR LEADS SHALL BE SDR 26 OR AS NOTED IN THE PLANS.
4. JOINTS FOR P.V.C. PIPE SHALL BE ELASTOMERIC (RUBBER GASKET) AS SPECIFIED IN A.S.T.M. DESIGNATION D-3212.

WATER MAIN NOTES:

1. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 5.5' BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL ELEVEN AND A QUARTER (11.25°) DEGREE BENDS, PROPERLY ANCHORED.
2. ALL TEES, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.
3. PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER MAINS UNTIL REQUIRED TESTING IS SATISFACTORILY COMPLETED.
4. MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATERMAIN AND ANY SANITARY/STORM SEWER OR STRUCTURE.
5. NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE CITY.
6. ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.
7. WATER MAIN SERVICE LEADS SHALL BE TYPE 'K' ANNEALED SEAMLESS COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.
8. ALL FIRE HYDRANTS SHALL BE EJW #5BR MODEL #250 PER CITY STANDARDS.
9. ALL HYDRANTS TO BE A MINIMUM OF 5' FROM BACK OF CURB, TYP.
10. ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE CITY.
11. THE WATER MAIN CONTRACTOR SHALL NOTIFY THE INSPECTION DEPARTMENT OF THE CITY AT LEAST THREE WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.

SANITARY SEWER NOTES:

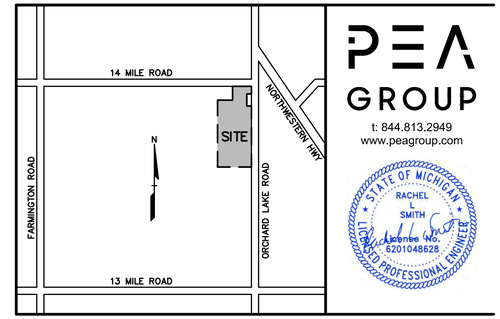
1. DOWNSPOUTS, WEEP TILE, FOOTING DRAINS OR ANY CONDUIT THAT CARRIES STORM OR GROUND WATER SHALL NOT BE ALLOWED TO DISCHARGE INTO A SANITARY SEWER.
2. ALL SANITARY LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
3. ALL SANITARY SEWER 8" OR LARGER SHALL BE P.V.C. TRUSS PIPE (ASTM D2680) AND FITTINGS, WITH ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
4. ALL SANITARY SEWER LEADS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
5. SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.J.I.W. #1565 BOX OR EQUAL.



NOTE:
ALL WORK WITHIN THE ORCHARD LAKE ROAD RIGHT-OF-WAY IS UNDER THE JURISDICTION OF THE R.C.O.C. AND REQUIRES A PERMIT.

PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 12' WIDE EASEMENT.

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).



PEA GROUP
t: 844.813.2949
www.peagroup.com
STATE OF MICHIGAN RACHEL L SMITH License No. 6201048628 LICENSED PROFESSIONAL ENGINEER

LEGEND

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

EXISTING		PROPOSED
—OH—ELEC—W—O—	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
—UG—CATV—	UNDERGROUND CABLE TV, CATV PEDESTAL	
—UG—PHONE—	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
—UG—ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	—UG—ELEC—
	GAS MAIN, VALVE & GAS LINE MARKER	
	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
	SANITARY SEWER, CLEANOUT & MANHOLE	C.O.
	STORM SEWER, CLEANOUT & MANHOLE	C.O.
Y.D.	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	Y.D.
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
	UNIDENTIFIED STRUCTURE	
x 938.91	SPOT ELEVATION	
670	CONTOUR LINE	671
	FENCE	
	GUARD RAIL	
	STREET LIGHT	
	SIGN	
CONC.	CONCRETE	STD DUTY / HEAVY DUTY / R.O.W. ONLY
ASPH.	ASPHALT	STD DUTY / HEAVY DUTY / DEEP STRENGTH

REFERENCE DRAWINGS

WATER MAIN	TRANSMISSION MAP 4Y, GLWA, APRIL 2019
WATER MAIN	TRANSMISSION MAP 5Y, GLWA, MARCH 2007
ELECTRIC	LOCATION MAP 262-374, DTE, JUNE 2023
GAS	TRANSMISSION MAP, CONSUMERS ENERGY, 01-59-03-1
OTHER	HUNTER SQUARE LAND TITLE SURVEY, PEA GROUP #21-0052, MARCH 2021.
OTHER	LOEHMANN'S AT HUNTERS SQUARE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., AUGUST 1981, UPDATED 1989
OTHER	ORCHARD PLACE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., ISSUED FEBRUARY 1983, UPDATED MAY 2005
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OTHER	ORCHARD PLACE REHABILITATION PROJECT AS BUILTS, OHM CONSULTING ENGINEERS, ISSUED OCTOBER 1995, UPDATED DECEMBER 2005
OTHER	HUNTERS SQUARE/BUILDING "F", OHM CONSULTING ENGINEERS, DECEMBER 2004
OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD, HRC INC, OCTOBER 2019

NORTH

0 40 80 160
SCALE: 1" = 80'

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

CAUTION!!
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KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
OVERALL UTILITY PLAN

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-7.0

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\22-0256 HUNTERS SQUARE REDEVELOPMENT\PWD\PHASE II REDEVELOPMENT\SITE PLAN\C-7.0\OVERALL UTIL-22025(FH-2).dwg PLOT DATE: 7-14-2025 BY: Isaac Miller OVERALL TWO1: 22x34"/2x5"CW

BENCHMARKS:
(GPS DERIVED - NAVD88)

BM #300
DIMPLE ON ARROW ON HYDRANT AND ±109' DIRECTLY NORTHEASTERLY FROM NORTHEAST BUILDING CORNER STORE BUY BUY BABY.
ELEV.- 877.55

BM #301
DIMPLE ON ARROW ON HYDRANT AND ±39' DIRECTLY WEST FROM SOUTHWEST BUILDING CORNER AT SOUTHWEST CORNER OF SITE.
ELEV.- 874.61

BM #302
LIGHT POLE BASE IN SHOPPING MALL ±180' DIRECTLY SOUTH FROM McDONALDS RESTUARANT
ELEV.- 875.56

FLOODPLAIN NOTE:
BY GRAPHIC PLOTTING, THE SUBJECT PARCEL IS IN "AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN." (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP PANEL NUMBER26125C0513F EFFECTIVE SEPTEMBER 29, 2006.

GENERAL UTILITY NOTES:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF FARMINGTON HILLS AND OAKLAND COUNTY.
2. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
3. WHERE EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OUT.
4. THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING UTILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE DESIGN ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY UTILITIES.
5. THE CONTRACTOR SHALL COORDINATE TO ENSURE ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED FOR THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, IRRIGATION, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT AND LANDSCAPING.
6. PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.
7. CONTRACTOR SHALL INSPECT ALL EXISTING PUBLIC STORM SEWER, SANITARY SEWER AND WATER MAIN STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION AND WITH THE GOVERNING AGENCY INSPECTOR PRIOR TO ESTABLISHING FINAL GRADE. NOTIFY THE ENGINEER, OWNER/DEVELOPER, AND GOVERNING AGENCY IF STRUCTURE IS DEEMED TO BE STRUCTURALLY UNSOUND AND/OR IN NEED OF REPAIR.

STORM SEWER NOTES:

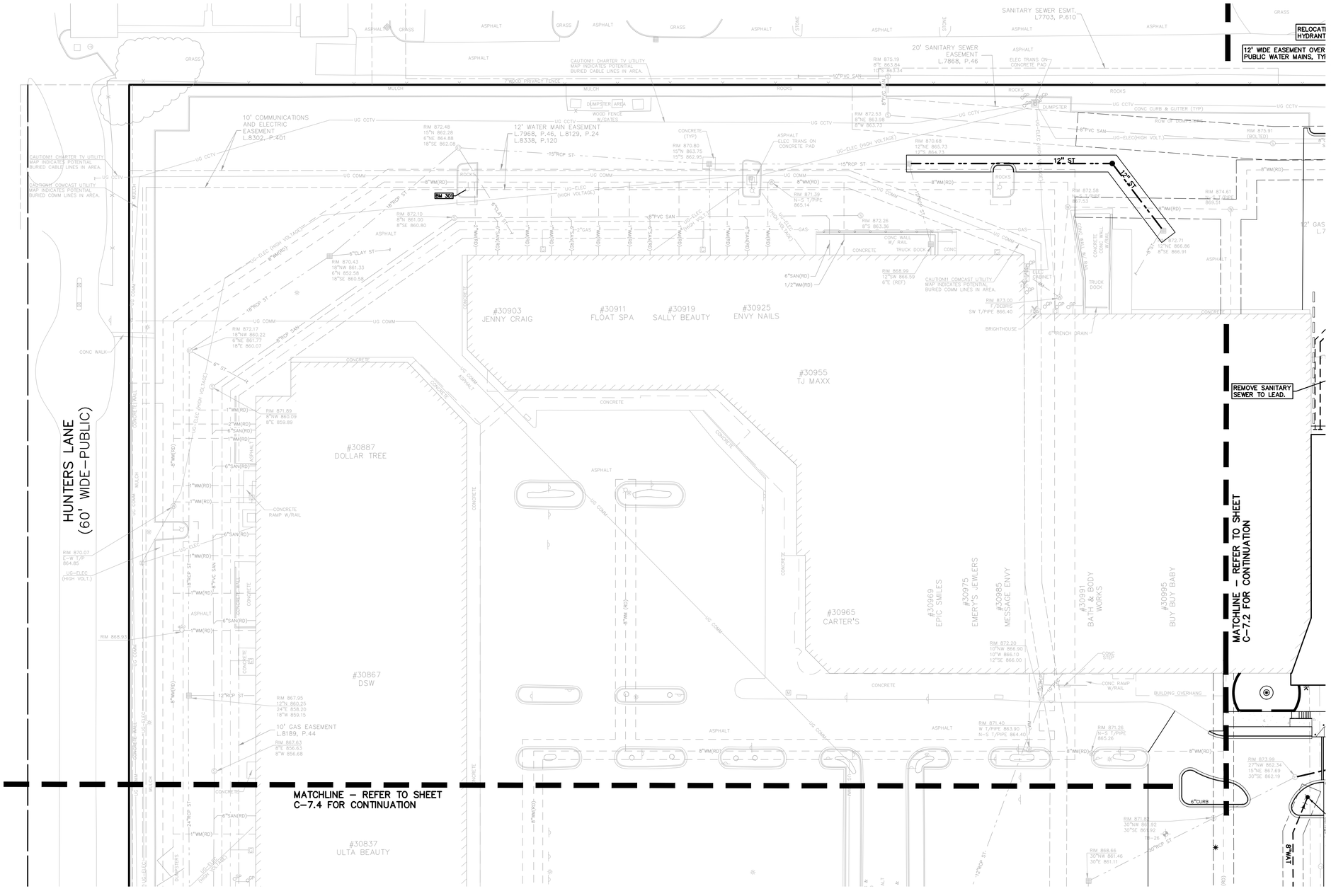
1. ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP C-76) CLASS IV WITH MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS UNLESS SPECIFIED OTHERWISE (ASTM C-443).
2. ALL STORM SEWER LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
3. ALL STORM SEWER 10" OR LESS AND/OR LEADS SHALL BE SDR 26.
4. JOINTS FOR P.V.C. PIPE SHALL BE ELASTOMERIC (RUBBER GASKET) AS SPECIFIED IN A.S.T.M. DESIGNATION D-3212.

WATER MAIN NOTES:

1. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 5.5' BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL ELEVEN AND A QUARTER (11.25°) DEGREE BENDS, PROPERLY ANCHORED.
2. ALL TEES, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.
3. PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER MAINS UNTIL REQUIRED TESTING IS SATISFACTORILY COMPLETED.
4. MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATERMAIN AND ANY SANITARY/STORM SEWER OR STRUCTURE.
5. NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE CITY.
6. ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.
7. WATER MAIN SERVICE LEADS SHALL BE TYPE 'K' ANNEALED SEAMLESS COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.
8. ALL FIRE HYDRANTS SHALL BE EJIW #5BR MODEL #250 PER CITY STANDARDS.
9. ALL HYDRANTS TO BE A MINIMUM OF 5' FROM BACK OF CURB, TYP.
10. ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE CITY.
11. THE WATER MAIN CONTRACTOR SHALL NOTIFY THE INSPECTION DEPARTMENT OF THE CITY AT LEAST THREE WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.

SANITARY SEWER NOTES:

1. DOWNSPOUTS, WEEP TILE, FOOTING DRAINS OR ANY CONDUIT THAT CARRIES STORM OR GROUND WATER SHALL NOT BE ALLOWED TO DISCHARGE INTO A SANITARY SEWER.
2. ALL SANITARY LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
3. ALL SANITARY SEWER 8" OR LARGER SHALL BE P.V.C. TRUSS PIPE (ASTM D2680) AND FITTINGS, WITH ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
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5. SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.J.I.W. #1565 BOX OR EQUAL.



LEGEND

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

EXISTING		PROPOSED
—OH—ELEC—W—	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
—UG—CATV—	UNDERGROUND CABLE TV, CATV PEDESTAL	
—UG—PHONE—	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
—UG—ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	—UG—ELEC—
GAS	GAS MAIN, VALVE & GAS LINE MARKER	
W	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
S	SANITARY SEWER, CLEANOUT & MANHOLE	C.O.
S	STORM SEWER, CLEANOUT & MANHOLE	C.O.
Y.D.	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	Y.D.
W	WATER VALVE BOX-HYDRANT VALVE BOX, SERVICE SHUTOFF	
M T	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
?	UNIDENTIFIED STRUCTURE	
x 598.91	SPOT ELEVATION	671.21
670	CONTOUR LINE	671
	FENCE	
	GUARD RAIL	
	STREET LIGHT	
	SIGN	
CONC.	CONCRETE	STD DUTY, HEAVY DUTY, R.O.W. ONLY
ASPH.	ASPHALT	STD DUTY, HEAVY DUTY, DEEP STRENGTH

REFERENCE DRAWINGS

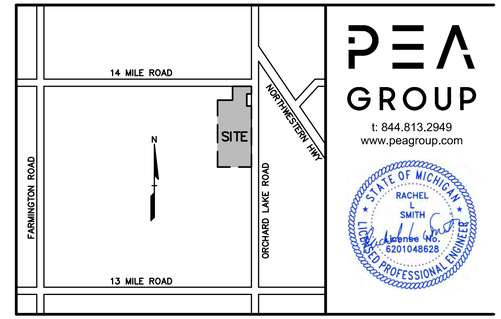
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OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD, HRC INC, OCTOBER 2019

GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
2. ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
3. THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
4. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE CITY PRIOR TO CONSTRUCTION.
5. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT.
6. REFER TO CONSTRUCTION PLANS FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
7. ALL SLOPES EXCEEDING 1:6 MUST BE STABILIZED BY SODDING OR BY PLACING A MULCH BLANKET PEGGED IN PLACE OVER SEED.
8. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL, IN THE OPINION OF THE THIRD PARTY TESTING COMPANY, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.
10. ON-SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON-SITE SOIL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.
11. THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOFROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEOGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
12. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL AREAS OR BELOW PROPOSED SUBGRADE IN CUT AREAS WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
13. SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED AS RECOMMENDED IN THE GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT.
14. ANY SUBGRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.

NOT FOR CONSTRUCTION



PEA GROUP
t: 844.813.2949
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STATE OF MICHIGAN
RACHEL L SMITH
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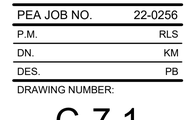
NORTH

0 15 30 60
SCALE: 1" = 30'

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

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KEY MAP



SITE SHEET KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
PRELIMINARY GRADING AND UTILITY PLAN - SHEET 1

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-7.1

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\CIVIL\PHASE II REDEVELOPMENT\SITE PLAN\(C-7.1)GRAD UTIL-22256(PH-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DWEW TIMED: 9:24:57 25"W

BENCHMARKS:
(GPS DERIVED - NAVD88)

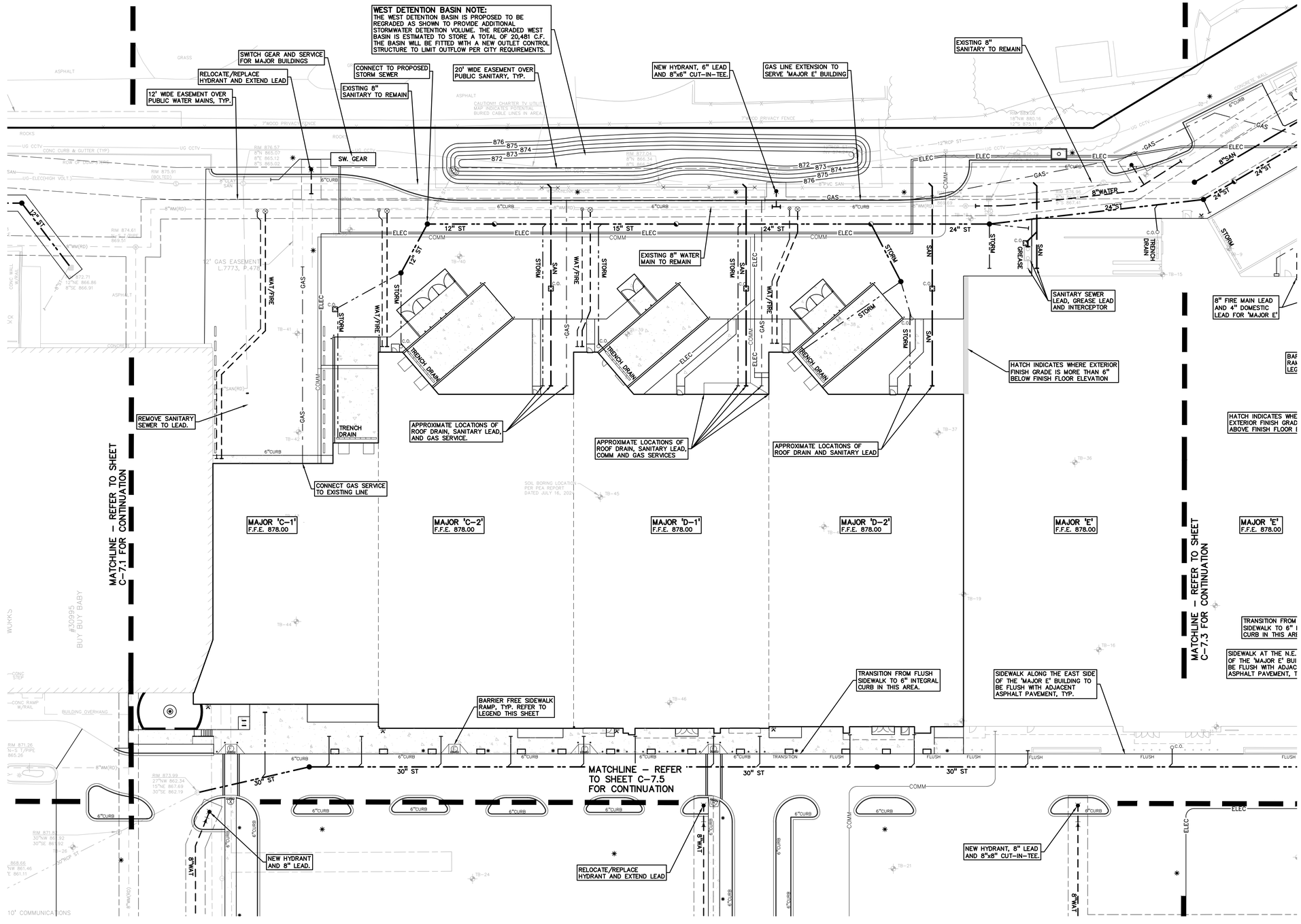
BM #300
DIMPLE ON ARROW ON HYDRANT AND ±109' DIRECTLY NORTHEASTERLY FROM NORTHEAST BUILDING CORNER STORE BUY BUY BABY.
ELEV.- 877.55

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DIMPLE ON ARROW ON HYDRANT AND ±39' DIRECTLY WEST FROM SOUTHWEST BUILDING CORNER AT SOUTHWEST CORNER OF SITE.
ELEV.- 874.61

BM #302
LIGHT POLE BASE IN SHOPPING MALL ±180' DIRECTLY SOUTH FROM McDONALDS RESTUARANT
ELEV.- 875.56

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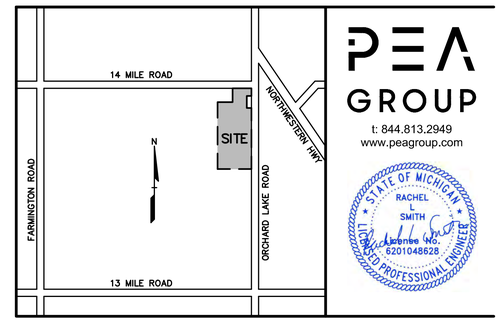
WEST DETENTION BASIN NOTE:
THE WEST DETENTION BASIN IS PROPOSED TO BE REGRADED AS SHOWN TO PROVIDE ADDITIONAL STORMWATER DETENTION VOLUME. THE REGRADED WEST BASIN IS ESTIMATED TO STORE A TOTAL OF 20,481 C.F. THE BASIN WILL BE FITTED WITH A NEW OUTLET CONTROL STRUCTURE TO LIMIT OUTFLOW PER CITY REQUIREMENTS.



SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE D'	Ⓓ
SIDEWALK RAMP 'TYPE F'	Ⓕ
SIDEWALK RAMP 'TYPE P'	Ⓟ
SIDEWALK RAMP 'TYPE R'	Ⓡ
CURB DROP ONLY	Ⓧ

REFER TO LATEST EDITION OF MDOT R-28 STANDARD PLAN FOR SIDEWALK RAMP DETAILS.



LEGEND

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

EXISTING		PROPOSED
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CONC.	CONCRETE	STD DUTY / HEAVY DUTY / R.O.W. ONLY
ASPH.	ASPHALT	STD DUTY / HEAVY DUTY / DEEP STRENGTH

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NORTH

0 15 30 60
SCALE: 1" = 30'

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

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KEY MAP



SITE SHEET KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
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ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
PRELIMINARY GRADING AND UTILITY PLAN - SHEET 2

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-7.2

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\22022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\C-7.1\SRAD UTIL-220256(Ph-2).dwg PLOT DATE: 7/14/2025 BY:Kyle Miller DWEW TWIST: 92445°25°CW

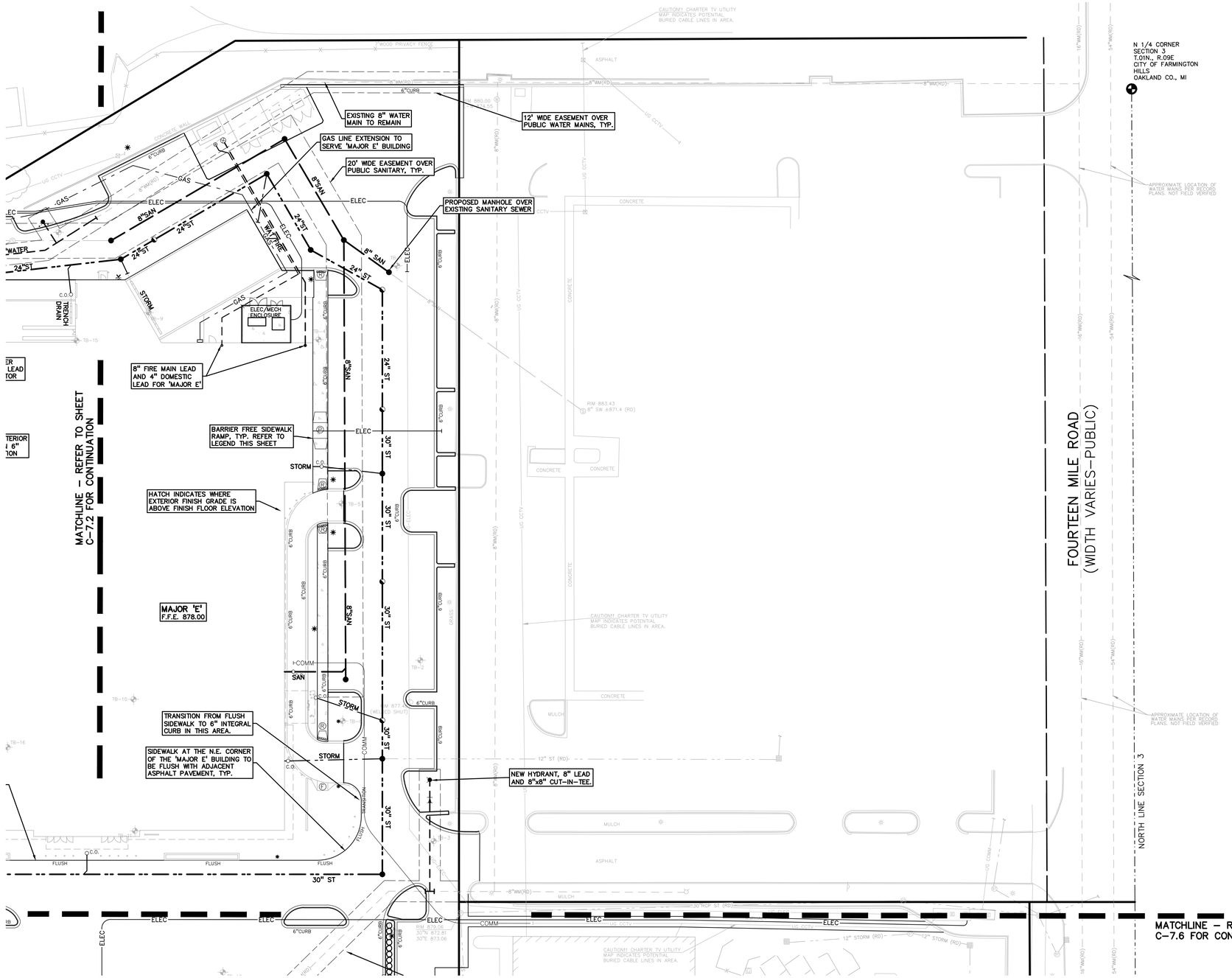
BENCHMARKS:
(GPS DERIVED - NAVD88)

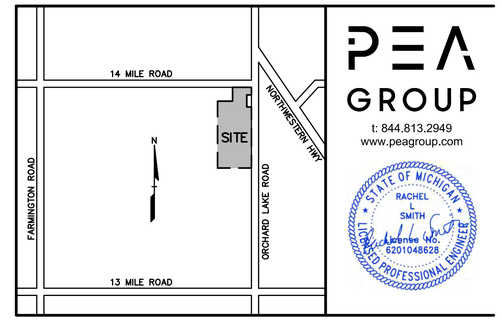
BM #300
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ELEV. - 877.55

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ELEV. - 874.61

BM #302
LIGHT POLE BASE IN SHOPPING MALL ±180' DIRECTLY SOUTH FROM McDONALDS RESTUARANT
ELEV. - 875.56

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BY GRAPHIC PLOTTING, THE SUBJECT PARCEL IS IN "AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN." (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP PANEL NUMBER26125C0513F EFFECTIVE SEPTEMBER 29, 2006.





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STATE OF MICHIGAN
RACHEL L SMITH
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LEGEND

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

EXISTING		PROPOSED
—OH—ELEC—W—	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
—UG—CATV—	UNDERGROUND CABLE TV, CATV PEDESTAL	
—UG—PHONE—	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
—UG—ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	—UG—ELEC—
—GAS—	GAS MAIN, VALVE & GAS LINE MARKER	—GAS—
	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
	SANITARY SEWER, CLEANOUT & MANHOLE	C.O.
	STORM SEWER, CLEANOUT & MANHOLE	C.O.
	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	Y.D.
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
	UNIDENTIFIED STRUCTURE	
×TOE 671	SPOT ELEVATION	×671.21
670	CONTOUR LINE	671
	FENCE	
	GUARD RAIL	
	STREET LIGHT	
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SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE D'	(D)
SIDEWALK RAMP 'TYPE F'	(F)
SIDEWALK RAMP 'TYPE P'	(P)
SIDEWALK RAMP 'TYPE R'	(R)
CURB DROP ONLY	(X)

REFER TO LATEST EDITION OF MDOT R-28 STANDARD PLAN FOR SIDEWALK RAMP DETAILS.

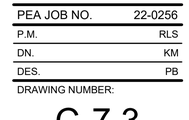
NORTH

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ORIGINAL ISSUE DATE:
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DRAWING TITLE
PRELIMINARY GRADING AND UTILITY PLAN - SHEET 3

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-7.3

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\COMP\PHASE II REDEVELOPMENT\SITE PLAN\(C-7.1)SHAD UTIL-22025dd(PH-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DVIEW TIMES: 9:24:57 23"Dw

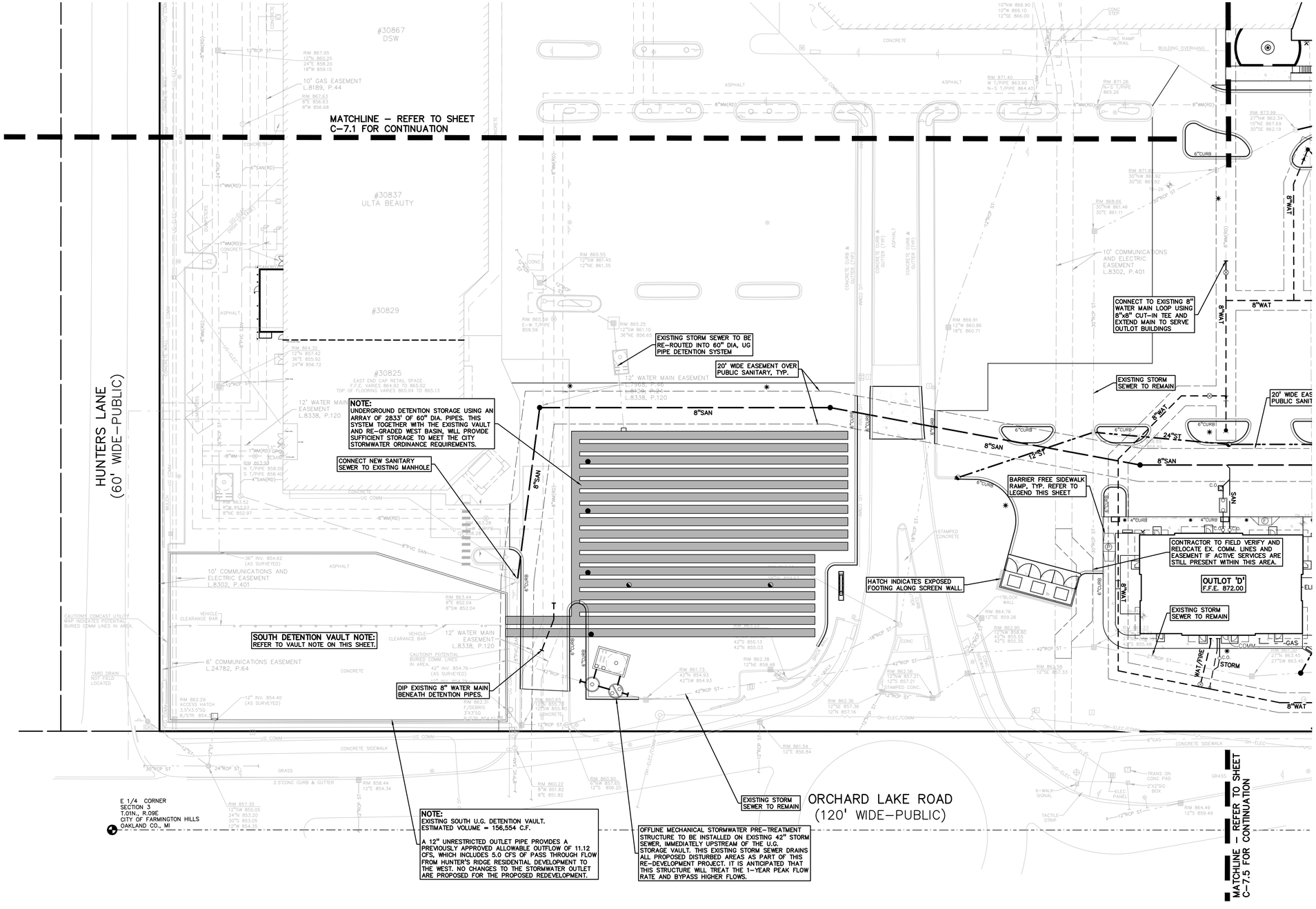
BENCHMARKS:
(GPS DERIVED - NAVD88)

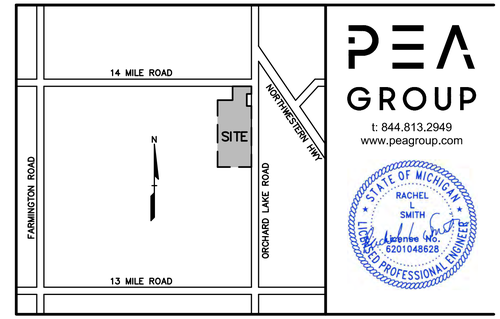
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LEGEND

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

EXISTING	PROPOSED
ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
UNDERGROUND CABLE TV, CATV PEDESTAL	
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
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WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
SANITARY SEWER, CLEANOUT & MANHOLE	
STORM SEWER, CLEANOUT & MANHOLE	
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WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
UNIDENTIFIED STRUCTURE	
SPOT ELEVATION	671.21
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FENCE	
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SIDEWALK RAMP 'TYPE F'	(F)
SIDEWALK RAMP 'TYPE P'	(P)
SIDEWALK RAMP 'TYPE R'	(R)
CURB DROP ONLY	(X)

REFER TO LATEST EDITION OF MDOT R-28 STANDARD PLAN FOR SIDEWALK RAMP DETAILS.

SOUTH DETENTION VAULT NOTE:
ORIGINAL SITE DESIGN (1979) APPEARS TO HAVE PROVIDED TWO STORMWATER DETENTION BASINS FOR THE NORTH RETAIL PARCEL, AND TWO ADDITIONAL DETENTION BASINS FOR THE SOUTHERN RETAIL PARCEL (1981). IN 1994, THE SITE WAS RE-DEVELOPED AND ALL DRAINAGE FROM THE PREVIOUS FOUR BASINS WAS ROUTED TO A SINGLE U.G. DETENTION VAULT AT THE SOUTHEAST CORNER OF THE COMBINED PROPERTY. THAT VAULT REMAINS IN USE TODAY.

THE WEST BASIN CURRENTLY DRAINS A PORTION OF THE ADJACENT RESIDENTIAL PROPERTY TO THE WEST, AND THE OUTLET FROM THIS BASIN DRAINS THROUGH THIS PROPERTY AND INTO THE SOUTH VAULT, WHERE THE FLOW PASSES THROUGH.

NO ADDITIONAL DETENTION WAS REQUIRED FOR THE McDONALDS SITE WHEN CONSTRUCTED (1994).

DETENTION FOR THE OLD NAVY PORTION OF THE SITE IS SEPARATE FROM THE REMAINDER OF THE PROPERTY.

PER THE ANALYSIS COMPLETED BY O.H.M. IN 2006, A TOTAL REQUIRED VOLUME OF 135,434 C.F. WAS AGREED UPON FOR THIS DEVELOPMENT WITH AN ALLOWABLE OUTLET TO THE CITY'S SYSTEM USING A 12" UNRESTRICTED PIPE FOR A TOTAL OF 11.12 CFS, WHICH INCLUDED 5.0 CFS OF PASS THROUGH FLOW FROM THE HUNTER'S RIDGE RESIDENTIAL DEVELOPMENT TO THE WEST.

THE PROPOSED DEVELOPMENT SHALL EXPAND DETENTION STORAGE NEAR THE SOUTHERN VAULT BY ADDING ±2336 LF OF 60" PIPE IMMEDIATELY NORTH OF THE EXISTING VAULT, AND BY RE-GRADING THE WEST BASIN TO MAXIMIZE THE STORAGE CAPACITY. DETAILED CALCULATIONS FOR STORAGE CAPACITY AND OUTFLOW RATES ARE PROVIDED ON SHEET C-12.0. IN SUMMARY:

ORIGINAL SOUTH VAULT STORAGE = 156,554 C.F.
ADDITIONAL 60" PIPE STORAGE = 45,867 C.F.
RE-GRADED WEST BASIN STORAGE = 20,481 C.F.

TOTAL ON-SITE DETENTION STORAGE = 222,902 C.F.
CITY REQUIRED STORAGE VOLUME (2" OVER SITE) = 218,599 C.F.

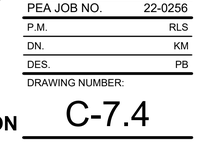
NORTH

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KEY MAP



SITE SHEET KEY MAP

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ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
PRELIMINARY GRADING AND UTILITY PLAN - SHEET 4

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-7.4

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\DC-7.1(GRAD UTIL-220256(Ph-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DWEW TWST: 0264(2)5"CW

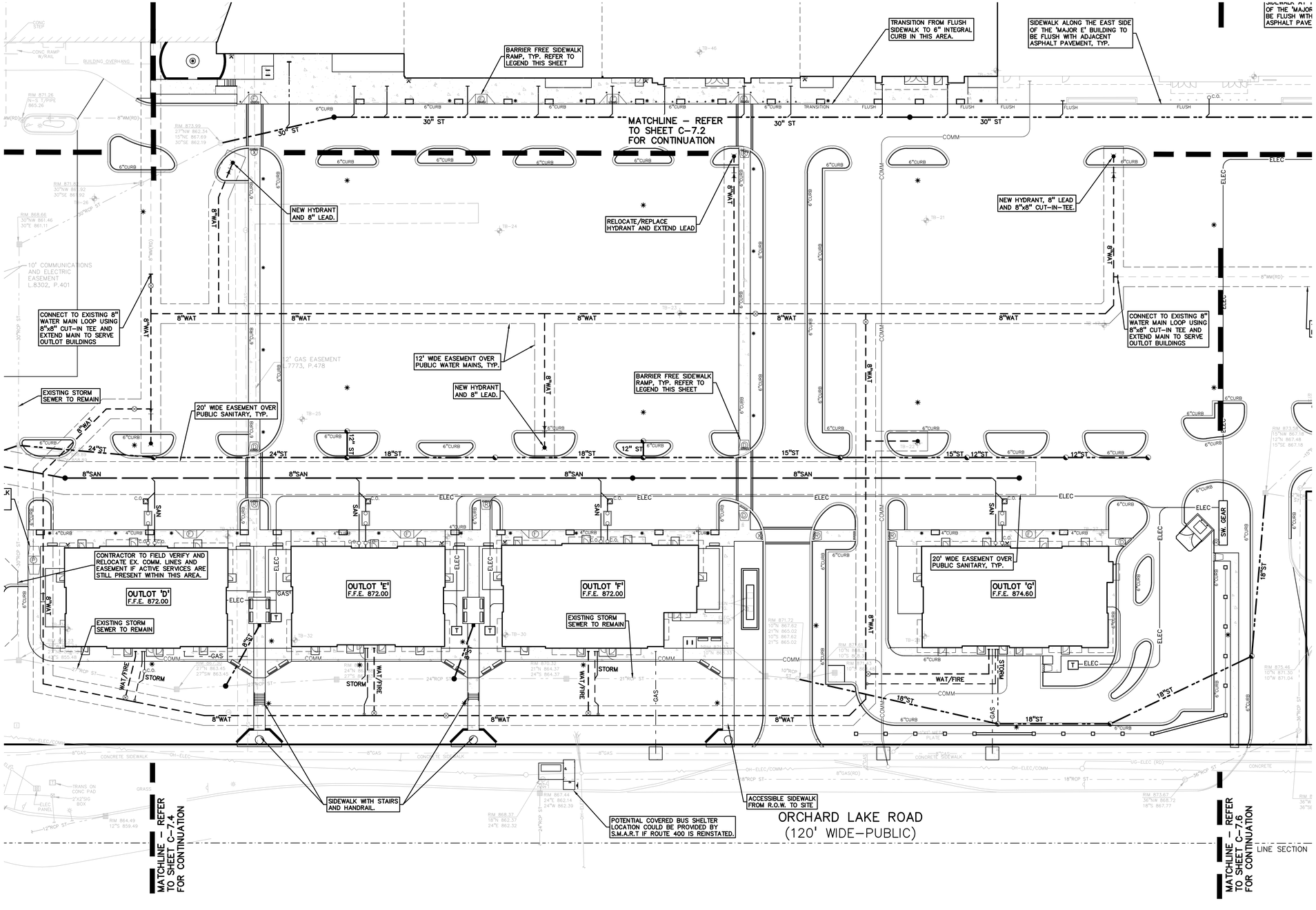
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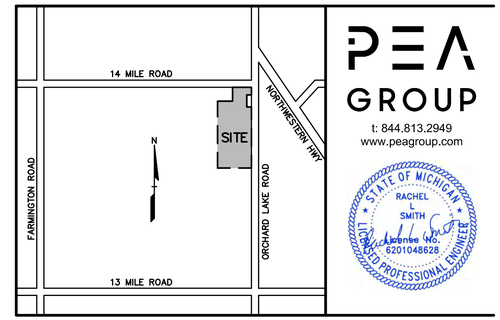
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W	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	W
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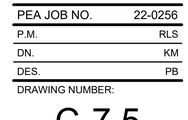
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SEPTEMBER 15, 2023

DRAWING TITLE
PRELIMINARY GRADING AND UTILITY PLAN - SHEET 5

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-7.5

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\COMO\PHASE II REDEVELOPMENT\SITE PLAN\(C-7.1)SHAD UTIL-2022(RH-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DWEW TIMES: 93245723"CW

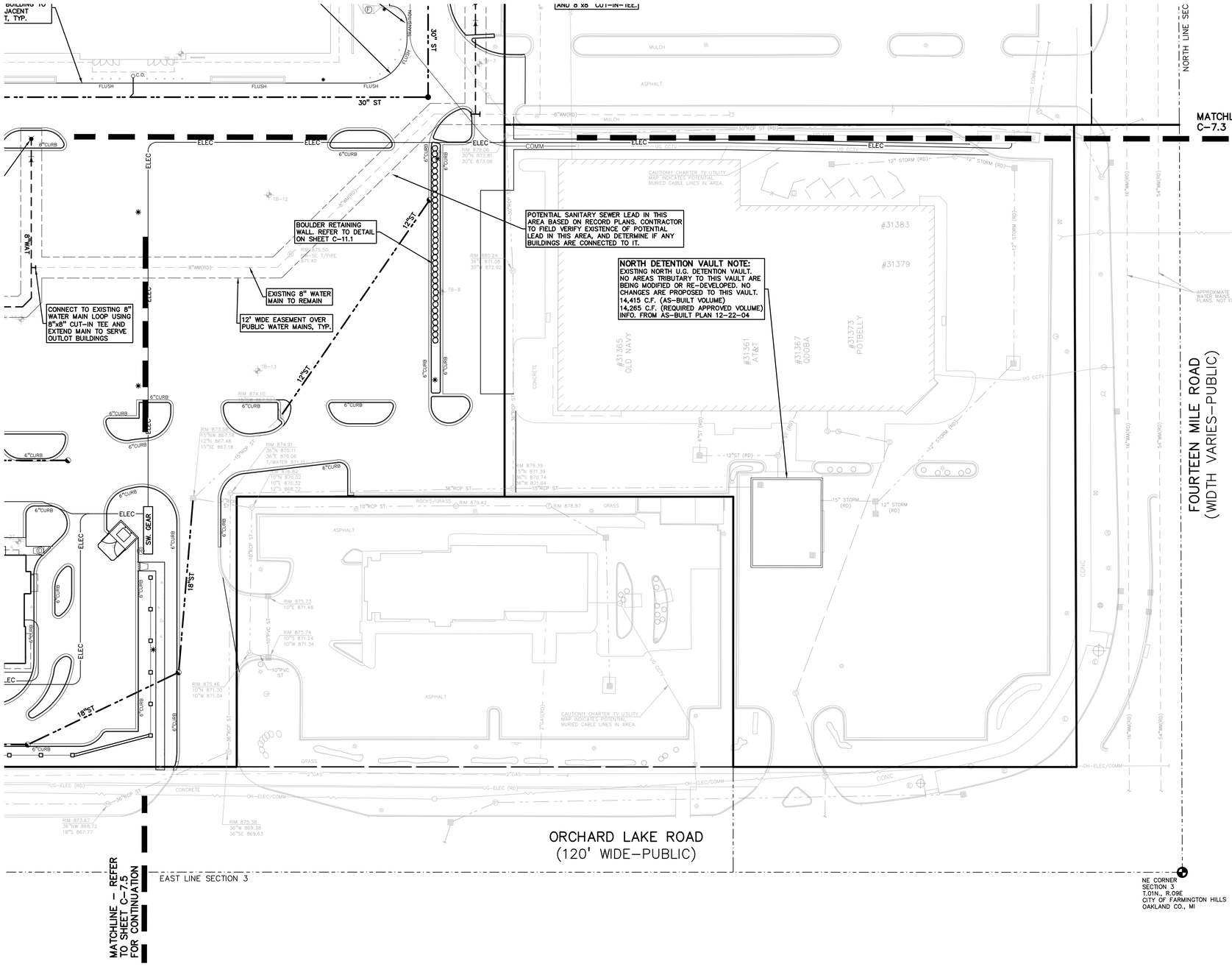
BENCHMARKS:
(GPS DERIVED - NAVD88)

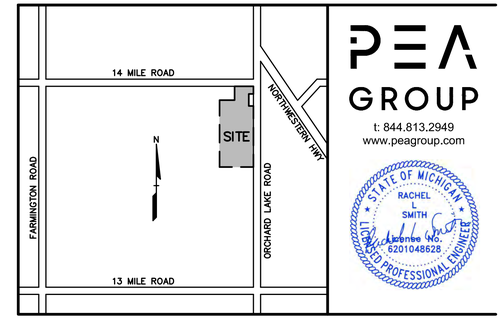
BM #300
DIMPLE ON ARROW ON HYDRANT AND ±109' DIRECTLY NORTHEASTERLY FROM NORTHEAST BUILDING CORNER STORE BUY BUY BABY.
ELEV. - 877.55

BM #301
DIMPLE ON ARROW ON HYDRANT AND ±39' DIRECTLY WEST FROM SOUTHWEST BUILDING CORNER AT SOUTHWEST CORNER OF SITE.
ELEV. - 874.61

BM #302
LIGHT POLE BASE IN SHOPPING MALL ±180' DIRECTLY SOUTH FROM McDONALDS RESTUARANT
ELEV. - 875.56

FLOODPLAIN NOTE:
BY GRAPHIC PLOTTING, THE SUBJECT PARCEL IS IN "AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN." (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP PANEL NUMBER26125C0513F EFFECTIVE SEPTEMBER 29, 2006.





PEA GROUP
t: 844.813.2949
www.peagroup.com
STATE OF MICHIGAN
RACHEL L SMITH
License No. 6201048628
LICENSED PROFESSIONAL ENGINEER

LEGEND

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

EXISTING		PROPOSED
—OH—ELEC—W—	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
—UG—CATV—	UNDERGROUND CABLE TV, CATV PEDESTAL	
—UG—PHONE—	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
—UG—ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	—UG—ELEC—
—GAS—	GAS MAIN, VALVE & GAS LINE MARKER	—GAS—
—W—	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	—W—
—S—	SANITARY SEWER, CLEANOUT & MANHOLE	C.O.
—ST—	STORM SEWER, CLEANOUT & MANHOLE	C.O.
	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
	UNIDENTIFIED STRUCTURE	
×SHE-01	SPOT ELEVATION	×871.21
670	CONTOUR LINE	671
—X—X—X—	FENCE	
	GUARD RAIL	
	STREET LIGHT	
	SIGN	
CONC.	CONCRETE	STD DUTY, HEAVY DUTY, R.O.W. ONLY
ASPH.	ASPHALT	STD DUTY, HEAVY DUTY, DEEP STRENGTH

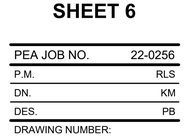
NORTH

0 15 30 60
SCALE: 1" = 30'

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

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

KEY MAP



SITE SHEET KEY MAP

REFERENCE DRAWINGS

WATER MAIN	TRANSMISSION MAP 4Y, GLWA, APRIL 2019
WATER MAIN	TRANSMISSION MAP 5Y, GLWA, MARCH 2007
ELECTRIC	LOCATION MAP 262-374, DTE, JUNE 2023
GAS	TRANSMISSION MAP, CONSUMERS ENERGY, 01-59-03-1
OTHER	HUNTER SQUARE LAND TITLE SURVEY, PEA GROUP #21-0052, MARCH 2021.
OTHER	LOEHMANN'S AT HUNTERS SQUARE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., AUGUST 1981, UPDATED 1989
OTHER	ORCHARD PLACE AS BUILTS, ORCHARD, PAPKE, HILTZ & McCLIMENT, INC., ISSUED FEBRUARY 1983, UPDATED MAY 2005
OTHER	HUNTERS SQUARE PARKING LOT AND DRIVEWAY RENOVATIONS AS BUILTS, ORCHARD, HILTZ & McCLIMENT, INC., ISSUED SEPTEMBER 1993, UPDATED MAY 2005
OTHER	ORCHARD PLACE REHABILITATION PROJECT AS BUILTS, OHM CONSULTING ENGINEERS, ISSUED OCTOBER 1995, UPDATED DECEMBER 2005
OTHER	HUNTERS SQUARE/BUILDING "F". OHM CONSULTING ENGINEERS, DECEMBER 2004
OTHER	ORCHARD LAKE ROAD REHABILITATION 13 MILE ROAD TO 14 MILE ROAD, HRC INC, OCTOBER 2019

CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

PRELIMINARY GRADING AND UTILITY PLAN - SHEET 6

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-7.6

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\GC-7.1(PAD UTIL-220256(PH-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DVIEW TWIST: 92.94°23"DW

STORMWATER CALCULATIONS FOR SOUTH VAULT AND PIPE STORAGE:

TRIBUTARY AREA TO STORAGE SYSTEM = 30.10 ACRES
RUNOFF COEFFICIENT 'C' = 0.87

CITY REQUIRED FLOOD CONTROL STORAGE VOLUME FOR ENTIRE PROPERTY:

2" OF STORMWATER VOLUME ACROSS THE TRIBUTARY AREA
30.10 ACRES x 2" OVER THE SITE = 218,526 C.F.

CHANNEL PROTECTION RATE CONTROL (CPRC) VOLUME FOR ENTIRE PROPERTY:

CPRC = 6897 x AREA x C = 6897 x 30.10 x 0.87 = 180,612 C.F.

NOTE: DETENTION VOLUME OF 19,384 C.F. AND CPRC STORAGE OF 8839 C.F. IS TO BE STORED IN THE WEST BASIN. THEREFORE, NET STORAGE VOLUMES REQUIRED IN THE SOUTH VAULT AND PIPE SYSTEM ARE:

NET FLOOD CONTROL VOLUME REQUIRED (218,536 – 19,384) = 199,142 C.F.
NET C.P.R.C. EVENT VOLUME REQUIRED (180,612 – 8,839) = 171,773 C.F.

REFER TO STAGE–STORAGE TABLE ON THIS SHEET FOR THE COMBINED VAULT AND PIPE SYSTEM.

MAXIMUM STORAGE VOLUME PROVIDED ON–SITE = 218,526 C.F.
NET CITY FLOOD CONTROL VOLUME STORED IN VAULT–PIPES AT ELEVATION 862.00
NET CPRC VOLUME STORED AT ELEVATION = 860.55
1/2 NET CPRC VOLUME (85,887 C.F.) STORED AT ELEVATION = 857.70

SOUTH VAULT OUTLET CONTROL DESIGN:

WHEN CALCULATING THE RESTRICTOR REQUIRED FOR THE AVERAGE RELEASE RATE, THE HEAD OVER THE RESTRICTOR MUST BE CALCULATED ASSUMING THE VAULT AND PIPES ARE STORING HALF OF THE CPRC VOLUME.

AVERAGE RELEASE RATE = NET CPRC VOLUME/48 HOURS = 0.99 CFS
1/2 CPRC VOLUME (85,887 CF) STORAGE ELEVATION = 857.70
12" PIPE OUTLET INVERT = 854.40
HEAD OVER 12" OUTLET PIPE INVERT (857.70 – 854.40) = 3.30'
USING ORIFICE EQUATION, Q = 0.62 x A x (2 x g x H)^1/2
AND SOLVING FOR 'A', REQUIRED ORIFICE AREA = 15.77 SQ.IN.
FIVE (5) 2" DIA. ORIFICE HOLES = 15.71 SQ.IN.
USING 5–2" ORIFICES HOLES, THE AVERAGE FLOW RATE WILL BE 0.99 CFS
THE CPRC VOLUME WILL DE–WATER IN ±48.0 HOURS.

FLOOD CONTROL EVENT OUTLET SHALL NOT EXCEED 0.20 CFS PER ACRE FOR THE DEVELOPED SITE, PLUS AN ADDITIONAL 5 CFS FROM THE OFFSITE TRIBUTARY AREA.
ALLOWABLE OUTFLOW = (30.10 ACRES x 0.20 CFS PER ACRE) + 5.00 = 11.02 CFS
FLOOD CONTROL STORAGE ELEVATION = 862.00
MAX. HEAD OVER CPRC ORIFICE (862.00 – 854.40) = 7.60'
USING ABOVE ORIFICE EQUATION FOR 2" HOLES, SOLVING FOR FLOW, Q = 1.50 CFS
THEREFORE A SECOND OUTLET WILL BE REQUIRED AT THE CPRC STORAGE ELEVATION IN ORDER TO ALLOW FOR ADDITIONAL OUTFLOW (11.02 – 1.50) OF 9.52 CFS.

CREATE NOTCH WEIR IN OUTLET PLATE TO PASS 9.52 CFS:
MAX. ALLOWABLE DEPTH OF WEIR (BOTTOM OF VAULT SLAB TO CPRC ELEVATION)
862.00 – 860.55 = 1.45'
WEIR EQUATION: FLOW, Q = 3.367 x LENGTH x HEIGHT^3/2
ALLOWABLE HEIGHT = 1.45'
ALLOWABLE FLOW = 9.52 CFS
THEREFORE ALLOWABLE WEIR WIDTH = 1.62'

STORMWATER QUALITY CALCULATION (UNIT WQ15A):

TRIBUTARY AREA TO WATER QUALITY DEVICE, A = 21.50 ACRES (GRAY SHADED AREA)
RUNOFF COEFFICIENT 'C' = 0.85
TIME OF CONCENTRATION AT WATER QUALITY STRUCTURE = 26.1 MINUTES

RAINFALL INTENSITY FOR O.C.W.R.C. 1–YEAR EVENT, I = 30.20/(Tc + 9.17)^0.81
USING Tc OF 26 MINUTES, RAINFALL INTENSITY = 1.69" PER HOUR.

PEAK 1–YR FLOW RATE, Q = CIA
= 0.85 x 1.69 x 21.50 = 30.88 CFS

RECENTLY ADOPTED CITY STANDARDS REQUIRE THE ABOVE FLOW RATE BE TREATED BY A WATER QUALITY DEVICE AND REMOVE 80% TOTAL SUSPENDED SOLIDS PER NJDEP STANDARDS.

CITY HAS AGREED TO AN ALTERNATE PROPOSAL FROM THE DEVELOPER THAT WOULD SUBSTITUTE A DEVICE CAPABLE OF REMOVING 79% OF TOTAL SUSPENDED SOLIDS USING A DIFFERENT PARTICLE SIZE DISTRIBUTION (OK 110) THAN NJDEP.

STORMWATER CALCULATIONS FOR WEST DETENTION BASIN:

PER ORIGINAL DESIGN CALCULATIONS FOR HUNTER'S SQUARE (PROVIDED BY THE CITY ENGINEERING DEPT.) THE WEST BASIN TAKES 2.67 ACRES OF RUNOFF AND HAS AN ALLOWABLE 10–YR STORM OUTFLOW/PASS THROUGH RATE OF 5.0 CFS.

USING AN ESTIMATED TIME OF CONCENTRATION OF 20 MINUTES, AND THE RAINFALL INTENSITY EQUATION USED FOR THE ORIGINAL CALCULATIONS (I = 175/(T+25)), AND THE RATIONAL METHOD FLOW FORMULA (Q = CIA), THE APPROXIMATE RUNOFF COEFFICIENT FOR THIS TRIBUTARY AREA IS:

TIME OF CONCENTRATION (AT BASIN) = 20 MINUTES
RAINFALL INTENSITY, I = 175/(T+25) = 3.89 IN/HR
PEAK FLOW = 5.0 C.F.S.
TRIBUTARY AREA = 2.67 ACRES
ESTIMATED RUNOFF COEFFICIENT 'C' = 0.48

CITY REQUIRED FLOOD CONTROL STORAGE VOLUME:

2" OF STORMWATER VOLUME ACROSS THE TRIBUTARY AREA
2.67 ACRES x 2" OVER THE SITE = 19,384 C.F.

CHANNEL PROTECTION RATE CONTROL (CPRC) VOLUME:

CPRC = 6897 x AREA x C = 6897 x 2.67 x 0.48 = 8,839 C.F.

WEST DETENTION BASIN INFORMATION:

WEST BASIN OUTLET INVERT = 871.79
MAXIMUM STORAGE AVAILABLE IN WEST BASIN = 20,481 C.F. (SEE TABLE THIS SHEET)

CITY FLOOD CONTROL VOLUME STORED AT ELEVATION 875.84
CPRC VOLUME STORED AT ELEVATION = 874.19
1/2 CPRC VOLUME (4420 C.F.) STORED AT ELEVATION = 873.23

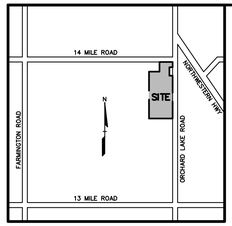
WEST BASIN OUTLET CONTROL DESIGN:

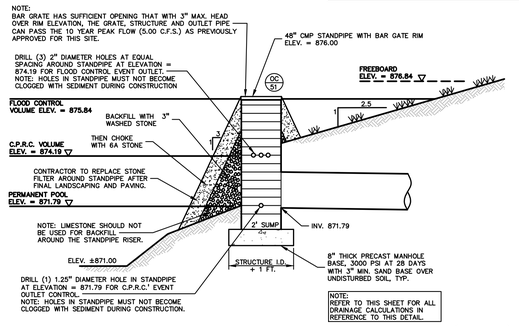
CPRC EVENT MUST BE RELEASED OVER 48 HOURS. WHEN CALCULATING THE RESTRICTOR REQUIRED FOR THE AVERAGE RELEASE RATE, HEAD OVER THE RESTRICTOR MUST BE CALCULATED ASSUMING THE BASIN IS STORING HALF OF THE CPRC VOLUME.

AVERAGE RELEASE RATE = CPRC VOLUME/48 HOURS = 0.0512 CFS
1/2 CPRC VOLUME (4420 CF) STORAGE ELEVATION = 873.23
OUTLET INVERT = 871.79
HEAD OVER ORIFICE (873.23 – 871.79) = 1.44'
USING ORIFICE EQUATION, Q = 0.62 x A x (2 x g x H)^1/2
AND SOLVING FOR 'A', AREA OF ORIFICE = 0.0086 S.F. OR 1.235 SQ.IN.
ORIFICE SIZE = 1.25" DIA. TO BE PLACED IN STAND PIPE AT 871.79

FLOOD CONTROL EVENT OUTLET SHALL NOT EXCEED 0.20 CFS PER ACRE
PEAK ALLOWABLE OUTFLOW = 0.20 x 2.67 = 0.53 CFS
FLOOD CONTROL STORAGE ELEVATION = 875.84
MAX. HEAD OVER CPRC ORIFICE (875.84 – 871.79) = 4.05'
USING ABOVE ORIFICE EQUATION, SOLVING FOR FLOW, Q = 0.086 CFS
THEREFORE ANOTHER ORIFICE WILL BE REQUIRED AT THE CPRC STORAGE ELEVATION IN ORDER TO ALLOW FOR ADDITIONAL OUTFLOW (0.53 – 0.086) OF 0.444 CFS.

SECOND ORIFICE INVERT ELEVATION = 874.19
MAX. HEAD OVER SECOND ORIFICE (875.84 – 874.19) = 1.65'
PEAK ALLOWABLE FLOW OUT OF SECOND ORIFICE = 0.444 CFS
USING ORIFICE EQUATION, SOLVING FOR ORIFICE AREA 'A' = 0.0695 S.F. OR 10.0 SQ.IN.
SECOND ORIFICE WILL BE 3 – 2" HOLES AT 874.19 (9.42 SQ.IN.)





WEST DETENTION BASIN OUTLET CONTROL STRUCTURE DETAIL (OC#51)
NOT TO SCALE

PEA GROUP
t: 844.813.2949
www.peagroup.com

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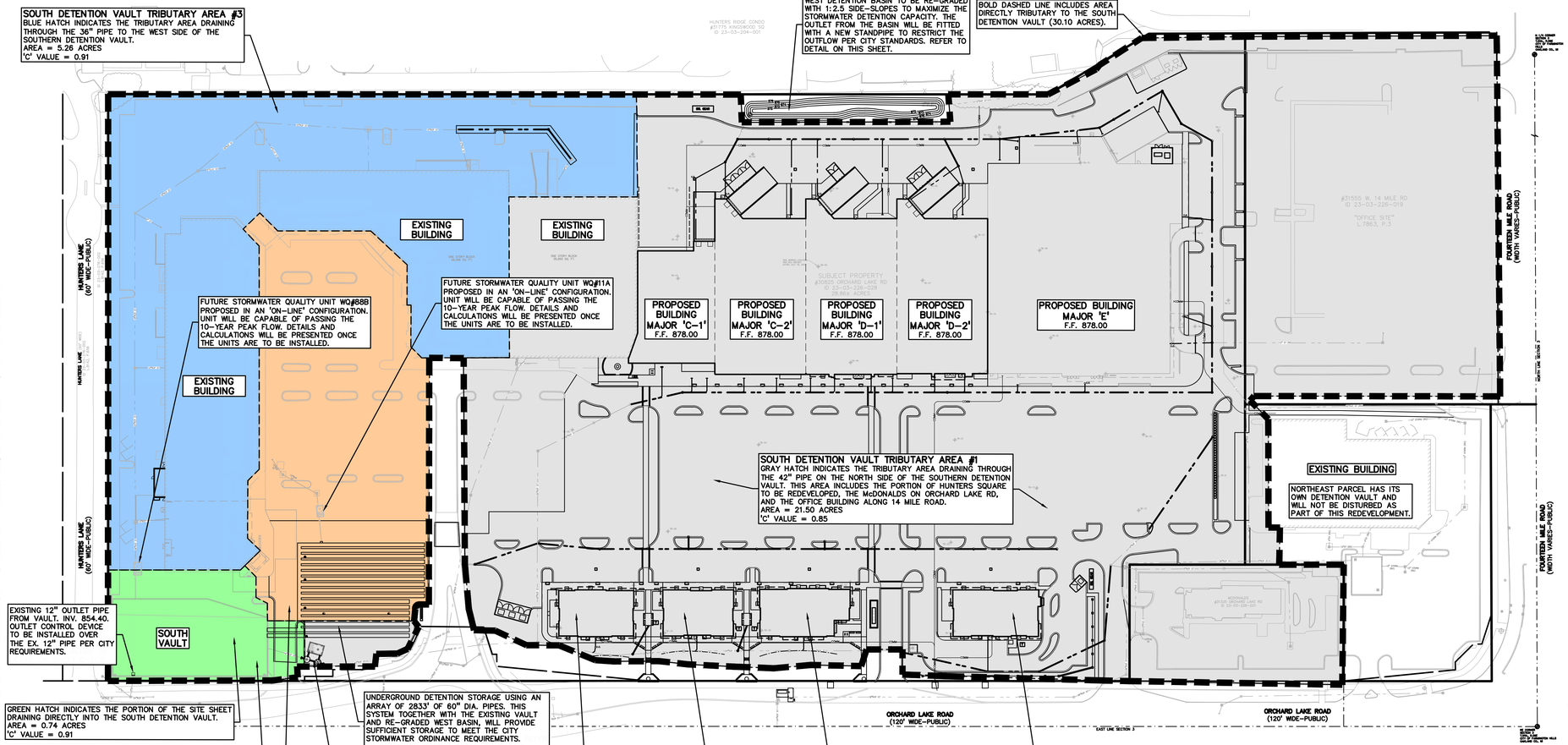
NORTH

0 40 80 160
SCALE: 1" = 80'

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

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KEY MAP



Volume in South Vault and Pipe System:

Elevation	Vault Volume	Pipe Volume	Total Volume
854.40	0		0
854.50	1888		1,888
854.70	5665		5,665
854.90	9441		9,441
855.10	13217		13,217
855.30	16994		16,994
855.50	20770	0	20,770
855.70	24546	746	25,292
855.90	28323	2085	30,408
856.10	32099	3781	35,880
856.30	35875	5745	41,620
856.50	39652	7920	47,572
856.70	43428	10266	53,694
856.90	47204	12750	59,954
857.10	50981	15345	66,326
857.30	54757	18029	72,786
857.50	58533	20778	79,311
857.70	62310	23574	85,884
857.90	66086	26397	92,483
858.10	69862	29229	99,091
858.30	73639	32052	105,691
858.50	77415	34848	112,263
858.70	81191	37597	118,788
858.90	84968	40280	125,248
859.10	88744	42876	131,620
859.30	92520	45360	137,880
859.50	96297	47706	144,003
859.70	100073	49881	149,954
859.90	103849	51845	155,694
860.10	107626	53541	161,167
860.30	111402	54879	166,281
860.50	115178	55626	170,804
860.70	118955		174,581
860.90	122731		178,357
861.10	126507		182,133
861.30	130284		185,910
861.50	134060		189,686
861.70	137836		193,462
861.90	141613		197,239
862.10	145389		201,015

Volume in Regraded West Basin:

Elevation	Volume	Cumulative Volume
871.79	0	0
872.00	1768	371
873.00	3034	3405
874.00	4337	7742
875.00	5679	13421
876.00	7060	20481

Total Storage Available at Elevation 875.84 = 19,384 CF

Total Available Stormwater Storage(Vault, Pipes, West Basin) = 220,399 CF
(Include West Basin Storage only up to Storage Elevation of 875.84)

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI. 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
OVERALL DRAINAGE PLAN AND CALCULATIONS

PEA JOB NO.	22-0256
P.M.	RLS
DN.	KM
DES.	PB

DRAWING NUMBER:
C-12.0

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\C-12.0\OVERALL DRAIN-22025625(H-2).dwg PLOT DATE: 7/14/2025 BY: Kyle Miller DWG TM: STD_92345275"CW

DECIDUOUS TREE PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
3	AL8	Allegheny Serviceberry	*Amelanchier laevis*	8' Ht.	B&B
9	AB3	Bowhall Maple	*Acer rubrum 'Bowhall'*	3" Cal.	B&B
8	AR3	Scarlet Sentinel Maple	*Acer rubrum 'Scarsen'*	3" Cal.	B&B
15	CA3	American Hornbeam	*Carpinus caroliniana*	3" Cal.	B&B
8	CB3	Frans Fontaine European Hornbeam	*Carpinus betulus 'Fran Fontaine'*	3" Cal.	B&B
19	GB3	Magyar Ginkgo	*Ginkgo biloba 'Magyar'*	3" Cal.	B&B
14	GT3	Skyline Honeylocust	*Gleditsia triacanthos f. inermis 'Skycole'*	3" Cal.	B&B
6	MJ2.5	Marilee Crab	*Malus 'Jarmin' PP14337 (white, upright,fruitless)*	2.5" Cal.	B&B
13	MR2.5	Royal Raindrops Crab	*Malus 'JFS-KW5 PP 14375' (bright pink, upright)*	2.5" Cal.	B&B
6	MS2.5	Sugar Time Crab	*Malus 'Sugar Tyme'*	2.5" Cal.	B&B
4	QG3	Skinny Genes Oak	*Quercus alba 'JFS-KW2QX' P.A.F. (col./fastigiate)*	3" Cal.	B&B
5	QS3	Streetspire Oak	*Quercus alba 'JFS-KW1QX' (columnar)*	3" Cal.	B&B
3	SR3	Japanese Tree Lilac	*Syringa reticulata 'Ivory Silk'*	3" Cal.	B&B
13	TB3	Boulevard Linden	*Tilia americana 'Boulevard'*	3" Cal.	B&B
4	ZS3	Green Vase Zelkova	*Zelkova serrata 'Green Vase'*	3" Cal.	B&B
130	TOTAL DEC.				

EVERGREEN TREE /UPRIGHT EVG. PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
14	AC8	Concolor Fir	*Abies concolor*	8' Ht.	B&B
15	PG8	White Spruce	*Picea glauca*	8' Ht.	B&B
12	PO8	Serbian Spruce	*Picea omorika*	8' Ht.	B&B
30	TN6	Dark Green Arborvitae	*Thuja occidentalis 'Nigra'*	6' Ht.	B&B
35	TT6	Techny Arborvitae	*Thuja occidentalis 'Techny'*	6' Ht.	B&B
106	TOTAL EVG.				

LANDSCAPE CALCULATIONS:
PER THE CITY OF FARMINGTON HILLS ZONING ORDINANCE
(EXISTING ZONING B-2 COMMUNITY BUSINESS DISTRICT, PROPOSED PUD)
FRONT YARD OPEN SPACE PROVIDED 41,398 SF/ 100,333 = 41%
GREENSPACE PROVIDED APPROX. 17,500 SF (SEE SHT.C-1.0B FOR GREEN AREAS)

PARKING LOT LANDSCAPE

REQUIRED: 1 DEC. CANOPY TREE FOR EVERY 2,800 SF OF PAVEMENT.
(180 SF MIN. PARKING LOT ISLAND; SEPARATE PARKING LOT FROM PUBLIC THOROUGHFARE W/CONTINUOUS 2' HT. HEDGE/WALL OR BERM ALONG R.O.W.)
209,018.16 SF PVMT. AREA OF CONSTRUCTION/ 2,800 = 75 TREES REQUIRED

PROVIDED: 75, DECIDUOUS TREES AND CONTINUOUS SHRUB HEDGE BETWEEN PARKING LOT AND R.O.W. AT ORCHARD LAKE ROAD.
SHRUBS/PERENNIALS WITHIN PARKING LOT

GREENBELT BUFFER

REQUIRED: NONE PER CITY ORDINANCE
(PROVIDE ENHANCED BUFFER GREENBELT LANDSCAPE)

PROVIDED:
14 MILE ROAD: EXISTING TREES & SHRUBS (OUTSIDE CONSTRUCTION LIMITS)

ORCHARD LAKE ROAD: 16 EXISTING TREES, 11 DEC. CANOPY TREES, 6 EVG. TREES, 25 ORN. TREES,
SHRUB HEDGE AND PERENNIALS TO PROVIDE ENHANCED BUFFER GREENBELT LANDSCAPE

BUFFER/SCREENING BETWEEN USES

REQUIRED: PLANTINGS AND 6' HT. WALL OR BERM BETWEEN B-2/B-3 DISTRICT AND RC-2 DISTRICT

PROVIDED:
WEST SIDE OF PROPERTY AND WEST SIDE OF PROPOSED BLDG:
EXISTING 7' HT. FENCE/WALL, EXISTING BERM, 18 EXISTING TREES,
20 EVG REPLACEMENT TREES PROPOSED IN VOID AREAS,
AND 4 BUFFER TREES, 15 EVG, 44 UPRIGHT EVG AND 34 DEC SHRUBS

REPLACEMENT TREES

REQUIRED:
REGULATED TREES: REPLACE 1:1 = 35; 3" DEC. TREES OR 8' HT. EVG

REQUIRED:
LANDMARK TREES: 0. x 0.25 = 0, NONE REQUIRED

PROVIDED: 35 TREES (15, DEC. TREES AND 20, 8' HT. EVG)

SEE SHEET T-1.0 FOR TREE CALCULATIONS

298 TOTAL TREES SURVEYED (ON-SITE AND ADJ. TO SITE)

STANDARD TREES		
STANDARD TREES REMOVED:	35	(1:1 REPLACEMENT)

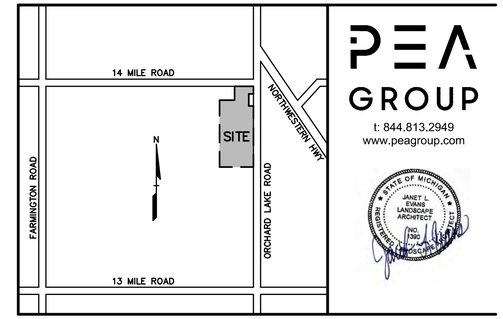
LANDMARK TREES	(7 LANDMARK TREES SAVED)	
LANDMARK TREES REMOVED:	0	
LANDMARK TREE DBH REMOVED:	0	(25% DBH REPLACEMENT)
REPLACEMENT DBH REQUIRED:	0	INCHES

113 TREES GREATER THAN 6 INCHES DBH (ON-SITE)
97 TREES LESS THAN 6 INCHES DBH (ON-SITE)

KEY:

- = PARKING LOT TREES
- = GREENBELT/ BUFFER LANDSCAPE
- = REPLACEMENT TREES
- = UPRIGHT EVG. BUFFER SCREEN SHRUB
- = DECIDUOUS BUFFER SCREEN SHRUB
- = SHRUBS/ PERENNIALS/ ORNAMENTAL GRASS TO BE DETAILED DURING CONSTRUCTION DWGS.
- = EVERGREEN SHRUB HEDGE TO BE DETAILED DURING CONSTRUCTION DWGS.
- = RAISED PLANTER PERENNIALS/ ANNUALS TO BE DETAILED DURING CONSTRUCTION DWGS.
- = IRRIGATED SEED LAWN
- = STORMWATER SEED MIX SEE DTL. SHT L-2.0
- = EXISTING TREE TO REMAIN WITH TREE PROTECTION FENCE

SEE SHEET L-1.1 TO L-1.6 FOR ENLARGED LANDSCAPE PLANS
SEE SHEET L-2.0 FOR LANDSCAPE NOTES AND DETAILS
PROPOSED CANOPY TREES TO BE MIN. 3" CAL. AND 8' HT. EVG
PROPOSED ORNAMENTAL TREES TO BE MIN. 2" CAL.
ALL LAWN AND LANDSCAPE AREAS TO BE IRRIGATED WITH AN UNDERGROUND SPRINKLER SYSTEM
PLANTINGS TO BE MIN. 4' OFF PROPERTY LINE



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STATE OF MICHIGAN — JANET L. EVANS — LANDSCAPE ARCHITECT — NO. 1390

NORTH

0 10 60 120
SCALE: 1" = 60'

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

CAUTION!!
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KEY MAP



SITE SHEET KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS

1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
OVERALL LANDSCAPE PLAN

PEA JOB NO.	22-0256
P.M.	RLS
DN.	BGG
DES.	JLE

DRAWING NUMBER:
L-1.0

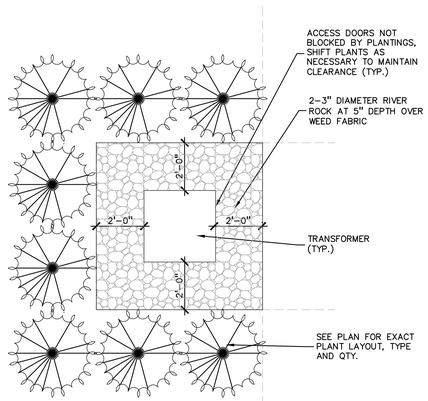
NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\L-1.0\LANDSCAPE OVERALL - 2202560PH-2.DWG PLOT DATE: 7/14/2025 BY:Charlotte L. Esperance DWEW TWO1: 80345^25TCW

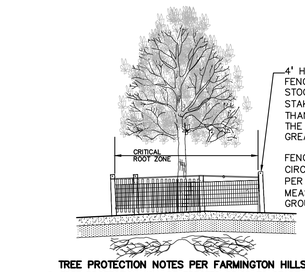
FOR NATIVE SEED MIXES, PROVIDE EROSION MAT ON SLOPES AND AREAS OF WASH OUT TYP. INSTALL AND PREP PER MANUFACTURES SPECIFICATIONS. NO INVASIVE SPECIES PERMITTED.

Stormwater Seed Mix
Stantec Native Plant Nursery 574-586-2412
stantec.com/native-plant-nursery

Botanical Name	Common Name
Permanent Grasses/Sedges/Rushes:	
Bolboschoenus fluviatilis	River Bulrush
Carex cristatella	Crested Ovai Sedge
Carex lurida	Bottlebrush Sedge
Carex vulpinoidea	Brown Fox Sedge
Elymus virginicus	Virginia Wild Rye
Glyceria striata	Fowl Manna Grass
Juncus effusus	Common Rush
Leersia oryzoides	Rice Cut Grass
Panicum virgatum	Switch Grass
Schoenoplectus tabernaemontani	Softstem Bulrush
Scirpus atrovirens	Dark Green Rush
Scirpus cyperinus	Wool Grass
Temporary Cover:	
Avena sativa	Common Oat
Lolium multiflorum	Annual Rye
Forbs & Shrubs:	
Alisma spp.	Water Plantain (Various Mix)
Asclepias incarnata	Swamp Milkweed
Bidens spp.	Bidens (Various Mix)
Helenium autumnale	Sneezeweed
Iris virginica	Blue Flag
Lycopus amencanus	Common Water Horehound
Mimulus ringens	Monkey Flower
Oligoneuron riddellii	Riddell's Goldenrod
Penthorum sedoides	Ditch Stonecrop
Polygonum spp.	Pinkweed (Various Mix)
Rudbeckia subtomentosa	Sweet Black-Eyed Susan
Rudbeckia triloba	Brown-Eyed Susan
Sagittaria latifolia	Common Arrowhead
Senna hebecarpa	Wild Senna
Symphyotrichum novae-angliae	New England Aster
Thalictrum dasycarpum	Purple Meadow Rue



6 TRANSFORMER SCREENING DETAIL
SCALE: 1" = 3'–0"



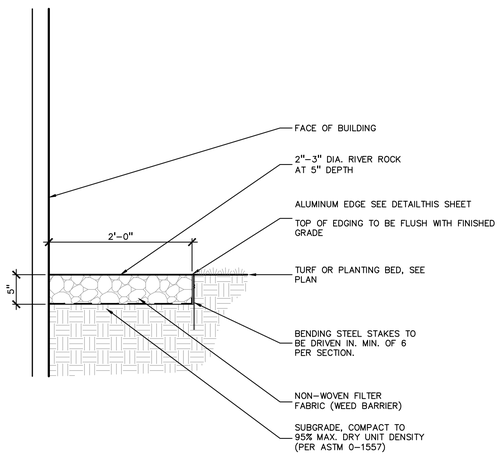
TREE PROTECTION NOTES PER FARMINGTON HILLS:

- TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
- NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN; INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN DRIP LINES.
- GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES.
- DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE.
- ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.
- TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.
- TREES TO BE REMOVED SHALL BE MARKED IN THE FIELD WITH RED PAINT OR FLAGS AND INSPECTED BY FARMINGTON HILLS PLANNING OFFICE PRIOR TO ANY TREES BEING REMOVED. A TREE PERMIT MUST BE OBTAINED FROM THE PLANNING DEPT PRIOR TO ANY TREES BEING REMOVED.

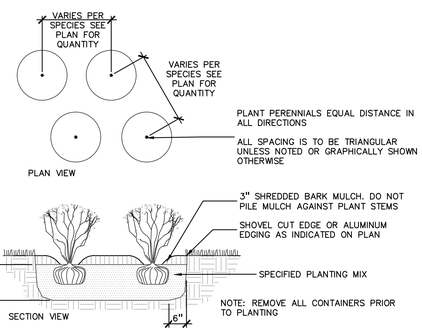
3 TREE PROTECTION DETAIL, PER CITY
NOT TO SCALE

GENERAL PLANTING NOTES:

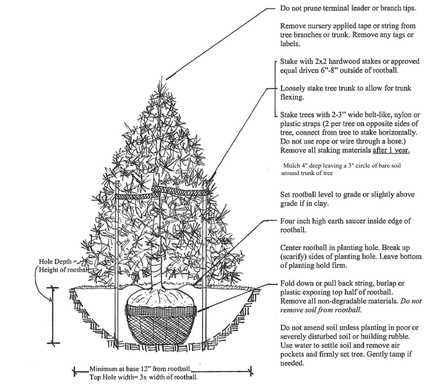
1. LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1–800–482–7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
3. ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1. GRADE.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
5. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
6. ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
7. ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
8. ALL MULTI STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE SIDED TREES OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
9. ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
10. ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
11. NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.
12. ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
13. IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
14. ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
15. ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
16. SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
17. FOR NON–LAWN SEED MIX AREAS, AS NOTED ON PLAN, BRUSH MOW ONCE SEASONALLY FOR INVASIVE SPECIES CONTROL.
18. CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS.
19. TREES SHALL NOT CONFLICT/ BLOCK PROPOSED REGULATORY/ DIRECTION SIGNAGE, MONUMENT SIGNS, ADDRESS OR LIGHT POLES. SHIFT TREES AS NECESSARY TYP.



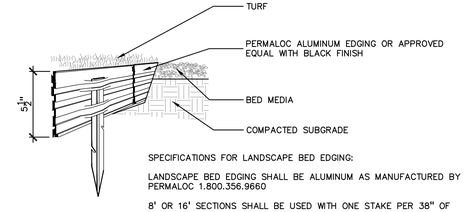
8 STONE MAINTENANCE STRIP
SCALE: 1" = 1'–0"



5 PERENNIAL PLANTING DETAIL
SCALE: 1" = 2'–0"



2 EVERGREEN TREE DETAIL, PER CITY
NOT TO SCALE



SPECIFICATIONS FOR LANDSCAPE BED EDGING:

LANDSCAPE BED EDGING SHALL BE ALUMINUM AS MANUFACTURED BY PERMALOC 1.800.356.9660

8' OR 16' SECTIONS SHALL BE USED WITH ONE STAKE PER 38" OF EDGING

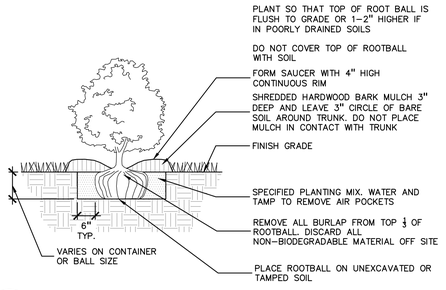
EDGING SHALL BE $\frac{3}{16}$" THICK X 4" DEPTH WHEN ADJ. TO MULCH AND $\frac{3}{8}$" THICK X 5 $\frac{1}{2}$" DEPTH WHEN ADJ. TO ROCK, FINISH: BLACK DURAFLEX MEETING AAMA 2603

STAKE SHALL SECURELY ENGAGE EDGING AND SHALL BE ENTIRELY BELOW TOP SURFACE OF EDGING

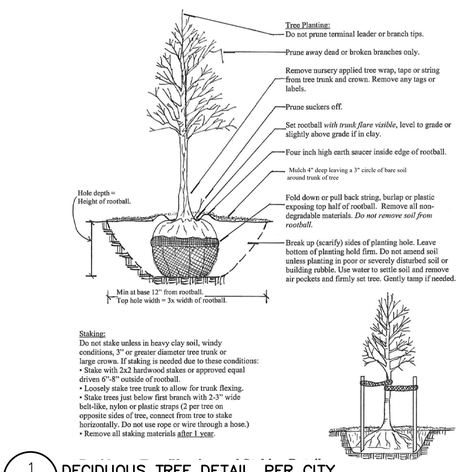
EDGING SHALL HAVE A MINIMUM OF 2" OF INTERLOCKING OVERLAP BETWEEN SECTIONS

INSTALL AS PER MANUFACTURER'S SPECIFICATIONS WITH TOP OF EDGING $\frac{1}{2}$"–$\frac{3}{4}$" ABOVE COMPACTED FINISH GRADE. FINISH GRADE TO BE COMPACTED ON BOTH SIDES OF EDGING TO MAINTAIN STABILITY

7 ALUMINUM EDGE DETAIL
SCALE: 1/2" = 1'–0"



4 SHRUB PLANTING DETAIL
SCALE: 1" = 2'–0"



1 DECIDUOUS TREE DETAIL, PER CITY
NOT TO SCALE

NOT FOR CONSTRUCTION

PEA GROUP
t: 844.813.2949
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STATE OF MICHIGAN · REGISTERED · JANET L EVANS LANDSCAPE ARCHITECT NO. 7360 LANDSCAPE ARCHITECT

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KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

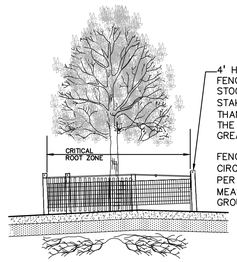
ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
LANDSCAPE DETAILS

PEA JOB NO.	22-0256
P.M.	RLS
DN.	CAL
DES.	JLE

DRAWING NUMBER:
L-2.0

S:\PROJECTS\2022\22022–0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\22–2.0_LANDSCAPE DETAILS–220256(PH–2).DWG PLOT DATE: 7/14/2025 BY: Charlotte L. Esperanza OWEN TWO: 9324572570



4' HT. PROTECTIVE WOOD SNOW FENCE OR SIMILAR STURDY STOCK MATERIAL WITH METAL STAKES, 10' O.C. NO CLOSER THAN 6' FROM TRUNK OR AT THE DRIP LINE, WHICHEVER IS GREATER PER FARMINGTON HILLS.

FENCE SHALL BE PLACED IN A CIRCLE WITH A RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND.

TREE PROTECTION NOTES:

- TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
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1 TREE PROTECTION DETAIL, PER CITY
NOT TO SCALE

KEY
- 1007 = EXISTING TREE TO REMAIN AND CORRESPONDING TREE TAG
- 1176 = EXISTING TREE TO BE REMOVED AND CORRESPONDING TREE TAG
- LM = LANDMARK TREE
- = TREE PROTECTION FENCING

REFER TO SHEET T-1.1 TO T-1.4 FOR ENLARGED TREE PLANS
REFER TO SHEET T-1.4 AND T-1.5 FOR EXISTING TREE LIST
REFER TO SHEET L-1.0 FOR TREE REPLACEMENT INFORMATION

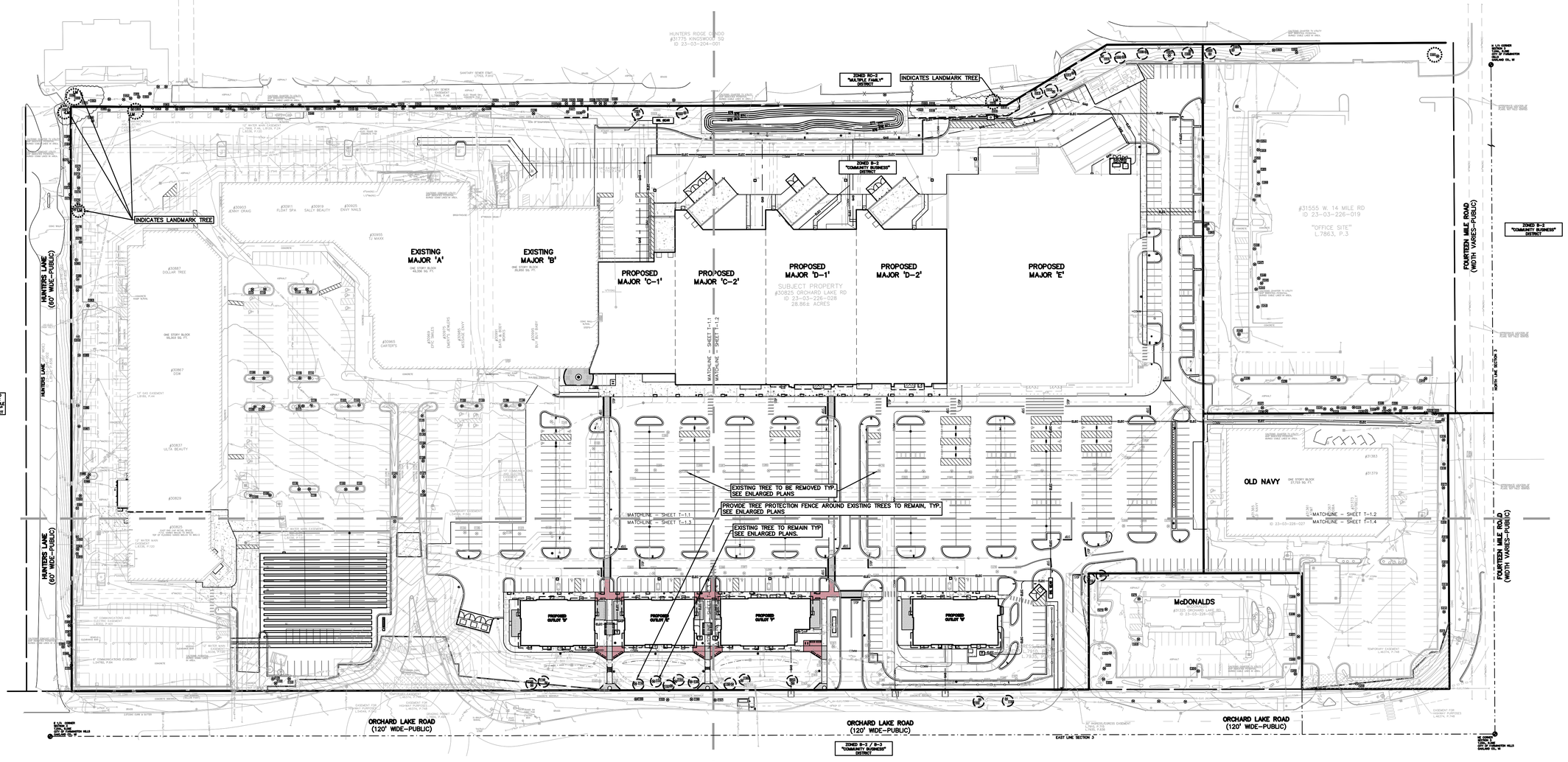
REGULATED TREE = ANY TREE 6" CAL. AND ABOVE IN GOOD-POOR CONDITION
REGULATED TREE; REPLACE AT 1:1
LANDMARK TREE; REPLACE AT 25% OF DBH OF REMOVED TREE

298 TOTAL TREES SURVEYED (ON-SITE AND ADJ. TO SITE)

STANDARD TREES		
STANDARD TREES REMOVED:	35	(1:1 REPLACEMENT)

LANDMARK TREES	(7 LANDMARK TREES SAVED)	
LANDMARK TREES REMOVED:	0	
LANDMARK TREE DBH REMOVED:	0	(25% DBH REPLACEMENT)
REPLACEMENT DBH REQUIRED:	0	INCHES

113 TREES GREATER THAN 6 INCHES DBH (ON-SITE)
97 TREES LESS THAN 6 INCHES DBH (ON-SITE)



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STATE OF MICHIGAN — JANET L. EVANS — LANDSCAPE ARCHITECT — NO. 3901 — REGISTERED

NORTH

NOT TO SCALE

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KEY MAP

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
TREE PRESERVATION PLAN

PEA JOB NO.	22-0256
P.M.	RLS
DN.	BGG
DES.	JLE

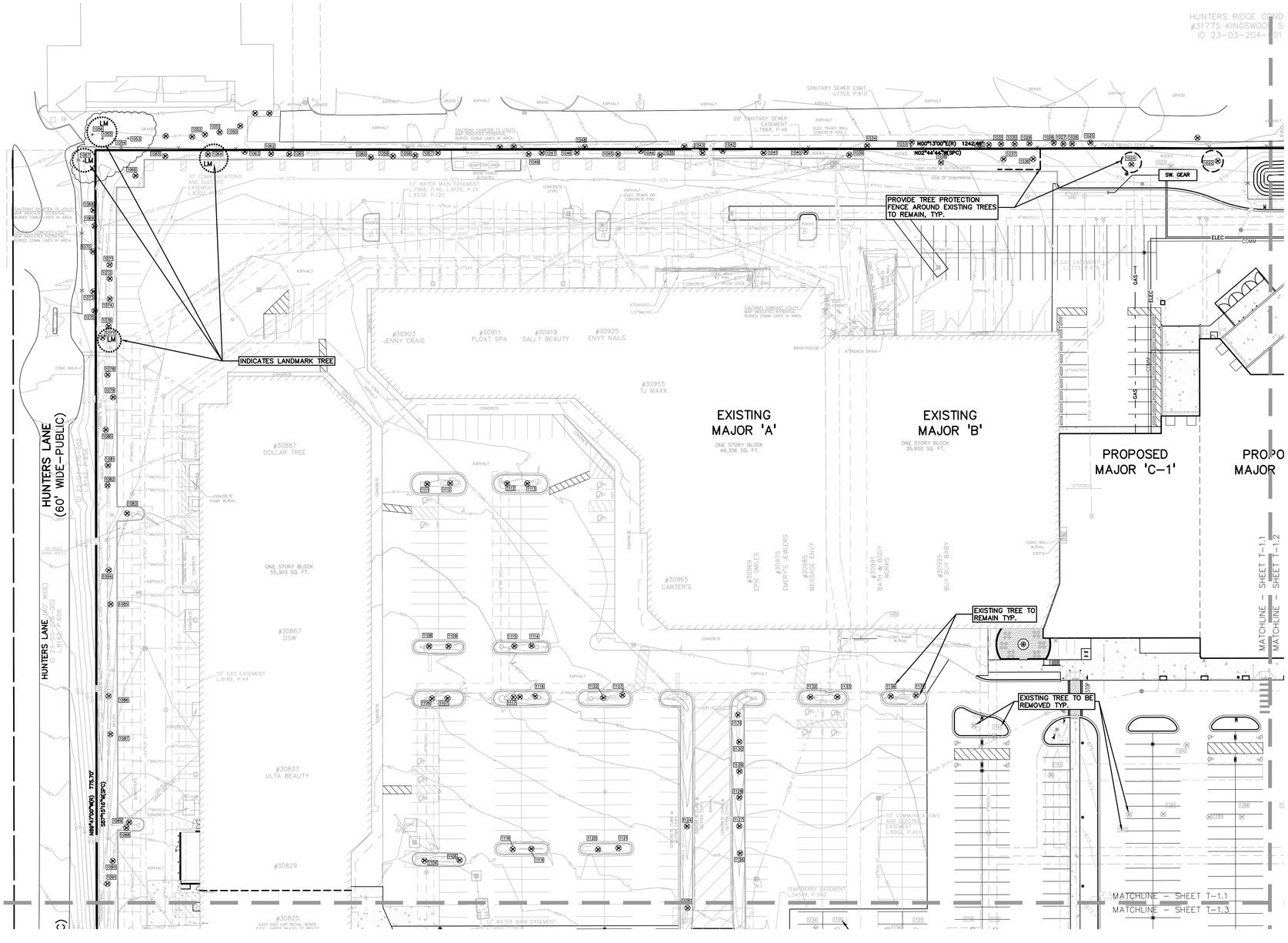
DRAWING NUMBER:
T-1.0

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\T-1.0 TREE PRESERVATION PLAN-220256(PH-2).DWG PLOT DATE: 7/14/2025 BY: Charlotte L. Esperance DWDV TWIST: 90d45'25"CW

KEY

- 1007 = EXISTING TREE TO REMAIN AND CORRESPONDING TREE TAG
- 1176 = EXISTING TREE TO BE REMOVED AND CORRESPONDING TREE TAG
- LM = LANDMARK TREE
- = TREE PROTECTION FENCING



PEA GROUP
t: 844.813.2949
www.peagroup.com

JANET L. EVANS LANDSCAPE ARCHITECT NO. 1350 REGISTERED LANDSCAPE ARCHITECT STATE OF MICHIGAN

NORTH

0 20 40 80
SCALE: 1" = 40'

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KEY MAP

T-1.1	T-1.2
T-1.3	T-1.4

14 MILE ROAD
ORCHARD LAKE ROAD

CLIENT
SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE
HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
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3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE
TREE PRESERVATION PLAN - SW

PEA JOB NO.	22-0256
P.M.	RLS
DN.	BGG
DES.	JLE

DRAWING NUMBER:
T-1.1

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\T-1.0 TREE PRESERVATION PLAN- 22025(PH-2).DWG PLOT DATE: 7/14/2025 BY: Charlotte L Esperance DVIEW TWIST: 93.4452°

KEY

1007 = EXISTING TREE TO REMAIN AND CORRESPONDING TREE TAG

1176 = EXISTING TREE TO BE REMOVED AND CORRESPONDING TREE TAG

LM = LANDMARK TREE

= TREE PROTECTION FENCING

ZONED RC-2 "MULTIPLE FAMILY" DISTRICT

ZONED B-2 "COMMUNITY BUSINESS" DISTRICT

INDICATES LANDMARK TREE

EXISTING TREE TO REMAIN TYP.

PROVIDE TREE PROTECTION FENCE AROUND EXISTING TREES TO REMAIN, TYP.

EXISTING TREE TO BE REMOVED TYP.

PROPOSED MAJOR 'C-2'

PROPOSED MAJOR 'D-1'

PROPOSED MAJOR 'D-2'

PROPOSED MAJOR 'E'

SUBJECT PROPERTY
#30825 ORCHARD LAKE RD
ID 23-03-226-028
28.86± ACRES

#31555 W. 14 MILE RD
ID 23-03-226-019
"OFFICE SITE"
L.7863, P.3

OLD NAVY
ONE STORY BLOCK
27,723 SQ. FT.

MATCHLINE - SHEET T-1.1

MATCHLINE - SHEET T-1.2

MATCHLINE - SHEET T-1.2

MATCHLINE - SHEET T-1.4

FOURTEEN MILE ROAD
(WIDTH VARIES-PUBLIC)

NORTH LINE SECTION 3

N 1/4 CORNER SECTION 3 T.2N., R.10E CITY OF FARM HILLS OAKLAND CO.,

PEA GROUP
t: 844.813.2949
www.peagroup.com

STATE OF MICHIGAN
JANET L. EVANS
LANDSCAPE ARCHITECT
NO. 1302
REGISTERED

NORTH

0 20 40 80

SCALE: 1" = 40'

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

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

KEY MAP

T-1.1	T-1.2
T-1.3	T-1.4

14 MILE ROAD

ORCHARD LAKE ROAD

CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS

1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

TREE PRESERVATION PLAN - NW

PEA JOB NO.	22-0256
P.M.	RLS
DN.	BGG
DES.	JLE

DRAWING NUMBER:

T-1.2

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\T-1.0 TREE PRESERVATION PLAN-2022256(PH-2).DWG PLOT DATE: 7/14/2025 BY: Charlotte L. Esperanza DWEW TWEI: 5324572577W

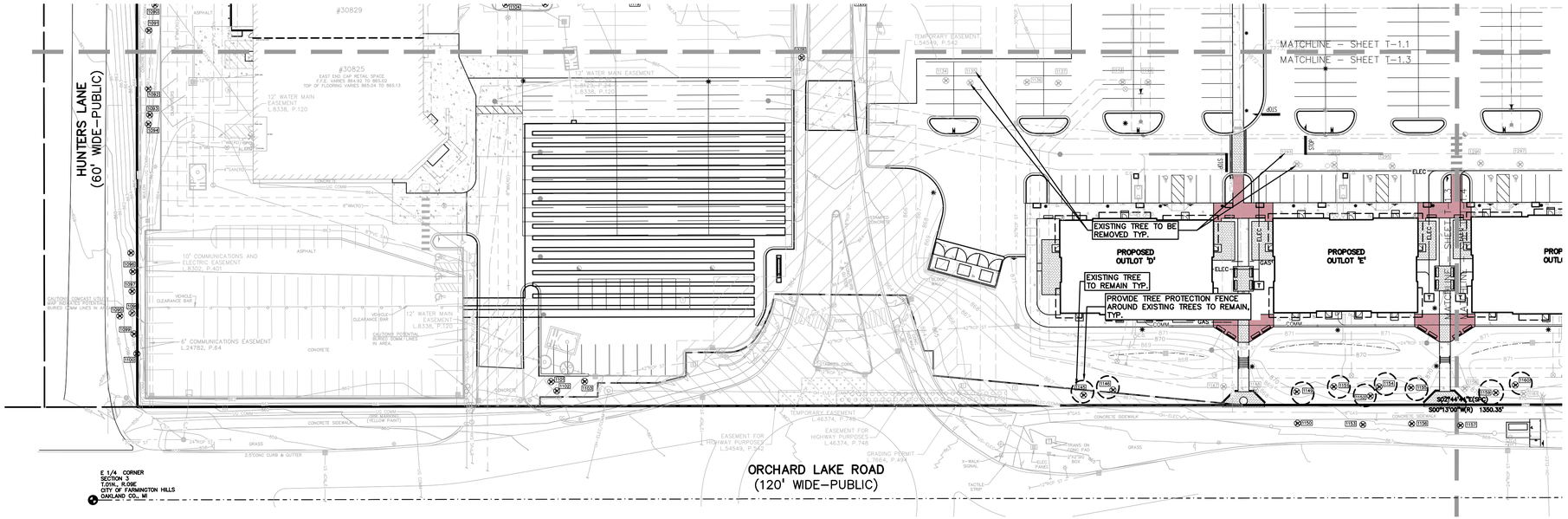
KEY

1007 = EXISTING TREE TO REMAIN AND CORRESPONDING TREE TAG

1176 = EXISTING TREE TO BE REMOVED AND CORRESPONDING TREE TAG

LM = LANDMARK TREE

= TREE PROTECTION FENCING



NOT FOR CONSTRUCTION

PEA GROUP
t: 844.813.2949
www.peagroup.com

STATE OF MICHIGAN
JANET L. EVANS
LANDSCAPE ARCHITECT
No. 3901
REGISTERED LANDSCAPE ARCHITECT

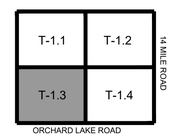
NORTH

0 20 40 80
SCALE: 1" = 40'

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

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KEY MAP



CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS	
1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

TREE PRESERVATION PLAN - SE

PEA JOB NO.	22-0256
P.M.	RLS
DN.	BGG
DES.	JLE

DRAWING NUMBER:

T-1.3

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLANS\T-1.0 TREE PRESERVATION PLAN-2022256(Ph-2).DWG PLOT DATE: 7/14/2025 BY: Charlotte L Eagerance DVIEW TIMES: 9:24:57:25 PM

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	EXTRA TRUNKS	CLASS	CONDITION/ FACTOR: trunk	growth rate	structure	insects/ diseases	crown dev	life exp.	OVERALL RANK	SAVE / REMOVE	STATUS	> MIN	REPLACE	ONSITE
1001	NM	18	Norway Maple	Acer platanoides		LANDMARK	5	5	5	5	5	3	28	S	PROT	Y	-	OFFSITE
1002	NM	14	Norway Maple	Acer platanoides		WOODLAND	4	5	4	5	5	3	26	S	PROT	N	-	OFFSITE
1003	NM	15	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1004	NM	14	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1005	NM	11	Norway Maple	Acer platanoides		WOODLAND	4	5	5	5	4	3	26	S	PROT	N	-	OFFSITE
1006	NM	14	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1007	NM	11	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1008	NM	13	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1009	NM	14	Norway Maple	Acer platanoides		WOODLAND	5	5	4	5	4	3	26	S	PROT	N	-	ON
1010	NM	15	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1011	NM	16	Norway Maple	Acer platanoides		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1012	NM	15	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1013	NM	15	Norway Maple	Acer platanoides		WOODLAND	4	4	4	4	5	3	24	S	PROT	N	-	ON
1014	NM	13	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1015	NM	13	Norway Maple	Acer platanoides		WOODLAND	4	3	3	5	4	3	22	S	PROT	N	-	ON
1016	NM	18	Norway Maple	Acer platanoides		LANDMARK	5	5	5	5	5	3	28	S	PROT	Y	-	ON
1017	TH	8	Thornapple/Hawthorne	Crataegus spp.		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1018	NM	11	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1019	RP	17	Red Pine	Pinus resinosa		WOODLAND	5	4	3	5	4	3	24	S	PROT	N	-	ON
1020	RP	14	Red Pine	Pinus resinosa		WOODLAND	4	3	3	5	4	3	22	S	PROT	N	-	ON
1021	RM	12	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1022	RM	6	Red Maple	Acer rubrum		WOODLAND	2	2	2	2	2	3	13	S	PROT	N	-	ON
1023	RM	12	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1024	RM	12	Red Maple	Acer rubrum		WOODLAND	3	3	3	3	3	3	18	S	PROT	N	-	ON
1025	SU	14	Sugar Maple	Acer saccharum		WOODLAND	5	5	4	5	5	3	27	S	PROT	N	-	OFFSITE
1026	SU	5	Sugar Maple	Acer saccharum	x1.4	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1027	SU	13	Sugar Maple	Acer saccharum		WOODLAND	3	3	3	4	2	3	18	S	PROT	N	-	OFFSITE
1028	SU	10	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1029	SU	8	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1030	SU	10	Sugar Maple	Acer saccharum		WOODLAND	5	4	4	5	5	3	26	S	PROT	N	-	OFFSITE
1031	SU	9	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1032	SU	9	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1033	SU	14	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1034	SU	12	Sugar Maple	Acer saccharum		WOODLAND	5	5	4	5	4	3	26	S	PROT	N	-	OFFSITE
1035	SU	12	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1036	SU	6	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1037	SU	5	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1038	SU	4	Sugar Maple	Acer saccharum		WOODLAND	4	5	5	5	5	3	27	S	PROT	N	-	ON
1039	S	10	Sycamore	Platanus occidentalis		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1040	S	13	Sycamore	Platanus occidentalis		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1041	TH	9	Thornapple/Hawthorne	Crataegus spp.		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1042	S	13	Sycamore	Platanus occidentalis		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1043	RC	7	Red Cedar	Juniperus virginiana	x1.5	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1044	BP	3	Bradford Pear	Pyrus calleryana	x3 2.2.2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1045	RC	9	Red Cedar	Juniperus virginiana		WOODLAND	4	5	5	5	5	3	27	S	PROT	N	-	ON
1046	RC	5	Red Cedar	Juniperus virginiana	x2 4.2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1047	BP	5	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1048	SU	12	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	5	4	29	S	PROT	N	-	OFFSITE
1049	SU	12	Sugar Maple	Acer saccharum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1050	SM	15	Silver Maple	Acer saccharinum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1051	SM	16	Silver Maple	Acer saccharinum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1052	SM	14	Silver Maple	Acer saccharinum		WOODLAND	5	5	5	5	5	3	30	S	PROT	N	-	OFFSITE
1053	SM	17	Silver Maple	Acer saccharinum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1054	SM	17	Silver Maple	Acer saccharinum		WOODLAND	5	5	5	5	5	3	30	S	PROT	N	-	OFFSITE
1055	SM	26	Silver Maple	Acer saccharinum		LANDMARK	5	5	5	5	5	3	30	S	PROT	Y	-	OFFSITE
1056	SM	20	Silver Maple	Acer saccharinum		LANDMARK	5	5	5	5	5	3	28	S	PROT	Y	-	OFFSITE
1057	JZ	14	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	4	5	5	3	27	S	PROT	N	-	ON
1058	RC	5	Red Cedar	Juniperus virginiana	x2 4.3	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1059	BP	9	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1060	RC	5	Red Cedar	Juniperus virginiana	x1 4	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1061	RC	6	Red Cedar	Juniperus virginiana	x1 5	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1062	S	5	Sycamore	Platanus occidentalis	x1 3	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1063	RC	3	Red Cedar	Juniperus virginiana	x4 3, 2.2.2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1064	CT	24	Cottonwood	Populus deltoides		LANDMARK	5	5	5	5	4	3	27	S	PROT	Y	-	ON
1065	RC	7	Red Cedar	Juniperus virginiana	x5, 3,3,3,2.2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1066	BS	11	Blue Spruce	Picea pungens		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1067	CT	52	Cottonwood	Populus deltoides		LANDMARK	5	5	5	5	5	3	28	S	PROT	Y	-	OFFSITE
1068	BS	11	Blue Spruce	Picea pungens		WOODLAND	5	5	5	4	5	3	27	S	PROT	N	-	OFFSITE
1069	BS	12	Blue Spruce	Picea pungens		WOODLAND		5	5	4	5	3	22	S	PROT	N	-	OFFSITE
1070	BS	6	Blue Spruce	Picea pungens		WOODLAND	3	3	2	3	3	3	15	S	PROT	N	-	OFFSITE
1071	BS	12	Blue Spruce	Picea pungens		WOODLAND	5	5	5	4	4	3	26	S	PROT	N	-	ON
1072	TH	5	Thornapple/Hawthorne	Crataegus spp.		WOODLAND	4	5	4	5	3	3	24	S	PROT	N	-	ON
1073	BS	11	Blue Spruce	Picea pungens		WOODLAND	5	4	4	4	4	3	24	S	PROT	N	-	OFFSITE
1074	BS	12	Blue Spruce	Picea pungens		WOODLAND	4	4	5	5	4	3	25	S	PROT	N	-	ON
1075	BS	11	Blue Spruce	Picea pungens		WOODLAND	4	5	5	4	5	3	26	S	PROT	N	-	OFFSITE
1076	BS	9	Blue Spruce	Picea pungens		WOODLAND	4	5	4	4	4	3	24	S	PROT	N	-	ON
1077	BS	o	Blue Spruce	Picea pungens		LANDMARK	4	4	4	4	4	3	23	S	PROT	Y	-	ON
1078	BS	13	Blue Spruce	Picea pungens		WOODLAND	5	5	4	4	4	3	25	S	PROT	N	-	ON
1079	S	11	Sycamore	Platanus occidentalis		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1080	RP	8	Red Pine	Pinus resinosa		WOODLAND	5	4	4	5	3	3	24	S	PROT	N	-	ON
1081	RP	9	Red Pine	Pinus resinosa		WOODLAND	4	4	4	5	3	3	23	S	PROT	N	-	ON
1082	JZ	13	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1083	CA	5	Crab Apple	Malus coronaria	x2 3.2	WOODLAND	3	3	3	5	2	3	19	S	PROT	N	-	ON
1084	TH	9	Thornapple/Hawthorne	Crataegus spp.		WOODLAND	5	5	4	5	4	3	26	S	PROT	N	-	ON
1085	JZ	15	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1086	BP	9	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1087	JZ	16	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1088	GA	6	Green Ash	Fraxinus pennsylvanica		WOODLAND	2	2	2	2	2	3	13	S	PROT	N	-	ON
1089	CA	3	Crab Apple	Malus coronaria		WOODLAND	2	2	2	2	2	3	13	S	PROT	N	-	ON
1090	TH	7	Thornapple/Hawthorne	Crataegus spp.		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1091	RP	17	Red Pine	Pinus resinosa		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1092	BP	7	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1093	RP	15	Red Pine	Pinus resinosa		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1094	RP	6	Red Pine	Pinus resinosa		WOODLAND	5	4	4	5	3	3	24	S	PROT	N	-	ON
1095	BS	13	Blue Spruce	Picea pungens		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1096	BS	8	Blue Spruce	Picea pungens		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1097	BS	9	Blue Spruce	Picea pungens		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1098	BS	12	Blue Spruce	Picea pungens		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1099	WS	6	White Spruce	Picea glauca		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1100	BS	12	Blue Spruce	Picea pungens		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE

KEY

1007 = EXISTING TREE TO REMAIN AND CORRESPONDING TREE TAG

1176 = EXISTING TREE TO BE REMOVED AND CORRESPONDING TREE TAG

LM = LANDMARK TREE

= TREE PROTECTION FENCING

KEY

OVERALL RANK OF 16 OR MORE, TREE MUST BE REPLACED

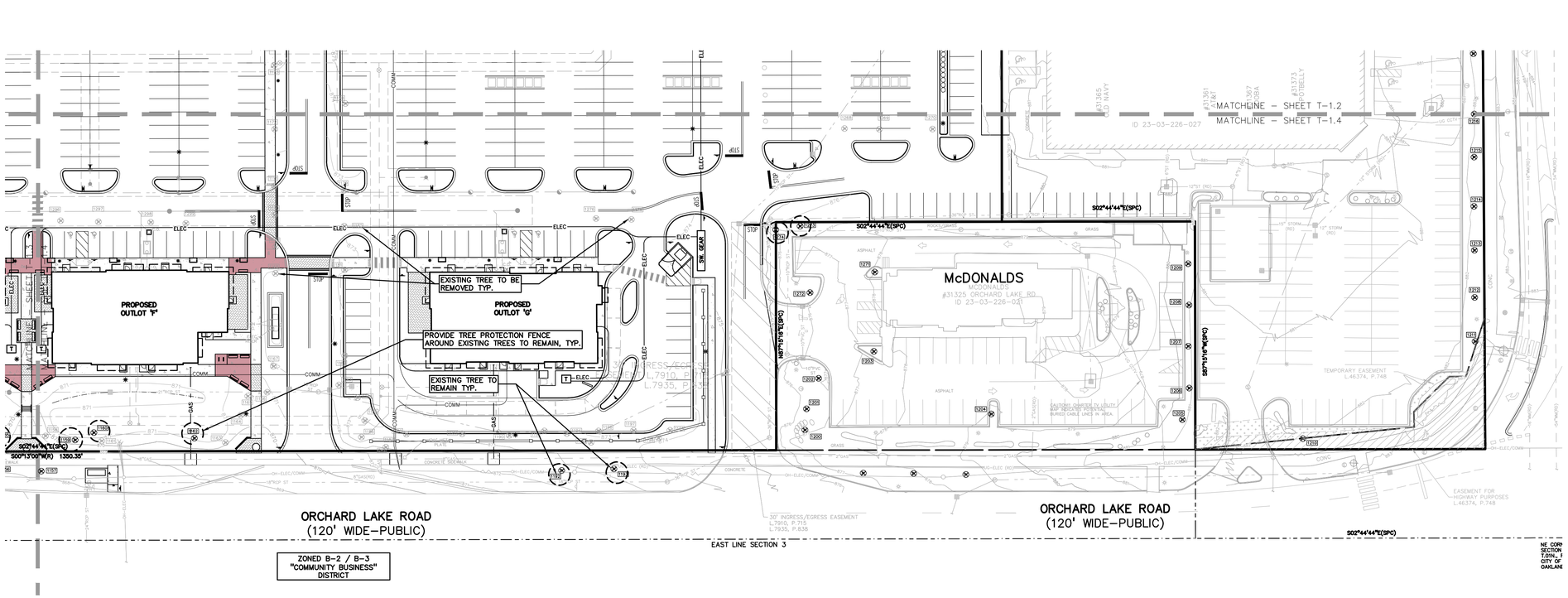
S = EXISTING TREE TO REMAIN

R = EXISTING TREE TO BE REMOVED

LINE WITH STRIKE OUT = EXISTING TREE TO BE REMOVED

REFER TO SHEET T-1.5 FOR ADDITIONAL EXISTING TREE LIST
REFER TO SHEET L-1.0 FOR TREE REPLACEMENT INFORMATION

TODD D. SHELLY
PROFESSIONAL SURVEYOR
NO. 4001041111
LICENSED PROFESSIONAL SURVEYOR
STATE OF MICHIGAN



PEA GROUP
t: 844.813.2949
www.peagroup.com

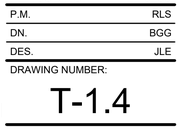
JANET L. EVANS
LANDSCAPE ARCHITECT
STATE OF MICHIGAN
REGISTERED
No. 3901
LANDSCAPE ARCHITECT

NORTH

0 20 40 80
SCALE: 1" = 40'

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

KEY MAP



CLIENT

SYMMETRY MANAGEMENT
812 S. MAIN STREET, SUITE #200
ROYAL OAK, MI, 48067

PROJECT TITLE

HUNTER'S SQUARE REDEVELOPMENT
ORCHARD LAKE ROAD AT 14 MILE ROAD
FARMINGTON HILLS, MICHIGAN, 48334

REVISIONS

1 - SPA/PUD RESUBMISSION	12/08/23
2 - SPA/PUD RESUBMISSION	05/31/24
3 - SPA/PUD RESUBMISSION	07/14/25

ORIGINAL ISSUE DATE:
SEPTEMBER 15, 2023

DRAWING TITLE

TREE PRESERVATION PLAN - NE

PEA JOB NO.	22-0256
P.M.	RLS
DN.	BGG
DES.	JLE

DRAWING NUMBER:

T-1.4

NOT FOR CONSTRUCTION

S:\PROJECTS\2022\2022-0256 HUNTERS SQUARE REDEVELOPMENT\DWG\PHASE II REDEVELOPMENT\SITE PLAN\T-1.0 TREE PRESERVATION PLAN-2022(Rev-2)).DWG PLOT DATE: 7/14/2025 BY: Charlotte L. Eagleson DVIEW TIMES: 9:24:57 25 PM

KEY
OVERALL RANK OF 16 OR MORE, TREE MUST BE REPLACED
S = EXISTING TREE TO REMAIN

R = EXISTING TREE TO BE REMOVED
LINE WITH STRIKE OUT = EXISTING TREE TO BE REMOVED

REFER TO SHEET T-1.4 FOR ADDITIONAL EXISTING TREE LIST
REFER TO SHEET L-1.0 FOR TREE REPLACEMENT INFORMATION

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	EXTRA TRUNKS	CLASS	CONDITION/ FACTOR						OVERALL RANK	SAVE / REMOVE	STATUS	> MIN	REPLACE	ONSITE
							trunk	growth rate	structure	insects/ diseases	crown dev	life exp.						
1101	CA	6	Crab Apple	Malus coronaria	x3 6,6,5	WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1102	AP	5	Domestic Apple	Malus sylvestris		WOODLAND	5	4	5	5	3	3	25	S	PROT	N	-	ON
1103	NM	13	Norway Maple	Acer platanoides		WOODLAND	5	4	5	5	4	3	26	S	PROT	N	-	ON
1104	BP	6	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1105	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	5	3	3	24	S	PROT	N		ON
1106	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	4	5	3	3	25	S	PROT	N	-	ON
1107	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	4	4	3	26	S	PROT	N	-	ON
1108	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	4	5	5	5	4	3	26	S	PROT	N		ON
1109	HL	4	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	3	3	26	S	PROT	N	-	ON
1110	BP	5	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1111	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	4	28	S	PROT	N		ON
1112	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1113	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1114	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	4	4	27	S	PROT	N	-	ON
1115	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1116	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	4	5	5	4	3	26	S	PROT	N		ON
1117	HL	7	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1118	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1119	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	4	4	28	S	PROT	N		ON
1120	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	4	5	4	3	26	S	PROT	N	-	ON
1121	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1122	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1123	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1124	LL	8	Littleleaf Linden	Tilia cordata		WOODLAND	5	5	4	5	4	3	26	S	PROT	N		ON
1125	LL	6	Littleleaf Linden	Tilia cordata		WOODLAND	5	4	4	5	3	3	24	S	PROT	N	-	ON
1126	LL	7	Littleleaf Linden	Tilia cordata		WOODLAND	5	4	4	5	3	3	24	S	PROT	N	-	ON
1127	LL	7	Littleleaf Linden	Tilia cordata		WOODLAND	4	4	4	5	4	4	25	S	PROT	N	-	ON
1128	LL	8	Littleleaf Linden	Tilia cordata		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1129	LL	7	Littleleaf Linden	Tilia cordata		WOODLAND	5	5	4	5	3	3	25	S	PROT	N		ON
1130	LL	8	Littleleaf Linden	Tilia cordata		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1131	LL	8	Littleleaf Linden	Tilia cordata		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1132	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	4	4	4	5	4	3	25	S	PROT	N		ON
1133	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	4	4	5	3	3	24	S	PROT	N	-	ON
1134	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	4	5	5	5	4	3	26	R	PROT	N	REPLACE	ON
1135	HL	4	Honeylocust	Gleditsia triacanthos		WOODLAND	5	4	3	5	3	3	23	R	PROT	N		ON
1136	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	4	5	4	3	26	R	PROT	N	-	ON
1137	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	4	4	5	5	4	3	25	R	PROT	N	-	ON
1138	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	4	5	4	4	26	S	PROT	N		ON
1139	HL	9	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	4	5	5	3	27	S	PROT	N	-	ON
1140	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	4	5	4	3	26	R	PROT	N	-	ON
1141	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	4	5	4	3	26	R	PROT	N	REPLACE	ON
1142	HL	8	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1143	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	5	4	4	5	4	3	25	R	PROT	N	REPLACE	ON
1144	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	4	4	3	5	3	3	22	R	PROT	N	-	ON
1145	RM	6	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1146	RM	5	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1147	RM	6	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1148	NM	14	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1149	NM	11	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1150	JZ	15	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	4	5	4	3	26	S	PROT	N	-	OFFSITE
1151	BP	5	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	4	28	S	PROT	N		ON
1152	RM	6	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1153	JZ	12	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1154	RM	5	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1155	RM	6	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1156	JZ	13	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	5	5	4	3	27	S	PROT	N		OFFSITE
1157	JZ	13	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1158	NM	12	Norway Maple	Acer platanoides		WOODLAND	5	4	4	5	3	3	24	R	PROT	N	REPLACE	ON
1159	NM	14	Norway Maple	Acer platanoides		WOODLAND	4	5	5	5	4	4	27	S	PROT	N	-	ON
1160	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1161	RM	3	Red Maple	Acer rubrum	DEAD	WOODLAND							0	R	PROT	N		ON
1162	RM	4	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	4	4	28	S	PROT	N		ON
1163	NM	13	Norway Maple	Acer platanoides		WOODLAND	4	4	4	4	4	3	23	R	PROT	N	REPLACE	ON
1164	CA	6	Crab Apple	Malus coronaria		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1165	CA	7	Crab Apple	Malus coronaria		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1166	CA	5	Crab Apple	Malus coronaria		WOODLAND	5	5	5	5	4	3	27	R	PROT	N		ON
1167	NM	7	Norway Maple	Acer platanoides		WOODLAND	4	5	5	5	5	3	27	R	PROT	N	REPLACE	ON
1168	NM	6	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1169	NM	5	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	-	ON
1170	NM	7	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1171	NM	6	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1172	NM	7	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1173	NM	7	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1174	NM	7	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1175	BP	3	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	5	5	4	3	26	R	PROT	N		ON
1176	BP	3	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	4	5	3	3	25	R	PROT	N	-	ON
1177	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	5	4	4	3	25	R	PROT	N	-	ON
1178	NM	5	Norway Maple	Acer platanoides		WOODLAND	5	5	4	5	4	3	26	R	PROT	N	-	ON
1179	NM	5	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	-	ON
1180	NM	4	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	3	3	26	R	PROT	N		ON
1181	NM	6	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1182	NM	6	Norway Maple	Acer platanoides		WOODLAND	4	5	5	5	4	3	26	R	PROT	N	REPLACE	ON
1183	CA	3	Crab Apple	Malus coronaria		WOODLAND	5	5	4	5	3	3	25	R	PROT	N	-	ON
1184	CA	5	Crab Apple	Malus coronaria		WOODLAND	4	4	4	5	4	3	24	R	PROT	N	-	ON
1185	CA	4	Crab Apple	Malus coronaria		WOODLAND	5	5	5	5	4	3	27	R	PROT	N		ON
1186	NM	14	Norway Maple	Acer platanoides		WOODLAND	4	4	4	4	3	3	22	R	PROT	N	REPLACE	ON
1187	NM	7	Norway Maple	Acer platanoides	Dead	WOODLAND							0	R	PROT	N	-	ON
1188	RM	3	Red Maple	Acer rubrum		WOODLAND	5	4	4	4	4	3	24	R	PROT	N	-	ON
1189	NM	7	Norway Maple	Acer platanoides		WOODLAND	3	3	3	3	1	3	16	R	PROT	N	REPLACE	ON
1190	NM	12	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1191	NM	8	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1192	JZ	12	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1193	BP	7	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1194	JZ	7	Japanese zelkova	Zelkova serrata		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1195	NM	8	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1196	NM	6	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1197	NM	12	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	3	3	26	R	PROT	N	REPLACE	ON
1198	NM	13	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1199	NM	8	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	3	3	26	R	PROT	N	REPLACE	ON

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	EXTRA TRUNKS	CLASS	CONDITION/ FACTOR						OVERALL RANK	SAVE / REMOVE	STATUS	> MIN	REPLACE	ONSITE
							trunk	growth rate	structure	insects/ diseases	crown dev	life exp.						
1200	CA	4	Crab Apple	Malus coronaria		WOODLAND	2	2	2	4	2	3	15	S	PROT	N	-	OFFSITE
1201	CA	7	Crab Apple	Malus coronaria		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1202	NM	12	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1203	CA	6	Crab Apple	Malus coronaria		WOODLAND	4	4	4	5	4	3	24	S	PROT	N	-	OFFSITE
1204	NM	13	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1205	NS	12	Norway Spruce	Picea abies		WOODLAND	4	5	4	4	3	3	23	S	PROT	N		OFFSITE
1206	LL	10	Littleleaf Linden	Tilia cordata		WOODLAND	5	5	4	5	4	3	26	S	PROT	N	-	OFFSITE
1207	LL	9	Littleleaf Linden	Tilia cordata		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1208	LL	7	Littleleaf Linden	Tilia cordata		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1209	LL	9	Littleleaf Linden	Tilia cordata		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	OFFSITE
1210	BP	5	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	5	4	3	25	S	PROT	N	-	ON
1211	RM	5	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	4	3	27	S	PROT	N		ON
1212	RM	6	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N		ON
1213	RM	5	Red Maple	Acer rubrum		WOODLAND	4	5	5	5	4	3	26	S	PROT	N	-	ON
1214	RM	8	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1215	RM	4	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1216	RM	5	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	ON
1217	RM	5	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N		ON
1218	RM	4	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N		ON
1219	RM	6	Red Maple	Acer rubrum		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1220	RC	5	Red Cedar	Juniperus virginiana	x3 4. 2. 1	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1221	RC	4	Red Cedar	Juniperus virginiana	x2 1.1	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1222	RC	4	Red Cedar	Juniperus virginiana	x2 2,2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	ON
1223	RC	3	Red Cedar	Juniperus virginiana	x1 2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1224	RP	14	Red Pine	Pinus resinosa		WOODLAND	3	4	4	2	3	3	19	S	PROT	N		OFFSITE
1225	RP	12	Red Pine	Pinus resinosa		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1226	RP	12	Red Pine	Pinus resinosa		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1227	RP	11	Red Pine	Pinus resinosa		WOODLAND	5	5	4	5	4	3	26	S	PROT	N	-	OFFSITE
1228	BP	5	Bradford Pear	Pyrus calleryana	x1 4	WOODLAND	4	5	4	5	4	3	25	S	PROT	N	-	OFFSITE
1229	BP	10	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1230	RP	9	Red Pine	Pinus resinosa		WOODLAND	5	5	4	5	4	3	26	S	PROT	N		OFFSITE
1231	RP	9	Red Pine	Pinus resinosa		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1232	BP	11	Bradford Pear	Pyrus calleryana		WOODLAND	4	5	5	5	4	3	26	S	PROT	N	-	OFFSITE
1233	BP	10	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1234	BP	12	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1235	RP	10	Red Pine	Pinus resinosa		WOODLAND	5	4	5	4	4	3	25	S	PROT	N	-	OFFSITE
1236	BP	11	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1237	BP	13	Bradford Pear	Pyrus calleryana		WOODLAND	4	5	4	5	4	3	25	S	PROT	N	-	OFFSITE
1238	HL	4	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	5	5	30	S	PROT	N	-	OFFSITE
1239	HL	4	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	4	3	27	S	PROT	N	-	OFFSITE
1240	HL	4	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1241	NM	9	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1242	CA	7	Crab Apple	Malus coronaria	x2 7.5	WOODLAND	5	5	5	5	5	4	29	S	PROT	N	-	OFFSITE
1243	RB	5	River Birch	Betula nigra	x2 5,3	WOODLAND		5	5	5	5	5	25	S	PROT	N	-	OFFSITE
1244	SB	2	Service Berry	Amelanchier arborea	2,2,2,2, 1,	#NA	5	5	5	5	5	5	30	S	#N/A	#N/A	-	OFFSITE
1245	SB	3	Service Berry	Amelanchier arborea	2,1,1,1,1,1	#NA	4	5	5	5	5	5	29	S	#N/A	#N/A	-	OFFSITE
1246	SB	2	Service Berry	Amelanchier arborea	2,2,2,2,1,	#NA	5	5	4	5	5	3	27	S	#N/A	#N/A	-	OFFSITE
1247	RB	3	River Birch	Betula nigra	x2 3,2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1248	NM	16	Norway Maple	Acer platanoides		WOODLAND	4	5	5	5	4	3	26	S	PROT	N	-	OFFSITE
1249	NM	13	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1250	NM	13	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1251	RB	3	River Birch	Betula nigra	x2 2,2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1252	RB	3	River Birch	Betula nigra	x2 3,2	WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1253	RB	4	River Birch	Betula nigra	x1 3	WOODLAND	5	5	5	5	5	5	30	S	PROT	N	-	OFFSITE
1254	NM	17	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N		OFFSITE
1255	RM	5	Red Maple	Acer rubrum	DEAD	WOODLAND							0	R	PROT	N		ON
1256	RM	5	Red Maple	Acer rubrum	DEAD	WOODLAND							0	R	PROT	N	-	ON
1257	RM	5	Red Maple	Acer rubrum	DEAD	WOODLAND							0	R	PROT	N	-	ON
1258	RM	3	Red Maple	Acer rubrum	DEAD	WOODLAND							0	R	PROT	N	-	ON
1259	RP	10	Red Pine	Pinus resinosa		WOODLAND	5	4	4	5	3	3	24	S	PROT	N	-	OFFSITE
1260	RP	10	Red Pine	Pinus resinosa		WOODLAND	5	5	5	5	4	3	27	S	PROT	N		OFFSITE
1261	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1262	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1263	NM	8	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	REPLACE	ON
1264	HL	7	Honeylocust	Gleditsia triacanthos		WOODLAND	5	5	5	5	5	3	28	R	PROT	N	REPLACE	ON
1265	RB	2	River Birch	Betula nigra	x1	WOODLAND	5	5	5	5	5	3	28	R	PROT	N	-	ON
1266	RB	3	River Birch	Betula nigra	x4 2,2,2,1	WOODLAND	5	5	5	5	5	3	28	R	PROT	N	-	ON
1267	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	R	PROT	N		ON
1268	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	R	PROT	N	-	ON
1269	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	4	4	4	5	3	3	23	R	PROT	N	-	ON
1270	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	4	5	4	3	26	R	PROT	N	-	ON
1271	CA	6	Crab Apple	Malus coronaria		WOODLAND	4	4	4	4	4	3	23	S	PROT	N	-	OFFSITE
1272	NM	13	Norway Maple	Acer platanoides		WOODLAND	5	5	5	5	5	3	28	S	PROT	N	-	OFFSITE
1273	WS	9	White Spruce	Picea glauca		WOODLAND	4	4	4	5	3	3	23	S	PROT	N		OFFSITE
1274	NM	12	Norway Maple	Acer platanoides		WOODLAND	4	4	5	5	4	3	25	S	PROT	N	-	ON
1275	HL	6	Honeylocust	Gleditsia triacanthos		WOODLAND	3	3	3	3	3	3	18	R	PROT	N	REPLACE	ON
1276	HL	5	Honeylocust	Gleditsia triacanthos		WOODLAND	3	3	3	4	3	3	19	R	PROT	N	-	ON
1277	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	4	5	4	3	26	R	PROT	N	-	ON
1278	BP	5	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	4	5	4	3	26	R	PROT	N	-	ON
1279	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	4	4	3	26	R	PROT	N		ON
1280	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	4	4	4	5	5	3	25	S	PROT	N	-	ON
1281	BP	3	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	5	4	3	25	R	PROT	N	-	ON
1282	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	4	4	3	24	R	PROT	N	-	ON
1283	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	5	4	3	25	R	PROT	N	-	ON
1284	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	4	5	4	3	26	R	PROT	N	-	ON
1285	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	5	5	5	5	4	3	27	R	PROT	N		ON
1286	BP	5	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	5	4	3	25	R	PROT	N	-	ON
1287	BP	4	Bradford Pear	Pyrus calleryana		WOODLAND	4	5	4	5	4	3	25	R	PROT	N	-	ON
1288	BP	4	Bradford Pear	Pyrus calleryana	x1 4	WOODLAND	5	5	5	5	4	3	27	R	PROT	N	-	ON
1289	BP	3	Bradford Pear	Pyrus calleryana		WOODLAND	5	4	4	5	3	3	24	R	PROT	N	-	ON
1290	CA	4	Crab Apple	Malus coronaria		WOODLAND	5

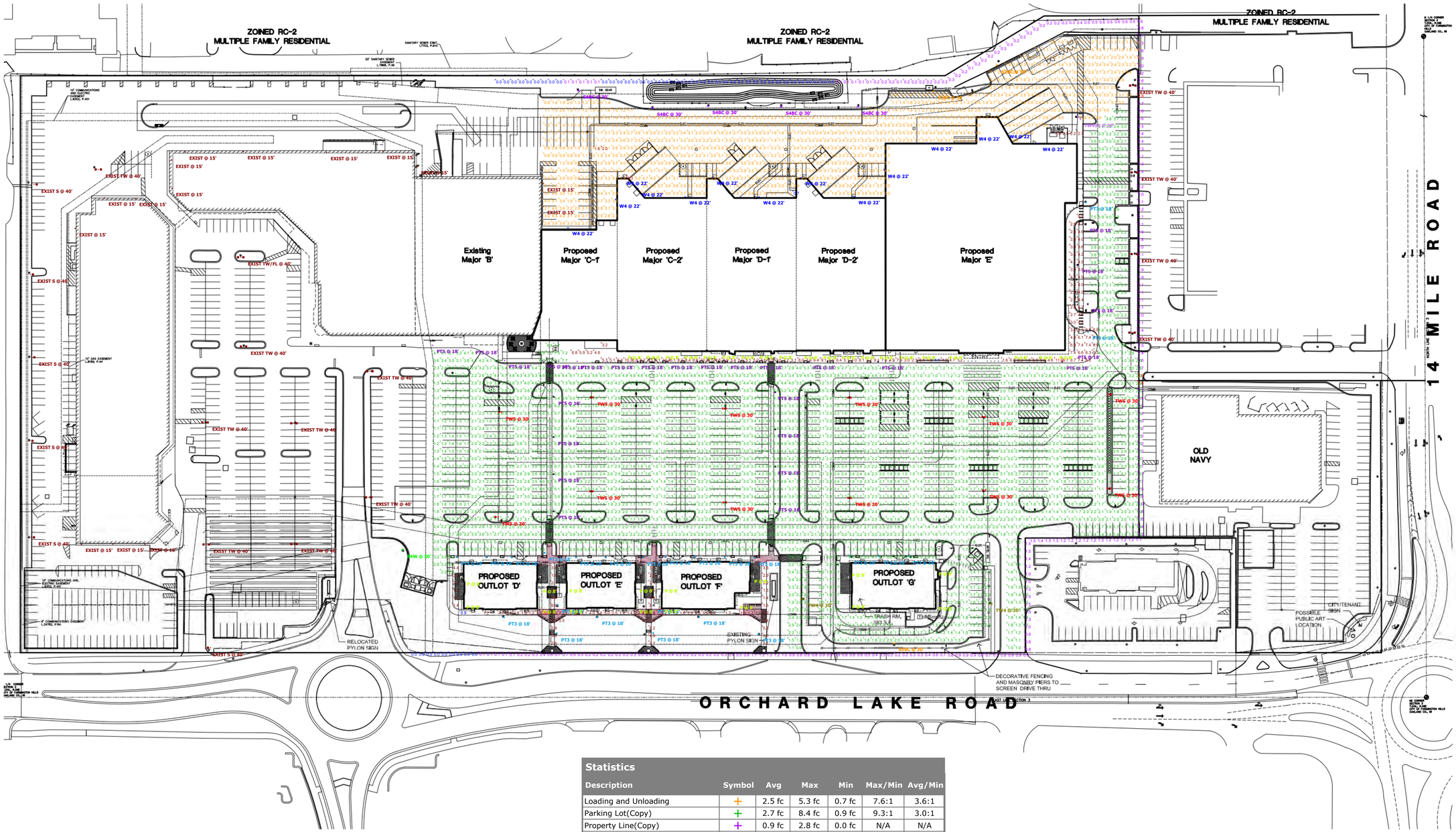
Note

1. CCT of Existing Luminaires Unknown, New Fixtures = 3500K - 80CRI

2. Site Fixtures within 50FT of a Residential Property Line or Public Right-Of--Way to have External or Optic Mounted Back-Light Shielding to meet City Ordinances.

3. Site Fixtures near public roadways to be aimed/directed to minimize light spill - per City Ordinances

4. All fixtures to be full cut-off - any adjustable arm fixtures to be mounted at 90deg.



Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Loading and Unloading	+	2.5 fc	5.3 fc	0.7 fc	7.6:1	3.6:1
Parking Lot(Copy)	+	2.7 fc	8.4 fc	0.9 fc	9.3:1	3.0:1
Property Line(Copy)	+	0.9 fc	2.8 fc	0.0 fc	N/A	N/A
Walkways - Proposed Outlots(Copy)	+	3.5 fc	8.0 fc	0.9 fc	8.9:1	3.9:1
Walkways Major C-E(Copy)	+	5.3 fc	11.0 fc	1.1 fc	10.0:1	4.8:1

Site Plan

SCALE: 1" = 60'-0"

Plan View

BLC EAST

Hunters Square Shopping Center
Photometric Site Plan
Farmington Hills, MI

Designer
BG
Date
7/10/2025
Scale
Not to Scale
Drawing No.
001-REV6
Summary

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Polar Plot
	S38C		3	LSI INDUSTRIES, INC.	VALS-27L-3W-35KB-IS		1	16599	0.95	178	Max: 22360cd
	S4W		1	LSI INDUSTRIES, INC.	VALS-27L-4W-35KB		1	18757	0.95	178	Max: 21442cd
	S4BC		5	LSI INDUSTRIES, INC.	VALS-27L-4F-35KB-IS		1	16072	0.95	178	Max: 22171cd
	TW4		2	LSI INDUSTRIES, INC.	VALS-27L-4W-35KB		1	18757	0.95	356	Max: 21442cd
	TW4 90		1	LSI INDUSTRIES, INC.	VALS-27L-4W-35KB		1	18757	0.95	356	Max: 21442cd
	TW5		12	LSI INDUSTRIES, INC.	VALS-27L-5QW-35KB		1	22462	0.95	356	Max: 11928cd
	P		36	Performance IN Lighting	070713	SHIELD+1 14.5W 840 Type III 1-10V - Iron grey	1	1773	0.95	14.5	Max: 1214cd
	PT3		24	LSI INDUSTRIES, INC.	OPS-PT-10L-3W-35KB-U0		1	9021	0.95	70	Max: 2631cd
	PT5		27	LSI INDUSTRIES, INC.	OPS-PT-10L-5Q-35KB-U0		1	9443	0.95	70	Max: 3235cd
	W4		14	LSI INDUSTRIES, INC.	XWM-FT-LED-12L-50-BKXG		1	11320	0.95	77	Max: 5862cd
	EXIST TW		12	EXO	ASL2-320L-170-4K7-SQW-U		1	24475	0.7	336	Max: 10228cd
	EXIST TW/FL		1	EXO	ASL2-320L-170-4K7-SQW-U w/Twin Bullhorn Floods		1	24475	0.7	816	Max: 10228cd
				EXO	ASL2-320L-170-4K7-SQW-U w/Twin Bullhorn Floods		1	24475	0.7	408	Max: 10228cd
				EXO	ASL2-320L-170-4K7-SQW-U w/Twin Bullhorn Floods		1	24475	0.7	408	Max: 10228cd
	EXIST S		6	EXO	ASL2-320L-145-4K7-48F-U		1	20495	0.7	143	Max: 17446cd
	EXIST		15	EXO	LNC2-48L-4S-4K7-3-UNV-U-OBT	LNC2 Wall Pack w/ 48L Microstrike Type III Lens	1	5027	0.7	45.1	Max: 4903cd

Quote #: _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

V-Locity® Small (VALS)

Outdoor LED Area Light



OVERVIEW	
Lumen Package	6,000 - 27,000
Wattage Range	36 - 178
Efficacy Range (LPW)	96 - 171
Weight (lbs)	20-(63)
Control Options	IMSBT, ALB, ALS, 7-Pin, PCI

QUICK LINKS

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical units. Cast aluminum wiring access door located underneath.
- Self-contained optic board and heat sink assembly can be rotated or replaced in the field.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Max shipping weight: 308lbs in carton

Optical System

- State-of-the-Art one piece silicone optic provides industry leading optical control while also acting as an integrated gasket reducing system complexity and improving fixture reliability.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in Types 2, 3, 4, and FT distributions.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- 5000K, 4000K, 3500K, 3000K, and 2700K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak intensity at 610nm.
- 70 or 80CRI Minimum.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >60k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F).
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed via hinged door.
- Optional integral emergency battery pack provides 90 minutes of constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance. The fixture delivers 1500 lumens during emergency mode.

Controls

- Optional integral passive infrared Bluetooth™ motion sensor and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- AirLink™ Bllue wireless control system with technology partner Silvair incorporates Luminaire Level Lighting Controls (LLLC) and high-end trim.

Installation

- RIEDIMount pole mount arm allows for a true one-person installation.
- Side arm pole mount designed to mount to square or round poles.
- Pole mount arms can accommodate pole drill patterns from 2.4 to 5" on center and utilize LSI's reduced B3 or traditional B5 drill patterns.
- Additional mounting options are available including a mast arm or adjustable slip fitter that allow for luminaire attachment to a 2.3/8" tenon or mast arm.
- Adjustable arms allow for 65° of tilt (-5°below horizontal to +60° above horizontal) in 5° increments.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- DarkSky Approved with 3000K or warmer color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications are qualified.

Quote #: _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

Mirada Medium Wall Sconce (XWM)

Outdoor Wall Sconce



OVERVIEW	
Lumen Package	3,000 - 21,000
Wattage Range	23 - 175
Efficacy Range (LPW)	125 - 158
Weight (lbs/kg)	27 (12.2)
Control Options	MSBT, ALB, ALS, PCI

QUICK LINKS

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Hinged die-cast aluminum wiring access door located underneath.
- Galvanized-steel universal wall mount bracket comes standard with hinging mechanism to easily access the junction box wire connections without removing the luminaire.
- Optional pole-mounting bracket (XPMA) permits mounting to standard poles.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Max shipping weight: 308lbs in carton

Optical System

- State-of-the-Art one piece silicone optic provides industry leading optical control while also acting as an integrated gasket reducing system complexity and improving fixture reliability.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in Types 2, 3, 4, and FT distributions.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- 5000K, 4000K, 3500K, 3000K, and 2700K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak intensity at 610nm.
- 70 or 80CRI Minimum.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) input 50/60 HZ or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >60k Hours
- Total harmonic distortion (THD): <20%
- 3L to 12L operating temperature: -40°C to +50°C (-40°F to +122°F).
- 15L operating temperature: -40°C to +45°C (-40°F to +113°F).
- 18L operating temperature: -40°C to +40°C (-40°F to +104°F).
- 21L operating temperature: -40°C to +35°C (-40°F to + 95°F).
- Power factor (PF): > 90
- Input power stays constant over life.
- Optional 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed via hinged door.
- Optional integral emergency battery pack provides 90 minutes of constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance. The fixture delivers 1500 lumens during emergency mode.

Controls

- Optional integral passive infrared Bluetooth™ motion sensor options. Fixtures operate independently and can be commissioned via iOS or Android configuration app. Updates and modifications to the control strategy are easily implemented via an intuitive app.
- AirLink™ Bllue wireless control system with technology partner Silvair incorporates Luminaire Level Lighting Controls (LLLC) and high-end trim.

Installation

- Universal wall mounting plate easily mounts directly to 4" octagonal or square junction box.
- 2 fasteners secure the hinged door underneath the housing and provide quick & easy access to the electrical compartment for installing/servicing.
- Optional terminal block accepts up to 12 ga wire.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.
- 1 Year warranty on Battery Back-up option

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- DarkSky Approved with 3000K or warmer color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet Locations.
- IP65 rated luminaire per IEC 60598.
- 3G rated for ANSI C136.31 high vibration applications when pole mounted (using optional XPMA bracket) or wall mounted
- IK08 rated luminaire per IEC 62262 mechanical impact code
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL, to confirm which versions are qualified.

Quote #: _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

V-Locity® Small (VALS) Outdoor LED Area Light

Have questions? Call us at (800) 436-7830

ORDERING GUIDE

TYPICAL ORDER EXAMPLE: VALS 18L AW UNV 4K0 BLK SA ALDM2ZLB IS

Prefix

VALS - V-Locity Area Light Small

Lumen Package

6L - 6,000 lms, 36W
9L - 9,000 lms, 54W
12L - 12,000 lms, 74W
21L - 21,000 lms, 130W
24L - 24,000 lms, 148W
27L - 27,000 lms, 178W
Custom Lumen Packages†

Distribution

2 - Type 2
3M - Type 3 Medium
3W - Type 3 Wide
4M - Type 4 Medium
4W - Type 4 Forward
4F - Type 4 Wide
FTM - Forward Throw Medium
5QW - Type 5 Square Wide
5QM - Type 5 Square Medium
5W - Type 5 Square
SQW - Type 5 Square Wide
AM - Automotive Merchandise
WF - Wall Wash Front
IC - Left Corner
RC - Right Corner

Orientation†

(Blank) - Standard
S - Optics rotated to the left 90°
R - Optics rotated to right 90°

Voltage

UNV - Universal Voltage (120-277V)
HV - High Voltage (347-480V)

Color Temp / Rendering

5K7 - 5700 CCT - 70 CRI
5K0 - 5000 CCT - 80 CRI
4K7 - 4800 CCT - 70 CRI
4K0 - 4000 CCT - 80 CRI
3K0 - 3000 CCT - 80 CRI

Zonal Lite Approved (CT°):

3K7 - 3500 CT - 70 CRI
3K0 - 3000 CT - 80 CRI
2K7 - 2700 CT - 80 CRI

Finish

BLK - Black
BRZ - Dark Bronze
GPG - Gun Metal Gray
GPT - Graphite
MSP - Metallic Silver
PCP - Platinum Plus
WHT - White

Mounting

SA - Universal Side Arm Pole Mount
SF - Adjustable Slip Fitter
SAA - Universal Adjustable Pole Mount Arm
MA - Mast Arm

Controls (Choose One)

(Blank) - None

Wireless Controls Systems
ALSC - AirLink Synapse Control System
ALSC2 - AirLink Synapse Control System with 12-27 Mt Motion Sensor
ALSC3 - AirLink Synapse Control System with 25-42 Mt Motion Sensor

ALDM2ZB - AirLink Blue Long-Range Wireless Multi-Range Sensor Controller (9-15' MH)*
ALDM3ZB - AirLink Blue Long-Range Wireless Multi-Range Sensor Controller (35-40' MH)*

Stand-Alone Controls
EBT - 0-10v Dimming leads extended to housing exterior

CBTP - 7 Pin Control Receptacle ANSI C136.41*

IMSBT1 - Integral Bluetooth™ Motion and Photocell Sensor (9-24' MH)*
IMSBT2 - Integral Bluetooth™ Motion and Photocell Sensor (25-42' MH)*

PCR - 120-277 Volts Photocell
PCRHV - 347V Button Photocell

Options

IS - Internal Shield*
TE - Toolless Entry (Pole/Arm Only)

Need more information? Click here for our glossary

Have additional questions? Call us at (800) 436-7830

Accessory Ordering Information†

CONTROLS ACCESSORIES	
Description	**Order Number**
Twist Lock Photocell (120V) for use with CBTP	52304
Twist Lock Photocell (208-277) for use with CBTP	52305
Twist Lock Photocell (347V) for use with CBTP	52306
Twist Lock Photocell (480V) for use with CBTP	52308
AirLink 7 Pin Twist Lock Controller	601495
AirLink 7 Pin Twist Lock Calibrator	601496
Starting Cap for use with CBTP	141528

FUSING OPTIONS*	
Description	**Order Number**
Single Fusing (120V)	Type: Fusetron, Size: 8mm X 32mm, Slo-Blo® Fuse
Single Fusing (277V)	
Double Fusing (120V - 240V)	
Double Fusing (480V)	
Double Fusing (347V)	

EXTERNAL SHIELDING OPTIONS	
Description	**Order Number**
11" External Shield	
9" External Shield	

1. Custom lumens and wattage packages available (consult factory). Values are within industry standard tolerances but not ULI listed.
2. Not available on Type 5 or wide flood distributions.
3. Control Blank or Starting Cap must be ordered separately. See Accessory Ordering Information.
4. "CBTP" (Control Box Twist Lock Receptacle) must be specified if photocell will be purchased from user or purchased in values as shown.
5. Fusing must be located in field for all pole or arm mounted luminaires.
6. "CBTP" (Control Box Twist Lock Receptacle) must be specified if photocell will be purchased from user or purchased in values as shown.
7. Not available on HV.
8. Accessories are shipped unassembly and field installed.
9. Fusing must be located in a hand hole for pole or arm mounted luminaires.
10. "CBTP" (Control Box Twist Lock Receptacle) must be specified if photocell will be purchased from user or purchased in values as shown.

Mirada Medium Wall Sconce (XWM) Outdoor Wall Sconce

Have questions? Call us at (800) 436-7830

ORDERING GUIDE

TYPICAL ORDER EXAMPLE: XWM 2 LED 8SL 5Q UE BRZ ALSC

Family

XWM - Mirada Medium Wall Sconce

Distribution

2 - Type 2
3 - Type 3
4 - Type 4
FT - Type 4 Forward Throw

Light Source

LED

Lumen Package

3L - 3,000
4L - 4,000
6L - 5,000
8L - 8,000
12L - 12,000
15L - 15,000
18L - 18,000
21L - 21,000
Custom Lumen Packages†

Color Temperature

5K - 5000K (70CRI)
5KHO - 5000K (80CRI)
4K - 4000K (70CRI)
4KHO - 4000K (80CRI)
3KHO - 3000K (80CRI)

Voltage

UE - Universal Voltage (120-277V)
HV - High Voltage (347-480V)

Finish

BLK - Black
BRZ - Dark Bronze
GPG - Gun Metal Gray
GPT - Graphite
MSP - Metallic Silver
PCP - Platinum Plus
SVG - Satin Verde Green
WHT - White

Controls

Blank - None

Wireless Controls
ALSC - AirLink Synapse Control System
ALSC2 - AirLink Synapse Control System with 8-12' Motion Sensor
ALSC3 - AirLink Synapse Control System with 12-20' Motion Sensor
ALDM2ZB - AirLink Blue Wireless Motion & Photo Sensor Controller (8 - 15') (mounting height)*
ALDM3ZB - AirLink Blue Wireless Motion & Photo Sensor Controller (16 - 40' mounting height)*

Standalone Controls
EBT - 0-10v Dimming leads extended to housing exterior
IMSBT1 - Integral Bluetooth™ Motion and Photocell Sensor (8-24' MH)*
IMSBT2 - Integral Bluetooth™ Motion and Photocell Sensor (25-40' MH)*

Button Type Photocells
PCS120 - 120V
PCS208-277 - 208 - 277V
PCS347 - 347V

Options

Blank - None
BB - Battery Back-up (0°C)*
CWBB - Cold Weather Battery Backup (-20°C)*
XPMA - Pole Mounting Bracket
TB - Terminal Block

Need more information? Click here for our glossary

Have additional questions? Call us at (800) 436-7830

FUSING ACCESSORY ORDERING INFORMATION†

Part Number	Description
FK120*	FK120 - Single Fusing
FK277*	FK277 - Single Fusing
FK347*	FK347 - Single Fusing
DFK208*	DFK - Double Fusing
DFK240*	DFK - Double Fusing (240V)
DFK480*	DFK - Double Fusing (480V)

MOUNTING ACCESSORY ORDERING INFORMATION†

Part Number†	Description
RMS7AR18	RMM Mid Location Surface Conduit/Entrapment Box
753652	18" Linear Mini Trailer Kit (2' decommendedper Luminaire)



1. Custom lumens and wattage packages available (consult factory). Values are within industry standard tolerances but not ULI listed.
2. Only available in UE, Lumen Package, Consult factory for lead time and availability.
3. IMSBT and ALDM2ZB sensor options are not available in 2, or 4, or lumen packages with high voltage (HV) is specified.
4. PCS0, 4, 5 Not configurable via the Lumina app that can be downloaded from your smartphone's app store.
5. Not available on HV.
6. Accessories are shipped unassembly and field installed.
7. Fusing must be located in field for all pole or arm mounted luminaires.
8. "CBTP" (Control Box Twist Lock Receptacle) must be specified if photocell will be purchased from user or purchased in values as shown.

Quote #: _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

Opulence Post Top (Zero Uplight)

Outdoor Decorative Post Top



OVERVIEW	
Lumen Package (lm)	3,000 - 17,000
Wattage Range (W)	20 - 105
Efficacy Range (LPW)	112 - 146
Weight lbs (kg)	25.0 (11.3)

QUICK LINKS

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.

Optical System

- High density LED optical system delivers industry leading optical performance and visual comfort.
- 7 distribution types 3W, 4F, 5Q, 5C, 5R, 5D & AD
- Diffused lens version provides maximum visual comfort with reduced brightness and LED pixelization.
- Available in 3000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377. Also available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 80
- External Shield available for field installation (see accessory ordering information and dimensions for details).

Electrical

- High-performance driver features overvoltage, under-voltage, short-circuit and over temperature protection (6kV surge standard).
- 0-10V dimming driver (optional extended leads).
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- Total harmonic distortion (THD): <20%
- Operating temperature: -40°C to +40°C (-40°F to +104°F).
- Power factor (PF): >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Integral passive infrared Bluetooth™ motion and photocell sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule. Updates and modifications to the control strategy are easily implemented via an intuitive iOS app.

Installation

- Designed to mount directly to a 2 5/8" - 3" outer diameter tenon (4" tall).
- Optional flush mount accessory slips inside the top of a 4" round pole for a virtually seamless transition from pole to luminaire.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements
- DarkSky Approved; with 3000K and warmer color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- IK09 rated luminaire per IEC 62262 mechanical impact code with polycarbonate lens (PLY).
- 3G rated for ANSI C136.31 high vibration applications.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL, to confirm which versions are qualified.

PERFORMANCE IN LIGHTING | powered by GEWISS

PRODUCT CODE 070713
PROJECT
TYPE

SHIELD+1 TYPE III

IP 66 | 3000K | WET | DALI 2 | 1-10 V | LISTED | RAL

Part number 070713
Lampholder: LED
Wattage: 14.5 W
Finishing: AN-96 / Iron gray / Textured
Degree of protection: IP66
CRI: 80
Kelvin: 4000
IESNA Type: Asymmetric Extra-Wide
BUG Rating: Type III
Luminaire lumen output [lm]: B1-U0-G0
1773 lm
Li: L80
B: B10
Lifetime: 200000 h
cULus: cULus
Voltage: 120277 V
Min. ambient temperature [°C]: -30
Max. ambient temperature [°C]: 50



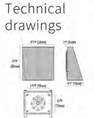


Description

Long lasting energy-efficient wall pack series. Fixtures consist of:
- Multi-step powder coat painting process, optimized against UV rays and corrosion;
- Copper-free (<1%) precision die-cast aluminum housing and mounting plate;
- Extra-clear, tempered, silk-screened, flat glass diffuser;
- Custom-molded, anti-aging gasket(s);
- Stainless steel external hardware;
- High-efficiency LSB, combined with an optimized passive cooling system, provides a long LED life;
- Specular vacuum metallized polycarbonate reflector provides full cutoff, no glare design, and precision optical control;
- Type III light distribution;
- Input voltage: 120-277 V (50 / 60 Hz). Integral 1-10 V dimming driver;
- Field settable integral tri-level lumen/wattage package proprietary (IP rated) driver for SHIELD+ 1 (rotating factory setting at the lowest level);
- Standard knock-out template for multiple junction box mounting options;
- Suitable for three surface mounted conduit entry points with 1/2" NPS plugs;
- BUTTON and SENSEL (2R 277 V Dc / 347AC photoelectric switch options available (ordered separately);
- The luminaire may be configured with numerous options and multiple standard finishes. Not all options are available in all configurations. Consult factory for more information about specification sheet details to build your light.
- Product meets Buy American Act (BAA) requirements within AREA.

Photometric data

Technical drawings



Opulence Post Top (Zero Uplight) Outdoor Decorative Post Top

Have questions? Call us at (800) 436-7830

ORDERING GUIDE

TYPICAL ORDER EXAMPLE: OPS PT 8L SQ UNV 4K0 BLK ALDM2R1

Prefix

OPS - Opulence Small

Mounting

PT - Post Top
(2 3/8" 3" tenons)

Lumen Package†

3L - 3,000 lms, 25W
5L - 5,000 lms, 50W
8L - 8,000 lms, 75W
9L - 9,000 lms, 95W
12L - 12,000 lms, 114W
15L - 15,000 lms, 135W
18L - 17,000 lms, 150W

Distribution

3W - Type 3 Wide (Tenon)
4F - Type 4 (Forward Throw)
5Q - Type 5 Square
5W - Type 5 (Wide)
5QW - Type 5 Wide Square
5C - Type 5 (Concentrated)
AD - Asymmetric Diffused

Voltage

UNV - Universal Voltage (120-277V)
HV - High Voltage (347-480V)

Color Temperature / Rendering

5K0 - 5000K (CT) / 80 CRI
4K0 - 4000K (CT) / 80 CRI
3K0 - 3000K (CT) / 80 CRI

ZoneLite Approved (CT°):

3K7 - 3700K (CT) / 80 CRI
2K7 - 2700K (CT) / 80 CRI
AMB - Phosphor Converted Amber*

Finish

BLK - Black
BRZ - Dark Bronze
GPT - Graphite
MSP - Metallic Silver
PCP - Platinum Plus
WHT - White

Controls

Blank - None

Wireless Controls System
ALDM1 - AirLink Blue Wireless Motion & Photo Sensor Controller (9-15' MH)*
ALDM2 - AirLink Blue Wireless Motion & Photo Sensor Controller (16-40' MH)*

Stand-Alone Controls
EBT - 0-10v Dimming leads extended to housing exterior
CBTP - 7 Pin Control Receptacle ANSI C136.41.3*
IMSBT1 - Integral Bluetooth™ Motion and Photocell Sensor (9-24' MH)*
IMSBT2 - Integral Bluetooth™ Motion and Photocell Sensor (25-40' MH)*

Options

Blank - None
BB - Battery Back-up (0°C)*
CWBB - Cold Weather Battery Backup (-20°C)*
SP1 - 20kV Surge Protection Device
P2F - Polycarbonate Lens†

Need more information? Click here for our glossary

Have additional questions? Call us at (800) 436-7830

CONTROLS ACCESSORIES ORDERING INFORMATION*

Order Number	Description
52253A	Twist Lock Photocell (120V) for use with CBTP
52253C	Twist Lock Photocell (208-277V) for use with CBTP
52253B	Twist Lock Photocell (347V) for use with CBTP
52253UB	Twist Lock Photocell (480V) for use with CBTP
601489	AirLink 7 Pin Twist Lock Controller
601522	AirLink 7 Pin Twist Lock Calibrator
141528	Starting Cap for use with CBTP

MOUNTING ACCESSORIES ORDERING INFORMATION†

Order Number†	Description
754420GB	Internal Flush Mount Adapter for 4" OP Round Pole
752767GB	Post Top Wall Mount Bracket
753788GB	6"OD Post Top Arm Bracket
694638GB	Internal Tenon Adapter for 4" Square Pole
694643GB	Internal Tenon Adapter for 5" Square Pole
694642GB	Internal Tenon Adapter for 5" Square Pole
807870GB	Decorative Base Cover (1 1/2" Round Pole)
753152	10' Linear Mini Trailer Kit (2' decommendedper Luminaire)
752340	RMS - External Shield (Black Finish Only)

FUSING ACCESSORIES ORDERING INFORMATION†

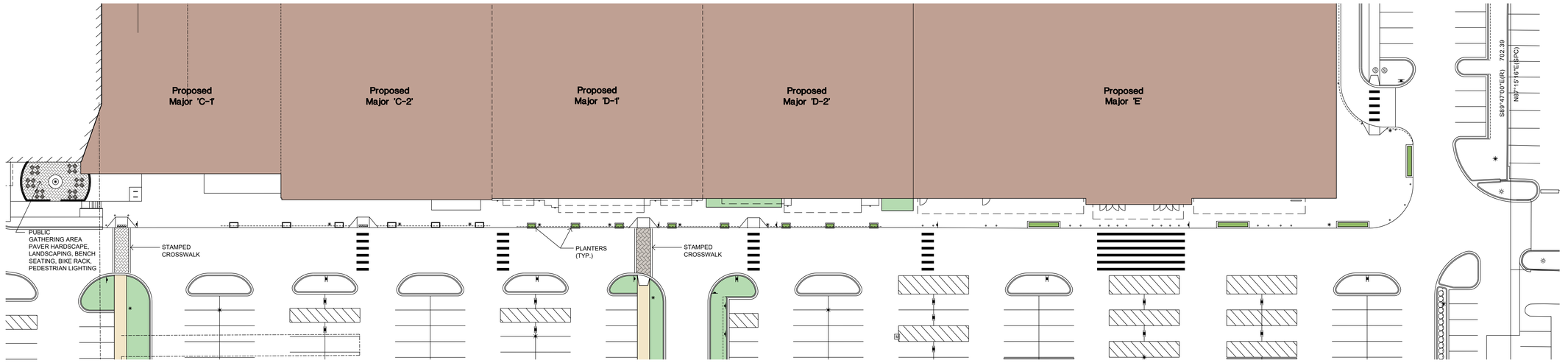
Order Number	Description
FK120	Single Fusing (120V)
FK277	Single Fusing (277V)
DFK347	Double Fusing (347V)
DFK480	Double Fusing (480V)

1. CSA-2270 thru 8A available with ML-8/13 Lumina Package.
2. Amber 3000 not available in CZ, 1K, or 5C lumen packages.
3. Camera can flash/cycle/activate via a phone app but can be downloaded from your smartphone's app store.
4. Not available with HV/347V options.
5. Fusing must be located in field for all pole.
6. Accessories are shipped unassembly and field installed.
7. "CLR" is the material to be used. Matte texture. See finish options for paint color selection.
8. Not available with 8/13 Gold Ballast or MVOLT/480V inverter options.

LSI EAST

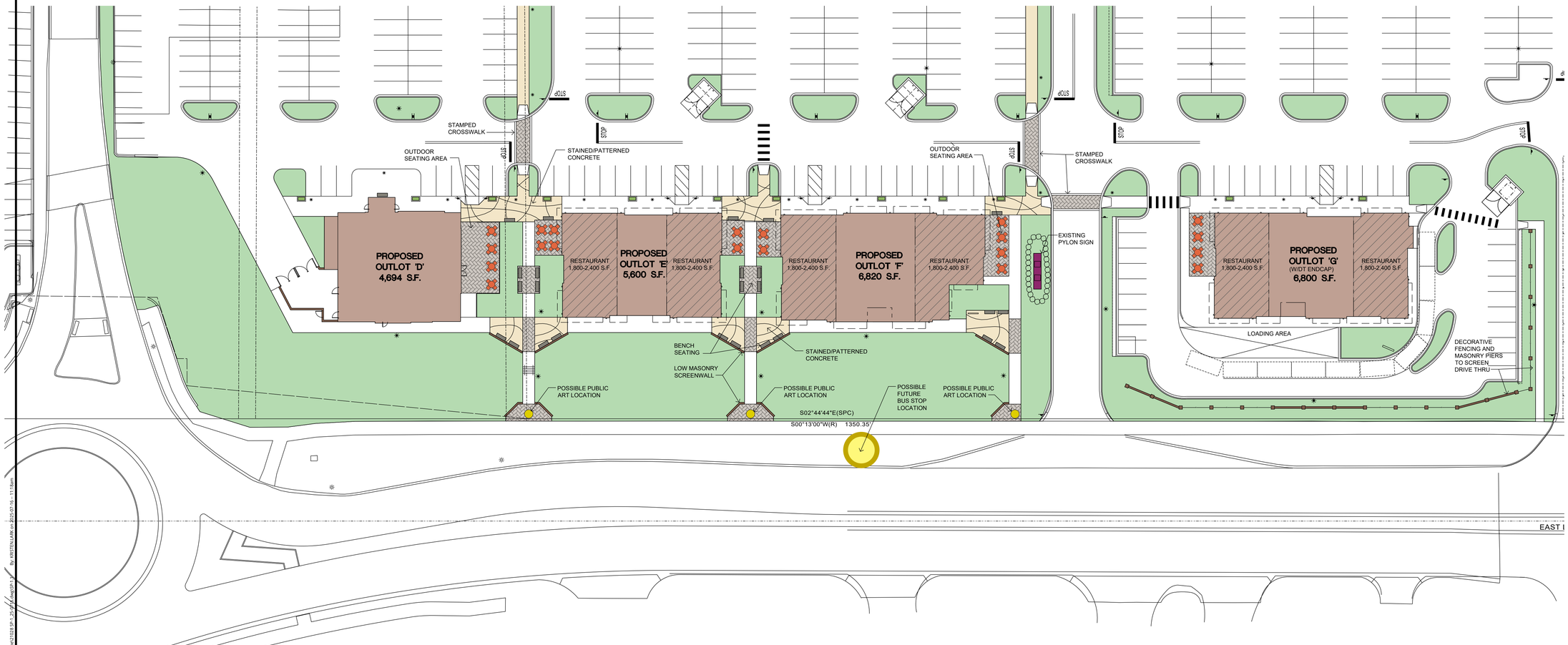
Hunters Square Shopping Center
Photometric Site Plan
Farmington Hills, MI

Designer
BG
Date
7/10/2025
Scale
Not to Scale
Drawing No.
001-REV6
Summary



Partial Site Plan - Major C, D & E

SCALE: 1" = 30'-0"



Partial Site Plan - Outparcels

SCALE: 1" = 30'-0"

C:\Drawings\21028\01\SD\SD2 Submittal\21028 SP-1.2.dwg, By: KRISTEN LARK, 9/8/2023 - 11:15am

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REV	DATE	DESCRIPTION
	09/08/23	REVIEW

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

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SOUTHFIELD
20750 Civic Center Dr., Suite 305
Southfield, MI 48076
Phone: 248.540.7700
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING, CT P.C.

SCALE: AS SHOWN	DRAWN BY: BDB
DESIGNED BY: BDB	REVIEWED BY: MD
DATE ISSUED: 09/08/23	PROJECT NUMBER: 21028-OD

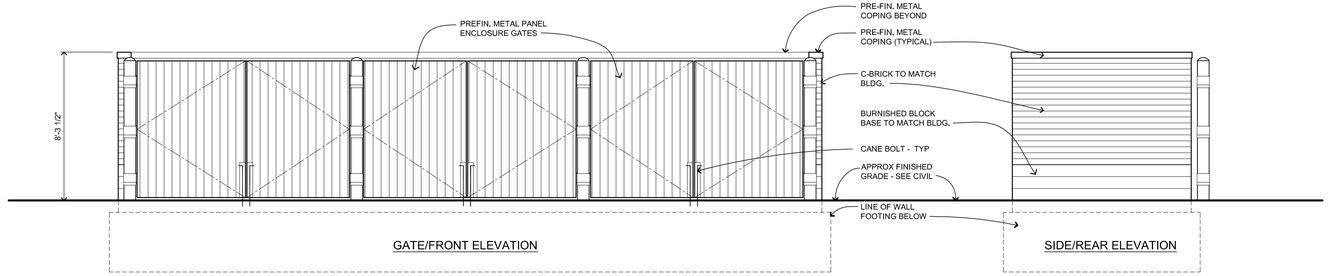
SHEET NAME:

Site Plan Amenities

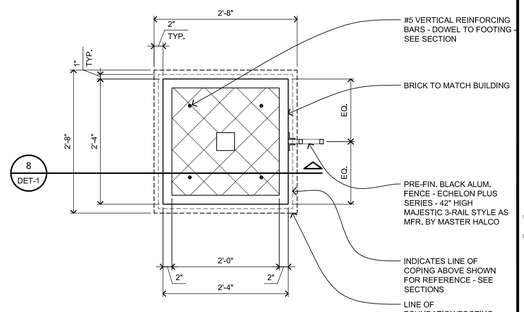
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SP-1.1

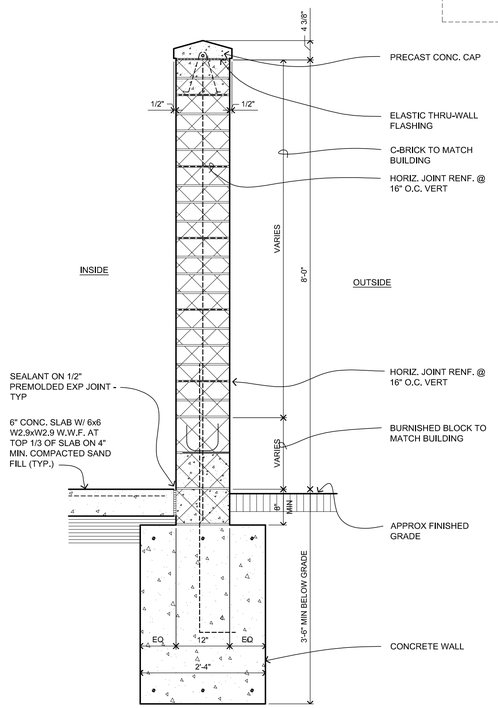
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



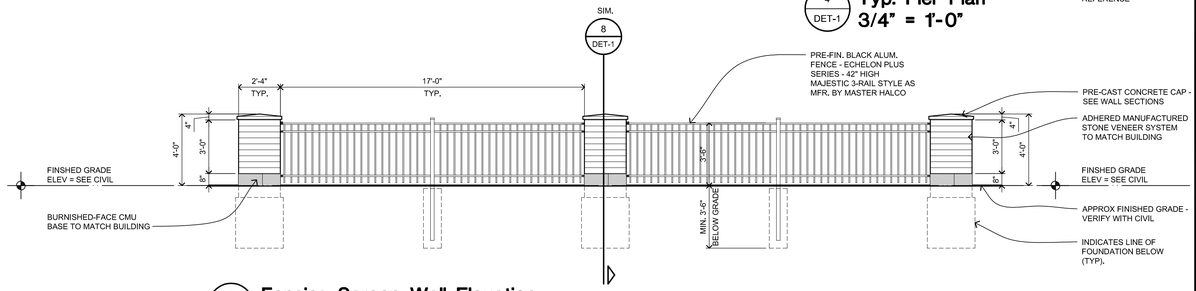
Dumpster Enclosure Elevations
1/4" = 1'-0"
(TYP. FOR SINGLE/DOUBLE/TRIPLE ENCLOSURES)



4 DET-1 Typ. Pier Plan
3/4" = 1'-0"

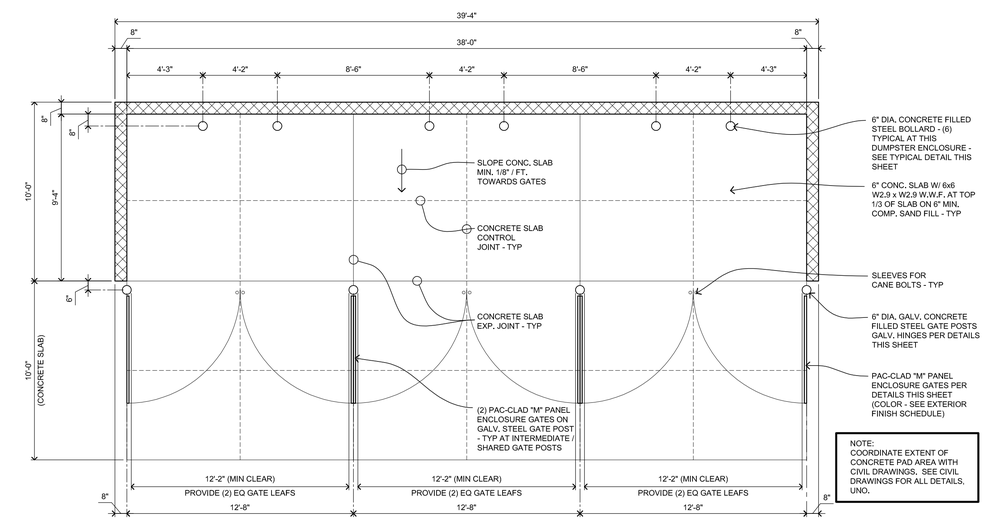


Dumpster Enclosure Wall Section
3/4" = 1'-0"

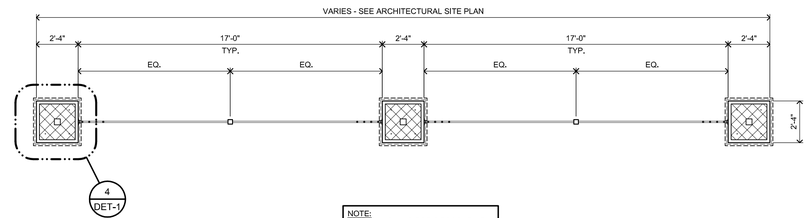


6 Fencing Screen Wall Elevation
1/4" = 1'-0"

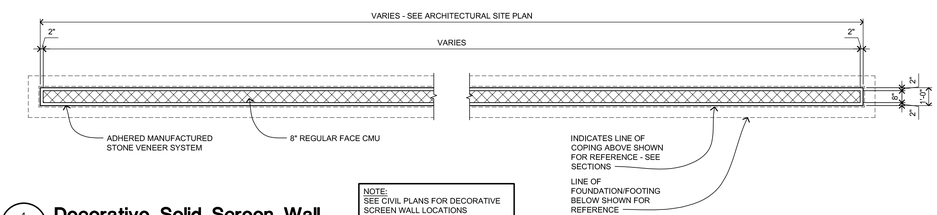
5 DET-1 Decorative Screen Wall Elevation
1/4" = 1'-0"



Dumpster Enclosure Plan - Triple
1/4" = 1'-0"



2 Fencing Screen Wall Plan
1/4" = 1'-0"



1 Decorative Solid Screen Wall Plan 1/4" = 1'-0"

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.	09/08/23	REVIEW

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SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

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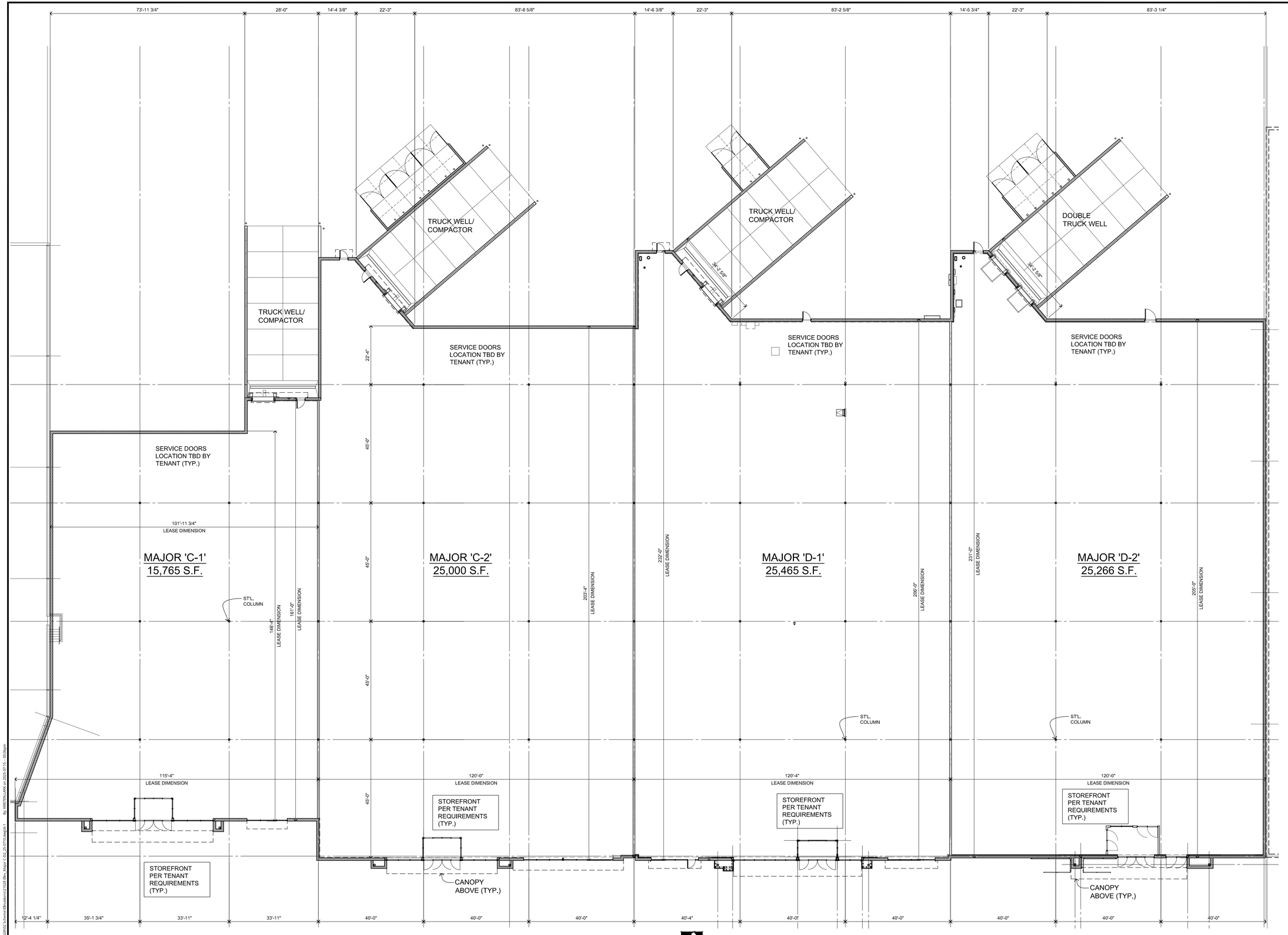
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DRAWN BY: BDB
DESIGNED BY: BDB
REVIEWED BY: MD
DATE ISSUED: 09/08/23
PROJECT NUMBER: 21028-OD

SHEET NAME:
Architectural Site Details

DRAWING NUMBER:
DET-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

G:\Drawings\2021\21028\02 Drawings\21028-SP-1A_DET-1 25-0719.dwg(DET-1 By: MARTIN.PYKARI on 2025-07-19 - 03:58pm



Floor Plan

Scale: 1/16"=1'-0"

D:\Drawings\2021\210203 Shared\Revit\m210203_Bldg_Major C-D_25-01V3.rvt By KRISTEN.LASK on 2025-07-15 - 05:00pm

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.	06/27/23	REVIEW
.	09/24/23	REVISED
.	09/07/23	REVISED

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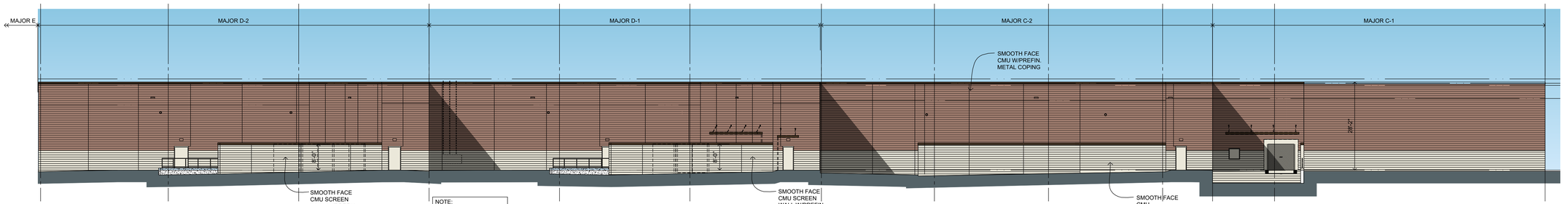
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SCALE: AS SHOWN
DRAWN BY: KL
DESIGNED BY: KL
REVIEWED BY: MD
DATE ISSUED:
PROJECT NUMBER: 21028

SHEET NAME: Conceptual Floor Plan

DRAWING NUMBER: A-1

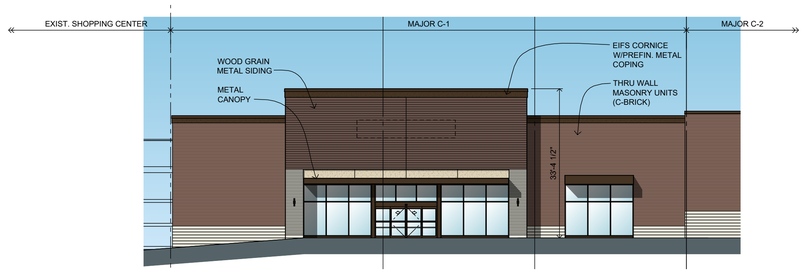
NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

Partial West Elevation

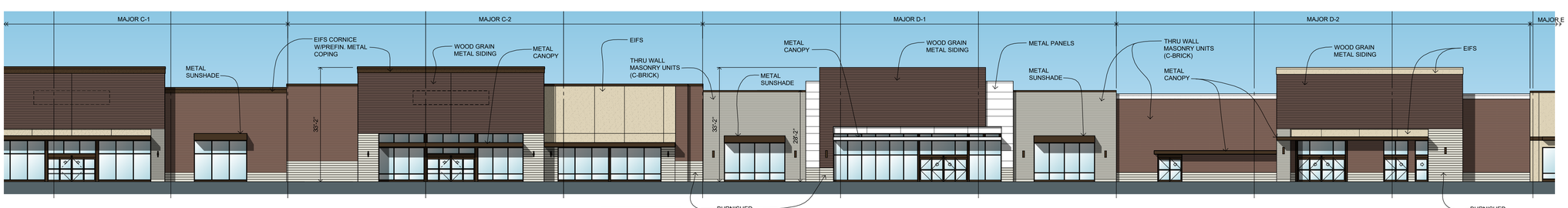
Scale: 1/16"=1'-0"



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

Partial East Elevation

Scale: 1/16"=1'-0"



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

Partial East Elevation

Scale: 1/16"=1'-0"

C:\Drawings\2021\21028\03 Schemes\Revisions\21028 Rev Major E-D2-25-2710.dwg 8.x.2 By KRISTEN LAIRE on 2025-07-15 - 10:52pm

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.	09/15/23	OWNER REVIEW
.	08/29/23	REVISED
.	12/05/23	REVISED

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Farmington Hills, MI

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SCALE: AS SHOWN
DRAWN BY: KL
DESIGNED BY: KL
REVIEWED BY: MD
DATE ISSUED:
PROJECT NUMBER: 21028

SHEET NAME:

Conceptual Building Elevations

DRAWING NUMBER:

A-2

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

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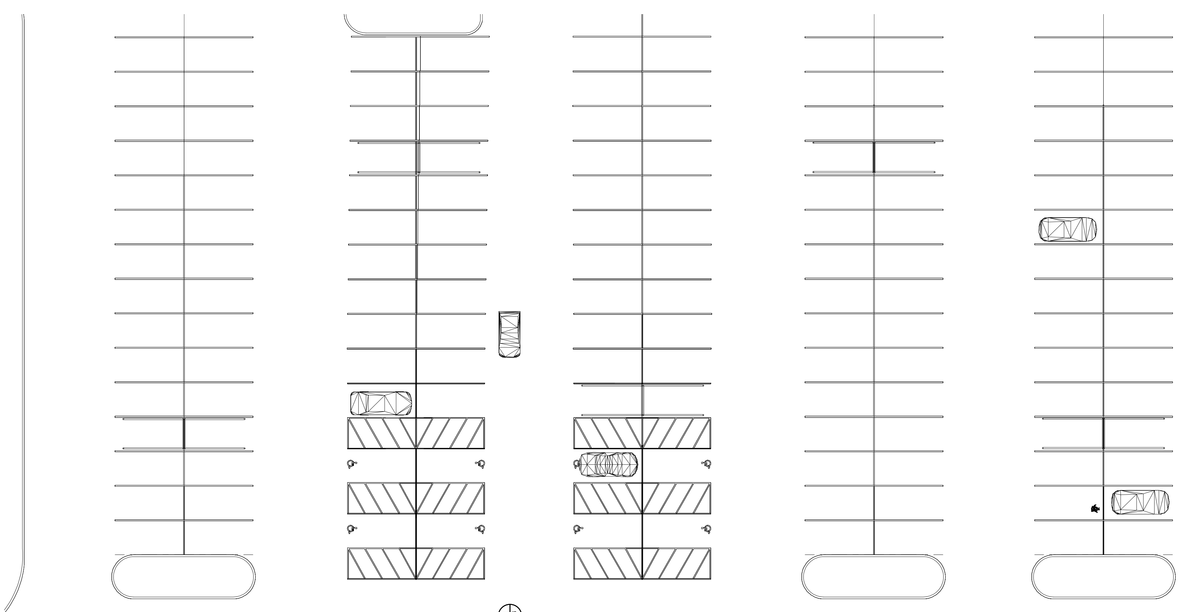
FARMINGTON HILLS, MICHIGAN
ORCHARD LAKE ROAD AND 14 MILE ROAD
FARMINGTON HILLS, MI 48334

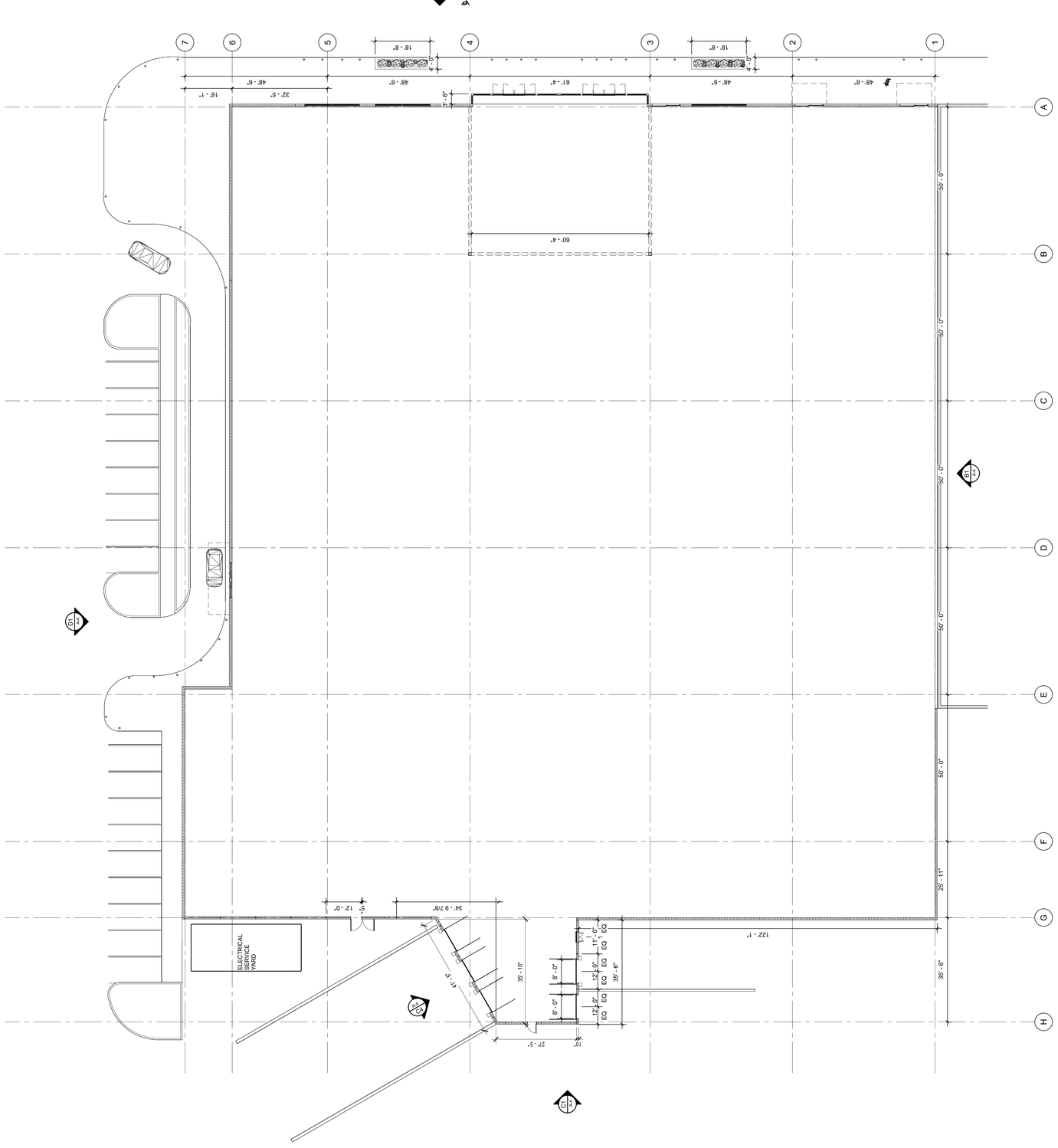
OVERALL FLOOR PLAN

ISSUED FOR:
PERMIT
BID
CONSTRUCTION

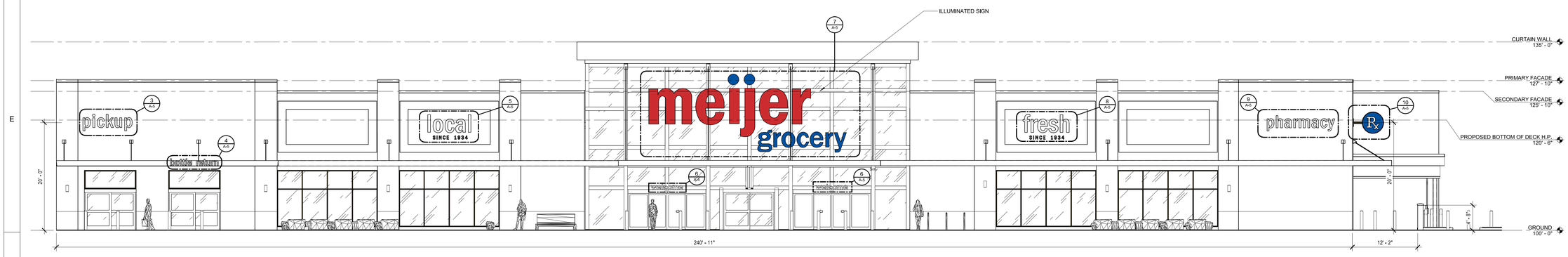
PROJECT MANAGER: TRR
DESIGNER: KJH
JOB NO. 23010766A

A-3



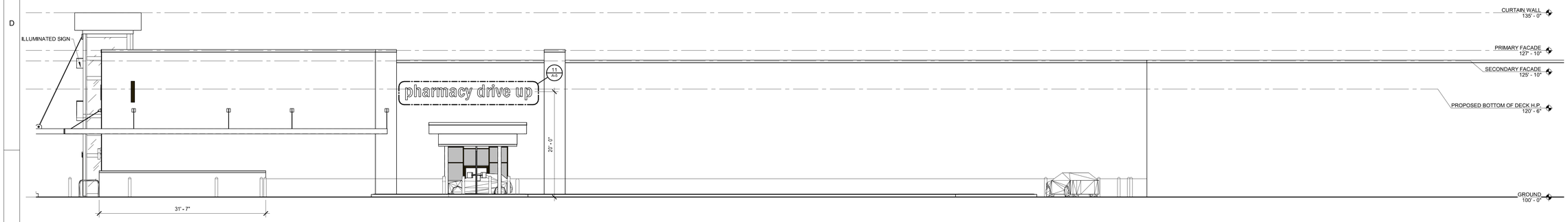


A1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"



EAST ELEVATION - SIGNAGE

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



NORTH ELEVATION - SIGNAGE

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



3 PICKUP SIGNAGE — 16.81 S.F.
SCALE : 1/2" = 1'-0"



4 BOTTLE RETURN SIGNAGE — 9.90 S.F.
SCALE : 1/2" = 1'-0"



5 LOCAL SIGNAGE — 30.00 S.F.
SCALE : 1/2" = 1'-0"



6 WELCOME SIGNAGE — 8.45 S.F.
SCALE : 1/2" = 1'-0"



8 FRESH SIGNAGE — 32.19 S.F.
SCALE : 1/2" = 1'-0"

EAST ELEVATION SIGNAGE

TOTAL SIGNAGE: 675.49 S.F.

TOTAL ELEVATION: 6,981.69 S.F.

SIGNAGE PERCENTAGE OF ELEVATION: 9.68%

NORTH ELEVATION SIGNAGE

TOTAL SIGNAGE: 41.93 S.F.

TOTAL ELEVATION: 6,968.71 S.F.

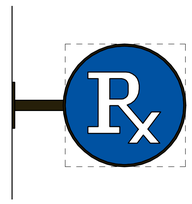
SIGNAGE PERCENTAGE OF ELEVATION: 0.60%



7 MEIJER GROCERY SIGNAGE — 531.67 S.F.
SCALE : 1/2" = 1'-0"
INTERNALLY ILLUMINATED



9 PHARMACY SIGNAGE — 22.02 S.F.
SCALE : 1/2" = 1'-0"



10 RX BLADE SIGNAGE — 16.00 S.F.
SCALE : 1/2" = 1'-0"
INTERNALLY ILLUMINATED



11 PHARMACY DRIVE UP SIGNAGE — 41.93 S.F.
SCALE : 1/2" = 1'-0"

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REV.	DATE	DESCRIPTION

FARMINGTON HILLS, MICHIGAN
ORCHARD LAKE ROAD AND 14 MILE ROAD
FARMINGTON HILLS, MI 48334

SIGNAGE

ISSUED FOR:	
PERMIT	
BID	
CONSTRUCTION	

PROJECT MANAGER	DESIGNER
TRR	KJH

JOB NO.
23010766A

A-4.3









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REV.	DATE	DESCRIPTION

FARMINGTON HILLS, MICHIGAN
ORCHARD LAKE ROAD AND 14 MILE ROAD
FARMINGTON HILLS, MI 48334

3D VIEWS

ISSUED FOR:	
PERMIT	
BID	
CONSTRUCTION	

PROJECT MANAGER	DESIGNER
TRR	KJH

JOB NO.
23010766A

A-6







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ARCHITECTS ENGINEERS PLANNERS
7050 W. Saginaw Highway Suite 200
Lansing, MI 48917
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f: 517.272.9836

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REV.	DATE	DESCRIPTION

FARMINGTON HILLS, MICHIGAN
ORCHARD LAKE ROAD AND 14 MILE ROAD
FARMINGTON HILLS, MI 48334

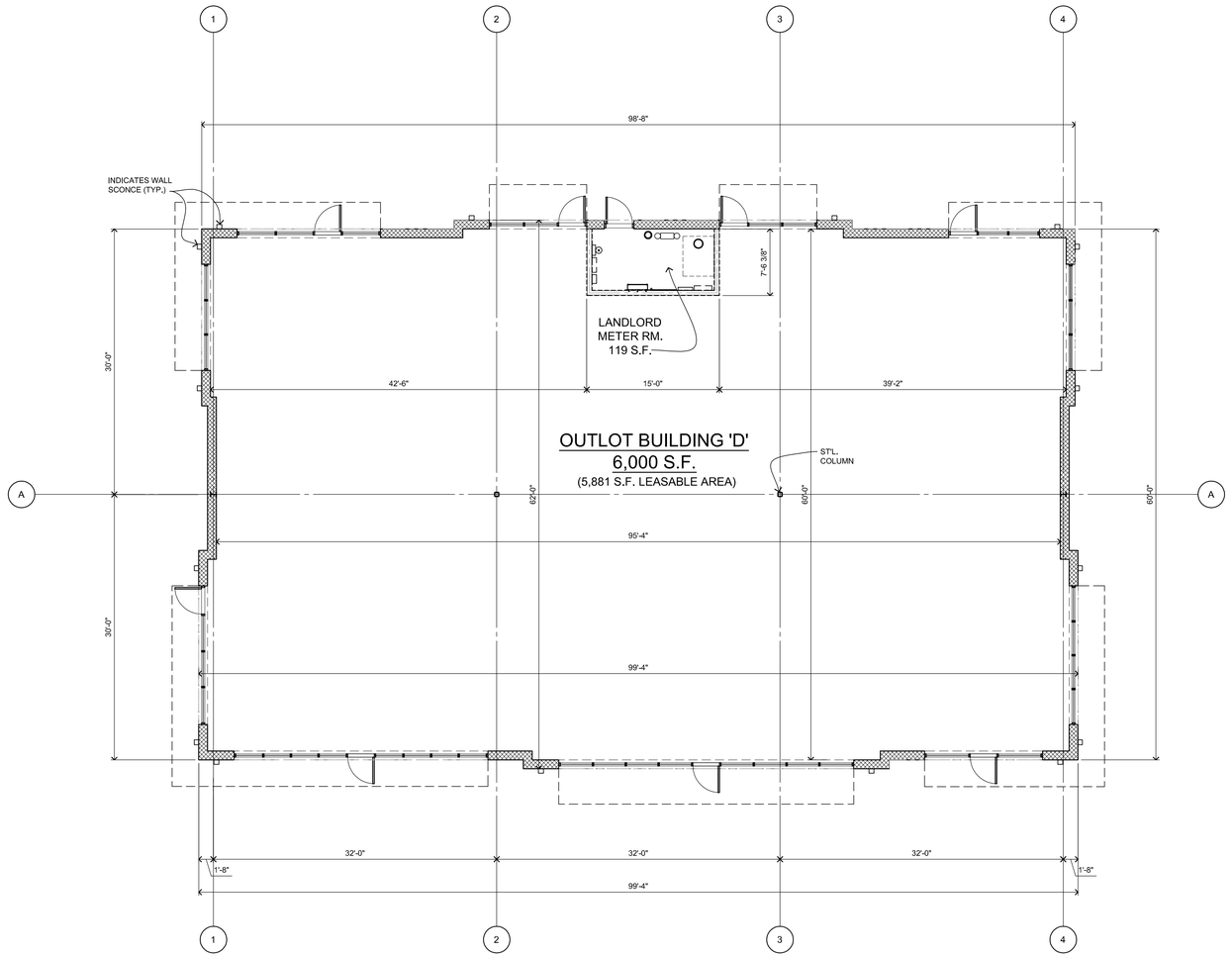
EVENING AND PHARMACY 3D VIEWS

ISSUED FOR:	
PERMIT	
BID	
CONSTRUCTION	

PROJECT MANAGER	DESIGNER
TRR	KJH

JOB NO.
23010766A

A-7



Floor Plan - Outlot Building 'D'

6,000 S.F. **Scale: 1/8"=1'-0"**

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Formerly Known as ROGVOY ARCHITECTS

REV	DATE	DESCRIPTION
.	6/27/23	REVIEW
.	09/07/23	REVIEW

Proposed Outlot Building 'D' at

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

Colliers Engineering & Design

SOUTHFIELD
20750 Civic Center Dr., Suite 305
Southfield, MI 48076
Phone: 248.540.7700
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING, CT P.C.

SCALE:	DRAWN BY:
AS SHOWN	BDB
DESIGNED BY:	REVIEWED BY:
BDB	MD
DATE ISSUED:	PROJECT NUMBER:
06/27/23	21028-OD

SHEET NAME:

Conceptual Floor Plan

DRAWING NUMBER:

A-5

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

C:\Drawings\2021\21028\02 Scheme\Overall Footprint\ 21028-OD.dwt 6/27/2023 12:14pm By: MATTHEW.PICKERT on 2023-06-27

WEST ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 75.8% (452 S.F.)	EAST ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 49.1% (290.75 S.F.)
NORTH ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 46.1% (166 S.F.)	SOUTH ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 46.1% (166 S.F.)
OVERALL TRANSPARENCY PERCENTAGE : 56.3% (1,074.75 S.F.)	



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

North Elevation

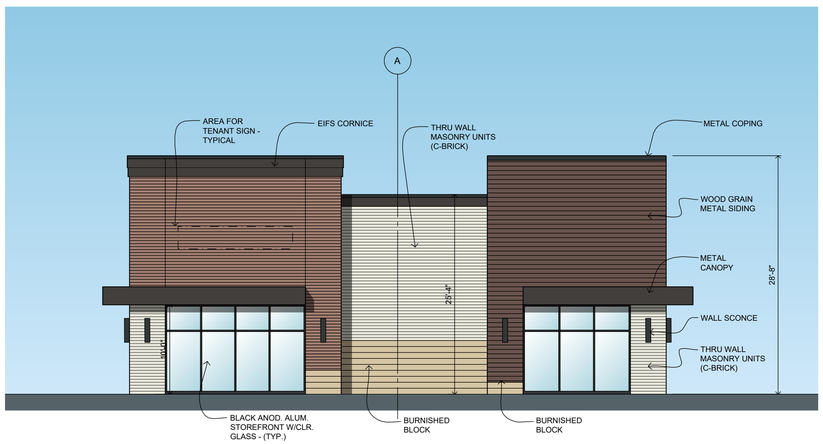
Scale: 1/8"=1'-0"



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

East Elevation

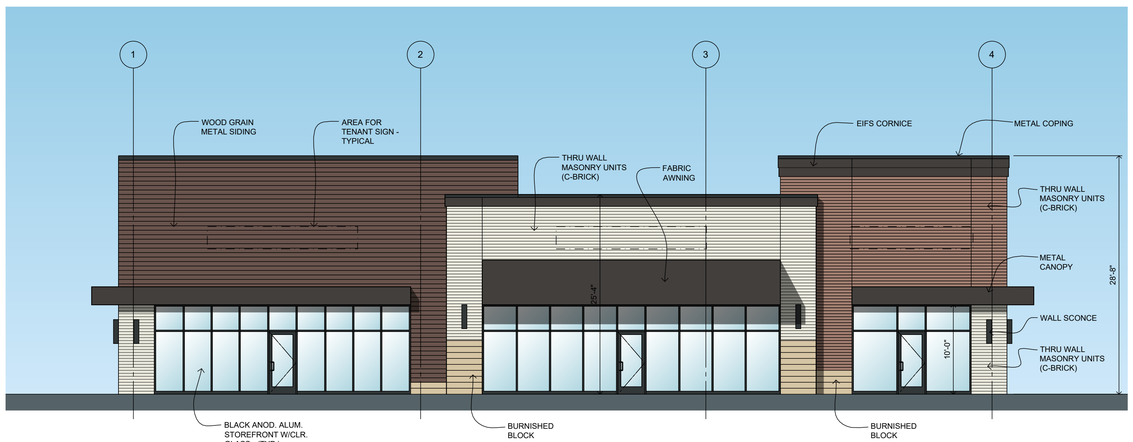
Scale: 1/8"=1'-0"



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

South Elevation

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



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

West Elevation

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

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Formerly Known as ROGVOY

REV	DATE	DESCRIPTION
	06/28/23	REVIEW
.	09/07/23	REVIEW
.	12/05/23	REVISED
.	.	.
.	.	.

.

Proposed Outlot Building 'D' at

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

Colliers Engineering & Design

SOUTHFIELD
20750 Civic Center Dr., Suite 305
Southfield, MI 48076
Phone: 248.540.7700
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING, CT P.C.

SCALE: AS SHOWN	DRAWN BY: BDB
DESIGNED BY: BDB	REVIEWED BY: MD
DATE ISSUED: 06/28/2023	PROJECT NUMBER: 21028-OD

SHEET NAME:

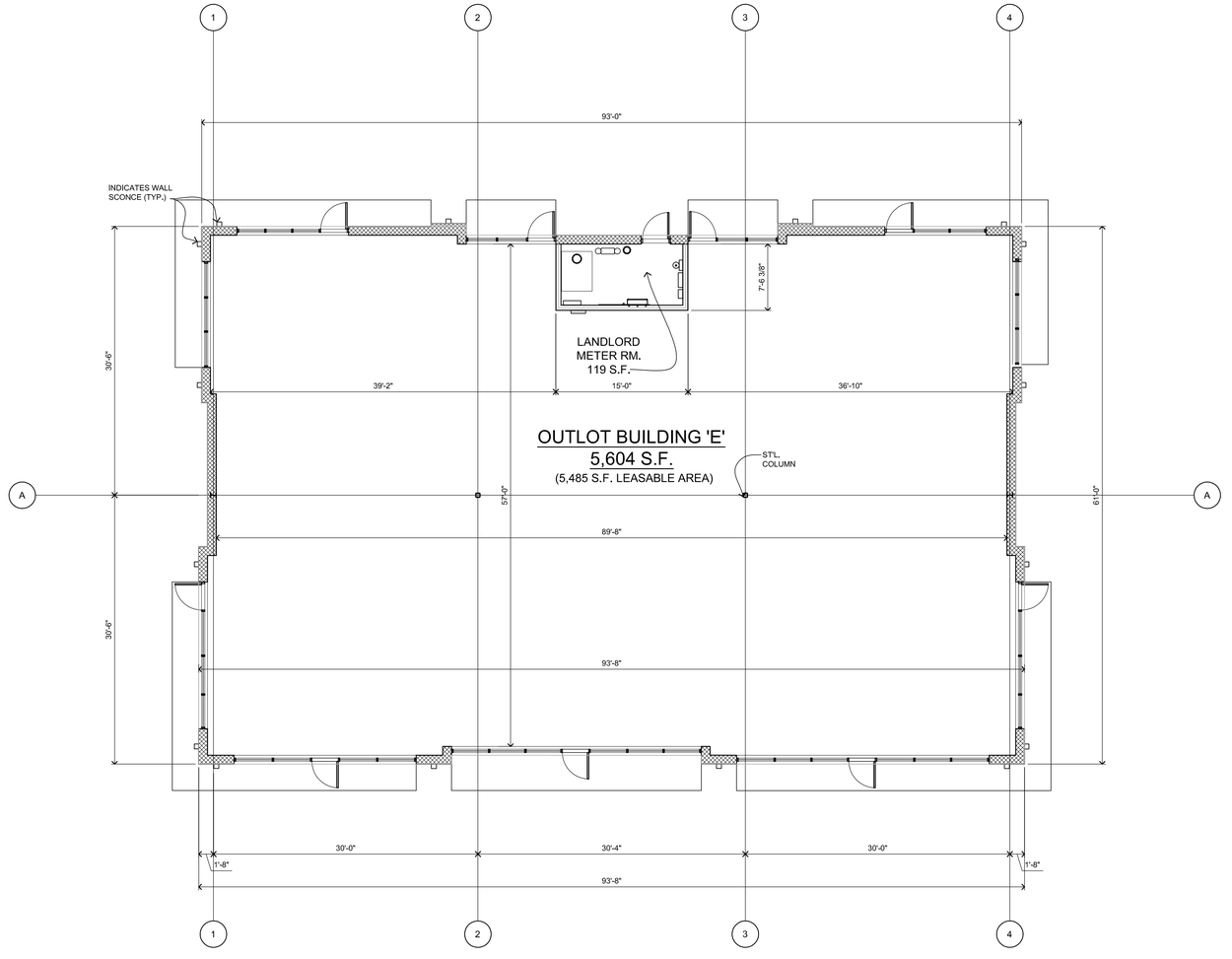
Conceptual Building Elevations

DRAWING NUMBER:

A-6

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

G:\Drawings\2021\21028\02 Scheme\Overall Outparcel LODs\Outlot D\21028-OD LOD 25-0710-2.dwg, By: KAITLIN.PICKART on 2025-07-10 – 01:41pm



Floor Plan - Outlot Building 'E'

5,604 S.F. **Scale: 1/8"=1'-0"**

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Formerly Known as ROGVOY ARCHITECTS

REV	DATE	DESCRIPTION
	06/27/23	REVIEW
.	09/07/23	REVIEW
.	.	.
.	.	.
.	.	.
.		

Proposed Outlot Building 'E' at

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

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Southfield, MI 48076
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SCALE: AS SHOWN	DRAWN BY: BDB
DESIGNED BY: BDB	REVIEWED BY: MD
DATE ISSUED: 06/27/23	PROJECT NUMBER: 21028-OE

SHEET NAME:

Conceptual Floor Plan

DRAWING NUMBER:

A-7

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

C:\Drawings\2021\21028\02 Shared\Shared Projects\01 CEDV\Outlet E\21028-OE (10-25-0916).dwg By: MATTHEW PICKARD on 2023-07-19 - 01:31pm

WEST ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 82.9% (466 S.F.)	EAST ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 47.8% (267 S.F.)
NORTH ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 47% (172 S.F.)	SOUTH ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 47% (172 S.F.)
OVERALL TRANSPARENCY PERCENTAGE : 58.1% (1,077 S.F.)	



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

North Elevation

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



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

East Elevation

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



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

South Elevation

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



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

West Elevation

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

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Formerly Known as ROGVOY

REV	DATE	DESCRIPTION
	06/28/23	REVIEW
.	09/07/23	REVIEW
.	12/05/23	REVISED

Proposed Outlot Building 'E' at

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

Colliers Engineering & Design
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SCALE: AS SHOWN	DRAWN BY: BDB
DESIGNED BY: BDB	REVIEWED BY: MD
DATE ISSUED: 06/28/23	PROJECT NUMBER: 21028-OE

SHEET NAME:

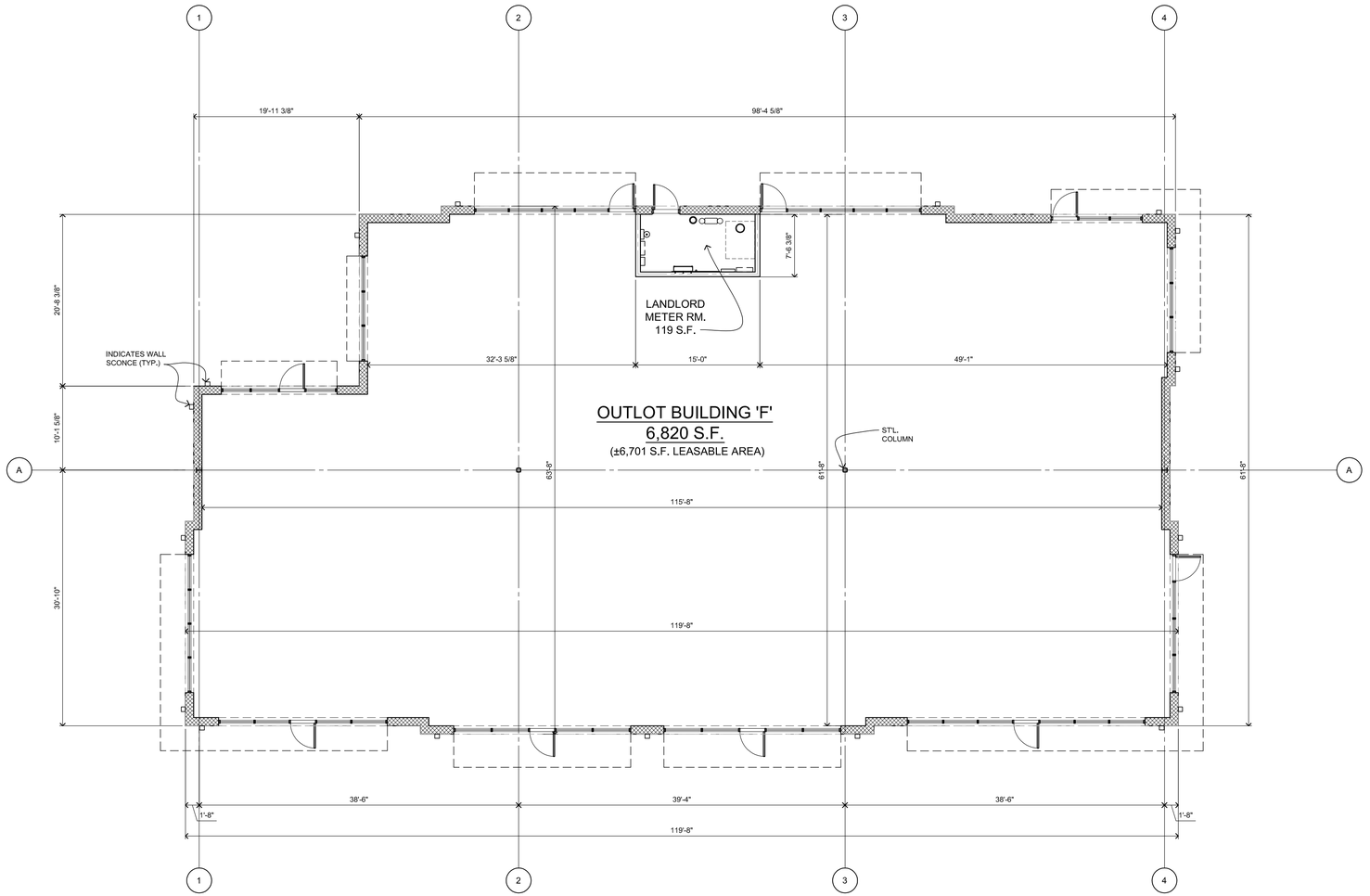
Conceptual Building Elevations

DRAWING NUMBER:

A-8

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

G:\Drawings\2021\21028\02 Scheme\Overall Outparcel LOD\Outlot E\21028-OE LOD 25-0710.dwg, By: KAITLIN PICKART on 2025-07-10 - 01:44pm



Floor Plan - Outlot Building 'F'

+/-6,820 S.F. Scale: 1/8"=1'-0"

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Formerly Known as ROGVOY ARCHITECTS

REV	DATE	DESCRIPTION
.	06/27/23	REVIEW
.	09/07/23	REVISED
.	.	.
.	.	.
.	.	.
.		

Proposed Outlot Building 'F' at

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

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COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING, CT P.C.

SCALE:	DRAWN BY:
AS SHOWN	BDB
DESIGNED BY:	REVIEWED BY:
BDB	MD
DATE ISSUED:	PROJECT NUMBER:
06/27/2023	21028-OF

SHEET NAME:

Conceptual Floor Plan

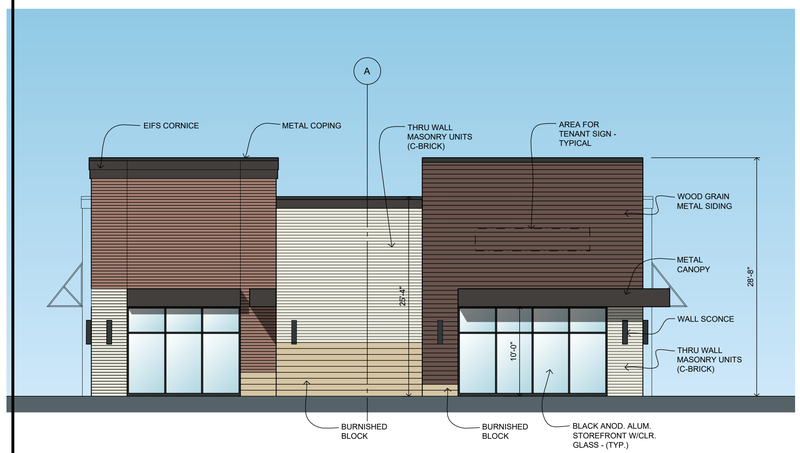
DRAWING NUMBER:

A-9

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

G:\Drawings\2021\210280\2 Submit\Shell & Outparcel\Cmb\Outlot Plot\108 FOF LOD 25 (FTI).dwg 9:9 By: KAITLIN PEKART on 2025-07-15 - 01:53pm

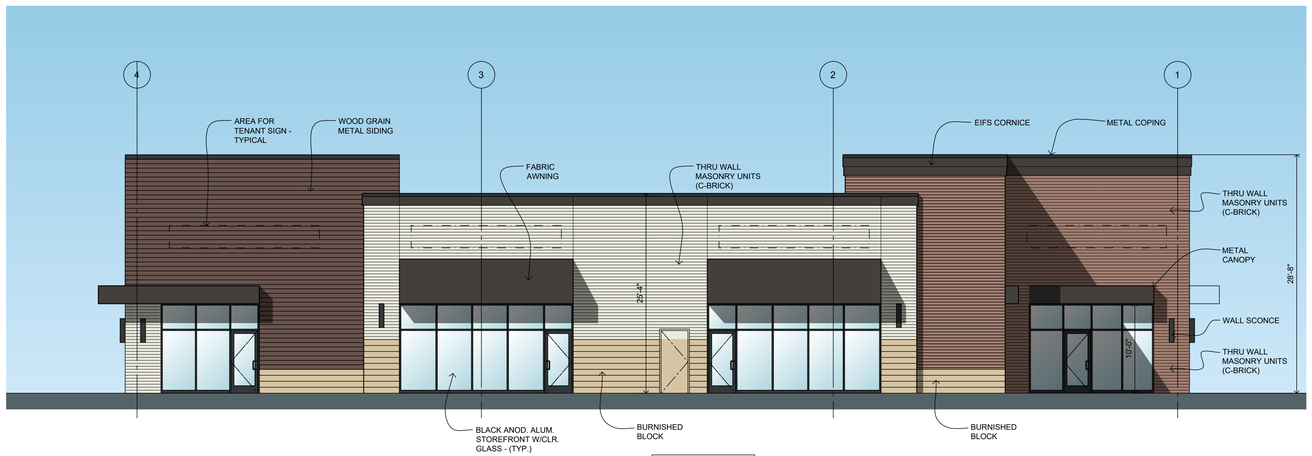
WEST ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 76.6% (550 S.F.)	EAST ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 53.5% (382.6 S.F.)
NORTH ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 46.5% (176 S.F.)	SOUTH ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 46.5% (176 S.F.)
OVERALL TRANSPARENCY PERCENTAGE : 59.1% (1,284.6 S.F.)	



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

North Elevation

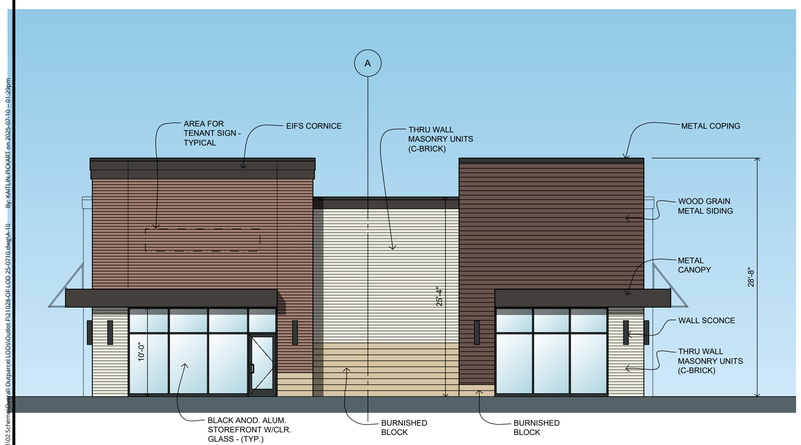
Scale: 1/8"=1'-0"



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

East Elevation

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



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

South Elevation

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



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

West Elevation

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

G:\Drawings\2021\21028\02-Schematic\Working\Outparcel\LOD\Outlot F\21028-OF-LOD-25-0710.dwg A-10 By: KAITLIN.BOGART on 2025-07-10 - 01:29pm

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Formerly Known as ROGVOY

REV	DATE	DESCRIPTION
.	06/28/23	REVIEW
.	09/07/23	REVISED
.	12/05/23	REVISED

Proposed Outlot Building 'F' at

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

Colliers Engineering & Design
SOUTHFIELD
20750 Civic Center Dr., Suite 305
Southfield, MI 48076
Phone: 248.540.7700
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING, CT P.C.

SCALE: AS SHOWN	DRAWN BY: BDB
DESIGNED BY: BDB	REVIEWED BY: MD
DATE ISSUED: 06/28/2023	PROJECT NUMBER: 21028-OF

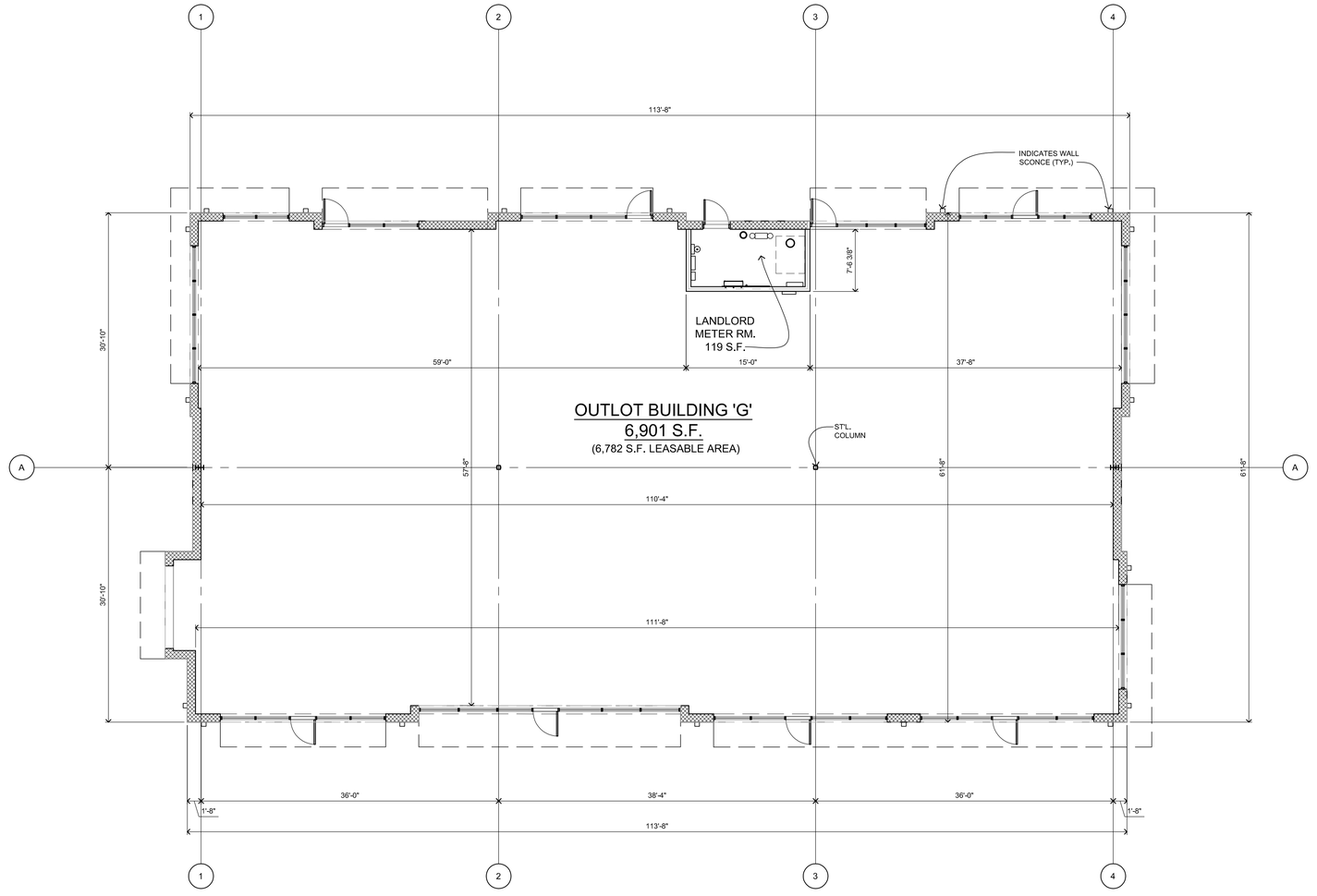
SHEET NAME:

Conceptual Building Elevations

DRAWING NUMBER:

A-10

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



Floor Plan - Outlot Building 'G'

6,901 S.F. Scale: 1/8"=1'-0"

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

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Formerly Known as ROGVOY ARCHITECTS

REV	DATE	DESCRIPTION
.	06/27/23	REVIEW
.	09/07/23	REVIEW
.	12/05/23	REVISED
.	.	.
.	.	.

Proposed Outlot Building 'G' at

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

Colliers Engineering & Design
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20750 Civic Center Dr., Suite 305
Southfield, MI 48076
Phone: 248.540.7700
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING, CT P.C.

SCALE:	DRAWN BY:
AS SHOWN	BDB
DESIGNED BY:	REVIEWED BY:
BDB	MD
DATE ISSUED:	PROJECT NUMBER:
06/27/2023	21028-OG

SHEET NAME:

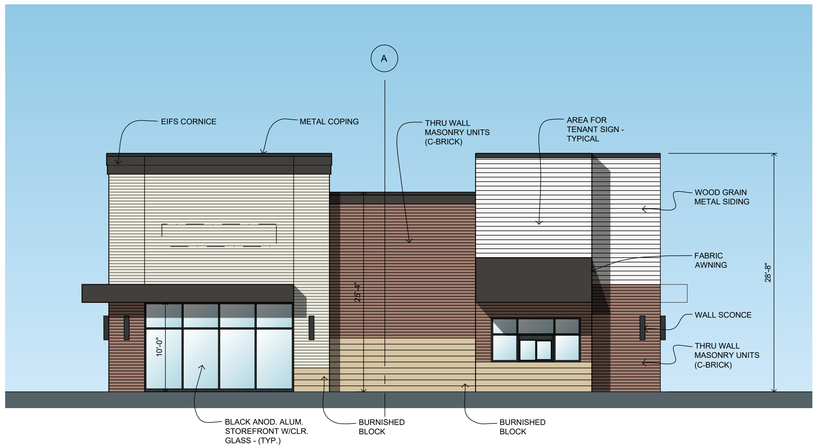
Conceptual Floor Plan

DRAWING NUMBER:

A-11

G:\Drawings\2021\21028\02 Drawings & Documents\04 Outlots\Outlot G\21028-OG-23-01TH.dwg|A-11 By: KARTHIK PICKART on 2025-01-10 - 10:31pm

WEST ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 82.4% (562 S.F.)	EAST ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 58.1% (394 S.F.)
NORTH ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 40.5% (150 S.F.)	SOUTH ELEVATION TRANSPARENCY PERCENTAGES : (MEASURED BETWEEN 2'-8" A.F.F.) PROVIDED: 47.5% (176 S.F.)
OVERALL TRANSPARENCY PERCENTAGE : 61.0% (1,282 S.F.)	



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

North Elevation

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



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

East Elevation

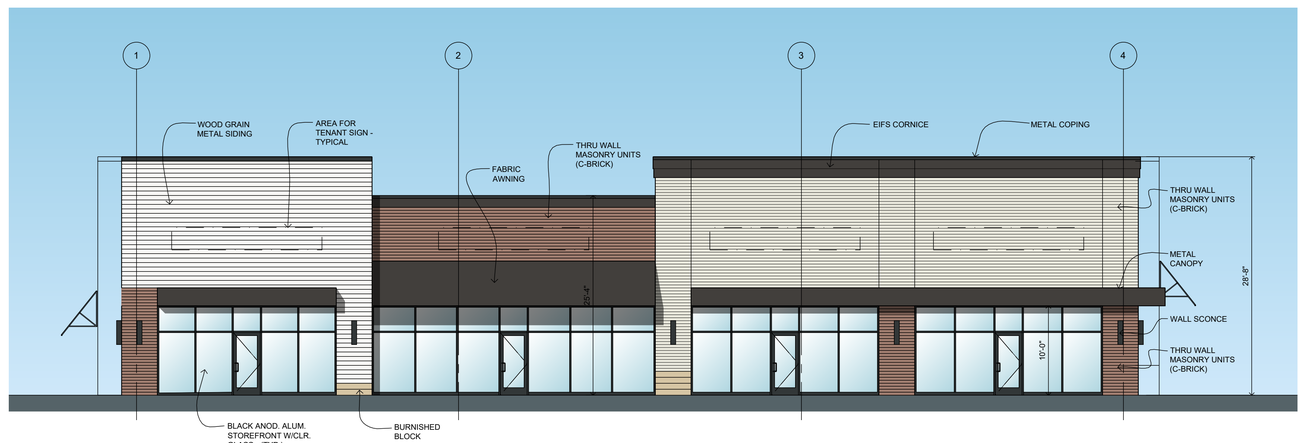
Scale: 1/8"=1'-0"



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

South Elevation

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



NOTE:
ROOF TOP UNITS SHALL BE SCREENED BY BLDG. PARAPET WALLS

West Elevation

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

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Formerly Known as ROGVOY ARCHITECTURE

REV	DATE	DESCRIPTION
.	06/28/23	REVIEW
.	09/07/23	REVIEW
.	12/05/23	REVISED

Proposed Outlot Building 'G' at

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

Colliers Engineering & Design
SOUTHFIELD
20750 Civic Center Dr., Suite 305
Southfield, MI 48076
Phone: 248.540.7700
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING, CT P.C.

SCALE: AS SHOWN	DRAWN BY: BDB
DESIGNED BY: BDB	REVIEWED BY: MD
DATE ISSUED: 06/28/2023	PROJECT NUMBER: 21028-OG

SHEET NAME:

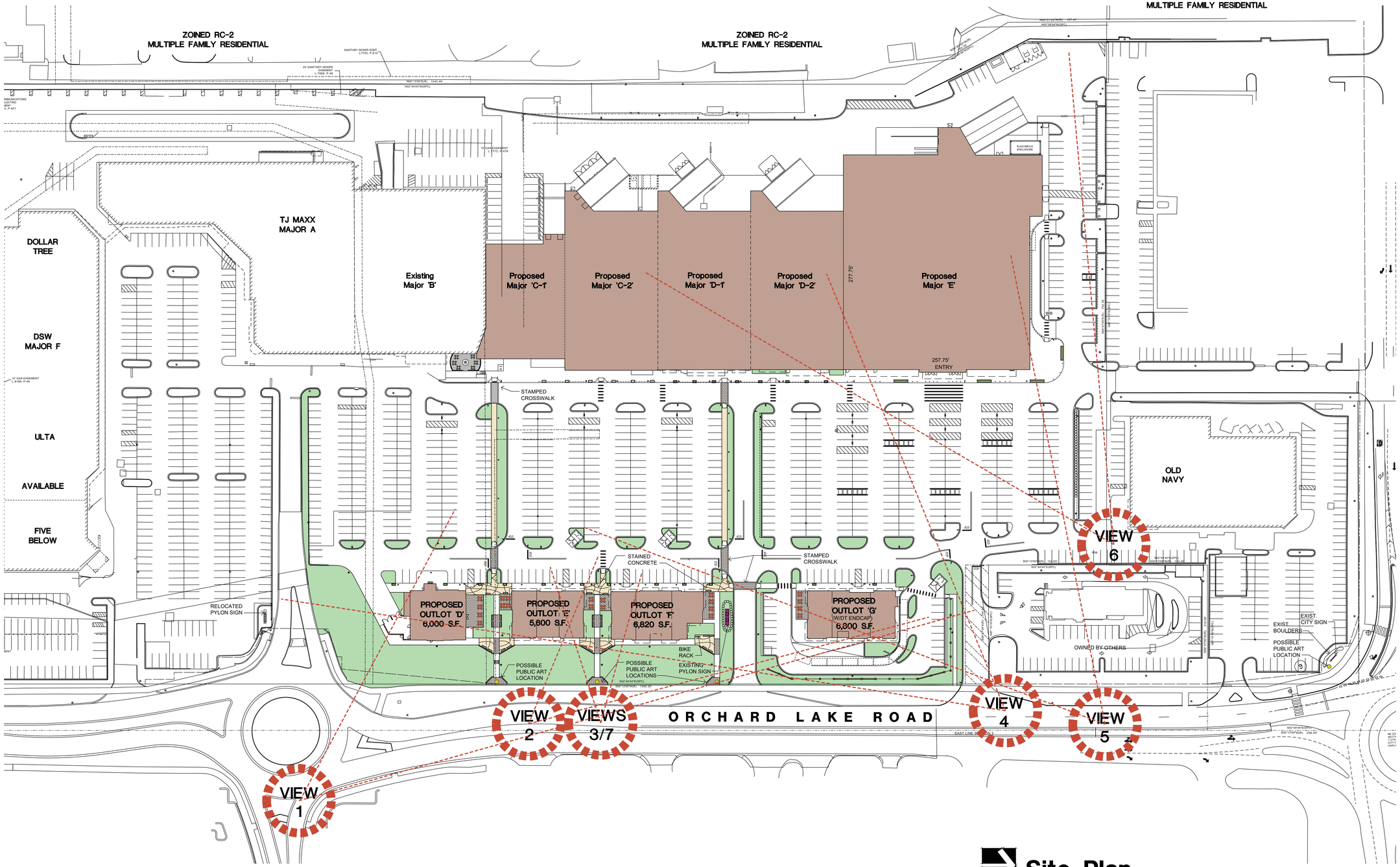
Conceptual Building Elevations

DRAWING NUMBER:

A-12

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

C:\Drawings\2021\21028\02 Schemes\Overall Outparcel\21028-OG1-25-0918.dwg By: AMTHUN Plotted on: 2025-09-18 - 02:41pm



Site Plan

SCALE: 1" = 60'-0"

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Formerly Known as ROGVOY

REV	DATE	DESCRIPTION
.	09/08/23	REVIEW

Hunter's Square Shopping Center

SWC Orchard Lake Rd. & 14 Mile Rd.
Farmington Hills, MI

Colliers Engineering & Design
SOUTHFIELD
20750 Civic Center Dr., Suite 305
Southfield, MI 48076
Phone:248.540.7700
COLLIERS ENGINEERING & DESIGN, ARCHITECTURE, LANDSCAPE ARCHITECTURE, SURVEYING, CT P.C.

SCALE: AS SHOWN	DRAWN BY: BDB
DESIGNED BY: BDB	REVIEWED BY: MD
DATE ISSUED: 09/08/23	PROJECT NUMBER: 21028-OD

SHEET NAME: Rendering Views

DRAWING NUMBER: SP-RV

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

G:\Drawings\2021\21028\02-Scheme2\21028_SP-1_25-07-16.dwg|SP-RV By: ABISTELLARI on 2025-07-16 - 11:23am



(SEE SHEET SP-RV FOR LOCATION)

VIEW-1



(SEE SHEET SP-RV FOR LOCATION)

VIEW-2



(SEE SHEET SP-RV FOR LOCATION) VIEW-3



(SEE SHEET SP-RV FOR LOCATION)

VIEW-4



(SEE SHEET SP-RV FOR LOCATION)

VIEW-5



(SEE SHEET SP-RV FOR LOCATION)

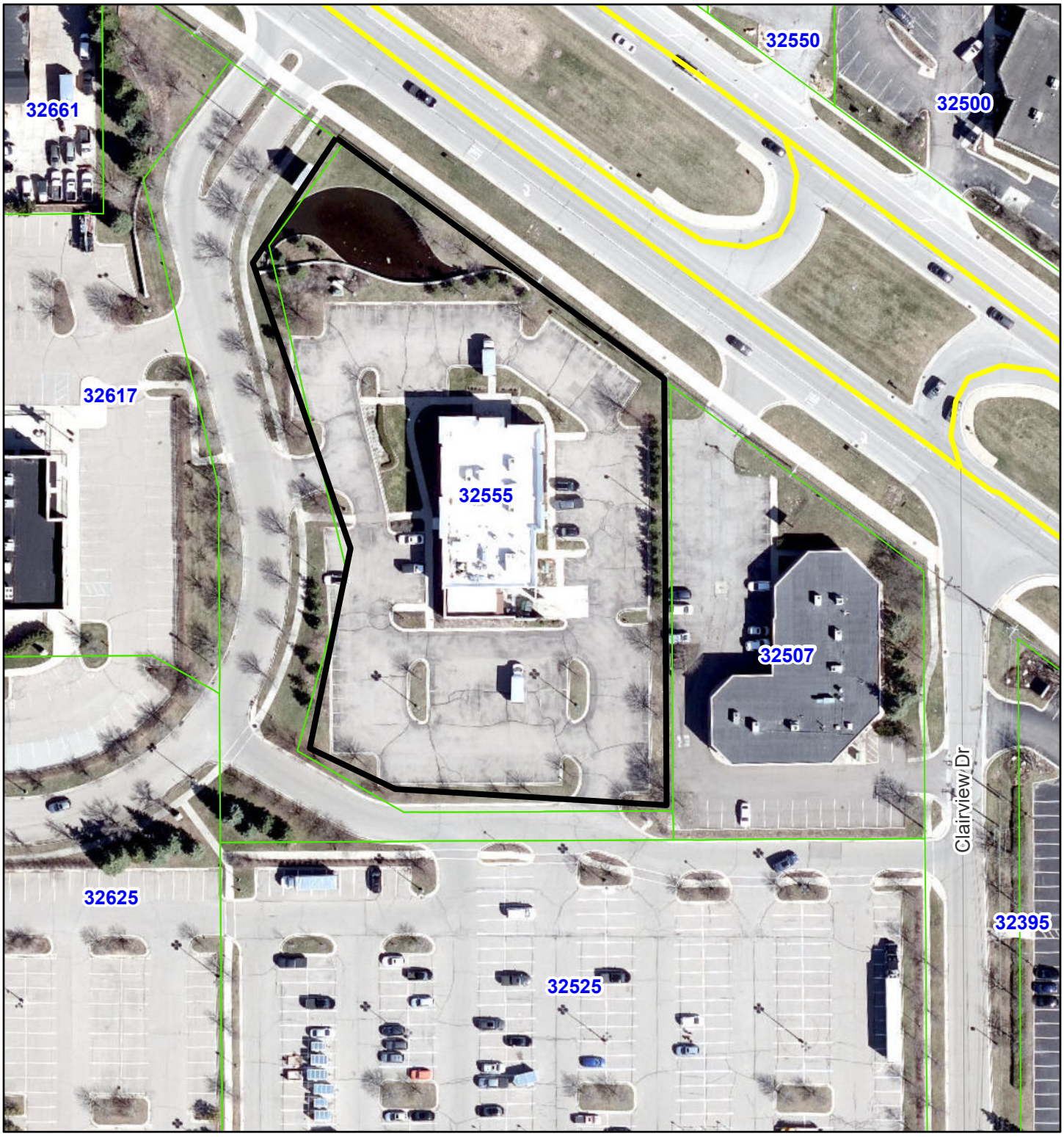
VIEW-6



(SEE SHEET SP-RV FOR LOCATION)

VIEW-7

Amend PUD 4, 2000



8/14/2025, 1:09:33 PM

Tax Parcels

1:1,462

0 0.01 0.01 0.03 mi

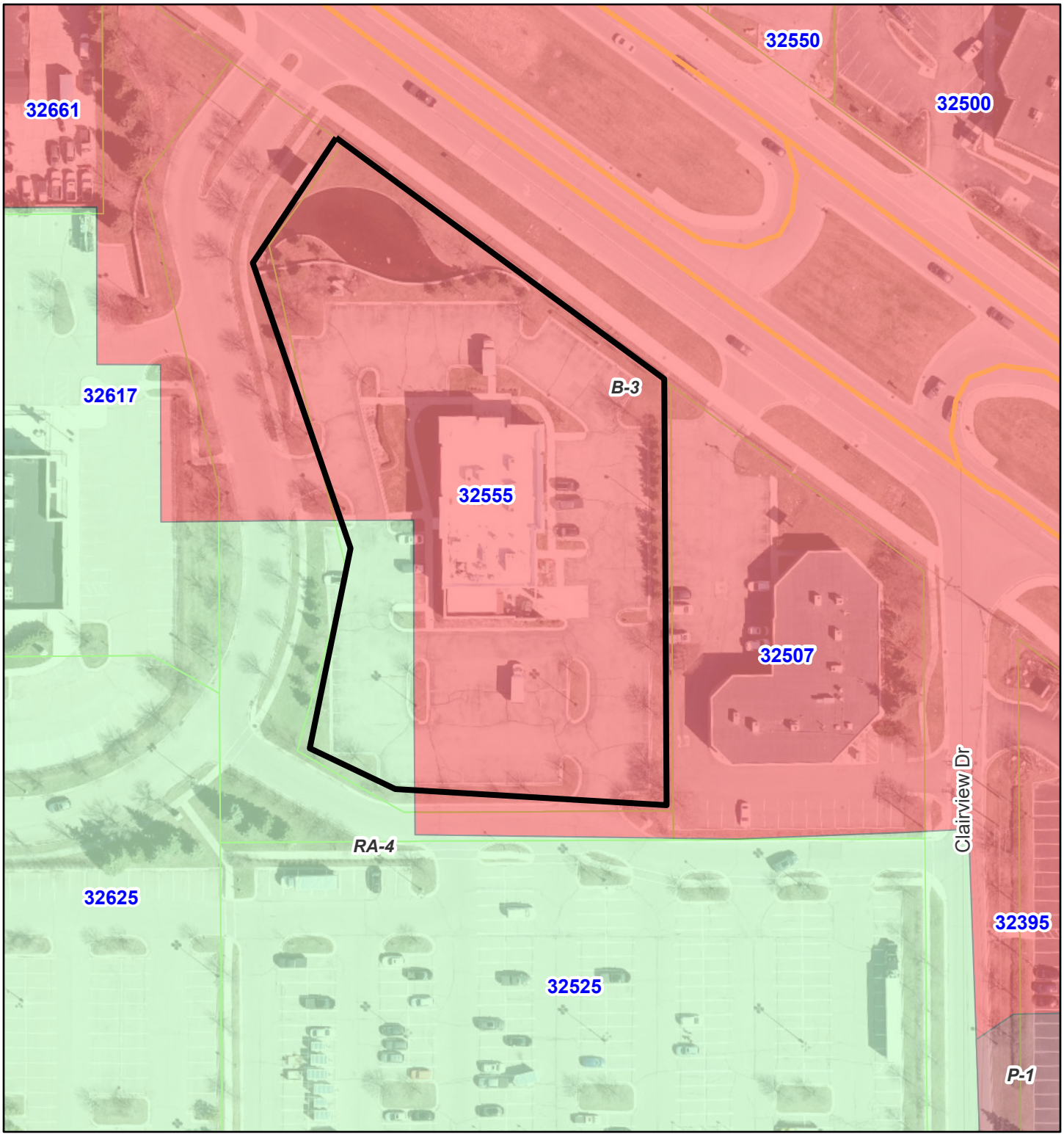
0 0.01 0.03 0.06 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

City of Farmington Hills, MI

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Amend PUD 4, 2000



8/14/2025, 1:10:31 PM

1:1,462

0 0.01 0.01 0.03 mi

0 0.01 0.03 0.06 km

Zoning districts

- B-3
- P-1
- RA-4
- Tax Parcels

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

City of Farmington Hills, MI

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Zack Sklar

Cutting Edge Cuisine

32555 Northwestern Highway

Farmington Hills, MI

(248) 444-9789

zack@cuttingedgecuisine.com

Date: July 26, 2025

To:

Charmaine Kettler-Schmult

Planning Department

City of Farmington Hills

31555 W. Eleven Mile Road

Farmington Hills, MI 48336

RE: Request for PUD Amendment – Site Modification and Community Activation Enhancements

Dear Ms. Kettler-Schmult and Members of the Planning Department,

I am writing to formally request an amendment to the existing Planned Unit Development (PUD) for the property located at [insert property address or project name]. This amendment is driven by two key objectives: (1) the removal of the existing manmade pond due to its operational and environmental unsustainability, and (2) a minor addition to the building footprint to help free up the front of the property for flexible outdoor use and community activation.

1. Removal of the Pond – Environmental and Operational Rationale

(248) 444-9789

August 11, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

PUD Amendment Qualification

Major or Minor Determination

Case:	Amendment to PUD 4, 2000
Site:	32555 Northwestern Highway
Applicant:	Zack Sklar
Plan Date:	July 10, 2025
Zoning:	RA-4/ B-3 (Part of PUD 4, 2000)

We have completed a review of the application for PUD, site plan, and landscape plan approval referenced above and a summary of our findings is below. Items in **bold** require specific action by the Applicant. Items in *italics* can be addressed administratively.



Existing Conditions

1. **Zoning.** The site is currently zoned PUD with underlying B-3 zoning.
2. **Existing site.** The site is 1.85 acres and developed with a 1-story commercial building that was previously used as a restaurant (Anna's House). The site is part of a larger PUD
3. **Adjacent Properties.**

Direction	Zoning	Land Use
North	B-3	Shopping Center
East	B-3 (Part of PUD 4, 2000)	Single Story Commercial
South	RA-4 (Part of PUD 4, 2000)	Parking/ Home Depot
West	B-3 (Part of PUD 4, 2000)	Single Story Commercial

4. **Site configuration and access.** The site is accessed in two locations that connect to internal drives. There is no direct access to Northwestern Highway from the site itself.

Project Summary – Changes to Approved PUD

Summary. The applicant proposes an addition to a single-story building that is located within an existing PUD to be occupied by a catering business. The applicant also indicated in their application that they would like to host events at the facility, and the proposed addition includes four new roll-up doors facing east. In addition to the proposed building addition, the plans include the elimination of a manmade pond facing Northwestern Highway which is proposed to be replaced by an assortment of native plantings. Other proposed changes include the elimination of 20 existing parking spaces, two landscape islands, and the removal of a walled-off area behind the building that included a shed and cooler/freezer. *Although the plan notes clarify that it is the intent is to remove all 20 spaces and both landscape islands, the plans appear to show the removal of only 16 spaces and one island.*

Conditions

The Original PUD agreement included several conditions which shall apply to consideration of this application:

a. The PUD includes a restricted list of uses which does not include catering facilities. Assembly halls are listed, but must be conducted entirely within the building. The applicant included several roll-up doors on the east elevation and described outdoor events as a part of their application. ***Approval of this request will require an amendment to the development agreement to permit these uses.***

b. The dimensional standards of the B-2 District apply to developments within the PUD.

c. Parking shall be provided in accordance with the formula in the agreement.

d. Building heights shall be limited to 40 feet plus 5 feet for parapet and architectural features

e. There are exterior lighting requirements, but they only apply to yards adjacent to single family residential zones. (Not applicable).

f. There are landscape screening requirements, but they only apply to the portion of the site adjacent to the West Gate Franklin Village Subdivision. (Not applicable).

g. There are screening requirements for loading, but these apply to the loading bay for structures near the south property line. (Not applicable).

h. An internal integrated road network and pedestrian network is required.

i. The Development Agreement includes building material requirements, and grants authority to the City Manager to approve modifications from the building material requirements. ***Approval of this request will require relief from the building materials in the Development Agreement subject to the review of the City Manager.***

Proposal

The applicant is proposing the following modifications to the plans.

1. **Use.**
   a. The applicant has submitted a site plan that proposes occupancy of this building for a catering business. **Catering businesses are not listed as permitted uses in the PUD. The Development Agreement must be updated to include them.**
   b. The applicant described the following, "This internal adjustment is being made specifically to free up the front exterior area of the property for event use and community-facing activations. Our goal is to create a space that can be used for public gatherings, seasonal markets, neighborhood events, and similar programming." Public assembly uses are only permitted when located entirely within a building. **The Development Agreement must be updated to allow outdoor events.**
2. **Building**. The plans include a 5,480 square foot building addition on the southern portion of the building. *Elevation plans should be updated the complete length of each façade, including the proposed addition. All elevation plans should be consistent with the floor plans and site plans that were provided.*
3. **Parking.** The plans include the removal of 20 parking spaces. The parking requirements in the PUD agreement require 5 spaces per 1,000 SF of gross leasable floor area. The applicant provided incorrect parking calculations. At 75% gross leasable floor area, the applicant is required to provide 45 spaces and 4.5 landbanked spaces. The application includes 78 spaces and is compliant.
4. **Landscaping.**
   a. The plans include removal of the pond in the front yard, to be replaced with native plantings. The pond was initially considered as a public benefit of the PUD. **The Planning Commission shall determine whether the proposed plantings offer an equal benefit or whether they would like to review additional community benefits from the applicant.**
   b. In addition to the pond, the plans note the elimination of two landscape islands, as well as the relocation of existing plant materials. *A landscape plan demonstrating these modifications was not provided.*
5. **Dumpsters.** The floor plans include the addition of a new dumpster area along the eastern elevation, but this is not reflected in the elevation drawings. Instead, a dumpster is shown on the northern elevation drawing. The site plan indicates that the existing dumpster area will be maintained along the western side of the building. *Clarification regarding this modified dumpster arrangement shall be provided.*
6. **Building Materials**. Elevation plans did not describe building materials. *Building materials should be labeled on all elevations.* **Any deviations from those permitted in the PUD agreement shall require approval by the City Manager.**

Determination

Per Section 34-3.20.5.G, "Proposed amendments or changes to an approved PUD plan shall be submitted to the planning commission. The planning commission shall determine whether the proposed modification is of such minor nature as not to violate the area and density requirements or to affect the overall character of the plan, and in such event may approve or deny the proposed amendment. If the planning commission determines the proposed amendment is material in nature, the amendment shall be reviewed by the planning commission and city council in accordance with the provisions and procedures of this section as they relate to final approval of the Planned Unit Development."

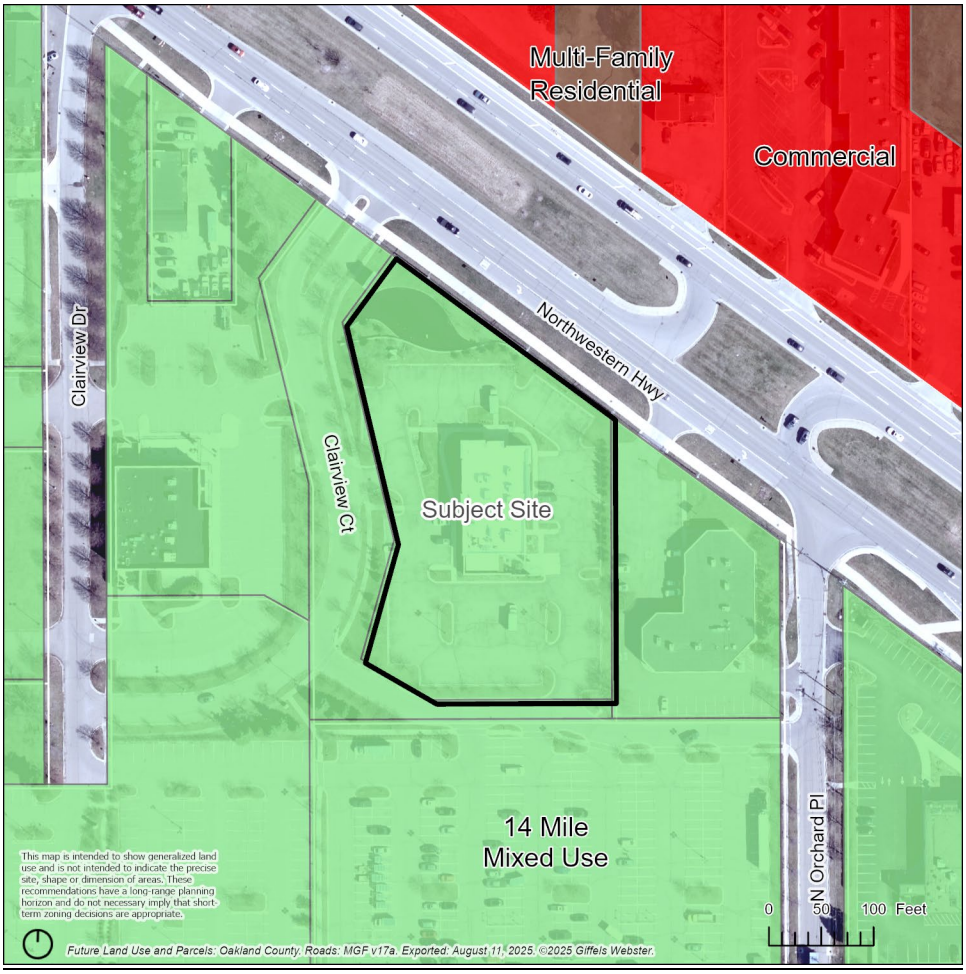
If the PC makes a determination that this is a major amendment to the PUD, the PC will set a public hearing on the amendment and make a recommendation to Council.

We are available to answer questions.

Respectfully,
Giffels Webster

Joe Tangari, AICP
Principal Planner

Julia Upfal, AICP
Senior Planner


Multi-Family Residential
Commercial
Northwestern Hwy
Clairview Dr
Clairview Ct
Subject Site
14 Mile Mixed Use
N Orchard Pl
This map is intended to show generalized land use and is not intended to indicate the precise site, shape or dimension of areas. These recommendations have a long-range planning horizon and do not necessary imply that short-term zoning decisions are appropriate.
0 50 100 Feet
Future Land Use and Parcels: Oakland County. Roads: MGF v17a. Exported: August 11, 2025. ©2025 Giffels Webster.


RC-2
B-3
P-1
Clairview Dr
Northwestern Hwy
Clairview Ct
Subject Site
N Orchard Pl
RA-4
P-1
0 50 100 Feet
Zoning: City of Farmington Hills, Farmington. Parcels: Oakland County. Roads: MGF v17a.
Exported: August 11, 2025. ©2025 Giffels Webster.

Site Plan & Use:

1. **Summary of Proposed Use.** The applicant has submitted a site plan that proposes occupancy of this building for a catering business. In addition to catering, the applicant described the following: "This internal adjustment is being made specifically to free up the front exterior area of the property for event use and community-facing activations. Our goal is to create a space that can be used for public gatherings, seasonal markets, neighborhood events, and similar programming."
2. **Density.** The plans include 12,035 square feet of floor area. The lot size is 80,471 square feet. The lot coverage is 15%. ,
3. **Master Plan.** This amendment should be consistent with the 2024 Master Plan. The new Master Plan identified this area as 14-mile Mixed Use which may include a mix of commercial and residential uses, as well as enhancements for greater pedestrian and non-motorized access. T

   "*This area is currently developed with a mix of uses, including large-scale commercial, some of it unoccupied, and a single-family neighborhood that has gradually declined and is nor majority vacant." "Redevelopment in this area may include increased building heights, and should be in the character of a mixed-use, walkable neighborhood, ideally with a central park or plaza providing a gathering point for community events. Residential uses may occur above retail, office, and personal service uses, or as stand-alone multi-family or attached housing. Entertainment uses, public art, galleries and artisan spaces, specialty and boutique commercial, and outdoor dining areas are encouraged."*
4. **Dimensional Standards of the B-2 District (34-3.1.24.E). The original PUD agreement requires compliance with the B-2 Dimensional Standards.**

Standard	B-2 Requirement	Proposed
Lot Size	Not Specified	1.85 acres (80,471 sf)
Lot width	Not Specified	265.16'
Lot coverage	Not Specified	15%
Front setback	75 ft	*Not Labeled, Existing*
Rear setback[1]	20 ft	*Not Labeled (Compliant)*
Side setback (west)	20 ft	*Not Labeled (Compliant)*
Side setback (east)	20 ft	*Not Labeled, Existing*
Building height	50 ft/ 3 stories	20'
Front Yard Open Space	20% of Front Yard, or 15'	Compliant

5. **Notes to Schedule of Regulations (34-35)**

   - Landscaping for all yards abutting a street shall be provided. *See our review of landscaping below.*

   j. Parking in the front yard setback. Parking may be permitted in the front yard setback provided that the parking is set back not less than 10 feet and an area within the front yard, including that 10', remains as lawn or landscaped area which is equal to the specified percentage of the area of the required front yard setback. *No changes to front yard parking are proposed as part of this application. The applicant should provide a measuring line to demonstrate the extent of compliance with this requirement.*

n. See the loading/unloading requirements of Section 34-5.4. *See comments below on loading/ unloading.*

o. Rooftop equipment shall be screened in accordance with Section 34-5.17. *See comments below on rooftop equipment.*

v. Required landscaped area. In any yard abutting a street or freeway, a landscaped area not less than 10 feet deep and abutting the street or freeway shall be provided in the setback. *No changes to the depth of the existing front yard are proposed as part of this application. The applicant should provide a measuring line to demonstrate the extent of compliance with this requirement.*

6. **B-3 District Required Conditions (34-3.11).**

The underlying zoning is B-3. The standards require all uses in the B-3 district to be reviewed and approved by the Planning Commission.

7. **Pedestrian Access. (34-3.24).** Pedestrian access-ways are required between public sidewalks and principal building entrances, principal building entrances and off-street parking lots, and between uses on abutting parcels.

- *The floorplan indicates that doors are proposed on the building addition facing south, but no pedestrian connections to this door were provided.*
- *The applicant included four new rollup doors facing east, adjacent to a landscape area. The , west, and east , but there is only a pedestrian sidewalk along the east elevation. Pedestrian access should be included on all elevations with access points.*
- *The application describes hosting outdoor events. Additional information on pedestrian and vehicular circulation during these events must be provided.*

The decorative pond currently on site has proven to be both environmentally inefficient and logistically impractical. It must be drained and refilled annually, resulting in unnecessary water usage and resource consumption. The synthetic liner and mechanical systems contribute no ecological value and offer no support for native wildlife or habitat.

Since the original PUD approval, the costs associated with maintaining the pond have escalated significantly, and the availability of qualified vendors or staff to service such a feature has become increasingly limited. The upkeep has become a burden without corresponding public or ecological benefit. For these reasons, we propose the full removal of the pond, including its liner, concrete base, and associated electrical infrastructure, and its replacement with a native, low-maintenance natural landscape.

2. Minor Building Addition to Support Community-Oriented Use

We are also requesting approval for a modest addition to the existing building footprint. This internal adjustment is being made specifically to free up the front exterior area of the property for event use and community-facing activations. Our goal is to create a space that can be used for public gatherings, seasonal markets, neighborhood events, and similar programming that enhances the site's integration with the broader community.

By consolidating internal operations and reallocating outdoor space, we are creating a more dynamic, usable, and publicly beneficial environment. This shift better supports community engagement while preserving the intent and integrity of the original development.

We believe these updates are not only necessary given current conditions, but they also reflect a forward-thinking approach to land use, sustainability, and community value. We greatly appreciate your consideration of this request and look forward to working with the City of Farmington Hills to move this amendment forward.

Sincerely,

Zack Sklar

Cutting Edge Cuisine

zack@cuttingedgecuisine.com

DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: August 13, 2025

TO: Charmaine Kettler-Schmult Director of Planning and Community Development

FROM: James Cubera, City Engineer

SUBJECT: Amended PUD 4, 2000
Cutting Edge Cuisine Kitchen and Storage Addition
32555 Northwestern Highway
22-23-01-176-068
PJ #: 02-25-71

This office has performed a preliminary review of the above referenced proposed AMENDED PUD plan submitted to the Planning Department on July 31, 2025.

Our comments are as follows.

1. We have no objection to the plan as submitted. Engineering construction plans for this expansion will be required for review and approval. However, the majority of the engineering site requirements were addressed when the original building and the overall development were issued construction approvals.

FIRE
FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

DATE: August 13, 2025

TO: Planning Commission

FROM: Jason Baloga, Fire Marshal

SUBJECT: 2nd Amendment PUD 4-2020 (32555 Northwestern Hwy.)

The Fire Department has no objection to the scope of work proposed contingent upon compliance with the following:

1. The building shall be designed and maintained in accordance with the Michigan Building Code, International Fire Code and applicable NFPA Standards.

2. Building shall have one (1) sprinkler system, one (1) FDC, one (1) riser room, and one (1) single fire alarm.

3. Any modification to the Life Safety Systems shall require a 3rd party plan review, permit and acceptance test.

4. Any changes to the kitchen line-up shall require a 3rd party plan review, permit and acceptance test.

5. Proponent did not include hydrants on the plans reviewed by the Fire Department. Please contact the Fire Department to discuss how the plans for construction will meet Chapter 12 Section 12-11(2) hydrants.

6. Fire lanes signs shall be posted and strictly enforced. Faded existing signs shall be replaced.

7. Proponent shall provide a professionally drawn updated pre-plan upon completion of the project.

8. Emergency Responder Radio system shall be required if it is determined signal strength is not adequate.

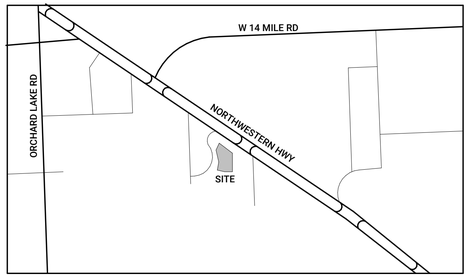
Jason Baloga, Fire Marshal

31455 West Eleven Mile Road • Farmington Hills MI 48336
Administration • 248.871.2800 Phone 248.871.2801 Fax Fire Prevention • 248.871.2820 Phone

32555 NORTHWESTERN HIGHWAY

CATERING KITCHEN AND STORAGE ADDITION

VICINITY MAP



PROJECT SUMMARY

NO. 32555 NORTHWESTERN HIGHWAY, PART OF THE NW. 1/4 OF SECTION 2, T.1N., R.9E, CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MI

PROJECT INCLUDES INTERIOR AND EXTERIOR RENOVATIONS OF A ±6,569 SF CATERING KITCHEN AS WELL AS A ±5,480 SF STORAGE ADDITION. SITE PARKING AND FOLIAGE CHANGES ASSOCIATED WITH THE RENOVATIONS WILL BE INCLUDED. THE PROJECT INCLUDES THE REMOVAL OF AN EXISTING POND AND ASSOC. EQUIPMENT TO BE REPLACED WITH A NATIVE GARDEN AND SCULPTURE PARK.

DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE:

KEVIN J. CROSBY, AIA, NCARB
STUDIO DETROIT, LLC
2040 PARK AVENUE, SUITE 200
DETROIT, MI 48226
E. KEVIN@STUDIO-DETROIT.COM
P. 313.909.3607
MICHIGAN LICENSE NUMBER 1301062181
EXPIRES: 02.10.26

NOTE:
THESE CONSTRUCTION DRAWINGS WERE PREPARED FOR COMPLIANCE WITH THE MICHIGAN CONSTRUCTION CODES IN EFFECT AT THE TIME OF PERMIT SUBMITTAL. ALL ENGINEERS, CONTRACTORS AND SUPPLIERS INVOLVED WITH THIS PROJECT SHALL COMPLY WITH THE SAME CODES, ISSUED AND APPROVED CODE MODIFICATIONS AND/OR CITY CODE AUTHORITY CONSTRUCTION BOARDS OF APPEALS RULINGS AND WHENEVER REQUIRED SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS CLEARLY DESCRIBING COMPLIANCE TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR REVIEW AND APPROVAL.

PROJECT DATA

OWNER
ZACK SKLAR
32555 NORTHWESTERN HWY, FARMINGTON HILLS, MI 48334
P. 248-444-9789
E. zack@peasandcarrotshospitality.com

BUILDING CODE AUTHORITY
CITY OF FARMINGTON HILLS, MI

BUILDING CODES
BUILDING CODE
2021 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS INCORPORATING 2021 MICHIGAN BUILDING CODE (MBC 2021) FOR ALL NEW WORK AND AS REFERENCED

MECHANICAL CODE
ALSO KNOWN AS THE "MICHIGAN MECHANICAL CODE"
2021 MICHIGAN MECHANICAL CODE (MMC) AS AMENDED

PLUMBING CODE
ALSO KNOWN AS THE "MICHIGAN PLUMBING CODE"
2021 MICHIGAN PLUMBING CODE (MPC) AS AMENDED

ELECTRICAL CODE
2023 NATIONAL ELECTRIC CODE (NEC)

AMERICANS WITH DISABILITIES ACT; ALSO KNOWN AS ADA
ICC . ANSI 117.1 - 2017
MBC-2015 CHAPTER 11

2021 MICHIGAN COMMERCIAL ENERGY CODE; 2021 IECC w/ AMENDMENTS AND ANSI/ASHRAE/IESNA STANDARD 90.1-2019 w/ AMENDMENTS

2021 INTERNATIONAL FUEL GAS CODE

2021 INTERNATIONAL FIRE CODE

NFPA 13 - 2019

NFPA 72 - 2019

CONSTRUCTION CLASSIFICATION
IIB, FULLY SPRINKLERED

OCCUPANCY CLASSIFICATION
A-2 ASSEMBLY, B BUSINESS, S-2 STORAGE

SHEET INDEX

DRAWING INDEX KEY
- NOT ISSUED
- PREVIOUSLY ISSUED
- ISSUED
- REFERENCE

		ISSUED FOR: PUD REVIEW 07.10.25
GENERAL		
TS1.1	COVERSHEET	●
CIVIL		
1	LAND TITLE SURVEY	●
ARCHITECTURAL		
SP1.1	ARCHITECTURAL SITE PLAN	●
A1.1	FLOOR PLAN	●
A2.1	EXTERIOR ELEVATIONS	●
A2.2	EXTERIOR ELEVATIONS	●

STUDIO DETROIT ARCHITECTS
2040 PARK AVENUE, SUITE 200
DETROIT, MICHIGAN 48226
STUDIO-DETROIT.COM

PROJECT MANAGER
ADAM COPPERSMITH
adam@studio-detroit.com

DO NOT SCALE DRAWINGS

ISSUED	
07.10.25	PUD REVIEW

DRAWN AGB
CHECKED KJC

SEAL



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CLIENT

ZACK SKLAR
zack@peasandcarrotshospitality.com
32555 NORTHWESTERN HWY
FARMINGTON HILLS, MI 48334
248-444-9789

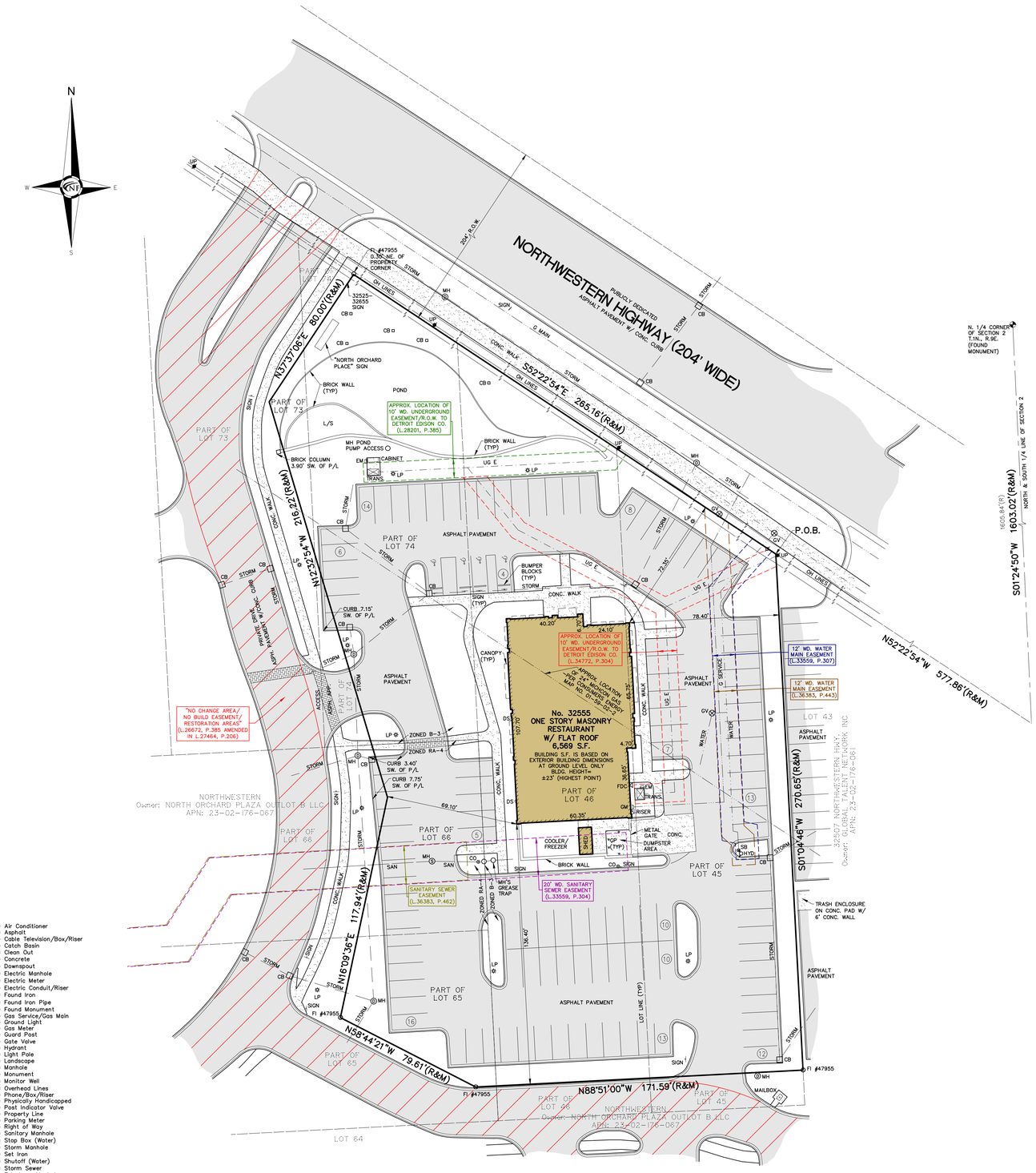
PROJECT

32555 NORTHWESTERN HIGHWAY
CATERING KITCHEN AND STORAGE ADDITION

PROJECT NO. 24060

COVERSHEET

TS1.1

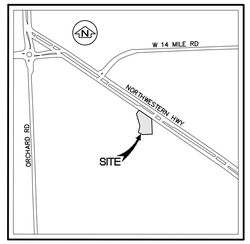


LEGEND

⊠	AC	= Air Conditioner
	ASPH	= Asphalt
(T) (F) (A)	CATV	= Cable Television/Box/Riser
□ ⊠	CB	= Catch Basin
◎	CO	= Clean Out
	CONC	= Concrete
	DS	= Downspout
(E)	E MH	= Electric Manhole
▤	EM	= Electric Meter
▫	EC	= Electric Conduit/Riser
○	FI	= Found Iron
○	FIP	= Found Iron Pipe
○	FMON	= Found Monument
	G	= Gas Service/Gas Main
⊛	GL	= Ground Light
▫	GM	= Gas Meter
▪	GP	= Guard Post
⊗	GV	= Gate Valve
▽	HYD	= Hydrant
✲	LP	= Light Pole
	L/S	= Landscape
◯	MH	= Manhole
◎	MON	= Monument
◎	MW	= Monitor Well
	OH LINES	= Overhead Lines
▫	P	= Phone/Box/Riser
	PH	= Physically Handicapped
⊙	PIV	= Post Indicator Valve
	P/L	= Property Line
◇	PM	= Parking Meter
	ROW	= Right of Way
(S)	SAN	= Sanitary Manhole
⊛	SB	= Stop Box (Water)
(D)	MH	= Storm Manhole
●	S.I.	= Set Iron
⊗	SO	= Shutoff (Water)
	STM	= Storm Sewer
(T)	T MH	= Telephone Manhole
⊠	TRANS	= Transformer
✱	UP	= Utility Pole
	WM	= Water Main
	(R)	= Record Measurement
	(M)	= Surveyed Measurement
	(C)	= Calculated

30 0 15 30 60

GRAPHIC SCALE 1"=30'



LOCATION MAP

LEGAL DESCRIPTION

Land situated in the City of Farmington Hills, County of Oakland, State of Michigan and described as:

Part of Lots 45, 46, 65, 66, 73 and 74 of GLEN ACRES, a Subdivision of part of the East 1/2 of the Northwest 1/4 of Section 2, Town 1 North, Range 9 East, City of Farmington Hills, Oakland County, Michigan, as recorded in Liber 57 of Plats, Page 13, Oakland County Records, more particularly described as: Commencing at the North 1/4 corner of said Section 2 and proceeding South 01 degrees 24 minutes 50 seconds West (1605.84 feet recorded), 1603.02 feet as measured, along the North and South 1/4 line of Section 2, said line also being the East line of said Glen Acres, and along the Southerly R.O.W. of (M-10) Northwestern Highway (204 feet wide), North 52 degrees 22 minutes 54 seconds West 577.86 feet to the point of beginning; thence South 01 degrees 04 minutes 46 seconds West 270.65 feet along the East line of Lot 45; thence North 88 degrees 51 minutes 00 seconds West 171.59 feet; thence North 58 degrees 44 minutes 21 seconds West 79.61 feet; thence North 16 degrees 09 minutes 36 seconds East 117.94 feet; thence North 12 degrees 32 minutes 54 seconds West 216.22 feet; thence North 37 degrees 37 minutes 06 seconds East 80.00 feet; thence along said Southerly right of way line of (M-10) Northwestern Highway, South 52 degrees 22 minutes 54 seconds East 265.16 feet to the point of beginning.

Together with non-exclusive easements as created, limited and defined in Reciprocal Easement and Operation Agreement recorded in Liber 26672, Page 385 and amended in Amended and Restated Reciprocal Easement and Operation Agreement recorded in Liber 27464, Page 206, Oakland County Records.

32555 Northwestern Highway
Tax ID: 22-23-02-176-068

BASIS OF BEARING NOTE

The basis of bearing for this survey was established by the aforesaid recorded Plat.

SITE DATA

Gross Land Area: 81,722 Square Feet or 1.876 Acres.
Zoned: PUD (Planned Unit Development)
B-3 (General Business District) & RA-4 (One Family Residential District)
Building Setbacks:
B-3
Front= 25'
Sides= 10'
Rear= 20'
Min from residential district= 20'
Min from side street= 25'
RA-4
Front= 25'
Sides= 5' (one side); 15' (total of two sides)
Rear= 35'
Max. Building Height permitted: B-3: 3 stories/50'; RA-4: 25'

Total Parking: 118 spaces including 4 handicap/barrier free spaces.

NOTE: The setbacks & height restrictions noted above are for reference purposes only and should not be used for design or construction and should not be used to determine compliance. A surveyor cannot make a certification on the basis of an interpretation or opinion of another party. A zoning endorsement letter should be obtained from the City of Farmington Hills to insure conformity as well as make a final determination of the required building setback & height requirements.

FLOOD HAZARD NOTE

The Property described on this survey does not lie within a Special Flood Hazard Area as defined by the Federal Emergency Management Agency; the property lies within Zone X of the current available Flood Insurance Rate Map identified as Map No. 26125C0513F with an effective date of 09-29-2006.

CEMETERY NOTE

There was no observable evidence of cemeteries or burial grounds within the subject property.

UTILITY NOTE

All utilities are underground unless otherwise noted.

The utilities shown on this survey were determined by field observation. All locations are approximate. The location of any other underground services which may exist can only be depicted if a Utility Plan is furnished to the surveyor.

NOTE: DTE has new regulations that may impact development outside their easement or the public right of way. Client shall contact DTE to determine the "New Structures and Power Line" requirements as they may apply to any future building or renovation of a structure. DTE Energy can be contacted at 800-477-4747.

TABLE A NOTES

16: There was no observable evidence of current earth moving work, building construction or building additions observed in the process of conducting the fieldwork.

17: There are no known proposed changes in street right-of-way lines available from the controlling jurisdiction.

17: There was no observable evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.

18: Improvements within offsite easements or servitudes as provided by the Title Company are shown within 25 feet of the subject land only.

SURVEYOR'S CERTIFICATION

To:

PEAS AND CARROTS, HOSPITALITY, LLC, a Michigan limited liability company, on behalf of an entity to be formed
M & S 1995 Corp., a Florida corporation
Fidelity National Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 2, 3, 4, 6(a), 6(b), 7(a), 7(b1), 7(c), 8, 9, 11(a), 13, 14, 16, 17, 18 & 19 of Table A thereof.

The field work was completed on 06-22-2021.

Kevin Christopher Navaroli, P.S.
No. 4001053503
Dated: 07-06-2021

STATE OF MICHIGAN
KEVIN CHRISTOPHER NAVAROLI
License No. 4001053503
PROFESSIONAL SURVEYOR

TITLE NOTES

2. Rights or claims of parties in possession not shown by the Public Records.

4. Easements or claims of easements not shown by the Public Records and existing water, mineral, oil and exploration rights.

6. Building and use restrictions not appearing in the record chain of title.

9. Rights of the public to any portion of the Land lying within the bounds of any street, road, alley or highway.

10. Any and all oil, gas and mineral rights and reservations of every kind and nature whether recorded or unrecorded and all rights pertinent thereto.

11. Ingress and Egress to the Land is by means of a private road which is subject to the rights of others to use said road and which is not required to be maintained by any governmental agency.

12. Rights of others in and to the use of the Easement(s) described in Schedule A.

13. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document Recording No: Liber 1991, Page 81 [DOCUMENT DOES REFERENCE A 25' BUILDING SETBACK FROM THE FRONT LOT LINE FOR BUILDINGS USED AS BUSINESS; ALSO A 40' BUILDING SETBACK FROM THE FRONT LOT LINE & 5' BUILDING SETBACK FROM SIDE LOT LINE FOR RESIDENTIAL BUILDINGS. LOCATIONS ARE NOT SHOWN. THE SURVEYED LAND IS WITHIN THE PROPERTY DESCRIBED IN SAID DOCUMENT].

14. Terms, covenants, and conditions of City of Farmington Hills Planned Unit Development Agreement as set forth in recording Liber 24573, Page 100; amended in Liber 28915, Page 494. [DOCUMENTS DO NOT DESCRIBE ANY PLOTTABLE EASEMENTS OR PLOTTABLE RESTRICTIONS; THE SURVEYED LAND IS WITHIN THE PROPERTY DESCRIBED IN SAID DOCUMENT].

15. Terms, covenants, conditions, restrictions and easements as recited in Reciprocal Easement and Operation Agreement recorded in Liber 26672, Page 385 and amended in Amended and Restated Reciprocal Easement and Operation Agreement recorded in Liber 27464, Page 206. [BLANKET EASEMENT FOR: INGRESS/EGRESS, RIGHT TO USE PARKING AREAS & UTILITIES. "NO BUILD EASEMENT" LOCATION IS SHOWN. THE SURVEYED LAND IS WITHIN THE PROPERTIES DESCRIBED IN SAID DOCUMENT].

16. Terms, covenants, conditions and restrictions as recited in Declaration of Restrictive Covenant recorded in Liber 26672, Page 441. [DOCUMENT DOES NOT DESCRIBE ANY PLOTTABLE EASEMENTS OR PLOTTABLE RESTRICTIONS; PART OF THE SURVEYED LAND IS WITHIN THE PROPERTY DESCRIBED IN SAID DOCUMENT].

17. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted to Detroit Edison Company recorded in Liber 28201, Page 385. [APPROXIMATE LOCATION OF EASEMENT WITHIN THE SURVEYED LAND IS SHOWN].

18. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted to Detroit Edison Company recorded in Liber 29555, Page 716. [EASEMENTS ARE NOT WITHIN AND DO NOT TOUCH THE SURVEYED LAND AND THEIR LOCATION IS NOT SHOWN].

19. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted to City of Farmington Hills recorded in Liber 33559, Page 304; [EASEMENT IS WITHIN & CROSSES THE SURVEYED LAND AND ITS LOCATION IS SHOWN] as affected by Watermain Easement Vacation Resolution No. 2 recorded in Liber 36211, Page 41. [LOCATION OF REFERENCED WATERMAIN EASEMENT VACATION IS UNKNOWN. EXHIBIT ATTACHED TO SAID DOCUMENT DESCRIBES THE SANITARY SEWER EASEMENT DESCRIBED IN LIBER 33559, PAGE 304].

20. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted to City of Farmington Hills recorded in: Liber 33559, Page 307. [LOCATION OF EASEMENT WITHIN THE SURVEYED LAND IS SHOWN].

21. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted to Detroit Edison Company recorded in Liber 34772, Page 304. [APPROXIMATE LOCATION OF EASEMENT WITHIN THE SURVEYED LAND IS SHOWN].

22. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted to City of Farmington Hills recorded in Liber 36383, Page 443. [EASEMENT IS WITHIN THE SURVEYED LAND AND ITS LOCATION IS SHOWN].

23. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted to City of Farmington Hills recorded in Liber 36383, Page 462. [EASEMENT IS WITHIN & CROSSES THE SURVEYED LAND AND ITS LOCATION IS SHOWN].

ALL EXCEPTIONS SHOWN OR NOTED ON THIS SURVEY WERE OBTAINED FROM TITLE COMMITMENT NO. GLT2100455, WITH A COMMITMENT DATE OF 05-20-2021, ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVENUE
PONTIAC, MI 48342
TEL. (248) 332-7931
FAX. (248) 332-8257
www.nowakfraus.com
EMAIL: rfraus@nfe-engr.com

PROJECT
RESTAURANT BUILDING

PROJECT LOCATION
No. 32555
Northwestern Highway
Part of the NW. 1/4 of
Section 2, T.1N., R.9E.,
City of Farmington Hills,
Oakland County, MI

SHEET
ALTA / NSPS
Land Title Survey

REVISIONS

DRAWN BY:
A.G.

APPROVED BY:
K.N./R.FRAUS

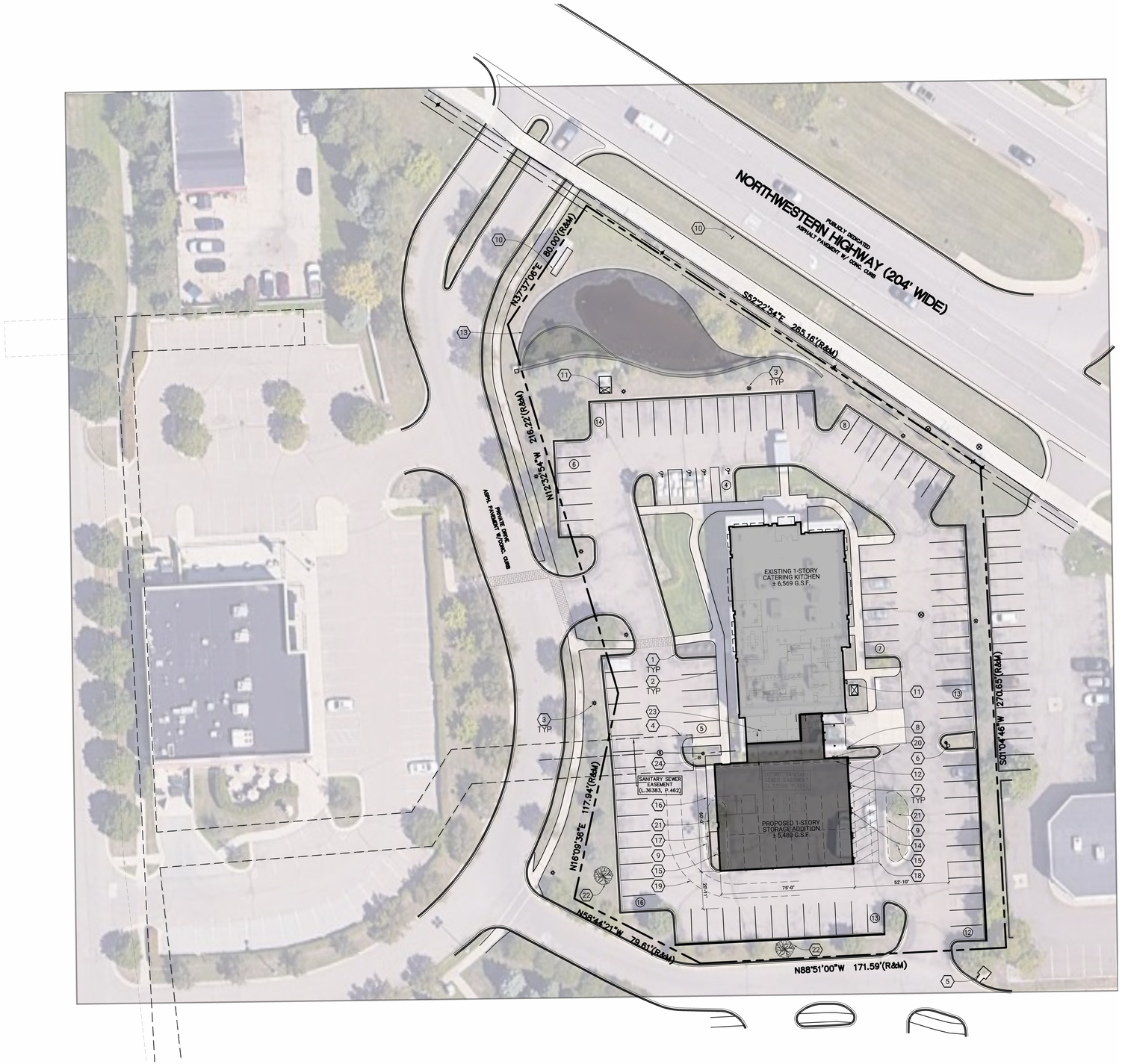
EMAIL:
rfraus@nfe-engr.com

DATE ISSUED:
07-06-2021

SCALE:
1"=30'

NFE JOB NO. M424

SHEET NO. 1 of 1



N

ARCHITECTURAL OVERALL SITE PLAN
SCALE: 1"=30'

SITE PLAN KEY NOTES: (TYPICAL THIS SHEET ONLY)

1. EXISTING CONC. CURB TO REMAIN, TYP
2. EXISTING CONC. SIDE WALK TO REMAIN, TYP
3. EXISTING SITE LIGHTING TO REMAIN, TYP
4. PROPOSED PUBLIC EASEMENT ADJUSTMENT TO AVOID BUILDING FOOTPRINT AS INDICATED
5. EXISTING MAILBOX TO REMAIN
6. EXISTING FIRE HYDRANT TO REMAIN
7. PROPOSED WALL MOUNTED LIGHT FIXTURE
8. EXISTING DUMPSTER w/ PROPOSED GATE ENCLOSURE
9. DEMOLITION OF EXISTING PARKING ISLANDS AND ASSOCIATED PARKING (20 SPACES); ISLAND FOLIAGE TO BE RELOCATED ON SITE
10. EXISTING SIGN TO REMAIN
11. EXISTING TRANSFORMER TO REMAIN
12. EXISTING CONCRETE CURB TO BE DEMOLISHED AND ASSOC. FOLIAGE TO BE RELOCATED
13. EXISTING POND AND ASSOC. EQUIP. TO BE REMOVED; REPLACE WITH SCULPTURE PARK WITH NATIVE GARDEN; PROPOSED CONCEPT, FINAL GARDEN/PARK DESIGN TBD.
14. PROPOSED STEEL BOLLARDS
15. EXISTING SITE LIGHTING TO BE RELOCATED AS EXTERIOR LIGHTING ON THE PROPOSED ADDITION
16. PROPOSED CONCRETE SIDEWALK
17. PROPOSED CONCRETE CURB AND FOLIAGE RELOCATION
18. PROPOSED LOADING DOCK AREA
19. TRUCK TURNING RADIUS WITH 30' INTERIOR RADIUS
20. EXISTING CLEAN OUT TO BE RELOCATED AS INDICATED
21. EXISTING TREE TO BE RELOCATED
22. PROPOSED NEW LOCATION FOR RELOCATED TREE
23. EXISTING WALK-IN FRIDGE/FREEZER
24. LOCATION OF NEW CLEAN OUT

SITE DATA

FARMINGTON HILLS, MI

LOT DESCRIPTION
PARTS OF LOTS 45, 46, 65, 66, 73, AND 74 OF GLEN ACRES SUBDIVISION.
32555 NORTHWESTERN HIGHWAY
TAX ID: 22-23-02-176-068

SITE AREA

SITE AREA TOTAL	±1.85 ACRES

ZONING
(ZONING REQ. MAY NOT BE DIRECTLY APPLICABLE PER PUD REQUIREMENTS. THE FOLLOWING ZONING ORDINANCE INFORMATION IS PROVIDED FOR REFERENCE)
B-3 BUSINESS

REQ'D FRONT SETBACK	25 FEET
REQ'D REAR SETBACK	20 FEET
REQ'D SIDE YARD SETBACK	10 FEET
REQ'D SIDE STREET SETBACK	25 FEET
MAX BUILDING HEIGHT	50 FEET
MAX NUMBER OF STORIES	3 STORIES

BUILDING AREAS

EXISTING	±6,569 SF
ADDITION	±5,480 SF
TOTAL	±12,035 SF

PARKING REQUIREMENTS

EXISTING	98 SPACES

REQUIRED PER 34-5.2.11(SEE FLOOR PLAN)

1 PER 85 SF AT 5,309 SF	63 SPACES
3 + 1 PER 1,300 SF AT 4,360	7 SPACES
TOTAL	70 SPACES

PROPOSED	78 SPACES

APPROVED BY P.U.D.

360,000 TOTAL BUILDING SQUARE FOOTAGE

1,353 PARKING SPACES

RATIO: 1:266 SF

EXISTING

270,692 TOTAL BUILDING SQUARE FOOTAGE

1,353 PARKING SPACES APPROVED
-135 LAND BANKED PARKING SPACES
1,218

RATIO: 1:222 SF

PROPOSED

270,692 SF
+5,480 SF ADDITION
276,172 SF

1,218 EXISTING PARKING SPACES
-27 PARKING SPACES LOSS FROM ADDITION
1,191

RATIO: 1:232 SF



SCULPTURE GARDEN VISUALIZATION
NOT TO SCALE

STUDIO DETROIT ARCHITECTS
2040 PARK AVE. STE 200
DETROIT, MICHIGAN 48226
STUDIO-DETROIT.COM
PROJECT MANAGER
PM NAME
PM E-MAIL
PM PHONE #

DO NOT SCALE DRAWINGS

ISSUED

10.23.24	CONCEPT REVIEW
07.10.25	PUD REVIEW

DRAWN AGB
CHECKED AC

SEAL

STATE OF MICHIGAN · KEVIN JAMES CROSBY · ARCHITECT · No. 1301062181 · LICENSED ARCHITECT

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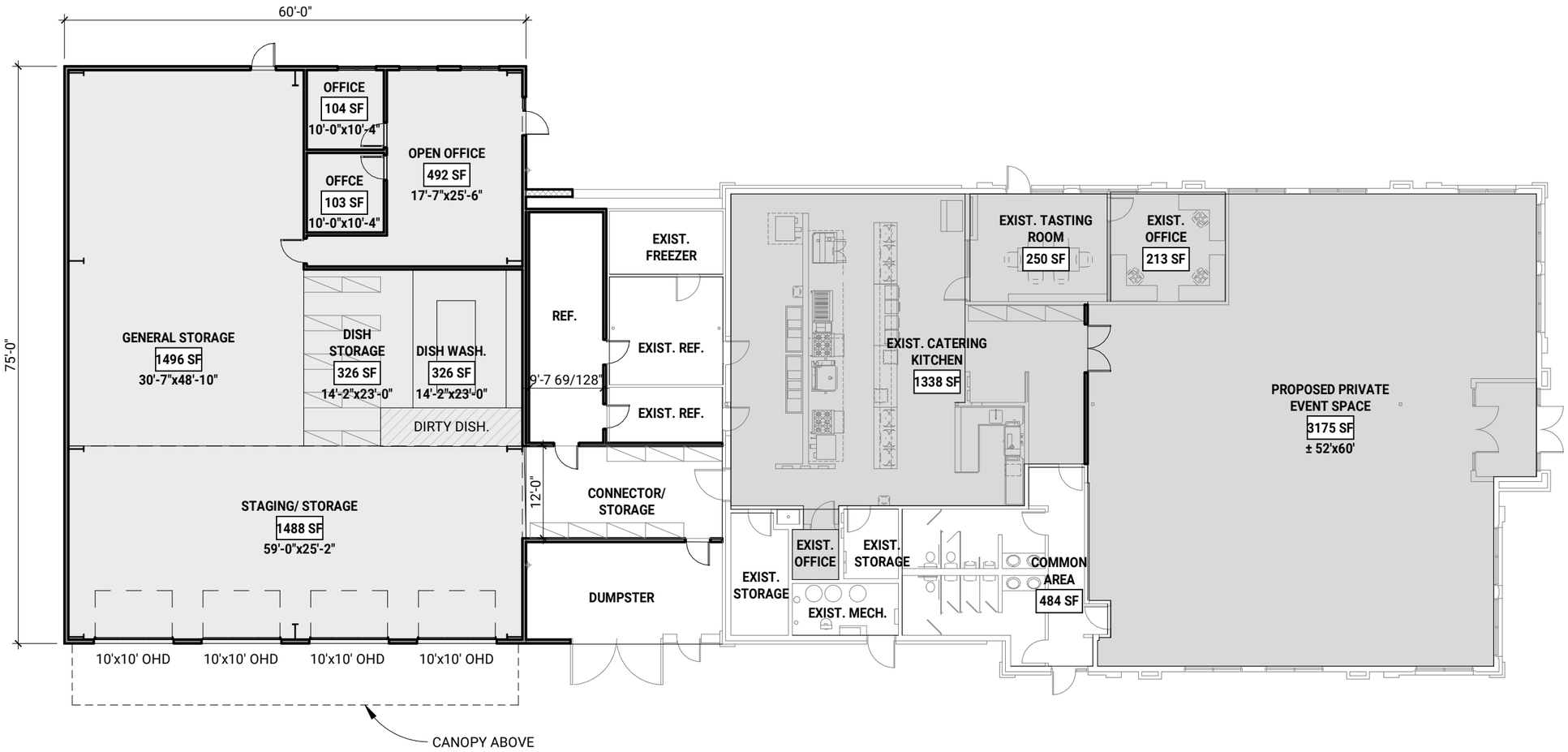
PROJECT 24060

32555 NORTHWESTERN HIGHWAY

SP1.1

PROJECT NO.
24060

32555 NORTHWESTERN HIGHWAY
CATERING KITCHEN AND STORAGE ADDITION



REQ PARKING BY USABLE AREA	
CATERING KITCHEN & PRIVATE EVENT SPACE	
EXISTING KITCHEN & OFFICES	±2,134 SF
PRIVATE EVENT SPACE	±3,175 SF
SUB TOTAL =	±5,309 SF
PARKING REQ	
5,309 / 85 SF =	**63 SPACES**
(RESTAURANT PER 35-5.2.11 C.XVII)	
PROPOSED ADDITION	
STORAGE ADDITION	±4,360 SF
PARKING REQ	
(4,360 / 1,300) + 3 =	**7 SPACES**
(WAREHOUSE PER 35-5.2.11 E.II)	
TOTAL SPACES REQ	70 SPACES
EXISTING SPACES	98 SPACES
PROPOSED SPACES	78 SPACES

OVERALL SQUARE FOOTAGE	
EXISTING KITCHEN, STORAGE, AND OFFICE	±3,223 SF
NEW CONSTRUCTION	±5,143 SF
SUB TOTAL	8,376 SF
COMMON AREA	±484 SF
PROPOSED PRIVATE EVENT SPACE	±3175 SF
GRAND TOTAL	12,035 SF

STATE OF MICHIGAN
KEVIN JAMES CROSBY
ARCHITECT
No. 1301062181
LICENSED ARCHITECT

N

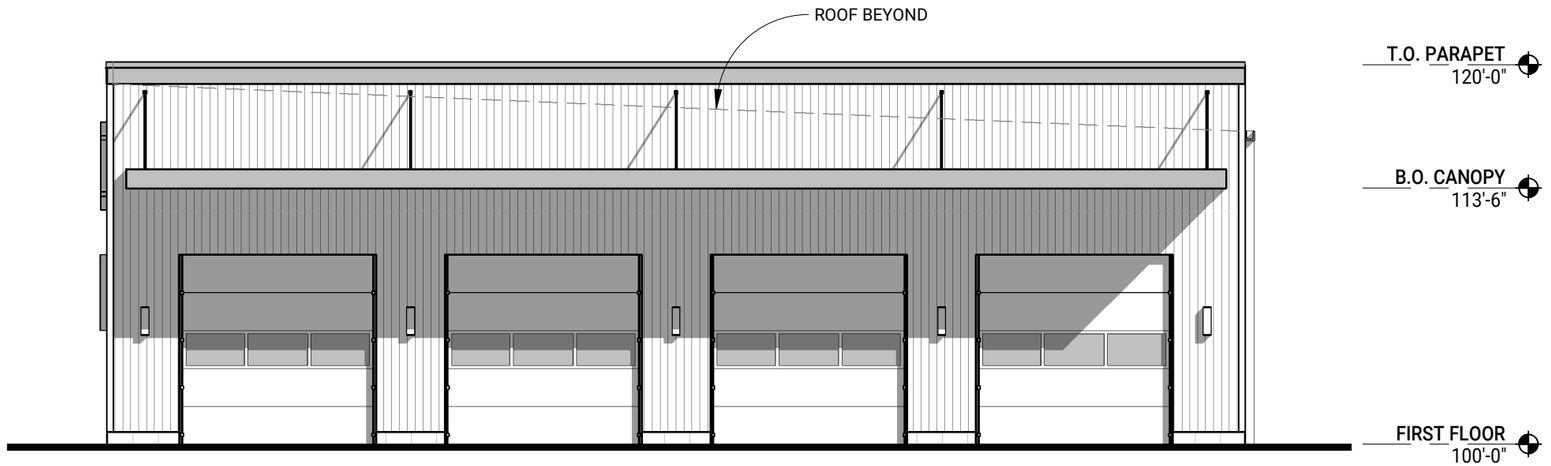
FLOOR PLAN
1/16" = 1'-0"

FLOOR PLAN

STUDIODETROIT
ARCHITECTS

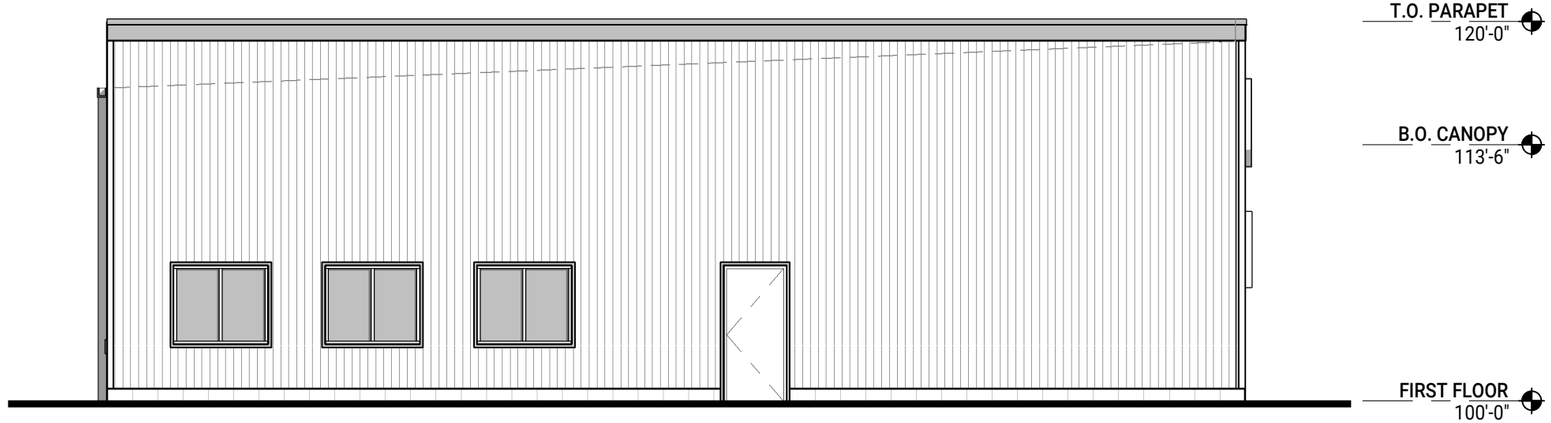
PROJECT NO.
24060

32555 NORTHWESTERN HIGHWAY
CATERING KITCHEN AND STORAGE ADDITION



EAST ELEVATION

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



WEST ELEVATION

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

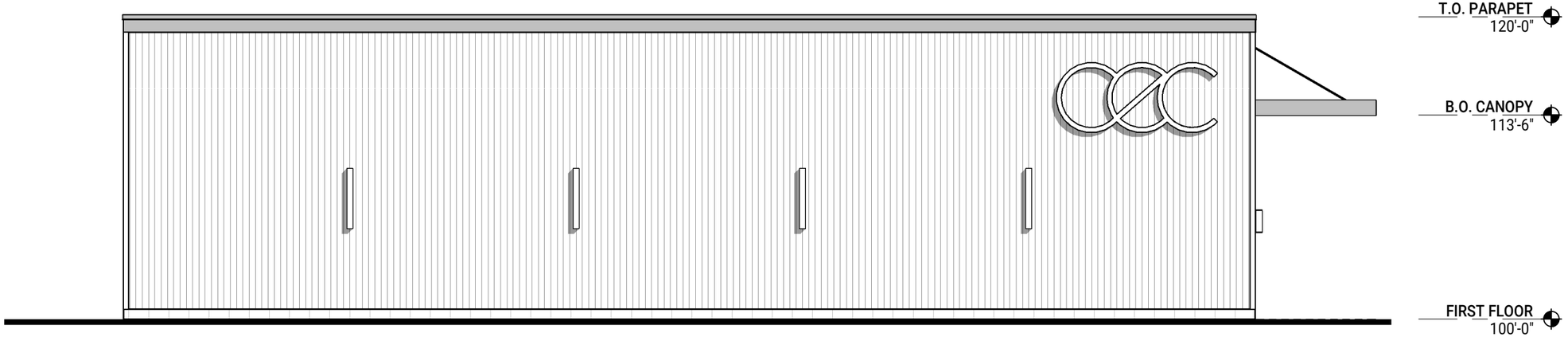
STATE OF MICHIGAN
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ARCHITECT
No. 1301062181
LICENSED ARCHITECT

EXTERIOR ELEVATIONS

STUDIODETROIT
ARCHITECTS

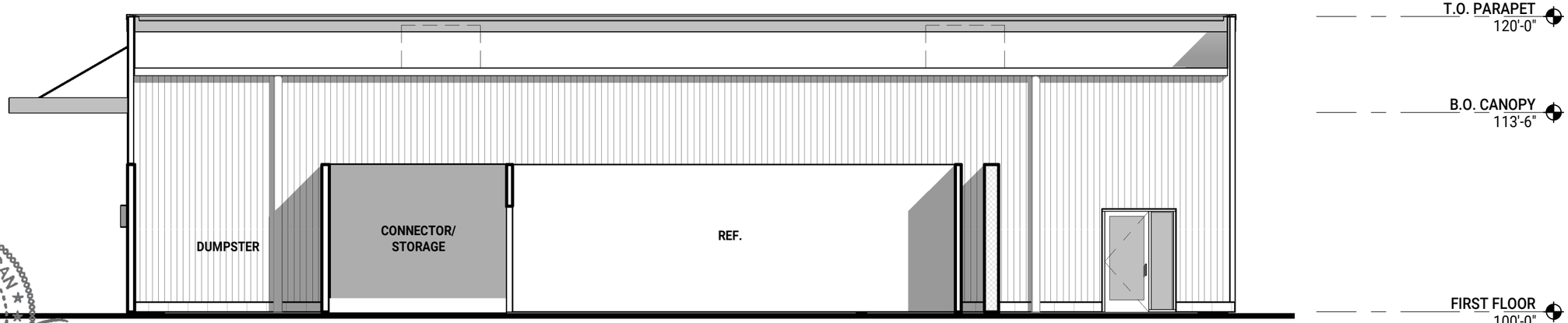
PROJECT NO.
24060

32555 NORTHWESTERN HIGHWAY
CATERING KITCHEN AND STORAGE ADDITION



SOUTH ELEVATION

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



STATE OF MICHIGAN
KEVIN
JAMES
CROSBY
ARCHITECT
No.
1301062181
LICENSED ARCHITECT

NORTH ELEVATION

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

EXTERIOR ELEVATIONS

STUDIODETROIT
ARCHITECTS

Bold text reflects changes since the June 19 Planning Commission study session

Percentage for Art – Draft Zoning Amendments

Amend Section 2.2 Definitions to add the following defined terms:

Artist means an individual generally recognized by critics and peers as a professional practitioner of the visual arts, as judged by the quality of that professional practitioner's body of work, educational background, experience, past public commissions, exhibition record, publications, receipt of honors and awards, training in the arts, and production of artwork.

Construction Cost means the total cost of a construction or renovation project, as determined by the Building Official for purposes of issuing a building permit for such construction or renovation.

Public Art means a tangible creation by an artist that is located within or highly visible from a public area and that exhibits the highest quality of skill and aesthetic principles, including paintings, sculptures, stained glass, projections, light pieces, statues, bas reliefs, engravings, carvings, frescoes, mobiles, collages, mosaics, tapestries, photographs, drawings, monuments, environmental artwork, and fountains or combinations thereof, and that are one-of–a-kind or part of an original, numbered series. Public art may include functional items such as bike racks, light fixtures, benches. Public art does not include items manufactured in large quantities by means of industrial machines and/or reproductions. Architectural enhancements and design elements may be considered public art, when it is determined by the Farmington Area Arts Commission that it is demonstrably conveying ideas, meaning, cultural significance, or conceptual complexity with extremely high artistic merit. It should be more expressive than mere utilitarian architecture and quality building materials.

Add Section 34-5.20 Public Art Requirement

1. **Intent.** The City of Farmington Hills finds that the visual and aesthetic quality of development projects has a significant positive impact on property values, the local economy, and the character and vitality of the city. The meaningful and intentional inclusion of public art throughout the city can illuminate, nurture, and celebrate the diversity and history of the city, as well as foster the economic development of the community. To achieve these goals, public art should be integrated into development projects citywide.

   As envisioned in the 2024 Farmington Hills Master Plan, public art is a placemaking strategy that provides benefits to the developed property on which it is located and the public, including, without limitation, enhancement of the character and aesthetics of developed property, surrounding properties, and the community in general. The purpose of this section is to enhance the City's livability by encouraging works of art throughout the city, **focusing on important commercial corridors,** and requiring the use and incorporation of publicly accessible art into significant development projects.

2. **Public Art Required.**

   A. The installation of public art in accordance with this Section is required for any non-public construction or renovation project with a construction cost of two million dollars ($2,000,000.00) or more, **in the Special Planning Areas described in the 2024 Master Plan, except as provided in subsection B, below. These include:**

      i. Orchard Lake Road between 12 Mile and 13 ½ Mile Roads;

      ii. 14 Mile/Northwestern/Orchard Lake Road;

iii. **Grand River Corridor/M-5 Interchange;**

iv. **Grand River and Drake**

v. **M-5 Corridor**

vi. **8 Mile Corridor**

vii. **12 Mile Corridor**

viii. **Freeway Redevelopment Areas**

ix. **Any projects developed using the Planned Unit Development process.**

B. The following projects are exempt from this requirement: **single-family residential** construction projects and projects completely funded by legally established non-profit entities.

C. The applicant shall establish and submit to the City a budget for the public art required by this section based on the allocation of one-half (0.5) percent of the total project construction cost up to fifty thousand dollars ($50,000.00) for applicable projects. For each year subsequent to the effective date of the Zoning Ordinance amendment adding this Section, the applicable construction cost threshold stated in the preceding sentence shall be increased in accordance with the Consumer Price Index for **All Urban Consumers (CPI-U)** to reflect the rising costs of goods and materials.

3. **Public Art Requirements**. When public art is required per subsection 2 above, the subject site shall be designed and developed to include public art, as defined in Section 34-2.2, for placement in a public place, publicly accessible private space, and/or integrated into the underlying architecture, landscape design or site, which shall be included as part of the site plan, and such public art shall comply with this Section and the following requirements:

   A. An applicant for site plan approval for projects where public art is required per Section 34-5.20.2 may proceed through site plan review before the selection of artwork is finalized, although involvement of the designer or artist is encouraged through the site design phase. For site plan review purposes, the area intended for the public art shall be noted on the site plan to demonstrate how the location for the art meets the requirements of Section 34-5.20.4 below. The final location, installation, footings, etc. are subject to review and approval by the city planner and building official.

   B. Following site plan approval, in conjunction with the application for building permits, the applicant shall furnish the City with an updated budget reflective of the project's construction costs.

   C. The public art shall be submitted for approval to the Farmington Area Arts Commission (established under Chapter 2, Article IV, Division 8 of the City Code) prior to site plan approval. The Farmington Area Arts Commission shall not unreasonably withhold approval.

4. **Placement.**

   A. In addition to other placement and locational requirements in this ordinance, public art shall be placed:

      i. In locations that are visible from public streets, rights-of-ways, parks, or plazas, taking into consideration the circulation patterns for vehicles and pedestrians on-site and on adjacent public streets and sidewalks; and

ii. (2) Out of the corner clearance area as provided in Section 34-5.10.

B. Public art may be permitted in required front setbacks, if the Planning Commission finds that no other location meeting the requirements of this ordinance is feasible and such placement is approved by the Director of Public Services.

5. **Guidelines.** At a minimum, works of public art shall:

A. Be created by an artist, as defined in Section 2.2;

B. Demonstrate excellence in aesthetic quality, workmanship, innovation and creativity;

C. Be appropriate in size, scale, and form, and of materials or a media suitable for the site;

D. Demonstrate feasibility in terms of budget, timeline, safety, durability, operation, maintenance, conservation, security, storage, and siting;

E. Bring diversity to the existing collection of public art in the City, in terms of media, artistic discipline, or artistic approach;

F. Reinforce the City's placemaking goals by reflecting and promoting the City's identity or the identity of individual neighborhoods or business districts within the City; and

G. Be consistent with public art guidelines as may be adopted by the City of Farmington Hills.

6. **Exemptions.** The Planning Commission may waive, or partially waive, the public art requirement upon finding one or more of the following conditions apply:

A. There is no feasible location on the subject property from which a work of art can be plainly and wholly seen by the public;

B. The present or any planned land use of the subject property is such that placement of a work of art, in any media, on the property would be destructive to the work of art due to the activities related to the land use;

C. The property is already fully developed in such a way that there is no location on the site for public art;

D. Projects where the applicant donates funds equivalent to the amount required in Section 34-5.20.3 to a public art fund established by City Council;

E. Projects where the applicant chooses to partially exempt a project from the public art requirement of this section to the extent the applicant chooses to donate funds less than the amount required in Section 34-5.20.3 to a public art fund established by City Council, in which case the budget required for public art shall be reduced by a corresponding amount; or

F. Projects where all of the residential dwellings are non-subsidized and affordable for rent or purchase to residents earning less than 120% of area median income, based on current US Census data, and as agreed to in a development agreement between the applicant and the City of Farmington Hills.

G. Projects where the application of this requirement would constitute a governmental taking or otherwise be contrary to law under the particular facts and circumstances of that case, as determined by the Planning Commission, under the particular facts and circumstances of that case as explained in detail by the applicant as part of its application for site plan approval. The Planning Commission may request additional information from the applicant or property owner, if it determines that insufficient information is provided by them to make a determination. The

applicant and property owner have all appeal rights as would otherwise be applicable to the determination of the Planning Commission.

7. Installation and Maintenance.

A. The total allocation as established pursuant to subsection in Section 34-5.2.3.A. may be held as a Guarantee for Improvements as provided in Section 34-7.2. In addition:

i. Maintenance shall be the responsibility of the owner of the property in addition to the established allocation.

ii. Failure to install the public art as required by this subparagraph and in accordance with the approved site plan shall result in denial of a certificate of occupancy.

iii. In instances where circumstances beyond the reasonable control of the property owner or developer impede timely installment of the public art (including, without limitation, weather, delay in creation or fabrication of the public art, or delivery of the public art), the guarantee for improvements referenced above shall be deposited with the City and held to ensure installation and compliance with this section in accordance with a schedule established by the City Planner.

iv. In the event the public art is not fully installed within the period of time as established by the City Planner, the public art guarantee shall be forfeited to the City.

v. Failure to properly maintain the public art in accordance with the approved site plan is a violation of the zoning code and subject to enforcement pursuant to provisions of section 7.13 of this chapter.

B. Public art required by this section shall be kept in good repair, free from refuse and debris. If public art becomes damaged or falls into disrepair, it shall be cleaned, repaired, or replaced with public art that complies with this section and is approved as an amendment to the site plan, within thirty (30) days after written notice from the city or within an extended reasonable time period as specified on such notice if necessary to accommodate replacement of the public art.

C. In the event the owner of the property wishes to remove the on-site public art, the City must be notified in writing prior to its removal. The property owner will be required to replace the public art with public art of equal or greater value. The replacement artwork will follow the process outlined in this section.

FAAC – Draft City Code Amendment

Amend City Code Chapter 2, Article IV, Division 8. – Farmington Area Arts Commission to add the following underlined sentence at the end of Section 2-222:

Article IV. Section 2-222 – Purposes, authority and duties

The FAAC is charged with the authority and responsibility of supporting the cities of Farmington and Farmington Hills in efforts to ensure the arts and cultural heritage are integral components of daily life in our communities. FAAC is committed to arts advocacy by serving as a conduit between local government and arts organizations, artists, educators, and the community at large. The FAAC shall also be responsible

for reviewing and approving public art under and in accordance with Section 34-5.20 of the City Zoning Ordinance.

CITY OF FARMINGTON HILLS
PLANNING COMMISSION MEETING
31555 W ELEVEN MILE ROAD
FARMINGTON HILLS, MICHIGAN
JULY 17, 2025, 7:30 P.M.

CALL MEETING TO ORDER

The Planning Commission Regular Meeting was called to order by Chair Trafelet at 7:30 p.m.

ROLL CALL

Commissioners present:	Aspinall, Brickner, Countegan, Mantey, Stimson, Trafelet, Ware
Commissioners Absent:	Mantey, Varga
Others Present:	Staff Planner II Mulville-Friel, Planning Consultant Upfal (Giffels Webster), Staff Engineer Alexander, City Attorney Schultz

APPROVAL OF THE AGENDA

MOTION by Countegan, support by Brickner, to approve the agenda as published.
Motion passed unanimously by voice vote.

REGULAR MEETING

A. REVISED SITE PLAN 60-10-2024 (PUD 5, 1993)

LOCATION:	**Southeast intersection of Twelve Mile Road and Investment Drive**
PARCEL I.D.:	**22-23-17-201-018**
PROPOSAL:	**Construct day care center within OS-4 Office Research District**
ACTION REQUESTED:	**Site plan approval**
APPLICANT:	**Farmington Hills VI Corporate Investors, L.L.C. / Cunningham Limp**
OWNER:	**Farmington Hills VI Corporate Investors, L.L.C.**

Applicant presentation

Chris Kojaian, Kojaian Company, presented the revised site plan for a day care center within the OS-4 Office Research District. He explained that during engineering review, stormwater and related factors required changes to the site plan approved in November 2024. The revised plan was substantially similar to the approved plan, with revisions as follows:

- The dumpster, which had been in a non-compliant front yard location, is now compliant. A retaining wall was added to preserve wetlands in the area.
- Parking spaces had been reduced from 42 to 40 spaces to accommodate the truck turning radius at the dumpster enclosure. The two spaces will be striped but marked off. The number of parking spaces was still compliant.
- The applicants were requesting 75 replacement trees instead of the 87 originally approved, with the difference to be paid into the tree fund. Even with the reduction, the site was well-landscaped.
- The applicants were requesting a waiver to the requirement for a sidewalk along Investment Drive. No other buildings in the 140-acre office park had sidewalk connectivity, and the sidewalk, if installed, would not lead anywhere. Foot traffic to the day care will be minimal, as

activity will involve parents dropping off children up to 6 years old. A connection to the 12 Mile Road sidewalk will be provided.

Consultant comments
Referencing the June 20, 2025 Giffels Webster memorandum, Planning Consultant Upfal gave the background and review for this request for a minor amendment to the previously approved site plan.

- The main changes to the plan were as outlined by the applicant.
- The truck turning template should be submitted for review.
- Regarding the reduction in replacement trees, the applicant is proposing to pay the difference into the tree fund under the original development agreement, which allows the developer to have a 33% discount on tree replacements.
- The Planning Commission will need to determine whether to allow the elimination of the sidewalk along Investment Drive.

Commission discussion
Commissioner Aspinall supported the sidewalk waiver, noting that Investment Drive is not walkable and pedestrian traffic involving children did not need to be encouraged.

In response to questions, Mr. Kojaian said the day care will accommodate up to 158 children, with staggered schedules and a staff of 22. The facility serves children from six months to six years old and includes educational programming. Once approved by the Planning Commission, the engineering process will be completed, and construction will begin as soon as possible.

MOTION by Brickner, support by Aspinall, that the revised application for Site Plan Review 60-10-2024, dated June 5th, 2025, submitted by Farmington Hills VI Corporate Investors, L.L.C. / Cunningham Limp, BE APPROVED because it appears to meet all applicable requirements of the zoning chapter, subject to the following conditions.

1) **All outstanding issues identified in Giffords Webster's June 20th, 2025 review shall be addressed to the reasonable satisfaction of the City Planner.**
2) **All outstanding issues identified in the City Engineer's November 12, 2024, interoffice correspondence shall be addressed to the reasonable satisfaction of the City Engineer,**
3) **All outstanding issues identified by the Fire Marshal's July 15th, 2025, interoffice correspondence shall be addressed to the reasonable satisfaction of the Fire Marshal.**

And with the following determinations:

- **The Commission determines that the requirement for the sidewalk along Investment Drive will be waived.**
- **The Commission approves the reduction in the number of replacement trees provided from 87 to 75. Applicant shall provide money into the public tree fund for deficient trees (115 replacement trees required – minus 75 replacement trees provided = equals 40 trees deficient).**

Motion approved unanimously by voice vote.

B. <u>ADOPTION OF AMENDED BYLAWS AND RULES OF PROCEDURE</u>

Referencing the July 10, 2025 memorandum from City Planner Perdonik, Staff Planner Mulville-Friel explained that the proposed changes to the Bylaws and Rules of Procedure clarified that regular Planning Commission meetings will be held on the third Thursday of the month only, and did not include regular meeting dates on the first and second Thursdays, as currently stated.

After discussion, and citing the need to provide direction should special meetings need to be called, the following motion was offered:

MOTION by Aspinall, support by Stimson, to RECOMMEND TO CITY COUNCIL that draft Amended Planning Commission Bylaws and Rules of Procedure (Resolution No. R-PC-1-25), BE APPROVED, with the following amendment:

- **Article II. Meetings, 3., add after the first sentence: "To the extent possible, such special meetings will be held on either the second or fourth Thursday of the month."**

Motion passed unanimously by voice vote.

APPROVAL OF MINUTES June 19, 2025, Regular and Special Meetings

MOTION by Stimson, support by Grant, to approve the June 19, 2025 Regular and Special Meeting minutes as submitted.
Motion passed unanimously by voice vote.

PUBLIC COMMENT
None

COMMISSIONER/STAFF COMMENTS
Commissioner Brickner asked that the City ask MDOT to remove the sign on Drake Road that is covered but which says that Drake Road is closed because of the work on the 696 Bridge, which work is complete.

Staff Planner Mulville-Friel noted that:

- The Commission had received a notice from the City of Southfield that they are updating their master plan.
- The Commission had received information regarding next Monday's joint meeting with City Council. The Grand River Corridor study will be sent electronically.

ADJOURNMENT
MOTION by Grant, support by Ware, to adjourn the meeting.
Motion passed unanimously by voice vote.

The meeting ended at 8:03pm.

Respectfully submitted,
Kristen Aspinall,
Planning Commission Secretary