



City of Plymouth Planning Commission

Regular Meeting Agenda

Wednesday, March 13, 2024 – 7:00 p.m.
City Hall & Online Zoom Webinar

City of Plymouth
201 S. Main
Plymouth, Michigan 48170

www.plymouthmi.gov
Phone 734-453-1234

<https://us02web.zoom.us/j/89450460839>

Passcode: 896122

Webinar ID: 894 5046 0839

1. **CALL TO ORDER**
 - a) Roll Call
2. **CITIZENS COMMENTS**
3. **APPROVAL OF THE MINUTES**
 - a) Approval of the February 14, 2024 meeting minutes
4. **APPROVAL OF THE AGENDA**
5. **COMMISSION COMMENTS**
6. **PUBLIC HEARINGS**
 - a) **SP24-02:** 413 N. Main, Special Land Use and Site Plan Review
7. **OLD BUSINESS**
 - a) **PUD23-01:** 1100 W. Ann Arbor Trail, Revised Preliminary PUD
8. **NEW BUSINESS**
 - a) **SP24-03:** 980 W. Ann Arbor Road, Signage
9. **REPORTS AND CORRESPONDENCE**
10. **ADJOURNMENT**

Citizen Comments - This section of the agenda allows up to 3 minutes to present information or raise issues regarding items not on the agenda. Upon arising to address the Commission, speakers should first identify themselves by clearly stating their name and address. Comments must be limited to the subject of the item.

Meetings of the City of Plymouth are open to all without regard to race, sex, color, age, national origin, religion, height, weight, marital status, disability, or any other trait protected under applicable law. Any individual planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) should submit a request to the ADA Coordinator at 734-453-1234 ext. 234 at least two working days in advance of the meeting. The request may also be submitted via mail at 201 S. Main St. Plymouth, MI 48170, or email to clerk@plymouthmi.gov.

GOAL AREA ONE - SUSTAINABLE INFRASTRUCTURE

OBJECTIVES

1. Identify and establish sustainable financial model(s) for major capital projects, Old Village business district, 35th District Court, recreation department, and public safety
2. Incorporate eco-friendly, sustainable practices into city assets, services, and policies; including more environmentally friendly surfaces, reduced impervious surfaces, expanded recycling and composting services, prioritizing native and pollinator-friendly plants, encouraging rain gardens, and growing a mature tree canopy
3. Partner with or become members of additional environmentally aware organizations
4. Increase technology infrastructure into city assets, services, and policies
5. Continue sustainable infrastructure improvement for utilities, facilities, and fleet
6. Address changing vehicular habits, including paid parking system /parking deck replacement plan, electric vehicle (EV) charging stations, and one-way street options

GOAL AREA TWO – STAFF DEVELOPMENT, TRAINING, AND SUCCESSION

OBJECTIVES

1. Create a 5-year staffing projection
2. Review current recruitment strategies and identify additional resources
3. Identify/establish flex scheduling positions and procedures
4. Develop a plan for an internship program
5. Review potential department collaborations
6. Hire an additional recreation professional
7. Review current diversity, equity, and inclusion training opportunities
8. Seek out training opportunities for serving diverse communities

GOAL AREA THREE - COMMUNITY CONNECTIVITY

OBJECTIVES

1. Engage in partnerships with public, private and non-profit entities
2. Increase residential/business education programs for active citizen engagement
3. Robust diversity, equity, and inclusion programs
4. Actively participate with multi-governmental lobbies (Michigan Municipal League, Conference of Western Wayne, etc.)

GOAL AREA FOUR - ATTRACTIVE, LIVABLE COMMUNITY

OBJECTIVES

1. Create vibrant commercial districts by seeking appropriate mixed-use development, marketing transitional properties, and implementing Redevelopment Ready Communities (RRC) practices
2. Improve existing and pursue additional recreational and public green space opportunities and facilities for all ages
3. Develop multi-modal transportation plan which prioritizes pedestrian and biker safety
4. Improve link between Hines Park, Old Village, Downtown Plymouth, Plymouth Township, and other regional destinations
5. Maintain safe, well-lit neighborhoods with diverse housing stock that maximizes resident livability and satisfaction
6. Modernize and update zoning ordinance to reflect community vision
7. Implement Kellogg Park master plan

Planning Commission 2024 Goals

1. Complete the master plan review
2. Engage in a training session
3. Review a compatibility ordinance

“The government in this community is small and accessible to all concerned.”

-Plymouth Mayor Joe Bida November 1977

City of Plymouth
Planning Commission Public Hearing Notice
201 S. Main Street Plymouth, Michigan 48170
Website: www.plymouthmi.gov Phone: (734) 453-1234 ext. 232

A regular meeting of the Planning Commission will be held on Wednesday, March 13, 2024, at 7:00 P.M. located at City Hall and online via Zoom to consider the following:

SP 24-02: 413 N. Main, Special land use and site plan review for expansion of outdoor dining area

Meetings of the City of Plymouth are open to all without regard to race, sex, color, age, national origin, religion, height, weight, marital status, disability, or any other trait protected under applicable law. Any individual planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) should submit a request to the ADA Coordinator at 734-453-1234 ext. 234 at least two working days in advance of the meeting. The request may also be submitted via mail at 201 S. Main St. Plymouth, MI 48170, or email to clerk@plymouthmi.gov.

Publish: Tuesday, February 27, 2024



Plymouth Planning Commission
Regular Meeting Minutes
Wednesday, February 14, 2024 - 7:00 p.m.
Plymouth City Hall 201 S. Main

City of Plymouth
www.plymouthmi.gov
734-453-1234
Plymouth, Michigan 48170-1637

1. CALL TO ORDER

Chair Karen Sisolak called the meeting to order at 7:00 p.m.

Present: Chair Sisolak, Vice Chair Scott Silvers, Commissioners Sidney Filippis, Zachary Funk, Joe Hawthorne, Trish Horstman, Kyle Medaugh

Excused: Member Hollie Saraswat, and Eric Stalter

Also present: Planning and Community Development Director Greta Bolhuis, Planning Consultant Sally Elmiger

2. CITIZENS COMMENTS

There were no citizen comments

3. APPROVAL OF MEETING MINUTES

Silvers offered a motion, seconded by Funk, to approve the minutes for the January 10, 2024, meeting. Medaugh asked that the minutes be amended to indicate that he was not present.

There was a voice vote.
MOTION PASSED

4. APPROVAL OF THE AGENDA

Hawthorne offered a motion, seconded by Silvers, to approve the agenda for February 14, 2024.

There was a voice vote.
MOTION PASSED

5. COMMISSION COMMENTS

There were no commission comments.

6. PUBLIC HEARINGS

a. RZ24-01: 353 Starkweather, Conditional rezoning request from O-1, Office Service District to RT-1, Two Family Residential

Sisolak opened the public hearing at 7:05 p.m.

Applicant Harold Polemitis described his rationale for requesting rezoning for his building, which has been used for his business. He said he no longer needs the entire building for office space and was considering moving his family there.

Drake Filippis, 697 Ann, said he supported the rezoning.

Sisolak closed the public hearing at 7:09 p.m.

Elmiger reminded the group that in conditional rezonings, the applicant offers the conditions. There was a discussion about parking, signage, and retaining the character of the home.

Motion

Silvers offered a motion, seconded by Horstman for RZ24-01 – 353 Starkweather to recommend to that the City Commission to approve a conditional rezoning from O-1 to RT-1.

Findings of Fact

The proposal aligns with the Master Plan.

In future land use maps, the multi-family, low density category is associated with the RT-1, two family residential zoning district.

The proposed action will advance the vision the city has set forth in its master plan.

Conditions

The permitted use is limited to two-family or single-family detached dwellings.

The permitted use on the subject site is limited to home occupations subject to the provisions of 78-212.

There was a voice vote.

MOTION PASSED

b. Amendment to Zoning Ordinance 78-127, Projections into Setbacks

Sisolak opened the public hearing at 7:29 p.m.

Pete Mundt, 643 N. Harvey, asked whether the amendment would restrict or expand the space where generators can be located. Silvers explained that the amendment would only define it for the first time.

Sisolak closed the public hearing at 7:31 p.m.

Silvers offered a motion, seconded by Filippis, to send the generator ordinance section 78-217 to the City Commission for review and approval.

There was a voice vote.

MOTION PASSED

7. OLD BUSINESS

a. PUD22-01: 100 S. Mill, PUD Extension

Bolhuis explained that the Planning Commission already approved the site plan, but the builder has not taken it to the City Commission because they have been working on difficulties with the water connection.

Silvers offered a motion, seconded by Medaugh, to approve a one-year extension to the PUD site plan, to end on November 9, 2024, and that the City Commission review and approve the extension.

There was a voice vote

MOTION PASSED

8. NEW BUSINESS

a. SP 24-01: 165 Liberty, Site Plan Review

Applicant Sharon Watson said she had received a variance for parking from the Zoning Board of Appeals. She distributed photos of her signs and offered to answer questions.

Drake Filippis, 697 Ann, said he supported the plan.

Motion

Silvers offered a motion, seconded by Hawthorne, to approve SP24-01 for site plan review.

Findings of Fact

The application meets all requirements of the master plan.

The project has passed the ZBA for concerns mentioned in previous meetings.

Condition

The applicant is to abide by recommendations contained within the Carlisle Wortman report.

There was a voice vote.

MOTION PASSED

b. 2024 Planning Commission Goals

Bolhuis reviewed her recommendations and said that the suggested public participation plan would be a city-wide effort. After a discussion, the group agreed on the following goals:

- Complete the master plan review
- Engage in a training session
- Review a compatibility ordinance

9. REPORTS AND CORRESPONDENCE

City Commission Liaison Brock Minton said the strategic plan's one-year tasks had been approved.

Sisolak gave a report on the engagement subcommittee, and Silvers gave a report on the future land use subcommittee.

10. ADJOURNMENT

Silvers offered a motion, seconded by Sisolak, to adjourn the meeting at 8:10 p.m.

There was a voice vote.

MOTION PASSED

CITY OF PLYMOUTH
SITE PLAN REVIEW APPLICATION

Community Development Department
 201 S. Main Street Plymouth, MI 48170
 Ph. 734-453-1234 ext. 232
www.plymouthmi.gov

I. Site/Project Information

Site Address 413 main street	Current Zoning Classification b3	Date of Application 3.18.24
--	--	---------------------------------------

Name of Property Owner Victor Nikollbibaj	Phone Number	
Mailing Address 413 main street	Email Address (Required) vitor413@yahoo.com	
City plymouth	State mi	Zip Code 48170

II. Applicant and Contact Information

Indicate Who the Applicant Is. If Property Owner, Skip to Section III.	Architect <input checked="" type="checkbox"/>	Developer <input type="checkbox"/>	Engineer <input type="checkbox"/>	Lessee <input type="checkbox"/>
Applicant/Company Name composition workshop	Phone Number 313-478-1547			
Applicant/Company Address 800 junction st	City plymouth	State mi	Zip Code 48170	
Email Address (Required) jkorf@cmpworkshop.com				

III. Site Plan Designer and Contact Information

Site Plan Designer Company Name composition workshop	Phone Number 313-478-1547		
Company Address 800 junction st	City plymouth	State mi	Zip Code 48170
Registration Number 1301057954	Expiration Date 3/14/2026	Email Address (Required) jkorf@cmpworkshop.com	

IV. Type of Project (Please Select All that Apply)


<input checked="" type="checkbox"/> Commercial	<input type="checkbox"/> Multi-Family	<input type="checkbox"/> New	<input type="checkbox"/> Remodel	<input type="checkbox"/> Change of Use	Is this project located in the Historic District? <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Mixed Use	<input type="checkbox"/> Industrial	<input type="checkbox"/> Addition	<input type="checkbox"/> Interior Finish	<input checked="" type="checkbox"/> Special Land Use	

V. Historic District

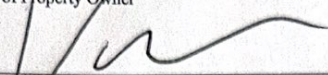
VI. Description of Work

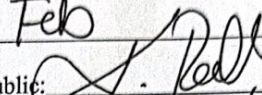
addition of a 360 sq/ft outdoor eating area near the northwest corner of the building, utilizing 2 parking spaces.

VII. Applicant Signature

Signature of Applicant 	Date 2.18.24
---	-----------------

VIII. Property Owner Signature

Signature of Property Owner 	Date 02.20.24
--	------------------

Subscribed and sworn before me this 20 day of Feb, 2024
Vitor Nikalbibaj Notary Public: 

K ROLLINS
Notary Public - State of Michigan
County of Wayne
My Commission Expires On 7 2026
Acting in the County of Wayne
My Commission expires: 10/07/2026

For Office Use Only

	YES/DATE	NO	N/A
1. Pre-Application Meeting			
2. Digital Copy of Application Package			
3. Public Hearing Notice			
4. CWA Review			
5. Municipal Services Review			
6. Fire Department Review			
7. Engineering Review			

compositionworkshop

architecture + interior design

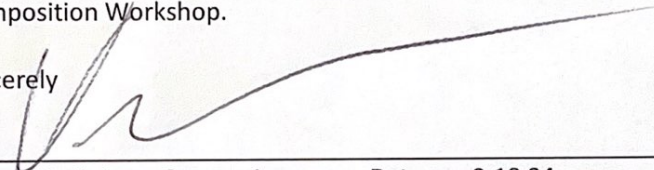
21.September.23

John Buzuvis
Economic Development Director
City of Plymouth
201 S Main, Plymouth, MI 48170

Re: 413 N. Main Street
Aqua Restaurant – outdoor dining
Plymouth, Michigan

Mr. Buzuvis:
My Architect, James Korf (Composition Workshop, Inc) has the authority to file any required documentation on my behalf.
Any direct correspondence or questions regarding this matter should be directed to Composition Workshop.

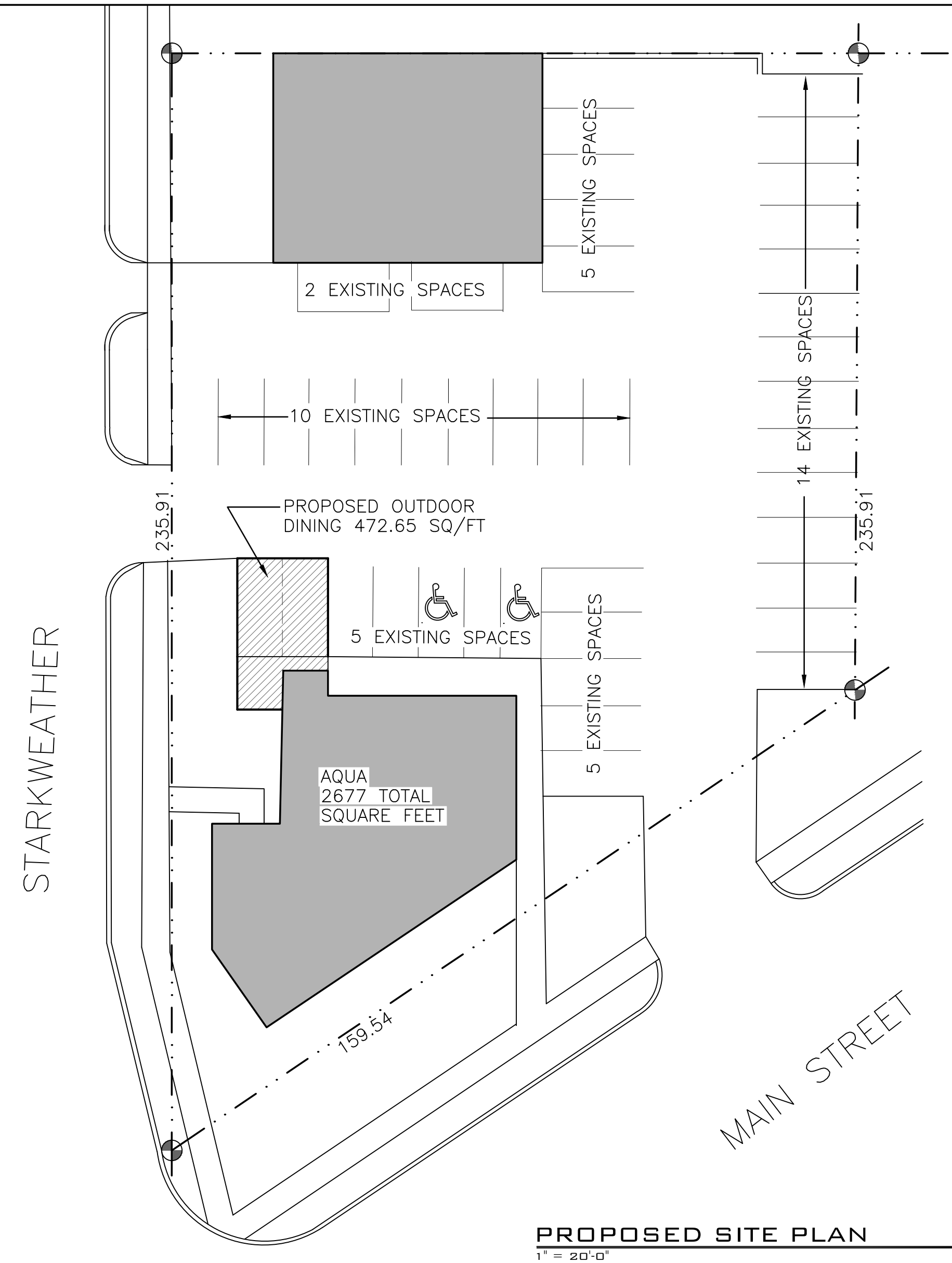
Sincerely



Victor Nikollbibaj *Owner, Aqua* Date: 2.18.24



* PICTURES SHOWN ARE OF A PREVIOUS INSTALLATION AND ARE SHOWN TO ILLUSTRATE CONSTRUCTION TYPE AND QUALITY. FOR ACTUAL SIZE SEE PLAN

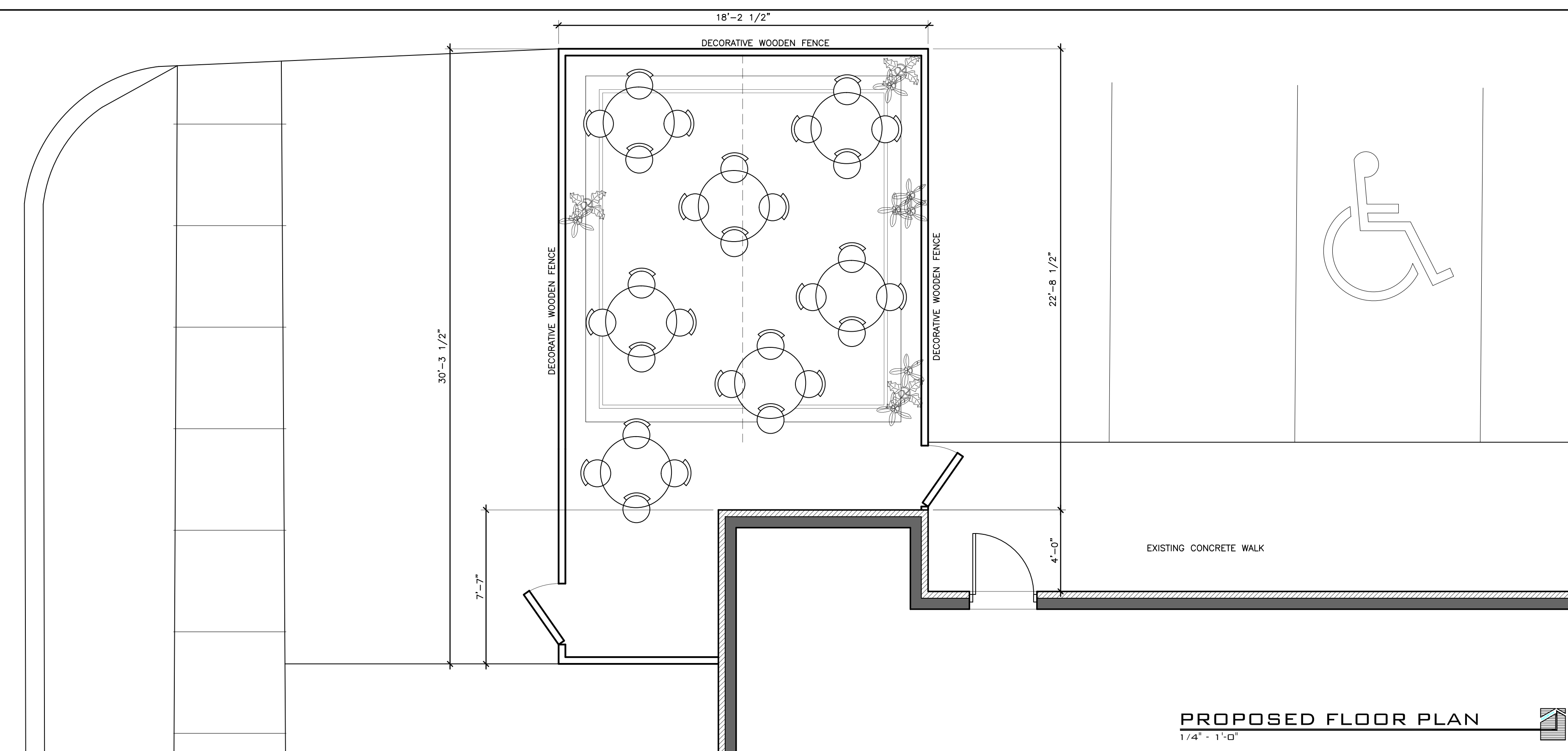


AQUA

413 N. MAIN STREET PLYMOUTH, MICHIGAN

SITE DATA		DRAWING INDEX	
ZONING REQUIREMENTS	B3 GENERAL BUSINESS	T1.1	TITLE SHEET / SITE PLAN
PROPOSED USE:	RESTAURANT	A1.1	FOUNDATION /1ST FLOOR PLAN
		A1.2	2ND FLOOR PLAN/ ROOF FRAMING
SETBACKS:	REQUIRED	PROVIDED	
FRONT	0' FEET	9'-10" FEET	
SIDE YARD	0' FEET	8' FEET WEST 68' FEET EAST	
REAR YARD	10' FEET	128'-8.5" FEET	
MAXIMUM BUILDING HEIGHT	30 FT 2 STORIES	20' FT 1 STORIES	
MIN LOT AREA	2 STORIES		
MAXIMUM LOT COVERAGE			
TOTAL SITE:	EXISTING HOUSE	2677 SQ/FT	
	NEW OUTDOOR DINING	472.65 SQ/FT	
	DRIVEWAYS + PATIOS	3059.65 SQ/FT	
PROJECT DESCRIPTION			
THE PROJECT CONSISTS OF THE ESTABLISHMENT OF A NEW OUTDOOR EATING AREA (480 SQ/FT) COMPRISED OF DECORATIVE WOODEN FENCING (MOVABLE AND REMOVABLE) TO BE INSTALLED AND REMOVED SEASONALLY.			

PARKING REQUIREMENTS		OWNER	
AQUA RESTAURANT AND THE BUSINESS IMMEDIATELY TO THE NORTH SHARE A PARKING LOT BY LEGAL AGREEMENT. THE BUSINESS TO THE NORTH SHALL NOT, BY AGREEMENT, PARK ANY CARS IN THE SHARED LOT PAST 5PM. AQUA RESTAURANT OPENS ONLY FOR DINNER.		VITOR NIKOLLBIBAJ 413 N. MAIN PLYMOUTH, MI 48170	
BY DIVISION XXII, SECTION 78-271 OF THE ZONING ORDINANCE, CITY OF PLYMOUTH: Establishment for sale and consumption on the premises of beverages, food and refreshments Outside of the downtown development district: One for each 75 square feet of usable floor area or one for each three persons allowed within the maximum occupancy load as established by local, county or state fire, building or health codes, whichever is greater.		ARCHITECT	
LISTED OCCUPANCY BY FIRE MARSHALL: 109 SPACES REQUIRED BY OCCUPANCY: 109 / 3 = 36.3		COMPOSITION WORKSHOP INC 800 JUNCTION ST PLYMOUTH, MI 48170 313-478-1547 734-425-5226 FAX	
BUILDING SQ/FT: 2677 SQ/FT GROSS FLOOR AREA: 2587 SQ/FT AREA OF OUTDOOR DINING: 472.65 SQ/FT TOTAL AREA: 3059.65 SQ/FT			
REQUIRED PARKING: 3059.65 / 75 SQFT = 40.79			
SPACES REQUIRED: 41 SPACES SPACES PROVIDED: 41 SPACES			



THE CONTRACTOR IS REQUIRED TO FIELD VERIFY ALL EXISTING CONDITIONS WITH REGARD TO THE VIABILITY OF EXISTING FOUNDATIONS, STRUCTURAL BEARING LOCATIONS, AND ALL DIMENSIONS, PRIOR TO THE BEGINNING OF CONSTRUCTION.

COMPOSITION WORKSHOP
Architecture + Interior Design
800 Junction, Plymouth, Michigan, 48170
Phone: 313-478-1547
Fax: 734-425-5226

AQUA
OUTDOOR DINING

DATE: 21.FEB.24
ISSUED FOR SPECIAL USE PERMIT

FILE NUMBER: 08_01
DRAWN BY: JFK
DATE ISSUED: 21NOV23

SHEET TITLE: **SITE PLAN**

SHEET NUMBER: **ST1.1**

PLYMOUTH POLICE DEPARTMENT MEMORANDUM

TO: GRETA BOLHUIS, PLANNING & COMMUNITY DEVELOPMENT DIRECTOR
FROM: A.L. COX, DIRECTOR OF PUBLIC SAFETY *A.L. Cox*
SUBJECT: SPECIAL LAND USE & SITE PLAN REVIEW AT 413 N MAIN (AQUA)
DATE: 2/28/2024

Per City Ordinance 78-92(4)(b), you have asked that I review the request for approval of a new outdoor dining area at 413 N Main Street (VNB, LLC currently doing business as Aqua). The review was narrowly focused on the impact to public safety only.

VNB, LLC operates under a Class C and a Specially Designated Merchant (SDM) liquor license with the following permits: Sunday Sales (PM) and two (2) Outdoor Service Areas (neither of which have been utilized over the last year). Their license type provides for the service of beer, wine, spirits, and mixed drinks. The licensee is requesting approval to create a new outdoor dining space on the north side of the existing structure. The proposed area is 472.65 square feet which includes two (2) currently utilized parking spaces.

While the proposed area would allow for patrons to enjoy a meal and/or drink(s) out of doors in good weather, it would also provide for an increase in customer capacity for the establishment when the area is in use. This will require that management provide for the same close monitoring/observation of guests outside as well as inside the establishment. It should also be noted that this proposed area will require notification to the Michigan Liquor Control Commission (MLCC) by the owner. In order to comply with MLCC rules and regulations, the proposed area will need to be inspected by the MLCC Enforcement division, and ultimate approval will come from the Commission.

Based on the provided plans, input from the licensee, and the establishment's history regarding the responsible service of alcohol to date, I do not see a negative impact on public safety. Additionally, any concerns regarding the loss of 2 parking spaces are alleviated by the fact that their private lot will still provide 39 available spaces. Should alterations or amendments to the plans be made, an additional review of those changes should be conducted.



Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: March 6, 2024

**Special Land Use and
Site Plan Review
For
Plymouth, Michigan**

Applicant:	Victor Nikollbibaj 413 Main St. Plymouth, MI 48170
Project Name:	Aqua Restaurant Outdoor Seating
Plan Date:	November 21, 2023
Latest Revision:	February 21, 2024
Location:	413 N. Main St.
Zoning:	B-3 – General District
Action Requested:	Special Land Use and Site Plan Approval
Required Information:	Any deficiencies are noted in the report.

PROJECT AND SITE DESCRIPTION

The applicant is proposing to use two adjoining parking spaces to locate a 480-square-foot outdoor dining area on the subject site. The outdoor area is directly adjacent to the applicant's place of business (Aqua Restaurant), and will be blocked off using moveable black wooden fencing.

This change represents an expansion of a use that serves alcohol, and is therefore a Special Land Use in the B-3 District, and requires a Special Use Permit.

An aerial and street view of the subject site is shown in **Figures 1 and 2** on the following page.

Figure 1. Subject Site



Source: Near Maps (Capture 4-7-2023)

Figure 2. Subject Site – Street View



Source: Google Maps (Capture 7-2019)

SPECIAL LAND USE STATUS

The applicant is proposing to expand the service of alcohol out of doors, which is a Special Land Use and must meet the Special Land Use standards in Section 78-281.

In addition, the B-3 General Business District (in Section 78-112) states that the Community Development Director shall request a report from the city's Director of Public Safety regarding the possible impacts of the establishment serving alcoholic beverages, and that the Planning Commission will consider this report.

The special land use standards in Section 78-281 are as follows. Our comments regarding each are provided below:

(1) Will be harmonious and in accordance with the general objectives or any specific objectives of the City of Plymouth Master Plan.

CWA Comment:

The 2018 Master Plan:

- Identifies this site as "Mixed Use High Density," which includes a mixture of retail, service, office, recreation and residential uses. It also states that parking shall be located at the rear of the building, or integrated and hidden. (Pg. 12)
- The North Main Street Sub Area Plan also states that parking should be located at the rear of buildings, and that landscape strips or decorative knee walls should separate front yard parking and sidewalk areas. (Pg. 23)
- Lastly, *Figure 12: Primary & Secondary Transportation Routes* map (Pg. 37) identifies the public sidewalk on the east side of Starkweather (adjacent to this site) as being too narrow. This public sidewalk also directly abuts the curb, and has no green strip between the curb and sidewalk, placing pedestrians right next to the street.

Proposed Use

Unlike the Downtown Sub Area Plan, the North Main Street Sub Area Plan doesn't encourage outdoor cafes. However, this Sub Area does call for a mix of retail, service, office, recreation and residential uses. Outdoor eating areas help to establish a "mixed-use" atmosphere.

Proposed Layout

While the use may be consistent (in our opinion) with the Master Plan, the layout of this site is not compliant. The existing parking lot directly abuts the public sidewalk along Starkweather, and there is no landscape separation or knee wall between the lot and the street, making it clearly visible to passersby. This business has also constructed a 3- or possibly 4-season enclosed dining room in the Starkweather St. right-of-way. These features are not going to be improved with the proposed outdoor dining layout.

The plans do not accurately reflect the existing conditions on site. The building is much closer to the public sidewalk on both Starkweather and N. Main St. than the plans indicate. The location of the building on site needs to be corrected.

The outdoor dining area is proposed to be located in the two most westerly parking spaces on the north side of the building. The plan shows a 14-foot wide strip of asphalt between the sidewalk

and proposed edge of the outdoor dining fence; however, this space is actually only about 4-feet wide, which is within the right-of-way. The proposed dining use should not be placed in the right-of-way. To make the proposal more consistent with the goals of the Master Plan, the Planning Commission may want to discuss the addition of landscape planters along the west side of the dining enclosure fence.

- (2) Will be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and will not change the essential character of the area.**

CWA Comment:

No permanent structures are proposed. Sheet ST1.1 shows photographs of when an outdoor dining area was installed up next to the sidewalk in previous years, with a black fence. Will the same fence/umbrellas/chairs shown in the photos be used if the outdoor dining area is approved? The plans also show that the outdoor dining area will accommodate 7 tables/28 patrons.

- (3) Will not be hazardous or disturbing to existing or future nearby uses.**

CWA Comment:

The outdoor dining area will be located directly across the street from a property that was just recommended for approval for single-family residential use. (Note: The City Commission approved the first reading on March 4.) Therefore, an outdoor use that extends into the evening 7-days a week could be disturbing to these neighbors.

The Aqua Restaurant's website indicates that the business is open 4pm – 10pm, 7-days a week. We have the following questions:

- Will the current hours of operation apply to the outdoor dining area?
- Will the outdoor area be used only for patrons eating a meal, or will patrons only using the bar also be able to sit outside?
- Is the applicant proposing any outdoor speakers or music?
- How will the outdoor area be managed to minimize disturbance to nearby residents?

- (4) Will be compatible with adjacent uses of land and will promote the use of land in a socially and economically desirable manner.**

CWA Comment:

As mentioned above, the building across Starkweather to the west of the outdoor eating area could be approved for single-family residential use. The building to the north is approximately 2,220 s.f. and contains two commercial units. One of these units is occupied by an "event" business (accommodating up to 50 people at a time).

The outdoor dining area is compatible with the commercial building to the north, but could be disturbing to residents directly across Starkweather. See our questions above.

- (5) **Will be served adequately by essential public services and facilities or that the persons responsible for the establishment of the proposed use will provide adequately any such service or facility.**

CWA Comment:

Essential public services currently serve the Aqua Restaurant. The outdoor dining area does not require any additional public services.

- (6) **Will not create excessive additional public costs and will not significantly decrease property values of surrounding properties.**

CWA Comment:

We don't believe the proposed outdoor dining area will significantly decrease property values of surrounding properties.

- (7) **Will meet all the requirements and standards of this chapter and any other applicable laws, standards, ordinances, and or/regulations.**

CWA Comment:

See our comments in the remainder of this review for compliance with ordinance requirements.

In summary, we consider *the proposed use* to meet the criteria for the standards in 78-281 and 78-102(2). However, we don't consider the proposed layout to meet the criteria. The applicant needs to correct the plans and provide additional information to answer the questions in this review, and any additional questions Commissioners may have. Also, the Planning Commission may want to discuss modifications to the layout with the applicant to better meet the goals of the Master Plan.

Items to be Addressed: 1) Planning Commission to consider Director of Public Safety report. 2) Correct plans to accurately locate building on site. 3) Planning Commission to discuss the addition of landscape planters along the west side of the dining enclosure fence. 4) Will the same fence/umbrellas/chairs shown in the photographs be used if the outdoor dining is approved? 5) Will the current hours of operation apply to the outdoor dining area? 6) Will the outdoor area be used only for patrons eating a meal, or will patrons only using the bar also be able to sit outside? 7) Is the applicant proposing any outdoor speakers or music? 8) How will the outdoor area be managed to minimize disturbance to nearby residents?

SITE PLAN REQUIRED INFORMATION

Per Section 78-247, the submission shall show specific site information. A site layout, including the building to the north, is provided on Sheet ST1.1. We have the following comments:

- 1) The building to the north is not on the subject site, but on an independent lot. The site plan should show the property line that divides the subject site from the lot to the north.
- 2) The aerial photograph of the existing building (captured in 2023) shows the edge of the building about 5-feet from the edge of the public sidewalk along N. Main St. The site plan locates the edge

of the building approximately 26-feet from the edge of the public sidewalk along N. Main St. Another inconsistency is that the aerial photo doesn't show a sidewalk on the east side of the building (while the site plan shows this walk). Is the applicant proposing to add a sidewalk here, and extend this walk south to connect to the public walk along Main St.? The southern-most driveway into the parking lot along Starkweather is located approximately 105 feet from N. Main St.; the site plan shows the driveway approximately 130 feet from N. Main St. The site plan must be drawn on an accurate survey of the property. The submission needs to be corrected and resubmitted.

Items to be Addressed: 1) *Site Plan should be drawn on an accurate survey of the property; the plan should be corrected and resubmitted.* 2) *Is the applicant proposing to locate a new sidewalk on the east side of the building, and extend this walk to the public walk on N. Main St.?*

PARKING

Parking in the B-3 zoning district requires one space per 75 square feet of usable floor area, or one space for each three persons allowed within the maximum occupancy load.

The plans show 2,587 gross s.f. of floor area for the existing building, and 472.65 s.f. for the outdoor dining area. We have the following comments/questions:

- 1) No building floor plans are provided, so we are unable to confirm the floor area calculation. The plans calculate required parking using "gross floor area;" however, the ordinance requirements use "usable floor area," which is defined as follows:

Floor area, usable, for the purposes of computing parking, means that area used for or intended to be used for the sale of merchandise or services, or for use to serve patrons, clients or customers. Such floor area which is used or intended to be used principally for the storage or processing of merchandise, hallways or for utilities or sanitary facilities, shall be excluded from the computation of usable floor area. Measurement of usable floor area shall be the sum of the horizontal areas of the several floors of the building, measured from the interior faces of the exterior walls.

The applicant should confirm that they used the "usable floor area" definition to calculate parking.

- 2) Does the "maximum occupancy" figure include the roofed/enclosed dining area that was added to the west side of the building? If not, it should be added.
- 3) The number of spaces shown on the site plan are inconsistent with the aerial photograph (captured in 2023), as follows:
 - a. Parking spaces adjacent to the east side of the restaurant building: aerial shows 6 spaces; site plan shows 5 spaces.
 - b. Parking spaces adjacent to the north side of the restaurant building: aerial shows 7 spaces (of which 2 are being occupied by the proposed outdoor dining area), but the location of these spaces is not consistent with the aerial.
 - c. Parking spaces in the middle of the lot: aerial shows 11 spaces in the same location as the site plan shows 10 spaces (although the arrow indicating the 10 spaces should extend all the way to the Starkweather public sidewalk to count 10 spaces).

- d. Parking spaces on the east side of the neighboring building to the north: aerial shows 3 spaces with a shed occupying the most northerly spaces; site plan shows 5 spaces and doesn't show the shed.

The plans should be corrected to accurately reflect the existing conditions on site.

Based on these comments, it is unclear if the number of parking spaces meets ordinance requirements. The plans should be corrected, and information provided so that the figures on the plans can be confirmed. Also, we defer whether parking for outdoor uses on private property is typically required to the Community Development Director.

The Site Plan states that this property owner has a parking agreement with the adjacent property owner. This agreement should be submitted as part of this Special Land Use request.

Items to be Addressed: 1) Correct plans to reflect the existing number of parking spaces, and accurately located on the site. 2) Provide floor plans of the existing building so that the floor area figures and maximum occupancy on the plans can be confirmed. 3) Defer determination if parking is required for outdoor dining to Community Development Director. 4) Applicant to provide shared parking agreement with northern property owner to the City as part of the Special Land Use request.

RECOMMENDATIONS

In our opinion, the outdoor seating area use meets the vision in the Master Plan for this street, but the layout is not consistent with the Master Plan. We recommend the Planning Commission discuss the plans with the applicant, and give the applicant more time to update the plans and resubmit. A summary of the comments in the review follows:

Special Land Use


- 1) Planning Commission to consider Director of Public Safety report.
- 2) Correct plans to accurately locate building on site.
- 3) Planning Commission to discuss the addition of landscape planters along the west side of the dining enclosure fence.
- 4) Will the same fence/umbrellas/chairs shown in the photographs be used if the outdoor dining is approved?
- 5) Will the current hours of operation apply to the outdoor dining area?
- 6) Will the outdoor area be used only for patrons eating a meal, or will patrons only using the bar also be able to sit outside?
- 7) Is the applicant proposing any outdoor speakers or music?
- 8) How will the outdoor area be managed to minimize disturbance to nearby residents?

Site Plan Requirements

- 1) Site Plan should be drawn on an accurate survey of the property; the plan should be corrected and resubmitted.
- 2) Is the applicant proposing to locate a new sidewalk on the east side of the building, and extend this walk to the public walk on N. Main St.?

Parking

- 1) Correct plans to reflect the existing number of parking spaces, and accurately located on the site.
 - 2) Provide floor plans of the existing building so that the floor area figures and maximum occupancy on the plans can be confirmed.
 - 3) Defer determination if parking is required for outdoor dining to Community Development Director.
 - 4) Applicant to provide shared parking agreement with northern property owner to the City as part of the Special Land Use request.
-



CARLISLE/WORTMAN ASSOC., INC.
Sally M. Elmiger, AICP, LEED AP
Principal

cc: Greta Bolhuis
Marleta Barr

February 26, 2024

Ms. Greta Bolhuis /
Plymouth Planning Commission
City of Plymouth, Michigan
201 S. Main
Plymouth, MI 48170

**Subject: Updated PUD Submission
Proposed Brookside Village Development
1100 W Ann Arbor Trail**

Ms. Bolhuis and the Planning Commission,

We are pleased to be submitting a significant update to the previously submitted Mixed-Use PUD proposal at the 1100 W Ann Arbor Trail property titled Brookside Village. The contents of this submission include:

DOCUMENTS

- Project Update Narrative
- Public Benefits Summary
- Tonquish Creek Corridor Restoration Master Plan - (ECT Consultants)
- Trip Generation Analysis - (Fleis & Vandenbrink Consultants)

DRAWINGS

Site / Civil

C-1	COVER SHEET	C-9	LANDSCAPING NOTES & DETAILS
C-2	DEMOLITION PLAN	C-10	CONSTRUCTION DETAILS
C-3	SITE PLAN	C-11	CONSTRUCTION DETAILS
C-4	GRADING PLAN	L-1	SUBJECT AREA / REMOVAL PROTOCOL (Creek Bed)
C-5	STORMWATER MANAGEMENT PLAN	L-2	PLANTING SCHEMATIC (Creek Bed)
C-6	UTILITY PLAN	1	ALTA / TOPO Survey
C-7	LIGHTING PLAN		
C-8	LANDSCAPING PLAN		

Architectural – Townhouse Residential Condominium

A-1	FLOOR PLAN OPTIONS	A-3	RENDERINGS
A-2	ELEVATIONS & SECTION STUDY	A-4	RENDERINGS

Architectural – Stand Alone Residential Condominium

SC110	STAND ALONE CONDO TYP. FLOOR PLANS
SC310	STAND ALONE CONDO TYP. ELEVATIONS

Architectural – Church and General

CH101	ARCHITECTURAL FLOOR PLAN (Church)	AR101	ASSORTED RENDERERS
CH301	EXTERIOR ELEVATIONS (Church)	AR102	ASSORTED RENDERERS
CH302	EXTERIOR ELEVATIONS (Church)	AR103	ASSORTED RENDERERS
		AR105	CONCEPTUAL SECTION

As you will see from your review, the design and scope of this submission is very similar to the previous 3 versions. The primary differences for this scope revolve around the following issues:

- We have further REDUCED the density from a total of 24 residential units to a new total of **20** units (17 Townhouses + 3 Stand Alone units).
- We have significantly added scope and features to the **Public Benefits** being offered with this project.
- We have provided for **extra parking spaces** that may be shared with the neighboring property.
- We have provided 2 guest spaces in front of every Townhouse significantly increasing parking capacity.
- We have commissioned creation of a **Creek Restoration Environmental / Ecological Master Plan** Report included herein.
- We have commissioned the creation of a **Traffic Analysis Report** to study traffic conditions for the project design, also included herein.

We understand that we may be able to appear at the **March 13** Planning Commission meeting. We greatly look forward to being able to move this project forward at that meeting. Should you have any questions, please do not hesitate to contact us.

Regards,



Douglas B Hamborsky AIA
Director of Design and Construction
Champion Development Group

Hamgroup2@gmail.com

313-282-6432

1100 W Ann Arbor Trail
PROPOSED PUD DEVELOPMENT (Revised) – FEBRUARY 2024
PROJECT UPDATE NARRATIVE

OVERALL PROJECT OVERVIEW

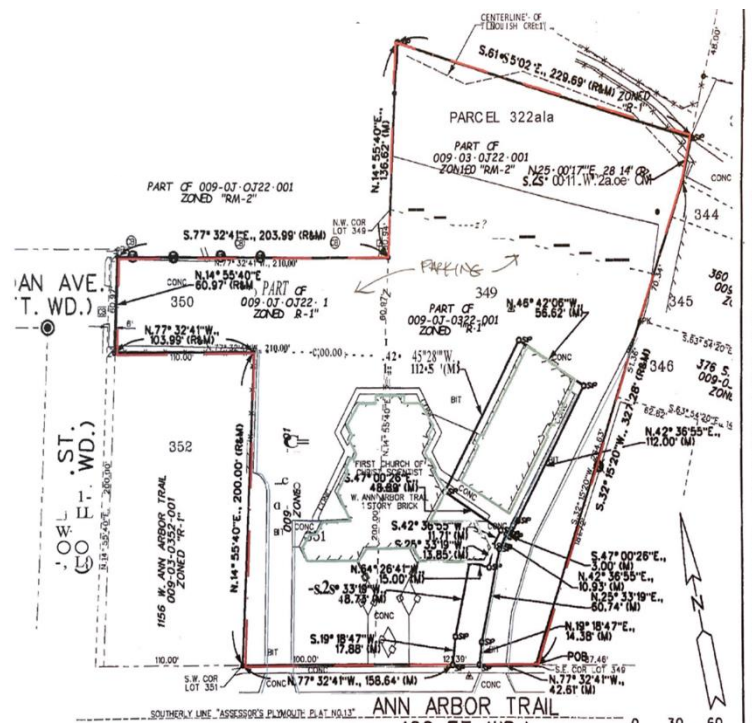
The existing **First Church of Christ, Scientist, Plymouth** has been on its present 2.25 Acre site since the 1950's. Prior to this location, the Church family was located in Downtown Plymouth. In all, this Church Community has been part of the Plymouth population for around 120 years.

The existing campus located at 1100 W. Ann Arbor Trail contains 2 structures of around 8,000 sf + 4,200 sf totaling around 12,200 sf. The existing Church congregation population has become reduced over the years, and no longer requires the use of a large church building. The projection for the future does not see this population growing. The present Church operations have been conducted in the smaller building for the last several years. The larger structure is presently being temporarily leased out on a temporary basis to an unaffiliated Church group.

The need for the **First Church of Christ, Scientist, Plymouth** Church at this time is to develop a new structure with parking that is appropriately sized for the present and future population of the Church family. This can be accomplished on around 1/3 of the existing property land. The plan as presented in this project is that the developer, Champion Development Group, shall develop a project suitable and harmonious with the Church family, the adjacent Plymouth community and the Plymouth Master Plan.

The Champion Development Group (CDG) has entered into a Contract with the First Church of Christ, Scientist, Plymouth entity to purchase the available remaining portion of the property and has been working closely with the Church leadership to help define what each entity needs to move forward with a workable Master Site layout. The intention is for CDG to develop a Townhouse style residential Condominium community as depicted in the designs provided within this submission.

The property will become divided into a Church section and a Townhouse section. Both sections will be part of a 'Master' Condominium site that will have assorted rights and obligations to be defined in future Condominium Documents. Within the Townhouse Condominium, each structure will then become defined as 'Units' that will be regulated by requirements defined within their own



Condominium Documents. This approach is common for this style of development, and we anticipate significant success with managing this plan.

REVISION OVERVIEW

To date, this project has been before the Planning Commission on March 8, 2023 and April 12, 2023 PC for informal meeting appearances, and July 19, 2023 for the initial Formal PUD submission. We have processed the assorted comments and input from the productive dialogue at these PC meetings along with the Public Comments and have incorporated what we believe was the prominent input that was offered into this current submission. Below is a summary of revisions incorporated into this new submission:

SIGNIFICANT UPDATES

- ***Density of the Townhouse units have been FURTHER REDUCED from 30 (March) to 28 (April) to 24 (July) to now a total of 17 Townhome units + 3 Single units for a Site total of 20 units.***
- ***The 3 stand alone condominiums will be located directly on Ann Arbor Trail. The spacing and size of these units will essentially match the existing homes on the same side of Ann Arbor Trail directly to the West of Joel R Street. In essence, the appearance and function of Brookside Village along Ann Arbor Trail will now ‘match’ the existing community.***
- ***The PUBLIC BENEFIT scope has been significantly expanded and enhanced as defined in the separate Narrative for that work.***
- ***The parking lot by the Church has been maximized to provide for additional potential parking for certain neighbor use or events. See details in Public Benefits Narrative.***

The net effects of all these substantive revisions are that this updated PUD scope addresses the most prominent concerns including: reducing density, providing for a single family appearance along Ann Arbor Trail, providing expanded parking options and providing significant enhancements to the Tonquish Creek and Trail. All while maintaining the ability of a 120-year-old Church community to remain in Plymouth. And finally, converting a large portion of Church property into a new residential use will bring significant new revenue to the city.

PUBLIC BENEFITS

A more detailed description of all of the Public Benefits proposed in this project is included within this full submission. As an introduction, the following items combine to form the overall Public Benefit package for this project:

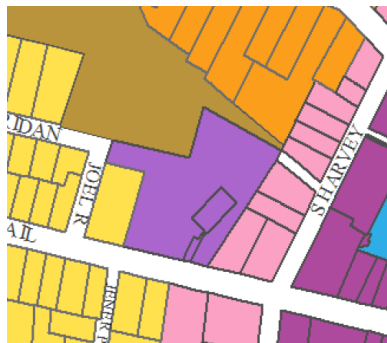
1. ***Provide Shared Parking for the Adjacent Tonquish Manor Operations***
2. ***Provide Tonquish Creek and Trail Restoration Plan***
3. ***Provide Funding for Some Creek Restoration Work Within the Report***
4. ***Provide a Full Restoration for the Champion Section of the Creek Bed***
5. ***Provide Select Tonquish Creek Trail Improvements***
6. ***Deed a Portion of Property Along the Bank of the Creek to the City***
7. ***Construct a New Access Stair at the Head End of the Creek***
8. ***Provide a New Pocket Park at the Reading Room Bookstore***

9. *Provide a New Pocket Park Along the Creek*
10. *Provide Significant New Tax Revenue for the City*
11. *Produce Significant Net Traffic Reduction*
12. *Addition of 20 New Families for the Downtown Community*
13. *Site to be Updated with All New Construction and Utilities*
14. *Provide Significant Additional Guest Parking for Townhouse Units*

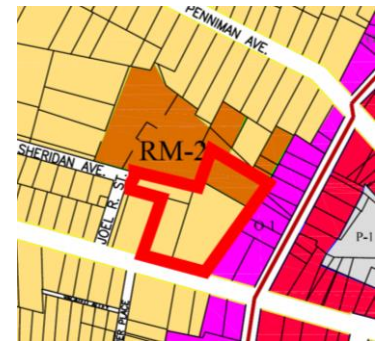
We look forward to bringing these significant enhancements to the City of Plymouth as part of our proposed PUD project.

ZONING DISCUSSION

The existing property is presently zoned primarily 'R-1' Residential, which allows for a Church use. (Note, there is a small portion of the North side of the property that is zoned 'RM-2'). The adjacent senior housing property to the Northwest is zoned 'RM-2' Multi-Family and the property to the East is zoned 'O-1' Office.



Future Land Use Map



Existing Zoning Map

The Future Land Use Plan has designated this property for a 'Mixed Use' future zoning.

Our proposed combination of lower density Townhouse residential along with the Church that operates a small public bookstore (The Christian Science Reading Room), represents a perfect application to address the Master Plan goals for this parcel.

To support the mixed use development scope, there is not a single district that would apply to this approach. The best way to accomplish the vision as submitted is to propose that this project be considered as a **Planned Unit Development (PUD)**. This would allow for the flexibility to have the uses and features as presented to be implemented on this property. The original submission had specific references to the RM-2 District. In lieu of this approach, setbacks, building height and similar regulations will be utilized as defined on the design drawings without specific references to the RM-2 District at this time.

COMMUNITY GOALS

From review of the Plymouth Master Plan, we understand that there are perpetual goals to continue the improvement of the Plymouth City environment into the future. We feel the proposed PUD project addresses all of the Plymouth goals in substantial ways as follows:

QUALITY OF LIFE

- The addition of smaller, low maintenance Condominium homes will offer the Plymouth residents that wish to 'downsize' from their larger single family homes into these wonderful, zero maintenance Condominium homes.
- With the inclusion of smaller Condominium units, this will keep pricing lower than other similar properties in the area and provide living options for a significant group of residents.

- This will allow the valuable Christ Science community to remain in Plymouth for decades to come.

FINANCIAL STABILITY

- The existing large Church structure is dated and in need of significant repair and maintenance. The proposed replacement of this structure with a campus of new structures will significantly increase property values on and around the property.
- This project will convert a large portion of the existing parcel into a residential use that will immediately begin producing property tax revenue for the City.

ECONOMIC VITALITY

- The population of residents that will live in the new Condominiums will produce significant financial activity to the Downtown Plymouth area.
- The proposed enhancements to the Tonquish Creek and adjacent Trail will produce an improved environment that will affect all properties that utilize this public amenity.

INFRASTRUCTURE

- The utilities that serve the proposed development will be enhanced from the decades old services that exist. This will be especially true for the Storm Water Management of the new site.
- The new drive and traffic configuration will be designed to current MDOT standards.

The project TEAM remains extremely excited to bring this wonderful development to the City of Plymouth for consideration and look forward to presenting this scope as our final, formal PUD submission.

FIRST CHURCH OF CHRIST,
SCIENTIST, PLYMOUTH

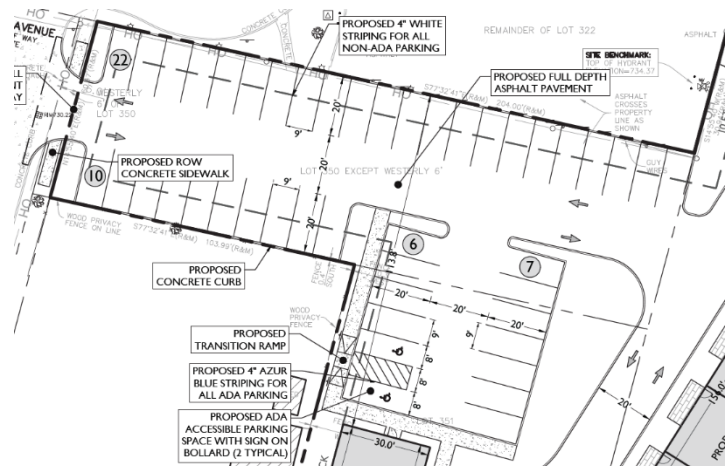
1100 W Ann Arbor Trail
PROPOSED PUD DEVELOPMENT (Revised) – FEBRUARY 2024
PUBLIC BENEFITS SUMMARY

During the previous project introductions and submissions, a need to improve the scope of additional project elements that would be considered as a **Public Benefit** to the overall community was mentioned. This summary along with assorted attachments as referenced represent a significant upgrade toward providing the community with select project elements that would be of additional benefit to the City and our neighbors that would be done **ONLY** as part of the proposed development. Specific descriptions of these Benefits are as follows:

1. Provide Shared Parking for the Adjacent Tonquish Manor Operations.

For the past several years First Church of Christ Scientist, Plymouth has had an arrangement to share a limited amount of parking for some residents at the adjacent Tonquish Manor senior housing center. It has not been clear if that shared parking arrangement could survive the proposed new development, but there has been a general goal to do so. Within the new site design, the parking lot for the Church has been designed to provide more parking than the Church population would require. This produces additional parking spaces that could be shared in some fashion going forward. Here are some features regarding how the shared parking arrangement is expected to evolve in the future:

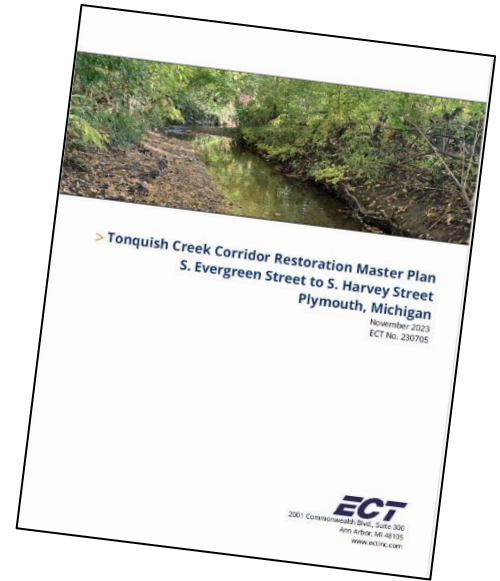
- The new community parking lot design has been **maximized** for parking and could have as many as **45** spaces as shown. This design assumes minimum landscaping and maximum paving.
- Per zoning requirements, the parking demand for the new Church would be **32** spaces.
- The Church parking is used on Sunday morning and Wednesday evening.
- There could be as many as 13 spaces available for shared use.
- The Church community is willing to explore sharing some of the excess parking with Tonquish Manor:
 - Some quantity of the excess parking may be shared on a **24 hour basis x 7 days per week** to accommodate full time parking needs of select Manor residents.
 - Some of the excess parking may be shared during normal business hours **Monday through Saturday** for use by staff, guests, vendors, medical personnel, and similar daily visitors to the Manor.
- **Specific details of the parking sharing arrangements are not yet finalized. It is expected that the Church and the Manor will work towards a mutually beneficial agreement once the project is approved.**



PUBLIC BENEFITS SUMMARY

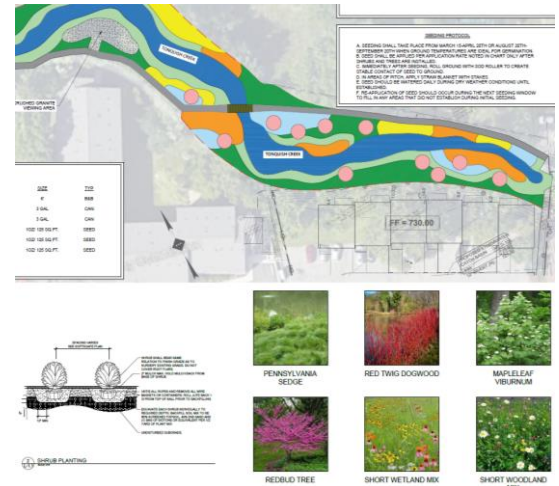
2. Provide Tonquish Creek and Trail Restoration plan

The Tonquish Creek in this section of town has been a feature since before there was a City. Over the decades, properties and infrastructure have become constructed around the Creek causing the quality of this natural resource to deteriorate below desirable standards. Champion Development Group has commissioned **Environmental Consulting and Technology (ECT)**, a highly reputable Consulting firm that specializes in this area of work, to perform an initial survey and provide a Master Plan of work that could be done to restore and upgrade the condition and function of the Creek to desirable standards. This full report is attached to this submission. We understand that this report can be used by the City and other authorities to seek funding and grants to perform some of the work as identified in the report. The eventual net **Public Benefit** would be to improve and restore a wonderful natural resource to become a treasured asset for the community for decades to come.



3. Provide Funding for Some Creek Restoration Work Within the Report

While the total estimated costs to achieve all the scope items defined in the ECT report is significant, Champion Development Group is willing to provide limited funding to achieve some of the work items as defined in the report. We would work with the City and other authorities to select certain items that could bring some measurable and visible improvement to this wonderful resource. Scope items that come to mind are to remove invasive species and clean up debris in a certain section of the Creek bed, most likely the area along the North side of the proposed Brookside Village area and the Tonquish Manor. The 'L-1' and 'L-2' Drawings included within this submission provide a graphic representation of applicable initial work scope in this area of the Creek. The net **Public Benefit** would be to provide a visually enhanced nature experience for this significant section of the Creek that many local residents could enjoy.



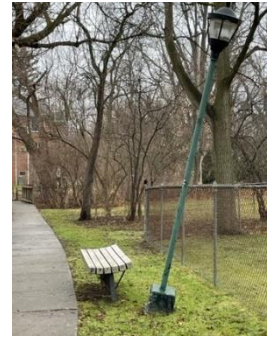
4. Provide a Full Restoration for the Champion Development Section of the Creek Bed

Using design and scope directives as defined in the ECT Restoration Plan, we shall perform a complete restoration of the 300 ft wide section of the creek bed that lies along the North side of our Development Property. This work is defined in sheet 'L-1' and 'L-2' attached herein and shall include removal of invasive species of plant material and any dead trees, removal of debris and broken concrete, trimming of healthy trees, planting of a native blanket of new plant and flower material that will fill in and stabilize the bank. The result will be a stable and attractive ecosystem that will enhance the appearance and function of this section of Tonquish Creek.

PUBLIC BENEFITS SUMMARY

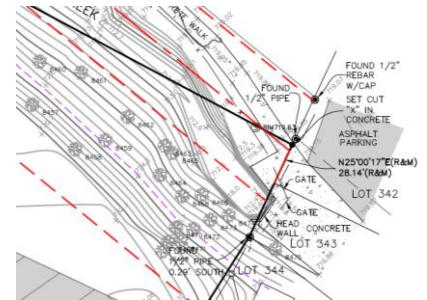
5. Provide select Tonquish Creek Trail Improvements

For the paved section of the Tonquish Creek Trail located along the North side of the Development property and the Tonquish Manor, there is an assortment of dated and damaged **light fixtures and benches**. As part of the proposed project, we would replace or provide additional ornamental light fixtures and benches along the approximate 600 lineal foot section of the Trail.



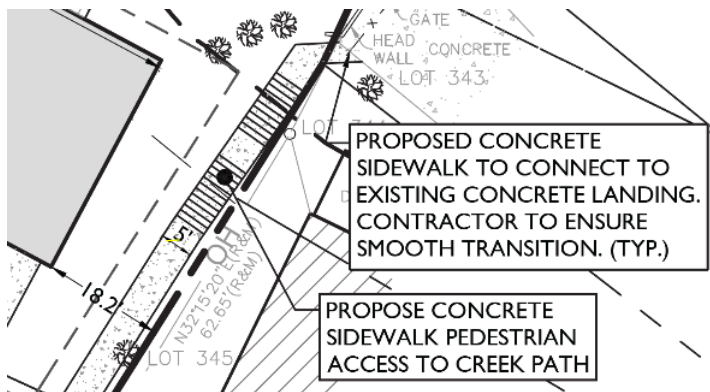
6. Deed a portion of property along the bank of the Creek to the City

It has become known that at the far East end of the Creek where there is a grate located just before the water enters a large culvert pipe that then travels below the streets, the City needs to periodically perform clearing and maintenance operations that includes placing debris on the bank area. To better facilitate maintenance operations, Champion Development is willing to **Deed a portion of the Creek bed to the City** along the South side of the Creek that runs along our entire 300 ft long property boarder. This offering would provide the City with increased flexibility to address Creek maintenance issues well into the future.



7. Construct a new access stair at the head end of the Creek.

To facilitate the opportunity for the Public and the new Village Condominium residents to access the Creek more conveniently, we offer to construct a **new concrete access stair** at the far Northeast corner of the property. This will allow people along Ann Arbor Trail to walk to the Trail area in a more convenient and direct way.



PUBLIC BENEFITS SUMMARY

8. Provide a new Pocket Park at the Reading Room Bookstore.

A patio area with some bench seating will be provided between the public sidewalk and the Church Reading Room entry. This will allow visitors the ability to rest or simply enjoy the area during nice weather days.

Landscaping will be included to form a 'Pocket Park' and a bike rack will be placed in this area for convenience.



9. Provide a new Pocket Park along the Creek.



A patio area with some bench seating will be provided along the Southern side of the Tonquish Creek along the paved Trail that goes behind the Tonquish Manor. The purpose of this 'Pocket Park' is to provide a nature based resting area for the persons that use the Trail. To stop and enjoy the sounds and atmosphere of the full Creek experience in a natural landscaped setting.

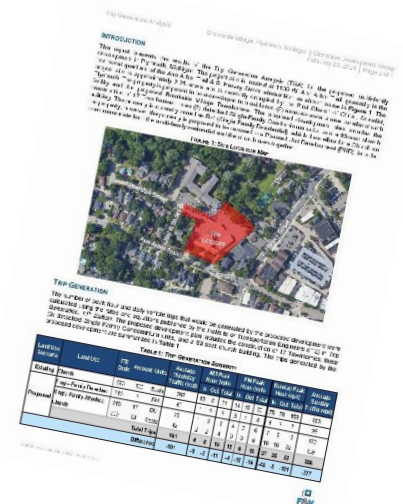
10. Provide Significant New Tax Revenue for the City

This property has been occupied by the Church for decades. By changing the use and occupancy of this land from Church use to Luxury Residential use, the City will be in line to receive new property tax revenue for decades to come. The final amount of new income to the City will be tied to the final value of the developed property but is expected to be very significant. This money can help with City services, infrastructure maintenance and other City costs.

11. Produce Significant Net Traffic Reduction.

While this property has had artificially less traffic to and from it over the past several years, the size of the existing Church and parking lot could produce significantly more traffic if the property were to be sold to a new Church community with a larger congregation. Some facts regarding the existing property include:

- Existing main church building main assembly area has over 300 seats.
- Existing parking lot has over 100 paved parking spaces.
- Existing Auxiliary building could house a multitude of Church based services including school activities, assorted member services, community meetings and other activities.
- A robust Church community could have multiple programs and events 5 to 7 days per week, not just on Sunday.



PUBLIC BENEFITS SUMMARY

The net of having a fully occupied Church community on this property has in the past and could again produce ***significant daily traffic issues*** that could far exceed the traffic potential from the proposed residential development. Included with this submission is a traffic study produced by **Fleis & Vandenberg**, a recognized local Traffic Consultant. Their study clearly shows how the proposed development will in fact REDUCE traffic from what a fully occupied Church facility would otherwise produce.

What is most important to realize is that if the proposed mixed-use Townhouse / Smaller Church design were to become implemented, this reduced traffic condition would become fixed for decades. Any concerns regarding a large Church community potentially coming to this site would become eliminated.

12. Addition of 20 New Families for the Downtown Community

With the addition of 20 new residential homes, there will be many new friends and neighbors that will frequently be visiting the vast assortment of shops and restaurants in the Downtown Community. The extra bonus of this increased business activity for the City is that these new customers will NOT require any additional parking since each unit has its own abundant parking spaces. This represents a very significant Public Benefit to all the business owners in Downtown Plymouth.



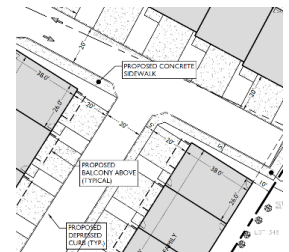
13. Site to be Updated with All New Construction and Utilities

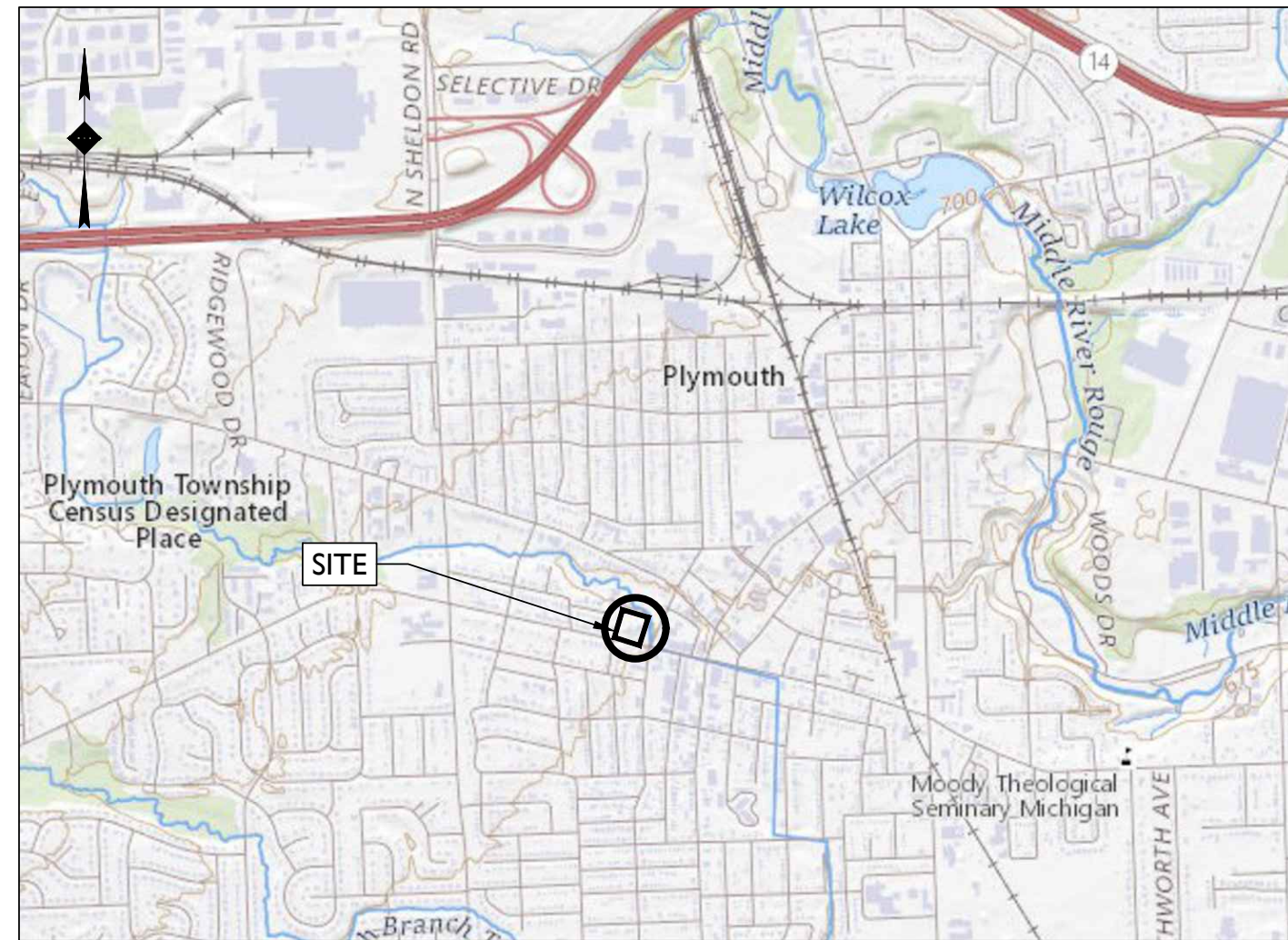


With this Development, the entire site will be converted from decades old, dated construction, utilities and infrastructure to All New buildings, sitework and utilities. One prominent feature is the updating of the whole site to now have a full **Stormwater Management System**. For the last several decades, all stormwater has simply flow into the creek, streets or adjacent properties. The new design will now be fully code compliant regarding proper management of stormwater on this site.

14. Provide Significant Additional Guest Parking for Townhouse Units

A concern was previously raised regarding if there was sufficient guest parking for visitors to the Townhouse residents. To address this issue, we have added 2 car parking aprons in front of EVERY Townhouse unit. This effectively doubles the available parking for the Townhouse population and their guests and greatly relieves any burden on other parking resources.





SOURCE: USGS NATIONAL MAPPER

LOCATION / KEY MAP

SCALE: 1" = 2,000'±

SITE DEVELOPMENT PLANS FOR BROOKSIDE VILLAGE PROPOSED PLANNED UNIT DEVELOPMENT

PID: 49009030322309
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH, WAYNE COUNTY, MICHIGAN

APPLICANT/ OWNER

LL REAL ESTATE, LLC
5000 E GRAND RIVER AVENUE
HOWELL, MI 48843
313-282-6432
HAMGROUP2@GMAIL.COM

ARCHITECTS

STUCKY VITALE ARCHITECTS
27172 WOODWARD AVENUE
ROYAL OAK, MI 48067
248-546-6700

LINDHOUT ASSOCIATES ARCHITECTS
10465 CITATION DRIVE
BRIGHTON, MI 48116
810-227-5668

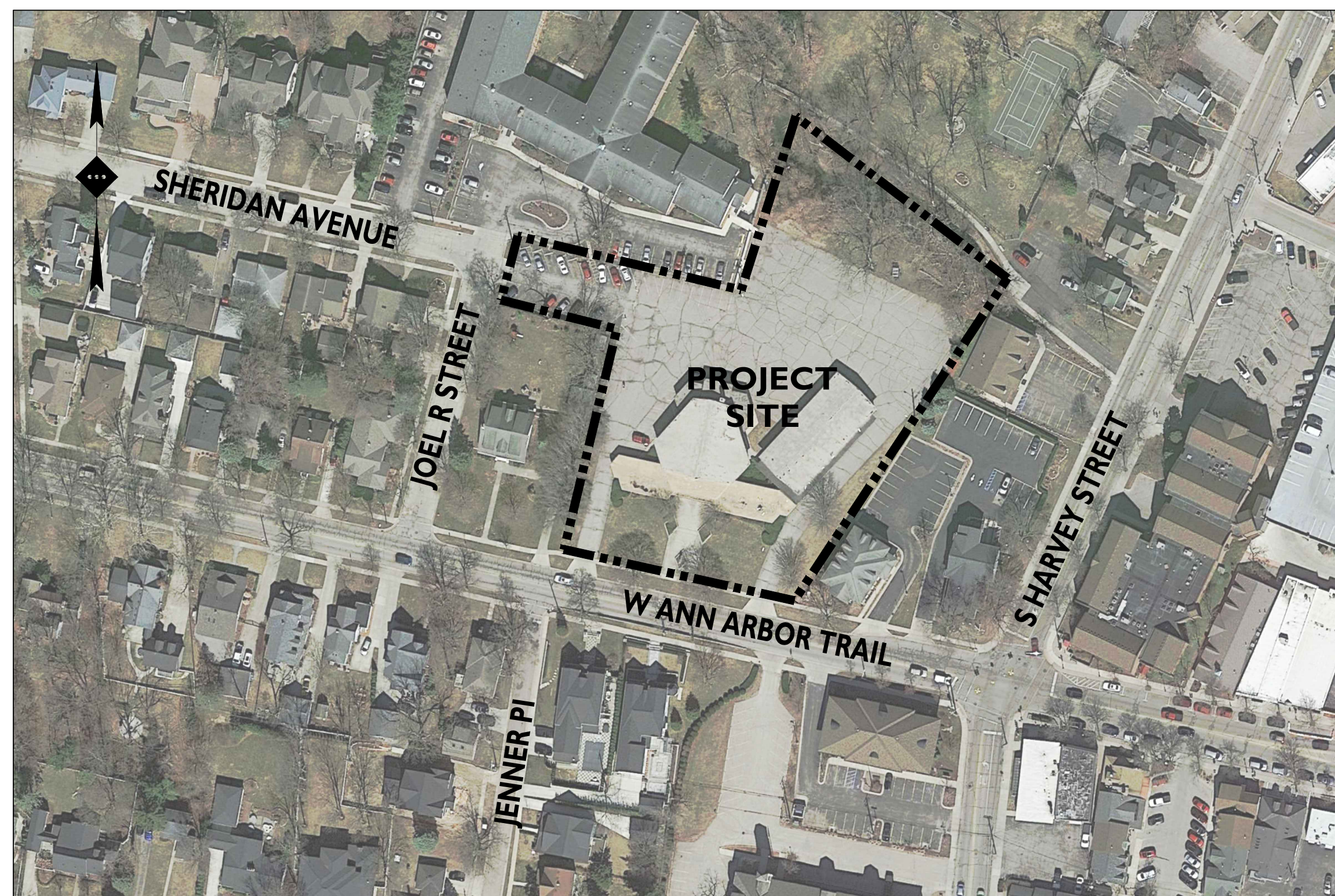
NOT APPROVED FOR CONSTRUCTION



Detroit, MI · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Rutherford, NJ
www.stonefieldeng.com
607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

**SITE DEVELOPMENT PLANS
BROOKSIDE VILLAGE
PROPOSED PLANNED UNIT
DEVELOPMENT**

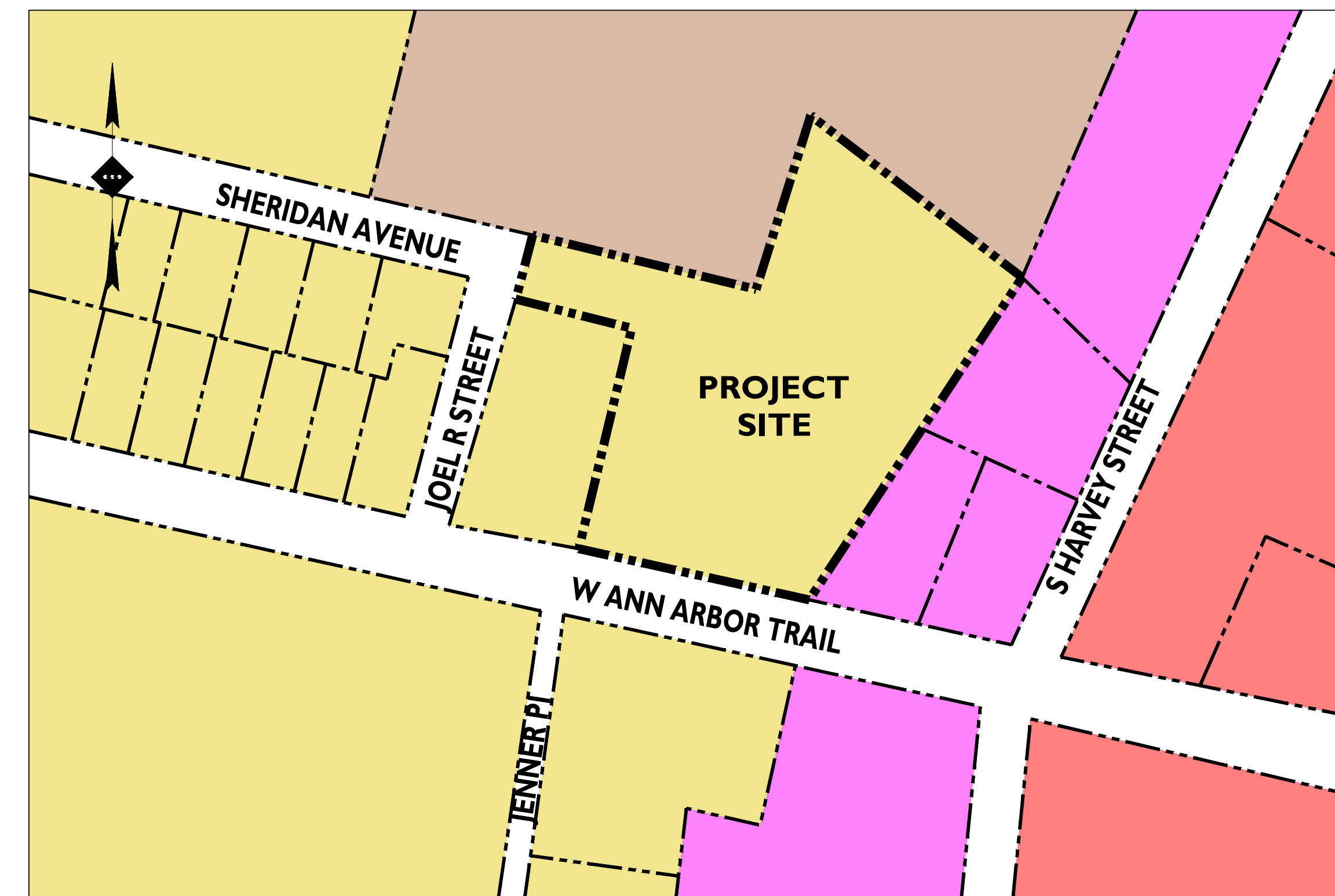
PARCEL ID: 49009030322309
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH
WAYNE COUNTY, MICHIGAN



SOURCE: GOOGLE EARTH PRO

AERIAL MAP

SCALE: 1" = 100'±



SOURCE: CITY OF PLYMOUTH, WAYNE COUNTY MICHIGAN OFFICIAL ZONING MAP

B-2: CENTRAL BUSINESS DISTRICT
M-2: MULTIPLE-FAMILY RESIDENTIAL DISTRICT
O-1: OFFICE DISTRICT
R-1: SINGLE FAMILY RESIDENTIAL DISTRICT

ZONING MAP

SCALE: 1" = 100'±

PLAN REFERENCE MATERIALS:

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
 - ALTA/NSPS LAND TITLE SURVEY PREPARED BY KEM-TEC DATED 06/22/2022
 - ARCHITECTURAL PLANS PREPARED BY SVA ARCHITECTS & LINDHOUT ASSOCIATES ARCHITECTS DATED 07/11/2023
 - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO 07/10/2023
 - LOCATION MAP OBTAINED FROM USGS ONLINE MAPS 07/10/2023
- ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

PLANS PREPARED BY:



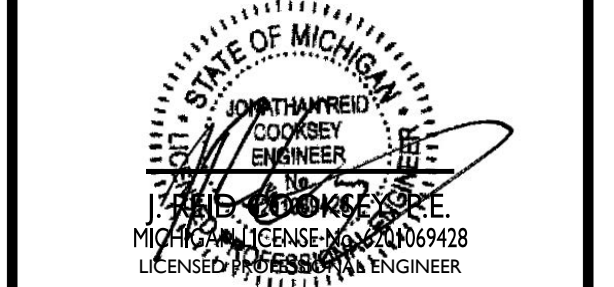
Detroit, MI · Rutherford, NJ · New York, NY
Boston, MA · Princeton, NJ · Tampa, FL
www.stonefieldeng.com

607 Shelby Suite 200 Detroit MI
Phone 248.247.1115



Know what's below
Call before you dig.

SHEET INDEX	
DRAWING TITLE	SHEET #
COVER SHEET	C-1
DEMOLITION PLAN	C-2
SITE PLAN	C-3
GRADING PLAN	C-4
STORMWATER MANAGEMENT PLAN	C-5
UTILITY PLAN	C-6
LIGHTING PLAN	C-7
LANDSCAPING PLAN	C-8
LANDSCAPING NOTES & DETAILS	C-9
CONSTRUCTION DETAILS	C-10 TO C-11



SCALE: AS SHOWN PROJECT ID: DET-220084

TITLE:

COVER SHEET

DRAWING:

C-1

V:\072023\DET220084\LL REAL ESTATE, LLC\1000 WEST ANN ARBOR TRAIL\PROJ\PHOTO\811\811.DWG



Know what's below
Call before you dig.

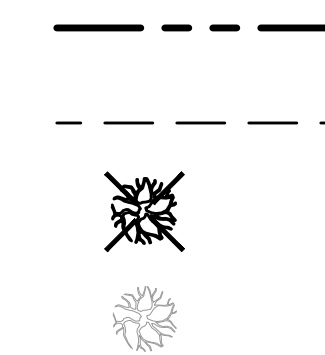
ALL SITE FEATURES WITHIN THE PROPERTY LINE ON THIS PLAN ARE TO BE REMOVED / DEMOLISHED UNLESS OTHERWISE NOTED. ALL FEATURES WITHIN THE RIGHT-OF-WAY ARE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS

TREE REMOVAL AND MITIGATION REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 34-18(1)	HERITAGE TREE REPLACEMENT REQUIREMENTS HERITAGE TREES SHALL BE REPLACED AT A SLIDING SCALE RATE SET BY THE CITY COMMISSION (2) TWO HERITAGE TREES PROPOSED TO BE REMOVED	2 TREES PROPOSED
§ 34-19(1)	FRONT YARD REPLACEMENT REQUIREMENTS TREES > 6" BUT LESS THAN HERITAGE TREE TREES SHALL BE REPLACED AT A SLIDING SCALE RATE SET BY THE CITY COMMISSION (2) TWO NON HERITAGE TREES PROPOSED TO BE REMOVED IN THE FRONT YARD	2 TREES PROPOSED

DEMOLITION NOTES

- THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
- EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE, AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
- ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTEDERIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.

SYMBOL



DESCRIPTION

- PROPERTY LINE
- FEATURE TO BE REMOVED / DEMOLISHED
- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO REMAIN

NOT APPROVED FOR CONSTRUCTION



Detroit, MI · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Rutherford, NJ
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

SITE DEVELOPMENT PLANS
BROOKSIDE VILLAGE
PROPOSED PLANNED UNIT DEVELOPMENT

PARCEL ID: 490903032309
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH
WAYNE COUNTY, MICHIGAN



SCALE: 1" = 30' PROJECT ID: DET-220084

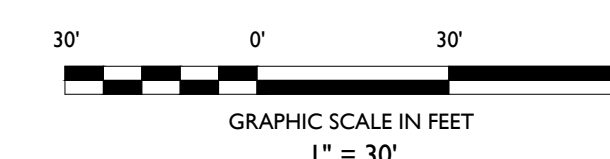
TITLE:

DEMOLITION PLAN

DRAWING:

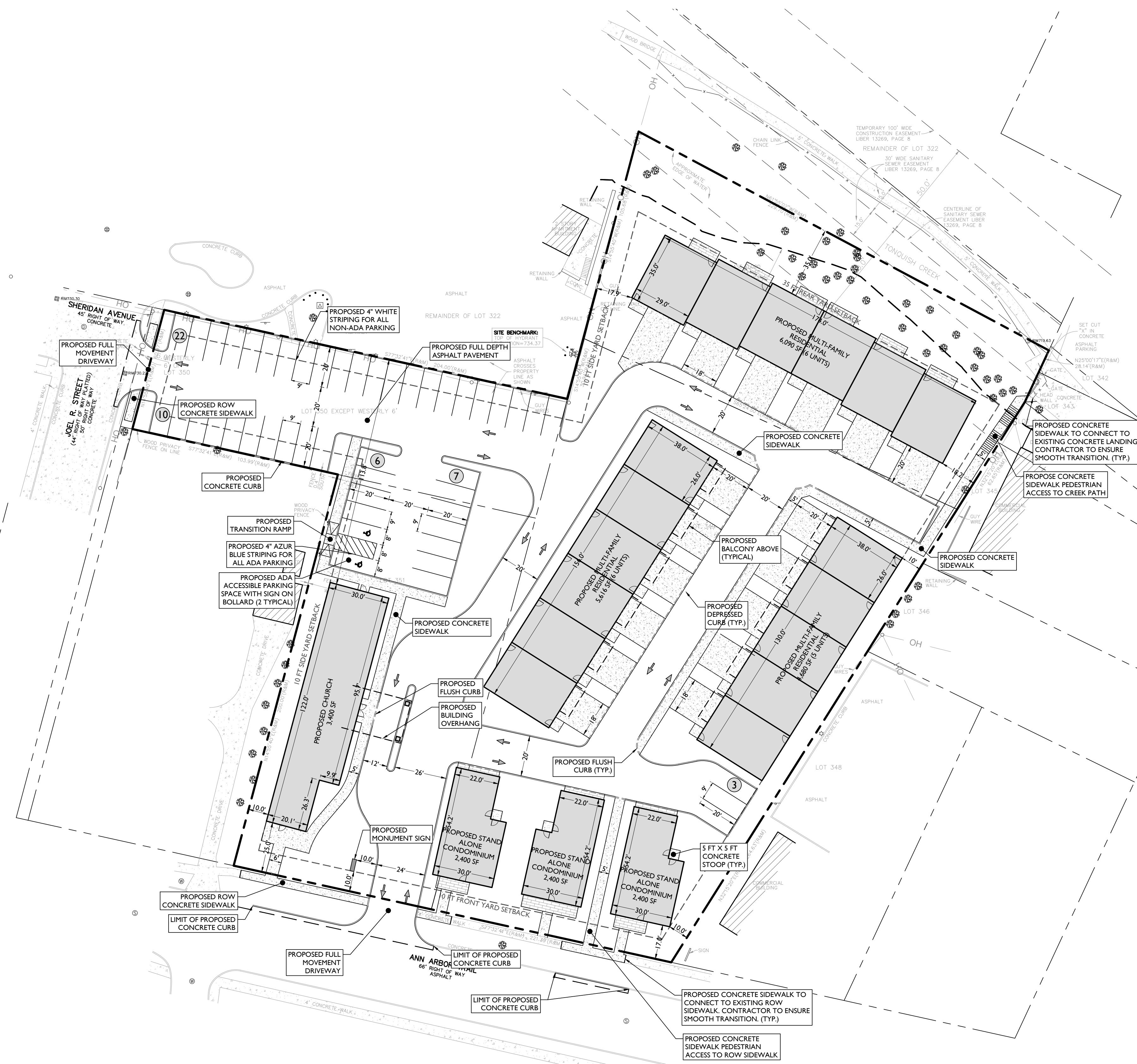
C-2

TREE REMOVAL SCHEDULE									
TREE #	D.B.H.	CANOPY RADIUS	BOTANICAL NAME	COMMON NAME	CONDITION	COMMENTS	"(N) NOT REGULATED (C = condition)"	HERITAGE (H)	RECOMMENDATION
8430	21	21'	Acer saccharum	Sugar Maple	good			H	TO BE REMOVED
8431	18	18'	Acer saccharum	Sugar Maple	poor	- Extensive rot & dead branches	N (c)		TO BE REMOVED
8432	21	21'	Acer platanoides	Norway Maple	fair	- Girdling root(s)		H	
8433	6 / 6 / 6 / .	10'	Malus sp.	Crabapple	fair	- Dead branch(es)			TO BE REMOVED
8434	10 / 8 / 6 / .	10'	Malus sp.	Crabapple	fair	- Rot in trunk			TO BE REMOVED
8435	22	22'	Acer platanoides	Norway Maple	fair	- Girdling root(s)		H	
8436	17	17'	Acer platanoides	Norway Maple	fair	- Scarred trunk			
8437	6	6'	Acer negundo	Boxelder	poor	- 75% or more dead	N (c)		
8438	6 / 3	6'	Acer negundo	Boxelder	fair	- Vine-choked			
8439	9	9'	Acer platanoides	Norway Maple	poor	- Substantial rot, missing leader, & substantial lean	N (c)		
8440	19	---	---	---	dead		N (c)		
8441	8	8'	Acer platanoides	Norway Maple	fair	- Bent/crooked/bowed leader			
8442	8	8'	Acer negundo	Boxelder	poor	- 75% or more dead	N (c)		
8443	6	6'	Alnus incana	Tree-of-Heaven	poor	- Hollow/rot	N (c)		
8444	14	---	---	---	dead		N (c)		
8445	14	14'	Ulmus sp.	Elm	poor	- Base of tree undermined by erosion	N (c)		
8446	9	9'	Alnus incana	Tree-of-Heaven	poor	- Missing main leader, and large area of dead bark	N (c)		
8447	9	9'	Acer negundo	Boxelder	poor	- Lean > 45 degrees	N (c)		
8448	30	30'	Juglans sp.	Walnut	fair	- Rot in trunk		H	
8449	7	7'	Acer negundo	Boxelder	poor	- Lean > 45 degrees	N (c)		
8450	6 / 4	6'	Acer negundo	Boxelder	poor	- Lean > 45 degrees	N (c)		
8451	21	21'	Juglans sp.	Walnut	poor	- 75% or more dead	N (c)		
8452	6	6'	Acer negundo	Boxelder	poor	- 50% or more dead	N (c)		
8453	43	43'	Juglans sp.	Walnut	fair	- Rot in trunk		H	TO BE REMOVED
8454	8	8'	Acer negundo	Boxelder	poor	- 50% or more dead	N (c)		
8455	6	6'	Ulmus sp.	Elm	fair	- Concorted crown			
8456	14	14'	Acer negundo	Boxelder	poor	- 50% or more dead	N (c)		
8457	7	7'	Ulmus sp.	Elm	fair	- Bent/crooked/bowed leader			
8458	10	10'	Acer negundo	Boxelder	poor	- Extensive rot & dead branches	N (c)		
8459	6	---	---	---	dead		N (c)		
8460	11	---	---	---	dead		N (c)		
8461	27	27'	Populus deltoides	Cottonwood	poor	- 50% or more dead	N (c)		
8462	29	29'	Salix sp.	Willow	poor	- 75% or more dead	N (c)		
8463	10	10'	Acer platanoides	Norway Maple	fair	- Dead branch(es)			
8464	9	---	---	---	dead		N (c)		
8465	26	26'	Salix sp.	Willow	poor	- 75% or more dead	N (c)		
8466	7	5'	Ulmus sp.	Elm	poor	- More than half of leader missing	N (c)		
8467	6	6'	Acer platanoides	Norway Maple	fair	- Bent/crooked/bowed leader			TO BE REMOVED
8468	6 / 5	6'	Acer negundo	Boxelder	poor	- 50% or more dead	N (c)		
8469	7 / 7	7'	Acer negundo	Boxelder	poor	- Lean > 45 degrees	N (c)		TO BE REMOVED
8470	8 / 4	8'	Ulmus sp.	Elm	fair	- More than half of leader missing			TO BE REMOVED
8471	6	6'	Acer platanoides	Norway Maple	poor	- More than half of leader missing	N (c)		TO BE REMOVED
8472	10	10'	Acer negundo	Boxelder	fair	- Concorted crown			
8473	7	---	---	---	dead		N (c)		
8474	6	2'	Acer platanoides	Norway Maple	poor	- More than half of leader missing	N (c)		
8475	7	2'	Cercis canadensis	Eastern Redbud	poor	- More than half of leader missing	N (c)		
8476	10 / 8	10'	Acer platanoides	Norway Maple	fair	- Utility-pruned			TO BE REMOVED
8477	7	7'	Pseudotsuga menziesii	Douglasfir	fair	- Utility-pruned			TO BE REMOVED
8478	9	9'	Picea pungens	Colorado Blue Spruce	good				
8479	10	10'	Picea pungens	Colorado Blue Spruce	good				



I:\PROJECTS\2022\220084\220084.DWG

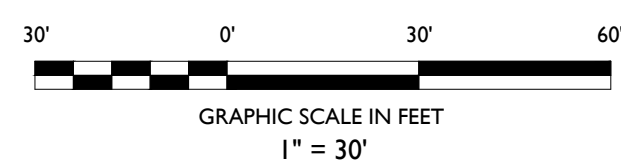
V:\072025\DET220084\BROOKSIDE VILLAGE\BROOKSIDE VILLAGE SITE PLAN.dwg



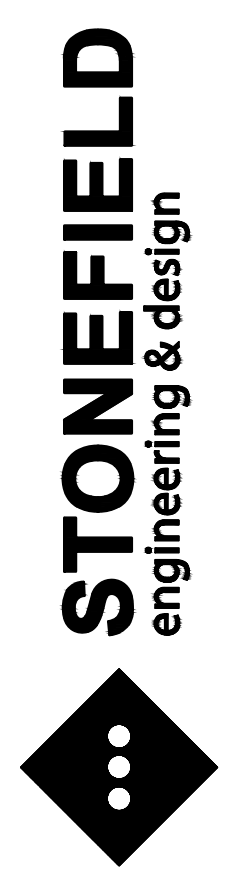
OFF-STREET PARKING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 78-271.2.A	CHURCH: 1 SPACE PER 2 SEATS OR 4 FT OF PEWS (63 SEATS)(1 SPACE / 2 SEATS) = 32 SPACES MULTI-FAMILY: 2 BEDROOM: 2.5 SPACES PER DWELLING (20 UNITS)(2.5 SPACES / UNIT) = 50 SPACES TOTAL: 32 + 50 = 82 SPACES	122 SPACES
§ 78-272.2	90° PARKING REQUIREMENT: 9 FT X 20 FT W/ 20 FT AISLES	9 FT X 20 FT W/ 20 FT AISLES

SYMBOL	DESCRIPTION
---	PROPERTY LINE
- - - -	SETBACK LINE
- . - . - .	SAWCUT LINE
=====	PROPOSED CURB
=====	PROPOSED FLUSH CURB
○ ○ ○	PROPOSED SIGNS / BOLLARDS
■	PROPOSED BUILDING
□	PROPOSED CONCRETE
■	PROPOSED AREA LIGHT
▬	PROPOSED RETAINING WALL
∩	PROPOSED BUILDING DOORS

- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
 - ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
 - THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
 - THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC, WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
 - THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
 - SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



NOT APPROVED FOR CONSTRUCTION

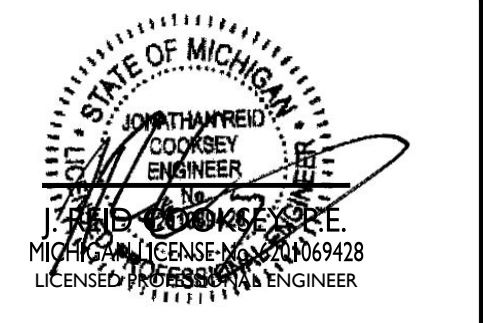


Detroit, MI · New York, NY · Boston, MA
 Princeton, NJ · Tampa, FL · Rutherford, NJ
 www.stonefielddesign.com
 607 Shelby Suite 200, Detroit, MI 48226
 Phone 248.247.1115

SITE DEVELOPMENT PLANS

**BROOKSIDE VILLAGE
PROPOSED PLANNED UNIT
DEVELOPMENT**

PARCEL ID: 4909030323309
 1100 WEST ANN ARBOR TRAIL
 CITY OF PLYMOUTH
 WAYNE COUNTY, MICHIGAN



SCALE: 1" = 30' PROJECT ID: DET-220084

TITLE: **SITE PLAN**

DRAWING: **C-3**

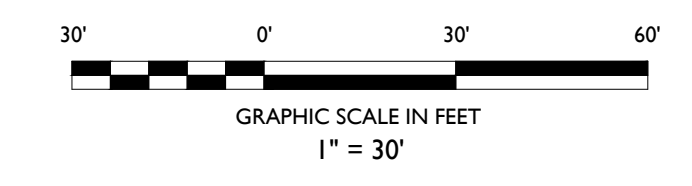
ISSUE	DATE	BY	DESCRIPTION
I		JRC	SUBMISSION FOR PRELIMINARY PUD APPROVAL



SYMBOL	DESCRIPTION
---	PROPERTY LINE
	PROPOSED GRADING CONTOUR
	PROPOSED GRADING RIDGELINE
	PROPOSED DIRECTION OF DRAINAGE FLOW
X G 100.00	PROPOSED GRADE SPOT SHOT
X TC 100.50 BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
X FC 100.00	PROPOSED FLUSH CURB SPOT SHOT
X DC 100.13 BC 100.00	PROPOSED DEPRESSED CURB / BOTTOM OF CURB SPOT SHOT
X TW 102.00 BW 100.00	PROPOSED TOP OF WALL / BOTTOM OF WALL SPOT SHOT

- GRADING NOTES**
- ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
 - THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
 - PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING THE BASEMENT AREA.
 - THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
 - MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
 - CURB GUTTER: 0.50%
 - CONCRETE SURFACES: 1.00%
 - ASPHALT SURFACES: 1.00%
 - A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IF THIS CONDITION CANNOT BE MET.
 - FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

- ADA NOTES**
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
 - THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP. AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00%. IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP, FOR ALTERATIONS, A CURB RAMP FLARE SHALL NOT HAVE A SLOPE GREATER THAN 8.33%. IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP, CURBS RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
 - ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
 - A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
 - THE CONTRACTOR SHALL ENSURE A MAXIMUM OF 1/4 INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN 1/4 INCHES AND 1/2 INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP 1/4 INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
 - THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN 1/4 INCH.



DATE	ISSUE	BY	DESCRIPTION
02/24/2024	1	JRC	SUBMISSION FOR PRELIMINARY PUD APPROVAL

NOT APPROVED FOR CONSTRUCTION

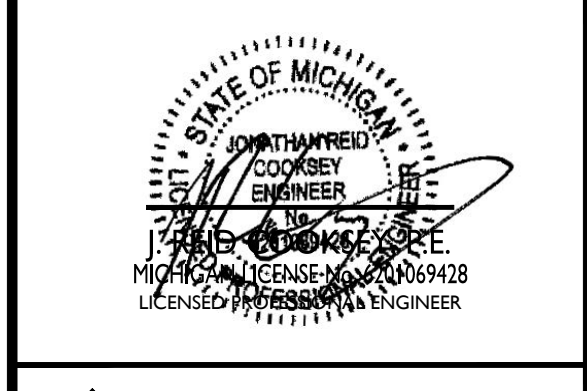
STONEFIELD
engineering & design

Detroit, MI · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Rutherford, NJ
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

SITE DEVELOPMENT PLANS
BROOKSIDE VILLAGE
PROPOSED PLANNED UNIT
DEVELOPMENT

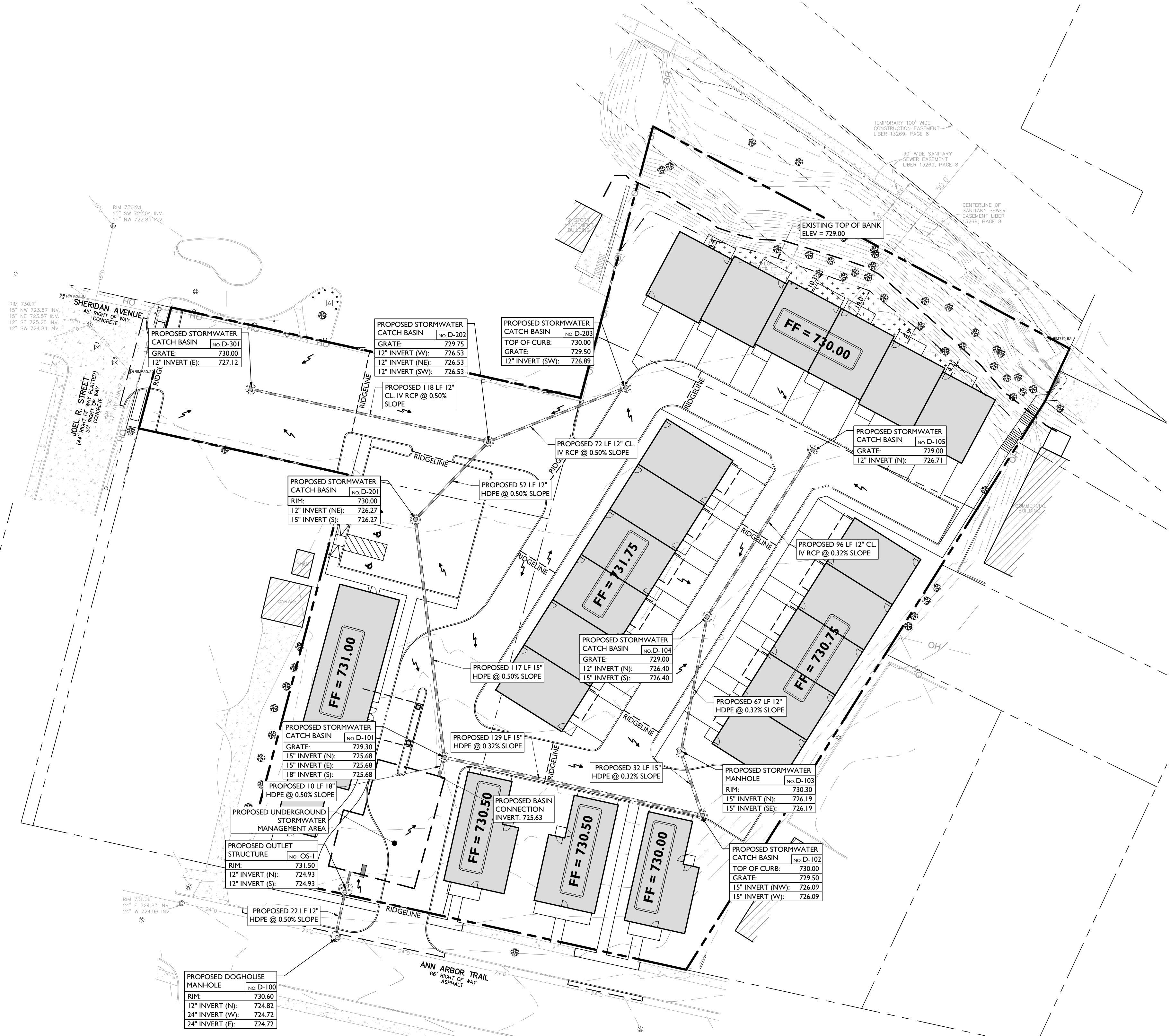
PARCEL ID: 4909030323209
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH
WAYNE COUNTY, MICHIGAN



SCALE: 1" = 30' PROJECT ID: DET-220084

TITLE:
GRADING PLAN

DRAWING:
C-4



SYMBOL	DESCRIPTION
	PROPERTY LINE
	PROPOSED GRADING CONTOUR
	PROPOSED GRADING RIDGELINE
	PROPOSED STORMWATER STRUCTURES
	PROPOSED STORMWATER PIPING
	PROPOSED UNDERGROUND OUTLET STRUCTURE

DRAINAGE AND UTILITY NOTES

- THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
- CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP GRADIENT.
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
- THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES

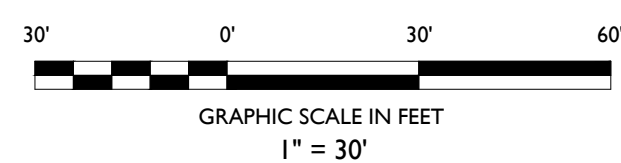
- THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION, THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
- THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL SHORING DESIGNER. THESE DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PROTECTED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.

STORMWATER INFILTRATION BMP CONSTRUCTION NOTES

- PRIOR TO THE START OF CONSTRUCTION, ANY AREA DESIGNATED TO BE USED FOR AN INFILTRATION BMP (E.G. BASIN, BIORETENTION AREA, ETC.) SHALL BE FENCED OFF AND SHALL NOT BE UTILIZED AS STORAGE FOR CONSTRUCTION EQUIPMENT OR AS A STOCKPILE AREA FOR CONSTRUCTION MATERIALS. NO ACTIVITY SHALL BE PERMITTED WITHIN THE INFILTRATION BASIN AREA UNLESS RELATED TO THE CONSTRUCTION OF THE INFILTRATION BASIN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL SUBCONTRACTORS OF BASIN AREA RESTRICTIONS.
- THE CONTRACTOR SHALL MAKE EVERY EFFORT, WHERE PRACTICAL, TO AVOID SUBGRADE SOIL COMPACTION IN THE AREAS DESIGNATED TO BE USED FOR AN INFILTRATION BMP.
- ALL EXCAVATION WITHIN THE LIMITS OF ANY INFILTRATION BMP SHALL BE PERFORMED WITH THE LIGHTEST PRACTICAL EXCAVATION EQUIPMENT. ALL EXCAVATION EQUIPMENT SHALL BE PLACED OUTSIDE THE LIMITS OF THE BASIN WHERE FEASIBLE. THE USE OF LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT (LESS THAN 8 PSI APPLIED TO THE GROUND SURFACE) IS RECOMMENDED WITHIN THE BASIN LIMITS.
- THE SEQUENCE OF SITE CONSTRUCTION SHALL BE COORDINATED WITH BASIN CONSTRUCTION TO ADHERE TO SEQUENCING LIMITATIONS.
- DURING THE FINAL GRADING OF AN INFILTRATION BASIN, THE BOTTOM OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND THEN SMOOTHED OUT WITH A LEVELING DRAW OR EQUIVALENT GRADING EQUIPMENT. ALL GRADING EQUIPMENT SHALL BE LOCATED OUTSIDE OF THE BASIN BOTTOM WHERE FEASIBLE.
- FOLLOWING CONSTRUCTION OF AN INFILTRATION BASIN, SOIL INFILTRATION TESTING BY A LICENSED PROFESSIONAL ENGINEER IS REQUIRED TO CERTIFY COMPLIANCE WITH THE DESIGN INFILTRATION RATES IN ACCORDANCE WITH APPENDIX E OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL, LATEST EDITION. IF THE FIELD INFILTRATION RATES ARE LOWER THAN THE RATE USED DURING DESIGN, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING IMMEDIATELY TO DETERMINE THE APPROPRIATE COURSE OF ACTION.
- THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY TO DETERMINE IF WITNESS TESTING IS REQUIRED DURING INFILTRATION BASIN EXCAVATION AND/OR SOIL INFILTRATION TESTING.

STORMWATER UNDERGROUND BMP CONSTRUCTION NOTES

- THE CONTRACTOR SHALL INSTALL AND BACKFILL THE UNDERGROUND BMP IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- UNDERGROUND BASINS SHALL UTILIZE A STONE BACKFILL WITH A MINIMUM VOID RATIO OF 40%.
- NO CONSTRUCTION LOADING OVER UNDERGROUND BASINS IS PERMITTED UNTIL BACKFILL IS COMPLETE PER THE MANUFACTURER'S SPECIFICATIONS. NO VEHICLES SHALL BE STAGED OR OPERATE FROM A FIXED POSITION OVER THE BASIN.



DATE	ISSUE	BY	DESCRIPTION
02/26/2024	1	JRC	SUBMISSION FOR PRELIMINARY PUD APPROVAL

NOT APPROVED FOR CONSTRUCTION

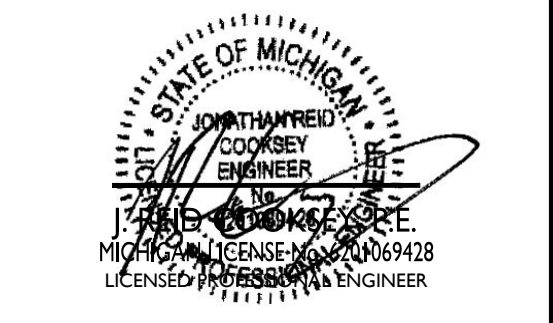
STONEFIELD
engineering & design

Detroit, MI · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Rutherford, NJ
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

BROOKSIDE VILLAGE
PROPOSED PLANNED UNIT
DEVELOPMENT

PARCEL ID: 4909030323309
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH
WAYNE COUNTY, MICHIGAN



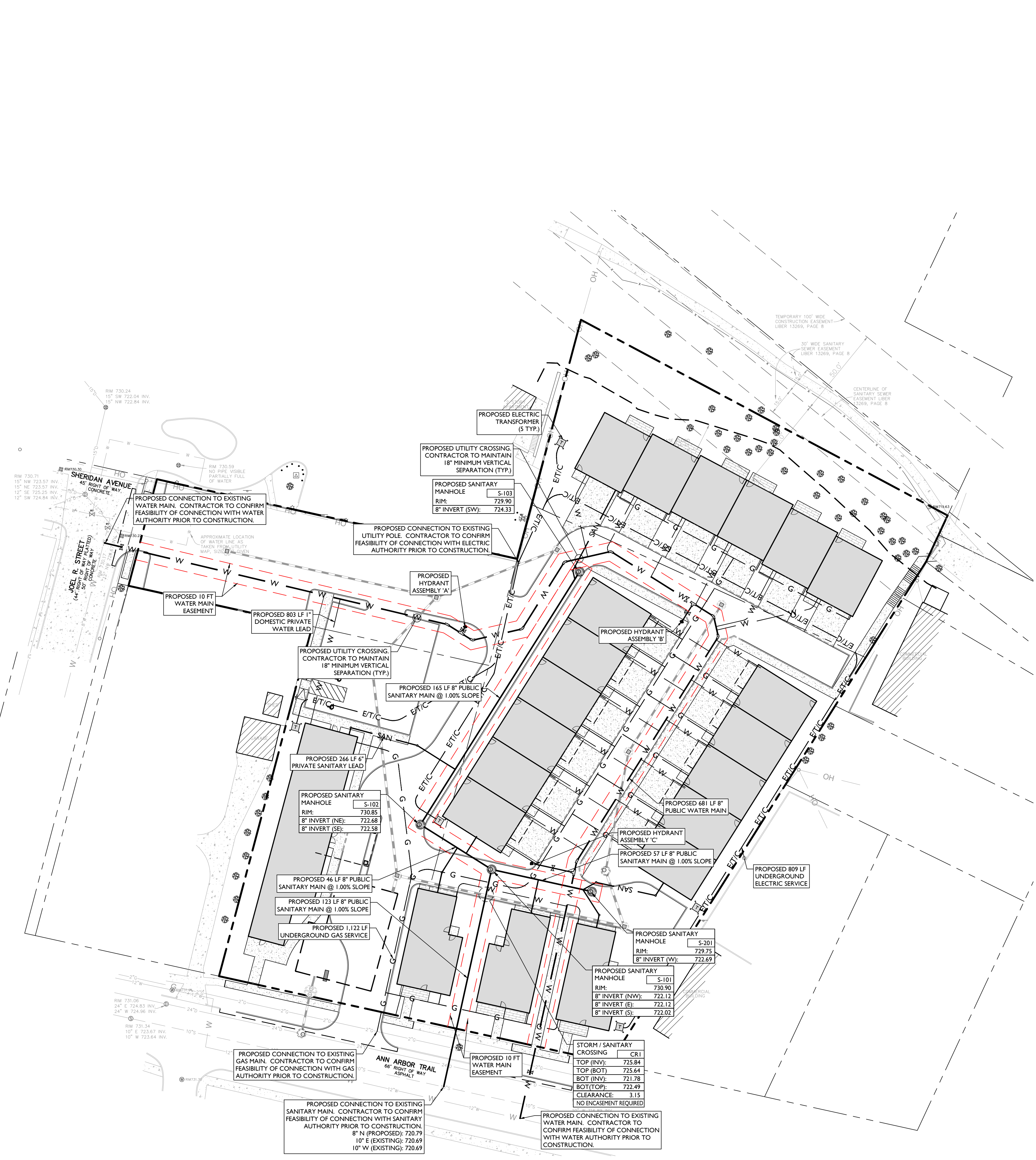
STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-220084

TITLE:
**STORMWATER
MANAGEMENT PLAN**

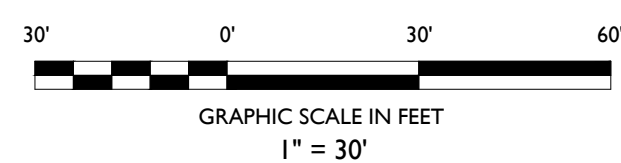
DRAWING:
C-5

NOT FOR CONSTRUCTION. THIS DRAWING IS THE PROPERTY OF STONEFIELD ENGINEERING & DESIGN, LLC. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM STONEFIELD ENGINEERING & DESIGN, LLC.



SYMBOL	DESCRIPTION
---	PROPERTY LINE
SAN	PROPOSED SANITARY LATERAL
W	PROPOSED DOMESTIC WATER SERVICE
E/T/C	PROPOSED ELECTRICAL/DATA CONDUITS
G	PROPOSED GAS LINE
⊗	PROPOSED VALVE
T	PROPOSED WATER TEE / BEND
⊙	PROPOSED FIRE HYDRANT
⊙	PROPOSED SANITARY MANHOLE / CLEANOUT
T	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
 - A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
 - CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP-GRADE.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.



DATE	ISSUE	BY	DESCRIPTION
02/26/2024	I	JRC	SUBMISSION FOR PRELIMINARY PUD APPROVAL

NOT APPROVED FOR CONSTRUCTION

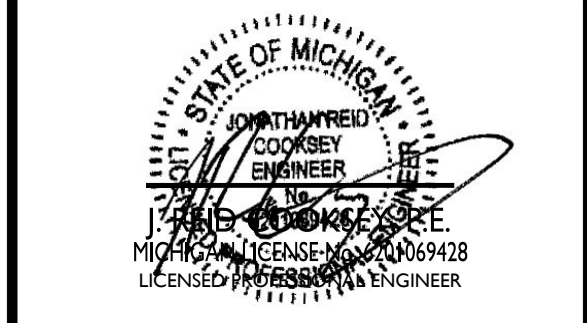
STONEFIELD
engineering & design

Detroit, MI • New York, NY • Boston, MA
Princeton, NJ • Tampa, FL • Rutherford, NJ
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

SITE DEVELOPMENT PLANS
BROOKSIDE VILLAGE
PROPOSED PLANNED UNIT
DEVELOPMENT

PARCEL ID: 4909030323309
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH
WAYNE COUNTY, MICHIGAN



STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-220084

TITLE: UTILITY PLAN

DRAWING: C-6



FIXTURES 'A' & 'B'



FIXTURE 'C'

PROPOSED LUMINAIRE SCHEDULE						
SYMBOL	LABEL	QUANTITY	SECURITY LIGHTING	DISTRIBUTION	LLF	MANUFACTURER / IES FILE
	A	7	MIRADA SMALL LED AREA LIGHT 06L LUMEN PACKAGE W/ HOUSE-SIDE SHIELD - SINGLE	FT	0.90	LSI INDUSTRIES / MRS-LED-06L-SIL-FT-30-70CRH-I
	B	1	MIRADASMALL LED AREA LIGHT 06L LUMEN PACKAGE - DOUBLE @ 180°	FT	0.90	LSI INDUSTRIES / MRS-LED-06L-SIL-FT-30-70CRH-I
	C	2	ARBOR POST TOP DECORATIVE LUMINAIRE - 2,300 LUMENS	V	0.90	COOPER LIGHTING / ARB-B3-LED-D1-T5

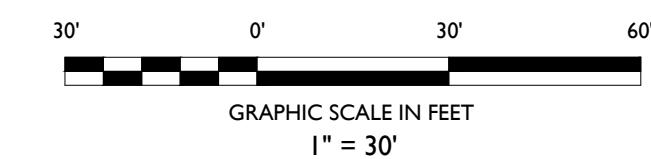
SYMBOL	DESCRIPTION
---	PROPERTY LINE
A (XX')	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
+xxx	PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
	PROPOSED AREA LIGHT
	PROPOSED PEDESTRIAN LIGHT



LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 78-204(a)(1)	ALL OUTDOOR LIGHTING IN RESIDENTIAL USE DISTRICTS USED TO LIGHT THE GENERAL AREA OF A SITE SHALL BE SHIELDED OR DIRECTED IN A MANNER WHICH REDUCES GLARE AND SHALL BE SO ARRANGED AS TO REFLECT OBJECTIONABLE LIGHTS AWAY FROM ALL ADJACENT RESIDENTIAL DISTRICTS OR ADJACENT RESIDENCES	COMPLIES
§ 78-204(b)(3)a.	MAXIMUM PROPERTY LINE (RESIDENTIAL): 0.1 FC	0.1 FC
§ 78-204(b)(3)a.	MAXIMUM PROPERTY LINE (NON-RESIDENTIAL): 1.0 FC	0.4 FC
§ 78-204(b)(3)b.1.	MINIMUM ILLUMINATION OF LIGHTED AREAS (RESIDENTIAL AND CHURCHES): 0.4 FC	0.0 FC (W)
§ 78-204(b)(3)b.1.	MAXIMUM ILLUMINATION OF LIGHTED AREAS (RESIDENTIAL AND CHURCHES): 0.6 FC	2.0 FC (W)
§ 78-204(b)(3)b.1.	MAXIMUM HEIGHT: 25 FT OR HEIGHT OF BUILDING, WHICHEVER IS LESS	25 FT

LIGHTING STATISTICS			
DESCRIPTION	AVERAGE	MINIMUM	MAXIMUM
OVERALL PARCEL	0.41 FC	0.0 FC	2.0 FC
PROPERTY LINE (RESIDENTIAL)	0.01 FC	0.0 FC	0.1 FC
PROPERTY LINE (NON-RESIDENTIAL)	0.08 FC	0.0 FC	0.4 FC

- GENERAL LIGHTING NOTES**
- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE. LIGHTING LEVELS MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
 - WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
 - UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.90
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
 - THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS.
 - THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.



NOT APPROVED FOR CONSTRUCTION

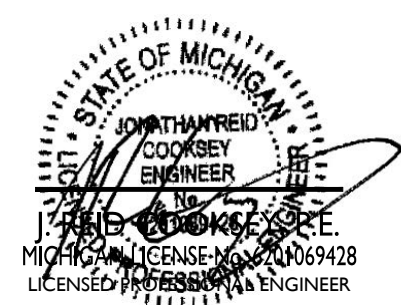
STONEFIELD
engineering & design

Detroit, MI · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Rutherford, NJ
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

SITE DEVELOPMENT PLANS
BROOKSIDE VILLAGE
PROPOSED PLANNED UNIT
DEVELOPMENT

PARCEL ID: 490903032309
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH
WAYNE COUNTY, MICHIGAN



STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-220084

TITLE:
LIGHTING PLAN

DRAWING:
C-7

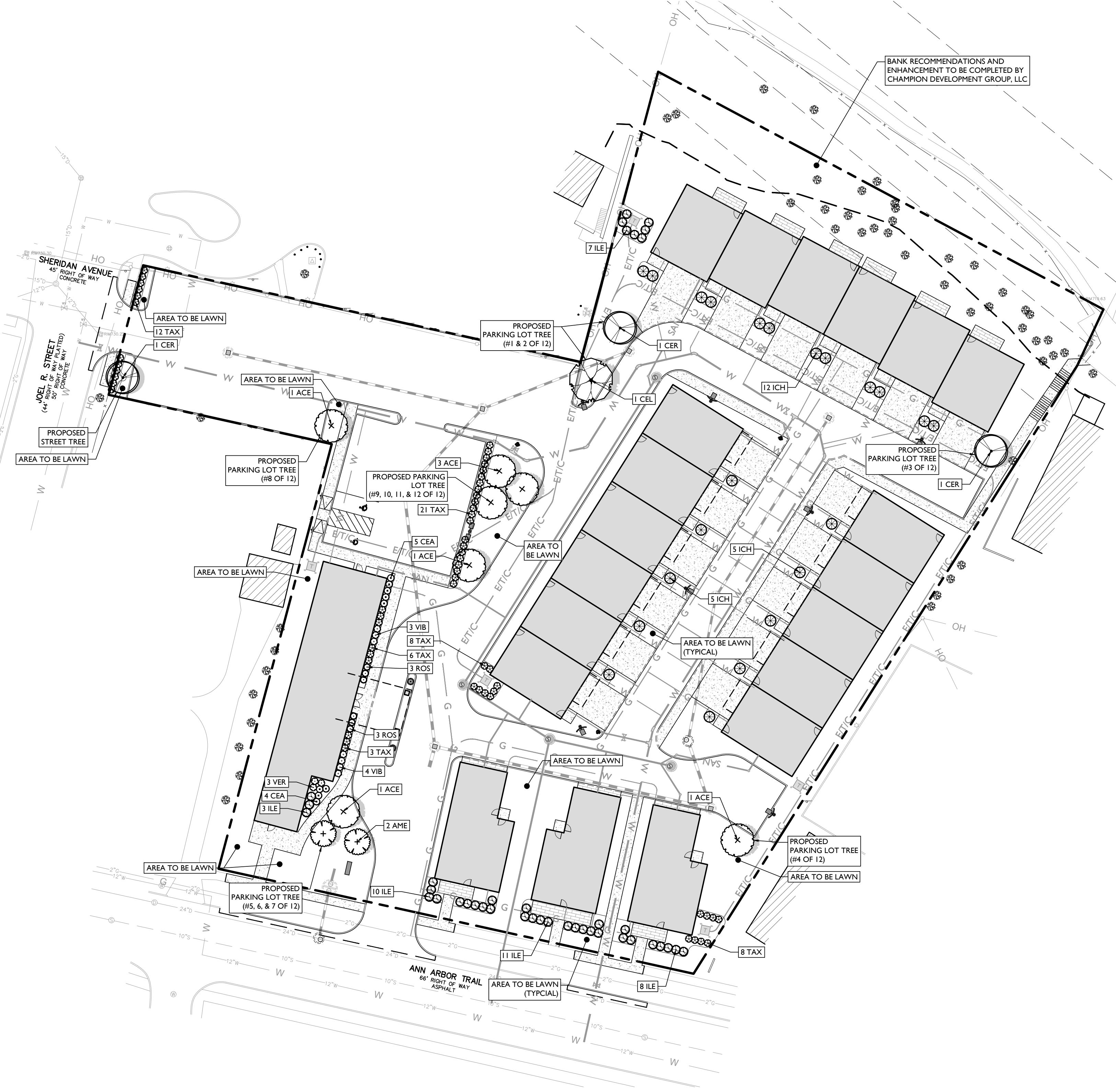
MAINTENANCE TASK	LANDSCAPE MAINTENANCE SCHEDULE														
	WINTER			SPRING			SUMMER			FALL					
	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	FREQUENCY	JUNE	JULY	AUGUST	FREQUENCY	SEPTEMBER	OCTOBER	NOVEMBER	FREQUENCY
SITE INSPECTION				X			ONCE PER SEASON	X			ONCE PER SEASON			X	ONCE PER SEASON
DEBRIS & WEED CONTROL				X	X	X	BI-WEEKLY	X	X	X	BI-WEEKLY	X	X		BI-WEEKLY
IRRIGATION MAINTENANCE					X		ONCE PER SEASON				N/A	X	X		ONCE PER SEASON
MULCHING					X		ONCE PER SEASON				N/A				N/A
SEASONAL PLANTINGS						X	ONCE PER SEASON	X	X	X	WEEKLY	X	X	X	WEEKLY
MOWING OF TURF				X	X	X	WEEKLY	X	X	X	WEEKLY	X	X	X	WEEKLY
MOWING OF WILDFLOWERS							N/A				N/A			X	ONCE PER SEASON
PRUNING				X	X		MONTHLY				N/A		X		ONCE PER SEASON
FERTILIZER & AMENDMENTS				X	X	X	MONTHLY	X	X	X	BI-WEEKLY	X	X	X	BI-WEEKLY
INSECT & DISEASE CONTROL						X	ONCE PER SEASON	X	X	X	BI-WEEKLY	X	X		N/A
PLANTING RENOVATION				X			ONCE PER SEASON				N/A		X		ONCE PER SEASON
LANDSCAPE STRUCTURES INSPECTION					X		ONCE PER SEASON				N/A				N/A
LIGHTING MAINTENANCE				X			ONCE PER SEASON				N/A		X		ONCE PER SEASON
PAVED SURFACE MAINTENANCE					X		ONCE PER SEASON				N/A				N/A

LANDSCAPING AND BUFFER REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 78-167.(e)(1)a.	PARKING AREA SCREENING OFF-STREET PARKING SHALL BE BUFFERED FROM VIEW FROM PUBLIC RIGHTS-OF-WAY	COMPLIES
§ 78-167.(e)(2)d.	MINIMUM 4 FT BUFFER REQUIRED BETWEEN PARKING AREA AND STREET 36" HIGH MASONRY SCREENING REQUIRED 1 TREE FOR EVERY 40 LF OF FRONTAGE ANN ARBOR TRAIL: NO PARKING PROPOSED JOEL R. STREET: 40 FT (40 FT) * (1 TREE / 40 LF OF FRONTAGE) = 1 TREE	ANN ARBOR TRAIL: N/A(1) JOEL R. STREET: 5.4 FT PROVIDED 36" HIGH EVERGREEN HEDGE PROPOSED N/A(1) 1 TREE PROPOSED
§ 78-168.(a)(1)a.	INTERIOR PARKING LOT LANDSCAPING PARKING LOTS 25 - 100 SPACES: 1 TREE FOR EVERY 10 SPACES (122 SPACES) * (1 TREE / 10 SPACES) = 12 TREES 100 SF OF LANDSCAPE AREA FOR EVERY 10 SPACES (122 SPACES) * (100 SF / 10 SPACES) = 1,200 SF MINIMUM LANDSCAPE AREA: 60 SF	12 TREES PROPOSED 1,969 SF PROVIDED 45 SF PROVIDED
§ 78-168.(a)(2)		

(N/A) NOT APPLICABLE
(1) INTERNAL DRIVE ISLES AND PARKING DO NOT ABUT ROADWAY FRONTAGE.

PLANT SCHEDULE							
DECIDUOUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
⊗	ACE	7	ACER SACCHARUM	SUGAR MAPLE	3" - 3.5" CAL	B&B	NATIVE, DROUGHT TOLERANT
⊗	CEL	1	CELTIS OCCIDENTALIS	COMMON HACKBERRY	3.5" - 4" CAL	B&B	NATIVE, DROUGHT TOLERANT, SALT TOLERANT
ORNAMENTAL TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
⊗	AME	2	AMELANCHIER ARBOREA	DOWNY SERVICEBERRY	2" - 2.5" CAL	B&B	NATIVE, DROUGHT TOLERANT, SALT TOLERANT
⊗	CER	3	CERCIS CANADENSIS	EASTERN REDBUD	2.5" - 3" CAL	B&B	NATIVE
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
⊙	CEA	9	CEANOETHUS AMERICANUS	NEW JERSEY TEA	30" - 36"	POT	NATIVE, DROUGHT TOLERANT
⊙	VER	3	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	30" - 36"	POT	NATIVE, SALT TOLERANT
⊙	ROS	6	ROSA VIRGINIANA	VIRGINIA ROSE	30" - 36"	POT	NATIVE, DROUGHT TOLERANT, SALT TOLERANT
⊙	VIB	7	VIBURNUM ACERIFOLIUM	MARLEAF VIBURNUM	36" - 42"	POT	NATIVE, DROUGHT TOLERANT
EVERGREEN SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	REMARKS
⊙	ICH	22	ILEX CRENATA 'CHESAPEAKE'	CHESAPEAKE JAPANESE HOLLY	36" - 42"	POT	
⊙	ILE	39	ILEX GLABRA 'COMPACTA'	COMPACT INKBERRY	36" - 42"	POT	DROUGHT TOLERANT, SALT TOLERANT
⊙	TAX	58	TAXUS CANADENSIS	CANADA 'YEW'	30" - 36"	POT	NATIVE, DROUGHT TOLERANT

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

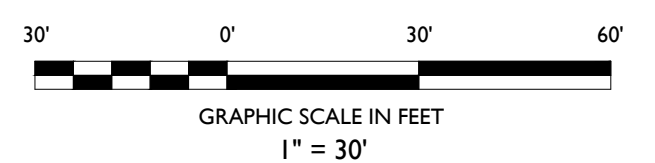


IRRIGATION NOTE:
IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA PRIOR TO CONSTRUCTION. DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON-SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

- LANDSCAPING NOTES**
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
 - THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
 - THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
 - THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.



Know what's below
Call before you dig.



NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Rutherford, NJ
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

SITE DEVELOPMENT PLANS

BROOKSIDE VILLAGE

PROPOSED PLANNED UNIT DEVELOPMENT

PARCEL ID: 4900903032309
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH
WAYNE COUNTY, MICHIGAN

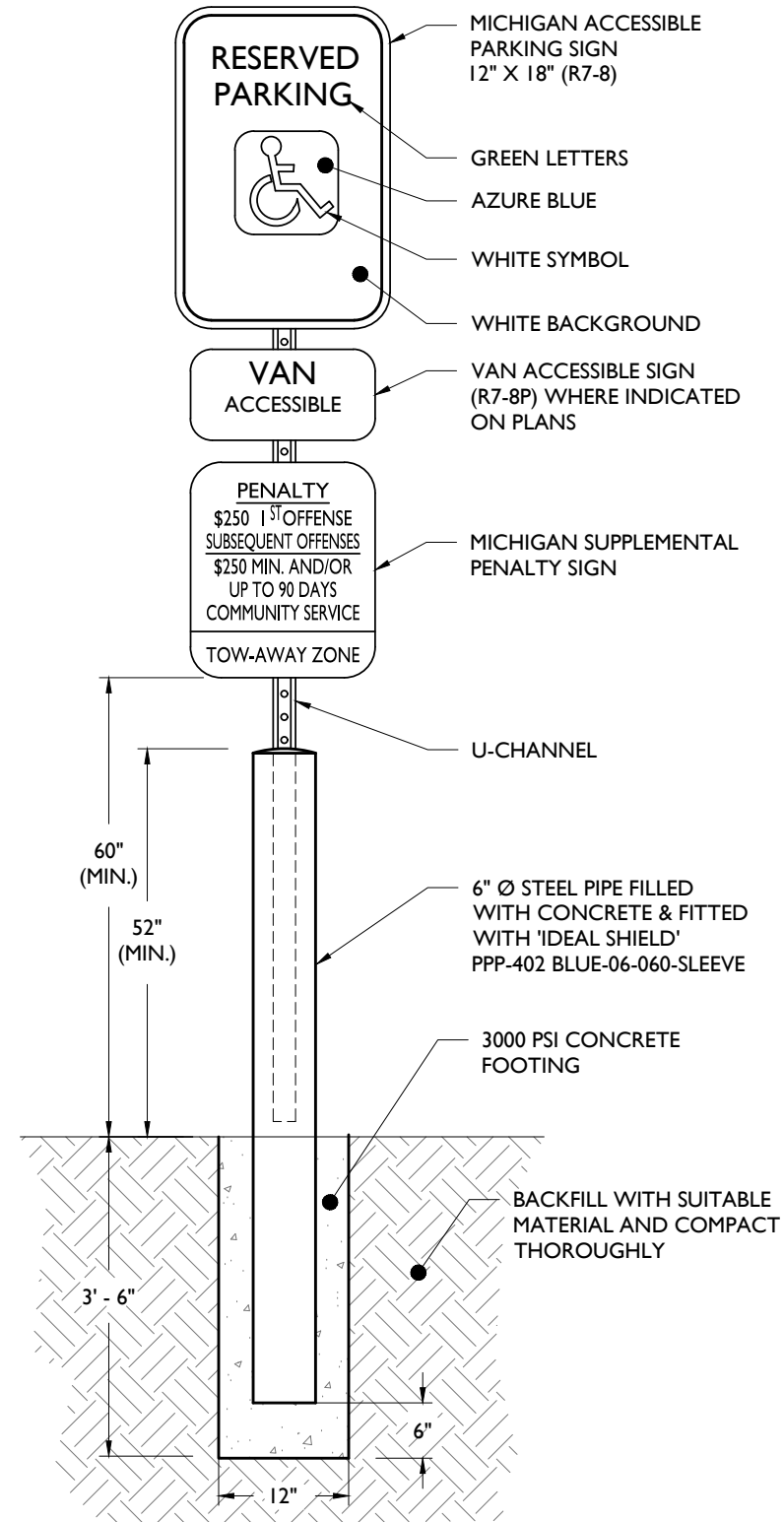
J. REID COOKSEY, P.E.
MICHIGAN LICENSE No. 6201069428
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

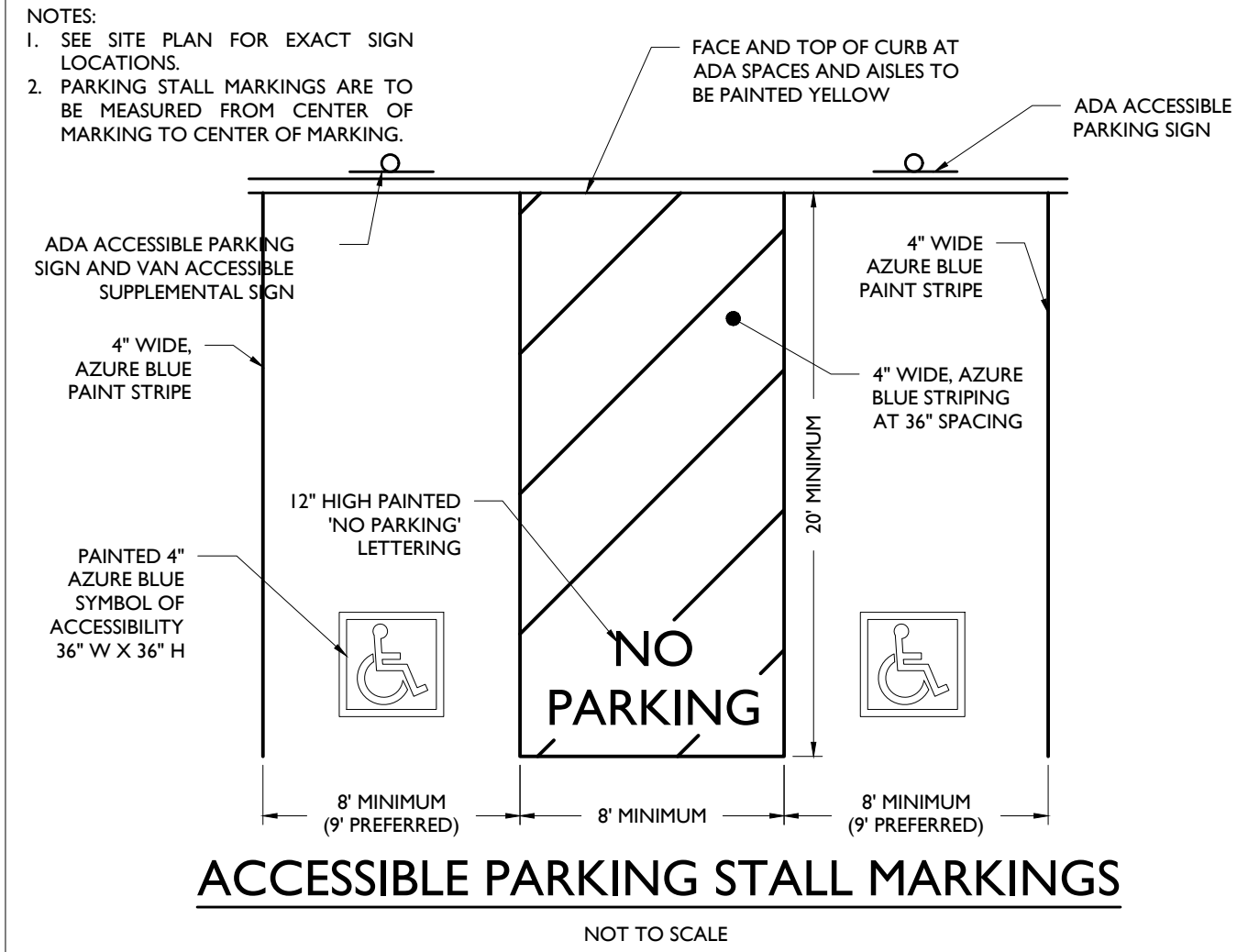
SCALE: 1" = 30' PROJECT ID: DET-220084

TITLE:
LANDSCAPING PLAN

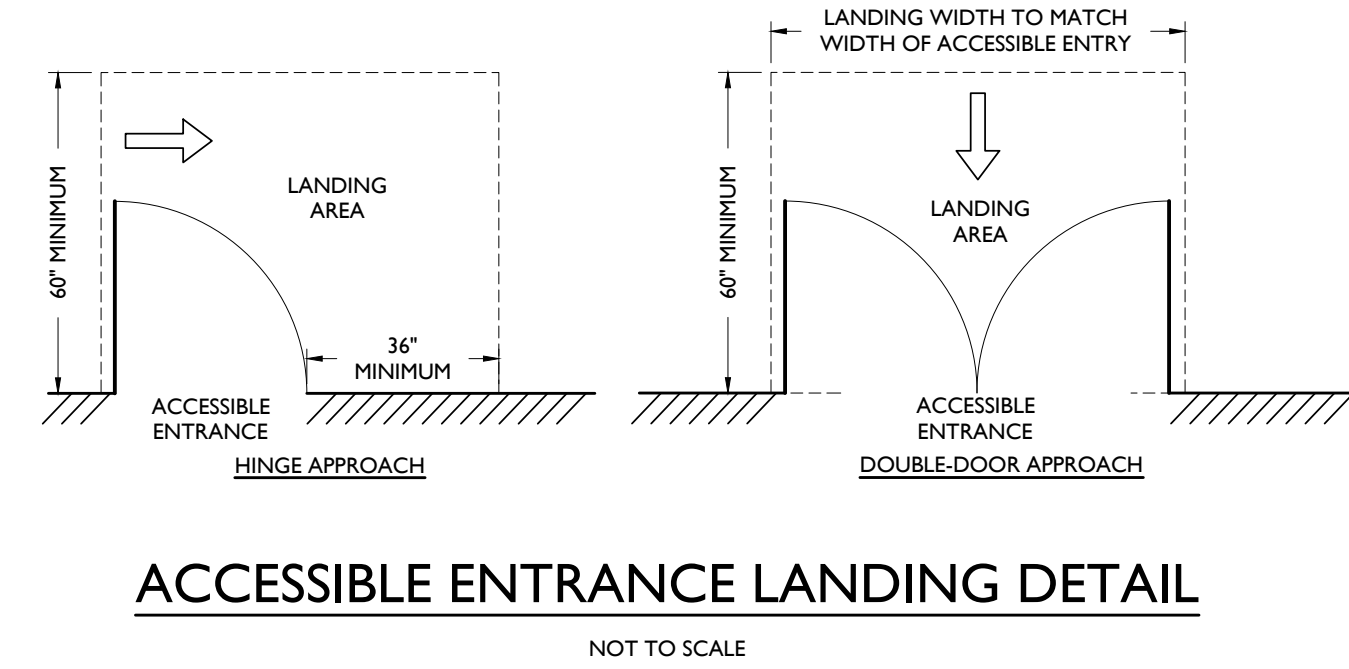
DRAWING:
C-8



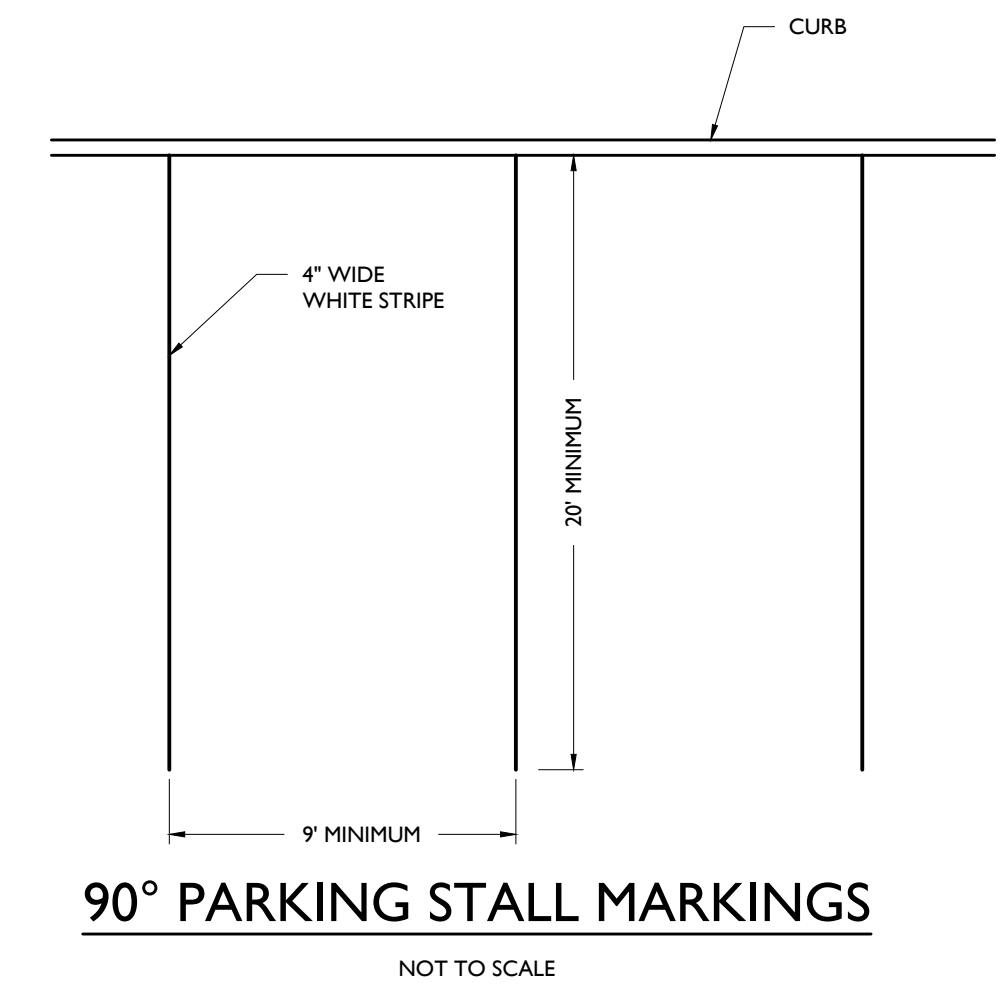
ACCESSIBLE PARKING SIGN WITH BOLLARD DETAIL
NOT TO SCALE



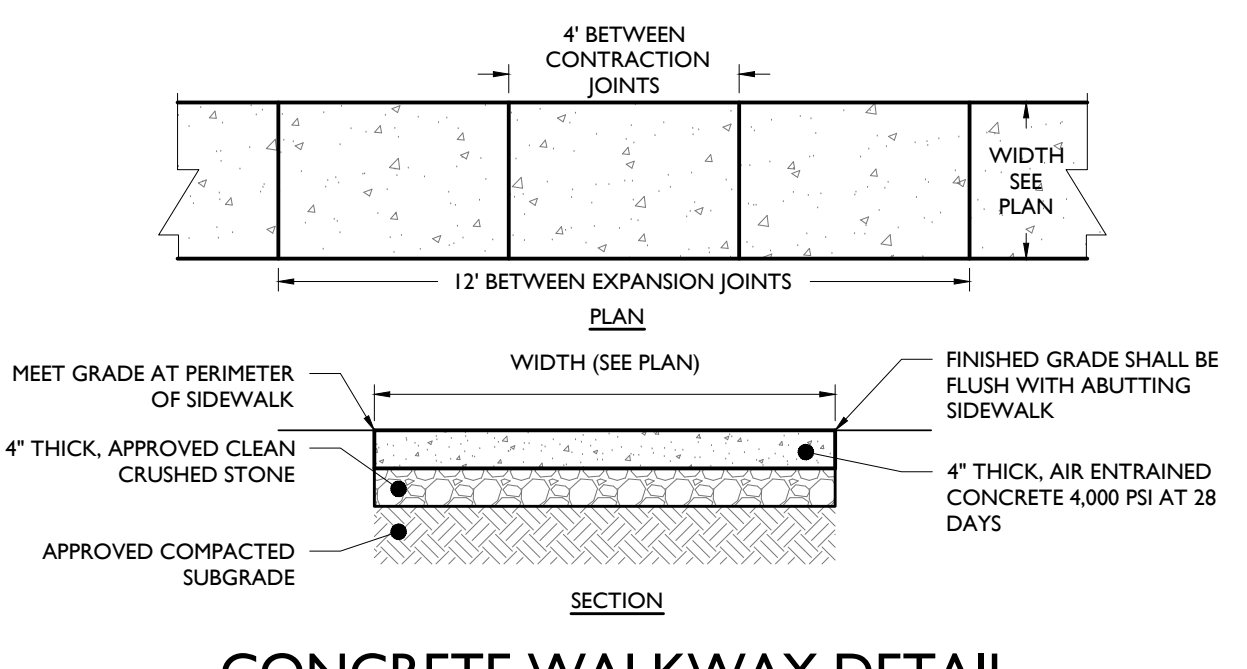
ACCESSIBLE PARKING STALL MARKINGS
NOT TO SCALE



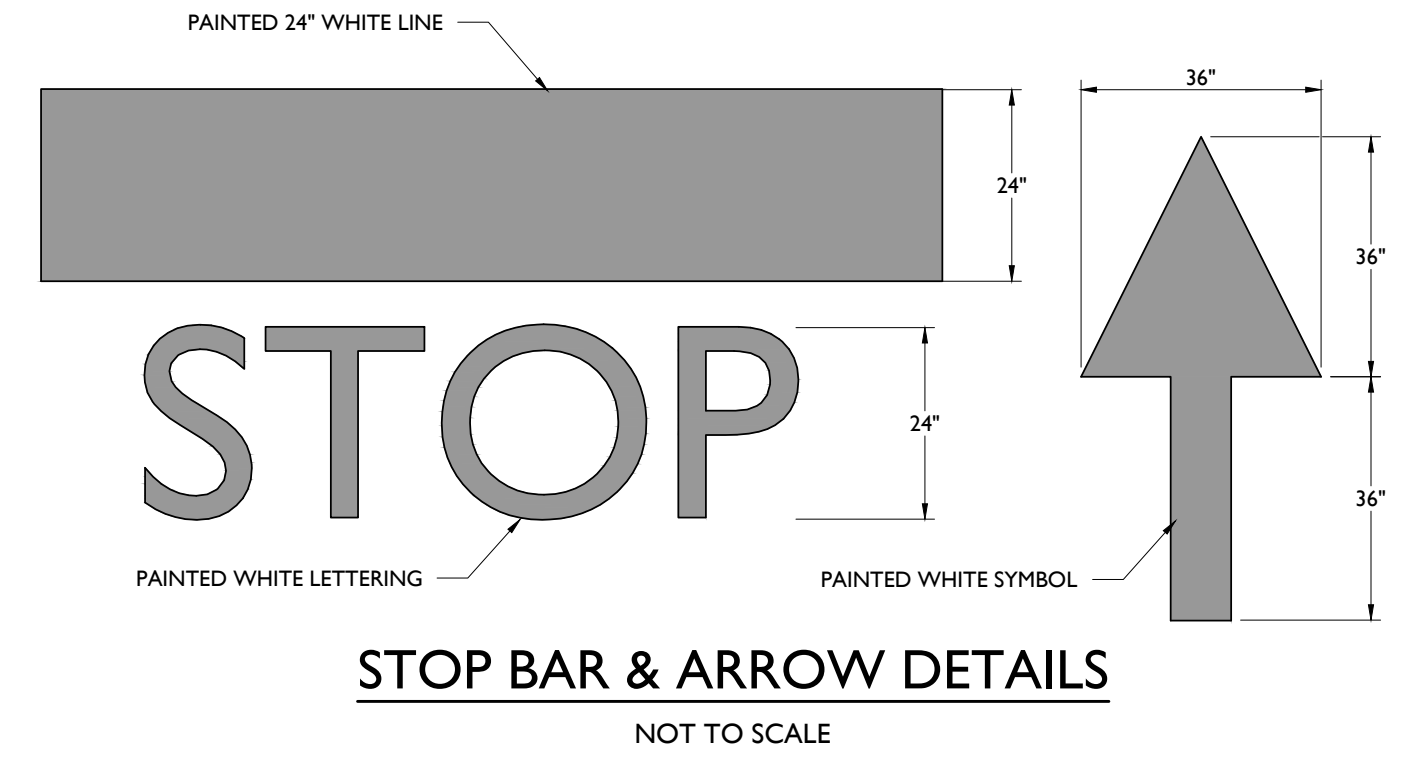
ACCESSIBLE ENTRANCE LANDING DETAIL
NOT TO SCALE



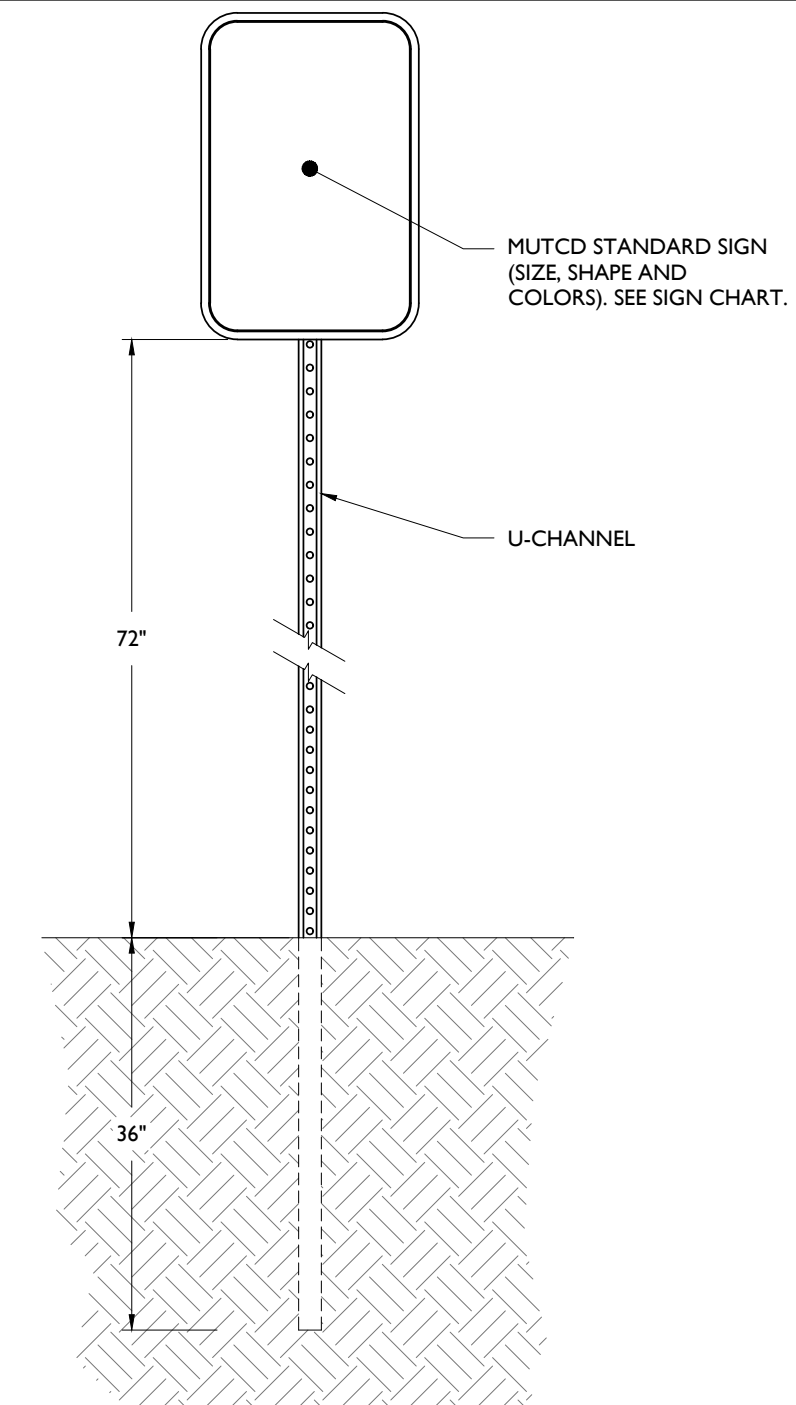
90° PARKING STALL MARKINGS
NOT TO SCALE



CONCRETE WALKWAY DETAIL
NOT TO SCALE



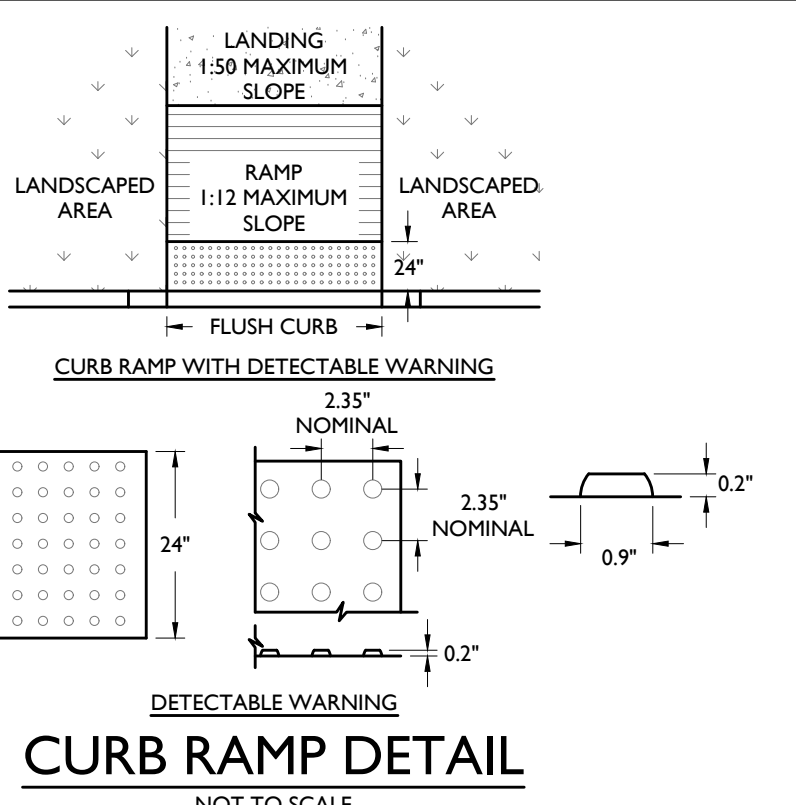
STOP BAR & ARROW DETAILS
NOT TO SCALE



SIGN DETAIL & DATA TABLE
NOT TO SCALE

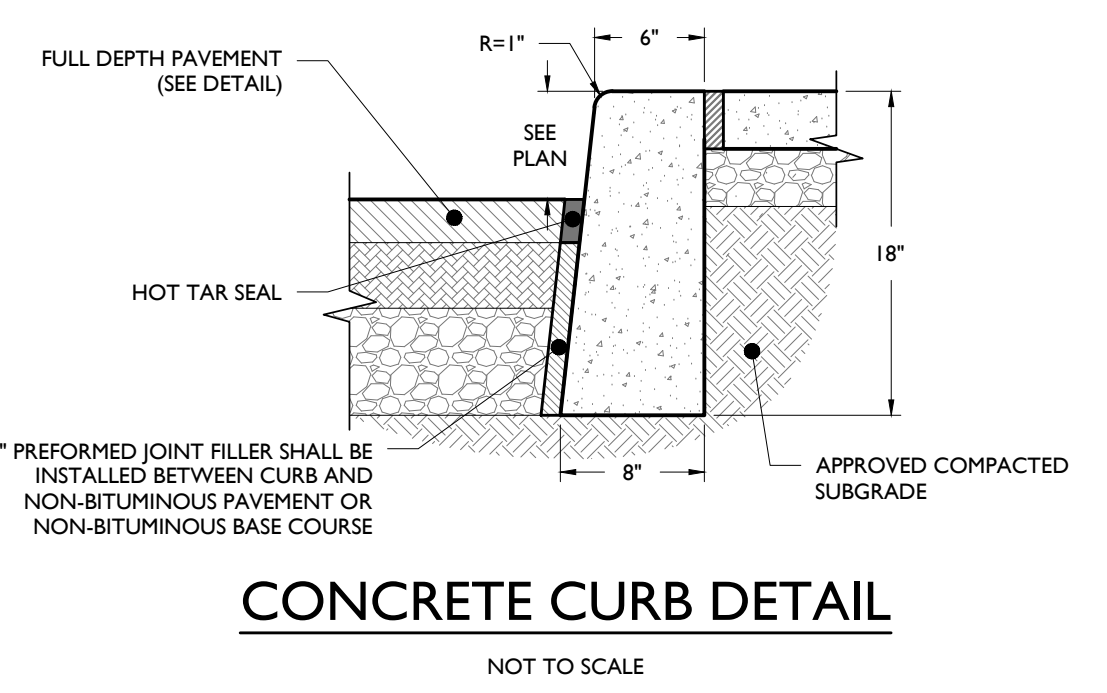
M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
		LEGEND	BACKGROUND		
STOP SIGN (R1-1)	STOP	WHITE	RED	36" X 36"	GROUND
DO NOT ENTER (R5-1)	DO NOT ENTER	RED	WHITE	30" X 30"	GROUND

NOTES:
1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.
2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF 'STOP' (R1-1) AND 'YIELD' (R1-2) SIGNS.



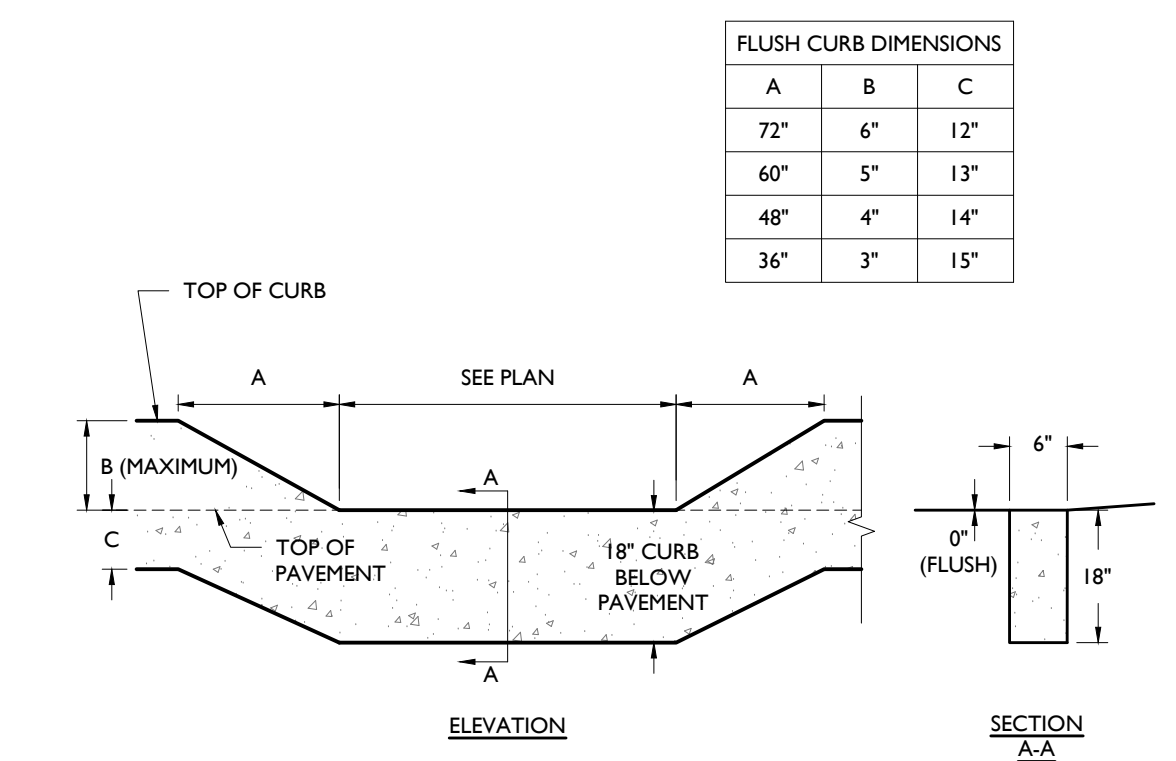
CURB RAMP DETAIL
NOT TO SCALE

NOTES:
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%
2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36" SEE PLAN FOR EXACT WIDTH.
3. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES
4. VISUAL CONTRAST: THERE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE
5. DETECTABLE WARNING STRIP REQUIRED WHERE RAMP DIRECTS PEDESTRIAN TRAFFIC TOWARDS VEHICLE TRAVEL WAY. WARNING STRIP SHALL BE CAST-IN-PLACE
6. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL



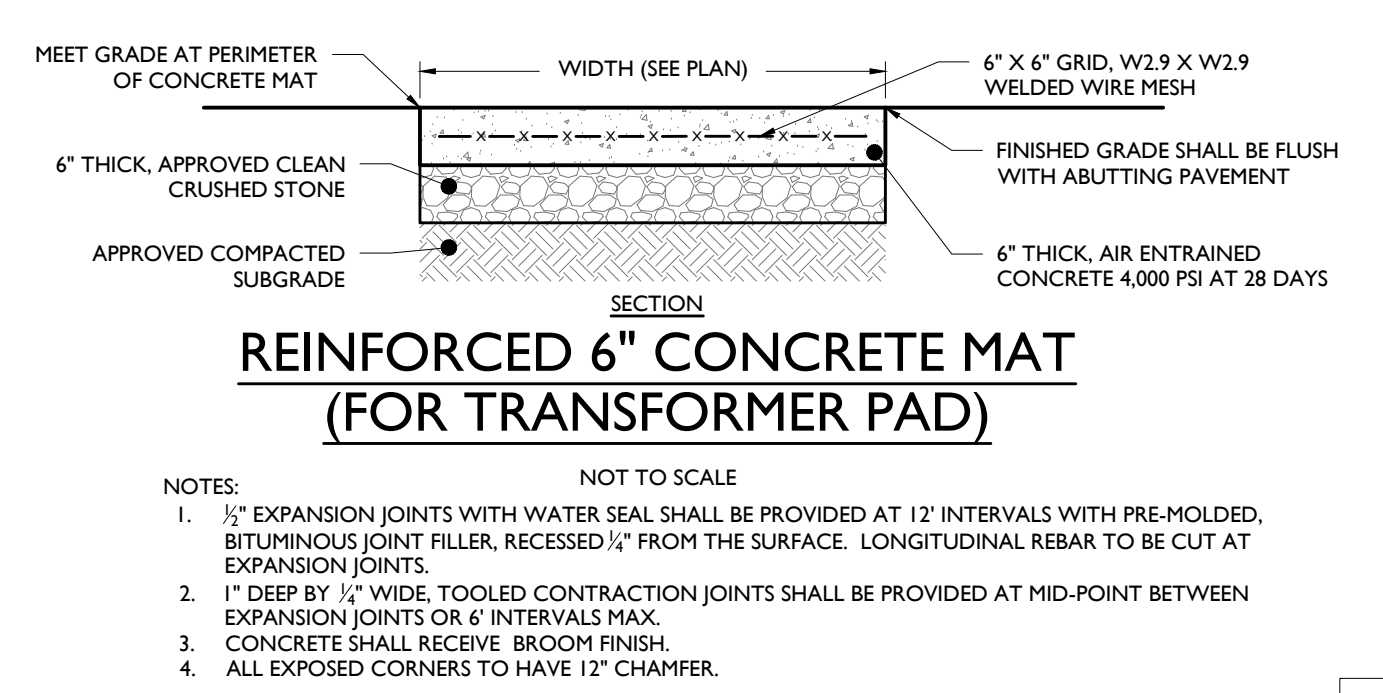
CONCRETE CURB DETAIL
NOT TO SCALE

NOTES:
1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
4. 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.



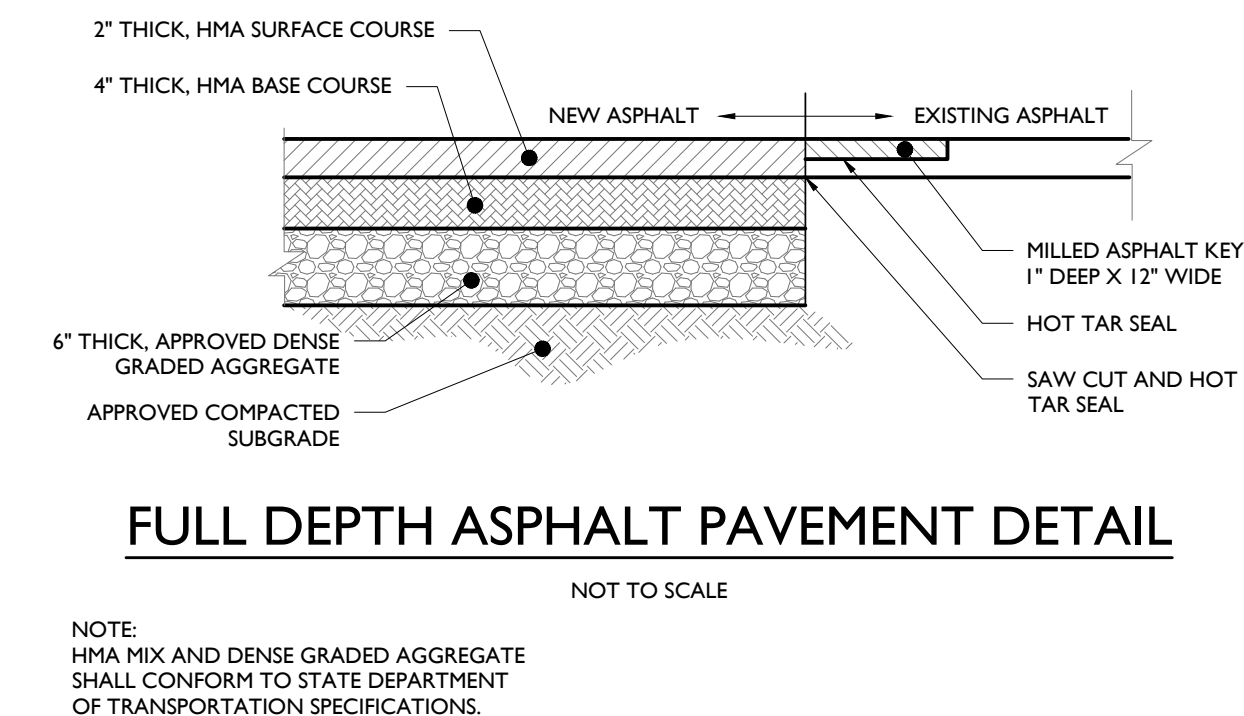
FLUSH CURB DETAIL
NOT TO SCALE

FLUSH CURB DIMENSIONS			
A	B	C	
72"	6"	12"	
60"	5"	13"	
48"	4"	14"	
36"	3"	15"	



REINFORCED 6" CONCRETE MAT (FOR TRANSFORMER PAD)
NOT TO SCALE

NOTES:
1. 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
2. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
3. CONCRETE SHALL RECEIVE BROOM FINISH.
4. ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.



FULL DEPTH ASPHALT PAVEMENT DETAIL
NOT TO SCALE

NOTE:
HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

SUBMISSION FOR PRELIMINARY PUD APPROVAL

DATE

ISSUE

BY

JRC

ID264304L

1

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Boston, MA
Princeton, NJ • Tampa, FL • Rutherford, NJ
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

SITE DEVELOPMENT PLANS

BROOKSIDE VILLAGE

PROPOSED PLANNED UNIT DEVELOPMENT

PARCEL ID: 490903032309
1100 WEST ANN ARBOR TRAIL
CITY OF PLYMOUTH
WAYNE COUNTY, MICHIGAN

STONEFIELD
engineering & design

SCALE: AS SHOWN PROJECT ID: DET-220084

TITLE:

CONSTRUCTION DETAILS

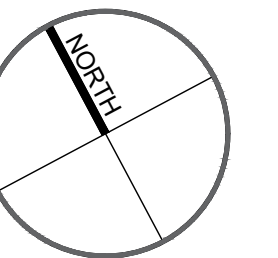
DRAWING:

C-10

PROJECT:
TONQUISH CREEK BANK RESTORATION PLAN

DATE & REVISIONS:
FEBRUARY 26, 2024
SUBMISSION FOR
PRELIMINARY PUD
APPROVAL

SCALE & NORTH ARROW:



SCALE: 1"=20'-0"



Know what's below.
Call before you dig.

SHEET TITLE:
SUBJECT AREA/REMOVAL PROTOCOL

SHEET NO:
L-1

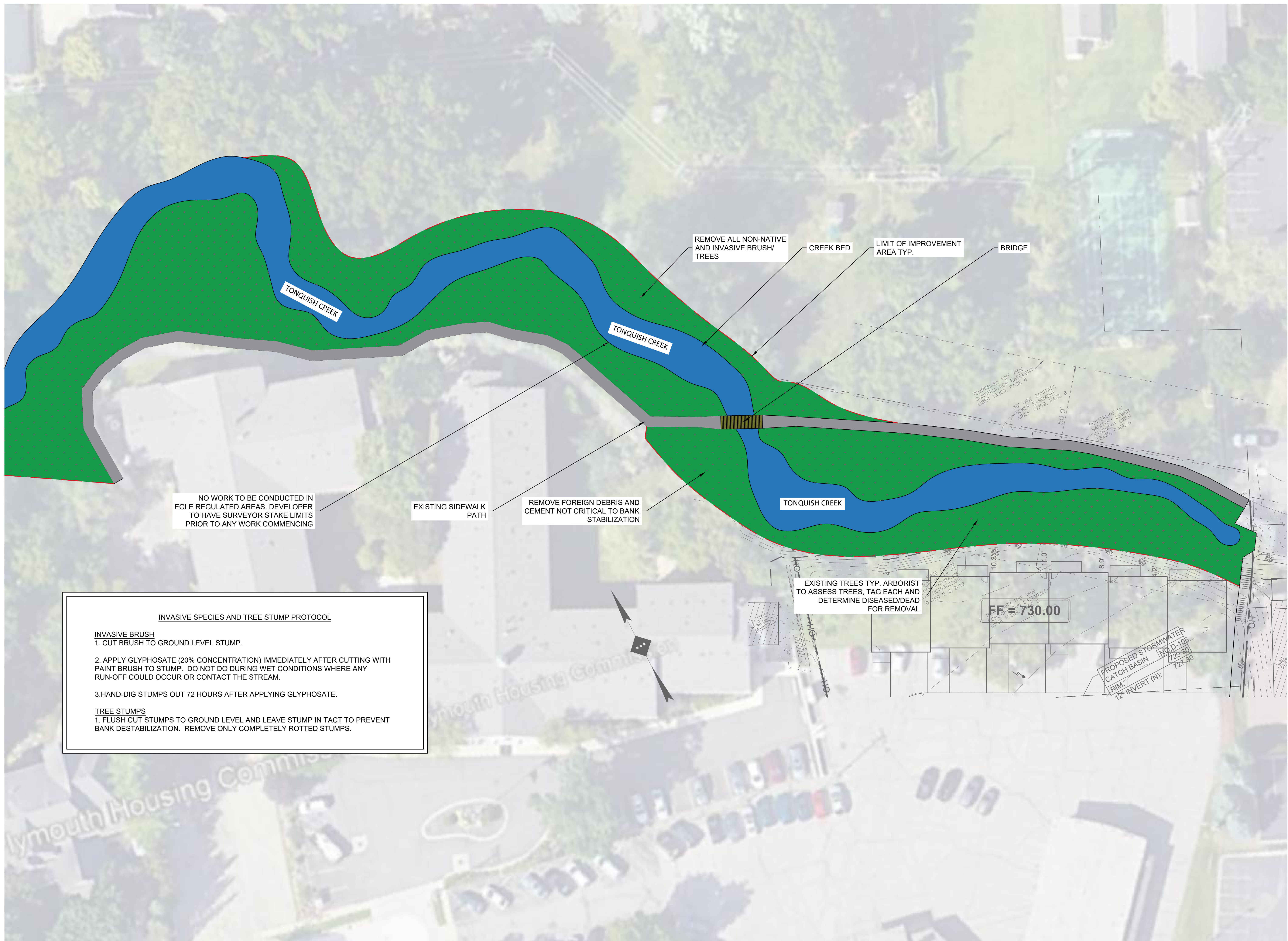
DESIGNED BY:
M.M.

NOTE:
Moshier Design Co. has solely provided drawings for this project and has no involvement with its implementation or required permitting of the project.

LEGAL NOTICE:

Ownership of Drawings and Plans- All drawings, plans, schematics, diagrams, specifications, and blueprints collectively, "Plans", whether in written or electronic form are the sole and exclusive property of Moshier Design Co. (MDC), and MDC expressly asserts a copyright on all Plans. Plans may not be reproduced or used by any party other than MDC without the express prior written consent of an authorized representative of MDC.

Use of this plan and any other MDC plans for this project are subject to the terms and conditions of Moshier Design Company, which can be found at <https://drive.google.com/file/d/1g4u3Z7f66yQ7Jkx3510vo077N86GZ/view?usp=sharing>, and which are incorporated into these plans by reference.



NO WORK TO BE CONDUCTED IN EGLE REGULATED AREAS. DEVELOPER TO HAVE SURVEYOR STAKE LIMITS PRIOR TO ANY WORK COMMENCING

EXISTING SIDEWALK PATH

REMOVE FOREIGN DEBRIS AND CEMENT NOT CRITICAL TO BANK STABILIZATION

EXISTING TREES TYP. ARBORIST TO ASSESS TREES, TAG EACH AND DETERMINE DISEASED/DEAD FOR REMOVAL

FF = 730.00

PROPOSED STORMWATER CATCH BASIN
NO. D-106
729-30
RIM: 727.80
12" INVERT (N)

INVASIVE SPECIES AND TREE STUMP PROTOCOL

INVASIVE BRUSH
1. CUT BRUSH TO GROUND LEVEL STUMP.
2. APPLY GLYPHOSATE (20% CONCENTRATION) IMMEDIATELY AFTER CUTTING WITH PAINT BRUSH TO STUMP. DO NOT DO DURING WET CONDITIONS WHERE ANY RUN-OFF COULD OCCUR OR CONTACT THE STREAM.
3. HAND-DIG STUMPS OUT 72 HOURS AFTER APPLYING GLYPHOSATE.

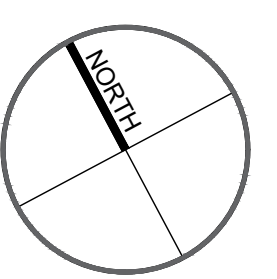
TREE STUMPS
1. FLUSH CUT STUMPS TO GROUND LEVEL AND LEAVE STUMP IN TACT TO PREVENT BANK DESTABILIZATION. REMOVE ONLY COMPLETELY ROTTED STUMPS.

PROJECT:
**TONQUISH
CREEK BANK
RESTORATION
PLAN**

DATE & REVISIONS:

FEBRUARY 26, 2024
SUBMISSION FOR PRELIMINARY PLD APPROVAL

SCALE & NORTH ARROW:



SCALE: 1" = 20'-0"



Know what's below.
Call before you dig.

SHEET TITLE:
**PLANTING
SCHEMATIC**

SHEET NO:
L-2

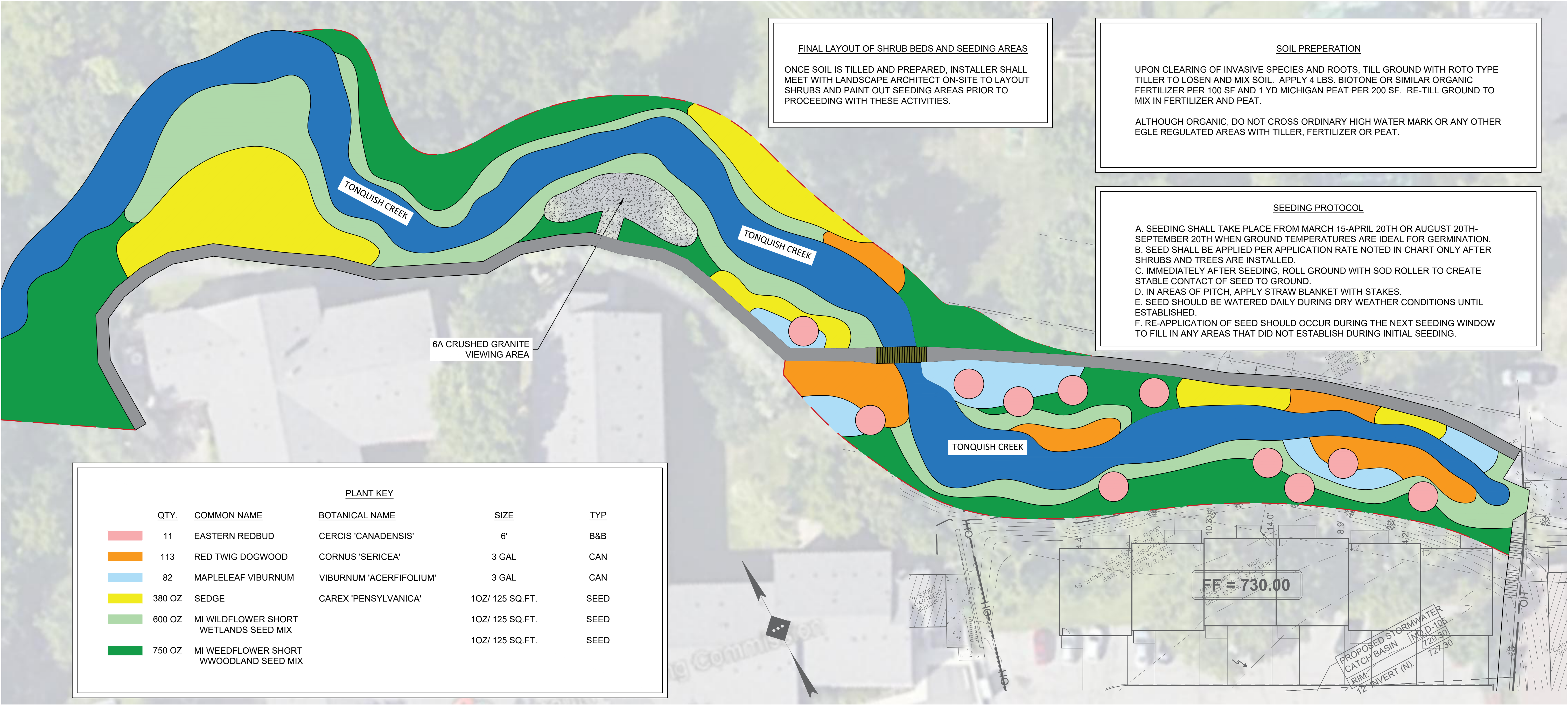
DESIGNED BY:
M.M.

NOTE:
Mosher Design Co. has solely provided drawings for this project and has no involvement with its implementation or required permitting of the project.

LEGAL NOTICE:

Ownership of Drawings and Plans: All drawings, plans, schematics, diagrams, specifications, and blueprints (collectively, "Plans"), whether in written or electronic form are the sole and exclusive property of Mosher Design Co. (MDC), and MDC expressly asserts a copyright on all Plans. Plans may not be reproduced or used by any party other than MDC without the express prior written consent of an authorized representative of MDC.

Use of this plan and any other MDC plans for this project are subject to the terms and conditions of Mosher Design Company, which can be found at <https://www.google.com/maps/@33.4522716,86.9738351,15m3d/data=!3m1!1e3!1m1!1s1778662/view?usp=sharing>, and which are incorporated into these plans by reference.



FINAL LAYOUT OF SHRUB BEDS AND SEEDING AREAS
ONCE SOIL IS TILLED AND PREPARED, INSTALLER SHALL MEET WITH LANDSCAPE ARCHITECT ON-SITE TO LAYOUT SHRUBS AND PAINT OUT SEEDING AREAS PRIOR TO PROCEEDING WITH THESE ACTIVITIES.

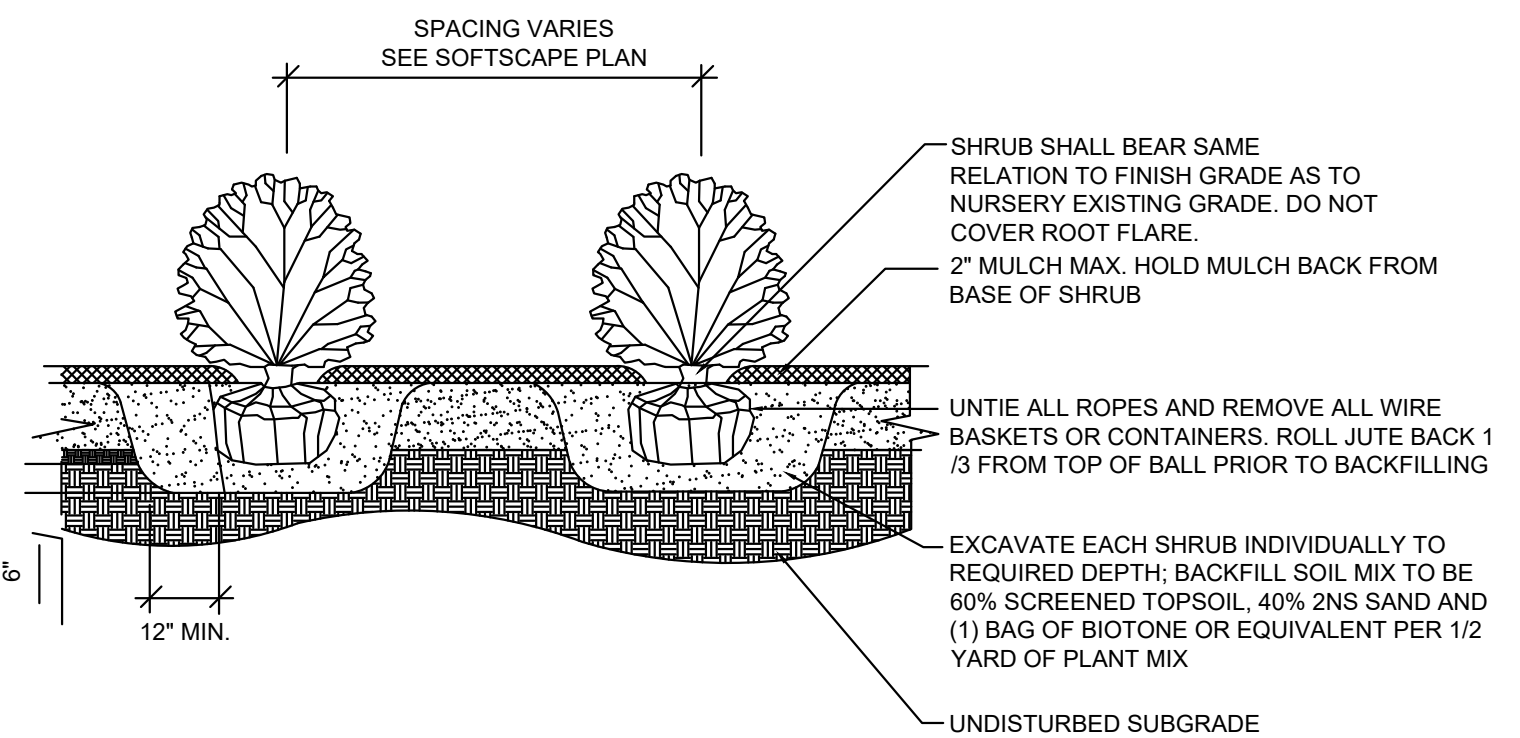
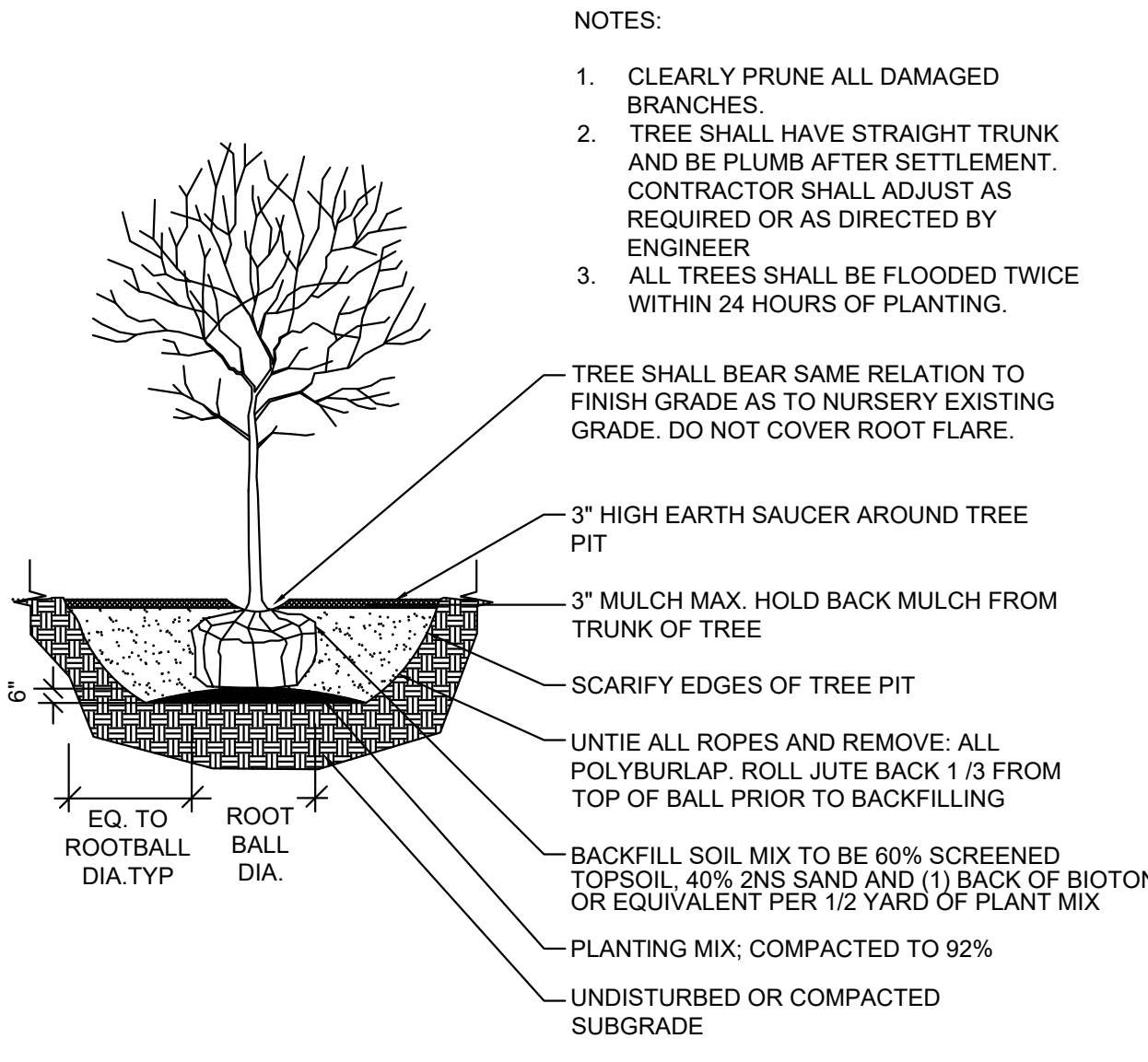
SOIL PREPARATION
UPON CLEARING OF INVASIVE SPECIES AND ROOTS, TILL GROUND WITH ROTO TYPE TILLER TO LOSEN AND MIX SOIL. APPLY 4 LBS. BIOTONE OR SIMILAR ORGANIC FERTILIZER PER 100 SF AND 1 YD MICHIGAN PEAT PER 200 SF. RE-TILL GROUND TO MIX IN FERTILIZER AND PEAT.

ALTHOUGH ORGANIC, DO NOT CROSS ORDINARY HIGH WATER MARK OR ANY OTHER EGLE REGULATED AREAS WITH TILLER, FERTILIZER OR PEAT.

SEEDING PROTOCOL
A. SEEDING SHALL TAKE PLACE FROM MARCH 15-APRIL 20TH OR AUGUST 20TH-SEPTEMBER 20TH WHEN GROUND TEMPERATURES ARE IDEAL FOR GERMINATION.
B. SEED SHALL BE APPLIED PER APPLICATION RATE NOTED IN CHART ONLY AFTER SHRUBS AND TREES ARE INSTALLED.
C. IMMEDIATELY AFTER SEEDING, ROLL GROUND WITH SOD ROLLER TO CREATE STABLE CONTACT OF SEED TO GROUND.
D. IN AREAS OF PITCH, APPLY STRAW BLANKET WITH STAKES.
E. SEED SHOULD BE WATERED DAILY DURING DRY WEATHER CONDITIONS UNTIL ESTABLISHED.
F. RE-APPLICATION OF SEED SHOULD OCCUR DURING THE NEXT SEEDING WINDOW TO FILL IN ANY AREAS THAT DID NOT ESTABLISH DURING INITIAL SEEDING.

PLANT KEY

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	TYP
11	EASTERN REDBUD	CERCIS 'CANADENSIS'	6'	B&B
113	RED TWIG DOGWOOD	CORNUS 'SERICEA'	3 GAL	CAN
82	MAPLELEAF VIBURNUM	VIBURNUM 'ACERIFOLIUM'	3 GAL	CAN
380 OZ	SEDGE	CAREX 'PENSYLVANICA'	10Z/ 125 SQ.FT.	SEED
600 OZ	MI WILDFLOWER SHORT WETLANDS SEED MIX		10Z/ 125 SQ.FT.	SEED
750 OZ	MI WEEFLOWER SHORT WOODLAND SEED MIX		10Z/ 125 SQ.FT.	SEED



1 DECIDUOUS PLANTING
SCALE: NTS

2 SHRUB PLANTING
SCALE: NTS



PENNSYLVANIA SEDGE



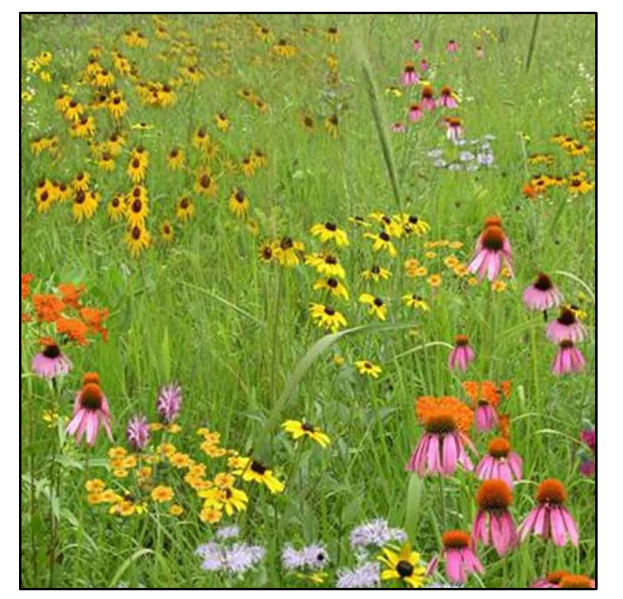
RED TWIG DOGWOOD



MAPLELEAF VIBURNUM



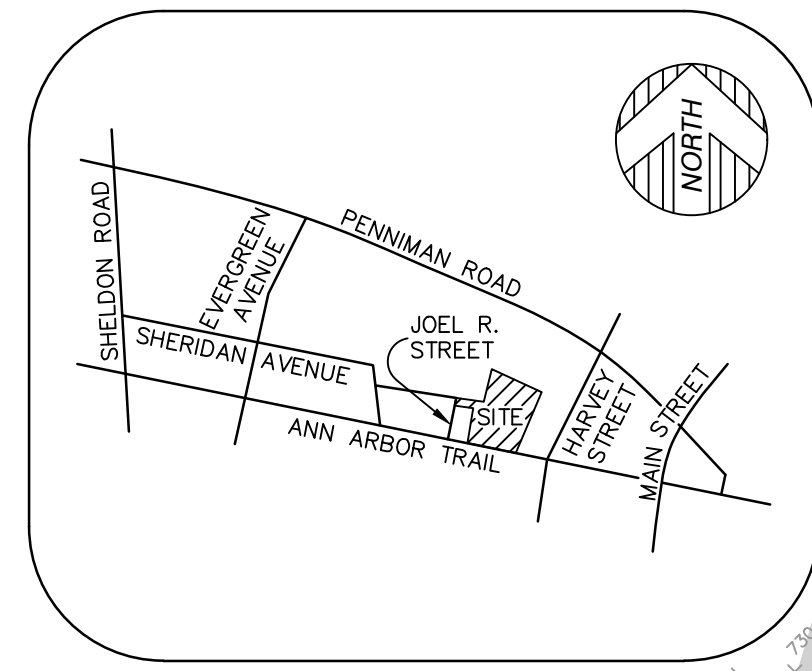
REDBUD TREE



SHORT WETLAND MIX



SHORT WOODLAND MIX



VICINITY MAP
(NOT TO SCALE)

PARKING
HANDICAP PARKING = 2 STALLS
STANDARD PARKING = 94 STALLS

PARCEL AREA
97,818 SQUARE FEET = 2.25 ACRES

BASIS OF BEARING
SOUTH 77°32'41" EAST, BEING THE NORTHERLY RIGHT OF WAY LINE OF ANN ARBOR TRAIL AS SHOWN IN LIBER 66, PAGE 46 OF PLATS, WAYNE COUNTY RECORDS.

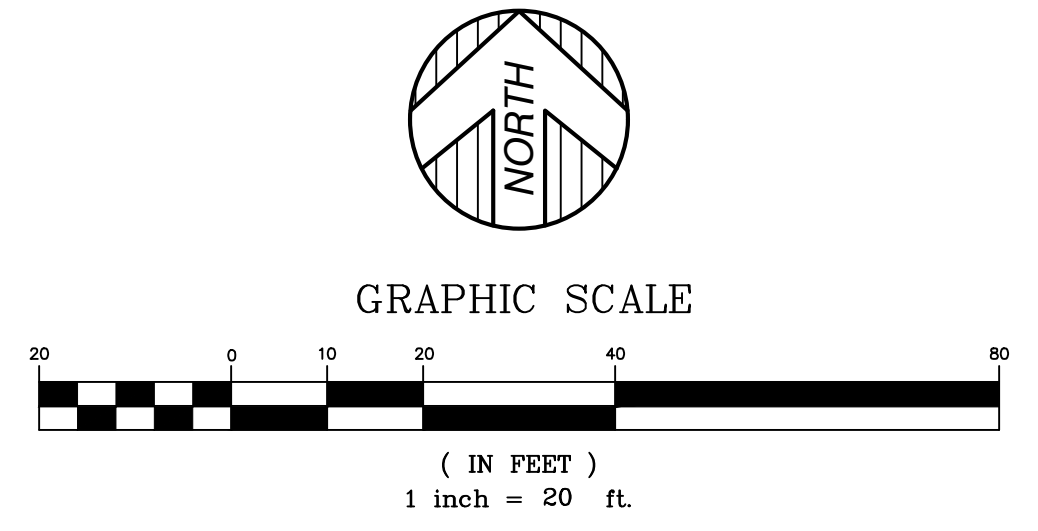
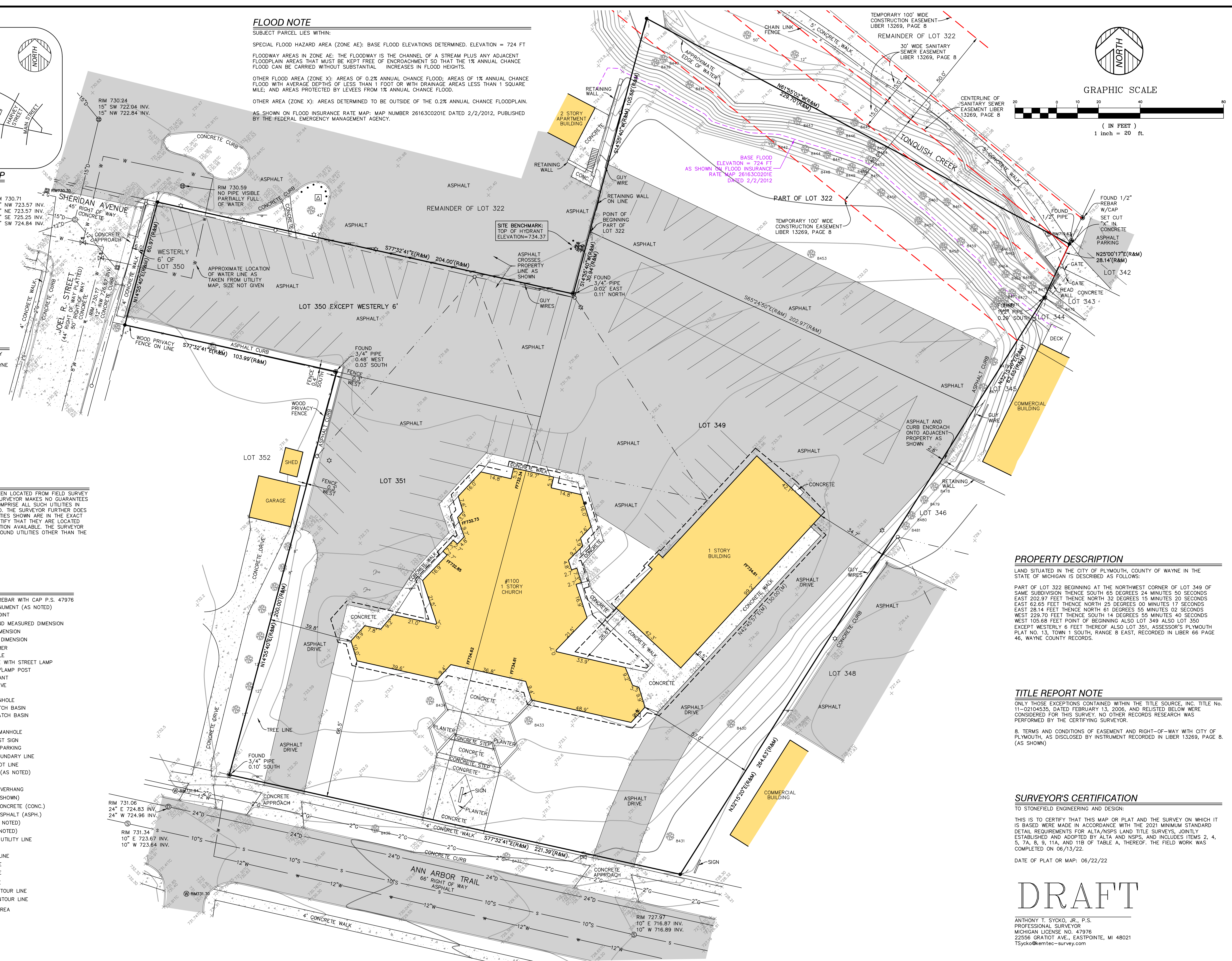
BENCHMARK
TOP OF HYDRANT
ELEVATION = 734.37' (NAVD 88)

SURVEYOR'S NOTE
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

LEGEND

●	SET 1/2" REBAR WITH CAP P.S. 47976
○	FOUND MONUMENT (AS NOTED)
○	GROUND POINT
(R&M)	RECORD AND MEASURED DIMENSION
(R)	RECORD DIMENSION
(M)	MEASURED DIMENSION
⊠	TRANSFORMER
○	UTILITY POLE
⊕	LIGHT POLE WITH STREET LAMP
⊕	LIGHTPOST/LAMP POST
⊕	FIRE HYDRANT
⊕	WATER VALVE
⊕	BOLLARD
⊕	STORM MANHOLE
⊕	ROUND CATCH BASIN
⊕	SQUARE CATCH BASIN
⊕	CLEANOUT
⊕	SANITARY MANHOLE
⊕	SINGLE POST SIGN
⊕	HANDICAP PARKING
---	PARCEL BOUNDARY LINE
---	PLATTED LOT LINE
---	EASEMENT (AS NOTED)
---	BUILDING
---	BUILDING OVERHANG
---	CURB (AS SHOWN)
---	EDGE OF CONCRETE (CONC.)
---	EDGE OF ASPHALT (ASPH.)
---	FENCE (AS NOTED)
---	WALL (AS NOTED)
---	OVERHEAD UTILITY LINE
G	GAS LINE
S	SANITARY LINE
D	STORM LINE
W	WATER LINE
---	FLOOD LINE
---	MINOR CONTOUR LINE
---	MAJOR CONTOUR LINE
---	BUILDING AREA
---	ASPHALT
---	CONCRETE

FLOOD NOTE
SUBJECT PARCEL LIES WITHIN:
SPECIAL FLOOD HAZARD AREA (ZONE AE): BASE FLOOD ELEVATIONS DETERMINED. ELEVATION = 724 FT
FLOODWAY AREAS IN ZONE AE: THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS.
OTHER FLOOD AREA (ZONE X): AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.
OTHER AREA (ZONE X): AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.
AS SHOWN ON FLOOD INSURANCE RATE MAP: MAP NUMBER 26163C0201E DATED 2/2/2012, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.



PROPERTY DESCRIPTION

LAND SITUATED IN THE CITY OF PLYMOUTH, COUNTY OF WAYNE IN THE STATE OF MICHIGAN IS DESCRIBED AS FOLLOWS:
PART OF LOT 322 BEGINNING AT THE NORTHWEST CORNER OF LOT 349 OF SAME SUBDIVISION THENCE SOUTH 65 DEGREES 24 MINUTES 50 SECONDS EAST 202.97 FEET THENCE NORTH 32 DEGREES 15 MINUTES 20 SECONDS EAST 62.65 FEET THENCE NORTH 25 DEGREES 00 MINUTES 17 SECONDS EAST 281.14 FEET THENCE NORTH 61 DEGREES 55 MINUTES 02 SECONDS WEST 229.70 FEET THENCE SOUTH 14 DEGREES 55 MINUTES 40 SECONDS WEST 105.68 FEET POINT OF BEGINNING ALSO LOT 349 ALSO LOT 350 EXCEPT WESTERLY 6 FEET THEREOF ALSO LOT 351, ASSessor'S PLYMOUTH PLAT NO. 13, TOWN 1 SOUTH, RANGE 8 EAST, RECORDED IN LIBER 66 PAGE 46, WAYNE COUNTY RECORDS.

TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE TITLE SOURCE, INC. TITLE NO. 11-02104535, DATED FEBRUARY 13, 2006, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.
8. TERMS AND CONDITIONS OF EASEMENT AND RIGHT-OF-WAY WITH CITY OF PLYMOUTH, AS DISCLOSED BY INSTRUMENT RECORDED IN LIBER 13269, PAGE 8. (AS SHOWN)

SURVEYOR'S CERTIFICATION

TO STONEFIELD ENGINEERING AND DESIGN:
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, 4, 5, 7A, 8, 9, 11A, AND 11B OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 06/13/22.
DATE OF PLAT OR MAP: 06/22/22

DRAFT
ANTHONY T. SYCKO, JR., P.S.
PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 47976
22556 GRATIOT AVE., EASTPOINTE, MI 48021
TSycko@kemtec-survey.com

KEM-TEC
A GROUP OF COMPANIES
PROFESSIONAL ENGINEERING SURVEYING & ENVIRONMENTAL SERVICES
Eastpointe, MI 48021
Ann Arbor, MI 48106
Detroit, MI 48226
(800) 255-7222 (919) 758-9977 (734) 954-0888
Grand Blanc, MI 48031
(888) 654-0001
www.kemtecgroupofcompanies.com

ALTA / NSPS LAND TITLE SURVEY
PREPARED FOR: STONEFIELD ENGINEERING AND DESIGN
11100 W. ANN ARBOR TRAIL, PLYMOUTH, MICHIGAN,
PART OF SECTION 27,
TOWN 1 SOUTH, RANGE 8 EAST

NO.	DATE	REVISION	BY	DESCRIPTION
1	06/22/22		MRJ	
2	06/22/22		MRJ	
3	JUNE 22, 2022			
4	22-01402			

SCALE: 1" = 20'

1 OF 1 SHEETS



> **Tonquish Creek Corridor Restoration Master Plan**
S. Evergreen Street to S. Harvey Street
Plymouth, Michigan

November 2023
ECT No. 230705



2001 Commonwealth Blvd., Suite 300
Ann Arbor, MI 48105
www.ectinc.com

Table of Contents

1.0 Introduction	1
1.1 Background.....	1
1.2 Project Location	1
1.3 Construction Costs	6

List of Figures

Figure 1. Tonquish Creek Location in Plymouth, MI.....	2
Figure 2. Example Brush Toe Stabilization, Fabric-Encapsulated Soil Lift and Native Seed.....	5
Figure 3. Typical Log Riffle with Natural Gravel Material	6

List of Tables

Table 1. Preliminary Range of Probable Costs	6
--	---

Exhibits

Exhibit 1	Existing Conditions
Exhibit 2	Proposed Plan

1.0 Introduction

1.1 **Background**

Environmental Consulting & Technology, Inc. (ECT) was tasked with developing a preliminary master plan to provide a vision for restoring the stream corridor for the City of Plymouth to implement in cooperation with stakeholders. The restoration project may include different site improvement components that may be implemented together or in phases over time:

- stream restoration and streambank stabilization;
- stormwater drainage, wetland, and/or water quality treatment retrofits;
- additional land or easement acquisition;
- re-construction of pedestrian trails and other passive recreation features;
- replace bridge crossing replacement; and/or
- riparian vegetation management and enhancement

The plan includes the attached Exhibits of existing and proposed conditions, general descriptions of each of the above six components, and associated costs for each.

1.2 **Project Location**

Tonquish Creek is a tributary to the Lower Branch of the Rouge River (Figure 1). Much of the reach between Evergreen and Harvey Streets is publicly owned and, therefore, is under long-term protection. There are opportunities to improve the safety and aesthetics of the stream corridor once it is restored and then trails, lighting, and other recreational amenities can be improved to make the area an amenity to the community of Plymouth.

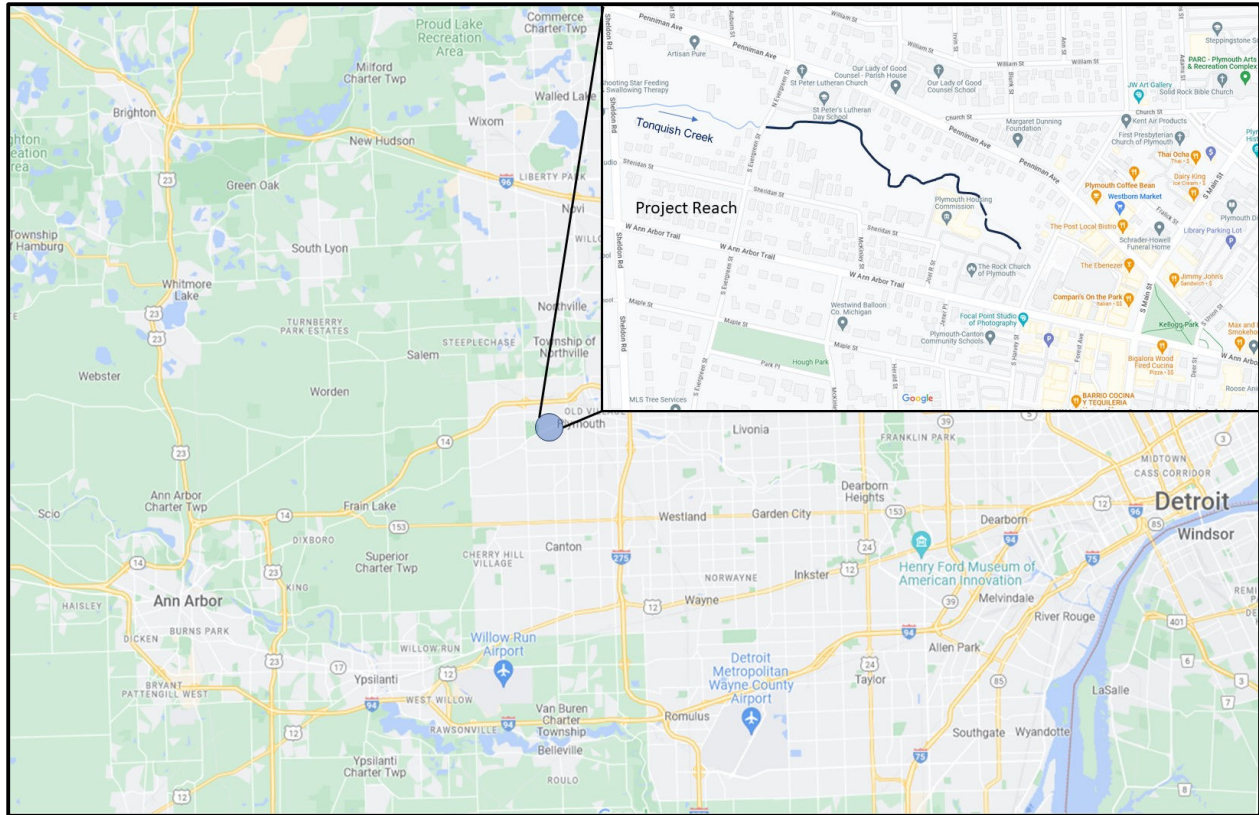


Figure 1. Tonquish Creek Location in Plymouth, MI

Stream Restoration

ECT staff walked the stream corridor on October 24, 2023 and qualitatively evaluated existing conditions such as utilities and other site constraints, storm outfalls, streambank erosion rates, existing wetlands, trails, and streamside landmark trees. A combination of available LiDAR data and ECT field measurements were used to generate a base map of 1 ft contours and existing conditions (Exhibit 1). A preliminary stream corridor restoration master plan was developed for planning purposes (Exhibit 2). Despite past physical alterations, the headwaters of Tonquish Creek produce a steady base flow and there is fair restoration potential.

The assessment of existing stream conditions concluded:

- The surface geology of the stream is alluvium within an area of glacial outwash.
- The soils consist of Cohoctah fine sandy loam which were historically hydric soils but the hydrology has been impacted by dredging and incision (downcutting).

- The pre-settlement vegetation was Beech/Sugar Maple Mesic Southern Forest. The existing vegetation community has mostly low quality trees with an understory of upland invasive shrubs (mostly honeysuckle spp.) with no herbaceous cover on the banks.
- The stream had moderate sinuosity and, although it may have only been historically channelized at the upstream and downstream ends, there are signs of active downcutting.
- The stream is laterally confined with high banks that are typically >2X bankfull max. depth. Other lateral constraints include utilities, sanitary manholes, pedestrian crossings, fences, and grouted concrete walls.
- The streambed is predominantly a thin layer of gravelly/sand alluvium over a clay till bed. The D100 of the bar averaged 50 mm (2 inches).
- Potential Stream Type: Rosgen E4 or B3c depending on lateral constraints
- Much of the stream bank length and some of the streambed are lined with broken concrete and debris. More than 1/3 of the streambanks are actively eroding. Erosion is contributing >36 tons of sediment, >40 lb phosphorus, and >50 lb nitrogen to the creek each year.

Restoration of the stream may involve:

- riprap and debris removal
- moderate re-meandering of approx. 2,000 feet of stream
- bank terracing to provide floodplain connectivity
- riffle/pool construction to provide bedform diversity
- toewood and soil bioengineering practices to stabilize banks
- native understory seed mix and shrub plantings along outer banks and riffles/runs

Green Stormwater Infrastructure (GSI)

The City of Plymouth should consider stormwater retrofit opportunities for the Plymouth Housing Commission's Tonquish Creek Manor. Additional practices along public land or suitable private properties could provide improve habitat, stormwater infiltration, and water quality treatment such as:

- riparian wetland enhancement
- infiltration, bioretention, vegetated swales, filtration practices
- storm outfall stabilization

Land Acquisition

First Church of Christ, Scientist, has proposed the donation of a section of the parcel along the creek. In addition, the City may consider coordinating with property owners along the proposed trail to acquire some additional land for safety, grading, access, and fencing (Exhibit 2).

Recreational Trail

Exhibit 2 provides a preliminary layout of re-constructed and new trails, boardwalks, waste bins, lighting, benches, and overlooks could be integrated into the final corridor.

Pedestrian Stream Crossings

The existing stream crossings at St. Peter's Lutheran Church and Tonquish Creek Manor should be replaced along with the grouted concrete walls next to each. Sanitary manholes, storm outfalls, and other site constraints may exist at each crossing. The stream crossing types in order of preference include installation of:

1. pre-fabricated bridge that spans the creek and adjacent floodplain,
2. bottomless arch culvert with concrete footers, or
3. round culvert (diameter equal to the bankfull width) buried 1/6 of the diameter into the creekbed.

Riparian Vegetation Management

Riparian restoration of the stream corridor includes:

- select thinning of dead, diseased, or non-native trees
- removing invasive shrubs and treating stumps with herbicides
- selectively spraying invasive herbaceous plants

A preferred vegetation management approach may be to contract the initial invasive species removal and follow-up treatments in the second year with a licensed applicator. The understory can then be seeded with a wild rye or similar native cover crop. This first phase of work could be followed in years 3-5 by using volunteer workdays to remove invasive shrub seedlings that may grow from the remaining seed bank. The stream restoration work should improve the riparian hydrology and reduce the presence of upland invasive shrubs.

Tonquish Creek Restoration

The creek restoration should use on-site wood and other natural materials to the extent possible. Outer bend protection may be necessary due to the excess gradient and shear stress. Brush toe will be used along outer bends due to the scale of the stream (Figure 2). Over-sized rootwads and toewood structures would not have been appropriate for this small stream. Log riffles provide additional grade control, riffle complexity, and micro-pools, but will not be used immediately upstream of road crossings. Brush-packed runs will be used to increase run roughness and complexity. Log vanes will be used to maintain pool depths and dissipate energy around compound bends. Log sills will be integrated into the log vanes to improve stability and prevent flanking.



Figure 2. Example Brush Toe Stabilization, Fabric-Encapsulated Soil Lift and Native Seed



Figure 3. Typical Log Riffle with Natural Gravel Material

1.3 Construction Costs

Table 1 provides a preliminary range of probable costs for each type of improvement practices recommended for the Tonquish Creek corridor at this location. The work can be phase or sequenced based on the availability of funding. If possible, the selective clearing of the riparian area and stream crossings should be completed first and the appropriate wood utilized as part of the construction. The cost includes approximately 20-25% for design, permitting, and part-time construction over-sight exclusive of permitting fees.

Table 1. Preliminary Range of Probable Costs

IMPROVEMENTS		COST RANGE	COMMENTS
A	Stream Restoration	\$1M-\$1.2M	2,000 ft of stream
B	Green Stormwater Infrastructure	\$100K-\$125K	Tonquish Manor
C	Land Acquisition	TBD	n/a
D	Recreational Trail	\$500K-\$600K	Includes ADA gravel trails, trail improvements, boardwalks, lighting, benches, signage
E	Pedestrian Stream Crossings	\$200K-\$500K	Depends on materials
F	Riparian Vegetation Management	\$50K-\$75K	Includes 3 acres of initial and follow-up treatment

Exhibit 1 Existing Conditions



1 GULLY BELOW STORM OUTFALL



2 PEDESTRIAN CROSSING #1



3 BROKEN CONCRETE LINED STREAMBANK AND BED - TYPICAL



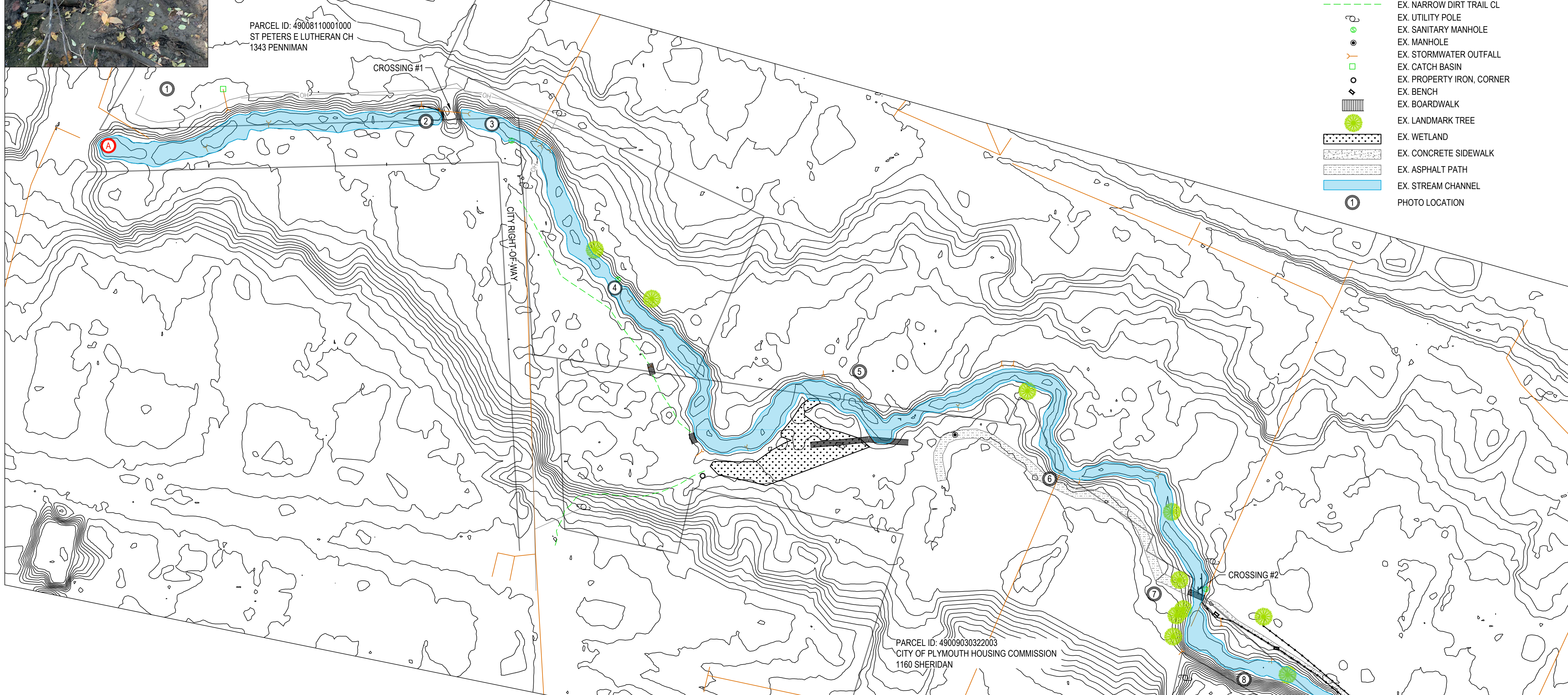
4 SANITARY SEWER MANHOLE

TONQUISH CREEK - NOTES

- ELEVATION DROP OF 12 FT FROM **A** TO **B**
- 1 OF 3 BANKS ARE ERODING
- 36 TON/YR (ALMOST DOUBLE REFERENCE REACH RATES)
- 40 LB P PER YR
- 50 LB N PER YR

LEGEND

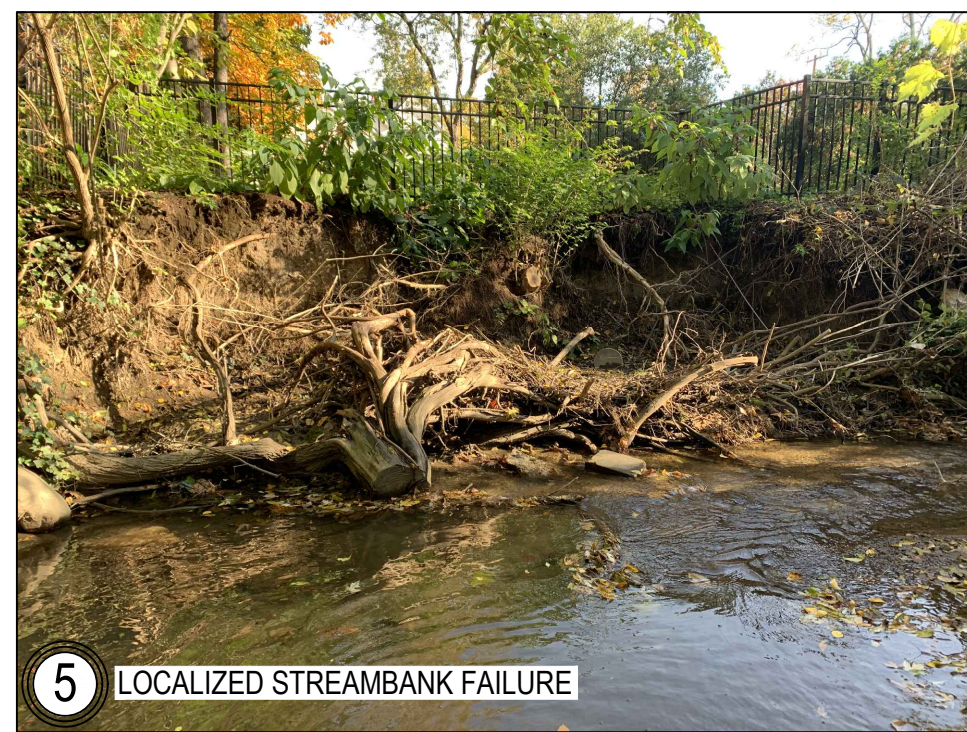
- PARCEL BOUNDARIES
- EX. 1' CONTOUR (LIDAR)
- EX. STORM SEWER
- OH — EX. OVERHEAD LINE
- EX. CHAIN LINK FENCE
- EX. NARROW DIRT TRAIL CL
- EX. UTILITY POLE
- EX. SANITARY MANHOLE
- EX. MANHOLE
- EX. STORMWATER OUTFALL
- EX. CATCH BASIN
- EX. PROPERTY IRON, CORNER
- EX. BENCH
- ▨ EX. BOARDWALK
- EX. LANDMARK TREE
- ▨ EX. WETLAND
- ▨ EX. CONCRETE SIDEWALK
- ▨ EX. ASPHALT PATH
- ▨ EX. STREAM CHANNEL
- ① PHOTO LOCATION



PARCEL ID: 49008110001000
ST PETERS E LUTHERAN CH
1343 PENNIMAN

PARCEL ID: 49009030322003
CITY OF PLYMOUTH HOUSING COMMISSION
1160 SHERIDAN

PARCEL ID: 49009030322309
BROOKSIDE VILLAGE-
CHRISTIAN SCIENCE CHURCH
1100 W ANN ARBOR TRL



5 LOCALIZED STREAMBANK FAILURE



6 GROUTED CONCRETE WALL



7 PEDESTRIAN CROSSING #2

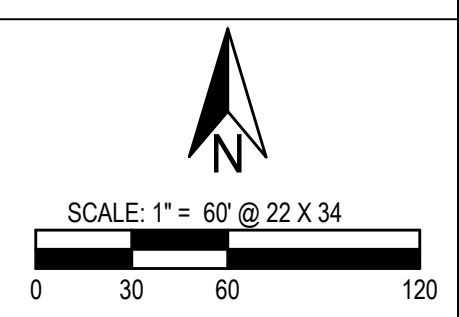


8 HILL SLOPE EROSION ARMORED WITH BROKEN CONCRETE

**TONQUISH CREEK
MASTER PLAN**

ECT PROJECT No.:	230705
DESIGNED BY:	RM
DRAWN BY:	SD
CHECKED BY:	RM
APPROVED BY:	RM
STATUS:	PRELIMINARY DESIGN 11-7-2023
REVISIONS:	

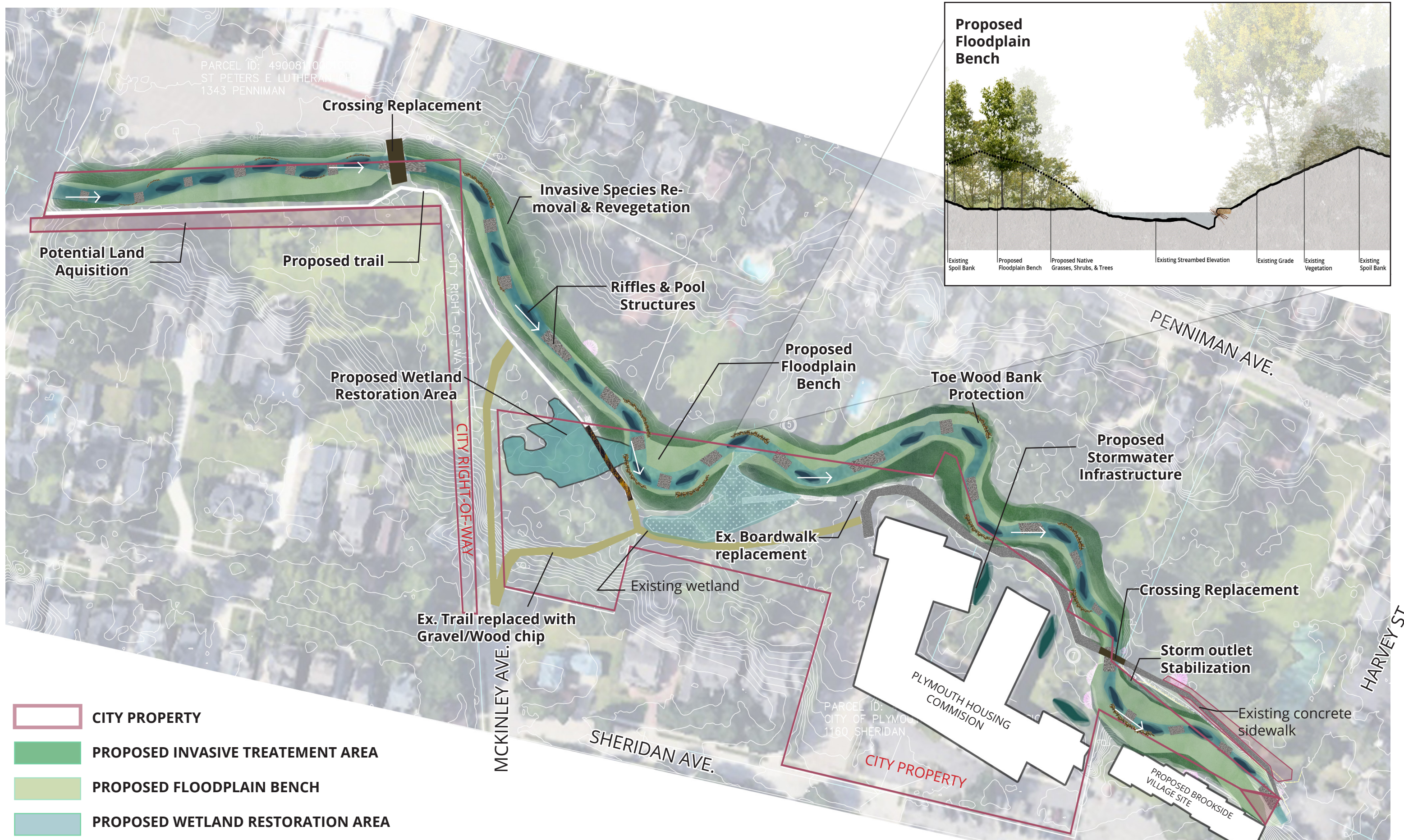
EXHIBIT 1



CALL BEFORE YOU DIG
811

P:\CHAMBERLAIN DEVELOPMENT GROUP - LLC\230705 - TONQUISH CREEK MASTER PLAN\CAD\TONQUISH CREEK.DWG 11/7/2023 10:45 AM by Shady DK

Exhibit 2 Proposed Plan



TONQUISH CREEK - EXHIBIT 2 PROPOSED PLAN





Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: July 31, 2023
Rev.: March 6, 2024

**Planned Unit Development
For
City of Plymouth, Michigan**

GENERAL INFORMATION

Applicant:	Champion Development Group LL Real Estate, LLC 5000 E. Grand River Howell, MI 48843
Project Name:	Brookside Village-Christian Science PUD Development
Plan Date:	Engineered Site Plans: February 26, 2024 Architectural Plans: February 23, 2024
Location:	1100 West Ann Arbor Trail
Zoning:	R-1, Single-Family Residential District
Action Requested:	Preliminary PUD Approval

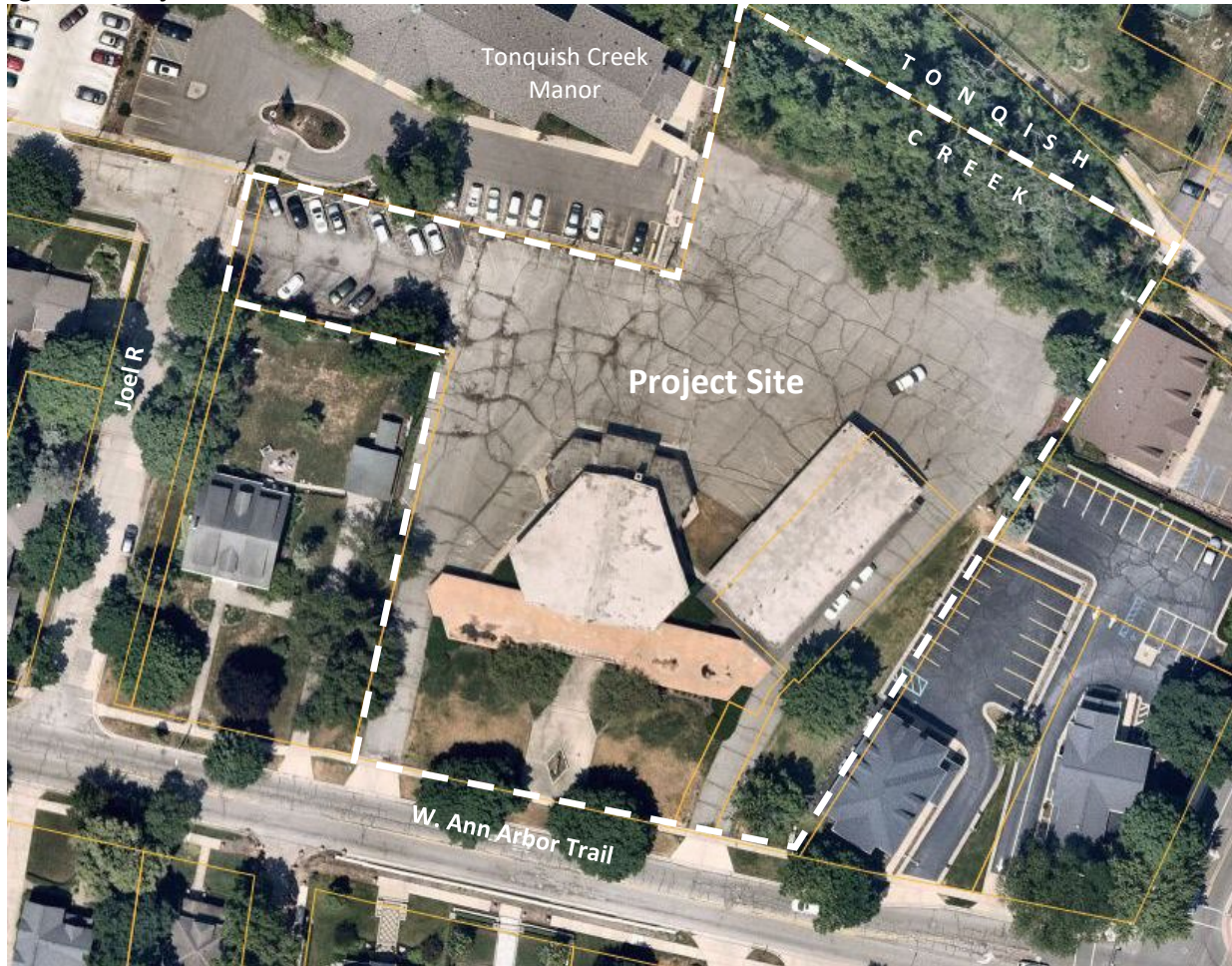
PROJECT DESCRIPTION

The applicant is proposing a Planned Unit Development (PUD) on this site, including a small worship building for the current property owner, Christian Science of Plymouth, renovation of the existing parking for this use, and 20 condominium units (down from 24) on the remainder of the site. Three (3) condominium units along E. Ann Arbor Trail will be in the style of a single-family home, while the remaining 17 units will be designed as attached townhomes. The project is also proposing to add a stairwell on the east side of the site to Tonquish Creek at the back of the site. Additional improvements to the Tonquish Creek trail are also proposed as public benefits of the PUD.

The applicants appeared before the Planning Commission at their March 8 and April 12, 2023 meetings to present their concepts and receive input. They discussed a formal proposal with the Commissioners at their August 9, 2024 meeting. They are returning with a revised plan for formal Preliminary PUD review.

An aerial of the proposed project area is shown on the next page.

Figure 1. Subject Site



Source: Near Maps (Image Capture June 17, 2023)

At the August Planning Commission meeting, the minutes reflect that the Commissioners discussed the PUD application and brought up a number of points, chiefly density, traffic, and the public benefit. They noted that density can be measured in several different ways, but considering the townhomes separately seemed to be most aligned with the ordinance. Massing was also brought up as a concern. They asked for a comprehensive traffic study in order to better understand the impact this project could have. Commissioners stated that they needed to see greater detail of the proposed public benefit for the project to be designated a PUD.

PUD PROCESS AND PLAN REQUIREMENTS

According to Section 78-314 of the Zoning Ordinance and the prescribed PUD procedures for review, the applicant attended several pre-application conferences with City staff, the most recent in June, 2023. A formal application has been submitted and includes the transmittal of preliminary PUD plans/site plans.

The requirements of a preliminary site plan submission that accompany a PUD plan (Sec. 78-314) include the following information, which needs to be provided:

1. The ordinance requires a narrative report to accompany the site plan explaining the manner in which the PUD criteria (Sec. 78-313) has been met. A narrative has been included with the submission that

addresses some of the PUD criteria, but doesn't address all of the criteria. **The narrative should list the criteria in the ordinance (Section 78-311(c)), and respond to each.**

2. The ordinance also requires the developer to provide an explanation of why the submitted PUD is superior to a plan which could have been prepared under strict adherence to related sections of the Zoning Ordinance. This needs to be provided, and could be included in the narrative responding to the PUD criteria.
3. Current land use abutting properties to the subject site needs to be provided on the plans.
4. Description of how the project implementation will be phased in, if at all, should be provided.

Note that the Planning Commission may request additional information needed to assist in determining the appropriateness of the PUD.

Items to be Addressed: 1) Provide a narrative listing the PUD criteria (Sec. 78-311(c)), and describe how the project meets each. 2) Provide an explanation of why the submitted PUD is superior to a plan which could have been prepared under strict adherence to the Zoning Ordinance. 3) Show current land uses abutting subject site on plans. 4) Provide phasing description, if any.

PUD CRITERIA

Section 78-311(c) of the Zoning Ordinance establishes PUD criteria which determine the overall eligibility for a Planned Unit Development. The project must demonstrate that they meet all of these criteria to be entitled to PUD treatment. The criteria are provided below, with our comments after each.

(1) Grant of the planned unit development will result in one (1) of the following:

- a. ***A recognizable and material benefit to the ultimate users of the project and to the community, where such benefit would otherwise be unfeasible or unlikely to be achieved without application of the planned unit development regulations;***

CWA Comment: Regarding benefits to the users:

- The existing property owner, Christian Science Church, has no need for the existing large building on site given the size of their current congregation. The proposed redevelopment will provide this group with a building that meets their current needs, and allow them to stay in the City of Plymouth.

Regarding benefits to the broader community:

- The project offers a housing type other than single-family homes. According to the Southeast Michigan Council of Governments (SEMCOG) and the 2021 American Community Survey, Plymouth's housing stock is 60% single-family homes, and 40% multi-unit housing. (Sixty-two percent of the multi-unit housing is owner-occupied.) The population of Plymouth is also aging. Since 2010, the average age of Plymouth residents has changed from 39.2 to 45.7 years. Also, the number of residents aged 55 and older has increased from 26% of the City's population in 2010 to 32% of the population in 2021. People in this age bracket are often downsizing, and looking for housing opportunities that require less maintenance.

- The project narrative describes other “benefits” that this project offers. Note that the ordinance defines “benefit” in the PUD section as follows: “...where such benefit would otherwise be unfeasible or unlikely to be achieved without application of the planned unit development regulations.” Therefore, we haven’t included the full list of benefits listed by the applicant because some would be achieved by any redevelopment of this site. The benefits (that meet the ordinance definition) offered by the project that wouldn’t be achieved without application of a PUD include:
 - a. Shared parking for the adjacent Tonquish Creek Manor operations. The narrative states that up to 13 “excess” parking spaces might be available to the Tonquish Creek Manor residents. The narrative is not firm on this offer, and leaves the scope of the benefit to be decided in the future. The Planning Commission cannot make a recommendation on “maybes.” The applicant needs to decide what this benefit will be today (specific number of spaces, when they would be shared, and who can use them).
 - b. Work associated with Tonquish Creek improvements:
 - i. **Tonquish Creek and Trail Restoration Plan.** As part of the submission, the materials include a “Tonquish Creek Corridor Restoration Master Plan.” This document provides a preliminary assessment of approximately 1,900 lineal feet of the creek corridor, and provides general recommendations on how to address streambank and streambed issues. While this assessment could have been provided as part of any development of the site, it is unlikely to have been done. Also, this information lists what work needs to occur to improve the corridor, and is the basis for the applicant’s other listed benefits.
 - ii. **Provide funding for some creek restoration work.** The narrative states that the developer is willing to provide limited funding to achieve some of the work items defined in the report (above). A dollar figure has not been provided, and needs to be.
 - iii. **Restore creek bed along 300-foot abutting proposed project.** The narrative states that the developer will perform a complete restoration of the creek along their northern property line. (Note that this property line measures approximately 230 lineal feet, but the boundaries of the actual location/extent of the restoration is not shown on the plans.) The work will include removal of invasive species and dead trees, removal of debris and broken concrete, trimming healthy trees, planting native shrubs and herbaceous plants to fill in and stabilize the bank.

While the intent is good, it appears that this type of work may be outside of the developer’s area of expertise. We have formed this opinion given the following observations:

- Any work within the streambed itself will require an Inland Lakes and Streams Permit from the Michigan Department of Energy, Great Lakes and Environment (EGLE). This isn’t mentioned on the plans.
- Given the close proximity of the townhomes to the top of the streambank, grading and heavy equipment will negatively impact this area. Some restoration will be necessary simply because of the proposed construction on site. Therefore, this work is required *because* of the project, not in addition to the project.
- The applicant has characterized this work as an ecological benefit. To be such, the planning for (i.e., plans), and the implementation of the work needs to be conducted by ecological restoration professionals. While the Restoration Plan was prepared by ecological professionals, the restoration sheets in the plan set do not illustrate industry standard techniques for ecological restoration.

- Sheet L-1 notes state that the roots of invasive shrub should be dug out. This is contrary to the Restoration Plan that indicates that these roots should be retained to hold the streambank in place. This plan should be prepared by an ecological professional with demonstrated experience in streambank restoration.
 - Sheet L-2 calls for planting landscape-sized shrubs right next to the flowing water. Typically, stream bank restoration is done with “live stakes,” which are woody plant cuttings inserted into the streambank so that they root into, and protect, the streambank slopes. This plan should be prepared by an ecological professional with demonstrated experience in streambank restoration.
 - In addition, plans for successful streambank restoration include a description of the activities necessary to ensure the plantings become established and the maintenance activities necessary to ensure the plantings are not overrun by invasive species (as partly described in the Restoration Plan).
- iv. **Provide select Tonquish Creek Trail Improvements.** The narrative states that they will replace or provide additional ornamental light fixtures and benches along the paved portion of the Trail that abuts the project and Tonquish Creek Manor (approximately 600 lineal feet section of the Trail). The plans should show the location of the existing fixtures/benches to be replaced, and where new fixtures/benches will be installed.
 - v. **Deed a portion of property along the creek bank to the City.** Again, it doesn’t appear that the plans show where this property is located, and how much property will be deeded. This information should be provided.
 - vi. **Construct a new access stair at the head end of the Creek.** This proposal is shown on Sheet C-3, showing these stairs as part of an internal sidewalk system, and a connection to the public sidewalk between two of the individual condo units along Ann Arbor Trail. This connection will benefit project residents and the public at large. To accomplish this benefit, the end of the staircase will need a section of pavement located on the easterly neighbor’s property (and therefore an easement) to meet up with the trail. Has the applicant discussed this with the neighboring property owner?
 - vii. **Pocket Park along the Creek.** The narrative describes a patio area with some bench seating installed along the southern side of Tonquish Creek along the paved trail behind Tonquish Creek Manor. Sheet L-2 shows a crushed-gravel area next to the creek, about 70 feet from existing benches and 100 feet from the wooden bridge, which provides a view of the creek. The proposed gravel area is approximately 600 s.f. in size. Installation of the gravel area will require tree removal, which could threaten the stabilization of the stream bank.
- Pocket park at the Reading Room bookstore. A 250 square foot concrete pad is shown in front of the new church building/reading room. The narrative states that this area will contain landscaping and a bike rack. These features need to be shown on the plans.

To make a recommendation to the City Commission, the Planning Commission needs to determine if the deviations from the ordinance balance with the public benefits offered by the project. Without certainty that the benefits listed in the proposal will actually be available, the Planning Commission can’t possibly make this decision. The questions expressed above regarding the proposed benefits should be addressed.

- b. Long-term protection and preservation of natural resources and natural features of a significant quantity and/or quality, where such benefit would otherwise be unfeasible or unlikely to be achieved without application of the planned unit development regulations;***

CWA Comment. As mentioned in our previous review, the northern-most buildings are too close to the top of the Tonquish Creek bank. As in the previous plans, this plan locates the eastern-most unit in the bank, and the remaining bank will be impacted because of the “building envelope” needed to construct the buildings. A building envelope is typically 15-20 feet beyond the exterior wall of a building where heavy construction equipment, vehicles, and activities occur during construction. Restoration of this area will be necessary because of these impacts. Bank impacts will most likely also have a negative impact on the stream and water quality in the stream. These impacts will be permanent.

A preliminary ecological assessment of the current streambank has been provided. It estimates that bank erosion contributes more than 36 tons of sediment to the stream, with more than 1/3 of the stream’s banks eroding. As mentioned above, the plan sheets (L-1 and L-2) describing the streambank activities do not reflect accepted restoration techniques.

- c. Long-term protection of historic structures or significant architecture worthy of historic preservation; or***

CWA Comment. There are no known historic resources on the property.

- d. A nonconforming use shall, to a material extent, be rendered more conforming, or less offensive, to the zoning district in which it is situated.***

CWA Comment: N.A.

- (2) The proposed type and density of use shall not result in an unreasonable increase in the need for or burden upon public services, facilities, roads and utilities.***

CWA Comment: We assume that the City’s water and sewer system has additional capacity to handle this development. This needs to be confirmed by the City’s Engineer and an opinion provided at this stage of the project review.

Regarding traffic, the applicant submitted a Trip Generation Analysis, which estimates the number of vehicle trips generated by the proposal. The report also provides an estimate of “vehicle distribution,” which makes a prediction about how the traffic generated by the proposal will use the existing street grid.

The conclusions of the report state that, compared to a church with full occupancy (300 seats), the proposed project will generate significantly less vehicle trips (and therefore, traffic). While this comparison isn’t a reflection of the current conditions (since the church membership is significantly less than 300 people), it does show that the proposal will not generate a significant number of new trips when compared to the SEMCOG data, illustrating the number of trips currently using this portion of Ann Arbor Trail (or 7,330 for weekday flow).

(3) The proposed planned unit development shall be consistent with the public health, safety and welfare of the City.

CWA Comment: We would consider this project to be, in general, consistent with the public health, safety and welfare of the City.

(4) The proposed planned unit development shall not result in an unreasonable negative environmental impact or loss of a historic structure on the subject site or surrounding land.

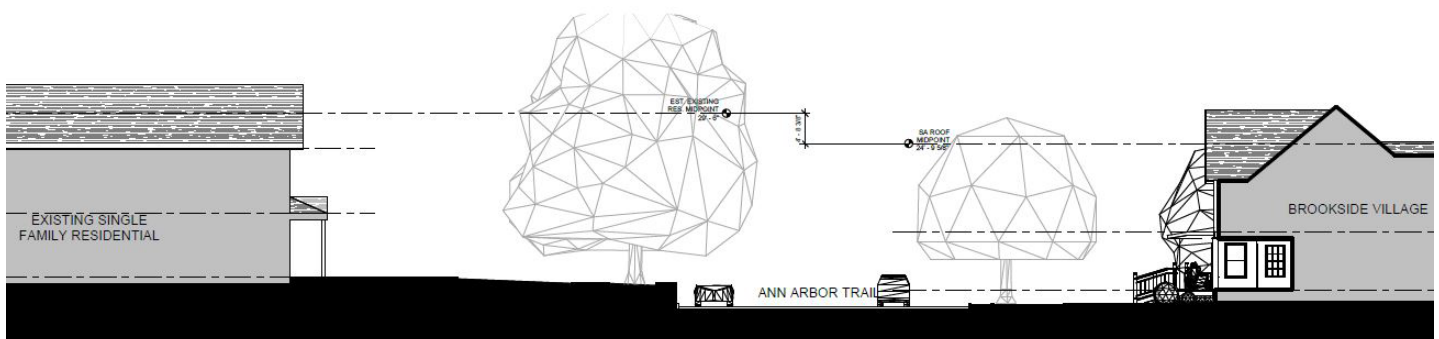
CWA Comment: As mentioned above, the project is proposing to construct townhouse units at the top of the Tonquish Creek streambank, with grading impacts past the top of the stream bank. This will have negative impacts on the streambank, and most likely the stream and water quality. The northern townhouse units need to be moved away from the top of the bank so that the construction doesn't impact the top of the bank. See the Density Analysis below for options that achieve this goal, and therefore meet this PUD criterion. The property doesn't contain any historic structures.

(5) The proposed planned unit development shall not result in an unreasonable negative economic impact upon surrounding properties.

CWA Comment: No financial information regarding the cost of the residential units has been provided; so, we can't provide an analysis. However, it is important that the development "fit" into the neighborhood. Ways this can be accomplished is that the new buildings are of similar height and massing of surrounding residential buildings, have similar architectural characteristics and level of detail, and that the setbacks from the street have a relationship to the adjacent buildings along the street.

Regarding **height**, we looked at all three building types below:

- The 3 detached units along Ann Arbor Trail are proposed at 2.5-stories, 24.75-feet tall at the midpoint of the roof. These buildings have not changed from the previous submission. The current submission includes the image below, showing how the project will relate to the single-family homes on the south side of Ann Arbor Trail. The midpoint of the house on the south side of the street is 29.5-feet, which is 4.75-feet taller than the proposed unit. The height dimensions (to the midpoint of the roof) of the office building to the east should be provided, as well as a graphic comparison of this building with the proposed buildings along Ann Arbor Trail.



- The 17 attached townhome units on the interior of the site are proposed at 2.5-stories, 25-feet tall at the midpoint of the roof. These units are only a few inches taller than the units facing Ann Arbor Trail, and will likely be perceived as virtually the same height, or slightly lower due to the sloping topography (the site slightly slopes down from the street to the back by 2-feet).

- The church building is proposed at one-story, 20-feet tall at the midpoint of the roof. This building design has not changed from the previous submission. This building will be lower than most buildings along Ann Arbor Trail, and will not dominate the street.
- Regarding **massing**, the three detached units along Ann Arbor Trail are proposed at 2,400 s.f. (per Sheet C-3). Researching the existing homes along Ann Arbor Trail, the three proposed detached units along Ann Arbor Trail are similar to the average size of the homes on both sides of the street (traditional & new). They are significantly (31%) smaller than the average-sized new homes on the street. We have tallied these results in the table below:

Table 2: Average home sizes on Ann Arbor Trail – Subject Site to McKinley St.

Subject Site to McKinley St.	Average Home Size (s.f.)
South Side:	
Traditional (1950s-older)*	2,258 s.f.
New (1960-younger)	3,493 s.f.
North Side:	
Traditional (1950s-older)	1,559 s.f.
Both Sides/All Ages:*	2,147 s.f.

*Note: The large house on the southeast corner of Ann Arbor Trail/McKinley was not included in this analysis. If included, this would change the average “traditional” house size on the south side of the street to 2,595 s.f., and the “Both Sides/All Ages” average to 2,285 s.f.

Regarding the **architectural characteristics, and level of detail** of the proposed structures:

- The three units along Ann Arbor Trail appear to be designed in the modern “farmhouse” style, with very few architectural details. The form of the buildings, with pitched roofs and front porches, is consistent with other traditional homes along the street; however, the mix of brick and board-and-batten siding is not. Horizontal siding, with board-and-batten accents would be more in line with the character of the street, in our opinion.
- The front façade of the 6-unit townhome building facing the church (and shared internal drive) is visible from the street (see the top right images on Sheets A3 and A4). This orientation places the garage doors at the rear, and not facing the shared drive. The rear elevation with the garage doors faces an internal street that is partially blocked from view of the street by one of the detached units.
- The current church building is a contemporary style with low-pitched roofs and a horizontal orientation. The proposed church building also has a contemporary style. The pergola over the side façade (at the front) helps to connect the building to the patio area, and adds interest to the street view.

Regarding **front setbacks** of the proposed buildings, the two buildings that define this development are the 3 single-unit residential buildings that face Ann Arbor Trail, and the church building.

Table 3: Existing and Proposed Front Setbacks:

	Front Setback – Existing Buildings on North Side of AA Trail	Front Setback – Proposed Buildings on North Side of AA Trail
Office Building	9 - 22 feet	N.A.
Residential Buildings	House to west of church: 67 feet Ave. Joel R to McKinley: 19 feet	Front Porch: 10 feet House: 17 feet
Church Building	63 feet	25 feet

We have the following observations:

- Both the proposed single-unit residential buildings and church building are oriented to be parallel to Ann Arbor Trail, which is consistent with the other residential buildings in the vicinity. However, the office building to the east is at an angle to the street. In our opinion, we think this difference helps to create a transition between the residential uses on Ann Arbor Trail, and the beginning of downtown.
- The front porches of the proposed residential buildings are closer to the street than other homes to the west; however, the body of the house is setback a similar distance to the average of existing homes. (Note that porches closer to the street encourage interaction between people using the sidewalk, and residents on the porch, which is consistent with the goals of the City’s ordinance to incentivize rear garages/front porches (78-43(11)). Also, the front setback of the body of the proposed house is similar to the front setback of the office building’s western side.
- On the current set of plans, the proposed church building has been shifted south, and is now setback 25-feet (vs. 59-feet on the previous plans) from the front edge of the property. Sec. 78-296 requires a front setback minimum of 50-feet. This represents a deviation. The new location for the church makes space for dedicated parking behind the building.

The proposed setback is much closer to the street than the existing church building. A more gradual setback transition between the new residential buildings and the house to the west would be to place the new church building at a front setback of 42-feet.

Locating the church building as shown screens activity at the church from the neighbor’s front yard. A privacy fence is located on the neighbor’s property, starting approximately at the rear wall of the proposed church building.

(6) *The proposed planned unit development shall be under single ownership and/or control such that there is a single person, corporation, or partnership having responsibility for completing the project in conformity with this article.*

CWA Comment: The narrative states that the Champion Development Group has entered into a contract with the First Church of Christ, Scientist, Plymouth to purchase the available remaining portion of the property and is working together to define a Master Site layout. The intention of the Champion Development group is to develop a townhouse style residential condominium community as depicted in the submission. In our view, it doesn’t appear that there is a “single” entity with the responsibility for completing the project. It appears that Champion will be responsible for the townhomes, and the church for their part of the project. The information provided does not confirm that this criterion is met.

The narrative also describes how the *future* ownership of the property will be handled. It states that the property will be divided into a Church section and Townhouse section. Both sections will be part of a “Master” Condominium site that will have assorted rights and obligations, as defined in the Condominium Documents. Sec. 78-215 requires that the Condominium Documents be reviewed and approved by the City. Due to the unusual nature of the proposed condominium, we recommend that the Planning Commission condition any approval of the Preliminary PUD plans on the applicant providing draft Condominium Documents with their Final PUD plan submission.

(7) The proposed planned unit development shall be consistent with the goals and policies of the City Master Plan.

CWA Comment: The project is proposing a mix of townhouse (multi-family) residences, and a house of worship. The Master Plan identifies this area as “Mixed Use: Low Density.” The Plan describes this future land use designation as follows:

The Mixed Use Low Density designation is specific to land uses where it is appropriate to have a low-impact commercial use adjacent to single-family or multi-family residential areas. This land use allows for single and multi-family uses to continue and be established, while encouraging lower-intensity commercial and office uses that can serve the residential areas. The Mixed Use Low Density land use designation is generally detached buildings with the character of single-family residences that are no more than two stories. Parking in this land use should be located at the rear of the property.

The proposal is consistent/inconsistent with the Master Plan vision in the following ways:

1. The Christian Science Reading Room is a low-impact commercial use that would be adjacent to single- and multi-family residential development.
2. The project is proposing to establish multi-family uses. Houses of worship are often combined with residential uses in the same district; however, houses of worship are considered a “Special Land Use.”
3. The site design along the street frontage locates three single-unit residential buildings, which look like a single-family residence, and is consistent with the Master Plan. The buildings in the interior and rear of the site are of a “townhouse” (multi-family) character. Also, all the proposed residential buildings are 2.5-stories, which is taller than the height called for in the Master Plan. However, the top ½ story is integrated into the roof, with dormers, which creates a two-story appearance. The actual building height dimension is within the maximum permitted in the R-1, One-Family Residential District:

Table 4: Maximum Permitted and Proposed Building Heights in R-1 District:

Building Type	Maximum Permitted Height	Proposed Height
Church Building	25 feet	20 feet
Single-Unit Residential Buildings		24.75 feet
Townhouse Buildings (See below)		25 feet

Townhouse Building: Section 78-313, *PUD General Design Standards*, states that the schedule of regulations for each respective land use must be met, unless the Planning Commission and City Commission approve deviations that advance the objectives of the Zoning Ordinance. The townhouse buildings are considered “multi-family” buildings, and are regulated by the bulk

requirements in the RM-2, Multi-Family Residential District (since the proposed buildings are 2.5-stories). Multi-family districts regulate height by the number of stories. If the building has more than 2-stories, a maximum height dimension is not provided in the ordinance. In our interpretation, the proposed townhouse buildings are consistent with the RM-2 District requirements.

4. Parking is proposed at the side and rear of the buildings, as required.

The Planning Commission should discuss the one inconsistency of the project and Master Plan (multi-family/townhouse vs. single-family appearance) with the applicant. Also reference our Density Analysis later in this review.

(8) The proposed use or uses shall be of such location, size, and character as to be in harmony with the zoning district in which it is situated, and shall not be detrimental to the adjoining zoning districts.

CWA Comment: The project is located in the R-1, One-Family Residential District. The project is proposing a multi-family product. This use is not single-family, but in our opinion, the residential buildings harmonize with single-family residential uses because of the single-unit buildings along Ann Arbor Trail, and because of the height of the townhouse buildings in the interior of the site. The project is relatively small, and will not have a significant impact on surrounding traffic (see analysis above), and will provide a logical transition between the downtown to the east and single-family residential homes to the west. Also reference our Density Analysis later in this review.

(9) A demonstration that the PUD is not proposed in an attempt by the applicant to circumvent the strict application of zoning standards.

CWA Comment: We don't believe the applicant is proposing the project to circumvent the strict application of the zoning standards. The Master Plan identifies this site as appropriate for multi-family residential use, in combination with low-intensity commercial uses that support the neighboring residential properties. We would argue that a house of worship also supports neighboring residential uses.

The most recent set of plans has reduced the number of units from 37 units originally discussed with the Community Development Department, to 20 units. They have also limited the townhomes to 2.5-stories, and designed the buildings to appear like 2-story buildings to better coordinate with the existing homes along the street. Townhomes also provide a logical transition between the downtown and single-family residential uses.

The Planning Commission needs to evaluate the above criteria pertaining to PUD eligibility.

In summary, the PUD project appears to meet some of the criteria. The following information should be provided and discussed with the Planning Commission:

1. **Public Benefits:**
 - a. Shared parking with Tonquish Creek Manor. Specifically state number of parking spaces, when they will be available, and who can use them
 - b. Funding for some creek restoration work. The specific funding figure being offered needs to be provided.

- c. Creek restoration along northern boundary of project. The plans for this work need to be prepared by an ecological professional with demonstrated experience in streambank restoration, include details of required EGLE permits, and include accepted industry standards techniques for plant installation, establishment, and maintenance of streambank restoration work.
 - d. Select Tonquish Creek Trail improvements. Update plans to show existing light fixtures/benches to be replaced, and where new fixtures/benches will be installed.
 - e. Deed property along creek to City. The plans need to show where this property is located, and how much property will be deeded.
 - f. New stair access. This project will require an easement on the property to the east to install pavement between the stairwell and the public trail. Has the applicant discussed this with the neighboring property owner?
 - g. Pocket park behind Tonquish Creek Manor. This project will require tree removal, which could destabilize the streambank slopes.
 - h. Pocket park at the Church Reading Room. The narrative states that this area will contain landscaping and a bike rack. These features need to be shown on the plans.
2. Confirmation by City Engineer that the City's water and sewer system has additional capacity to handle this development.
 3. Shift the northern townhouse units away from the top of the streambank so that the construction doesn't impact the bank.
 4. Provide the height dimension (to the midpoint of the roof) of the office building to the east, and graphic comparison of this building with the proposed single-unit buildings along Ann Arbor Trail.
 5. Applicant to confirm that a single entity will be responsible for implementing all aspects of the project (both townhome and church portions) in conformance with the approved plans.
 6. Planning Commission to discuss one project inconsistency with Master Plan (multi-family/townhouse vs. single-family appearance).
 7. Recommend that the Planning Commission condition any approval of the Preliminary PUD plans on the applicant providing draft Condominium Documents with their Final PUD plan submission.

Items to be Addressed: 1) Applicant to provide additional information about public benefits, as summarized on Pages 11 and 12 of this review. 2) Confirmation by City Engineer that the City's water and sewer system has additional capacity to handle this development. 3) Shift the northern townhouse units away from the top of the streambank. 4) Provide height dimension (to the midpoint of the roof) of the office building to the east, and provide graphic comparison of this building with the proposed single-unit buildings along Ann Arbor Trail. 5) Planning Commission to discuss one project inconsistency with Master Plan (multi-family/townhouse vs. single-family appearance). 6) Applicant to confirm that a single entity will be responsible for implementing all aspects of the project (townhome portion and church portion) in conformance with the approved plans. 7) Recommend Planning Commission condition any Preliminary PUD Plan approval on the applicant providing draft Condominium Documents with their Final PUD Plan submission.

DENSITY ANALYSIS

The project will establish 20 new residential units in the City, allowing some current Plymouth residents to move, or provide homes for new residents. The applicant has not prepared a “parallel plan” that shows how the site could be redeveloped under current zoning. However, if the church re-located to a different property, we estimate that the site could accommodate approximately 10 single-family homes on 7,200 s.f. lots. Our estimate is based a rule of thumb, with 80% of the land being occupied by residential lots, and 20% being occupied by roads, utilities, etc. Therefore, this plan offers approximately 10 more residential units than if the site were re-developed for single-family homes under current zoning. This would be considered a deviation from the existing R-1 zoning.

At their August, 2023 meeting, the Planning Commission determined that the townhome density should be calculated by the area occupied by the townhomes. Based on the current site plan, we estimate that the land occupied by the church is approximately 31,212 s.f., and the land occupied by the townhomes is approximately 66,879 s.f.

As mentioned above, Section 78-313, *PUD General Design Standards*, states that the schedule of regulations for each respective land use must be met, unless the Planning Commission and City Commission approve deviations that advance the objectives of the Zoning Ordinance. Therefore, we have evaluated the density of the townhomes using the RM-2, Multi-Family Residential District, since this district permits multi-family buildings up to 4-stories in height. (Note: RM-1 Multi-Family Residential District only permits multi-family buildings up to 2-stories in height; since the proposed buildings are 2.5 stories, we must use RM-2 standards.) Townhomes are considered a “permitted” use in the RM-2 District.

The ordinance calculates permitted density by dividing the area of the lot by 900 s.f. (Sec. 78-191(c)). The table below shows the results of this calculation using the land area occupied by the townhomes and associated maneuvering lanes:

Table 5: Calculating Number Of “Rooms”

Permitted Density per RM-2, Multi-Family Residential District
$66,879 \text{ s.f.} / 900 = 74 \text{ rooms}$

The ordinance assigns a specific number of “rooms” to a unit, based on the number of bedrooms in each unit. Other rooms, such as a den, office, or similar extra space, are considered bedrooms when calculating density. Therefore, the number of rooms assigned to a unit is assigned as follows:

- Efficiency apartment unit = 1 room
- One-bedroom unit = 2 rooms
- Two-bedroom unit = 3 rooms
- Three-bedroom unit = 4 rooms
- Four-bedroom unit = 5 rooms

The proposal has a variety of options that could result in either a 2-bedroom unit, a 3-bedroom unit or a 4-bedroom unit. The proposal could have as few as

Using this information, the density of the project is proposed as listed in the table on the next page. We have also included the maximum allowed under the RM-2 Zoning District for comparison:

Table 6: Density Analysis

	Proposed Number of Rooms/Units
Single-Unit Buildings (3 units)	3 units x 5 rooms = 15 rooms
If Townhomes all had 4 “bedrooms” (17 units)	17 units x 5 rooms = 85 rooms
If Townhomes all had 3 “bedrooms” (17 units)	17 units x 4 rooms = 68 rooms
If Townhomes all had 2 “bedrooms” (17 units)	17 units x 3 rooms = 51 rooms
TOTAL	20 units/ 66 - 100 rooms

At the least, the density is 11% under the ordinance standard for a multi-family project on this site; and at the most, the density is 35% over the ordinance standard. If the townhomes were an even mix of units having 2 to 4 bedrooms (or 67 rooms), then the density would be 9% below the ordinance standard.

Another way to look at density is to calculate “dwelling units per acre.” We have estimated the density of other similar projects in Plymouth in the table on the next page. This will allow the Planning Commission to experience the density of the built projects and understand the character these projects offer, and how they fit into the existing streetscape.

Table 7: Similar Existing Projects

Project	Density	Comments
Brookside Village (Current Proposal)	20 units / 1.53 ac. = 13 DU/AC	2.5- story townhouses on Ann Arbor Trail.
Saxton’s– Jewell/Maple PUD	10 units / 0.75 ac. = 13 DU/AC	2.5-story townhouses on Maple St.
Plymouth Trail Condominiums	29 units / 2.15 ac. = 13.5 DU/AC	1.0-2.0-story attached single-family on A2 Trail.
Daisy PUD	159 units / 10.47 ac. = 15 DU/AC	2.0-story attached single-family & 3.0-story townhouses on N. Union St.
A2 Trail & Hamilton	10 units / .52 ac. = 19 DU/AC	2.5 story townhouses on Ann Arbor Trail.
Hamilton St.	27 units / 1.13 ac. = 28 DU/AC	3.0-story condominium building on Hamilton St.

The project could build-out to be below or above the maximum number of rooms depending on how each unit is designed. If looking at the project via “dwelling units per acre,” this project is on the low end of other similar projects in Plymouth.

If the Planning Commission deems that 17, 4-bedroom townhomes are appropriate (or 100 rooms for the entire project), then this would be a deviation from the ordinance (or over the maximum in the ordinance by 26 rooms, or 35%).

In our opinion, we evaluate density on the land's ability to support the proposed development, as well as what "fits" within the context of the setting, and similar developments already built in the community. Our analysis above has provided the opinion that the proposal has a number of characteristics that fit into the character of the existing street. In addition, this project proposes a rate of "dwelling units per acre" which is on the low end of other similar projects in town. However, this site is not able to support the level of development proposed along the stream. As mentioned above, we think the 6 large townhome units along the rear of the property are too close to the stream.

Items to be Addressed: 1) *Planning Commission to determine if potential density deviation is consistent with the intent of the Master Plan.*

SITE PLAN

SCHEDULE OF REGULATIONS

Section 78-313 states that the schedule of regulations for each respective land use must be met, unless the Planning Commission and City Commission approve deviations that advance the objectives of the Zoning Ordinance. The proposed church is evaluated by the R-1 One-Family Residential District standards, while the proposed townhomes are evaluated by the RM-2 Multi-Family Residential District standards.

Table 8: Schedule of Regulations Requirements: Church Building

		R-1 Required	Proposed (Church)
Minimum Lot Size/Width		3-acres / 200 feet road frontage	Approx. 0.72-acres / 81 feet road frontage**
Height of building		2 stories, 25 feet maximum	1 story, 20 feet
	Front (Ann Arbor Trail)	50 feet*	25 feet
	Sides Least one	30 feet least*	10 feet
	Rear	50 feet*	114 feet
Frontage		Located on street with min. 86-foot right-of-way	Ann Arbor Trail – 66-foot right-of-way**

*Per Special Land Use standards in Sec. 78-296.

**The church already occupies this site, and currently doesn't meet these ordinance standards. We consider these conditions to be existing non-conformities that could be approved through the PUD process.

Table 9: Schedule of Regulations Requirements: Townhome Buildings

		RM-2 Required	Proposed (Townhomes)
Minimum Lot Size/Width		10,000 s.f. (No min. width req.)	Approx. 66,879 s.f.
Height of building		4 stories	2.5 stories, 25 feet
	Front (Ann Arbor Trail)	25 feet, or equal to the height of the building (or 24.75 feet)***	43 feet***
	Sides Least one	10 least / 20 total	10 feet (east) 17.9 feet (west)
	Rear	35 feet	35 feet
Distance Between Buildings		70 feet - Front to Front 70 feet - Rear to Rear 25 feet - End to End (sides) 50 feet - End to Front 50 Feet -End to Rear	N/A - Front to Front 31 feet - Rear to Rear N/A feet - End to End (sides) N/A feet - End to Front 33 Feet -End to Rear
Minimum usable open space		150 s.f. x 43 to 77 beds = 6,450 s.f. 11,550 s.f.	?? s.f.

***Sec. 78-191 states that 1/2 of the right-of-way width may be considered as a front yard setback. The Ann Arbor Trail right-of-way is 66-feet wide. Therefore, if 1/2 of the right-of-way width is counted toward the front setback, then the location of the townhomes along this street frontage is 43 feet (or 10-feet on the subject site, and 33-feet of right-of-way width).

Side Setbacks: Section 78-296 requires a minimum 30-foot side setback for the church. The current building is located 39.8 feet away from the westerly property line. The proposal locates the church building 10-feet from the westerly property line. This is a deviation of the proposed project.

Distance Between Buildings: The ordinance requires a certain dimension between buildings. The purpose of these requirements is to ensure there is enough space for vehicular access, and to create a more campus-like setting. However, it’s our opinion that these distances are more attuned to a suburban setting, and not a built-out city. Also, the other, similar developments in the City noted above do not fully comply with these requirements. Distance between buildings would be a project deviation.

Minimum Usable Open Space: Because the units may be built-out in a variety of ways, it’s unknown if this standard could/will be met. In any case, the amount of usable open space should be shown on the plans.

Items to be Addressed: 1) Proposed side yard setback of church building. 2. Proposed distance between buildings for townhouse buildings. 3) Show proposed amount of usable open space on plans.

PARKING, LOADING

Again, the required parking is difficult to calculate given the flexibility in how the townhomes could be build-out (2 bedrooms to 4 bedrooms). The table below shows a range of required parking for the townhomes, parking required for the church, and the proposed parking shown on the site plan:

Parking Requirements

	Parking Required	Parking Provided
Townhouses	2 spaces per 2-bedrooms unit, and 2.5 spaces per units with 3 or more bedrooms = (3 units x 2.5) + (17 units x 2) = 42 spaces to (20 units x 2.5) = 50 spaces	2 garage spaces/unit plus 2 driveway spaces for 17 units (20 units x 2) + (17 x 2) = 74 spaces
Church Building	One parking space per 2 seats = 63 seats / 2 = 32 spaces	45 spaces
TOTAL	74 to 82 spaces	119 spaces

Number of Parking Spaces

The proposal exceeds the requirement for number of parking spaces. However, the three individual units along Ann Arbor Trail have no visitor parking spaces, and there are no visitor spaces outside of driveways. Will visitors to the three individual townhomes along Ann Arbor Trail be able to use the church’s lot? If yes, how will this coordinate with the vehicles of Tonquish Creek Manor residents?

The church lot shows the required number of barrier-free parking spaces, with at least one van-accessible parking space (8-foot wide space with 8-foot wide aisle).

Location of Parking Lots

Sec. 78-296 (applicable to church parking) requires that parking lots be setback a minimum of 15-feet from the side and rear property lines. The proposed church parking lots are in the same location as the

existing church parking lot, and are located directly on the property lines. We consider this condition an existing non-conformity, which will be improved with the addition of parking lot islands.

Screening of Parking Lots

Section 78-203 requires a 10-foot landscaped strip between a parking lot and any abutting street. This requirement applies to the parking lot that abuts Joel R Street, as the parking lot does not abut Ann Arbor Trail. The current parking lot has no buffer, and pavement abuts the sidewalk along Joel R. The proposal shows two new landscape areas of 5-8-feet wide between the rear parking lot and the public sidewalk. We would consider this change to reduce an existing non-conformity.

Sec. 78-206 also requires that where a multi-family use is located next to a single-family residential district, a 4.5-6.5-tall wall, fence, or landscaped berm is required between land uses. Given the current site design, implementing this requirement is not feasible. The Planning Commission could consider this a deviation, and in our opinion, is logical.

Parking Lot/Space Dimensions

The dimensions of the proposed parking spaces meet ordinance requirements.

The maneuvering lane in the church lot meets the minimum width of 20-feet. However, the lane underneath the overhang (for drop-off/pick-up) is wide for a one-way lane, and could be narrowed. The need for such a wide lane, since it is one-way, should be provided.

The internal maneuvering lane in the townhouse portion of the project is 20-feet wide, meeting the minimum width in the ordinance.

Loading Space

The plans do not show any loading/unloading space. Given that the church has a reading room, the applicant should describe the types of delivery trucks visiting the site, and indicate where they would “stand” while making their delivery.

Clear Vision Area

No buildings are within the clear vision area along either street facade.

Items to be Addressed: 1) Will visitors to the three independent units on Ann Arbor Trail be able to use the church lot? If yes, how will this coordinate with parking offered to Tonquish Creek Manor residents? 2) Lack of screen wall/fence/landscaping between multi-family use and single-family district; Planning Commission to consider if acceptable deviation. 3) Applicant to provide reasoning on proposed width of pavement under church canopy given that it is a one-way lane. 4) Provide information on truck deliveries to the reading room, and proposed standing location on site while making deliveries.

CIRCULATION

Access to both the church and townhouse development are provided via two shared driveways, one from Ann Arbor Trail and a second from Joel R Street. Both driveways currently exist, but the Ann Arbor Trail driveway has been shifted to the east. We consider sharing the driveways between uses as a positive aspect of the plan.

Items to be Addressed: None.

SIDEWALKS

Currently, public sidewalks exist along both street frontages. The plans proposed to retain these walks.

A new sidewalk is proposed between the public sidewalk along Ann Arbor Trail and the Tonquish Creek trail via a new staircase at the back of the site. We consider this sidewalk a positive aspect of the plan, but an easement will be necessary to locate pavement between the stairs and the trail pavement.

Items to be Addressed: None.

LANDSCAPING/LIGHTING/SIGNAGE

Information regarding landscaping, lighting, and signage are components of a Final PUD Site Plan. We will evaluate these topics upon Final Site Plan review.

Items to be Addressed: None.

ARCHITECTURAL ELEVATIONS AND FLOOR PLANS

The plan set provides architectural elevations and floor plans of the proposed church, single-use residential buildings, and the multi-family townhouse buildings. However, the floor area of the townhome units has not been provided. We estimate that the smallest unit (38' x 26' footprint) would be 2,579 s.f., and the largest unit (35' x 29') would be 2,736 s.f. The applicant should confirm the possible floor area range of the townhomes on the plans. Also note that in the previous submission, the smallest unit (41.5 x 18.5) was approximately 2,160 s.f. and the large unit (35' x 26') was approximately 2,620 s.f. The number of units has gone down, but the size of the units has increased.

We have provided our opinions regarding the character of the proposed buildings under the "PUD Criteria" section of this review, as well as possible adjustments to the location of the townhouse units along the north side of the site to keep construction impacts out of the Tonquish Creek streambanks. We commend the applicant for designing "usable" front porches on the single-unit residential buildings.

Items to be Addressed: 1) Applicant to provide possible floor area range of proposed townhomes on plans.

RECOMMENDATIONS

We support the general concept illustrated in this PUD proposal, and think it meets most of the PUD criteria. However, there are a number of details that, in our opinion, need to be clarified before recommending Preliminary approval. Our main concern is that the layout of the project is too close to Tonquish Creek, and will have a negative impact on the creek, stream, and water quality. The Planning Commission should consider the proposed deviations in light of the proposed “public benefits” offered by the project (see Appendix), and discuss areas of non-compliance with the applicant. The applicant should provide additional information, and clarification of the following topics:

A. Preliminary PUD Plan Requirements:

- 1) Provide a narrative listing the PUD criteria (Sec. 78-311(c)), and describe how the project meets each.
- 2) Provide an explanation of why the submitted PUD is superior to a plan which could have been prepared under strict adherence to the Zoning Ordinance.
- 3) Show current land uses abutting subject site on plans.
- 4) Provide phasing description, if any.

B. PUD Criteria: Provide additional information to complete evaluation of all PUD Eligibility criteria, including:

- 1) Applicant to provide additional information about public benefits, as summarized on Pages 11 and 12 of this review.
- 2) Confirmation by City Engineer that the City’s water and sewer system has additional capacity to handle this development.
- 3) Shift the northern townhouse units away from the top of the streambank.
- 4) Provide height dimension (to the midpoint of the roof) of the office building to the east, and provide graphic comparison of this building with the proposed single-unit buildings along Ann Arbor Trail.
- 5) Planning Commission to discuss one project inconsistency with Master Plan (multi-family/townhouse vs. single-family appearance).
- 6) Applicant to confirm that a single entity will be responsible for implementing all aspects of the project (townhome portion and church portion) in conformance with the approved plans.
- 7) Recommend Planning Commission condition any Preliminary PUD Plan approval on the applicant providing draft Condominium Documents with their Final PUD Plan submission.

C. Density:

- 1) Planning Commission to determine if potential density deviation is consistent with the intent of the Master Plan.

D. Area, Width, Height Setbacks:

- 1) Proposed side yard setback of church building.
- 2) Proposed distance between buildings for townhouse buildings.
- 3) Show proposed amount of usable open space on plans.


E. Parking/Loading.

- 1) Will visitors to the three independent units on Ann Arbor Trail be able to use the church lot? If yes, how will this coordinate with parking offered to Tonquish Creek Manor residents?
- 2) Lack of screen wall/fence/landscaping between multi-family use and single-family district; Planning Commission to consider if acceptable deviation.

- 3) Applicant to provide reasoning on proposed width of pavement under church canopy given that it is a one-way lane.
- 4) Provide information on truck deliveries to the reading room, and proposed standing location on site while making deliveries.

F. Architectural Elevations and Floor Plans.

- 1) Applicant to provide possible floor area range of proposed townhomes on plans.



CARLISLE/WORTMAN ASSOC., INC.
Sally M. Elmiger, AICP, LEED AP
Principal

#152-1804

cc: Greta Bolhuis
John Buzuvis
Marleta Barr

APPENDIX:

Project Benefits that Could Not/Not Likely Part of Project without application of PUD Process	Project Deviations
1. Project allows church to remain in Plymouth	1. 20 vs. max. of 10 units using underlying zoning
2. Project offers housing type alternative not readily available in the City.	2. Townhouse design vs. single-family appearance (as called for in Master Plan).
3. Tonquish Creek and Trail Restoration Plan (Prepared by ECT)	3. Possible 35% increase in density (as calculated using “bedrooms,” as defined in the ordinance). The scope of this deviation depends on how the units are built-out.
	4. Church building side setback (10’ vs. req. 30’)
	5. Townhouse distance between buildings
Project Benefits that Require More Details	6. Townhouse min. usable open space.
1. Shared parking with Tonquish Creek Manor residents (how many spaces, how often/when available, who may use them?)	7. Screen wall requirement between multi-family and single-family uses.
2. Funding for some creek restoration work (how much?)	
3. Creek restoration plan (need for plans prepared by ecological restoration professional with demonstrated experience in this work)	
4. Deed land to City along creek to facilitate maintenance (where, how much land?)	
5. Easement required for new staircase to creek trail.	
6. New lights/benches along creek trail (how many, where?)	
7. Tonquish Creek Manor pocket park (negative impacts on trees/streambank slopes)	
8. Pocket park at church reading room (add bike racks & landscaping to plans)	

RECEIVED

CITY OF PLYMOUTH
SITE PLAN REVIEW APPLICATION

Community Development Department
201 S. Main Street Plymouth, MI 48170
Ph. 734-453-1234 ext. 232
www.plymouthmi.gov

JAN 21 2024

CITY OF PLYMOUTH
COMMUNITY DEVELOPMENT

I. Site/Project Information

Table with 3 columns: Site Address (980 W Ann Arbor Rd), Current Zoning Classification (ARC), Date of Application (02/20/2024)

Table with 3 columns: Name of Property Owner (KC & AC Investments LLC), Phone Number (810-523-1614), Mailing Address (50255 Boardwalk Ave), Email Address (kacinvests@gmail.com), City (Northville), State (MI), Zip Code (48167)

II. Applicant and Contact Information

Form with checkboxes for Architect, Developer, Engineer, Lessee. Applicant: Soothing Dental PLLC Alejandra Cutter, Phone: 248-892-7651, Address: 496 W Ann Arbor trl Suite 201, Plymouth, MI 48170, Email: dds@soothingdental.com

III. Site Plan Designer and Contact Information

Form for Site Plan Designer: Vital Signs Livonia -Michael Nagy, Phone: 734-542-4800, Address: 37037 Schoolcraft Road, Livonia, MI 48150, Registration: 5306242, Expiration: 12/31/2024, Email: mcnvital@aol.com

IV. Type of Project (Please Select All that Apply)

Form with checkboxes for Commercial, Multi-Family, New, Remodel, Mixed Use, Industrial, Addition, Interior Finish, Change of Use, Special Land Use

V. Historic District

Form asking: Is this project located in the Historic District? Yes/No

VI. Description of Work

Text area containing: Please See attached letter. Our West side sign permit was denied because there is no egress or ingress on West side of building.

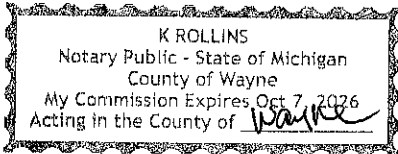
VII. Applicant Signature

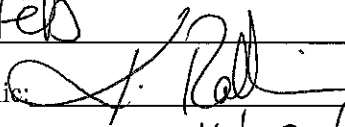
Signature of Applicant 	Date 2/21/2024
---	-------------------

VIII. Property Owner Signature

Signature of Property Owner 	Date 2/21/2024
--	-------------------

Subscribed and sworn before me this 21st day of Feb, 2024.



Notary Public: 
 My Commission expires: 10/07/2026

For Office Use Only

		YES/DATE	NO	N/A
1.	Pre-Application Meeting			
2.	Digital Copy of Application Package			
3.	Public Hearing Notice			
4.	CWA Review			
5.	Municipal Services Review			
6.	Fire Department Review			
7.	Engineering Review			

IX. Site Plan Review Checklist

Please include the following applicable information on the site plan.		YES	NO	N/A
1.	Correct scale	[]	[]	[]
2.	Name of person preparing plan*	[]	[]	[]
3.	Date, north point	[]	[]	[]
4.	Property line dimension	[]	[]	[]
5.	Street right-of-way widths	[]	[]	[]
6.	Existing utilities (sewer, water, gas, etc.) and easements	[]	[]	[]
7.	Show adjacent property and buildings, including zoning	[]	[]	[]
8.	Existing topography, trees and other features	[]	[]	[]
9.	Off-site ground, parking lot, roadway, driveway and/or structure elevations for minimum distance of 50 feet	[]	[]	[]
10.	On-site grid of maximum 100 feet intervals each way (closer where rolling terrain warrants) and minimum 2.0 feet contours	[]	[]	[]
11.	Location of new structures including side and front yard setbacks and building length and width (show a general floor plan)	[]	[]	[]
12.	Number of dwelling units per building	[]	[]	[]
13.	Height of structure	[]	[]	[]
14.	Percent one room apartments (efficiencies)	[]	[]	[]
15.	Total number of rooms if multiple-family	[]	[]	[]
16.	Parking requirements met (See Section 78-270)	[]	[]	[]
17.	Number of units and bedrooms each building	[]	[]	[]
18.	Parking lot layout (showing paved area) including ingress and egress and service area	[]	[]	[]
19.	Parking lot space dimensions	[]	[]	[]
20.	Loading and unloading space	[]	[]	[]
21.	Site grading and drainage plan (on-site elevations for pavements, drives, parking lots, curbs, sidewalks and finish grade at bldg.)	[]	[]	[]
22.	Utility connections (sanitary sewer, water, storm sewers)	[]	[]	[]
23.	On-site storm water retention	[]	[]	[]
24.	Fire hydrants within 300 feet (on- and off-site)	[]	[]	[]
25.	Sidewalks and elevations	[]	[]	[]
26.	Sedimentation and erosion control plan	[]	[]	[]
27.	Landscape plan showing plant materials to be used	[]	[]	[]
28.	Sign requirements met	[]	[]	[]
29.	Require walls and fences or greenbelts	[]	[]	[]
30.	Corner clearance	[]	[]	[]
31.	Service drive needed	[]	[]	[]
32.	Acceleration lanes and traffic pattern	[]	[]	[]
33.	Trash receptacle locations including screening type and height	[]	[]	[]
34.	Mail box locations	[]	[]	[]

Please include the following applicable information on the site plan.		YES	NO	N/A
35.	Air conditioner unit locations	[]	[]	[]
36.	Special site features (play areas, pools, etc.)	[]	[]	[]
37.	Handicapped facilities	[]	[]	[]
38.	Building elevation drawings	[]	[]	[]

*Where property line surveys, topography, sewer, water or storm drains are shown, the name of the registered engineer or land surveyor preparing such elements of the plan shall be indicated on the plan.



February 20, 2024

Dear City of Plymouth Planning Commission,

This letter is written with the purpose of appealing to the Planning Commission to grant Soothing Dental PLLC the permission to place a sign in both sides of the brick tower that exists in the building located at 980 W. Ann Arbor Rd. This will be consistent with the pre-existing sign that Chase bank had at said location. In addition to these 2 signs, Chase Bank also had a ground level sign facing Ann Arbor Rd. Placing a sign facing the West side of the tower and the East side will allow for visibility from the traffic flowing in both directions.

The main entrance of the building does not run parallel the road, in which case one sign would have made sense. Because the main entrance faces east this building needs two signs in order to have the proper visibility for patients to find it. Lack of proper visibility will result on ineffective marketing, and frustration from patients driving from the west side. It will decrease community engagement and it will pose safety concerns. Patients coming from the west side could impede traffic and increase the potential for accidents since they are not being directed properly. Most importantly, if emergency services are needed it will delay the response if coming from the west.

Esthetically, having mirror image signs facing west and east will create consistency and balance.

Lack of signage on the west side of the building will completely conceal the type of business located in this building making it unidentifiable posing safety, economical and community engagement concerns.

I hope this letter explains the importance of having signage facing east and west.

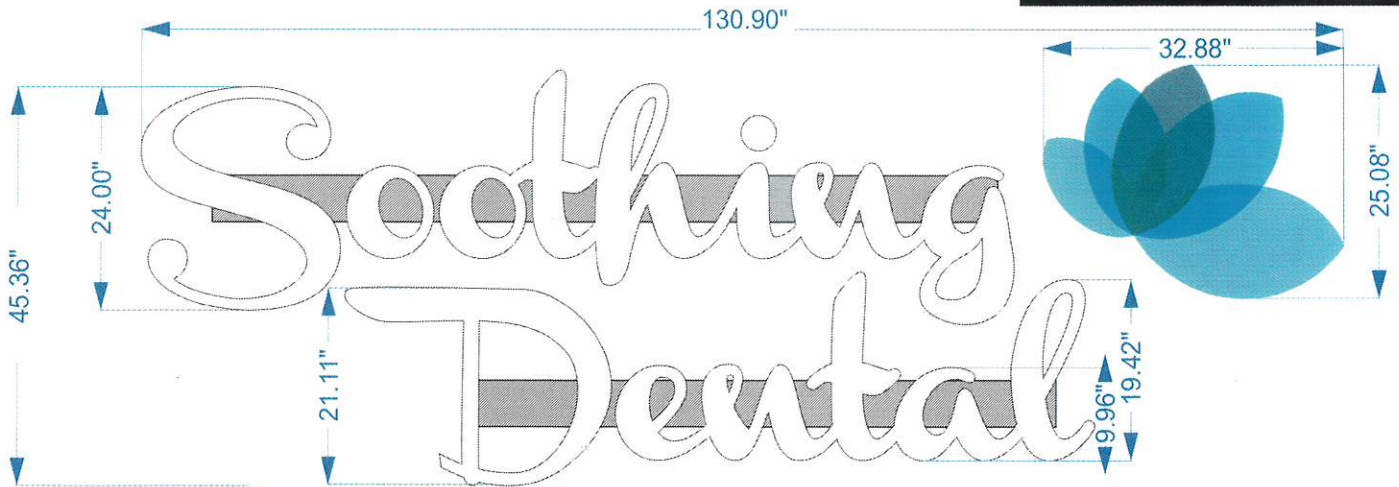
Sincerely,

Dr. Alejandra Cutter DDS

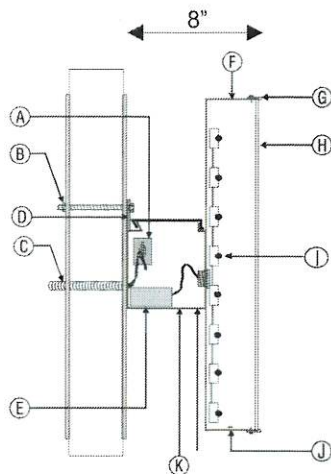
Phone: 734-453-9413
496 W. Ann Arbor Trail, Suite 201
Plymouth, Michigan 48170



Fax: 734-453-9197
www.soothingdental.com
smile@soothingdental.com



Letter Cross Section Detail



- A - listed disconnect switch
- B - thru bolt
- C - primary electrical source
- D - mounting tab
- E - power supply
- F - 3" (.040) aluminum return
- G - 1" trim cap
- H - 1/8" thick acrylic face
- I - white LED
- J - weep holes
- K - 5" deep aluminum raceway

LED ILLUMINATED CHANNEL LETTERS ON RACEWAYS WITH LOGO. WHITE ALUMINUM RETURNS, WHITE PLASTIC FACES, WHITE LED, BLACK TRIMCAP. DIGITALLY PRINTED VINYL OVERLAY ON LOGO FACE. ALUMINUM RACEWAY PAINTED PER CLIENT DIRECTION.

All electrical to be UL Listed and Labeled

CUSTOMER APPROVAL

DATE

SQUARE FOOTAGE:

41.2

ADDRESS:

980 W. Ann Arbor Road
Plymouth, MI 48170

CLIENT:

Soothing Dental

DATE:

1/23/24



SIGN MANUFACTURER

37037 Schoolcraft, Livonia, MI 48150

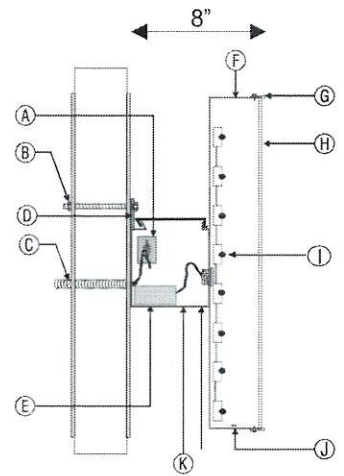
734-542-4800 (o) 734-542-4070 (f)

mcnvital@aol.com





Letter Cross Section Detail



- A - listed disconnect switch
- B - thru bolt
- C - primary electrical source
- D - mounting tab
- E - power supply
- F - 3" (.040) aluminum return
- G - 1" trim cap
- H - 1/8" thick acrylic face
- I - white LED
- J - weep holes
- K - 5" deep aluminum raceway

LED ILLUMINATED CHANNEL LETTERS WITH LOGO ON RACEWAYS . WHITE ALUMINUM RETURNS, WHITE PLASTIC FACES, DIGITALLY PRINTED VINYL ON LOGO FACE, WHITE LED, BLACK TRIMCAP. ALUMINUM RACEWAY PAINTED PER CLIENT DIRECTION.

All electrical to be UL Listed and Labeled

CUSTOMER APPROVAL _____

DATE _____

SQUARE FOOTAGE:	ADDRESS:
41.2	980 W. Ann Arbor Road Plymouth, MI 48170
CLIENT:	DATE:
Soothing Dental	1/23/24

SQUARE FOOTAGE:	ADDRESS:
41.2	980 W. Ann Arbor Road Plymouth, MI 48170
CLIENT:	DATE:
Soothing Dental	1/23/24



SIGN MANUFACTURER
 37037 Schoolcraft, Livonia, MI 48150
 734-542-4800 (o) 734-542-4070 (f)
 mcnvital@aol.com

