



**AGENDA
CITY OF LAPEER
LAPEER CITY COMMISSION
576 LIBERTY PARK, LAPEER, MI 48446
HOUSING WORKSHOP
SEPTEMBER 8, 2025
810-664-5231 * www.ci.lapeer.mi.us**

5:30 P.M. CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

A. HOUSING WORKSHOP:

- 1.** Summary of Housing Development Financial Incentives and Developer Input
- 2.** Get Housing Ready Guide
- 3.** Lapeer Planning and Zoning Review: Housing Supply and Choice Memo
 - a. Lapeer Master Plan-Review of Housing Element
 - b. Lapeer Zoning Ordinance Review-Review for Housing Reform
- 4.** Pattern Book Homes for 21st Century Michigan
 - a. Permit Ready Housing Plans
- 5.** E.T. White School Property
 - a. Single-Family Concept
 - b. Duplex Concept
 - c. Row Housing Concept
 - d. Discussion about E.T. White Property

B. PUBLIC COMMENT

ADJOURNMENT

Notice:

Persons with disabilities needing accommodations for effective participation through electronic means in this meeting should contact the City Clerk at (810) 664-5231 or by email at clerk@ci.lapeer.mi.us at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.



Interoffice Memo

To: City Commission, City Manager, City Attorney
From: Denise Soldenski, Director of Housing & Neighborhood Development
Date: August 8th, 2025
RE: **Summary of Housing Development Financial Incentives & Developer Input**

The various financial incentives that are most commonly used for affordable housing development have been researched and the basics of each are summarized below. Please note that these incentives are complicated financial resources that can vary depending upon each project. The information presented is a simple summary intended to provide a general understanding of how each incentive could help to fund housing development in the City of Lapeer.

Related Definitions

Area Median Income: The median income for the area as determined under section 8 of the United States housing act of 1937, 42 USC 1437f, adjusted for family size. At or below 30% AMI is considered "extremely low income", between 30% and 50% AMI is "very low income", between 50% and 80% AMI is "low income" and 80% to 120% AMI is "moderate income" per HUD. Attached are the income levels for 30% to 120% of the AMI for Lapeer County as prepared by the Michigan State Housing Development Authority (MSHDA).

Limited Dividend Housing Association (LDHA) and Limited Dividend Housing Corporations (LDHC): Basically, for profit entities formed to develop property for extremely low to moderate income families. Their formation is approved by, and operations are supervised by MSHDA. Returns to the entity investors/partners are limited or capped at the face value of the investment plus cumulative dividends at a rate which the Authority (MSHDA) deems to be reasonable and proper. There are other types of entities similar to this such as housing associations with tenant ownership, and nonprofit housing corporations. Chapters within Michigan Act 346 of 1966, the State Housing Development Authority Act, provide regulations for each type of entity which benefits from partnership with MSDHA. Typically, MSHDA will set aside a percentage of tax credits for each funding round for these organizations. These entities are also eligible for PILOT incentives.

Workforce Housing: Rental units or other housing options that are reasonably affordable to, and occupied by, a household whose total income is not greater than 120% AMI as published by the United States Department of Housing and Urban Development (HUD). Can be tied to a PILOT of typically 10% of the annual shelter rents obtained from the project, not to exceed 15 years. Section 125.1415a of Michigan Act 346 of 1966 specifically addresses PILOTs for workforce housing which require the governing municipality to adopt an ordinance and provide acceptance or denial for housing projects via ordinance or resolution.

Financial Incentives

HTIF:

Housing Tax Increment Financing. To promote development of affordable workforce housing, HTIF's allow for the capture of the difference between the pre-development property tax and the post-development assessed taxable value on eligible new or renovated housing projects which can then be used to reimburse a developer over a period of time. HTIFs assist households below 120% AMI up to a maximum of 30 yrs and are available at any time of the year unlike Low Income Housing Tax Credits (LIHTC).

Traditionally the Michigan Public Act 381 of 1996, Brownfield Redevelopment Financing, only allowed TIF for environmental remediation and site preparation. Michigan Public Act 90 of 2023, significantly expands the use of tax increment financing for "housing development activities," including new construction, rehabilitation, and mixed-use developments, broadening the scope of eligible projects. Projects need to be located in a Brownfield Redevelopment Authority (BRA) jurisdiction.

HTIFs can be approved only by the local municipality or by both the local municipality and MSHDA. If approved locally only, the developer gets reimbursed with local taxes only. If approved by both, the developer gets reimbursed for local, state school and state education taxes. If the school system is formula based with per child state funding, HTIF will not reduce the school's funding allocation. It is important to note that if a Downtown Development Authority (DDA) already receives a TIF tax capture at the location of the proposed project site, the DDA will also be required to approve the plan and formally allow for the future HTIF capture by the local BRA vs. the DDA. Up front development costs are typically obtained via bank loans, then reimbursed overtime via the tax captured by the local BRA.

The municipality must have a Brownfield Redevelopment Authority, have the ability to review and support a developer proposed project, and the plan must be approved by the governing body. In some cases, both City and County government must approve the plan. Developers create separate plans for State approval for the state portion of tax capture. Plans estimate the value of the annual TIF based on estimated taxable value of the developed project via the local tax assessor; therefore, is dependent upon the number of units, type of units, size of units, etc. Once the housing project is complete, actual taxable value can be determined. The developer will be responsible for verifying initial household incomes are at or below 120% AMI and rents are affordable; however, renters can stay if income increases overtime – only initial incomes are verified.

HTIFs can be used for rental and owner-occupied units; however, they are used mostly for rentals because principal resident exemption taxes are lower and don't provide as much incremental benefit as rental tax rates.

LIHTC:

Low Income Housing Tax Credits. Allocated and administered by MSHDA in the State of Michigan and are established under section 42 of the internal revenue code of 1986. An approved MSHDA Qualified Allocation Plan (QAP) provides the application criteria used to determine housing priorities of the state and gives preference to housing projects which serve the lowest income tenants (30% AMI – 80% AMI) for the longest period of time. Federal regulations require the

project to be affordable for a minimum of 30 years; however, the actual compliance term can be 15 years (after that the property can be sold but still needs to remain affordable). MSHDA provides more points to applications that extend for longer affordability periods, maxing out at 45 yrs. Property managers are required to verify tenant income annually, not just at initial occupancy.

Developers apply directly to MSHDA for LIHTC for specific housing projects. A 9% round is available in April and October of each year, and points are associated with specific components of the application making the 9% very competitive. The 4% round is non-competitive and uses tax exempt bonds. If awarded, MSHDA allocates the tax credit to the Developer, who then can sell to and secure funding from investment banks for a percentage of the dollar amount associated with the specific project (i.e. 9% of the available property taxes over a duration of time). This is essentially how the project can receive funds, in advance, to use for development.

MSHDA's QAP also allocates points for projects that dedicate a percentage of units to Permanent Supportive Housing (homeless with disability) or to vulnerable populations requiring on-going case management. Currently, developers will receive points on the LIHTC application for responding to an RFQ for the specific project which makes a re-release of an RFQ from the City for the WJH property important for some developers wishing to apply for LIHTC. From developer comments, the City could be asked for a PILOT for 15 - 45 yrs to help pay annual operating costs. Because there are only two rounds annually for the 9% tax credit, timing of application corresponding to a specific project is essential. The City of Lapeer will need to be prepared relatively quickly (July/Aug) if open to LIHTC financing incentive for the October 2025 round or will need to wait until the April 2026 round.

PILOT:

Payment in Lieu of Taxes (PILOT): PILOT agreements can be negotiated to incentivize affordable housing developments funded by state or federal government. The owner/developer pays a set service charge based on a percentage of total rents or total owner revenue instead of paying the local property tax rate based on assessed value. Typical PILOTs are 10% of total rents for at least 15 yrs. Michigan, Act 346 of 1966, also known as the State Housing Development Authority Act, allows PILOT for specific housing developments and enables eligible entities such as housing authorities or LDHAs to make payments to local governments in place of traditional property taxes, particularly for developments that serve lower-income households. Typically, ordinances formally outline the standard terms acceptable by the municipality.

PROPERTY VALUE:

The City may also choose to leverage the value of the property or some portion of the value as an incentive for development.

TAX ABATEMENTS:

Tax abatement incentive agreements can be negotiated; however, they are regulated by specific state legislation, such as Neighborhood Enterprise Zones (NEZ) Public Act 147 of 1992 and Residential Housing Facilities (RHF) Public Act 237 of 2022 which require the local government to designate zones or districts in which tax reductions could be applied for by qualified/eligible developers/owners. These tools promote housing development for household incomes at or under 120% AMI. Generally, NEZ promotes lower density, owner occupied condominium style units (rehab of existing for 1-8 units and new structures for single or duplex units). Under NEZ, a

residential facility will have two assessments, the land will be assessed with regular ad valorem assessment roll while the buildings will have an assessment on the NEZ specific tax roll. The NEZ tax considerations go from 6 to 15 yrs. RHF allows for rehabilitation of rental properties of 4 or more units for incomes at or under 120% AMI and rents no higher than 30% of the household's income. Under RHF, the exemption is for ad valorem real property taxes for the term determined by the local government, from 1 to 12 years. After local approval, the application is provided to the State Tax Commission for final review and approval. Typically, ordinances formally outline the standard terms acceptable by the municipality.

Please let me know if there are further questions regarding the incentives. If I don't have the answer, I can attempt to obtain from other resources.

The City Manager, City Planner, Housing Staff and DDA Director received feedback in May of this year from six developers who have shown interest in the White Jr. High property at 201 Jefferson St. Included in the preliminary information to each developer was the original RFQ released 8/24/22, three conceptual drawings prepared by Rowe Engineering, and an introductory email regarding the intention of the meetings. The goal was to learn more about specific residential concepts and financial incentives that would be attractive for development and favorable to our local Community. Based on the knowledge gained from these meetings, the City Commission may decide to re-release the RFQ or choose to forego a re-release by reviewing proposals from selected developers.

Input was received from the following. A chart summarizing key points of interest is attached:

1. Allen Edwin Homes (in-person meeting) <https://www.allenedwin.com/>
2. DeShano Development Corporation (email feedback) <https://www.deshanodevelopment.com/>
3. Middlepointe Investment Group (virtual meeting) <https://middlepointe.com/>
4. River Caddis Group (in-person meeting) <https://www.rivercaddisdev.com/>
5. Spire Development (virtual meeting) <https://www.livespired.com/>
6. Woda Cooper Companies (in-person meeting) <https://www.wodagroup.com/>

Many of the developers provided additional information to the City; for example, flip books, resumes, full proposals, sample purchase agreement, and conceptual drawings. ***Due to the length of these submissions, information by developer is located in the following network drive for review:***

Common>>White Jr. High Property – 201 Jefferson>>Developer Information 6-5-25.

Incentives that were discussed are the following: Local PILOTs, negotiable property price, City paying for environmental assessments, 9% Low Income Housing Tax Credits (LIHTC), Housing Tax Increment Financing (local & via MSHDA), bonds and legislative appropriations. It seems apparent that the overall specific plan for development will drive the incentive package.

Therefore, to move forward, the City Commission may want to determine what income level to serve in terms of housing for this property. Some of the developers propose a 30% Area Median Income (AMI) to 80% AMI income population and some are more focused on a higher income Workforce Housing approach with incomes at 80% AMI to 120% AMI. Many suggested applying for the 9% LIHTC from MSHDA specifically for this project which would require inclusion of the 30% AMI to 80% AMI affordable housing. That application window will be open Oct. 1st, 2025, with a second round April 1st, 2026, and developers would need some decision from the City in advance of the deadline to prepare an application. At least three of the developers suggested that they would gain points on the LIHTC application for responding to an RFQ, which makes an RFQ process favorable to them. On the other hand, other developers suggested foregoing the RFQ process to enable proposals to be presented directly to the City Commission for a potential partner to be selected.

The City Commission may want to determine, in advance, if they would like single family homes, rental properties, or a mix of the two. Along the same lines, would high density apartment buildings be acceptable or only lower profile 1-2 story buildings? Lease to own for a duration of years was also a concept shared by some of the developers.

If an RFQ is re-released, some suggested changes to the current RFQ are the following:

1. Update contact names for City Manager and DPW Director
2. Update demographic information to simply reference the State of Michigan Housing Data Portal. https://mihousingdata.org/data_portal. The majority of our community does not have "disposable income".
3. Provide better information regarding the environmental history of the property. A Phase II Environmental suggests contamination has been found on the property during a Phase I. Based on review of the environmental data, this may not actually be true. The property may be more attractive to developers without the suggestion of contamination. Many of the developers stated that a purchase offer would be contingent upon the results of an environmental assessment.
4. Unless the Commission is open to any offer; be specific on income range served, rental or homeowner occupied, high or low density, or some mixture of the above.

Several of the developers that provided input for the White Jr. High property expressed interest in presenting their plans including details regarding the desired incentive to the City Commission. Please let me know if you would like to move forward with developer presentations at an upcoming regular meeting or a special workshop.

Lastly, attached for reference is a MSHDA "Get Housing Ready Guide" released 7/9/25. This guide provides six suggested actionable strategies to help local and regional leaders make their communities more attractive to housing developers.

04/01/2025 INCOME AND RENT LIMITS

County: 44 Lapeer

Income	Effective Date:							
	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
20%	14,140	16,160	18,180	20,200	21,820	23,440	25,060	26,680
25%	17,675	20,200	22,725	25,250	27,275	29,300	31,325	33,350
30%	21,210	24,240	27,270	30,300	32,730	35,160	37,590	40,020
35%	24,745	28,280	31,815	35,350	38,185	41,020	43,855	46,690
40%	28,280	32,320	36,360	40,400	43,640	46,880	50,120	53,360
45%	31,815	36,360	40,905	45,450	49,095	52,740	56,385	60,030
50%	35,350	40,400	45,450	50,500	54,550	58,600	62,650	66,700
55%	38,885	44,440	49,995	55,550	60,005	64,460	68,915	73,370
60%	42,420	48,480	54,540	60,600	65,460	70,320	75,180	80,040
70%	49,490	56,560	63,630	70,700	76,370	82,040	87,710	93,380
80%	56,560	64,640	72,720	80,800	87,280	93,760	100,240	106,720
100%	70,700	80,800	90,900	101,000	109,100	117,200	125,300	133,400
120%	84,840	96,960	109,080	121,200	130,920	140,640	150,360	160,080
125%	88,375	101,000	113,625	126,250	136,375	146,500	156,625	166,750
140%	98,980	113,120	127,260	141,400	152,740	164,080	175,420	186,760
150%	106,050	121,200	136,350	151,500	163,650	175,800	187,950	200,100

Rent By Person	Effective Date:							
	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
20%	353	404	454	505	545	586	626	667
25%	441	505	568	631	681	732	783	833
30%	530	606	681	757	818	879	939	1,000
35%	618	707	795	883	954	1,025	1,096	1,167
40%	707	808	909	1,010	1,091	1,172	1,253	1,334
45%	795	909	1,022	1,136	1,227	1,318	1,409	1,500
50%	883	1,010	1,136	1,262	1,363	1,465	1,566	1,667
55%	972	1,111	1,249	1,388	1,500	1,611	1,722	1,834
60%	1,060	1,212	1,363	1,515	1,636	1,758	1,879	2,001
80%	1,414	1,616	1,818	2,020	2,182	2,344	2,506	2,668
100%	1,767	2,020	2,272	2,525	2,727	2,930	3,132	3,335
120%	2,121	2,424	2,727	3,030	3,273	3,516	3,759	4,002
125%	2,209	2,525	2,840	3,156	3,409	3,662	3,915	4,168
140%	2,474	2,828	3,181	3,535	3,818	4,102	4,385	4,669
150%	2,651	3,030	3,408	3,787	4,091	4,395	4,698	5,002

Rent By Bedroom

Rent By Bedroom	Effective Date:							
	0 Bedroom	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 Bedroom	6 Bedroom	7 Bedroom
20%	353	378	454	525	586	646	707	768
25%	441	473	568	656	732	808	884	960
30%	530	568	681	787	879	970	1,062	1,154
35%	618	662	795	919	1,025	1,131	1,237	1,343
40%	707	757	909	1,050	1,172	1,293	1,415	1,537
45%	795	852	1,022	1,181	1,318	1,455	1,592	1,729
50%	883	946	1,136	1,313	1,465	1,616	1,768	1,919
55%	972	1,041	1,249	1,444	1,611	1,778	1,945	2,112
60%	1,060	1,136	1,363	1,575	1,758	1,940	2,123	2,305
70%	1,237	1,325	1,590	1,838	2,051	2,263	2,476	2,688
80%	1,414	1,515	1,818	2,101	2,344	2,587	2,830	3,073
100%	1,767	1,893	2,272	2,626	2,930	3,233	3,536	3,839
120%	2,121	2,272	2,727	3,151	3,516	3,880	4,245	4,610
125%	2,209	2,367	2,840	3,282	3,662	4,042	4,422	4,802
140%	2,474	2,651	3,181	3,676	4,102	4,527	4,952	5,377
150%	2,651	2,840	3,408	3,939	4,395	4,850	5,305	5,760

Developer Informational Chart

	Allen Edwin	DeShano	Middlepointe	River Caddis	Spire	Woda Cooper
Location	Portage, MI	Gladwin, MI	Southfield, MI	Lansing, MI	Columbus, OH	Columbus, OH
Specialty	Single Family, Duplex, 4-Plex	Multi-family & Single	Mixed Use Comm. & Res.	Higher Density Rental	Multi-family	Multi-family
Income Target Range	Workforce 80% AMI-120% AMI, market rate	30% AMI – 80% AMI	Workforce 80% & market rate	40% AMI – 120% AMI	30% AMI – 80% AMI – Avg. 60% AMI workforce?	30% AMI – 80% AMI
Mixed Income?	Yes	Yes	Yes	Yes	Yes	Yes
Financial Incentive most used	TIF, PILOT	LIHTC w/ PILOT	Transformational Brownfield TIF, Bonds?	Several: TIF, PILOT, MEDC, LIHTC, appropriations	LIHTC w/ PILOT	LIHTC w/ PILOT, TIF – several funding sources
Affordability term	15 yr	15 yr	30 yr	15 – 45 yrs	30 yr	15 – 45 yrs
Rental Vs. Owner Occupied preferred	Owner Occupied or rent	Rental – proposes mixed solution, lease to own	Rental	Rental	Rental – senior or family	Rental – senior or family
Mixed – Use? (Commercial & Residential)	No	No	Yes	Either or combo	No	Either or combo
Maintains Ownership	Either	Yes through affordability term	Yes	Yes long term	Yes	Yes through affordability term
Internal Construction	Uses local trades	Yes	No	No	No	Yes
Internal On-going Management	No uses local realtors	Yes	Yes	Yes	No	Yes
LDHA ?	No	No	No	Yes	Yes	Yes
WJR proposal	SF, duplex, 4plex: for sale or rent, 33-84 units	Mix Single Fam: rent to own w/ market rate rent or for sale	Rental: 3 story garden walkup	Market Study to determine – TBD	Rental: 2-3 story garden walkup 50-100 units	Rental: 2 story garden or townhouse

LIHTC = Low Income Housing Tax Credit translates into a PILOT for municipalities

LDHA = Limited Dividend Housing Association – profits are capped to maintain affordability & regulated by MSHDA

PILOT = Payment in Lieu of Taxes

TIF = Tax Increment Financing

6/5/2025 Data provided is based on information gained & perceived while discussing this particular project and may not be applicable to other projects. These developers have broad capabilities, and this is not intended to narrow or limit their business.



GET HOUSING READY GUIDE



GET HOUSING READY GUIDE

This Get Housing Ready Guide has been developed by the Michigan State Housing Development Authority (MSHDA) to help local and regional leaders identify actionable strategies that can make their communities more attractive to housing developers. The intent is to offer a menu of practical ideas that local governments can consider to reduce barriers, streamline processes, and proactively support housing growth.

This guide is a suggested starting point, not a prescriptive checklist. It presents a range of policy reforms, process improvements, financial tools, and public engagement strategies that have been effective in communities across the state and nation. Local leaders are encouraged to build upon these ideas, tailor them to local needs, and explore additional innovative approaches as part of their housing readiness efforts.

By taking intentional steps toward becoming more development-friendly, municipalities can better attract the investment needed to expand housing options, support economic growth, and ensure that homes are available and affordable for residents across all income levels.



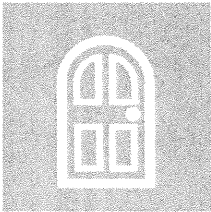
I. PROPERTY INVENTORY AND TRANSPARENCY

1. Maintain a Development-Ready Property List

Keep an up-to-date inventory of sites suitable for single-family and multifamily development.

Purpose:

- Promote investment
- Support transparency
- Facilitate matchmaking between developers and community assets



II. EXPANDING HOUSING OPTIONS THROUGH POLICY AND ZONING REFORM

1. Allow Single-Family Home Conversions

Simplify zoning codes to permit conversions of single-family homes into duplexes or triplexes without burdensome approvals.

Steps:

- Amend zoning codes
- Adjust permitting procedures
- Communicate changes to homeowners and builders

2. Permit Backyard Cottages/Accessory Dwelling Units (ADUs)

Enable homeowners to add ADUs in all residential zones to support multigenerational living and rental options.

Steps:

- Amend zoning codes and establish design guidelines
- Simplify permitting
- Educate homeowners

3. Legalize Starter Homes

Remove restrictions on smaller (400–800 sq. ft.), affordable homes for first-time buyers and downsizers.

Steps:

- Amend zoning codes
- Create supportive design standards
- Streamline approvals
- Provide public education

4. Eliminate Minimum Lot Size Requirements

Encourage more efficient land use and affordability by removing outdated minimum lot size mandates.

Steps:

- Revise zoning
- Simplify subdivision procedures
- Inform community members

5. Repeal Parking Mandates

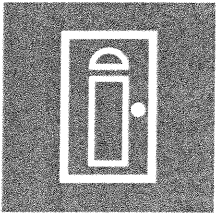
Reduce costs and allow developers flexibility by eliminating rigid off-street parking requirements.

Steps:

- Update zoning language
- Clarify regulations
- Communicate updates clearly

6. Encourage Diverse Housing Types

Promote mixed-use, energy-efficient, and workforce housing through incentives and zoning flexibility.



III. FINANCIAL TOOLS AND INCENTIVES

1. Automatic PILOT (Payment in Lieu of Taxes) Ordinance for Affordable Housing

Offer predictable property tax relief for projects with significant affordable housing components.

Key Features:

- Projects with 50%+ affordable units qualify
- PILOT starts at 10% of assessed value and increases over 20 years
- Automatic approval by the housing authority
- Annual compliance reporting required
- Duration up to 30 years

2. Housing TIF (Tax Increment Financing)

Use Housing TIF to support redevelopment, especially for brownfield and mixed-income projects.

Municipal Responsibilities:

- Understand the cost, complexity, and lender limitations of Housing TIF
- Train staff on for-sale TIF challenges
- Ensure projects are shovel-ready to access incentives

3. Administer CDBG Grants

Use Community Development Block Grants (CDBG) to support housing development, homeowner repairs, and infrastructure.

Steps:

- Educate the community on the benefits
- Outline transparent application and allocation processes
- Address concerns around compliance and management

4. Establish Housing and Brownfield Redevelopment Authorities (BRA)

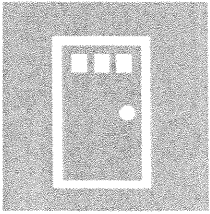
Support long-term site planning and access to funding by establishing a BRA.

Actions:

- Work with Michigan Department of Environment, Great Lakes and Energy on environmental assessments
- Emphasize community engagement and transparency
- Share success stories from similar projects

5. Flexible Local and Regional Housing Funds

Partner with philanthropic and impact investors to establish more responsive housing finance tools.



IV. BUILDING PUBLIC AND POLITICAL SUPPORT

1. Tell the Story of Diverse Housing

Show how diversified housing supports local economies and the local workforce, including teachers, healthcare workers, and municipal employees.

Tactics:

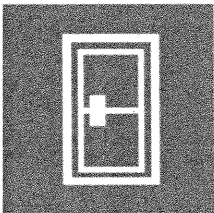
- Use storytelling and case studies
- Frame housing as critical infrastructure
- For the public, municipalities and developers
- Example: What is workforce housing, who lives there, why do we need it

2. Prioritize Housing-Ready Sites

Incorporate housing into master plans and prioritize sites for quick activation, like those certified by the Michigan Economic Development Corporation (MEDC) as Redevelopment Ready Communities (RRC).

3. Champion Public-Private Partnerships (PPPs)

Support true collaboration between municipalities and developers. Reduce barriers such as excessive fees, engineering costs, and redundant reviews.



V. EDUCATING MUNICIPALITIES ON DEVELOPMENT REALITIES

1. Understand Development Timelines

Housing projects can take 4–10 months just to close due to incentives and lender underwriting.

Actions:

- Educate officials and the public on realistic expectations
- Support developers in pre-incentive preparation

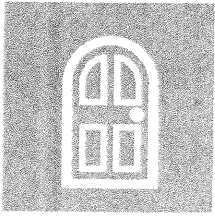
2. Recognize Financing and Underwriting Complexities

Municipalities should understand:

- Low-Income Housing Tax Credit (LIHTC) eligibility, scoring, and design requirements
- Area Median Income (AMI) impacts on rent/sale rates
- How lender underwriting drives design, schedules, and feasibility
- The need to parcelize duplexes for financing eligibility

3. Market Studies and Absorption Rates

Understand how demand affects feasibility and timelines. Delays in absorption can impact financing and construction pace.



VI. STREAMLINING APPROVAL, ENGINEERING, AND UTILITIES

1. Streamline the Site Plan Review and Approval Process

Ensure quick and predictable approvals for all housing types, particularly missing middle and ADU projects.

Steps:

- Test real applications and identify bottlenecks
- Implement administrative approvals for post-plan stages (e.g., site condo or parcelization)
- Eliminate excessive reviews
 - o Cap the numbers of reviews – time is money for developers
 - o Cap the fees for reviews – especially third-party reviews

2. Early Utility Coordination

Engage utility providers early in the development process to prevent delays and reduce risk.

Municipal Action:

- Facilitate working sessions with developers and utility companies
- Build timelines that reflect realistic utility coordination

3. Simplify Fees and Inspections

Streamline administrative procedures related to bonding, permit, tap, and inspection fees.

Steps:

- Create transparent, consistent fee schedules
- Offer clear inspection timelines and protocols



GET HOUSING READY GUIDE

GET HOUSING READY GUIDE

This Get Housing Ready Guide has been developed by the Michigan State Housing Development Authority (MSHDA) to help local and regional leaders identify actionable strategies that can make their communities more attractive to housing developers. The intent is to offer a menu of practical ideas that local governments can consider to reduce barriers, streamline processes, and proactively support housing growth.

This guide is a suggested starting point, not a prescriptive checklist. It presents a range of policy reforms, process improvements, financial tools, and public engagement strategies that have been effective in communities across the state and nation. Local leaders are encouraged to build upon these ideas, tailor them to local needs, and explore additional innovative approaches as part of their housing readiness efforts.

By taking intentional steps toward becoming more development-friendly, municipalities can better attract the investment needed to expand housing options, support economic growth, and ensure that homes are available and affordable for residents across all income levels.



I. PROPERTY INVENTORY AND TRANSPARENCY

1. Maintain a Development-Ready Property List

Keep an up-to-date inventory of sites suitable for single-family and multifamily development.

Purpose:

- Promote investment
- Support transparency
- Facilitate matchmaking between developers and community assets



II. EXPANDING HOUSING OPTIONS THROUGH POLICY AND ZONING REFORM

1. Allow Single-Family Home Conversions

Simplify zoning codes to permit conversions of single-family homes into duplexes or triplexes without burdensome approvals.

Steps:

- Amend zoning codes
- Adjust permitting procedures
- Communicate changes to homeowners and builders

2. Permit Backyard Cottages/Accessory Dwelling Units (ADUs)

Enable homeowners to add ADUs in all residential zones to support multigenerational living and rental options.

Steps:

- Amend zoning codes and establish design guidelines
- Simplify permitting
- Educate homeowners

3. Legalize Starter Homes

Remove restrictions on smaller (400–800 sq. ft.), affordable homes for first-time buyers and downsizers.

Steps:

- Amend zoning codes
- Create supportive design standards
- Streamline approvals
- Provide public education

4. Eliminate Minimum Lot Size Requirements

Encourage more efficient land use and affordability by removing outdated minimum lot size mandates.

Steps:

- Revise zoning
- Simplify subdivision procedures
- Inform community members

5. Repeal Parking Mandates

Reduce costs and allow developers flexibility by eliminating rigid off-street parking requirements.

Steps:

- Update zoning language
- Clarify regulations
- Communicate updates clearly

6. Encourage Diverse Housing Types

Promote mixed-use, energy-efficient, and workforce housing through incentives and zoning flexibility.



III. FINANCIAL TOOLS AND INCENTIVES

1. Automatic PILOT (Payment in Lieu of Taxes) Ordinance for Affordable Housing

Offer predictable property tax relief for projects with significant affordable housing components.

Key Features:

- Projects with 50%+ affordable units qualify
- PILOT starts at 10% of assessed value and increases over 20 years
- Automatic approval by the housing authority
- Annual compliance reporting required
- Duration up to 30 years

2. Housing TIF (Tax Increment Financing)

Use Housing TIF to support redevelopment, especially for brownfield and mixed-income projects.

Municipal Responsibilities:

- Understand the cost, complexity, and lender limitations of Housing TIF
- Train staff on for-sale TIF challenges
- Ensure projects are shovel-ready to access incentives

3. Administer CDBG Grants

Use Community Development Block Grants (CDBG) to support housing development, homeowner repairs, and infrastructure.

Steps:

- Educate the community on the benefits
- Outline transparent application and allocation processes
- Address concerns around compliance and management

4. Establish Housing and Brownfield Redevelopment Authorities (BRA)

Support long-term site planning and access to funding by establishing a BRA.

Actions:

- Work with Michigan Department of Environment, Great Lakes and Energy on environmental assessments
- Emphasize community engagement and transparency
- Share success stories from similar projects

5. Flexible Local and Regional Housing Funds

Partner with philanthropic and impact investors to establish more responsive housing finance tools.



IV. BUILDING PUBLIC AND POLITICAL SUPPORT

1. Tell the Story of Diverse Housing

Show how diversified housing supports local economies and the local workforce, including teachers, healthcare workers, and municipal employees.

Tactics:

- Use storytelling and case studies
- Frame housing as critical infrastructure
- For the public, municipalities and developers
- Example: What is workforce housing, who lives there, why do we need it

2. Prioritize Housing-Ready Sites

Incorporate housing into master plans and prioritize sites for quick activation, like those certified by the Michigan Economic Development Corporation (MEDC) as Redevelopment Ready Communities (RRC).

3. Champion Public-Private Partnerships (PPPs)

Support true collaboration between municipalities and developers. Reduce barriers such as excessive fees, engineering costs, and redundant reviews.



V. EDUCATING MUNICIPALITIES ON DEVELOPMENT REALITIES

1. Understand Development Timelines

Housing projects can take 4–10 months just to close due to incentives and lender underwriting.

Actions:

- Educate officials and the public on realistic expectations
- Support developers in pre-incentive preparation

2. Recognize Financing and Underwriting Complexities

Municipalities should understand:

- Low-Income Housing Tax Credit (LIHTC) eligibility, scoring, and design requirements
- Area Median Income (AMI) impacts on rent/sale rates
- How lender underwriting drives design, schedules, and feasibility
- The need to parcelize duplexes for financing eligibility

3. Market Studies and Absorption Rates

Understand how demand affects feasibility and timelines. Delays in absorption can impact financing and construction pace.



VI. STREAMLINING APPROVAL, ENGINEERING, AND UTILITIES

1. Streamline the Site Plan Review and Approval Process

Ensure quick and predictable approvals for all housing types, particularly missing middle and ADU projects.

Steps:

- Test real applications and identify bottlenecks
- Implement administrative approvals for post-plan stages (e.g., site condo or parcelization)
- Eliminate excessive reviews
 - Cap the numbers of reviews – time is money for developers
 - Cap the fees for reviews – especially third-party reviews

2. Early Utility Coordination

Engage utility providers early in the development process to prevent delays and reduce risk.

Municipal Action:

- Facilitate working sessions with developers and utility companies
- Build timelines that reflect realistic utility coordination

3. Simplify Fees and Inspections

Streamline administrative procedures related to bonding, permit, tap, and inspection fees.

Steps:

- Create transparent, consistent fee schedules
- Offer clear inspection timelines and protocols



Michigan Association of Planning
A Chapter of the American Planning Association

To: **City of Lapeer**
Denise Soldenski, Director of Housing and Neighborhood Development
Mike Womack, City Manager
Alex Hritcu, Rowe Professional Services

From: **Michigan Association of Planning**
Leah DuMouchel, Director of Programs and Communications
for Region H Housing Partnership

August 11, 2025

Planning and Zoning Review: Housing Supply and Choice

Dear Mike, Denise, Alex, and City of Lapeer Planning Commission and Council Members,

Thank you for your participation this Planning and Zoning Review, supported by your Regional Housing Partnership. The purpose of the project is to offer personalized suggestions to your community for items that could be added to or amended in your Community Master Plan and Zoning Ordinance to increase housing supply and broaden the range of housing options available in your community.

Included with this letter are the rubrics used to analyze the Master Plan and Zoning Ordinance, filled in with findings that are specific to the City of Lapeer. They are based on best practices such as those in MAP's Zoning Reform Toolkit, designed to identify possible areas of improvement and opportunities for analysis—no plan or zoning ordinance would be likely to include all of the elements in either rubric. Moreover, planning and zoning needs for housing have changed significantly over the past several years, as the housing market and supply chain have changed in Michigan and nationally. The investments made by MSHDA and Region H in developing this review project and offering it to communities like yours acknowledge the wide scope and broad scale of change to “business as usual” planning and zoning practices that are needed to meet this moment.

The recommendations in this letter summarize the findings of the rubric and highlight areas for your community to consider focusing its efforts on. While we certainly hope that you will find them helpful and actionable, they are advisory only and you are under no obligation to implement them. We suggest that you include this letter and the rubrics on an upcoming Planning Commission meeting agenda for

1919 West Stadium Blvd., Suite 4
Ann Arbor, Michigan 48103

p: 734.913.2000
f: 734.913.2061

discussion, and submit them to your elected body for review. MAP is available to discuss these recommendations and provide additional information.

Local Context

MAP met with the City of Lapeer at the beginning of this review to learn more about the status of housing in the community. We understand that the City of Lapeer already enjoys some housing diversity, including condominiums and duplexes. Getting new units constructed has been a challenge, however.. For example, developer interest has remained elusive on a 7-acre site for which an RFP/Q was prepared by MEDC in 2019-2020. The City would like to identify and lower barriers, especially bureaucratic ones.

The City's approach to housing developed was described several times as "conservative." The City Commission has trended toward expressing a desire to reduce rentership rates, and it was viewed as unlikely that the community would be a leader in allowing new housing formats like external ADUs on garages. A lack of "great sites" was viewed as a key barrier to housing development, along with cost. Housing supply is extremely limited, and it is acknowledged that the dearth of housing is limiting the ability to support job growth.

These are challenging times for the traditional housing model—it is precisely the cost of a single-family, owner-occupied home that is surrounded by only single-family, owner-occupied homes that has become widely unworkable in Michigan and across America. The push toward housing diversity has been driven by the fact that median household wages cannot support this model in 2025. Lapeer is fortunate to have examples of housing diversity within the City already which can demonstrate other successful configurations, like more duplexes and attached single-unit homeownership (condos). If a house over a garage seems extreme, a conservative community may find it an appropriate property right to allow a property owner to configure their interior space to allow for two units.

One tool that can help make the built result predictable while still allowing for more units are pre-approved or permit-ready housing plans. A community's investment in these helps defray the "soft costs" of design and approval to the developer / builder, often allowing homeowners or smaller-scale firms to participate. There are now two sources of these that were developed specifically for Michigan. Whether officially adopted or not, they are good conversation starters about form and neighborhood housing diversity. The Michigan Municipal League published [Pattern Book Homes for 21st Century Michigan](#), which includes six duplex, quadplex, accessory dwelling unit, and small-home plans. The Michigan Economic Development Corporation's [Permit Ready Housing Plans](#) include five duplex and quadplex options. Both of these resources were specifically designed to help new housing formats get built in a manner that feels traditional and timeless.

Master Plan Review

Overall, the goal of housing diversity is stressed several times throughout the plan. The demographics section identifies several trends that affect housing format, such as increasing number of seniors and decreasing household sizes, and there are direct policy statements advocating for the range of housing that would accommodate these varied households.

However, other language regularly prioritizes single-family housing as the “main” kind of housing. Denser housing could be described as a unique segment of the spectrum rather than as a “transition” between detached units and nonresidential uses. There are also few of the specifics that would move the community toward implementing more housing diversity, like identifying specific districts or locations that are appropriate for zoning changes or using engagement to ferret out the most desirable multifamily building types. The master plan is an ideal place to identify specific zoning districts that can be amended to accommodate new housing styles, including multiple attached units, attached single-family, senior housing, and small-lot housing. These recommendations could be tied back to demographic findings about household size, “family” status, and income in comparison to housing costs.

It’s good to include an engagement program in each master plan update. Even a single well-prepared community survey, which can be reused for subsequent updates to track changes, allows a documented link between plan recommendations and public desires. When conducting and reporting the engagement, be sure to report the representativeness of the respondent pool compared to the community as a whole. Use housing needs as a basis for engagement that is specific to housing. Include outreach to local and regional employers, renters, people in the 18-40 age group, and 1- and 2-person households to determine their preferences

The issue of stopping and reversing the conversion of SF dwellings to MF appears several times, suggesting a high priority for the City. Rethinking this strategy could allow for more housing while helping to preserve the existing physical character of the community. This can offer a better match between housing size and household size and increase affordability. If changing course, evaluate opportunities for the nonconformities section of the ordinance to allow for MORE flexibility rather than less

The emphasis on maintenance of existing stock is well done, and would be well served with more detail. What funding and resources will be dedicated to this? What are the strategies? There is also room to include a discussion of the role of housing in the City’s downtown, especially business support and the opportunity for high-density and affordable housing.

Zoning Ordinance Review

As a whole, the regulations display a handful of opportunities to reduce barriers to more housing. A good first step is permitting more housing across all of the business districts, including standalone apartments in the CBD. The City could intentionally use housing demand to support commercial development by targeting denser housing toward areas that are adjacent to and inside commercial areas.

Within the existing residential areas, Lapeer could relax either the uses, the dimensions, or both. Allowing duplexes in most residential areas would permit up to two times the number of housing units without changing the character significantly. If these were permitted in existing building footprints only, there would be almost no exterior indication of the change. Up to four units could be permitted on major thoroughfares, corner lots, and larger parcels. The City already commendably permits boarding (room-renting), which is especially accommodating to unrelated households. To reduce bureaucratic barriers, this could be permitted by right; could

allow for more than two renters per household; and could be allowed with reduced parking requirements.

Dimensionally, the R1 and R2 districts may be similar enough to consider collapsing into a single zone. An interesting exercise would be calculating the infrastructure cost—water, sewer, and road—of the 20' of frontage that makes up the difference between the two lot widths, and considering the savings that the narrower lots accrue over time. Minimum dwelling sizes are another imposed cost, this time to the property owner: the additional square footage required in the R2-R3 districts adds about \$22,000 to each home according to cost-per-square foot estimates in the Region 6 report. Requirements for attached garages and storage space also have a direct and quantifiable impact on housing affordability.

Finally, the administrative approval that is currently available to single-family homes on existing lots could be expanded at least to duplexes and accessory dwelling units, thus directly removing a process barrier.

Lapeer Master Plan – Review of Housing Element

Michigan Association of Planning for Region H Housing Partnership

August 2025

General

- Link: <https://cms4files.revize.com/lapeermi/PlanningDeptPHNotices/City%20of%20LapeerMP2021%20Adopted.pdf>
- Date adopted: 2008; amended April 2014 and February 2021
- Consultant: Rowe Professional Services

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Data		
DEMOGRAPHICS		
Population change	2.5% decrease 2000-2010 (appendix)	Put this information in the body of the housing section and directly address strategies to it. Consider change in number of households alongside change in population.
Age	42% of population is age 20-49, labeled “family forming”; decrease of 9 percentage points 2000-2010. 29% of HH have children	Consider household composition alongside age: how many households have children in them vs. how many are of childbearing age. Directly address sharp decrease in the 20-49 age group, even though it is still the largest
	Senior population 18% and “steadily increasing”	Address this directly in the text. Include strategies for a diversity of housing that accommodates seniors, including smaller homes, cottage courts, units that are accessible to commercial and health services without driving
Household size and type	The average household size has declined in the past 10 years and is projected to continue to decline as people have fewer children and ‘empty nesters’ are becoming more prevalent.	Discuss how this affects housing stock: smaller units needed, less capacity for / interest in yardwork, greater interest in being near amenities

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Household size and type, continued	• Almost 40% of all households consist of married-couple families, lower than the county average. • Almost another 40% of the community is made up of one-person households • Approximately 16% of households are made up of 'one head households' in which there is a single parent with children. • Approximately 12.5% of households are made up of 'non-family households': non-related individuals living together.	Discuss what each of these population trends mean for housing, and include recommendations for each change in housing type. For example, what percentage of Lapeer housing structures are suitable for a single-person household? Are more needed? Do all residential zoning districts accommodate them?
	Downtown chapter centers on a strategy identified as "family friendly" for physical improvements and branding	15% of Lapeer households are made up of married couples with children; less than a third of Lapeer households have children. Consider a strategy that more closely reflects Lapeer's residents
Household income	After a 55% increase in household income in the City of Lapeer from 1990 to 2000, a 3% decrease was experienced from 2000 to 2010, dropping from \$35,526 to \$34,351.; comparison to County included	Good that income is included; relate to housing costs to understand affordability trends
HOUSING STOCK		
Number	Household growth can be tracked by looking at building permits and demolition permits to identify changes in total dwelling units and look at utility connections and disconnections to estimate vacancy rates.	This was a suggestion for future work; recommend including in the next master planning effort

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Type / size	SF dwellings converted to multifamily cited as Key Issue in residential neighborhoods; Lapeer Neighborhoods Inc promotes undoing conversions by purchasing and supporting home buying	The issue of stopping and reversing the conversion of SF dwellings to MF appears several times, suggesting a high priority for the City. Recommend rethinking this strategy. As household sizes fall, converting existing SF homes into two or more units is often an excellent way to increase the number of housing units, better match housing size with household size, increase affordability, and retain existing built character.
	One of the goals of the plan is to promote an increase in owner-occupied housing.	Consider whether this is a realistic strategy. Government has very little control over ownership, so this often boils down to conflating detached dwellings with owner occupancy. But that is not a perfect correlation, and as detached dwellings are the most expensive housing type, this strategy may lead to MORE rentals if that's all that's available but incomes can't cover ownership.
	Housing mix can be tracked by review of building permit data. Tenure is more difficult to track because of rentals of single-family homes, but estimates can be made by comparing the address of a residence with the address of the owner in sample sets of assessing records.	Recommend conducting these analyses.
Age / condition	"Deteriorating housing stock" cited as Key Issue in residential neighborhoods	Develop strategies to support housing stock repair, including funding
	• 38% of homes date 1959 or earlier and the largest single percentage of homes are pre-1940. • There has been a steady decrease in the number of homes built each decade 1970 through 2000	Set targets for housing stock increase by housing type, tying targets to demographic analysis

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Value / cost	Changes in housing cost in comparison with household income impacts housing affordability. ... The City can get a rough measure by comparing changes in property values provided by assessing and changes in rents based on a random sample of rental units. An increase in the housing affordability gap may justify consideration in changes to Future Land Use Plans or other housing policies to increase the supply of affordable housing.	Include this analysis in the master plan, with future land use changes
HOUSING NEEDS		
Vacancy	10% vacancy noted in 2010; comparison to County included	OK. Record changes over time, also
Income / value match	Need for additional affordable units cited as Key Issue in residential neighborhoods	Provide a strategy for achieving these units, including a target number, desired format, and potential locations
Size / type match	High rate of rental units cited as Key Issue in residential neighborhoods	Compare rate of rental units to similar communities to see if it is indeed “high” (appendix cites less than half of units as rentals); include evidence of why this would be a “key issue” such as a study documenting maintenance conditions or nuisance complaints; consider strategies that address specific outcomes rather than rentership in general since government has very limited influence over ownership
PROJECTED NEEDS		
Jobs	Not mentioned	Include anticipated changes to local jobs; plan for housing that responds
Population forecast	Not mentioned	Include a discussion that covers general historical population trends in the City and County; jobs; and development pipeline

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Infrastructure	All areas of the City are provided with municipal water and sewers is noted as an opportunity. Later text states that the sewer system is nearing capacity; and that the age of both water and sewer infrastructure is an item of concern. The plan also “recognizes the recent expansion of the City’s sewer treatment capacity and extension of the City water and sewer mains into undeveloped areas in the southwest portions of the City.”	Tie water and sewer infrastructure considerations to housing needs. Identify targets for housing number, density, and location, and recommend improvements as needed to serve them.
Services	Police and fire resources are inventoried, but not connected to land development by a quantified service recommendation. “The level of police and fire protection limits the range and quality of service provided to all land uses.”	Cite standards that indicate whether current police and fire resources are adequate to the existing population, and make specific recommendations about changes to support newly identified housing targets
Schools	Inventory of schools, but no enrollment trends	Enrollment trends are more relevant to determining whether existing sites are likely to continue and may inform the residential context surrounding them
Recreation	The proximity to community facilities such as schools and recreational facilities determines the areas that are especially attractive for residential development	Good
	Strategy: Support timely expansion of recreational facilities to support anticipated growth such as additional parkland.	Cite standards that indicate the adequacy of recreational resources to today’s population, and provide quantified guidance about how much recreation should be included with anticipated growth
Transportation	Accessibility to and the capacity of the road network limits the type and intensity of uses that may be served in an area of the City without adversely impacting traffic operations.	Identify areas where this capacity is an existing issue, and also areas which have existing transportation capacity that could be utilized

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Commercial development	Commercial uses demand customers to continue to thrive and an increase in the percentage of residential development may be necessary to support additional commercial growth	Good! Make this connection more directly in each commercial area. Also cite it in all residential areas adjacent to commercial.

Engagement		
General	2007: 2 Stakeholder meetings; 2 public open houses. No summary is included. 2013 and 2019 updates do not mention community engagement	Include an engagement program in each master plan update. Even a single well-prepared community survey, which can be reused for subsequent updates to track changes, allows for a documented link between plan recommendations and public desired. When conducting and reporting the engagement, be sure to calculate and report the representativeness of the respondent pool compared to the community as a whole.
Housing	No engagement that was specific to housing was reported.	Consider engagement that is specific to housing, using housing needs as a basis. Include outreach to local and regional employers, renters, people in the 18-40 age group, and 1- and 2-person households to determine their preferences.

Policy

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Diversity of housing statement	• Goal The City of Lapeer is a safe community that provides for high quality residential areas with a variety of housing types and community character for current and future residents. • Provide a range of housing types suitable for all ranges of income levels and household types. This could include infill housing development in established neighborhoods, live-work condominium development, and older housing rehabilitation. • Future development issues: The City must also focus on providing a variety of housing types to supplement the typical single-family neighborhoods. • Promote infill housing and dwellings of various sizes and design to provide a housing mixture for a range of costs.	The goal of housing diversity is repeated several times throughout the plan. This is good. However, other language regularly prioritizes single-family housing as the “main” kind of housing. There are also few of the specifics that would move the community toward implementing more housing diversity: No specific districts or locations are identified for changes, either in commercial nodes or in existing neighborhoods; no forms are identified as being particularly suitable.
	Continue to prohibit single family conversions and encourage existing multiple family conversions to be converted back into single family homes.	This goal directly conflicts with housing diversity. Smaller units in existing buildings can meet the needs of smaller households without changing the character of a neighborhood.
Zoning	• Evaluate and review the zoning ordinance to allow a variety of housing styles. • Review zoning district uses to allow for multiple attached units in certain zoning districts. • Distinguish opportunities for high density residential that could include attached single-family and more innovative housing options in the downtown and other areas of concentrated development. • Identify locations for specialized senior housing • Explore locations for tiny houses, regulation to control them.	The master plan is an ideal place to identify specific zoning districts that can be amended to accommodate new housing styles, including multiple attached units, attached single-family, senior housing, and small-lot housing

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Zoning, continued	Consider the reuse of the former school property and Perkins Nursery at the northwest corner of Genesee Street and M-24 for residential, office, and commercial purposes. Uses might include a mix of senior housing, live-work units, and clustered single-family units. Residents in this location would enjoy convenient access to downtown Lapeer.	Good
	Require that new development be compatible with the character of existing, nearby neighborhoods. New housing should consist of a mix of housing sizes and designs so that a more interesting and integrated built-form is created.	Carefully define “compatibility” here: what should reflect the existing neighborhoods, and what should change in order to allow for the desired mix of housing sizes and designs?
Housing increase	Identify locations for additional residential to expand the boundaries of existing residential neighborhoods and promote in-fill redevelopment.	The master plan is an ideal document to show where desired residential expansion should take place
	Encourage new residential development and neighborhood development where infrastructure is adequate and adjacent land uses are non-conflicting and where a demand for new housing exists.	Indicate such areas on the future land use map
	Require high standards in housing developments so that attractive neighborhoods, good housing design and construction, privacy, and access to usable and convenient open space are achieved. Adopt residential design standards to accomplish this. Strategies: • Provide for residential growth within the ability of the community to economically provide necessary infrastructure and services. • Promote infill housing and dwellings of various sizes and design to provide a housing mixture for a range of costs.	Residential design standards are a good way to apply these criteria consistently. For each standard adopted, include an assessment of the cost added to each residential unit, and focus on standards that do not increase cost either directly (design features) or indirectly (size, infrastructure)

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Housing increase, continued	Downtown goals and objectives do not mention housing. Strategy in Chapter 3: Encourage the development of underutilized spaces, such as parking lots or public space for mixed use development to increase density downtown. “Consider doing a study to identify underutilized properties in the downtown.”	Plan for housing in the downtown, including identifying locations and providing guidance for a zoning amendment that includes housing type and intensity
Housing and commercial services	Offer a node of neighborhood commercial uses in the southwest area to service the residents that will live there.	Good!
	Stabilize residential areas by preventing the encroachment of incompatible land uses into residential neighborhoods and eliminating non-conforming uses.	Define “incompatible” land uses here and how they are encroaching. Ensure that multifamily is treated as a “residential” use.
Existing housing stock	Examine the existing housing stock and promote maintenance and rehabilitation of existing housing and residential neighborhoods.	The emphasis on maintenance of existing stock is well done. Consider in more detail how this will be done: what funding and resources will be dedicated to this? What are the strategies?
	Encourage the retention of existing housing stock since this contributes to the attractiveness of residential neighborhoods.	
	Evaluate strategies to help preserve and protect neighborhood character and historic qualities.	
	Community facilities: Continue to offer renter and owner-occupied housing assistance programs and expand programs as needed as demand for affordable housing increases.	
Number of units needed	Not mentioned	Include a general forecast of units needed that takes into account trends in households, housing affordability, population forecast, jobs information, and development pipeline

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Type of units needed	Not mentioned	Include a general forecast of unit types needed that takes into account trends in households, housing affordability, population forecast, jobs information, and development pipeline

Land Use		
CATEGORIES THAT INCLUDE HOUSING		
<i>EXISTING</i>		
Low-Density Single-Family Residential.	• single-family homes on lots < 12,000sf. • Represent most of the single-family residential development over the last 40 years • located outside the urban core	OK
Medium-Density Single-Family Residential	• single-family homes < 12,000 sf • Majority of lots are within the urban core of the City • Built in the earliest years of the City and up to the 1950s.	OK
Duplex Residential	• Homes within the City's urban core that have been converted from single-family into duplexes; distributed throughout residential districts surrounding downtown. • Second type were purposely built as duplexes.	OK
Multiple-Family Residential	• 3+ dwelling units • Includes both conversions and purpose-built	OK
Manufactured Housing Community	Two existing developments	OK
Comparison of land use ratios	Lapeer has 33% residential land compared to 52% average for cities under 100,000; 20% commercial land use compared to 10%; 10% industrial vs 7%; 36% public vs 31%. Description says that "residential uses do not generate as much tax revenue as demand for city services as industrial or commercial uses."	This may be true at the relatively low densities permitted by Lapeer's current code, but is not necessarily always true; this outcome is greatly influenced by density and compactness of residential development

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Opportunities	- Annexed lands at I-69 and M-24 interchange is opportunity to add desired commercial and residential uses to the City's tax base. - City possesses stable residential neighborhoods, including historical dwellings in the neighborhoods to the north and west of downtown - City possesses historic residential neighborhoods. - A range of housing types are available.	Good, especially ID of new housing location
Constraints	- Additional affordable housing and a greater variety of housing types are needed - The conversion of single-family homes in historic areas threatens the character of these areas and must be restricted - Residential properties on M-24, between Nepessing Street and Second Street, are under threat due to traffic volumes	- Define carefully how conversion of single-family homes threatens "character". It would seem to actually be PRESERVING character since the building still stands. - Define how traffic volume is a "threat" to residential properties
<i>FUTURE</i>		
Low-Density Single-Family Residential	- Density between 1.9 and 2.9 DU/acre - Uses anticipated: single-family detached housing, ancillary uses - Primarily in outer limits of City boundary, correspond with R-3. - Appropriate future areas include additional land annexed into the City ; could allow significant residential development - Development should protect open space and natural features: qualifies for the cluster housing option. - Density accommodates a mixture of housing options including typical single-family homes, attached single-family condominiums, townhouses, and duplexes	Uses anticipated are very limited, but later note indicates that housing variety is possible under the density limitation. This section could be much more emphatic about the opportunity to implement the housing mix and diversity that the goals call for in several places. Describing a neighborhood that includes this mix compellingly, especially for newly developed areas, would be a valuable addition.

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Medium-Density Single-Family Residential	• Density range of 3.6 to 4 DU/acre • Intended uses: detached housing and ancillary uses • Applies to existing development; allows new developments that provide a transition between high-density or non-residential areas and lower density residential areas. • Corresponds with R-2 district • Development should reflect a more urban neighborhood character • Density accommodates a mixture of housing options including typical single-family homes, attached single-family condominiums, townhouses, and duplexes if a proposed development qualifies for the cluster housing option under the City's Zoning Ordinance.	• It is common to describe some residential uses as a “transition” between nonresidential uses and (usually) single-family residential, but this is not the most thoughtful way to treat desired housing diversity. Recommend thinking of ALL residential uses as important segments of the community that should be planned for with care and attention • Uses anticipated are very limited, but later note indicates that housing variety is possible under the density limitation. This section could be much more emphatic about the opportunity to implement the housing mix and diversity that the goals call for in several places. Describing a neighborhood that includes this mix compellingly, especially for newly developed areas, would be a valuable addition.
High-Density Single-Family Residential	• > 5 single-family DU/acre • Corresponds with R-1 zoning • Intended to apply to existing historic neighborhoods and neighborhoods north and south of the downtown. • “These attractive neighborhoods add to the City's character and are a source of affordable housing. These areas should be preserved for single-family dwellings and ancillary uses” • Density accommodates a mixture of housing options if a proposed development qualifies for the cluster housing option	• The “cluster housing” segment seems out of place here, where there is already a compact form and affordability, as well as a desire to retain the current form.

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Multiple-family residential	• Density range of 8 to 21 DU / acre. • Primarily for existing high-density residential land uses including apartment complexes. • Corresponds with RM, RM-1, and RM-2 districts.	Language suggests that no future development is planned at this density, since it's intended for existing uses? Compare with needs / gap analysis; recommendation to include high-density residential in zoning changes
Manufactured housing	• Corresponds to the mobile home park (MHP) zoning classification. • Areas designated on the Future Land Use Map are the two existing sites in the City; plan does not propose new manufactured housing sites. "although the 2007 housing study ... recommends additional mobile homes to meet affordable housing demand" • Other approaches for affordable housing include small 'cottage' style homes in areas for medium or higher densities or encouraging multiple-family dwellings. • Appropriate locational criteria identified if new park needed	• State enabling act does not allow prohibiting a land use for which there is a demonstrated need. The "other" approaches for affordable housing listed here are not well accommodated in the plan. Recommend taking one of those approaches more firmly.

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Commercial - Downtown	• Corresponds with the CBD-1 and CBD-2 zoning districts • City's primary community gathering place • Under "surrounding uses," two places state that the intent is to keep single-family homes. No recommendations include housing diversity. • Vacant second-story apartments or office space areas in downtown. • Along the north side of the downtown north of Park Street, is residential, office, or other low intense uses are desired. • The area south of Clay Street it is desired to have this area convert into more commercial uses. Currently, many of the single-family homes are rental units.	• Include a discussion of the role of housing in the City's downtown, especially business support and the opportunity for high-density and affordable housing • Where existing housing is mixed in with commercial, consider embracing the blended character.

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
PUD / Mixed Use	• PUD area south of the mobile home park and north of the interchange to be developed with mixed uses, with residential uses buffered from the commercial and industrial uses. • The E.T. White property in the northwest quadrant of the intersection of M-24 and Genesee Street to allow for a mix of residential, commercial, and office with consideration for live-work. To minimize impacts on adjacent single-family residential areas, commercial uses should be located adjacent to M-24 or Genesee Street and buffered from single-family by office, multifamily, commercial, and open space. • Area bordered by the railroad, Saginaw Street, Farmers Creek, and M-24 is a mix of single-family, multiple-family, commercial, office, and light industrial uses. Creation of a mixed use district to allow for a wide range of residential, commercial, and office uses with performance standards that might include buffering or separation distances between single-family and non-residential uses, limited building heights for non-residential uses when beside a residential use, restricted open storage, etc.	Great that all three of these areas provide for a mixed use environment, and that the success of this mixing is being considered through buffering. Recommend treating all residential uses as residential uses, and not considering anyone's residence as a "buffer" to enhance a neighbor's residence.
Nonconformities	The majority of non-conforming lots are located in residential neighborhoods north and west of the downtown. Most are residences previously converted into duplexes or multiple-family uses; the City continually strives to remove these non-conformities	Consider changing this approach. These could be viewed as "gentle density," allowing for more units without significantly altering the physical environment.

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Nonconformities, continued	The parcels with existing uses that are more intensive than the zoning classification they are in are normally the result of down zoning of an area or other changes to the text of the ordinance that removes a previously permitted use from the items now allowed. This is the case of the multiple-family residences in the single-family residential areas north and west of downtown. These non-conformities will tend to linger until forced to change. The rapidity of the change will be based on market forces and the stringency of the community's non-conforming use provisions in the Zoning Ordinance.	If there are nonconformities in an area that has been downzoned, which are continuing to function well in their context, consider reversing the downzoning, especially if a need for more, smaller, and less expensive units is revealed in the data.
	• Objective: Evaluate zoning ordinance to ensure the nonconformity section is as strict as necessary. • Strategy: Enforce zoning regulations within established residential neighborhoods to ensure that existing non-conformities are not expanded upon and modify zoning requirements in residential districts to encourage the elimination of non-conformities.	If changing course, evaluate opportunities for the nonconformities section of the ordinance to allow for MORE flexibility rather than less
Future development issues	Existing residential neighborhoods must be protected from being converted to nonresidential uses. The older historic neighborhoods surrounding downtown and the stable residential area along M-24, between Genesee Street, and Oregon Street should be protected.	Clarify the protection being recommended here, assuming that the area is already zoned and used as residential.

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
----------------	-----------------	--------------------

SPATIAL AREA SUMMARY AND CHANGE						
Land Use	Acres			Percent		
	<i>Existing</i>	<i>Future</i>	<i>Change</i>	<i>Existing</i>	<i>Future</i>	<i>Change</i>
Single family residential	486.0		1176.9	10.5%		26.3%
Single family - high density		222.9			4.9%	
Single family - low density		435.3			9.6%	
Single family - med density		1004.7			22.3%	
Duplex residential	24.0		-237.5	0.5%	0.0%	-0.5%
Multiple family residential	119.0	166.4	47.4	2.6%	3.7%	1.1%
Manufactured housing community	95.0		0.1	2.1%		0.0%
Mobile home park		95.1			2.1%	
Commercial	380.0		200.7	8.2%		4.6%
Commercial - Auto		114.5			2.5%	
Commercial - Regional		195.7			4.3%	
Commercial - Downtown		31.6			0.7%	
Commercial - General		238.9			5.3%	
Medical	55.0		73.5	1.2%		1.7%
Office	33.0	161.5		0.7%	3.6%	
Industrial	224.0		282.9	4.8%		6.4%
Industrial - Heavy		285.9			6.3%	
Industrial - Light		221			4.9%	
Institutional	352.0		-44.8	7.6%		-0.6%
Cemetery	25.0			0.5%		
Governmental	127.0			2.7%		
Recreation	284.0			6.1%		
Recreation / Institutional		743.2			16.5%	
Mixed		62.2	62.2		1.4%	1.4%
PUD		533.3	533.3		11.8%	11.8%
Undeveloped land	1817.0		-1817.0	39.3%		-39.3%
Right-of-way, river, other	598.0		-598.0	12.9%		-12.9%
Total	4619.0	4512.2		100%	99.9%	

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Summary	The Future Land Use plan and map show an expansion of land used for single-family housing as the greatest change, followed by undeveloped land that is intended to be developed under Planned Unit Development agreements. Housing diversity in the City of Lapeer would be well-served by planning for “gentle density” formats like duplexes through fourplexes in existing single-family neighborhoods, thus allowing the expansion of residential area to include smaller, denser, more affordable formats. The sections of the Plan that address areas intended to be developed under PUDs mention housing diversity as an option, and would benefit from a stronger expression of preference for mixed formats that accommodate a range of incomes and household types.	

Lapeer Zoning Ordinance Review – Review for Housing Reform

Michigan Association of Planning for Region H Housing Partnership

August 2025

General

- Link: Code, <https://ecode360.com/30253588>; Map, <https://cms4files.revize.com/lapeermi/DOCUMENTS-EVIP/Zonong%20Map%20-%202024%20-%208-19-2024.pdf>
- Date adopted: 1973, amended 1986, 2011, and subsequently where noted
- Consultant: None / Unknown
- Pages: 228

Element	Included	Recommended
Zone Districts		
Abbreviation	Name	
R-1	R-1 Single Family Residential	
R-2	R-2 Single Family Residential	
R-3	R-3 Single Family Residential	
RM-1	RM-1 Multiple Family Residential	
RM-2	RM-2 Multiple Family Residential	
MHP	Manufactured Home Park	
MU	Mixed Use Overlay	
M-24	M-24 Overlay	
COLLAPSE ZONE DISTRICTS		
Number of SF districts, and distinctions among them	3 R districts • Area and width are key distinctions • Setbacks are substantially similar in R1 and R2; larger in R3	Consider whether R1 and R2 are similar enough to use the same standards for redevelopment

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
Number of residential districts that allow housing other than SF	- Multiple-Family Residential Districts provide for multiple-family dwelling structures and related uses, which generally serve as zones of transition between nonresidential districts and lower-density single-family districts. MF districts serve the needs for the apartment type of unit in an otherwise medium-density, single-family community, with the RM-2 district providing for structures of greater height and with a greater density of dwelling units. - RM1 and RM2 allow housing, education, recreation, health care	- Language stating that the community is “otherwise medium-density single family” contradicts the idea of offering a range of housing. - It is common to refer to multifamily housing as serving a “transition” or “buffer” function between other types of housing and nonresidential uses, but it would be better to site and treat multifamily housing according to its own needs and function

REZONE FOR MIXED USE AND MULTIFAMILY IN COMMERCIAL DISTRICTS		
Districts other than residential that allow housing	CBD permitted: - Apartments above business establishments - Apartments on first floor if: minimum floor area met; < 25% of gross first floor area; in rear of building; entrance or windows not visible from front lot line.	- Allow standalone apartments in CBD - Also allow housing in other business districts
EXPAND ALLOWABLE USES IN RESIDENTIAL DISTRICTS		
Uses permitted in lowest-density residential districts	- Detached dwellings, public assembly, schools, golf courses - Intent in single-family districts text: “Further, it is the intent of the Single-Family Residential Districts to eliminate multiple-family residential uses in these districts.”	Consider opening up to “gentle density,” including 2-4 attached units in existing buildings and ADUs
	Boarding / room renting is permitted with SLU and standards	Good, consider allowing by right; allowing more than 2; and reducing parking requirements
PERFORMANCE ZONING		
Buffering between residential and nonresidential	RM1, RM2: 30’ side setback if bordering other than MF	This is a large setback that imposes land costs. Allow other methods of buffering and screening to suffice

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
	Landscaping section requires a setback, wall / berm, AND vegetation	Allow applicant to select one approach
Driveway/parking	Not mentioned	OK
Building stepdown/stepback	Not mentioned	OK

Form and Context		
REDUCE MINIMUM LOT WIDTH AND AREA		
Minimum lot widths and areas for residential	Single family districts • R1: 6000sf; 50' width; coverage 30% • R2: 8400 sf; 70' width; 30% coverage • R3: 12,000sf; 90' width; 30% coverage	• OK • Consider collapsing R1-2 • Calculate infrastructure cost imposed by the additional 20' of frontage and impact on taxable value
	Multifamily districts • No minimum area or width	Good
Setbacks	Single family districts • R1: F25, S6, R35 • R2: F25, S7.5, R35 • R3: F35, S12.5, R45	OK
	Multifamily districts • RM1: F30, S10, R35 • RM2: F30, S17.5, R none	OK

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
	- All RM Districts: minimum distance between two buildings = 1.5x height of adjacent building and > 30' - RM-2; buildings >3 stories or 35' provide additional setbacks for all yards = 1/2 the height of the building above 35'	Consider other criteria for site design that allows taller buildings to realize space savings
REDUCE OR ELIMINATE MINIMUM DWELLING UNIT SIZE		
Minimum dwelling unit size	R1: 850 R2, R3: 1000	Reduce or eliminate. This is a cost-imposing requirement; the additional square footage required in the R2-R3 districts adds about \$22,000 according to cost-per-square foot estimates in the Region 6 report
	RM1, RM2: Efficiency 300sf; 1BR 500sf; 2br 700sf; 3br 900sf; 4br 1100sf	Reduce or eliminate. The building code sets minimum safety standards
Bedroom standards	Not mentioned	Good
Attached garage standards	Dwelling units shall have attached garages where 75% of DUs within 300' have attached garages.	Eliminate and allow this space to be used as living area
	DU shall contain storage capability in a basement, attic, closet, or separate structure = 10% of the square footage of the dwelling or 100 square feet	Allow this space to be living area as needed

REDUCE OR ELIMINATE MINIMUM PARKING REQUIREMENTS		
On-site spaces required per dwelling unit	- SF: 2 per DU - MF: 2 per DU if >=2 BR; 2.5 per du if 3+ BR - MHP: 3 per site + employees - Boarding: 2 for owners + 1 per boarder - Senior: 1 per DU	Reduce. 3 spaces per mobiles home site is especially large, as is 1 per boarder on top of 2 for owners. Consider 1.5 per DU
Parking location requirements	Parking allowed for nonresidential uses up to 300' from building	Allow for residential uses
Does on-street count?	Not mentioned	Allow on-street capacity to count
Share parking?	Total spaces provided must = sum of spaces required for each separate use; PC may reduce based on operating hours	Allow for more generous reduction based on sharing; does not need to depend on hours, may be administrative

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
MISSING MIDDLE HOUSING TYPOLOGIES, INCLUDING ADUS		
ADUs allowed? Restrictions?	Not mentioned	Allow at least 1 ADU per lot
2-4 units, cottage courts allowed in neighborhoods	No	- Allow 2-4 attached units - Allow small detached units on a single lot
High lot coverage permitted for multifamily	RM1: No, 35% RM2: Yes, no maximum	Good in RM2; extend the approach to RM1 or allow a higher percentage
DENSITY AND HEIGHT BONUS		
Bonus language	None	OK
Parking and open space calibration	N/A	N/A
Affordability component	N/A	N/A
FORM AND SITE STANDARDS		
Density based on lot criteria	No	Allow for more units based on criteria such as corner lot or frontage on major thoroughfare
Building element requirements	No	OK

Process		
ELIMINATE OR REDUCE ELECTED BODY APPROVALS		
Elected body approves PUDs	Yes	OK
Elected body approves SLUs	No	OK
Elected body approves site plans	No	OK
EXPAND ADMINISTRATIVE REVIEW		
What can be administratively approved	SF dwelling on existing lot There is an “administrative review” section in the ordinance; it is not clear what projects it can apply to	What else can you expand the SF process to? Duplexes? ADUs?
Required materials	Same as PC review	OK
Administrative departure	Minor changes defined for admin approval	Expand as much as possible

<i>Element</i>	<i>Included</i>	<i>Recommended</i>
PRE-APPROVED PLANS		
	Not mentioned	OK
FLEXIBLE APPROACH TO NONCONFORMITIES		
Second nonconforming category	Yes! Criteria focus on lack of harm from nonconforming use, lack of benefit from adherence, and inability to use as zoned	Could cite provision of housing as a positive benefit allowing for Class A designation
Right to rebuild	SF homes may be replaced even if completely destroyed	Extend this protection to all housing
POLICE POWER TO REGULATE NUISANCE		
Overcrowding, noise	Not mentioned	OK

Map		
General	- Extremely limited RM2 - RM1 on the outskirts of community - Limited mixed use overlay	Use housing demand to support commercial development. Allow for denser housing adjacent to and inside commercial areas.



THIS USED TO BE NORMAL

PATTERN BOOK HOMES FOR 21ST CENTURY MICHIGAN



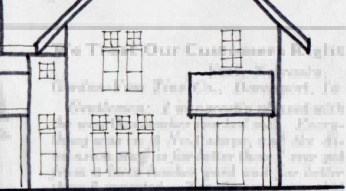
GREEN FACTORS

- a. Covered rainwater cistern, with spigot
- b. Composting drum near Kitchen
- c. Solar panels on South-facing roof

Two-Family Plan Build It for the a Single House

n that is a prize. For the man who wants a
ey-maker, and for the man who wants a home it
that you can build this house, live in one of the
floor at a high enough price to pay interest on
means that you can get your own rent free, or
n and soon pay for the house.
te in itself; a comfortable and cozy home. The
wall lighted. The center hall places the bathroom
en the two chambers. Each kitchen is provided
, which we furnish complete.

ys are plastered in and supplied with doors so
ry. Space is allowed for the ice box for each
extend down to the basement, where the doors
the basement being used for each apartment.
and for each apartment to rear, and a complete
d for each apartment is high.

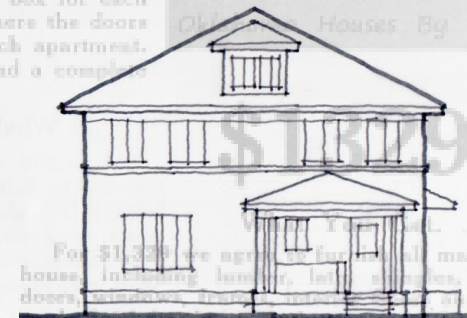


you shall have credit for everything that
is coming to you when the house is com-
pleted, on I fully realize that you people
lead your customers right.

January 15, 1915.
"Boston-Fox Fire Co., Davenport, Iowa"
"Grafton: My lot (Plan No. 100)



Old Houses By Mail



For \$1,325 we agree to furnish material to build this
house, including lumber, labor, supplies, finishing (car-
peting, windows, doors, trim, and finish, with
all material in standard grades, as described on pages
2 and 3.
COMPLETE PLANS AND DIRECTIONS are furnished
FREE with each house.
Two FIRE KING FURNACES, complete with all pipes
and fittings, and ready to install, extra, \$218.

Special Features.



CONTENTS

	ACKNOWLEDGMENTS
	HOLD HARMLESS STATEMENT
	4-5
	INTRODUCTION
	6-7
	PART I: THIS USED TO BE NORMAL
	8-15
	PART II: ENABLING THE NEIGHBORHOODS WE DESIRE
	16-27
	PART III: DESIGN & FINANCIAL CONSIDERATIONS
	28-41
	PART IV: SCHEMATICS
	42-49
	ADDITIONAL RESOURCES
	50-51

ACKNOWLEDGMENTS

This publication was made possible by a partnership between the Michigan Municipal League and the Michigan Economic Development Corporation. Project ideation and narrative content were authored by Melissa Milton-Pung, MHP, EDP, with Richard Murphy, AICP. Architectural drawings and design considerations are the work of Daniel E. Bollman, AIA, and Amanda Harrell-Seyburn, Associate AIA of East Arbor Architecture. Graphic design and layout were carried out by Piper & Gold Public Relations. Special thanks to Dr. Rebecca Price of the Art, Architecture and Engineering Library at the University of Michigan for her invaluable assistance in primary research and for the use of the historical context research conducted by her student team (Anthony Erebor, Rachel London, and Lyse Messmer) for their 2021 Clark Library Exhibit, "Buying Home, Selling America: the House Catalog, 1906-1966." Additional thanks to the support and encouragement received from the Michigan State Land Bank Authority and the many practitioners in the field who were generous with their time, experience, and advice.

Copyright 2022



HOLD HARMLESS STATEMENT

This Pattern Book for new infill construction is **focused on multi-unit housing solutions based on built historic precedents and primary documentary research.** In presenting replicable, context-sensitive designs for use in creating new infill construction of duplexes and fourplexes, our goal is to enrich the urban fabric of neighborhoods within existing downtown-adjacent Michigan neighborhoods.

In championing infill and the concentration of new housing units within existing infrastructure, our focus is on vacant lots laid bare by blight removal or the utilization of lots never built upon. **The building concepts, sample interior layouts, and open-source construction documents presented in this publication are intended for construction on vacant parcels in existing neighborhoods or redevelopment sites.** In no way is this manual or the recommendations contained herein an endorsement for tear-downs of existing historic housing units.

Visual and written recommendations are provided for housing form/massing, lot placement, and exterior finishes complementary to existing neighborhoods. Sample construction documents are presented without official seal. Surveying, Landscape Architecture, Structural Engineering, and Site Engineering are outside of the scope of this endeavor. Each building site and its accompanying circumstances are unique. Statewide public distribution necessitated cautionary omissions in the final set. These omissions must be addressed by design professionals familiar with the chosen site. **Verification of local conditions, including lot irregularities, soil conditions, snow loads, and numerous other factors, will need to be confirmed by professionals who will address the many regional variations.** In conclusion, it is incumbent on the groups or individuals who proceed with one or more of the model plans presented in this publication to conduct their own due diligence.

INTRODUCTION

Michigan has a rich housing stock, spanning in origin from the early nineteenth century to the present day, offering a diverse array of forms and styles. Many homes are “vernacular” styles, the common, everyday building language adapted to the climate of the Great Lakes region. Some examples echo national housing styles popularized by pattern books and mass marketing, with Victorian-era styles, pre-Depression kit homes, and post-World War II tract developments occupying a substantial portion of this portfolio and mid-century modern suburban homes currently enjoying a popular revival. Absent from this brief story is evidence of our multi-family homes once abundant in Michigan cities.

This manual touches upon the history of housing development in the United States and Michigan, including the duplexes and fourplexes commonly constructed until the mid-twentieth century. It offers models for intertwining smaller-scale housing options into the existing urban fabric. It is inspired by the patterns of historic precedents that worked well before Federal housing policy and local zoning ordinances shifted public opinion to the primacy of single-family housing.



***THIS APPROACH IS FAR FROM REVOLUTIONARY.
IN FACT, IT IS A FORM OF REVIVAL.***

This work is informed by the desires of Michigan’s increasingly diverse population, shrinking average household size, and shifting housing market demands influenced by aspirations for walkability, housing affordability, and climate action.

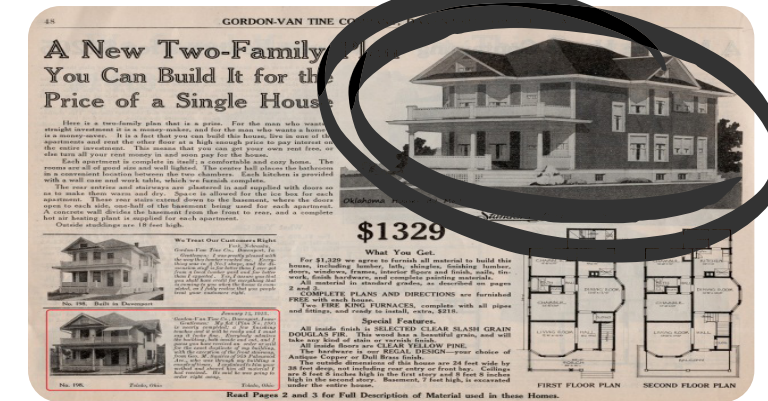
Many Michigan neighborhoods were built based on the pattern books and kit home manuals studied during our research. When considering what Michigan cities and villages will tolerate or embrace versus the current trends of other places, we place this work within the context of national trends and experiments presently underway across the United States. In breaking new ground while these (re)emerging trends are happening around them, local leaders and developers can rely on a menu of options tailored to our state’s landscape and our communities’ unique identities. Our approach of critical regionalism is calibrated to empower Michigan municipalities to feel like they can do this work without going off into left field, to build new in a manner that shares genetic material with the housing stock already familiar.

PART I

THIS USED TO BE NORMAL

THE GREAT URBANIZATION

During the early twentieth century, Michigan shifted from an agrarian economy to one heavily reliant on industrialization, particularly the auto industry. **People migrated to Michigan from all over the country for Ford's "\$5 a day" deal and similar draws by other auto manufacturers, occupying all manner of "double houses" and "rooms to let."** Demand for safe, clean housing led to the creation of multi-family units and apartments.



During the early twentieth century, as part of the Great Migration and other pre-WWII demographic shifts, millions of workers and their families moved from the rural South to the industrial North.

The housing markets in growing city centers were strained by the need to accommodate the rapid growth of affordable housing.

Thousands of units were constructed quickly and densely to provide shelter and form community.

In Detroit and other automotive manufacturing cities across the state, six-unit buildings of “cold water flats” were built, so named because they had basic plumbing but not the luxury of hot water. These flats were constructed as large houses, often with wide, shared porches and common hallways. Still others were made from converted aging mansions. Such smaller-sized unit housing choices provided a sense of community among tenants and yet also offered privacy and affordability.

Out of necessity, most of these multi-family dwellings were located within walking distance from employers or the nearest streetcar. Many were used as flexible ways for families or extended relations to live together. Today, we would call them duplexes, triplexes, “quads” or fourplexes, and small apartment buildings.

People migrated to Michigan from all over the country for Ford’s “\$5 a day” deal and similar draws by other auto manufacturers, occupying all manner of “double houses” and “rooms to let.” Demand for safe, clean housing led to the creation of multi-family units and apartments.

MAIL-ORDER SOLUTIONS

The kind of manufacturing that drew migrants to cities during this era also scaled up to meet the residential sector. Several mail-order companies, such as Bay City, MI-based Aladdin Homes and the Chicago department store Sears, Roebuck & Co., appeared in the market. **People could save up the cash to purchase or access financing through the manufacturer for an entire home, which would arrive on a railcar ready for construction by the buyer or locally hired skilled trades.** Casually and without fanfare, these manufacturers also offered a modest array of “two-family houses” or small apartment fourplexes alongside small cottages, mid-sized models, and spacious single-family homes.

In 1913, the Sears Model “No. 130” was described as “a four-family apartment house with four rooms for each family that can be built at a very low cost and will make an exceptionally good paying investment.” The floorplan was neatly arranged as if two sets of mirrored shotgun houses were stacked upon one another with common wet walls, connected by a central hall, skinned with a confidence-garnering brick exterior, and accessed by a singular entry door on a shared porch.



According to *Buying Home, Selling America: the House Catalog, 1906-1966*, an exhibit on view at the Clark Research Library at the University of Michigan in 2021, there were many Michigan connections to the mail order housing industry. In the pre-Depression years, “evidence of Michigan’s building boom” could be found

in house models and the companies designing them. Some models were laid out for lots only 30 feet wide. This narrow width is unusual in most towns, but typical in Detroit and other heavily urbanized cities, whereas the majority were envisioned for more expansive lots of 50 feet or more.

Aladdin Homes, based in Bay City, was a large kit home producer with model names like “The Detroit,” “The Woodward,” and “The Michigan.” **The University of Michigan exhibit went on to state:**

Bay City, [Michigan,] situated at the mouth of the Saginaw River, was a hub of the mail-order house industry. This was not by chance, because Bay City was by the mid-19th century a national center of shipbuilding, home to and supported by an infrastructure of lumber yards, sawmills, and skilled workers. Three of the major national kit house companies, Aladdin company, Liberty Homes, and Sterling Homes, operated out of Bay City. Together these three companies sold almost four times as many homes as the Sears, Roebuck and Company.

A popular model offered by Aladdin Homes was simply named “The Duplex.” Created in response to significant demand for two-family houses, this floorplan enabled its owners to “live in one part [of the house] and secure a good rental from the other” with a “return which is consequently much greater than if [they] had built two separate houses.”

Once constructed, most duplexes or four-family homes blended seamlessly with their neighbors. While the value of accommodating two or four households in one urban lot was sold as a sound investment, the visuals of unobtrusively fitting into the residential landscape were accomplished with form, massing, and siting nearly indistinguishable from single-family homes.

ALADDIN DWELLINGS

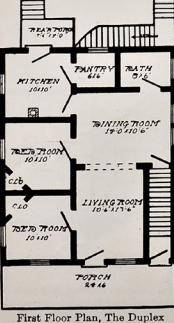


THE DUPLEX

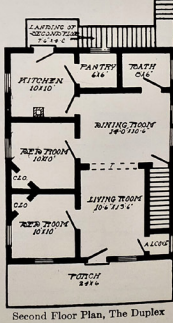
THE “Aladdin” two-family house, The Duplex, is produced as the result of a large demand we have had for a double house. The double house has some very attractive features. It enables its owner to live in one part and secure a good rental from the other—and his return is consequently much greater than if he had built two separate houses. The Duplex is a big, strong, conveniently arranged house, and its completed cost will be several hundred dollars less than it could possibly be built for by any other method. Note the double front and back porches, with rear stairways.

SPECIFICATIONS

Size, 24 x 36 ft. Price, \$1,210. Cash Discount, 5%. Net Price, \$1,149.50. See Terms. All lumber selected Yellow Pine, Red Cedar, and Huron Pine. Height of ceilings, 9 ft. first floor; 8 ft. second floor. All ceilings up stairs and down stairs square, not hipped. Sill, 6 x 8 in. Joists, 2 x 8 in. first floor, 2 x 8 in. second floor. Studding, ceiling joists, and rafters, 2 x 4 in. Joists, studding and ceiling joist placed on 16-inch centers. Sheathing Lumber. Flooring, 1-inch matched, 3 inches wide. Bevel siding. Roof, inch lumber, overlaid with best prepared roofing or shingles. Patent plaster board or lath and plaster. Base board and all interior trim and finish clear Yellow Pine. Windows, sash, 30 x 32 in., two sliding, sash, glass double strength. Doors, outside, 2 ft. 8 in. x 6 ft. 8 in., inside, 2 ft. 8 in. x 6 ft. 8 in.; front door, upper half glass. Porch columns, square, 10 in., with railing. Front and rear steps. Hardware, locks, hinges, knobs, nails, paint for two coats inside and outside.



First Floor Plan, The Duplex



Second Floor Plan, The Duplex

[58]

WRITTEN OFF THE MAP

With the arrival of Euclidean zoning in many American towns by the mid-to-late 1920s and the connoted moral superiority of R1 neighborhoods, the ability to slide multi-family units into urban and suburban lots was written out of the playbook. In subsequent decades, the adaptation of larger single-family housing units to multi-unit housing has continued to occur naturally and sometimes covertly in both urban and suburban landscapes.

Despite their pragmatic approach, these kinds of functional adaptations to market needs are still, with rare exceptions, essentially outlawed. While some have been permitted to remain as non-conforming uses pre-dating current zoning code, others have been grudgingly allowed by zoning boards on a case-by-case basis. These factors, combined with loan products focused on single-family housing and the high cost of new multi-family construction unsupportable outside of the luxury market, have created a vacuum in housing choice options for a substantial portion of Michiganders.

WHAT WE NEED NEXT

Michigan's cities continue to grapple with vacant lots yielded from Recession-era blight demolitions, blank parcels never developed within municipal boundaries, and a lack of activity for creating by-right accessory dwelling units (ADUs). Such undercapitalized land assets present the opportunity to develop new housing units – and create future taxable revenue with increased density – while availing of municipal investments already sunk into public transit and non-motorized corridors, as well as standard roads, water lines, and sewer infrastructure.

Currently, most of Michigan's housing stock – approximately 70% – is single-family housing, the ideal of the post-World War II era. Meanwhile, the average household size continues to shrink – from 4.5 individuals in the 1960s to 2.5 individuals in the 2020s. The need for expansive, multi-bedroomed

residences has waned. **With 47% of all housing units constructed prior to 1970, it's also clear that new construction has not kept pace with the kinds of housing types needed by our population.** Related to this shift is the demand for a specific type of housing – smaller (2,000 sf or less) missing middle – in the workforce price range of 80% to 120% of Area Median Income (AMI).

Parallel to these conditions, of pressing concern, is the **reality that household incomes have dropped or failed to realize net gains over time.** Meanwhile, demand for housing units within the affordable or attainable cost range has markedly increased. The need for varied and diverse housing options – beyond the default of single-family housing – is being expressed by an increasing number of households. Market appetite is far outpacing the current supply in cities. Reasons for the desirability

One option for what we need again is, in fact, hidden in plain sight, in the form of these multi-family housing solutions to age-old housing needs.

of smaller scale, attainable housing are varied – from a pragmatic desire to keep housing overhead low to the struggle to find accommodations within reach for a broader range of income levels. Such lifestyle choices are also often attached to reliance on public transit (by need or by choice), limited funds for a new household, intentional downsizing, the establishment of multi-generational housing arrangements, or simply the desire to reduce a carbon footprint.

Michigan communities are also becoming more diverse, with heightened demand for a more comprehensive menu of housing choices fueled by economic mobility, intentionally inclusive public policies empowered by increasing demands for social justice, and the persistence and success of multi-ethnic households. These trends are in direct contrast to the history of redlining and racism still evident on our landscapes. In the early twentieth century, and even more visibly in the Post-World War II Era, the messaging of housing catalogs, both implicitly and explicitly, focused solely on the white householder. When people of color entered the housing market, they faced opposition, discouragement, and hostility. While unfair housing practices were legally challenged and rolled back by the

Civil Rights Act of 1968 (Fair Housing Act), segregation and discrimination persisted for decades and remain visible on the landscape. They remain evidenced in marginalized communities and artificially stagnant housing markets in many Michigan communities. **Creating new multi-unit housing units within existing neighborhoods will contribute to the variety of housing choices, increase financially attainable options, and foster the persistence of residents of all backgrounds and socio-economic statuses.**

Two decades into the twenty-first century, a fraction of Michigan's historic multi-family units remain standing. It was not that these pragmatic housing solutions fell out of fashion; they were written off of the landscape by the perceived superiority of single-family housing. While the big house on a large lot may work for some, it is not the solution for everyone. **One option for what we need again is, in fact, hidden in plain sight, in the form of these multi-family housing solutions to age-old housing needs.** Shifting zoning up to allow for the kind of neighborhoods which already exist and function well could, perhaps, begin to allow the housing sector to respond to current needs.



PART II

ENABLING THE NEIGHBORHOODS *WE DESIRE*

“IN THE UNITED STATES, IT WOULD SEEM THAT DIVERSITIES OF STYLE AND STRONG CONTRASTS OF ARCHITECTURAL DESIGN ARE A PERFECTLY NATURAL OCCURRENCE.”

– Calvert Vaux, architect and landscape designer, co-creator of New York’s Central Park

In keeping with the philosophy of Michigan’s Redevelopment Ready Communities program, this guide focuses on making the development you want in your community the development that’s easy to do in your community. Many of our current zoning codes still show their roots in the suburban construction boom after World War II. These codes were focused on managing the rapid construction and first life cycle of large-scale, generally uniform residential subdivisions and shopping centers. **Unfortunately, these codes reinforced the standardization of homes within a neighborhood, limiting both diversity of choices and the ability to adapt homes over generations and discouraging the inclusion of duplex and quadplex homes.**

These codes were also applied retroactively to many existing traditional neighborhoods, where they were ill-suited to the range of home types already present, and to the fine-grained scale of these neighborhoods. **By preventing new construction of these options and pushing existing examples towards conformity, our codes have constrained the options available to residents.** Approaches to re-enabling our traditional neighborhood patterns can take three forms: neighborhood zoning repair, coding to permit desired home patterns, and pre-approved building plans.

NEIGHBORHOOD CODE REPAIR

A neighborhood repair approach can be taken in areas where the homes predate the codes currently regulating them. This strategy focuses on pruning back incompatible codes that have grown over and constricted the neighborhood over time. In addition to enabling infill construction of a range of home types that fit the history of the space, this approach has the added benefit of bringing existing examples back into conformity, making investments to preserve or rehabilitate those homes.

In communities with these older neighborhoods, the code repair option can be an easy first step: it prioritizes the existing built fabric of the community over the current regulations, and residents generally tend to like their neighborhood better than their zoning ordinance.

To identify the restrictions or pain points in your code that conflict with traditional patterns, use a mix of consultation with your building and zoning staff, neighborhood residents, and local builders or architects; a review of assessing and GIS parcel data; or a visual survey of properties in the neighborhood.

COMMON PROBLEMS TO LOOK FOR IN YOUR CODE, AND POTENTIAL NEIGHBORHOOD-SCALE FIXES, INCLUDE:

MINIMUM LOT WIDTH AND AREA

Traditional neighborhoods include a mix of lot sizes, many of which are smaller than current minimums in zoning. Consider reducing lot width and area minimums in the code to match the smaller lots in the neighborhood. Alternately, if your code declares that all originally platted lots are considered conforming, make sure that language does not include an adjacent-ownership restriction or limit the property's use to a single unit detached house.

SETBACKS

Post-war front and side setbacks are often inappropriately large for traditional neighborhoods and

a frequent source of variance requests or denied permits. Review side setbacks against existing homes to determine whether smaller setbacks are more appropriate to existing neighborhood patterns. Allow new construction to match the front setback of existing homes by setting a build-to zone based on adjacent homes, such as the average of the existing front setbacks on the block +/- five feet.

DENSITY AND DWELLING SIZE

Lot size, height, setback, and lot coverage standards address building bulk, and building and fire codes handle health and safety concerns within buildings. Remove redundant standards that limit housing flexibility without improving development character, such as per-lot density standards (including minimum lot area per unit) and minimum per-unit floor area requirements.

PERMIT A MIX OF HOME TYPES

Use neighborhood precedents to consider what home types to permit by-right, such as ADUs, duplexes, fourplexes, or small townhome blocks. Re-enable these traditional uses throughout the neighborhood, on particular street frontages, or on corner lots.

FIX PARKING REQUIREMENTS

Zoning standards often cause parking to dominate a parcel, especially for multi-home development. To prevent unnecessary excess parking, eliminate residential parking minimums, or reduce them to 1 off-street parking space per home.

Focus standards on the location, not amount, of parking to support the neighborhood: require parking access via alleys or side streets, where parcels have access to these; prohibit front yard parking; and

require that the front façade of garages be set back at least 20 feet from the front façade of the home.

PERMIT ADDITIONAL RESIDENTIAL BUILDINGS ON LARGER PARCELS

In some cases, a parcel may be large enough to host two or more of the pattern home buildings offered here. Depending on the site, these may be side-by-side twins or mirror images; a front/back pair; or a “duplex court” of three or more buildings arranged in a U-shape around a central green shared.

Identify barriers to these arrangements in your code, such as requirements of only one residential structure per property, prohibitions against placing one residential structure behind another on a site, or build-to language that would require all homes to be within a certain distance of the front lot line (versus only the frontmost home).

CODING TO SUPPORT DESIRED PATTERNS

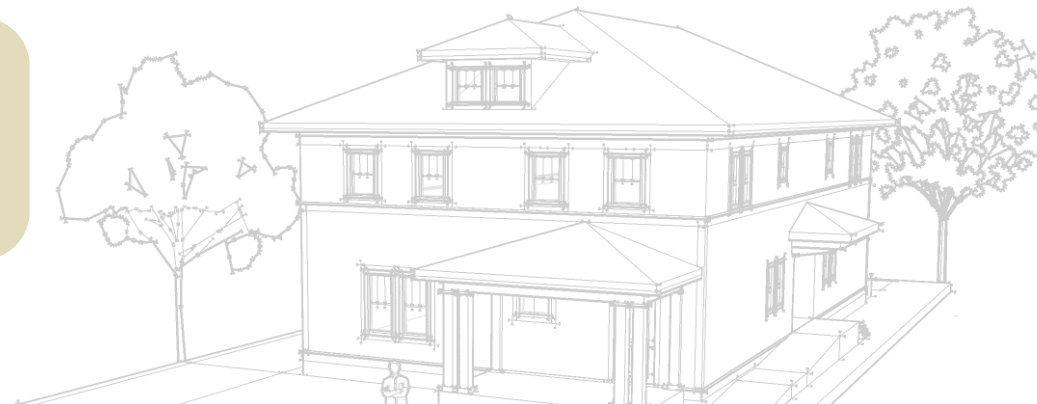
Each duplex and fourplex home pattern presented in this guide can be used as a target for code updates in any neighborhood. Building these may be the next step after code repair in a historic neighborhood to encourage compatible infill on individual vacant lots or can be applied to any area where additional home types are desired. We have examined many of the same code standards discussed in the repair approach addressed in the Users' Guide to Code Reform, but with specific targets of desired new-build home types in mind, rather than relying only on existing buildings.

The home patterns are presented with dimensional information that can be used to "stress test" an existing code—to identify and correct obstacles in the current zoning before a homebuilder encounters them. This can be a valuable exercise for local staff to perform with the Planning Commission and ZBA or with neighborhood residents to show precisely why the existing code needs adjustment, rather than simply presenting changed numbers.

In North America, a duplex is a building divided into two separate living spaces. Most duplexes are built with the two homes side by side, although you can also live in a duplex with apartments on two floors. The Latin duplex means "twofold," from duo, "two," and -plex, "to intertwine." The word was coined in the U.S. around 1922.

In that step of updating the code, the goal is to establish the desired home patterns as permitted / by-right construction that can be approved administratively in the same fashion as a single-unit house. Removing only some barriers while still requiring the home to receive variances, special land use approval, or a similar step does not achieve the goal of making desired development easy.

Additionally, this stress test process should be focused on the purpose of enabling identified home types. **While there may be the temptation to add new constraints or limitations simultaneously, that brings the risk of trading off old barriers for new, rendering additional homes non-conforming.**



To stress-test a local zoning code:

1. **Select the home patterns desirable in a particular neighborhood.**
2. **Identify several sample parcels in that neighborhood.** Ideally, these would include a few different parcel sizes and corner and mid-block options, as well as parcels with and without alleys, if these exist. A focus on currently vacant parcels or side lots is reasonable, but the process should also consider whether these represent the neighborhood as a whole.
3. **Attempt to site each of the home patterns on each sample lot in a sketch plan,** documenting any points at which the existing zoning standards would block construction or require a variance or other discretionary approval.
4. **Amend the code to remove those barriers.**

OFFER PRE-APPROVED BUILDING PLANS

Some communities are taking the step of pre-approving specific building plans for neighborhood construction. **Under this approach, the municipality offers a library of construction plans that have already undergone review by the local code official and designates areas where those specific plan sets may be used.** This designation may be simply highlighting neighborhoods with compatible zoning and dimensional standards or may potentially be written into the zoning code. For example, the city of Bryan, TX, specifically lists their pattern buildings as permitted uses in an overlay district applied to the area where this development is desired.

A builder may then use one of the pre-approved plansets for their project rather than incurring the time and financial expenses of having new plans drawn up and reviewed by code officials.

This does not completely eliminate code review, but it does provide significant savings—both on the developer’s side and in the municipal administration of plan review.



Some steps still remain for review:

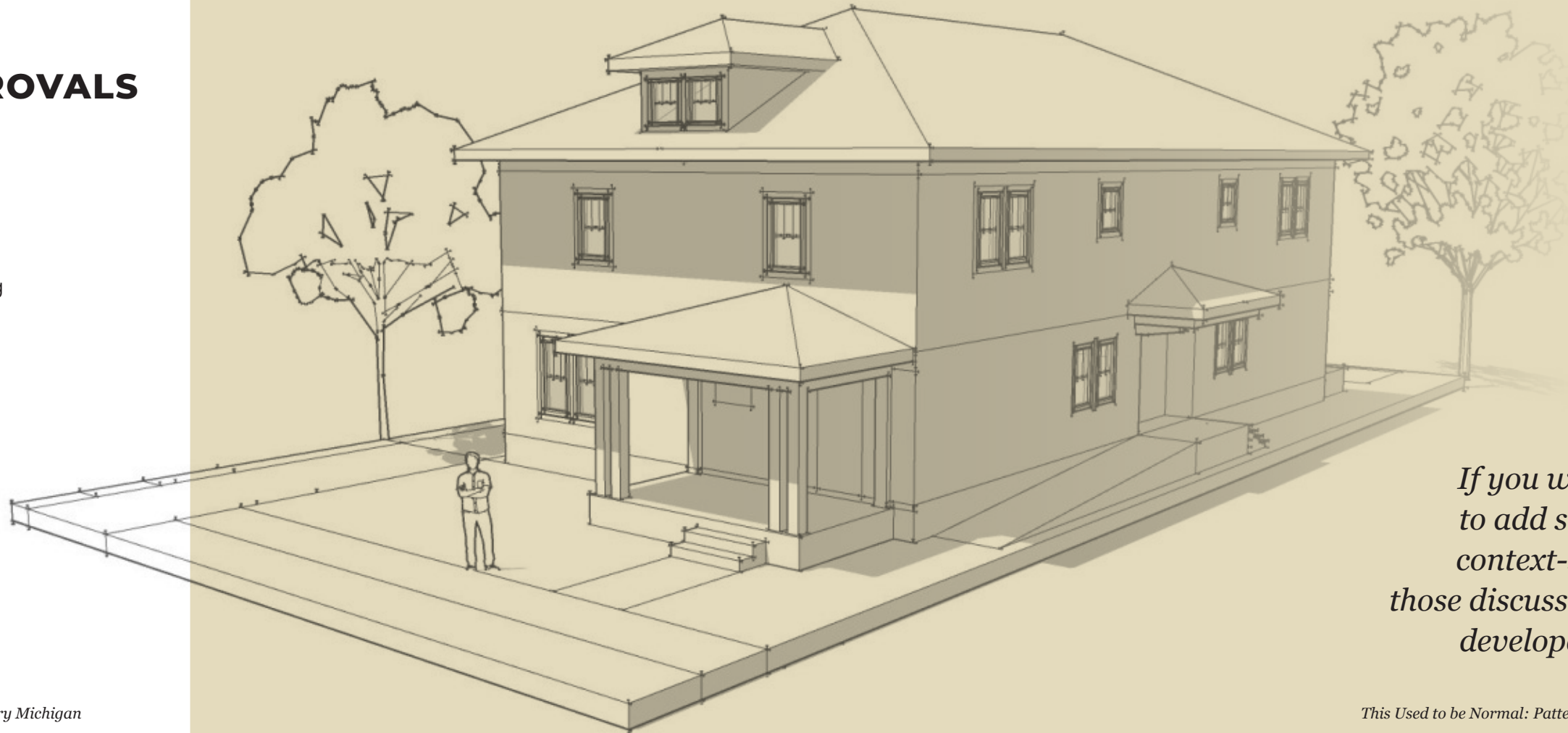
- 1. The builder may still need to have their individual copy of the plans stamped by an architect; this can either be an individual builder’s responsibility or a service the municipality contracts with a designated architect to provide.
- 2. The placement of a pre-approved building on a specific site must still have setbacks, etc., verified.
- 3. Controls like wetland or steep slope protections or stormwater management requirements should be maintained.

In addition to the patterns included in this guide, communities may also consider adopting plans created independently by other municipalities (such as those linked in the “Additional Resources” section) or having their own prepared.

PROVIDE BY-RIGHT ADMINISTRATIVE APPROVALS

Regardless of what combination of the above methods is used, the desired homes should be able to receive approval through an administrative process, without the need to seek variances from the ZBA, site plan reviews by the Planning Commission, or any action by the local elected body. All of those processes add both time and uncertainty to the task of creating new homes, which reduces the number of homes built, increases the cost of every new home created, and cuts smaller, neighborhood-scale developers out of the process.

Again: Every additional review process or body engaged keeps your community further from that goal.



If you want your neighborhoods to add small-scale, fine-grained, context-sensitive new homes like those discussed here, make it easy for developers to build those homes.

EYES ON THE PRIZE

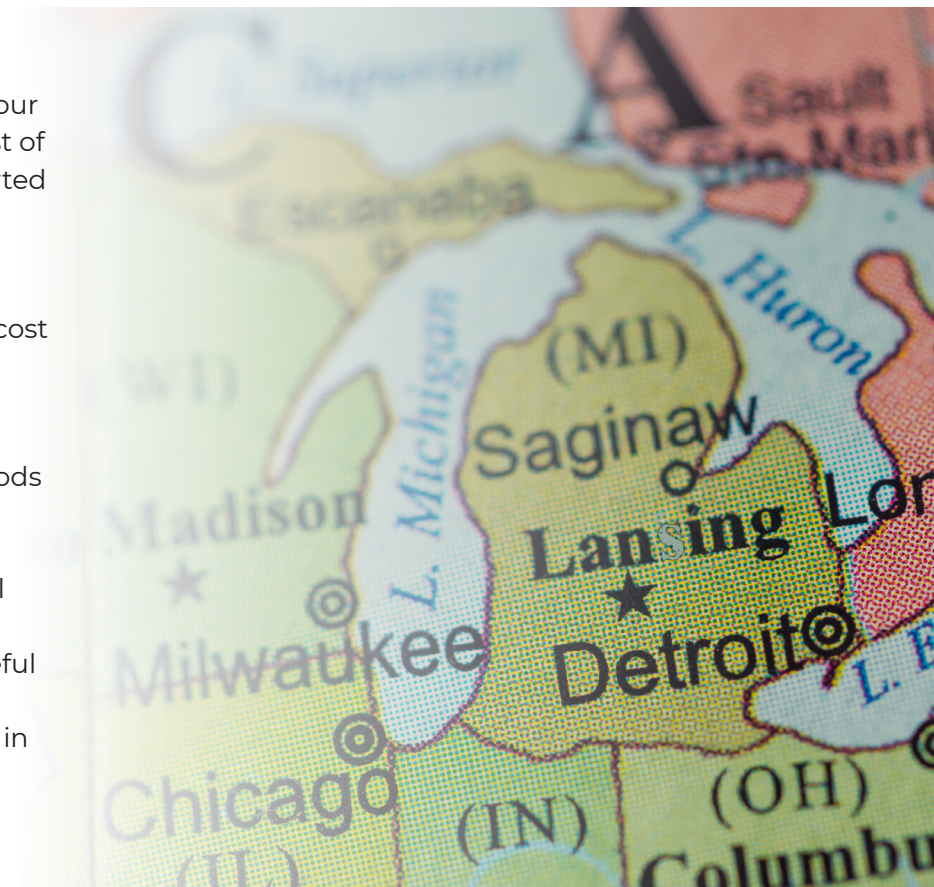
Thoughtfully designed landscapes don't occur by accident. Walkability is central to contemporary conversations on community and economic redevelopment in neighborhoods of all sizes across the state. This is also true in peer communities around the United States. The ability to easily pop into the local craft brewery, bike to the market, or for your kids to walk to school is prized by those who are also in the market for newly constructed housing options. Well-managed population density leads to sought-after communities with a strong economic core that improves property values over time. The drawback is that when cities invest in residential construction in their downtown areas, it is often compounded by a costly permitting and site plan approval process that adds significantly to the cost of construction of higher-density housing units.

Many of the same reasons that Michigan is ill-equipped to handle growth are the very same reasons that the costs of new construction are so high in this state compared to others. Michigan's classic strategy over the past decades has been to expand outwards with new greenfield construction on an auto-oriented landscape – whether we're growing on net or not.

Michigan has expanded its developed land area by 50% in 30 years, a greater than 5:1 ratio of infrastructure expansion to population growth.

Adding infrastructure so much faster than growing our population of people to pay for it means that the cost of that infrastructure is drastically increased. Unsupported and often unnecessary outward expansion directly impacts the cost of doing business in Michigan. The growing scarcity of land leads to increased costs for buildable lots, which, in turn, increases the baseline cost to build new.

Making small changes to enable the introduction of gentle density in our already developed neighborhoods is a thoughtful and low-cost strategy to concentrate reinvestments in our communities and utilize infrastructure already in place. Layering in additional housing units and relying upon the precedents of form, massing, height, lot placement, and other careful design elements can accomplish what was done decades ago: welcoming in more neighbors, hidden in plain sight.





PART III

DESIGN & FINANCIAL CONSIDERATIONS

CRITICAL REGIONALISM FOR MICHIGAN

When approaching the idea of home, we acknowledge that housing comes in many formats. Referencing the broad array of manuals available for Accessory Dwelling Units (ADUs) and the need already met in that sub-set of housing formats, the design problem for this project has centered specifically on Duplexes and Fourplexes.

Grounding in block-level context is critically important when building new housing that blends seamlessly within a single-family format dominated landscape. How a house presents itself visually is of eminent importance for its lasting impact on the landscape. How does a building touch the sky? How does it connect to the ground? How is it accessed from the street? Are there easily comprehensible entries, and does it invite sociability?

*In the case of this project, we also asked:
Does it look like it's in Michigan?*

For each model shown in this manual, several optional skins of varying styles are presented for customization on the building site. The design team's intention has been to illustrate a selection of options and design choices that can be applied to each floor plan. For those exterior appearances, the design team set forth intent on authentic emulation of historic pattern books and kit homes. This work is also done with a healthy dose of respect for the building traditions found in existing neighborhoods; a contextual approach is often called critical regionalism. The idea of critical regionalism in architecture is rooted in the modern tradition, and it is tied to geographical and cultural historical context. **In observing these elements, we identified key components which make a dwelling functional, comfortable, and visually compatible with the common housing types in this region.** We have employed a progressive approach to design that seeks to mediate between the global and the local languages of architecture.

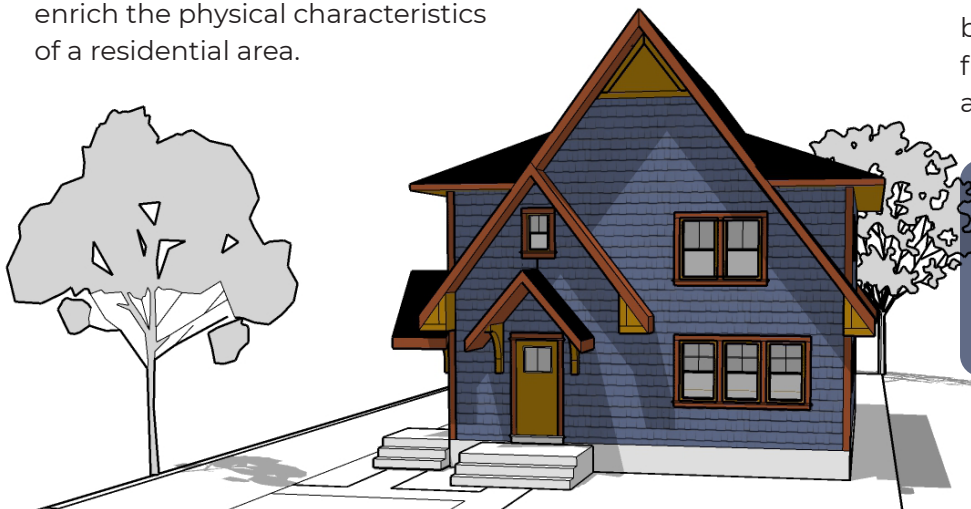
We also acknowledge that the current housing stock was created through historic design influences and shifts in building technology. At the turn of the twentieth century, manufacturing led to streamlining house construction. The Victorian Era and its complex hallmark, Queen Anne/Folk Victorian, gave way to more restrained derivations, including the balloon-framed Free Classic, built with more readily available dimensional lumber milled with industrial equipment. Ornamentation slimmed down or disappeared. Commonly seen in an upright and wing or gable-fronted or gable-dominant ell format, this housing form was so ubiquitous that it was thus named “The Michigan” by Aladdin Homes in 1914.

While Tudor Revivals, Craftsman Bungalows, Georgians, and Dutch Colonial Revivals made a heavy showing in Michigan neighborhoods during the early decades of the twentieth century, with a few notable exceptions, a relatively small number of exotics, such as Mediterranean Revivals or Art Deco style made

their way into Michigan’s middle-class domestic architecture. In contrast, Midwest born and bred, the Prairie style is native to the region.

These dominant styles and related forms have colored the plans presented in this manual.

The models presented here are intended primarily as discrete infill for vacant lots laid bare by blight removal or lots never built up. They can also be built as part of a more significant undertaking for many new housing units constructed at once. In either case, the construction of these new housing units will enrich the physical characteristics of a residential area.



In considering the existing conditions of neighborhoods in Michigan communities, the design process for these models has also given careful deference to the Secretary of the Interior’s Standards for Rehabilitation. This set of guidelines is recognized at the national level as the measure by which most historic district commissions evaluate alterations to historic properties or new infill in designated districts. To be clear, if a lot is selected for building one or more of the models presented in this manual and is located in a local historic district covered by a local ordinance, the design review process is conducted at that community level by the local historic district commission.

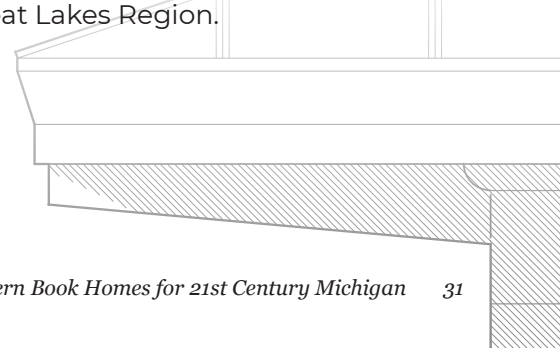
Regardless of the local historic district status of future building sites, the design process has held close to the fundamental principles of compatible building form and careful lot placement.

Per Secretary’s Standard #3, “Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.”

The models outlined in this manual are artifacts of their time. Once constructed, they will be visibly new construction that reflects historic antecedents.

Per Secretary’s Standard #9, “New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.”

The models in this manual echo current housing forms, size, scale, and massing. Once built, they will increase density and strengthen walkable, downtown adjacent neighborhoods. In doing so, they will perpetuate visual cues consistent with residential building stock in Michigan and the Great Lakes Region.



HACKING THE COSTS OF CONSTRUCTION

The need for more housing units of all types remains palatable in nearly every Michigan community and is hindered by increasing costs.

New construction is expensive in not only the case of private housing but also in the public and corporate housing sectors. According to the Michigan Statewide Housing Plan, affordability remains a significant barrier in Michigan. Before the Covid-19 Pandemic, 48% of Michigan renters and 18% of homeowners paid more than 30% of their monthly income for housing. Between January 2013 and October 2021, the average sales price for a home in Michigan increased by 84%. During that same period, the asking rent for a Michigan apartment increased by 20%, with the highest increases registered in mid-market properties most likely to contain affordable units.



Rising and fluctuating costs of materials create uncertainty. Even when new housing options are approved and encouraged, the most desirable housing choices come with a high price tag that pushes costs into the luxury market. The scarcity of a skilled labor force to build and rehab housing also comes into play, with insufficient capacity to meet demand. And, with a few notable exceptions, attempts to increase the labor force are faced with struggling or stagnating trades and apprenticeship programs. Nevertheless, current housing market reports show that the supply and demand curve remains in full effect. When supply is low and demand is high, then prices increase. Thus, in Michigan, we have an increased unmet need for skilled labor and supply chain challenges for material, leading to higher construction costs.

This is not a new problem to address. Land and materials costs, labor supply, and the permitting and site plan approval process add significantly to the construction cost of higher-density housing units.

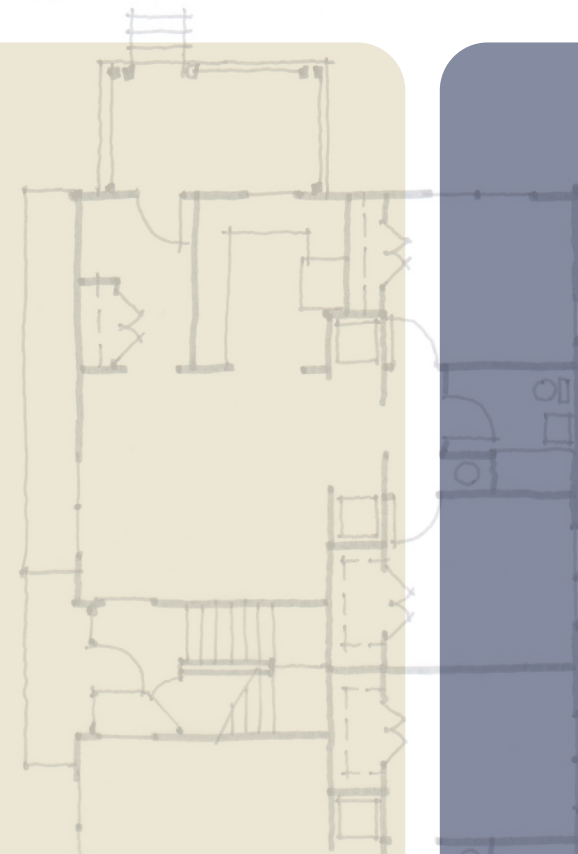
These three core variables create barriers to success for the kinds of projects ostensibly needed by Michigan residents. The trick is understanding exactly what the costs are and the impacts contributing to this high-cost environment in Michigan, then addressing what can be changed head-on.

DESIGNING-IN COST REDUCTIONS

The models in this publication embody a pragmatism focused on attainable building costs. However, the plans and materials proposed are not cheap. **Early on, design sacrifices were made to generally keep costs down where possible and focus resources on maximizing square footage and efficiency of the layout.**

1. REDUCED PARKING MINIMUMS

The site plans presented in this publication provide minimal parking accommodations. Working in coordination with our best practices zoning recommendations, off-street parking is offered for only one car per unit. If the chosen lot has alley access, a rear-loaded access point would be preferable, not only for design considerations and lot maximization but also to reduce the cost of concrete in pouring parking pads. Similarly, no garages are depicted in these site plans. While garage(s) can most certainly be constructed at the discretion of local implementors, either during initial construction or as a later site addition, this type of structure does not figure into our designs, and substantial costs are saved as a result.



2. BUDGET-CONSCIOUS FOUNDATIONS

None of our presented designs are depicted on a basement foundation. While basements are common in Michigan, their excavation and construction are additional costs that can be reduced by choosing a raised foundation of concrete blocks. This alternative provides height comparable to adjacent existing housing without incurring the price of a full basement. It also creates an accessible crawl space that can be insulated for energy efficiency and can house separate HVAC units if additional storage space is desired in each unit. Of course, a basement can be built at extra cost if desired.

3. MODEST INTERIOR FEATURES

Fireplaces and built-in shelving, traditionally associated with many pattern book and kit homes from the pre-World War II era, are missing from these models. Such features are nice to have and, in some cases, can be fitted into the space at a later date, and they are not necessary at the initial outset in setting up functional living spaces.

OTHER COST CONTAINMENT STRATEGIES

The cost for constructing these models can be somewhat contained through the following strategies.

1. SAVVY LAND ACQUISITION & READY ZONING

Keeping costs within an attainable range is predicated on the expectation of low or no-cost land acquisition, the reduction of permitting fees, and the preparation or identification of likely development sites by implementing zoning updates, as discussed in Part II of this guide. Municipalities can reduce or eliminate land costs by utilizing vacant lots created by blight removal, brownfield remediation, or historic undercapitalization. Sale by the municipality, landbank authority, or non-profit entity for little or no cost could substantially reduce the overall project costs.

2. OPTIONAL FINISH LEVELS

Housing units can be constructed at various finish levels. A pared-down building gets built. It can be upgraded over time. Cheapest is not best, however, and guidance is offered in the Options Sheet on choosing durable exterior and interior detailing of moderate quality that will be a wise investment in the long run.

3. INCREMENTAL EXPANSION

Getting the core block of the building constructed is the first step to providing the basics of shelter. Like the existing neighborhoods these models seek to emulate, contextually sensitive and naturally occurring additions of additional bedrooms, bathrooms, and other living spaces are entirely valid options. Such incremental growth is typical of many housing types, persisting because they break down the cost of construction over time and can be initiated as household needs grow and change.

4. LOCAL INCENTIVES FOR CREATIVE FINANCING PACKAGES

Despite the cost containment strategies outlined here, due to rising materials and labor costs, the average total capital outlay to build these models still far exceeds the attainability range for residents of nearly every community in Michigan. In the face of such discouraging odds, community leaders can take action to reduce overall project costs by partnering

with non-profit and private developers and employing their toolkit of financial incentives at the local level. Local leaders can also lend their endorsement of projects and advocate with lenders to utilize or create loan products that enable this form of new housing creation.

By layering additional incentives within the developer’s complex capital stack, the overall per-unit cost can be reduced, thus reducing the minimum sales or rental price point. These tools include, but are not limited to, the use of the following:

- Tax Increment Financing (TIF)
- Local Bonds & Millages
- Strategic Funds
- Brownfields & OPRA (obsolete property rehabilitation act)
- CDBG (community development block grants)
- Neighborhood Enterprise Zones
- Community Land Trusts

By placing housing as a high priority and leveraging multiple tools in both zoning and creative financing, community leaders can assist builders and developers with bringing the costs of construction closer to the range of attainability for Michigan households. In the end, an investment in creating new housing units is a win for local tax revenues. More importantly, it has a lasting impact on a community’s ability to welcome and retain residents.

ELEMENTS OF DIGNITY AND COMFORT

In contrast to the cost reduction measures deployed, several key features that contribute daily to residents' quality of life have been designed into these models.

SEPARATE ENTRIES

Covered entry for each unit to shelter from the elements, provide a landing place for residents and guests, and create a separation between exterior and interior with a natural rain/snow/wind sifting. For each model shown, a formal entry has been planned for at least one unit from the front of the home, supporting visual fit with neighboring residences.



ACCESSIBILITY

The patterns presented are all stacked flats rather than side-by-side or townhome units. This allows the first-floor units to be fully accessible without stairs, adding much-needed options for residents with mobility-limiting conditions or seeking aging-in-place options. All doorways are compatible with universal design standards. Where possible, accommodations have been made to leave open the optional installation of ramps at outdoor entrances and grab bars in bathrooms.

FIRE SEPARATION

The unit is built with complete fire separation, including rated walls in both duplex and fourplex. The fourplex includes the addition of sprinklers in compliance with current IBC: while this could be avoided with townhome-style units, that interior layout did not address other design constraints.

SOUND BAFFLING

Sound buffering between units has been accomplished by careful stacking of service areas. Firewalls/fire separations have been created and enhanced with additional insulation.

SEPARATE HVAC UNITS

The design team placed the highest value on the assurance of complete air circulation separation for comfort and code compliance and the ease of individual billing ability per unit.

IN-UNIT WASHERS/DRYERS

Nearly standard in all contemporary new construction is the amenity of a clothes laundry. Each unit has an individual, not community shared, washer/dryer unit.

INTERIOR AND EXTERIOR MATERIALS SELECTIONS

The design process and considerations endeavored to set forth a menu of options to visualize a few floorplans with a variety of interchangeable skins. While the level of detail presented is more complex, the user can peel back finish levels to result in a more pared-down version of the design without sacrificing the bones of the building.

Generally, materials selections are provided at a grade level that will not adversely affect the attainable cost approach of the model yet still have fidelity to the core belief that durable, repairable materials will last longer and be a better investment over time. Alternate exterior materials are illustrated on the Options Sheet but are not detailed comprehensively within the drawing set. Given other design sacrifices made in the modeling process, it is implied that

the cheapest materials should be avoided. More explicitly, cladding choices such as HardiPlank clapboards or shingles, stucco, and/or masonry veneer are far preferable to vinyl or other low-end finishes due to their durability, repairability, and environmental impact. Roofing should be dimensional asphalt shingles.

Similarly, the construction documents generally assume interior selections from a mid-range list for counters, floors, trim, and molding types.



PRICING ASSUMPTIONS

During the programming phase, it was determined that, given the construction cost at the time of publication in mid-2022, the residential units would be market-rate products, possibly reaching attainable pricing in some markets with simplified details and careful material selection.

While it is possible to reduce or increase costs due to variances in materials choices, fluctuations

in labor costs, or other financing constructs, we established a baseline for the sake of estimation. We used a unit cost of \$250/sf for mid-grade materials, resulting in building costs of approximately \$500,000 for the Duplex and \$915,000 for the Fourplex. We remain sensitive to fluctuating materials and labor costs – these numbers are current estimates as of May 2022.

Duplex					Fourplex				
	ESTIMATE	ACTUAL	UNIT COST	COSTS		ESTIMATE	ACTUAL	UNIT COST	COSTS
UNIT AREA	1,000 SF	999 SF	\$249,500		UNIT AREA	900 SF	833 SF	\$228,750	
BUILDING AREA	2,000 SF	1,998 SF	\$250/SF	\$499,500	BUILDING AREA	3,600 SF	3,660 SF	\$250/SF	\$915,000

PART IV

SCHEMATICS

BUILDING ASSUMPTIONS

Our goal was to coordinate the appearance of the buildings with the anticipated context of single-family, detached residences. The buildings have been designed to reflect construction details found in the Great Lakes region. We composed or detailed the buildings where feasible to suggest that the building has developed over time to fit its neighborhood's context.

Schematic designs were developed with a basement or partial lower level for mechanical equipment. However, accommodations have been anticipated for slab-on-grade or crawl space construction with in-unit mechanicals.

- **The Options Sheet notes where barrier-free entry ramps may be located within the 50'x100' design parcel.** The assumption of rear-yard parking includes ramps aligned for convenient access from that direction.



- **Some items are indicated as blanks for local calibration—some aspects of the plans cannot be one-size-fits-all, especially in a state with 400 miles of north-to-south variability in climate.** This calibration includes items such as footing depth, R-value of insulation, and roof truss sizing for snow load—individual communities may opt to perform this calibration once for their local copy of the construction plans rather than leaving it to be repeated by each builder.

Duplex

The duplex pattern was organized with one primary door on the front façade, facing the street, for the first-floor home. The secondary door is located on the side but near the front of the building and is also oriented toward the street. It is detailed to offer equal dignity to the upstairs resident.

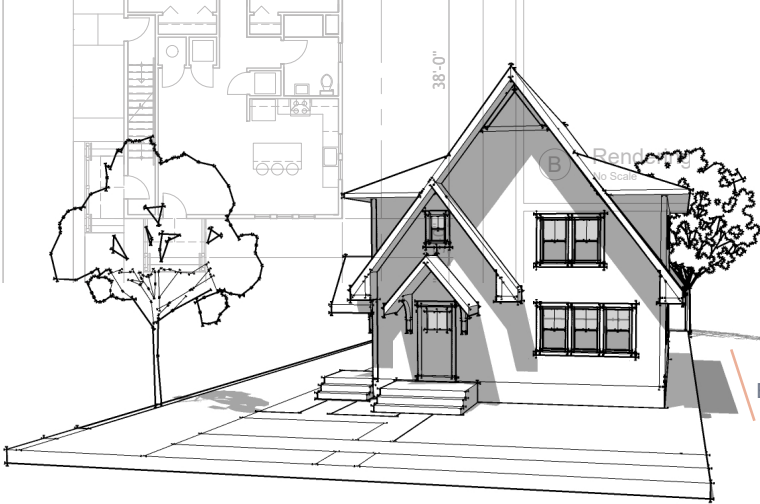
The table shows how this pattern may interact with various standards found in zoning codes, including the minimum values needed to enable this home on different lot sizes, including lots both smaller and larger than the design assumption.

As noted in the zoning recommendations section, some standards may be found in local zoning ordinances that are redundant with the form and placement standards discussed here, that conflict with the goal of enabling housing, and that are too abstract to provide meaningful regulatory value. We recommend that FAR (floor area ratio) and dwelling unit density standards in particular be avoided in neighborhood contexts, or removed where they currently exist.



28 ft*
BUILDING WIDTH

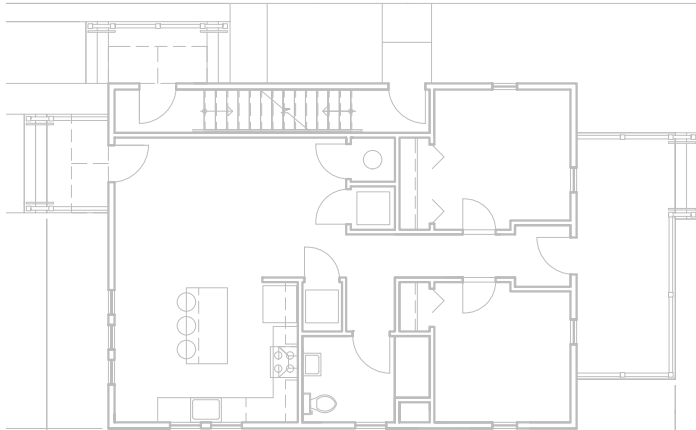
2
HOMES
1,998 ft²
TOTAL FLOOR AREA
1,064 ft²
TOTAL FOOTPRINT



38 ft*
BUILDING DEPTH

Building Coverage by Lot Depth	Density (units per net acre)
40 FT LOT WIDTH	
100 ft: 27% 110 ft: 24% 120 ft: 22%	100 ft: 22 110 ft: 20 120 ft: 18.5
50 FT LOT WIDTH	
100 ft: 22% 110 ft: 20% 120 ft: 18%	100 ft: 17.5 110 ft: 16 120 ft: 15
60 FT LOT WIDTH	
100 ft: 18% 110 ft: 16% 120 ft: 15%	100 ft: 15 110 ft: 13.5 120 ft: 12.5

Duplex Pattern



Lot Width	Side setbacks needed to enable	Parking locations
40 FT	- Both sides total of < 12 ft - One side < 4 ft - Allow un-enclosed porch to encroach in wider side setback.	- Rear-load (alley) - Side-load (corner lot) - Side yard 8 ft. max width driveway
50 FT	Both sides total < 22 ft	- Rear-load (alley) - Side-load (corner lot) - Side yard driveway
60 FT	Both sides total < 32 ft	- Rear-load (alley) - Side-load (corner lot) - Side yard driveway

Fourplex

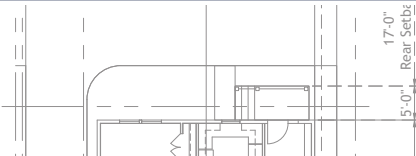
The fourplex building features a front-facing entrance in the front main unit to fit with the expected neighborhood setting and presents a façade similar to nearby single-unit houses. The primary entrance for other units is on the side façade, allowing a central stairway to access all of the homes in the building.

The table shows how this pattern may interact with various standards found in zoning codes, including the minimum values needed to enable this home on different lot sizes, including lots both smaller and larger than the design assumption. Note that while the duplex pattern can easily be fit on a 40-foot-wide lot, the dimensions of the fourplex pattern make it difficult to place on such a parcel.

4 HOMES
3,660 ft² TOTAL FLOOR AREA
1,911 ft² TOTAL FOOTPRINT



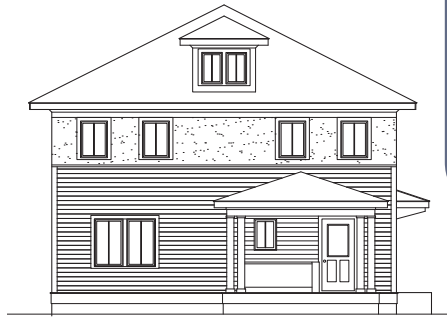
Lot Width	Side setbacks needed to enable	Parking locations
40 FT	Both sides total < 6 ft	- Rear-load (alley) - Side-load (corner lot)
50 FT	- Both sides total < 16 ft - One side < 6 ft if from driveway is needed	- Rear-load (alley) - Side-load (corner lot) - Side yard driveway
50 FT	Both sides total < 26 ft	- Rear-load (alley) - Side-load (corner lot) - Side yard driveway



(A) Rendering
No Scale

Fourplex Pattern

Building Coverage by Lot Depth	Density (units per net acre)
40 FT LOT WIDTH	
100 ft: 48% 110 ft: 44% 120 ft: 40%	100 ft: 4.4 110 ft: 4.0 120 ft: 3.6.5
50 FT LOT WIDTH	
100 ft: 38% 110 ft: 35% 120 ft: 32%	1100 ft: 3.5 110 ft: 3.2 120 ft: 2.9.5
60 FT LOT WIDTH	
100 ft: 32% 110 ft: 29% 120 ft: 27%	100 ft: 2.9.5 110 ft: 2.6.4 120 ft: 2.4.5



34 ft*
BUILDING WIDTH

SITE ASSUMPTIONS

Single Site Infill

The duplex and fourplex patterns included in this manual were prepared with an assumption of 50' x 100' lots as a common lot size in traditional neighborhoods around the state. With careful attention to setbacks, the duplex will fit on a 40' wide lot.

A minimum side setback of 5 feet allows a 50' parcel to have a front-loading driveway on the wider side of the lot leading to rear parking if alley access is unavailable. Where possible, rear access via an existing or new alley reduces the paving needed on the site, decreasing construction cost and stormwater runoff and heat absorption.

The provided plans can be mirrored to place the site entrance towards either the left or right lot line. Ideally, the site plan should provide the home with a

larger setback on the side with the door for entry access from a driveway or to a larger side yard. This deeper side yard should be placed facing south or west, depending on lot orientation, to maximize natural light availability to the homes.

While specific measures were undertaken to simplify the building footprints, some adjustments, including site grading, may be necessary to accommodate the building. As with other local variations, the local design professional will need to undertake these adjustments.

Tackling Larger Sites

While this guide focuses on a single-parcel infill as the primary use case, these patterns could also be used on larger lots, whether they are a few adjacent infill parcels on a block or a larger site. Having a handful of similar homes in a row is itself a typical historical building pattern and provides some opportunities that a one-off site lacks:

- Use shared vehicle access points to minimize the amount of space consumed by driveways and curb cuts or create new side street or alley access points.

- Maximize usable green space by mirroring or rotating buildings relative to each other so that entries relate to each other and face a well-designed common yard area.

- Employ incremental construction of homes rather than building all at the same time. This method may allow a homeowner-developer to live in the first building and construct the others as financing allows or provide opportunities for the use of these patterns in cooler local housing markets where only a few homes can be absorbed at a time.

Consider adding architectural variations, such as through color, finish materials, or entry design, when using more than two or three of the same building on a site.



ADDITIONAL RESOURCES

CONTEMPORARY BUILT EXAMPLES IN THE US

Bryan, TX, <https://www.bryantx.gov/midtownpatterns>

Chattanooga, TN, <https://www.incrementaldevelopment.org/chattanooga>

Norfolk, VA, <https://www.norfolk.gov/DocumentCenter/View/66555/MissingMiddlePatternBook>

Seattle, WA, “ADUniverse” <https://aduniverse-seattlecitygis.hub.arcgis.com>

Fayetteville, AR, <https://www.3vdevelopment.net>

DESIGN RESOURCES

Building Technology Heritage Library of the Association for Preservation Technology, Int., <https://archive.org/details/buildingtechnologyheritagelibrary>

Flintlock Lab, <http://www.flintlocklab.com>

Incremental Development Alliance, <https://www.incrementaldevelopment.org>

Missing Middle Housing, <https://missingmiddlehousing.com>

Secretary of the Interior’s Standards for Rehabilitation, <https://www.nps.gov/tps/standards/rehabilitation.htm>

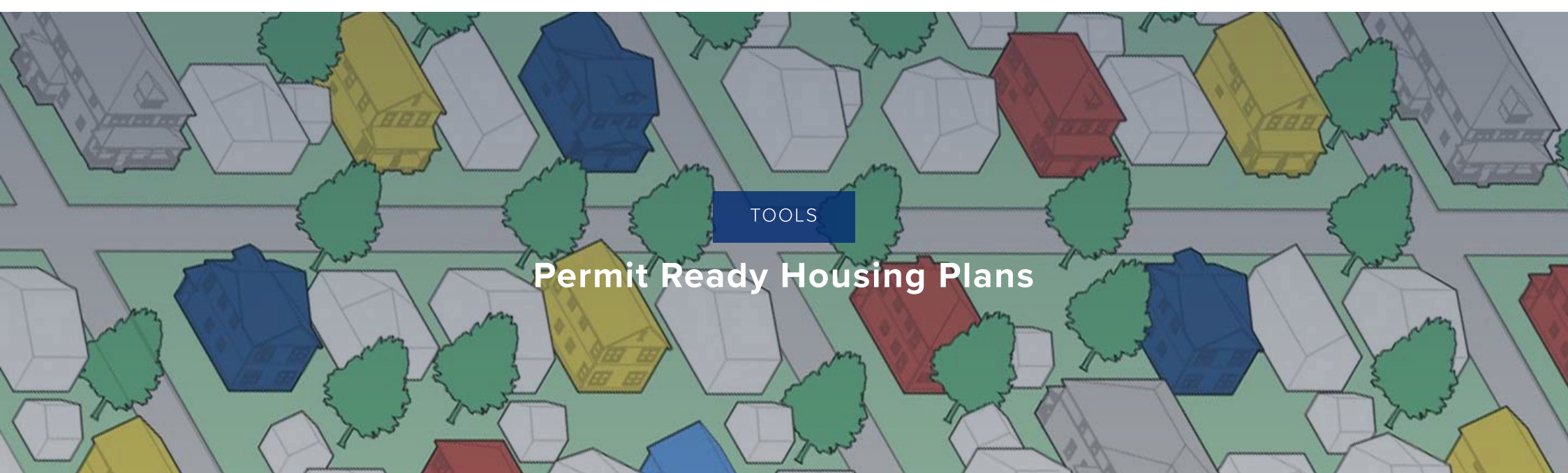
BOOKS

The Color of Law: A Forgotten History of How Our Government Segregated America by Richard Rothstein. Liveright Publishing Corporation, 2017.

America’s Favorite Homes: Mail-Order Catalogues as a Guide to Popular Early 20th-Century Houses by Robert Schweitzer and Michael W. R. Davis. Wayne State University Press, 1990.

Houses by Mail: A Guide to Houses from Sears, Roebuck and Company by Katherine Cole Stevenson and H. Ward Jandl. John Wiley & Sons, 1995.

Building the Dream: A Social History of Housing in America by Gwendolyn Wright. MIT Press, 1983.



The Redevelopment Services Team is piloting "permit ready" housing plans to streamline project approval processes for pre-approved housing types. These open source stamped housing plans and handbooks are available for any community in Michigan.

These permit-ready housing plans are made possible through the partnership with the MEDC, the Michigan Municipal League (MML), the City of Grand Rapids, and Driven Design, LLC.

Housing Designs

We are offering a series of proposed housing layouts, designs, and densities for the construction of duplex, and quadraplex residential development. These proposed plans are both architecturally contextual to a “traditional neighborhood” and sized appropriately for typical vacant lots in cities across the state. In total, five (5) complete plan sets were developed which include three (3) duplex and two (2) quadraplex housing options.



DUPLEX HOUSING MODELS





The Macey Handbook

[Download Here](#)



The Luce Handbook

[Download Here](#)



The Herman Handbook

[Download Here](#)

QUADRAPLEX HOUSING MODELS



The Fritz Handbook

[Download Here](#)



The Retting Handbook

[Download Here](#)

READY TO BUILD?

Fill out the form below to download the Permit Ready Housing Construction Drawings.

***Name**

***Email**

***Company Name**

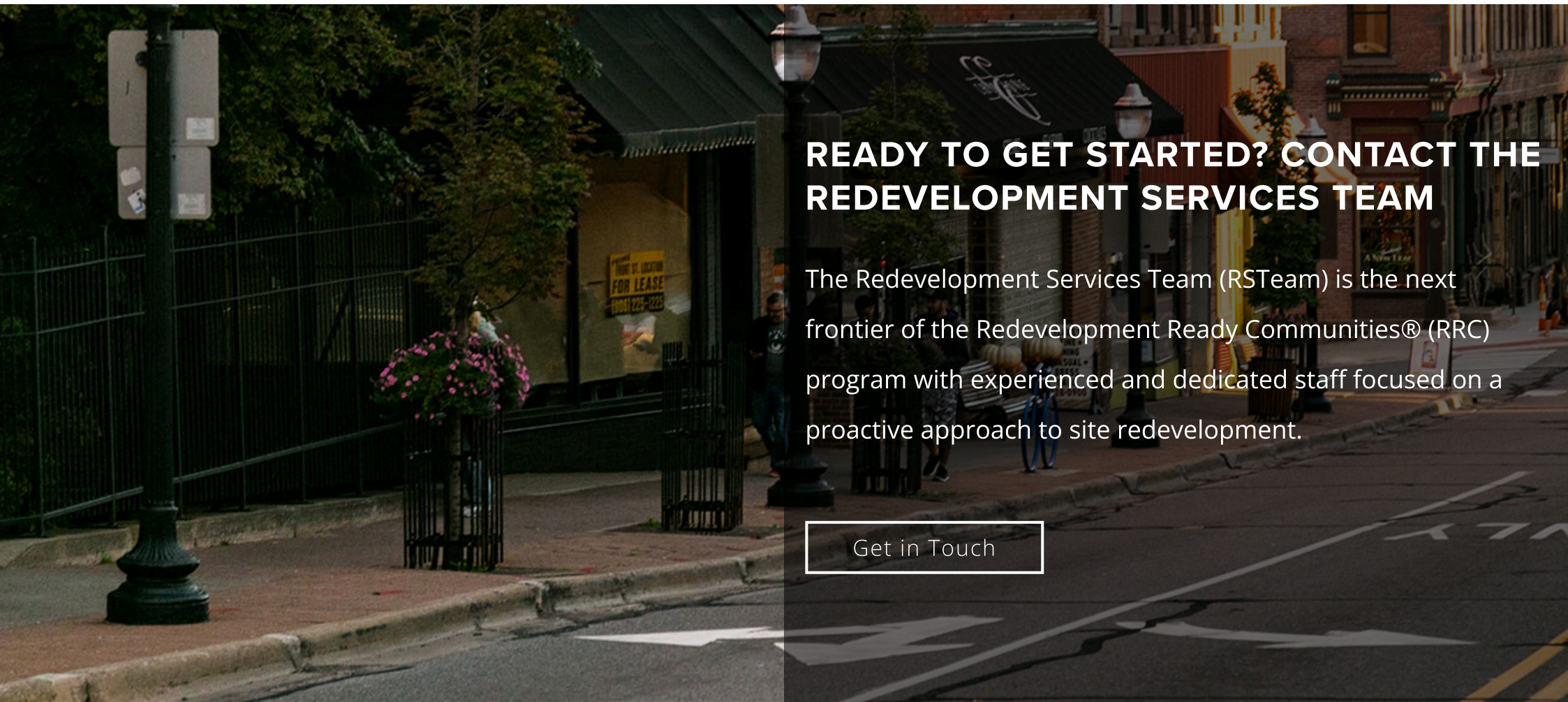
[Submit](#)



Pattern Book Homes

The MEDC has partnered with the Michigan Municipal League to offer the Pattern Book Homes manual and plans to communities across the State of Michigan. This manual and the accompanying housing plans touch upon the history of housing development in the United States and Michigan, including the duplexes and fourplexes commonly constructed until the mid-twentieth century. It offers models for intertwining smaller-scale housing options into the existing urban fabric.

[Access Manual Here](#)



READY TO GET STARTED? CONTACT THE REDEVELOPMENT SERVICES TEAM

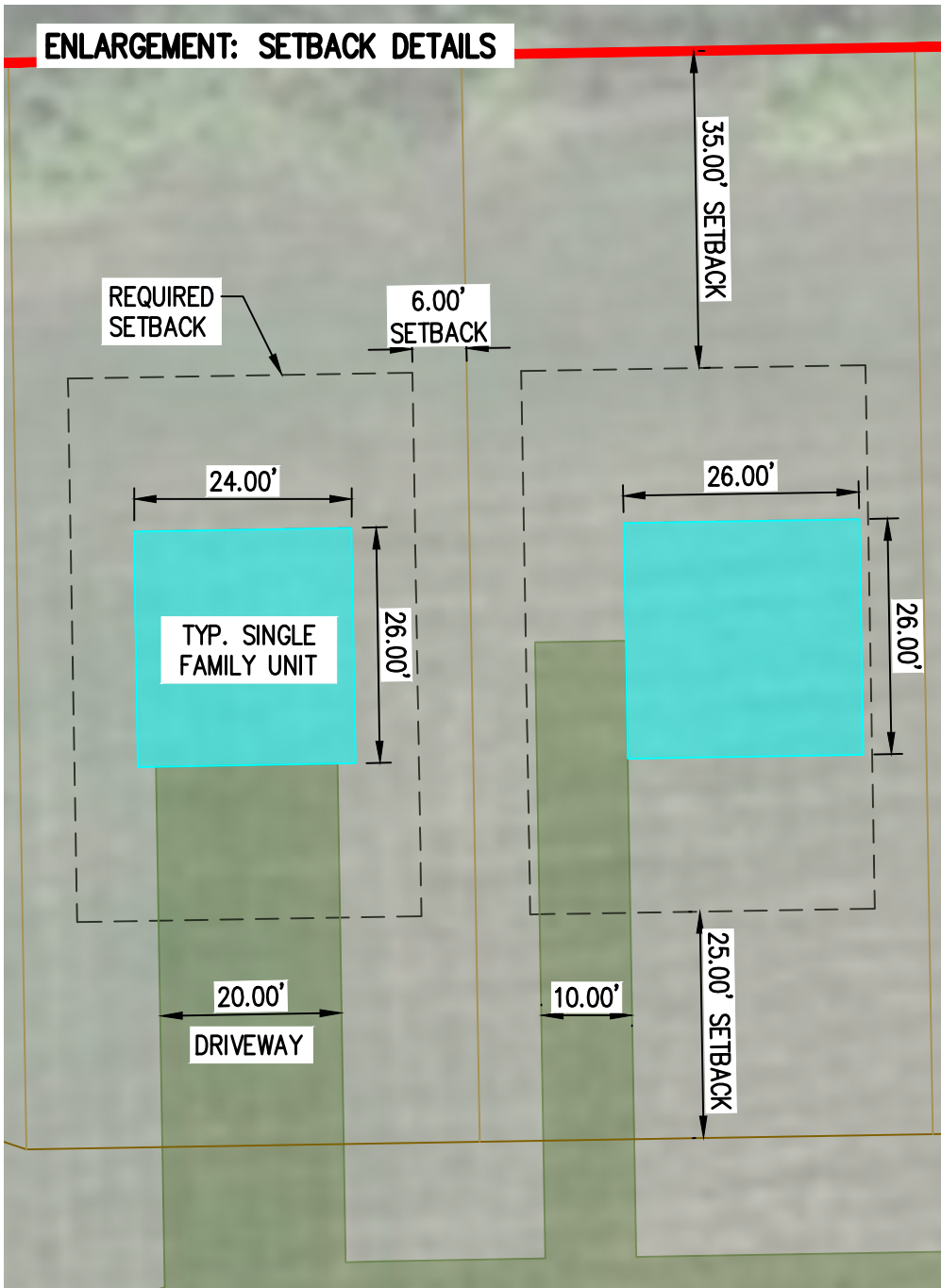
The Redevelopment Services Team (RSTeam) is the next frontier of the Redevelopment Ready Communities® (RRC) program with experienced and dedicated staff focused on a proactive approach to site redevelopment.

[Get in Touch](#)

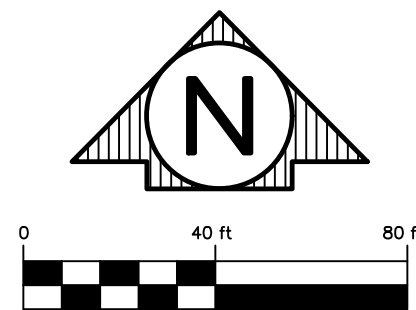
SINGLE FAMILY LOT CONCEPT



EXAMPLE OF TYP. SINGLE FAMILY UNITS



SUMMARY:
32 LOTS, AVG 0.14 ACRE
UNIT SFT AS SHOWN AVG 650 SQFT
SITE TOTAL 7.24 ACRES
ROADWAY, 24' WIDE, 981 LFT, CURB AND GUTTER, 1,576 LFT



PLAN DATE: FEBRUARY 2025
PROJECT MGR: ###
REVIEWER: ###
SCALE: 1" = 40'

ROWE PROFESSIONAL SERVICES COMPANY
The Rowe Building
540 S. Saginaw St., Suite 200
Flint, MI 48502
O: (810) 341-7500
www.rowepsc.com

PREPARED FOR
CITY OF LAPEER
WHITE JUNIOR HIGH MEDC
SINGLE FAMILY LOT CONCEPT



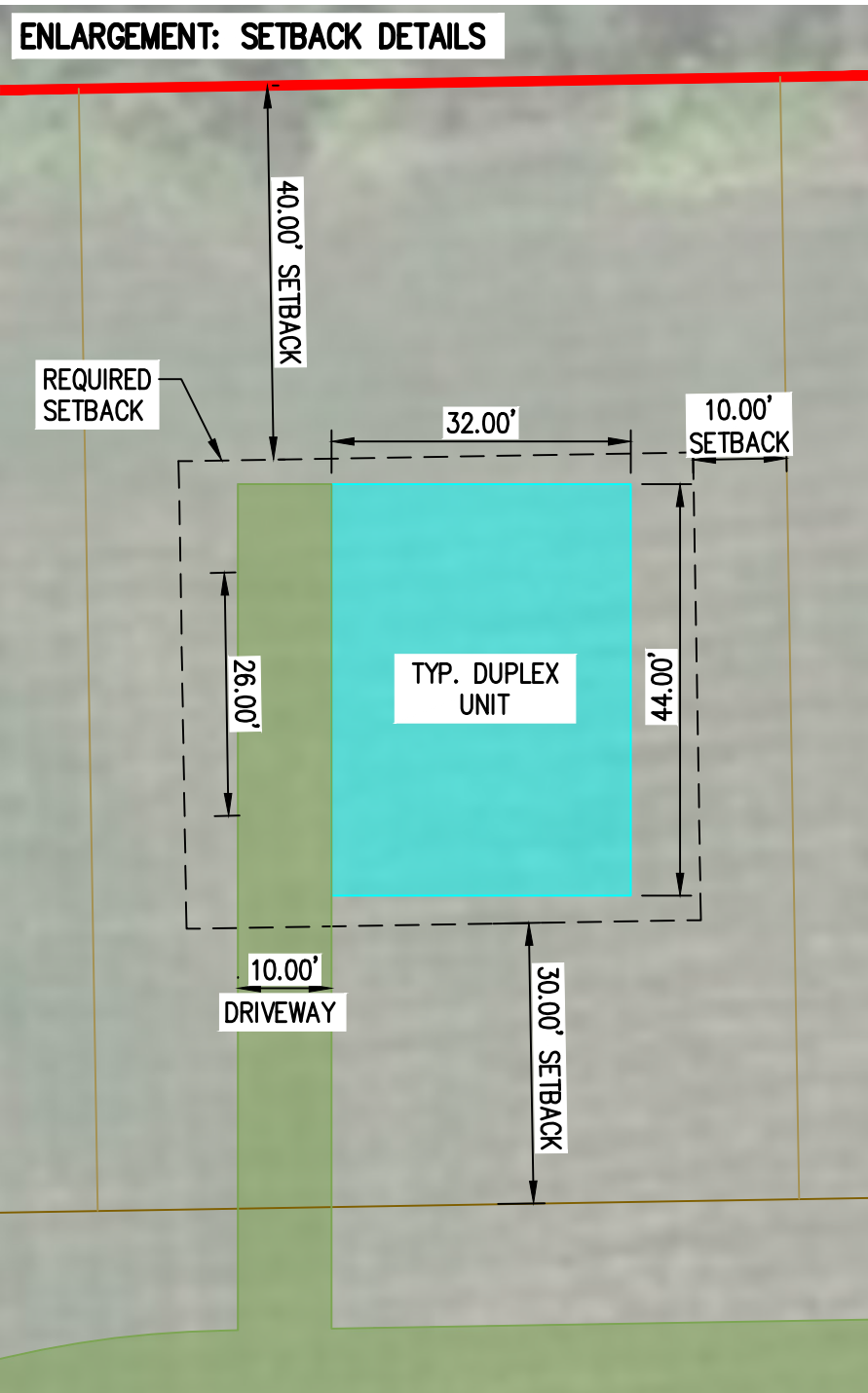
PLAN SUBMITTALS AND CHANGES	
PRELIMINARY PLANS - **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION
###	###
###	###
###	###
###	###
###	###

REV:
SHT# 11111
JOB No: 2300001

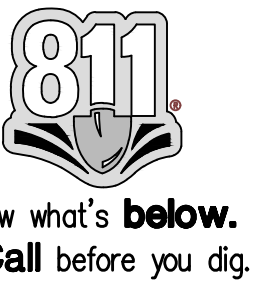
DUPLEX LOT CONCEPT



EXAMPLE OF TYP. DUPLEX UNITS



SUMMARY:
22 LOTS, AVG 0.21 ACRE
UNIT SFT AS SHOWN AVG 1,728 SQFT
SITE TOTAL 7.24 ACRES
ROADWAY, 24' WIDE 981 LFT, CURB AND GUTTER, 1,826 LFT



PLAN SUBMITTALS AND CHANGES	
PRELIMINARY PLANS - **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION
###	###
###	###
###	###
###	###
###	###
###	###

REV: _____
SHT# **116111**
JOB No: 2300001

ROWE PROFESSIONAL SERVICES COMPANY

The Rowe Building
540 S. Saginaw St., Suite 200
Flint, MI 48502

O: (810) 341-7500
www.rowepsc.com

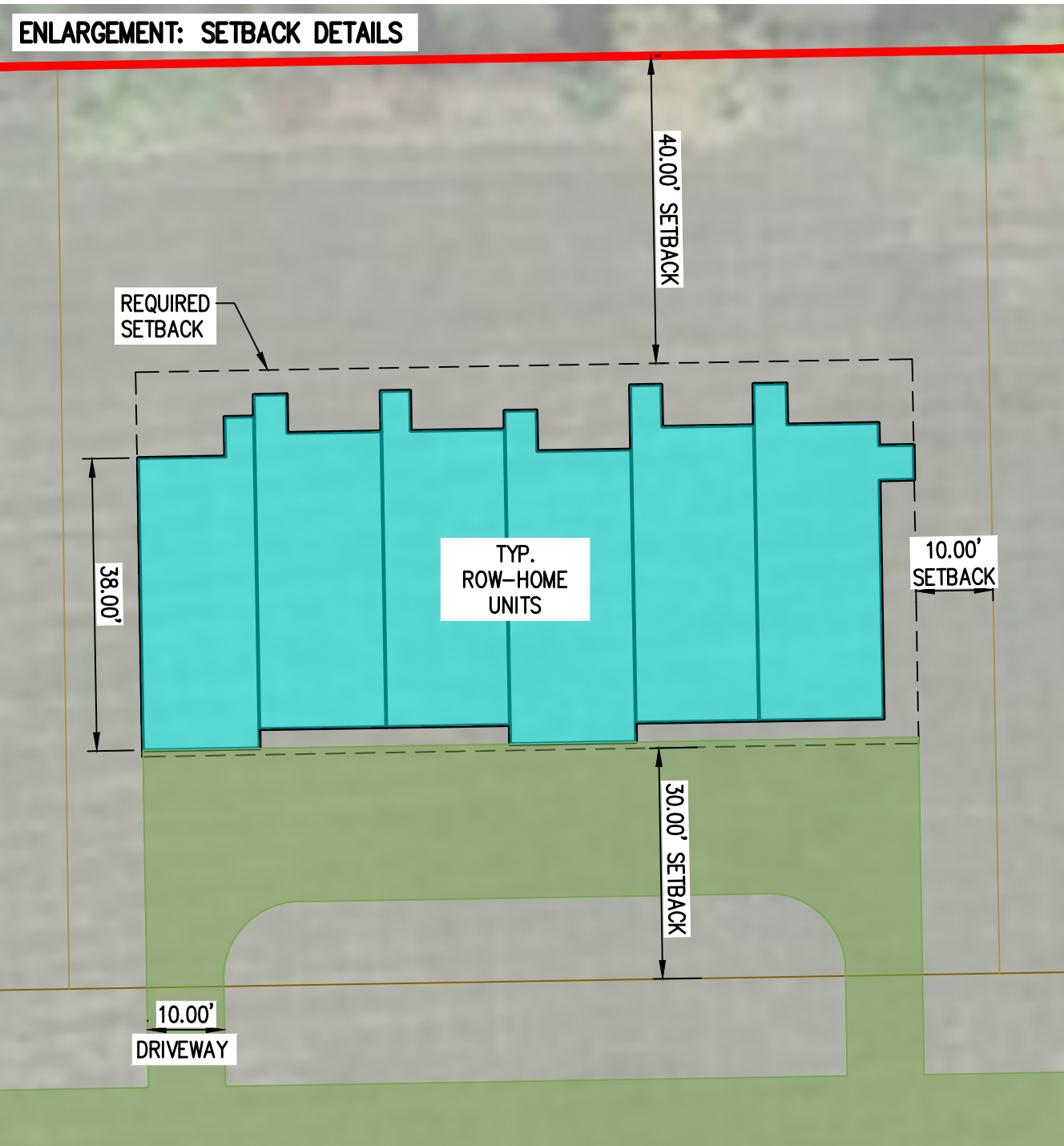
PREPARED FOR
CITY OF LAPEER
WHITE JUNIOR HIGH MEDC
DUPLEX LOT CONCEPT

PLAN DATE: FEBRUARY 2025
PROJECT MGR: ###
REVIEWER: ###
SCALE: 1" = 40'

ROW-HOME LOTS CONCEPT



EXAMPLE OF TYP. DUPLEX UNITS



SUMMARY:
14 LOTS, AVG 0.34 ACRE
UNIT SFT AS SHOWN AVG 2,304 SQFT
SITE TOTAL 7.24 ACRES
ROADWAY, 24' WIDE 981 LFT, CURB AND GUTTER, 1,765 LFT



PLAN SUBMITTALS AND CHANGES	
PRELIMINARY PLANS - **NOT FOR CONSTRUCTION**	
DATE	DESCRIPTION
###	###
###	###
###	###
###	###
###	###

PREPARED FOR
CITY OF LAPEER
WHITE JUNIOR HIGH MEDC
ROW-HOME LOTS CONCEPT

ROWE PROFESSIONAL
SERVICES COMPANY



The Rowe Building
540 S. Saginaw St., Suite 200
Flint, MI 48502

O: (810) 341-7500
www.rowepsc.com

PLAN DATE: FEBRUARY 2025
PROJECT MGR: ###
REVIEWER: ###
SCALE: 1" = 40'

REV:

SHT# 11111
JOB No: 2300001