

Planning Commission
Mark Piotrowski, Chairperson
Wilbert Fobbs III
Jason Hammond
Charito Hulleza
Bruce Kantor
Les Stansbery
Anna Thompson

CITY OF LATHRUP VILLAGE
PLANNING COMMISSION AGENDA
Tuesday, April 21, 2020
7:00 p.m.

27400 SOUTHFIELD RD., LATHRUP VILLAGE, MI 48076
CITY COUNCIL CHAMBERS

1. Call to order and Pledge of Allegiance
2. Roll Call
3. Approval of Agenda
4. Approval of meeting minutes
 - a. Regular Meeting – January 21, 2020
5. Public Comment – regarding items not listed on the agenda
6. New Business
 - a. 2020 – 2025 Capital Improvements Plan
 - b. Zoning amendments – Building materials
 - c. Site Plan Review – Lathrup Shopping Plaza (26710 Southfield Road)
7. Old Business and Tabled Items
 - a. Comprehensive Plan
 - i. Virtual Open House
 - ii. Parking options
 - iii. Priority redevelopment sites
8. Other Matters for Discussion
9. General communication & correspondence
 - a. Legal Update
 - b. Planning Update
 - c. Staff Update
10. Adjournment

Zoom Webinar

<https://zoom.us/j/98013564213?pwd=b3JEN1gzVWtzNVJraG15L3hDMTkOUT09>

Meeting ID: 980 1356 4213

Password: 625819

At 7:04 p.m. the Regular meeting was called to order by Chair Piotrowski on Tuesday, January 21, 2020 in the City Council Chambers of the Municipal Building, 27400 Southfield Road, Lathrup Village, Michigan.

Commissioners Present: Mark Piotrowski, Chair
Bruce Kantor, City Council Liaison
Anna Thompson, Secretary
Charito Hulleza, Resident
Les Stansbery, Resident

Excused: Jason Hammond, Vice Chair

Staff Present: Dr. Sheryl L. Mitchell, City Administrator, Yvette Talley, City Clerk

Also Present: Scott Baker, City Attorney, Jill Bahm and Meghan Cuneo of Giffels Webster

All present joined in the Pledge of Allegiance.

PC-01-20 CALL TO ORDER AND ROLL CALL

Roll call was taken. Motion by Commissioner Kantor, seconded by Commissioner Hulleza to excuse Commissioner Jason Hammond from this meeting.

Motion carried.

PC-02-20 APPROVAL OF AGENDA

Motion by Commissioner Kantor, seconded by Commissioner Stansbery to approve the Agenda.

Motion carried.

PC-03-20 MINUTES OF REGULAR MEETING ON DECEMBER 17, 2019

Motion by Commissioner Thompson, seconded by Commissioner Kantor to approve the minutes of the Regular Meeting of December 17, 2019 with a correction.

Motion carried.

PC-04-20 Election of Officers (Chairperson, Vice Chairperson, Secretary)

Motion by Commissioner Hulleza, seconded by Commissioner Kantor to nominate Mark Piotrowski as Chairperson for 2020.

Motion carried.

Motion by Commissioner Hulleza, seconded by Commissioner Kantor to nominate Jason Hammond as Vice-Chairperson for 2020.

Motion carried.

Motion by Chairperson Piotrowski, seconded by Commissioner Kantor to nominate Anna Thompson as Secretary for 2020.

Motion carried.

PC-05-20 **PUBLIC COMMENT**

There was no audience participation.

PC -06-20 **OLD BUSINESS and TABLED ITEMS**

a. Comprehensive Plan

i. 2015 Master Plan Action Strategies Prioritization results and discussion

Jill Bahm introduce the new staff planner, Meghan Cuneo. Jill Bahm gave an overview and answered specific questions about the action strategy survey. Discussed providing written notification to City Council of the action strategy survey by identifying priorities. Requesting City Council to identify funding source(s). The next step is to look at Village Center, Southfield Road Corridor, future land use map, if it needs to change and why it may need to change.

ii. Initial Market Study Findings

Looked at housing in Oakland County and how the recession impacted housing. Suggested actions; discussed demand estimates/marketable activity of housing/senior housing, goods and services, enhancing walkability within neighborhoods, understanding the barrier with Southfield road/I696 and expanding specialty food opportunities. Commissioner Hulleza said asked Ms. Bahm from her vantage point that begin to tell a story about the needs of the residents. Next, will be an open-house, more plan development and a public hearing. Commissioner Hulleza said highlight the findings from the survey of the Commissioners and the two assessment questions from the survey of the residents to form the design in framing the public meeting.

PC-07-20 **NEW BUSINESS**

None

PC-08-20 **OTHER MATTERS FOR DISCUSSION**

None

PC-09-20 **GENERAL COMMUNICATION & CORRESPONDENCE**

a. Legal Update

None

b. Planning Update

None

c. Staff Update

Susie Stec said Mr. Surnow will re-group and return with a sight plan for 26710-26780 Southfield Rd. Will meet with him to discuss Panera Bread redevelopment. Meeting with Southfield, Lathrup Village and Beverly Hills and Oakland County Road Commission on Thursday, January 23 4:00 p.m.- 6:00 p.m. regarding Southfield Rd.

PC-10-20 **ADJOURNMENT**

Motion by Commissioner Thompson, seconded by Commissioner Stansbery to adjourn this meeting.

Motion carried.

The meeting adjourned at 8:16 p.m.

Submitted by Yvette Talley

Recording Secretary

memorandum

DATE: April 20, 2020
TO: Lathrup Village Planning Commission
CC: Sheryl Mitchel, City Administrator
FROM: Jill Bahm, AICP & Matt Wojciechowski; Giffels Webster
SUBJECT: Capital Improvement Plan – 2020-2025

The Michigan Planning Enabling Act requires the Planning Commission to prepare the CIP. Generally, this is interpreted to mean that the Planning Commission oversees the process and acts to ensure public projects identified in the city's long-range plans are incorporated.

The process for drafting the CIP starts with department heads reviewing their needs and identifying capital projects over \$5,000 over the next six years. The first year of the CIP generally ties into the city's operating budget.

Following the development of the project list, the subcommittee, comprised of two Planning Commissioners and staff, reviewed it; the projects were incorporated into the CIP. In the attached draft, new projects representing a change from the 2019-2024 CIP appear in yellow highlight.

The most exciting new component of the CIP is the development of an online platform intended to help with transparency about the CIP and improve understanding of how projects may relate. Please refer to the plan page 13 or use the following link:

<https://oakgov.maps.arcgis.com/apps/opsdashboard/index.html#/45dd43a3429a404b9d8287f40d2e7d57>

At its April 21, 2020 meeting, the Planning Commission will review the draft and make a recommendation to City Council. Due to the timing with the City Council preparation of the budget, the public hearing on the CIP will be held by the City Council in coming weeks.

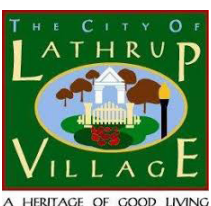


City of Lathrup Village 2020 Capital Improvement Plan

PREPARED FOR:

CITY OF LATHRUP VILLAGE
PLANNING COMMISSION
27400 SOUTHFIELD ROAD
LATHRUP VILLAGE, MI
48076

APRIL 2020



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Introduction

Introduction

The 2020-2025 City of Lathrup Village Capital Improvement Plan (CIP) will serve as a tool to assist the city in turning long-range policy planning into real improvements on the ground. A six-year capital improvement plan and an annual update of that plan is a requirement for the City of Lathrup Village under the Michigan Planning Enabling Act of 2008. The following report identifies the major capital improvements needed and/or planned for the community, the timeframe for implementation of those improvements, and the budget and revenue sources that will make those improvements a reality. Capital improvements cover multiple departments within the City of Lathrup Village and include new facilities, water and sewer line replacements and improvements, police equipment, parks and recreation facilities, non-motorized pathways, and professional services.



Drainage ditch repair (Giffels Webster, 2020)

WHAT IS A CAPITAL IMPROVEMENT PLAN (CIP)?

A Capital Improvement Plan is a six-year schedule of public physical improvements which identifies the needs for improvements and the sources of funding to make those improvements. It provides a schedule of expenditures for constructing, maintaining, upgrading, and/or replacing a community's physical inventory. The CIP, therefore, is a tool to assess the long-term capital project requirements (the "big jobs") of Lathrup Village. Since capital improvement projects are spread across multiple community needs (fire protection, police, water and sewer, parks and recreation, municipal administration, etc.), the CIP prioritizes these projects across the entire community and over time, providing a comparison of the community's various needs and wants.



City Street in Lathrup Village (Giffels Webster, 2020)

WHAT ARE CAPITAL IMPROVEMENT PROJECTS?

Capital improvement projects are major and infrequent expenditures, such as the construction of a new facility, a major rehabilitation or repair of an existing facility, or the purchase of major equipment. Capital improvement projects are non-recurring expenditures that tend to be large both in physical size and in cost, and have a long-term usefulness (10 years or more) . Examples of capital improvement projects can include:

- Construction of a new city hall
- Construction of a new police station
- Extension or replacement of a water/sewer line
- Major rehabilitation of a city's community center
- Creation of a new city park
- Large equipment and vehicles



Lathrup Village DPS yard (Giffels Webster, 2020)

Each city department is asked to take a long view look at future initiatives or improvements that may require capital purchases in order to be fully implemented. Each department works to improve the manner by which the city delivers services to its residents and stakeholders. Lists of need are developed based on research and discussions with communities that have similar needs. The majority of the capital purchases in these categories are funded through the general fund or other dedicated city funds. Thorough knowledge and research of our future planned costs allows for the pursuit of grant and other outside funding sources to meet our policy goals. The following sections discuss the city's various needs and proposed funding by department.

The term "major expenditure" is relative; what is "major" to one community might be "minor" to another. The City of Ann Arbor, for example, sets a minimum threshold of \$100,000 for projects to be included in the City's CIP, while the City of Rochester Hills sets a minimum of \$25,000. Lathrup Village's policy for determining a Capital Improvement is defined in the following section.

WHAT IS THE CITY OF LATHRUP VILLAGE'S CAPITAL IMPROVEMENT POLICY (CIP)?

A capital improvement project is a major, nonrecurring expenditure that meets one of more of the following criteria:

- Any acquisition of land for a public purpose which costs \$5,000 or more.
- Any construction of a new public facility (city building, water/sewer lines, pathways), or any addition to an existing public facility, the cost of which equals \$5,000 or more and has a useful life of three or more years.
- A nonrecurring rehabilitation (not to include annual/recurring maintenance) of a building, its grounds, a facility, or equipment, the cost of said rehabilitation being \$5,000 or more with a useful life of three or more years.
- Purchase of major equipment which, individually or in total, cost \$5,000 or more with a useful life of three or more years.

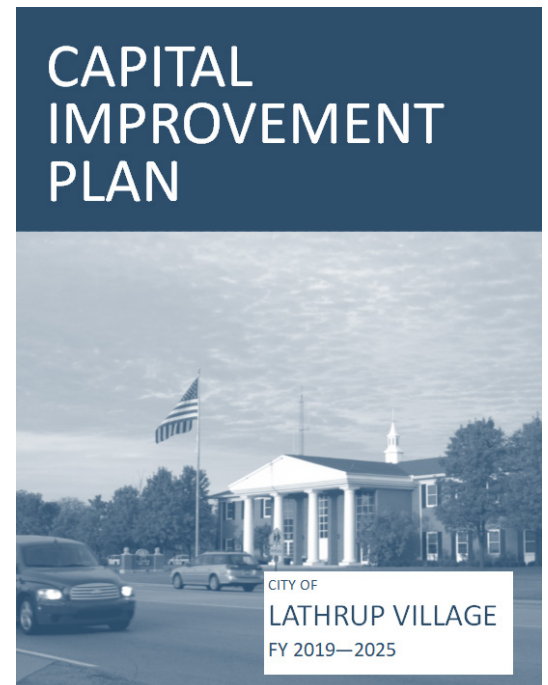
Planning, feasibility, engineering, or design studies related to an individual capital improvement project, or program implemented through individual capital improvement projects, with a cost of \$5,000 or more and a useful life of three or more years.

WHAT IS THE ROLE OF THE CITY PLANNING COMMISSION IN THE CIP PROCESS?

The Capital Improvement Program is a dynamic planning document, intended to serve as a tool to implement the City of Lathrup Village's Master Plan. The Master Plan should correspondingly include capital improvement projects as well as guide long-term capital planning. The Planning Commission is uniquely qualified to manage the development and annual update of the City's CIP, based on their role in creating and updating the city's Master Plan. The Planning Commission's role will ensure that public works projects are consistent with the land uses identified within the Master Plan. By making a recommendation of approval for the CIP to the City Council, the Planning Commission agrees that the projects outlined within it reasonably address the city's capital improvement needs.



Lathrup Village public safety vehicles (Giffels Webster, 2020)



Lathrup Village 2019 CIP (Giffels Webster, 2020)

The CIP is an essential link between planning for capital improvement projects and budgeting for them. Once approved by the City Council, the CIP can be used to develop the capital project portion of the city's budget. Those projects included in the CIP's first year (2020) potentially form the basis for the upcoming year's capital project budget. As the CIP is annually updated, a continuous relationship will be maintained between the CIP and the city's annual budget. The annual update to the CIP will typically occur in advance of the preparation of the city's budget.

WHAT ARE THE BENEFITS OF PREPARING A CAPITAL IMPROVEMENT PLAN?

- Prudent use of taxpayer dollars
- Prioritizing projects across the needs of the community and across departments (an "apples-to-apples" comparison)
- Generating community support by inviting public input
- Promoting economic development
- Improving the city's eligibility for State and Federal grants
- Providing an implementation tool for the goals and objectives of the city's Master Plan
- Transparency in identification of high-priority projects
- Coordination / cost-sharing between projects



Lathrup Village DPS yard (Giffels Webster, 2020)



Damaged storm sewer culvert (Giffels Webster, 2020)

Program Areas

Program Areas

The following sections outline the Program Areas of the City of Lathrup Village's CIP:

1. Data Collection Process
2. Data Compilation Process
3. CIP Adoption Process

The components of the CIP are compiled and reported by Program Areas. The following table (Figure 1) displays the Program Areas used in this CIP (each assigned with a color). These program areas represent the stakeholders in the CIP.

FIGURE 1 CIP PROGRAM AREAS	
AD	Administrative
DPS	Department of Public Services
DDA	Downtown Development Authority
PR	Parks & Recreation
PD	Police Department
R	Roads
S	Sewer
W	Water

1. DATA COLLECTION. Each of the stakeholders outlined above has either a master plan or schedule that defines the needs and resource level within their respective area of responsibility. To more easily identify projects, standard forms were created that allow the stakeholders to define their projects and resource allocation levels. The standard forms used for data collection are found in the Appendix.



Sarackwood Park (Google, 2020)

Capital Project Request

Section 1

Project Title: _____ Department: _____

Prepared By: _____ Date Prepared: _____

Contact Information

Email: _____ Contact Person: _____

Phone: _____

Section 2

Project Description: Provide a brief description of the project

Section 3

Cost and recommended sources of funding

Budget Fiscal Year	Estimated Cost	Recommended Source of Financing (Include matching funds, if any, required for grants)
2019-2020 FY	_____	_____
2020-2021 FY	_____	_____
2021-2022 FY	_____	_____
2022-2023 FY	_____	_____
2023-2024 FY	_____	_____
2024-2025 FY	_____	_____
TOTAL	_____	_____

Impact on Operating Budget: _____

Please complete back of form and note result here

Section 4

Project Ranking: (Please see form D for project ranking details and then select one below)

Priority 4: Essential ☐

Priority 3: Desirable ☐

Priority 2: Acceptable ☐

Priority 1: Deferable ☐

Capital Project Request form

A definition of the standard CIP forms is provided as follows:

- **PROJECT APPLICATION FORM** - Consists of project descriptions, schedules, necessity, and possible sources of funding. The information provides an understanding of the overall scope of each project and how it is valued within its program area and within the City. While stakeholders may be aware of major projects further out on the horizon, only those planned for within the six-year window of the 2020-2026 CIP were included.
- **PROJECT COST DETAIL FORM** - Consists of a matrix of six (6) budget years across the top of the form and a listing of costing components along the side of the form. The form is split into two (2) parts; the upper half is the capital cost for the project and the lower half is the cost of operations or maintenance for that project if applicable. Recognition of the operations and maintenance costs of a project is a valuable tool in forecasting future needs for resource allocation. Investment in a new facility is only worthwhile if there are funds available to operate and maintain it.
- **PROJECT RATING FORM** - This form is used when new projects are identified but cannot all be funded within a given fiscal year. The forms are used to rate both the importance and impact of a project within its program area and within the city. The ratings are weighted with emphasis given to those projects that are mandated by law, by agreement, or because they are a matter affecting health safety and welfare. Projects without a ranking were not competing for funding, either because they are mandatory or because no other similar projects were proposed.

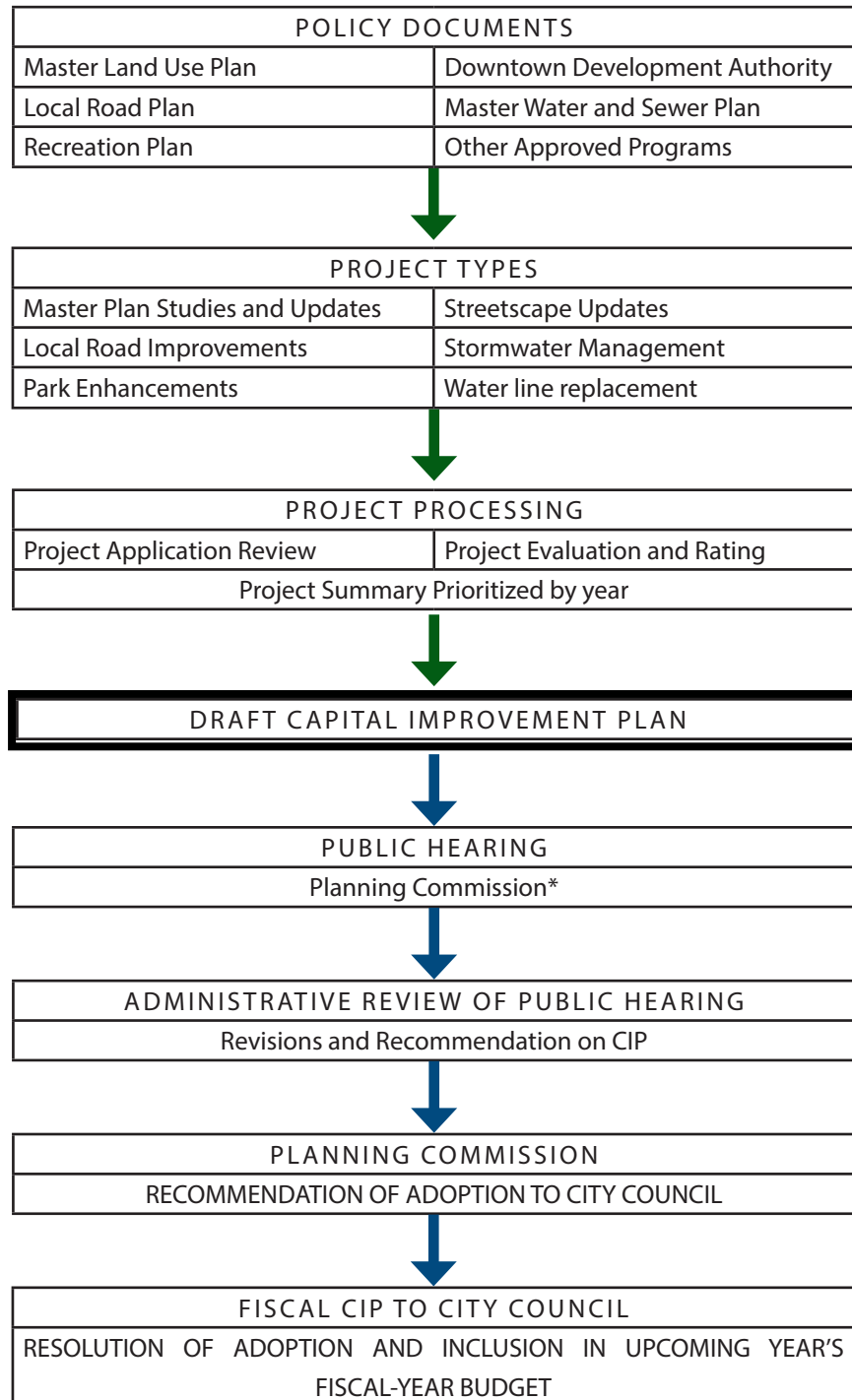
2. **DATA COMPILATION.** The information received from the stakeholders has been compiled into a Project Summary Worksheet. This worksheet contains all of the projects in the CIP over six (6) budget years with a cost summary of each budget year by program area and for the entire CIP. Included with the worksheet is the listing of possible funding sources and an estimate of the city's share for each project. The project summary worksheet can be found in the Appendix of this CIP.



Lathrup Village welcome sign (Giffels Webster, 2020)

Figure 2 - CIP Adoption Process

3. CIP ADOPTION PROCESS. The adoption process involves a public hearing to solicit citizen input. The CIP will then be modified (if necessary), approved by the city Planning Commission (via a formal recommendation for approval to the City Council), and forwarded to the City Council for adoption. Adoption of the CIP by the City Council does not constitute an authorization to commit resources to any project. This approval is recognition of a plan for projects within the community that may move toward implementation in the future. The projects included within Year 1 of the Capital Improvement Plan potentially form the basis for the upcoming year's capital projects budget. An outline of the process is displayed in Figure 2 on the following page.



* The Public hearing was held by the City Council as part of their budget adoption due to timing. The Planning Commission reviewed and recommended adoption of the 2020 CIP at their April 202 meeting

Project Inventory

Below is a summarized list of all projects considered for the 2020 Capital Improvement Plan. Project details are shown on the following pages; they can also be viewed online via the [Interactive CIP Dashboard Map](#).

Project Number	Name	Fiscal year start	Funding source	Total
Administrative				
AD20-01	Monitors	2020/2021	General	\$14,171
Administrative Total				\$14,471
Department of Public Services (DPS)				
DPS20-01	New Parking Lot - DPS	2020/2021	TBD	\$60,000
DPS20-02	Backhoe tractor	2020/2021	TBD	\$100,000
DPS20-03	Leaf Vac	2021/2022	TBD	\$40,000
DPS20-04	Hotpatch Trailer	2022/2023	TBD	\$7,500
DPS20-05	Flatbed/dumpbox	2022/2023	TBD	\$15,000
DPS20-06	New roof	2023/2024	TBD	\$30,000
DPS20-07	4WD Pick-up truck	2024/2025	TBD	\$45,000
DPS Total				\$297,500
Downtown Development Authority (DDA)				
DDA20-01	Hanging Flower Baskets	2020/2021	DDA Funds	\$6,700
DDA20-02	Light Pole Banners	2020/2021	DDA Funds	\$4,185
DDA20-03	Southfield Rd ROW parking	2020/2021	DDA Funds	TBD
DDA20-04	Complete Streets - DDA share	2020/2021	DDA Funds	\$6,300
DDA20-05	Bus Stop Improvements	2020/2021	DDA Funds	\$5,000
DDA Total				\$41,105
Parks and Recreation (P&R)				
PR20-01	Park Investment Package	2020/2021	General Fund	\$20,000
PR20-02	Community Vegetable Garden	2020/2021	General Fund	\$8,000
PR20-03	Dog Park Pre-planning	TBD	TBD	TBD
PR20-04	Splash Pad Study and Planning	TBD	TBD	TBD
PR20-05	Goldengate Park Update Study and Planning	TBD	TBD	TBD
PR20-06	Replace Sarackwood Playground Equipment	TBD	TBD	TBD
PR20-07	Construction of Dog Park	TBD	TBD	TBD
PR20-08	Goldengate Park Remodel	TBD	TBD	TBD
PR20-09	Acquisition and Development of Southeast Quadrant Park	TBD	TBD	TBD
P&R Total				\$28,000
Police				
P20-01	Axon Taser	2020/2021	Police	\$8,900
P20-02	Patrol Vehicle	2021/2022	Police	\$45,000
P20-03	Speed Trailer	2020/2021	Police	\$8,000
P20-04	Mobile Radios	2021/2022	Police	\$30,000
P20-05	New Police Station Study	2021/2022	Police	\$5,000
Police Total				\$96,900

INTERACTIVE CIP DASHBOARD URL:

<https://oakgov.maps.arcgis.com/apps/opsdashboard/index.html#/45dd43a3429a404b9d8287f40d2e7d57>

Project Inventory - continued

Project Number	Name	Fiscal year start	Funding source	Total
Roads				
R20-01	Matching TIP Funds	2020/2021	General Fund	\$13,3,000
R20-01	2020 Paving Program	2020/2021	Local/Major Road Fund	\$250,000
R20-02	2021 Paving Program	2021/2022	Local/Major Road Fund	\$250,000
R20-03	2022 Paving Program	2022/2023	Local/Major Road Fund	\$250,000
Roads Total				\$767,300
Sanitary Sewer				
S20-01	2020 Sewer Improvements	2020/2021	Sewer	\$120,000
S20-02	2021 Sewer Improvements	2021/2022	Sewer	\$120,000
S20-03	2022 Sewer Improvements	2022/2023	Sewer	\$120,000
Sanitary Sewer Total				\$360,000
Water				
W20-01	2020 Water Main Repair Program (II of III)	2020/2021	Water fund	\$400,000
W20-02	2020 Water Main Repair Program (III of III)	2021/2022	Water fund	\$180,000
W20-03	2021 Water Main Repair Program	2021/2022	Water fund	\$325,000
W20-04	2022 Water Main Repair Program	2022/2023	Water fund	\$475,000
W20-05	2023 Water Main Repair Program	2023/2024	Water fund	\$475,000
W20-06	Gate Vale Replacement	2021/2025	Water fund	\$960,000
W20-07	Fire Hydrant Replacement Program	2021/2022	Water Fund	\$544,000
W20-08	Lead and Copper Investigation	2021/2022	Water fund	\$250,000
W20-09	Lead and Copper Investigation	2022/2023	Water Fund	\$250,000
Water Total				\$3,609,000
ALL PROJECT TOTAL				\$5,274,976

INTERACTIVE CIP DASHBOARD URL:

<https://oakgov.maps.arcgis.com/apps/opsdashboard/index.html#/45dd43a3429a404b9d8287f40d2e7d57>

Administrative

The City Administrator is responsible for the efficient administration of all City Departments, ensuring all laws and ordinances are enforced, development of an annual budget, and maintenance of an accounting system that shall conform with the laws and generally accepted accounting principles. The administrative departments include the office of the City Administrator, Treasurer, City Clerk, and the City's boards and commissions. This category also includes general inter-departmental needs such as copiers, printers and other office equipment.

AD20-01		Monitors
Project Year:	2020/2021	Purchase of new audio and visual equipment for City Hall
Estimated Cost:	\$ 14,171	
Funding Source:	General	
Ranking:	TBD	



Lathrup Village City Hall (Giffels Webster, 2019)

Department of Public Services

Lathrup Village has maintained a contract with the private company Lathrup Services to manage all of its public service provisions. Services such as water main repair, snow plowing, landscaping and general maintenance and repairs fall into this category.

DPS20-01		New Parking Lot - DPS
Project Year:	2020-2021	Entire DPS parking lot is falling apart and salt/dirt are getting into the storm sewers. It is hard to maneuver and is unsafe.
Estimated Cost:	\$60,000	
Funding Source:	General Fund	
Ranking:	TBD	
DPS20-02		Backhoe Tractor
Project Year:	2021-2022	Current tractor is 12 years old and in need of replacement.
Estimated Cost:	\$100,000	
Funding Source:	General Fund	
Ranking:	TBD	
DPS20-03		Leaf Vac
Project Year:	2021-2022	Newest vac is three years old; next oldest is 12 years old and needs to be moved to backup status to ensure continuation of leaf program.
Estimated Cost:	\$40,000	
Funding Source:	General Fund	
Ranking:	TBD	
DPS20-04		Hot-patch Trailer
Project Year:	2022/2023	A new trailer is needed to keep patch pliable and speed up the process of keeping roads in good condition.
Estimated Cost:	\$7,500	
Funding Source:	General Fund	
Ranking:	TBD	
DPS20-05		Flatbed dump-box
Project Year:	2022/2023	
Estimated Cost:	\$15,000	
Funding Source:	General Fund	
Ranking:	TBD	
DPS20-06		New Roof for DPS building
Project Year:	2023/2024	
Estimated Cost:	\$30,000	
Funding Source:	General Fund	
Ranking:	TBD	

DPS20-08		New 4WD Pick-up truck
Project Year:	TBD	Current truck is from 2006 and is in need of replacement
Estimated Cost:	TBD	
Funding Source:	General Fund	
Ranking:	TBD	



Lathrup Village DPS pick-up truck (Giffels Webster, 2020)



Lathrup Village DPS yard - rear parking lot (Giffels Webster, 2020)



Lathrup Village DPS yard - entrance and front parking lot (Giffels Webster, 2020)

Downtown Development Authority - Equipment

The DDA has proposed improvements to Southfield Road at the gateways to the City as incremental improvements while the Southfield Road improvement project awaits federal funding priority. These projects will bolster economic development efforts to keep Lathrup Village competitive and attractive for business development. Streetlight Improvements include transitioning street lights to LEDs and installment of additional streetlights in the Village Center, which will improve lighting and create a more walkable, safe, downtown.

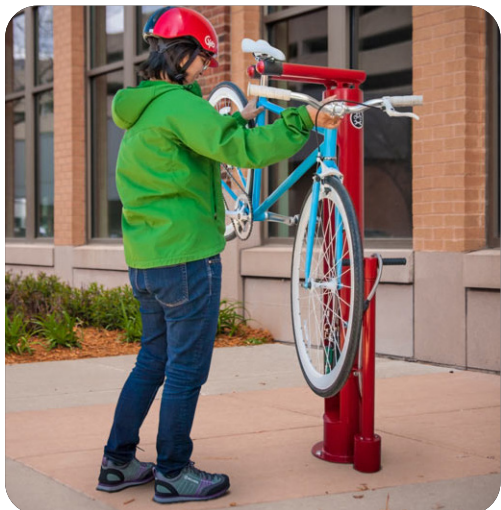
DDA20-01		Hanging Flower Baskets
Project Year:	2020/2021- 2024/2026	Purchase of 25 Flower baskets, soil and flowers (\$6,700) and six years of maintenance at \$350 annually (including 2020)
Estimated Cost:	\$8,800	
Funding Source:	DDA Funds	
Ranking:	3	
DDA20-02		Light Pole Banners
Project Year:	2020/2021	Purchase of 20 light pole banners for placement on light poles within the DDA. Includes \$1,920 equipment purchase FY 2020-2022 and \$2,150 annual instillation cost (six years)
Estimated Cost:	\$19,005	
Funding Source:	DDA Funds	
Ranking:	3	



Existing Light pole banner on Southfield Road (Giffels Webster, 2020)

Downtown Development Authority - Capital Projects

DDA20-03		Southfield Road ROW parking
Project Year:	2021 - 2025	This proposed project intends to begin mitigating anticipated PROW parking loss as a result of the Southfield Road widening/reconstruction. There is an estimated 135 needed (27 spaces a year x 5 years). Federal funds may become available in 2021 that would help offset the cost to the city.
Estimated Cost:	\$771,585 (\$154,317 annually)	
Funding Source:	TBD	
Ranking:	4	
DDA20-04		Complete Streets - DDA atch
Project Year:	2020/2021	Implement complete streets city-wide bicycle route wayfinding elements. Plan includes pavement markings, signage and bike repair kiosks. The city received \$60,00 in grant funds (Act 51 and TAP) and is paying a matching \$20,000 (\$6,700 from DDA and \$13,300 from General Fund) for a total of \$80,000.
Estimated Cost:	\$6,700	
Funding Source:	DDA Funds	
Ranking:	3	
DDA20-06		Bus Stop Improvements
Project Year:	2020 - 2026	Upgrade and enhance bus stops within the city to provide a safer and more attractive transit experience for riders.
Estimated Cost:	\$5,000	
Funding Source:	DDA Funds	
Ranking:	4	



Example of Bike repair kiosk (Source: Dero - Fixit)



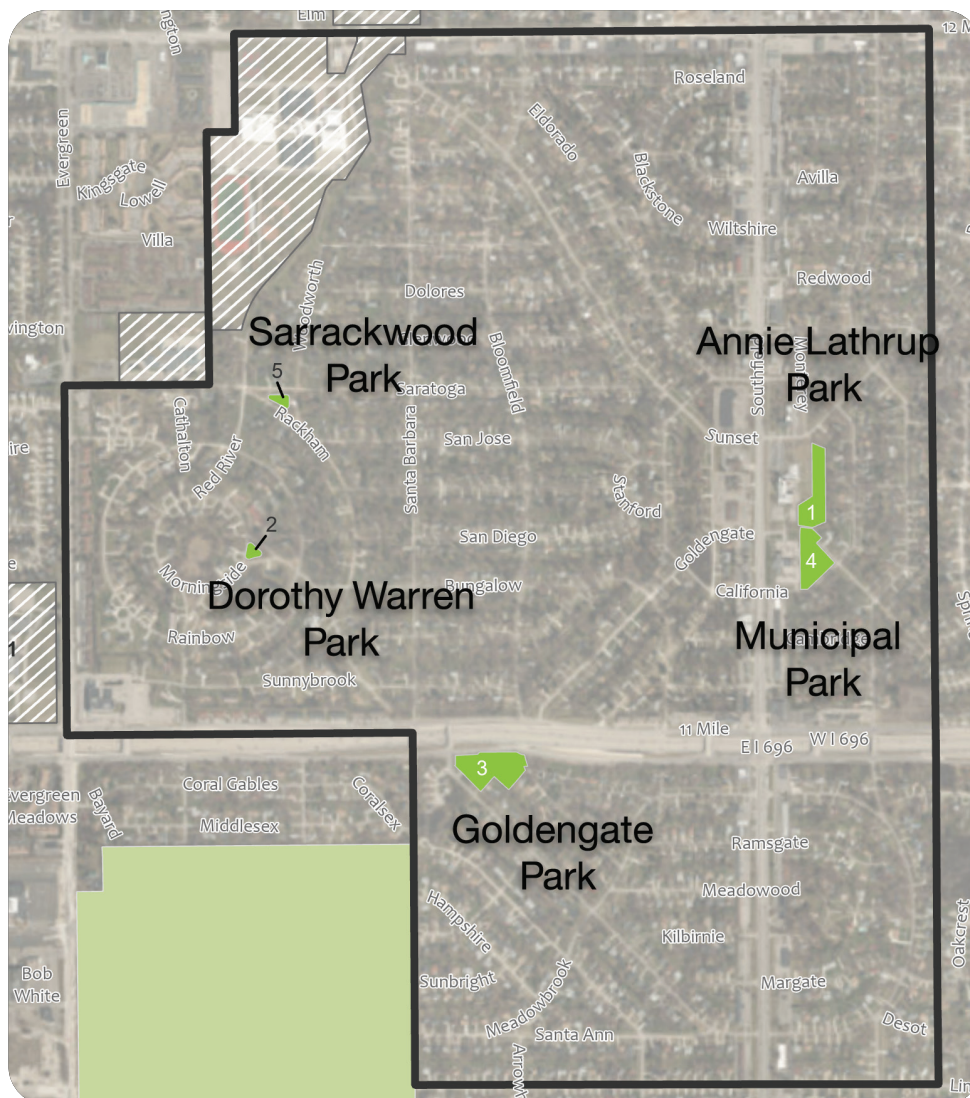
Existing bus stops on Southfield Road in need of safety upgrades (Giffels Webster, 2020)

Parks and Recreation

The Recreation Department includes upgrades to City Parks, Community Room, and Fitness Center. The City's parks are in need of restoration and upgrades to maintain safety and accessibility. Several parks are in need of additional wood chips and landscaping around play equipment in order to ensure safety of use. Drainage improvements around recreational amenities are additionally needed to reduce instances of standing water and to protect accessibility.

PR20-01		Park Investment Package
Project Year:	2020/2021	Improvements to Municipal, Lathrup, Sarrackwood, Warren and Goldengate Parks.
Estimated Cost:	\$20,000	
Funding Source:	General Fund	
Ranking:	TBD	
PR20-02		Community Vegetable Garden
Project Year:	2020/2021	Establish a community vegetable garden in Municipal Park to the north of City Hall (or another location if the area is not suitable).
Estimated Cost:	\$8,000	
Funding Source:	General Fund	
Ranking:	TBD	
PR20-03		Dog park pre-planning
Project Year:	TBD	To move forward with constructing a dog park, we need professional planning to determine the best location and design as well as what budget and timeline are practical.
Estimated Cost:	TBD	
Funding Source:	TBD	
Ranking:	TBD	
PR20-04		Splash Pad Study and Planning
Project Year:	TBD	Determine if a splash pad would be a good investment for the city, what the best location would be and what it would cost.
Estimated Cost:	TBD	
Funding Source:	TBD	
Ranking:	TBD	
PR20-05		Goldengate Park Update Study and Planning
Project Year:	TBD	Professional planning to determine feasibility, design, costs and plans for upgrades to Goldengate Park. Upgrades could include addition of naturescapes along the northern wall, water access, a pavilion or volleyball court, electrical access, removal of barriers, signage and an expanded parking lot.
Estimated Cost:	TBD	
Funding Source:	TBD	
Ranking:	TBD	
PR20-06		Replace Sarackwood Playground Equipment
Project Year:	TBD	Replace the worn out playground equipment at Sarrackwood Park with a new, inclusive model.
Estimated Cost:	TBD	
Funding Source:	TBD	
Ranking:	TBD	

PR20-07		Construction of Dog Park
Project Year:	TBD	Construction and opening of dog park
Estimated Cost:	TBD	
Funding Source:	TBD	
Ranking:	TBD	
PR20-08		Goldengate Park Remodel
Project Year:	TBD	Revitalization of Goldengate Park
Estimated Cost:	TBD	
Funding Source:	TBD	
Ranking:	TBD	
PR20-09		Acquisition and Development of SE quadrant park
Project Year:	TBD	Acquire the land and develop a park in a currently vacant, private-owned property lot in the Southeast quadrant of the city. The lot is a little less than an acre in size. Project cost would depend on the types of features desired in the park.
Estimated Cost:	TBD	
Funding Source:	TBD	
Ranking:	TBD	



Lathrup Village Parks (Giffels Webster, 2020)

Police

The Lathrup Village Police Department offers full policing services to its residents including routine patrol, traffic enforcement, detective services, community relations, and other specialized functions. Lathrup Village holds the distinction of being one of the Oakland County's safest cities.

P20-01		Axon Taser
Project Year:	2020/2021- 2021-2022	Tasers increase officer safety and reduce liability to department by reducing lethal force. This funding request is for two years at \$4,450 per year.
Estimated Cost:	\$8,900	
Funding Source:	Police	
Ranking:	TBD	
P20-02		Patrol Vehicle
Project Year:	2021/2022	Need to replace older unit in fleet
Estimated Cost:	\$45,000	
Funding Source:	Police	
Ranking:	TBD	
P20-03		Speed Trailer
Project Year:	2020/2021	
Estimated Cost:	\$8,000	
Funding Source:	Police	
Ranking:	TBD	
P20-04		Mobile Radios
Project Year:	2021/2021	Police communication equipment is needed for patrol vehicles and offices prep radios
Estimated Cost:	\$30,000	
Funding Source:	Police	
Ranking:	TBD	
P20-05		New Police Station Study
Project Year:	2021/2022	A study i need to determine where a larger police building could possibly be located. A new facility is needed to accommodate growth - the current station is at capacity.
Estimated Cost:	\$5,000	
Funding Source:	Police	
Ranking:	TBD	

Roads

The City of Lathrup Village has 26.2 miles of local roads and 7.36 miles of major streets. In each year since 2012, the city has dedicated an equivalent of 1.5 to 2 mils of taxable value to repaving local roads. While this did constitute a major increase in funding from previous years, it should be noted that based on the engineer's industry experience, the entire street system should be put on a 15-20 year resurfacing cycle. The overall goal is to provide an adequate level of road maintenance within the local street system; however, based on the long term estimates, a 20-year resurfacing cycle would require an annual contribution of \$495,000+ (or approximately 4.2 mils) and adjusted in each subsequent year based on inflation. This will require ongoing discussion and policy-setting by City Council.

R20-01		Complete Streets - City match
Project Year:	2020/2021	Implement complete streets city-wide bicycle route wayfinding elements. Plan includes pavement markings, signage and bike repair kiosks. The city received \$60,00 in grant funds (Act 51 and TAP) and is paying a matching \$20,000 (\$6,700 from DDA and \$13,300 from General Fund) for a total of \$80,000.
Estimated Cost:	\$13,300	
Funding Source:	General Fund	
Ranking:	3	
R20-02		2020 Paving Program
Project Year:	2020-2021	Santa Barbra road repair project.
Estimated Cost:	\$250,000	
Funding Source:	Local/Major Roads	
Ranking:	TBD	
R20-03		2021 Paving Program
Project Year:	2021/2022	TBD road repair
Estimated Cost:	\$250,000	
Funding Source:	Local/Major Roads	
Ranking:	TBD	
R20-04		2022 Paving Program
Project Year:	2022/2023	TBD road repair
Estimated Cost:	\$250,000	
Funding Source:	Local/Major Roads	
Ranking:	TBD	

Sewer

SANITARY SEWER

The Lathrup Village sanitary sewer system consists of approximately 145,000 linear feet (lft) of sewers ranging in size from 8 inch to 24 inches in diameter. Of the 145,000 lft of sewer, the older portion of the system is comprised of approximately 118,900 (82%) of vitrified clay pipe, while the newer portion of the system is comprised of approximately 26,100 (18%) lft of concrete pipe. Constructed in the 1920's as a combined sewer system, the city converted it to a dedicated sanitary sewer system in the 1960's (meaning that storm water and sanitary water are not permitted to mix). It is believed that all residents and businesses within the city are connected to the sanitary sewer and there are no active septic systems. Since the City of Lathrup Village reached its full development capacity the sanitary sewer system covers the entire city with no need for expansion.

During the construction of I-696, the system was severed and divided into a northern and a southern system that are metered and discharged into the Evergreen Farmington Sewage Disposal System (EFSDS). The sewer system north of I-696 is routed to a 3-million-gallon retention tank which is located at the west end of Sunnybrook, near Evergreen Road north of I-696. This facility is currently receiving significant maintenance and repair in order to safeguard the operation of the system.

In 2012 and 2013, all sanitary sewers on the south side of I-696 were cleaned and visually inspected for apparent structural failures and signs of inflow and infiltration (I & I) and found that approximately 66% of the sewers that were assessed were in need of repairs. The city engineer recommended that Lathrup Village repair the identified sewers in an effort to provide structural improvements to sewers with multiple cracks within the sewer segment and reduce the amount of infiltration of ground water. According to the project's final report, the majority of the defects can be addressed by either grouting the sewer joints or by installing cured-in-place pipe (CIPP). The following map depicts the sewers locations recommended for either joint-grouting or CIPP.

The City of Lathrup Village sewer system is a separated system but still considered a "wet" system due to the presence of footing drains. The City's upgrades and maintenance over the past 15 years has been done with the primary goal of "drying out" or removing the ground and storm water from the system; however, recent studies by the Oakland County Water resource commissioner's office has called into question the effectiveness of relining sewer mains and grouting joints as a method of lowering inflow and infiltration (I & I). Their current hypothesis is that the sanitary sewer leads and footing drains contribute enough I & I to negate any benefits gained from sealing sewer mains. The relining process does add structural integrity to the system which prevents against failures and collapse. The cost of sanitary sewer capital projects is calculated into annual sewer rates and paid through monthly water and sewer billing.

STORM SEWER

Of the four infrastructure categories of public infrastructure (sanitary sewer, storm sewer, roads and water), the city's storm sewer system has received the least amount of resources and attention in the last decade. Upkeep of ditches, culverts, and drains found in the right-of-way is, by City ordinance, the responsibility of the adjoining property owner.

For many blocks, ditches have not been properly maintained and the culverts have become damaged or have been shifted by the freeze/thaw cycle rendering them unable to perform their function. The result is a storm system that functions at a level below full capacity and leaves standing water in ditches for days following rainstorms. Poor maintenance on culverts have left them slow to drain or impassible, preventing storm water from reaching the proper drains which send water to the Rouge River. The current state of the storm and ditch system impacts the subsurface ground water levels and the volume of flow in the city's sanitary sewer system.

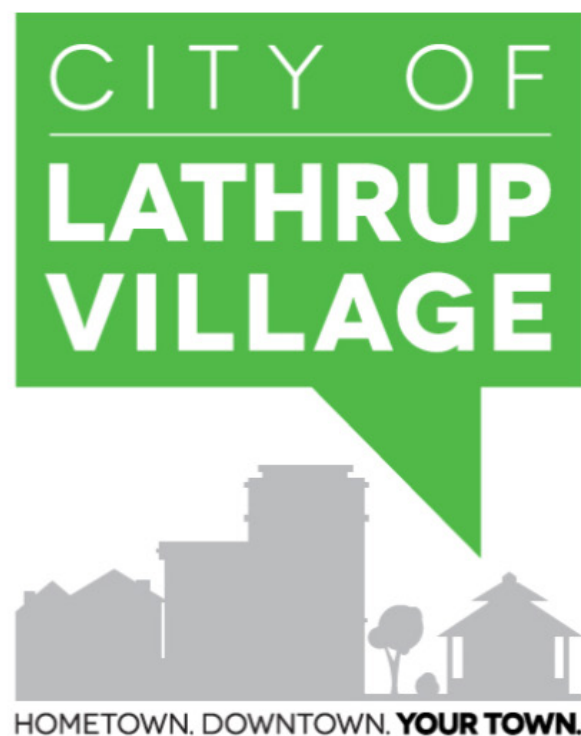
Over the next six years, an aggressive maintenance and re-ditching program will be implemented through our contract with Lathrup Services LLC. Given the scope of the repairs that are needed, this program could take over ten years to complete. Areas where ditches could be enclosed with corrugated drain pipes will also be studied. There was a successful pilot project on the 17300 section of Rainbow Drive, which included new approach work. If the success of that project can be replicated through cost sharing or a specific millage, the city may be able to remove the need for homeowner ditch maintenance.

S20-01		2020 Sewer CCTV
Project Year:	2020-2021	Includes the cost to clean, televise and design sewer improvements based on findings.
Estimated Cost:	\$120,000	
Funding Source:	Sewer Fund	
Ranking:	TBD	
S20-02		2021 Sewer Improvements
Project Year:	2021-2022	Perform repairs found during the 2020 CCTV
Estimated Cost:	\$120,000	
Funding Source:	Sewer Fund	
Ranking:	TBD	
S20-03		2022 Sewer Improvements
Project Year:	2022-2023	Perform repairs found during the 2020 CCTV
Estimated Cost:	\$120,000	
Funding Source:	Sewer Fund	
Ranking:	TBD	

Water

W20-01		2020 Water Main Repair Program (II of III)
Project Year:	2020-2021	Install approx. 1,700' of NEW 12" water main from San Quentin to Wiltshire (Santa Barbara Phase II of III) (Includes 7% engineering fee)
Estimated Cost:	\$400,000	
Funding Source:	Water Fund	
Ranking:	TBD	
W20-02		2021 Water Main Repair Program (III of III)
Project Year:	2021-2022	Install approx. 1,700' of NEW 12" water main from Wiltshire to 12 Mile. (Santa Barbara Phase III of III) (Includes 7% engineering fee)
Estimated Cost:	\$180,000	
Funding Source:	Water Fund	
Ranking:	TBD	
W20-03		2021 Water Main Repair Program
Project Year:	2021-2022	Replace approx. 1,300' of existing 6" water main (1928) located in San Diego from Rackham to Bloomfield (San Diego Phase I of II) (Includes 7% engineering fee)
Estimated Cost:	\$325,000	
Funding Source:	Water Fund	
Ranking:	TBD	
W20-04		2022 Water Main Repair Program
Project Year:	2022-2023	Replace approx. 1,900' of existing 6" deteriorated water main on San Rosa and Wiltshire (Southfield to Lathrup) . (Includes 7% engineering fee)
Estimated Cost:	\$475,000	
Funding Source:	Water Fund	
Ranking:	TBD	
W20-05		2023 Water Main Repair Program
Project Year:	2023-2024	Replace approx. 1,900' of existing 6"/8" deteriorated water main on Lincoln East (Southfield to city border). (Includes 7% engineering fee)
Estimated Cost:	\$475,000	
Funding Source:	Water Fund	
Ranking:	TBD	
W20-06		Gate Valve Replacement
Project Year:	2021-2026	The City's gate valves are very old and do not close correctly. Budget for the replacement of 27 valves per year for 6 years to replace all gate valves installed before 1930 . Useful life is 50 years.
Estimated Cost:	\$960,000 (\$160K x 6 years)	
Funding Source:	TBD	
Ranking:	TBD	

W20-07		Fire Hydrant Replacement Program
Project Year:	2021 - 2025	The City's fire hydrants are very old and experiencing operational issues. Budget for the replacement of 20 hydrants per year for 6 years to replace all hydrants installed before 1930 . Useful life is 50 years. (\$90,800 annually x 6 years)
Estimated Cost:	\$544,000	
Funding Source:	TBD	
Ranking:	TBD	
W20-08		Lead and Copper detection
Project Year:	2021/2022 - 2022/2023	Budget for right-of-way material verification in 2021 and 2022 (\$250,000 per year x two years)
Estimated Cost:	\$500,000	
Funding Source:	TBD	
Ranking:	TBD	



memorandum

DATE: March 11, 2020
TO: Susie Stec, Manager – Community & Economic Development
FROM: Jill Bahm & Meghan Cuneo, Giffels Webster
SUBJECT: Zoning Discussion – Building Materials

Introduction

What prompted this amendment?

- Innovations in building materials are creating new options for architects and designers. There are new products on the market that appear to meet the spirit of the city's requirements on building materials that may be appropriate in terms of longevity and appearance that the Planning Commission may wish to consider.

Current Language

What does the Zoning Ordinance say?

Section 5.14: Except as otherwise provided in this ordinance, on all permanent buildings, exterior wall construction and exposed, exterior chimneys shall be either brick, natural stone, masonry materials other than brick, or a combination thereof, provided all such materials comply with the following specifications:

- All brick made from clay, shale, fire clay, or mixtures thereof shall be hard burned facing brick meeting all the specifications contained in American Society for Testing and Materials Standard C216-65, for grade SW facing brick.
- All other brick, stone and other masonry materials not included in the foregoing paragraphs shall nevertheless meet the durability, strength, and rate of absorption standards established in said above-mentioned specifications.
- Architectural trim material may be wood, aluminum, or other material of equal strength and durability if the building walls proper are of fire-resistant material. Such trim material shall not cover more than ten percent of the exterior wall construction.
- All building materials must also conform to state and local building code requirements.

Background on Issue

Why discuss this issue?

The Planning Commission reviewed a recent project that proposed alternative building materials and did not find the current ordinance provided sufficient standards to evaluate whether the materials would satisfy the requirements.

ORDINANCE NO __ OF 2018

**ORDINANCE AMENDING
THE LATHRUP VILLAGE ZONING ORDINANCE**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LATHRUP VILLAGE
MICHIGAN:**

PART 1.

Amend the Intent statement for the R1 district as follows:

The R1 district is intended to be limited ~~exclusively~~ **primarily** to single-family dwelling units for use as a residence by one family per dwelling unit under regulations specially tailored to preserve the quality of life that appeals to the average resident of this city. **The City also recognizes that the provision of limited off-street parking in this district, adjacent to the Mixed Use districts only, may foster quality redevelopment of those parcels that aligns with the City's vision for a vibrant, pedestrian-oriented commercial corridor.** The regulations in this article apply everywhere within an R1 district in addition to the other applicable regulations of this ordinance.

PART 2.

Amend Section 3.1.2 of the Zoning Code to allow parking as special land uses with a reference to conditions as follows:

3.1.2.C. i. **Parking (4.16) to serve customers and employees of uses within 500 ft**

PART 3.

Amend Section 4 of the Zoning Code by adding Section 4.16 to add standards for parking as follows:

4.16. Parking in the R-1 District. Parking may be permitted in the R-1 district, subject to standards of Section 36-6.2, special land uses, and the following conditions:

- 1. The parcel on which the parking lot is located shall share a lot line that abuts the MX – Mixed Use district, or is adjacent to a public alley adjacent to the MX district, or shall share a lot line with a parcel that is currently developed as a parking lot or is proposed to be developed as a parking lot in conjunction with the subject parcel.**
- 2. Parking areas are setback a minimum of 5 ft from the street right-of-way and 10 ft from a residential district. Parking lot ingress and egress shall be at least 20 ft from any adjacent property in a residential district.**
- 3. The parking lot shall be developed so as to maintain the north-south public alley, where one exists. Where a public alley does not exist, a public alley or private backstreet equivalent shall be provided in conjunction with redevelopment of the parking lot and Southfield Road properties, consistent with the City's Master Plan.**

4. The parking lot shall not be used for outdoor sales, display, or storage.
5. The parking lot shall be landscaped and screened as follows:
 - A. A 6 ft masonry screenwall shall be located 10 ft from the property line that abuts residential property. The wall shall be constructed of red-brown brick or the equivalent integrally colored masonry unit and shall include a stone cap.
 - B. The 10 ft setback area between the screenwall and residential property line shall be landscaped in accordance with Section 5.15.3, buffer requirements. The wall height shall be modified to meet corner clearance requirements at intersections.
 - C. All parking lots shall be separated from a public thoroughfare by a planted hedge of small shrubs or by a masonry wall a minimum of two (2) feet high. The wall shall be constructed of red-brown brick or the equivalent integrally colored masonry unit and shall include a stone cap. When a hedge is proposed, it shall be planted and maintained so as to form a continuous visual screen. The size and plant spacing shall be configured so that a continuous visual screen will be established within three (3) years of planting.
 - D. The parking lot shall be landscaped in accordance with Section 5.15.4, parking facility landscaping.
 - E. The owner of the parking lot shall maintain the landscape buffer area in good condition, per Section 5.15.9.B.

PART 5.

If any section, paragraph, sentence, clause and/or phrase of this Ordinance or the application thereof is declared unconstitutional, unenforceable or invalid by the valid judgment of any court of competent jurisdiction such unconstitutionality, unenforceability or invalidity shall not affect any of the remaining sections, paragraphs, sentences, clauses and/or phrases of this Ordinance, since the same would have been enacted by the City of Lathrup village without the incorporation in this Ordinance of any such unconstitutional, unenforceable or invalid section, paragraph, sentence, clause or phrase. To this end, the provisions of this Ordinance are hereby declared severable.

PART 6.

All other Ordinances, or any parts thereof, which are in conflict with the provisions of this Ordinance, are hereby repealed. To the extent that any provision or provisions of this Ordinance are inconsistent or in conflict with any other provision of the Code of Ordinances or any regulation of the City, the provisions of this Ordinance shall be deemed to control.

PART 7.

This Ordinance shall become effective upon final adoption and publication of the same in the manner prescribed by law.

This Ordinance was introduced on _____, by _____; Notice of Public Hearing was published on _____. A Public Hearing was held, the title having been read and the

Ordinance considered, on motion to adopt by _____, seconded by _____, a record vote was taken and the following result was had:

YEA:

NAY:

ABSENT:

WHEREUPON, the presiding officer declared the above Ordinance duly adopted on the _____ day of _____.

ATTEST:

Zoning Alternatives

The Planning Commission may choose to maintain the current standards as written or explore alternatives, including the following modification. This is intended to be a simplified standard that gives the Planning Commission flexibility in review of materials.

Section 5.14: Except as otherwise provided in this ordinance, on all permanent buildings, exterior wall construction and exposed, exterior chimneys shall be **comprised of high-quality, durable and attractive materials, including** either brick, natural stone, masonry materials other than brick, or a combination thereof. **Alternative building materials may be permitted by the Planning Commission if the applicant demonstrates that the proposed materials achieve the goals noted herein.** ~~—provided that the all such materials comply with the following specifications:~~

- ~~• All brick made from clay, shale, fire clay, or mixtures thereof shall be hard burned facing brick meeting all the specifications contained in American Society for Testing and Materials Standard C216-65, for grade SW facing brick.~~
- ~~• All other brick, stone and other masonry materials not included in the foregoing paragraphs shall nevertheless meet the durability, strength, and rate of absorption standards established in said above mentioned specifications.~~
- ~~• Architectural trim material may be wood, aluminum, or other material of equal strength and durability if the building walls proper are of fire resistant material. Such trim material shall not cover more than ten percent of the exterior wall construction.~~
- All building materials must also conform to state and local building code requirements.

April 9, 2020

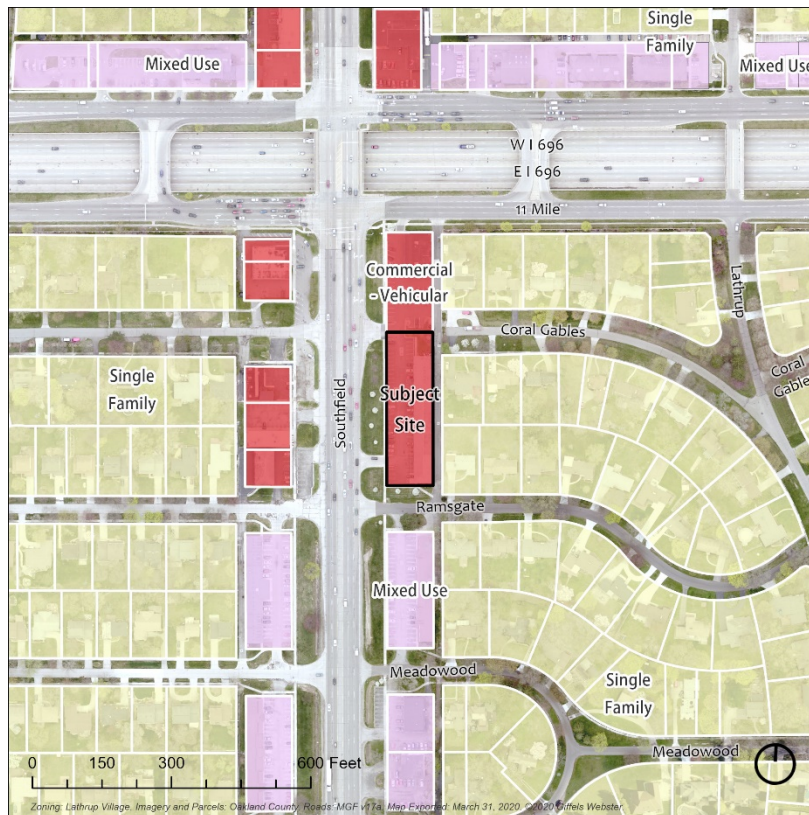
Planning Commission
City of Lathrup Village
27400 Southfield Road
Lathrup Village, MI 48076

Site Plan Review

Site: 26710-26780 Southfield Road
Applicant: Sam Surnow/ Surnow Company LLC
Plan Date: 3/23/20
Zoning: CV – Commercial Vehicular
Parcel ID: 24-24-103-032
Proposal: Façade Renovation

Dear Planning Commissioners,

We have reviewed the site plan and a summary of our findings are below. Items in **bold** require specific action by the applicant.



Summary of Findings

Existing Conditions

1. **Summary.** The 33,000 sf (0.758-acre) site is zoned CV – Commercial Vehicular. Properties to the north and west across Southfield Road are zoned Commercial Vehicular (CV). The property to the south is zoned Mixed Use. A 20-ft wide public alley separates the subject site from the adjacent parcels to the east, which are zoned R-1 – Single Family Residential. The subject site is currently developed with a commercial building. The applicant is proposing to renovate the façade facing Southfield Road to include new materials and increase the height of the west elevation.
2. **Existing site.** The existing 0.758 acre site is a 1 story, 9,450 sf commercial building. The lot is rectangular and includes in addition to the commercial building, an asphalt parking surface, a dumpster, landscaping, and a 5 ft brick embossed concrete screening wall along the rear lot line. Currently, the building height is 18'-5".
3. **Adjacent land uses.** Adjacent uses include medical and offices both north and west of the site. Mixed retail uses to the south of the site. East of the site, beyond the public alley, are single family homes.
4. **Site configuration and access.** The site has two access drives from Southfield Road, as well as access from the alley (Ramsgate Drive at the south end and W Eleven Mile Road at the north end).

Proposed

5. **Use.** Uses will remain consistent with existing building.
6. **Building Materials.** The Applicant is proposing to update the façade of the building with new materials. The new façade includes Nichiha fiber cement panels, cultured stone, metal ribbed panels, and vinyl fabric awnings to replace the existing wood fascia. Per Section 5.4, all permanent buildings and exterior walls shall be either brick, natural stone, masonry material, or a combination thereof. All other materials must meet the durability, strength, and rate of absorption standards. The applicant submitted detailed material profiles for the Nichiha fiber cement panels, cultured stone, and metal ribbed panels which appear to confirm that the materials meet the standards. **The Planning Commission may wish to discuss these materials further with the applicant.**
7. **Building Height.** Applicant is proposing to replace the existing roof as well as increase the west elevation building height with a parapet wall to 26 ft with alternating storefronts increased to 20 ft. The maximum building height in the Commercial Vehicular district is 30 ft, therefore the proposed façade is in compliance with the standards.
8. **Parking.** Per Section 5.13.12, personal service and retail uses shall provide one space for each 200 square feet of usable floor space; restaurants require one space for each 70 square feet of usable floor area. The existing principal building is 9,450 square feet; the applicant notes that 19.6% of the building is used as a restaurant. As such, the Zoning Ordinance provides that the standard for retail uses may be applied. Therefore, 47 spaces are required and 61 spaces are provided on site; the site is currently compliant with the standard.

9. **Circulation.** The façade renovation should not present any conflicts with the site's parking.
10. **Landscaping.** Section 5.15.2 requires five percent of the site to be landscaped, which is 1,650 sf. Parking Lot Landscape requires 15 sf of landscaping for each parking space, with 61 parking spaces the additional required landscaping is 915 sf. The applicant is proposing to keep all the existing trees, shrubs, and ornamental grasses on the site. In addition, the applicant is proposing to add three plant beds along the west side of the parking lot. These areas plus the existing lawn in front of the office building bring the total of landscaping to approximately 7.8% of the site.
11. **Screening.** Section 5.5 requires a protective/barrier wall between the subject site and the adjacent residential zoning district (along the residential side of the alley). The applicant has an existing 5 ft masonry screen wall as required.
12. **Lighting.** The applicant indicates new exterior lighting fixtures on the updated façade. **Applicant shall submit a lighting plan.**

We will look forward to discussing the site plan with the Planning Commission.

Regards,

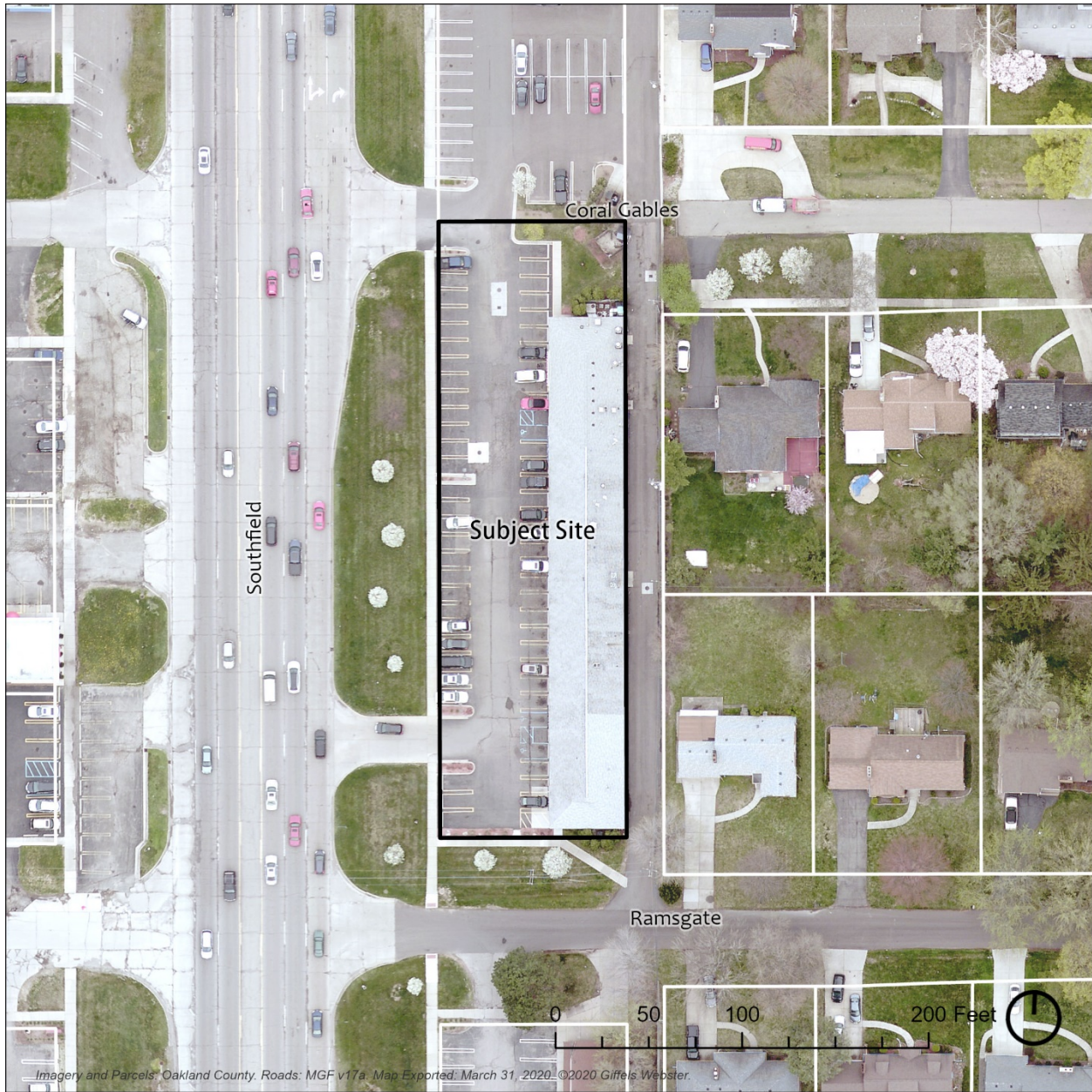
Giffels Webster

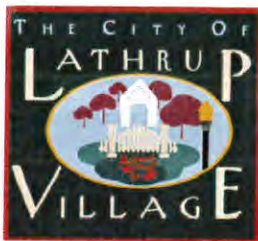


Staff Planner

Jill Bahm, AICP
Meghan Cuneo
Partner







A HERITAGE OF GOOD LIVING

City of Lathrup Village
Planning Commission
27400 Southfield Road
Lathrup Village, MI 48076

Phone: (248) 557-2600

Fax: (248) 557-2602

Office Use Only

Date Submitted: _____

Administrative Review Date: _____

Site Plan Review Date: _____

Application for Site Plan Review

Pursuant to Sec. 6.1 site plan review requirements are intended to provide a consistent and uniform method of review of proposed development plans, to ensure full compliance with the regulations of this article and other applicable ordinances and state and federal laws, to achieve efficient use of land, to protect natural resources, and to prevent adverse impact on adjoining or nearby properties. It is the intent of these provisions to encourage cooperation and consultation between the city and the applicant to facilitate development in accordance with the city's land use objectives.

Project Location

Subject Property Address: **26710-26780 SOUTHFIELD RD. LATHRUP VILLAGE, MI.**

Subject Property Parcel Number: **24-24-103-032**

Project Name: **LATHRUP SHOPPING PLAZA FACADE RENOVATION**

Applicant's Information

Name: **SAM SURNOW / SURNOW COMPANY, LLC,**

Address: **320 MARTIN ST. STE 100 BIRMINGHAM** State: **MI** Zip Code: **48009**

Phone Number: **248-865-3000** Fax: _____

Email Address: **SAME SURNOW.COM**

Interest in Property: **OWNER - MANAGING PARTNER**

Property Owner's Information

Name: **THE SURNOW COMPANY LLC.**

Address: **320 MARTIN ST. STE 100 BIRMINGHAM** State: **MI** Zip Code: **48009**

Phone Number: **248-865-3000** Fax: _____

Email Address: **SAM@SURNOW.COM**

Signature: _____ Date: _____

Description of Proof of Ownership Provided: **TAX BILLS ATTACHED**

Parcel Information

Legal Description: **CITY OF LATHRUP VILLAGE, COUNTY OF OAKLAND, STATE OF MICHIGAN AND DESCRIBED AS FOLLOWS:
T1N., R10E., SEC 24 LOUISE LATHRUP'S CALIFORNIA BUNGALOW SUB
NO 5 LOTS 2972 TO 2984, INCL., ALSO S 1/2 OF VAC CORAL GABLES
AVE ADJ TO SD LOT 2972-3-28-02 CORR**

Acreage: **0.758** Frontage (in feet): **330 FT.** Dimensions: **330' x 100'**

Proposed Building/Alteration Information

Proposed Building: **EXISTING RETAIL SHOPPING CENTER**

Existing Zoning: **CV** Proposed Use: **RETAIL**

Square Footage: **9,450 SF** Employment Opportunities Created: **30 ±**

Application for Site Plan Review Page 2

Please provide all information that applies to the Project:

Project Engineer

Name:	NOWAK & FRAUS ENGINEERS		
Address:	28 W. ADAMS, STE 210, DETROIT	State:	MI Zip Code: 48226
Phone Number:	(313) 965-2444	Fax:	248-332-8257
Email Address:	CFINDLEY@NFE-ENGR.COM		

Project Attorney

Name:	NONE		
Address:		State:	Zip Code:
Phone Number:		Fax:	
Email Address:			

Project Architect

Name:	SIEGAL TUOMAPLA ASSOCIATES ARCHITECTS & PLANNERS INC		
Address:	29200 NORTHWESTERN HWY STE 160 SOUTHFIELD	State:	MI Zip Code: 48034
Phone Number:	248-352-0099	Fax:	248-352-0088
Email Address:	LZIMMERMAN@STA-ARCHITECTS.COM		

Other Professionals Associated with the Project

Name:			
Address:		State:	Zip Code:
Phone Number:		Fax:	
Email Address:			



Interest in Project:	
----------------------	--

Pursuant to Sec. 6.1.4 (C) Submission of site plan for final review: the applicant is required to submit the following materials to the City Hall 21 days prior to the scheduled date of the formal Site Plan review

1. Three completed and signed copies of the application for site plan review
2. Fourteen individually folded copies of the site plan
3. Proof that the plan has been submitted for review to governmental agencies that have jurisdiction over any aspect of the project, including, but not limited to; the county road commission, county drain commission, county health division, Michigan Department of Transportation, Michigan Department of Environmental Quality, and other agencies deemed appropriate by the planning commission or city council; and
4. In escrow the required consultant review fee

Signatures

Application MUST be signed by both the applicant and legal property owner). The undersigned deposes that the foregoing and any attached information is true & correct.

Applicant's Signature:	
Applicant's Printed Name	SAM SUNNOW / THE SUNNOW COMPANY LLC
Owner's Signature	
Owner's Printed Name:	SAM SUNNOW / THE SUNNOW COMPANY LLC

Site Plan Review Checklist for Applicants

According to **Sec. 6.1.4** of the Zoning Ordinance of Lathrup Village entitled "Required information on all site plans" the following items are required to complete an application for Site Plan Review. It is the responsibility of the applicant to ensure that the application is complete, factual and complies with the city's ordinances.

Sec. 6.1.4 (B) Descriptive and Identification Data

Site plans shall consist of an overall plan for the entire development, drawn to a scale of not less than one inch = 20 feet for property less than one acre, one inch = 30 feet for property larger than one acre but less than three acres, and one inch = 50 feet for property larger than three acres. Sheet size shall be at least 24 inches by 36 inches.

Y	N	N/A	
<input checked="" type="checkbox"/>			Applicant's name and address, and telephone number.
<input checked="" type="checkbox"/>			Title block indicating the name of the development.
<input checked="" type="checkbox"/>			Scale.
<input checked="" type="checkbox"/>			Northpoint.
<input checked="" type="checkbox"/>			Dates of submission and revisions (month, day, and year).
<input checked="" type="checkbox"/>			Location map drawn to scale without northpoint.
<input checked="" type="checkbox"/>			Legal and common description of property.
<input checked="" type="checkbox"/>			The dimensions of all lots and property lines, showing the relationship of the site to abutting properties. If the site is a part of a larger parcel, the plan should indicate the boundaries of total land holding.
		<input checked="" type="checkbox"/>	A schedule of completing the project, including the phasing or timing of all proposed developments.
<input checked="" type="checkbox"/>			Identification and seal of architect, engineer, land surveyor, or landscape architect who prepared plan.
		<input checked="" type="checkbox"/>	Written description of proposed land use.
<input checked="" type="checkbox"/>			Zoning classification of applicant's parcel and all abutting parcels.
<input checked="" type="checkbox"/>			Proximity to driveways serving adjacent parcels.
<input checked="" type="checkbox"/>			Proximity to section corner and major thoroughfares.
		<input checked="" type="checkbox"/>	Notation of any variances which have or must be secured.
<input checked="" type="checkbox"/>			Net acreage (minus right-of-way) and total acreage, to the nearest one-tenth acre.

Sec. 6.1.4 (C) Site Data

Y	N	N/A	
<input checked="" type="checkbox"/>			Existing lot lines, building lines, structures, parking areas, and other improvements on the site and within 100 feet of the site.
<input checked="" type="checkbox"/>			Front, side, and rear setback dimensions.
		<input checked="" type="checkbox"/>	Topography on the site and within 100 feet of the site at two-foot contour intervals, referenced to a U.S.G.S. benchmark.
<input checked="" type="checkbox"/>			Proposed site plan features, including buildings, roadway widths and names, and parking areas.
<input checked="" type="checkbox"/>			Dimensions and centerlines of existing and proposed roads and road rights-of-way.
<input checked="" type="checkbox"/>			Acceleration, deceleration, and passing lanes, where required.
<input checked="" type="checkbox"/>			Proposed location of driveway entrances and on-site driveways.
		<input checked="" type="checkbox"/>	Typical cross-section of proposed roads and driveways.
		<input checked="" type="checkbox"/>	Location of existing drainage courses, floodplains, lakes and streams, with elevations.
		<input checked="" type="checkbox"/>	Location and dimensions of wetland areas. If deemed necessary because of site or soil conditions or because of the scope of the project, a detailed hydrology study may be required.
<input checked="" type="checkbox"/>			Location of sidewalks within the site and within the right-of-way.
<input checked="" type="checkbox"/>			Exterior lighting locations and method of shielding lights from shining off the site.
<input checked="" type="checkbox"/>			Trash receptacle locations and method of screening, if applicable.
		<input checked="" type="checkbox"/>	Transformer pad location and method of screening, if applicable.

Y	N	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Parking spaces, typical dimensions of spaces, indication of total number of spaces, drives, and method of surfacing.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Information needed to calculate required parking in accordance with zoning ordinance standards.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The location of lawns and landscaped areas, including required landscaped greenbelts.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Landscape plan, including location, size, type and quantity of proposed shrubs, trees and other live plant material.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location, sizes, and types of existing trees five inches or greater in diameter, measured at one foot off the ground, before and after proposed development.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cross-section of proposed berms.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location and description of all easements for public right-of-way, utilities, access, shared access, and drainage.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Designation of fire lanes.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loading/unloading area.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The location of any outdoor storage of materials and the manner by which it will be screened.

Sec. 6.1.4 (D) Building and Structure Details.

Y	N	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location, height, and outside dimensions of all proposed buildings or structures.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Indication of the number of stores and number of commercial or office units contained in the building.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Building floor plans.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Total floor area.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location, size, height, and lighting of all proposed signs.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Proposed fences and walls, including typical cross-section and height above the ground on both sides.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Building facade elevations, drawn to a scale of one inch equals = four feet, or another scale approved by the building official and adequate to determine compliance with the requirements of this article. Elevations of proposed buildings shall indicate type of building materials, roof design, projections, canopies, awnings and overhands, screen walls and accessory building, and any outdoor or roof-located mechanical equipment, such as air conditioning units, heating units, and transformers, including the method of screening such equipment. Such equipment shall be screened from view of adjacent properties and public rights-of-way. Such screening shall be designed to be perceived as an integral part of the building design.

Sec. 6.1.4 (E) Information Concerning Utilities, Drainage, and Related Issues

Y	N	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Schematic layout of existing and proposed sanitary sewers and septic systems; water mains, well sites, and water service leads; hydrants that would be used by public safety personnel to service the site; and, the location of gas, electric, and telephone lines.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location of exterior drains, dry wells, catch basins, retention/detention areas, sumps and other facilities designed to collect, store, or transport stormwater or wastewater. The point of discharge for all drains and pipes should be specified on the site plan.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Indication of site grading and drainage patterns.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Types of soils and location of floodplains and wetlands, if applicable.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soil erosion and sedimentation control measures.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Proposed finish grades on the site, including the finish grades of all buildings, driveways, walkways, and parking lots.

Y N N/A

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Listing of types and quantities of hazardous substances and polluting materials which will be used or stored on-site at the facility in quantities greater than 25 gallons per month.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Areas to be used for the storage, use, loading/unloading, recycling, or disposal of hazardous substances and polluting materials, including interior and exterior areas.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Underground storage tanks locations.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Delineation of areas on the site which are known or suspected to be contaminated, together with a report on the status of site cleanup.

Sec. 6.1.4 (F) Information Concerning Residential Development.

Y N N/A

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The number, type and location of each type of residential unit (one-bedroom units, two-bedroom units, etc.).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Density calculations by type of residential unit (dwelling units per acre).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lot coverage calculations.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Floor plans of typical buildings with square feet or floor area.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Garage and carport locations and details, if proposed.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pedestrian circulation system.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Location and names of roads and internal drives with an indication of how the proposed circulation system will connect with the existing adjacent roads. The plan should indicate whether proposed roads are intended to be private or dedicated to the public.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Community building location, dimensions, floor plans, and facade elevations, if applicable.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Swimming pool fencing detail, including height and type of fence, if applicable.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Location and size of recreation open areas.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Indication of type of recreation facilities proposed for recreation area.

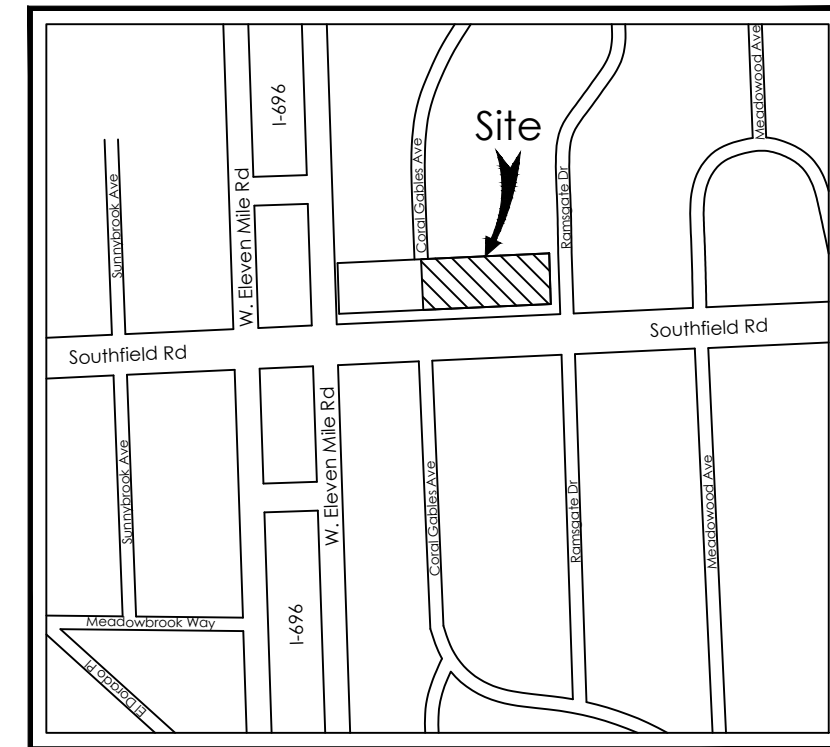
Please Note:

Other data which may be required. Other data may be required if deemed necessary by the city administrative officials, planning commission, or city council to determine compliance with the provisions in this article. Such information may include traffic studies, market analysis, environmental assessment and evaluation of the demand on public facilities and services.

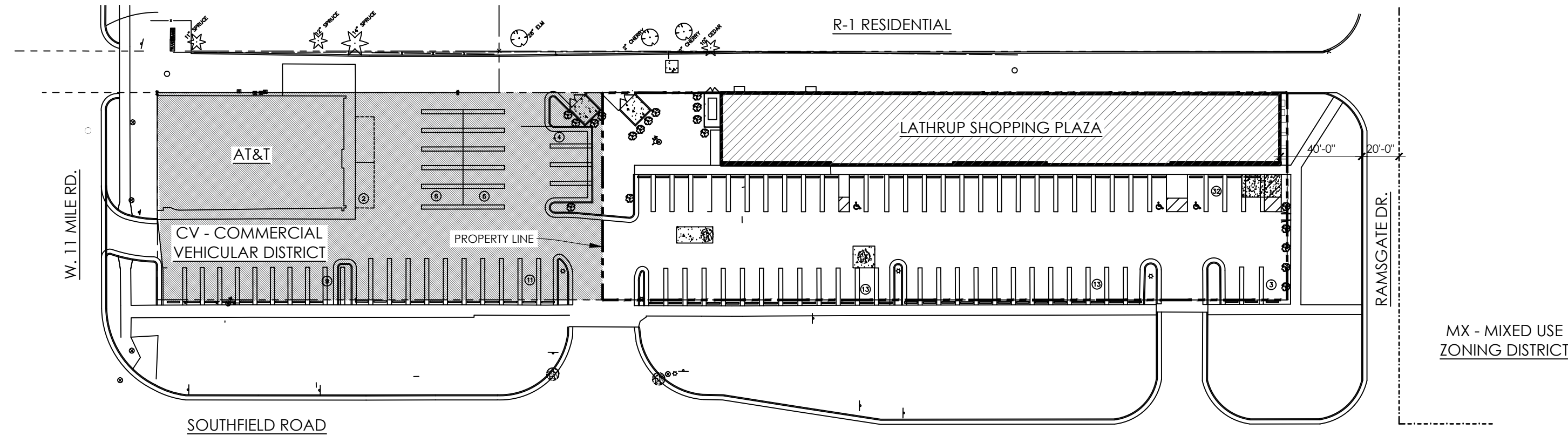
Site Plan Approval

Lathrup Shopping Plaza Facade Renovation

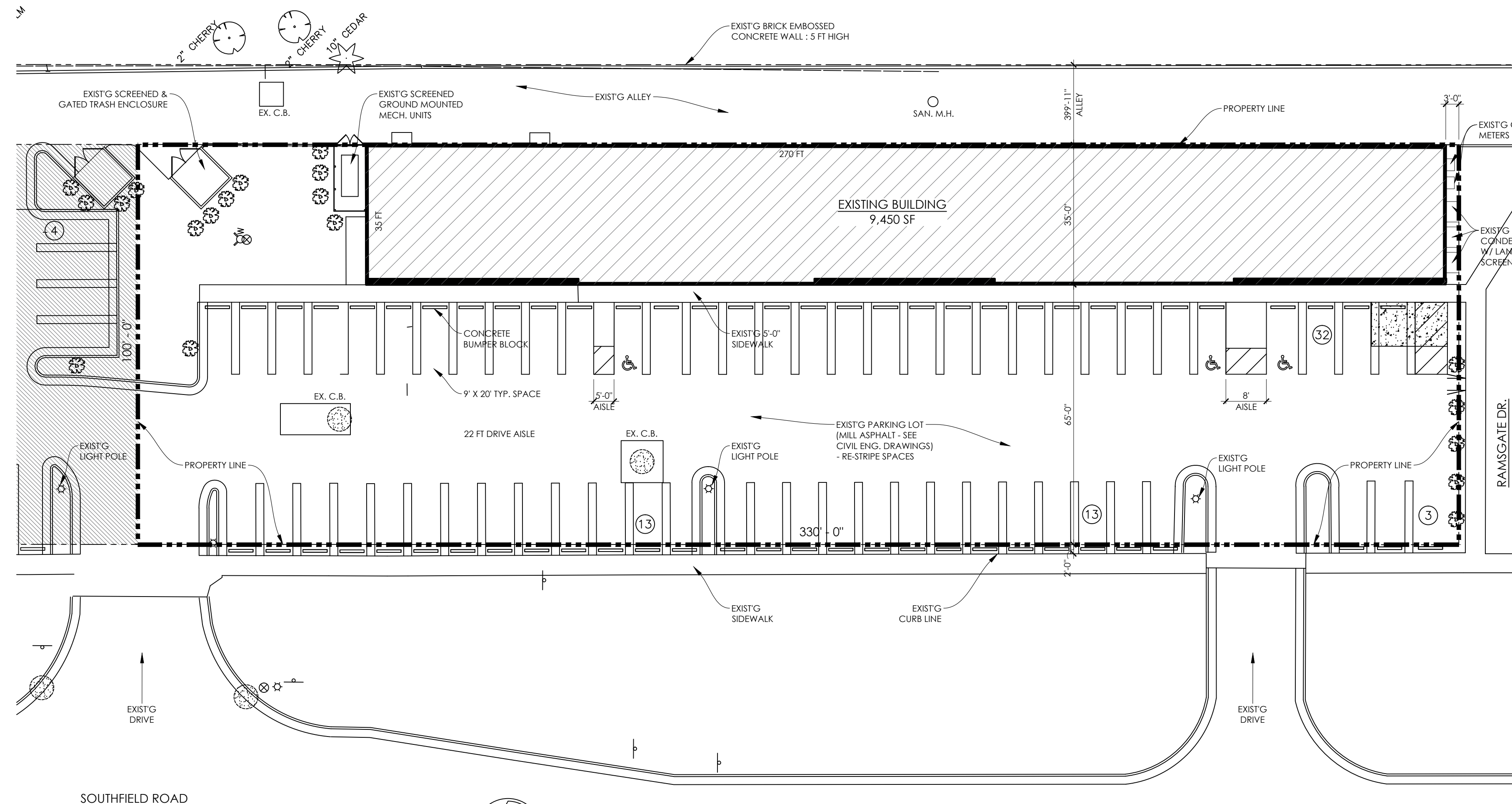
26710 - 26780 Southfield Road Lathrup Village, MI 48076



LOCATION PLAN
NO SCALE



ENLARGED
LOCATION PLAN
SCALE: 1" = 50'-0"



EXISTING
SITE PLAN TO REMAIN
SCALE: 1" = 20'-0"

INDEX OF DRAWINGS

- P.1 SITE PLAN
- P.2 EXISTING & PROPOSED ELEVATIONS
- P.3 EXISTING & PROPOSED ELEVATIONS
- P.4 EXISTING & PROPOSED FLOOR & ROOF PLANS
- P.5 PERSPECTIVE RENDERINGS
- P.6 ENLARGED ELEVATIONS, NIGHT RENDERING

- C.1 BOUNDARY & TOPOGRAPHIC SURVEY
- C.2 DEMOLITION & SOIL EROSION CONTROL PLAN
- C.3 SITE IMPROVEMENT & PAVING PLAN

LEGAL DESCRIPTION

CITY OF LATHRUP VILLAGE, COUNTY OF OAKLAND, STATE OF MICHIGAN AND DESCRIBED AS FOLLOWS:

T1N., R10E., SEC 24 LOUISE LATHRUP'S CALIFORNIA BUNGALOW SUB NO 5 LOTS 2972 TO 2984, INCL., ALSO S 1/2 OF VAC CORAL GABLES AVE ADJ TO SD LOT 2972-3-28-02 CORR

SITE DATA

EXISTING SITE AREA : 330' X 100' = 0.758 ACRES
ZONING : CV COMMERCIAL VEHICULAR DISTRICT
EXISTING & PROPOSED BUILDING AREA : 9,450 SF
EXISTING BUILDING HEIGHT : 15'-4 1/2"
MAX. PERMITTED BUILDING HEIGHT : 30 FT (2 STORIES)
MAX. PROPOSED BUILDING HEIGHT : 26 FT (1 STORY)

PARKING

REQUIRED : 1 SPACE PER 200 SF OF USABLE AREA W/ LESS THAN 25% RESTAURANT
NOTE : EXISTING HAPPY'S PIZZA = 1,855 SF ±
1,855 SF / 9,450 SF = 19.6%
REQUIRED : 9,450 SF / 200 = 47 SPACES
(3 ACCESSIBLE SPACES REQUIRED)
PROVIDED : 61 SPACES
(3 ACCESSIBLE SPACES PROVIDED)

DELIVERY

9,450 SF REQUIRES 1 SPACE @ 10' X 40'

NOTE:

EXISTING DELIVERIES UTILIZE THE ALLEY - THIS SHALL CONTINUE WITH DELIVERIES TO BE MADE DURING NON-PEAK/OFF HOURS, USING SMALLER TRUCKS.

NOTES:

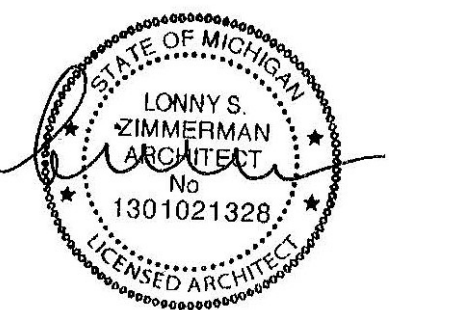
1. NO ROOF MOUNTED HVAC UNITS.
2. EXISTING SCREENED TRASH RECEPTACLE TO REMAIN.
3. EXISTING LED LIGHT POLES TO REMAIN.
4. SEE CIVIL ENGINEERING AND LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.



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29200 northwestern hwy
suite 160
southfield, mi 48034

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f • 248 • 352 • 0088
www.sta-architects.com



project name:

Lathrup
Shopping Plaza
Facade Renovation

project location:

26710-26780
Southfield Road
Lathrup Village,
MI 48076

date/revision:

03.18.20 Site Plan Approval

sheet title:

Cover Sheet

project number:

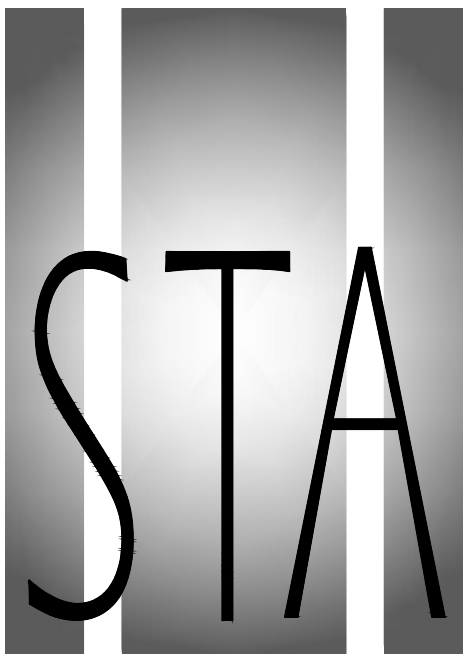
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sheet number:

P.1

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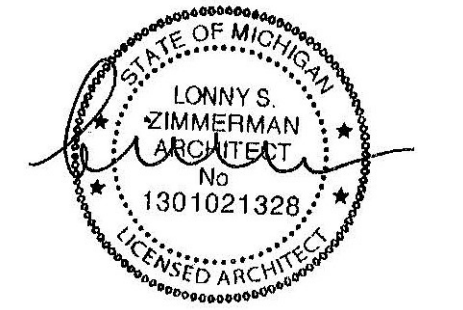
2019



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project name:
Lathrup
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Facade Renovation

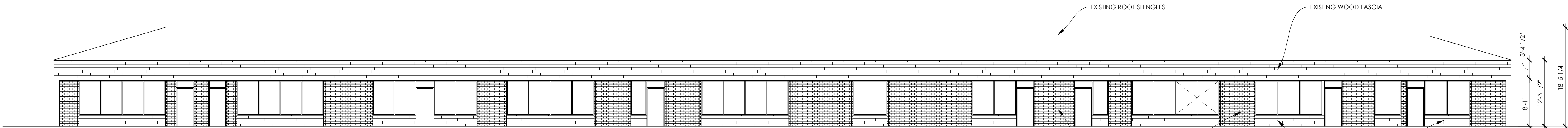
project location:
26710-26780
Southfield Road
Lathrup Village,
MI 48076

date/revision:
03.18.20 Site Plan Approval

sheet title:
Existing &
Proposed
Elevations

project number:
2510
sheet number:

P.2

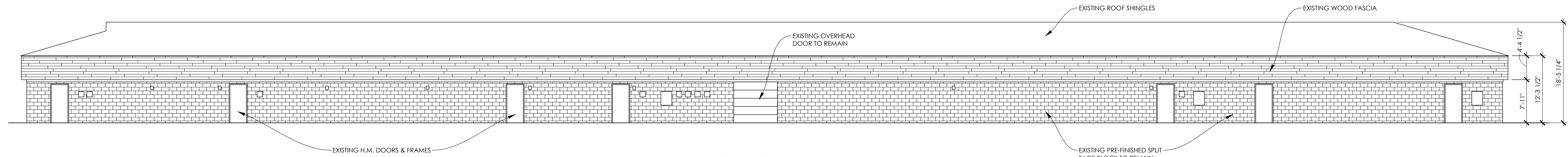


EXISTING
WEST ELEVATION (FRONT)
SCALE: 3/32" = 1'-0"



PROPOSED
WEST ELEVATION (FRONT)
PERSPECTIVE - NO SCALE

NOTE: SIGNAGE NOT INCLUDED IN SITE PLAN APPROVAL



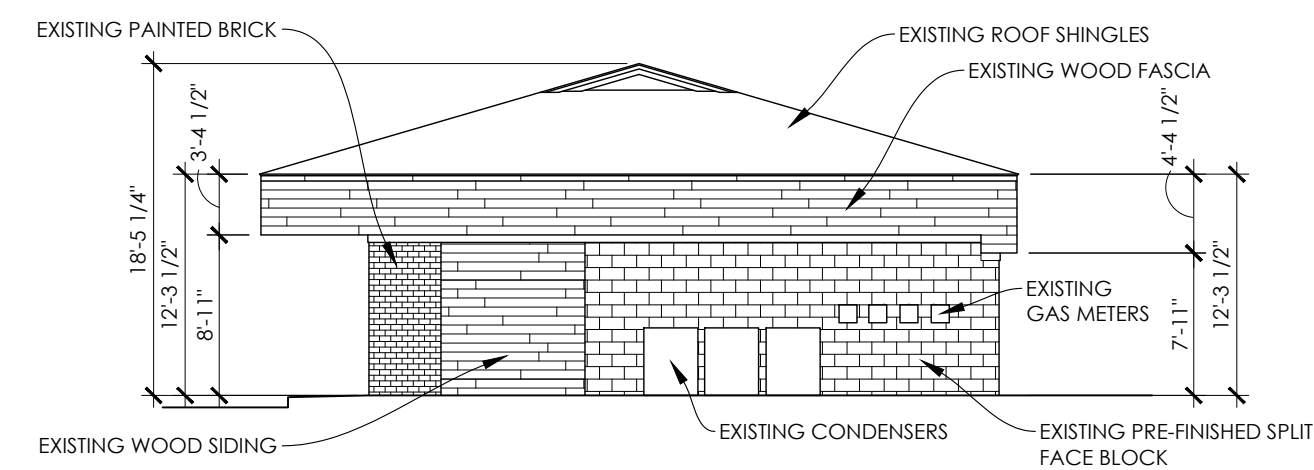
EXISTING EAST ELEVATION (REAR)

SCALE: 3/32" = 1'-0"



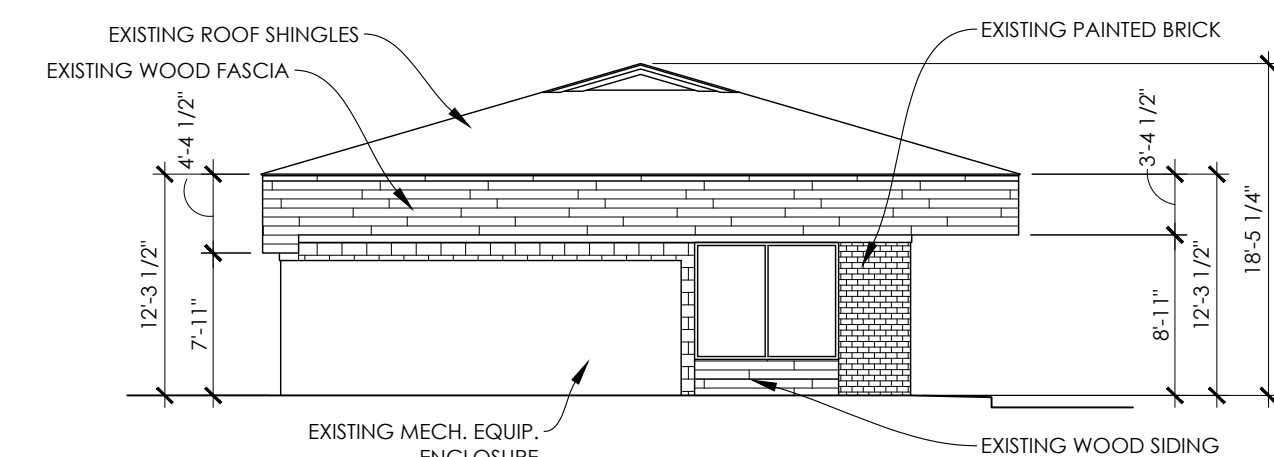
PROPOSED EAST ELEVATION (REAR)

PERSPECTIVE - NO SCALE



EXISTING SOUTH ELEVATION

SCALE: 3/32" = 1'-0"



EXISTING NORTH ELEVATION

SCALE: 3/32" = 1'-0"



PROPOSED SOUTH ELEVATION

PERSPECTIVE - NO SCALE



PROPOSED NORTH ELEVATION

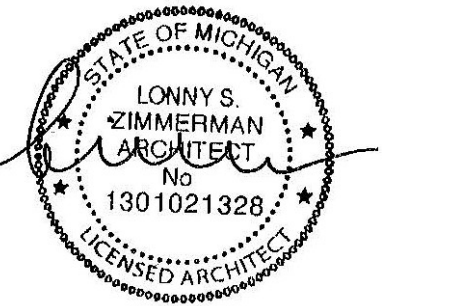
PERSPECTIVE - NO SCALE



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Facade Renovation

project location:
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MI 48076

date/revision:

■ 03.18.20 Site Plan Approval

sheet title:

Existing &
Proposed
Elevations

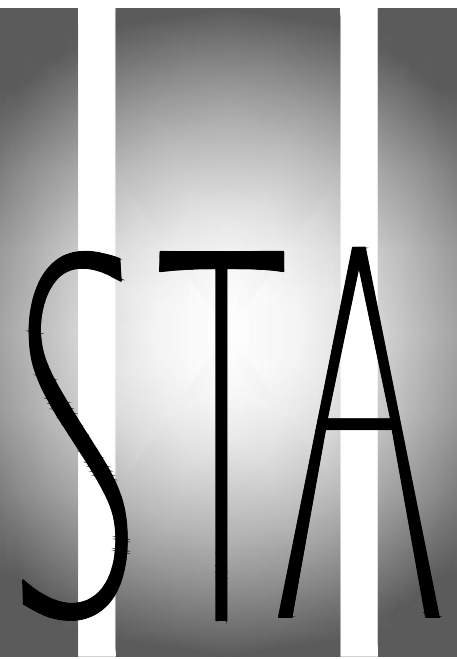
project number:

2510

sheet number:

P.3

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project name:
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project location:
26710-26780
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MI 48076

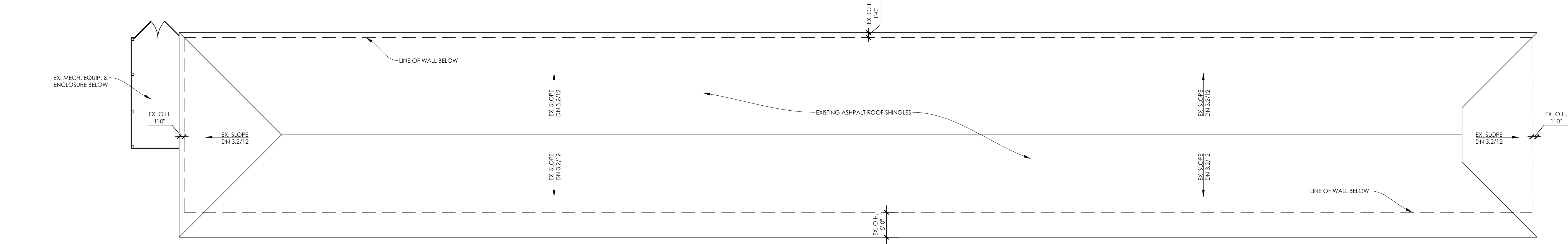
date/revision:
03.18.20 Site Plan Approval

sheet title:
Existing &
Proposed
Floor & Roof
Plans

project number:
2510
sheet number:

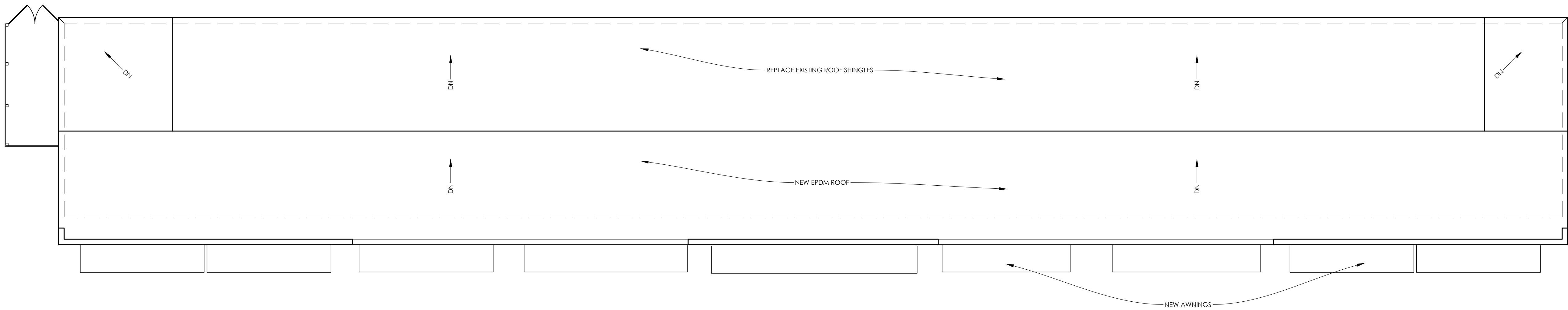
P.4

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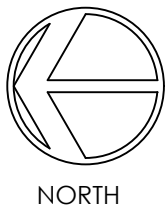
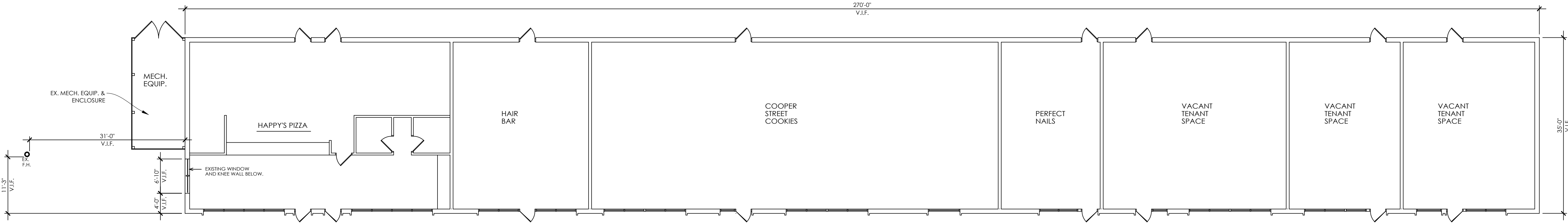
EXISTING ROOF PLAN

SCALE: 3/32" = 1'-0"



PROPOSED ROOF PLAN

SCALE: 3/32" = 1'-0"



EXISTING FLOOR PLAN (TO REMAIN)

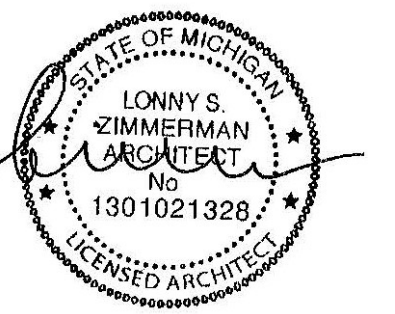
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project name:
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Southfield Road
Lathrup Village,
MI 48076

date/revision:

03.18.20 Site Plan Approval

sheet title:

Perspective
Renderings

project number:

2510

sheet number:

P.5

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ENLARGED
WEST ELEVATION

PERSPECTIVE - NO SCALE



ENLARGED
WEST ELEVATION

PERSPECTIVE - NO SCALE

NOTE:
SHIELDED LED CONTINUOUS LIGHT STRIP RECESSED
BEHIND METAL COPING TO WASH FASCIA.



NIGHT
PERSPECTIVE RENDERING

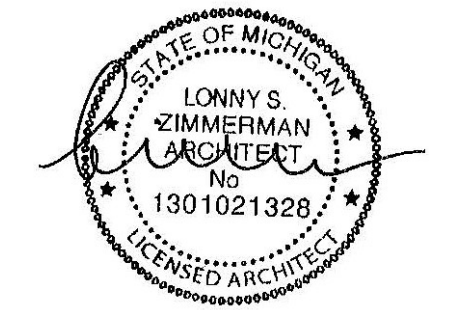
PERSPECTIVE - NO SCALE



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project location:
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Southfield Road
Lathrup Village,
MI 48076

date/revision:
03.18.20 Site Plan Approval

sheet title:
Enlarged
Elevations,
Night
Rendering

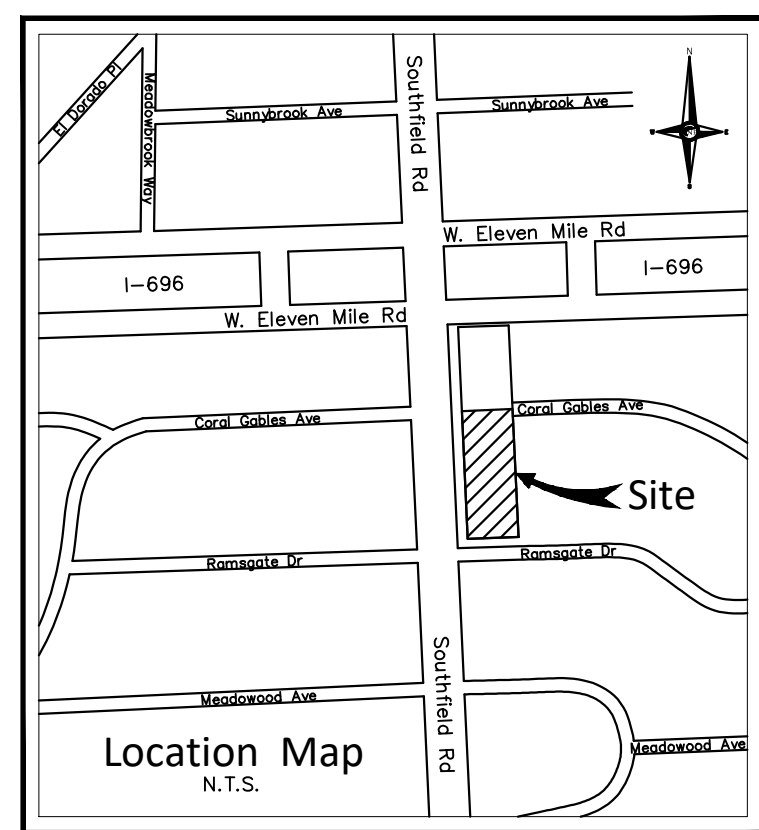
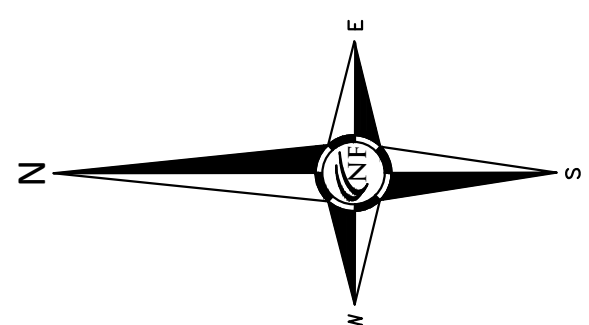
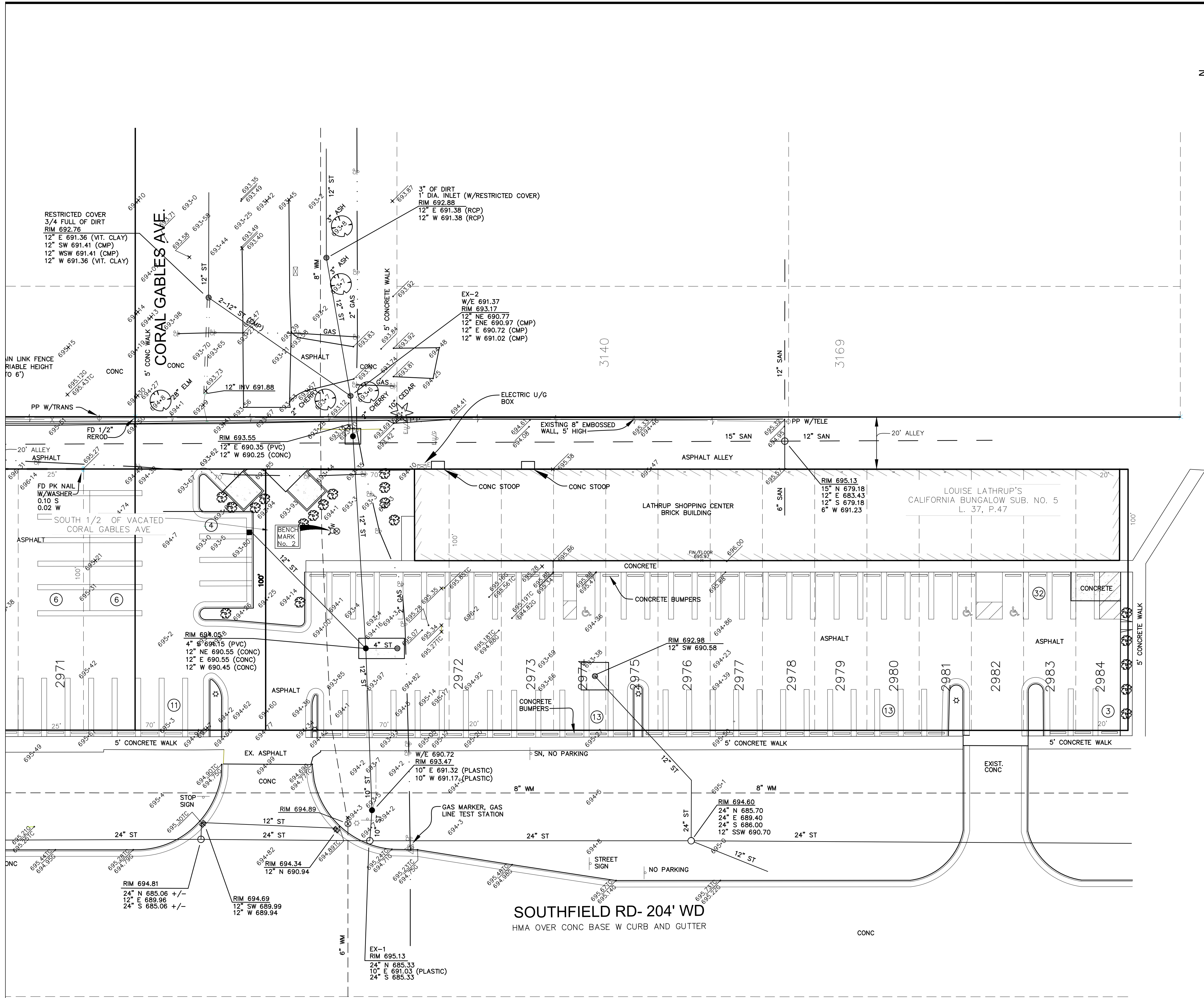
project number:

2510

sheet number:

P.6

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TOPOGRAPHIC & BOUNDARY SURVEY
BY JOHNSON & ANDERSON
CONSULTING ENGINEERS.
PRELIMINARY SITE ENGINEERING
PREPARED BY:

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
28 W. ADAMS, SUITE 210
DETROIT, MI 48226
TEL. (313) 965-2444
FAX. (248) 332-8257

SURVEY NOTE:
THIS BOUNDARY AND TOPOGRAPHIC SURVEY HAS BEEN PROVIDED BY THE PROJECT ARCHITECT, SEGAL/TUOMALA ASSOCIATES, FOR THE PURPOSES OF SITE LAYOUT AND DESIGN BY NOWAK & FRAUS, PLLC. NOWAK & FRAUS, PLLC HAS NOT FIELD VERIFIED THE INFORMATION CONTAINED ON THIS SHEET. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT FOR CLARIFICATION BY THE ORIGINAL SURVEYOR.

NO GUARANTEE IS MADE BY NOWAK & FRAUS, PLLC FOR THE ACCURACY OF THE DATA CONTAINED ON THIS SURVEY.

NFE JOB NO: L576

LEGAL DESCRIPTION

CITY OF LATHRUP VILLAGE, COUNTY OF OAKLAND, STATE OF MICHIGAN AND DESCRIBED AS FOLLOWS:
TIN, R10E., SEC 24 LOUISE LATHRUP'S CALIFORNIA BUNGALOW SUB NO 5 LOTS 2972 TO 2984, INCL., ALSO S 1/4 OF VAC CORAL GABLES AVE ADJ TO SD LOT 2972-3-28-12 CORN

NOTE

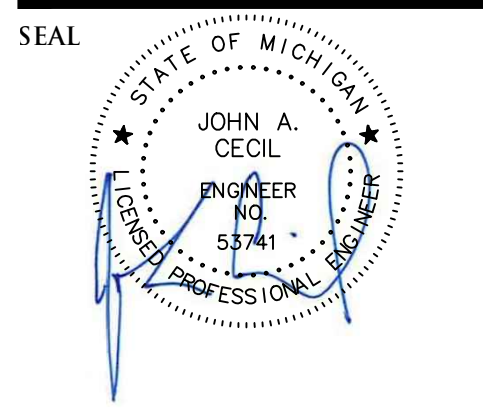
REFER TO LANDSCAPE PLAN FOR EXISTING LANDSCAPING.

LEGEND

- | | |
|-------------------|-------------------------|
| MANHOLE | EXISTING SANITARY SEWER |
| HYDRANT | EXISTING SAN. CLEAN OUT |
| MANHOLE | EXISTING WATER MAIN |
| UTILITY POLE | EXISTING STORM SEWER |
| GUY WIRE | OVERHEAD LINES |
| SIGN | LIGHT POLE |
| EXISTING GAS MAIN | |

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
28 WEST ADAMS, SUITE 210
DETROIT, MI 48226
TEL. (313) 965-2444
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM



PROJECT
Lathrup Shopping Center
26754 Southfield Road

CLIENT
Siegal / Tuomala Associates
31731 Northwestern Hwy,
Suite 261
Farmington Hills, MI, 48334
Ph: 248-851-3325

PROJECT LOCATION
Part of the Northwest 1/4
of Section 24
T.1 North, R.10 East
Lathrup Village,
Oakland County, Michigan

SHEET
Boundary & Topographic
Survey



DATE	ISSUED/REVISED
02-28-20	50% OWNER REVIEW
03-06-20	90% OWNER REVIEW
03-18-20	SITE PLAN APPROVAL

DRAWN BY:
A. Nesbitt

PROJECT MANAGER:
J. Cecil

APPROVED BY:
J. Cecil

DATE:
February 14, 2020

SCALE: 1" = 20'

NFE JOB NO. **L576** SHEET NO. **C1**

UTILITIES

AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY MISS DIG AND THE LOCAL COMMUNITY (WHERE APPLICABLE) TO STAKE LOCATIONS OF EXISTING UTILITIES.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING UTILITIES WHICH DO NOT MATCH THE PLANS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. ANY FIELD CHANGES OF THE PROPOSED UTILITIES SHALL BE APPROVED BY THE OWNER AND ENGINEER BEFORE THE WORK IS DONE.

THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE. ANY SERVICE OR UTILITY DAMAGED OR REMOVED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR, IN CONFORMANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY PROVIDER.

DAMAGE TO PRIVATE PROPERTY

ALL SIDEWALKS, DRIVEWAYS, LAWNS, FENCING, TREES, SHRUBS, SPRINKLERS, LANDSCAPING, ETC., THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED, IN KIND OR BETTER, BY THE CONTRACTOR. ALL STREET SIGNS, MAIL BOXES, ETC., REMOVED SHALL BE REPLACED IN KIND OR BETTER, BY THE CONTRACTOR. ALL THE REPAIRS OR REPLACEMENTS DUE TO THE CONTRACTOR'S WORK ARE TO BE INCLUDED IN THE CONTRACT PRICE(S) AND SHALL NOT BE AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL SECURE PERMISSION IN WRITING FROM ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON ANY ADJOINING PROPERTIES, UNLESS OFFSITE PERMITS HAVE ALREADY BEEN OBTAINED BY THE OWNER AND ARE PART OF THE CONTRACT DOCUMENTS.

PAVEMENT REMOVAL

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE THICKNESS OF THE PAVEMENT REMOVAL. NO PAVEMENT CORES HAVE BEEN PERFORMED ONSITE. THEREFORE THE CURRENT CROSS SECTION IS UNKNOWN. PAVEMENT REMOVAL CONSISTS OF TWO (2) OPERATIONS:

- HMA PAVEMENT REMOVAL. FULL DEPTH INCLUDES REMOVAL OF THE ASPHALT WEARING AND LEVELING COURSES. THE EXISTING AGGREGATE BASE MATERIAL SHALL REMAIN IN PLACE. IF THE EXISTING AGGREGATE BASE MATERIAL ENCOUNTERED IS IN POOR CONDITION, THE CONTRACTOR MUST NOTIFY THE ENGINEER PRIOR TO INSTALLATION OF NEW HMA.
- PAVEMENT CORES HAVE NOT BEEN TAKEN FOR THIS PROJECT. IT IS ASSUMED THAT THE EXISTING PAVEMENT SECTION IS 3"-3.5" IN DEPTH.
- JOINT TOOTH/CRACK REPAIR WILL BE REQUIRED AS PART OF THE REPAIR WORK. THE CONTRACTOR AND OWNER/ENGINEER SHALL DETERMINE LOCATIONS ONSITE FOR THIS WORK.

MAINTENANCE OF TRAFFIC

DURING THE PROGRESS OF THE WORK THE CONTRACTOR SHALL ACCOMMODATE BOTH VEHICULAR AND PEDESTRIAN TRAFFIC IN THE ROAD RIGHTS OF WAY. THE CONTRACTOR'S EQUIPMENT AND OPERATIONS ON PUBLIC STREETS SHALL BE GOVERNED BY ALL APPLICABLE LOCAL, COUNTY AND STATE ORDINANCES, REGULATIONS AND LAWS. THE CONTRACTOR SHALL OBTAIN AND SATISFY ANY AND ALL PERMIT REQUIREMENTS BY THE LOCAL, COUNTY AND STATE GOVERNMENTAL AGENCIES.

IN ADDITION, WHERE THE WORK REQUIRES THE CLOSURE OF ONE OR MORE LANES OR IS WITHIN THE INFLUENCE OF THE ROAD OR PEDESTRIAN RIGHT OF WAY, THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAG PERSONS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED BY MDOT, THE COUNTY, OR THE COMMUNITY HAVING JURISDICTION OF THE ROAD AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

COMPENSATION FOR TRAFFIC CONTROL SHALL BE INCLUDED IN THE CONTRACT PRICE(S) UNLESS SPECIFIC TRAFFIC CONTROL ITEMS ARE CONSIDERED IN THE ACCEPTED BID PROPOSAL.

ACCESS TO THE SITE MUST BE MAINTAINED AT ALL TIMES THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER FOR ACCESS AND PHASING FOR THE PROJECT.

SOIL EROSION / SEDIMENTATION CONTROL

THE CONTRACTOR SHALL SATISFY ALL REGULATORY REQUIREMENTS FOR CONTROLLING SOIL EROSION AND SEDIMENT TRANSPORT. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR INSPECTION OR APPROVAL OF THE CONTRACTOR'S WORK IN CONNECTION WITH SATISFYING THE SOIL EROSION PERMIT REQUIREMENTS UNLESS SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS. ALL SOIL EROSION MEASURES SHALL BE INSTALLED AND MAINTAINED TO MEET OAKLAND COUNTY SOIL EROSION REQUIREMENTS.

DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.

FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LIKEWISE SHALL ARRANGE FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES, IF REQUIRED.

SUB-SOIL CONDITIONS

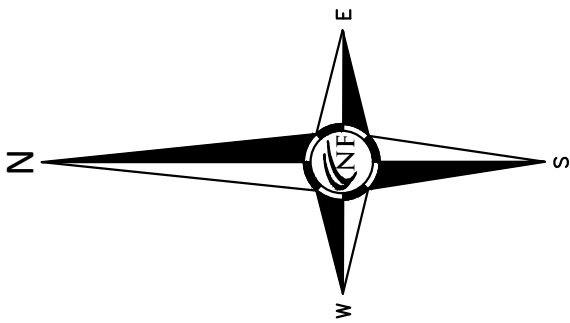
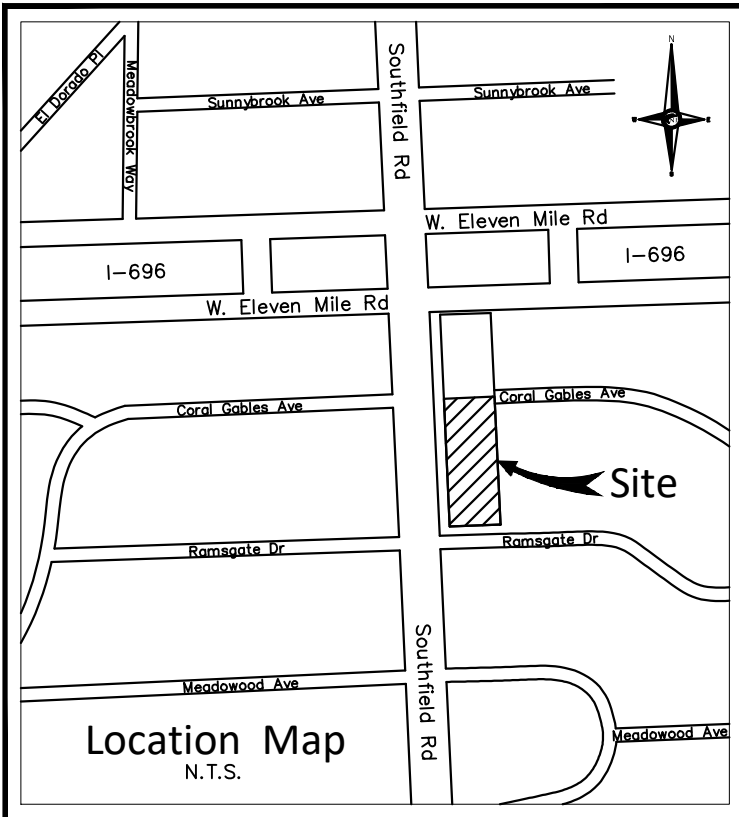
ANY SOIL BORING PROVIDED BY THE OWNER AND/OR ENGINEER IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THIS INFORMATION IS NOT OFFERED AS EVIDENCE OF GROUND CONDITIONS THROUGHOUT THE PROJECT AND ONLY REFLECT THE GROUND CONDITIONS AT THE LOCATION OF THE BORING ON THE DATE THEY WERE TAKEN.

THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION AND SUB-SOIL INVESTIGATION AND SECURE OTHER SUCH INFORMATION AS THE CONTRACTOR CONSIDERS NECESSARY TO DO THE WORK PROPOSED AND IN PREPARATION OF THEIR BID.

SUBGRADE UNDERCUTTING AND PREPARATION

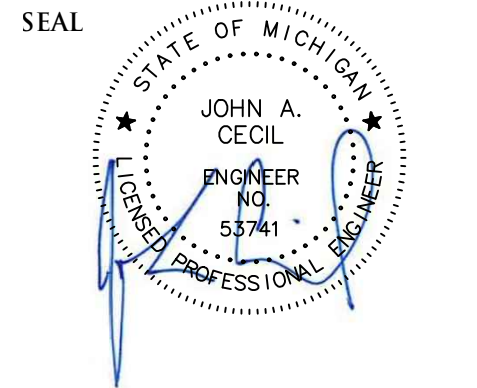
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY AND ALL SOILS WHICH DO NOT CONFORM TO THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A SUBGRADE IN CONFORMANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS. THE MEANS AND METHODS USED TO ACHIEVE THE REQUIRED RESULT SHALL REST SOLELY WITH THE CONTRACTOR.

ANY AREAS OF UNDERCUTTING THAT RESULT IN ADDITIONAL OR EXTRA WORK BECAUSE THEY COULD NOT BE IDENTIFIED BY THE CONTRACTOR'S PRE-BID SITE OBSERVATION OR ARE NOT SET FORTH IN THE PLANS AND SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE ANY EXTRA WORK IS PERFORMED. THE CONTRACTOR SHALL MAKE A REQUEST FOR ANY ADDITIONAL COMPENSATION FOR THE UNDERCUTTING IN WRITING AND THE REQUEST SHALL CONFORM TO THE CONTRACT'S CHANGE ORDER PROVISIONS.



NOWAK & FRAUS ENGINEERS
28 WEST ADAMS, SUITE 210
DETROIT, MI 48226
TEL. (313) 965-2444
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL



PROJECT
Lathrup Shopping Center
26754 Southfield Road

CLIENT
Siegal / Tuomaala Associates
31731 Northwestern Hwy,
Suite 261
Farmington Hills, MI, 48334
Ph: 248-851-3325

PROJECT LOCATION
Part of the Northwest 1/4
of Section 24
T.1 North , R.10 East
Lathrup Village,
Oakland County, Michigan

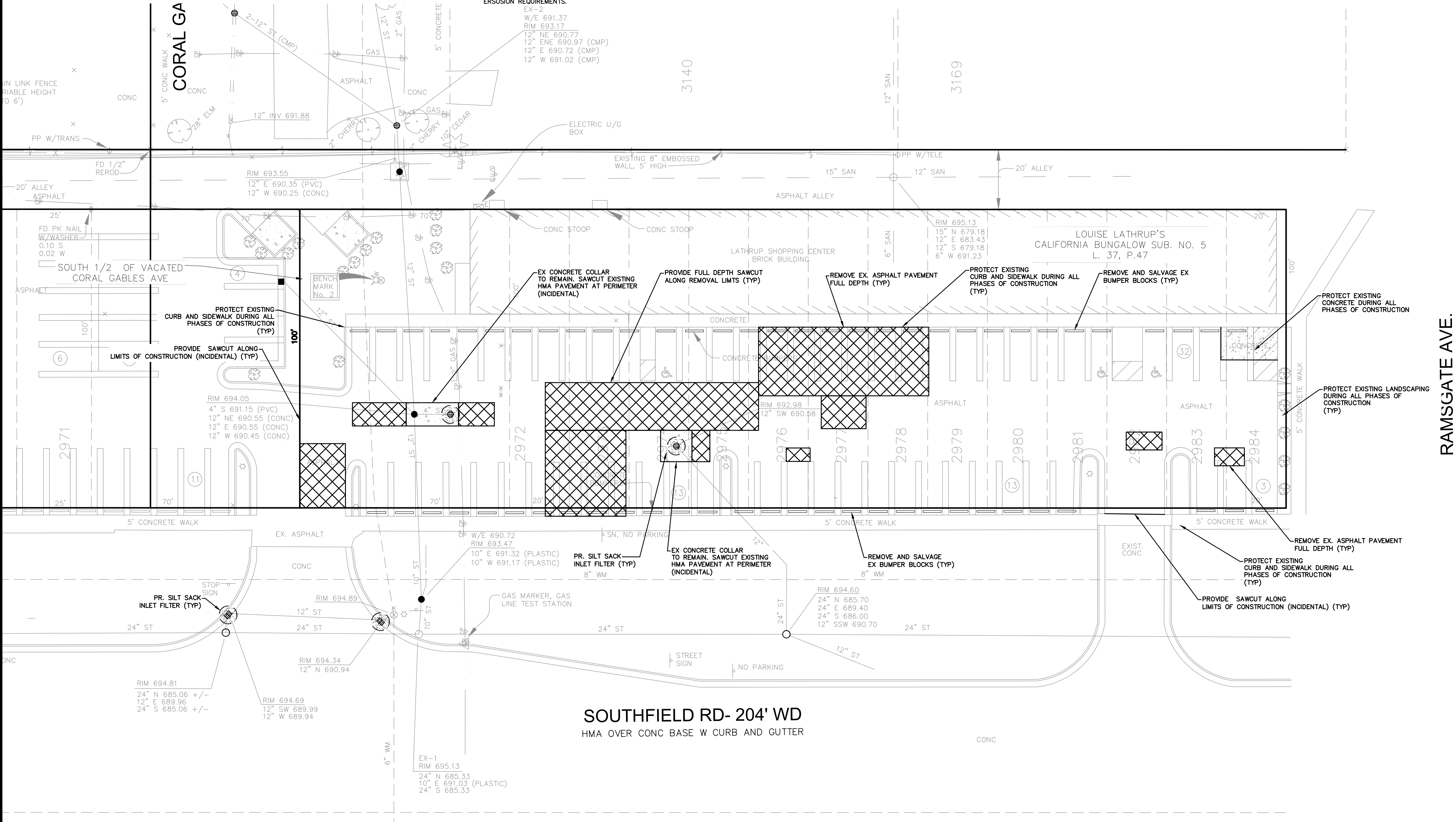
SHEET
Demolition & Soil Erosion
Control Plan



DATE ISSUED/REVISED
02-28-20 50% OWNER REVIEW
03-06-20 90% OWNER REVIEW
03-18-20 SITE PLAN APPROVAL

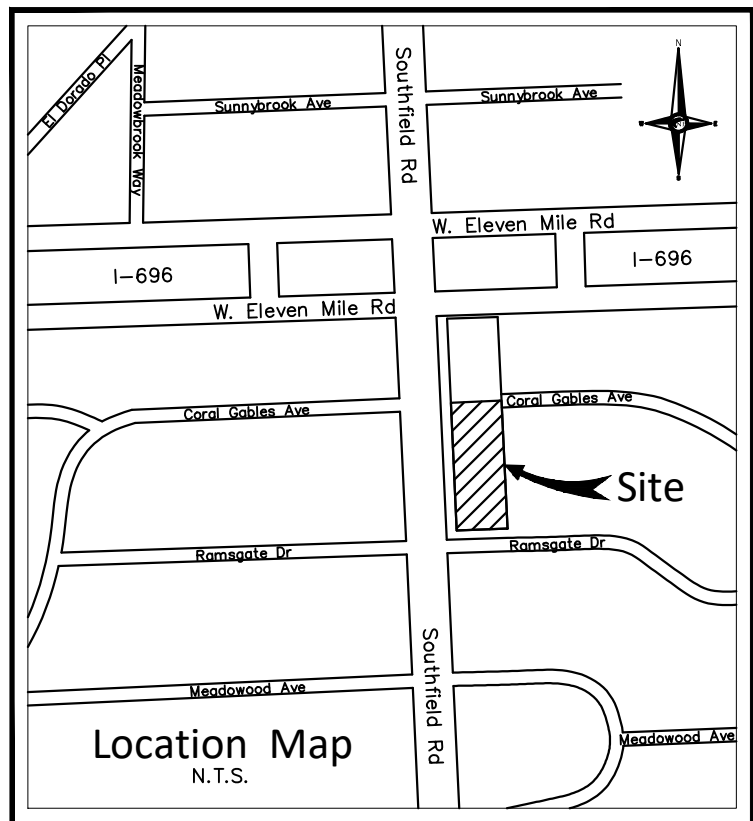
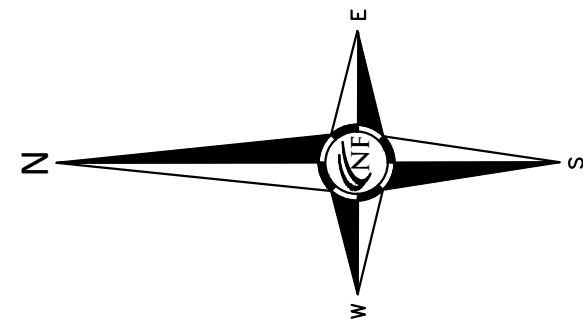
DRAWN BY:
A. Nesbitt
PROJECT MANAGER:
J. Cecil
APPROVED BY:
J. Cecil
DATE:
February 14, 2020

SCALE: 1" = 20'
20 10 0 10 20 30
NFE JOB NO. L576 SHEET NO. C2



SOUTHFIELD RD- 204' WD
HMA OVER CONC BASE W CURB AND GUTTER

LEGEND		
	MANHOLE	EXISTING SANITARY SEWER
	HYDRANT	EXISTING SAN. CLEAN OUT
	GATE VALVE	EXISTING WATER MAIN
	MANHOLE CATCH BASIN	EXISTING STORM SEWER
	UTILITY POLE	EXIST. R. Y. CATCH BASIN
	GUY POLE	EXISTING BURIED CABLES
	GUY WIRE	OVERHEAD LINES
	LIGHT POLE	SIGN
	EXISTING GAS MAIN	EXISTING UTILITY TO BE REMOVED
	EXISTING UTILITY TO BE ABANDONED	INDICATES EXISTING TREE TO BE REMOVED
	12" MAPLE	INDICATES AREAS OF FULL DEPTH ASPHALT PAVEMENT REMOVAL



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GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

ASPHALT: BASE COURSE - HMA MIXTURE 3C;
SURFACE/OVERLAY COURSE - HMA MIXTURE SE1;
ASPHALT CEMENT PENETRATION GRADE 85-100, BOND COAT - MDOT SS-1H
EMULSION AT 0.10 GALLON PER SQUARE YARD; MAXIMUM 2 INCH LIFT.

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.

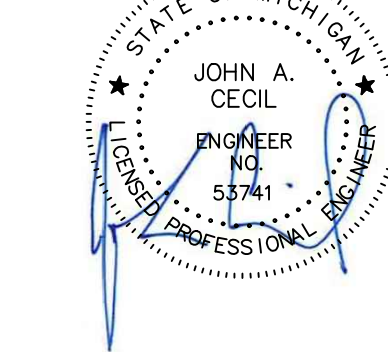
GENERAL NOTES

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAINTAIN ALL GRADING FOR THE SITE. THE CONTRACTOR SHALL MEET EXISTING GRADING PATTERNS AS BEST AS POSSIBLE, AND SHALL ENSURE POSITIVE DRAINAGE FOR THE SITE. IF POSITIVE DRAINAGE CANNOT BE MAINTAINED THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MEASURE EXISTING STRIPING LAYOUT AND MAINTAIN THE EXISTING PARKING LAYOUT AFTER PAVING IS COMPLETE. ALL PARKING SPACES SHALL MEET THE CITY OF LATHRUP STANDARDS FOR PARKING WIDTHS.

REGULAR SPACE: YELLOW STRIPE
HANDICAPPED SPACE: BLUE STRIPE

SEAL



PROJECT
Lathrup Shopping Center
26754 Southfield Road

CLIENT
Siegal / Tuomaala Associates
31731 Northwestern Hwy,
Suite 261
Farmington Hills, MI, 48334
Ph: 248-851-3325

PROJECT LOCATION
Part of the Northwest 1/4
of Section 24
T.1 North, R.10 East
Lathrup Village,
Oakland County, Michigan

SHEET
Site Improvement &
Paving Plan



DATE ISSUED/REVISED
02-28-20 50% OWNER REVIEW
03-06-20 90% OWNER REVIEW
03-18-20 SITE PLAN APPROVAL

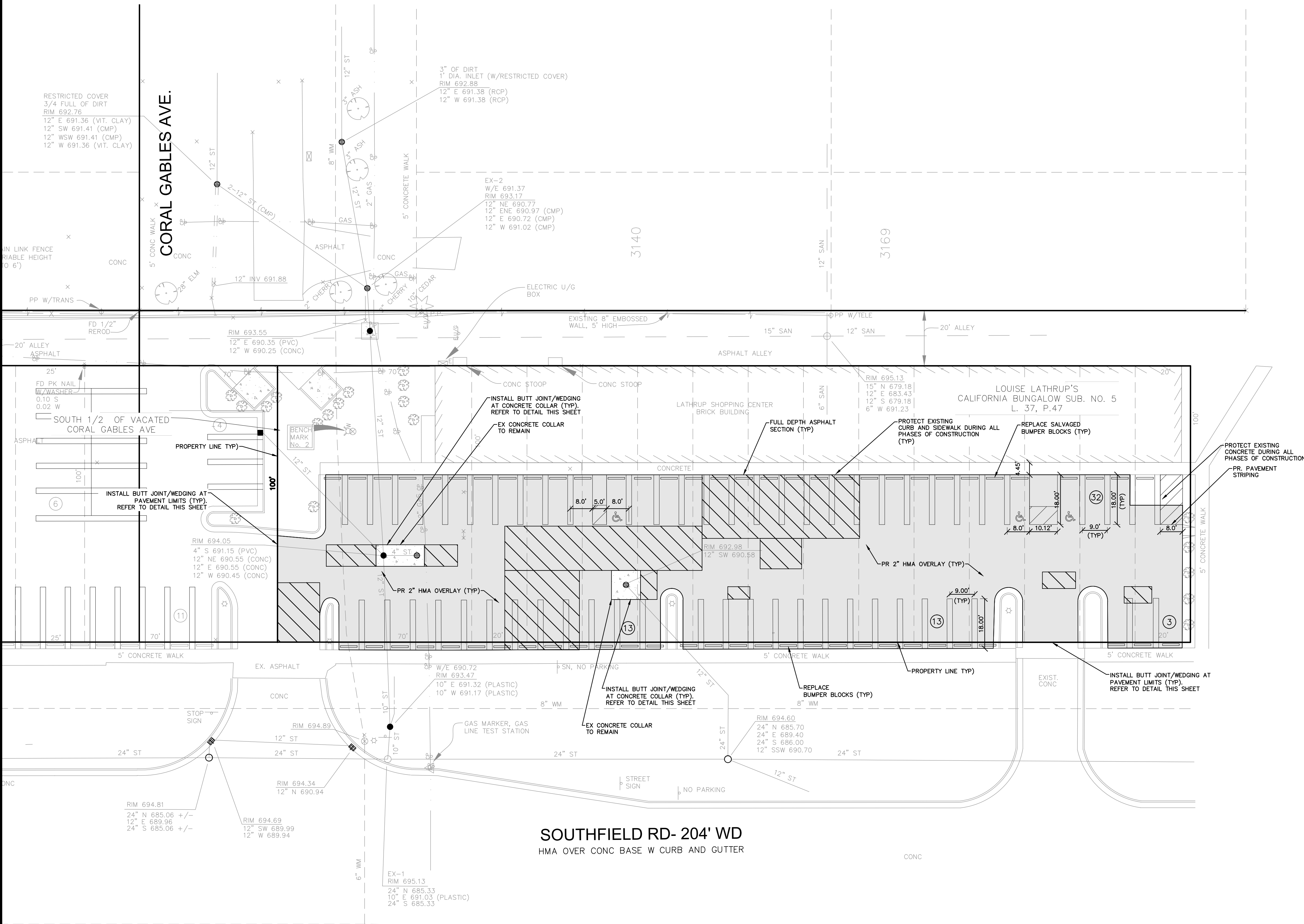
DRAWN BY:
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PROJECT MANAGER:
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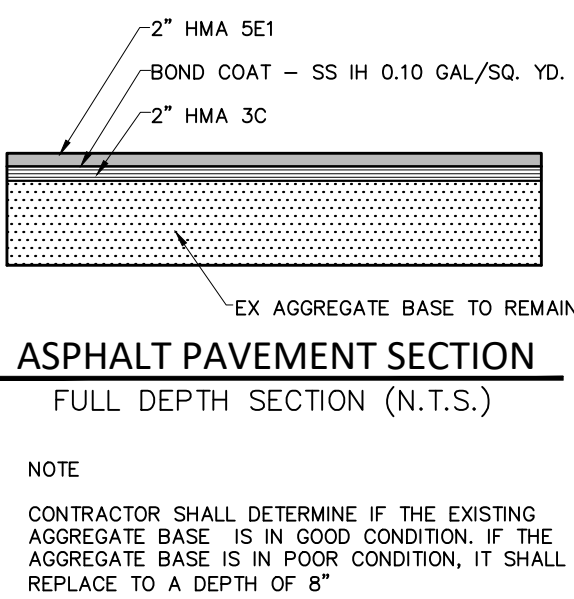
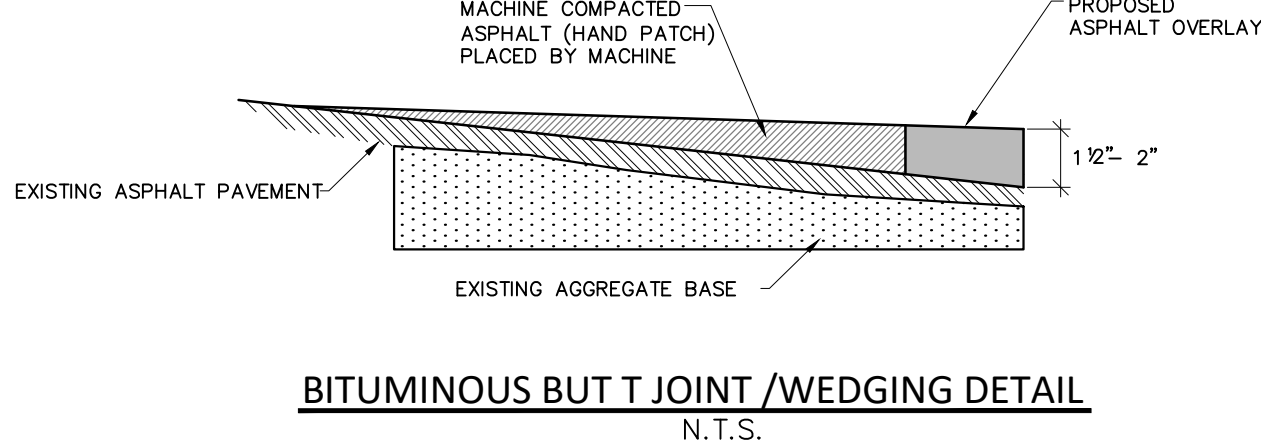
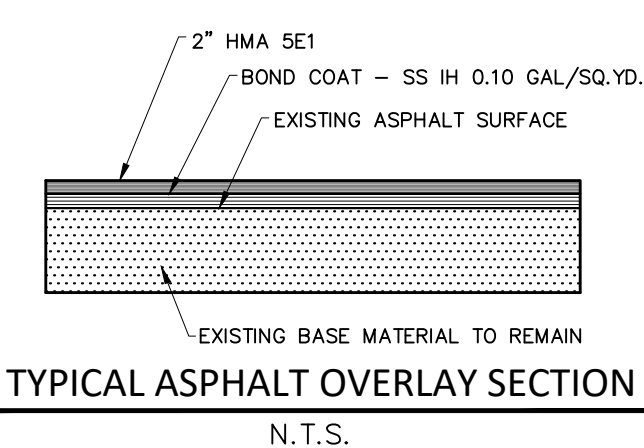
SCALE: 1" = 20'

NFE JOB NO. SHEET NO.

L576 C3



SOUTHFIELD RD- 204' WD HMA OVER CONC BASE W CURB AND GUTTER



ESTIMATED QUANTITIES PAVING - THIS SHEET

DESCRIPTION	QUANTITY	UNITS
8" AGGREGATE BASE, 21AA CRUSHED CONC.	20	TON
SUBGRADE UNDERCUTTING, 21AA CRUSHED CONC.	20	C.Y.
JOINT TOOTH CRACK REPAIR	300	L.F.
2", SE1, HMA	240	TON
2", 3C, HMA	55	TON
REPLACE SALVAGED BUMPER BLOCKS	61	EA
PARKING LOT STRIPING	1	LSUM

PAVING LEGEND

	PROPOSED 2" HMA OVERLAY
	PROPOSED 4" HMA SURFACE

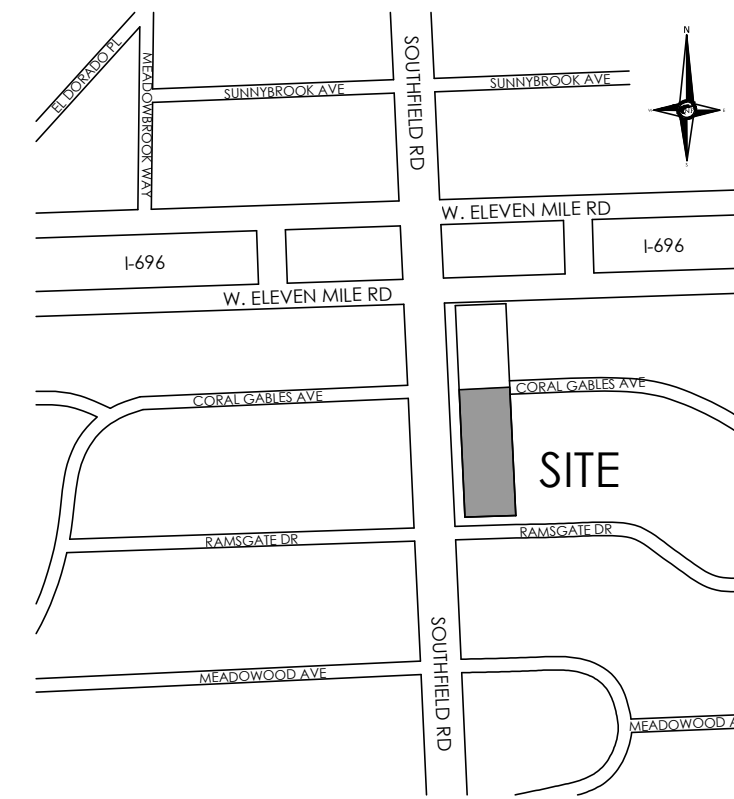
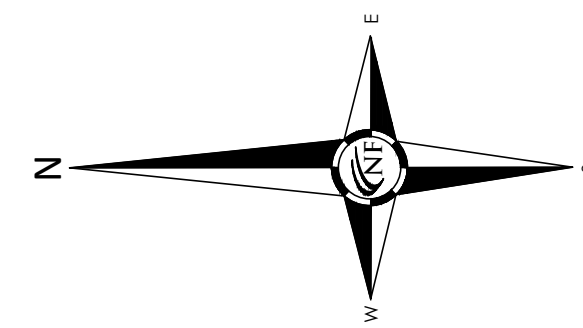
LEGEND

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		SAN. CLEAN OUT
	MANHOLE CATCH BASIN		EXISTING WATERMAIN
	UTILITY POLE		EXISTING STORM SEWER
	GUY POLE		EX. R. Y. CATCH BASIN
	GUY WIRE		EXISTING BURIED CABLES
	LIGHT POLE		OVERHEAD LINES
	SIGN		EXISTING GAS MAIN
	C.O.		PR. SANITARY SEWER
	MANHOLE		PR. WATER MAIN
	HYDRANT		PR. STORM SEWER
	INLET		PR. R. Y. CATCH BASIN
	PROPOSED LIGHT POLE		



GENERAL LANDSCAPE NOTES

1. LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, THE PLAN SHALL GOVERN QUANTITIES. CONTACT THE LANDSCAPE ARCHITECT WITH ANY CONCERNS.
2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIGHER PHASE OF WORK. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES AND SHALL REPORT ANY UNACCEPTABLE SITE CONDITIONS TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT.
4. PLANTS SHALL BE FULL, WELL-BRANCHED, AND IN HEALTHY VIGOROUS GROWING CONDITION.
5. PLANTS SHALL BE WATERED BEFORE AND AFTER PLANTING IS COMPLETE.
6. ALL TREES MUST BE STAKED, FERTILIZED AND MULCHED AND SHALL BE GUARANTEED TO EXHIBIT A NORMAL GROWTH CYCLE FOR AT LEAST ONE (1) YEAR FOLLOWING PLANTING.
7. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN THE MOST RECENT EDITION OF THE "AMERICAN STANDARDS FOR NURSERY STOCK".
8. CONTRACTOR WILL SUPPLY FINISHED GRADE AND EXCAVATE AS NECESSARY TO SUPPLY PLANT MIX DEPTH IN ALL PLANTING BEDS AS INDICATED IN PLANT DETAILS AND A DEPTH OF 4" IN ALL LAWN AREAS.
9. PROVIDE CLEAN BACKFILL SOIL, USING MATERIAL STOCKPILED ON SITE. SOIL SHALL BE SCREENED AND FREE OF DEBRIS, FOREIGN MATERIAL, AND STONE.
10. SLOW-RELEASE FERTILIZER SHALL BE ADDED TO THE PLANT PITS BEFORE BEING BACKFILLED. APPLICATION SHALL BE AT THE MANUFACTURER'S RECOMMENDED RATES.
11. AMENDED PLANT MIX (PREPARED TOPSOIL) SHALL CONSIST OF 1/3 SCREENED TOPSOIL, 1/3 SAND, AND 1/3 "DAIRY DOG" COMPOST, MIXED WELL AND SPREAD TO A DEPTH AS INDICATED IN PLANTING DETAILS.
12. ALL PLANTINGS SHALL BE MULCHED WITH SHREDDED HARDWOOD BARK, SPREAD TO A DEPTH OF 3" FOR TREES AND SHRUBS, AND 2" ON ANNUALS, PERENNIALS, AND GROUNDCOVER PLANTINGS. MULCH SHALL BE FREE FROM DEBRIS AND FOREIGN MATERIAL AND PIECES ON INCONSISTENT SIZE.
13. NO SUBSTITUTIONS OR CHANGES OF LOCATION, OR PLANT TYPE SHALL BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
14. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS PRIOR TO INSTALLATION.
15. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN A VERTICAL CONDITION THROUGHOUT THE GUARANTEED PERIOD.
16. THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIAL THAT DOES NOT MEET THE REQUIREMENTS OF THE PLANS AND/OR SPECIFICATIONS.
17. THE LANDSCAPE CONTRACTOR SHALL SEED AND MULCH OR SOO (AS INDICATED ON PLANS) ALL AREAS DESIGNATED AS SUCH ON THE PLANS, THROUGHOUT THE CONTRACT LIMITS. FURTHER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING AREAS DISTURBED DURING CONSTRUCTION, NOT IN THE CONTRACT LIMITS, TO EQUAL OR GREATER CONDITION.
18. ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESSIVE WATER FROM PONDING ON LAWN AREAS OR AROUND TREES AND SHRUBS.
19. ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM.



LANDSCAPE REQUIREMENTS

EXISTING SITE AREA: 33,010.41 S.F.

R.O.W. PLANTINGS
1 TREE PER 50 L.F. OF ROAD FRONTAGE
REQUIRED: 330.22 L.F. OF FRONTAGE / 50 L.F. = 6.6 OR 7 TREES REQUIRED
PROVIDED: 0 TREES, 7 EXISTING

PARKING LOT LANDSCAPE REQUIREMENTS
15 S.F. OF INTERIOR LANDSCAPING FOR EACH PARKING SPACE
1 TREE PER 400 S.F. OF REQUIRED AREA
61 PKG SPACES X 15 S.F. = 915 S.F.
915 S.F. / 400 S.F. = 2.2 OR 2 TREES REQUIRED
PROVIDED: 1 EXISTING TREE, 1 PROPOSED TREE

SITE LANDSCAPE
5% OF SITE SHALL BE LANDSCAPED
REQUIRED:
33,010.41 S.F. X 5% = 1,650.52 S.F.

SUMMARY OF PROVIDED LANDSCAPE
PARKING LOT AREA REQUIRED: 915 S.F.
SITE LANDSCAPE AREA REQUIRED: 1,650.52 S.F.
TOTAL AREA REQUIRED: 2,565.52 S.F.
TOTAL AREA PROVIDED: 2,585.86 S.F.

NOTE:
GUY DECIDUOUS TREES ABOVE 3" CALIPER, STAKE TREES BELOW 3" CALIPER
STAKE TREES JUST BELOW FIRST BRANCH USING 2"X3" WIDE BELT-LIKE NYLON OR PLASTIC STRAPS, CONNECT FROM TREE TO STAKE OPPOSITE. ALLOW FOR SOME FLEXING. REMOVE AFTER ONE (1) YEAR.
DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.
REMOVE ALL TAGS, STRING, PLASTIC AND OTHER MATERIALS

DECIDUOUS TREE PLANTING DETAIL

N.T.S.

NOTES:
TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 6" ABOVE GRADE. IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOILS.
DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.
REMOVE ALL TAGS, STRING, PLASTIC AND OTHER MATERIALS

HEDGE PLANTING DETAIL

N.T.S.

GENERAL SEED NOTE:

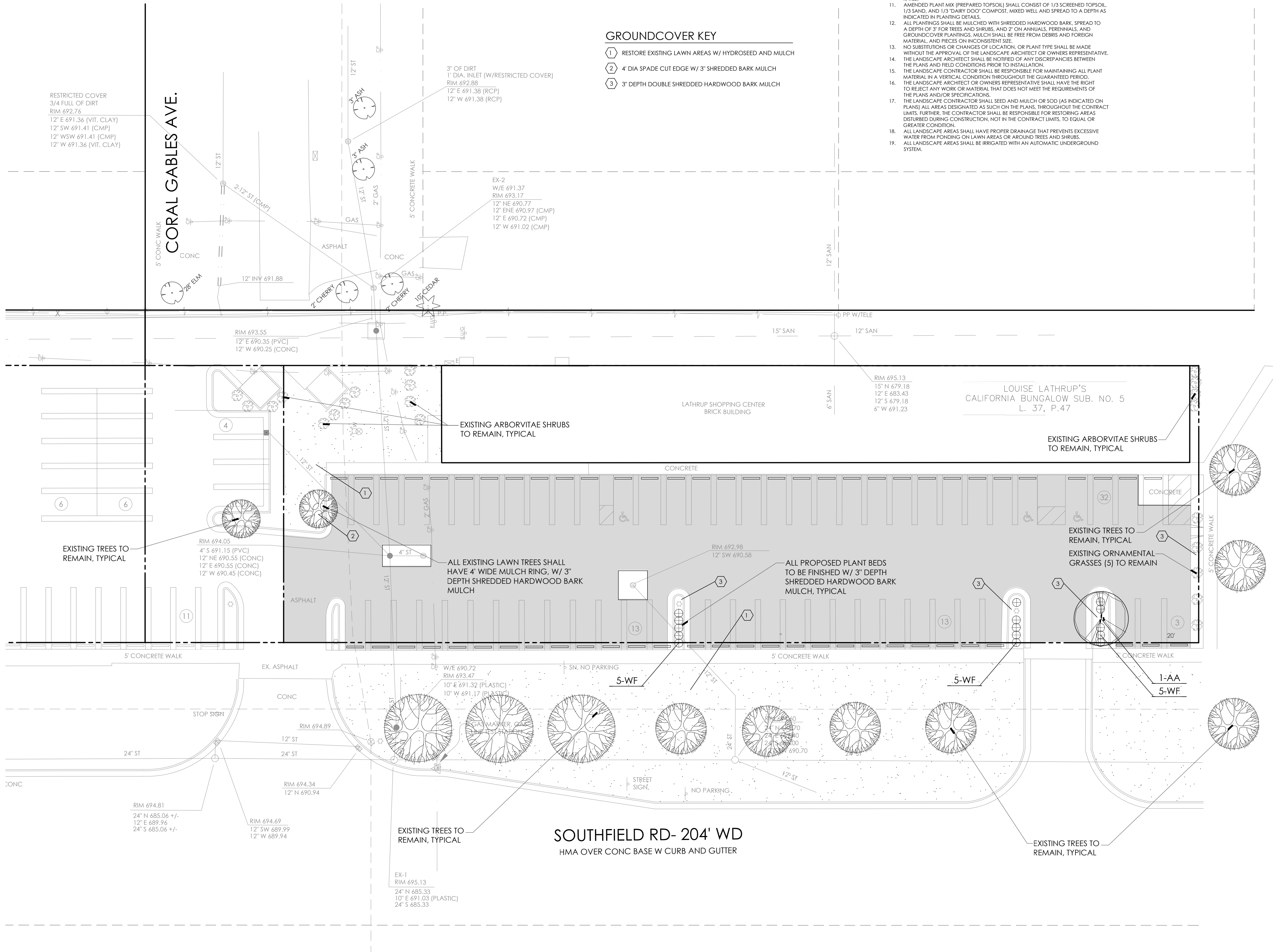
ALL LAWN AREAS DESIGNATED TO BE SEED, SHALL BE HYDRO-SEEDED WITH SPECIFIED BLENDS, AND STABILIZED WITH WOOD CELLULOSE FIBER MULCH (2,000 LBS PER ACRE). IN AREAS SUBJECT TO EROSION, SEEDING LAWN SHALL BE FURTHER STABILIZED WHERE NECESSARY WITH BIODEGRADABLE EROSION BLANKET AND STAKED UNTIL ESTABLISHED. ALL SEED SHALL BE APPLIED OVER A MINIMUM 3" PREPARED TOPSOIL, AND SHALL BE KEPT MOIST AND WATERED DAILY UNTIL ESTABLISHED.
SEEDING INSTALLATION SHALL OCCUR ONLY:
SPRING: APRIL 1 TO JUNE 1
FALL: AUGUST 15 TO OCTOBER 15

PLANT SCHEDULE

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	SPACING	ROOT	COMMENT
TREES						
AA	1	Acer rubrum 'Armstrong' Armstrong Maple	2.5" CAL	SEE PLAN	B&B	FULLY BRANCHED HEADS
SHRUBS						
WF	15	Weigela florida 'Minuet' Minuet Weigela	24" HT	30" OC	CONT	

GROUND COVER KEY

1. RESTORE EXISTING LAWN AREAS W/ HYDROSEED AND MULCH
2. 4" DIA SPADE CUT EDGE W/ 3" SHREDDED BARK MULCH
3. 3" DEPTH DOUBLE SHREDDED HARDWOOD BARK MULCH



2019 SUMMER TAX STATEMENT • RETURN THIS PORTION WITH YOUR REMITTANCE

Make Remittance Payable to: CITY OF LATHRUP VILLAGE
27400 Southfield Road
Lathrup Village, MI 48076

DUE JULY 1, 2019 to AUGUST 31, 2019

Telephone: 248-557-2600

TOTAL	PENALTY	TOTAL PAID	
11,825.98			



SURNOW CO
320 MARTIN ST # 100
BIRMINGHAM MI 48009

Report change of ownership promptly. Failure to receive tax statement does not exempt property from penalties when taxes become delinquent.

PARCEL I.D. NUMBER

40-24-24-103-032

WARNING: Check your Parcel I.D. No. before paying your TAXES. You are responsible if you pay on wrong parcel.

Fiscal Year: 7-1-2019 - 6-30-2020 **1 Year Community College**
1 Year City • 1/2 Year Southfield Schools
Fiscal Year 10-1-2019 to 9-30-2020 **1 Year State Education**
Fiscal Year 10-1-2018 to 9-30-2019 **1 Year County General**

DUE JULY 1, 2019 to AUGUST 31, 2019

IMPORTANT

These taxes are payable July 1, 2019. On September 1, 2019, 4% shall be added for late payment. On the first day of October and each succeeding month, an additional 1/2 of 1% shall be added. **BEGINNING MARCH 3, 2020**, all delinquent taxes must be paid to the Oakland County Treasurer, 1200 North Telegraph Road, Pontiac, Michigan 48341, with additional penalties. During the month of March, a verification of the revised tax amount from the City Treasurer must accompany your remittance to the County Treasurer.

SURNOW CO
320 MARTIN ST # 100
BIRMINGHAM MI 48009

Property Address:
26710 SOUTHFIELD RD

CODE #	*P.R.E. TAX BASE	PARCEL I.D. NUMBER / SCHOOL DIST.	
13666	0	40-24-24-103-032	63060
*% DECLARED AS P.R.E.	*NON-P.R.E. TAX BASE	TAXABLE VALUE	STATE EQUALIZED VALUE
0%	241,850	241,850	286,330
TAX DESCRIPTION		RATE PER \$1,000	AMOUNT
COUNTY OPERATING		4.04000	977.07
INTERMEDIATE		3.25390	786.95
COLLEGE		1.53030	370.10
STATE EDUCATION		6.00000	1451.10
SCHOOL OPERATING		8.91290	2155.58
SCHOOL DEBT		1.15000	278.12
SCHOOL SUPP <18		7.46890	0.00
CVT OPERATING		18.51720	4478.38
REFUSE		2.77750	671.73
DRAIN		0.00000	0.00
DDA		1.88230	455.23
SCHOOL OPER FC		8.91290	0.00
SINKING FUND		0.35000	84.64
ADMIN FEE		0.00000	117.08

JUL 2
ENTERED

PARTIAL DESCRIPTION OF PROPERTY

T1N, R10E, SEC 24 LOUISE LATHRUP'S CALIFORNIA BUNGALOW SUB
NO 5 LOTS 2972 TO 2984 INCL, ALSO 1/2 OF VAC CORAL
GABLES AVE ADJ TO SD LOT 2972 3-28-03 CORR

201 BUSINESS IMPROVED

Personal Property and Real Property are assessed as of Tax Day, December 31, 2018. All Personal Property Taxes are payable on demand or no later than August 31, 2019.
(BUSINESS IN EXISTENCE ON TAX DAY SHALL BE TAXED AS SUCH FOR A FULL YEAR.)

**RETAIN THIS LOWER PORTION FOR YOUR RECORDS.
YOUR CANCELED CHECK IS YOUR RECEIPT**

**CITY OF LATHRUP VILLAGE
2019 SUMMER TAX STATEMENT**

SPECIAL
ASSESSMENTS

COMPANY	SUR
VENDOR	CLV
APPROVED BY:	MS
AMOUNT:	11,825.98
ACCOUNT NO:	5910

TOTAL	PENALTY	TOTAL PAID	
11,825.98			

Checks accepted only as a conditional payment. If not honored by bank, tax is unpaid and subject to unpaid tax penalties.

*P.R.E. = Principal Residence Exemption

40-24-24-103-032

NEW EXTERIOR MATERIAL DATA

- **NICHIHA FIBER CEMENT PANELS**
 - **CULTURED STONE**
 - **METAL RIBBED PANEL**
 - **VINYL FABRIC AWNINGS**



NICHIHA FIBER CEMENT PANELS



TEST SUMMARIES: AWP 1818 & 3030

ASTM C 1185/6 - Physical Properties Tests
ASTM C 518 - Steady-State Heat Flex & Thermal Tests (R-Value)
ASTM E 84 - Surface Burning Characteristics
CAN/ULC - S102 Surface Burning Characteristics
ASTM E 119 - Fire Resistance of a Wall Assembly (Load-Bearing Wood)
NFPA 268 - Ignition Resistance of Exterior Wall Assemblies
NFPA 285 - Fire Test Method - Vertical & Lateral Flame Propagation
NFPA 285 - Fire Test Method - Vertical & Lateral Flame Propagation (4" Polyiso C.I.)
CAN/ULC S-134 - Fire Test Method - Vertical & Lateral Flame Propagation
AAMA 509-14 - Drained and Back Ventilated Rain Screen Test
ASTM B-117 - Standard Practice for Operating Salt Spray (Fog) Apparatus
ADA 2018 Visual Contrast Requirements - Light Reflectance Values (LRV)

Code Certifications and Product Approvals

U.S.: Intertek [CCRR-0299](#)
Canada: CCMC approval under development
Canada: NBCC Part 3/4/5 [Engineering Evaluation](#)
Florida Product Approval [FL #12875](#)
Los Angeles Research Report [RR 26081](#)
Miami-Dade [NOA 18-0522.05](#)
Texas Department of Insurance (TDI) [EC-58](#)





ASTM C-1185/6 PHYSICAL PROPERTIES

Date of Test: October, 2015
Test Agency: Progressive Engineering, Inc., 58640 State Road 15, Goshen, IN 46528
Test Method: ASTM C 1185-08 Standard Test Methods for Sampling and Testing Fiber Cement Flat Sheets
 ASTM C 1186-08 Standard Specification for Flat Fiber Cement Sheets
Test Specimen: Nichiha Architectural Wall Panels (AWP - EX Series)
Sample Specs: Thickness: 16mm (nominal 5/8"), Width: Various. Length: Various.
Test Procedure: The tests were performed in accordance to ASTM requirements.
Test Results: The test results show Nichiha AWP meet the requirements of ASTM C1186 to be classified as a Type A, Grade II fiber cement sheet.

Property	Test Result	Requirement	Pass / Fail
Linear Variation w/ Change in Moisture Content %	1.177%	Report Value	Report Value
Moisture Content %	7.10%	Report Value	Report Value
Flexural Strength			
Equilibrium	1580 psi	1450 psi	Pass
Wet Saturated	1418 psi	1015 psi	Pass
Water Tightness	No drop formation observed	No drop formation	Pass
Freeze/Thaw Resistance			
Strength Retention, %	80.0%	80.0%	Pass
Observation	No cracks or delaminations	No cracks or delaminations	Pass
Warm Water Resistance			
Strength Retention, %	78.6%	Report Value	Report Value
Observation	No deleterious effects	No deleterious effects	Pass
Heat / Rain Resistance	No signs of cracks, damage or structural failure after 25 cycles	No visible cracks or structural alteration	Pass



ASTM C 518 - STEADY-STATE HEAT FLEX & THERMAL TESTS

Date of Test: October 16, 2017

Test Agency: Intertek - ATI, 130 Derry Court, York, PA 17406

Test Method: ASTM C 518 -17, Standard Test Method for Steady-State Thermal Transmission Properties by means of the Heat Flow Meter Apparatus.

Test Specimen: Nichiha AWP

Sample Specs: Thickness: Two 16mm (5/8") samples, stacked.

Test Procedure: The test apparatus consists of a warm plate, a cold plate, a heat flow meter, and the necessary electronic measurement devices. The test specimen is held between the two temperature controlled plates, of which the lower can be raised or lowered to the desired specimen thickness.

Results: The test results show a single, 16mm-thick Nichiha AWP has a thermal resistance or R-Value of 0.47. This data is shown below and is based off the test measurement R-Value for two sample panels stacked together with a total thickness of 1.256".

<u>Element</u>	<u>Measurement</u>
Warm Plate	100°F
Cold Plate	50°F
Mean Specimen Temperature	75°F
Average heat flux (Btu/hr-ft ²)	52.66
Average thermal conductance – C (Btu/hr-ft ² - °F)	1.05
Average thermal resistance – R (hr-ft ² -°F/Btu)	0.95 (0.47 single panel)
Average thermal resistance – Rsi (m ² -K/W)	0.17 (0.08 single panel)



ASTM E 84 - SURFACE BURNING CHARACTERISTICS

Date of Test: September 4, 2015

Test Agency: Commercial Testing Company, 1215 South Hamilton Street, Dalton, GA 30720

Test Method: ASTM E 84-15a Standard test method for Surface Burning Characteristics of building materials, sometimes referred to as the Steiner Tunnel test.

Test Specimen: Nichiha Architectural Wall Panels (AWP - EX Series)

Sample Thickness: 16mm (nominal 5/8")

Test Procedure: The panels were physically self-supporting and required no additional sample preparation. For testing, three 8-foot sections consisting of three pieces, 18" wide by 96" long, and three pieces, 7" wide by 96" long, were placed end-to-end on the ledges of the tunnel furnace to make up the 24 foot test sample. Testing was performed in accordance with ASTM procedure.

Results: *Flame Spread Index: 0*

Smoke Developed Index: 0

Per IBC 2015, Chapter 8, Section 803.1, Nichiha AWP's are a Class A finish material.



CAN/ULC S-102 SURFACE BURNING CHARACTERISTICS

Date of Test: April 7, 2016

Test Agency: Intertek Testing Services
1500 Brigantine Drive, Coquitlam, B.C. V3K 7C1

Test Method: CAN/ULC S102-10 Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

Test Specimen: Nichiha Architectural Wall Panels (AWP - EX Series)

Sample Specs: Thickness: 16mm (nominal 5/8")
Width: 455mm (nominal 17-7/8")
Length: 1818mm (nominal 71-9/16")

Test Procedure: The panels were physically self-supporting and required no additional sample preparation. For testing, panels were cut to 24" widths and were placed end-to-end on the ledges of the tunnel furnace to make up the 24 foot test sample. Testing was performed in accordance with CAN/ULC S102-10.

Results:

Flame Spread Rating: 0

Smoke Developed Classification: 5



ASTM E-119 - ONE-HOUR RATED, LOAD-BEARING WOOD ASSEMBLY

Date of Test: June 27, 2018

Test Agency: Southwest Research Institute, 6220 Culebra Road, San Antonio, TX 78228

Test Method: ASTM E 119-18 Standard Test Methods for Fire Tests of Building Construction and Materials

Test Specimen: Nichiha Architectural Wall Panels (VintageWood) on a wood, load-bearing wall assembly

Sample Specs: 16mm (nominal 5/8"), Width: 3030mm, cut as needed for test.
Other: Double Flange Sealant Backer, 10mm Spacer, polyurethane sealant

Test Panel Structure:
Base Wall: Standard gypsum base wall assembly (9'x12'), comprising of 2x4 wood studs at 16" spacing. One layer of 5/8", Type X gypsum was attached to the interior side using #8 by 1-5/8" cement board screws. A single layer of 5/8", Type X gypsum (DensGlass) was attached to the exterior side with 11 GA, 1.75" roofing nails every 7" o.c. perimeter and field. Stud cavities were filled with unfaced R-13 fiberglass insulation. Nichiha panels were installed in a horizontal application using Starter Track and Ultimate Clips.

Test Procedure: The test panel was secured to the test fixture in accordance with the requirements of ASTM. The test exposed assembly to a standard fire exposure controlled to achieve specified temperatures throughout a 60 minute time period. A superimposed load of 13,200 lbs (1,100 lb/ft) was utilized. The fire exposure was followed by a standard hose stream test, which subjects the specimen to impact, erosion, and cooling effects of the water.

Results: The wall was evaluated with exterior (Nichiha face) exposure. The wall successfully endured a 60 minute fire exposure without developing excessive unexposed surface temperatures or allowing flaming on the unexposed side of the assembly. The Hose Stream Test did not penetrate the interior sheathing.



NFPA 268 IGNITION RESISTANCE

Date of Test:	October 8, 2014
Test Agency:	Southwest Research Institute 6220 Culebra Road, San Antonio, TX 78238-5166 SwRI Project No. 01.19582.01.220
Test Method:	National Fire Protection Association (NFPA) 268 – 2012 Edition – Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a Radiant Heat Energy Source.
Test Specimen:	Nichiha Architectural Wall Panels (EX Series), JEL777 Panel clips, 10mm Spacer, FA100B Starter Track
Sample Specs:	Nichiha Architectural Wall Panels, 455mm x 1,818mm x 16mm, were cut to width for a 4' x 8' metal stud assembly and installed via Nichiha attachment hardware – Starter Track and Panel Clips. The top course was cut to height and face fastened over Nichiha Spacer.
Test Procedure:	Test conducted in accordance with the NFPA 268 standard, with sample cladding subjected to a minimum radiant heat flux of 12.5 kW/m ² ± 5% in the presence of a pilot ignition source for a 20-minute period.
Results:	The wall assembly met the acceptance criteria given in the NFPA 268 standard. No sustained flaming exhibited.



NFPA 285 FIRE PROPAGATION

Date of Test: April 24, 2014

Test Agency: Southwest Research Institute, 6220 Culebra Road,
San Antonio, TX 78238-5166
SwRI Project No. 01.19577.01.608

Test Method: National Fire Protection Association (NFPA) 285 – 2012 Edition – Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Nonload-Bearing Wall Assemblies containing Combustible Components.

Test Specimen: Nichiha Architectural Wall Panels (EX Series), JEL777 Panel Clips, 10mm Spacer, Single Flange Sealant Backer, Starter Track T300, vertical panel Starter Track.

Sample Specs: Full size Nichiha Architectural Wall Panels, 455mm x 1,818mm x 16mm, and reduced panels, cut at terminations, were installed via Nichiha attachment hardware - starter track and panel clips fastened to 18 gauge, 3-5/8" C-channel steel studs, spaced 16" on center. Steel framing was sheathed on the interior with 5/8" Type X gypsum and on the exterior side with 1/2" Densglass Gold Sheathing. Stud wall cavities were lined with 4" thick, 4-pct, mineral wool insulation. The exterior sheathing was covered with a layer of Tyvek Commercial Wrap. The two-story assembly included a 78" x 30" window opening. Panels were face fastened over 10mm Spacer at the window head and sill and at the top of the wall. The Vertical Panel Starter Track was used at the window header, installed over 10mm Spacer prior to panel installation.

Test Procedure: Test conducted in accordance with NFPA 285 standard, with matrix of temperature measurement devices recording data throughout the assembly, including, but not limited to, the panels' surface, the air cavity between the back of the panels and face of the Densglass sheathing, and burn room ceiling. The test was comprised of three parts with a total duration of 40 minutes, including a 10-minute observation period at the end. The burn room burners acted alone for the first five minutes. Next, a window burner was placed to provide flame exposure directly to the assembly exterior face, and the test continued for 25 minutes until the burners were deactivated and the 10-minute observation period began.

Results: *The wall assembly met the acceptance criteria given in the NFPA 285 standard.*

- No vertical flame propagation to 10 feet above the top of the window.
- No lateral flame propagation to 5 feet from the centerline of the window.
- Surface temperature readings did not exceed 1000° F at any time.
- Temperatures in the air cavity did not exceed 1000° F at any time.
- Flame propagation did not occur in the second floor test room at any time, nor did temperatures exceed 500° F at any time.



NFPA 285 FIRE PROPAGATION (4" POLYISO C.I.)

Date of Test: December 27, 2019

Test Agency: Intertek, 16015 Shady Falls Road, Elmendorf, TX 78112
Report Number 104152993SAT-001

Test Method: National Fire Protection Association (NFPA) 285 – 2019 Edition – Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies containing Combustible Components.

Test Specimens: Nichiha 16mm Architectural Wall Panels (EX Series), Hunter Panels Xci CG (Class A) - 4" thick polyiso, Soprema SOPRASEAL® STICK 1100T WRB.

Sample Specs: Nichiha Architectural Wall Panels, 455mm x 3,030mm x 16mm, cut to fit the test frame and at terminations, were installed via Nichiha attachment hardware - FA700 Starter Track and JEL778 panel clips fastened to 2x4x2 in. vertical z-girts. Hunter Xci CG panels, 4" thick, were fitted between the 24" o.c. furrings. The backup wall assembly included Soprema SOPRASEAL® STICK 1100T weather membrane applied to 1/2" DensGlass® exterior sheathing on 3-5/8" c-channel steel studs, spaced 24" on center. Steel framing was sheathed on the interior side with 5/8" Type X gypsum. Stud wall cavities were empty. The two-story assembly included a 78" x 30" window opening. Panels were face fastened to the furring over Nichiha 10mm Spacer at the window sill and at the top of the wall. A vertical joint featuring aluminum H-Mold trim was continuous up the wall, within 12" of the window centerline. The window opening was lined with 24 gauge steel flashing.

Test Procedure: The test was conducted in accordance with the NFPA 285-19 standard. A matrix of temperature measurement devices was used to record data throughout the assembly, including, but not limited to, the panels' surface, the air cavity between the back of the panels and face of the exterior insulation, and burn room ceiling. The test total duration was 30 minutes. The burn room burners acted alone for the first five minutes. Next, a window burner was placed to provide flame exposure directly to the assembly exterior face, and the test continued for 25 minutes until the burners were deactivated after 30 minutes.

Results: *The Nichiha AWP and wall assembly met the acceptance criteria given in the NFPA 285-19 standard.*

- No vertical flame propagation to 10 feet above the top of the window.
- No lateral flame propagation to 5 feet from the centerline of the window.
- Thermocouples 11 and 14-17 temperature readings did not exceed 1000° F at any time.
- Thermocouples 18-19, 28, and 39-40 readings did not exceed 750° F above ambient temperature.
- Flame propagation did not occur in the second floor test room at any time.



CAN/ULC S-134 FIRE PROPAGATION

Date of Test: September 17, 2015

Test Agency: NRC Fire Safety Laboratory, Mississippi Mills, Ontario
NRC Report No. A1-007541.1

Test Method: CAN/ULC S134-13 – Standard Method of Fire Test for Evaluation of Exterior Wall Assemblies.

Test Specimen: Nichiha Architectural Wall Panels (EX Series), JEL777 Panel Clips, 10mm Spacer, Double Flange Sealant Backer, and Starter Track FA700.

Sample Specs: Full size Nichiha Architectural Wall Panels, 455mm x 3,030mm x 16mm, and reduced panels, cut at the window sill and jambs, were installed via Nichiha attachment hardware - Starter Track and Panel Clips fastened to 2x4 wood studs, spaced 16" on center. Wood framing was sheathed on the interior with 5/8" Type X gypsum and on the exterior side with 5/8" Fire Resistant Plywood Sheathing. Stud wall cavities were lined with 3.5" thick fiber-glass insulation batts. The exterior sheathing was covered with a layer of Tyvek WRB. The 10 meter assembly included a 2.51 x 1.42 m window opening. The sample assembly included a Double Flange Sealant Backer vertical joint above the center of the window, up to a height of 2.73 meters where there was a horizontal/compression joint. FA700 Starter Track was used at the wall base, window header, and above the compression joint. The top edge of the panels just below the horizontal/compression joint and those at top of the wall were face fastened over 10mm Spacer. Otherwise all other panel edges were secured with JEL777 Panel Clips.

Test Procedure: Test conducted in accordance with CAN/ULC S134 standard with a matrix of temperature measurement devices recording data throughout the assembly, including, but not limited to, the panels' surface, on the WRB, on the interior gypsum sheathing, and within the burn room. The test lasted 60 minutes with flame ignition/gas flow ramping upwards until the 20 minute mark. At 20 minutes, the gas flow reduction began until cut off at 25 minutes. The assembly was then monitored until the 60 minute mark.

Results: *The wall assembly met the acceptance criteria given in the CAN/ULC S134 standard.*

- No vertical flame propagation to 5 meters above the top of the window.
- Highest flames measured at 2.5 m
- The maximum one-minute averaged value of the total heat flux density at 3.5 m above the top of the window did not exceed 35 kW/m².
- Max one-minute averaged value was 25.4 kW/m²



AAMA 509-14 DRAINED/BACK-VENTILATED RAIN SCREEN

Date of Test: February 21-22, 2018
Test Agency: Intertek, 1701 Westfork Drive, Suite 106, Lithia Springs, GA 30122
Test Method: AAMA 509-14 – Voluntary Test and Classification Method of Drained and Back Ventilated Rain Screen Wall Cladding Systems
Test Specimen: Nichiha Architectural Wall Panels
Sample Specs: Thickness: 16 mm (5/8" nominal) AWP 1818 and 3030

Assembly/Installation:

One steel Starter Track (FA700) was installed at the bottom of an 8'x 8' wood support frame, located 3/4" from the bottom edge. Starter Track was installed using one No. 10 by 1-5/8" long flat head wood screw at each vertical stud at 16" o.c. Three 26" long (full-width) panel clips (JEL778) and one cut, 6" clip were installed horizontally on each row of panels using No. 10 by 1-5/8" wood screws at each vertical stud. Cladding was installed at the top of the sample wall by face-fastening panels with No. 8 by 2" long flat head wood screws through 10mm corrugated shim at each vertical stud. The Nichiha AWP installation included representative standard horizontal and vertical panel joints.

Test Procedure: AAMA 509-14 was performed in accordance with AAMA instructions and component tests, including ASTM E283 Rate of Air Leakage, ASTM E331 Water Penetration (Uniform Static Pressure), and AAMA 501.1-17 Water Penetration (Dynamic Pressure).

Results:

Test	Result
Air Leakage (Ventilation Test) via ASTM E283	
Initial Tare (@75 Pa (1.57 psf))	5.77 L/s
Defects in air-water barrier	9.34 L/s
Total with cladding	3.59 L/s
Air flow across cladding elements	
Head (@26 Pa (0.55 psf))	20.15 L/s
Sill	25.11 L/s
Vertical joints	0.55 L/s
Horizontal joints	0.45 L/s
Sum	46.26 L/s (7.78 L/s/m ²)
	Ventilation Classification: V1
Water Penetration (Water collected off AWB behind cladding)	
<u>ASTM E331 Static Pressure</u>	<u>water in ml (oz)</u>
300 Pa (6.24 psf)	0.00 (0.00)
575 Pa (12 psf)	16.87 (0.57)
<u>AAMA 501.1 Dynamic Pressure</u>	<u>water in ml (oz)</u>
300 Pa (6.24 psf)	9.12 (0.31)
575 Pa (12 psf)	18.7 (0.63)
Sum	7.52 ml/m ²
Average	1.88 ml/m ²
	Water Penetration Classification: W1



ASTM B117 CORROSION RESISTANCE

Date of Test:	November 19, 2018 - February 8, 2019
Test Agency:	Intertek, 1500 Brigantine Drive, Coquitlam, BC, V3K 7C1
Test Method:	ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus
Test Specimens:	Nichiha Ultimate Clips (JEL778) (ZAM®), BT-R100 Brick Tie (305 g/m ²), HTT4 Tension Tie (610 g/m ²), and MSTA18 Stainless Steel Strap
Test Procedure:	Nichiha Ultimate Clips (coated with Zinc, Aluminum, and Magnesium (ZAM®)) along with comparative samples of hot-dipped zinc coated steel, of coating weights 305 and 610 g/m ² , as well as samples of stainless steel were subjected to 2000 hours of salt fog testing per ASTM B117.
Results:	Nichiha Ultimate Clips experienced a mass change of 1.3% with moderate signs of salt deposits but no corrosion or red rust. The 305 g/m ² brick ties experienced a mass change of -0.2% with significant corrosion and salt deposits. The 610 g/m ² tension ties gained 1.6% mass due to significant salt deposits, and lastly, the stainless steel straps had 0% mass change with slight brown staining near cuts but no corrosion or salt deposits.



ADA 2018 - VISUAL CONTRAST - LRV

Date of Test: May 16, 2019

Test Agency: PRI Construction Materials Technologies, 6412 Badger Drive, Tampa, FL

Test Method: Light Reflectance Values (LRV) measured by Hunter UltraScan Pro Spectrophotometer

Test Specimens: Nichiha Wood Series, Modern Series, and Gloss Series

Test Procedure: Nichiha panel samples were scanned with 5 measurements each utilizing a Hunter UltraScan Pro Spectrophotometer using a d/8 sphere at D65/10 degree illumination. Data reported below are average values.

Results:	<u>PRODUCT NAME</u>	<u>COLOR NAME</u>	<u>AVG. LRV (5 SCANS/SAMPLE)</u>
	VintageWood	Ash	25.66
		Bark	8.88
		Cedar	17.33
		Redwood	14.15
	RoughSawn	Espresso	7.31
		Smoke	24.64
		Tobacco	10.45
	ArchitecturalBlock	Gray	31.41
		Mocha	14.25
		Tuscan	27.43
	TuffBlock	Bamboo	23.86
		Pewter	27.15
		Steel	8.24
		Walnut	13.16
	Miraia	Glacier	54.41
		Onyx	3.99
		Snow	72.38

TECHNICAL DATA

The **Cultured Stone®** collection of manufactured stone veneers is engineered to meet or exceed specifications for all major code approvals. Manufacturers who offer "just like" or a so-called "equivalent" to Cultured Stone manufactured stone veneer products should be asked to document claims of test results and research reports.

Complete copies of these Cultured Stone manufactured stone veneer building code evaluation reports, research reports, approvals and listings are available upon request:

- ICC-ES ESR-1364
- Tested and listed by Underwriters Laboratories, Inc.
- Texas Department of Insurance—Product Evaluation Report, EC-21
- Florida Product Approval FL15047
- HUD Materials Release No. 1316
- BMEC Authorization

Note: Local building codes may vary; always check with your local building code authority prior to installation.

Results of tests conducted by an independent testing agency confirm that the Cultured Stone collection of manufactured stone veneers conforms to or exceeds the following test requirements as specified in ICC Evaluation Service Acceptance Criteria 51 for Precast Stone Veneer:

MATERIALS

CEMENT	ASTM C 150 or ACI 318 Section 3.2.1
SAND	ASTM C 144 or C 33
AGGREGATE	ASTM C 33 or C 330 (except gradation), C 331

TESTING

SHEAR BOND TEST (ADHESION)	Tested in accordance with ASTM C 482	> 50 psi
WATER ABSORPTION	Tested in accordance with UBC 15-5	9%–22% depending on texture
FREEZE/THAW CHARACTERISTICS	Testing procedures follow those outlined in ASTM C 67	< 3% mass loss
COMPRESSIVE STRENGTH	Tested in accordance with ASTM C 39	> 1800 psi @ 28 days
UNIT WEIGHT	Density is determined in accordance with ASTM C 567	< 15 lbs. per square foot
TENSILE STRENGTH	Tested in accordance with ASTM C 190	Reported
FLEXURAL STRENGTH	Tested in accordance with ASTM C 348	Reported
THERMAL PROPERTIES	Tested in accordance with ASTM C 177-71	R-value is .620 based on a 1.75" thick sample. Average thickness may vary on different Cultured Stone veneer products, and the R-value will vary accordingly.
NONCOMBUSTIBLE	Tested and listed by Underwriters Laboratories, Inc.	Cultured Stone brand products showed zero flame spread and zero smoke development.

STONE INSTALLATION INSTRUCTIONS

LATH INSTALLATION

Where lath is required, it shall be installed in accordance with ASTM C1063. Typically this will require corrosion resistant fasteners every 6" on center vertically, and 16" on center horizontally, fastened to framing. If an alternative lath is used, install it in accordance with the manufacturer's installation instructions and evaluation report. See the following **Material Selection** section for more specific lath requirements.

Note: Fasteners installed between framing should be limited as they may extend into the wall's insulation cavity.

SCRATCH COAT

Using a trowel or spray application, install mortar scratch coat of minimum thickness of 1/2" up to 3/4". Use sufficient material and pressure to fully engage and encapsulate the lath. No lath material should be visible after scratch coat installation.

Note: Proper encapsulation and scratch coat thickness are key aspects to lath corrosion resistance and physical performance characteristics.



MATERIAL SELECTION

WATER RESISTIVE BARRIER (WRB)

Select a material meeting one or more of the following standards:

- ASTM D226 Type 1 No.15 Asphalt Felt, intended for wall application
- ASTM E2556/E2556M
- ICC ES AC-308. Current Evaluation Report, by an ANSI accredited evaluation service, showing compliance to ICC ES Acceptance Criteria #38
- ILiquid WRB/Air Barrier–Current Evaluation Report by an ANSI accredited evaluation service showing compliance to code requirements for WRB

LATH

Select a material meeting one or more of the following standards:

- ASTM C847, minimum 2.5 lb/yd expanded metal lath
- ASTM C1032, minimum 18 gauge, woven wire mesh
- ASTM C847, minimum 3.4 lb/yd, 3/8" rib, expanded metal lath
- ASTM C933, welded wire lath
- Non-metallic lath, with a current evaluation report, confirming compliance to ICC-ES AC 275 by an ANSI accredited evaluation service, confirming alternative to one of the above lath products
- Liquid WRB/Air Barrier–Current Evaluation Report by an ANSI accredited evaluation service showing compliance to code requirements for WRB
- Alternate lath products showing compliance with ICC-ES AC 275, or equivalent. Drain-N-Dry™ Lath is a best in class ventilated rainscreen and superior integral Alkali Resistant glass lath combined meeting AC 275. For more information visit www.DrainNDryLath.com

All lath products must be self-furred, or use furring fasteners, to provide 1/4" clearance between lath and substrate, for the purposes of mortar embedded encapsulating lath.

LATH FASTENERS

Select fasteners that meet the requirements of the following standard:

- ASTM C1063
 1. Galvanized nails, staples, concrete nails. Penetration depth into wood framing is 3/4" minimum.
 2. Corrosion-resistant, self-drilling, self-tapping pancake-head screw with 7/16" head, 1 1/4" length or suitable to obtain 3/8" penetration beyond inside surface of metal. (Used for installing to metal surfaces such as metal studs or metal building siding.)

Applications over continuous insulation, refer to **Technical Evaluation Reports 1312-02 or 1302-01** available at www.culturedstone.com.

MORTAR

Select a material meeting one or more of the following standards:

- ASTM C270 Type N or Type S
- ANSI 118.4 and 115.15
- ASTM C1714 Type N or Type S

50-YEAR TRANSFERABLE LIMITED WARRANTY

LIMITATIONS ON THE TRANSFERABILITY OF THIS
WARRANTY ARE SET FORTH HEREIN

INTRODUCTION

Thank you for your recent purchase of **Cultured Stone®** by **Boral®** manufactured stone veneer products ("Product(s)"). This express limited warranty ("Warranty") only covers Cultured Stone manufactured stone veneer products manufactured by Boral Stone Products LLC ("Boral").

WHO IS COVERED & FOR HOW LONG

Subject to the following terms, Boral warrants its Products for fifty (50) years to the original purchaser (the "Purchaser") (based upon the date of retail purchase, date of substantial completion of the installation if professionally installed, or date of settlement of the purchase of a newly constructed building, whichever is applicable). This Warranty is personal to you; however, the Warranty may be transferred to any subsequent purchaser(s) of your home or building during the first fifteen (15) years after the original purchase date (as described above), but the warranty period as to such subsequent owners is limited to fifteen (15) years from the original purchase date (as described above).

WHAT BORAL WARRANTS

Boral, subject to the conditions and limitations listed herein, warrants its Products to be manufactured in compliance with the International Code Council Acceptance Criteria 51 ("ICC AC 51") for Precast Stone Veneer; however, Products that are accessories and Products that are not wall veneer shall not meet the weight, density and dimension parameters of ICC AC 51.

WHAT IS NOT COVERED

We do not cover damage to the Product due to any cause not expressly covered herein. This Warranty does not cover any problems with non-defective material caused by conditions or handling beyond our control.

Some examples of conditions not covered by this Warranty include:

1. Improper application, use of accessories which do not properly receive and/or secure our Products, or installation not in strict adherence to the applicable installation instructions or installation not in accordance with local building code requirements.
2. Damage resulting from accident, misuse, neglect, casualty, fire, vandalism, plant growth, impact of foreign objects, salt or de-icing chemicals, excessive exposure to water due to things such as standing water, water backups, improper flashing, leaks, seepage or irrigation systems, failure of or damage to the wall substrate on which the Product was applied caused by movement, distortion, cracking, or settling of such wall or the foundation of the building, surface discoloration due to airborne stains, pollutants, algae, fungi, lichens or cyanobacteria, exposure to harmful chemicals, external heat sources (including, but not limited to, a barbecue grill, fire, or reflection from windows and doors), acts of God, or other such occurrences beyond the control of Boral;
3. Product or material that has been painted, varnished, sealed with non-breathable sealer, or similarly coated over the manufacturer's original finish; and
4. The use of sandblasting, power washing, silicone treatments, or any other form of chemical wash.

Products shall not be in breach of this Warranty if they contain or exhibit (i) minor chipping, as defined under ASTM C1364, Section 8.2; or (ii) minor cracks, as defined under ASTM C 90-05, Section 7.2.1, incidental to the usual methods or materials of manufacture or minor chipping resulting from customary methods of handling in shipment and delivery which do not affect the proper placement of the unit or significantly impair the strength or permanence of the construction.

Products are not warranted against discoloration caused by air pollution, exposure to harmful chemicals, or "normal weathering" resulting from exposure to the elements. "Normal weathering" is defined as the damaging effects of sunlight and extremes of weather and atmosphere that may cause any colored surface to oxidize, fade, or become soiled or stained over time.

Boral strives to accurately reproduce the colors of its masonry stone veneer Products in its marketing literature and sample boards. The Product colors that you see are as accurate as technology allows. Boral makes no warranty with respect to any real or perceived color differences between those depicted in its marketing literature and sample boards and those of the actual Products that will be installed on or within the home or building. Boral recommends that you look at actual Product samples before making a color selection for your home or building.

50-YEAR TRANSFERABLE LIMITED WARRANTY

WHAT IS YOUR REMEDY

If the Products are not in conformance with our Warranty, Boral will, in its sole discretion, either (i) repair or replace the nonconforming Products at no charge to you, or (ii) refund the price paid for the Products. Labor costs for removal or installation are not covered. Any Products repaired or replaced hereunder will continue to be covered under the terms of this Warranty for the remainder of the original warranty period.

SUBMITTING A WARRANTY CLAIM

To obtain performance under this Warranty, the Purchaser(s) shall notify Boral of the claim promptly following its discovery, and shall submit with such notification proof of date of purchase and/or installation, and proof of property ownership, in order to provide Boral an opportunity to investigate the claim and examine the material claimed to be defective. All notifications shall be provided to Boral at **Boral Stone Products Warranty Department, 2256 Centennial Road, Toledo, Ohio 43617** or call **1-800-255-1727**. Shortly after we receive your communication, we will contact you regarding your claim. To fully evaluate your claim, we may ask you to provide pictures of your Products or samples for us to test. If you have any questions, do not hesitate to write us at the address above or call **1-800-255-1727**.

REPLACEMENT & PRODUCT VARIATIONS

As a result of our ongoing efforts to improve and enhance our product line, we reserve the right to discontinue or modify our Products, including their colors, without notice to the Purchaser(s) and shall not be liable to the Purchaser(s) as a result of such discontinuance or modification. We are not liable to you if you make a warranty claim in the future and any replacement Products you receive vary in color or finish because of normal weathering or changes in our product line. You should understand that if we replace any Products under this Warranty, we reserve the right to provide you with substitute Products that are comparable only in quality and price to your original Products.

LIMITATIONS

EXCEPT AS SET FORTH ABOVE, BORAL MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ANY PRODUCT SOLD. ORAL STATEMENTS CONCERNING THE PRODUCT(S) COVERED BY THIS WARRANTY, OR STATEMENTS CONTAINED IN BORAL'S GENERAL ADVERTISING, PAMPHLETS OR OTHER PRINTED MATERIALS DO NOT CONSTITUTE WARRANTIES, AND PURCHASER ACKNOWLEDGES THAT IT HAS NO RIGHT TO RELY UPON SAME. BORAL, WHETHER AS A MANUFACTURER OR CARRIER, SHALL NOT BE LIABLE FOR ANY COMMERCIAL LOSSES, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, OR FOR ANY LOSS, DAMAGE OR EXPENSE ARISING UNDER OR IN CONNECTION WITH ANY SALE OF PRODUCT. BORAL'S LIABILITY FOR DAMAGES OF ANY KIND SHALL IN NO EVENT EXCEED THE ORIGINAL PURCHASE PRICE OF THE PARTICULAR ORDER, LOT OR SHIPMENT (OR THE ORIGINAL PURCHASE PRICE OF THAT PORTION THEREOF WHICH IS NOT REPAIRED OR REPLACED) WITH RESPECT TO WHICH A CLAIM IS ASSERTED. IN PARTICULAR, BORAL SHALL NOT BE LIABLE FOR LOSS OF SALES, REVENUES OR PROFITS OR CLAIMS OF ANY THIRD PARTIES.

LEGAL RIGHTS

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Some states do not allow the exclusion or limitation on incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. If the laws of a particular state require terms other than or in addition to those contained in this Warranty, this Warranty shall be deemed modified so as to comply with the appropriate laws of such state, but only to the extent necessary to prevent the invalidity of this Warranty or any provision of this Warranty or to prevent the imposition of any fines, penalties or any liability.



METAL RIBBED PANEL

Berridge "M" Panel

EXPOSED FASTENER PANEL SYSTEM



The Berridge "M" Panel is a wide, economical panel providing 36" of coverage for vertical and horizontal applications with exposed fasteners. This versatile corrugated panel can be used over open framing or solid sheathing providing endless design possibilities.

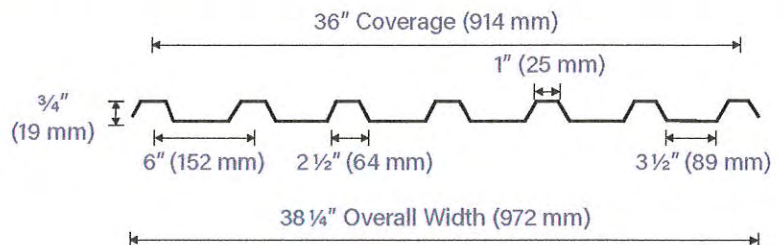


Materials

24 and 22 Gauge Steel
0.032 Aluminum

Specifications

Uses: Roof, Wall, Soffit, Ceiling, Fascia, Mansard, Sheathing, Screen Wall
Coverage: 36"
Finishes: Smooth corrugated
Fasteners: Exposed
Applications: Vertical on Roof or Mansard; vertical or horizontal over open framing or solid sheathing for other uses



Installation

- Panel is available from the factory in continuous lengths to a maximum of 40'
- Structural properties allow it to be utilized as a sheathing option
- Estimate 115 fasteners/sq
- Use inside and outside foam closures to help prevent air infiltration at ridges, eaves, head walls, etc.
- Use expandable foam filler tape per installation details at closure at hips and valleys
- Use mastic sealant tape per installation details at panel endlaps, sidelaps, skylights, with foam closure, etc.



Pictured Above

Project: Laramie Recreation Center
Architect: Ohlson Lavoie Collaborative of Denver, CO
General Contractor: Sampson Construction
Installing Contractor: Taylor Kohrs of Denver
Color: Almond, Sierra Tan

Pictured Right

Project: Laramie Ice Arena
Architect: Ohlson Lavoie Collaborative of Denver, CO
General Contractor: JC Construction of Laramie
Installing Contractor: JC Construction of Laramie
Color: Almond

BERRIDGE "M" PANEL TESTING AND CERTIFICATION SUMMARY CHART

CATEGORY	CHARACTERISTIC	TEST METHOD	PURPOSE	RESULT
FIRE	■ Room Fire Performance	UL 790	Test methods for fire tests of roof coverings	Class A Rating
ENVIRONMENTAL	■ Impact Resistance	UL 2218	Impact resistance of prepared roof coverings	Class 4 Rating
ROOF LISTINGS	■ Florida Product Approval	TAS 125	Local and state approval of products and systems for compliance with the structural requirements of the Florida Building Code	FL# 14210.7 (24 GA-Purlins) FL# 14669.4 (24 GA-Girts)
	■ Underwriters Laboratories	UL 580 Uplift Class 90	Standard for Tests for Uplift Resistance of Roof Assemblies	Construction No. 39 (Open Framing)

■ - Steel only □ - Steel and Aluminum
For further details please visit www.berridge.com



CORPORATE HEADQUARTERS

2610 Harry Wurzbach Road
San Antonio, TX 78209
(800) 669-0009
www.Berridge.com

VINYL FABRIC AWNINGS

SECTION 10536 FABRIC AWNINGS

Flame Treated Acrylic Fabric, Aluminum Frame

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

A. Drawings and general provisions of the contract, including General and Special Conditions, apply to the work of this section.

1.02 DESCRIPTION OF WORK:

A. The extent of awning work is indicated on drawings and by provisions of this section.

1.03 QUALITY ASSURANCE:

A. General: Provide awning units which are complete assemblies, produced by one manufacturer/fabricator. All structural framework and fabric elements are single source responsibility of fabricator.

B. Fabricator's Qualifications: Where indicated units require custom fabrication, provide units fabricated by shop which is skilled, and with a minimum of ten (10) years of experience in similar work. Fabricate all custom equipment items at same shop. Where units cannot be fully shop fabricated, complete fabrication work at project site.

1.04 SUBMITTALS:

A. Shop Drawings: Submit shop drawings for all components and application conditions of awning units which are not fully dimensioned or detailed in product data. Show relationships to adjoining work. Provide sections and details at connections and corners. Provide schedule of all units to be furnished, including field measurements at each location.

B. Samples: For initial selections, submit color charts showing full range of colors and actual fabric samples available for each awning assembly.

1.05 WARRANTY:

A. Awning Manufacturer to guarantee workmanship for a period of one (1) year.

B. Fabric warranty period to be ten (10) years from the original installation date.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS:

A. Manufacturer: Subject to compliance with requirements, provide products of the following:

2.02 MATERIALS:

A. Awning fabric: Woven fabric, made of 100% modacrylic solutions dyed fibers with a fluorocarbon finish. Typical weight approximately 9.25 oz. per square yard. "Sunbrella" by Glen Raven Mills Inc. or approved equal. Fabric to be treated with Flamecoat N.F.P.A. 701 Small Scale, Class A. A.S.T.M.E-84, Flame Spread: 10 Smoke Density: 25, After Flame Average: 0.0 sec, California Title Section 19 Section 1237, California TB 117E.

B. All seams to be heat sealed using the Triad Wedge Welder. Seams not possible for heat sealing are to be sewn.

C. Thread: Bonded polyester V-92 meets spec. VT285E, Type II, Class I, Sub Class B (Thread color to match fabric color).

D. Framework:

Frame structure to be constructed of completely welded 6063-T5 aluminum extrusions.

Aluminum framing profiles shall be sized to withstand all live, dead and superimposed loads. The frame design shall meet regional code restrictions.

E. **Paint:** Frames to be Powder Coated using "Tiger Drylac Polyester Powder Coatings" Color to be chosen from standard color chart.

F. **Expansion Anchors:** Zinc Plated Carbon Steel anchors shall be a pre-assembled sleeve style anchor with a hex head. Components shall be plated according to ASTM specification B63, SCI, Type III. "LOK/BOLT" by Powers Fasteners or approved equal.

G. **Graphics (if applicable):** 3M™ Scotchcal™ ElectroCut™ Graphic film, applied with the Sunbrella Graphics System (SGS) Machine, by a Certified Sunbrella Graphics System Manufacturer. Screen printing, hand painting or any other method of graphic application will not be accepted.

2.03 FABRICATION GENERAL:

A. **Shop Assembly:** Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

B. **Awning Framework:** Use materials of size and thickness as required to produce strength and durability in finished product for use intended. Work to dimensions indicated or accepted on shop drawings, using proven details of fabrication and support. Use type of materials indicated or specified for various components of work.

1. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges. Maintain cross-section of pipe and tubing. Crimped pipe ends, fitting and tee connections are not acceptable.

2. Weld corners and seams continuously, complying with AWS recommendations. Grind and brush all welds. Brazed welds are not acceptable.

3. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where-ever possible.

4. Provide for anchorage of type shown, coordinated with supporting structure. Fabricate and space anchoring devices to provide adequate support for intended use.

PART 3 - EXECUTION

3.01 INSTALLATION:

A. **General:** Install awning units in manner indicated to comply with manufacturer's instructions. Position units level, plumb, secure, at proper height and location relative to adjoining window units, openings and other related work. Securely anchor units with proper clips, brackets, anchorages, suited to type of mounting indicated.

B. Provide adequate clearances between fabric awning framework and structures to permit unencumbered operation of hardware.

C. Attach fabric to frame work as recommended by manufacturer to assure proper fit of fabric to frame.

NICHIHA PHOTOGRAPHS



SIEGAL/TUOMAALA ASSOCIATES ARCHITECTS AND PLANNERS INC.

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NICHIHA PANELS
SUGARTREE SHOPPING CENTER
WEST BLOOMFIELD, MI
2011





DETROIT PISTONS

PERFORMANCE CENTER

Find imperfect perfection with
THE CONCRETE SERIES

INDUSTRIALBLOCK

Put a fresh face on industrial chic.

Take back your time with the Nichiha Concrete Series. Designed to mimic the natural texture of concrete, our two panels offer distinct textures and styles to fit your creative vision. Plus, with the power of fiber cement, you can enjoy the look and feel of concrete without the curing times, cracking or color inconsistency.

IndustrialBlock™ offers a distressed design with all the irregularities and characteristics of natural concrete. It can pair seamlessly with a wide range of products, whether you are aiming for a modern or vintage vibe. EmpireBlock™ delivers the look and feel of precast concrete block with a modern twist. Perfect for indoor environments as well as exterior cladding, it features a unique dimple that defines the look of industrial chic.

Both sets of lightweight panels can be installed vertically and horizontally, covering approximately 15 square feet per panel, and have the durability you've come to expect from Nichiha.

Sleek. Bold. Vibrant. THE DESIGNER SERIES



ILLUMINATION

Get polished sophistication in your color.

Modern appeal. High performance. Cost-effective. The Designer Series, featuring Illumination and Miraia, is ideal for contemporary design projects. With its satin finish, ease of installation and virtually limitless color palette, Illumination provides significantly more value than traditional aluminum composite and phenolic panels.

Miraia — the only product of its kind in the fiber cement market — offers a reflective, high-gloss finish, perfect for design accents and as an affordable alternative to metal. It's available in Snow, Glacier and Onyx.



In just 3 simple steps, Nichiha's Color Xpressions System opens your project up to a nearly limitless world of color possibilities. Backed by a 15-year limited factory-applied finish warranty, this premium feature can apply virtually any color to your design.

Just look for this Color Xpressions icon on select Nichiha products.



Schools Multi-family Mixed-use Office Building Healthcare



Warm up your project with THE WOOD SERIES

VINTAGEWOOD

Get the natural look of wood with unmatched durability.

Nichiha provides the look of wood without the drawbacks of natural wood cladding. Built to last, our VintageWood™ and RoughSawn™ panels offer the rich textures of wood while providing color stability and withstanding extreme weather elements. VintageWood exudes modern refinement and works well in both modern and vintage designs. With its earthy appeal, RoughSawn adds rustic sophistication to all types of projects. Both products pair perfectly with glass, metal and block panels, adding a touch of warmth to the coolness of these materials.

VintageWood and RoughSawn are as versatile as they are durable. Our Wood Series panels can install both vertically and horizontally and can be used in interior and exterior settings. Hidden fasteners provide a clean and beautiful look. Creating the perfect match, Nichiha gives you the beauty of wood backed by the brawn of fiber cement.

Find form and function in THE MODERN SERIES



Take modern to the next level with distinct textures and tones.

The clean, modular look of the Nichiha Modern Series is a versatile choice for commercial and residential projects alike. The stylish tones and subtle seams are the perfect partner for gleaming glass and stainless steel. If you're looking for a modern contrast, the cool hues glow when paired with the warmth of wood. This series offers two distinct textures to ensure you find the perfect fit. ArchitecturalBlock™ is a handsome, durable and cost-effective solution. The ease of installation and wide variety of corner options make it as popular with contractors as it is with clients.

Its partner product, TuffBlock™, offers many of the same features as ArchitecturalBlock, but takes urban to the next level with a tough, textured finish. TuffBlock is built to last with strong construction that stands up to everyday wear and tear, making it the perfect panel for high-traffic areas. Whichever panel you choose, you've picked one that packs a punch while saving you time and money in the long run.



NICHIHA PANELS
 MARX LAYNE
 FARMINGTON HILLS, MI
 2006

SIEGAL TUOMAALA ASSOCIATES
 ARCHITECTS AND PLANNERS INC.



NICHIHA PANELS
BOARDWALK SHOPPING CENTER
WEST BLOOMFIELD, MI
2010



SIEGAL TUOMAALA ASSOCIATES
ARCHITECTS AND PLANNERS INC.

RIBBED METAL PANEL FASCIA **PHOTOGRAPHS**



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RIBBED METAL PANEL
2028 W. BIG BEAVER RD.
TROY, MICHIGAN

Black Rock 41601 Ford Road, Canton, MI





RIBBED METAL PANEL
SUBURBAN FORD
21600 WOODWARD AVE.
FERNDALE, MICHIGAN



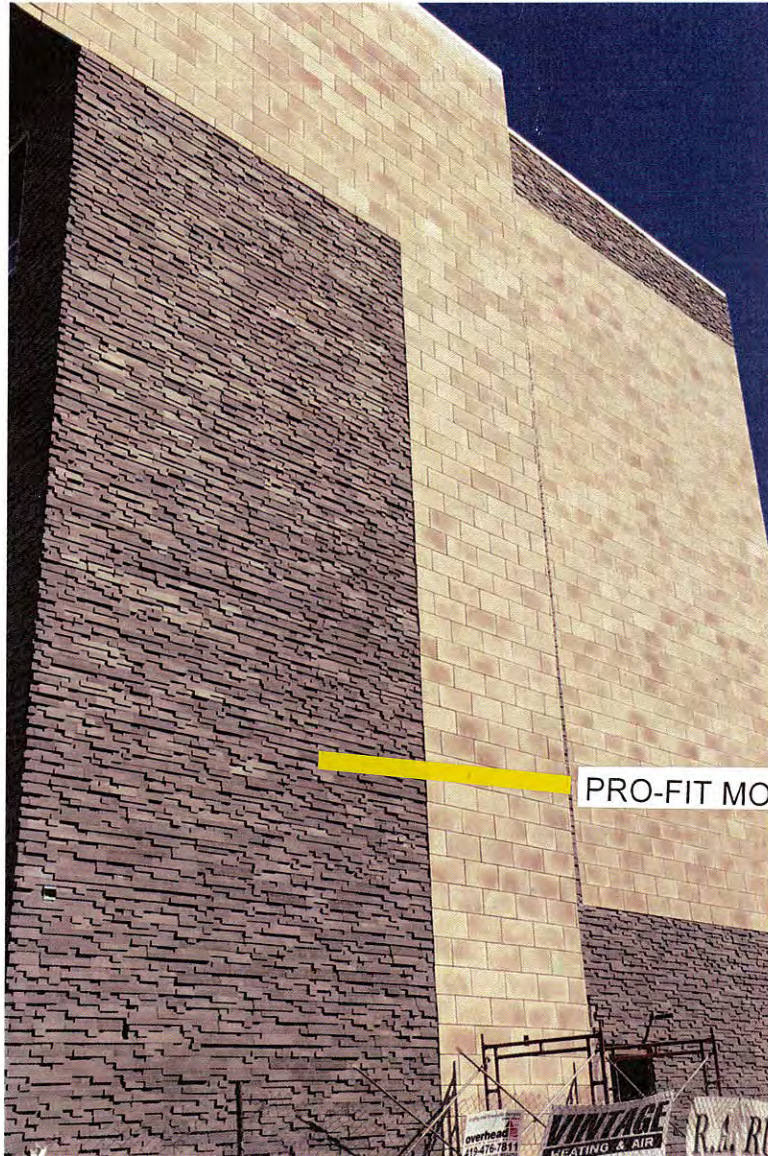
RIBBED METAL PANEL
AMERITRUST BUILDING
26555 AMERICAN DRIVE
SOUTHFIELD, MICHIGAN

PRO-FIT MODERA LEDGESTONE **PHOTOGRAPH**



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PRO-FIT MODERA LEDGESTONE

memorandum

DATE: March 11, 2020

TO: City of Lathrup Village Planning Commission

FROM: Jill Bahm, Giffels Webster

SUBJECT: Parking in MX District

As some Planning Commissioners may recall, in 2014, and again in 2017, the city considered an amendment to the Zoning Ordinance that would encourage redevelopment in the Southfield Road corridor. One of the key limiting factors in revitalization of this corridor is the shallowness of the lots. For the demolition of an existing building and the construction of a new building to be financially feasible, the new construction should provide more value than the building being removed. This would occur if the new building offers more usable space. However, to add more usable space requires more on-site parking than most sites can provide, given the shallow depths of properties in this corridor.

Attached is the final packet of information, including the relevant pages from the 2015 Master Plan that explains the amendment proposed to address parking in this area. The Planning Commission may wish to revisit this subject and evaluate how to proceed.

Commercial Corridor

Improving redevelopment opportunities for a mix of uses

In 2012, the City refined its concept for the Village Center Area with input from the owner of the Annie Lathrup School and feedback from residents (see Fig 20-21 on previous page). The updated concept maintains the framework for the Village Center with the street and sidewalk network, and adds in additional public space behind the school and a narrow median on Southfield Road to facilitate pedestrian crossings.

The DDA's 2013 market study was intended to define opportunities and suggest implementation strategies for the City to engage redevelopment as well as to retain and recruit businesses to the commercial areas of the City, particularly the Village Center.

As noted in Chapter 4, the context of the study is that there are demographic and other changes within the United States and Michigan that impact the current and future opportunities for Lathrup Village. In addition to those mentioned in Chapter 4, additional changes relating to commercial development include:

- Manufacturing is changing significantly through changing technology, technology application and the introduction of new materials. Manufacturing changes will impact retail and related space in significant ways in the future. More buying will be based on "on demand" production methods.
- In the short-term, countering the previous two factors is the trend among major box stores and others to fulfill online orders from stores versus warehouses.
- Higher education costs continue to rise.

In addition to the national trends and patterns impacting Lathrup Village, there are significant local patterns, including but not limited to those that follow:

- The regional economy as well as the areas around Lathrup Village, like many communities, suffered economically during the "Great Recession." Unemployment and under-employment levels continue to thwart other growth and economic changes.
- The demographics of the surrounding area and to a lesser extent within Lathrup Village have changed. The population has aged; depressed or declined housing values impacted local revenues; and increases in demand for certain goods and services is occurring while creating demand in other components of the local economy is diminishing.

Multiple analyses, including a comparative assessment or gap analysis and demand forecasting, were performed to define current and future opportunities for Lathrup Village. To determine additional potential uses without bias, the property must be placed within (a) the context of the larger geographic area or market, and (b) the local population. The overall purpose of both analyses is to define opportunities and niches that are un-met and under-served or could potentially be successful at present or in the near future in Lathrup Village.

Summary of Findings

Growth in housing units and households will result in increased demand for retail goods and related services. However, countering the increased demand for goods and services generated from household growth will be increased growth of online sales, at least in the foreseeable future, and technological change that will result in changes in required inventories within “bricks and mortar” operations. The study does find additional demand for retail goods and related services, as well as entertainment uses, and office space. The conclusion of the study is:

Housing

- Market rate units from a low of 20 to as many as 90.
- Adult/Senior housing units ranging from 75 to 210.
- Adult compendium care housing from three levels of assisted, through nursing care, through hospice.
- There could be a range of or various physical forms other than single-family detached.

Retail

- Potential for 75,000 square feet of space.
- Larger amounts of space are possible depending upon niche activity and potential intertwined with entertainment.
- Food service activity and the extension of farmers' market through the holiday season if space created indoors, niche apparel additions from "on demand" production.

Entertainment. The quality transportation system connections within the region make entertainment development marketable; however, there is little to no probability of such development without a configuration in a town/village center development.

- About 60,000 square feet could be supported in a “village center” area.
- Must capture regional market share.
- Likely to incorporate food service.
- Should include passive and indoor recreation component in the village/town center.

Office and “Flex” Space

- Range from 14,000 to 130,000 square feet capturable in Lathrup Village.
- Focus on select professional and business service space.
- Additional space potential for outpatient medical and urgent care activity.

Study Implications for the Master Plan. Increasing services for residents and an expanded tax base will not likely be significant given the existing configuration and deteriorating condition of certain properties. With no “green fields” or virgin land remaining, new opportunities require reuse of existing structures/properties.

- One ripe opportunity for redevelopment in the City is at the vacant “Annie Lathrup School” property. This site can be defined as a negative influence on Lathrup Village as the buildings continue to deteriorate. While the redevelopment of this site has its own challenges, given the historic nature of the structures, the size and shape of the parcel will help facilitate site design and layout.
- Another contributing factor to the deteriorating conditions along Southfield Road is in the road right-of-way area that is typically used as parking throughout the corridor. These areas are in rough shape, yet significant improvements to these areas is out of the hands of property owners as well as the City, and these conditions have to be changed. Options likely include diminishing the right-of-way, gaining enhancement and maintenance control over that portion of the right-of-way, or having the State and County invest dollars in its improvement. The latter, if that is the path upon which Lathrup Village continues, cannot wait five to ten years.

In addition to the physical needs of the corridor, the City should also be considering the following:

- Rethinking code application, enforcement procedures and the relationship between taxes and property revenues (considering formulas more closely related to residential) could be of significant benefit to Lathrup Village over time.

- While technically Lathrup Village is a city, many stakeholders envision it as a "village" or a small community which it is in terms of land mass and population. The City should continue to reinforce this identity. Such an identity is critical for visitors to instantly recognize when they have entered or left Lathrup Village and be impressed and comfortable when in it.
- The City must continue to mitigate the impact of deteriorating properties through strict code enforcement, irrespective of occupancy status
- The City should continue to identify opportunities for placemaking activities—whether public or semi-public (such as outdoor dining for restaurants, art displays, or unique retail events)
- The frontage along Southfield for most of its length in the City was built in a different era and is no longer compatible with modern commercial needs. The depth of the parcels zoned for commercial is often inadequate to support modern site and structure design. Addressing this issue means creating select parcels with greater depth, affording demolition of existing structures while preserving the character of surrounding areas through limited infringement of residential area integrity.

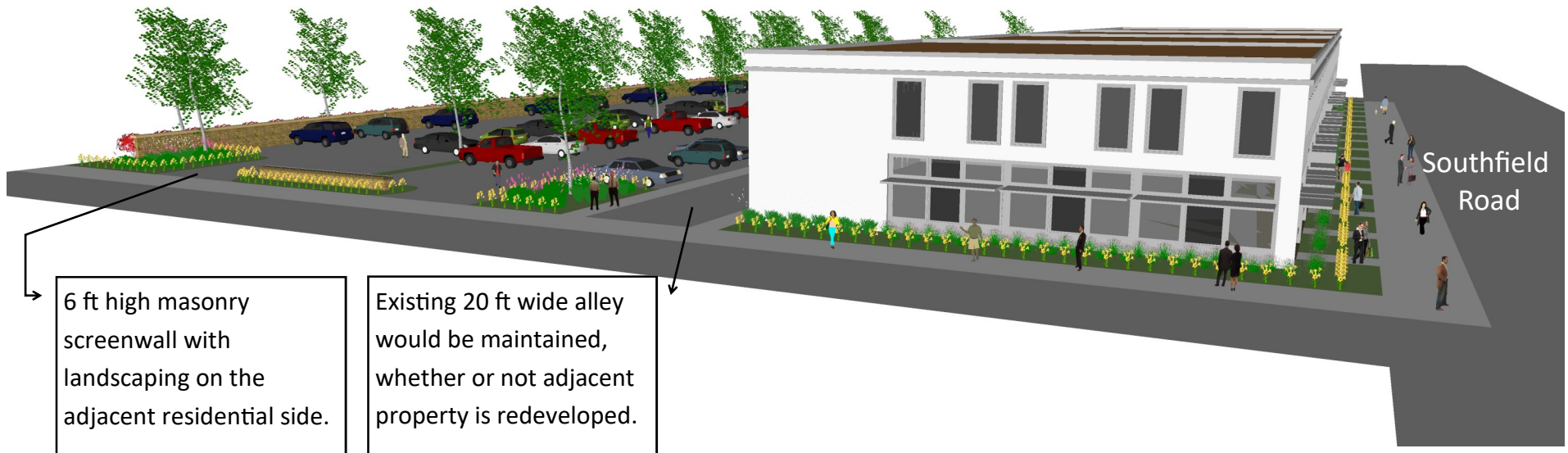
A concept to mitigate this issue involves the optional conversion of property adjacent to Southfield Road properties to be used for parking. This would allow Southfield Road properties to be redeveloped, presenting opportunities for new uses and businesses in the entire corridor.

If properly screened and landscaped, this parking area would serve as a buffer between more intense commercial uses and the adjacent residential neighborhoods. Images on this page provide examples of the types of development that would be appropriate in this corridor. A graphic that illustrates this concept ("Mixed Use Expansion Area") is presented on the following page (See Fig. 22).

These findings are incorporated into Goals 1, 2, 3, 4 and 5 (see Chapter Eight)



Concept Sketch for Parking in the R-1 district



Precedent Images for Redevelopment in the Southfield Road Corridor

