

A G E N D A

REGULAR MEETING OF THE MIDLAND CITY PLANNING COMMISSION, TO TAKE PLACE ON TUESDAY, JUNE 14, 2016, 7:00 P.M., COUNCIL CHAMBERS, CITY HALL, MIDLAND, MICHIGAN

1. Call to Order

2. Pledge of Allegiance to the Flag

3. Roll Call

4. Approval of the Minutes

Regular Meeting – May 24, 2016

5. Public Hearings

- a. **Site Plan No. 350** - initiated by Primrose Retirement Communities, LLC for site plan review and approval for a 118,416 square foot retirement community, located at 5900 Waldo Avenue.
- b. **Zoning Petition No. 607** – initiated by Wahlack, LLC to zone the property located at 204 Commerce Drive from Residential A-2 Single-Family Residential zoning to Residential A-4 One and Two-Family Residential zoning.
- c. **Zoning Text Amendment No. 158** – initiated by the City of Midland, to amend Section 8.09 of the Zoning Ordinance being the sign regulations of the Center City Authority Overlay district.

Public Hearing Process

1. Staff presentation and overview of petition
2. Petitioner presentation
3. Public comments in support of the petition
4. Public comments in opposition to the petition
5. Opportunity for petitioner rebuttal and final comments
6. Closing of public hearing
7. Deliberation and possible decision by Planning Commission

6. Old Business

7. Public Comments (unrelated to items on the agenda)

8. New Business

- a. **Capital Improvement Plan**

9. Communications

10. Report of the Chairperson

11. Report of the Planning Director

12. Items for Next Agenda – June 28, 2016

- a. Site Plan No. 351 – initiated by Fred Eddy Jr, on behalf of the Dow Gardens for site plan review and approval for improvements at both Dow Gardens and Whiting Forest, located at 2303 Eastman Avenue.
- b. Zoning Ordinance Revision – Article 9.02 I

13. Adjournment

**MINUTES OF THE MEETING OF THE
MIDLAND CITY PLANNING COMMISSION
WHICH TOOK PLACE ON
TUESDAY, MAY 24, 2016, 7:00 P.M.,
COUNCIL CHAMBERS, CITY HALL, MIDLAND, MICHIGAN**

1. The meeting was called to order at 7:00 p.m. by Chairman McLaughlin
2. The Pledge of Allegiance was recited in unison by the members of the Commission and the other individuals present.

3. **Roll Call**

PRESENT: Bain, Mayville, McLaughlin, Pnacek, Senesac, and Tanzini

ABSENT: Hanna and Heying

VACANCY: One

OTHERS PRESENT: Brad Kaye, Assistant City Manager for Development Services; Grant Murschel, Community Development Planner; and six (6) others.

4. **Approval of Minutes**

Moved by Mayville and seconded by Pnacek to approve of the amended minutes of the regular meeting of May 10, 2016. Motion passed unanimously.

5. **Public Hearing**

- a. Site Plan No. 349– initiated by Prein&Newhof on behalf of Northwood University for site plan review and approval for the proposed North Village Housing, a 75,350 square foot student housing facility, located at 4203 West Sugnet Road.

Murschel gave the presentation of the proposal. He described the site plan and explained the proposal as it related to the objective criteria of the review. The subject site is zoned Community as the subject zoning petition was approved by City Council on May 23, 2016. The proposal meets the requirements for use, setbacks, landscaping and parking. A pedestrian connection is proposed to access the main portion of the campus across the Pere Marquette Rail-Trail.

Senesac wondered if the remainder of campus could be accessed by pedestrians if the crossing of the rail-trail was not approved. Murschel indicated that yes it could be through the proposed connection along West Sugnet Road. Murschel also explained that the site was designed with multiple modes of transportation in mind, including Dial-A-Ride, walking and bicycling.

John VerPlank, the representative for Prein&Newhof, indicated that the proposed development is approximately 3.7 acres of the 10 acre site. The crossing under the rail trail will be a directional drill and the pathway connection will be to the edge of the existing pathway, so the pathway's existing asphalt will not be cut and the underground crossing will not close the trail.

Keith Pretty, President of Northwood University, indicated that the campus security team, made up by a system director and contractor workers, will monitor this facility like the remainder of campus. The housing will be targeted toward upper classman. He further indicated that it is the University's intent to occupy the facility by the fall of 2017 if possible. It has been 37 years since the last housing was built on campus.

There were no public comments in support or opposition. Public hearing closed.

A motion was made by Mayville to waive the procedural requirements to delay a decision on the site plan until the next meeting. The motion was seconded by Pnacek. The motion was approved unanimously.

Mayville indicated his support for the proposal as it meets all of the necessary criteria. Bain mentioned that he is glad to see that the university is growing and that he intends to support the proposal.

It was moved by Pnacek and supported by Mayville to recommend approval of Site Plan No. 349 initiated by Prein&Newhof on behalf of Northwood University for site plan review and approval to City Council contingent on:

1. A final stormwater management permit must be approved by the City Engineering Department.
2. A final soil and sedimentation control plan must be approved by the City Building Department.
3. Public water utility easement documents shall be submitted for review and approval by the City Engineering Department and the City Attorney, and executed and recorded at the Midland County Register of Deeds upon approval.
4. License agreements for the above ground pedestrian crossing and underground sanitary sewer crossing of the Pere Marquette Rail-Trail shall be approved to the satisfaction of the City Public Services Department and the City Attorney.
5. The above ground pedestrian connection and underground sanitary sewer crossing of the Pere Marquette Rail-Trail shall be coordinated with the City Public Services and Engineering Departments.

YEAS: Bain, Mayville, McLaughlin, Pnacek, Senesac, and Tanzini.
NAYS: None
ABSENT: Hanna and Heying
VACANCY: One

The motion passed (6-0).

6. Old Business

None

7. Public Comments (unrelated to items on the agenda)

None

8. New Business

- a. Discussion of future training needs/topics

Kaye explained that these trainings would be conducted sometime after July 1 once the two new members of the Planning Commission are appointed. He indicated that the topics could range from legal topics to planning theory, as outlined in the staff report.

Bain indicated that it might be helpful to consider planning areas that went well or went wrong in Midland's planning history. He also explained that he would like to know more about why the built environment is developed differently now as in the past as it pertains to neighborhood amenities such as parks and small commercial businesses.

Mayville mentioned that access management would be a good topic to consider. McLaughlin agreed; he further explained that he would like to see a focus on non-motorized transportation as it is a huge quality of life measure.

Senesac commented that he has noticed overtime that the general public struggles to understand the planning process. He would like to see an effort by the Planning Commission to train the community in better understanding the process. He encouraged members of the public to attend the training sessions to learn more.

Pnacek commented that the joint training sessions with the Zoning Board of Appeals and the Planning Commission was very helpful. Senesac continued with explaining that rezoning requests should not be considered with the future use intended by the applicant as all of the uses within the zone must be considered.

Tanzini indicated that he would like to see an analysis of the city as it pertains to actual use versus planned property. Some of this information is in the Master Plan but could be reviewed and discussed in more detailed to determine whether or not the planned area is adequate.

9. Communications

None

10. Report of the Chairperson

None

11. Report of the Planning Director

Approved at City Council at the May 23 meeting was the Northwood rezoning petition from Residential A-1 Single-Family Residential and Residential B Multiple-Family residential zoning to Community zoning. Also approved was the rezoning of the Rapanos property on North Waldo from Midland Township zoning to Residential A-3 Single-Family zoning. The site plans for the medical facility and the self-storage units were also approved at City Council and will move forward.

The interviews for the Planning Commission appointments will take place on May 25. There are three applicants. There are two openings, one for the remainder of Jim Stewart's term and one to fill Ray's spot beginning on July 1.

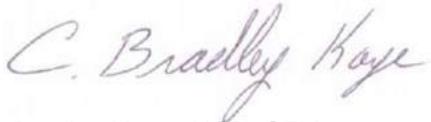
12. Items for Next Agenda – June 14, 2016

- a. Zoning Text Amendment No. 158 – initiated by the City of Midland, to amend Section 8.09 of the Zoning Ordinance to the sign regulations for the Center City Overlay district.
- b. Zoning Petition No. 607 – initiated by Wahlack, LLC to zone the property located at 204 Commerce Drive from Residential A-2 Single-Family Residential zoning to Residential A-4 One and Two-Family Residential zoning.
- c. Capital Improvement Plan introduction.

13. Adjourn

It was motioned by Senesac and seconded by Pnacek to adjourn at 8:09p.m. Motion passed unanimously.

Respectfully submitted,

A handwritten signature in cursive script that reads "C. Bradley Kaye".

C. Bradley Kaye, AICP, CFM
Assistant City Manager for Development Services

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE PLANNING COMMISSION



Site Plan SP #350

Date: June 8, 2016

STAFF REPORT TO THE PLANNING COMMISSION

SUBJECT: Primrose Retirement Community

APPLICANT: Primrose Retirement Communities, LLC

LOCATION: 5900 Waldo Avenue

ZONING: Township Zoning*
 *Site subject to Zoning Petition #605, proposed (RB) Multiple Family Residential, subject to conditions.

ADJACENT ZONE: North: Township Zoning
 South: Township Zoning
 East: Township Zoning
 West: Township Zoning

ADJACENT DEV: North: Agriculture
 South: Agriculture
 East: Agriculture
 West: Agriculture and single-family homes.

REPORT

Site Plan No. 350, initiated by Primrose Retirement Communities, LLC, is a proposal for an 118,416 square foot retirement community. The proposal includes a catered living facility, a dining facility, a memory care facility, fourteen (14) two-unit villas for independent living, four (4) parking areas, stormwater detention facilities, and site landscaping elements.

At the time of this report, the subject property is zoned with township zoning as the City has not adopted a zoning district for this parcel since it was annexed into the City. The property is, however, subject to current Zoning Petition No. 605, the request of Primrose Retirement Communities, LLC, to zone the subject property to (RB) Multiple-Family Residential, subject to the set of following conditions, as voluntary offered by the applicant:

- Multiple family dwellings will be removed from the list of permitted land uses for the subject parcel.

During the April 26, 2016 meeting of the Planning Commission, approval of ZP #605 was recommended by a vote of 7-1. On Monday, June 13, 2016, the City Council is scheduled to hold a public hearing to consider the Planning Commission recommendation, and any public comments, and vote on the petition. In anticipation of the City Council following the recommendation of the Planning Commission, the following report has been prepared with the subject site being zoned (RB) Multiple Family Residential, subject to the offered condition.

Should City Council deny ZP #605 this application cannot be considered and recommended for approval. The applicant should then be offered the opportunity to withdraw the application. Barring that action, the site plan would then have to be denied as the proposed use would not be permitted by zoning.

Two family residential, senior apartments and elderly housing, and congregate housing and dependent housing facilities uses are permitted uses by right within the (RB) Multiple Family Residential zoning district. Site plan review and approval under Section 27.02(A) of the Zoning Ordinance is required for this proposed use. Section 27.06(A) of the Zoning Ordinance states that: "The following criteria shall be used as a basis upon which site plans will be reviewed and approved:"

BASIS FOR ACTION

1. Adequacy of Information

The site plan shall include all required information in sufficiently complete and understandable form to provide an accurate description of the proposed uses and structures.

Staff believes the proposed site plan is deficient in the following areas for site plan approval:

- The side to side villa spacing must be no less than 20 feet.
- Minor modifications to the proposed sidewalk system and the driveway lengths to the villas are necessary.
- No Parking signs must be added to the proposed emergency vehicle turnaround.
- A photometric plan demonstrating compliance with City external-illumination standards must be submitted.
- A detail of the dumpster enclosure is needed to demonstrate compliance with the City waste and refuse collection screening requirements.
- Minor modifications to the sanitary sewer system to satisfy the City Wastewater Department are needed.
- Additional preliminary calculations for stormwater management to satisfy the City Engineering Department are necessary.
- Confirmation of approval from the County Drain Commissioner for the proposed discharge of the stormwater off site is required.
- Approval of the proposed driveway location by the City's traffic consultant has not yet been secured.

2. Site Design Characteristics

All elements of the site design shall be harmoniously and efficiently organized in relation to topography, the size and type of parcel, the character of adjoining property, and the type and size of buildings. The site shall be developed so as not to impede the normal and

orderly development or improvement of surrounding property for uses permitted by this Ordinance.

The proposed site plan locates the catered living, dining facility, and memory care portions of the development within the center of the site. Surrounding this facility is fourteen (14) two-unit villas for independent living and a clubhouse. The site is proposed to be served by a single driveway off Waldo Avenue with the internal driveway travelling through the site to a turnaround at the end, sized to accommodate emergency vehicles. Landscaping is proposed along the street frontage, within the parking areas, and generally throughout the rest of the site. The stormwater pond is located at the rear of the site, taking advantage of the existing drainage course.

Due to the nature of the use, connection to adjacent properties is not proposed. Road connections and the impact of those connections is discussed further under Section 8: Ingress and Egress, below.

3. **Appearance**

Landscaping, earth berms, fencing, signs, walls and other similar site features shall be designed and located on the site so that the proposed development is aesthetically pleasing and harmonious with nearby existing or future developments.

The appearance of the proposal is generally seen as appropriate. This is the first development proposed in this area of Waldo Avenue. Lands south are planned for Medium Density Residential use, while lands north and east are planned for Low density Residential use. The proposed use has been designed in such a manner that it should be able to blend aesthetically into this anticipated mix of land uses.

Questions remain regarding the proposed driveway location, which will be discussed in further detail later in this report.

4. **Compliance with District Regulations**

The site plan shall comply with the district requirements for height of building, lot size, lot coverage, density, and all other requirements set forth in the Schedule of Regulations (Article 26.00) unless otherwise provided in this Ordinance.

The only outstanding dimensional issue is that the side to side spacing of the villas must be no less than twenty (20) feet. The project meets all other setback, lot area, height and other dimensional requirements for the proposed uses in the (RB) Multiple Family Residential zoning district. An adjustment to the villa layout is required to meet this standard, but it would appear that sufficient area remains available on site to make this adjustment.

5. **Preservation and Visibility of Natural Features**

Natural features shall be preserved as much as possible, by minimizing tree and soil removal alteration to the natural drainage course and the amount of cutting, filling, and grading.

The proposal is utilizing the natural drainage course of the site and minimizes the amount of cutting and filling required. While the site is largely void of mature trees, the proposal does retain some existing trees along the southern property line.

6. **Privacy**

The site design shall provide reasonable visual and sound privacy. Fences, walls, barriers, and landscaping shall be used, as appropriate if permitted, for the protection and enhancement of property and the safety and privacy of occupants and uses.

The side of the westernmost villa on the south side is screened from Waldo Avenue by a row of white spruce. The other provisions for privacy appear adequate for this type of development within this location of the city.

7. **Emergency Vehicle Access**

All buildings or groups of buildings shall be so arranged as to permit convenient and direct emergency vehicle access.

The Fire Department has reviewed the proposed site plan for adequate emergency vehicle access and is satisfied with the plan as proposed. Adequate access will exist on all sides of the proposed buildings. The Fire Department did note that the turnaround should be marked with 'No Parking' signs.

8. **Ingress and Egress**

Every structure or dwelling unit shall be provided with adequate means of ingress and egress via public or private streets and pedestrian walkways.

The proposal contains a single driveway access to Waldo Avenue along the southern portion of the frontage. This single access driveway serves only the subject parcel and does not propose shared access with any of the abutting property. The applicant has indicated that they prefer their own single access. Given the nature of the use, this is an understandable objective on the part of the applicant. It is, however, of concern to city staff.

Staff is concerned that the proposed access design and location could create precedent along this corridor whereby multiple properties design with their own direct access to Waldo Avenue and do not establish shared or coordinated access with the neighboring property. This approach, if it were to occur, could result in an abundance of access points along the corridor, contributing to traffic conflict and possibly even unwarranted congestion.

Staff has brought the proposed driveway location to the attention of the City's traffic consultant for his determination on whether it is the optimal location for a driveway along this relatively undeveloped corridor. The traffic consultant's initial response has indicated that the optimal location for the driveway is direct alignment with Diamond Drive while also including the provision that the driveway be shared with the property to the north. It is likely that at some point in the future, as development occurs, a traffic signal may become warranted at Diamond and Waldo. A shared access driveway that serves this development and any future development of the balance of the property to the north and east would benefit from such a signal.

The applicant has indicated that a directly aligned driveway with Diamond Drive is suitable for their needs. However, both the applicant and the property owner to the north have indicated to staff their disapproval of a shared access driveway, and have refused to agree to this access design. Although asked directly by staff, the applicant has not articulated their specific objections beyond saying that Primrose will not agree to such a design. The

neighboring property owner argues that they will not utilize an access at this location but instead will be proposing a consolidated access point further to the north, perhaps through a boulevard access for a future residential project.

Resolution of this matter is still outstanding. Staff have relayed the concerns and objections of the applicant and the neighboring property owner to the consulting traffic engineer. A response is anticipated in advance of the public hearing but was not available at the time this report was completed. Therefore, this matter will require further discussion during the meeting of the Planning Commission. If a response is received from the consultant early enough for staff to prepare an addendum report, such will be completed and forwarded to the Planning Commission as soon as it can be made available.

9. **Pedestrian Circulation**

Each site plan shall provide a pedestrian circulation system, which is insulated as completely as is reasonably possible from the vehicular circulation system.

Pedestrian circulation is provided through interior sidewalks that travel through the site and connect to the public sidewalk on Waldo Avenue. While the path of the sidewalks appear appropriate, the exact placement of the sidewalks relative to the interior driveways and parking causes some concern. The following changes should be made to improve the safety of the pedestrian system:

1. The internal sidewalk along the driveway should be separated from the edge of the driveway by a strip of grass. With the sidewalk adjacent to the curb, issues arise such as mailbox placement or irregular profiles caused by driveway curb cuts to the villas. Resident safety is also compromised when no separation exists between the pedestrian and travelling vehicles. Given the nature of residents that will utilize this sidewalk system, the current configuration is therefore considered unsafe.
2. The internal sidewalk connection to be connected to the public sidewalk along Waldo Avenue along the proposed driveway.
3. Where parking is perpendicular to the sidewalk, the width should be increased from 5' to 7' so that if a vehicle overhangs the sidewalk there is still 5' of walk available.
4. Where there are sidewalk connections proposed across the internal driveway, the design should account for a clean connection on both sides. In two locations, the sidewalks dead end at the driveway and direction across for the end is a villa driveway. These connections should be corrected and designed with barrier-free standard compliance.

10. **Vehicular and Pedestrian Circulation Layout**

The layout of vehicular and pedestrian circulation systems shall respect the pattern of existing or planned streets or pedestrian or bicycle pathways in the vicinity of the site. The width of streets and drives shall be appropriate for the volume of traffic they will carry in accordance with subsection 3.10. In order to insure public safety and promote efficient traffic flow and turning movements, the applicant may be required to limit street access points or construct a secondary access road.

As discussed previously, there are some remaining questions regarding the best driveway access arrangement. Additionally, the changes needed to the sidewalk system location must also be resolved. The driveway lengths to the villas appear relatively short. There should be sufficient length to park a car in the driveway without it hanging over into the internal driveway. Once these items are resolved, this standard will be satisfied.

11. **Parking.**

The proposed development shall provide adequate off-street parking in accordance with the requirements in Article 5.00 of this ordinance.

The parking proposed for the new development is compliant with Article 5.00 of the Zoning Ordinance.

12. **Drainage**

The project must comply with the City's Stormwater Ordinance.

The City Engineering Department has reviewed the proposal and indicated that further calculations must be presented to determine whether the proposal will meet the City's stormwater management ordinance.

Additionally, some concerns exist regarding the proposed discharge of the stormwater off of the site and onto private property. The plan proposes discharge of the site stormwater from the site to the northeast via a private, underground stormwater drain. The plan indicates this drain discharges into Branch #1 of the Waldo Drain. While this drain appears to be protected by a drain easement, the applicant has not submitted documentation supporting approval by the County Drain Commissioner. Documentation supporting this approval is required to confirm that this design proposal is satisfactory to the appropriate drain jurisdiction.

In addition to the County Drain Commissioner approval, a final stormwater permit must still be signed off by the City Engineering Department. Following construction, a private stormwater drainage easement must also be executed and recorded at the Midland County Register of Deeds to ensure that the drain is protected in perpetuity. These required easements can be addressed as contingencies to approval, but specific written agreement from the impacted property owner acknowledging their agreement to this drainage plan should be submitted in advance of site plan approval.

13. **Soil Erosion and Sedimentation**

The proposed development shall include measures to prevent soil erosion and sedimentation during and upon completion of construction, in accordance with current State, County, and City standards.

A soil erosion and sedimentation control permit has been submitted for review and approval. The City Building Department will give final approval on this permit, which is typically addressed at the final permitting stage.

14. **Exterior Lighting**

Exterior lighting shall be designed so that it is deflected away from adjoining properties and so that it does not impede vision of drivers along adjacent streets and comply with the provisions in Section 3.12.

The applicant has not submitted a photometric plan as of the date of this report. It is anticipated that the applicant will submit such a plan that demonstrates compliance with City standards for illumination ahead of Tuesday's meeting. Review and comment will be provided as soon as that plan has been reviewed by the City Building and Planning Departments.

15. **Public Services**

Adequate services and utilities, including water, sewage disposal, sanitary sewer, and storm water control services, shall be available or provided, and shall be designed with sufficient capacity and durability to properly serve the development. All streets and roads, water, sewer, and drainage systems, and similar facilities shall conform to the design and construction standards of the City.

As previously discussed, approval from the County Drain Commissioner and further preliminary stormwater calculations are needed. Eventually a final stormwater management permit must also be approved by the City Engineering Department.

The City Fire and Utility Departments are satisfied with the water main extension proposed within the site plan. A 20' public utility easement shall be given to the City to protect the water main and the service it provides to the fire hydrants within the development. Drafting and execution of this type of easement is typically handled following construction of the water line.

The City Wastewater Department has indicated a grease trap location must be noted, a bar screen or equivalent must be installed at a single point on the site before discharge into the public sanitary sewer system, and the proposed stubs at the southern extend of the sanitary sewer extension (point of beginning) shall be sized at 10" rather than 8" to better accommodate future development. These three items should be addressed on updated plans submitted to address other outstanding concerns, but otherwise do not need to hold up site plan approval as they can be addressed during final construction permit issuance.

16. **Screening**

Off-street parking, loading and unloading areas, outside refuse storage areas, and other storage areas shall be screened by walls or landscaping of adequate height and shall comply with Articles 6.00 and 7.00 of this Ordinance. All roof-top mechanical equipment shall be screened from view from all residential districts and public roadways.

A detail of the proposed dumpster screening is needed to demonstrate compliance with Article 3.15 of the Zoning Ordinance.

17. **Health and Safety Concerns**

Any use in any zoning district shall comply with all applicable public health, pollution, and safety laws and regulations.

No health and safety concerns have been identified.

18. **Sequence of Development**

All development phases shall be designed in logical sequence to insure that each phase will independently function in a safe, convenient and efficient manner without being dependent upon subsequent improvements in a later phase or on other sites.

The applicant has indicated that this will be built in one phase.

19. **Coordination with Adjacent Sites**

All site features; including circulation, parking, building orientation, landscaping, lighting, utilities, common facilities, and open space shall be coordinated with adjacent properties.

The proposal is proposed to be contained on the site. While the current proposal does include a future water connection to the property to the east, the applicant has indicated that they intend for this connection to be removed. The Utility Department has no concerns with the removal of this future connection, but notes that the remaining properties will then be responsible for water main construction when development is proposed.

The plan does not contain any coordination with properties to the north, south and east regarding shared vehicle access, relying on any future development to provide its own access via additional driveway accesses to Waldo Avenue. This design feature could contribute to an increase in the number of driveway connections onto the Waldo Avenue corridor. Appropriate design considerations on the undeveloped properties north and south can, however, minimize the number of road access points and alleviate traffic concerns that multiple road and driveway accesses could otherwise create.

20. **Signs.**

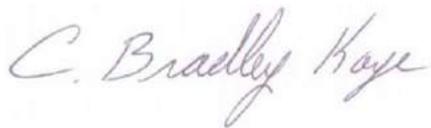
All proposed signs shall be in compliance with the regulations in Article 8.00 of this Ordinance

No signage is proposed at this time with this project. Any future signage will need to meet the requirements of Article 8 and be approved by the City Building Department before installation.

PLANNING COMMISSION ACTION

The Planning Commission will hold a public hearing on this request during its regular meeting on June 14, 2016 and will formulate a recommendation to City Council thereafter. Based on consideration of the site plan thus far, staff is of the opinion that there are sufficient outstanding items that warrant resolution before an action by the Planning Commission is appropriate. These City requirements should be met in full in order for the site plan criteria to be considered complete. That said, staff is recommending that the outstanding items, as explained above, be discussed during the Planning Commission meeting to determine clarity on how to best move forward to resolution, especially as it relates to the question of driveway access. Staff will then work with the applicant to resolve the items ahead of the next meeting on June 28, 2016.

Respectfully Submitted,

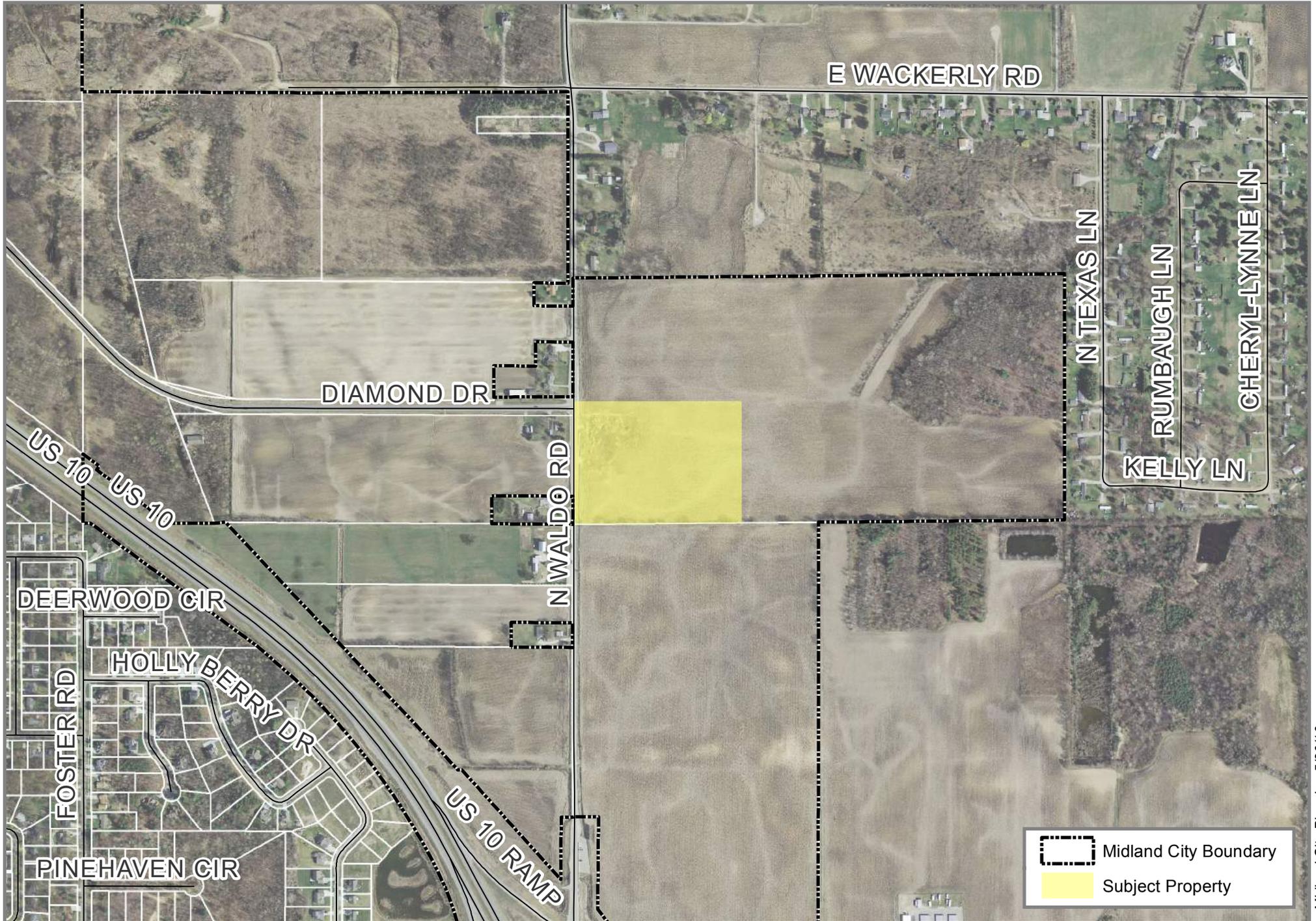


C. Bradley Kaye, AICP, CFM
Assistant City Manager for Development Services

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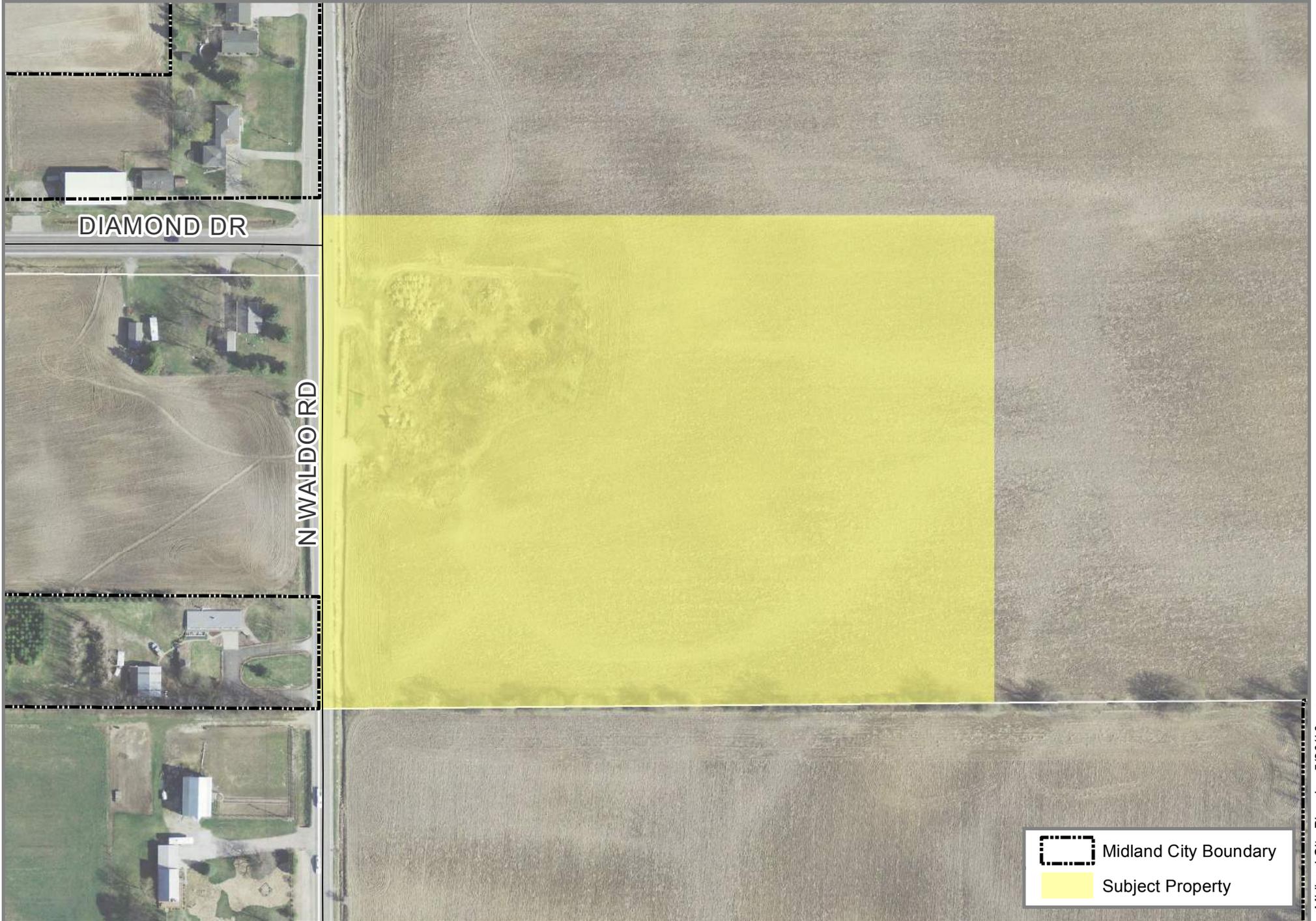
SP #350 | Primrose Retirement Community

> 5900 Waldo Avenue - Primrose Retirement Communities, LLC



SP #350 | Primrose Retirement Community

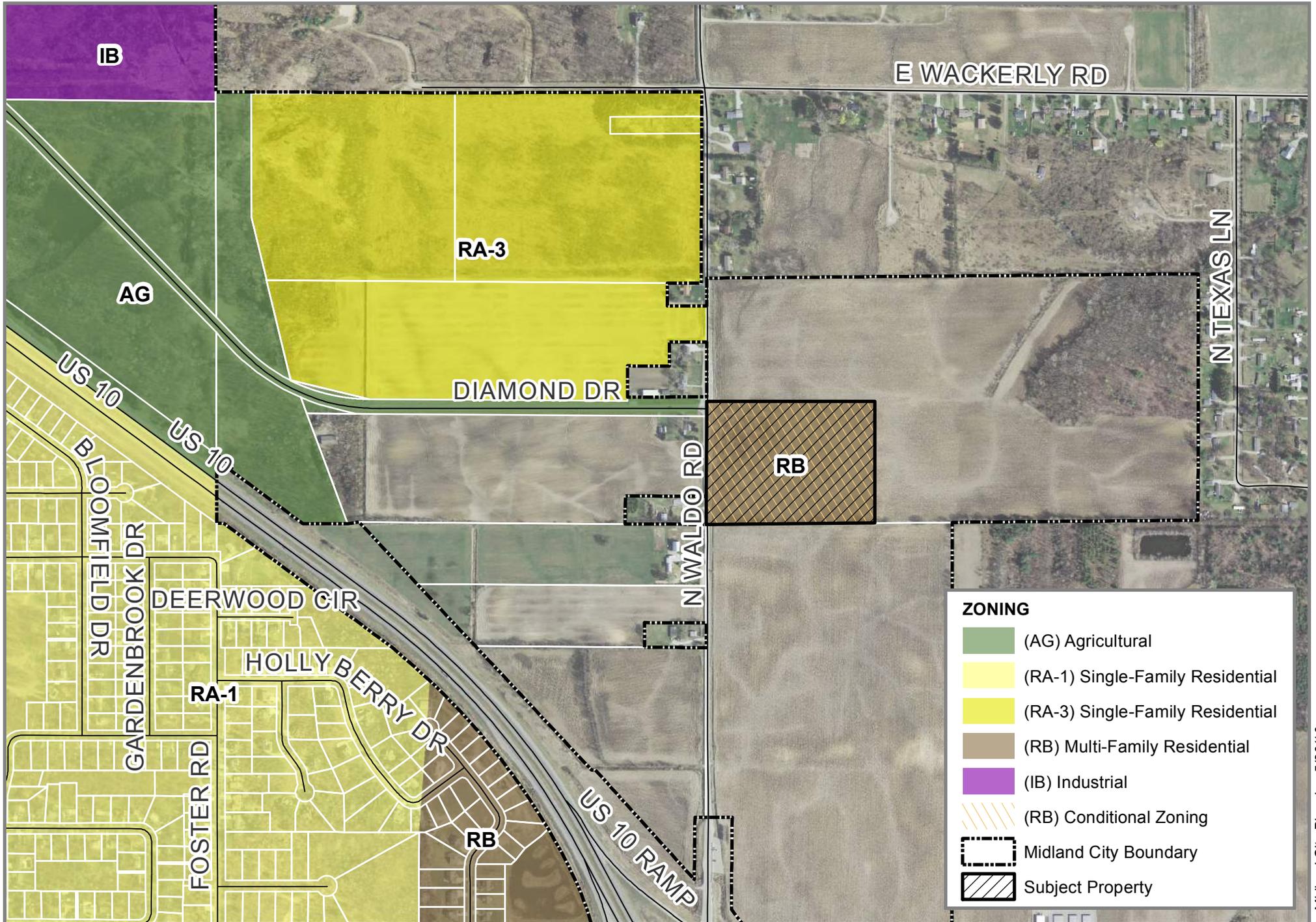
> 5900 Waldo Avenue - Primrose Retirement Communities, LLC



 Midland City Boundary
 Subject Property

SP #350 | Primrose Retirement Community

> 5900 Waldo Avenue - Primrose Retirement Communities, LLC



ZONING

- (AG) Agricultural
- (RA-1) Single-Family Residential
- (RA-3) Single-Family Residential
- (RB) Multi-Family Residential
- (IB) Industrial
- (RB) Conditional Zoning
- Midland City Boundary
- Subject Property

PRIMROSE RETIREMENT COMMUNITIES

N. WALDO ROAD
SECTION 1, TOWN 14 NORTH, RANGE 2 EAST
CITY OF MIDLAND, MIDLAND COUNTY, MICHIGAN

OWNER

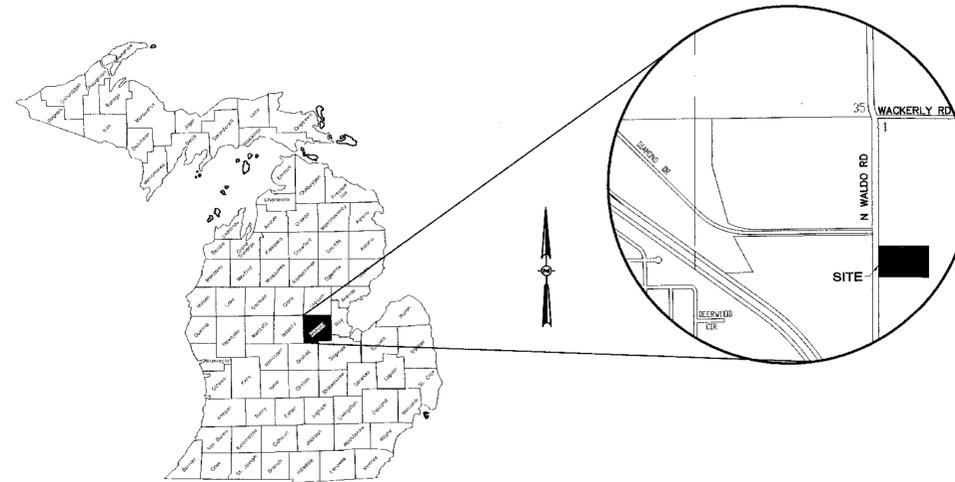
PRIMROSE RETIREMENT COMMUNITIES
815 NORTH 2nd ST.
ABERDEEN, S. DAKOTA 57401

CONTACT: BRAD ANDERA
PHONE: (605) 226-3300
EMAIL: bandera@primrosereirement.com

CIVIL ENGINEER

D&M SITE, INC
401 BALSAM STREET
P.O. BOX 159
CARROLLTON, MI 48724

JOHN D MOREY
PHONE: (989) 752-6500
EMAIL: jmorey@dandmsite.com



LOCATION MAP
NOT TO SCALE

DRAWING INDEX

- C1.0 COVER SHEET
- C2.0 TOPOGRAPHIC SURVEY
- C2.1 DEMOLITION PLAN
- C3.0 SITE PLAN
- C3.1 GRADING
- C3.2 UTILITY PLAN
- C3.3 GRADING / UTILITY PLAN
- C3.4 PROPOSED DRAINAGE TABLES
- C3.5 SOIL EROSION SEDIMENTATION CONTROL PLAN
- C3.6 VILA UTILITY PLAN
- C4.0 DETAIL SHEET
- C4.1 DETAIL SHEET
- C4.2 DETAIL SHEET
- L1.0 LANDSCAPING PLAN
- L1.1 LANDSCAPING PLAN

LEGEND	
	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
	SET PROPERTY IRON
	EXISTING CATCHBASIN
	PROPOSED CATCHBASIN
	EXISTING MANHOLE/CATCHBASIN
	PROPOSED MANHOLE/CATCHBASIN
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING HYDRANT
	PROPOSED HYDRANT
	EXISTING HYDRANT
	PROPOSED VALVE
	EXISTING VALVE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	EXISTING WATERMAIN
	PROPOSED STORM SEWER
	EXISTING LIGHT POLES
	PROPOSED LIGHT POLES
	PROPOSED ASPHALT
	PROPOSED CONCRETE
	EXISTING CONCRETE SURFACE
	EXISTING BIT SURFACE
	EXISTING FENCE LINE
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND GAS LINE
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND CABLE T.V. LINE
	OVERHEAD ELECTRICAL WIRES
	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
	EXISTING SIGN
	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER
	PROPOSED FLOW ARROW
	PROPOSED CONTOURS
	PROPOSED MODIFIED CURB AND GUTTER
	PROPOSED TOP OF CURB ELEVATION
	PROPOSED FINISH SURFACE ELEVATION
	PROPOSED TOP OF WALK ELEVATION

BENCHMARKS	
B.M. #1 - 2-HEADED NAIL IN EAST FACE OF POWER POLE AT SOUTHWEST QUADRANT OF DIAMOND DR. AND WALDO ROAD. (CITY BENCHMARK # 2934)	CITY OF MIDLAND ELEV. 670.11
B.M. #2 - RR SPIKE IN EAST FACE OF POWER POLE ON EAST SIDE OF WALDO ROAD.	CITY OF MIDLAND ELEV. 669.58

FLOODPLAIN INFORMATION	
CITY OF MIDLAND MIDLAND COUNTY STATE MAP NUMBER: 26111C0200E PANEL NOT PRINTED	



UTILITY NOTE

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OF COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIG (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

ZONING INFORMATION	
ZONED- RB (RESIDENTIAL B)	
REQUIRED:	PROVIDED:
LOT MINIMUM- AREA: - 10,000 SFT.	AREA: - 585,000 SFT
WIDTH: - 70'	WIDTH: - 850.00'
MAX HEIGHT- FEET: - 28'	MAX HEIGHT- FEET: 21'
SETBACKS- FRONT: - 25'	SETBACKS- FRONT: - 25'
REAR: - 25'	REAR: - 25'
SIDE: - 25' MIN TOTAL OF 50'	SIDE: - 25'

UTILITY CONTACTS	
TELEPHONE AT & T c/o ENGINEERING DEPARTMENT ROOM 525A 508 S. WASHINGTON AVE. SAGINAW, MICHIGAN 48607 ROB AUGUSTINE (989) 771-5404	GAS AND ELECTRIC CONSUMERS ENERGY 2400 WEISS STREET SAGINAW, MICHIGAN 48602 KEVIN COUTURIER - GAS DIV. (989) 791-5885 GREG SQUANDA ELEC. DIV. (989) 791-5353
ZONING CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 (989) 837-3300	WATER DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 ANDY PARROT (989) 837-3348
WASTE WTR. DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 STEVE SMITH (989) 837-3504	ENGINEERING DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 JOSH FEDRICKSON (989) 837-3352
SIGNS AND SIGNALS CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 JEFF MURPHY (989) 837-3354	CABLE TELEVISION CHARTER COMMUNICATIONS MARK KELLY (989) 233-9404
STORM SEWER MIDLAND COUNTY ROAD COMM. ENGINEERING DEPT. 2334 NORTH MERIDIAN RD. MIDLAND, MICHIGAN 48657 (989) 687-9060	DRAIN MIDLAND COUNTY DRAIN COMM. ENGINEERING DEPT. 220 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 (989) 832-6770

FILE	PROJECT MOR	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	SHEET
2016-106	JDM	SAL	M.M.D.			1 OF 15

PRIMROSE RETIREMENT COMMUNITIES
MR. BRAD ANDERA
815 NORTH 2nd ST.
ABERDEEN, S. DAKOTA 57401
605-226-3300

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T44N-R2E
MIDLAND COUNTY, MICHIGAN

COVER SHEET

D&M SITE, INC.
Surveying • Inspection • Testing • Engineering
401 BALSAM STREET P.O. BOX 159, CARROLLTON, MICHIGAN 48724
PHONE (989) 752-6500 • FAX (989) 752-6600

C1.0

2016.106

120-002-100-170-00
SECTION 1
T14N-R2E
8917 WALDO RD.
HLAYACKER, DALE J ET UX
MIDLAND, MI 48842

120-002-100-175-00
5811 WALDO RD.
KAMINSKI, TIMOTHY C
5811 WALDO RD
MIDLAND, MI 48842

120-002-100-281-00
CHRISTIAN CUL SWAMP CENTER
8300 SWENDE AVE
MIDLAND, MI 48840
ZONED RA-1

120-002-100-300-00
BLIEBENER, ROLAND C
5505 WALDO RD.
MIDLAND, MI 48842

14-02-30-100
BIG TIMBER LLC
5401 WALDO AVE
MIDLAND, MI 48842



Know what's below.
Call before you dig.

N. WALDO ROAD

33' R/W

10' UTIL. ESMT.

W LINE OF SECTION 1

12" WTR

FLOODPLAIN INFORMATION
CITY OF MIDLAND
MIDLAND COUNTY, STATE
MAP NUMBER: 261100200E
PANEL NOT PRINTED

UTILITY NOTE
THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OF COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIGG (1-800-452-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

ZONING INFORMATION
ZONED- RB (RESIDENTIAL B)
SETBACKS:
FRONT: - 25'
REAR: - 25'
SIDE: - 25' MIN TOTAL OF 50'

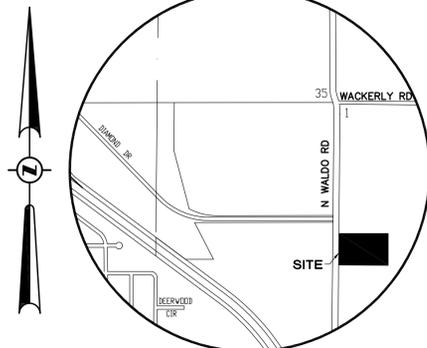
BENCHMARKS
B.M. #1 - 2-HEADED NAIL IN EAST FACE OF POWER POLE AT SOUTHWEST QUADRANT OF DIAMOND DR. AND WALDO ROAD. (CITY BENCHMARK # 2934)
CITY OF MIDLAND ELEV. 670.11
B.M. #2 - RR SPIKE IN EAST FACE OF POWER POLE ON EAST SIDE OF WALDO ROAD.
CITY OF MIDLAND ELEV. 669.58

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD
AREA 13.43 ACRES
PROPOSED ZONE RB

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

NO. 14-01-50-500
3401 E. WHEELER RD
RAPANOS, J A FAMILY TRUST #1
ZONED RA-1



LOCATION MAP

NOT TO SCALE
GRAPHIC SCALE
0 25 50 100
(IN FEET)
1 inch = 50 ft.

LEGEND

Table with 2 columns: Symbol and Description. Includes Monument / Section Corner, Found Property Iron, Set Property Iron, Existing Catchbasin, Existing Manhole/Catchbasin, Existing Manhole, Existing Hydrant, Existing Valve, Existing Sanitary Sewer, Existing Storm Sewer, Existing Watermain, Existing Fence Line, Existing Underground Electric Line, Existing Underground Gas Line, Existing Underground Telephone Line, Existing Centerline, Existing Overhead Electrical Wires, Existing Mailbox / Newspaper Box, Existing Sign, Existing Deciduous Trees, Existing Coniferous Trees, Existing Utility Power Pole, Existing Telephone Riser.

LEGAL DESCRIPTION

PARCEL A (PART OF PARCEL NO. 14-01-70-400) PART OF THE SOUTH 1/2 OF THE NORTHWEST FRACTIONAL 1/4 OF SECTION 1, T14N-R2E, CITY OF MIDLAND, MIDLAND COUNTY, MICHIGAN BEING FURTHER DESCRIBED AS BEGINNING AT THE WEST 1/4 CORNER OF SAID SECTION 1; THENCE N00°00'46"W 650.00 FEET ALONG THE WEST LINE OF SAID SECTION; THENCE S89°59'33"E 900.00 FEET PARALLEL WITH THE EAST-WEST 1/4 LINE OF SAID SECTION 1; THENCE S00°00'46"E 650.00 FEET TO SAID EAST-WEST 1/4 LINE; THENCE N89°59'33"W 900.00 FEET ALONG SAID 1/4 LINE TO THE POINT OF BEGINNING, CONTAINING 13.43 ACRES, MORE OR LESS, AND SUBJECT TO ANY AND ALL EASEMENTS AND OR RIGHTS-OF-WAY WHETHER USED, IMPLIED OR OF RECORD.

UTILITY CONTACTS

Table with 2 columns: Utility Type and Contact Information. Includes Telephone, Gas and Electric, Zoning, Waste Wtr. Dept., Signs and Signals, Storm Sewer, Water Dept., Engineering Dept., Cable Television, Drain.

CERTIFICATION

I, BRIAN D FERGUSON A PROFESSIONAL SURVEYOR, BEING DULY LICENSED BY THE STATE OF MICHIGAN, DO HEREBY CERTIFY THAT I HAVE CAUSED THE PROPERTY HEREON SHOWN, TO BE SURVEYED AND MAPPED IN ACCORDANCE WITH ALL LOCAL AND STATE ACCEPTED PRACTICES FOR THE ACCURACY OF A SURVEY OF THIS TYPE. I ALSO CERTIFY THAT THE EXISTING CONDITIONS OF THE PROPERTY ARE AS SHOWN HEREON.
BRIAN D FERGUSON, PS #26454 DATE

PROJECT LOG table with columns: FILE, PROJECT MGR, DESIGNED BY, DRAWN BY, CHECKED BY, SCALE, SHEET.

PRIMROSE RETIREMENT COMMUNITIES
815 NORTH 2nd
ABERDEEN, S. DAKOTA 57401
MR. BRAD ANDERA

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

TOPOGRAPHIC SURVEY

D&M SITE INC.
Surveying, Inspection, Testing, Engineering
401 BALSAM STREET PO BOX 159, CARROLLTON, MICHIGAN 48724
PHONE (989) 752-6888 FAX (989) 752-8660

C2.0
2016.106

120-002-100-170-00
5917 WALDO RD.
HLAVACEK, DALE J ET UX
MIDLAND, MI 48842

120-002-100-175-00
5911 WALDO RD.
KAMINSKI, TIMOTHY C
5911 WALDO RD
MIDLAND, MI 48842

120-002-100-251-00
1317 N. WALDO RD.
CHRISTIAN CELEBRATION CENTER
6100 SWEDDED AVE.
MIDLAND, MI 48840
ZONED RA-1

120-002-100-300-00
BLESENER, ROLAND C
5805 WALDO RD.
MIDLAND, MI 48842

14-02-30-100
BIG TIMBER LLC
5401 WALDO AVE
MIDLAND, MI 48842



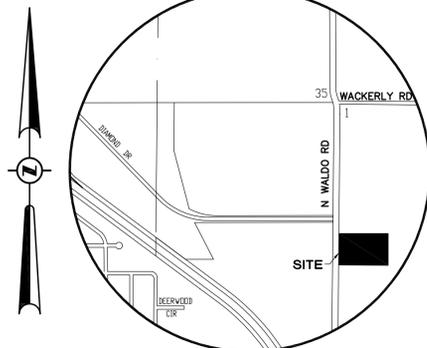
Know what's below.
Call before you dig.

FLOODPLAIN INFORMATION
CITY OF MIDLAND
MIDLAND COUNTY, STATE
MAP NUMBER: 261110200E
PANEL NOT PRINTED

UTILITY NOTE
THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OF COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIGG (1-800-452-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

ZONING INFORMATION
ZONED- RB (RESIDENTIAL B)
SETBACKS:
FRONT: - 25'
REAR: - 25'
SIDE: - 25' MIN TOTAL OF 50'

BENCHMARKS
B.M. #1 - 2-HEADED NAIL IN EAST FACE OF POWER POLE AT SOUTHWEST QUADRANT OF DIAMOND DR. AND WALDO ROAD. (CITY BENCHMARK # 2934)
CITY OF MIDLAND ELEV. 670.11
B.M. #2 - RR SPIKE IN EAST FACE OF POWER POLE ON EAST SIDE OF WALDO ROAD.
CITY OF MIDLAND ELEV. 669.58



LOCATION MAP
NOT TO SCALE
GRAPHIC SCALE
0 25 50 100
(IN FEET)
1 inch = 50 ft.

LEGEND

	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
	SET PROPERTY IRON
	EXISTING CATCHBASIN
	EXISTING MANHOLE/CATCHBASIN
	EXISTING MANHOLE
	EXISTING HYDRANT
	EXISTING VALVE
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATERMAIN
	EXISTING FENCE LINE
	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING UNDERGROUND GAS LINE
	EXISTING UNDERGROUND TELEPHONE LINE
	EXISTING CENTERLINE
	EXISTING OVERHEAD ELECTRICAL WIRES
	EXISTING MAILBOX / NEWSPAPER BOX
	EXISTING SIGN
	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER

LEGAL DESCRIPTION
PARCEL A (PART OF PARCEL NO. 14-01-70-400)
PART OF THE SOUTH 1/2 OF THE NORTHWEST FRACTIONAL 1/4 OF SECTION 1, T14N-R2E, CITY OF MIDLAND, MIDLAND COUNTY, MICHIGAN BEING FURTHER DESCRIBED AS BEGINNING AT THE WEST 1/4 CORNER OF SAID SECTION 1; THENCE N00°00'46"W 650.00 FEET ALONG THE WEST LINE OF SAID SECTION; THENCE S89°59'33"E 900.00 FEET PARALLEL WITH THE EAST-WEST 1/4 LINE OF SAID SECTION 1; THENCE S00°00'46"E 650.00 FEET TO SAID EAST-WEST 1/4 LINE; THENCE N89°59'33"W 900.00 FEET ALONG SAID 1/4 LINE TO THE POINT OF BEGINNING, CONTAINING 13.43 ACRES, MORE OR LESS, AND SUBJECT TO ANY AND ALL EASEMENTS AND OR RIGHTS-OF-WAY WHETHER USED, IMPLIED OR OF RECORD.

UTILITY CONTACTS

TELEPHONE AT & T 2400 NEISS STREET ROOM 525A 309 S. WASHINGTON AVE. SAGINAW, MICHIGAN 48607 ROB AUGUSTINE (989) 771-5404	GAS AND ELECTRIC CONSUMERS ENERGY SAGINAW, MICHIGAN 48602 KEVIN COUTURIER - GAS DIV. (989) 791-5885 GREG SQUANDA ELEC. DIV. (989) 791-5353
ZONING CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 (989) 837-3300	WATER DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 ANDY PARROT (989) 837-3348
WASTE WTR. DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 STEVE SMITH (989) 837-3504	ENGINEERING DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 JOSH FEDRICKSON (989) 837-3352
SIGNS AND SIGNALS CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 JEFF MURPHY (989) 837-3354	CABLE TELEVISION CHARTER COMMUNICATIONS MARK KELLY (989) 233-9404
STORM SEWER MIDLAND COUNTY ROAD COMM. ENGINEERING DEPT. 2334 NORTH MERIDIAN RD. MIDLAND, MICHIGAN 48657 (989) 687-9060	DRAIN MIDLAND COUNTY DRAIN COMM. ENGINEERING DEPT. 220 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 (989) 832-6770

CERTIFICATION
I, BRIAN D FERGUSON A PROFESSIONAL SURVEYOR, BEING DULY LICENSED BY THE STATE OF MICHIGAN, DO HEREBY CERTIFY THAT I HAVE CAUSED THE PROPERTY HEREON SHOWN, TO BE SURVEYED AND MAPPED IN ACCORDANCE WITH ALL LOCAL AND STATE ACCEPTED PRACTICES FOR THE ACCURACY OF A SURVEY OF THIS TYPE. I ALSO CERTIFY THAT THE EXISTING CONDITIONS OF THE PROPERTY ARE AS SHOWN HEREON.
BRIAN D FERGUSON, PS #26454 DATE

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD
AREA 13.43 ACRES
PROPOSED ZONE RB

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

NO. 14-01-50-500
3401 E. WHEELER RD
RAPANOS, J A FAMILY TRUST #1
ZONED RA-1

PROJECT LOG

FILE: 2016-106-SHEETS	DATE: 12-16
PROJECT MGR: JDM	5/20/16
DESIGNED BY: SAL	
DRAWN BY: M.M.D.	
CHECKED BY:	
SCALE: 1"=50'	
SHEET: 3	OF 15

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN
815 NORTH 2nd
ABERDEEN, S. DAKOTA 57401
MR. BRAD ANDERA

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN
DEMOLITION PLAN

D&M SITE INC.
Surveying • Inspection • Testing • Engineering
401 BALSAM STREET, PO BOX 159, CARROLLTON, MICHIGAN 48724
PHONE: (989) 752-6868 • FAX: (989) 752-6860

C2.1
2016.106

120-002-100-170-00
5917 WALDO RD.
HLAVACEK, DALE J ET UX
MIDLAND, MI 48642

120-002-100-175-00
5911 WALDO RD.
KAMINSKI, TIMOTHY C
5911 WALDO RD
MIDLAND, MI 48642

120-002-100-281-00
1317 N. WALDO RD.
CHRISTIAN CELEBRATION CENTER
6000 SWEBERD AVE.
MIDLAND, MI 48640
ZONED RA-1

120-002-100-300-00
BLESENER, ROLAND C
6506 WALDO RD.
MIDLAND, MI 48642

14-02-30-100
BIG TIMBER LLC
6401 WALDO AVE
MIDLAND, MI 48642



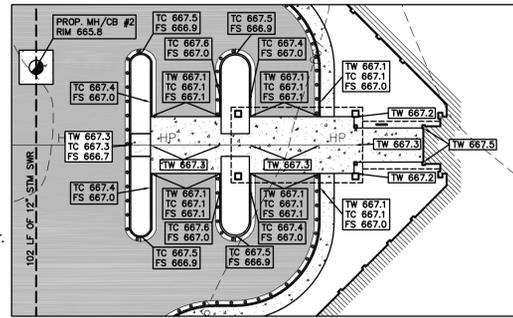
Know what's below.
Call before you dig.

N. WALDO ROAD

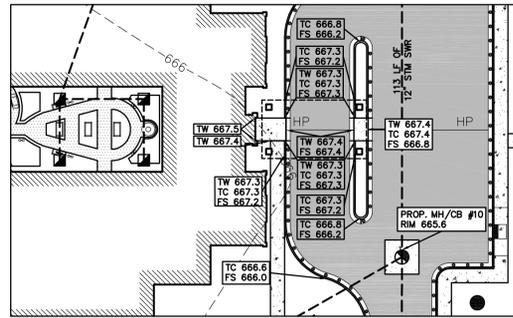
N. WALDO ROAD

NW COR SECTION 1 T14N-R2E

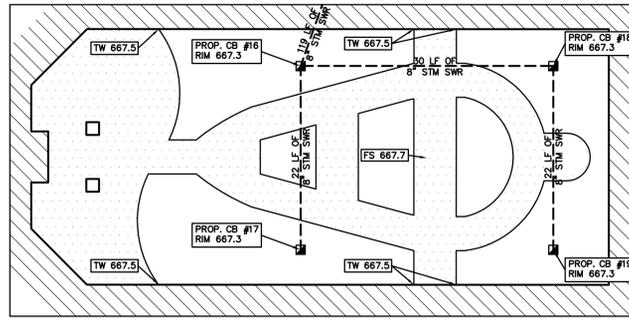
W 1/4 COR SECTION 1 T14N-R2E



WEST ENTRY GRADING DETAIL



EAST ENTRY GRADING DETAIL

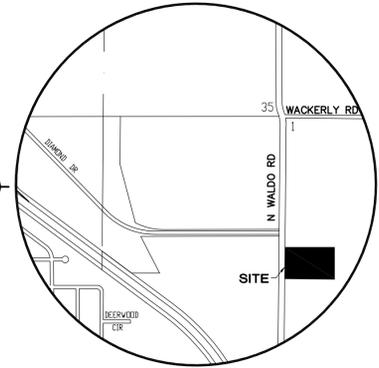


COURT YARD GRADING DETAIL

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD
AREA 13.43 ACRES
PROPOSED ZONE RB

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD



LOCATION MAP

NOT TO SCALE

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

LEGEND table with symbols and descriptions for various site features like monuments, catchbasins, manholes, etc.

UTILITY CONTACTS table listing telephone, gas and electric, water dept, waste wtr. dept, engineering dept, signs and signals, storm sewer, cable television, and drain contacts.

BENCHMARKS table listing B.M. #1 and B.M. #2 locations and elevations.

PREPARED UNDER THE SUPERVISION OF:

PROJECT LOG table with columns for FILE, PROJECT MGR, DESIGNED BY, DRAWN BY, CHECKED BY, SCALE, SHEET.

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

D&M SITE INC.
Surveying, Inspection, Testing, Engineering
401 BALSAM STREET PO BOX 159, CARROLLTON, MICHIGAN 48724
Phone: (989) 752-6868 FAX: (989) 752-6666

120-002-100-170-00
SECTION 1
T14N-R2E
HLAVACEK, DALE J ET UX
MIDLAND, MI 48642

120-002-100-175-00
5811 WALDO RD.
KAMINSKI, TIMOTHY C
5811 WALDO RD
MIDLAND, MI 48642

120-002-100-281-00
1817 N. WALDO RD.
CHRISTIAN CELEBRATION CENTER
6000 SWEEDEY AVE.
MIDLAND, MI 48640
ZONED RA-1

120-002-100-300-00
BLEESNER, ROLAND C
5505 WALDO RD
MIDLAND, MI 48642

14-02-30-100
BIG TIMBER LLC
6401 WALDO AVE
MIDLAND, MI 48642



Know what's below.
Call before you dig.

N. WALDO ROAD

N. WALDO ROAD

BORE AND JACK NOTE
THE WATERMAIN CASING SHALL CONSIST OF FURNISHING AND PLACING A 20" EPOXY COATED STEEL CASING PIPE WITH A MINIMUM WALL THICKNESS OF 1/4 (0.25) INCH 5' BEHIND THE CURB ON EACH SIDE OF THE ROADWAY. ALL JOINTS ON THE CASING PIPE SHALL BE WELDED. THE BORE PIT SHALL BE PROTECTED WITH STEEL SHIELD PILING TO MINIMIZE DAMAGES TO THE SURROUNDING AREAS. THE BORING SHALL BE COMPLETED IN ACCORDANCE WITH M.D.O.T. "PROVISIONS FOR BORE AND JACK CONSTRUCTION IN CONNECTION WITH PERMIT OPERATIONS". THE ANNUAL SPACE BETWEEN THE WATERMAIN PIPE AND CASING SHALL BE FILLED WITH PEA STONE. BOTH ENDS OF THE CASING SHALL BE BULKHEADED WITH 12" OF COMMERCIAL GRADE CONCRETE. THE WATERMAIN PIPE SHALL BE INSTALLED IN THE CENTER OF THE CASING PIPE WITH CASING SPACERS (WOOD SPACERS WILL NOT BE ALLOWED). THE METHOD OF PLACEMENT OF THE WATERMAIN WITHIN THE CASING PIPE SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

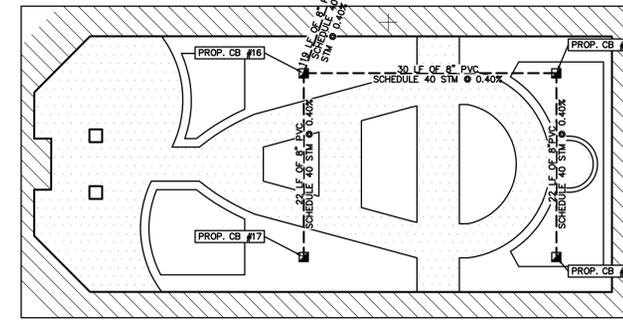
SANITARY SEWER NOTE
SANITARY SEWER PLAN AND PROFILES WILL BE PROVIDED AT THE APPROPRIATE TIME/BEFORE BUILDING PERMIT APPLICATION.

WATERMAIN NOTE
WATERMAIN PLAN AND PROFILES WILL BE PROVIDED AT THE APPROPRIATE TIME/BEFORE BUILDING PERMIT APPLICATION.

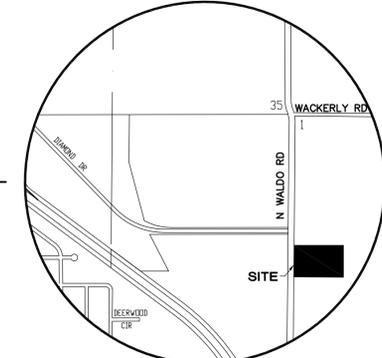
DETENTION CALCULATIONS
TOTAL SITE AREA: 563,549.96 SFT / 12.94 ACRES
TOTAL IMPERVIOUS AREA: 242,481.70 SFT / 5.57 ACRES
TOTAL PERVIOUS AREA: 321,068.26 SFT / 7.37 ACRES
NOTE: DETAILED STORM CALCULATIONS WILL BE PROVIDED AT THE APPROPRIATE TIME/BEFORE BUILDING PERMIT APPLICATION.

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD
AREA 13.43 ACRES
PROPOSED ZONE RB



COURT YARD DETAIL
SCALE: 1" = 10'



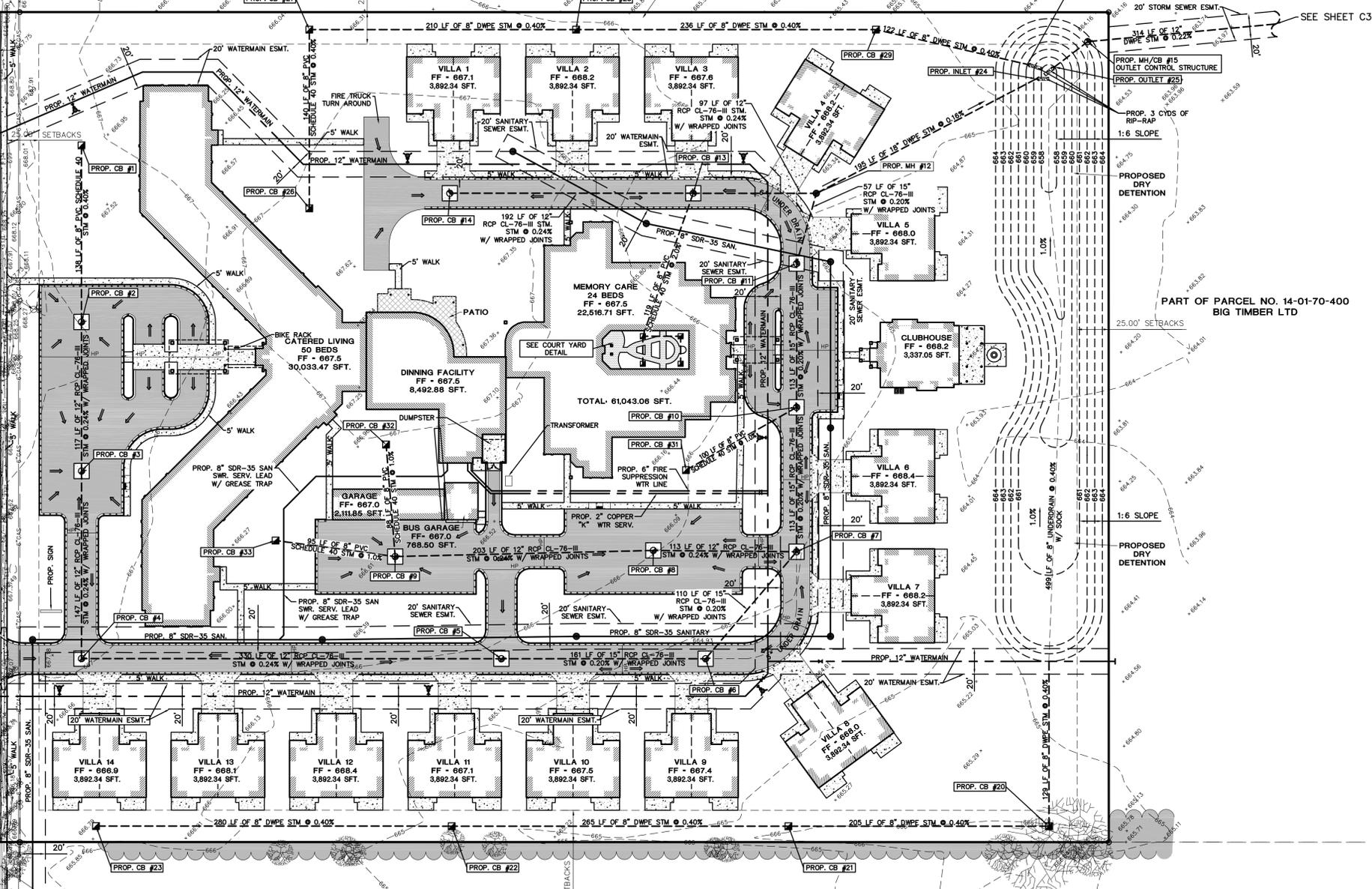
LOCATION MAP
NOT TO SCALE

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

CENTERLINE OF
DIAMOND DRIVE

PROP. BORE & JACK 52 LF OF
GRADE B WELDED STEEL PIPE
SLEEVE 20" I.D. W/ 1/4" MINIMUM
WALL THICKNESS.

PROP. BORE & JACK 52 LF OF
GRADE B WELDED STEEL PIPE
SLEEVE 20" I.D. W/ 1/4" MINIMUM
WALL THICKNESS.



LEGEND

[Symbol]	MONUMENT / SECTION CORNER
[Symbol]	FOUND PROPERTY IRON
[Symbol]	SET PROPERTY IRON
[Symbol]	EXISTING CATCHBASIN
[Symbol]	PROPOSED CATCHBASIN
[Symbol]	EXISTING MANHOLE/CATCHBASIN
[Symbol]	PROPOSED MANHOLE/CATCHBASIN
[Symbol]	EXISTING MANHOLE
[Symbol]	PROPOSED MANHOLE
[Symbol]	EXISTING HYDRANT
[Symbol]	PROPOSED VALVE
[Symbol]	EXISTING VALVE
[Symbol]	EXISTING SANITARY SEWER
[Symbol]	PROPOSED SANITARY SEWER
[Symbol]	EXISTING STORM SEWER
[Symbol]	PROPOSED WATERMAIN
[Symbol]	PROPOSED STORM SEWER
[Symbol]	EXISTING WATERMAIN
[Symbol]	EXISTING LIGHT POLES
[Symbol]	PROPOSED LIGHT POLES
[Symbol]	PROPOSED ASPHALT
[Symbol]	PROPOSED CONCRETE
[Symbol]	EXISTING CONCRETE SURFACE
[Symbol]	EXISTING BIT SURFACE
[Symbol]	EXISTING FENCE LINE
[Symbol]	UNDERGROUND ELECTRIC LINE
[Symbol]	UNDERGROUND GAS LINE
[Symbol]	UNDERGROUND TELEPHONE LINE
[Symbol]	UNDERGROUND CABLE T.V. LINE
[Symbol]	OVERHEAD ELECTRICAL WIRES
[Symbol]	EXISTING DECIDUOUS TREES
[Symbol]	EXISTING CONIFEROUS TREES
[Symbol]	EXISTING SIGN
[Symbol]	EXISTING UTILITY POWER POLE
[Symbol]	EXISTING TELEPHONE RISER
[Symbol]	PROPOSED FLOW ARROW
[Symbol]	PROPOSED CONTOURS
[Symbol]	PROPOSED MODIFIED CURB AND GUTTER
[Symbol]	TC 647.0
[Symbol]	FS 646.9
[Symbol]	TW 646.9

UTILITY CONTACTS

TELEPHONE AT & T C/O ENGINEERING DEPARTMENT ROOM 525A 308 S. WASHINGTON AVE. SAGINAW, MICHIGAN 48607 ROB AUGUSTINE (989) 771-5404	GAS AND ELECTRIC CONSUMERS ENERGY 2400 WEISS STREET SAGINAW, MICHIGAN 48602 KEVIN COUTURIER - GAS DIV. (989) 791-5885 GREG SQUANDA ELEC. DIV. (989) 791-5353	ZONING CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 (989) 837-3300	WATER DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 ANDY PARROT (989) 837-3348
WASTE WTR. DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 STEVE SMITH (989) 837-3504	ENGINEERING DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 JOSH FEDRICKSON (989) 837-3352	SIGNS AND SIGNALS CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 JEFF MURPHY (989) 837-3354	CABLE TELEVISION CHARTER COMMUNICATIONS MARK KELLY (989) 233-9404
STORM SEWER MIDLAND COUNTY ROAD COMM. ENGINEERING DEPT. 2334 NORTH MERIDIAN RD. MIDLAND, MICHIGAN 48657 (989) 687-9060	DRAIN MIDLAND COUNTY DRAIN COMM. ENGINEERING DEPT. 220 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 (989) 832-6770		

BENCHMARKS
B.M. #1 - 2-HEADED NAIL IN EAST FACE OF POWER POLE AT SOUTHWEST QUADRANT OF DIAMOND DR. AND WALDO ROAD. (CITY BENCHMARK # 2934)
CITY OF MIDLAND ELEV. 670.11
B.M. #2 - RR SPIKE IN EAST FACE OF POWER POLE ON EAST SIDE OF WALDO ROAD.
CITY OF MIDLAND ELEV. 669.58

RD. 14-01-50-500
8401 E. WHEELER RD
RAPANOS, J A FAMILY TRUST #1
ZONED RA-1

PREPARED UNDER THE SUPERVISION OF:

PROJECT LOG	DATE: 12-15-16	SHEET: 6 OF 15
START DRAWING	PLANNING COMMISSION SUBMITTAL	
PROJECT MOR: JDM	DESIGNED BY: SAL	
	DRAWN BY: M.M.D.	
	CHECKED BY:	
	SCALE: 1"=50'	

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

UTILITY PLAN

D&M SITE INC.
Surveying, Inspection, Testing, Engineering
401 BALSAM STREET PO BOX 159, CARROLLTON, MICHIGAN 48724
PHONE (989) 752-6884 FAX (989) 752-8660

C3.2
2016.106

NO. 120-001-200-085-00
E. WACKERLY RD.
MAZANEC, JOSEPH

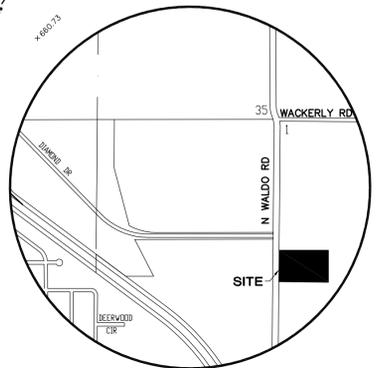
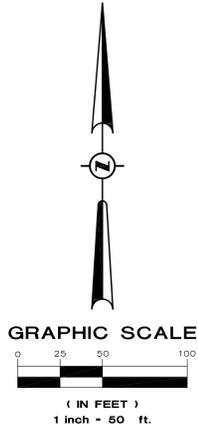
NO. 120-001-200-080-00
E. WACKERLY RD.
ROKOSZ, CECILIA

RD. 120-001-200-001-00
4780 E. WACKERLY RD.
JENKINS, MELVIN

PROP. 1 CYD OF
RIP-RAP

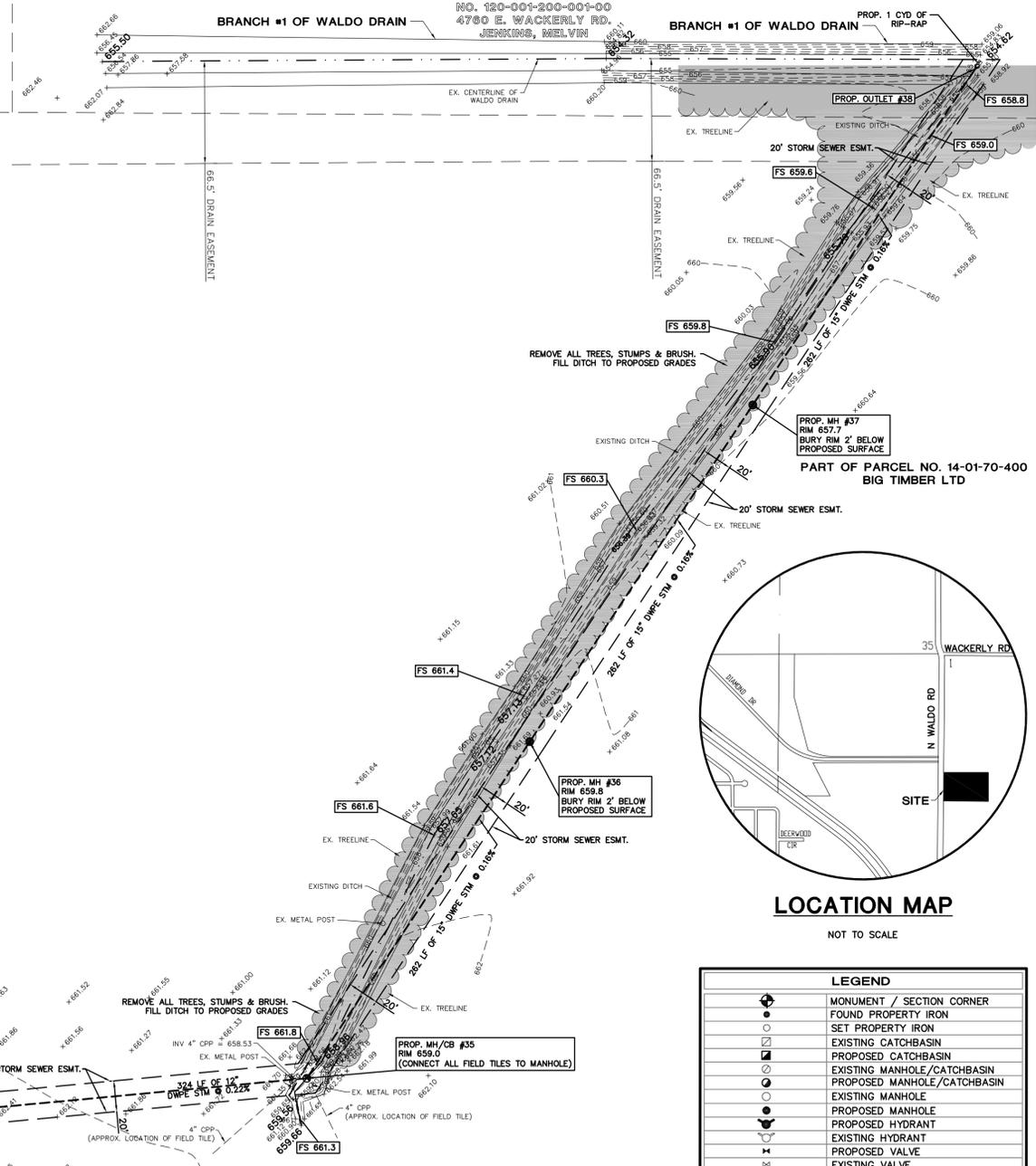
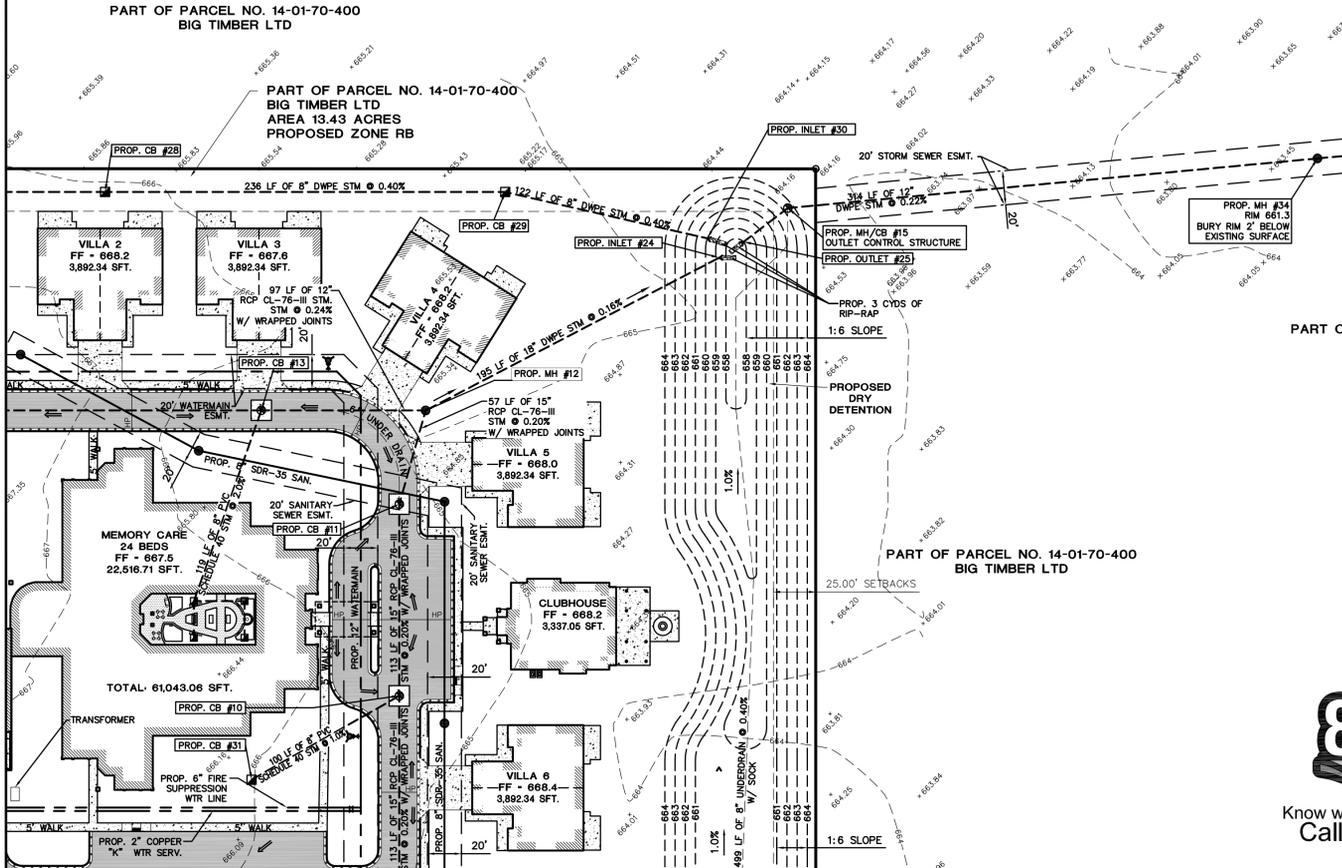
PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD



LOCATION MAP

NOT TO SCALE



LEGEND

	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
	SET PROPERTY IRON
	EXISTING CATCHBASIN
	PROPOSED CATCHBASIN
	EXISTING MANHOLE/CATCHBASIN
	PROPOSED MANHOLE/CATCHBASIN
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING HYDRANT
	PROPOSED HYDRANT
	EXISTING VALVE
	PROPOSED VALVE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	EXISTING WATERMAIN
	PROPOSED WATERMAIN
	EXISTING LIGHT POLES
	PROPOSED LIGHT POLES
	PROPOSED ASPHALT
	PROPOSED CONCRETE
	EXISTING CONCRETE SURFACE
	EXISTING BIT SURFACE
	EXISTING FENCE LINE
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND GAS LINE
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND CABLE T.V. LINE
	OVERHEAD ELECTRICAL WIRES
	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
	EXISTING SIGN
	EXISTING UTILITY POWER POLE
	EXISTING TELEPHONE RISER
	PROPOSED FLOW ARROW
	PROPOSED CONTOURS
	PROPOSED MODIFIED CURB AND GUTTER
	PROPOSED TOP OF CURB ELEVATION
	PROPOSED FINISH SURFACE ELEVATION
	PROPOSED TOP OF WALK ELEVATION

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B.M. #2 - RR SPIKE IN EAST FACE OF POWER POLE ON EAST SIDE OF WALDO ROAD. CITY OF MIDLAND ELEV. 669.58



Know what's below.
Call before you dig.

PROJECT LOG

FILE: 2016-106-SHEETS
PROJECT MGR: JDM
DESIGNED BY: SAL
DRAWN BY: M.McD.
CHECKED BY:
SCALE: 1"=50'
SHEET: 7 OF 15

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R3E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

815 NORTH 2nd
ABERDEEN, S. DAKOTA 57401
MR. BRAD ANDERA

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R3E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

GRADING / UTILITY PLAN



C3.3
2016.106



Know what's below. Call before you dig.

PROPOSED DRAINAGE TABLE						
UPPER END DRAINAGE STRUCTURE	DRAINAGE STRUCTURE TYPE	FRAME AND GRATE	PIPE MATERIAL	T/C-RIM ELEVATION	SIZE, INVERT AND DIRECTION	CONNECTION TYPE
CB #1	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	666.6	8" S 663.05	SEE CB DETAIL
CB #2	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	PVC SCHEDULE 40 RCP CL-76-III	665.8	8" N 662.50 12" S 662.50	SEE CB DETAIL
CB #3	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	665.5	12" N 662.21 12" S 661.22	SEE CB DETAIL
CB #4	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	664.2	12" N 660.87 12" E 660.87	SEE CB DETAIL
CB #5	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	664.2	12" W 660.08 15" E 660.08	SEE CB DETAIL
CB #6	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	665.6	15" NE 659.76 15" W 659.76	SEE CB DETAIL
CB #7	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	665.6	15" SW 659.54 12" W 660.52 15" N 659.54	SEE CB DETAIL
CB #8	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	664.9	12" W 660.79 12" E 660.79	SEE CB DETAIL
CB #9	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	665.2	12" E 661.28 8" N 661.28 8" W 661.28	SEE CB DETAIL
CB #10	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	665.6	15" S 659.30 8" SW 660.29 15" N 659.30	SEE CB DETAIL
CB #11	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	665.4	15" S 659.08 15" N 659.08	SEE CB DETAIL
MH #12	4' PRECAST MH	EJW #1040 FRAME W/TYPE A SOLID COVER (OR EQUIVALENT)	RCP CL-76-III	666.8	15" SW 658.97 18" NE 658.97 12" W 659.94	SEE MH DETAIL
CB #13	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	665.1	12" E 660.17 8" SW 660.17 12" W 660.17	SEE CB DETAIL
CB #14	4' PRECAST CB	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	RCP CL-76-III	664.6	12" E 660.63	SEE CB DETAIL
#15 (LEVEL CONTROL STRUCTURE)	4' PRECAST MH/CB	2" X 2" FLAT BAR GRATE (OR EQUIVALENT)	DWPE	663.5	1" SW 667.00 12" E 667.00	SEE LEVEL CONTROL STRUCTURE DETAIL
CB #16	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	667.3	8" NE 662.57 8" E 662.57 8" S 662.57	SEE CB DETAIL
CB #17	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	667.3	8" N 662.66	SEE CB DETAIL
CB #18	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	667.3	8" W 662.69 8" S 662.69	SEE CB DETAIL
CB #19	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	667.3	8" N 662.77	SEE CB DETAIL
CB #20	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	DWPE	664.5	8" N 660.23 8" W 660.23	SEE CB DETAIL
CB #21	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	DWPE	664.5	8" E 661.05 8" W 661.05	SEE CB DETAIL
CB #22	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	DWPE	664.5	8" E 662.11 8" W 662.11	SEE CB DETAIL
CB #23	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	DWPE	665.0	8" E 663.23	SEE CB DETAIL
INLET #24	N/A	N/A	DWPE	N/A	18" SW 658.66	N/A

NOTE: ALL PERMANENT CASTINGS SHALL READ "DUMP NO WASTE"

PROPOSED DRAINAGE TABLE						
UPPER END DRAINAGE STRUCTURE	DRAINAGE STRUCTURE TYPE	FRAME AND GRATE	PIPE MATERIAL	T/C-RIM ELEVATION	SIZE, INVERT AND DIRECTION	CONNECTION TYPE
OUTLET #25	N/A	N/A	?	N/A	1" NE 658.00	N/A
CB #26	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	666.0	8" N 662.88	SEE CB DETAIL
CB #27	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40 DWPE	665.0	8" S 662.32 8" E 662.32	SEE CB DETAIL
CB #28	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	DWPE	665.0	8" W 661.48 8" E 661.48	SEE CB DETAIL
CB #29	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	DWPE	664.0	8" W 660.54 8" SE 660.54	SEE CB DETAIL
INLET #30	N/A	N/A	DWPE	N/A	8" NW 660.00	N/A
CB #31	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	666.0	8" NE 661.29	SEE CB DETAIL
CB #32	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	666.0	8" S 662.16	SEE CB DETAIL
CB #33	2' HP CATCHBASIN	EJW #1040 FRAME W/TYPE N OVAL GRATE (OR EQUIVALENT)	PVC SCHEDULE 40	666.0	8" SE 662.23	SEE CB DETAIL
MH #34	4' PRECAST CB	EJW #1040 FRAME W/TYPE A SOLID COVER (OR EQUIVALENT)	DWPE	661.3	12" W 656.30 12" E 656.30	SEE CB DETAIL
MH #35	4' PRECAST MH	EJW #1040 FRAME W/TYPE M1 FLAT GRATE (OR EQUIVALENT)	DWPE	659.0	12" W 655.60 15" NE 655.60	SEE MH DETAIL
MH #36	4' PRECAST CB	EJW #1040 FRAME W/TYPE A SOLID COVER (OR EQUIVALENT)	DWPE	659.8	15" SW 655.18 15" NE 655.18	SEE CB DETAIL
MH #37	4' PRECAST CB	EJW #1040 FRAME W/TYPE A SOLID COVER (OR EQUIVALENT)	DWPE	657.7	15" SW 654.76 15" NE 654.76	SEE CB DETAIL
OUTLET #38	N/A	N/A	DWPE	N/A	15" SW 654.34	N/A

NOTE: ALL PERMANENT CASTINGS SHALL READ "DUMP NO WASTE"

PREPARED UNDER THE SUPERVISION OF:

PROJECT LOG

FILE: 2016-106-SHEETS

PROJECT MGR: JDM

DESIGNED BY: SAL

DRAWN BY: M.M.D.

CHECKED BY:

SCALE: 1"=50'

SHEET: 8 OF 15

PRIMROSE RETIREMENT COMMUNITIES

SECTION 1, T14N-R9E CITY OF MIDLAND MIDLAND COUNTY, MICHIGAN

815 NORTH 2nd ABERDEEN, S. DAKOTA 57401 MR. BRAD ANDERA

PROPOSED DRAINAGE TABLES

D&M SITE INC. Surveying • Inspection • Testing • Engineering

401 BALSAM STREET PO BOX 159, CARROLLTON, MICHIGAN 48724 Phone (989) 752-6860-1700 (989) 752-6860

C3.4

2016.106

120-002-100-170-00
SECTION 1
T14N-R2E
HLAVACEK, DALE J ET UX
MIDLAND, MI 48642

120-002-100-175-00
SECTION 1
T14N-R2E
KAMINSKI, TIMOTHY C
5211 WALDO RD
MIDLAND, MI 48642

120-002-100-285-00
SECTION 1
T14N-R2E
CHRISTIAN CELEBRATION CENTER
6000 SWEDEN AVE.
MIDLAND, MI 48640
ZONED RA-1

120-002-100-300-00
SECTION 1
T14N-R2E
BLESNER, ROLAND C
5505 WALDO RD
MIDLAND, MI 48642

14-02-30-100
BIG TIMBER LLC
6401 WALDO AVE
MIDLAND, MI 48642



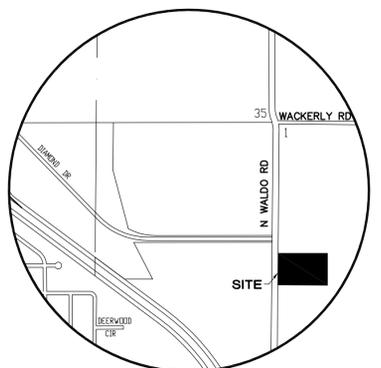
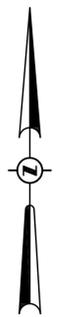
Know what's below.
Call before you dig.

MICHIGAN UNIFIED KEYING SYSTEM SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

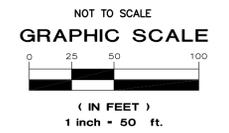
7		Mulch tacking agent used to provide immediate protection until grass is rooted. Should include prepared topsoil bed.
14		Tracking Mat - Replenish stone as required due to rutting. 1"-3" crushed concrete 8" thick on geo-fabric. 30' wide by 50' long. Temporary measure, remove after completion of construction.
36		Catch Basin, Drain Inlet Collects high velocity concentrated runoff. Use Silt-Sac
54		Silt Fence Filters and detains runoff.

P = PERMANENT CONTROL MEASURE
T = TEMPORARY CONTROL MEASURE
DISTURBED SOILS SHALL INCLUDE TOPSOIL, SAND, AND CLAY MATERIAL

TASK	FREQUENCY	TRACKING MAT	SILT FENCE	INLET FILTERS	STORM SEWER	CB SUMPS	VEGETATION
INSPECT FOR SEDIMENT ACCUMULATION	WEEKLY	X	X	X	X	X	
REMOVE ACCUMULATED SEDIMENT	AS NEEDED				X	X	
INSPECT FOR FLOATABLES AND DEBRIS	WEEKLY		X	X	X	X	
REMOVE FLOATABLES AND DEBRIS	AS NEEDED				X	X	
INSPECT FOR PERMIT CONFORMANCE	AFTER RAIN	X	X	X			
RESTORE TO PERMIT CONFORMANCE	AS NEEDED	X	X	X			
INSPECT FOR SOIL EROSION	AFTER RAIN						X
RESTORE TO PREVENT EROSION	AS NEEDED						X
SCRAPE STREET	DAILY						
SWEEP PINE ROAD AS NECESSARY FOR TRACK OUT	WEEKLY						



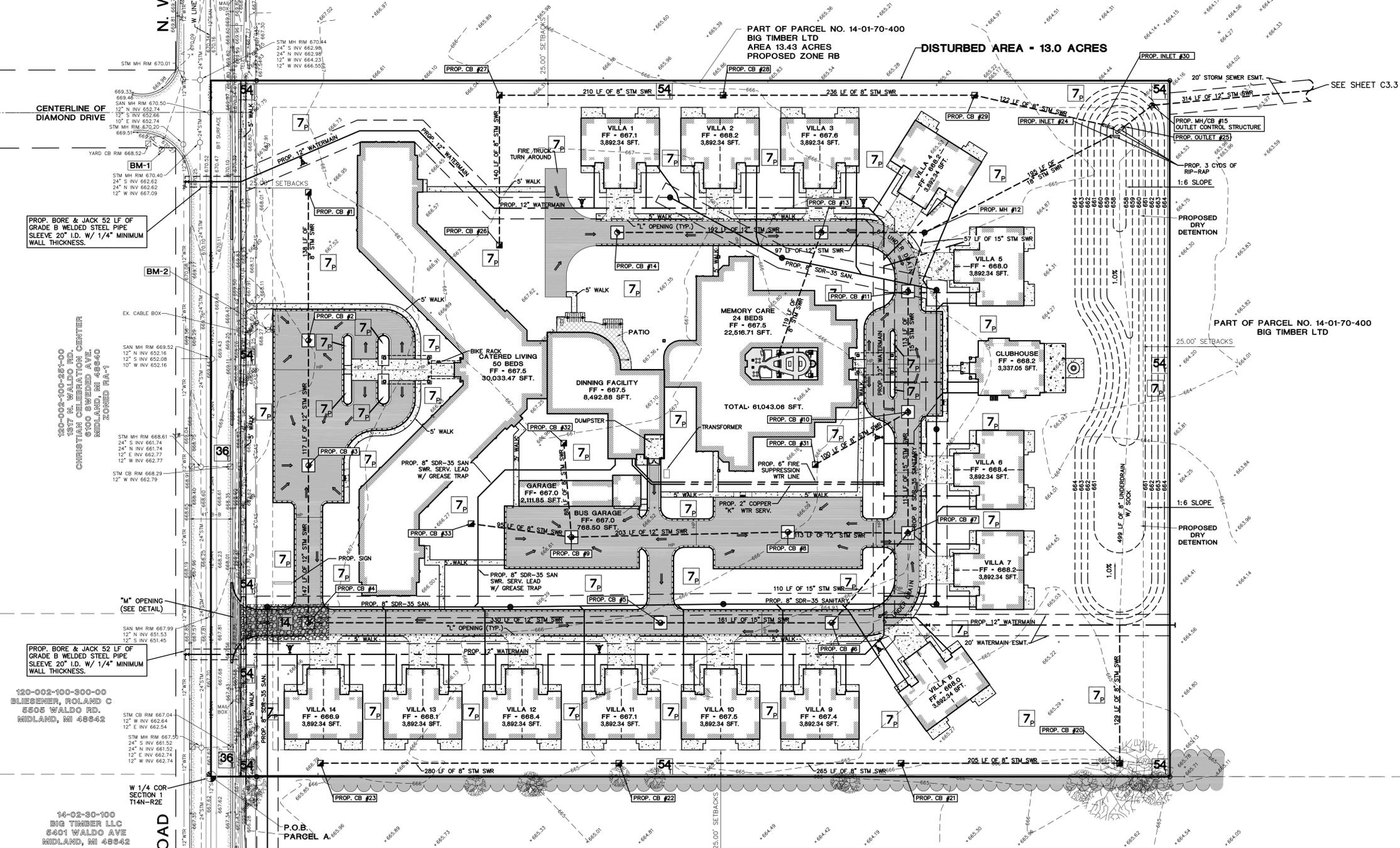
LOCATION MAP



PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD
AREA 13.43 ACRES
PROPOSED ZONE RB

DISTURBED AREA - 13.0 ACRES



LEGEND

	MONUMENT / SECTION CORNER
	FOUND PROPERTY IRON
	SET PROPERTY IRON
	EXISTING CATCHBASIN
	PROPOSED CATCHBASIN
	EXISTING MANHOLE/CATCHBASIN
	PROPOSED MANHOLE/CATCHBASIN
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING HYDRANT
	PROPOSED HYDRANT
	EXISTING VALVE
	PROPOSED VALVE
	EXISTING SANITARY SEWER
	PROPOSED SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	EXISTING WATERMAIN
	PROPOSED WATERMAIN
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	PROPOSED LIGHT POLES
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	UNDERGROUND ELECTRIC LINE
	UNDERGROUND GAS LINE
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND CABLE T.V. LINE
	OVERHEAD ELECTRICAL WIRES
	EXISTING DECIDUOUS TREES
	EXISTING CONIFEROUS TREES
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	PROPOSED FLOW ARROW
	PROPOSED MODIFIED CURB AND GUTTER
	PROPOSED TOP OF CURB ELEVATION
	PROPOSED FINISH SURFACE ELEVATION
	PROPOSED TOP OF WALK ELEVATION

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CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
STRIP & STOCKPILE TOPSOIL / ROUGH GRADE												
TEMPORARY EROSION CONTROL MEASURES												
INSTALL SANITARY SEWER SYSTEM												
INSTALL STORM SEWER w/ REARLOT + DETENTION												
INSTALL WATERMAIN												
ROADWAY, CURB/GUTTER, & PAVEMENT												
PERMANENT EROSION CONTROL MEASURES												
FINISH GRADING												

B.M. #1 - 2-INCH NAIL IN EAST FACE OF POWER POLE AT SOUTHWEST QUADRANT OF DIAMOND DR. AND WALDO ROAD. (CITY BENCHMARK # 2934) CITY OF MIDLAND ELEV. 670.11
B.M. #2 - RR SPIKE IN EAST FACE OF POWER POLE ON EAST SIDE OF WALDO ROAD. CITY OF MIDLAND ELEV. 669.58

PREPARED UNDER THE SUPERVISION OF:

PROJECT LOG

FILE: 2016-106-SHEETS	DESIGNED BY: SAL	DRAWN BY: M.M.D.	CHECKED BY:	SCALE: 1"=50'	SHEET: 9 OF 15
PROJECT MOR: JDM	START DRAWING: 5/20/16	PLANNING COMMISSION SUBMITAL:			

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

815 NORTH 2nd
ABERDEEN, S. DAKOTA 57401
MR. BRAD ANDERA

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

D & M SITE INC.
Surveying, Inspection, Testing, Engineering
401 BALSAM STREET PO BOX 159, CARROLLTON, MICHIGAN 48724
Phone: (989) 752-6888 FAX: (989) 752-6660

SOIL EROSION SEDIMENTATION CONTROL PLAN

C3.5
2016.106

120-002-100-170-00
5917 WALDO RD.
HLAVACEK, DALE J ET UX
MIDLAND, MI 48642

120-002-100-175-00
5917 WALDO RD.
KAMINSKI, TIMOTHY C
5917 WALDO RD
MIDLAND, MI 48642

120-002-100-283-00
1837 N. WALDO RD.
CHRISTIAN CELEBRATION CENTER
6000 SWEEDED AVE.
MIDLAND, MI 48640
ZONED RA-1

120-002-100-300-00
BLIESNER, ROLAND C
5505 WALDO RD.
MIDLAND, MI 48642

14-02-30-100
BIG TIMBER LLC
6401 WALDO AVE
MIDLAND, MI 48642



Know what's below.
Call before you dig.

N. WALDO ROAD

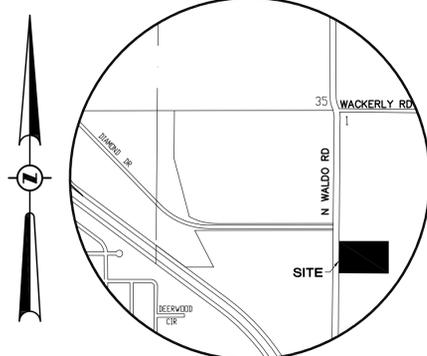
N. WALDO ROAD

BORE AND JACK NOTE
THE WATERMAIN CASING SHALL CONSIST OF FURNISHING AND PLACING A 20" EPOXY COATED STEEL CASING PIPE WITH A MINIMUM WALL THICKNESS OF 1/4" (0.25) INCH 5' BEHIND THE CURB ON EACH SIDE OF THE ROADWAY. ALL JOINTS ON THE CASING PIPE SHALL BE WELDED. THE BORE PIT SHALL BE PROTECTED WITH STEEL SHEET PILING TO MINIMIZE DAMAGE TO THE SURROUNDING AREAS. THE BORING SHALL BE COMPLETED IN ACCORDANCE WITH M.D.O.T. "PROVISIONS FOR BORE AND JACK CONSTRUCTION IN CONNECTION WITH PERMIT OPERATIONS". THE ANNULAR SPACE BETWEEN THE WATERMAIN PIPE AND CASING SHALL BE FILLED WITH PEA STONE. BOTH ENDS OF THE CASING SHALL BE BULKHEADED WITH 12" OF COMMERCIAL GRADE CONCRETE. THE WATERMAIN PIPE SHALL BE INSTALLED IN THE CENTER OF THE CASING PIPE WITH CASING SPACERS (WOOD SPACERS WILL NOT BE ALLOWED). THE METHOD OF PLACEMENT OF THE WATERMAIN WITHIN THE CASING PIPE SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

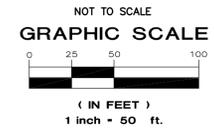
WATERMAIN NOTE
WATERMAIN PLAN AND PROFILES WILL BE PROVIDED AT THE APPROPRIATE TIME/BEFORE BUILDING PERMIT APPLICATION.

DETENTION CALCULATIONS
TOTAL SITE AREA: 563,549.96 SFT / 12.94 ACRES
TOTAL IMPERVIOUS AREA: 242,481.70 SFT / 5.57 ACRES
TOTAL PERVIOUS AREA: 321,068.26 SFT / 7.37 ACRES
NOTE: DETAILED STORM CALCULATIONS WILL BE PROVIDED AT THE APPROPRIATE TIME/BEFORE BUILDING PERMIT APPLICATION.

BENCHMARKS
B.M. #1 - 2-HEADED NAIL IN EAST FACE OF POWER POLE AT SOUTHWEST QUADRANT OF DIAMOND DR. AND WALDO ROAD. (CITY BENCHMARK # 2934)
CITY OF MIDLAND ELEV. 670.11
B.M. #2 - RR SPIKE IN EAST FACE OF POWER POLE ON EAST SIDE OF WALDO ROAD.
CITY OF MIDLAND ELEV. 669.58



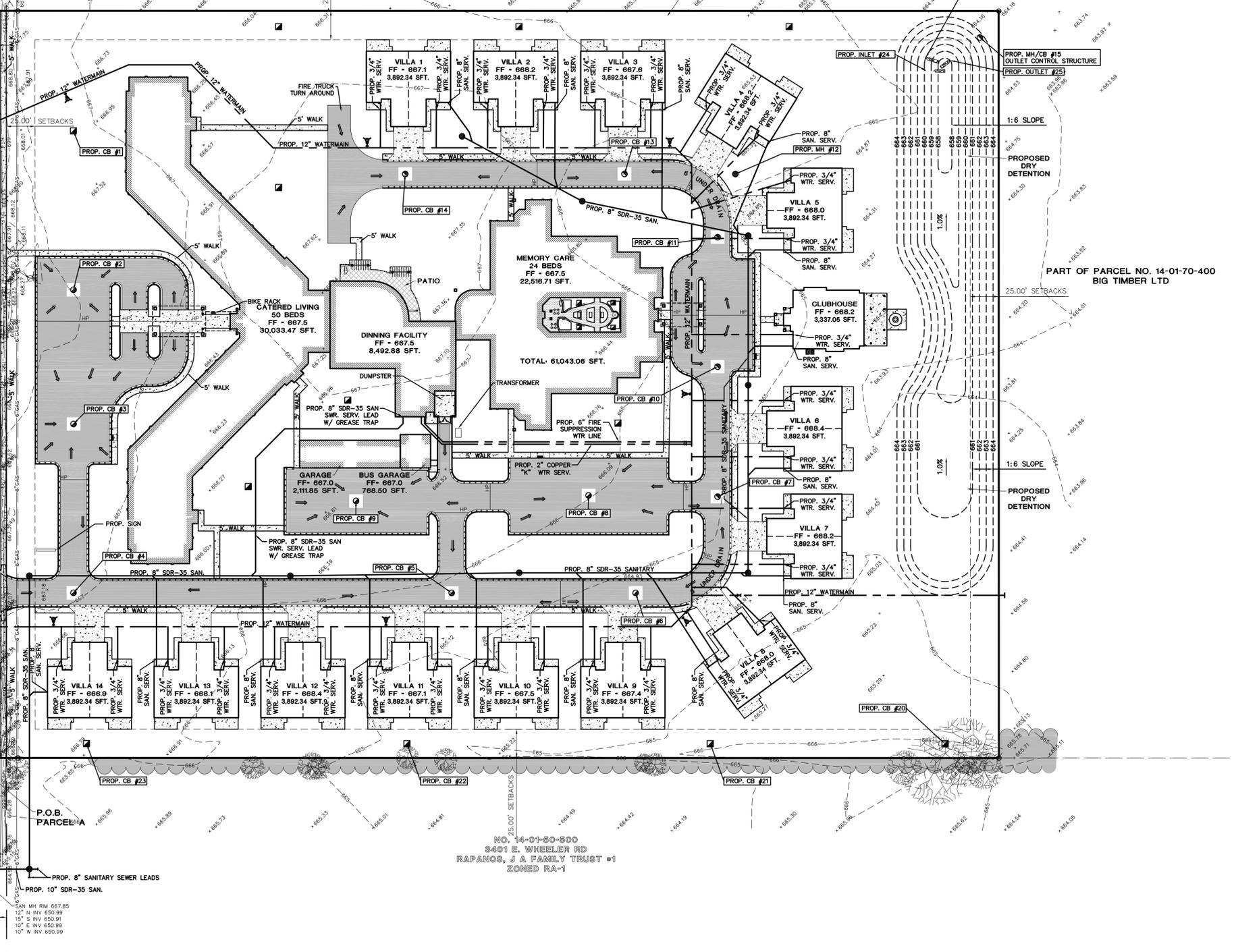
LOCATION MAP



PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD
AREA 13.43 ACRES
PROPOSED ZONE RB

PART OF PARCEL NO. 14-01-70-400
BIG TIMBER LTD



LEGEND

[Symbol]	MONUMENT / SECTION CORNER
[Symbol]	FOUND PROPERTY IRON
[Symbol]	SET PROPERTY IRON
[Symbol]	EXISTING CATCHBASIN
[Symbol]	PROPOSED CATCHBASIN
[Symbol]	EXISTING MANHOLE/CATCHBASIN
[Symbol]	PROPOSED MANHOLE/CATCHBASIN
[Symbol]	EXISTING MANHOLE
[Symbol]	PROPOSED MANHOLE
[Symbol]	EXISTING HYDRANT
[Symbol]	PROPOSED HYDRANT
[Symbol]	EXISTING VALVE
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[Symbol]	EXISTING SANITARY SEWER
[Symbol]	PROPOSED SANITARY SEWER
[Symbol]	EXISTING STORM SEWER
[Symbol]	PROPOSED STORM SEWER
[Symbol]	EXISTING WATERMAIN
[Symbol]	PROPOSED WATERMAIN
[Symbol]	EXISTING LIGHT POLES
[Symbol]	PROPOSED LIGHT POLES
[Symbol]	PROPOSED ASPHALT
[Symbol]	PROPOSED CONCRETE
[Symbol]	EXISTING CONCRETE SURFACE
[Symbol]	EXISTING BIT SURFACE
[Symbol]	EXISTING FENCE LINE
[Symbol]	UNDERGROUND ELECTRIC LINE
[Symbol]	UNDERGROUND GAS LINE
[Symbol]	UNDERGROUND TELEPHONE LINE
[Symbol]	UNDERGROUND CABLE T.V. LINE
[Symbol]	OVERHEAD ELECTRICAL WIRES
[Symbol]	EXISTING DECIDUOUS TREES
[Symbol]	EXISTING CONIFEROUS TREES
[Symbol]	EXISTING SIGN
[Symbol]	EXISTING UTILITY POWER POLE
[Symbol]	EXISTING TELEPHONE RISER
[Symbol]	PROPOSED FLOW ARROW
[Symbol]	PROPOSED CONTOURS
[Symbol]	PROPOSED MODIFIED CURB AND GUTTER
[Symbol]	TC 647.0 PROPOSED TOP OF CURB ELEVATION
[Symbol]	FS 646.9 PROPOSED FINISH SURFACE ELEVATION
[Symbol]	TW 646.9 PROPOSED TOP OF WALK ELEVATION

UTILITY CONTACTS

TELEPHONE AT & T C/O ENGINEERING DEPARTMENT ROOM 525A 308 S. WASHINGTON AVE. SAGINAW, MICHIGAN 48607 (989) 791-5404 ROB AUGUSTINE (989) 771-5404	GAS AND ELECTRIC CONSUMERS ENERGY 2400 WEISS STREET SAGINAW, MICHIGAN 48602 KEVIN COUTURIER - GAS DIV. (989) 791-5885 GREG SQUANDA ELEC. DIV. (989) 791-5353	WATER DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 ANDY PARROT (989) 637-3348
ZONING CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 (989) 837-3300	ENGINEERING DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 JOSH FEDRICKSON (989) 837-3352	CABLE TELEVISION CHARTER COMMUNICATIONS MARK KELLY (989) 233-9404
WASTE WTR. DEPT. CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 STEVE SMITH (989) 837-3504	STORM SEWER MIDLAND COUNTY ROAD COMM. ENGINEERING DEPT. 2334 NORTH MERIDIAN RD. MIDLAND, MICHIGAN 48657 (989) 687-9060	DRAIN MIDLAND COUNTY DRAIN COMM. ENGINEERING DEPT. 220 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 (989) 832-6770
SIGNS AND SIGNALS CITY OF MIDLAND 333 W. ELLSWORTH ST. MIDLAND, MICHIGAN 48640 JEFF MURPHY (989) 837-3354	DRIVE MIDLAND COUNTY ROAD COMM. ENGINEERING DEPT. 2334 NORTH MERIDIAN RD. MIDLAND, MICHIGAN 48657 (989) 687-9060	

PREPARED UNDER THE SUPERVISION OF:

PROJECT LOG

FILE: 2016-106-SHEETS	DESIGNED BY: SAL	DRAWN BY: M.M.D.	CHECKED BY:	SCALE: 1"=50'	SHEET: 10 OF 15
PROJECT MOR: JDM	START DRAWING: 5/20/16	PLANNING COMMISSION SUBMITTAL:			

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

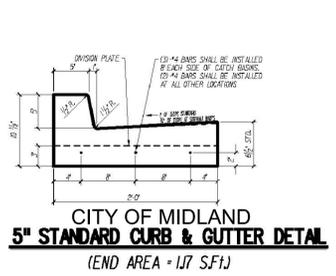
PRIMROSE RETIREMENT COMMUNITIES
815 NORTH 2nd
ABERDEEN, S. DAKOTA 57401
MR. BRAD ANDERA

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

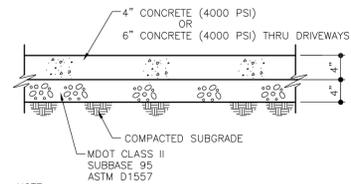
VILLA UTILITY PLAN

D&M SITE INC.
Surveying, Inspection, Testing, Engineering
401 BALSAM STREET PO BOX 159, CARROLLTON, MICHIGAN 48724
Phone (989) 752-6888 FAX (989) 752-8660

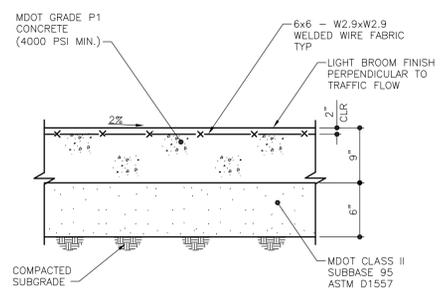
C3.6
2016.106



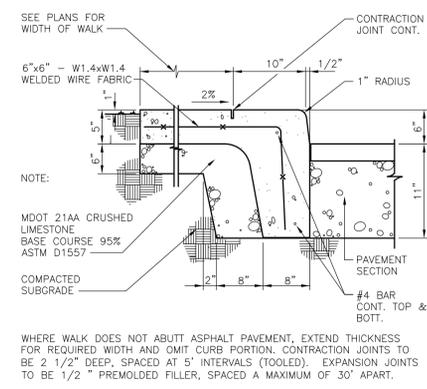
CITY OF MIDLAND 5" STANDARD CURB & GUTTER DETAIL (END AREA = 117 SF)



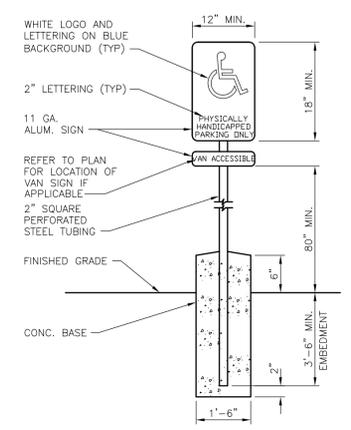
CONCRETE WALK NO SCALE



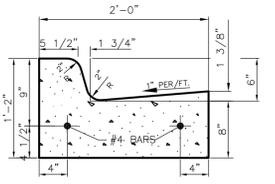
CONCRETE DUMPSTER PAD NO SCALE



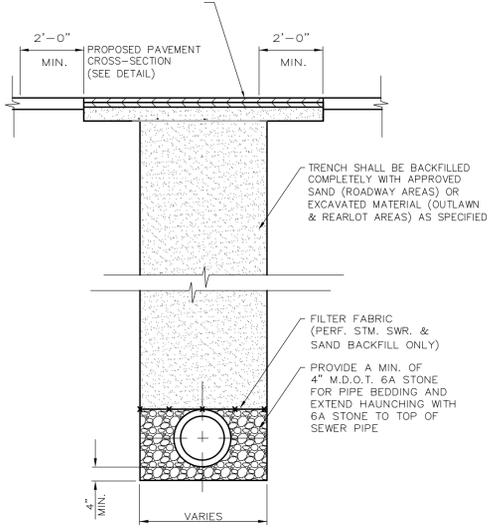
CONCRETE CURB WALK NO SCALE



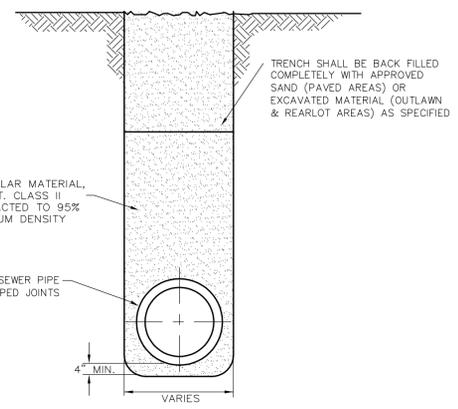
TYPICAL HANDICAP SIGN NO SCALE



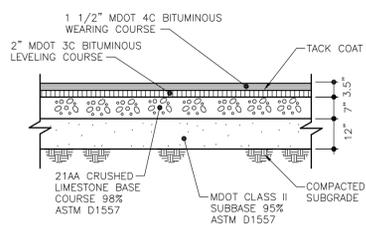
CONCRETE CURB & GUTTER DETAIL M.D.O.T. F-4 NO SCALE



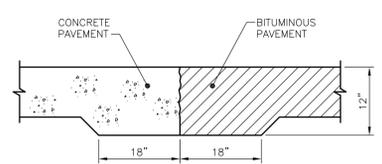
D.W.P.E., P.E., PVC AND A/D 2000 SEWER TRENCH DETAIL SCALE: 1/2"=1'-0"



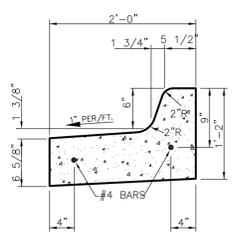
RCP TRENCH DETAIL NO SCALE



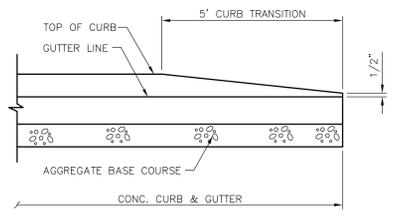
HMA PARKING LOT SECTION NO SCALE



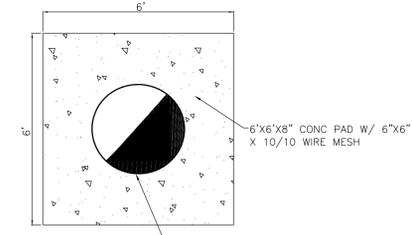
TURNDOWN PAVEMENT SECTION NO SCALE



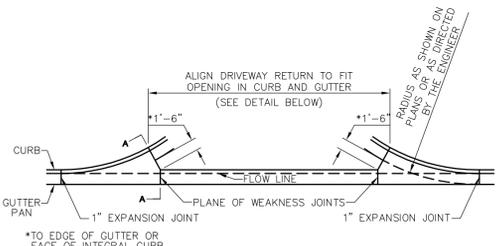
CONCRETE CURB & GUTTER DETAIL M.D.O.T. F-4 MODIFIED NO SCALE



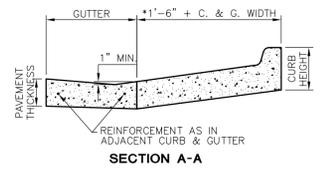
TYPICAL CURB END TRANSITION NO SCALE



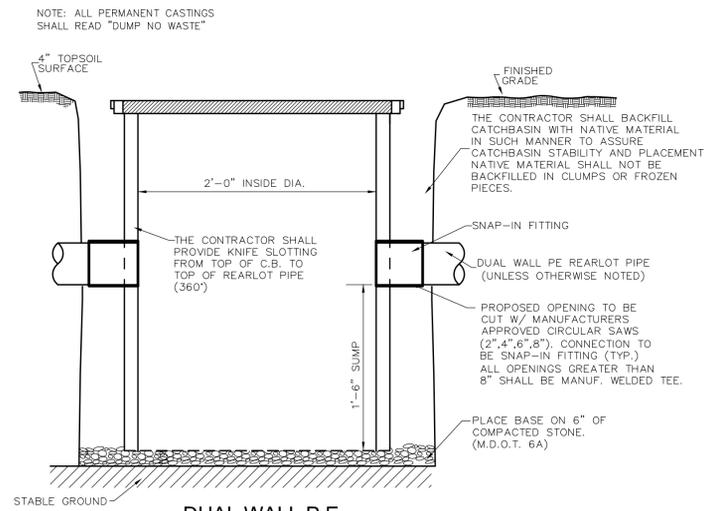
MANHOLE / CATCHBASIN CONCRETE SLAB NOT TO SCALE



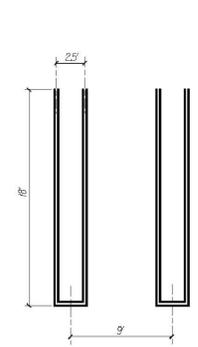
MDOT CONCRETE DRIVEWAY OPENING-DETAIL M NO SCALE



SECTION A-A



DUAL WALL P.E. 2" DIA. REARLOT CATCHBASIN NO SCALE



PAVEMENT MARKING DETAIL

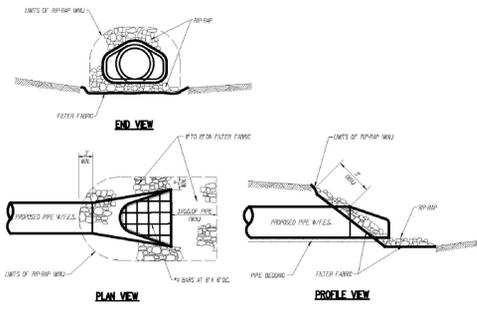
PREPARED UNDER THE SUPERVISION OF:

FILE: 2016-106-SHEETS	PROJECT MGR: JDM	DESIGNED BY: SAL	DRAWN BY: M.M.D.	CHECKED BY:	SCALE:	SHEET: 11 OF 15
START DRAWING: 5/20/16	PLANNING COMMISSION SUBMITTAL					

PRIMROSE RETIREMENT COMMUNITIES
 SECTION 1, T14N-R2E
 CITY OF MIDLAND
 MIDLAND COUNTY, MICHIGAN
 815 NORTH 2nd
 ABERDEEN, S. DAKOTA 57401
 MR. BRAD ANDERA

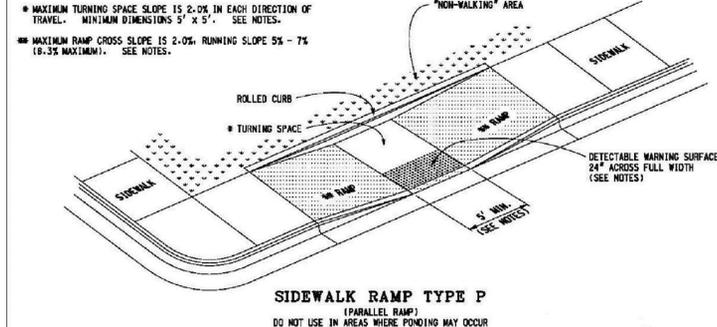
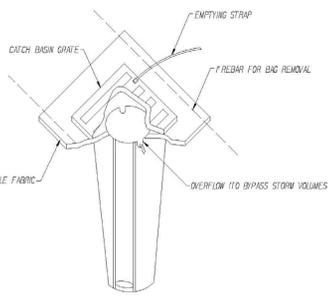
PRIMROSE RETIREMENT COMMUNITIES
 SECTION 1, T14N-R2E
 CITY OF MIDLAND
 MIDLAND COUNTY, MICHIGAN
 DETAIL SHEET

D&M SITE INC.
 Surveying, Inspection, Testing, Engineering
 401 BALSAM STREET, PO BOX 159, CARROLLTON, MICHIGAN 48724
 PHONE: (989) 752-0860 FAX: (989) 752-0866



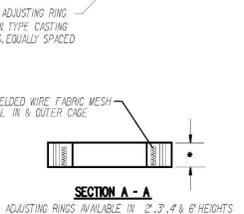
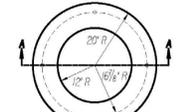
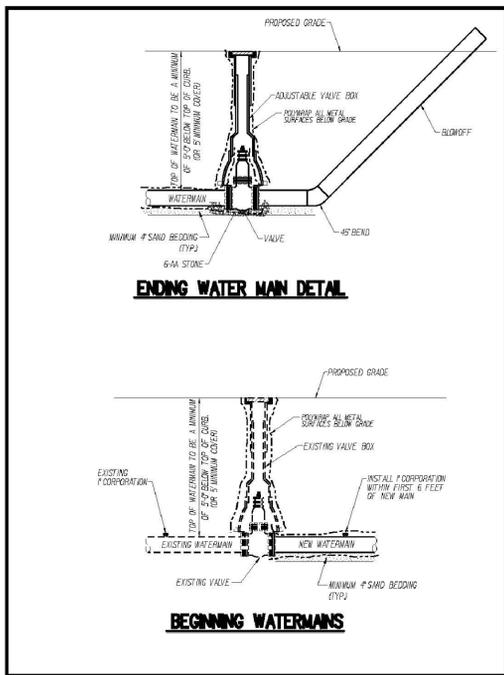
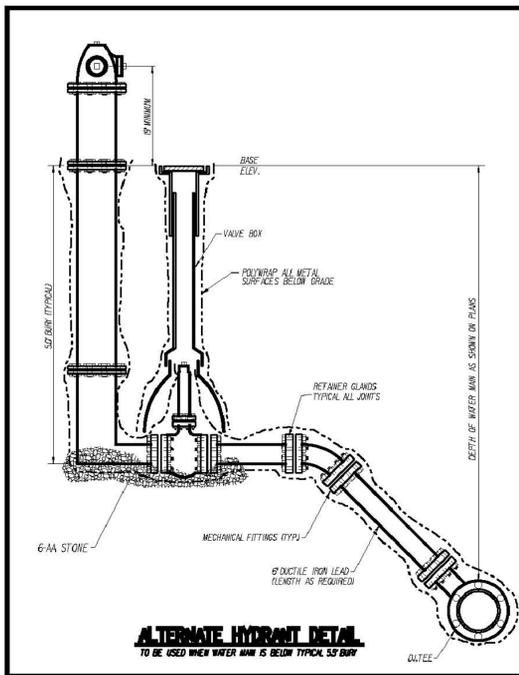
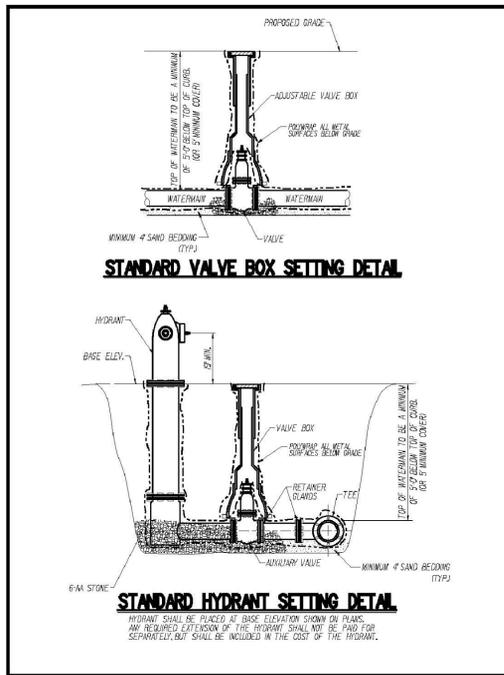
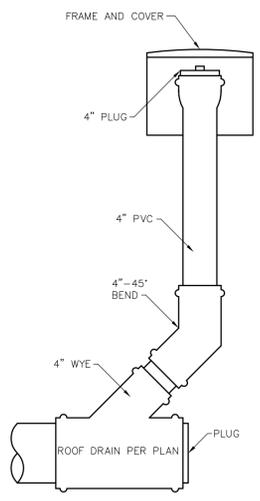
CATCH BASIN INSERT NOTES:

1. INSTALL SLOTSACK IN CATCH BASIN, MAKING SURE STRAPS ARE TIGHT AND OUTSIDE OF BASIN AND HELD IN PLACE BY DRAIN GRATE.
2. HOLD REMOVAL FLAP, POCKETS AND EMPTYING STRAPS BY COVERING WITH SOIL.
3. USE CURB STYLE INSERTS WITH FABRIC ROLL FOR OPEN BACK CURB INLETS.
4. EXPECT FOR MAINTENANCE EVERY 2 WEEKS OR AFTER A STORM EVENT.
5. CATCH BASIN SEGMENT CONTROLS SHALL BE A WOVEN GEOTEXTILE FABRIC, INSERTS AS MANUFACTURED BY 30" CONTOURFLEX SYSTEMS, POLYCONCRETE SYSTEMS, OR APPROVED EQUIVALENT.

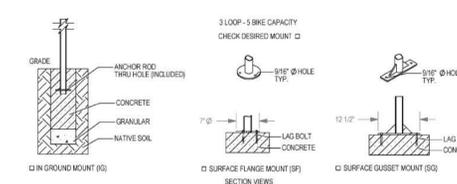
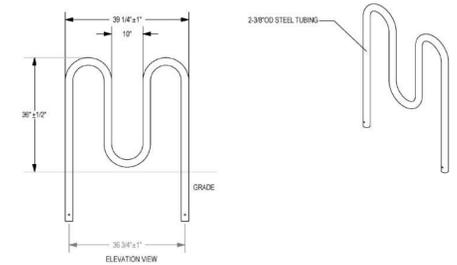


GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE TO CITY OF MIDLAND STANDARD SPECIFICATIONS.
2. FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL 1-800-882-7011 A MINIMUM OF 3 WORKING DAYS PRIOR TO EXCAVATION IN THE VICINITY OF UTILITY LINES.
3. THE PROPOSED WATER MAIN SHALL BE INSTALLED A MINIMUM OF 10 FEET HORIZONTALLY AND 18 INCHES VERTICALLY FROM ALL EXISTING OR PROPOSED SEWERS.
4. THE PROPOSED WATER MAIN SHALL BE INSTALLED A MINIMUM OF 5 FEET BELOW TOP OF CURB GRADE.
5. ALL WATER MAIN FITTINGS SHALL BE MECHANICAL RESTRAINED JOINTS. INSTALL FIELD LOCK GASKETS AS DETERMINED BY THE FIELD ENGINEER.



PRE-CAST CONCRETE ADJUSTING RING

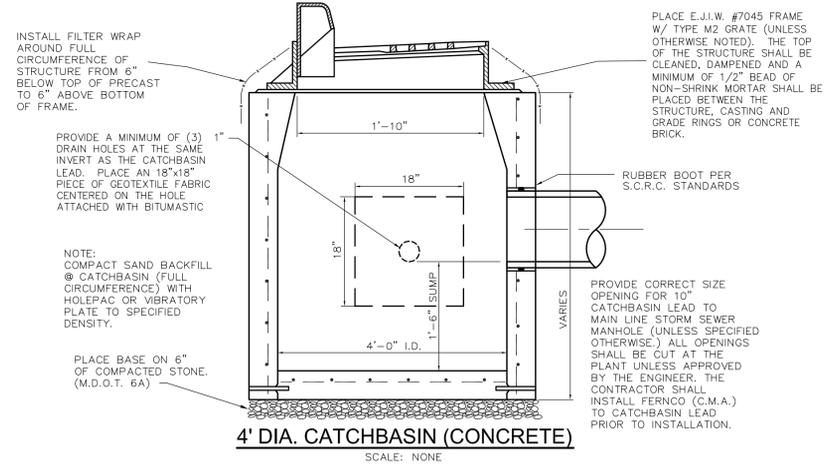
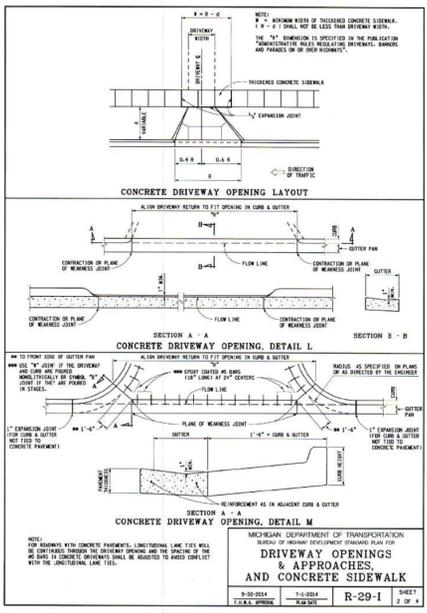
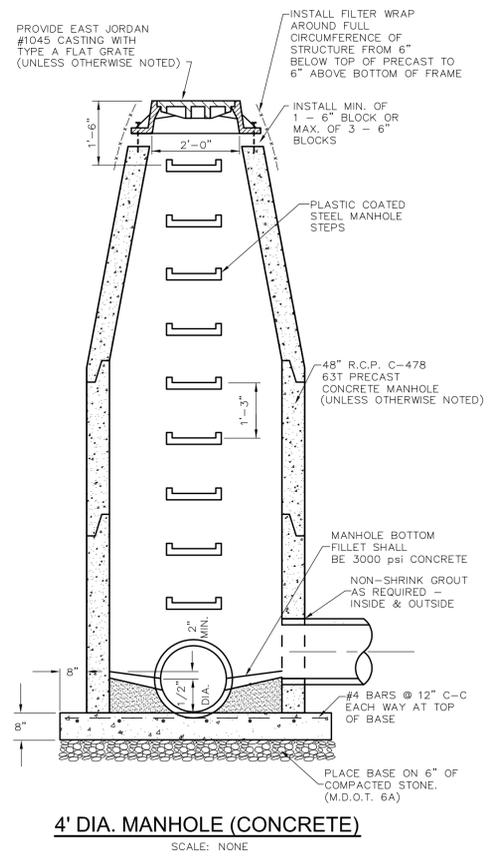


PRODUCT: H08-4-SIGSET (S)
DESCRIPTION: HEAVY DUTY CHALLENGER BIKE RACK
3 BIKE SURFACE DOWN GROUND MOUNT
DATE: 8-14-13
ENG: SMC

NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULT ANY TO SELECT COLOR/PIN, SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT TOWER.

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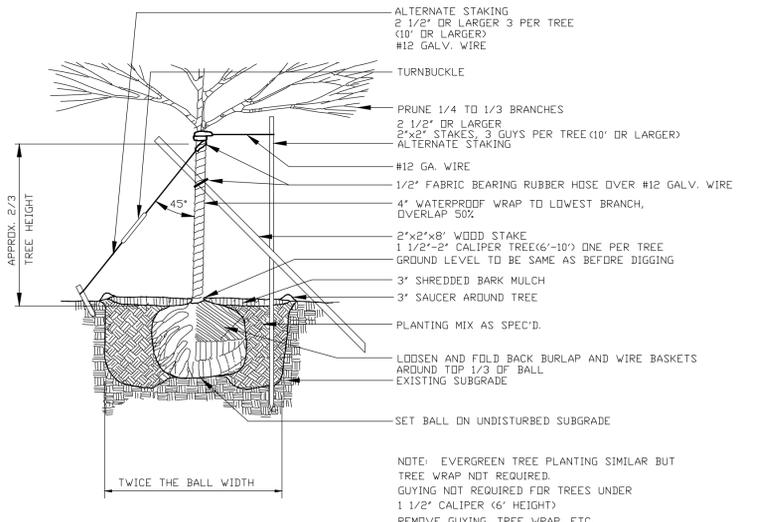
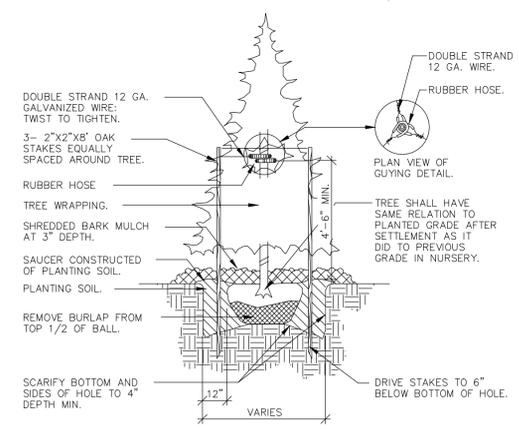
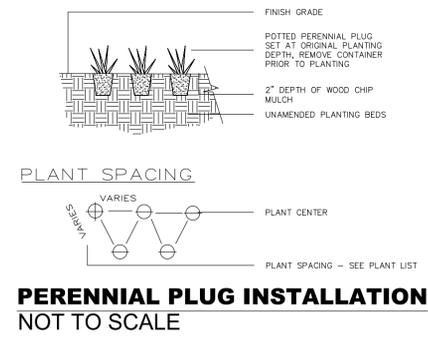
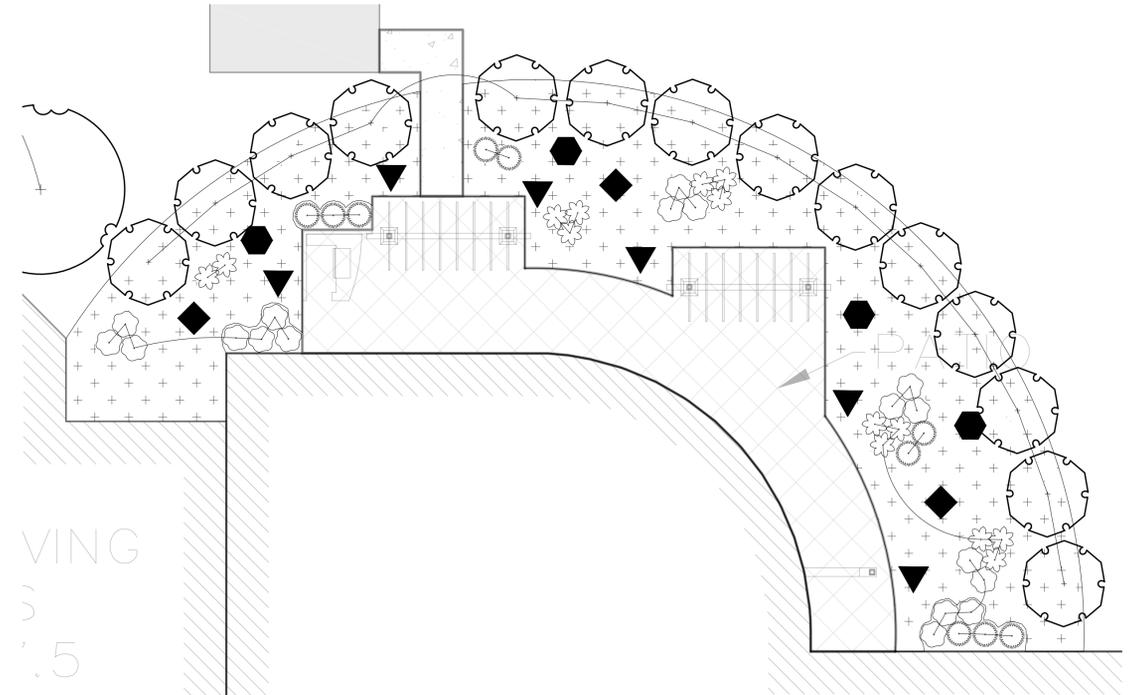
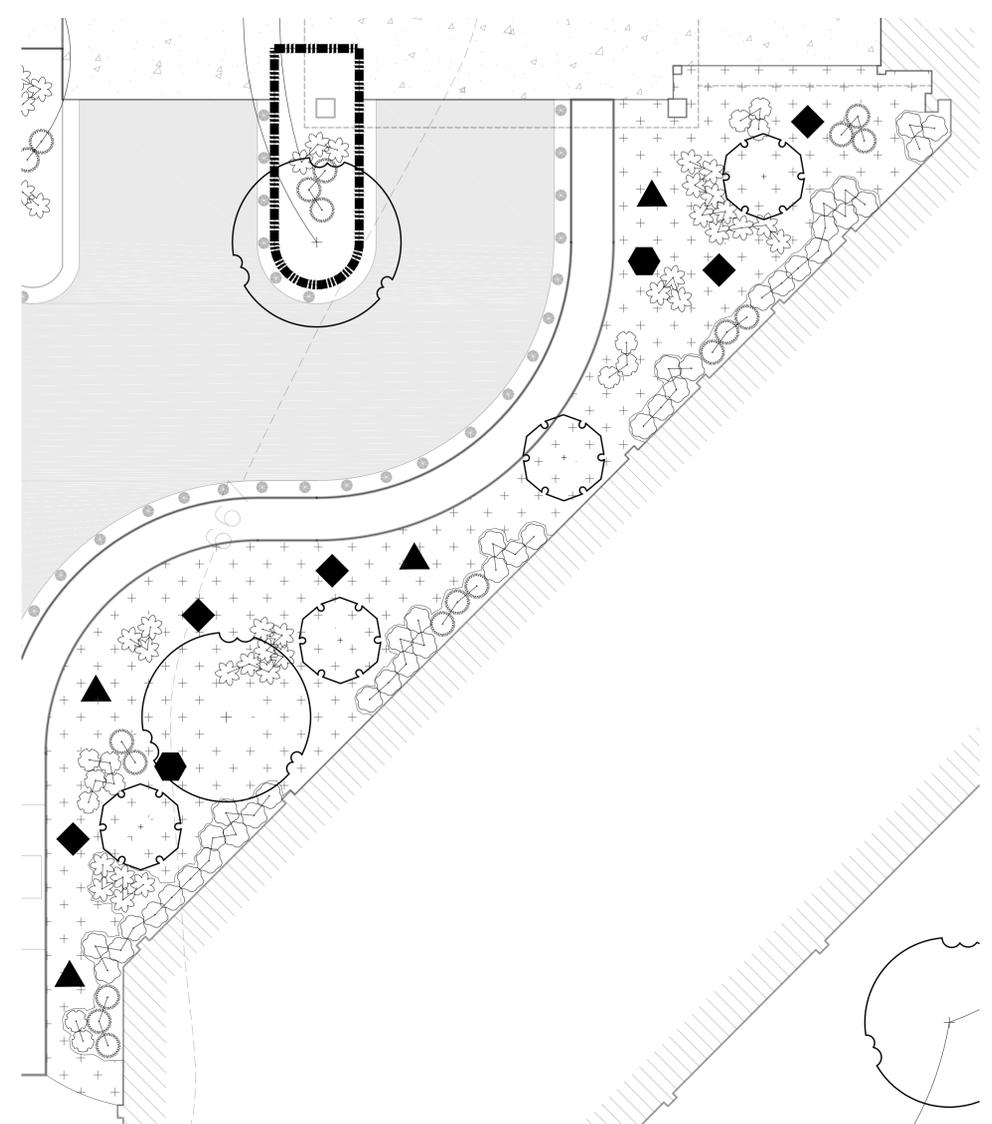
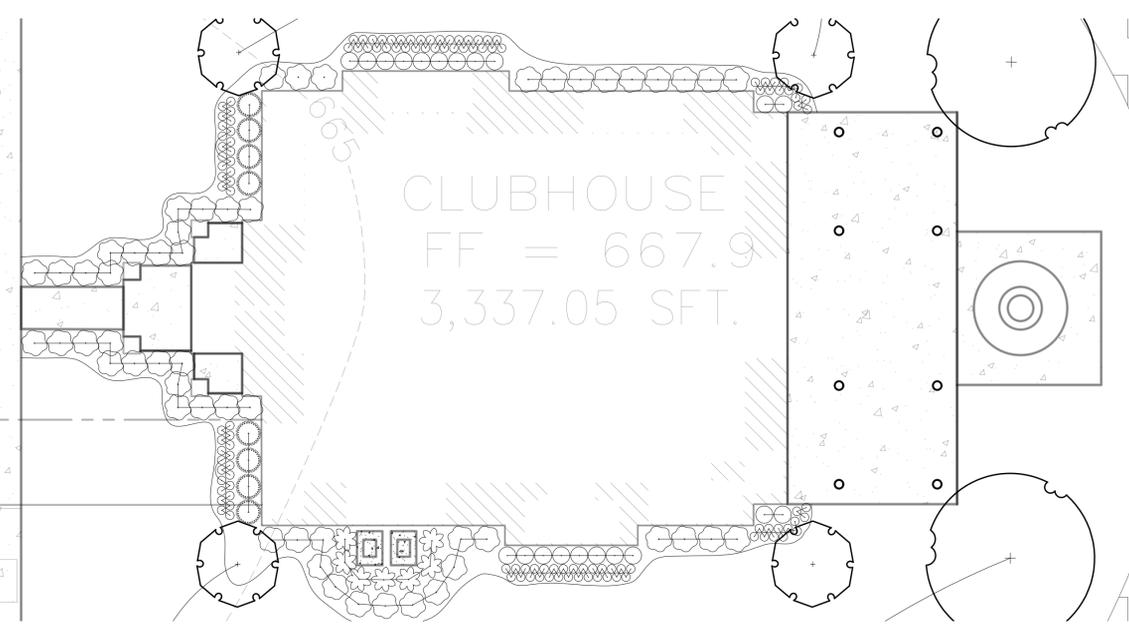
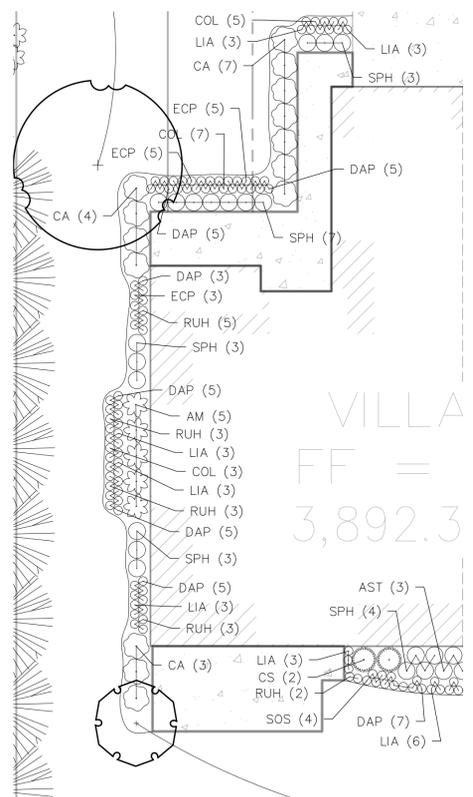
FILE: 2016-106-SHEETS	PROJECT MGR: JDM	DESIGNED BY: SAL	M.M.D.	DRAWN BY: M.M.D.	CHECKED BY:	SCALE:	SHEET: 12 OF 15
PROJECT LOG	START DRAWING	PLANNING	COMMISSION	SUBMITTAL	04-15-16	5/20/16	

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

D&M SITE INC., Inc.
Surveying • Inspection • Testing • Engineering
401 BALSAM STREET, PO BOX 159, CARROLLTON, MICHIGAN 48724
PHONE: (989) 752-0880 • FAX: (989) 752-0880

DETAIL SHEET

C4.1
2016.106



PREPARED UNDER THE SUPERVISION OF:

PROJECT LOG

FILE: 2016-106-SHEETS	PROJECT MGR: JDM	DESIGNED BY: SAL	DRAWN BY: M.Mgd.	CHECKED BY:	SCALE: 1"=10'	SHEET: 15 OF 15
START DRAWING						

PRIMROSE RETIREMENT COMMUNITIES
SECTION 1, T14N-R2E
CITY OF MIDLAND
MIDLAND COUNTY, MICHIGAN

PRIMROSE RETIREMENT COMMUNITIES
815 NORTH 2nd
ABERDEEN, S. DAKOTA 57401
MR. BRAD ANDERGA

SITE PLAN

D&M SITE INC.
Surveying, Inspection, Testing, Engineering
401 BALSAM STREET PO BOX 159, CARROLLTON, MICHIGAN 48724
PHONE (989) 752-4500 FAX (989) 752-6000

L1.1
2016.106



ZP #607

Date: June 8, 2016

STAFF REPORT TO THE PLANNING COMMISSION

SUBJECT: ZONING AMENDMENT ZP #607 REZONING REQUEST

APPLICANT: Wahlack LLC

LOCATION: 204 Commerce Drive

AREA: 18.38 acres

ZONING: EXISTING Residential A (Larkin Twp.)
PROPOSED RA-4

ADJACENT ZONING: North: Residential A (Larkin Twp.)
East: Residential A (Larkin Twp.)
South: Residential A (Larkin Twp.)
West: RB and CC (City of Midland)

ADJACENT DEVELOPMENT: North: Agricultural/vacant (Larkin Twp.)
East: Sparse residential (Larkin Twp.)
South: Agricultural/vacant (Larkin Twp.)
West: Developing multiple family residential (City of Midland)

REPORT

Zoning Petition No. 607, initiated by Wahlack LLC, proposes to rezone property located at 204 Commerce Drive from Larkin Township zoning Residential A to City of Midland zoning RA -4 Residential. The proposed zoning district would permit both one and two family dwellings, whereas the existing RA-2 district permits only one family dwellings. It is understood that the zoning petition is intended to facilitate future development of the site.

BACKGROUND

This parcel was the subject of two earlier petitions to rezone both this parcel and the lands to the immediate west. The first petition proposed RB Multiple Family Residential zoning and was rescinded prior to a final decision in 2010. The second petition proposed RA-4 zoning on the parcel to the west, and RA-2 zoning on the lands subject to the current petition. The second zoning petition was approved in July of 2011.

A subsequent zoning petition was submitted on the parcel to the immediate west in 2014. That petition was approved in July of 2014, rezoning the parcel to RB Multiple Family Residential but with conditions limiting the maximum density to 7 units per acre and the maximum building height to 18.5 ft. Development of that parcel is just now underway.

The intent of the Residential Districts is to primarily provide for single family and two-family detached residential development. The RA-1, RA-2, RA-3, and RA-4 Districts have different minimum area, density, and building placement requirements to provide different housing types to accommodate the varied needs of the population.

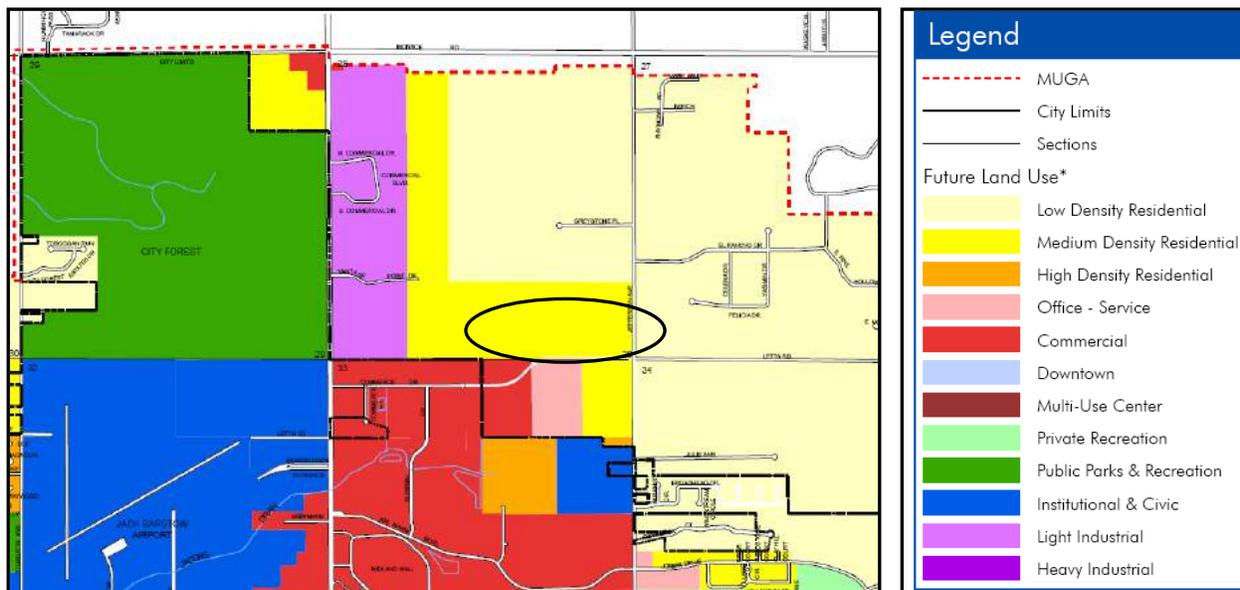
It is further the intent of these Districts to permit a limited range of uses that are related to and compatible with residential land use, and which would contribute to the richness and stability of neighborhoods. Uses that would interfere with the quality of single family residential life are prohibited in these districts.

This property was annexed into the City on November 6, 2009.

ASSESSMENT

In accordance with Section 30.03(D) of the Zoning Ordinance, the Planning Commission and City Council shall at minimum, consider the following before taking action on any proposed zoning map amendment:

1. Is the proposed amendment consistent with the City's Master Plan?



Yes.

The Future Land Use map of the City's Master Plan identifies this property as medium density. Medium density is defined as residential densities not exceeding 10 dwelling units per acre.

The RA-4 zoning district requires a minimum lot size of 7,200 sq. ft. for single family dwellings and 9,000 sq. ft. for two family dwellings. Deducting 10% of acreage for infrastructure use and assuming all lots are 7,200 sq. ft., the effective density could be 5.4 du/acre or 100 single family lots on 18.38 acres of RA-4.

Using the same method to calculate the maximum density for two family structures in RA-4, and assuming all lots are 9,000 sq. ft., there could be up to 80 lots, each with a two family dwelling on it, yielding a density of 8.7 du/acre.

Assuming the maximum density is developed in each of these zoning classifications, the density could be between 5.4 du/acre and 8.7 du/acre, depending on how many lots are developed as single family and how many are two family. This range of densities falls into the medium density category of land use and is consistent with the intended use of RA-4 zoning to implement the Medium Density Residential land use policies of the Master Plan.

2. Will the proposed amendment be in accordance with the intent and purpose of the Zoning Ordinance?

Yes. In staff's opinion, the proposed rezoning would promote the intent of the zoning code through reclassification of the parcel as stated (outlined below) in the City's zoning code.

Section 1.02 B INTENT

It is the purpose of this Zoning Ordinance to promote the public health, safety, comfort, convenience, and general welfare of the inhabitants of Midland by encouraging the use of lands and natural resources in accordance with their character, adaptability and suitability for particular purposes; to enhance social and economic stability; to prevent excessive concentration of population; to reduce hazards due to flooding; to conserve and stabilize the value of property; to provide adequate open space for light and air; to prevent fire and facilitate the fighting of fires; to allow for a variety of residential housing types and commercial and industrial land uses; to minimize congestion on the public streets and highways; to facilitate adequate and economical provision of transportation, sewerage and drainage, water supply and distribution, and educational and recreational facilities; to establish standards for physical development in accordance with the objectives and policies contained in the Master Plan (Comprehensive Development Plan); and to provide for the administration and enforcement of such standards.

3. Have conditions changed since the Zoning Ordinance was adopted that justifies the amendment?

Yes. Conditions that impact this parcel have changed since the zoning ordinance was adopted. Commerce Drive was extended to intersect with Jefferson in 2007, creating additional access to the parcel. As a result, the parcel was eligible for annexation, which occurred in 2009. There has been continued commercial development at the mall and on Jefferson with the addition of a large religious institution, senior care facility and two banks in the vicinity. Additional residential development that is multiple family residential in nature but still medium density in form, is developing on the parcel to the immediate west.

4. Will the amendment merely grant special privileges?

No. The immediate area has been planned for residential development for many years by Larkin Township and now by the City. The proposed use of the subject parcel and those of the adjoining parcels are suitable for low and medium density housing in the future. The proposed zoning will coordinate well with existing land uses in the area.

5. Will the amendment result in unlawful exclusionary zoning?

No. The zoning amendment would continue a pattern of zoning designation that is consistent with the general pattern of development in the area and in a manner that would not be considered exclusionary.

6. Will the amendment set an inappropriate precedent?

No. The zoning petition is supported by the city's Master Plan.

7. Is the proposed zoning consistent with the zoning classification of surrounding land?

Yes. Surrounding lands exhibit a pattern of mixed use and mixed zoning. The proposed zoning will permit one and two family dwellings, which are considered appropriate use types given surrounding one family, multiple family and even community commercial zoning.

8. Is the proposed zoning consistent with the future land use designation of the surrounding land in the City Master Plan?

Yes. The current Master Plan, adopted in 2007 and the previous Master Plan, adopted in 1997, support this parcel and the area in general as being appropriate for residential uses.

9. Could all requirements in the proposed zoning classification be complied with on the subject parcel?

Yes. The parcel could meet all of the Residential A-4 zoning requirements for new developments.

10. Is the proposed zoning consistent with the trends in land development in the general vicinity of the property in question?

Yes. This zoning classification of RA-4 as proposed will be consistent with the existing and anticipated land uses in the area. Commercial and office service development is expected to continue to the south and southwest but can be planned in such a way to be consistent with medium density residential uses in this area.

STAFF RECOMMENDATION

Upon review of the requested zoning change, staff recommends approval of the rezoning petition for the following reasons:

- The proposed zoning is a reasonable and logical extension of existing residential zoning in the area.

- RA-4 zoning is a reasonable and appropriate zoning classification that will permit development of the subject lands for uses compatible with the adjacent development multiple family development and the existing single family residential uses scattered over properties to the north and east.
- RA-4 zoning would continue the development pattern envisioned by the City of Midland Master Plan.
- The proposed zoning district is considered appropriate given the anticipated future development patterns in the area.

PLANNING COMMISSION ACTION

Staff currently anticipates that the Planning Commission will hold a public hearing on this request during its regular meeting on June 14, 2016 and will formulate an appropriate recommendation to City Council thereafter. If recommended to City Council the same evening, we anticipate that on June 27, 2016 the City Council will set a public hearing on this matter. Given statutory notification and publication requirements, the City Council will schedule a public hearings for July 18, 2016 at which time a decision will be made on each proposed zoning change. Please note that these dates are merely preliminary and may be adjusted due to Planning Commission action and City Council agenda scheduling.

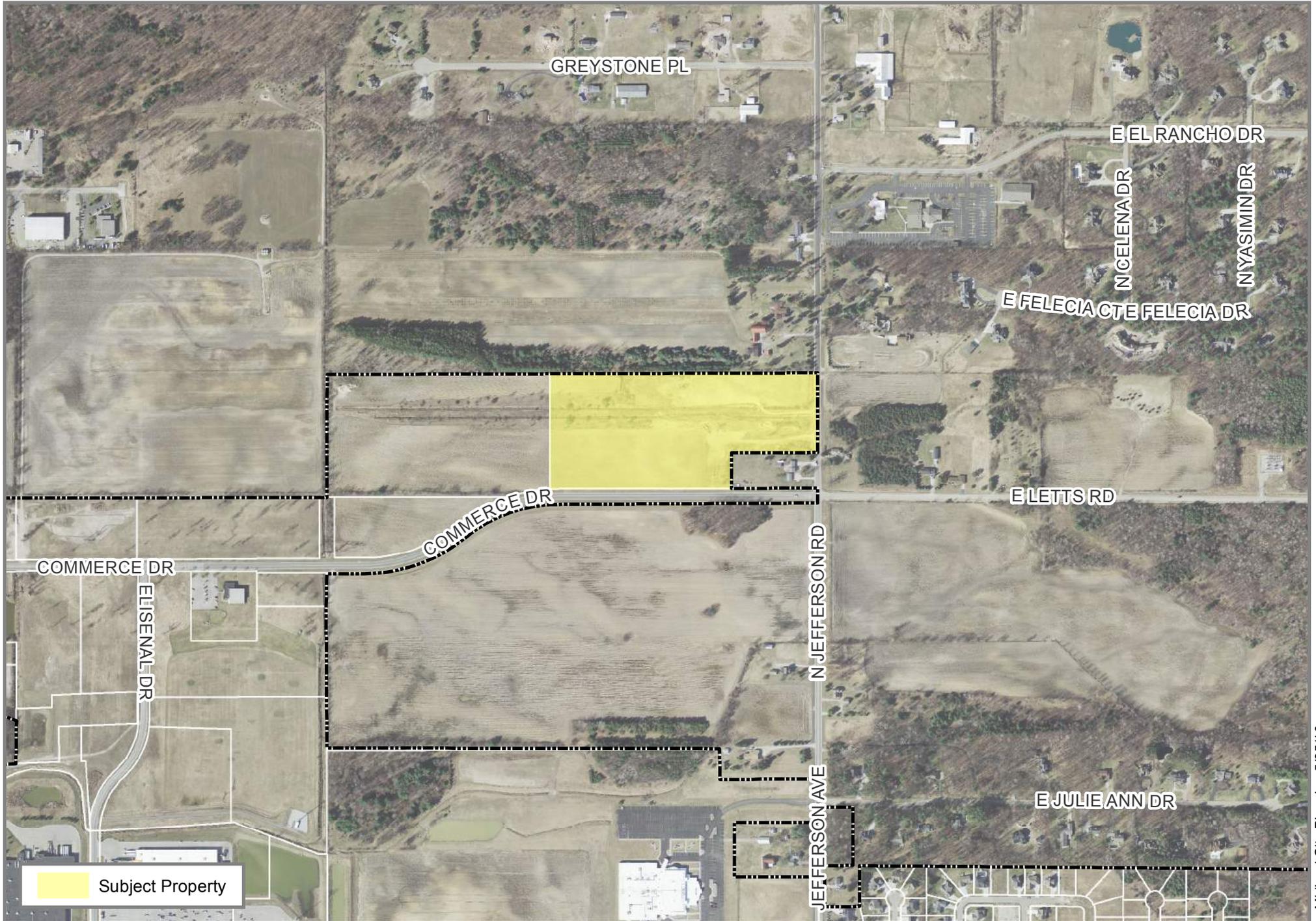
Respectfully Submitted,



C. Bradley Kaye, AICP
Assistant City Manager for Development Services

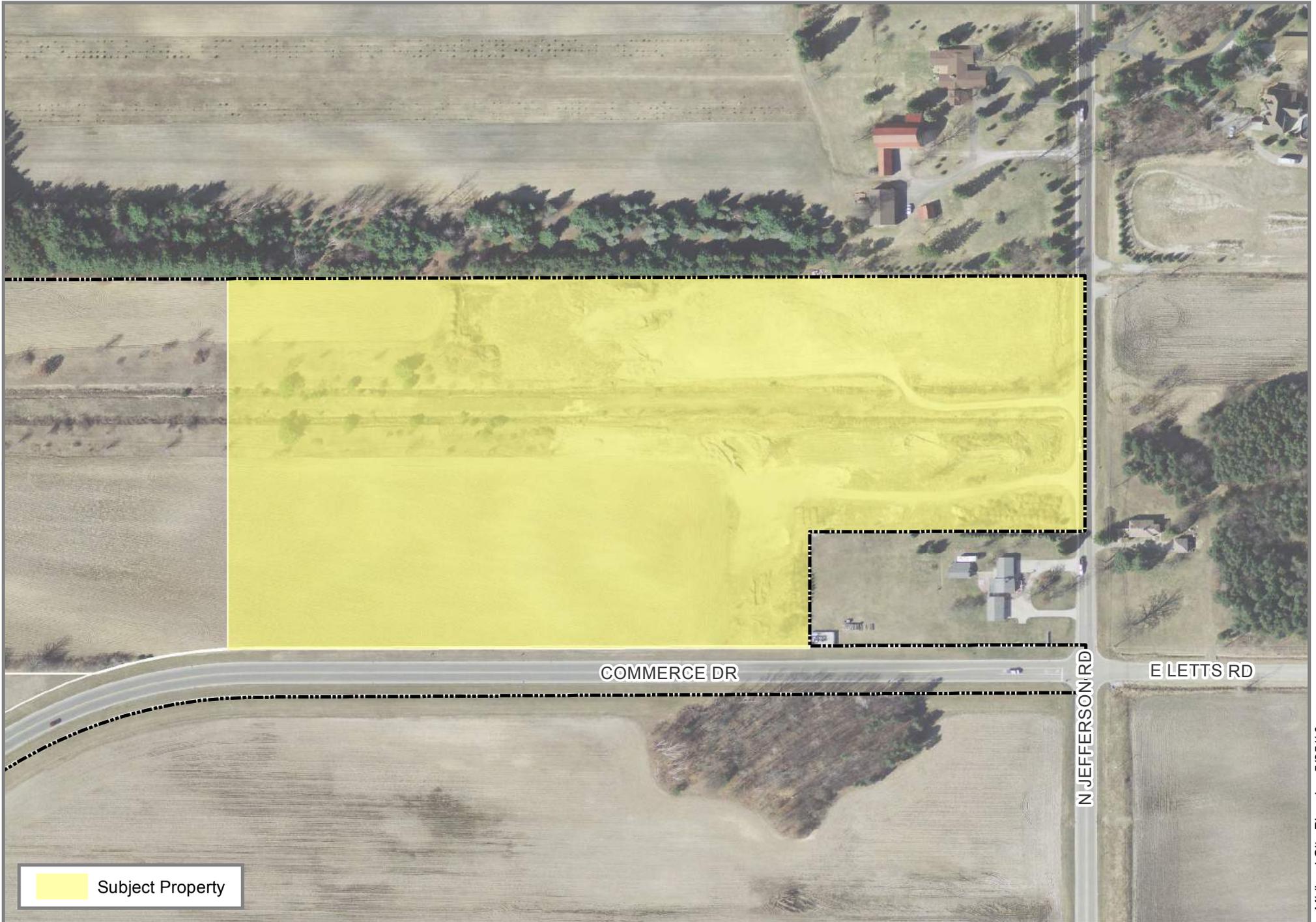
ZP #607 | RA-2 Residential to RA-4 Residential

> 204 Commerce Drive - Wahlack, LLC



ZP #607 | RA-2 Residential to RA-4 Residential

> 204 Commerce Drvie - Wahlack, LLC



COMMERCE DR

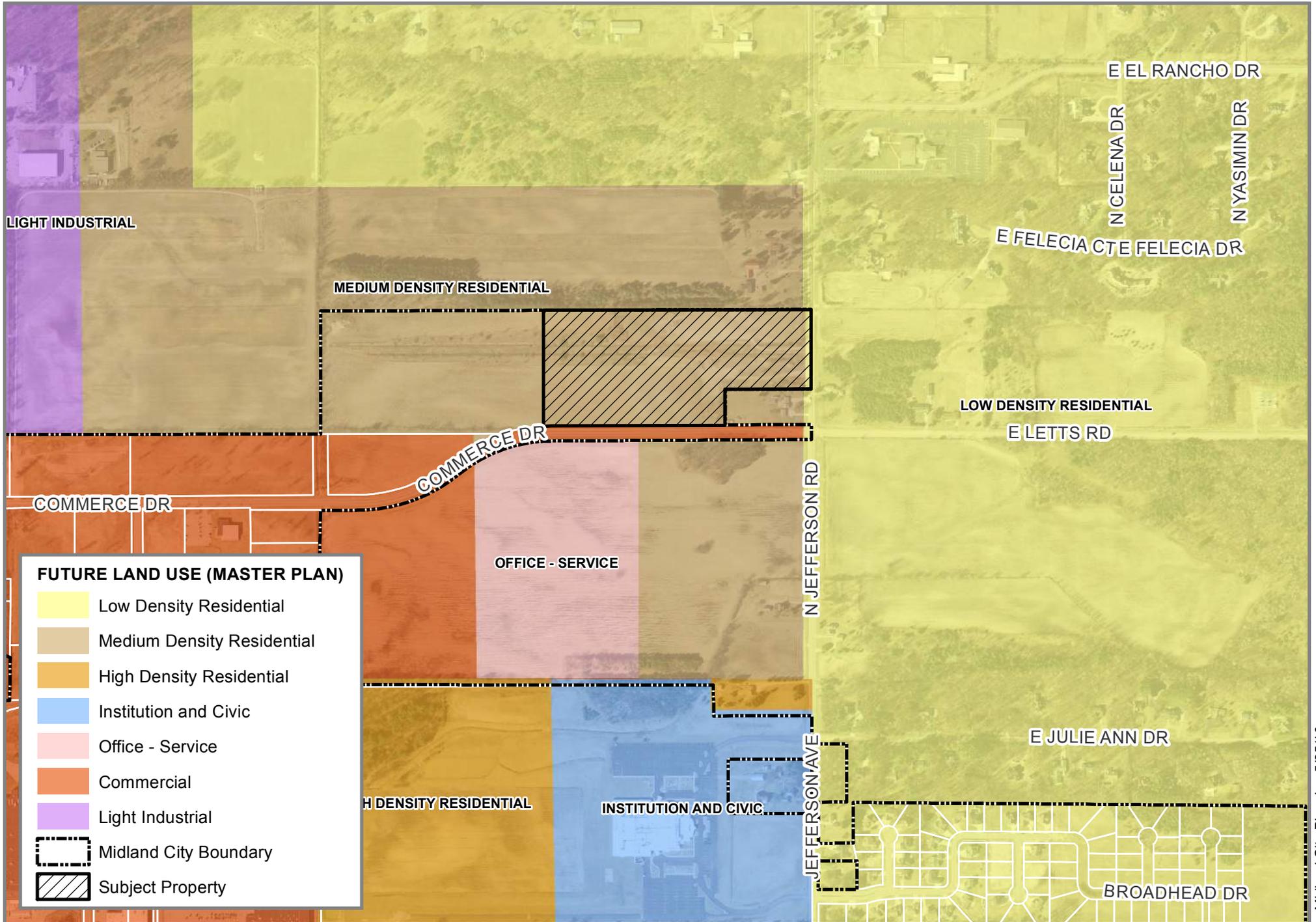
E LETTS RD

N JEFFERSON RD

 Subject Property

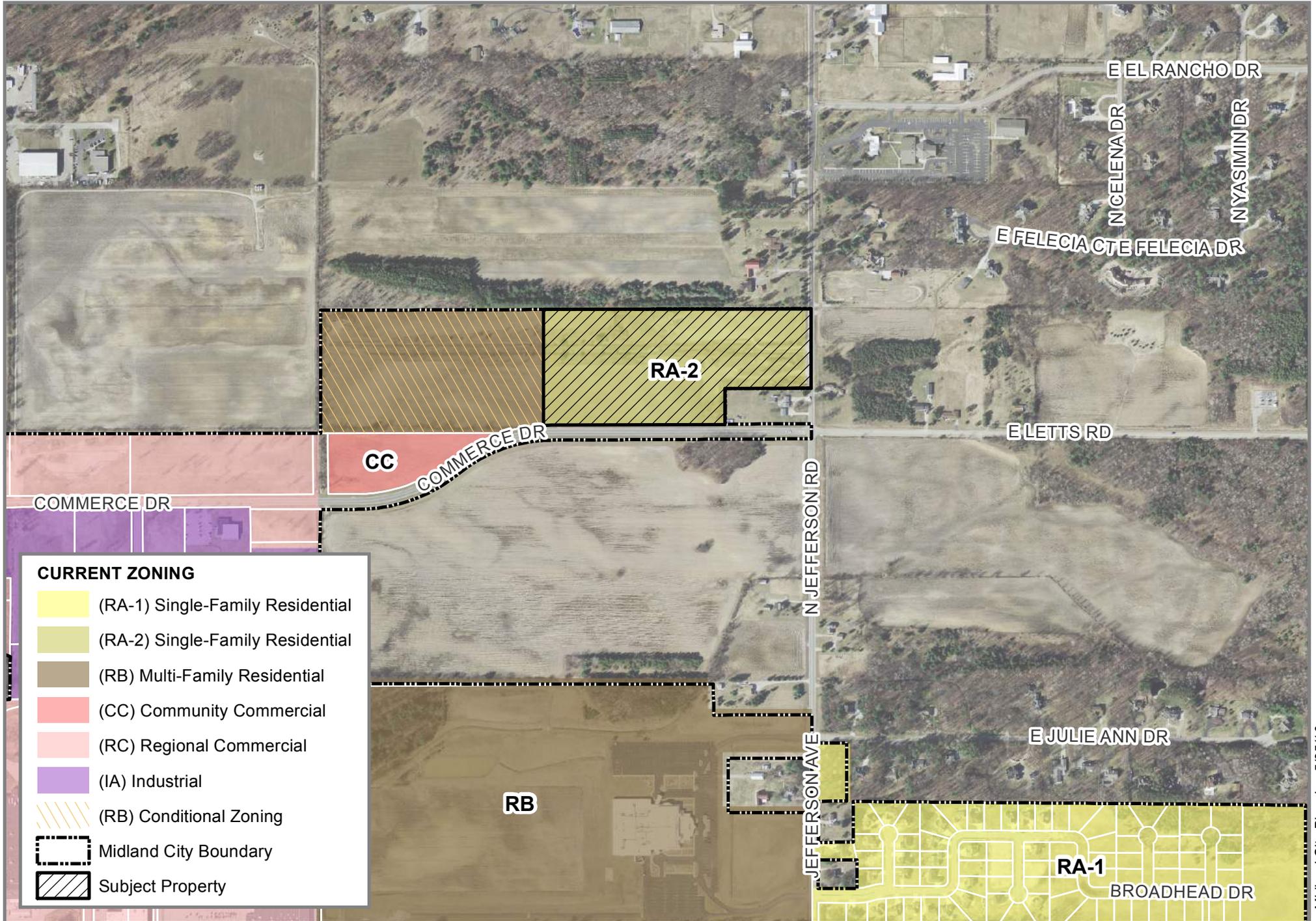
ZP #607 | RA-2 Residential to RA-4 Residential

> 204 Commerce Drive - Wahlack, LLC



ZP #607 | RA-2 Residential to RA-4 Residential

> 204 Commerce Drive - Wahlack, LLC





Center City Overlay District

Date: June 8, 2016

STAFF REPORT TO THE PLANNING COMMISSION

SUBJECT: Center City Overlay Zoning District – Temporary Signage Provisions
APPLICANT: Staff Proposal on behalf of the Center City Authority
PROPOSED: Temporary Signage Provisions to be added to the Center City Overlay Zoning District

REPORT

BACKGROUND

In the fall of 2015, Midland City Council approved the establishment of the Center City Overlay Zoning District (CCO) as recommended by the Planning Commission and Center City Authority Board. This district encompasses the full extent of the Center City Authority (CCA), a Corridor Improvement Authority, along South Saginaw Road and Washington Street from Ashman Circle to Patrick Road. To date, the zoning provisions of the CCO district relate to permanent signage, including standards for ground signs, wall signs, projecting signs, and sandwich/board a-frame signs. The district standards do not, however, address any form of temporary signage.

In the early part of 2016, at the request of the CCA, city staff began working with the CCA's Physical Improvements Committee on drafting regulatory standards for temporary signage within the CCO district. In addition, the current sandwich/board sign standards were also reviewed and proposed revisions were drafted. The following outlines the proposed revisions and additions to the CCO district signage regulations, as recommended for approval by the CCA Board during its meeting on April 20, 2016.

During the meeting of May 10, 2016, city staff presented the contents of the proposal to the Planning Commission for initial review. After reviewing the information, the Planning Commission directed staff to schedule the public hearing for June 14 on the proposed text amendments in accordance with Article 30 of the Zoning Ordinance.

PROPOSAL DETAILS

Enclosed following this report is the proposed ordinance language within Article 8, the portion of the Zoning Ordinance that regulates signage, which addresses the amendments explained below. The ordinance language changes have been reviewed and approved by the City Attorney's Office. The changes (on pages 8-6, 8-7, & 8-17) are **bolded** and

highlighted in yellow. **[Example]**

A review of the proposal details in simple explanation form follows below:

Temporary Banner Signs

In the Zoning Ordinance, a Banner Sign is defined as “a sign made of fabric or any non-rigid material with no enclosing framework.” This definition includes:

- Wall mounted banners
- “Feathers” (ground mounted banners that are similar to a tall vertical flag)

Proposed Temporary Banner Regulations within CCO:

➤ Maximum Size:	32 square feet*
➤ Maximum Height:	15 feet*
➤ Type of Sign Permitted:	Plastic or Fabric*
➤ Setback Requirement:	Shall not be placed in the right of way.
➤ Permit Required:	Yes (30 days/permit)
➤ Max. Permits Per Year	4 (120 days)

Sandwich Board Signs

Currently, the Zoning Ordinance stipulates that sandwich board signs must be portable and free-standing in design in all districts where permitted. In the CCO district only, sandwich board signs must be:

- Constructed using high-quality materials;
- Placed on an improved, pedestrian-oriented surface;
- Located within eight (8) feet of the pertaining establishment’s main entrance; and
- Permitted outdoors only during business hours.

However, the district regulations do not specify how many sandwich board signs are permitted per business establishment. As such, the CCA Board is proposing revised regulations to address this omission and to adjust the amount of square footage allowed per establishment.

Proposed Sandwich Board Sign Regulations:

➤ Maximum Size:	46 12 square feet
➤ Number Permitted Per Establishment:	1 per entrance, total between all sandwich board signs not to exceed 12 square feet.



Banner Sign Samples



“Feather” Sign Sample



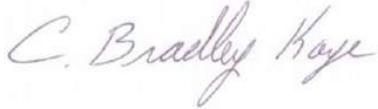
Sandwich Board Sign

PLANNING COMMISSION CONSIDERATION

Staff has brought this proposal in front of the Commission by request of the Center City Authority Board. Following initial review, the Commission directed staff to move forward with the amendment procedures in accordance with Article 30 of the Zoning Ordinance. Article 30 stipulates that a public hearing will be held by both the Planning Commission and City Council as part of the consideration of the amendment.

The Planning Commission public hearing on this matter will take place on June 14, 2016. If agreeable to the Commission, a recommendation can be formulated to City Council during that evening. If formulated during the June 14 meeting, staff anticipates that on June 27, 2016 the City Council will set a public hearing on this matter. Given the statutory notification and publication requirements, the City Council public hearing would then be scheduled for July 18, 2016. Please note that these dates are merely preliminary and may be adjusted due to Planning Commission action and City Council agenda scheduling.

Respectfully Submitted,

A handwritten signature in cursive script that reads "C. Bradley Kaye".

C. Bradley Kaye, AICP, CFM
Assistant City Manager for Development Services

/grm

ARTICLE 8.00

SIGNS

Section 8.01 -- PURPOSE

The purpose of these sign regulations is to establish requirements for signs and other displays that are needed for identification or advertising, subject to the following objectives:

1. **Safety.** The requirements with regard to placement, installation, maintenance, size and location of signs are intended to minimize distractions to motorists, maintain unobstructed vision for motorists, protect pedestrians, and otherwise minimize any threat to public health or safety.
2. **Aesthetics.** Signs should enhance the aesthetic appeal of the City. Thus, these regulations are intended to: 1) regulate signs that are out-of-scale with surrounding buildings and structures, 2) prevent an excessive accumulation of signs, and 3) encourage signs that enhance the appearance and value of the business districts.
3. **Equal protection and fairness.** These regulations are designed to be fair to each property owner by establishing uniform standards that provide adequate exposure to the public for all property owners.
4. **Land use planning objectives.** The placement and design of signs should further the land use planning objectives of the City, and protect neighborhood character and the value of surrounding properties.

Section 8.02 -- SCOPE OF REQUIREMENTS

No sign may be erected, relocated, enlarged, structurally changed, painted, or altered in the City unless in conformance with the standards and procedures set forth in this Article, including the issuance of a permit except as otherwise provided herein.

Section 8.03 -- ENFORCEMENT

A. Plans, Specifications, and Permits

1. Permits

It shall be unlawful for any person to erect, alter, relocate, enlarge, or structurally change a sign or other advertising structure, unless specifically exempted by these regulations, without first obtaining a permit in accordance with the provisions set forth herein. A permit shall require payment of a fee, as established in Section 21.29 of the Code of Ordinances of the City of Midland.

2. Applications

Application for a sign permit shall be made upon forms provided by the Building Department. The following information shall be required:

- a. Name, address, and telephone number of the applicant.
- b. Location of the building, structure, or lot on which the sign is to be attached or erected.
- c. Position of the sign in relation to nearby buildings, structures, and property lines.

- d. Plans and specifications showing the dimensions, materials, method of construction, and attachment to the building or in the ground.
- e. Copies of stress sheets and calculations, as required by the Building Code.
- f. Name and address of the person, firm, or corporation owning, erecting, and/or maintaining the sign.
- g. Location and square footage areas of all existing signs on the same premises.
- h. Information concerning required electrical connections.
- i. Insurance policy or bond, as required in this Article.
- j. Written consent of the owner and/or lessee of the premises upon which the sign is to be erected.
- k. Other information required by the Building Official to make the determination that the sign is in compliance with all applicable laws and regulations.

3. **Review of Application**

a. Planning Commission Review

Sign proposals submitted in conjunction with the proposed construction of a new building or addition to an existing building that requires review by the Planning Commission shall be shown on the site plan.

b. Building Official Review

The Building Official shall review the sign permit application for any proposed sign.

c. Issuance of a Permit

A sign permit shall be approved if the application meets all of the standards of this Article or if a variance has been granted for the sign. Following review and approval of a sign application, the Building Official shall have the authority to issue a sign permit. A sign permit shall become null and void if the work for which the permit was issued has not been completed within a period of sixty (60) days after the date of the permit.

4. **Exceptions**

A new permit shall not be required for ordinary servicing, sign face replacement, repainting of an existing sign message, cleaning of a sign, or changing of the message on the sign where the sign is designed for such changes (such as lettering on a marquee). Furthermore, a permit shall not be required for certain exempt signs listed in Section 8.05, sub-section A. However, an electrical permit shall be required for all signs that make use of electricity.

B. Inspection and Maintenance

1. **Inspection of New Signs**

All signs for which a permit has been issued shall be inspected by the Building Official when erected. Approval shall be granted only if the sign has been constructed in compliance with the approved plans and applicable Zoning Ordinance and Building Code standards.

All signs requiring permits under this Ordinance shall have affixed to them an identification tag as provided by the sign contractor. Said identification tag will be affixed by the City to indicate compliance with the provisions of this Article. It shall be the responsibility of the owner of a sign to see that said identification tag is replaced, should it be removed for any reason.

In cases where fastenings or anchorages are to be eventually bricked in or otherwise enclosed, the sign erector shall advise the Building Official when such fastenings are to be installed so that inspection may be completed before enclosure.

2. Inspection of Existing Signs

The Building Official shall have the authority to routinely enter onto property to inspect existing signs.

3. Maintenance

All signs shall be maintained at all times in a safe and secure manner. Exposed surfaces shall be cleaned and painted as necessary. Broken and defective parts shall be repaired or replaced.

4. Correction of Violations

- a. If the Building Official finds that any sign is in violation of this ordinance, the official shall notify one or more of the responsible persons to correct the violations by repair, removal or other action, within a timetable established by the official.
- b. The notice provided in Subsection (a) may be accompanied or followed by a written order, sent to the responsible persons, requiring correction of violations by repair, removal or other action within thirty (30) days. Where there is imminent danger to public safety, immediate removal or action may be required.
- c. For purposes of this Section, responsible persons include the owner(s) of the building, structure or premises upon which the sign is located.

C. Removal of Obsolete Signs

Any sign that identifies a business that is no longer in operation, or that identifies an activity or event that has already occurred, or a product that is no longer made, shall be considered abandoned and shall be removed by the owner, agent, or person having use of the building or structure. Upon vacating a commercial or industrial establishment, the proprietor shall be responsible for removal of all signs used in conjunction with the business.

However, where a conforming sign structure and frame are typically reused by a current occupant in a leased or rented building, the building owner shall not be required to remove the sign structure and frame in the interim periods when the building is not occupied, provided that the sign structure and frame are maintained in good condition.

D. Nonconforming Signs

No nonconforming sign shall be altered, enlarged or reconstructed, unless the alteration or reconstruction is in compliance with Article 4.00 of the Zoning Ordinance, and the following regulations:

1. Repairs and Maintenance

Normal maintenance shall be permitted, provided that any nonconforming sign that is destroyed by any means to an extent greater than fifty percent (50%) of the sign's pre-catastrophe fair market value, exclusive of the foundation, shall not be reconstructed. Normal maintenance shall include painting of chipped or faded signs; replacement of faded or damaged surface panels; or, repair or replacement of electrical wiring or electrical devices.

2. Nonconforming Changeable Copy Signs

The sign face or message on a nonconforming changeable copy sign or nonconforming bulletin board sign may be changed provided that the change does not create any greater nonconformity.

3. Substitution

No nonconforming sign shall be replaced with another nonconforming sign. However, the panel containing the message may be replaced with a different message without affecting the legal nonconforming status of a sign, provided that the sign structure or frame is not altered.

E. Appeal to the Zoning Board of Appeals

Any party who has been refused a sign permit for a proposed sign or received a correction or removal order for an existing sign may file an appeal with the Zoning Board of Appeals, in accordance with Article 29.00 of the Zoning Ordinance.

F. Enforcement

Placards, posters, circulars, showbills, handbills, election signs, cards, leaflets or other advertising matter, except as otherwise provided herein, shall not be posted, pasted, nailed, placed, printed, stamped or in any way attached to any fence, wall, post, tree, sidewalk, pavement, platform, pole, tower, curbstone or surface in or upon any public easement, right-of-way or on any public property whatsoever. Nothing herein shall prevent official notices of the City, school districts, County, State or Federal Government from being posted on any public property deemed necessary.

All placards, posters, circulars, showbills, handbills, election signs, cards, leaflets or other advertising matter posted, pasted, nailed, placed, printed, stamped on any right-of-way or public property may be removed and disposed of by City enforcement officials without regard to other provisions of this Ordinance.

Section 8.04 -- GENERAL PROVISIONS**A. Permitted Exempt Signs**

A sign permit shall not be required for the following signs, which shall be permitted subject to applicable provisions herein:

1. Address numbers in compliance with Section 304.3 of the International Property Maintenance Code.
2. Nameplates identifying the occupants of the building, not to exceed two (2) square feet.
3. Public signs, including the authorized signs of a government body or public utility, including traffic signs, legal notices, railroad crossing signs, warnings of a hazard, and similar signs.
4. Flags bearing the official design of a nation, state, municipality, educational institution, or noncommercial organization.
5. Incidental signs, including home occupations complying with this ordinance, provided that total of all such signs shall not exceed two (2) square feet.
6. Portable real estate "open house" signs with an area no greater than three (3) square feet.
7. Real Estate signs, subject to the requirements in Section 8.05.
8. Construction signs, subject to the requirements in Section 8.05.
9. Plaques or signs designating a building as a historic structure, names of public and quasi-public buildings, churches, schools, dates of erection, monumental citations, commemorative tablets, and the like.
10. "No Trespassing," "No Hunting," and "No Dumping" signs, provided that no individual sign is greater than four (4) square feet in area.

11. Signs used to direct vehicular or pedestrian traffic to parking areas, loading areas, or to certain buildings or locations on the site, subject to the following conditions:
 - a. Directional signs shall not contain logos or other forms of advertising.
 - b. Individual directional signs shall not exceed six (6) square feet in area.
 - c. Directional signs may be located in any required setback area, but may not be located in a right-of-way.
 - d. Any sign not visible off the property.
12. Window signs.
13. Changing of advertising copy or message on an approved painted or printed sign or billboard or on a theatre marquee and similar approved signs which are specifically designed for the use of replaceable copy.
14. Painting, repainting, cleaning and other normal maintenance and repair of a sign or sign structure unless a structural change is made.

B. Prohibited Signs

The following signs are prohibited in all districts:

1. Any sign not expressly permitted.
2. Signs that incorporate flashing or moving lights or screens capable of displaying moving images that flash or move or otherwise change at intervals of less than six (6) seconds. These signs distract drivers and impact traffic safety.
3. Moving signs, including any sign which has any visible moving parts, visible revolving parts, visible mechanical movement, or other visible movement achieved by electrical, electronic, or mechanical means, including movement caused by normal wind current. These signs distract drivers and impact traffic safety.
4. Obsolete signs.
5. Signs affixed to a parked vehicle or truck trailer which is being used principally for advertising purposes rather than for transportation purposes.
6. Any sign which obstructs free access to or egress from a required door, window, fire escape, driveway or other required exit from a building or premises.
7. Any sign unlawfully installed, erected, enlarged, altered, moved or maintained.
8. Signs on street furniture including, but not limited to, signs on benches and trash receptacles.
9. Off-premise advertising signs.

C. Temporary Signs

Temporary signs shall be permitted as specified in Table 8.1:

TABLE 8.1: TEMPORARY SIGN STANDARDS

Type of Sign	Districts Permitted	Type of Sign Permitted	Maximum Size	Maximum Height	Maximum Number Per Parcel	Permit Required	Required Setback	Permitted Duration [g]
Construction Sign	AG, RB, Office, Commercial, DNO, LCMR, Industrial	Ground or Wall	32 sq. ft.	15 ft.	1	No	[a]	From: issuance of Building Permit To: 14 days after occupancy.
	RA-1, RA-2, RA-3, RA-4	Ground or Wall	12 sq. ft.	3.5 ft.				
Real Estate - sale or lease of individual home or residential lot	Residential	Ground	12 sq. ft.	3.5 ft.	1[b]	No	[d]	Remove within 14 days of completion of sale or lease
Real Estate - sale or lease of individual business or vacant lot	Office, Commercial, LCMR, Industrial, DNO	Ground or Wall	32 sq. ft.	10 ft.	1[b]	No	[d]	Remove within 14 days of completion of sale or lease
Real Estate - sale or lease of unplatted vacant	All	Ground	32 sq. ft.	10 ft.	1[b]	No	[a]	Remove within 14 days of completion of sale land or lease
Real Estate Development Sign	All	Ground	32 sq. ft.	10 ft.	[c]	No	[a][f]	Remove after 75% of units or lots are built
Grand Opening Sign	Commercial	Ground or Wall	16 sq. ft.	10 ft.	1	Yes	[d]	30 days
Garage Sale Sign	Residential	Ground or Wall	6 sq. ft.	30"	--	No	[d]	4 consecutive days
Community Special Event Sign	All	[e]	[e]	[e]	[e]	Yes	[d]	Duration of the event
Election Sign	All	Ground or Wall	32 sq. ft.	5 ft.	[i]	No	[d]	Remove within 14 days of the election
Banner Signs	CC, CCO RC, LCMR, IA, IB	Plastic or Fabric	32 sq. ft.	15 ft.	1	Yes	[d]	30 days [k]
Real Estate Signs	[h]	Plastic or Fabric	32 sq. ft.	15 ft.	1[j]	No	[d]	[h]
Pennants	[h]	Plastic or Fabric	--	--	--	No	[d]	[h]
Personal Special Occasion Signs	Residential Districts	Per definition in Section 2.03	25 sq. ft.	8 ft.	1	No	[a]	5 consecutive days

Footnotes

- [a] The temporary sign shall be set back from any property or right-of-way line a distance equal to the height of the sign.
- [b] On a corner parcel two (2) signs, one (1) facing each street, shall be permitted.
- [c] Two (2) on-premise signs shall be permitted on private property within the development and shall not be located within five hundred (500) feet of one another.
- [d] The temporary garage sale signs may be located in the area between the curb or road edge and the property line (the outlawn). Signs located in the right of way.
 1. May not exceed 30” in height above the level of the crown of the road.
 2. Each sign must have the owner’s name and address on it.
 3. Permission from the property owner must be obtained.
 4. Signs in the right of way must not obstruct vehicular or pedestrian traffic.
 5. Signs may be placed in the right of way from 8:00am Thursday until 8:00am Monday the week of the sale. Signs must be removed by 8:00am Monday.
- [e] Community special event signs may include banners or other devices advertising a public entertainment or event, if specially approved by the City Manager or his authorized representative.
- [f] Real estate development signs shall not be erected within fifty (50) feet of any occupied dwelling unit.
- [g] The Building Official may require a performance bond to assure proper removal of temporary signs upon expiration of the permitted duration.
- [h] Banners and pennants for the purpose of advertising real estate open houses and builders parade of homes are permitted in all districts but shall be limited to periods not to exceed seventy-two (72) consecutive hours, no more than four (4) times per calendar year. Banners and pennants for advertising special promotions and events are permitted in all nonresidential districts but shall be limited to periods not to exceed one hundred and sixty-eight consecutive hours, no more than four (4) times per calendar year.
- [i] Total sign area, in aggregate, shall not exceed 32 square feet for residentially zoned parcels.
- [j] All properties on corner lots may erect two (2) real estate signs.
- [k] **The number of banner sign permits in the Center City Overlay District shall not exceed four (4) per calendar year, equating to one-hundred twenty (120) days, per parcel.**

Section 8.05 -- SIGN DESIGN STANDARDS**A. Illumination****1. General Requirements**

Signs shall be illuminated only by steady, stationary, shielded light sources directed solely at the sign, or internal to it.

2. Non-Glare, Shielded Lighting

Use of glaring undiffused lights or bulbs shall be prohibited. Lights shall be shaded so as not to project onto adjoining properties or streets. Signs that incorporate flashing or moving lights, or screens capable of displaying moving images and/or L.E.D. (light emitting diode) sign images shall not be brighter than 500 candelas per square meter during the nighttime hours of 7 p.m. to 7 a.m. The sign must have an automatic dimmer control which produces a distinct

illumination change from a higher, daytime illumination level to the designated nighttime level prescribed above.

3. **Bare Bulb Illumination**

Illumination by bare bulbs or flames is prohibited, except that bare bulbs are permitted on changeable copy signs and theater marquees.

4. **Signs Displaying Moving Images**

Signs that incorporate flashing or moving lights, or screens capable of displaying moving images that flash or move or otherwise change at regular or irregular intervals (e.g. L.E.D. signs) shall be turned off when the businesses or buildings, that they service or provide advertisement for, are located in, bordering, directly adjacent to, or sharing a common property line with any residential zoning districts when those businesses or buildings are not open for business, or special events or other activities.

B. Location

1. **Within a Public Right-of-Way**

No sign shall be located within, project into, or overhang a public right-of-way except as permitted by the City Engineer.

2. **Setback Requirements from Right-of-Way and Street Property Lines**

See table 8.4 for sign setback requirements.

3. **Sight Lines for Motorists**

Signs shall comply with the requirements for unobstructed motorist visibility in Section 3.09A(5) – Unobstructed Sight Distance.

4. **On-Premise Advertising Signs**

On-premise advertising signs shall be located on the parcel of the use to which the sign pertains. If a driveway off the premises services the use, an advertising sign for that use may be allowed at the driveway under the following conditions:

- a. If the driveway services more than one (1) use, a single sign advertising all uses serviced by the driveway is allowed.
- b. All provisions of Table 8.2 are met for the use or uses serviced by the driveway.

C. Measurement

1. **Sign Area**

Sign area shall be computed as follows:

- a. **General Requirements.** The extreme limits of the writing, representation, emblem or any figure or similar character together with any frame or other material forming an integral part of the display shall be enclosed in a circle, square, rectangle, or parallelogram. The street address, in compliance with insert cross reference, and the necessary supports or uprights upon which the sign is placed shall not be enclosed in the aforesaid shape. The area of the shape shall be the sign area.
- b. **Double-Face Sign.** The area of a double-face sign shall be computed using only one (1) face of the sign provided that the two (2) faces are back-to-back, so that only one face is visible at any given time, and at no point are more than three (3) feet apart. If the two faces are of unequal area, the larger face shall be used to determine compliance with sign face area requirements. If the faces are not back-to-back and/or more than three (3) feet apart at any given point, then the area of all sign faces shall be included in determining the area of the sign.

- c. **Add-On Signs.** The area of any add-on signs shall be computed as part of the sign area.

2. **Setback, Height and Distance Measurements**

The following guidelines shall be used to determine compliance with setback, height and distance measurements:

- a. The distance between two signs shall be measured along a straight horizontal line that represents the shortest distance between two signs.
- b. The distance between a sign and a parking lot or building shall be measured along a straight horizontal line that represents the shortest distance between the outer edge of the parking lot or building.
- c. The distance between a sign and a building or property line shall be measured along a straight horizontal line that represents the shortest distance between the sign and the building.
- d. Maximum sign height shall be measured from the top of the sign structure to the lowest adjacent grade within ten (10) feet of the sign.

D. Wall, Ground and Roof Signs

All wall, ground and roof signs shall meet the following provisions:

1. **Area**

The aggregate area of the wall, ground and roof signs a use displays may not exceed the maximum area that Table 8.2 allows for in that zoning district.

2. **Wall Sign Projection**

Wall signs may be painted on or attached to or pinned away from the wall but shall not project from the wall by more than twelve (12) inches.

3. **Wall Sign Height**

The top of the wall sign shall not be higher than the lowest point of the roof (e.g. eaves or parapet).

4. **Roof Sign Height**

The top of the roof sign may not be higher than the roofline of the building.

5. **Ground/Monument Sign Height**

Ground and monument sign height shall be determined by Table 8.2.

E. Projecting Signs

All projecting signs shall comply the following provisions

1. **Clearance**

Projecting signs shall clear sidewalks by a least eight (8) feet and may project no more than four (4) feet from a building.

2. **Placement**

Projecting signs shall project from the wall at an angle of ninety (90) degrees.

3. **Height**

The top of a projecting sign may not extend vertically above one and a half (1 ½) stories above grade.

4. Undercanopy Signs

All undercanopy signs shall comply with the provisions in Section 8.07.F.

Table 8.2: ON-PREMISE ADVERTISING SIGN STANDARDS

Zoning District	Wall and Roof signs				Projecting signs			Ground Signs			
	Area	Height	#	Notes	Area	#	Notes	Area	Height	#	Notes
AG, RA – Permitted Nonresidential Uses	12 sq. ft.	See Section 8.05.D	1	a,b,c	Not Allowed			12 sq. ft.	5 ft.	1	a,b,c,m
RB	12 sq. ft.		1	a,b,c	Not Allowed			18 sq. ft.	5 ft.	1	a,b,c,m
RD	40 sq. ft.		1	b,c	Not Allowed			40 sq. ft.	5 ft.	1	a,b,c,j,m
OS – Permitted Nonresidential Uses	12 sq. ft.			a,b,c,d	Not Allowed			12 sq. ft.	5 ft.	1	a,i,j,k,m
Community	50 sq. ft.				Not Allowed			32 sq. ft.	15 ft.	1	a,j
NC	40 sq. ft.			e,f,g	8 sq. ft.	1	f	40 sq. ft.	8 ft.	1	i,j,m
CC, RC	150 sq. ft.			e,f,g	Not Allowed			100 sq. ft.	20 ft.	1	i,j,k,l
CCO	100 sq. ft.			e,o,p,q	12 sq. ft.	1	r	60 sq. ft.	12 ft.	1	s,t
D	40 sq. ft.			d,e,f,g	8 sq. ft.	1	f	40 sq. ft.	8 ft.	1	l,m
D-O	40 sq. ft.			d,e,f,g	8 sq. ft.	1	f	12 sq. ft.	5 ft.	1	l,m,n
DNO	See Section 8.08 Downtown Northside Overlay (DNO) District Signs										
IA, IB	300 sq. ft.			e,f,g,h	Not Allowed			150 sq. ft.	25 ft.	1	i,j,k
LCMR	150 sq. ft.			e,f,g	Not Allowed			100 sq. ft.	18 ft.	1	i,j,k

Wall, Roof, and Ground Sign Footnotes:

- [a] Places of worship and other religious institutions shall be permitted one (1) additional on-premise advertising sign for each school, parsonage, or other related facility.
- [b] Public and quasi-public buildings and facilities, schools, and places of worship, when combining the name with a sign as permitted in Section 8.04.A.9, may have a total name with sign area of 32 sq. ft.

-
- [c] One (1) residential entranceway or identification sign, either a wall or ground sign, shall be permitted at each entrance to a subdivision, apartment complex or other residential development. The residential entranceway or identification sign shall comply with the provisions of Section 8.06.D.
- [d] Where a site has no ground sign on a site in the D-O district, a sign may run the length of an awning up to the maximum wall sign area allowed in table 8.2.

Wall and Roof Sign Footnotes:

- [e] Where multiple business, office or industrial establishments are located in a single building with common, exterior entrances, the total area of all signs on the parcel may be increased by four (4) square feet for each additional establishment, up to a maximum of thirty-two (32) additional square feet.
- [f] Where multiple business, office or industrial establishments are located in a single building and each has its own exterior entrance, each establishment will be allowed additional wall signage so long as the total wall signage for the entire building does not exceed the Zoning Ordinance requirements. In addition to the maximum sign area permitted by Table 8.2, sign area may be increased based on the street frontage measured at the right of way line on a one to one ratio, up to a maximum of 150 square feet.
- [g] For buildings on corner or through lots, the maximum total area of all wall signs may be increased by fifty percent (50%) where the signage is divided between the two (2) street frontages. The larger of the two (2) signs shall not exceed the maximum sign area permitted by Table 8.2.

Ground Sign Footnotes:

- [h] In the IA and IB districts, the size of all wall signs on each wall where signage is permitted, may be increased if
1. Any point of the principle structure on the wall on which the sign size will be calculated, is more than 200' from the property line abutting a public road, measured from a 90 degree angle at the road right of way. The structure must be located on the property abutting the public road from which the measurement is being taken.
 2. There is at least 200' of frontage on the public road identified in item 1. of this provision.
 3. If items 1. and 2. are met,
 - a. The total signage on a wall facing a public road may be increased by 1 square foot for each foot greater than 200' lineal feet, not to exceed 600 square feet on any one wall.
 - b. Multiple signs may be placed on one wall provided the total square footage on any one wall does not exceed 600 square feet.
 - c. If all walls of the principle structure are less than 200' from the road, the sign may not exceed 300 square feet of total signage on the parcel, per Table 8.2.
 - d. If the property owner chooses not to place any signage on a wall facing a public right of way on a qualifying structure, wall signage, at the size it would have been had it faced the road, may be used on another wall without public road frontage.
 - e. Total wall signage on all walls on any qualifying structure may not exceed 1,200 square feet.
- [i] For large parcels: one (1) additional ground sign is permitted for each six hundred (600) feet of road frontage measured at the right-of-way line over and above six hundred (600) feet. Multiple signs shall be spaced at least two hundred (200) feet apart.

- [j] For corner lots: The maximum area of all ground signs shall not exceed the maximum sign area listed in Table 8.2, except where a parcel has frontage on more than one street, an additional ground sign may be permitted facing the secondary frontage provided it does not exceed one half (1/2) the maximum square footage of the primary ground sign square foot listed in Table 8.2.
- [k] Industrial, Office and Commercial Parks: The ground sign shall not exceed 100 sq. ft. in area. Industrial, Office and Commercial Park identification/directory ground signs that list the names of all of the businesses within the park are permitted at the main entrance. In no case, shall this ground sign be located within the public right of way.
- [l] One additional sign is permitted in the RC, IA, IB, LCMR district if the sign is an entranceway identification sign to a commercial or industrial development, is of monument style and does not exceed eight (8') feet in height or twenty-four (24) square feet. Ground signs are permitted only if the building is set back a minimum of two (2) feet from the property line.
- [m] Only monument ground signs are permitted. Pole mounted ground signs are not permitted due to sign height and underclearance restrictions listed in Table 8.2.
- [n] Ground signs in the D districts shall only be permitted in the side yard setback a distance equal to the building and shall not be permitted between the building and the front lot line.
- [o] In the CCO district, where multiple businesses or office establishments are located in a single building and each has its own exterior entrance, each establishment will be allowed wall signage of 2.0 square feet of wall signage for every lineal foot of tenant lease building frontage, up to a maximum of 100 square feet per tenant. This shall be measured on the face of the building which contains the main entrance to the establishment.
- [p] In the CCO district, business establishments of 30,000 square feet or more of usable floor area may be allowed wall signage of 2.0 square feet for every lineal foot of tenant lease building frontage, which shall be measured on the face of the building which contains the main entrance, up to the amount indicated in the following schedule:

Allowed Wall Signage for Large Scale Establishments (CCO District)	
Usable Floor Area	Wall Signage Maximum Area
30,000-39,999 sq. ft.	200 sq. ft.
40,000-49,999 sq. ft.	240 sq. ft.
50,000+ sq. ft.	280 sq. ft.

- [q] For sites in the CCO district with more than one street frontage (e.g. corner lots, through lots): additional wall signage may be permitted facing the secondary frontage(s) provided it does not exceed 50% of the permitted square footage. For additional secondary frontage signage, one single sign may be no more than 100 square feet.
- [r] Projecting signs shall be permitted provided they are oriented towards pedestrian traffic and have a minimum clearance of eight (8) feet.
- [s] Ground signs in the CCO district must be monument style signs constructed with a base using decorative stone, brick, or enhanced concrete.
- [t] For sites in the CCO district with more than one street frontage (e.g. corner lots, through lots): an additional ground sign may be permitted facing the secondary frontage provided it does not exceed 30 sq. ft. (Half of the maximum square footage of the primary ground sign).

Section 8.06 -- RESIDENTIAL AND AGRICULTURAL DISTRICT SIGNS

The following signs shall be permitted in all districts zoned for residential use:

Table 8.3: GENERALIZED SCHEDULE OF SIGN STANDARDS FOR RESIDENTIAL USES

Type of Sign	Number	Notes
Nameplate	1	2 sq. ft. maximum area
Street Address	Shall comply with Section 304.3 of the International Property Maintenance Code	
Places of Worship	1[a] [b]	
Real Estate Signs	1[b]	12 sq. ft. maximum area
Garage Sale Signs	--	6 sq. ft. maximum area
Residential Entranceway Signs	1[c]	See Subsection 8.07.D
Home Occupation	1	2 sq. ft. maximum area
Non-residential Uses	Shall comply with Table 8.2	

Footnotes:

- [a] One (1) additional sign shall be permitted for each school, parsonage, or other related facility.
 [b] On a corner parcel, or double fronting two (2) signs, one facing each street, shall be permitted.
 [c] One (1) sign is permitted at each entrance to a subdivision, apartment complex or residential development.

A. Nameplate and Street Address

A nameplate sign shall be permitted in accordance with Section 8.04A. The sign may not project within five (5) feet of any property line. All street addresses shall comply with Section 304.3 of the International Property Maintenance Code.

B. Real Estate Signs

Real estate signs shall be permitted in accordance with Section 8.04C.

C. Garage Sale Signs

Garage sale signs shall be permitted in accordance with Section 8.04C.

D. Residential Entranceway Signs

One (1) residential entranceway or identification sign, either a wall or ground sign, shall be permitted at each entrance to a sub-division, apartment complex or other residential development in accordance with the following regulations:

1. Area

The maximum area for such sign shall be twenty-five (25) square feet.

2. Height

The maximum height for such sign shall be six (6) feet.

3. Setback

All ground signs shall be set back a minimum distance of fifteen (15) feet from any property line or right-of-way line.

E. Signs for Nonresidential Uses

Each nonresidential use in a residential district shall be permitted one wall or ground sign, provided that the type, height, area, and number of signs shall comply with Table 8.2

Section 8.07 -- NONRESIDENTIAL DISTRICT SIGNS

The following signs shall be permitted in districts zoned for nonresidential use (Community - COM, Office Service - OS, Neighborhood Commercial - NC, Community Commercial - CC, Regional Commercial - RC, Downtown – D, Circle - C, LCMR, Industrial A - IA, and Industrial B – IB Zoning Districts):

A. Nameplate and Street Address

A nameplate and street address shall be permitted in accordance with Section 8.04.A. The street address shall comply with Section 304.3 of the International Property Maintenance Code.

B. Real Estate Signs

Real estate signs shall be permitted in accordance with Section 8.04C.

C. Projecting and Roof and Wall Signs

Projecting, roof and wall signs shall be permitted in non-residential districts as authorized by Table 8.2.

1. Murals

Murals, displaying a commercial message, may be permitted in all non-residential districts provided they adhere to the maximum wall sign area requirements listed in Table 8.2.

D. Ground Signs

Ground signs shall be permitted in the community district, commercial districts, industrial districts, and office districts subject to the provisions of Section 8.05 and the following regulations:

1. Building Setback

Ground signs shall be permitted only if the buildings are set back at least two (2) feet from the property line.

2. Number

One (1) ground sign shall be permitted per street frontage on each parcel. However, only one sign shall be permitted on lots having frontage on more than one street if a single sign can be located such that it is clearly visible from both streets. In multi-tenant buildings or shopping centers, the sign area may be allocated for use by individual tenants.

3. Sign Setbacks

All ground signs shall comply with the setback requirements in Table 8.4:

TABLE 8.4: GROUND SIGN SETBACKS

Zoning District	Setback from Property Line	Setback from Residentially Zoned or Used Property
Community	none	25 feet
AG, RA – Permitted Nonresidential Uses	5 feet	None
NC, C, D, OS, D-O	5 feet	25 feet
CC, RC	none	None
LCMR	none	50 feet
Industrial A and Industrial B	none	None

4. Pole Mounted Ground Signs

Pole mounted ground signs are permitted in the Community, Regional Commercial, Community Commercial, LCMR and Industrial districts. Pole mounted ground signs are not permitted in the Center City Overlay district. All pole mounted ground signs shall comply with the following regulations:

- a. Pole mounted ground signs shall have a minimum under clearance height of (8) feet.
- b. Pole mounted ground signs shall comply with the height and area regulations in Table 8.2.
- c. Pole mounted ground signs shall not be located within the clear vision corner nor shall they obstruct vehicular or pedestrian sight lines.

5. Monument Ground Signs

Monument ground signs are permitted in all districts. Monument Ground Signs shall comply with the following regulations:

- a. Monument ground signs may not be located in the clear vision triangle or otherwise obstruct lines of sight for vehicular or pedestrian traffic.
- b. A landscaped area including planting beds and/or shrubs shall be provided and maintained around the monument ground sign.

E. Awnings and Canopies

Signs on awnings and canopies in commercial, office-service, community and industrial districts shall be permitted, subject to the following standards:

1. Compliance with Size Requirements for Wall Signs

The area of signs on awnings or canopies shall be counted in determining compliance with the standards for total area of wall signs permitted on the parcel.

2. Projection

Limitations imposed by this Ordinance concerning projection of signs from the face of a wall or building shall not apply to awning and canopy signs, provided that such signs shall comply with the permitted projections into yards for awnings and canopies in Table 3.2.

F. Undercanopy Signs

One (1) undercanopy sign shall be permitted for each business, subject to the following conditions:

1. Vertical Clearance

A minimum vertical clearance of eight (8) feet shall be provided between the bottom edge of the sign and the surface of the sidewalk.

2. Orientation

Undercanopy signs shall be designed to serve pedestrians rather than vehicular traffic.

3. Size

Undercanopy signs shall not exceed two (2) square feet in area.

G. Types of Signs Allowed in Non-Residential Districts

The following types of signs are allowed in the non-residential districts, provided that they comply with all provisions of this Article:

1. Add-on sign.

-
2. Animated sign, including scrolling screens or scenes, provided the movement or change of lighting changes in intervals of six (6) seconds or more.
 3. Bulletin board.
 4. Changeable copy signs.

H. Signs in the Downtown, Center City Overlay, and Circle Districts

The Downtown and Circle Districts are unique centers for the City of Midland. It is important to capture and preserve the unique character of the both areas in the types of signs permitted. Accordingly, the following additional standards shall apply to signs in the Downtown, Center City Overlay and Circle districts:

1. Location

Signs shall not cover architectural details such as arches, transom windows, moldings, columns, capitals, sills cornices and similar details.

2. Materials

Sign materials shall complement the original construction materials and architectural style of the building facade. Generally, wood or metal signs are considered more appropriate than plastic.

3. Illumination

In the Downtown and Circle districts only, it is preferred that signs be illuminated using a direct but shielded light source, rather than internal illumination.

4. Projecting Signs

Projecting signs shall be permitted provided they are oriented towards pedestrian traffic, have a minimum under clearance of eight (8) feet, and have a maximum size of twelve (12) square feet.

5. Signs Allowed in the Downtown, Center City Overlay, and Circle Districts Only

The following signs are allowed in the Downtown, Center City Overlay, and Circle districts:

- a. Sandwich board signs with a maximum sign area of sixteen (16) square feet **in the Downtown district or twelve (12) square feet in the Center City Overlay district.** Sandwich board signs shall not obstruct pedestrian access and shall not be permanently affixed to the sidewalks or any structure within the public right of way. Sandwich board signs must be portable and free-standing in design.
- b. In the CCO district only, sandwich board signs must be constructed using high-quality materials including metal, plastic, wood, composite or hardboard (chalkboard or dry erase).
- c. In the CCO district only, sandwich board signs must be placed on an improved, pedestrian oriented surface and must be located within eight (8) feet of the pertaining establishment's main entrance. **Each establishment shall be allowed one (1) sandwich board sign per entrance but the total size between all sandwich board signs for each single establishment shall not exceed twelve (12) square feet.**
- d. In the CCO district only, sandwich board signs are only permitted outdoors during business hours and must be removed from the pedestrian walkway and placed inside the establishment during non-business hours.

I. Outline Tubing (Neon) Signs

Outline tubing signs, also known as neon signs, are permitted in commercial districts subject to the following conditions:

1. Construction

Such signs shall be enclosed unless the applicant provides sufficient documentation that unenclosed signs satisfy requirements in the adopted Building Code.

2. Maximum Size

Such signs shall be considered wall signs for the purposes of determining compliance with maximum size standards.

Section 8.08 – DOWNTOWN NORTHSIDE OVERLAY (DNO) DISTRICT SIGNS

A. The following signs are permitted on a per tenant on the ground floor with street frontage or per public entrance basis:

TABLE 8.5

Type of Sign	Number	Max. Size	Location	Other	Example
Name plate/Plaque	1 per street frontage	8 s.f.	Any wall		
Street Address	1 per street frontage	Letters up to 8" high	Any wall 6'-10' above sidewalk grade	Non cursive lettering	
Blade/Shingle	1 per street frontage	6 s.f. 9' clearance above sidewalk	Ground floor	May not be internally illuminated	
Sandwich	1 per street frontage	64"h x 28"w Display area of 48"h x 28"w	Sidewalk, not blocking traveled portion Displayed only when business is open	Must be two sided Securely hinged ¹ No changeable copy ²	
Window	2 per tenant	6 s.f. of total signage	Ground floor or second story	May not be painted	
Directional	Per section 8.04 A. 11.				

¹ Securely hinged means hinged at the top and properly stabilized with 36" of chain between faces or the equivalent and a weighting mechanism that is properly screened.

² Changeable copy using individually placed letters is prohibited on all signs including sandwich board signs. Chalk board are permitted.

B. In addition to the signs permitted in item A. of this section, an awning or canopy and any one signs per building façade area is permitted according to the following schedule:

TABLE 8.6

Type of Sign	Number	Max. Size	Location	Other	Example
Wall, Band	1 wall band Up to 3 signs within wall band	2' H x 20' W and 80% of building lineal frontage Letters up to 24" high, 3" depth	May not be within 2' of an adjacent common lot line or boundary of the area permitted to be used by the tenant		
Wall, Other	1 wall sign	Not to exceed 5% of square footage of the building facade or 80 s.f.	Above the second story		
Awning/Canopy			Min.8' clearance above sidewalk	Quarter cylinder style is prohibited	
Marquee	1 per corner of a building located at the intersection of two public streets and 1 per 250' of building street frontage.	Not to exceed 70 s.f. Max height = 50% of structure	Min. 10' clearance above sidewalk	Signs may be placed on both sides of marquee.	

C. The following signs are prohibited:

TABLE 8.7

Type of Sign	Other	Example
Freestanding signs		
Painted window signs	Temporary	
Painted on exterior of buildings	Excludes murals	
Any sign feature that has flashing, traveling, animated, or intermittent light associated with it.		
Portable, wheeled or otherwise moveable advertising devices	Excluding sandwich signs	
Roof	Signs or displays of any kind	
Awning	Quarter cylinder style	
Sandwich	Moveable letters	



Date: June 8, 2016

STAFF MEMORANDUM TO THE PLANNING COMMISSION

Capital Improvement Plan – Final Draft

CAPITAL IMPROVEMENT PLANS:

The following excerpt is taken from the Michigan Association of Planning's Community Planning handbook and provides a general overview of Capital Improvement Plans:

A capital improvements program (CIP) is the result of the preparation and updating of a plan listing all new major public facilities to be built, substantially remodeled, or purchased in a community within the foreseeable future. "Capital improvements" (also called "public improvements") are all major physical facility projects over and above annual operating expenses. A CIP establishes a schedule, or program, for each capital improvement project according to its priority in the community. The program also includes cost estimates and the sources of financing for each project. A six-year programming period is the most widely utilized, although the CIP must be updated annually to reflect changing priorities and financial resources in the community.

Any municipality may participate in the CIP process. The planning commission is usually responsible for the preparation of capital improvements programs in coordination with the municipal master plan. Planning staff generally coordinate the process, reviewing project requests from individual operating departments and preparing the final document.

After the planning commission formally adopts the completed program, it is forwarded to the legislative body for adoption and inclusion in the municipal budgetary process. The CIP is the principal tool for a planning commission to ensure consistency of proposed new public improvements with an adopted master plan.

Additional text is included in the attached Capital Improvement Plan (CIP) that more fully describes the purpose and intent of the plan.

BACKGROUND:

On March 10, 2015, a preliminary listing of planned capital projects covering roads, utilities and the municipal landfill operation was presented to the Planning Commission for review. Following discussion, it was determined that further discussion was required to identify additional capital projects which should be considered for inclusion in the

Capital Improvement Plan, even if the certainty of those projects is not known. Staff was asked to identify any such projects and present such projects as the starting point for further discussion.

Later that same month, a further report was presented to the Planning Commission. That report concluded that all necessary projects were included in the original draft. The lone exception to this general finding was the possibility of adding work related to the relocation of the farmer's market if such a project were to ever occur. Planning Commission direction at the time was to include this as a "potential project" in the CIP.

Subsequent staff review of the Michigan Planning Enabling Act (MPEA) standards, available guidelines for CIP's, and review of other CIP's across the state followed. This review provided no support for the inclusion of projects that were identified as potential but for which no local support had been demonstrated. As such, inclusion of public works related to the possibility of relocating the farmer's market were determined to be inappropriate for this plan.

Shortly following the meetings held last March, it was also determined that the CIP preparation process would be delayed until the fall of 2015, at which time additional input from the City Engineering Department in the form of their own capital planning processes would be available. That process was completed in November and compiled in December, together with coordinated data from the Utility Department. To meet the 6 year CIP standards of the MPEA, two additional years of projects were also added to the plan last seen by the Planning Commission.

Through assistance provided to the City via the Michigan Economic Development Corporation (MEDC) and the Redevelopment Ready Communities (RRC) program, consultant assistance in the preparation of the final CIP document was obtained from Carlisle Wortman Associates Inc. This firm was able to consolidate the table form of data previously reviewed into a CIP more readily readable and understandable. Their original draft was reviewed by staff and further updated, resulting in the final draft attached to this report. While some minor typographical errors remain and will yet be corrected, the document is now presented for forwarding to public hearing.

NEXT STEPS:

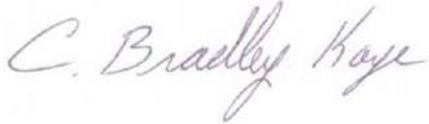
Planning Commission review and discussion on the draft CIP is welcomed at this time. Following this review, a public hearing is recommended on the plan to provide a final opportunity for public comment. Upon conclusion of the public hearing, a recommendation to City Council will then be required. City Council consideration and adoption will follow.

It should be noted that initial adoption of the CIP does not complete all work on the plan for the next 6 years. Instead, this document must then be reviewed on an annual basis, adjusting projects as priorities and financial circumstances dictate. Additionally, one additional year of projects must also be added to the back end of the project schedule each year so that the plan continues to cover the forthcoming 6 year period of time. While much of the work in preparing this information falls to City Engineering, Utility and Planning staff, the Planning Commission and City Council must ultimately review and adopt the update each year.

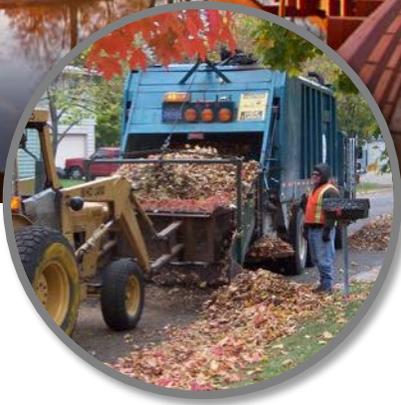
Also to be noted is the timing of annual updates anticipated by staff. To best fit with the annual city budget process, CIP project updates should take place late in the calendar year, immediately following the receipt of public input on engineering and utility priorities.

This will allow staff to compile and prepare updates of the CIP each December, followed by Planning Commission review and recommendation early each calendar year. This timing is appropriate given that City Council will then receive the recommended CIP in the middle of their budget process, while decisions are being made on the funding of capital projects for the coming fiscal year.

Respectfully Submitted,

A handwritten signature in cursive script that reads "C. Bradley Kaye". The ink is a light grey or blue color.

C. Bradley Kaye, AICP
Assistant City Manager for Development Services



CITY OF 
Midland *Michigan* THE CITY OF *Modern Explorers*

CITY OF MIDLAND
CAPITAL IMPROVEMENT PLAN
2016-2022

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Prepared by the CIP Committee

Date _____

Adopted by City Council

Date _____

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Acknowledgements

CITY COUNCIL

Maureen Donker, Mayor
Tom Adams
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INTRODUCTION

Introduction

Every municipality has a portfolio of capital assets that it owns, maintains, and employs to help deliver quality services to its residents. These assets include equipment and vehicles, such as fire engines, snow plows, and tools, but also more permanent assets such as roads, bridges, buildings, underground utilities, storm water systems, parklands, parking facilities, and natural areas. With ownership comes an obligation to maintain and continually improve these assets. The process used to determine how to invest City resources to maintain and improve the City's capital assets is known as the Capital Improvement Plan.

The City of Midland has always strived to offer its residents and businesses the most desirable community facilities and reliable infrastructure to maintain their quality of life. As the City plans for the future, maintaining existing high quality transportation and utility systems must be a high priority. In January 2016, the City of Midland completed a Capital Improvement Plan for the city's infrastructure including transportation and utilities.

This plan includes the following categories of capital projects:

- Major Streets
- Local Streets
- Stormwater
- Water and Water Treatment Plant
- Wastewater and Wastewater Treatment Plant
- Landfill
- Renewable Energy Services
- General

Future capital improvement plans may include additional categories such as:

- Airport
- Municipal Service Annex and Center
- Police Department
- Fire/Emergency Services
- Parks and Recreation
- Public Works
- Civic Arena
- Grace A. Dow Library
- Dial-A-Ride
- Midland Community Television
- Information Services – Operations
- Senior Housing

WHAT IS A CAPITAL IMPROVEMENT PLAN?

A Capital Improvement Plan (CIP) is a multi-year planning instrument used to identify needs and funding sources for municipal capital project expenditures. Projects are generally described as significant, physical improvements or purchases that have a long, useful life. These projects include municipal facilities; information technology systems; transportation systems; water, sewer, and stormwater utilities; street lighting; vehicles and large equipment; and other large capital purchases or improvements. Upon adoption by the City Council, the CIP becomes a statement of city policy regarding the timing, location, character, and funding of future capital projects.

In Michigan, the formation of a capital improvements program is driven by the Michigan Planning Enabling Act, Public Act 33 of 2008, MCL 125.3865.

PURPOSE

The quality of the infrastructure and community facilities in the City directly influences the quality of life that the City can provide. As community infrastructure and facilities age, continual improvements and updates are required to stay current with changing demands and needs. In the midst of shrinking resources and deferred maintenance costs, a CIP is more important than ever. The 2016-2022 Plan will reflect a six year anticipated scheduling and costs for infrastructure, facilities, and equipment based on input from the City's department.



The purpose of the CIP is to achieve the following outcomes:

- Ensure the timely repair and replacement of aging infrastructure, facilities, and equipment.
- Provide a level of certainty for residents, businesses, and developers regarding the location and timing of public investments.
- Identify the most economical means of financing capital improvements.
- Provide an opportunity for public input in the budget and financing process.
- Facilitate coordination upgrades to capital infrastructure systems.
- Enhance the community's credit rating, control of its tax rate, and avoid sudden changes in its debt service requirements.
- Ensure that patterns of growth and development are consistent with the master plan.
- Balance desired public improvements with the community's financial resources.

INTENT

A CIP facilitates coordinated infrastructure improvements; maintains, preserves, and protects the City's existing infrastructure system; and provides for the acquisition or scheduled replacement of equipment to ensure the efficient delivery of services to the community.

The CIP plays an important role by providing the link between planning and budgeting for capital expenditures to ensure that capital improvements are fiscally sound and consistent with City long-range goals and objectives. The CIP process occurs prior to the budget process and should be used to develop the capital portion of the municipal budget.

TIMELINE

The City of Midland's CIP outlines a schedule of capital expenditures over a six (6) year period. The original CIP document was drafted in 2016 and shall be updated annually by City departments based on current project completion, prioritization, and available funding. By updating the document annually, the projects contained in the first year of the CIP may be used to inform next year's department requested municipal budget. The CIP is scheduled for evaluation and updating annually in September and October.



The Capital Improvement Plan (CIP) is a six year plan that should be reviewed and updated annually so that it is always looking six years out.

RELATIONSHIP BETWEEN CIP AND BUDGET

The CIP makes capital spending for Engineering and Utility Departments more predictable and transparent. The CIP does not address all of the capital expenditures for the City, but provides for large, physical improvements and purchases that have a longer useful life, including the basic facilities, services, and installations needed for the functioning of the community. Capital planning identifies purchases of physical assets or construction, major repair, reconstruction, or replacement of capital items, such as buildings, utility systems, roadways, bridges, parks, heavy or specialized equipment, and extensive internal office needs which are of high cost and have a longer useful life. The intent is to have the first year of the CIP represent the proposed capital budget for the current fiscal year. The remaining years of the CIP serve as a financial plan for capital investments.



Budget goals for the City:

- Ensure economic sustainability
- Provide an outstanding quality of life
- Provide effective stewardship of community resources

RELATIONSHIP BETWEEN CIP AND MASTER PLAN



The CIP is a powerful tool for implementing a community's master plan. Capital projects involving roads, water and sanitary systems, stormwater utilities, and purchases of parkland can have a substantial impact on patterns of growth and public investment. By providing funding for strategic capital upgrades at a given time and location, the CIP helps ensure that the level of service is maintained and development occurs consistent with a community's plans and vision.

The following goals were taken from the 2012 update of the City of Midland Master Plan:



Transportation Goals

- Goal 1: Maintain and improve safety and efficiency in the transportation system to support land use patterns and ensure that Midland remains an attractive place to live, work, and visit.
- Goal 2: Provide and pursue multi-modal transportation alternatives that can improve connectivity between neighborhoods, schools, parks, businesses and other activity areas.

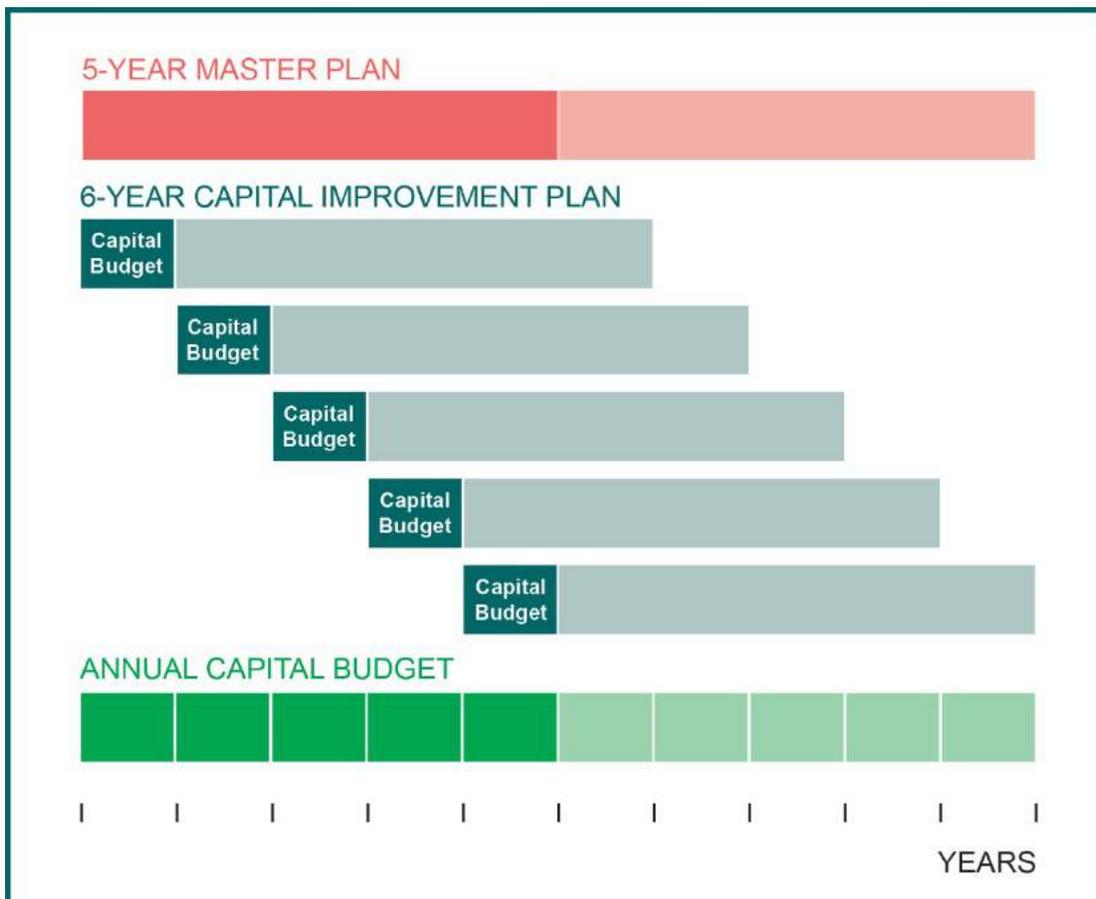
- Goal 3: Continue to improve the aesthetic appearance of the City’s transportation corridors.
- Goal 4: Endorse the Complete Streets Program.



Community Facilities Goals

- Goal 1: Continue to offer the highest quality, efficient services and facilities for residents.
- Goal 2: Promote community services and facilities that integrate and unify the community.
- Goal 3: Continue to acquire, develop, maintain and preserve open space and recreation facilities.
- Goal 4: Preserve significant natural features in the City and MUGA.

Figure 1. Relationship between Master Plan, CIP, and Budget



DEFINITION OF CAPITAL

Capital projects and improvements are major assets and projects including:

- Replacements and improvements greater than or equal to \$5,000;
- “Program” of projects whose total is greater than or equal to \$5,000; and
- Equipment purchases greater than or equal to \$5,000, with a service life of at least 5 years.

Examples include construction, expansion, or renovation of a public building, water line upgrades and extensions, major equipment, the acquisition of land for public use, streets, or new storm and sanitary sewers. The adoption of a common definition assists in determining what projects are part of the capital improvement program versus those that are part of the general budget.

Only the projects that meet the capital project or improvement definition are included in the capital improvement program. A capital improvement project can include one or more of the following:

- **Facility Improvements:** is the repair, replacement, or upgrades of exterior and interior walls, roofs, furnishings and similar non-mechanical features that extend a building’s life. Examples include new roofs, windows and doors, tuck pointing and masonry repair, interior and exterior painting, carpeting and furniture.
- **Building Equipment:** is the repair or replacement of heating, ventilation, and air conditioning (HVAC) systems.
- **Computer Equipment:** includes all equipment critical to the functioning of the city such as computers, telephones, cameras and voting machines.
- **Equipment:** includes specialized equipment and/or heavy apparatus used by the fire department and department of public services. Examples are system components, lifesaving equipment, vehicle hoists, and similar specialized mechanisms that last for several years.
- **Vehicles:** encompass cars, trucks, buses and grounds maintenance equipment. Vehicles are considered part of the motor pool that is maintained by the Department of Public Services. For the purpose of the capital improvements plan, vehicles are attached to their respective departments.
- **Infrastructure:** includes below grade, at grade and above grade (non-building) improvements. Examples include new water and sewer lines, park improvements, storm water, streets and sidewalks, bike lanes, landscape, and fences.
- **Planning/Engineering Services:** includes plans and studies as well as preliminary design and construction drawings.

Capital Improvement Planning Process

The CIP does not address all of the capital expenditures for the City, but provides for significant improvements and purchases related to basic facilities, services, and installations needed for the functioning of the community. The current Capital Improvement Plan contains utilities and infrastructure projects only. These projects include streets, stormwater, water, wastewater, landfill, and renewable energy projects. In the future, other capital improvement projects may be added to the plan. These projects may include parks, facilities, police, fire, vehicles, and major equipment.

CIP Committee

The annual CIP update should be headed by an individual CIP coordinator or committee. A CIP Committee may include the administrative lead as well as the various department representatives. The current CIP Committee includes Planning, Engineering, Water, and Wastewater department staff members.

Department Coordination

The Engineering and Utility Department meets annually with the City's Department of Public Services, Wastewater and Water division to prioritize the capital acquisitions and properties list.

Resident Requests

Each year, the Engineering and Utilities Departments undertake an aggressive program to maintain and upgrade streets and utilities such as water and sewer. As part of that program, residents may request that the City of Midland consider specific public improvement projects.

Project Evaluation

Once the improvements list has been generated, the Engineering and Utilities Departments estimates a cost for each requested project and prioritizes the list according to the project's feasibility and available funding. This list then goes to the Midland City Council after the 1st of the year. The City Council evaluates each project and assigns a project priority at a special Council meeting in January. Council then determines which projects receive highest priority and allocates funding for the chosen projects in the next fiscal year budget.

Construction of approved public improvement projects coordinated by the City begins in the following fiscal year. Projects are usually completed within 1 - 4 months during the summer of the year in which funding is provided.

Prioritization

The following investment policies along with Master Plan and budget goals provide a framework for CIP prioritization decisions:

- Maintain or improve standards of service
- Protect public health, safety, or welfare
- Result in economic development (capital investment, increased tax base, or increased valuation)
- Reduce energy consumption and/or improve environmental sustainability
- Have an identified source of funding
- Be ready to proceed
- Be coordinated with other capital improvements

Funding Sources

Special Assessments

When a public street, sewer, water main or sidewalk is installed where one does not currently exist, the majority of the cost for constructing these improvements is paid for by the property owners fronting the improvement. The property owner's share of the costs is referred to as a special assessment.

Special assessments are approved by City Council following 2 public hearings. These hearings allow the benefiting property owners whose property will front the improvement to voice any concerns or ask any questions they may have about the project.

Once a special assessment has been approved, the affected property owners have the option of paying the full assessed amount within 30 days or paying over time. If paying over time, the assessment appears on the property owner's tax bill and includes interest charges.

County Road Millage

Every 4 years, Midland County voters are asked to renew a 1-mil property tax millage for Midland County road maintenance and improvement projects. The funds acquired from this millage are split among the Village of Sanford, City of Coleman, Midland County Road Commission and the City of Midland. The intent of the road millage is to improve, maintain and construct new roadways to the benefit of all residents in Midland County.

Major & Local Streets

The City of Midland receives funds from the State of Michigan (in accordance with Act 51, Public Acts 1951, as amended), which distributes gas and weight tax revenues to all cities, villages and counties within the State of Michigan based on the mileage of the Major and Local Street systems of each City, village or county. These funds are utilized to reconstruct, resurface, repair and maintain the community's street system, including snow plowing.

While Major and Local Street funding available from gas and weight tax remains flat, in November 2014 Midland County voters approved a 1 mil increase in road millage for a period of four years. This increase, when combined with the existing County road millage, will provide a two mil levy towards roads for a period of two years. In November of 2016 we anticipate a ballot initiative to renew the original long standing County road millage. For the City of Midland this increase will provide funding that will go towards major road reconstruction within our aging street system. The first levy of the new four year millage will be available in January 2016.

Enterprise Funds

Enterprise Funds account for specific services that are funded directly by fees, charges to users, self-generated revenue and/or bonding. These include the following services provided by the City of Midland Utility Department:

- Water services
- Wastewater services
- Landfill services
- Renewable Energy services

These funds are intended to be fully self-supporting and are not typically subsidized by any general fund revenue or taxes. Within each Enterprise Fund, budgets are developed which are sufficient to fund current year operations and maintenance expenses, as well as provide for current and future years' upgrade, replacement, and expansion-related capital construction requirements.

Grants and Donations

Some projects are entirely or partially funded by grants and reimbursements from the state and federal government and other agencies, or by donations from local charitable organizations. The receipts of certain grants and reimbursements typically follow the award of contracts. Donations are more typically offered and received in advance of project initiation.

Department Coordination

The Engineering Department meets annually with the City's Department of Public Services, Wastewater and Water Departments to revise the Construction Project Priority List which leads to the Capital Improvement Plan. Included in the coordination process is a review of immediate capital needs to existing utility and street infrastructure.

Resident Requests/Public Involvement

Each year, the Engineering Department undertakes an aggressive program to maintain and upgrade our streets and utilities such as water and sewer. As part of that program, residents may request that the City of Midland consider specific public improvement projects.

During the month of October, property owners may submit a request for new infrastructure construction at unimproved locations only, such as: no existing water or sewer main; gravel streets; no sidewalks. Investments in new infrastructure follow along with the Master Plan and budget goals and are prioritized based on the following:

- Maintain or improve standards of service
- Protect public health, safety, or welfare
- Result in economic development (capital investment, increased tax base, or increased valuation)
- Reduce energy consumption and/or improve environmental sustainability
- Have an identified source of funding
- Be ready to proceed
- Be coordinated with other capital improvements

Petitions for new public infrastructure are taken to City Council during the month of December. Council evaluates each project and determines which, if any, projects should be advanced for further consideration. Projects which are advanced by City Council are then returned to the Engineering Department for cost estimating and feasibility review. During the month of January, the City Council reviews the estimates and feasibility of the project and makes a determination if the petitioned project for new infrastructure will proceed.

Requests for review of current infrastructure conditions and consideration for improvements are accepted in writing throughout the year. During the annual review and construction project priority process these requests are considered.

The construction project priority process includes a series of meetings with the Department of Public Works, the Water and Wastewater Departments to determine street and utility improvement needs. The Engineering Department utilizes inventory of street conditions combined with needs of Public Works are used to determine what mix of fixes is most effective for an annual street program. This program is reviewed by the Finance Department to ensure that sufficient funding is available. In the limited funding environment we develop a program to make the best use of available funds.

As existing infrastructure ages the condition degrades. Expenditures to maintain or repair a street are less if the issue is addressed earlier in the structures life cycle. The more degraded a structure the more costly the repair. For this reason the City implements a mix of repairs for various road conditions. Surface treatments are utilized to extend the service life of a roadway, prior to degrading. A pavement rehabilitation is done for streets. The most costly repairs are used on roadways where full reconstruction needs to occur.



CAPITAL IMPROVEMENT PLAN

Summary of Capital Projects

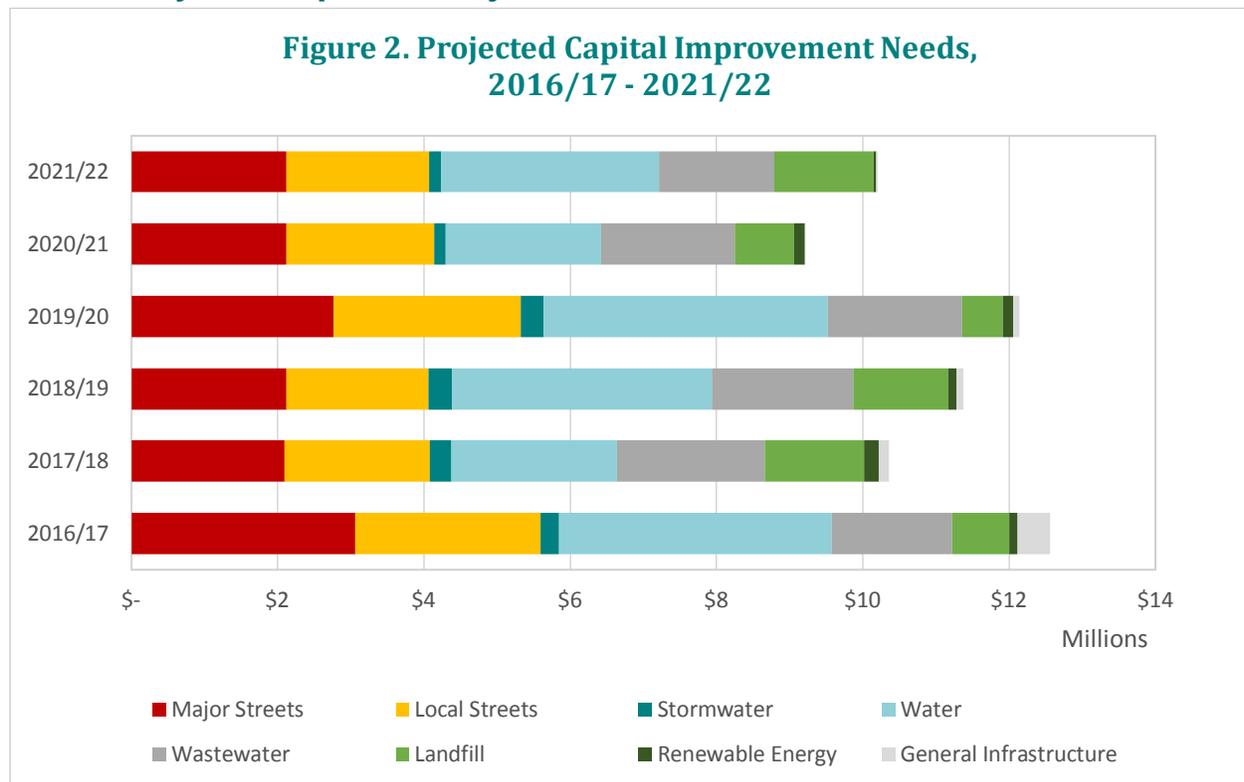


Table 1. Summary of Capital Improvement Projects

CIP Projects	Budget Year						Total
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	
Major Streets	3,057,000	2,091,000	2,117,000	2,765,000	2,125,000	2,123,000	14,278,000
Local Streets	2,535,000	1,987,000	1,943,000	2,559,000	2,013,000	1,950,000	12,987,000
Stormwater	253,000	295,000	320,000	313,000	160,000	160,000	1,501,000
Water	3,722,650	2,268,180	3,558,450	3,880,850	2,125,000	2,977,000	18,532,130
Wastewater	1,646,000	2,013,000	1,930,000	1,837,500	1,825,000	1,580,000	10,831,500
Landfill	790,000	1,360,000	1,300,000	560,000	810,000	1,360,000	6,180,000
Renewable Energy	112,500	202,500	110,000	133,000	145,000	35,000	738,000
General Infrastructure	441,000	141,000	91,000	91,000	15,000	15,000	794,000
Total	12,557,150	10,357,680	11,369,450	12,139,350	9,218,000	10,200,000	65,841,630

Major Streets

The City of Midland is responsible for 80 miles of major streets and 16 miles of state trunk line. Major streets include Principal Arterials, Minor Arterials, and Collector Streets based on the Federal Highway Administration’s (FHWA) National Functional Classification (NFC). The City also provides maintenance and replacement of over 10,000 traffic signs, maintains over 90 signalized intersections, and provides over 80 miles of pavement markings for all categories of streets.

Major street improvement projects have been organized into the following project types:

- **FACILITY** – These projects include bridge improvements and other infrastructure projects.
- **GENERAL** – These projects include general capital maintenance.
- **PLANNED PROJECTS UNDER \$100,000** – These projects include planned projects with estimated costs less than \$100,000.
- **PLANNED PROJECTS \$100,000 - 499,999** – These projects include large capital projects with estimated costs between \$100,000 and \$499,999.
- **PLANNED PROJECTS \$500,000 AND GREATER** – These projects include large capital projects with estimated costs \$500,000 and greater.
- **ENGINEERING** – These projects include engineering studies and preliminary design work.

Table 2. Major Street Improvement Projects

CIP Item	Budget Year						TOTAL
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	
Facility	667,000	166,000	0	0	0	0	833,000
General	275,000	275,000	275,000	275,000	275,000	0	1,375,000
Planned Projects Under \$100,000	246,000	0	0	0	0	0	246,000
Planned Projects \$100,000-499,999	979,000	1,043,000	1,306,000	1,065,000	600,000	788,000	5,781,000
Planned Projects \$500,000 and greater	850,000	587,000	516,000	1,400,000	1,225,000	1,335,000	5,913,000
Engineering	40,000	20,000	20,000	25,000	25,000	0	130,000
Total	3,057,000	2,091,000	2,117,000	2,765,000	2,125,000	2,123,000	14,278,000

Where possible, planned projects for major streets are coordinated with water and wastewater projects.

The following is a summary of major street improvements planned for the next 6 years:

- **FACILITY**

- The City's share of the M-20 bridge project is estimated at \$167,000 in 2016/17 and \$166,000 in 2018/19
- W. St. Andrews Road bridge at Snake Creek is estimated at \$500,000 in 2016/17

- **GENERAL**

- Non-motorized improvements are estimated at \$10,000 annually in 2016/17 – 2020/21
- Traffic sign upgrades are estimated at \$35,000 in 2016/17 – 2018/19 and \$30,000 in 2019/20 – 2020/21
- Traffic signal upgrades are estimated at \$30,000 in 2016/17 – 2018/19 and \$35,000 in 2019/20 – 2020/21
- Ditch cleaning for \$50,000 annually in 2016/17 – 2020/21
- Surface treatment and crack sealing at \$150,000 annually in 2016/17 – 2020/21

- **PLANNED PROJECTS UNDER \$100,000**

- In 2016/17, the City forecasts three (3) projects including Main, N. Saginaw, and Saginaw for a total cost of \$246,000

- **PLANNED PROJECTS \$100,000 - 499,999**

- In 2016/17, the City forecasts five (5) projects including Saginaw, W. Wackerly, Cambridge, Waldo, and E. St. Andrews for a total cost of \$979,000
- In 2017/18, the City forecasts three (3) projects including Washington, E. Nelson, and Eastlawn for a total cost of \$1,043,000
- In 2018/19, the City forecasts four (4) projects including Haley, Saginaw, Pershing, and Orchard for a total cost of \$1,306,000
- In 2019/20, the City forecasts three (3) projects including George, W. Wackerly, and E. Wheeler for a total cost of \$1,065,000
- In 2020/21, the City forecasts two (2) project including Main and Rockwell for a total cost of \$600,000

- In 2021/22, the City forecasts three (3) project including W. St. Andrews, W. Sugnet, and Joe Mann for a total cost of \$788,000
- **PLANNED PROJECTS \$500,000 AND GREATER**
 - In 2016/17, the City forecasts one (1) project including Eastman for a total cost of \$850,000
 - In 2017/18, the City forecasts one (1) projects including Carpenter for a total cost of \$587,000
 - In 2018/19, the City forecasts one (1) projects including W. Wheeler for a total cost of \$516,000
 - In 2019/20, the City forecasts two (2) projects including E. Sugnet and N. Saginaw for a total cost of \$1,400,000
 - In 2020/21, the City forecasts two (2) projects including W. St. Andrew and Saginaw for a total cost of \$1,225,000
 - In 2021/22, the City forecasts two (2) projects W. St. Andrew and Jefferson for a total cost of \$1,335,000
- **ENGINEERING**
 - Preliminary engineering services for \$40,000 in 2016/17, \$20,000 in 2017/18 and 2018/19, and \$25,000 in 2019/20 – 2020/21.

Local Streets

The City of Midland is responsible for 160 miles of local streets. Major streets include Principal Arterials, Minor Arterials, and Collector Streets based on the Federal Highway Administration’s (FHWA) National Functional Classification (NFC). The local street system is comprised of all facilities not included in the higher classification systems.

Local street improvement projects have been organized into the following project types:

- **GENERAL** – These projects include general capital maintenance.
- **PLANNED PROJECTS UNDER \$50,000** – These projects include projects with estimated costs less than \$50,000.
- **PLANNED PROJECTS \$50,000 - 199,999** – These projects include large capital projects with estimated costs between \$50,000 and \$199,999.
- **PLANNED PROJECTS \$200,000 AND GREATER** – These projects include large capital projects with estimated costs \$200,000 and greater.

Table 3. Local Street Improvement Projects

CIP Item	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	TOTAL
General	450,000	500,000	500,000	500,000	500,000	0	2,450,000
Planned Projects Under \$50,000	94,000	0	0	0	0	0	94,000
Planned Projects \$50,000 - 199,999	1,131,000	407,000	226,000	547,000	1,097,000	905,000	4,313,000
Planned Projects \$200,000 and greater	860,000	1,080,000	1,217,000	1,512,000	416,000	1,045,000	6,130,000
Total (\$)	2,535,000	1,987,000	1,943,000	2,559,000	2,013,000	1,950,000	12,987,000

Where possible, planned projects for local streets are coordinated with water and wastewater projects.

The following is a summary of local street improvements planned for the next 6 years:

- **GENERAL**
 - Curb replacement and pavement patching \$150,000 in 2016/17 and \$200,000 annually in 2017/18 – 2020/21
 - Surface treatment, crack sealing, and sidewalk ramp reconstruction for \$300,000 in annually in 2016/17 – 2020/21

- **PLANNED PROJECTS UNDER \$50,000**
 - In 2016/17, the City forecasts six (6) projects including Harrison, Woodlawn, Blarney, Ohio, Leeway, and Rockwell for a total cost of \$94,000

- **PLANNED PROJECTS \$50,000 - \$199,999**
 - In 2016/17, the City forecasts nine (9) projects including Ottawa, Leonard, Crane, Rosemary, Boston (2), Kentwood, Highbrook, and Westbriar for a total cost of \$1,131,000
 - In 2017/18, the City forecasts three (3) projects including St. Nicholas, Sayre, and Jay for a total cost of \$407,000
 - In 2018/19, the City forecasts two (2) projects including Richard and Townsend for a total cost of \$226,000
 - In 2019/20, the City forecasts five (5) projects including Byrd, W. Nickels, Adams, Bauss, and Federal for a total cost of \$547,000
 - In 2020/21, the City forecasts seven (7) projects including Dilloway, W. Collins, Virginia, Mertz, Paine, Hamilton, and Hancock for a total cost of \$1,097,000
 - In 2021/22, the City forecasts six (6) projects including Burrell, Lindy, Hubbard, Pine, Greenbrier, and Reardon for a total cost of \$905,000

- **PLANNED PROJECTS \$200,000 AND GREATER**
 - In 2016/17, the City forecasts three (3) projects including Jerome, Bayliss, and E. Meadowbrook for a total cost of \$860,000
 - In 2017/18, the City forecasts three (3) projects including Chapel, Diamond, and Airport for a total cost of \$1,080,000
 - In 2018/19, the City forecasts four (4) projects including Airfield, Manor, Gibson, and Buchanan for a total cost of \$1,217,000
 - In 2019/20, the City forecasts five (5) projects including Airport, Woodview, Mark Putnam, Whitewood, and Schuette for a total cost of \$1,512,000
 - In 2020/21, the City forecasts two (2) projects including Airfield and Fitzhugh for a total cost of \$416,000
 - In 2021/22, the City forecasts four (4) projects including N. Perrine, Cortland, Concord, and Cruz for a total cost of \$1,045,000

Stormwater

The storm maintenance staff is responsible for maintaining nearly 180 miles of storm sewer. The storm system is cleaned on a four-year rotation. Progress is tracked using a computerized work order system. Open drains throughout the city are inspected for debris after major rainfalls.

Stormwater improvement projects have been organized into the following project types:

- **EQUIPMENT** – These projects include specialized equipment or system components.
- **FACILITY** – These projects include site specific projects such as buildings, outfalls, ditches, culverts, and basins.

Table 4. Stormwater Improvement Projects

CIP Item	Budget Year						TOTAL
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
Equipment	43,000	35,000	60,000	53,000	10,000	10,000	211,000
Facility	210,000	260,000	260,000	260,000	150,000	150,000	1,290,000
Total	253,000	295,000	320,000	313,000	160,000	160,000	1,501,000

Where possible, planned projects for stormwater are coordinated with street projects.

The following is a summary of stormwater improvements planned for the next 6 years:

- **EQUIPMENT**
 - Catch basin lead new installations for \$25,000 in 2016/17 - 2017/18 and \$35,000 in 2018/19 – 2019/20
 - Catch basin lead replacements for \$10,000 annually
 - Root cutter for \$8,000 in 2016/17
 - Camera upgrade for \$15,000 in 2018/19
 - Large line sand nozzle for \$8,000 in 2019/20
- **FACILITY**
 - Culvert replacement for \$100,000 in 2016/17 and \$150,000 annually in 2017/18 – 2021/22
 - Outfall and open ditch rehabilitation for \$110,000 annually in 2016/17 – 2019/20

Water

The City of Midland's water comes from Lake Huron via the jointly owned Saginaw- Midland Municipal Water Supply Corporation pipeline. The City maintains 48" and 36" raw water transmission lines from Saginaw-Midland Municipal Water Supply Corporation to the City of Midland Water Treatment Plant. The water treatment plant is capable of producing 48 million gallons a day of high quality water.

The water transmission and distribution system is comprised of over 359 miles of water main providing water for fire protection, business, industry and individual customers in the City of Midland, Homer Township, Larkin Township, Midland Township, Mills Township, Water District #1 of Midland County and the City of Auburn. The Distribution staff also administers the City's Cross Connection Control Program to protect the system from backflow potential.

The system consists of five (5) pump stations including: industrial pumping, domestic pumping, pressure district pumping and booster pump stations. The City also maintains 3,193 fire hydrants including auxiliary valves.

Water improvement projects have been organized into the following project types:

- **EQUIPMENT** – These projects include specialized equipment or system components.
- **FACILITY** – These projects include site specific projects such as buildings, outfalls, ditches, culverts, and basins.
- **PLANNED PROJECTS UNDER \$100,000** – These projects include projects with estimated costs less than \$100,000.
- **PLANNED PROJECTS \$100,000 - 499,999** – These project include large capital projects with estimated costs between \$100,000 and \$499,999.
- **PLANNED PROJECTS \$500,000 AND GREATER** – These projects include large capital projects with estimated costs \$500,000 and greater.

Table 5. Water Improvement Projects

CIP Item	Budget Year						TOTAL
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	
Equipment	41,000	40,000	8,000	45,000	0	85,000	219,000
Facility	1,185,000	895,000	1,780,000	2,155,000	950,000	1,850,000	8,815,000
Planned Projects Under \$100,000	165,650	130,880	166,200	0	0	215,000	677,730
Planned Projects \$100,000 - 499,999	1,498,000	602,300	1,604,250	830,850	1,175,000	827,000	6,537,400
Planned Projects \$500,000 and greater	833,000	600,000	0	850,000	0	0	2,283,000
Total	3,722,650	2,268,180	3,558,450	3,880,850	2,125,000	2,977,000	18,532,130

Where possible, planned projects for water are coordinated with local and major street projects.

The following is a summary of water improvements planned for the next 6 years:

- **EQUIPMENT**

- Pipe trailer with box for appurtenances for \$8,000 in 2016/17
- Surface wash pump \$15,000 in 2016/2017
- Vibration tester for \$10,000 in 2016/17
- Utility locator for \$8,000 in 2016/17 and 2018/19
- Radio communication replacement for \$40,000 in 2017/18
- Scissor lift for \$28,000 in 2019/20
- Lawn mower \$17,000 in 2019/20
- Horizontal directional drill machine for \$85,000 in 2021/22

- **FACILITY**

- Valley drive building maintenance estimated at \$15,000 for 2016/17
- Filter control consoles for \$50,000 in 2016/17
- Surge relief valve for \$10,000 in 2016/17
- Freight elevator \$300,000 requested in 2016/17

- Industrial valve replacement (9 valves) for a total cost of \$50,000 in 2016/17
 - New water services for \$150,000 annually 2016/17 – 2021/22
 - Security upgrades for \$60,000 in 2016/17, 2017/18, and 2019/20 with \$300,000 of security upgrades planned for 2018/19
 - HVAC improvements for \$210,000 in 2016/17, \$290,000 in 2018/19, \$200,000 in 2019/20, \$800,000 in 2020/21, and \$900,000 in 2021/22
 - Concrete reservoir rehabilitation program costs estimated at \$340,000 in 2016/17, \$60,000 in 2017/18, and \$80,000 in 2018/19 – 2019/20
 - Industrial pump MCC replacement for \$500,000 in 2017/18
 - Township pressure improvements for \$100,000 in 2017/18 – 2019/20
 - Domestic reservoir baffle system for \$120,000 in 2018/19
 - Filter level measurement for nine (9) filters for \$50,000 in 2018/19
 - Control system replacement for \$25,000 in 2017/18 and \$250,000 in 2018/19
 - Domestic pump MCC replacement for \$440,000 in 2018/19 and 2019/20
 - Carbon feed system replacement for \$250,000 in 2019/20
 - Flow meter replacement for fourteen (14) meters for \$250,000 in 2019/20
 - Industrial meter replacement for \$30,000 in 2019/20
 - Lime feed system for \$200,000 in 2019/20
 - Lime silo painting for \$45,000 in 2019/20
 - Process piping painting for \$200,000 in 2019/20
 - Raw water reservoir aeration system for \$150,000 in 2019/20
 - East plant refit for \$800,000 in 2021/22
- **PLANNED PROJECTS UNDER \$100,000**
 - In 2016/17, the City forecasts eight (8) projects including Woodlawn, Sandy Ridge, Leeway, Blarney, Noeske, Boston, Leonard, and Ottawa for a total cost of \$165,650

- In 2017/18, the City forecasts two (2) projects including Eastlawn and Sayre for a total cost of \$130,880
- In 2018/19, the City forecasts three (3) project including W. Wheeler, Richard, and Pershing for a total cost of \$166,200
- In 2021/22, the City forecasts four (4) projects including Burrell, Concord, River, and Helen for a total cost of \$215,000

- **PLANNED PROJECTS \$100,000 - 499,999**
 - In 2016/17, the City forecasts nine (9) projects including Crane, Cambridge, W. Wackerly, Kentwood, Rosemary, Bayliss, Ohio, Westbrier, and E. Meadowbrook for a total cost of \$1,503,000
 - In 2017/18, the City forecasts two (2) projects including E. Nelson and Chapel for a total cost of \$602,300
 - In 2018/19, the City forecasts seven (7) projects including Saginaw, Buchanan, Airfield, Haley, Manor, Austin, and E. Wackerly for a total cost of \$1,604,250
 - In 2019/20, the City forecasts four (4) projects including Austin, E. Wackerly, Federal, and N. Greenbelt for a total cost of \$830,850
 - In 2020/21, the City forecasts seven (7) projects including Mertz, Paine, Saginaw, Hamilton, Hancock, and W. St. Andrews (2) for a total cost of \$1,175,000
 - In 2021/22, the City forecasts six (6) projects including Cortland, W. St. Andrews, Poseyville, Michigan, Plumer, and St. Charles for a total cost of \$827,000

- **PLANNED PROJECTS \$500,000 AND GREATER**
 - In 2016/17, the City forecasts one (1) project including Waldo for a total cost of \$833,000
 - In 2017/18, the City forecasts one (1) project including Carpenter for a total cost of \$600,000
 - In 2019/20, the City forecasts one (1) project including E. Wheeler for a total cost of \$850,000

Wastewater

The City’s wastewater system includes nearly 207 miles of sanitary sewers, 40 pump stations and 14 stand by generators at major pump stations. The City of Midland Wastewater Treatment Plant has a one megawatt standby diesel generator to run critical loads during a power outage. The plant is a “Class A” sewage treatment plant with a design capacity of 10.0 million gallons a day (MGD) and a hydraulic capacity of 18.0 MGD. The City of Midland recycles approximately 3.5 million gallons of bio-solids each year.

Staff has carefully reviewed its 20 year Asset Management Program and budgets and prioritizes capital expenditures to extend the life of the treatment plant and to keep it operating at peak efficiency. The sanitary system is cleaned on a two-year rotation.

Wastewater improvement projects have been organized into the following project types:

- **GENERAL** – These projects include general capital maintenance programs.
- **EQUIPMENT** – These projects include specialized equipment or system components.
- **FACILITY** – These projects include capital improvements at the wastewater treatment plant.
- **PLANNED PROJECTS**– These projects include sanitary sewer projects and pump stations.

Table 6. Wastewater Improvement Projects

CIP Item	Budget Year						TOTAL
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	
General	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Equipment	150,000	85,000	205,000	435,000	585,000	285,000	1,745,000
Facility	946,000	1,078,000	825,000	1,102,500	940,000	995,000	5,886,500
Planned Project	250,000	550,000	600,000	0	0	0	1,400,000
Total	1,646,000	2,013,000	1,930,000	1,837,500	1,825,000	1,580,000	10,831,500

Where possible, planned projects for wastewater are coordinated with local and major street projects.

The following is a summary of wastewater improvements planned for the next 6 years:

- **GENERAL**
 - Manhole rehabilitation and lateral lining \$100,000 annually 2016/17-2021/22
 - Miscellaneous sewer repairs and linings \$200,000 annually 2016/17-2021/22
- **EQUIPMENT**
 - Flow meter \$20,000 in 2016/17 and \$40,000 in 2020/21

- Forcemain evaluation/replacement at the Dow Chemical site \$60,000 in 2016/17, \$150,000 in 2018/19, \$350,000 in 2019/20, \$500,000 in 2020/21, and \$100,000 in 2021/22.
- Gas monitor \$10,000 in 2018/19
- Pump stations – telemetry \$7,500 in 2016/17 and \$10,000 in 2017/18 – 2021/22
- Pump stations – generator \$100,000 in 2021/22
- Sewage valves \$30,000 in 2016/17 and 2017/18 and \$35,000 in 2018/19 – 2021/22
- Spot lining equipment \$7,500 in 2016/17, \$20,000 in 2017/18, \$15,000 in 2019/20, and \$15,000 in 2021/22
- Waste pump \$25,000 in 2016/17, 2017/18, 2019/20, and 2021/22
- **FACILITY**
 - Auto sampler \$15,000 in 2021/22
 - Bar screen \$250,000 in 2016/17 and 2017/18 and \$275,000 in 2021/22
 - Centrifugal pump \$18,000 in 2016/17, \$30,000 in 2017/18 – 2020/21, and \$35,000 in 2021/22
 - Citi works \$15,000 in 2018/19 and \$7,500 in 2019/20
 - Fiber optic throughout \$15,000 in 2016/17
 - Gear boxes \$15,000 in 2016/17, \$20,000 in 2017/18, and \$35,000 in 2019/20
 - Grit building heat recovery \$125,000 in 2020/21
 - Intermediate pump house \$75,000 in 2019/20 – 2021/22
 - Main pump house lift \$110,000 in 2016/17 – 2018/19
 - Plant facilities roof \$105,000 in 2017/18 – 2018/19 and \$125,000 in 2019/20 – 2021/22
 - Plant improvements \$250,00 in 2016/17 – 2018/19 and 2020/21 – 2021/22
 - Plant ultraviolet \$50,000 in 2016/17, \$250,000 in 2017/18 – 2018/19, and \$750,000 in 2019/20
 - PLC equipment \$20,000 in 2016/17 – 2019/20 and \$25,000 in 2020/21 – 2021/22
 - Security lighting replacements \$15,000 in 2019/20

- Security upgrades \$50,000 in 2016/17 and \$15,000 in 2020/21
 - Sludge thickener \$30,000 in 2016/17 and \$150,000 in 2020/21 – 2021/22
 - Submersible pump \$30,000 in 2016/17 and \$35,000 in 2017/18 – 2021/22
 - Trickling filter arm, east secondary filter \$100,000 in 2016/17 and 2020/21
 - Variable frequency drive \$8,000 in 2016/17 – 2017/18 and \$10,000 in 2018/19 – 2021/22
- **PLANNED PROJECTS**
 - In 2016/17 and 2017/18, the City has planned for sewer rehabilitation Elizabeth to Main for \$250,000 annually
 - In 2017/18, the City has planned for sewer improvements along Waldo for a cost of \$300,000
 - In 2018/19, the City has planned for a new pump station at Waldo and White for a cost of \$600,000

Landfill

The City of Midland owns and operates a MDEQ-licensed solid waste disposal facility located at 4311 E. Ashman Street, Midland, Michigan. The Landfill site consists of approximately 329 acres.

As part of the natural decomposition process, the solid waste within the landfill generates landfill gas, a combination of methane, carbon dioxide and a small concentration of other chemical compounds. The methane content of the gas will be harnessed and used as a fuel for creating electricity. A gas pipeline system is located in road right-of-ways, and easements along public roads and residential driveways, and is used for the conveyance of the methane gas from the CML to the Landfill gas to energy facility located at the City of Midland’s Wastewater Treatment Plant (WWTP).

The Gas-To-Energy (GTE) facility houses two Caterpillar 3520 engine/generators capable of producing 1600 kilowatts of electricity each. This City has a long-range agreement with the Dow Chemical Company to sell all the energy the GTE facility produces. Staff processes an average of over 100 vehicles per day, which amounts to roughly 550 tons per day of waste being buried.

The site began filling the current waste disposal site, Cell 16, with residential refuse in fiscal year 2007-08. Partially filled Cells 14 and 15 are now being used for Type III (soil and construction debris) waste disposal. Waste disposal operations are being managed to optimize future potential for decomposition gas. Including permitted future cells, the site has over 40 years remaining.

A landfill gas collection and control system (GCCS) has been in operation since summer 2010. The GCCS collects the gas byproduct of waste decomposition and sends the gas to the gas-to-energy plant located at the City’s Wastewater Treatment facility.

Finally, in 2014 the bioreactor program began in Cells 15 and 16. The bioreactor accepts treated biosolids sludge from the City’s Wastewater Treatment Plant into the garbage received that day.

The City also runs a large scale yard waste composting operation on the property. Over 40,000 cubic yards of leaves and grass are ground, mixed, rotated several times and eventually screened to generate high-quality compost.

Landfill improvement projects have been organized into the following project types:

- **EQUIPMENT** – These projects include specialized equipment or system components.
- **FACILITY** – These projects include capital improvements at the landfill site.

Table 7. Landfill Improvement Projects

CIP Item	Budget Year						TOTAL
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	
Equipment	10,000	275,000	250,000	265,000	10,000	265,000	1,075,000
Facility	780,000	1,085,000	1,050,000	295,000	800,000	1,095,000	5,105,000
Total	790,000	1,360,000	1,300,000	560,000	810,000	1,360,000	6,180,000

Where possible, Landfill projects will be coordinated with Renewable Energy projects.

The following is a summary of landfill improvements planned for the next 6 years:

- **EQUIPMENT**

- 3-in-1 digital equipment \$10,000 in 2016/17 and 2020/21
- Excavator replacement \$250,000 in 2018/19
- Waste oil burner \$10,000 in 2017/18
- Waste tarp cover \$15,000 in 2017/18, 2019/20, and 2021/22
- Wheel loader \$250,000 in 2017/18, 2019/20, and 2021/22

- **FACILITY**

- Building improvements \$20,000 in 2017/18
- Construction and Demolition Debris Type III site \$1,000,000 in 2021/22
- Cell 15 interim cover \$30,000 in 2016/17, 2018/19, and 2021/22
- Cell 16 interim cover \$30,000 in 2019/20
- Cell 17 development \$750,000 in 2016/17 and \$1,000,000 in 2017/18 – 2018/19
- Garbage compactor \$800,000 in 2020/21
- Land acquisition \$200,000 in 2019/20
- Portable fencing \$20,000 in 2018/19
- Road improvements for landfill site \$65,000 in 2017/18, 2019/20, and 2021/22

Renewable Energy

As part of the natural decomposition process, the solid waste within the City’s landfill generates landfill gas, a combination of methane, carbon dioxide and a small concentration of other chemical compounds. The methane content of the gas is harnessed and used as a fuel for creating electricity. A gas pipeline system is located in road right-of-ways, and easements along public roads and residential driveways, and is used for the conveyance of the methane gas from the city landfill gas to energy facility located at the site between the City of Midland’s Wastewater Treatment Plant (WWTP) and Water Plant.

The Gas-To-Energy (GTE) facility houses two Caterpillar 3520 engine/generators capable of producing 1600 kilowatts of electricity each. This City has a long-range agreement with the Dow Chemical Company to sell all the energy the GTE facility produces.

A landfill gas collection and control system (GCCS) has been in operation since summer 2010. The GCCS collects the gas byproduct of waste decomposition and sends the gas to the gas-to-energy plant located at the City’s Wastewater Treatment facility.

Renewable energy improvement projects have been organized into the following project types:

- **EQUIPMENT** – These projects include specialized equipment or system components.
- **MISCELLANEOUS** – These projects include miscellaneous valves and controls.

Table 8. Renewable Energy Improvement Projects

CIP Item	Budget Year						TOTAL
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	
Equipment	95,000	195,000	100,000	113,000	135,000	10,000	648,000
Miscellaneous	17,500	7,500	10,000	20,000	10,000	25,000	90,000
Total	112,500	202,500	110,000	133,000	145,000	35,000	738,000

Where possible, Renewable Energy projects will be coordinated with Landfill projects.

The following is a summary of renewable energy improvements planned for the next 6 years:

- **EQUIPMENT**
 - Air Compressor \$25,000 in 2017/18 and 2020/21
 - Chiller Compressor replacement for \$5,000 in 2016/17, \$8,000 in 2019/20, and \$10,000 in 2021/22
 - Chiller engineering evaluation \$35,000 in 2017/18
 - H2S removal from gas stream evaluation is estimated at \$40,000 in 2017/18

- Major components replacement \$90,000 in 2016/17, \$95,000 in 2017/18, \$100,000 2018/19, \$105,000 in 2019/20, and \$110,000 in 2020/21

- MISCELLANEOUS
 - Miscellaneous PLC controls \$7,500 in 2016/17 and 2017/18, \$10,000 in 2018/19 to 2020/21, and \$15,000 in 2021/22

 - Miscellaneous valves \$10,000 in 2016/17, 2019/20, and 2021/22

General Infrastructure

The general category is a catch-all of infrastructure improvement projects within the City of Midland. General projects include non-motorized projects, wayfinding, street light upgrades, and pavement projects in the Midland Municipal Cemetery and other City facilities. In the future, the infrastructure capital improvement plan may be expanded to incorporate other capital improvements such as parks, police, fire, and City buildings.

General infrastructure projects have been organized into the following project types:

- **GENERAL** – These projects include general capital maintenance.
- **FACILITY** – These projects include capital improvements to
- **PLANNED PROJECTS** – These projects include

Table 9. General Infrastructure Improvement Projects

CIP Item	Budget Year						TOTAL
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	
Facility	265,000	15,000	15,000	15,000	15,000	15,000	340,000
General	71,000	76,000	76,000	76,000	0	0	299,000
Planned Projects	105,000	50,000	0	0	0	0	155,000
Total	441,000	141,000	91,000	91,000	15,000	15,000	794,000

The following is a summary of general infrastructure improvements planned for the next 6 years:

- **GENERAL**
 - Sidewalk improvements engineering \$10,000 annually 2016/17 – 2021/22
 - Sidewalk improvements \$40,000 annually 2016/17 – 2021/22
 - Street light upgrades \$6,000 annually 2016/17 – 2021/22
 - Wayfinding signs \$15,000 in 2016/17 and \$20,000 in 2017/18 – 2019/20
- **FACILITY**
 - Cemetery streets \$15,000 annually 2016/17 – 2021/22
 - W. St. Andrews Road bridge at Snake Creek (50% General, 50% Major Streets) \$250,000 in 2016/17

- PLANNED PROJECTS
 - Downtown paver project \$50,000 in 2016/17
 - M-20 bridge illumination \$50,000 in 2016/17 and 2017/18
 - Northwood sidewalk \$5,000 in 2016/17

[INTENDED AS REAR COVER]