



AGENDA
CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION – REGULAR MEETING
September 21, 2026 6:30 PM

1. CALL MEETING TO ORDER
2. ROLL CALL
3. PUBLIC REMARKS
4. APPROVAL OF AGENDA
5. APPROVAL OF MINUTES
 - A. August 10, 2026
6. COMMUNICATIONS
 - A. Bath Charter Township re: Notice of Distribution
7. PUBLIC HEARINGS
 - A. PUD #26026 – Capstone Hannah Boulevard Apartments
 - B. SUP #26028 – New Hope Church
 - C. ZA #26025 – Professional Office Updates
8. UNFINISHED BUSINESS
 - A. None
9. OTHER BUSINESS
 - A. CR #26033 – Section 61 Review – Township Property Acquisition – Liverance Street
 - B. CR #26034 – Section 61 Review – Township Property Acquisition – Algonquin Way
 - C. Drive-Through Sign Review – Wendy’s
10. REPORTS AND ANNOUNCEMENTS
 - A. Township Board update
 - B. Liaison reports
11. PROJECT UPDATES
12. PUBLIC REMARKS
13. COMMISSIONER COMMENTS
14. ADJOURNMENT

Individuals with disabilities requiring auxiliary aids or services should contact: Director of Community Planning and Development
Timothy R. Schmitt, 5151 Marsh Road, Okemos, MI 48864 or 517.853.4506 - Ten Day Notice is Required.
Meeting Location: 5151 Marsh Road, Okemos, MI 48864





AGENDA page 2
CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION MEETING
September 21, 2026 6:30 PM

TENTATIVE PLANNING COMMISSION AGENDA
October 12, 2026

1. PUBLIC HEARINGS
 - A. SUP #26035 – Bridges Group Child Care
2. UNFINISHED BUSINESS
 - A. ZA #26025 – Professional Office Updates
 - B. PUD #26026 – Capstone Hannah Boulevard Apartments
 - C. SUP #26028 – New Hope Church
3. OTHER BUSINESS
 - A. None

Individuals with disabilities requiring auxiliary aids or services should contact: Director of Community Planning and Development
Timothy R. Schmitt, 5151 Marsh Road, Okemos, MI 48864 or 517.853.4506 - Ten Day Notice is Required.
Meeting Location: 5151 Marsh Road, Okemos, MI 48864

Providing a safe and welcoming, sustainable, prime community.



CHARTER TOWNSHIP OF MERIDIAN
REGULAR MEETING PLANNING COMMISSION
5000 Okemos Road, Okemos MI 48864-1198
517.853.4000, Township Townhall Room
Monday, August 10, 2026, 6:30 pm

PRESENT: Chair Romback, Vice-Chair McCurtis, Commissioners Brooks, McConnell,
Shrewsbury, and Nahum

ABSENT: None

STAFF: Principal Planner Shorkey

1. CALL MEETING TO ORDER

Chair Romback called the August 10, 2026, regular meeting for the Meridian Township Planning Commission to order at 6:30 pm.

2. ROLL CALL

Chair Romback called the roll of the Board. All Board members were present.

3. PUBLIC REMARKS

None

4. APPROVAL OF AGENDA

Vice-Chair McCurtis moved to approve the August 10, 2026, Regular Planning Commission meeting agenda as amended. Seconded by Commissioner McConnell. Motion passed unanimously.

5. APPROVAL OF MINUTES

Vice-Chair McCurtis moved to approve Minutes of the July 27, 2026 meeting as amended. Seconded by Commissioner Nahum. Motion passed unanimously.

6. COMMUNICATIONS

Handout from Commissioner Nahum re: SUP #26018

7. PUBLIC HEARINGS

A. None

8. UNFINISHED BUSINESS

A. SUP #26018 – 7Eleven

Principal Planner Shorkey summarized the memo, described the changes on the site plan, and pointed out the resolutions for approval and denial in the packet.

Commissioner McConnell asked Principal Planner Shorkey to bring the site plan up and favorably commented on the proposed landscaping and the connection. Discussion ensued about the proposed pathway connection from Wardcliff Drive.

Vice-Chair McCurtis asked for clarification about the proposed dimensional variances and the motorized connections.

Mr. John Krupa spoke on behalf of the application and discussed the updated site plan. Mr. Krupa said that an eight-foot fence is proposed to screen the development from residents. Mr. Krupa discussed proposed landscaping and environmental mitigation measures for vapors and spillage.

Commissioner Nahum discussed his communication about health effects of gas stations on nearby residents and asked Mr. Krupa about benzene vapor calculations. Mr. Krupa said that he didn't have that information but that the environmental standards in the United States are strict. Further discussion about environmental effects.

Vice-Chair McCurtis moved to adopt the resolution to approve SUP #26018 to allow the construction of a new gas station and convenience store at the property at 2736 Grand River Avenue, subject to the conditions found in the resolution to approve. Seconded by Commissioner Shrewsbury.

Commissioner Brooks asked for Commissioners to explain their rationale for voting to approve the application. Commissioner McConnell said that he is ambivalent and discussed the Grand River access, the internal traffic connection, and the nonmotorized connection to the neighborhood.

Chair Rombach discussed environmental regulations and the approval process. Principal Planner Shorkey said that if the SUP is approved, the applicant will have to go through site plan approval and receive their building permits. Discussion about environmental reviews ensued. Commissioner Nahum said that they did not want houses right next to gas stations and that is the reason for the setback and that having no setback for the apartments is a hazard.

Commissioner Shrewsbury said that for the size and shape of the site, the site plan has been thoughtfully designed. Shrewsbury said there are several gas stations on Grand River and this is not any different from what is already there.

Chair Rombach called the question. Motion passed 4 to 2, Commissioners Brooks and Nahum dissenting.

B. ZA #26015 – Mass Timber

Principal Planner Shorkey summarized the memo and pointed out the resolution in the packet.

Commissioner McConnell moved to adopt the resolution recommending approval of Zoning Amendment #26015 in accordance with the revised draft ordinance language,

subject to the conditions found in the resolution to approve. Seconded by Vice-Chair McCurtis. Motion passed unanimously.

C. SUP #26022 – Krock Day Care

Principal Planner Shorkey summarized the memo and pointed out the resolution in the packet.

Commissioner Brooks moved to adopt the resolution approving SUP #26022 to establish a group child care home for up to fourteen children at 6364 Porter Avenue, subject to the conditions found in the resolution to approve. Seconded by Commissioner Nahum. Motion passed unanimously.

D. Restaurants in Professional Office – Discussion

Principal Planner Shorkey summarized the memo and discussed the history of the discussions up to this point.

Chair Romback said that the draft ordinance looked good. Principal Planner Shorkey complimented the proactive action and mentioned conversations with other potential restaurants. Commissioner Brooks said that he thought the ordinance looked good too.

During the discussion, Commissioner Brooks said that he realized that he wanted to amend the minutes of the July 27, 2026 meeting to confirm his support for allowing non-drive in or drive-through restaurants in the PO district without an SUP. Principal Planner Shorkey said that the minutes were already approved. Commissioner McConnell suggested that the minutes could be reopened.

Commissioner Brooks moved to reopen the minutes, seconded by Commissioner Nahum. Motion passed unanimously.

After discussion, Principal Planner Shorkey confirmed the amended text.

Commissioner Nahum moved to approve Minutes of the July 27, 2026 meeting as amended a second time. Seconded by Commissioner McConnell. Motion passed unanimously.

Principal Planner Shorkey said that he would schedule a public hearing for the proposed amendment for the first September meeting. Commissioner Shrewsbury said that only one meeting was scheduled in September. Shorkey confirmed that and said that the hearing would be scheduled on September 21, 2026.

9. OTHER BUSINESS

A. None

10. REPORTS AND ANNOUNCEMENTS

a. Township Board Update

Principal Planner Shorkey had no comment. Commissioner Nahum said that the Board had discussed the Singh rezoning.

b. Liaison Reports

Commissioner Nahum said that the Zoning Board of Appeals did not meet. Commissioner McConnell reported on recent Environmental Commission activity.

11. PROJECT UPDATES

None

12. PUBLIC REMARKS

None

13. COMMISSIONER COMMENTS

Vice-Chair McCurtis complimented the Township on a successful Celebrate Meridian.

Principal Planner Shorkey said that due to a lack of items, he would cancel the August 24th Planning Commission meeting; the next meeting would be September 21st.

Principal Planner Shorkey told the Commissioners to let him know if there was something they wanted to talk about at the next meeting. Chair Romback discussed a Detroit Free Press article about gas station moratoriums that he had sent earlier. Discussion about moratoriums ensued.

Commissioner McConnell said that it would be a good idea to check with the CIA and the DDA before they blindsided them with a moratorium. Chair Romback suggested a six-month moratorium for a study about the number of gas stations. Commissioner McConnell said that they had substantial health concerns about gas stations as well.

Commissioner McConnell asked how a moratorium would happen. Principal Planner Shorkey said that it had to be a Board action. Commissioner Brooks said that the Planning Commission could propose a zoning amendment and that they had the rationale to propose a moratorium based on the fact that all three recent gas stations required zoning variances. Commissioner Shrewsbury asked if it was a good idea to amend the ordinance to allow more pumps. Commissioner Brooks suggested that the Planning Commission review the entire ordinance.

Principal Planner Shorkey said that if the gas stations do not receive their variances, they would have to amend their SUPs. Commissioner McConnell said that the more tanks you have the greater risk you are creating and discussed vapor and spillage. Commissioner Brooks said that he did not advocate allowing more pumps and had asked all along what the long term effects of gas stations are and what has to be done to clean them up afterwards.

Commissioner McConnell said that he viewed every new car wash and gas station as an upgrade to an old gas station. Commissioner Brooks asked if that was what was happening. McConnell pointed out that that Sheetz is proposing to tear down an old car wash and said that he would support a moratorium while they figured the ordinance out.

Chair Romback asked if Staff has the resources internally to look at a comparison of Meridian Township to other communities for the number of gas stations. Commissioner Shrewsbury agreed and supported asking the Economic Development team about potential for development. Shrewsbury pointed out that that every new gas station or car wash or bank takes a site off the market for a different type of business. Shrewsbury said that she wanted the Planning Commission to be supportive of what the Economic Development team is trying to do.

Principal Planner Shorkey suggested that the Planning Commission might want to consider a minimum distance ordinance to separate gas stations and asked the Planning Commission if they wanted gas stations as a discussion item on the next agenda. Discussion about development trends. Chair Romback asked for gas stations to be a discussion item on the next agenda. Principal Planner Shorkey said that he would prepare a memo for discussion.

Commissioner Brooks suggested that the Planning Commission might not know what development is coming but could incentivize the kind of growth in the community that they want. Commissioner McConnell said that he thinks development comes in waves because market analyses find unmet demands and people detect that and then start looking to exploit it.

Commissioner McConnell asked Principal Planner Shorkey to ask the City of East Lansing about their gas station moratorium.

14. ADJOURNMENT

Chair Romback called for a motion to adjourn the meeting.

Commissioner Nahum moved to adjourn the August 10, 2026 regular meeting of the Planning Commission. Seconded by Vice-Chair McCurtis. Motion passed unanimously at 7:48.

August 19, 2026

Bath Township Planning Commission
14480 Webster Road
P.O. Box 247
Bath, MI 48808

Reid 8.24.26

**RE: Notice of Distribution
Bath Charter Township**

To Whom It May Concern:

As required by Section 125.3841 of the Michigan Planning Enabling Act (2008), the draft Bath Charter Township 2026 Comprehensive Plan is being made available for your review and comment. The Michigan Planning Enabling Act provides surrounding communities and other respondents with 63 days to provide comments. This review period expires on October 21st, 2026. Any response before that date would be appreciated. A copy of the draft Comprehensive Plan is available on the Township's webpage: <https://www.bathtownship.us>.

Thank you in advance for your cooperation and timely response in reviewing this draft plan. Should you have any questions regarding the proposed plan, please contact Planning Department Staff at 517-641-6728 or email info@bathtownship.us

We look forward to your input as we complete this update to the Township's Comprehensive Plan.

Sincerely,
BATH TOWNSHIP PLANNING COMMISSION

John Reich, Sr., Chair

Bath Township Planning Commission
14480 Webster Road
P.O. Box 247
Bath, MI 48808



To: Planning Commission

From: Brian Shorkey, *AICP*, Principal Planner

Date: September 21, 2026

Re: Planned Unit Development #26026 (Capstone), develop a PUD consisting of 256 multiple-family units on approximately 69 acres located at the east end of Hannah Boulevard.

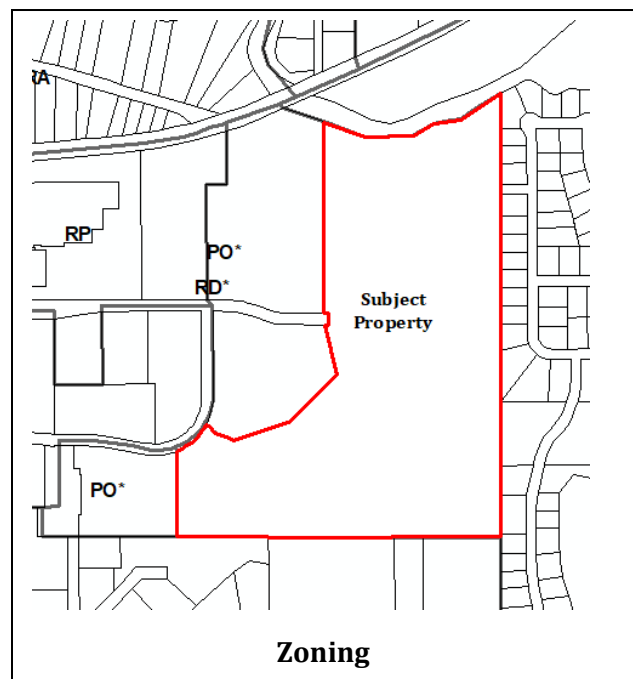
Capstone Collegiate Communities, the Applicant, has submitted a planned unit development (PUD) proposal for the property at the end of Hannah Boulevard. This submission follows the conditional rezoning of the property to RD, Multiple-Family Residential (REZ #26-01, May 7, 2026). The PUD proposal includes the construction of 256 new multiple-family units on two parcels, totaling approximately 69 acres located at the east end of Hannah Boulevard. Access to the buildings would be from Hannah Boulevard or Eyde Parkway.

The intent of the PUD ordinance is to permit greater flexibility and more creative design of residential developments than is possible under conventional zoning regulations. A minimum of 50% of the project area, excluding wetlands and floodplains, must be preserved as open space.

Zoning

The subject property is located in the RD (Multiple Family, 8 units per acre) zoning district. A PUD is allowed in any residential zoning district on any sized property. Four multiple-story buildings are proposed, as well as a number of cottages and townhomes.

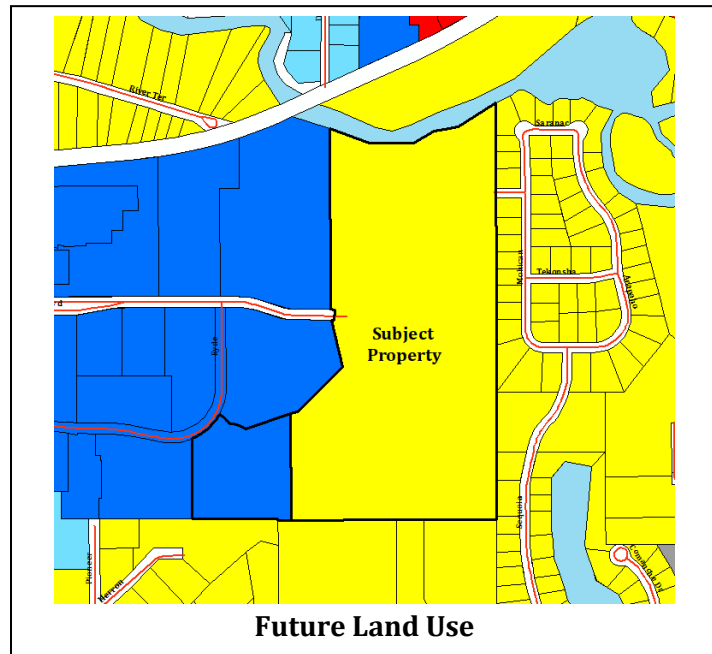
The properties to the north and east are zoned RAA, Single-Family Residential. The properties to the south are zoned RR, Rural Residential. The properties to the west are zoned PO, Professional Office.



Master Plan

As noted, the Subject Property consists of two parcels. The smaller parcel, fronting on Eyde Parkway, is shown as Mixed Use on the Future Land Use Map. These are areas envisioned for mixed uses containing engaging and walkable streetscapes with varied activities, including multiple residential housing. The Mixed Use designation supports the requested PUD.

The second, larger parcel is shown as Suburban Residential on the Future Land Use Map. This is the most prevalent residential category in the Township and is characterized by planned aesthetics, proximity to retail and cultural centers.



Physical Features

As shown on the attached proposed site plan, the Subject Property is undeveloped and consists of natural vegetation. The Township online GIS shows the presence of wetlands on the southeast and northeast corners of the Subject Property. These wetlands coincide with floodways associated with the Red Cedar River and the associated wetlands. The Applicant submitted a wetland delineation with the PUD application, dated May 27, 2025, to confirm the location of the wetlands. The site plan that was submitted with the application indicates that the Applicant has taken the wetlands and floodways into account. The north end of the site fronts on the Red Cedar River.

According to the Greenway Plan, the wetlands/floodways coincide with Priority Conservation Corridors. As noted, the proposed site plan shows that these areas are being preserved.

Streets and Traffic

The Subject Property is accessed from Hannah Boulevard (Buildings 2A, 2B, and 2C) or Eyde Parkway (Building #1). Both of these roads are two-lane local roads with curb and gutter. A 7-foot pedestrian pathway fronts on both of those roads.

An updated traffic impact analysis was submitted with the PUD application, prepared by Progressive Companies and dated January 2026. The assessment used data from the Institute of Transportation Engineers (ITE) Trip Generation Manual edition to estimate trip generation rates for the proposed development. The analysis concluded that no further infrastructure improvements are recommended,

although the study also suggests that signal timing adjustments may need to be made to ensure that queues do not exceed the storage capacity.

A traffic impact study is required for developments that are expected to generate more than 250 additional directional trips during the peak hour. The traffic assessment estimated that the development will generate approximately 110 weekday morning peak hour vehicle trips and approximately 131 afternoon peak hour vehicle trips. Based on the findings of the attached traffic analysis, the traffic expected to be generated by the proposed rezoning does not require a full traffic impact study. Note that the traffic assessment will have to be reviewed and accepted by the ICRD.

Although there is a stub street from the Indian Lakes Estates neighborhood going from Mohican into the Subject Property, it is clear from previous development proposals that connecting into the neighborhood was a strongly undesired outcome. As such, the development proposed secondary access through existing development to the west and functionally seals off the stub street through long term preservation of the land where the stub runs into.

Utilities

Municipal water and sanitary sewer are available to serve the subject site. Sewer and water run along Hannah Boulevard and Eyde Parkway and serve the existing development in Hannah Farms. The location and capacity of utilities for any proposed development will need to be approved by the Department of Public Works and Engineering.

The Hannah Farm Drain runs along the front of the property. There is also a branch of the Hannah Farm Drain that runs through the southern part of the Subject Property.

Planned Unit Development Standards

Planning Staff is providing the minimum PUD performance objectives for planned unit developments for the Planning Commission's review, as found in Sec. 86-439 in the zoning ordinance. Based on those objectives, Staff has the following comments:

1. All applications shall provide for buffering between any conflicting feature of the design and adjacent residential land use.

The Applicant met extensively with the HOA for the Indian Hills subdivision. The buffers as shown on the attached plan were mutually agreed on between the Applicant and the Indian Hills HOA and confirmed during the rezoning process.

2. All applications shall ensure good internal and external pedestrian accessibility with a minimum of conflicting points with the vehicular circulation system.

The site plan shows an internal sidewalk system that connects to the Township Pathway.

3. All applications shall minimize the cost of street construction and associated maintenance costs while adhering to official Township construction standards.

No new public streets are proposed and the traffic analysis states that no traffic improvements are expected to be necessary for the proposed development.

4. All applications shall consider convenient access to public transportation.

CATA's Route 18 loop connects to the west end of Hannah Boulevard. This is connected to the proposed development via a non-motorized system.

5. All applications shall minimize the cost of utility construction and associated maintenance costs while adhering to construction standards.

The permanent preservation of the natural areas on the site will minimize the amount of construction necessary for the development. The Applicant is responsible for all costs.

6. All applications shall take advantage of natural vegetation and topographic characteristics to promote natural air conditioning and enhancement of air quality.

As noted in this report, the site plan shows the preservation of the natural areas on the site.

7. All applications should enhance and preserve wildlife habitat, with special attention to wetlands and other unique habitats.

A wetland delineation has been submitted that verifies the location of wetlands on the site. The plan shows that the wetlands and associated buffers are confirmed.

8. Except in unusual circumstances, stormwater runoff induced by the proposed development shall be detained for storage and infiltration on the site.

Stormwater runoff will be reviewed by the Ingham County Drain Commission during site plan review.

9. All applications shall provide for active and/or passive recreation on the site in harmony with the character of the open space.

The proposed buildings are ringed with sidewalks that connect to the Township Pathway system. A clubhouse for residents is included on the plan.

10. A minimum of 50% of the project area allowed for density determination, excluding wetlands and floodplains, shall be provided as open space. Deliberate efforts must be made to preserve important landscape features and amenities of long term value and use these features as key components of design.

The plan as submitted meets this requirement.

11. All applications shall contain a housing type or types sufficient in number to maintain a harmonious relationship with important site features, structures and adjacent land uses and represent quality in design.

The housing types proposed comply with this requirement and were mutually agreed upon by the Applicant and the Indian Hills HOA.

12. All applications shall demonstrate that there is adequate capacity of public streets, sewer and water facilities to serve the development.

As mentioned, the traffic assessment states that no road improvements are necessary. Township Engineering confirms that there is sewer and water capacity for the proposed project.

Planning Commission Options

The Planning Commission may recommend approval as written, recommend approval of a revised version, or recommend denial of the proposed zoning amendment. The ultimate approval or denial of the PUD application is up to the Board of Trustees. Staff will provide a resolution at a future meeting after collecting the Planning Commission and the public comments and fully reviewing the application.

Attachments

1. Site plan prepared by KEBS, Inc., dated May 26, 2026 and received by the Township September 9, 2026.
2. Building Elevations and Architectural Drawings prepared by Nequette, dated June 23, 2026 and received by the Township July 28, 2026
3. Natural Feature Report prepared by Marx Wetlands, LLC, dated October 17, 2025 and received by the Township May 13, 2026
4. Traffic Impact Study prepared by Progressive Companies, dated January 2026 and received by the Township January 27, 2026

APPLICANT:	ENGINEER/SURVEYOR:	ARCHITECT:
CAPSTONE COLLEGIATE COMMUNITIES, LLC 431 OFFICE PARK DR. BIRMINGHAM, AL 35223 PH: (205) 414-6475	KEBS, Inc. 2116 HASLETT RD. HASLETT, MI. 48840 PH: (517) 339-1014	NEQUETTE ARCHITECTURE 2227 2ND AVENUE NORTH, 4TH FLOOR BIRMINGHAM, AL 35203 PH: (205) 329-7001

STANDARD CONSTRUCTION NOTES

1. The Contractor shall notify the Charter Township of Meridian, Department of Public Works, Office of Engineering, ph# 517-854-4440, a minimum of 72 hours prior to the start of construction of public utilities or of construction within the public right-of-way. In addition any work within the public right-of-way, including signage will require a permit from the Ingham County Road Department.
2. All construction shall conform to the current standards and specifications of the Charter Township of Meridian which are included as part of these plans in effect at the time of construction.
3. After the completion of construction of public utilities or construction within public right-of-way, the contractor must request a final inspection. Any punchlist items resulting from the final inspection must be resolved prior to final release and acceptance.
4. The existing utilities indicated on the plans are in accordance with available information. It shall be the contractor's obligation to verify the exact location of all existing utilities, which might affect this job.
5. The contractor shall notify "MISS DIG 1-800-482-7117" at least 72 hours prior to the start of construction.
6. The contractor shall at all times be aware of the location of all existing utilities caused by the abutting property owners and the general public. Where the contractor plans to do any work that may affect existing utilities, the contractor does not remedy undue inconveniences, the Meridian Charter Township, upon four hours notice, reserves the right to perform the work and deduct the cost therefore from the money due the contractor.
7. A Registered Land Surveyor provided by the contractor at the contractor's expense shall replace all property irons and monuments disturbed or destroyed by the contractor's operations.
8. Contractor shall provide Owner and Township Engineer a copy of written permission to use private property for storage of equipment and materials or for his construction operations.
9. Trench backfill under existing or proposed roadways, driveways, and parking areas, shall be sand or gravel, placed in 12" layers (maximum) and consolidated to 95% of maximum density as measured by modified proctor unless otherwise noted.
10. Trees and shrubs are to be protected during construction and bored where necessary.
11. Existing fences shall be removed and restored to their original condition or better where in conflict with construction.
12. Driveways, culverts, ditches, drain tile, tile fields, drainage structures, etc., that are disturbed by the contractor's operations shall be immediately restored.
13. All established lawn areas disturbed by the contractor's operations shall be resodded with matching sod. All other areas shall be seeded and mulched. Seeding and mulching shall be done in accordance with the General Specifications.
14. All ditch slopes shall have established vegetation and be protected from erosion.
15. All utility poles in close proximity to construction shall be supported in a manner satisfactory to the utility owner.
16. Prior to acceptance of the public utility, one set of acceptable sealed as-built mylars, minimum 3 mils thick, and one diskette (AutoCAD format) of the site plans shall be submitted to the Office of Engineering.
17. Onsite parking and sanitary facilities shall be provided for construction workers. The facilities shall be constructed and operated (with minimal impact to the surrounding area) to the satisfaction of the Township.

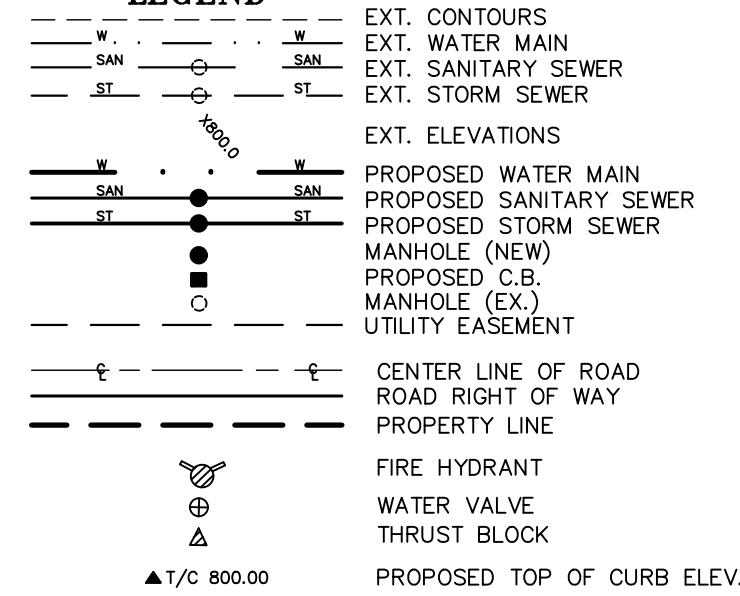
PATHWAY / SIDEWALK NOTES

1. Sidewalk - 5" (minimum) wide concrete 4" thick, 6" thick through single family residential driveways, 7" thick through multi-family residential and commercial driveways on 3" compacted sand backfill. To maintain continuity, all 4" wide concrete sidewalks shall be replaced with new 4" wide concrete sidewalk when appropriate.
2. Pathways - (adjacent to roadways) - 7" (minimum) (8" when next to a wall or other object) wide concrete, 4" thick, 6" thick through residential driveways, 7" thick through commercial driveways on 3" compacted sand backfill.
3. Pathways - (off-road) - 8" (minimum) wide concrete, 6" thick concrete on 3" compacted sand backfill or 8" (minimum) wide asphalt 3" thick (Bituminous Mixture 1500T/L) on 6" of 21A crushed limestone (minimum 9" wide).
4. Sidewalks and pathways shall generally be placed 1 (one) foot from the ultimate right-of-way as identified on the "Street and Highway Plan". Contact the Department of Planning and Community Development for a current copy of the plan.
5. A boardwalk may be required to be installed instead of a standard concrete sidewalk/pathway if regulations do not allow their installation.
6. Pathways and sidewalks shall be constructed so as to promote proper positive surface drainage. Where ever possible the sidewalk/pathway shall be constructed 0.5' higher than the curb.
7. Retaining walls shall only be installed where all other efforts (offsite grading easements, tree relocation, etc.) to mitigate the need for such wall have been evaluated for cost effectiveness and dismissed.
8. Guardrails and handrails shall be installed where the slopes adjacent to the pathway/sidewalk cannot be constructed to 1' vertical for every 3' horizontal. The depth to the toe of the slope area will be considered when implementing this requirement.
9. Pathways or sidewalks that do not connect to an existing pathway/sidewalk shall provide a gradual transition to existing ground. A "path ends" sign shall be posted at all pathway/sidewalk terminations.
10. Maximum slope of sidewalk is 5%. Cross slope is 2%.
11. All existing bituminous and concrete to be removed shall be sawcut.
12. Expansion joint to be placed at 100' intervals.
13. All lumber to be pressure treated (Osborne 33 or equal) to 0.4 retention.

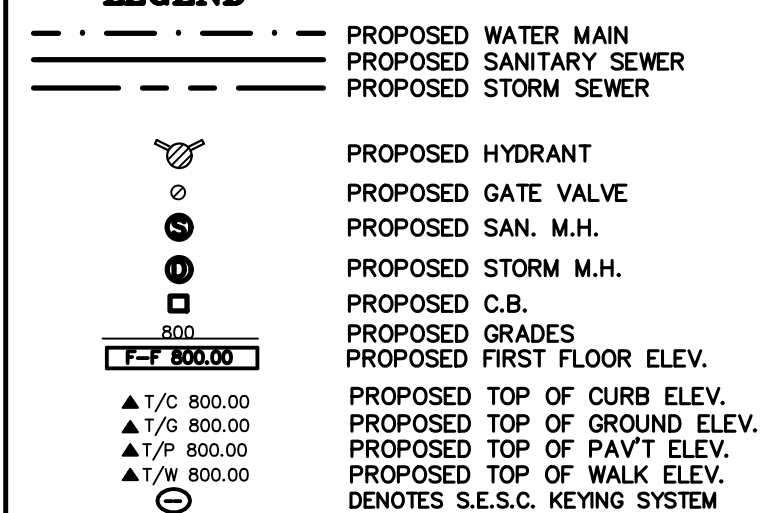
NOTE:

1. FLOOR DRAIN LOCATIONS IN PROPOSED BUILDINGS (SEE ARCHITECTURAL PLANS)
2. NO EXISTING OR PROPOSED STORAGE FACILITIES
3. NO PROPOSED BUILDINGS SHALL STORE, USE OR GENERATE HAZARDOUS WASTE
4. INVENTORY OF HAZARDOUS SUBSTANCE NOT PROVIDED SINCE NONE IS PROPOSED

LEGEND

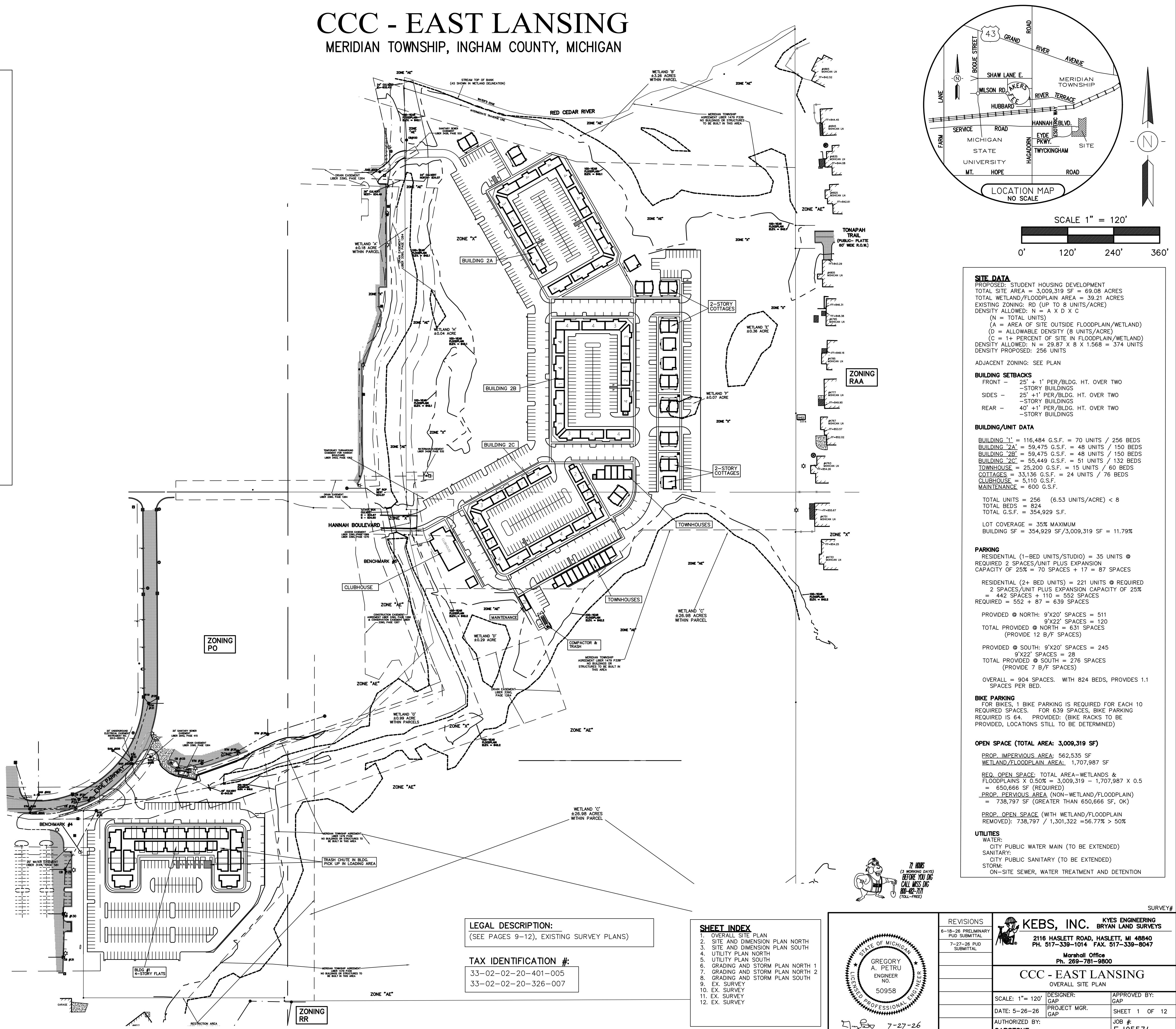


LEGEND



CCC - EAST LANSING

MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN



SITE DATA

PROPOSED: STUDENT HOUSING DEVELOPMENT
TOTAL SITE AREA = 3,009,319 SF = 69.08 ACRES
TOTAL WETLAND/FLOODPLAIN AREA = 39.21 ACRES
EXISTING ZONING: RD (UP TO 8 UNITS/ACRE)
DENSITY ALLOWED: $N = A \times D \times C$
(N = TOTAL UNITS)
(A = AREA OF SITE OUTSIDE FLOODPLAIN/WETLAND)
(C = ALLOWABLE DENSITY (8 UNITS/ACRE)
(D = 1+ PERCENT OF SITE IN FLOODPLAIN/WETLAND)
DENSITY ALLOWED: $N = 29.87 \times 8 \times 1.568 = 374$ UNITS
DENSITY PROPOSED: 256 UNITS

ADJACENT ZONING: SEE PLAN

BUILDING SETBACKS

FRONT - 25' + 1' PER/BLDG. HT. OVER TWO
-STORY BUILDINGS
SIDES - 25' + 1' PER/BLDG. HT. OVER TWO
-STORY BUILDINGS
REAR - 40' + 1' PER/BLDG. HT. OVER TWO
-STORY BUILDINGS

BUILDING/UNIT DATA

BUILDING '1' = 116,484 G.S.F. = 70 UNITS / 256 BEDS
BUILDING '2A' = 59,475 G.S.F. = 48 UNITS / 150 BEDS
BUILDING '2B' = 59,475 G.S.F. = 48 UNITS / 150 BEDS
BUILDING '2C' = 55,449 G.S.F. = 51 UNITS / 132 BEDS
TOWNHOUSE = 25,200 G.S.F. = 15 UNITS / 60 BEDS
COTTAGES = 33,136 G.S.F. = 24 UNITS / 76 BEDS
CLUBHOUSE = 5,110 G.S.F.
MAINTENANCE = 600 G.S.F.

TOTAL UNITS = 256 (6.53 UNITS/ACRE) < 8
TOTAL BEDS = 824
TOTAL G.S.F. = 354,929 S.F.

LOT COVERAGE = 35% MAXIMUM
BUILDING SF = 354,929 SF/3,009,319 SF = 11.79%

PARKING

RESIDENTIAL (1-BED UNITS/STUDIO) = 35 UNITS @
REQUIRED 2 SPACES/UNIT PLUS EXPANSION
CAPACITY OF 25% = 70 SPACES + 17 = 87 SPACES

RESIDENTIAL (2+ BED UNITS) = 221 UNITS @ REQUIRED
2 SPACES/UNIT PLUS EXPANSION CAPACITY OF 25%
= 442 SPACES + 110 = 552 SPACES
REQUIRED = 552 + 87 = 639 SPACES

PROVIDED @ NORTH: 9'X20' SPACES = 511
 9'X22' SPACES = 120
 TOTAL PROVIDED @ NORTH = 631 SPACES
 (PROVIDE 12 B/F SPACES)

PROVIDED @ SOUTH: 9'X20' SPACES = 245
9'X22' SPACES = 28
TOTAL PROVIDED @ SOUTH = 276 SPACES
(PROVIDE 7 B/F SPACES)

OVERALL = 904 SPACES. WITH 824 BEDS, PROVIDES 1.1 SPACES PER BED.

BIKE PARKING
FOR BIKES, 1 BIKE PARKING IS REQUIRED FOR EACH 10 REQUIRED SPACES. FOR 639 SPACES, BIKE PARKING REQUIRED IS 64. PROVIDED: (BIKE RACKS TO BE PROVIDED, LOCATIONS STILL TO BE DETERMINED)

OPEN SPACE (TOTAL AREA: 3,009,319 SF)

PROP. IMPERVIOUS AREA: 562,535 SF
WETLAND/FLOODPLAIN AREA: 1,707,987 SF

REQ. OPEN SPACE: TOTAL AREA-WETLANDS &
FLOODPLAINS X 0.50% = 3,009,319 - 1,707,987 X 0.5
= 650,666 SF (REQUIRED)

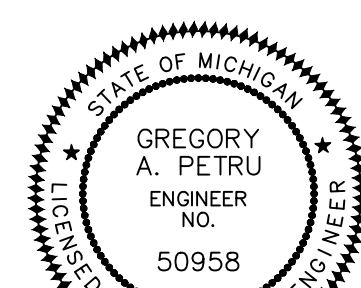
PROP. PERVIOUS AREA (NON-WETLAND/FLOODPLAIN)
= 738,797 SF (GREATER THAN 650,666 SF, OK)

PROP. OPEN SPACE (WITH WETLAND/FLOODPLAIN REMOVED): $738,797 / 1,301,322 = 56.77\% > 50\%$

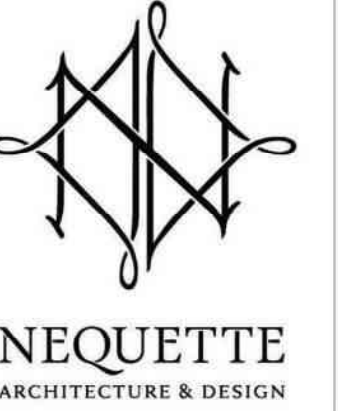
UTILITIES

WATER:
CITY PUBLIC WATER MAIN (TO BE EXTENDED)
SANITARY:
CITY PUBLIC SANITARY (TO BE EXTENDED)
STORM:
ON-SITE SEWER, WATER TREATMENT AND DETENTION

SURVEY#



REVISIONS 6-18-26 PRELIMINARY PUD SUBMITTAL 7-27-26 PUD SUBMITTAL	 KEBS, INC. 2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047 Marshall Office Ph. 269-781-9800	KYES ENGINEERING BRYAN LAM SURVEYS
CCC - EAST LANSING OVERALL SITE PLAN		
SCALE: 1" = 120' DATE: 5-26-26	DESIGNER: GAB PROJECT MGR. GAB	APPROVED BY: GAB SHEET 1 OF 12
AUTHORIZED BY: CAPSTONE	JOB #: E-105574	



NOT FOR CONSTRUCTION

CAPSTONE AT HANNAH FARMS EAST
EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

DISTRIBUTION LOG

DATE	NAME
7/22/2026	PUD ELEVATIONS

[illegible]ARCHITECTURAL
SITE PLAN

A100

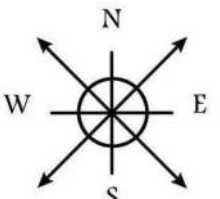


CAPSTONE AT HANNAH FARMS EAST

SITE LEGEND

Building	Use/Product Type	Quantity	Building Height (levels above grade)	1 Bed Unit Flat	2 Bed Unit Flat	3 Bed Unit Flat	3 Bed Unit Cottage	4 Bed Unit Flat	4 Bed Unit Cottage	4 Bed Unit Townhouse	Total Unit Count	Total Bed Count
1	4-Story Multi-Family Flats w/ Clubhouse	1	4	8				62			70	256
2	3-Story Multi-Family Lodge	3	3	27	21	33		66			147	432
3	Townhouse	15	3							15	15	60
4	Cottages	24	1 or 2				20		4		24	76
TOTALS				35	21	33	20	128	4	15	256	824

Parking Ratio Required at 1.1 Spaces per Bed	824 Beds	907 Required
Parking Provided		914 Provided



JUNE 23, 2026

$$1'' = 150'$$



NOT FOR CONSTRUCTION

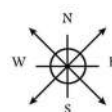
CAPSTONE AT HANNAH FARMS EAST

EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

[illegible]

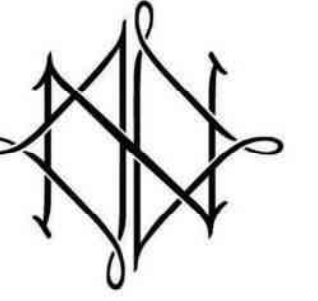
MAIN
CLUNHOUSE

A200



KEY

$$1/8'' = 1' - 0''$$



NOT FOR CONSTRUCTION

EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

DATE	NAME
07/22/2026	PUD ELEVATIONS

[illegible]

A201

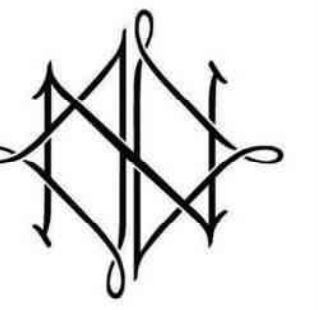


SIDE ELEVATION



SIDE ELEVATION

$$1/8'' = 1' - 0''$$



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ARCHITECTURE & DESIGN

NOT FOR CONSTRUCTION



REAR ELEVATION



SIDE ELEVATION



FRONT ELEVATION



SIDE ELEVATION

DISTRIBUTION LOG

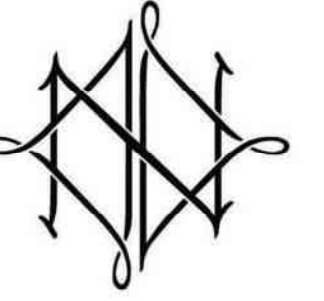
E	NAME
22/2026	PUD ELEVATIONS

COTTAGE
BEDROOM
DUPLEX ALT

A202

$$1/8" = 1' - 0"$$

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EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

DATE	NAME
07/22/2026	PUD ELEVATIONS

A203


$$1/8'' = 1' - 0''$$

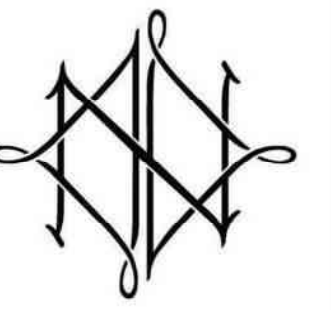
CAPSTONE AT HANNAH FARMS EAST
EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

[illegible]

TOWNHOUSE
10 PACK

A204

$$1/8'' = 1' - 0''$$



NEQUETTE
ARCHITECTURE & DESIGN

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CAPSTONE AT HANNAH FARMS EAST

EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

[illegible]

TOWNHOUSE
5 PACK

A204



REAR ELEVATION



SIDE ELEVATION

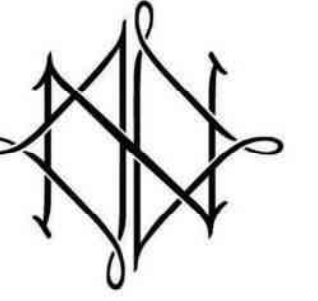


FRONT ELEVATION



SIDE ELEVATION

$$1/8" = 1'-0"$$



CAPSTONE AT HANNAH FARMS EAST

Architectural elevation drawing of a three-story townhome complex. The building features a dark grey roof, light grey siding, and a brick base. It includes multiple windows, balconies with white railings, and a central entrance with a small awning.

This architectural elevation rendering depicts a long, multi-unit residential building. The structure features a variety of siding colors, including dark grey, red, and white, and is topped with dark grey gabled roofs. The facade is punctuated by numerous windows, some of which are grouped in vertical columns. Several units have balconies with light-colored wooden railings. The building is shown against a plain white background, with a small black dot and a thin line indicating a point of view or a specific architectural detail on the left side.

An architectural rendering of a three-story townhome development. The building features a mix of light-colored horizontal siding and brickwork on the ground floor. The roof is dark grey with multiple gables. Units have various window arrangements, including double windows and small dormers. Balconies with wooden railings are visible on the second and third floors. The overall style is modern and suburban.

3 STORY LODGE: 28

4

2

1

POND

W N E S

The site plan shows a rectangular building with a central courtyard. The building is divided into several sections, with numbers 1, 2, 3, 4, 5, 6, 7, and 8 indicating different areas. A parking lot is located to the left of the building, and a pond is to the right. A compass rose indicates North (N), South (S), East (E), and West (W). The building is surrounded by landscaping, including trees and shrubs.

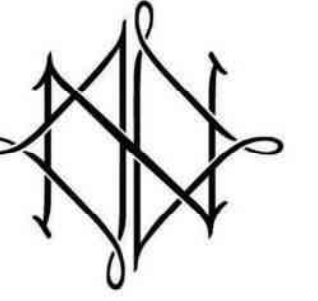
DISTRIBUTION LOG

DATE	NAME
7/22/2026	PUD ELEVATIONS

STORY LODGE
2B

A208

$$1/16'' = 1' - 0''$$



NEQUETTE
ARCHITECTURE & DESIGN

NOT FOR CONSTRUCTION

CAPSTONE AT HANNAH FARMS EAST

EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

[illegible]

3 STORY LODGE
2A

A210



4 SIDE ELEVATION



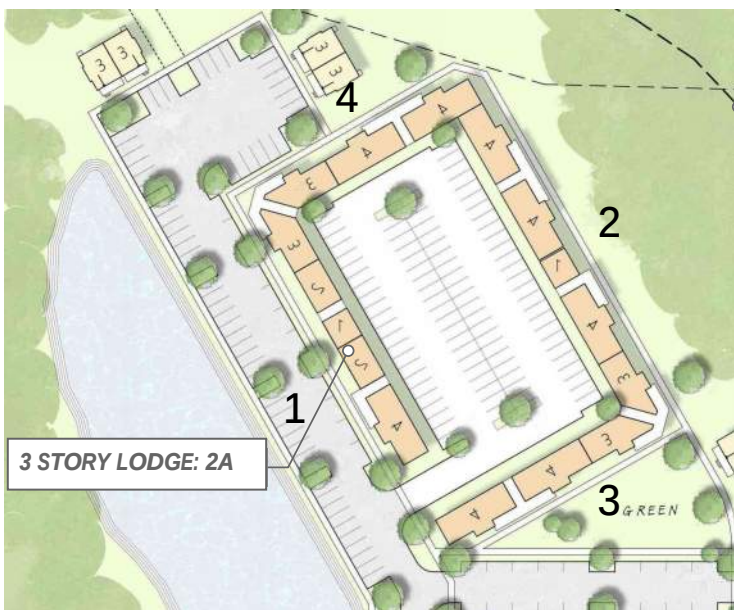
3 SIDE ELEVATION



2 REAR ELEVATION



1 FRONT ELEVATION

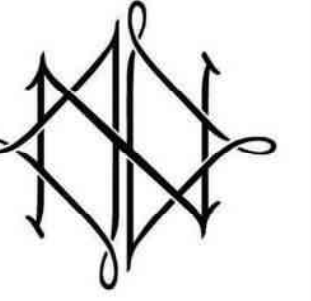


KEY

SEE A211

$$1/16'' = 1' - 0''$$

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ARCHITECTURE & DESIGN

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CAPSTONE AT HANNAH FARMS EAST

EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032

[illegible]

3 STORY LODGE
2A

A211



8 PARKING COURT ELEVATION



7 PARKING COURT ELEVATION



6 PARKING COURT ELEVATION



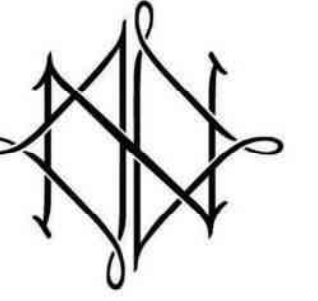
5 PARKING COURT ELEVATION



KEY

$$1/16'' = 1' - 0''$$

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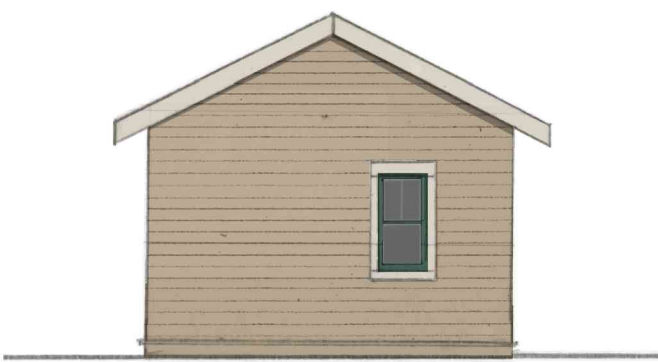
EAST LANSING, MI
NEQUETTE PROJECT NUMBER: 24032



3 SIDE ELEVATION



4 SIDE ELEVATION



3 SIDE ELEVATION



4 SIDE ELEVATION

A212

$$1/8'' = 1' - 0''$$

NATURAL FEATURES ASSESSMENT

for the

**60 Acre Parcel (Hannah Boulevard)
Meridian Township, Michigan**

Prepared for:

**Jim Beatty
Capstone Collegiate Communities, LLC
Office: 205-414-6475
Cell: 205-999-7140**



**MARX
WETLANDS
LLC**

Prepared by:

Marx Wetlands, LLC

10/17/2025

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APPENDICES

- I. Figure 1.1: Site Location Map
- Figure 1.2. Preliminary Concept Plan
- Figure 2: Aerial Imagery Map
- Figure 3: Pre-settlement Vegetation/MNFI ca. 1800 map
- Figure 4: Ingham County Drain Map- Meridian Township SE
- Figure 5: Meridian Township Natural Features Map
- Figure 6: National Wetland Inventory Map
- Figure 7: Flood Insurance Rate Map
- Figure 8: County Soils Survey Map
- II. Vegetation Lists
- III. Tree Survey Results & Memo (Marx Wetlands LLC; October 2025)
- IV. Wetland Delineation Report (Marx Wetlands LLC; Dated May 2025) & Wetland Map

1.0 INTRODUCTION

Marx Wetlands LLC (Marx) was contracted by **Capstone Collegiate Communities, LLC** (Developer) to perform a natural features assessment for an approximately 60-acre undeveloped property (parcel #33-02-02-20-401-005) located directly east of the dead-end of Hannah Blvd, approximately 0.10 miles east of its intersection with Eyde Parkway in Section 20 of Meridian Township (T4N, R1W), Ingham County, Michigan ("Site").

The Developer proposes that the Hannah Farms East residential development, which includes a mix of multi-family flats and cottage-style housing arranged around a central amenity area and multiple stormwater ponds. The layout incorporates natural buffers and existing wetlands designated as "No Development Zones."

The proposed project encompasses the construction of a total of 24 buildings, including a variety of residential building types and community amenities. Community amenities include a clubhouse, privacy landscaping, pedestrian pathways, and natural buffer/wetlands to be preserved. The primary access drive connects the development to the Hannah Blvd dead-end with a secondary emergency route (further north). The development will also include associated infrastructure such as internal roadways, surface parking facilities, and utility service connections.

Stormwater management for the project will be addressed through the construction of three (3) on-site stormwater detention basins, designed to manage runoff in accordance with the standards of Meridian Township and the Ingham County Drain Commission. The stormwater infrastructure will be engineered to meet applicable water quality, detention, and infiltration requirements.

As part of a Special Use Permit Application, the Charter Township of Meridian Department of Community Planning and Development requires a "Natural Features Assessment," which is to include "a written description of the anticipated impacts on the natural features at each phase and at project completion that contains the following:

- a. An inventory of natural features proposed to be retained, removed, or modified. Natural features shall include, but are not limited to, wetlands, significant stands of trees or individual trees greater than 12 inches dbh, floodways, floodplains, water bodies, identified groundwater vulnerable areas, slopes greater than 20 percent, ravines, and vegetative cover types with the potential to sustain significant or endangered wildlife.
- b. Description of the impacts on natural features.
- c. Description of any proposed efforts to mitigate any negative impacts.

After obtaining site location information, Marx Wetlands LLC (MW) completed desktop reviews, site assessments, and data analysis to support Meridian Township's natural features assessment requirements. MW performed a wetland determination and delineation on the approximately 60-acre project Site on May 15, 2025. *The delineation has not yet been verified by the Township's*

wetland consultant, *Fishbeck*. Additionally, MW conducted a tree survey between August 13 and September 5, 2025. The results of both the wetland delineation and the tree survey are presented in this report.

2.0 SITE LOCATION & CONDITIONS AND PROJECT DESCRIPTION

The subject site (the Site) is approximately 60 acres located east of the Lodges of East Lansing housing complex, on the south bank of the Red Cedar River, and west of a residential subdivision in Section 20, Meridian Charter Township, Ingham County, Michigan. The Site lies within a predominantly commercial and residential area of the township. Topography is generally flat with a gentle slope toward the northwest.

The Site is currently vacant and consists of a mix of upland and wetland habitats. Land cover includes upland open fields, scrub-shrub, forested areas, and planted pine groves. Mowed paths were observed throughout. The Red Cedar River and its forested floodplain form the northern boundary, while a large wetland is located along the southern edge.

On May 15, 2025, Marx Wetlands LLC (MW) conducted a wetland determination and delineation. Eight wetlands (Wetlands A–H) and two streams, including the Hannah Farms Drain and the Red Cedar River, were identified. No ponds occur on the Site. Refer to the KEBS Inc. Wetland Survey and Figure 2 (Aerial Imagery Map, Appendix I) for wetland boundaries.

Capstone Companies (Developer) proposes the construction of a residential complex on the Site. The project will be completed in a single phase and will include residential buildings, parking facilities, and an internal access drive. The proposed footprints will primarily be located within upland scrub-shrub, forested, and herbaceous cover types.

The development will require filling and grading that will directly impact three (3) wetlands regulated under Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act (NREPA), administered by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), as well as under the Meridian Township Wetland Ordinance. These impacts are associated with construction of emergency access road, residential buildings and associated impervious surfaces.

Capstone Companies has committed to minimizing wetland and buffer zone impacts to the greatest extent practicable, while meeting project objectives. Avoidance and minimization measures have been incorporated into the site design to reduce the overall extent of wetland disturbance.

Prior to clearing and grading, soil erosion and sedimentation control measures will be installed, inspected, and maintained throughout the construction period. These measures will be removed once final site stabilization is achieved. Refer to Figures 1 (Site Location Map) and 1.2 (Preliminary Site Plan) in **Appendix I** for additional details.

3.0 METHODS

MW conducted a desktop review for the Site using existing information and imagery, including the United States Geological Service (USGS) topographic map, aerial photographs, National Wetland Inventory (NWI) map, county soil survey map, county drain maps, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), and Meridian Township's Natural Features Map, which primarily includes wetlands and floodplains.

On May 15, 2025, MW conducted a wetland determination and delineation for the approximately 60-acre Site within Meridian Township, Ingham County, Michigan. A tree survey for an approximately 40-acre portion of the overall Site and natural features assessment were conducted between August 13 and September 4, 2025.

The on-site visits consisted of a site reconnaissance to evaluate the current and prior land use, determine habitat types, assess habitat quality, conduct a limited tree survey, delineate wetlands, observe wildlife, and identify floodplains or other special concerns. The wetland determination and delineation were performed in accordance with the Michigan Department of Environmental Quality's Wetland Identification Manual (2001) and the Northcentral-Northeast Regional Supplement to the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual. The findings from the desktop review, site visits, tree survey, and wetland delineation were combined to help interpret the site's natural features and evaluate potential project impacts on those features.

4.0 RESULTS, FINDINGS, AND DISCUSSION

4.1 Existing Structures, Materials, and Adjacent Land Use

The Site consists primarily of undeveloped land that includes open grassy fields, scrub-shrub areas, wetlands scattered throughout, and an extensive wetland system along the southern boundary. A forested floodplain extends along the Red Cedar River at the northern edge of the Site. The central portions support scrub-shrub and upland forested habitats, with mowed paths and grassy open areas interspersed.

The Site lies within a predominantly commercial and residential area of Meridian Township, Michigan, and is bordered by undeveloped land to the north and south, off-campus student housing to the west, and single-family residences to the east. Refer to *Figure 2: Aerial Imagery Map* in **Appendix I**.



Photograph 1. View of upland pine groves (Photo taken on 9/4/2025).



Photograph 2. View of Upland Opening (Photo taken on 9/4/2025).



Photograph 3. View of upland forest (Photo taken on 9/4/2025).



Photograph 4. View of the onsite forested/emergent wetland (Wetland C).

4.2 Topography

The lowest elevations on the Site are about 830 feet MSL, found in both the large wetland to the south and the edge of the Red Cedar River to the north. The highest elevation is about 856, found near the center-west part of the site. The Site is rolling, with relatively steep slopes dropping down to the river and the wetlands at the north and south ends of the Site. Refer to *Figure 1: Site Location Map* in **Appendix I** for additional topographic context.

4.3 Vegetation

A vegetation assessment was conducted during on-site visits to document the dominant plant communities and land cover types present. Based on aerial imagery, available online data, and field observations, the Site contains undeveloped land characterized by lawn/old field, upland scrub-shrub/forest, and wetlands.

Marx Wetlands LLC identified three (3) distinct vegetation community types within the site: 1) Upland Opening/Grassy Areas; 2) Upland Forest/Scrub-shrub; and 3) Forested & Emergent/Forested Wetlands.

Cover Type Descriptions

1) Upland Opening/Grassy Areas (Includes Lawn/Roadsides)

The upland openings support a mix of herbaceous species, including common evening primrose (*Oenothera biennis*), Kentucky and Canada bluegrasses (*Poa pratensis*, *P. compressa*), Queen Anne's lace (*Daucus carota*), wild bergamot (*Monarda fistulosa*), purple coneflower (*Echinacea purpurea*), orchard grass (*Dactylis glomerata*), smooth brome (*Bromus inermis*), sunflowers (*Helianthus* spp.), tall and Canada goldenrods (*Solidago altissima*, *S. canadensis*), and wild strawberry (*Fragaria virginiana*). Refer to Table 1 in **Appendix II**.

2) Upland Forest / Scrub-Shrub Areas

The upland scrub-shrub and mixed deciduous forested habitats contain a diverse ground and understory flora, including white avens (*Geum canadense*), ebony spleenwort (*Asplenium platyneuron*), white vervain (*Verbena urticifolia*), bluestem goldenrod (*Solidago caesia*), beggar's lice (*Hackelia virginiana*), Pennsylvania sedge (*Carex pennsylvanica*), orchard grass, and Virginia creeper (*Parthenocissus quinquefolia*).

The overstory is composed of white oak (*Quercus alba*), bur oak (*Q. macrocarpa*), red oak (*Q. rubra*), black walnut (*Juglans nigra*), white pine (*Pinus strobus*), box elder (*Acer negundo*), sugar maple (*Acer saccharum*), black cherry (*Prunus serotina*), cottonwood (*Populus deltoides*), basswood (*Tilia americana*), American elm (*Ulmus americana*), bitternut hickory (*Carya cordiformis*), trembling aspen (*Populus tremuloides*), Siberian elm (*Ulmus pumila*), and ash (*Fraxinus* spp.).

Common shrub species include buckthorn (*Rhamnus cathartica*), Eurasian honeysuckle (*Lonicera* spp.), staghorn sumac (*Rhus typhina*), blackberry (*Rubus allegheniensis*), and black raspberry (*Rubus occidentalis*). Vines are also prevalent, including riverbank grape (*Vitis riparia*), poison ivy (*Toxicodendron radicans*), woodbine (*Parthenocissus inserta*), Virginia creeper (*P. quinquefolia*), and invasive Oriental bittersweet (*Celastrus orbiculatus*).

3) Forested and Forested/Emergent Wetland Types

The Site supports eight (8) wetlands comprised of riverine, floodplain, and emergent/forested types associated with the Hannah Farms Drain, Red Cedar River, and interior low-lying areas. Collectively, these wetlands exhibit a mix of riverine floodplain forest, forested wetland, and emergent zones, with hydrology strongly influenced by overbank flooding, surface drainage, precipitation, and local groundwater inputs.

Overstory and Canopy

The forested wetlands are dominated by silver maple (*Acer saccharinum*, FACW), swamp white oak (*Quercus bicolor*, FACW), American elm (*Ulmus americana*, FACW), and eastern cottonwood (*Populus deltoides*, FAC). These species form a continuous canopy along the Hannah Farms Drain

(Wetlands A & G), the Red Cedar River floodplain (Wetland B), and the interior forested wetlands (Wetlands C, D, E, F, and H).

Shrubs and Sapling

The shrub layer includes dogwoods (*Cornus amomum*, *C. racemosa*, FAC), box-elder (*Acer negundo*, FAC) saplings, common buckthorn (*Rhamnus cathartica*, FAC), and invasive honeysuckle (*Lonicera tatarica*, FACU). These shrubs occur at varying densities, with higher concentrations along the margins of emergent areas and floodplain edges.

Herbaceous Layer

The ground layer supports a diverse mix of hydrophytic species, including reed canary grass (*Phalaris arundinacea*, FACW), rice-cut grass (*Leersia oryzoides*, OBL), cattails (*Typha angustifolia*, *T. latifolia*, OBL), woodreed (*Cinna arundinacea*, FACW), skunk cabbage (*Symplocarpus foetidus*, OBL), rough bedstraw (*Galium asprellum*, OBL), greater bladder sedge (*Carex intumescens*, FACW), smallspike false nettle (*Boehmeria cylindrica*, OBL), white avens (*Geum canadense*, FAC), moneywort (*Lysimachia nummularia*, FACW), and smooth goldenrod (*Solidago gigantea*, FACW). Emergent zones, particularly within Wetlands A, C, and G, are dominated by reed canary grass and sedges (*Carex blanda*, *C. scoparia*, *C. vulpinoidea*).

Woody Vines

Woody vines are well represented across the wetland complex and include riverbank grape (*Vitis riparia*, FAC) and poison ivy (*Toxicodendron radicans*, FAC). Oriental bittersweet (*Celastrus orbiculatus*) was also noted as an invasive species in adjacent upland-forest edges.

Habitat Variation

- **Riverine wetlands (A & G):** Associated with the Hannah Farms Drain; emergent zones with dense reed canary grass, cattails, and sedges beneath a silver maple/cottonwood canopy.
- **Floodplain wetland (B):** Red Cedar River corridor; dominated by silver maple, American elm, and cottonwood with diverse hydrophytic ground flora including wood reed, riverbank rye, and smallspike false nettle.
- **Emergent/forested wetland (C):** A mix of skunk cabbage, bladder sedges, and reed canary grass beneath silver maple and swamp white oak; dense with invasive shrubs.
- **Interior forested wetlands (D, E, F, H):** Primarily forested systems with silver maple, elm, and cottonwood, with herbaceous cover of rough bedstraw, bladder sedge, white avens, and moneywort.

Vegetation Assessment Summary

Several plant species commonly associated with disturbed habitats in the Great Lakes region were observed throughout the site. These included a mix of non-native species, invasive species, native species tolerant of human land use, and native pioneer species that typically colonize land following disturbance or abandonment. Representative examples observed on-site include:

- Smooth brome (*Bromus inermis*) – non-native grass
- Orchard grass (*Dactylis glomerata*) – non-native grass
- Bluegrasses (*Poa pratensis*, *P. compressa*) – non-native grasses
- Queen Anne’s lace (*Daucus carota*) – non-native forb
- Common buckthorn (*Rhamnus cathartica*) – invasive shrub
- Eurasian honeysuckles (*Lonicera* spp.) – invasive shrubs
- Invasive bittersweet (*Celastrus orbiculatus*) – invasive vine
- Cottonwood (*Populus deltoides*) – native pioneer/early successional tree species
- Trembling aspen (*Populus tremuloides*) – native pioneer tree
- Box-elder (*Acer negundo*) – native disturbance-tolerant tree
- Staghorn sumac (*Rhus typhina*) – native shrub, disturbance-tolerant
- Blackberry (*Rubus allegheniensis*) and black raspberry (*Rubus occidentalis*) – native disturbance-tolerant shrubs
- Goldenrods (*Solidago altissima*, *S. canadensis*) – native forbs with weedy tendency
- Poison ivy (*Toxicodendron radicans*) – native vine, disturbance-tolerant

These species are commonly associated with previously disturbed or unmanaged areas, suggesting historical land-use activities such as clearing, grading, or abandonment. Evidence of recent disturbance was observed throughout the parcel, where vegetative stockpiles were scattered in the Site’s east-central portion, indicating that land clearing or grading activities had occurred historically. The brush piles and mowed paths were also observed.

The Vegetation circa 1800 map produced by the Michigan Natural Features Inventory indicates that the Site was historically part of an extensive beech–maple forest extending many miles south of the Red Cedar River (refer to **Figure 3: Presettlement Vegetation/MNFI ca. 1800 Map in Appendix I**). Before widespread land clearing, these shaded forests were characteristic of the flatter till plains of mid-Michigan and supported a diverse canopy of species such as sugar maple, red maple, red oak, white oak, American beech, white ash, basswood, tulip tree, walnut, and hop hornbeam. Like much of the region, these forests were commonly cleared to support agriculture, and the higher-elevation portions of the Site were likely converted to farmland many decades ago. Additionally, the Pre-settlement Vegetation map also indicates that the Site spans a mixed hardwood swamp as well, which generally corresponds with the mapped wetland areas. The 1970 USGS Topographic Map shows lighter-toned areas indicative of open land (refer to **Figure 1 in Appendix I**), supporting this interpretation. Refer to *Figure 3: Pre-settlement Vegetation/MNFI ca. 1800 map* in **Appendix I**.

These forests were frequently cleared for agricultural purposes; however, some remnants have persisted, particularly in areas with sandy soil or on terrain too steep for cultivation. As commercial and residential development expanded throughout the twentieth century—especially between East Lansing and Okemos—The Site was likely left undeveloped due to the limited viability of small-scale farming. As a result, the Site now supports a mix of native and non-native plant species commonly associated with natural recolonization following disturbance.

The upland opening/grassy areas exhibit a relatively low native mean Coefficient of Conservatism (C) of 1.6 (with adventive species assigned a value of 0). This low C value suggests a predominance of disturbance-tolerant species, serving as an overall indicator that the site has experienced significant past disturbance.

The undeveloped and forested portions of the Site were likely retained due to limited viability for small-scale agriculture, despite the area's broader history of presumed land clearing for farming. The upland scrub-shrub/forest community is primarily dominated by native hardwood trees, including early successional species. It is interspersed with a mix of native and non-native shrubs and herbaceous groundcover. Representative species include cottonwood and naturally established native trees such as black cherry, various oak (*Quercus spp.*), maple (*Acer spp.*), and basswood (*Tilia americana*). Groundcover includes non-native orchard grass and scattered invasive species such as common buckthorns. These trees are likely remnants or descendants of the original maple-beech forest that historically occupied this landscape. As vegetation recolonization progressed, the Site became increasingly brushy, particularly along forest edges where Eurasian honeysuckles and common buckthorn are more prevalent.

Due to historical disturbances, such as habitat fragmentation, partial tree clearing, and nearby mixed residential and commercial development, the scrub-shrub/forest habitat now supports a mixed assemblage of native and non-native species, especially within the understory. Despite these impacts, the area retains several native hardwood species. The habitat's relatively low native mean Coefficient of Conservatism (C) of **3.2** indicates prior disturbance; however, it also reflects the highest ecological integrity observed on-site. Refer to the vegetation lists in **Appendix II** for additional detail.

Scattered wetlands occur throughout the Site and include emergent/forested, and forested types. These communities support a mix of native and non-native species and exhibit a relatively low native mean Coefficient of Conservatism (C-values) of **3.0**. This suggests the wetlands have been historically disturbed but continue to support some native plant diversity.



Photograph 5. View of forested wetland (Wetland B). (Photo taken on 5/15/2025).



Photograph 6. Upland Grassy Area/Opening (Photo taken on 9/4/2025).



Photograph 7. Planted Pine Groves. Photo taken on 8/13/2025.



Photograph 8. Wetland C (emergent/forested). Photo taken on 5/15/2025.

Although the Developer intends to preserve as many trees as possible, particularly native species, the proposed site development will require the removal of some existing vegetation. The Site currently consists of upland scrub-shrub/forest, upland openings, and wetland, including a mix of native trees and non-native shrubs. The Developer has not proposed a formal mitigation plan for vegetation removal at this time. **Traditional landscaping, including lawn, shrubs, and tree plantings, is anticipated; however, detailed landscaping plans have not yet been developed.** It is anticipated that portions of the existing vegetation, including large or native trees, may be incorporated into the final landscape design to the greatest extent practicable.

4.4 Tree Inventory

Marx Wetlands LLC conducted a tree survey between August 13 and September 4, 2025, within the Site (roughly 40-acre assessment area) to support this inventory and impact assessment of natural features. The survey included trees considered “significant” or deserving of special protection because of their size, relative rarity, or historical importance. During the survey, trees with a diameter at breast height (DBH) (the standard measure for tree size) of twelve (12) inches or greater were located on the Site and measured with a Trimble DA2 unit with sub-meter accuracy. MW identified the trees to the species, and their size and health condition were also recorded in a table (**Appendix III**).

MW recorded 1,952 trees with diameters at breast height (DBH) of 12.0 inches or greater within the Site, representing approximately 35 distinct tree species. The average tree size among the protected trees was 16.0 inches DBH, with the largest tree measured at 67.0 inches DBH. Tree species recorded in the tree survey area represent a diverse assemblage of native and ornamental trees common to southern Michigan. Refer to *Table 1. Tree Summary Table* (next page).

Table. 1 Tree Summary Table.

Tree Species Code	Scientific Name	Common Name	Tree Count
ACNE	<i>Acer negundo</i>	Box-elder	253
ACPL	<i>Acer platanoides</i>	Norway Maple	2
ACRU	<i>Acer rubrum</i>	Red Maple	20
ACSA	<i>Acer saccharum</i>	Sugar Maple	100
ACSAN	<i>Acer saccharinum</i>	Silver Maple	114
AIAL	<i>Ailanthus altissima</i>	Tree-of-Heaven	1
CACO	<i>Carya cordiformis</i>	Bitternut Hickory	9
CAOV	<i>Carya ovata</i>	Shagbark Hickory	1
CEOC	<i>Celtis occidentalis</i>	Hackberry	28
FAGR	<i>Fagus grandifolia</i>	American Beech	1
FRAM	<i>Fraxinus americana</i>	White Ash	10
JUNI	<i>Juglans nigra</i>	Black Walnut	47
JUVI	<i>Juniperus virginiana</i>	Eastern Red Cedar	1
MASP	<i>Malus species</i>	Apple/Crabapple species	4
MOAL	<i>Morus alba</i>	White Mulberry	3
PIAB	<i>Picea abies</i>	Norway Spruce	3
PIRE	<i>Pinus resinosa</i>	Red Pine	15
PIST	<i>Pinus strobus</i>	Eastern White Pine	313
PLOC	<i>Platanus occidentalis</i>	Sycamore	3
PODE	<i>Populus deltoides</i>	Cottonwood	235
POTR	<i>Populus tremuloides</i>	Quaking Aspen	21
PRSE	<i>Prunus serotina</i>	Black Cherry	255
QUAL	<i>Quercus alba</i>	White Oak	33
QUBI	<i>Quercus bicolor</i>	Swamp White Oak	13
QUMA	<i>Quercus macrocarpa</i>	Bur Oak	8
QURU	<i>Quercus rubra</i>	Northern red oak	272
QUVE	<i>Quercus velutina</i>	Black Oak	4
SAAM	<i>Salix amygdaloides</i>	Peachleaf Willow	15
SAEU	<i>Salix euxina</i>	Crack Willow	1
SANI	<i>Salix nigra</i>	Black Willow	11
TIAM	<i>Tilia americana</i>	American Basswood	104
ULAM	<i>Ulmus americana</i>	American elm	37
ULPU	<i>Ulmus pumila</i>	Siberian Elm	10
UNKN	-	Unknown Species	3
Total			1952 Trees

MW identified 1400 surveyed trees (approximately 71.7%) that were categorized as GOOD and EXCELLENT. 466 trees (approximately 23.9%) were classified as FAIR and exhibited stress and/or structural defects that may limit the longevity of the tree or require tree maintenance. Several FAIR trees were categorized as such due to visible stress indicators, evidence of pests, dead branches,

uneven crowns, and/or inner bark rot. In addition, some fair trees were categorized due to structural defects, such as codominant trunks, multi-trunk form, and/or leaning habit. Based on Marx Wetlands, LLC's preliminary tree health assessment of the surveyed trees, FAIR trees are considered low-quality trees that may require additional maintenance work or may present liability issues if tree care is neglected. Trees categorized as POOR (49 trees; approximately 2.51% of the trees surveyed) and Dead (35 standing dead trees; less than 2% of surveyed trees) should not be preserved due to the high likelihood of tree failure, which could cause damage and/or injury. Refer to *Marx Wetlands' Tree Survey Memo and Results* in **Appendix III**.

Impact Assessment: Tree Removal Estimate Based on Grading Plan Overlay

- **Total Trees Surveyed ($\geq 12"$ DBH):** 1952 trees.
- **Tree Tag Numbers Present:** #1-585, 587-1806, 1808-1848; 1850-1955 (total of 1952 Protected trees), three (3) lost tree tags (586, 1807, and 1849).
- **Estimated Trees within Grading/Impact Area:** several hundred trees

Upon reviewing the proposed grading and disturbance areas (cut/fill zones and building footprints), **several hundred trees** appear to fall within the construction limits and are anticipated to be removed. However, **the layout incorporates natural buffers and existing wetlands designated as "No Development Zones."**

- Trees located directly within the proposed **building footprints, driveway/parking areas, and cut/fill zones** are assumed to be **removed**.
- Trees located **immediately adjacent to grading zones** may also be impacted due to root zone disturbance or equipment access and may not be viable for preservation. If 30% of the roots (within the critical root zone) are removed, trees will decline.
- Several trees within the wetland areas and buffer may be retained or protected, depending on final construction limits, tree health, and preservation efforts.

It is the professional opinion of MW that the proposed tree-clearing activities will not result in a significant adverse impact on the overall extent or functional quality of forested habitat within the surrounding region. The proposed site layout incorporates natural buffer areas and existing wetlands that have been designated as "No Development Zones," thereby preserving contiguous habitat and minimizing fragmentation. **MW further recommends that any large native tree specimens (greater than 24 inches in diameter at breast height [DBH]) be retained post-construction wherever practicable to maintain mature canopy structure and habitat continuity.**

4.5 Wetlands

Marx Wetlands LLC (MW) identified eight (8) wetlands (Wetlands A, B, C, D, E, F, G, and H), and two streams, including a county drain (Hannah Farms Drain), and the Red Cedar River within the Site. No ponds appear within the Site. The wetland boundaries were delineated by MW in the field on May 15, 2025, using pink high-visibility flagging tape and surveyed by KEBS Inc. during the survey reconnaissance.

The delineation was conducted by MW in accordance with the **Northcentral and Northeast (NCNE) Interim Regional Supplement** to the **1987 U.S. Army Corps of Engineers Wetland Delineation Manual**. Under this methodology, wetlands are identified based on the presence of three required parameters:

1. **Hydrophytic vegetation** – plant species adapted to saturated soil conditions,
2. **Hydric soils** – soils that form under prolonged saturation, and
3. **Wetland hydrology** – evidence of periodic inundation or soil saturation near the surface during the growing season.

These parameters are typically interrelated and are expected to co-occur under normal circumstances in areas that meet the definition of a wetland. Refer to the enclosed Wetland Delineation Report (**Appendix IV**) and the enclosed Wetland Delineation Map for the location of the on-site wetland.

The *Meridian Township Natural Features Map* (Figure 5, **Appendix I**) identifies approximately four (4) potential regulated wetlands within the Site boundaries. Similarly, the National Wetlands Inventory (NWI) Map (Figure 6, **Appendix I**) indicates the Red Cedar River (R2UBH) lines the northern site periphery, a riverine (R2UBFx), a wetland along the western site boundary, and a large emergent and forested wetland complex is located along the Site's southern end. The configuration and extent of these wetlands differ slightly between the two mapping sources.

Regulations

Wetland Laws

The State of Michigan's Part 303, Wetlands Protection, of the NREPA, as amended in 1994, indicates that wetlands are regulated if they are any of the following:

- Connected to one of the Great Lakes or Lake St. Clair.
- Located within 1,000 feet of one of the Great Lakes or Lake St. Clair.
- Connected to an inland lake, pond, river, or stream.
- Located within 500 feet of an inland lake, pond, river, or stream.
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, but are more than 5 acres in size.
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, and less than 5 acres in size, but EGLE has determined that these wetlands are essential to the preservation of the state's natural resources and has notified the property owner.

Based on a memorandum of agreement between the U.S. Environmental Protection Agency (USEPA) and the EGLE, the EGLE administers Section 404 of the Federal Water Pollution Control Act of 1972 (Clean Water Act), Title 33 of the United States Code, Section 1251 for interior waters in Michigan. However, under the authority of the Rivers and Harbors Act of 1899, the USACE exercises jurisdiction over the Great Lakes and their connecting traditionally navigable waterways (navigable waters of the U.S.), as well as tributaries and wetlands adjacent to traditionally navigable waters of the U.S. (WOTUS), pursuant to Section 404 of the CWA.

Marx Wetlands, LLC's professional opinion is that Wetlands A, B, C, D, G, and H are likely regulated by EGLE.

- Wetland A is contiguous to the Red Cedar River and Hannah Farms drain
- Wetland B is contiguous to the Red Cedar River
- Wetland C is contiguous to Herron Creek (within wetland offsite) and larger than 5 acres.
- Wetland D is contiguous to the Hannah Farms Drain (Stream 2)
- Wetland G is contiguous to the Hannah Farms Drain (Stream 2)
- Wetland H is contiguous to the Hannah Farms Drain (Stream 2)

Wetlands E and F are less than 5 acres in size and isolated (not within or connected to a regulating water body, such as a stream, lake, or pond). MW's professional opinion is based on the site investigation and a review of available desktop resources (e.g., aerial photography, topographic maps, county soil data, national wetlands inventory, etc.). **A pre-application meeting through the EGLE can assist with the project development process and permitting if project activities anticipate impacts.**

Local Wetland Laws (Meridian Township)

Meridian Township (Township) has its own wetland protection ordinance. The township's Wetland Protection ordinance (Chapter 22, Article IV) states that wetlands are protected if they are:

- contiguous to any inland lake stream, river, or pond.
- Partially or entirely within 500 feet of the ordinary high-water mark of any inland lake, stream, river, or pond.
- Two or more areas of wetland separated only by barriers, such as dikes, roads, berms, or other similar features, if any of those wetlands are contiguous to an inland lake, stream, river, or pond.
- larger than two acres, even if not contiguous to an inland lake, stream, river, or pond.
- not contiguous to any inland lake, stream, river, or pond, if the state department of environmental quality determines the protection of the wetland is essential to the preservation of the natural resources of the state from pollution, impairment, or destruction.
- wetlands, equal to or greater than one-quarter acre and equal to or less than two acres in size, which are not contiguous to any inland lake, stream, river, or pond and are determined to be essential to the preservation of the natural resources of the Township as provided in township code § 22-156. Code § 22-156 provides that a wetland is essential to the preservation of the township's natural resources if it fulfills any of the ten criteria.

Marx Wetlands LLC's professional opinion is that Wetlands A, B, C, D, E, G, and H are likely regulated by Meridian Township. Wetland E is larger than 0.25 acres in size to be considered

Meridian Township regulated. **However, Wetland F is less than 0.25 acres in size and not contiguous to a water body.** Meridian Township's wetland consultant will decide on the regulatory status and shape of the on-site wetland during a wetland verification visit.

It is important to note that a wetland verification application is required following a wetland delineation conducted within Meridian Township, Ingham County, Michigan. Meridian Township's wetland consultant will make the final decisions during an on-site wetland verification visit. Applications should include the following information:

- A completed application form.
- The required administrative fee and escrow amount addressed to Meridian Charter Township.
- Written permission from the property owner if the owner is not the applicant.
- For verification only: written confirmation that the wetland flags are located on the site and remain observable.
- For verifications only: three (3) copies of an existing wetland delineation report and accompanying maps and materials prepared by a wetland or environmental consultant.
- Copies of any correspondence from the Michigan Department of Environment, Great Lakes, and Energy (EGLE).
- Copies of any permits issued by the Ingham County Drain Commissioner's office for the subject site.

The Meridian Township Wetland Verification & Escrow form can be found here: <http://www.meridian.mi.us/Home/ShowDocument?id=12235>.

Please note that the Meridian Township Board has a policy of no net loss of wetlands and impacts to wetlands may require wetland mitigation. A mitigation plan, if required, shall be approved as part of the wetland use permit decision.

A permit or approval is likely required by Meridian Township for any proposed work within the boundaries of a regulated wetland. Most construction activities in upland (outside wetland boundaries) do not require a wetland permit. Please note that the EGLE and Township have the final authority on the extent of regulated wetlands, lakes, floodplains, and streams in the State of Michigan and Meridian Township, respectively.

Impact Assessment

The proposed concept plan has been designed to avoid regulated wetlands and associated buffer zones to the extent feasible, while minimizing the clearing of native vegetation. **However, direct impacts on four (4) EGLE/Meridian Township Regulated wetlands (Wetlands A, G, and H) are currently anticipated. Wetland F is not anticipated to be considered regulated, but will be removed.** Any potential stormwater discharge impacts or temporary disturbance impacts will also need to be addressed. **MW understands that this is a preliminary concept plan and is subject to revision.**

A permit or formal approval is required from EGLE and/or Meridian Township for any proposed activity (e.g., filling, dredging, construction, draining, or other land development) that occurs within the boundaries of a regulated wetland. Construction activities that occur entirely outside of these boundaries typically do not require a wetland permit.

Please note that the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and Meridian Township retain final authority regarding the delineation and regulation of wetlands, lakes, streams, and other aquatic resources within their respective jurisdictions. **Marx Wetlands LLC recommends obtaining written concurrence from EGLE and Meridian Township confirming that a wetland permit is not required for the proposed development.**

4.6 Special Flood Hazard Area

Flood Hazard Areas are those that are most likely to be inundated during flood events. Flood Hazard Areas are regulated by local, state, and federal regulations designed to reduce the damage to structures during floods. The regulations apply to areas within 100-year floodplains, which are defined by a one percent (1%) annual probability of flood occurrence. These areas are mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps, or FIRMs. These maps were developed using flow modeling and the existing USGS topographic maps. The modeling produces an elevation associated with 100-year flood events, and areas below these elevations are designated as the 100-year floodplains.

As amended, the State of Michigan's Part 31, Water Resources Protection, NREPA, 1994 PA 451, requires an individual to obtain a permit before making any modifications to the 100-year floodplain or floodway of a river, stream, or drain. The statute also regulates activities within the floodplain of any watercourse with an upstream drainage area of two square miles or larger. MW's preliminary review of FEMA FIRM Panel No. 26065C0152D, effective 8/16/201, showed that most of the Site's interior is mapped within the minimal flood hazards (e.g., Zone X). However, the northern site boundary contains a 100-year floodway mapped as Zone AE (with available base flood elevations at 842.1 feet above sea level, asl) associated with the Red Cedar River and an associated 100-year floodplain along the Site's western site boundary mapped as Zone AE (with available base flood elevations at 842 asl). **Be sure to contact EGLE and file a floodplain elevation request or pre-application meeting to assist with the project development process and floodplain permitting, if applicable.** Refer to *Figure 7: Flood Insurance Rate Map* in Appendix I.

If an area on the Site were within the floodplain, a permit would be required to allow construction within the floodplain, and the project would be designed to meet flood-proofing standards that minimize the risk of flood damage.

FIRM maps can incorrectly show areas of the 100-year floodplain. In such cases, a Site's topography can be surveyed using modern techniques. When such studies show that the mapped floodplain is above the determined flood elevation or that the FIRM is otherwise inaccurate, this information can be sent to the National Flood Insurance Program to obtain a Letter of Map Amendment (LOMA), which officially changes the area included within the floodplain.

Part 31, Water Resources Protection, of the NREPA regulates activities within the 100-year floodplain and floodway of a river, stream, or drain, and within the floodplain of any watercourse with an upstream drainage area of two square miles or larger. Most construction activities that take place above the designated 100-year floodplain elevation may not require EGLE permitting and/or approvals. **Hannah Drain, Herron Creek, and Red Cedar River have associated 100-year floodplains. Be sure to contact EGLE and file a floodplain elevation request or pre-application meeting to assist with the project development process and floodplain permitting.**

4.7 Floodways

A *floodway* is the portion of the floodplain that is required to carry and discharge flood waters during a flood event. They have more rapidly moving water during flood events. They include river channels, upper banks, and adjacent areas that effectively become part of the water transit process during a flood. Per the FEMA Flood Insurance Rate Map (FIRM), **two EGLE-regulated 100-year floodways intersect the Site: The Red Cedar River in the northeast quadrant and Herron Creek along the southern portion. Therefore, a floodplain elevation or pre-application meeting request could help determine permit requirements.**

4.8 Water Bodies

Streams, rivers, lakes, and many ponds are afforded legal protection under a combination of Township, county, state, and federal regulations pertaining to wetlands, flood-prone areas, and water bodies. Any filling or alteration of these areas would typically require one or more permits from state, county, federal agencies, or Meridian Township.

The State of Michigan's Part 301, Inland Lakes, and Streams, of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 states that a feature is a regulated stream by the EGLE if it contains a defined bed, bank, and evidence of continued flow or a continued occurrence of water. **Two (2) streams were observed within the site, including Hannah Farms (county drain) and the Red Cedar River.**

Additionally, Ingham County's Southwest-Meridian Township Drain Map indicates that the Site contains two segments of the county drain, Hannah Farms, which were identified within the Site. No permanent structures can be built within county drain easements. The drain easement is used for any maintenance work or emergency access to the drain. Select activities can be permitted within the drain easements through the county drain commissioner. Be sure to contact Ingham County's Drain Commission office to see if site development requires any approvals or permits through Ingham County, if applicable. (Figure 4.1 in **Appendix I**).

Impact Assessment

Based on available information from Ingham County, the proposed project area contains a county drain (two segments of Hannah Drain). **It is recommended that the Ingham County Drain Commissioner's Office be contacted to determine if site development requires any easement approvals or permits.** The emergency exit route may need authorization from Ingham County Drain Commissioners office.

4.9 Soils

According to the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) *Web Soil Survey*, most of the Site is mapped with low hydric soils (<10% hydric rating), except three main areas mapped by Houghton muck, 0 to 1 percent slopes (HgtahA, 100% hydric rating), Sebewa loam, 0 to 2 percent slopes (Sb, 95% hydric rating), and Urban land-Fluvaquents complex (Uu, 45% hydric rating), which are hydric (wetland-ranked) soils. Refer to *Figure 8. County Soils Survey Map* in **Appendix I**. The soil types associated with hydric ratings are reflected in *Table 2. Soils with Hydric ratings* (see below).

Table 2. Soils with Hydric Ratings

Map Unit Symbol	Map Unit Name	Hydric Rating (%)	Description
Ce	Ceresco fine sandy loam	5%	Predominantly nonhydric but contains small hydric inclusions in depressions where seasonal saturation supports hydrophytic vegetation.
HgtahA	Houghton muck, 0 to 1 percent slopes	100%	Very poorly drained organic soil. Entirely hydric, saturated or ponded during most of the growing season, supporting wetland vegetation.
KbA	Kibbie loam, 0 to 3 percent slopes	10%	Generally nonhydric, but about 10% of this unit contains hydric inclusions in low-lying areas where seasonal saturation occurs.
OtB	Oshtemo-Spinks loamy sands, 0 to 6 percent slopes	0%	Well-drained sandy soils on gentle slopes. These soils are nonhydric and not typically associated with wetlands.
OtC	Oshtemo-Spinks loamy sands, 6 to 12 percent slopes	0%	Moderately sloping, well-drained sandy soils. This unit is nonhydric and unsuitable for hydrophytic vegetation.
OwB	Owosso-Marlette sandy loams, 2 to 6 percent slopes	0%	Moderately well drained to well drained soils. These are nonhydric upland soils.
Sb	Sebewa loam, 0 to 2 percent slopes	95%	Poorly drained, nearly level soil. Strongly associated with wetlands, forming wet meadows and forested wetlands.
UeB	Urban land–Boyer–Spinks complex, 0 to 10 percent slopes	4%	Largely disturbed urban land, but about 4% hydric inclusions occur in swales or remnant depressions.
UtB	Urban land–Marlette complex, 2 to 12 percent slopes	5%	Mostly urban disturbed soils. About 5% hydric inclusions remain in depressions or natural soil remnants.
Uu	Urban land–Fluvaquents complex	45%	Floodplain unit with 45% hydric soils. Reflects shallow groundwater and floodplain position that support hydrophytic vegetation.
W	Water	0%	Open water features mapped as soil units. <i>Not considered hydric soil, but supports aquatic ecosystems.</i>

If the Site has been at least partially altered by past grading, filling, or development, on-site verification may be necessary to confirm soil and hydrology characteristics related to potential wetland areas. Hydric soils are conducive to the growth and regeneration of hydrophytic vegetation due to their ability to hold water for extended periods (USDA-NRCS 2010).

Dominant Hydric Soil Map Units

The Site contains seven (7) partially hydric soils and hydric soils (**wetland-ranked**):

- **Ceresco fine sandy loam (Ce) — 5% hydric**
Ceresco fine sandy loam occurs on nearly level to gently sloping areas. While predominantly nonhydric, small pockets within depressions or poorly drained areas exhibit hydric characteristics. *These inclusions may support hydrophytic vegetation under prolonged saturation.*
- **Houghton muck, 0 to 1 percent slopes (HgtahA) — 100% hydric**
Houghton muck is a deep, very poorly drained organic soil formed in herbaceous organic material. With slopes of 0 to 1 percent, it remains saturated or ponded for much of the growing season. *This unit is entirely hydric and consistently supports wetland vegetation communities.*
- **Kibbie loam, 0 to 3 percent slopes (KbA) — 10% hydric**
Kibbie loam is moderately well drained to somewhat poorly drained, generally found on level to gently sloping ground. *Most of this unit is nonhydric, but about 10% consists of hydric inclusions in lower-lying positions, where seasonal saturation creates wetland microsites.*
- **Sebewa loam, 0 to 2 percent slopes (Sb) — 95% hydric**
Sebewa loam is nearly level and poorly drained, with groundwater at or near the surface during much of the year. *With a 95% hydric rating, this soil is strongly associated with wetland environments, commonly forming wet meadows or forested wetlands.*
- **Urban land–Boyer–Spinks complex, 0 to 10 percent slopes (UeB) — 4% hydric**
This complex is predominantly urban fill and altered soils, but contains approximately 4% hydric inclusions. *These small areas may persist as drainage swales or pockets of natural soil that retain hydric characteristics despite urban disturbance.*
- **Urban land–Marlette complex, 2 to 12 percent slopes (UtB) — 5% hydric**
Like other urban complexes, this unit is largely disturbed. Roughly 5% consists of hydric components in low areas where natural soils persist beneath or around development. *These hydric inclusions may serve as isolated wetlands or stormwater-influenced depressions.*

- Urban land–Fluvaquents complex (Uu) — 45% hydric:

This unit occurs along floodplains where urban land overlies recent alluvial soils (Fluvaquents). About 45% of this map unit is hydric, reflecting its floodplain position, shallow groundwater, and tendency to support hydrophytic vegetation.

Therefore, the presence of Houghton mucks, Sebewa loam, and some of these partially hydric soils strongly indicates that portions of the Site contain hydric soils capable of supporting wetlands.

Impact Assessment

Site balancing, filling, and subsurface excavation activities will take place within the limits of disturbance, which are contained primarily within the areas of previously developed and/or upland areas. However, wetland soil types will also likely be impacted as part of the preliminary concept plan. Soil erosion and sedimentation control (SESC) measures are anticipated to be installed and maintained by the Developer throughout the construction period, as required by the State of Michigan, Meridian Township, and the Ingham County Drain Commissioner, and will be removed once the entire Site has been stabilized. These measures will significantly reduce the possibility of soil erosion and the transport of these soil materials in water, which could cause degradation in areas receiving the Site's stormwater.

4.10 Identified Areas of Groundwater Vulnerability

Areas of groundwater vulnerability are locations where surface and subsurface hydrologic and geologic conditions make groundwater more susceptible to contamination. Wetlands are often considered sensitive or vulnerable features due to their connection to shallow groundwater systems and their essential role in protecting water quality.

Based on the preliminary site plan (Figure 1, **Appendix I**) provided by the Developer (Capstone Communities), the proposed development will likely require impacts to regulated wetlands. **As such, permitting through both EGLE and Meridian Township will be necessary for any anticipated wetland impacts, whether permanent or temporary.**

It is the professional opinion of Marx Wetlands LLC (MW) that the project should continue to be designed to minimize impacts to natural features to the greatest extent practicable. Additionally, all site grading and construction activities should incorporate standard Soil Erosion and Sedimentation Control (SESC) measures in accordance with local and state regulations to protect adjacent water resources and ecological integrity.

As the site plan is preliminary and subject to revision, ongoing coordination with Meridian Township and EGLE may be necessary to ensure full compliance with applicable wetland protection requirements.

4.11 Slopes Greater than 20 Percent

Slopes exceeding 20 percent are considered highly susceptible to soil erosion, which can contribute to sedimentation in on-site and off-site water resources such as ponds, streams, and

lakes. **The Site does not appear to contain significant slopes steeper than 20 percent, except in the northwest corner adjacent to the Red Cedar River. Project activities are not anticipated to affect this area.**

Although slopes are present near the southern Forested Wetland (Wetland C) and the northern Floodplain Forest associated with the Red Cedar River (Wetland B), the majority are less than 20 percent. These areas are also not expected to be disturbed by the proposed project. **Overall, the Site exhibits localized microtopographic variation, particularly in proximity to wetland areas.**

The development project will likely follow the structure, grading setbacks, and requirements provided in Meridian Township ordinances. During construction, any slopes over 20% (if present) created by the project should be intentionally designed and stabilized with appropriate landscaping materials. Soil erosion and sedimentation control (SESC) measures will be implemented and maintained in the areas necessary to prevent erosion that may occur during construction.

The project is expected to meet both state and local water quality standards and likely utilize the best available technologies, considering the characteristics of the receiving waters and associated aquatic resources. All excavated materials and structures should be placed in upland (non-wetland) areas.

4.12 Wildlife

Evidence of wildlife presence was observed throughout the Site in the form of tracks, droppings, and burrows. The amount of animal activity appeared greater than in the surrounding developed areas, likely due to the Site's large expanse of undeveloped forest, field, and wetland habitats. Documented species included white-tailed deer (*Odocoileus virginianus*), eastern cottontail rabbit (*Sylvilagus floridanus*), gray squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), and paper wasps (species undetermined). Squirrel signs were concentrated in the forested portions, while deer use was apparent throughout the Site. A freshly dug den was also noted and may have been created by either a raccoon or a woodchuck (*Marmota monax*), though this could not be confirmed. The Site likely also provides foraging and resting habitat for numerous insects and bird species, such as honeybees (*Apis mellifera*), American robins (*Turdus migratorius*), mourning doves (*Zenaida macroura*), and black-capped chickadees (*Poecile atricapillus*).

Overall, the Site supports a typical assemblage of urban and suburban wildlife—species that are adaptable, broadly distributed, and tolerant of human disturbance. These generalist species differ substantially from threatened or endangered species, which typically have specialized habitat requirements and limited tolerance to disturbance.

The proposed concept plan (Figure 1.2, **Appendix I**) has been designed to minimize impacts to natural features to the maximum extent practicable. Most of the proposed development is limited to upland forest/scrub-shrub, disturbed open grassy areas, and non-regulated wetlands.

However, roughly four (4) regulated wetlands may be directly impacted. **As a result, any minor displacement of abundant, common wildlife species is unlikely to have significant ecological impacts.**

Consequently, it is anticipated that many of the common wildlife species currently observed will continue to utilize portions of the Site post-construction.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The Site is an undeveloped parcel of approximately 60 acres located in Meridian Township (T4N, R1W), Ingham County, Michigan. It lies east of the Hannah Boulevard dead-end, south of the Red Cedar River, west of an existing residential subdivision, and north of undeveloped land primarily consisting of wetlands associated with Herron Creek.

The Site consists primarily of undeveloped land characterized by forested and scrub-shrub communities interspersed with upland open fields and wetlands. The Red Cedar River and its associated floodplain occupy the northern and northeastern portions of the Site, while the Hannah Drain defines the western boundary. Herron Creek, along with its associated floodplain and floodway, traverses the southern portion of the Site, continuing offsite.

Capstone Communities proposes to develop the Site into a multi-family residential complex with associated parking and utilities. The proposed development also includes the construction of three (3) stormwater facilities (e.g., sediment basins) to manage runoff quantity and quality associated with increased impervious surfaces.

Most of the soil types in Meridian Township are upland in nature or typical of developed areas. However, the Site contains several partially hydric soils and three regions of hydric (wetland-ranked) soil types. Historically, the Site likely formed part of a once-continuous forest that was cleared for agriculture and later surrounded by residential development. Wildlife observed on-site includes common urban and suburban species, and no significant impacts to local populations are anticipated. Vegetation consists of a mix of native trees and a brushy, weedy understory dominated by invasive shrubs. While tree clearing is expected, the species present are not likely to include any that are locally rare or state-listed. Several native hardwood trees remain in good condition and contribute to the remnant natural character of the Site.

This inventory provides a comprehensive assessment of the natural features and the anticipated impacts of the proposed development. It does not constitute a formal threatened and endangered species habitat assessment or formal coordination with regulating agencies.

The Developer evaluated multiple on-site layout alternatives considering existing conditions, site constraints, visibility, access, safety, traffic circulation, and the presence of natural features. Retention of larger or native trees in the final landscaping is encouraged where feasible.

Final Notes

Marx Wetlands LLC delineated eight (8) wetlands on May 15, 2025. A formal wetland verification by Meridian Township or EGLE has not yet been conducted; therefore, the delineated boundaries and regulatory status of these wetlands have not been confirmed. Wetlands determined to be regulated by Meridian Township will likely be subject to the Township's 40-foot wetland buffer requirement. **MW recommends that EGLE and/or the Township be contacted to confirm jurisdiction and provide regulatory concurrence for the delineated wetlands.**

- **Stormwater management** is not addressed in detail in the conceptual site plan. If post-construction stormwater will discharge offsite or into regulated features, minor discharge permits from EGLE and/or Meridian Township will be required. Final engineered plans should verify this.
- The Site does appear to contain mapped 100-year floodplains and floodways associated with the Red Cedar River and Herron Creek. **A floodplain elevation verification or pre-application meeting with EGLE is strongly recommended.**
- **Two segments of Hannah County Drain (open ditch) are mapped along the Site's western boundary.** MW recommends that the Developer consult the **Ingham County Drain Commissioner's Office** to confirm whether any easements or permits are necessary.
- A formal **threatened and endangered species review and habitat assessment** was not conducted. Coordination with the United Fish and Wildlife Service (USFWS) and Michigan Department of Natural Resources (MDNR), and/or Michigan Natural Features Inventory (MNFI) is recommended.

Conclusion

Based on current information and the preliminary site design, the proposed development appears to be a viable option that attempts to avoid direct impacts to regulated wetlands and associated buffer zones to the maximum extent practicable. **The items outlined above should be reviewed and resolved before construction, permit approvals, or any site development activities.**

Professional Opinion Disclaimer

The natural features and impact assessment presented herein represent the professional opinion of Marx Wetlands LLC (MW) based on field conditions observed at the time of the site visit(s). However, the final authority on the wetland and regulatory jurisdiction resides with the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Meridian Township, and, in some cases, the federal government. It should be noted that wetland evaluations conducted outside the recognized growing season (typically late October through late April) may not align with EGLE's official wetland identification program protocol. As such, delineations performed during this period are subject to a greater degree of regulatory scrutiny and potential revision. Boundary

adjustments may occur following the agency review and may vary depending on the season, site conditions, and the professional judgment of the reviewing agency representative. Furthermore, site characteristics can change over time due to factors such as weather events, shifts in vegetation, changes in land use on adjacent properties, or alterations in hydrology. These dynamics may alter the presence, boundaries, or regulatory status of wetlands on the Site. Marx Wetlands LLC is not responsible for how the information contained in this report is interpreted, used, or modified by others and is not liable for whether any permits are issued, approved, or denied by regulatory agencies.

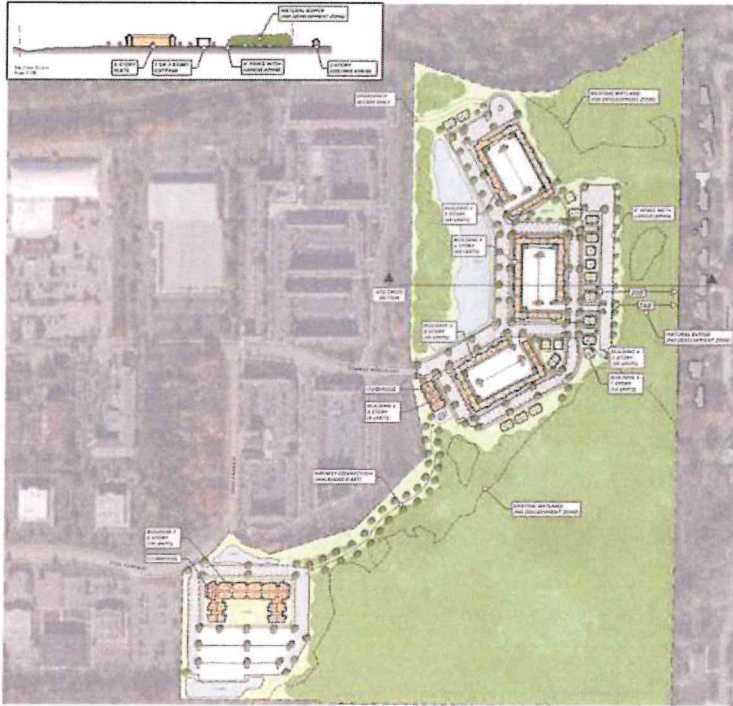
Thank you for the opportunity to conduct this natural feature inventory and impact assessment. Please feel free to contact me at 734.478.8277 or bg.marxwetlands@gmail.com with any questions.

Sincerely,

Marx Wetlands, LLC



Bryana J. Guevara, CSWO (MI)
Principal/Wetland Ecologist
ISA Certified Arborist #MI-4202A
Professional Wetland Scientist #2949
Certified Ecologist, Ecological Society of America



TRAFFIC IMPACT STUDY HANNAH FARMS MERIDIAN TOWNSHIP, MICHIGAN

Prepared for:

Capstone collegiate Communities, LLC
431 Office Park Drive
Birmingham, AL 35223

Prepared by:

Progressive Companies
1811 4 Mile Road NE
Grand Rapids, MI 49525

January 2026
Project No. 22820001

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EXECUTIVE SUMMARY

INTRODUCTION

Capstone Collegiate Communities, LLC is working to construct a multi-family residential development on vacant parcel land, located near Hannah Boulevard and Eyde Parkway in Meridian Township, Michigan. The development will consist of six (6) single family houses and 256 multifamily units. Access to the development will be via two (2) new driveways, one (1) to Eyde Parkway and one (1) to Hannah Boulevard.

The purpose of this Traffic Impact Study is to analyze the potential impacts of the new development and identify what physical and/or operational roadway system improvements may be necessary to mitigate existing or anticipated background issues and/or impacts created by this development's traffic.

Pre-study coordination was completed with Meridian Township and Ingham County Road Department staff to help identify the required study area, study parameters, and any specific areas of concern.

Study Area

The study area includes three (3) signalized intersections and two (2) existing stop-controlled intersections, as listed below:

- Hannah Boulevard / Eyde Parkway (One-Way Stop)
- Hannah Boulevard / Esoteric Way (Signalized)
- Hannah Boulevard / Hagadorn Road (Signalized)
- Eyde Parkway / Esoteric Way (One-Way Stop)
- Eyde Parkway / Hagadorn Road (Signalized)

Data Collection

Morning (7:00 a.m.–9:00 a.m.) and evening (4:00 p.m.–6:00 p.m.) peak hour turning movement counts at the study area intersections were collected in January 2026 on a typical weekday. These counts indicate that the typical weekday morning peak hour generally occurs between 8:00 a.m. to 9:00 a.m. and the typical afternoon peak hour occurs between 4:30 p.m. to 5:30 p.m.

Analysis

Two (2) analysis scenarios were completed for the weekday morning and afternoon peak hours as part of the study, as follows:

- Existing Conditions
- Future (2029) Conditions

Background Traffic Volumes

An annual traffic growth rate was used to estimate growth on the study area roadways. An annual growth rate of 1% (one percent) was applied to the existing peak hour volumes to help determine the background (2029) peak hour volumes. To our knowledge, no other developments are planned near the study area that could influence 2029 traffic patterns. A separate analysis of the background traffic conditions was not completed as part of this study, as the results would be largely the same as existing conditions, with only slightly more delay due to the minor increase in traffic volumes.

Trip Generation

The Institute of Transportation Engineers (ITE) *Trip Generation Manual* was used to calculate the anticipated traffic that may be generated by the proposed development. Trips are measured individually for inbound and outbound movements; therefore, a visit to the site by a resident, for instance, generates two (2) trips – one (1) inbound and one (1) outbound. Based on the land use descriptions provided within the ITE *Trip Generation Manual*, the most applicable land uses for the proposed site is Single Family Detached Housing (land use code 210), Multifamily Housing (Low-Rise) (land use code 220), and Multifamily Housing (Mid-Rise) (land use code 221).

Trip generation for the site was calculated for the typical weekday morning and afternoon peak hours based on the site plan provided by the site owner as well as the methodology defined in the *ITE Trip Generation Manual*.

Conclusions

Based on the analyses performed as part of this study, the proposed development will have minimal impact to the surrounding roadway network. The findings of this study are as follows:

Existing Conditions

Based on the existing conditions analysis, it appears that all intersections in the study area currently operate at a level of service (LOS) "B" or better for both peak periods. Additionally, all individual turning movements operate at a LOS "D" or better and queues in the study area are shown to be acceptable and within the storage space available.

Crash Analysis

Crash information for the most recent five (5) years available (2020–2024) was reviewed, based on information available on the *Michigan Traffic Crash Facts* website. The crash analysis was completed for each signalized intersection in the study area.

Overall, the majority of crashes in the study area were rear-end crashes on Hagadorn Road. This crash type is common for signalized intersections and the majority of crashes resulted in no injuries. There does not appear to be any abnormal crash patterns in the study area, however upgrading the signals on Hagadorn Road to box span configurations and adding traffic signal backplates can help improve signal visibility and potentially reduce rear-end and angle crashes.

Future (2029) Conditions

The future (2029) conditions analysis showed that all intersections in the study area are anticipated to operate at a LOS "C" or better during the morning and afternoon peak hours. Queues are also expected to remain acceptable.

The most effected individual turning movement in the study area was at the Hagadorn Road and Eyde Parkway intersection. The southbound left turning movement LOS is anticipated to decrease from a LOS "D" to a LOS "E" and delay is projected to increase by 29 seconds in the afternoon peak hour. While this increase in delay is significant, queues are anticipated to remain within the available storage lane and not back up into through traffic. If queuing problems become present in the future, changes to signal timing at this approach can be made to give more time to the southbound turning movement phase.

Turn Lane Warrant Analysis

Since the north driveway is essentially a continuation of Hannah Boulevard, turn lanes are not applicable at this location. Additionally, since the speed limit on Eyde Parkway is 25 miles per hour and is a local roadway with low traffic volumes, a dedicated turn lane is not recommended for the south driveway.

Recommendations

Based on the analysis of the study area intersections and proposed site driveways, no further infrastructure improvements are recommended for the study area. The southbound left turn movement on Hagadorn Road at Eyde Parkway should be observed after the proposed development is constructed, and signal timing adjustments may need to be made to ensure that queues do not exceed the available storage lane.

CHAPTER 1

INTRODUCTION

Capstone Collegiate Communities, LLC (Capstone Collegiate Communities) is working to construct a multi-family residential development on vacant parcel land, located near Hannah Boulevard and Eyde Parkway in Meridian Township, Michigan (Township). The development will consist of six (6) single family houses and 256 multifamily units. Access to the development will be via two (2) new driveways, one (1) to Eyde Parkway and one (1) to Hannah Boulevard.

The purpose of this Traffic Impact Study is to analyze the potential impacts of the new development and identify what physical and/or operational roadway system improvements may be necessary to mitigate existing or anticipated background issues and/or impacts created by this development's traffic.

Pre-study coordination was completed with the Township and Ingham County Road Department (ICRD) staff to help identify the required study area, study parameters, and any specific areas of concern. The following chapters outline the results of analyses completed during the study process. Tasks undertaken to complete the analyses include:

1. Data Collection

Morning and afternoon peak hour turning movement counts were completed at the five (5) study area intersections in January 2026. Information regarding lane configurations, speed limits, traffic controls, and other related data for the study area roadways was also collected.



Figure 1. Study Area

2. Background Growth

An annual background traffic growth rate of 1% (one percent) was applied to the existing volumes to help reflect anticipated non-development traffic increases by the 2029 horizon year. This background growth rate was provided by Township staff.

3. Trip Generation/Distribution

The number of trips the proposed development is expected to generate during peak hours was identified. These trips were then assigned to the adjacent street system based upon the patterns followed by existing traffic and engineering judgment.

4. Levels of Service

Capacity calculations were completed at the study area intersections to identify existing and anticipated future peak hour operational characteristics.

5. **Mitigation**

Roadway/intersection improvements were identified, when applicable, that will enable the adjacent roadways and study area intersections to maintain equal and/or acceptable levels of operation under future conditions, upon the addition of background traffic growth and/or due to the development's traffic.

The following chapters outline the results of analyses completed during the study process.

CHAPTER 2

EXISTING CONDITIONS

The first step in identifying potential traffic impacts is to determine how well the adjacent streets are operating under current conditions. This chapter summarizes the data collection and analysis procedures for existing operating conditions.

Key Study Area Roadways

Hannah Boulevard

Hannah Boulevard is an east-west local roadway within the study area under Township jurisdiction. It has a two (2)-lane to four (4)-lane cross section with one (1) to two (2) travel lanes in each direction and a speed limit of 25 miles per hour (mph) within the study area.

Eyde Parkway

Eyde Parkway is an east-west local roadway within the study area under the Township jurisdiction. It has a Two (2)-lane cross section with one (1) travel lane in each direction and a speed limit of 25 mph within the study area.

Hagadorn Road

Hagadorn Road is a north-south arterial roadway within the study area under the ICRD. It has a four (4)-lane cross section with two (2) travel lanes in each direction and a speed limit of 45 mph within the study area. Weekday 24-hour traffic volumes along Hagadorn Road average approximately 25,000 vehicles per day.

The study area includes three (3) signalized intersections and two (2) existing stop-controlled intersections, as listed in Table 1:



Westbound Hannah Boulevard at Hagadorn Road



Westbound Eyde Parkway at Hagadorn Road



Southbound Hagadorn Road at Hannah Boulevard

Table 1. Existing Intersections

Intersection	Traffic Control
Hannah Boulevard / Eyde Parkway	One-Way Stop
Hannah Boulevard / Esoteric Way	Signalized
Hannah Boulevard / Hagadorn Road	Signalized
Eyde Parkway / Esoteric Way	One-Way Stop
Eyde Parkway / Hagadorn Road	Signalized

Data Collection

Morning (7:00 a.m.–9:00 a.m.) and evening (4:00 p.m.–6:00 p.m.) peak hour turning movement counts at the study area intersections were collected in January 2026 on a typical weekday. These counts indicate that the typical weekday morning peak hour generally occurs between 8:00 a.m. to 9:00 a.m. and the typical afternoon peak hour occurs between 4:30 p.m. to 5:30 p.m.

Existing Conditions Capacity Analysis

Intersection “level of service” (LOS) calculations were completed to evaluate the current operational efficiency of the study area intersections. These calculations were completed using techniques outlined in the *Highway Capacity Manual*, published by the Transportation Research Board. Per Michigan Department of Transportation (MDOT) requirements, *Synchro*® traffic analysis software, Version 11, based on the *Highway Capacity Manual* methodologies, was used in the analysis.

Levels of service at signalized and unsignalized intersections relate to the delay, traffic volumes, and intersection geometry. Levels of service are expressed in a range from “A” to “F,” with “A” denoting the highest or best operating conditions. Generally, a LOS “D” rating is considered the minimum acceptable service level for signalized and unsignalized intersections in most areas, although a LOS “E” or LOS “F” can be deemed as acceptable during the peak hours. The criteria for determining the LOS at signalized and unsignalized intersections are outlined in the Appendix of this report.

The existing morning and afternoon peak hours were analyzed at the study area intersections. Table 2 shows the overall levels of service, while Figure 2 shows the levels of service for all movements at the study area intersections. Copies of the *Synchro*® analyses are included in the Appendix.

Table 2. Existing Levels of Service and Delay

Intersection	Existing Conditions			
	A.M.		P.M.	
	LOS	Delay(s)	LOS	Delay(s)
Hagadorn Road / Eyde Parkway	B	14.8	B	18.1
Hagadorn Road / Hannah Boulevard / Service Road	B	10.6	B	14.9
Hannah Boulevard / Esoteric Way	B	11.7	B	13.2
Eyde Parkway / Hannah Boulevard ¹	A	9.7	B	10.6
Eyde Parkway / Esoteric Way ¹	A	9.2	B	10.2

¹Unsignalized intersection, critical/worst approach/movement shown

Source: Progressive Companies, January 2026

Based on the existing conditions analysis, it appears that all intersections in the study area currently operate at a LOS “B” or better for both peak periods. Additionally, all individual turning movements operate at a LOS “D” or better and queues in the study area are shown to be acceptable and within the storage space available.

Crash Analysis

Crash information for the most recent five (5) years available (2020–2024) was reviewed, based on information available on the *Michigan Traffic Crash Facts* website. The crash analysis was completed for each intersection in the study area.

Hagadorn Road/Hannah Boulevard

There was a total of 81 crashes at the Hagadorn Road and Hannah Boulevard intersection in the last five (5) years. Of these crashes, three (3) crashes resulted in a “B” minor injury, nine (9) crashes resulted in a “C” possible injury, and the remaining crashes resulted in no injury. Rear-end crashes were the most common crash type at this intersection (37 crashes), followed by sideswipe crashes (20 crashes), and angle crashes (17 crashes). There were no crashes involving pedestrians or bicyclists.

One (1) of the “B” injury crashes involved a single motorcycle that slid and injured the driver. The other two (2) “B” injury crashes involved a vehicle running a red light. The majority of crashes were rear-end crashes, which are common for signalized intersections. A box span traffic signal and traffic signal backplates can increase signal visibility and help reduce rear-end and angle crashes at this location.

Hagadorn Road/Eyde Parkway

There was a total of 32 crashes at the Hagadorn Road and Eyde Parkway intersection. Of these crashes, two (2) crashes resulted in an "A" serious injury, one (1) crash resulted in a "B" minor injury, four (4) crashes resulted in a "C" possible injury, and the remaining crashes resulted in no injury. Rear-end crashes (14 crashes) were the most common types of crashes at this intersection, followed by angle crashes (seven (7) crashes) and single motor vehicle crashes (six (6) crashes). Two (2) crashes involved bicyclists, both resulting in "C" injuries and caused by vehicles turning right on red. There were no crashes involving pedestrians.

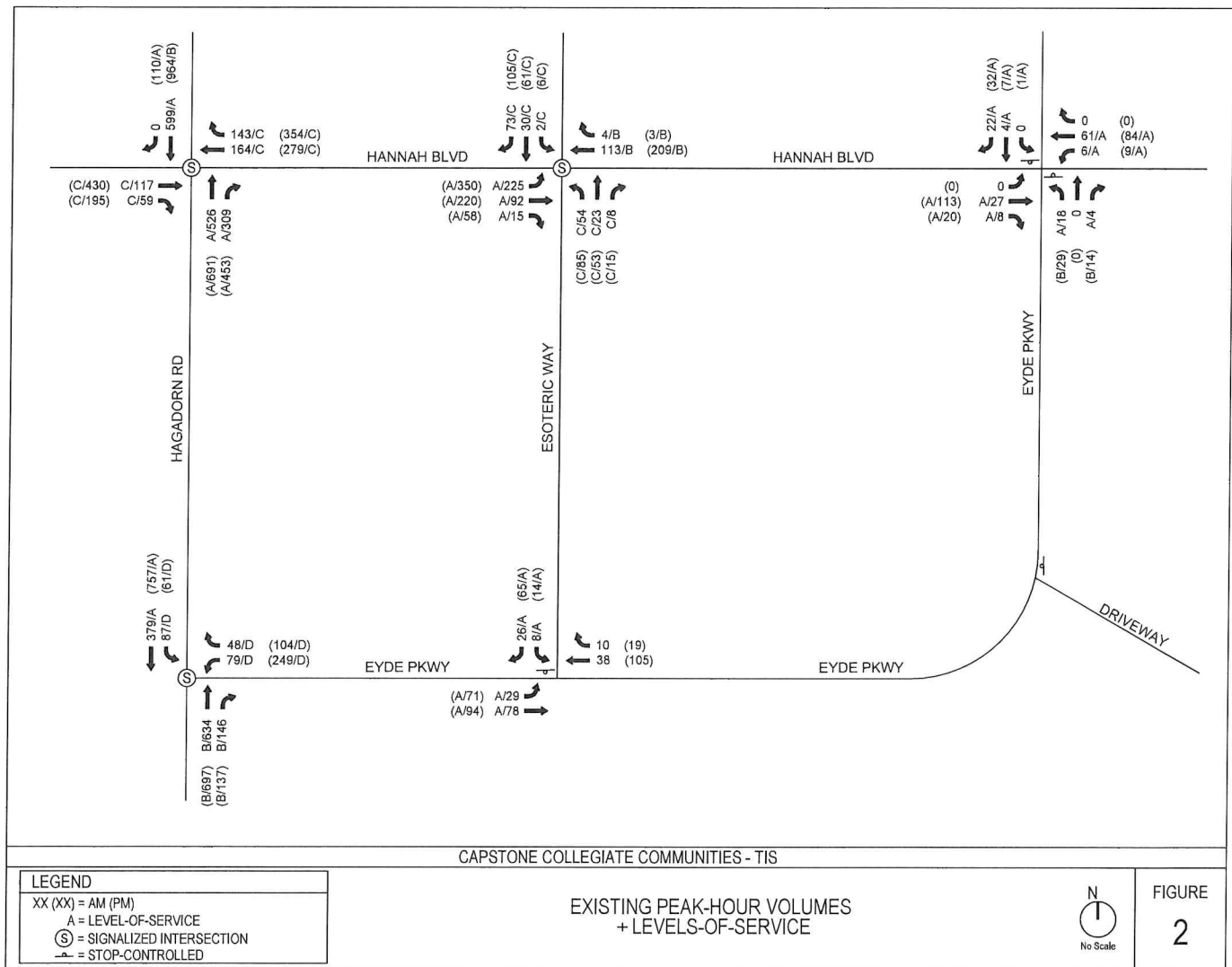
One (1) of the "A" injuries involved a driver having a heart attack and one (1) "A" injury involved a rear-end crash. The one (1) "B" injury crash involved a truck that was unable to stop in snowy conditions. The majority of crashes were rear-end crashes, which are common for signalized intersections. A box span traffic signal and traffic signal backplates can increase signal visibility and help reduce rear-end and angle crashes at this location.

Hannah Boulevard/Esoteric Way

There was a total of 15 crashes at the Hannah Boulevard and Esoteric Way intersection. Of these crashes, one (1) crash resulted in an "A" serious injury, two (2) crashes resulted in a "B" minor injury, two (2) crashes resulted in a "C" possible injury, and the remaining crashes resulted in no injury. Angle crashes (five (5) crashes) were the most common types of crash at this intersection, followed by sideswipe crashes (four (4) crashes) and single motor vehicle crashes (three (3) crashes).

Two (2) crashes involved bicyclists, one (1) resulting in a "B" injury and one (1) resulting in a "C" injury. The "B" injury involved a cyclist in the roadway and the "C" injury involved a cyclist in the crosswalk. The "A" injury crash involved a pedestrian crossing on a "Do Not Walk" signal and ran into the side of a vehicle. The traffic signal at this location is a box span signal, however the addition of backplates can increase signal visibility and reduce the prevalence of angle crashes. Signal timing should also be reviewed for proper yellow and all-red times to ensure proper clearance times are met.

Overall, the majority of crashes in the study area were rear-end crashes on Hagadorn Road. This crash type is common for signalized intersections and the majority of crashes resulted in no injuries. There does not appear to be any abnormal crash patterns in the study area; however, upgrading the signals on Hagadorn Road to box span configurations and adding traffic signal backplates can help improve signal visibility and potentially reduce rear-end and angle crashes.



CHAPTER 3

FUTURE (2029) CONDITIONS

The purpose of this chapter is to summarize the anticipated future (2029) traffic conditions within the study area with background traffic growth and the proposed development's traffic in place. This analysis will provide the before/after comparison of future conditions and help define the timing and applicability of any potential roadway improvements necessary to mitigate the impact of the proposed development.

Proposed Development and Site Access

Capstone Collegiate Communities is working to construct a multi-family residential development on vacant parcel land, located near Hannah Boulevard and Eyde Parkway in Meridian Township, Michigan. The development will consist of six (6) single family houses and 256 multifamily units. Access to the development will be via two (2) new driveways, one (1) to Eyde Parkway and one (1) to Hannah Boulevard.

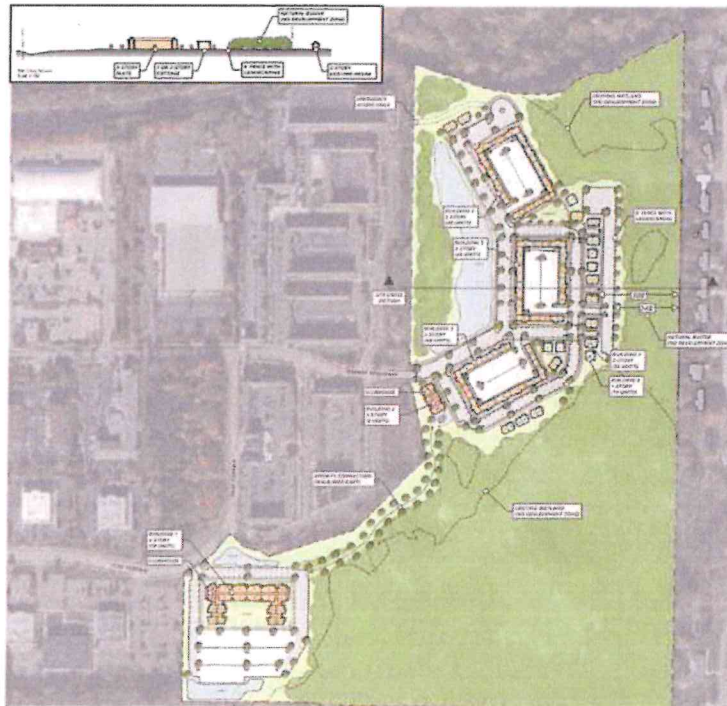


Figure 3. Preliminary Site Plan

Background Traffic Volumes

An annual traffic growth rate was used to estimate growth on the study area roadways. An annual growth rate of 1% (one percent) was applied to the existing peak hour volumes to help determine the background (2029) peak hour volumes. To our knowledge, no other developments are planned near the study area that could influence 2029 traffic patterns. A separate analysis of the background traffic conditions was not completed as part of this study, as the results would be largely the same as existing conditions, with only slightly more delay due to the minor increase in traffic volumes.

Trip Generation

The ITE *Trip Generation Manual* was used to calculate the anticipated traffic that may be generated by the proposed development. Trips are measured individually for inbound and outbound movements; therefore, a visit to the site by a resident, for instance, generates two (2) trips – one (1) inbound and one (1) outbound. Based on the land use descriptions provided within the ITE *Trip Generation Manual*, the most applicable land uses for the proposed site is Single Family Detached Housing (land use code 210), Multifamily Housing (Low-Rise) (land use code 220), and Multifamily Housing (Mid-Rise) (land use code 221).

Trip generation for the site was calculated for the typical weekday morning and afternoon peak hours based on the site plan provided by the site owner as well as the methodology defined in the ITE *Trip Generation Manual*.

Table 3. Trip Generation

Land Use	ITE Code	Size	A.M.			P.M.		
			Total	Enter	Exit	Total	Enter	Exit
Single Family Detached Housing	210	6 Units	10	3	7	7	4	3
Multifamily Housing (Low-Rise)	220	178 Units	75	18	57	93	58	35
Multifamily Housing (Mid-Rise)	221	78 Units	25	6	19	31	20	11
Total			110	27	83	131	82	49

The development is expected to generate approximately 110 weekday morning peak hour vehicle trips (27 inbound, 83 outbound) and approximately 131 weekday afternoon peak hour vehicle trips (82 inbound, 49 outbound) onto the street system.

Trip Distribution

The directional distribution of the site-generated new trips was based upon existing travel patterns and engineering judgment. New trips followed existing traffic patterns, the proposed building's location on the site, and locations of destinations nearby. These distributions are shown below:

	<u>A.M. Peak</u>	<u>P.M. Peak</u>
To/from Hagadorn Road North	60%	60%
To/from Hagadorn Road South	5%	5%
To/from Service Drive West	30%	30%
To/from Esoteric Drive North (Shopping Center)	5%	5%

The anticipated site trips were added to the background (2029) peak hour volumes to depict the estimated total future (2029) volumes during the morning and afternoon peak hours. Figure 4 and Figure 5 show the total anticipated future (2029) new generated trips and total future (2029) volumes, respectively.

Future (2029) Capacity Analysis

Intersection level of service calculations were completed to evaluate the future (2029) morning and afternoon peak hour conditions at the site access driveways and study area intersections, assuming the completion of the proposed development. Table 4 and Figure 5 summarize the levels of service at the study area intersections. Copies of the *Synchro*® analyses are included in the Appendix.

Table 4. Future (2029) Levels of Service and Delay

Intersection	Future (2029) Conditions			
	A.M. Peak		P.M. Peak	
	LOS	Delay(s)	LOS	Delay(s)
Hagadorn Road / Eyde Parkway	B	15.8	C	20.5
Hagadorn Road / Hannah Boulevard / Service Road	B	11.1	B	15.6
Hannah Boulevard / Esoteric Way	B	11.7	B	13.5
Eyde Parkway / Hannah Boulevard ¹	B	10.7	B	11.7
Eyde Parkway / Esoteric Way ¹	A	9.3	B	10.4
Eyde Parkway / Driveway ¹	A	8.7	A	8.9

¹Unsignalized intersection, critical/worst approach/movement shown

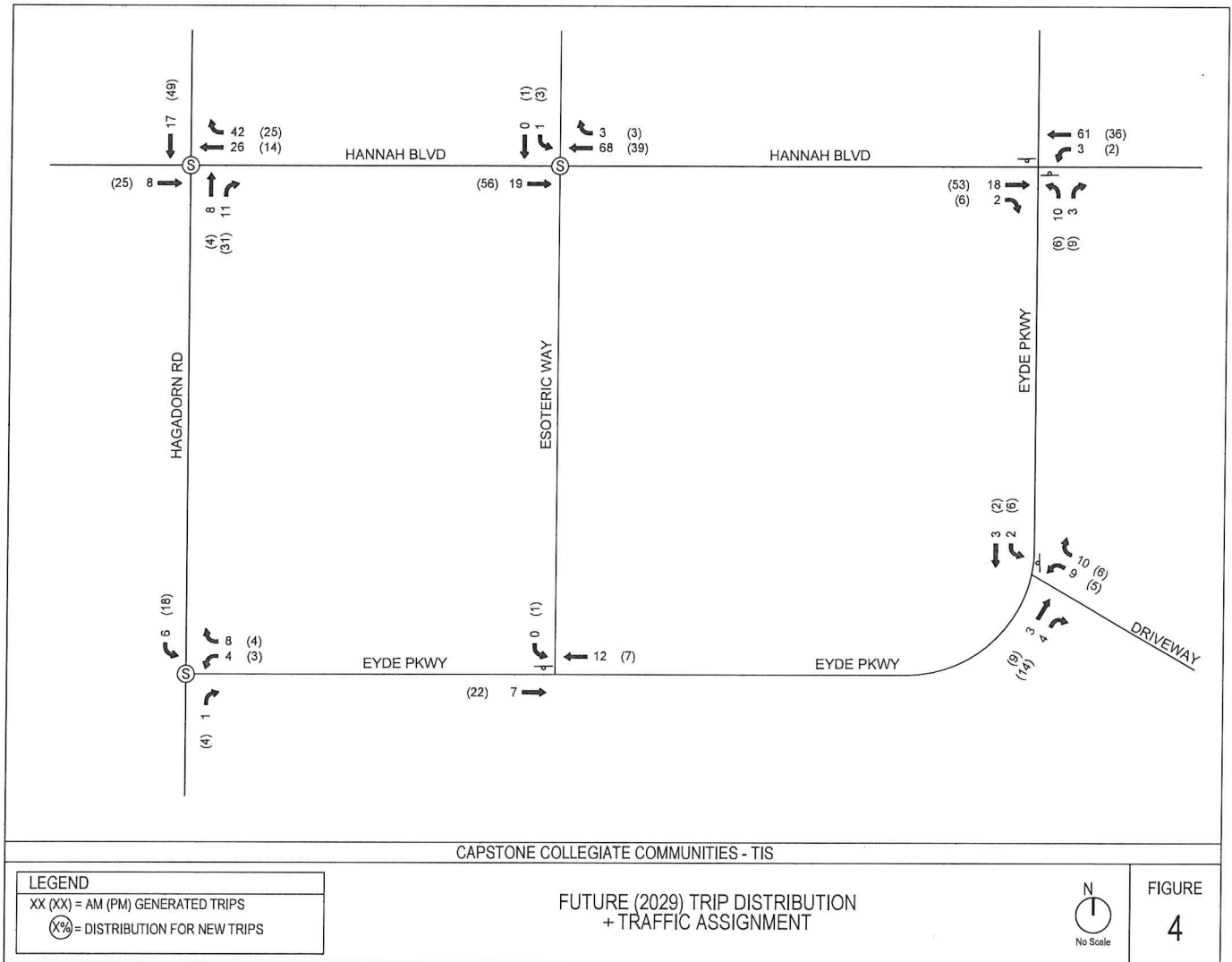
Source: Progressive Companies, January 2026

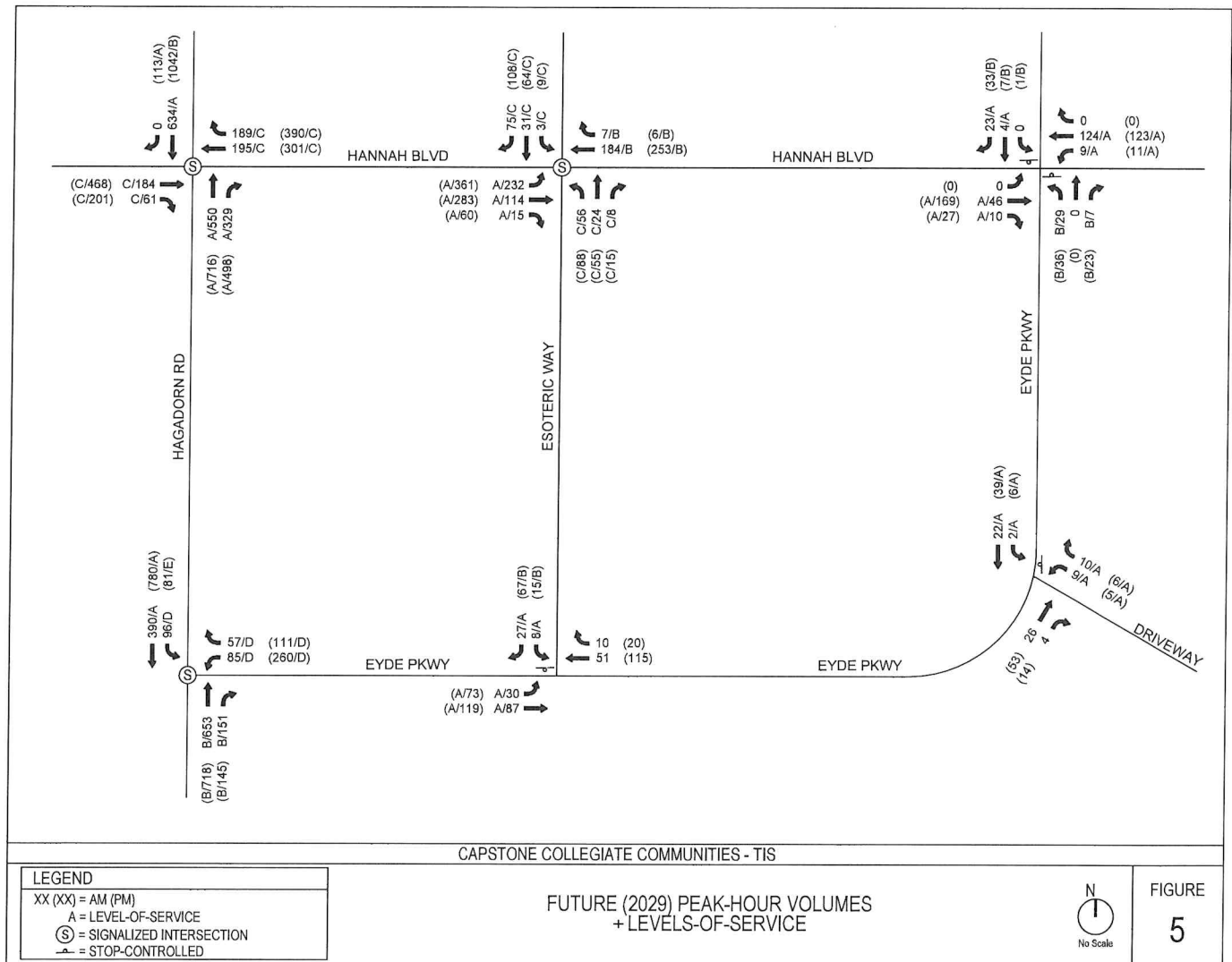
The future (2029) conditions analysis showed that all intersections in the study area are anticipated to operate at a LOS "C" or better during the morning and afternoon peak hours. Queues are also expected to remain acceptable.

The most effected individual turning movement in the study area was at the Hagadorn Road and Eyde Parkway intersection. The southbound left turning movement LOS is anticipated to decrease from a LOS "D" to a LOS "E" and delay is projected to increase by 29 seconds in the afternoon peak hour. While this increase in delay is significant, queues are anticipated to remain within the available storage lane and not back up into through traffic. If queuing problems become present in the future, changes to signal timing at this approach can be made to give more time to the southbound turning movement phase.

Turn Lane Warrant Analysis

Since the north driveway is essentially a continuation of Hannah Boulevard, turn lanes are not applicable at this location. Additionally, since the speed limit on Eyde Parkway is 25 mph and it is a local roadway with low traffic volumes, a dedicated turn lane is not recommended for the south driveway.





CHAPTER 4

CONCLUSIONS AND RECOMMENDATION

This chapter summarizes the results of the analyses performed as part of the study. A recommendation to improve the surrounding roadway network is also presented.

Conclusions

Based on the analyses performed as part of this study, the proposed development will have minimal impact to the surrounding roadway network. The findings of this study are as follows:

Existing Conditions

Based on the existing conditions analysis, it appears that all intersections in the study area currently operate at a level of service (LOS) "B" or better for both peak periods. Additionally, all individual turning movements operate at a LOS "D" or better and queues in the study area are shown to be acceptable and within the storage space available.

Crash Analysis

Crash information for the most recent five (5) years available (2020–2024) was reviewed, based on information available on the *Michigan Traffic Crash Facts* website. The crash analysis was completed for each signalized intersection in the study area.

Overall, the majority of crashes in the study area were rear-end crashes on Hagadorn Road. This crash type is common for signalized intersections and the majority of crashes resulted in no injuries. There does not appear to be any abnormal crash patterns in the study area, however upgrading the signals on Hagadorn Road to box span configurations and adding traffic signal backplates can help improve signal visibility and potentially reduce rear-end and angle crashes.

Future (2029) Conditions

The future (2029) conditions analysis showed that all intersections in the study area are anticipated to operate at a LOS "C" or better during the morning and afternoon peak hours. Queues are also expected to remain acceptable.

The most effected individual turning movement in the study area was at the Hagadorn Road and Eyde Parkway intersection. The southbound left turning movement LOS is anticipated to decrease from a LOS "D" to a LOS "E" and delay is projected to increase by 29 seconds in the afternoon peak hour. While this increase in delay is significant, queues are anticipated to remain within the available storage lane and not back up into through traffic. If queuing problems become present in the future, changes to signal timing at this approach can be made to give more time to the southbound turning movement phase.

Turn Lane Warrant Analysis

Since the north driveway is essentially a continuation of Hannah Boulevard, turn lanes are not applicable at this location. Additionally, since the speed limit on Eyde Parkway is 25 miles per hour and is a local roadway with low traffic volumes, a dedicated turn lane is not recommended for the south driveway.

Recommendations

Based on the analysis of the study area intersections and proposed site driveways, no further infrastructure improvements are recommended for the study area. The southbound left turn movement on Hagadorn Road at Eyde Parkway should be observed after the proposed development is constructed, and signal timing adjustments may need to be made to ensure that queues do not exceed the available storage lane.



To: Planning Commission

From: Brian Shorkey, Principal Planner

Date: September 21, 2026

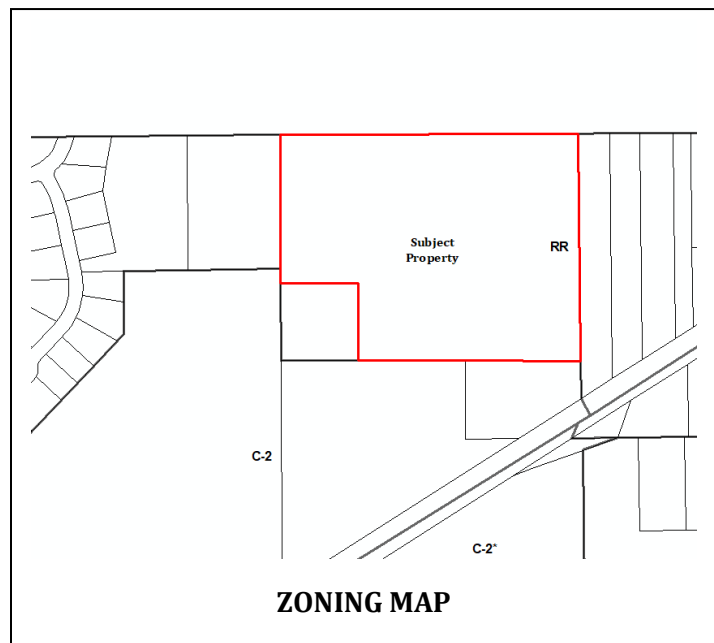
Re: Special Use Permit #26028 (New Hope Church), to construct an addition to the sanctuary, expand the parking lot, and construct a classroom addition and sidewalks.

New Hope Church (Applicant) has submitted a Special Use Permit (SUP) application for the construction of an expanded sanctuary, an enlargement of the parking lot, and the construction of new sidewalks and classrooms at 6482 Newton Road (Subject Property). The Subject Property contains a residence on the northwest corner and is otherwise undeveloped. The Subject Property is zoned RR, Rural Residential. New Hope Church has previously received an SUP for the original construction of the church for projects over 25,000 square feet. This is an amendment to that SUP and will require Board approval after a recommendation from the Planning Commission.

Zoning and Future Land Use

The Subject Property is located in the RR, Rural Residential zoning district. The is the same zoning designation as the property adjacent to the east. The property to the south, part of which includes the original New Hope Church, is zoned C-2, Commercial. The property to the west is zoned RAA, Single-Family Residential. The property to the north is a single-family development in Bath Township, shown as Low Density Residential in the Bath Township zoning map.

The RR district requires a minimum of 200 feet of lot frontage and 40,000 square feet of lot area. The Subject Property is approximately 28.9 acres in size and meets the dimensional requirements for the RR district.



The Future Land Use Map from the 2023 Master Plan designates the subject site in the Suburban Residential category. The same designation applies to the property to the west. The properties to the south are shown as Transitional Residential and Commercial. The properties to the east are designated as Commercial.

Staff Analysis

Applications for special land use permits are reviewed under Sec. 86-126 in the Zoning Ordinance. Based on that review, Staff has the following comments:

1. *The project is consistent with the intent and purposes of this chapter.*

The use, a church and associated development, is allowed as an SUP in the RR district.

2. *The project is consistent with applicable land use policies contained in the Township's comprehensive development plan of current adoption.*

The property is zoned appropriately and complies with the Future Land Use map and Master Plan.

3. *The project is designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the same area.*

The attached proposed site plan shows that the Applicant is complying with the dimensional requirements in the Township Zoning Ordinance.

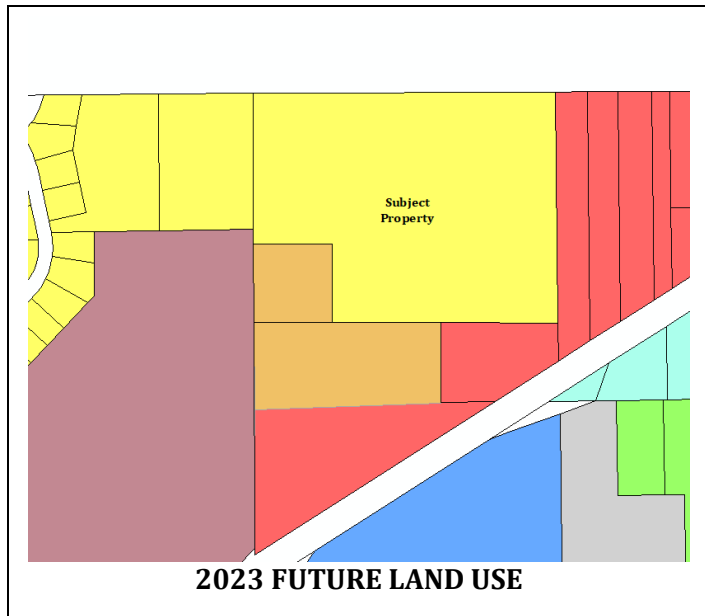
4. *The project will not adversely affect or be hazardous to existing neighboring uses.*

The project is not expected to adversely affect or be hazardous to existing neighboring uses.

5. *The project will not be detrimental to the economic welfare of surrounding properties or the community.*

The project is not expected to be detrimental to the economic welfare of the surrounding properties or the community.

6. *The project is adequately served by public facilities, such as existing roads, schools, stormwater drainage, public safety, public transportation, and public recreation, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide any such service.*



The Ingham County Road Department (ICRD) has issued a driveway permit for an entrance on Newton Road. Staff has determined that no further traffic analysis is required.

7. *The project is adequately served by public sanitation facilities if so designed. If on-site sanitation facilities for sewage disposal, potable water supply, and stormwater are proposed, they shall be properly designed and capable of handling the longterm needs of the proposed project.*

The project is adequately served by public water. Potential stormwater impacts will be reviewed by the Ingham County Drain Commission during site plan review.

8. *The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.*

The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.

9. *The project will not directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, and wildlife areas.*

The project is not expected to directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, or wildlife areas. While the proposed site plan shows environmentally sensitive areas, it also shows that the proposed development does not affect them.

Groups of buildings with a combined gross floor area greater than 25,000 square feet are regulated by Sec. 86-658 in the Zoning Ordinance. The approval processes for such special use permits are reviewed under the same SUP requirements. As a result, Staff has no further comments.

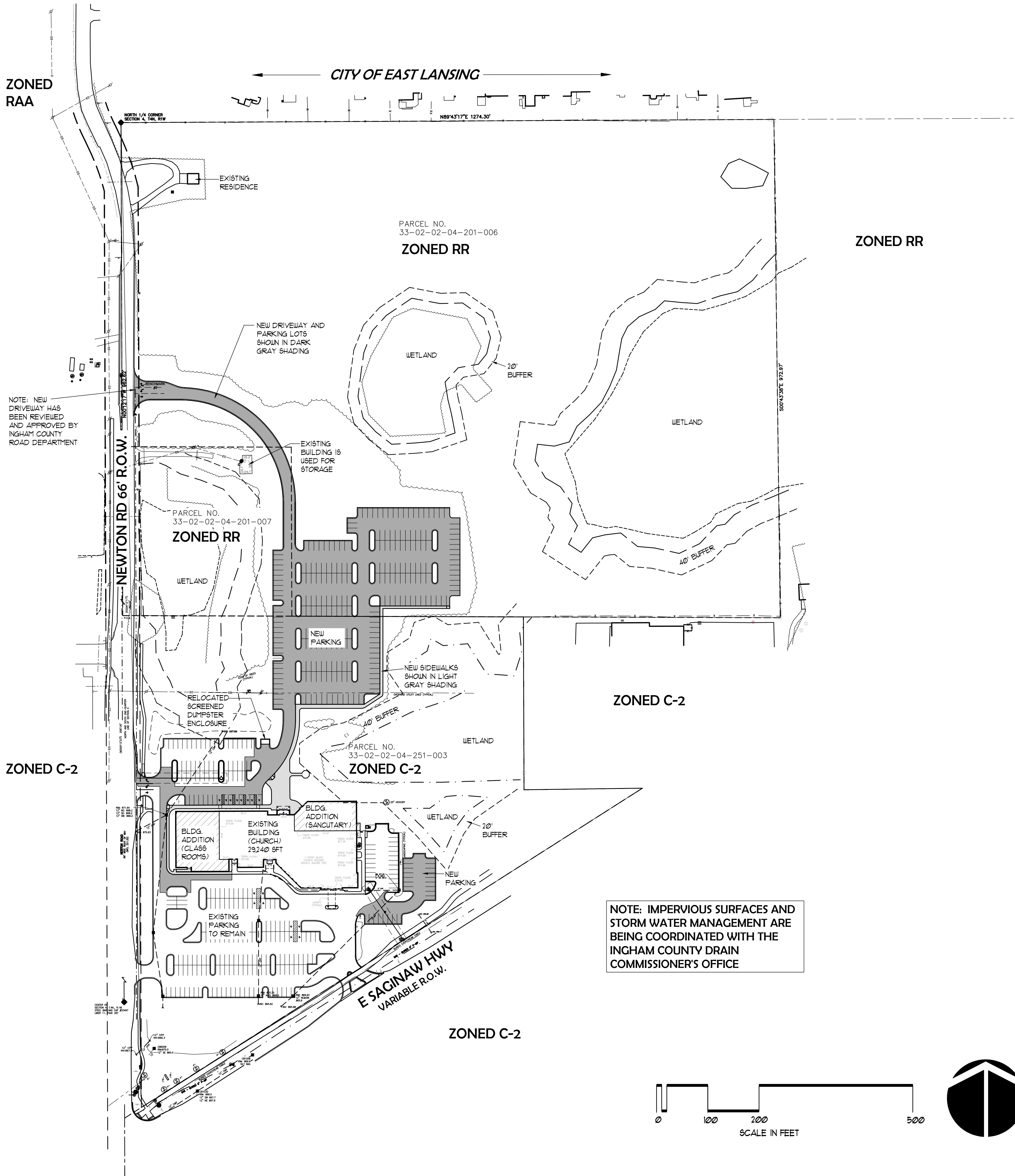
Based on the information provided by the Applicant, Staff has identified no major concerns that would negatively impact surrounding properties or the Township at large while reviewing the proposed Special Use Permit. If the Special Use Permit for the project is approved by the Planning Commission and the Township Board, the applicant will be required to submit for Site Plan Review and/or any required building permits prior to beginning operations.

Planning Commission Options

The Planning Commission may recommend approval, approval with conditions, or denial of the proposed special use permit. A resolution will be provided at a future meeting.

Attachments

1. Proposed Site Plan and Building Elevations, prepared by Mayotte Group
2. Natural Feature Inventory, prepared by Virdis Design Group
3. Driveway Permit from ICRD, dated June 30, 2026



LEGAL DESCRIPTIONS (FROM TAX RECORDS)

DESCRIPTION OF PARCEL NO. 33-02-02-04-251-003

PART OF NE FRACTIONAL 1/4 OF SEC 4 T4N R1W DESCRIBED AS: COMMENCING AT N 1/4 COR OF SEC 4 - S00D12'17"E ALONG NS 1/4 LINE 962.62 FT TO NW COR OF S 10 A OF NW 1/4 OF NE FRACTIONAL 1/4 & POB - S89D49'04"E ALONG N LINE OF SAID S 10 A 782 FT - S00D12'06"E 337.66 FT TO S LINE OF NW 1/4 OF NE 1/4 - N89D14'31"E ALONG SAID S LINE 231.04 FT TO NW'LY R/W LINE OF HWY M-78 - S57D29'13"W ALONG SAID NW'LY LINE 1198.54 FT TO NS 1/4 LINE - N00D12'17"W ALONG NS 1/4 LINE 981.31 FT TO POB

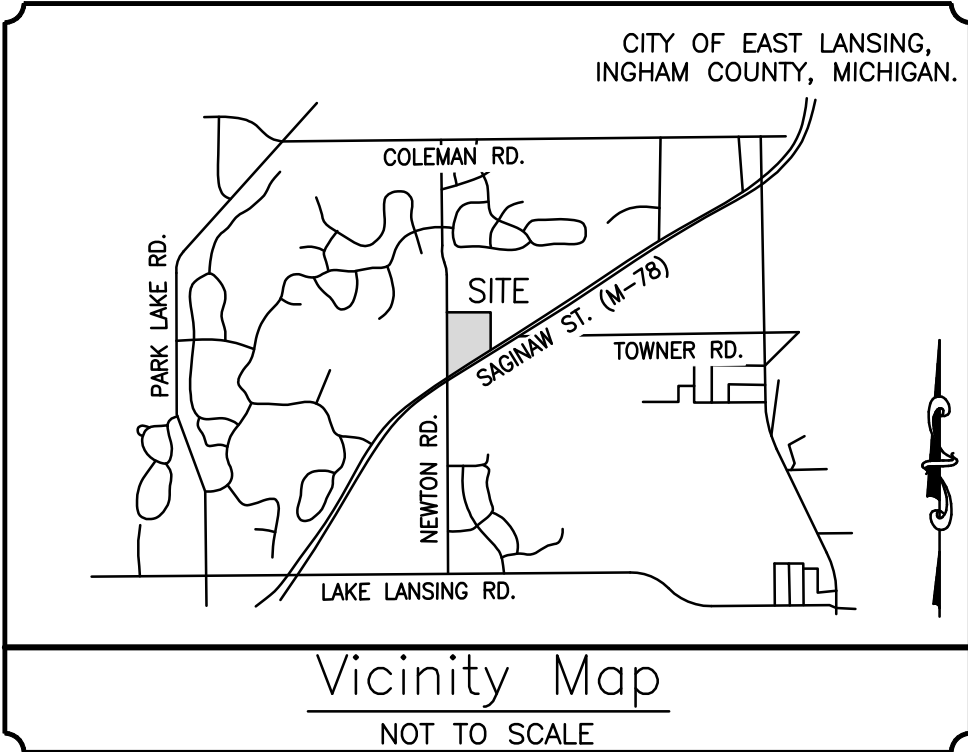
DESCRIPTION OF PARCEL NO. 33-02-02-04-201-007

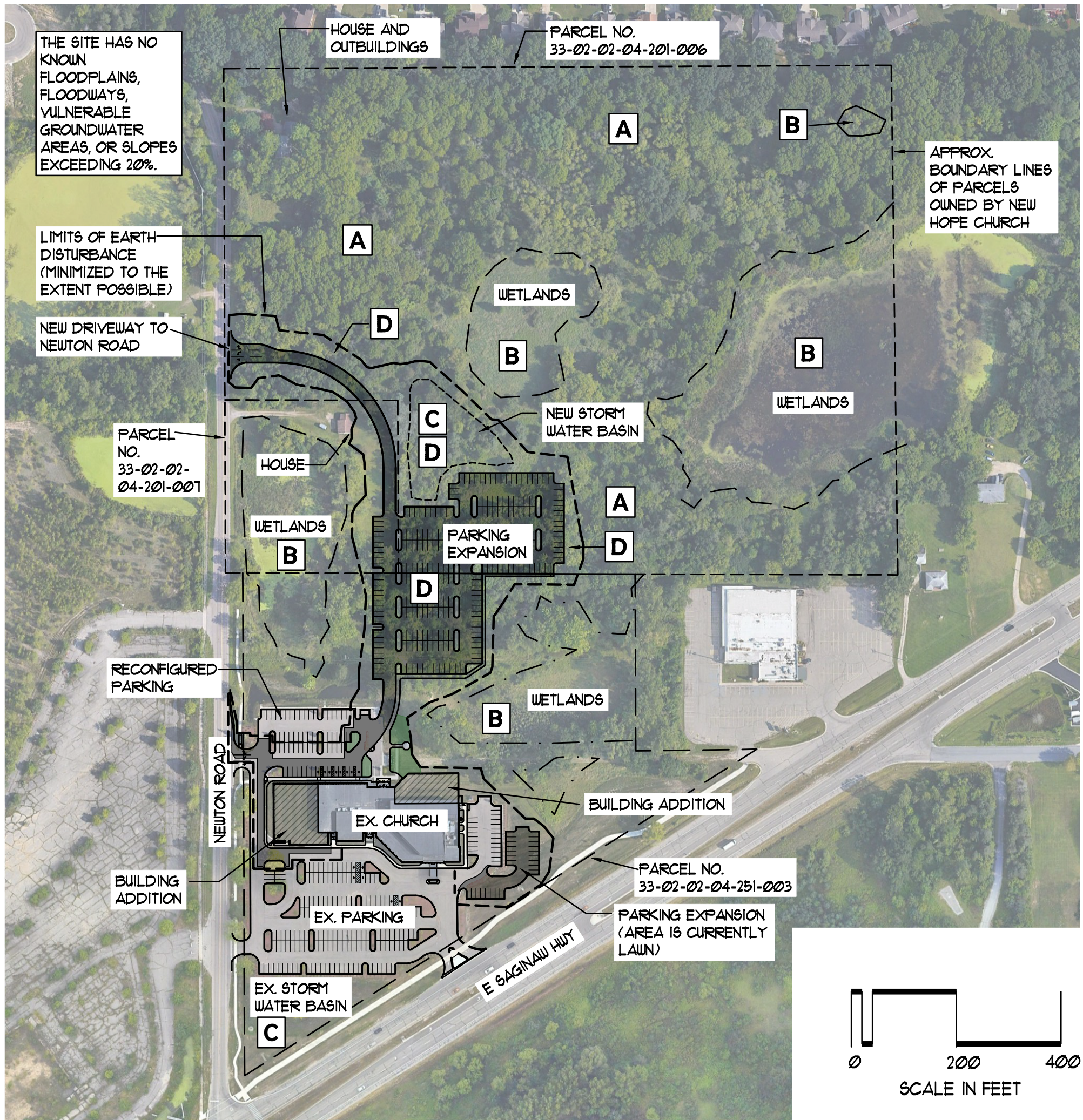
M 4-20-1 S 330 FT OF W 330 FT OF N 28.28 A OF NW 1/4 OF NE 1/4 SEC 4 T4NR1W 2.50 A

DESCRIPTION OF PARCEL NO. 33-02-02-04-201-006

M 4-20 NW 1/4 OF NE 1/4 OF SEC 4 EXC S 10 A & ALSO EXC S 330 FT OF W 330 FT THEREOF SEC 4 T4NR1W - 25.78 A

TOTAL OF SUBJECT PARCEL: #41.17 ACRES





LEGEND

- A** UPLAND, MOSTLY DECIDUOUS WOODED AREA (12" DBH AND GREATER) WITH UNDERGROWTH; NO CONSTRUCTION WORK, MATERIAL STORAGE OR OTHER DISTURBANCE
- B** WETLANDS AS PREVIOUSLY DELINEATED; NO CONSTRUCTION WORK, MATERIAL STORAGE OR OTHER DISTURBANCE
- C** STORMWATER MANAGEMENT BASIN, FOR COMPLIANCE WITH INGHAM COUNTY DRAIN COMMISSIONER'S REQUIREMENTS.
- D** AREAS WHERE EXISTING TREES AND STUMPS WILL BE REMOVED.

PROJECT DESCRIPTION

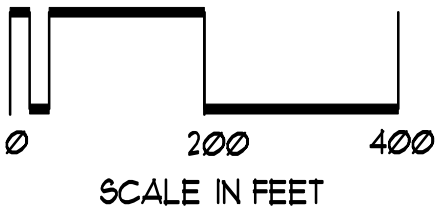
NEW HOPE CHURCH SEEKS APPROVAL FROM MERIDIAN TOWNSHIP TO CONSTRUCT BUILDING ADDITIONS, AND MAKE PARKING AND OTHER IMPROVEMENTS ON THEIR PROPERTY. THIS CAPITAL IMPROVEMENT PROJECT IS A RESULT OF THE SUCCESS OF THE CHURCH SINCE ITS CONSTRUCTION.

IMPACTS ON NATURAL FEATURES

WITHIN THE AREA PROPOSED FOR CONSTRUCTION, VEGETATIVE COVER WILL BE REMOVED AND IMPROVEMENTS CONSTRUCTED AS INDICATED. STORM WATER WILL BE COLLECTED IN A NEW DETENTION BASIN WITH A RESTRICTED OUTLET TO THE EXISTING SITE SYSTEM.

EFFORTS TO MITIGATE IMPACTS:

- THERE ARE NO PROPOSED WETLAND IMPACTS
- CLEARING LIMITS HAVE BEEN MINIMIZED TO THE EXTENT POSSIBLE
- STORM WATER WILL BE CAREFULLY MANAGED AND DISCHARGED TO EXISTING SYSTEMS
- SOIL EROSION CONTROL MEASURES WILL BE IMPLEMENTED AND MONITORED THROUGHOUT THE CONSTRUCTION PERIOD
- NATIVE SPECIES WILL BE USED FOR THE DETENTION BASIN; THE GOAL WILL BE TO NATURALIZE THE BASIN TO THE EXTENT POSSIBLE.



NATURAL FEATURES INVENTORY FOR:
NEW HOPE CHURCH
MERIDIAN TOWNSHIP, MICHIGAN
8/19/2026
PREPARED BY VIRIDIS DESIGN GROUP



Ingham County Road Department
301 Bush Street
P.O. Box 38
Mason, MI 48854-0000
Phone: 517-676-9722

APPLICATION AND PERMIT TO CONSTRUCT, OPERATE, USE AND/OR MAINTAIN WITHIN THE RIGHT-OF-WAY; OR TO CLOSE A COUNTY ROAD. If a contractor is to perform the construction entailed in this application and permit, and is supplying the deposit, and bond, he will fill out the information block provided, and thereby assumes responsibility, along with the applicant, for any provisions of this application and permit which apply to him.

Application No. 239481
Permit No. 2025-000825
Date 6/30/2026

A P P L I C A N T	New Hope Church 2926 West Main St Kalamazoo, MI 49006		C O N T R I B U T O R		
	Phone(s): 269-377-1185 / 269-585-2051 EMail: woody@virdg.com				
	Signature _____			Signature _____	
	Title _____ Date _____			Title _____ Date _____	
R E Q U I R E M E N T	Permit	350.00	A T T A C H M E N T S	Insurance	
				Plans	No
				Retainer Letter	No
				Attachments	No
	Receipt No.	35856		Bond No.	
	To Be Billed			Bond Amt.	
	Letter/Credit				
	Work Order No.				

**3 WORKING DAYS
BEFORE YOU DIG - DIAL
(MISS DIG)
(TOLL FREE)

(800-482-7171)**

Applicant and/or Contractor request a Permit for the purpose indicated in the attached plans and specifications at the following location:

City/Township Meridian **Project** Commercial Drive, , , ,
Name of Road Newton Rd **Roadside**
Between Saginaw St - 1475 ft. **and** Nichols Rd

For a Period Beginning 06/30/2026 **and Ending** 06/30/2027
and Agrees to the terms of this permit.

New Hope Church - Newton Rd - Meridian Twp
#239481, 2025-825

SEE PERMIT REQUIREMENTS PAGE 2

New Hope Church - Newton Rd - Meridian Twp
#239481, 2025-825

Permitted activities include a shoulder closure on Newton Rd to facilitate the installation of an auxiliary driveway and relocation of a fire hydrant, 1475 ' N of Saginaw Highway. Work permitted according to ICRD Standards and New Hope Church revised plan submitted and prepared by Viritis Design Group, revised 6/26/26. Permit covers work in ICRD right-of-way only.

Construct B2 Curb and Gutter according to the latest version of MDOT Standard plan R-30. Construct Type "M" driveway opening Commercial Driveway approach according to the latest version of MDOT Standard plan R-29. Install expansion joint where new cu meets existing curb.

Traffic control per MMUTCD. All traffic control devices shall be removed from the right-of-way within 48 hours of the completion of work. Failure to meet these deadlines will result in the ICRD removing the devices at the applicant's expense. Public right-of-way shall be restored in-kind.

Separate permits may be required from Meridian Twp and/or the Ingham County Drain Office.

Recommended For Issuance:			Ingham County Road Department
			Ingham County, Michigan
	<u>06/30/2026</u>		
(Investigator)	Date		
	<u>06/30/2026</u>	By	
(Project/Traffic Engineer)	Date		County Highway Engineer,
			Director of Engineering or Authorized Signature

TERMS AND CONDITIONS

1. **Specifications.** All work performed under this permit must be done in accordance with the application, plans, specifications, maps and statements filed with the Ingham County Road Department ("Road Department") and must comply with the Road Department's current procedures and regulations on file at its office and the current MDOT Standard Specifications for Construction, if applicable.
2. **Fees and Costs.** The Permit Holder shall be responsible for all costs incurred by the Road Department in connection with this permit and shall deposit estimated fees and costs as determined by the Road Department, at the time the permit is issued.
3. **Bond.** The Permit Holder shall provide a cash bond or bond in a form and amount acceptable to the Road Department at the time permit is issued.
4. **Insurance.** The Permit Holder shall furnish proof of general liability insurance in amounts not less than \$1,000,000 each occurrence and general aggregate, proof of automobile liability in amounts not less than \$1,000,000 combined single limit for each accident, bodily injury per accident, and property damage per accident, and in an amount not less than \$500,000 for bodily injury per person. Such proof of insurance shall include a valid certificate of insurance demonstrating that the Road Department is an additional insured party on the policy. Such insurance shall cover a period not less than the term of this permit and shall provide that it cannot be cancelled without 30 days advance written notice to the Road Department, by certified mail, first-class, return receipt requested. This permit is invalid if insurance expires during the authorized period of work described herein.
5. **Indemnification.** In addition to any liability or obligation of the Permit Holder that may otherwise exist, Permit Holder shall, to the fullest extent permitted by law, indemnify and hold harmless the Road Department and its Commissioners, officers, agents, and employees from and against any and all claims, actions, proceedings, liability, losses, and damages thereof, and any and all costs and expense, including legal fees, associated therewith which the Road Department may sustain by reason of claims for or allegations of the negligence or violation of the terms and conditions of this permit by the Permit Holder, its officers, agents or employees, arising out of the work which is the subject of this permit, or arising out of work not authorized by this permit, or arising out of the continued existence of the operation or facility, which is the subject of this permit.
6. **Miss Dig.** The Permit Holder must comply with the requirements of Act 53 of Public Acts of 1974, as amended. CALL MISS DIG AT (800) 482-7171 or www.missdig.org AT LEAST THREE (3) FULL WORKING DAYS, BUT NOT MORE THAN FOURTEEN (14) CALENDAR DAYS, BEFORE YOU START WORK. The Permit Holder assumes all responsibility for damage to or interruption of underground utilities.
7. **Notification of Start and Completion of Work.** The Permit Holder must notify the Road Department at least 48 hours before starting work, when work is completed, and additionally as directed by the Road Department.
8. **Time Restrictions.** All work shall be performed Monday through Friday between 8:00am - 5:00pm and only during the period set forth in this permit unless written approval is obtained from the Road Department. No work is to be performed on Saturdays, Sundays, or the holidays of: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, except emergency work, unless authorized by the Road Department.
9. **Safety.** Furnish, install and maintain all necessary traffic controls and protection during Permit Holder's operations in accordance with the Manual of Uniform Traffic Control Devices, Part 6, and any supplemental specifications set forth herein.
10. **Restoration and Repair of Road.** The construction, operation and maintenance of the activity covered by this permit shall also be responsible for the cost of restoration and repair of the right-of-way determined by the Road Department to be damaged as a result of the activity which is the subject of this permit. Restoration shall meet or exceed conditions when work is commenced and be in accordance with specifications. The Permit Holder shall be responsible for costs incurred by the Road Department for emergency repairs performed by or on behalf of the Road Department for the safety of the motoring public. Said repairs shall be performed with or without notice to the Permit Holder if immediate action is required. This determination shall be in the sole and reasonable opinion of the Road Department.
11. **Limitation of Permit.** Issuance of this permit does not relieve Permit Holder from meeting any and all requirements of law, or of other public bodies or agencies. The Permit Holder shall be responsible for securing and shall secure any other permits or permission necessary or required by law from cities, villages, townships, corporations, property owners, or individuals for the activities hereby permitted. Any work not described by the application, including the time and place thereof, is strictly prohibited in the absence of the application for and issuance of an additional permit or amendment to this permit.
12. **Revocation of Permit.** This permit may be suspended or revoked at will, and the Permit Holder shall surrender this permit and alter, relocate or remove its facilities at its expense at the request of the Road Department. It is understood that the



To: Planning Commission

From: Brian Shorkey, Principal Planner

Date: September 21, 2026

Re: PO, Professional Office District Use Updates

The Planning Commission recently heard an SUP application for a restaurant in the PO district and subsequently approved the application. Staff discussed restaurants in the PO, Professional Office district at their regular meetings on July 13th and August 10th. The discussion was about a line in the ordinance that defines a restaurant without a drive-thru as a special land use, “when deemed appropriate to the primary use of the land or structure.”

Staff discussed this with the Planning Commission at their regular meeting on July 27, 2026. At that time, the Planning Commission decided to recommend moving restaurants without drive-ins or drive-throughs to Sec. 86-432 (b), Uses Permitted in the Township Zoning Ordinance. After further discussion, the Planning Commission also decided to recommend moving barbers and beauty shops to Sec. 86-432(b) as well.

Staff has prepared the draft resolution attached to this memo. Staff looks forward to discussing this with the Planning Commission.

Attachments

1. PO Permitted Use Update Draft – Redlined
2. PO Permitted Use Update Draft – Clean

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Section 1. Section 86-432(b), Uses Permitted, is hereby amended to read as follows:

- Section 2.** Sect. 86-432(c)(3) is hereby amended to read as follows:

- 1

1 b. Public utility structures, publicly owned and operated buildings and uses.
2
3

4 **Section 3.** Validity and Severability. The provisions of this Ordinance are severable and the
5 invalidity of any phrase, clause or part of this Ordinance shall not affect the validity or effectiveness
6 of the remainder of the Ordinance.
7

8 **Section 4.** Repealer Clause. All ordinances or parts of ordinances in conflict therewith are
9 hereby repealed only to the extent necessary to give this Ordinance full force and effect.
10

11 **Section 5.** Savings Clause. This Ordinance does not affect rights and duties matured, penalties
12 that were incurred, and proceedings that were begun, before its effective date.
13

14 **Section 6.** Effective Date. This Ordinance shall be effective seven (7) days after its publication
15 or upon such later date as may be required under Section 402 of the Michigan Zoning Enabling Act
16 (MCL 125.3402) after filing of a notice of intent to file a petition for a referendum.
17

18 ADOPTED by the Charter Township of Meridian Board at its regular meeting this **XXth** day of
19 **XXXXXXX**, 2026.
20
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22 _____
23 Scott Hendrickson, Township Supervisor
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26 _____
27 Angela Demas, Township Clerk

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THE CHARTER TOWNSHIP OF MERIDIAN ORDAINS:

Section 1.

- b. Uses permitted. The following types of commercial activities may be permitted, provided that only public sanitary sewerage will be utilized. All of the following uses permitted must be conducted wholly in a permanent, fully enclosed building:
- (1) Offices of professionals licensed by the State of Michigan to treat human patients such as, but not limited to, chiropractors, dentists, dietitians/nutritionists, massage therapists, occupational therapists, optometrists, osteopaths, physical therapists, physicians, podiatrists and psychologists. This shall not include facilities accommodating overnight patients or providing secondary services not specifically listed as permitted.
 - (2) Hospitals, medical clinics, and veterinary clinics, provided that all activities are carried out within a building and that no objectionable sights, sounds, or odors are produced which may be discernable at the property lines.
 - (3) Offices of architects, engineers, urban planners, and artists and others employed in the graphic arts.
 - (4) Offices in which the personnel will be employed for work in one or more of the following fields: executive, administrative, legal, writing, clerical, stenographic, accounting, insurance, and similar enterprises.
 - (5) Research laboratories, provided that no heavy mechanical equipment is used in the normal operation of the laboratories and provided that the character of its research would not make it objectionable because of sights, sounds, odors, and traffic congestion produced.
 - (6) Religious institutions, except when located adjacent to a one-family or two-family residential zoning district (RR, RAAA, RAA, RA, RB, and RX).
 - (7) Restaurant, provided there are no drive-in or drive-through type facilities associated with it.
 - (8) Barber or beauty shop.

Section 2.

- (3) The following uses may be permitted by special use permit when deemed appropriate to the primary use of the land or structure:
- a. Drug store.
 - b. Public utility structures, publicly owned and operated buildings and uses.

1 **Section 3.** Validity and Severability. The provisions of this Ordinance are severable and the
2 invalidity of any phrase, clause or part of this Ordinance shall not affect the validity or effectiveness
3 of the remainder of the Ordinance.
4

5 **Section 4.** Repealer Clause. All ordinances or parts of ordinances in conflict therewith are
6 hereby repealed only to the extent necessary to give this Ordinance full force and effect.
7

8 **Section 5.** Savings Clause. This Ordinance does not affect rights and duties matured, penalties
9 that were incurred, and proceedings that were begun, before its effective date.
10

11 **Section 6.** Effective Date. This Ordinance shall be effective seven (7) days after its publication
12 or upon such later date as may be required under Section 402 of the Michigan Zoning Enabling Act
13 (MCL 125.3402) after filing of a notice of intent to file a petition for a referendum.
14

15 ADOPTED by the Charter Township of Meridian Board at its regular meeting this **XXth** day of
16 **XXXXXXX**, 2026.
17
18
19

20 _____
Scott Hendrickson, Township Supervisor

21
22 _____
23 Angela Demas, Township Clerk
24



To: Planning Commission

**From: Brian Shorkey, AICP
Principal Planner**

Date: September 21, 2026

Re: Commission Review #26033 (Meridian Township), Section 61 review of the location, character, and extent for a subject property consisting of three parcels, totaling 2.44-acres, recognized as Parcel I.D. #21-407-003, #21-407-004, and #21-407-005 for acquisition for storm water management

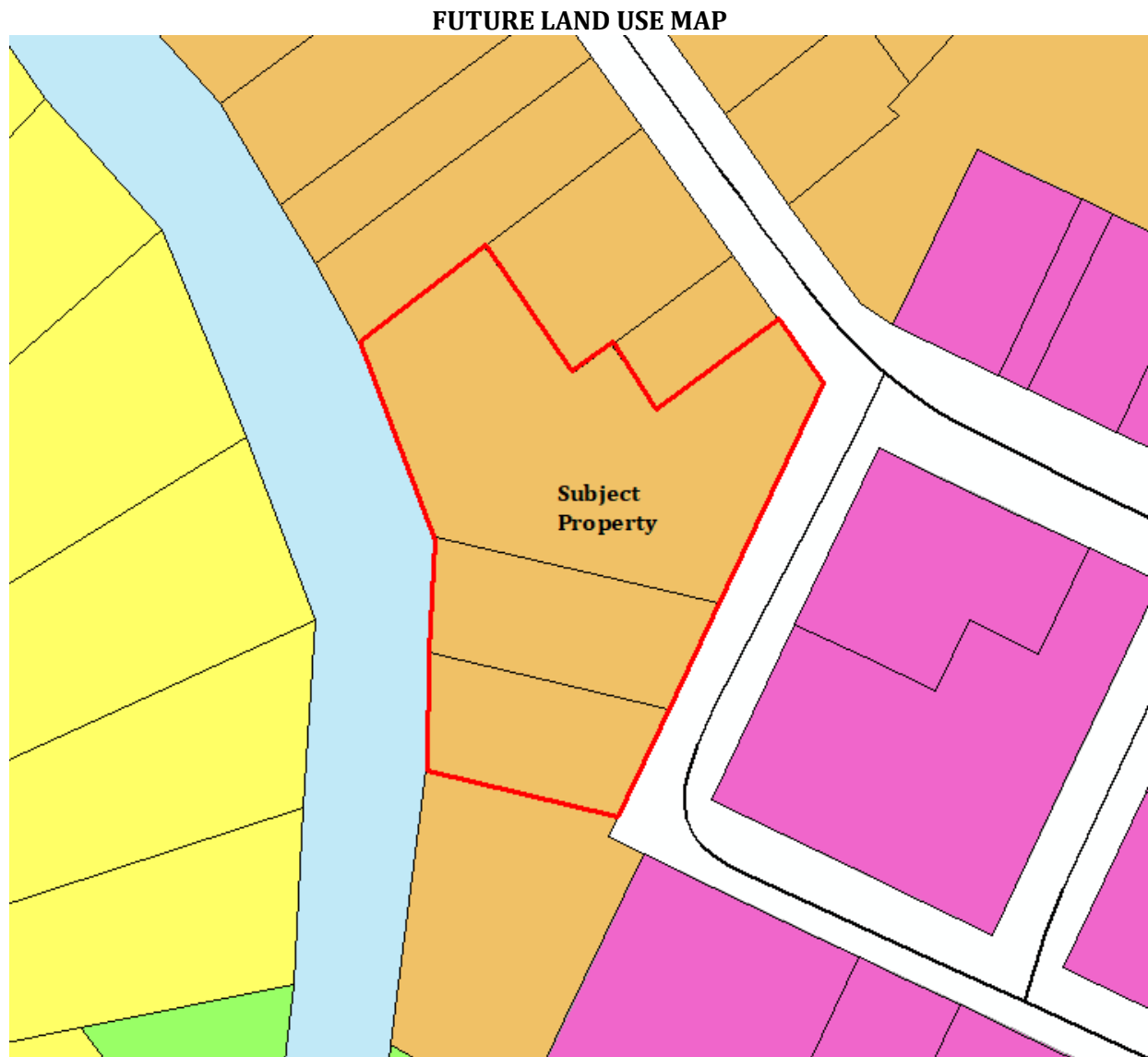
Township staff recently learned that the developer who proposed the Village of Okemos project at the northwest and southwest blocks of the Okemos and Hamilton Road intersection is letting the two blocks go into receivership, meaning the bank is taking control of the properties due to a failure by the owner/developer to make payments on the loan.

The former developer who proposed the Village of Okemos project had also acquired three parcels on Liverance Street with the intent that these parcels would be used to manage stormwater and as a park/greenspace within Downtown Okemos. Township Staff approached the developer/bank about acquiring these properties, so assist with the stormwater management in the broader downtown Okemos area.

Section 61 of the Michigan Planning Enabling Act (the "MPEA," Public Act 33 of 2008) requires Planning Commission review and approval of the location, character, and extent for the construction/purchase of new public streets, parks, open space, buildings, and other public facilities. This process is called a Section 61 Review. The MPEA does not require a public hearing for a Section 61 review.

Master Plan

The Future Land Use Map from the 2023 Master Plan designates the subject site in the Transitional Residential category.



Zoning

The site is zoned RB (One-Family High-Density Residential Districts).

ZONING MAP



Physical Features

The site is vacant and according to the Meridian Township wetlands map as well as the appraisal, there are wetlands on site. The Flood Insurance Rate Map (FIRM) for Meridian Township indicates that the western portion of the site is within the Red Cedar floodway. The Township Parcel Viewer also indicates that almost all of the property is within the Red Cedar River floodway. The survey of

the properties shows that the middle parcel has a drain easement running through the middle of the parcel, making the parcel challenging to build a structure on.

WETLAND MAP



Staff Analysis

Section 61 of the MPEA requires Planning Commission review and approval of the location, character, and extent for the construction/purchase of new public streets, parks, open space, buildings, and other public facilities. **Location** refers to the site's placement in the Township and its surroundings; the property proposed for acquisition is located on the intersection of Hamilton

and Liverance Road, on the east bank of the Red Cedar River. **Character** includes the site's distinguishing features. **Extent** includes the dimensions of the site which is approximately 2.44 acres in size with approximately 400 feet of frontage on Liverance Street, with approximately 83 feet of frontage on Hamilton Road.

The project is consistent with the 2023 Master Plan. The Master Plan notes that future development in wetlands is not viable, so taking this property off the market ensures that the wetland on the site will remain undisturbed. The project also protects the Red Cedar River by ensuring that no new development will take place within the floodway on this site. Under Township ownership, the area would be preserved in perpetuity providing an opportunity to address stormwater management in the downtown area.

Planning Commission Options

The Planning Commission may approve or deny the commission review. A resolution to approve is attached.

Attachments

1. Resolution to approve.
2. Site survey, prepared by KEBS

RESOLUTION TO APPROVE

**Commission Review #26033
Meridian Township
Approx. 2.44 acres, Liverance Street & Hamilton Road**

RESOLUTION

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 21st day of September, 2026 at 6:30 p.m., Local Time.

PRESENT:

ABSENT:

The following resolution was offered by Commissioner _____ and supported by Commissioner _____.

WHEREAS, Section 61 (MCL 125.3861) of the Michigan Planning Enabling Act states, "A street; square, park, playground, public way, ground, or other open space; or public building or other structure shall not be constructed or authorized for construction in an area covered by a municipal master plan unless the location, character, and extent of the street, public way, open space, structure, or utility have been submitted to the planning commission by the legislative body."; and

WHEREAS, the Land Preservation Advisory Board recommended the purchase of an approximately 2.44 acre vacant site made up of three parcels (Tax I.D. # 21-407-003, 21-407-004, and 21-407-005) on the west side of Liverance Street at the intersection of Hamilton Street in Okemos; and

WHEREAS, the Township Land Preservation Advisory Board referred the case to the Planning Commission at its April 14, 2026 meeting to review the location, character, and extent of the property; and

WHEREAS, the Planning Commission discussed the proposed property acquisition at its September 21, 2026 meeting and reviewed the staff material provided under a cover memorandum dated September 21, 2026; and

WHEREAS, the site is valuable for its environmental properties including wooded areas and wetlands, and proximity to the Red Cedar River; and

WHEREAS, purchase of the property is consistent with the Goals of the 2023 Master Plan to preserve open space and natural areas, maintain and expand a diverse park system, and maintain essential public services.

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN approves the location, character, and extent of an approximately 2.44 acre vacant parcel on the west side of Liverance Street at the intersection of Hamilton Road in Okemos.

ADOPTED: YEAS:

NAYS:

**Resolution to Approve
CR #26033 (Meridian Township)
Page 2**

STATE OF MICHIGAN)
COUNTY OF INGHAM) ss

I, the undersigned, the duly qualified and acting Chair of the Planning Commission of the Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and a complete copy of a resolution adopted at a regular meeting of the Planning Commission on the 21st day of September 2026.

Jeff Romback
Planning Commission Chairperson

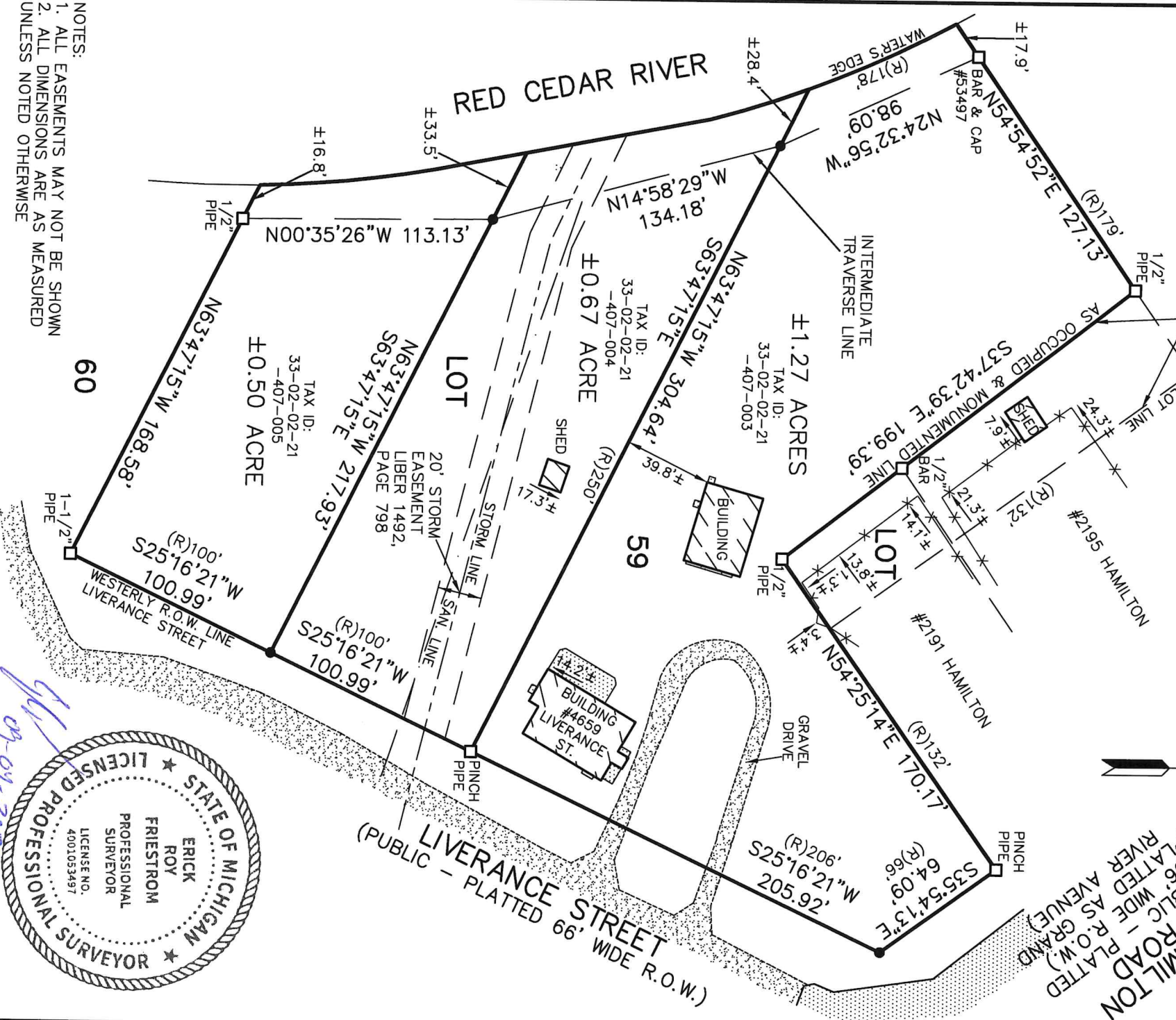
CERTIFIED BOUNDARY SURVEY

FOR: MERIDIAN TOWNSHIP

SEE SURVEYOR'S
REPORT ON SHEET 2



HAMILTON ROAD
(PUBLIC R.O.W.)
(PLATTED AS GRAND
AVENUE)



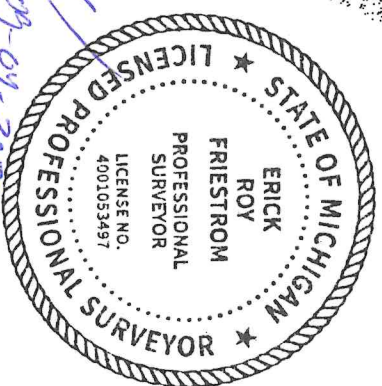
NOTES:
1. ALL EASEMENTS MAY NOT BE SHOWN
2. ALL DIMENSIONS ARE AS MEASURED
UNLESS NOTED OTHERWISE

LEGEND

- = Set 1/2" Bar with Cap
- = Found Iron as Noted
- = Survey Boundary Line
- = Distance Not to Scale
- = Fence
- = Denotes Distance to the Survey Line
- = Asphalt, Concrete, Deck



SCALE 1" = 60'



KEBS, INC. KYES ENGINEERING
BRYAN LAND SURVEYS

2116 HASLETT ROAD, HASLETT, MI 48840
PH. 517-339-1014 FAX. 517-339-8047
13432 PRESTON DRIVE, MARSHALL, MI 49068
PH. 269-781-9800 FAX. 269-781-9805

DRAWN BY	AN	SECTION	21, T4N, R1W
FIELD WORK BY	HS	JOB NUMBER:	106015.BND
SHEET	1 OF 2		

All Dimensions are in Feet and
Decimals Thereof.



To: Planning Commission

**From: Brian Shorkey, AICP
Principal Planner**

Date: May 11, 2026

Re: Commission Review #26034 (Meridian Township), Section 61 review of the location, character, and extent for a subject property consisting of two parcels, totaling 13.59-acres, recognized as Parcel I.D. #16-377-004 and, #16-377-005 for acquisition for flood control

Back in 2023, the Township applied for this Flood Mitigation Assistance Swift Current Grant to acquire 5040 Algonquin Way, Okemos, MI 48864 (parcel #s 33-02-02-16-377-005 and 33-02-02-16-377-004) as these parcels are in the floodway and floodplain of the Red Cedar River. These parcels comprise 13.592 acres located along the south water's edge of the Red Cedar River:

Parcel # 33-02-02-16-377-005: 0.682 acre

Parcel # 33-02-02-16-377-004: 12.91 acre

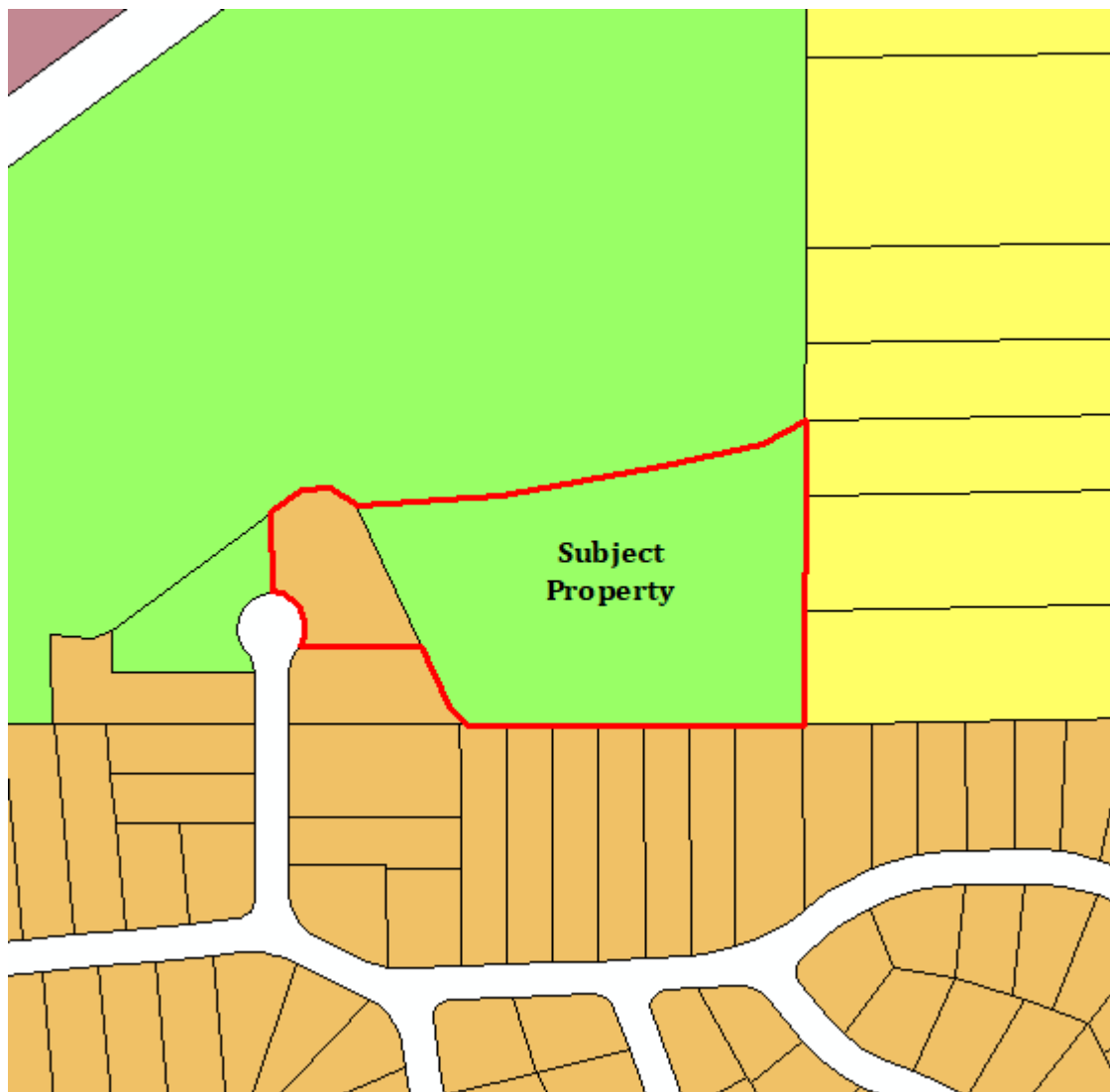
This land acquisition is consistent with best practices and the Township's history of acquiring land within the floodway and floodplain.

Section 61 of the Michigan Planning Enabling Act (the "MPEA," Public Act 33 of 2008) requires Planning Commission review and approval of the location, character, and extent for the construction/purchase of new public streets, parks, open space, buildings, and other public facilities. This process is called a Section 61 Review. The MPEA does not require a public hearing for a Section 61 review.

Master Plan

The Future Land Use Map from the 2023 Master Plan designates the west parcel of the subject site in the Mixed Intensity Residential category. The eastern parcel is designated as Park.

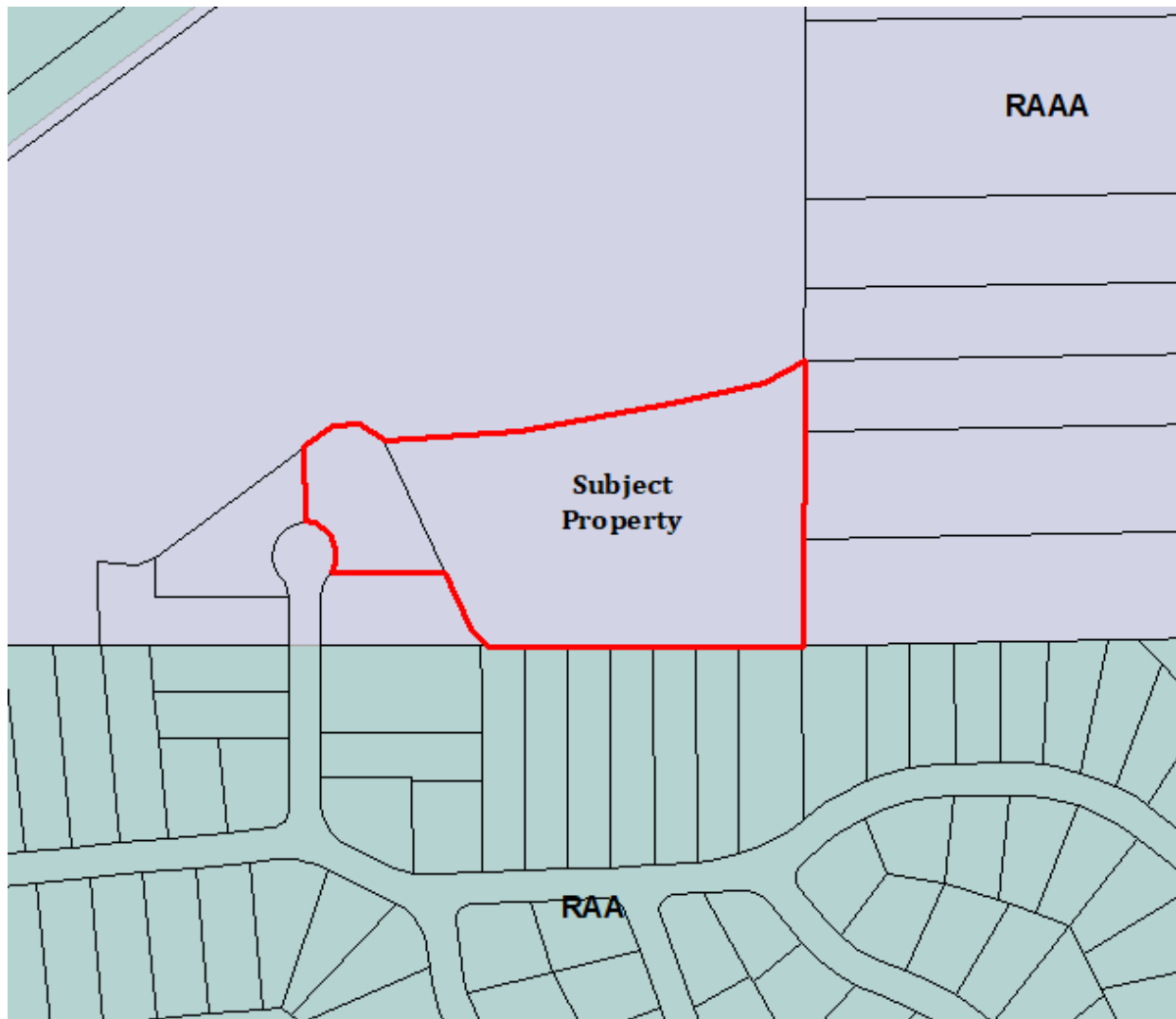
FUTURE LAND USE MAP



Zoning

The site is zoned RAAA (One-Family Low-Density Residential Districts).

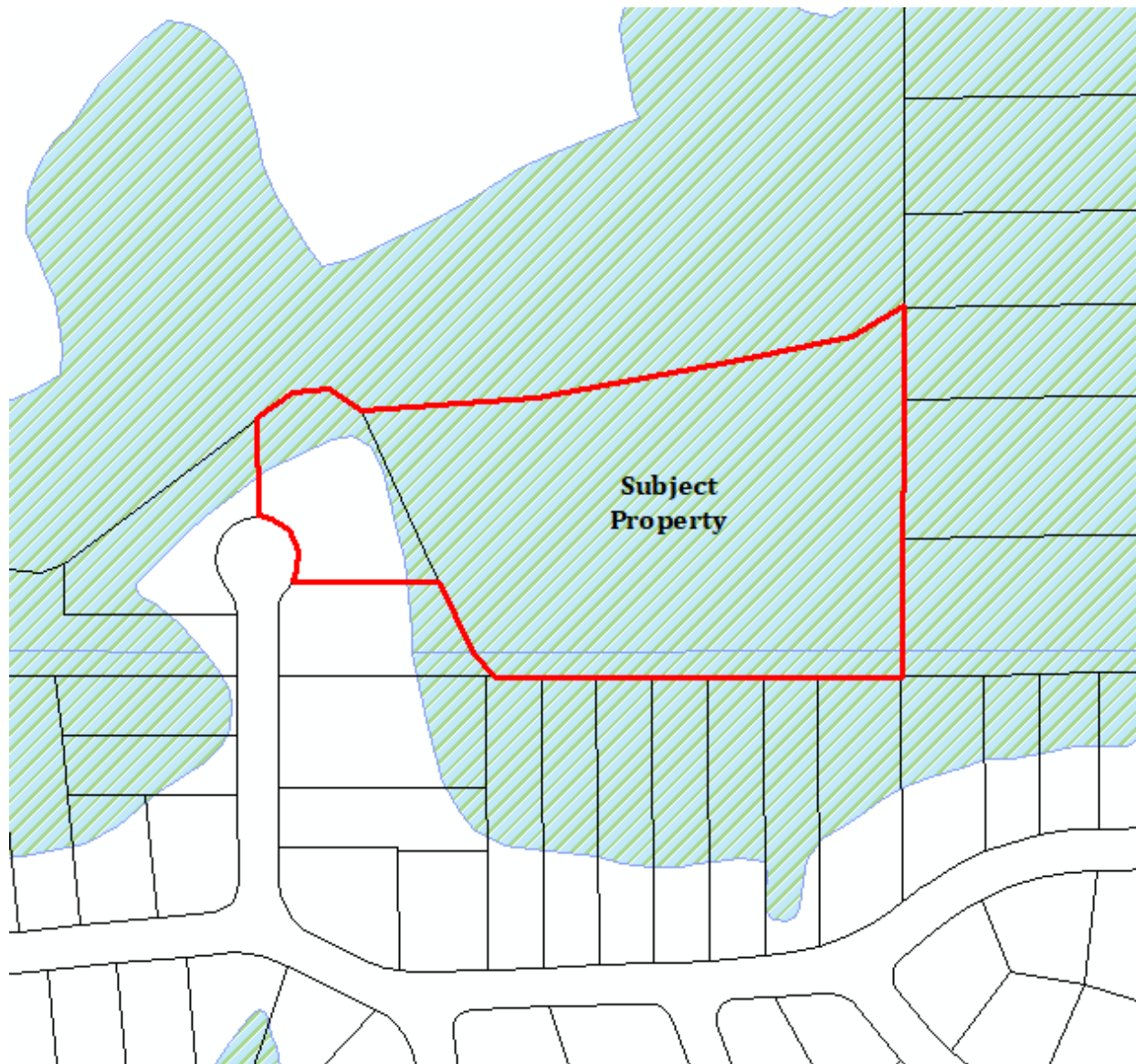
ZONING MAP



Physical Features

The site is vacant and according to the Meridian Township wetlands map as well as the appraisal, there are wetlands on site. The Flood Insurance Rate Map (FIRM) for Meridian Township indicates that the site is almost entirely within the Red Cedar floodway. The site is adjacent to the Central Meridian Uplands Preserve, an existing Township preserve.

WETLAND MAP



Staff Analysis

Section 61 of the MPEA requires Planning Commission review and approval of the location, character, and extent for the construction/purchase of new public streets, parks, open space, buildings, and other public facilities. **Location** refers to the site's placement in the Township and its surroundings; the property proposed for acquisition is located at the end of Algonquin Drive and adjacent to the south of the Central Meridian Uplands Preserve. **Character** includes the site's

distinguishing features. **Extent** includes the dimensions of the site which is approximately 13.59 acres in size with access on Algonquin Way.

The project is consistent with the 2023 Master Plan. The Master Plan notes that future development in wetlands is not viable, so taking this property off the market ensures that the wetland on the site will remain undisturbed. The project also protects the Red Cedar River by ensuring that no new development will take place within the floodway on this site. Under Township ownership, the area would be preserved in perpetuity providing an attraction for planned growth in the future.

Staff would also point out that this property is eligible to be acquired through grant funding because it has flooded multiple times. The house will be a constant flooding concern as long as it remains. And the neighboring property is generally wet and submerged with most rain. The Township will begin demolition of the home and all improvements, shortly after acquisition.

Planning Commission Options

The Planning Commission may approve or deny the commission review. A resolution to approve is attached.

Attachments

1. Resolution to approve.

RESOLUTION TO APPROVE

**Commission Review #26034
Meridian Township
Approx. 13.59 acres, 5040 Algonquin Drive**

RESOLUTION

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 21st day of September, 2026 at 6:30 p.m., Local Time.

PRESENT:

ABSENT:

The following resolution was offered by Commissioner _____ and supported by Commissioner _____.

WHEREAS, Section 61 (MCL 125.3861) of the Michigan Planning Enabling Act states, "A street; square, park, playground, public way, ground, or other open space; or public building or other structure shall not be constructed or authorized for construction in an area covered by a municipal master plan unless the location, character, and extent of the street, public way, open space, structure, or utility have been submitted to the planning commission by the legislative body."; and

WHEREAS, the Township received notification in 2024 from the Emergency Management and Homeland Security Division of the Michigan State Police that we may be eligible for grant funding for acquisition of flood prone parcels; and

WHEREAS, upon research, the property at 5040 Algonquin Way met the criteria under the Federal Emergency Management Agency's funding guidelines for acquisition and conversion to open space, to assist with flooding in the Township; and

WHEREAS, the Planning Commission discussed the proposed property acquisition at its September 21, 2026 meeting and reviewed the staff material provided under a cover memorandum dated September 21, 2026; and

WHEREAS, the site is valuable for its environmental properties including wooded areas and wetlands, and proximity to the Red Cedar River; and

WHEREAS, purchase of the property is consistent with the Goals of the 2023 Master Plan to preserve open space and natural areas, maintain and expand a diverse park system, and maintain essential public services.

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN approves the location, character, and extent of an approximately 13.59-acre property at 5040 Algonquin Way.

ADOPTED: YEAS:

NAYS:

**Resolution to Approve
CR #26034 (Meridian Township)
Page 2**

[illegible]

I, the undersigned, the duly qualified and acting Chair of the Planning Commission of the Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and a complete copy of a resolution adopted at a regular meeting of the Planning Commission on the 21st day of September 2026.

Jeff Romback
Planning Commission Chairperson



To: Planning Commission

From: Brian Shorkey, Principal Planner

Date: September 21, 2026

Re: Commission Review #26020 (Wendy's), to install updated drive through-signs.

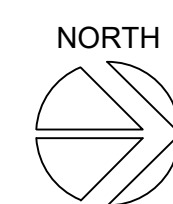
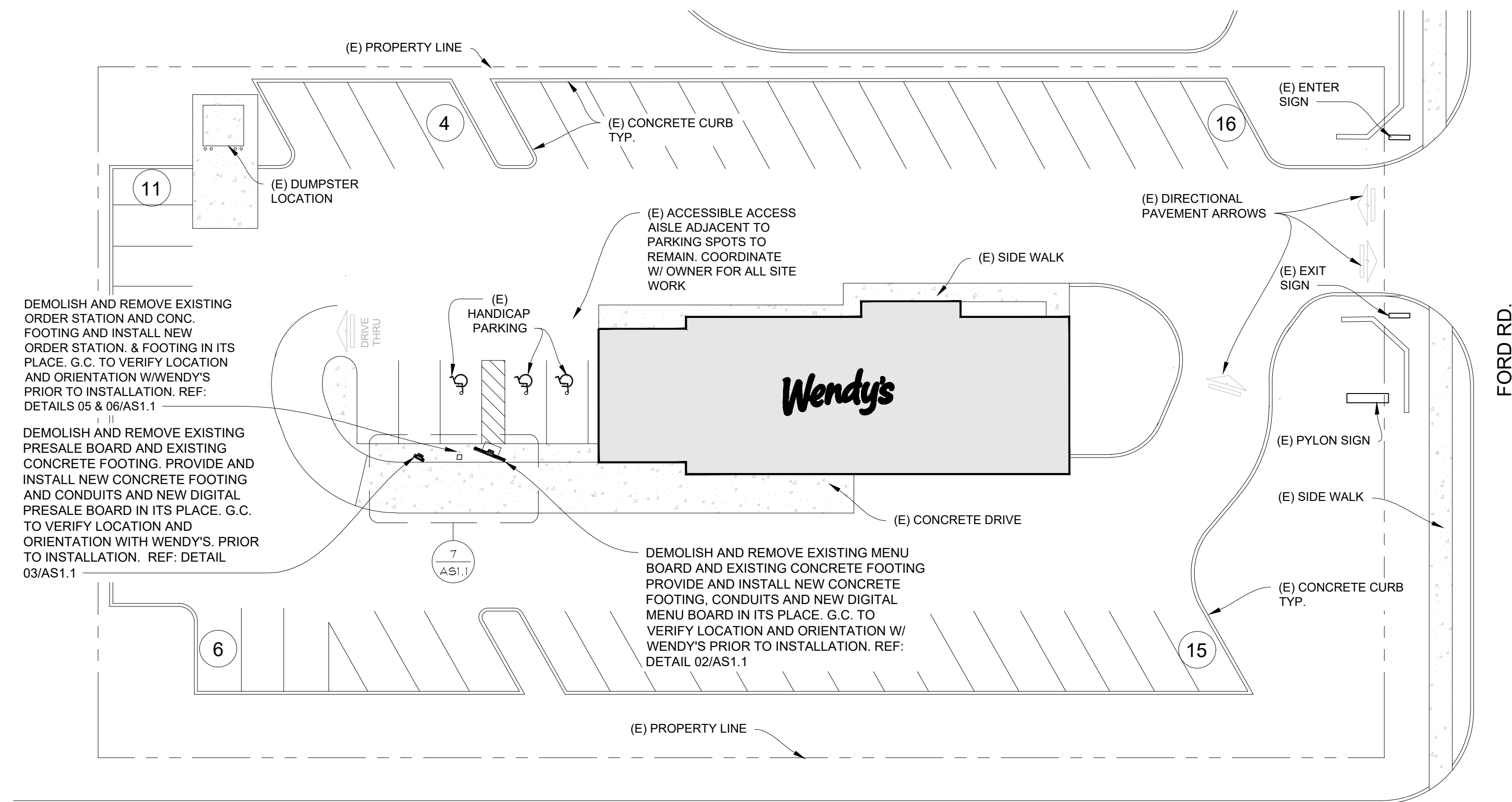
Wendy's (Applicant) has submitted a request for updating their drive-through signs at 4850 Marsh Road, Okemos, MI 48864 (Subject Property). The Subject Property is approximately 1.7 acres in size and is zoned C-2 – Commercial. The drive-through is on the northeast side of the building.

According to the updated Sign Ordinance for the commercial zoning districts (Sec. 86-687), drive-through signs require Planning Commission review and approval. Staff has reviewed the attached site plan materials and find the proposed drive-through signs to be compliant with the requirements of the Sign Ordinance.

Attachments

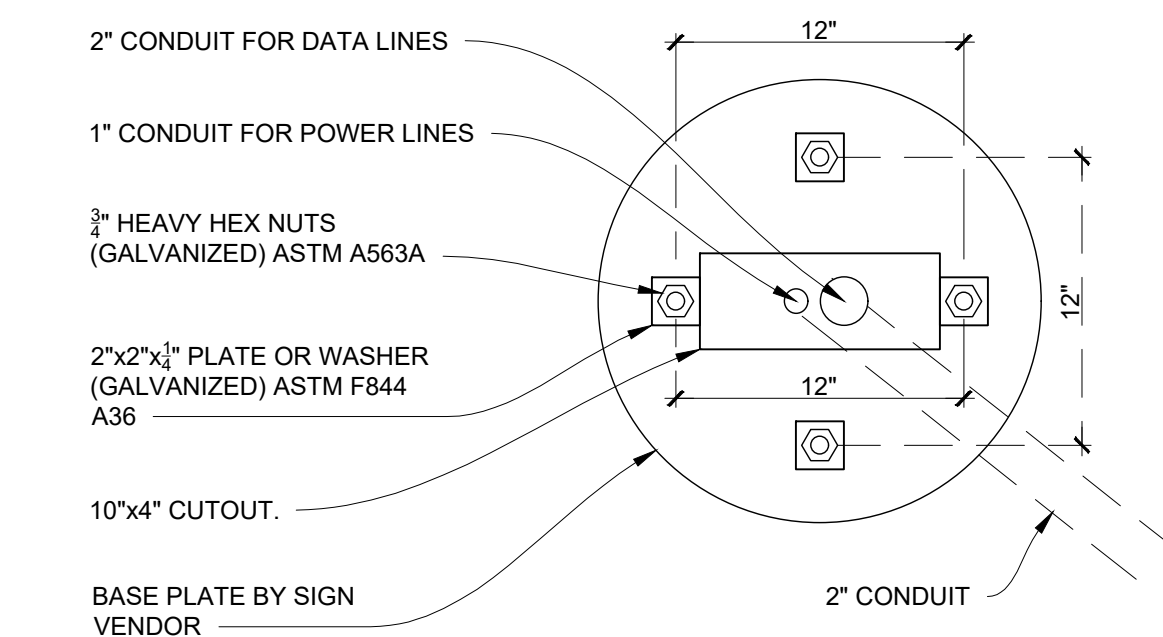
1. Wendy's Drive-Through sign site plan, prepared by Shremshock, dated March 20, 2026 and received by the Township on August 27, 2026.
2. Sign Ordinance regulations for Commercial districts.

c. SEISMIC DESIGN CRITERIA (FOR NON-STRUCTURAL COMPONENTS)	
1. SEISMIC COMPONENT IMPORTANCE FACTOR, I_p	1.0
2. RISK CATEGORY	II
3. MAPPED SPECTRAL RESPONSE ACCELERATIONS:	
a. SHORT PERIODS, S_s	0.105
b. 1 SECOND PERIOD, S_1	0.048
4. SITE CLASS	D (DEFAULT)
5. DESIGN SPECTRAL RESPONSE ACCELERATIONS:	
a. SHORT PERIODS, S_{ds}	0.112
b. 1 SECOND PERIOD, S_{d1}	0.077
6. SEISMIC DESIGN CATEGORY	B

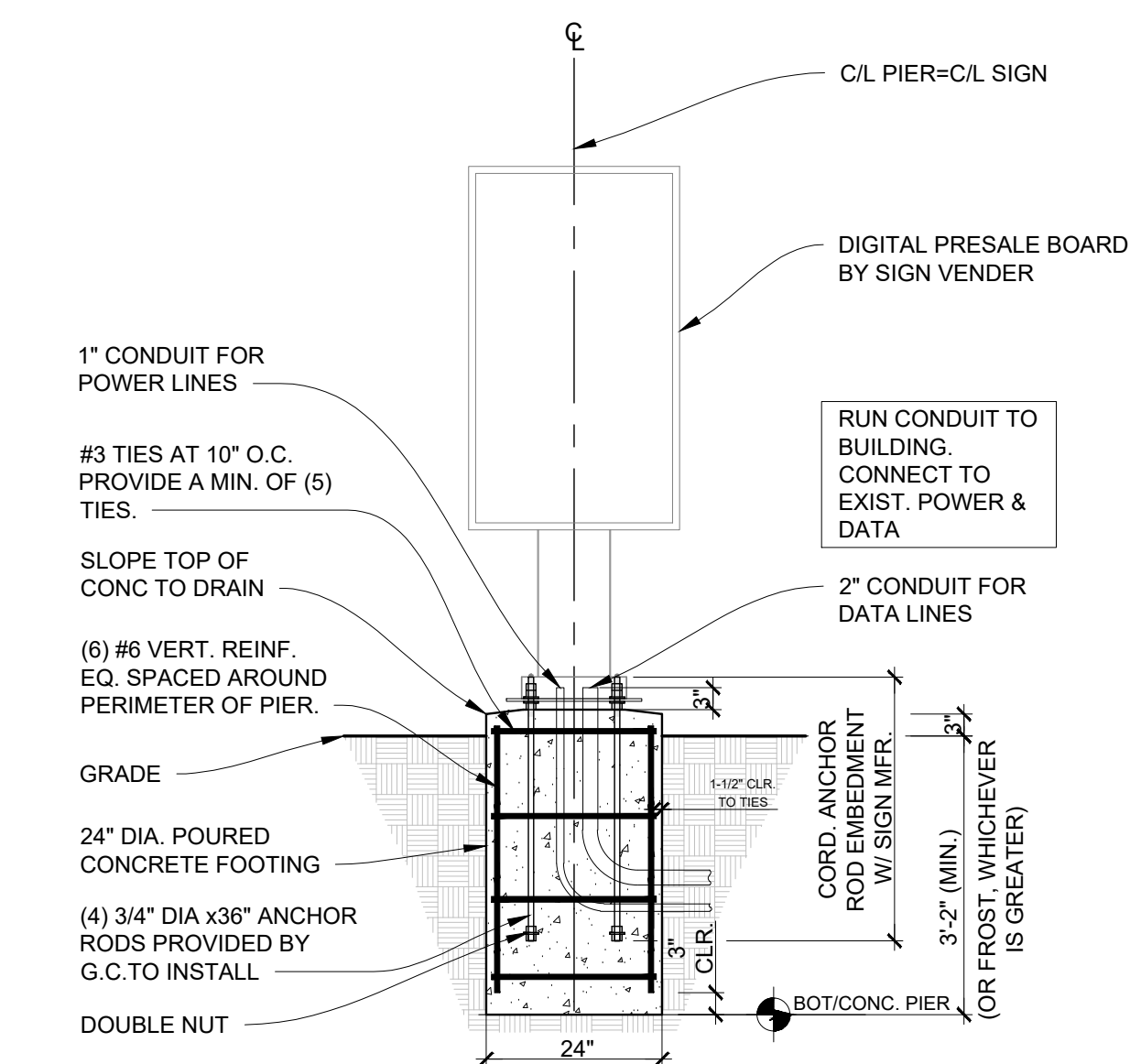


SCALE: 1" = 20'-0"

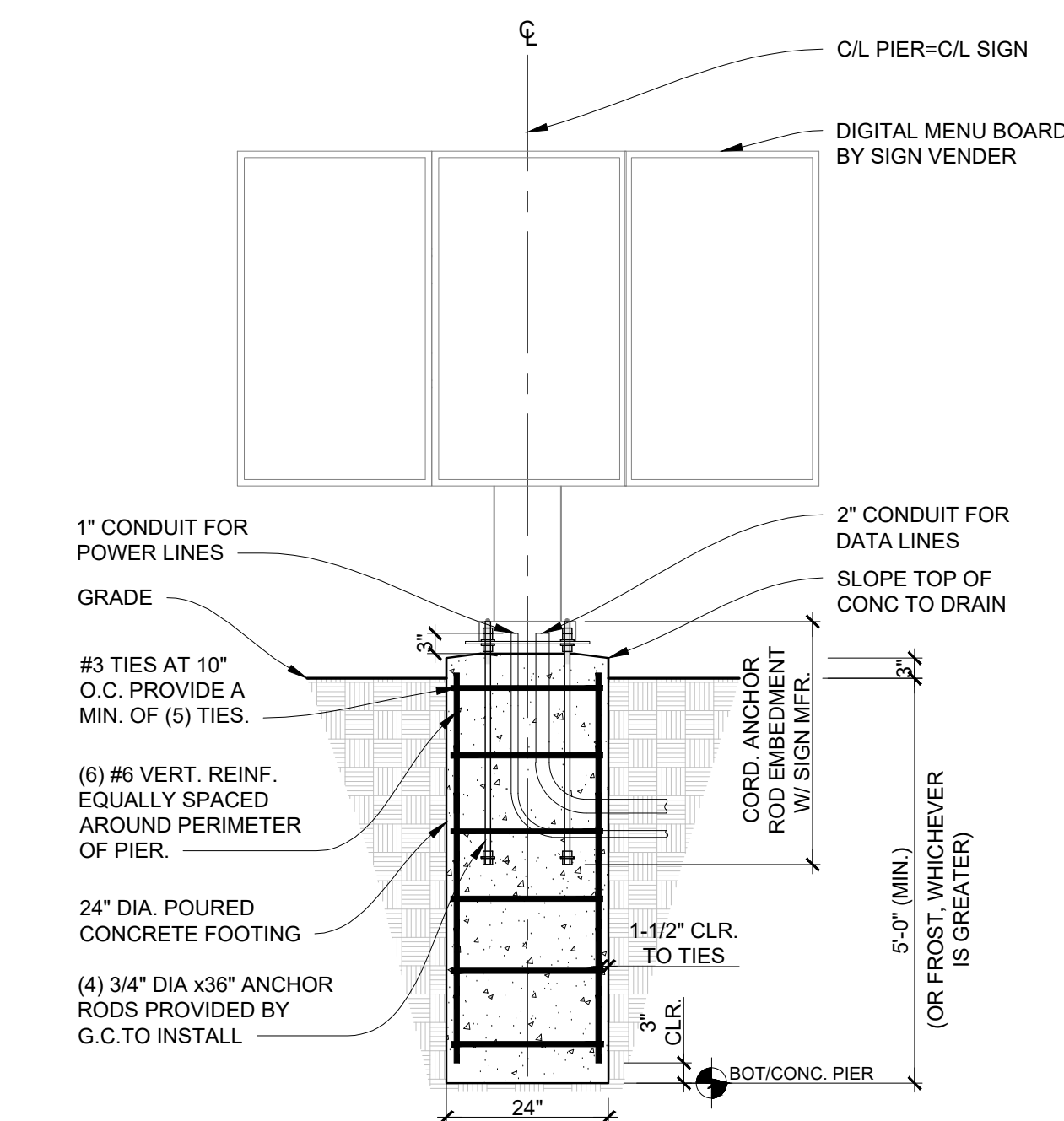
5' 10' 20' 40'

A horizontal scale bar with alternating black and white segments. The segments are labeled with their lengths: 5', 10', 20', and 40'. The total length of the bar represents 40 feet.

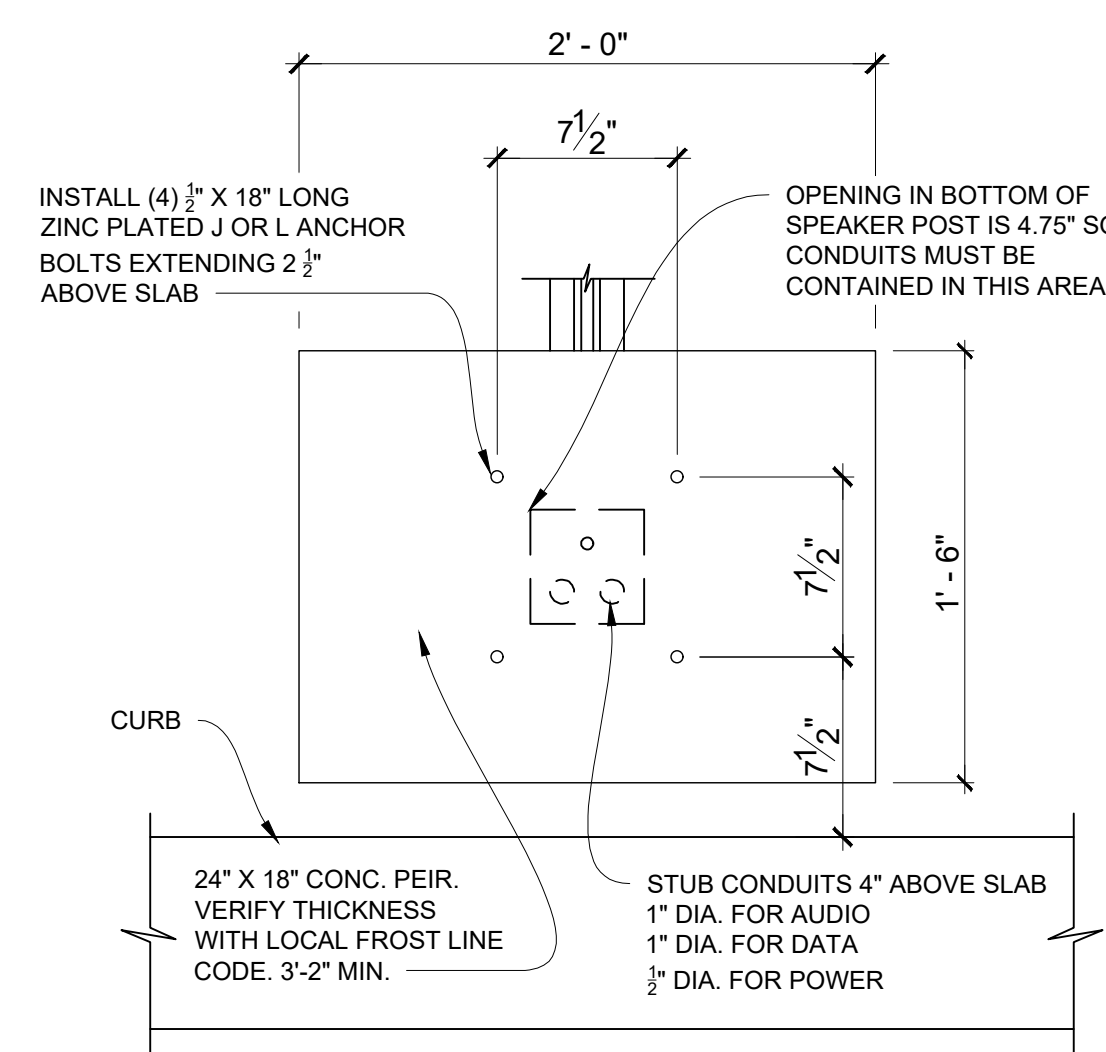
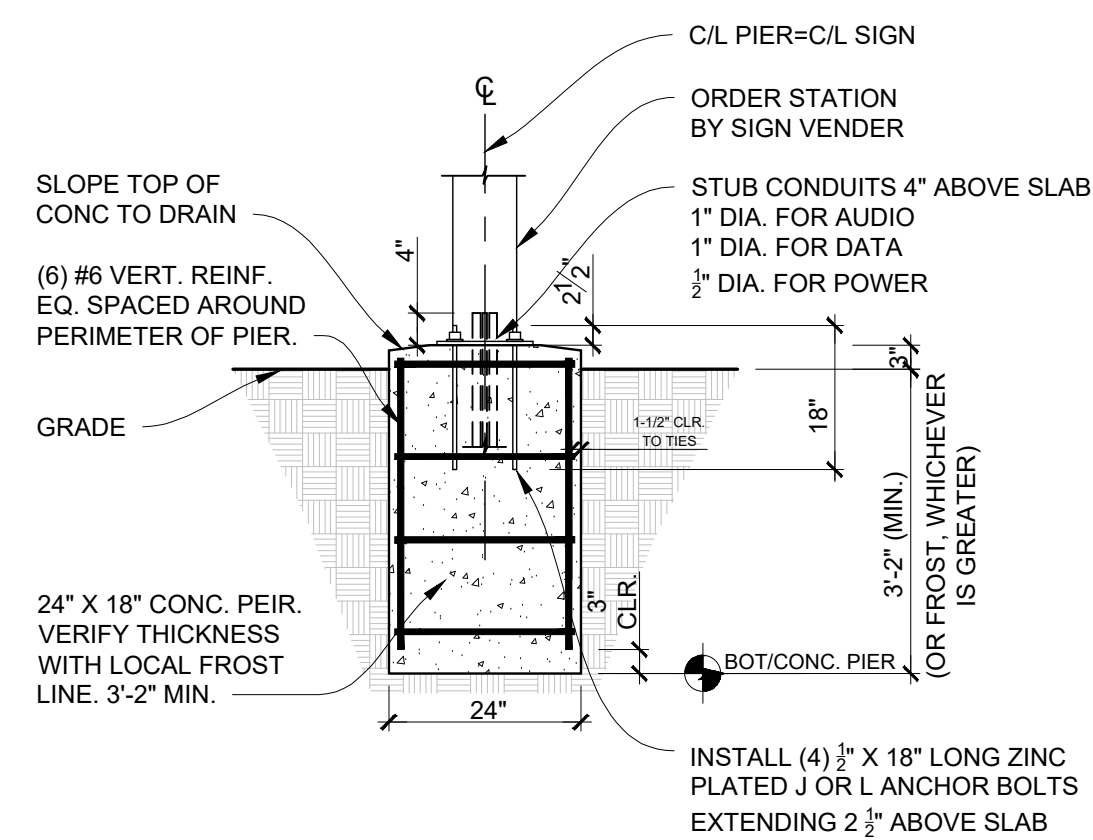
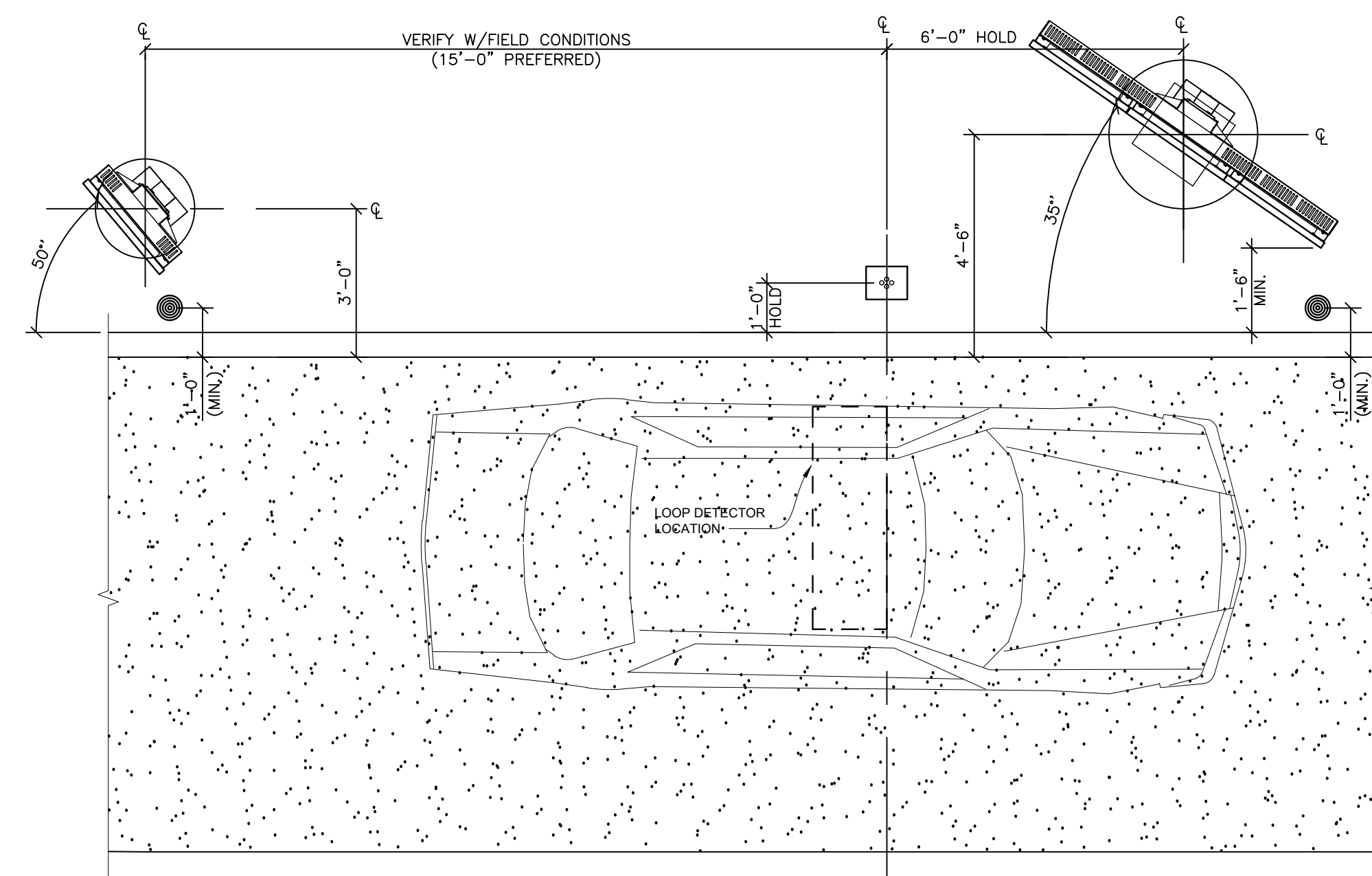
04 SCALE: 1 1/2" = 1'-0"



03 SCALE: 1/2" = 1'-0"



02 SCALE: 1/2" = 1'-0"



SITE NUMBER:	541
BUILDING TYPE:	WEN
ASSET TYPE:	FREESTANDING
CLASSIFICATION:	
OWNER:	N/A
BASE VERSION:	
UPGRADE CLASSIFICATION:	
	MENU BOARD REPLACEMENT
PROJECT YEAR:	2026
DESIGN TYPE:	
DRAWING RELEASE:	

PROJECT TYPE: REFRESH LITE
TIM/WEN

Wendy's.
41465 FORD RD.
CANTON, MI 48187

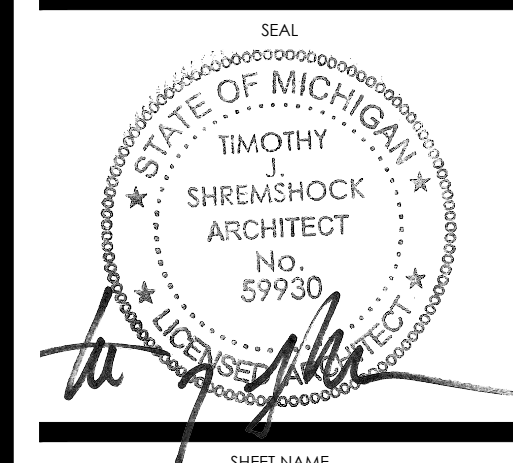
[illegible]

ISSUE DATE: 03/20/2026

PROJECT NUMBER: 260118

DRAWN BY: KME

CHECKED BY: M



ARCHITECTURAL SITE PLAN

SHEET NUMBER

AS1.1

*Charter Township of Meridian
Tuesday, March 24, 2026*

Chapter 86. Zoning

ARTICLE VII. Signs and Advertising Structures

§ 86-687. C-1, C-2, C-3, and CR Commercial Districts.

[Code 1974, § 84-5; amended by Ord. No. 2010-08, 7-18-2010; Ord. No. 2010-15, 12-26-2010; Ord. No. 2011-16, 12-6-2011; Ord. No. 2011-17, 12-13-2011; Ord. No. 2012-01, 4-1-2012; 4-28-2023 by Ord. No. 2022-16^[1]]

Signs proposed for the C-1, C-2, and C-3 Commercial and CR, Commercial Recreation, zoning districts shall be permitted in accordance with the following regulations.

- (1) Wall signs. A permanent sign may be permitted on a building, subject to the following regulations:
 - a. One wall sign shall be permitted on each building facade with frontage on a public street.
 - b. In no case shall any tenant have more than one wall sign on a facade.
 - c. No wall sign shall be located on a rear facade.
 - d. Wall signs shall be allowed up to a size equivalent to one square foot for each one lineal foot of building frontage occupied.
 - e. In the case of multi-tenant structures, one wall sign shall be permitted for each tenant having an individual means of public access up to a size equivalent to one square foot for each one lineal foot of building frontage occupied. Tenants shall be permitted signs on each building facade with frontage on a public street.
 - f. Where several tenants use a common entrance in a multi-tenant structure, wall signs shall be permitted for those tenants having an individual means of public access up to a size equivalent to one square foot for each one square foot of building frontage occupied.
- (2) Freestanding signs. A permanent sign, subject to the following regulations:
 - a. One freestanding sign per parcel shall be permitted, except a site with 500 feet or more of contiguous frontage on one street and more than one point of access on that street may have one additional freestanding sign. If two freestanding signs are located on a site based on this provision, a minimum of 250 feet shall separate the two signs.
 - b. Shall not exceed 16 feet in height.
 - c. Shall not exceed 38 square feet in surface display area per side.
 - d. Located in the front yard with the leading edge at least 10 feet back from any property line.
 - e. Only one freestanding sign shall be permitted for multi-tenant buildings or shopping centers except as provided in Subsection (2)a of this section.
- (3) Service station signs. Recognizing the changing nature of pricing and products for service stations, the following additional regulations apply to signs at any service station.

- a. No signs may be placed on-site other than the permitted maximum wall and freestanding signs, per the provisions of this article.
 - b. In addition to the freestanding signage allowed under the provisions of this article, an additional six square feet of surface display area, per side, may be permitted indicating the price and grade of gasoline for sale, either as an additional wall sign or attached to the freestanding sign.
- (4) Projecting signs. Buildings may elect to utilize projecting signs in addition to wall signs. In addition to all wall sign regulations, the following additional regulations shall apply to projecting signs:
- a. Projecting signs shall be no larger than 20 square feet in surface display area per side.
 - b. Any projecting sign shall count against the maximum wall sign size permitted for a building facade.
 - c. Projecting signs must clear sidewalks by at least eight feet and project no more than four feet from the building.
 - d. Projecting signs may extend to the bottom of the eaves of a building.
 - e. Projecting signs may be installed vertically or horizontally.
 - f. No projecting sign may be displayed unless the building to which it is attached is 20 feet or more in width, and no projecting sign may be closer than 50 feet to any other projecting sign.
- (5) Drive-through accessory signs. Recognizing the need to provide accessory signage for drive-through uses, in addition to the freestanding and directional signs allowed under the provisions of this article, drive-through accessory signs are permitted at any drive-through business, subject to the following:
- a. All signage for drive-through businesses shall be approved by the Planning Commission.
 - b. Each drive-through accessory sign shall not exceed seven feet in height.
 - c. Two signs may be permitted for each drive-through lane, as follows:
 - 1. One sign in the stacking lane shall not exceed 16 square feet.
 - 2. One sign at the speaker shall not exceed 32 square feet in area.
 - d. The area of the drive-in and drive-through accessory sign is exclusive of the structures framing.
 - e. All drive-in and drive-through accessory signs shall be single sided.
 - f. No drive-in and drive-through accessory sign may be located within the front yard.
 - g. The drive-in and drive-through accessory sign may include electronic message signage.
 - h. The Planning Commission may consider a modified sign area, subject to the following:
 - 1. Only one of the drive-in and drive-through accessory signs may be increased in area.
 - 2. The drive-in and drive-through accessory sign is completely screened from the roadway.
 - 3. Under no circumstances shall the drive-in and drive-through accessory sign exceed 48 square feet in area.

[1] *Editor's Note: This ordinance also amended the title of this § 86-687 from "NS, CS, CR, C-1, C-2 and C-3 Commercial Districts" to its current title.*