

CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION
AGENDA

REGULAR MEETING

APRIL 11, 2016

Meridian Municipal Building
5151 Marsh Road, Okemos, MI 48864

Work Session Meeting – Administrative Conference Room

1. Call meeting to order at approximately 6:00 p.m.
2. Approval of agenda
3. Discussion
 - A. Pedestrian-Bicycle Pathway Master Plan
4. Public Remarks
5. Adjournment

Regular Meeting – Town Hall Room

1. Call meeting to order at approximately 7:00 p.m.
2. Approval of agenda
3. Approval of minutes
 - A. March 28, 2016
4. Public remarks
5. Communications
6. Public Hearings
 - A. Special Use Permit #16051 (New Hope Church), request to construct a 42,000 square foot church on 13.5 acres addressed as 2170 Saginaw Highway (M-78), the northeast corner of Saginaw Highway and Newton Road
 - B. Special Use Permit #16041 (Meridian Township), request to work in the 100-year floodplain of the Smith Drain associated with improvements to the drain
7. Unfinished Business

Planning Commission Agenda

April 11, 2016

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8. Other Business
 - A. Pedestrian-Bicycle Pathway Master Plan review
9. Township Board, Planning Commission officer, committee chair, and staff comment or reports
 - A. New Applications
 - B. Update of Ongoing Projects
 - i. Site Plans Received
 - Site Plan Review #16-05 (Chick-Fil-A), request to construct a Chick-Fil-A restaurant north of Meijer
 - ii. Site Plans Approved
 - Site Plan Review #16-03 (Meridian Township Parks), request to develop Towner Road Park at 2055 Towner Road
 - Site Plan Review #16-04 (Kellie Murphy), request to occupy an existing building at 5000 Marsh Road with a new business (Kellie's Consignment)
10. Public Remarks
11. Adjournment

Post Script: Brett DeGross

The Planning Commission's Bylaws state agenda items shall not be introduced for discussion or public hearing that is opened after 10:00 p.m. The chair may approve exceptions when this rule would cause substantial backlog in Commission business (Rule 5.14 Limit on Introduction of Agenda Items).

Persons wishing to appeal a decision of the Planning Commission to the Township Board in the granting of a Special Use Permit must do so within ten (10) days of the decision of the Planning Commission (Sub-section 86-189 of the Zoning Ordinance)

**TENTATIVE
PLANNING COMMISSION AGENDA**

**Work Session Meeting
and**

**Regular Meeting
April 25, 2016**

**Meridian Municipal Building
5151 Marsh Road, Okemos, MI 48864**

Work Session Meeting – Administrative Conference Room

1. 2005 Master Plan Update

Regular Meeting – Town Hall Room

1. Public Hearings

2. Unfinished Business
 - A. Special Use Permit #16051 (New Hope Church), request to construct a 42,000 square foot church on 13.5 acres addressed as 2170 Saginaw Highway (M-78), the northeast corner of Saginaw Highway and Newton Road

 - B. Special Use Permit #16041 (Meridian Township), request to work in the 100-year floodplain of the Smith Drain associated with improvements to the drain

**CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION
REGULAR MEETING MINUTES
March 28, 2016**

DRAFT

**5151 Marsh Road, Okemos, MI 48864-1198
853-4000, Town Hall Room, 7:00 P.M.**

PRESENT: Commissioners DeGroff, Honicky, Ianni, Jackson, Opsommer, Scott-Craig, Tenaglia, Van Coevering
ABSENT: Commissioner Cordill
STAFF: Principal Planner Oranchak

1. Call meeting to order

Chair Scott-Craig called the regular meeting to order at 7:02 P.M.

2. Approval of agenda

Commissioner Honicky moved to approve the agenda. Seconded by Commissioner Ianni.

VOICE VOTE: Motion carried 8-0.

3. Approval of Minutes

Commissioner Opsommer moved to approve the Regular Meeting Minutes of March 14, 2016. Seconded by Commissioner Jackson.

VOICE VOTE: Motion carried 8-0.

4. Public Remarks

Chair Scott-Craig opened the floor for public remarks.

Scott Fairmont availed himself for Planning Commission questions on Tentative Preliminary Plat #16012 (Mayberry Homes).

Chair Scott-Craig closed public remarks.

5. Communications

Communications received and distributed at the February 8, 2016 meeting and placed on file:

- A. Lorraine Hoffman, co-owner, Special A'Fare Catering, 4661 Okemos Road, Suite 3, Okemos; RE: MARC/Central Fire Station Concept Plan
- B. David & Jane Ledebuhr, 4767 Cornell Road, Okemos; RE: TPP #16012 (Mayberry Homes)

6. Public hearings (None)

7. Unfinished Business

- A. Tentative Preliminary Plat #16012 (Mayberry Homes), a request to develop a 25-lot subdivision, Silverstone Estates, located on 25.5 acres east of Powell Road.

Principal Planner Oranchak highlighted changes to the tentative preliminary plat (TPP) as outlined in staff memorandum dated March 24, 2016.

Commissioner Ianni moved [and read into the record] **NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby recommends approval of the tentative preliminary plat for a 25-lot single family subdivision, commonly known as Silverstone Estates, located east of Powell Road and north of Grand River Avenue, with the following conditions:**

1. Approval is recommended based on the revised Tentative Preliminary Plat dated March 28, 2016, prepared by Enger Surveying and Engineering, indicating 25 single family lots, subject to revisions as required.
2. Approval is also recommended for granting a waiver from Section 62-61(c) of the Code of Ordinances to permit Lot #1, Lot #24 and Lot #25 to face Powell Road, a collector street.
3. The applicant shall obtain all necessary permits and approvals from the Ingham County Drain Commissioner, Ingham County Road Department, Michigan Department of Environmental Quality (MDEQ), and the Township. Copies of all permits and approval letters shall be submitted to the Department of Community Planning and Development. Should a permit be required from the Michigan Department of Environmental Quality, no grading or construction work shall be conducted until the permit is final and unappealable at the MDEQ.
4. Final utility plans shall be subject to the approval of the Director of Public Works and Engineering and shall be completed in accordance with Township Engineering Design and Construction Standards.
5. Storm sewer leads shall be provided to each lot in the subdivision. The final location of the leads shall be subject to the approval of the Director of Public Works and Engineering. All residences constructed in the subdivision shall be connected to an approved outlet.
6. An overall grading plan for the subdivision shall be required with detailed construction plans, prior to issuance of any building permits.
7. Prior to any construction or grading on the site, the applicant shall install silt fencing at the upland edge of water feature setbacks. The silt fencing shall be removed after construction once the area is stabilized and vegetation has been established.
8. Powell Road shall be paved from the northern extent of the plat southward to Grand River Avenue in accordance with the requirements of the Ingham County Road Department.
9. A paved shoulder shall be constructed along Powell Road as shown on the Pedestrian-Bicycle Master Plan. The final location of the shoulder shall be subject to the approval of the Director of Public Works and Engineering and the Ingham County Road Department. The design and construction of the pathway shall be in accordance with Ingham County Road Department and Township Engineering Design and Construction Standards.

10. **A five foot wide concrete sidewalk shall be constructed along the both sides of Silverstone Way. The final location of the sidewalk shall be subject to the approval of the Director of Public Works and Engineering. The design and construction of the sidewalk shall be in accordance with Township Engineering Design and Construction Standards.**
11. **The natural vegetation strip associated with wetlands and open county drains shall be clearly identified with permanent markers. The size, number, and location of the markers, and the language on the markers, shall be subject to the approval of the Director of Community Planning and Development.**
12. **A tree survey identifying existing trees greater than 12” in diameter at breast height (dbh) by species shall be prepared prior to Township Board’s review of the tentative preliminary plat. The applicant shall apply for and receive a Land Clearing Permit for the removal of trees greater than 12” at breast height (dbh) on the site.**
13. **Street trees shall be required along the east side of Powell Road and along both sides of Silverstone Way within the subdivision. Species and location of the trees shall be subject to the approval of the Director of Community Planning and Development and the Ingham County Road Department.**
14. **Any wellhead(s) located on the site shall be properly closed and abandoned per the requirements of the Ingham County Health Department and the Township, prior to the issuance of any permit for construction activity, including grading permits.**
15. **A copy of the information that exists on computer for the plat and construction plans shall be provided to the Township Engineering staff in an Auto Cad compatible format.**

Seconded by Commissioner Honicky.

Scott Fairmont, 4429 Apache Drive, Okemos, representative for Mayberry Homes, clarified changes made to the plan previously received by Planning Commissioners.

Planning Commission and applicant’s representative discussion:

- Public road right-of-way is moved to the northeast corner of the subject property, resulting in less impervious surface
- Moving the public road right-of-way is a better location for the adjacent property addressed as 4767 Cornell Road
- Tree survey revealed a number of trees worth saving
- Tree survey showed a large oak in the middle of the previous Lot 5
- Plan was revised to move the lot line for Lot 4 into the middle of the large oak knowing that Lot 4 and Lot 5 have side yard setback requirements which will provide 20 feet around the oak tree
- Lot line for Lot 4 was moved 100 feet to the west of the center of the oak tree, which placed the lot line in an area of trees proposed to become a park, essentially losing buildability on Lot 4
- A 72” oak tree is shown in the middle of the road and the applicant is proposing a road layout revision to shift the road north and keep the right-of-way outside of the 72” oak tree drip line
- If the road can be shifted north, the 72” oak tree will be included in the protected zone along with the area of trees near Lot 4

- Moving the road to the north will require a slightly different configuration for Lots 1 through 3 and Lots 22 through 25
- Appreciation to the applicant for making the Planning Commission's suggested connections to the north and east
- Creation of a park in the subdivision is an attraction
- Proposed park north of Lots 16-21 is still part of the plan
- Revised plan shows an additional lot at Lots 14 and 15 while preserving a section of park labeled Private Park A
- Applicant's consideration of the need for a sidewalk on the northern boundary of Lot 13 in the future
- Previous comment by the property owner at 4767 Cornell Road regarding his desire for a split-rail wooden fence along the eastern property line
- Applicant's assertion most of the eastern property line is heavily wooded
- Township does not typically require fencing along property lines, but does utilize landscape buffers
- Applicant's desire to retain any mature trees along the eastern property line
- Applicant will provide proper landscape buffering along Lot 13 where the woods end
- Paved shoulder width as planned is adequate for the speed of traffic on Powell Road
- Appreciation for the willingness of the applicant's representative to make adaptations to preserve mature trees on site
- Planning Commissioner inquiry as to the steps involved in the platting process
- Next step is the final preliminary plat (FPP) which would go to the Township Board for approval
- The Ingham County Road Department (ICRD), Ingham County Drain Commissioner (ICDC) and the Michigan Department of Environmental Quality (MDEQ) will submit their reviews of the plat between the TPP and FPP steps in the process
- Staff recommendation to amend the first sentence in condition #12 relative to removal of the language regarding the tree survey and insertion of language concerning the preservation of the mature and health trees

Commissioner Jackson offered the following amendment:

- **Amend condition #12 by deleting the language in the first sentence and inserting "Consider adjustment to lot lines and roadways to preserve healthy mature trees identified in the tree survey from Powell Road eastward to Lots 4 and 5."**

Seconded by Commissioner Tenaglia.

ROLL CALL VOTE: YEAS: Commissioners DeGroff, Honicky, Ianni, Jackson, Opsommer,
Tenaglia, Van Coevering, Chair Scott-Craig

NAYS: None

Motion carried 8-0.

ROLL CALL VOTE YEAS: Commissioners DeGroff, Honicky, Ianni, Jackson, Opsommer,
ON THE MAIN Tenaglia, Van Coevering, Chair Scott-Craig

MOTION: NAYS: None

Motion carried 8-0.

8. Other Business

A. Pedestrian-Bicycle Pathway Master Plan Review

Planning Commission discussion:

- Township Board is responsible for adopting the Pedestrian-Bicycle Pathway Master Plan
- Engineering Department is responsible for construction of the pathway
- Pedestrian-Bicycle Pathway Master Plan is incorporated into the Township Master Plan
- Trees continue to fall onto the pathway created by vehicles during drain repair from Hidden Lake Drive into the woods along the Raby Drain
- Responsible party to maintain the pathway
- Paved interurban pathway is part of the Consumers Energy transmission line right-of-way and is maintained by Consumers
- Purpose of tonight's discussion is to pass comments onto the Township Board relative to suggestions for improvements, inclusions, or questions regarding pathways
- Cost of pathway maintenance is covered by millage funds
- Inquiry if a wooden footpath will be constructed to address the "deep water" area near the Rysberg Point donation, parallel to the Raby Drain
- Proposed future extensions have been defined and adopted
- Planning Commission can comment on future proposed pathways
- Request for a better definition of each pathway type and its allowable uses
- All pathways are paved and the typical pathway is concrete, 7 feet wide and runs along streets
- Cross country pathways are generally constructed of asphalt and run through open land, connecting terminus places
- Cross country pathway from Okemos Road to Hulett Road just south of Knob Hill Apartments, which extends to the pedestrian/bicycle concrete pathway on Hulett and Okemos Road
- Asphalt based paved shoulders are an extension of the roadway and are generally striped and marked for bicycle/pedestrian use
- Proposed cross country pathways do not currently exist
- Inquiry if the Township already has the rights to the proposed cross country pathways
- Some easements will likely be required
- Concern with the gap in front of the Sumbal property on Jolly Road
- Mr. Sumbal has been working with the Engineering Department to grant an easement
- Gap on the lot next to the recently approved optometry clinic on Marsh Road
- Gap on the north and south side of Mt. Hope Road
- Connection from the Okemos Pointe project which leads to Robins Way
- Regional connections along the Township's borders
- Staff brings projects to the Township Board as part of the Capital Improvements Projects (CIP)
- Pedestrian-Bicycle Pathway millage is up for renewal later this year and includes construction and maintenance of pathways
- Addition of east/west pathways
- Top priority is the pathway leading from The Square on Grand River, along the railroad tracks around the bottom of Dawn Avenue and to Hagadorn Road
- Commissioner belief the top priority pathway is the subject of a proposal being prepared for the county park millage
- Several of the gaps proposed to be filled are costly and will require land acquisition
- Engineering Department is "fully engaged" in the planning of the top priority pathway to ascertain its cost in an effort to request the Park Commission assist with funds to construct the pathway

- Planning Commission belief the top priority pathway connects to a pathway through the campus of Michigan State University (MSU) on the other side of Hagadorn Road through to Lansing
- Top priority pathway speaks to regional connectivity
- Connections to MSU will lead down to Kalamazoo Street and to the River Trail in Lansing
- Planning Commissioner suggestion to identify costs for each connectivity and create an action plan to identify maintenance, preservation and forecast
- Coordination with ICRD for non-motorized funding through the Michigan Department of Transportation (MDOT)
- Planning Commissioner suggestion to have a five (5) year plan similar to the Transportation Improvement Plan (TIP)
- Assistant Township Manager and Engineering staff will collect input on the Pedestrian-Bicycle Pathway Master Plan through the month of April
- Desire of the Chair to place this item on the next agenda
- Request for available funds to be provided to Planning Commissioners
- Annual funds are applied to prioritization of the pathway system
- Each year there are projects to improve and projects to extend dependent upon available funds and the scope of the project
- Projects are completed when the funds are apportioned
- Planning Commission suggestions/comments can be compiled in a memo to the Director of Public Works and Engineering who will incorporate those comments into the information sent to the Board

B. 2016 Planning Commission 2016 Calendar Amendment

Principal Planner Oranchak highlighted proposed changes to hold several work sessions relative to the Master Plan update.

Commissioner Ianni moved [and read into the record] NOW THEREFORE BE IT RESOLVED THAT THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby revises the 2016 meeting schedule by adding work session meetings on Thursday, April 21, 2016; Monday, May 23, 2016, Monday June 27, 2016; Monday, July 25, 2016; Monday, August 22, 2016; and Monday, September 19, 2016. The additional meetings will begin at 6:00 p.m. in the Town Hall Room of the Meridian Municipal Building, 5151 Marsh Road, Okemos, MI 48864 (517-853-4560.

Seconded by Commissioner Tenaglia.

Planning Commission discussion:

- June 27, 2016 is a regularly scheduled Planning Commission meeting date
- Concern one (1) hour may not be sufficient time to thoroughly vet certain topics prior to the regularly scheduled Planning Commission meeting
- Preference for keeping the work sessions confined to one (1) hour to keep on task
- Definitive period of time McKenna & Associates has set aside for the work sessions
- Staff suggestion for an additional whereas clause which speaks to the possible delay of the regularly scheduled Planning Commission meetings
- Planning Commissioner concern there be sufficient time to hear all comments provided by the public
- Wisdom in advising the public the work sessions may go beyond the scheduled commencement time of the regularly scheduled Planning Commission meetings

- Planning Commissioner concern with the possibility of delaying the regular meetings until 8:00 P.M.
- Inquiry into the flexibility of the consultant's time in the event there is a pressing issue for the Planning Commission to deal with during the regularly scheduled meeting
- Intention by staff for strict adherence to the schedule approved tonight unless there are dire circumstances to change dates/times
- If the start time of the regular meeting is later than the time adopted last year in the 2016 Planning Commission schedule resolution, notice must be posted 18 hours in advance
- If the date of the work session is changed, notice must be posted 18 hours in advance

Commissioner Van Covering offered the following amendment:

- **Amend the fourth whereas clause by inserting “and regular meetings will begin no later than 8:00 P.M. with the exception of Thursday, April 21, 2016” after “(optionally)”**

Seconded by Commissioner DeGroff.

VOICE VOTE: Motion carried 7-1 (Tenaglia).

ROLL CALL VOTE YEAS: Commissioners DeGroff, Honicky, Ianni, Jackson, Opsommer,
ON THE MAIN Van Coevering, Chair Scott-Craig
MOTION: NAYS: Commissioner Tenaglia
Motion carried 7-1.

- 9. Township Board, Planning Commission officer, committee chair, and staff comment or reports**
Commissioner Ianni announced the Okemos Education Foundation (OEF) will host a Civil Rights Symposium entitled “The Legacy of Emmett Till: Understanding History from Four Perspectives” on Tuesday, April 19, 2016 beginning at 7:00 P.M. in the Okemos High School Auditorium. He stated admission is free to the public. Commissioner Ianni indicated more information is available at www.oefsite.org.

Chair Scott-Craig reported he will attend the April 5th Board meeting to respond to questions raised by Township Board members concerning his request for them to attend all meetings with the Master Plan consultant. He noted he was invited as the Chair of the Planning Commission to attend a focus group on branding for Meridian Township this Thursday. Chair Scott-Craig requested Planning Commissioners provide him with any thoughts on branding prior to the meeting.

Chair Scott-Craig noted the latest issue of *Planning and Zoning News* (PZN) announced the Michigan Association of Planning's Spring Institute will be hosting an all-day session on April 14th in Lansing regarding affordable housing and the “missing middle” type of housing.

Commissioner Honicky noted the same issue of PZN highlighted issues with corresponding house and senate bill numbers currently before the Legislature.

A. New Applications

- i. Special Use Permit #16051 (New Hope Church), request to construct a 42,000 square foot church on 13.5 acres addressed as 2170 Saginaw Highway (M-78), the northeast corner of Saginaw Highway and Newton Road

B. Update of Ongoing Projects

- i. Site Plans Received – NONE
- ii. Site Plans Approved - NONE

10. Public remarks

Chair Scott-Craig opened and closed public remarks.

11. Adjournment

Chair Scott-Craig adjourned the regular meeting at 8:32 P.M.

Respectfully Submitted,

Sandra K. Otto
Recording Secretary

**Special Use Permit #16051
(New Hope Church)
April 8, 2016**

APPLICANT: New Hope Church
1340 Haslett Road
Haslett, MI 48840

STATUS OF APPLICANT: Option to Purchase

REQUEST: Special use permit for size of building

CURRENT ZONING: C-2 (Commercial)

LOCATION: Southeast corner of Saginaw Highway and Newton Road
(6322 Newton Road)

AREA OF SUBJECT SITE: 13.51 acres

EXISTING LAND USE: Undeveloped

FUTURE LAND USE: Commercial and Residential 3.5 -5.0 DU/A

**EXISTING LAND USES
IN AREA:** North: Residential
South: Undeveloped
East: Commercial
West: Vacant (former cinema site)

CURRENT ZONING IN AREA: North: RR (Rural Residential)
South: C-2 (Commercial)
East: C-2 (Commercial)
West: RD (Multiple Family, Low Density)

FUTURE LAND USE MAP: North: Commercial, Residential 1.25-3.5 DU/A,
& Residential 3.5 -5.0 DU/A
South: Residential 1.25-3.5 DU/A
East: Residential 1.25-3.5 DU/A
West: Residential 8.0-14.0 DU/A

CHARTER TOWNSHIP OF MERIDIAN

MEMORANDUM

TO: Planning Commission

FROM


Martha K. Wyatt
Associate Planner/Landscape Architect

DATE: April 8, 2016

RE: Special Use Permit #16051 (New Hope Church), request to construct a church which is greater than 25,000 square feet in gross floor area.

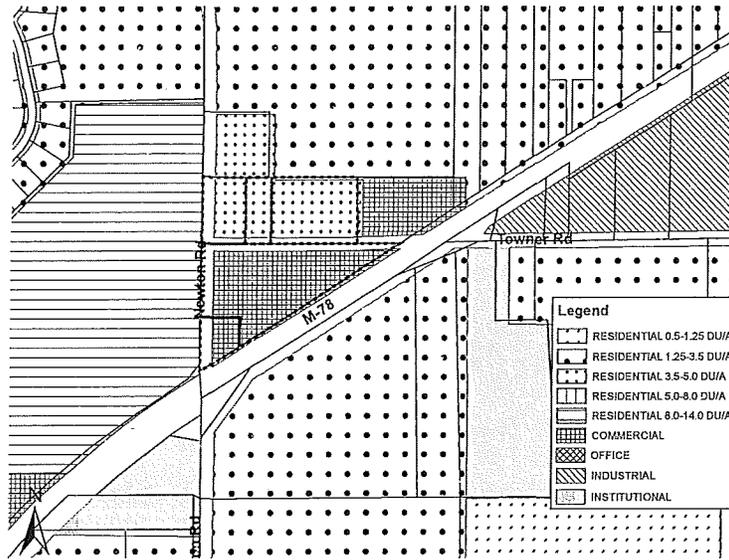
New Hope Church has requested a special use permit to construct an approximate 42,000 square foot church located at the northeast corner of Saginaw Highway (I-69 BR) and Newton Road, currently addressed as 6322 Newton Road. Currently New Hope Church is located at 1340 Haslett Road. The proposed church will contain 805 seats in the auditorium, along with associated Sunday school classrooms, meeting rooms, and offices. The approximate 13.51 acre site is currently undeveloped and is comprised of five parcels which are zoned C-2. The site is located in Section 4 of the Township. The plan also show future additions to the building and expansion of the parking area, however the current request only includes the building footprint (42,000 square feet) and parking areas as shown on the plans.

A church is a permitted use by right in the C-2 zoning district. A special use permit is required for any building or group of buildings totaling more than 25,000 square feet in gross floor area located on a lot, per Section 86-404(e)(9). The Planning Commission will make a recommendation to the Township Board regarding the special use permit for a structure greater than 25,000 square feet in gross floor area.

Master Plan

The 2005 Master Plan designates the subject property in the Commercial category.

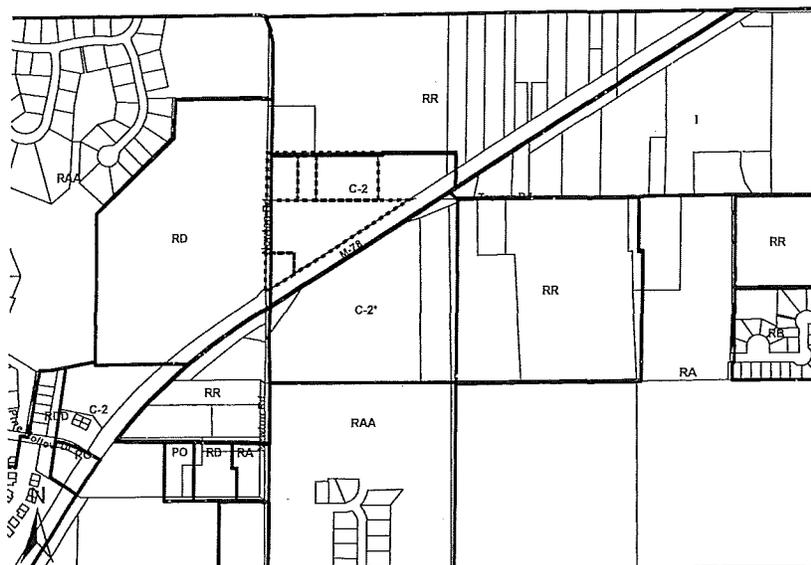
FUTURE LAND USE MAP



Zoning

The subject site consists of five parcels zoned C-2 (Commercial). The C-2 zoning district requires a minimum lot area of 4,000 square feet and 100 feet of lot width. Upon the properties being combined, the site will have approximately 1,200 feet of frontage along Saginaw Highway and 900 feet along Newton Road. The lot area of 13.51 acres complies with C-2 zoning area requirement.

ZONING MAP



Physical Features

The overall site consists of five properties. Three of the properties are located along the vacated portion of Towner Road. Two of those properties (addressed as 2246 and 2224 Newman Road) currently contain single family homes which are unoccupied, plus accessory buildings. The applicant intends to raze those buildings. The previously existing single family home on the third property has been razed from the site at some point in the past. The fourth and fifth parcels at (addressed as 6322 Newton Road) had at one time contained a truck stop/restaurant facility and gas station (between 1941 to 1950) at the corner of Newton Road and Saginaw Highway. All buildings were removed years ago.

The site is generally flat, rising from the southwest to the highest elevation of 875 feet above mean sea level in the middle of the site and then sloping towards a wetland in the northwest corner of the site to an elevation of 864 feet above mean sea level. Vegetation on the site includes lawn and some mature trees. A soil pile is located near the existing eastern driveway on Saginaw Highway. As this site has been previously developed, a natural features assessment was not required; however the applicant intends to preserve several mature trees along the frontage on Newton Road. There is no floodplain present on or around the property.

Wetlands

The Township Wetland Map indicates the presence of wetlands on the subject site. In February of 2016 the applicant's consultant Marx Wetlands, LLC investigated the wetlands to determine location and regulatory status, finding three wetlands present. Following is a summary of the findings from the applicant's wetland delineation report.

The first wetland (labeled as Wetland A on the site plans and Township Wetland #4-11) is approximately 0.34 acres in size for the area located in the northwest corner of the subject site. The wetland extends off-site and is approximately 1.84 acres in total size per the Township wetland map. Wetland A is regulated by the Township and most likely by the Michigan Department of Environmental Quality (MDEQ) as it is within 500 feet of nearby ponds. The second wetland (labeled as Wetland B on the site plans and Township Wetland #4-15) is located in the northeast corner of the site and is approximately 1.47 acres in size for the area located on the subject site. Wetland B also extends off-site and is approximately 3.56 acres per the Township wetland map. Wetland B is also regulated by the Township and MDEQ due to its proximity to the off-site pond. The third wetland identified (Wetland C) is located in the southeast part of the site along Saginaw Highway and consist of a shallow swale, approximately 0.04 acres in size. Wetland C is not on the Township wetland map and is not regulated as it is less than 0.25 acres in size and is not contiguous with any other water body, based on the wetland delineation plan from Marx Wetlands, LLC.

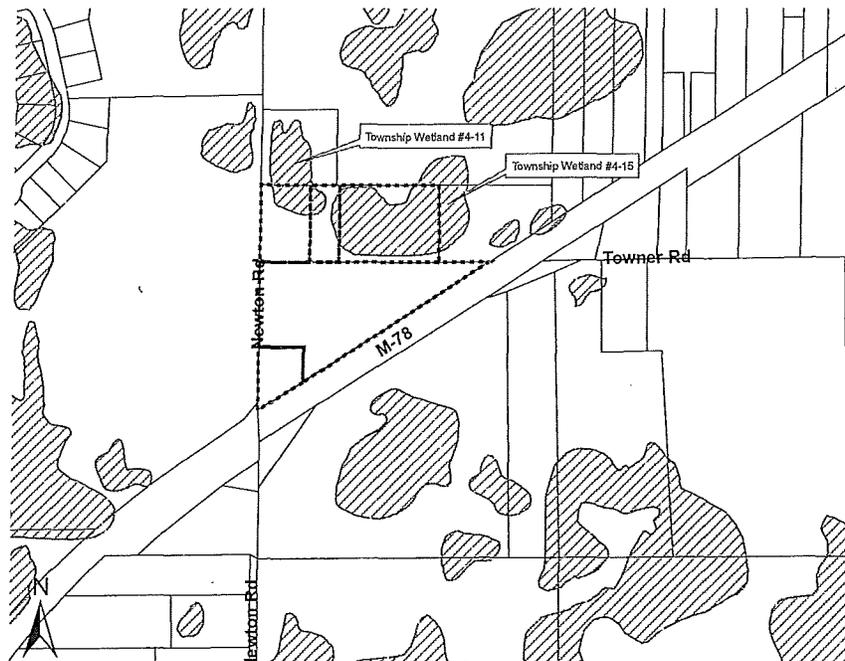
The Township's environmental consultant completed a wetland review of the site on March 29, 2016 evaluating the regulatory status of wetlands and wetland boundaries as determined by Marx Wetlands, LLC. The Township's wetland consultant concurred with the determination of regulatory status of the wetlands, but did recommend changes to the wetland boundaries.

SUP #16051 (New Hope Church)
Planning Commission (4/8/16)
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The Township's environmental consultant was observed a fourth wetland on the site which was not delineated by Marx Wetlands, LLC. It is generally located south of Wetland B in the area designated as "Future Parking" and "Future Addition" on the site plans for the proposed church. Per the Township's environmental consultant the fourth wetland appears to be hydrologically connected to Wetland B via a metal culvert pipe under the abandoned Towner Road. It is the opinion of the Township's environmental consultant a delineation of the fourth wetland should be done in the growing season to determine its size and regulatory status.

Based on the information presented at this time, the site plans for the current request do not indicate work in Wetland A or B, such as stormwater drainage or fill, nor is work proposed in the associated 40-foot structure and grading setbacks associated with the regulated wetlands (Wetland A and B), although a grading plan was not provided. Revisions to the plans may be required after the delineation of the fourth wetland is completed and verified by the Township's environmental consultant. Future parking and building additions would be reviewed under a separate application submittal.

WETLAND MAP



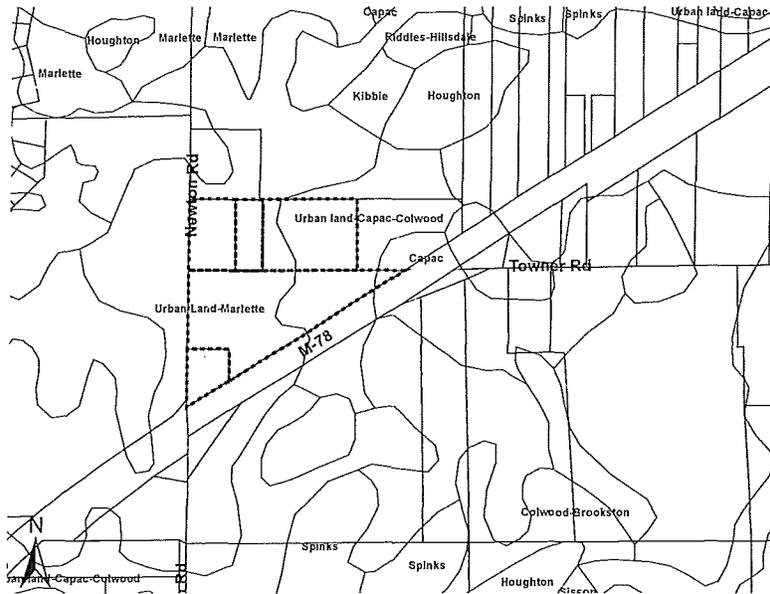
Soils

The following predominant soil types are found at the subject site:

| SOIL ASSOCIATION | SEVERE LIMITATIONS |
|------------------------|--------------------|
| CaA (Capac) | Wetness |
| Co (Colwood-Brookston) | Ponding |
| Mab/MaC (Marlette) | Slope |

Source: Soil Survey of Ingham County, Michigan. 1992.

SOILS MAP

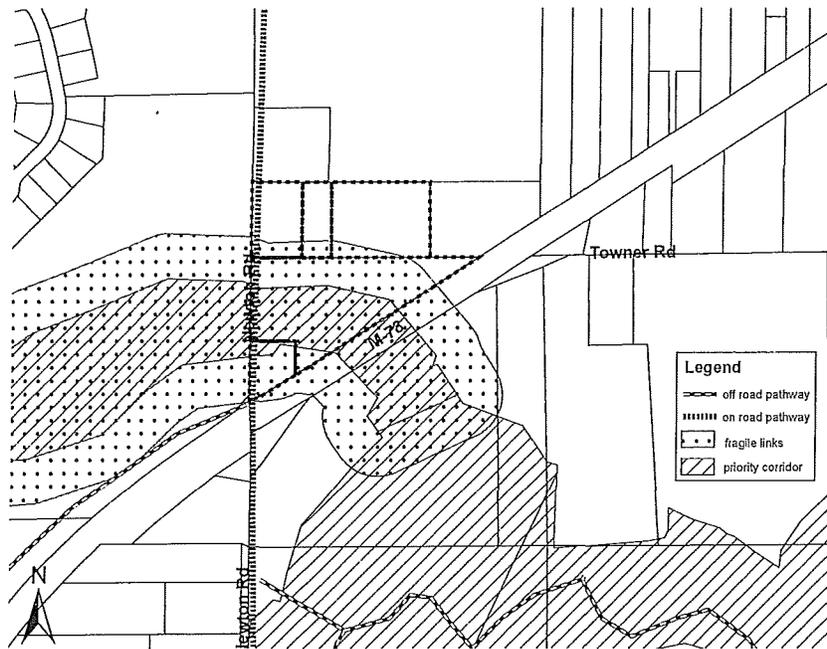


Greenspace Plan

The Township's Greenspace Plan indicates a priority conservation corridor and fragile link covering the portion of the site located primarily south of vacated Towner Road. Both on and off-road pathways generally border the site. The Greenspace Plan Map, like the Township Wetland Map, is a guide; it is not intended to serve as a detailed map at the parcel level. Instead it should be used as a general guide when assessing potential impacts of development projects. In this case the priority conservation corridor and fragile link do not indicate a location of wetlands, floodplains, or other significant natural features but serves as a connection between wetland areas located west of Newton Road, and south of Saginaw Highway.

An on-road pathway is shown on Newton Road which could include a bike lane or sidewalk on or adjacent to the roadway. An off-road pathway is shown on Saginaw Highway, west of the subject site.

GREENSPACE MAP



Other site issues

As noted previously a truck stop/restaurant facility was located on the site at the southwest corner of the site, including a gas station operating from 1941 to 1950. A development plan for the site, a proposed mixed use planned unit development (MUPUD #08014), was submitted by a different company and was reviewed by the Township in 2007 and 2008. As part of that project a Phase I and Phase II Environmental Site Analysis (ESA) were conducted in 2007 by AKT Peerless for contamination related to the former uses on the site. The mixed use project was approved by the Township Board on March 4, 2008. In 2008 the former applicant/ property owner had applied for and received approval of a brownfield plan from the Ingham County Brownfield Redevelopment Authority (BRA). The Township Board approved the brownfield plan in December 2007. The project did not progress to the construction phase and the brownfield plan and funds have expired.

During the 2007 site analysis by AKT Peerless, no underground storage tanks (USTs) were discovered near the location of the former gas station. Also the soil and groundwater samples showed no detectable concentrations above the MDEQ's Part 201 Generic Residential Cleanup Criteria or applicable MDEQ Target Detection Limits (TDLs). This is the location where the proposed detention area is shown for the current church project.

A Phase I ESA was conducted in March 2016 by AKT Peerless for the New Hope Church project. A summary of the findings was provided by the applicant. AKT Peerless identified the presence of a petroleum product (1, 2, 4-trimethylbenzene) in shallow soil beneath the central portion of the site as well as lead in groundwater in the west-central portion of the site.

AKT Peerless concluded the contamination is not migrating elsewhere and there are no known unacceptable exposure risks at the property that cannot be managed through reasonable precautions that will be part of a Due Care Compliance Plan that is to be developed by AKT Peerless for the site remediation. The MDEQ will be the governing agency that will monitor the plan and clean-up.

Streets and Traffic

Saginaw Highway is a four lane divided highway, without curb and gutter, classified as a Principal Arterial in the 2005 Master Plan. Saginaw Highway is under the jurisdiction of the Michigan Department of Transportation (MDOT). The posted speed limit is 55 miles per hour in the project area. A traffic count taken in 2014 by MDOT on Saginaw Highway, 100 feet northeast of Lake Lansing Road (approximately 3,800 feet southwest of the subject site), indicates an average of approximately 13,900 vehicles traveling both northeast and southwest in a 24 hour period.

Newton Road is a two lane paved road, without curb and gutter, classified as a Local Road in the 2005 Master Plan. The posted speed is 45 miles per hour and Newton Road is under the jurisdiction of the Ingham County Road Department (ICRD). A traffic count taken in 2008 by the ICRD on Newton Road, north of Saginaw Highway and south of vacated Towner Road, indicates an average of 1,734 total vehicles traveled that stretch of road in a 24 hour period.

In August of 2007, the Board of Ingham County Road Commissioners approved the abandonment of Towner Road in the area of the subject site. Towner Road had bisected the site, connecting Saginaw Highway to Newton Road. Towner Road is no longer open for vehicular traffic and will not be utilized in the proposed project as a road.

Two proposed driveways provide access to the subject site from Newton Road. A third access driveway is located on Saginaw Highway which is designed to have one (1) right-in and right-out only.

The applicant's consultant, Traffic Engineering Associates, Inc. (TEA), has provided a Traffic Impact Study, dated March 2016 for the proposed project using rates for Church (Land Use Code 560) as the land use type from the ITE Trip Generation Manual, 9th Edition. The study is based on the current project proposal and not future additions to the church building.

TEA conducted vehicle counts during the midweek, of a non-holiday week in the month of February, 2016 and also during a non-holiday Sunday morning of the intersection of Saginaw Highway and Newton Road. The weekday A.M. and P.M. peak hours of existing traffic on the adjoining road system are 7:15-8:15 A.M. and 4:45-5:45 P.M. respectively. The Sunday morning peak hour time is 11:30 A.M.-12:30 P.M.

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Based on the traffic study the proposed church will generate 22 vehicle trips in the weekday A.M. peak hour (7:15-8:15 A.M.), 22 vehicle-trips in the weekday P.M. peak hour (4:45-5:45 P.M.), with a weekday total volume of 364 trips. The Sunday peak hour traffic will generate 461 vehicle trips. The existing level of service (LOS) at the studied intersection operates at a good level of service (LOS C).

The applicant's traffic consultant offered the following conclusions and recommendations:

- Traffic issues to the existing public streets are not anticipated with additional traffic associated with the proposed church.
- The level of service (LOS) at the studied intersection for future traffic conditions is expected to operate at a good level of service (LOS C) during both the weekday A.M. and P.M. peak hours and the Sunday peak hour.
- The Ingham County Road Department should consider a northbound, right-turn taper at both of the site driveways on Newton Road.
- Consideration should be given to the construction of an exclusive right turn lane on Saginaw Highway at the proposed new entrance drive.

The TEA Traffic Impact study was forwarded to the Township's traffic consultant who noted concerns with the existing intersection of Saginaw Highway and Newton Road and conflicting left turns for both northbound and southbound traffic on Newton Road. The Township's traffic consultant suggested prohibiting left turns on eastbound Saginaw Highway and provide a one-way crossover at the proposed church entrance on eastbound Saginaw Highway. Since the time when the plans were submitted, MDOT has noted to staff a new crossover is proposed in the median of Saginaw Highway, east of the proposed driveway. The driveway is to be moved approximately 85 feet closer to Newton Road and the new crossover is approximately 120 feet easterly towards the City Limits Bowling facility at 2120 Saginaw Highway. The design has not been finalized at this time. MDOT makes the final decision relative to required improvements.

The plans and the Traffic Impact Study were sent to the Ingham County Road Department (ICRD), which has jurisdiction on Newton Road. The locations of the two proposed driveways are acceptable to the ICRD subject to their review and approval. The ICRD noted improvements to roadside drainage on the east side of Newton Road should be discussed as part of this project.

The Township's Pedestrian and Bicycle Master Plan is currently in the process of being updated including the recommendation to increase the width of the pedestrian/bicycle pathway along north side of Saginaw Highway from seven feet to ten feet wide. The submitted plans show a seven foot wide pedestrian/bicycle pathway along the frontage of the site on Saginaw Highway. A five foot wide sidewalk is shown along the frontage of the site on Newton Road, in the street right-of-way. The current version of the Township's Pedestrian and Bicycle Master Plan shows a paved shoulder along the east side of Newton Road. Further discussion will occur during site plan review as to the final plans for the pathway, paved shoulder, and sidewalks associated with the site.

Utilities

Public water and sanitary sewer services are available to serve the site. The final design of the utility plans will be addressed during site plan review. Stormwater plans include the construction of an on-site detention area in the southwest corner of the site, which will outlet to an existing storm drain in the right-of-way of Saginaw Highway, which is under the jurisdiction of MDOT.

Staff Analysis

The applicant is requesting a special use permit to construct a building which is greater than 25,000 square feet in area. A special use permit is evaluated using the nine general special use permit criteria listed in Section 86-126 of the Code of Ordinances.

The plans show an approximate 42,000 square foot building with two future additions to the building, as well as additional parking. The current request does not include the future build-out phase. If the project is approved future additions will require an amendment to the original special use permit.

Weekend worship services are at 6:00 P.M. Saturday with approximately 120 attendees, and Sunday at 9:15 A.M. and 11:00 A.M. with approximately 450 or so in attendance between the two services. Additional activities include youth group meetings on Sunday night and various bible study groups and ministry training Monday through Thursday (daytime and evening hours). The office hours for the church is 8 A.M. to 5 P.M., Monday through Thursday and with generally three to six staff members at the church at any one time. Four full time and twelve part time staff people work at the church.

Neither daycare programs nor a school are proposed for the church at this time. Should either of those be proposed in the future an amendment to Special Use Permit #16051 would be required.

The main entrances to the building are provided on the west and south sides of the building, which includes a drop-off lane and canopy on the south side of the building. A service drive is located on the north side of the building which provides access to a screened dumpster. Parking is provided on the west and south sides of the building. Parking is required in the amount of one parking space per every five seats or one parking space per ten feet of pew length. The auditorium has 805 seats thus 161 parking spaces are required. The plan shows 208 parking spaces. The applicant has provided a parking analysis regarding parking needs for the proposed church.

Bicycle parking is required at a rate of one bicycle parking space per ten motor vehicle parking spaces. Eleven bicycle racks (or 22 bicycle parking spaces) are required and six bicycle racks are provided on the west side of the building. Five additional bicycle racks will be added to the plans during site plan review.

The maximum allowed building height in the C-2 district is 35 feet and the proposed height of the building is 35 feet. The building materials include stacked stone and grey 20 gauge metal siding with a Kynar finish (protective resin product). The metal siding runs both horizontally and vertically.

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The siding and stacked stone are used on the south and west elevations, equating to approximately 25% stacked stone and 75% metal siding, exclusive of the windows on each elevation. The building materials on the north and east elevations are comprised of 100% metal siding (exclusive of the windows). The review criteria for a special use permit states the project should be designed and constructed so as to be harmonious and appropriate in appearance with the existing or intended character of the general area. The Planning Commission should review the proposed building materials for consistency with this criterion.

A five foot wide sidewalk is proposed along the east side of Newton Road as noted previously. Five foot wide sidewalks are provided internally and connect to the pathway along Saginaw Highway near the entrance drive on Saginaw Highway. As mentioned previously, a seven foot wide pedestrian/bicycle pathway is required along the frontage of the site on Saginaw Highway, which is shown on the plans.

The maximum allowed impervious coverage is 70% and the proposed impervious surface area is 34.42% which does not include the future expansion of the building or parking areas.

The required front yard setback for the building is 100 feet from the centerline of the westbound lane of Saginaw Highway. For Newton Road the required setback is 25 feet from the street right-of-way of Newton Road. The side yard setback is 15 feet on the east. The rear yard setback for the building and any parking areas or drive aisles is 100 feet, or 60 feet with additional landscaping, where adjacent to residential zoning (north property line of the subject site). The building and parking/drive aisles meets all the required setbacks.

A 20 foot wide landscaped buffer is required along the parking areas located on Newton Road and Saginaw Highway and the plan complies. Where adjacent to the same or other nonresidential zoning the required parking setback is 15 feet, which the plan meets on the east side of the site.

A landscape plan has been provided. A more detailed review will occur during site plan review. Landscaping requirements are outlined in Section 86-473 and Section 86-758 of the Code of Ordinances. Site lighting must comply with the Township's Lighting Ordinance, Chapter 38-171, of the Code of Ordinances. Site lighting will be evaluated during site plan review.

Comments from the Township's Development Review Committee have been incorporated into this memorandum.

The Planning Commission should take into consideration issues related to the church use, including hours of operation, number of employees, lighting, and noise. The Planning Commission may place appropriate conditions on an approval to address these topics.

Planning Commission Options

The Planning Commission may recommend approval, approval with conditions or denial of the special use permit for building size to the Township Board. A resolution will be provided for a future meeting.

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Attachments

1. Special Use Permit Application and Attachments
2. Special Use Permit Standards (Section 86-126)
3. Site Plans dated March 18, 2106
4. Floor Plans and Building Elevations

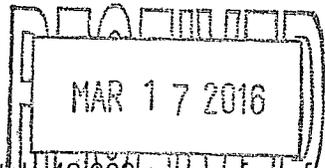
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CHARTER TOWNSHIP OF MERIDIAN
DEPARTMENT OF COMMUNITY PLANNING AND DEVELOPMENT
5151 MARSH ROAD, OKEMOS, MI 48864
PLANNING DIVISION PHONE: (517) 853-4560, FAX: (517) 853-4095

SPECIAL USE PERMIT APPLICATION

Before submitting this application for review, an applicant may meet with the Director of Community Planning and Development to discuss the requirements for a special use permit and/or submit a conceptual plan for review to have preliminary technical deficiencies addressed prior to submittal of the application. If the property or land use is located in the following zoning districts RD, RC, RCC, RN then the applicant must meet with the Planning Director to discuss technical difficulties before filing a formal application.

Part I

- A. Applicant New Hope Church
Address of Applicant 1340 Haslett Road, Haslett, MI 48840
Telephone - Work (517) 339-9000 Home (517) 896-2119 Fax (517) 339-7774 Email gary@newhopehaslett.com
Interest in property (circle one): Owner Tenant Option Other: Purchaser
(Please attach a list of all persons with an ownership interest in the property.)
Owner: Shaw's on Newton, LLC; Contact Person: Doug Austin, (517) 377-0838
- B. Site address / location / parcel number Northeast corner of Saginaw Hwy (M-78) and Newton Rd.
Legal description (please attach if necessary) See attached
Current zoning C-2
Use for which permit is requested / project name Construction of new church facility
Corresponding ordinance number § 86-658
- C. Developer (if different than applicant) Wieland
Address 4162 English Oak Dr, Lansing, MI 48911
Telephone - Work (517) 372-8650 Home _____ Fax (517) 372-8961
- D. Architect, Engineer Planner or Surveyor responsible for design of project if different from applicant:
Name KEBS, Inc.
Address 2116 Haslett Road, Haslett, MI 48840
Telephone - Work (517) 339-1014 Home _____ Fax (517) 339-8047
- E. Acreage of all parcels in the project: Gross 13.51 acres Net _____
- F. Explain the project and development phases:

This project will include the construction of a church building of approximately 42,000 square feet for use in weekend worship services, children's and youth ministry activities, and weekday and evening adult Christian education and ministry opportunities. Worship space seating capacity will be 900 and 296 parking spaces are provided for in the plan.
- G. Total number of:
Existing: structures _____ bedrooms _____ offices _____ parking spaces _____ carports _____ garages _____
Proposed: structures 1 bedrooms _____ offices _____ parking spaces _____ carports _____ garages _____
- H. Square footage: existing buildings _____ proposed buildings 42,000 sq. ft.
Usable Floor area: existing buildings _____ proposed buildings _____
- I. If employees will work on the site, state the number of full time and part time employees working per shift and hours of operation: Approximately 10 employees and 800 weekend attendees

J. Existing Recreation: Type _____ Acreage _____
 Proposed Recreation: Type _____ Acreage _____
 Existing Open Space: Type _____ Acreage _____
 Proposed Open Space: Type _____ Acreage _____

K. If Multiple Housing:
 Total acres of property _____
 Acres in floodplain _____ Percent of total _____
 Acres in wetland (not in floodplain) _____ Percent of total _____
 Total dwelling units _____
 Dwelling unit mix: Number of single family detached: for Rent _____ Condo _____
 Number of duplexes: for Rent _____ Condo _____
 Number of townhouses: for Rent _____ Condo _____
 Number of garden style apartments: for Rent _____ Condo _____
 Number of other dwellings: for Rent _____ Condo _____

L. The following support materials must be submitted with the application:

1. Nonrefundable Fee.
2. Legal Description of the property.
3. Evidence of fee or other ownership of the property.
4. Site Plan containing the information listed in the attachment to this application.
5. Architectural sketches showing all sides and elevations of the proposed buildings or structures, including the project entrance, as they will appear upon completion. The sketches should be accompanied by material samples or a display board of the proposed exterior materials and colors.
6. A Traffic Study, prepared by a qualified traffic engineer, based on the most current edition of *Evaluating Traffic Impact Studies: A Recommended Practice for Michigan Communities*, published by the State Department of Transportation.
 - a. A traffic assessment will be required for the following:
 - 1) New special uses which could, or expansion or change of an existing special use where increase in intensity would, generate between 50 to 99 directional trips during a peak hour of traffic.
 - 2) All other special uses requiring a traffic assessment as specified in the Township Code of Ordinances, Chapter 86, Article IV, Division 2.
 - b. A traffic impact study will be required for the following:
 - 1) New special uses which would, or expansion or change of an existing special use where increase in intensity would, generate over 100 directional trips or more during a peak hour of traffic, or over 750 trips on an average day.
 - 2) All other special uses requiring a traffic assessment as specified in the Township Code of Ordinances, Chapter 86, Article IV, Division 2.
7. Natural features assessment which includes 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, waterbodies, identified groundwater vulnerable areas, slopes greater than 20 percent, ravines, and vegetative cover types with 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.

The natural features assessment may be waived by the Director of Community Planning and Development in certain circumstances.

- M. Any other information specified by the Director of Community Planning and Development which is deemed necessary to evaluate the application.
- N. In addition to the above requirements, for zoning districts, **RD, RC, RCC, RN, and CV** and **Group Housing Residential Developments** the following is required:
1. Existing and proposed contours of the property at two foot intervals based on United States Geological Survey (USGS) data.
 2. Preliminary engineering reports in accordance with the adopted Township water and sewer standards, together with a letter of review from the Township Engineer.
 3. Ten copies of a report on the intent and scope of the project including, but not limited to: Number, size, volume, and dimensions of buildings; number and size of living units; basis of calculations of floor area and density and required parking; number, size, and type of parking spaces; architectural sketches of proposed buildings.
 4. Seven copies of the project plans which the Township shall submit to local agencies for review and comments.
- O. In addition to the above requirements, a special use application in zoning district **RP** requires the following material as part of the site plan:
1. A description of the operations proposed in sufficient detail to indicate the effects of those operations in producing traffic congestion, noise, glare, air pollution, water pollution, fire hazards or safety hazards or the emission of any potentially harmful or obnoxious matter or radiation.
 2. Engineering and architectural plans for the treatment and disposal of sewerage and industrial waste tailings, or unusable by-products.
 3. Engineering and architectural plans for the handling of any excessive traffic congestion, noise, glare, air pollution, or the emission of any potentially harmful or obnoxious matter or radiation.
- P. In addition to the above requirements, a special use application for a use in the Floodway Fringe of zoning district **CV** requires the following:
1. A letter of approval from the State Department of Environmental Quality.
 2. A location map including existing topographic data at two-foot interval contours at a scale of one inch representing 100 feet.
 3. A map showing proposed grading and drainage plans including the location of all public drainage easements, the limits, extent, and elevations of the proposed fill, excavation, and occupation.
 4. A statement from the County Drain Commissioner, County Health Department, and Director of Public Works and Engineering indicating that they have reviewed and approved the proposal.
- Q. In addition to the above requirements, a special use application for a use in the Groundwater Recharge area or zoning district **CV** requires the following:
1. A location map including existing topographic data at two-foot interval contours.
 2. A map showing proposed grading and drainage plans including the location of all public drainage easements, the limits and extent of the proposed fill, excavation, and occupation.
 3. A statement from the County Drain Commissioner, County Health Department, and Director of Public Works and Engineering indicating that they have reviewed and approved the proposal.

- R. In addition to the above requirements, the Township Code of Ordinances, Article VI, should be reviewed for the following special uses: group housing residential developments, mobile home parks, nonresidential structures and uses in residential districts, planned community and regional shopping center developments, sand or gravel pits and quarries, sod farms, junk yards, sewage treatment and disposal installations, camps and clubs for outdoor sports and buildings greater than 25,000 square feet in gross floor area.

Part II

SUP REQUEST STANDARDS
Township Code of Ordinances, Section 86-126

Applications for Special Land Uses will be reviewed with the standards stated below. An application that complies with the standards stated in the Township Ordinance, conditions imposed pursuant to the Ordinance, other applicable Ordinances, and State and Federal statutes will be approved. Your responses to the questions below will assist the Planning Commission in its review of your application.

- (1) The project is consistent with the intent and purposes of this chapter.

This project is consistent with the intent and purpose of the applicable township ordinance. A church building with a gross floor area over 25,000 square feet is a use permitted by right in a C-2 Commercial district as a special use under. [§86-404 (c)(4)]

- (2) The project is consistent with applicable land use policies contained in the Township's Master Plan of current adoption.

This church construction project is consistent with the "institutional land use" provisions of the Master Plan, as articulated in Chapter 10: *Future Land Use*. The location of the church will serve the rapidly growing population centers adjacent to the Saginaw Highway (M-78) corridor.

- (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.

This church building is designed to be aesthetically appealing in a manner that complements existing and future commercial and residential development in the area. The plan also addresses Master Plan Goal 6 by supporting a "Multi-Modal Transportation Network" through the extension of the Pedestrian/Bicycle Pathway linkage along the project's Saginaw Highway (M-78) frontage, in addition to a new sidewalk along the Newton Road frontage.

- (4) The project will not adversely affect or be hazardous to existing neighboring uses.

This project will not adversely affect or be hazardous to the existing nearby commercial and residential properties. Because of the nature of church operations and the location of this project, any additional vehicular traffic will occur during weekends and other off-peak times.

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

The combination of the aesthetic appeal of this church facility and surrounding green space, as well as the influx of new customers for nearby commercial establishments, will only enhance the property values and economic welfare of the surrounding property owners.

- (6) The project is adequately served by public facilities, such as existing roads, schools, storm water 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 church will be served by public road access from Saginaw Highway (M-78) and Newton Road. Storm water drainage will be handled by catch basins in the parking area which will drain to a storm water detention pond in the southwest corner of the property and into an 18" MDOT drain along M-78. Access is provided for public safety agencies and pathways will provide ready access to neighborhoods, commercial establishments and recreation.

(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 storm water are proposed, they shall be properly designed and capable of handling the long term needs of the proposed project.

This project will be adequately served by existing public water and sewer facilities readily accessible to the property at the intersection of Newton Road and the M-78 right of way, as detailed in the attached engineering plan.

(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.

Any increase in traffic volume will occur during off-peak hours on weekends when normal work week traffic is not a factor. This facility will not produce excessive 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.

This church facility will not have a substantial adverse impact on the natural resources of the township. Wetlands have been delineated and have been taken into consideration in the plans developed for this project and in the natural features assessment included with this application. Great care has been taken not to disturb or discharge storm drainage directly into existing wetlands and to conserve wetlands and other water retention areas. There are no lakes, rivers, streams, or major forests on this property.

Part III

I (we) hereby grant permission for members of the Charter Township of Meridian's Boards and/or Commissions, Township staff member(s) and the Township's representatives or experts the right to enter onto the above described property (or as described in the attached information) in my (our) absence for the purpose of gathering information including but not limited to the taking and the use of photographs.

Yes No (Please check one)

By the signature(s) attached hereto, I (we) certify that the information provided within this application and accompanying documentation is, to the best of my (our) knowledge, true and accurate

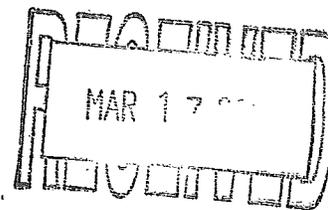
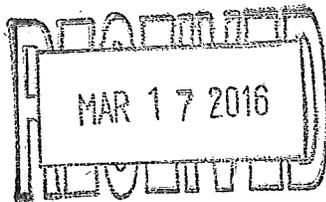
Gary M Post
Signature of Applicant

3/10/16
Date

Gary M. Post
Type/Print Name

Fee: \$1,060.00

Received by/Date: G. Ormick 3/17/16



**Special Use Permit Application Attachment
Site Plan Requirements Per Section 86-124(c)(4)**

A site plan, drawn to a legible scale, containing the following information where applicable:

- a. Boundaries of the subject property.
- b. Total area of the subject property.
- c. Location of all existing and proposed structures.
- d. Approximate location and distance of all structures within 100 feet of the subject property.
- e. Uses of existing and proposed buildings, on the subject site.
- f. Proposed means of vehicular and pedestrian ingress and egress to the subject property.
- g. Public and private roads and streets, rights-of-way, and easements, indicating names and widths, which abut or cross the site.
- h. Existing and proposed parking spaces, and vehicular and pedestrian circulation patterns.
- i. The buildable area of the subject property indicating all required setbacks, yards and open space.
- j. Zoning classification of the subject and adjacent properties.
- k. Existing and proposed fencing, screening, landscaping, and buffers.
- l. Location and sizes of existing utilities including power lines and towers, both above and below the ground.
- m. Amount and location of all impervious surfaces.
- n. The verified boundaries of all natural water features and required setback lines.

SCHEDULE A

Ref: 2246 Towner
East Lansing, MI 48823

Title No.: 173937LANS Revision No. 3

Loan No.:

1. Effective Date: February 16, 2016 at 8:00 am

2. Policy or Policies to be issued:

ALTA Owner's Policy

Policy Amount: \$875,000.00

Proposed Insured: New Hope Church of Haslett, a Michigan non-profit corporation

3. The estate or interest in the land described or referred to in this Commitment is
Fee Simple

4. Title to the estate or interest in the land is at the Effective Date vested in
Shaw's on Newton, LLC, a Michigan limited liability company

5. The land referred to in this Commitment is described as follows
Located in the Township of Meridian, County of Ingham, State of Michigan,

SEE ATTACHED EXHIBIT "A"

Countersigned by:

Kim Case Audia

Kim Case Audia

Exhibit "A"

A parcel of land in the Northeast fractional 1/4 of Section 4, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the boundary of said parcel described as: Commencing at the North 1/4 corner of said Section 4; thence South 01°57'22" West along the North-South 1/4 line of said Section 4, a distance of 962.62 feet to the North line of the South 10 acres of the Northwest 1/4 of the Northeast fractional 1/4 as occupied and the point of beginning of this description; thence South 87°39'13" East along said North line 227.76 feet; thence South 02°24'21" West 11.03 feet; thence South 88°26'35" East parallel with the centerline of Towner Road 565.00 feet; thence South 02°24'21" West 297.00 feet to the North right of way line of Towner Road; thence South 88°26'35" East along said North right of way line 282.56 feet to the Northerly right of way line of M-78; thence South 59°42'16" West along said Northerly line 1268.61 feet to the North-South 1/4 line of said Section 4; thence North 01°57'22" East along said North-South 1/4 line 980.64 feet to the point of beginning.

Excepting therefrom the following described parcel:

A parcel of land in the Northeast fractional 1/4 of Section 4, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the boundary of said parcel described as: Commencing at the North 1/4 corner of said Section 4; thence South 01°57'22" West along the North-South 1/4 line 1306.76 feet to the centerline of Towner Road; thence South 88°26'35" East along said centerline 790.08 feet to the point of beginning of this description; thence North 02°24'21" East 33.00 feet to the North right of way line of Towner Road; thence South 88°26'35" East along said North line 282.56 feet to the Northerly right of way line of M-78; thence South 59°42'16" West along said Northerly line 62.53 feet to the centerline of Towner Road; thence North 88°26'35" West along said centerline 229.94 feet to the point of beginning.

The above description now surveyed as:

A parcel of land in the Northeast fractional 1/4 of Section 4, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the North 1/4 corner of said Section 4; thence South 00°12'17" East along the North-South 1/4 line of said Section 4 a distance of 962.62 feet to the Northwest corner of the South 10 acres of the Northwest 1/4 of said Northeast fractional 1/4 as occupied and the point of beginning of this description; thence South 89°49'04" East along the North line of the South 10 acres of the Northwest 1/4 of said Northeast fractional 1/4 as occupied 782.00 feet; thence South 00°12'06" East 337.66 feet to the South line of the Northwest 1/4 of the Northeast 1/4 as occupied; thence North 89°14'31" East along said South line 231.04 feet to the Northwesterly right of way line of M-78 (E. Saginaw Street); thence South 57°29'13" West along said Northwesterly line 1198.54 feet to said North-South 1/4 line; thence North 00°12'17" West along said North-South 1/4 line 981.31 feet to the point of beginning.

Title No: 173937LANS Revision No. 3

SCHEDULE B - SECTION I

REQUIREMENTS

1. Warranty Deed from Shaw's on Newton, LLC, a Michigan limited liability company, by all managing members to New Hope Church of Haslett, a Michigan non-profit corporation.
2. Submit a copy of the Operating Agreement of Shaw's on Newton, LLC, a Michigan limited liability company, together with all amendments thereto. This commitment may be subject to such further requirements as may then be deemed necessary after examination of the aforementioned document.

NOTE: It has been requested by the Proposed Insured that the Company issue its ALTA Owner's Policy without standard exceptions. The ALTA Owner's Policy without standard exceptions shall be issued upon the Company determining that the following additional 2 requirements have been satisfied:

3. Submission of an affidavit in acceptable form executed by the present title holder establishing the following facts:
 - (a) That the present affiant is in possession of said property and has no knowledge of any other parties in possession or claiming rights of possession.
 - (b) That the affiant has no knowledge of the granting of any unrecorded water, mineral and/or oil rights, unrecorded easements or claims of easements, boundary line disputes, or claims of such grants or rights relative thereto.
 - (c) That no improvements have been made in the last 120 days.
4. Submit satisfactory survey by an approved surveyor, certified to the Company, showing no encroachments or adverse rights upon the subject property or any variation between the property description in this commitment and the survey description.
5. Discharge of the mortgage executed by Dougilray Properties, LLC, a Michigan Limited Liability Company to Mason State Bank dated January 4, 2005 and recorded January 21, 2005 in Liber 3148, Page 631.
6. Discharge of the mortgage executed by Shaw's Triangle Properties, L.L.C., a Michigan Limited Liability Company to Mason State Bank dated May 8, 2006 and recorded May 16, 2006 in Liber 3219, Page 445, which was modified in Modification of Mortgage recorded March 14, 2007 in Liber 3258, Page 7.
7. Assignment of Lease to New Hope Church of Haslett, a Michigan non-profit corporation of the Lessors interest in the Lease between Shaw's on Newton, LLC, a Michigan limited liability company, as lessor, and Adams Outdoor Advertising Limited Partnership, as lessee.
8. Record with the Ingham County Register of Deeds a Certificate of Redemption from the Certificate of Forfeiture of Real Property, for non-payment of property taxes,

recorded March 31, 2015, in Instrument No. 2015-012008.

9. Record with the Ingham County Register of Deeds a Certificate of Redemption from the Certificate of Forfeiture of Real Property, for non-payment of property taxes, recorded March 31, 2015, in Instrument No. 2015-012009.
10. Record with the Ingham County Register of Deeds a Certificate of Redemption from the Certificate of Forfeiture of Real Property, for non-payment of property taxes, recorded March 31, 2015, in Instrument No. 2015-012010.

NOTE: In the event the land to be insured is 'Commercial Real Estate' as defined in Public Act 201 of 2010 and the proposed transaction is or will be the subject of a written commission agreement running in favor of a commercial real estate broker, the Company shall be immediately notified and this Commitment will be revised and made subject to such further requirements and exceptions as deemed necessary.

11. 2015 Summer tax, partially paid in the amount of \$510.24, balance due in the amount of \$5.10, if paid by February 29, 2016. Payable to the Meridian Township Treasurer. (Base amount is \$515.34)

2015 Winter taxes are paid in the amount of \$546.71.
2015 State Equalized Value \$40,800.00.
2015 Taxable Value \$15,676.00.
Property located in Haslett Public School District.
Principal Residence Status for 2015 is 0%.
Permanent Property No. 33-02-02-04-201-002.

2015 Summer taxes are paid in the amount of \$306.74.
2015 Winter taxes are paid in the amount of \$325.36.
2015 State Equalized Value \$27,800.00.
2015 Taxable Value \$9,331.00.
Property located in Haslett Public School District.
Principal Residence Status for 2015 is 0%.
Permanent Property No. 33-02-02-04-201-003.

2015 Summer taxes are paid in the amount of \$1,837.79.
2015 Winter taxes are paid in the amount of \$1,949.75.
2015 State Equalized Value \$55,900.00.
2015 Taxable Value \$55,900.00.
Property located in Haslett Public School District.
Principal Residence Status for 2015 is 0%.
Permanent Property No. 33-02-02-04-201-004.

12. 2015 Summer tax, partially paid in the amount of \$2,138.15, balance due in the amount of \$21.38, if paid by February 29, 2016. Payable to the Meridian Township Treasurer. (Base amount is \$2,159.53)

2015 Winter taxes are paid in the amount of \$2,291.08.
2015 State Equalized Value \$184,100.00.
2015 Taxable Value \$65,686.00.
Property located in Haslett Public School District.
Principal Residence Status for 2015 is 0%.
Permanent Property No. 33-02-02-04-251-001.

13. 2015 Summer tax, partially paid in the amount of \$2,096.28, balance due in the amount of \$20.97, if paid by February 29, 2016. Payable to the Meridian Township Treasurer. (Base amount is \$2,117.25)

2015 Winter taxes are paid in the amount of \$2,246.26.

2015 State Equalized Value \$64,400.00.

2015 Taxable Value \$64,400.00.

Property located in Haslett Public School District.

Principal Residence Status for 2015 is 0%.

Permanent Property No. 33-02-02-04-251-002.

2015 Summer Millage Rate is: 32.5514

2015 Winter Millage Rate is: 34.5353

2014 Winter Millage Rate is: 34.7053

NOTE: The policy to be issued does not insure against unpaid water, sewer, electric or gas charges, if any, that have not been levied as taxes against these lands. (Meter readings should be obtained and adjusted between appropriate parties.)

NOTE: In the event that the Commitment Jacket is not attached hereto, all of the terms, conditions and provisions contained in said Jacket are incorporated herein. The Commitment Jacket is available for inspection at any Company office.

SCHEDULE B - SECTION II**EXCEPTIONS**

Schedule B of the policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the Effective Date but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment.
2. Any facts, rights, interests or claims that are not shown in the Public Records but that could be ascertained by an inspection of the Land or by making inquiry of persons in possession of the Land.
3. Easements, claims of easements or encumbrances that are not shown in the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the Land, and that are not shown in the Public Records.
5. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown in the Public Records.
6. Any and all oil, gas, mineral, mining rights and/or reservations thereof.
7. Taxes or special assessments which are not shown as existing liens by The Public Records.
8. Taxes and assessments which become due and payable or which become a lien against the property subsequent to the interest insured and deferred and/or installment payments of said taxes and assessments. The Company assumes no liability for tax increases occasioned by retroactive revaluation, changes in the land usage or loss of any principal residence exemption status for the insured premises.
9. Rights of the public and of any governmental unit in any part of the land taken, used or deeded for street, road or highway purposes.
10. Any provisions contained in any instruments of record which provisions pertain to the transfer of divisions under Section 109(3) of the Subdivision Control Act of 1967, as amended.
11. Easement granted to Michigan Bell Telephone Company recorded in Liber 1173, Page 1069.
12. Easement granted to Michigan Bell Telephone Company recorded in Liber 1173, Page 1080.
13. Easement for Right of Way purposes vested in State of Michigan by instrument recorded in Liber 19 of Miscellaneous Records, Page 32.
14. Easement for Right of Way purposes vested in People of the State of Michigan by instrument recorded in Liber 21 of Miscellaneous Records, Page 237.

15. Easement for Right of Way purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 63 of Miscellaneous Records, Page 202.
16. Easement for Right of Way purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 72 of Miscellaneous Records, Page 535.
17. Terms, conditions and provisions which are recited in the instrument recorded in Liber 1000, Page 822.
18. Terms, conditions and provisions which are recited in Resolution recorded in Liber 3281, Page 1005.
19. Easements and the terms, conditions and provisions thereof which are recited in Grant of Easement recorded in Liber 1004, Page 1276.
20. Highway M-78 is a limited access highway.
21. Lessee's interest of Adams Outdoor Advertising Limited Partnership and the terms, conditions and provisions contained in the lease between Shaw's Triangle Properties, L.L.C., as lessor and Adams Outdoor Advertising Limited Partnership, as lessee. Said lease being disclosed by the instrument recorded in Liber 3412, Page 537.

NO

CONSENT TO FILE APPLICATION FOR SPECIAL USE PERMIT

The undersigned, as owner of the parcels described on the attached survey, consents to New Hope Church of Haslett making application to Charter Township of Meridian for a special use permit which would authorize New Hope Church of Haslett to use the property for church purposes.

This consent is provided in furtherance of a purchase agreement between the undersigned, as seller, and New Hope Church of Haslett, as purchaser, effective February 11, 2016.

SHAW'S ON NEWTON LLC

By: 
Gilbert M. White
Its: Manager

Dated: February 18, 2016



KEBS, INC

Engineering • Surveying

March 15, 2016

Mr. David Love
Ingham County Drain Commission ("ICDC")
P.O. Box 220
Mason, Michigan 48854-0220

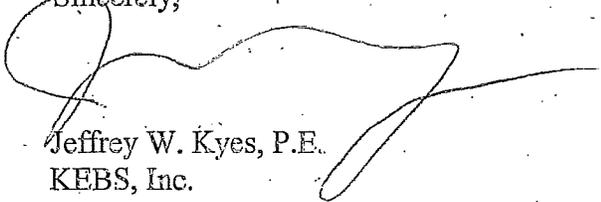
Re: New Hope Church of Haslett -- SUP Submittal

Dear Dave:

We have prepared SUP Plans for the proposed New Hope Church of Haslett located at the northeast corner of Newton Road and M-78 for submittal to Meridian Township. One of the Township requirements for the SUP is that we submit to the ICDC for written comments. Please find enclosed 1 copy of the proposed site plan for your preliminary review and comment. Your written comment back to Meridian Township would be greatly appreciated.

If you should have any questions regarding the plans please do not hesitate to contact me at (517) 339-1014, or you can email me at jkyes@kebs.com.

Sincerely,



Jeffrey W. Kyes, P.E.
KEBS, Inc.

Enclosures: - 1 Plan set

Cc: Mark Kieselbach



KEBS, INC

Engineering • Surveying

March 15, 2016

Mr. Bob Peterson, P.E.
Ingham County Road Department ("ICRD")
301 Bush Street
P.O. Box 38
Mason, Michigan 48854-0038

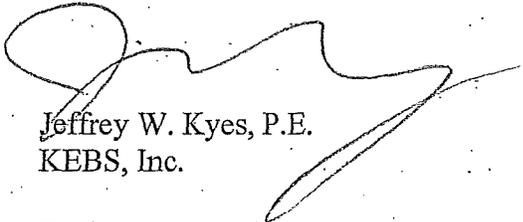
Re: New Hope Church of Haslett – SUP Submittal

Dear Bob:

We have prepared SUP Plans for the proposed New Hope Church of Haslett located at the northeast corner of Newton Road and M-78 for submittal to Meridian Township. One of the Township requirements for the SUP is that we submit to the ICRD for written comments. Please find enclosed 1 copy of the proposed site plan for your preliminary review and comment. Your written comment back to Meridian Township would be greatly appreciated.

If you should have any questions regarding the plans please do not hesitate to contact me at (517) 339-1014, or you can email me at jkyes@kebs.com.

Sincerely,



Jeffrey W. Kyes, P.E.
KEBS, Inc.

Enclosures: 1 Plan set

Cc: Mark Kieselbach



KEBS, INC

Engineering • Surveying

March 15, 2016

Mr. Larry Thelen
Michigan Department of Transportation (MDOT)
2700 Port Lansing Road
Lansing, Michigan 48906

Re: New Hope Church of Haslett – SUP Submittal

Dear Larry:

We have prepared SUP Plans for the proposed New Hope Church of Haslett located at the northeast corner of Newton Road and M-78 for submittal to Meridian Township. One of the Township requirements for the SUP is that we submit to the MDOT for written comments. Please find enclosed 1 copy of the proposed site plan for your preliminary review and comment. Your written comment back to Meridian Township would be greatly appreciated.

If you should have any questions regarding the plans please do not hesitate to contact me at (517) 339-1014, or you can email me at jkyes@kebs.com.

Sincerely,

Jeffrey W. Kyes, P.E.
KEBS, Inc.

Enclosures: 1 Plan set

Cc: Mark Kieselbach



KEBS, INC

Engineering • Surveying

March 15, 2016

Mr. Younes Ishraidi, P.E.
Meridian Township Engineering Department
5151 Marsh Road
Okemos, Michigan 48864-1104

Re: New Hope Church of Haslett – SUP Submittal

Dear Younes:

We have prepared SUP Plans for the proposed New Hope Church of Haslett located at the northeast corner of Newton Road and M-78 for submittal to Meridian Township. One of the Township requirements for the SUP is that we submit to the Township Engineering Department for written comments. Please find enclosed 1 copy of the proposed site plan for your preliminary review and comment. Your written comments would be greatly appreciated.

If you should have any questions regarding the plans please do not hesitate to contact me at (517) 339-1014, or you can email me at jkyes@kebs.com.

Sincerely,

A large, stylized handwritten signature in black ink, appearing to read 'Jeffrey W. Kyes'.

Jeffrey W. Kyes, P.E.
KEBS, Inc.

Enclosures: 1 Plan set

Cc: Mark Kieselbach



KEBS, INC

Engineering • Surveying

March 15, 2016

Mr. Tavis Millerov
Meridian Township Fire Department ("MTFD")
5151 Marsh Road
Okemos, MI 48864

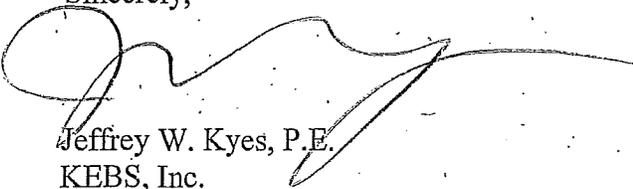
Re: New Hope Church of Haslett – SUP Submittal

Dear Tavis:

We have prepared SUP Plans for the proposed New Hope Church of Haslett located at the northeast corner of Newton Road and M-78 for submittal to Meridian Township. One of the Township requirements for the SUP is that we submit to the Township Fire Department for written comments. Please find enclosed 1 copy of the proposed site plan for your preliminary review and comment. Your written comments would be greatly appreciated.

If you should have any questions regarding the plans please do not hesitate to contact me at (517) 339-1014, or you can email me at jkyes@kebs.com.

Sincerely,

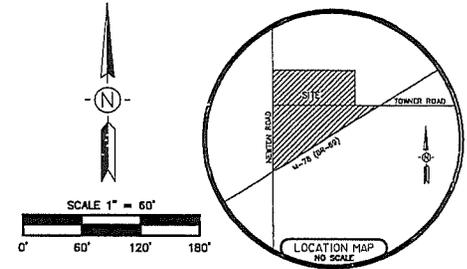


Jeffrey W. Kyes, P.E.
KEBS, Inc.

Enclosures: 1 Plan set

Cc: Mark Kieselbach

S.U.P. PLAN FOR:
New Hope Church of Haslett
 MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN



LEGAL DESCRIPTION
 A parcel of land in the Northwest fractional 1/4 of Section 4, T4N, R10E, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the North 1/4 corner of said Section 4; thence S00°21'17"E along the North-South 1/4 line of said Section 4 a distance of 825.25 feet to the northeast corner of the South 1/2 acre of the Northeast 1/4 of said Northwest fractional 1/4 as measured and the point of beginning of this description; thence S00°48'07"E along the North line of the South 1/2 acre of the Northwest 1/4 of said Section 4 a distance of 322.68 feet to the South line of the Northeast 1/4 of the Northwest 1/4 as measured; thence N85°14'31"E along said South line 221.04 feet to the Northwesterly right-of-way line of M-76 (E. Superior Street); thence S37°13'17"E along said Northwesterly line 110.54 feet to said North-South 1/4 line; thence N00°12'17"W along said North-South 1/4 line 825.25 feet to the point of beginning; and said parcel containing 13.21 acres more or less; said parcel subject to right-of-way for road purposes; subject to all easements and restrictions if any.

NOTE: ALL PUBLIC WATER SHALL BE WITHIN A 20' PUBLIC EASEMENT
 NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 10" VERTICAL SEPARATION FROM ALL SEWERS

SEWER INVENTORIES

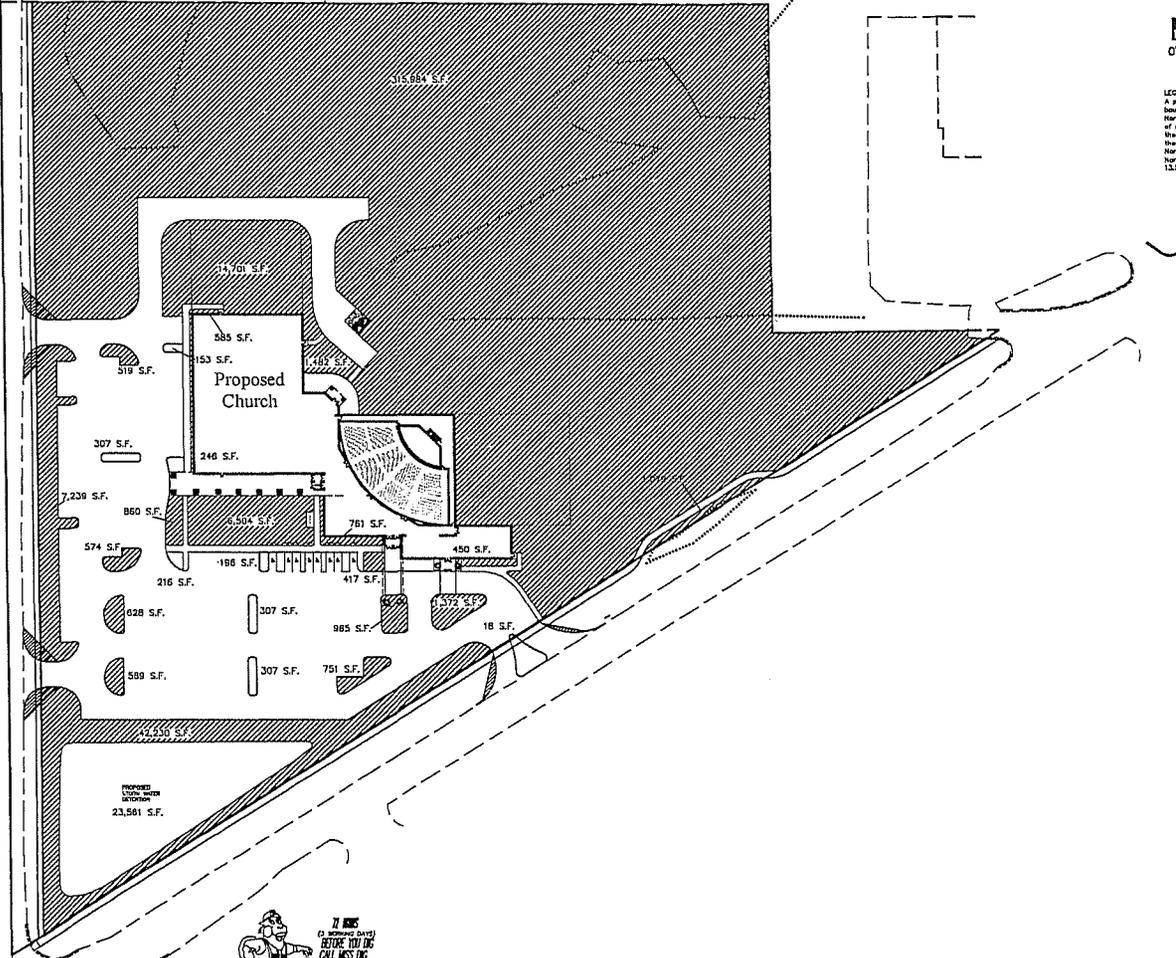
EX. LEGEND

- SET 1/2" DIA WITH CAP
- FOUND IRON AS NOTED
- DISTANCE NOT TO SCALE
- FENCE
- ASPHALT
- CONCRETE
- GRAVEL
- EXISTING CONTOUR ELEVATION
- GAS LINE
- OVERHEAD WIRING
- EDGE OF WOODS
- RECORDING TREE
- CONCRETE/PAVEMENT
- SANITARY CLEANOUT
- FIRE HYDRANT
- VALVE
- UTILITY POLE
- LIGHT POLE
- GUY WIRE
- UTILITY PEDestal
- TRANSFORMER
- ELECTRIC METER
- GAS METER
- WATER METER
- SIGN
- POST

LEGEND

- EXIST. CONTIGUOUS
- EXIST. WATER MAIN
- EXIST. SANITARY SEWER
- EXIST. STORM SEWER
- EXIST. ELEVATIONS
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- MANHOLE (NEW)
- PROPOSED C&I
- MANHOLE (EX.)
- UTILITY CLEANOUT
- CENTER LINE OF ROAD
- ROAD RIGHT OF WAY
- PROPERTY LINE
- FIRE HYDRANT
- WATER VALVE
- TURBID GLOUSE
- AT&C MARK
- PROPOSED TOP OF CURB ELEV.

SEWER INVENTORIES



BENCHMARKS

BENCHMARK #1 ELEVATION: 868.61 (NAVD 88)
 800 NAIL IN NORTH SIDE OF POWER POLE, 25' EAST OF EDGE OF ASPHALT OF HEWING ROAD, & 200' NORTH OF TOWNER ROAD.

BENCHMARK #2 ELEVATION: 876.54 (NAVD 88)
 FOUND RAILROAD SPIKE IN SOUTHWEST SIDE OF POWER POLE, APPROXIMATELY 25' SOUTH OF TOWNER ROAD & APPROXIMATELY 85' NORTHWESTERLY OF CENTERLINE OF WESTINGHOUSE #76.

BENCHMARK #3 ELEVATION: 874.16 (NAVD 88)
 TOP OF 800 GAL. OF FUEL HYDRANT IN SOUTHWEST QUAD OF TOWNER ROAD & HEWING ROAD.

PERVIOUS/IMPERVIOUS CALCULATIONS:
 TOTAL PROPERTY = 588,495 S.F. (13.51 AC.)
 397,690 S.F. GROSS PERVIOUS AREA
 - 1/2 OF DETENTION = 11,791 S.F.
 385,899 S.F. NET PERVIOUS AREA = 65.58%
 202,586 S.F. IMPERVIOUS AREA = 34.42%

| | | |
|----------------------------|--|---------------|
| REVISIONS | KEBS, INC. | NEED EXISTING |
| 3-18-18 SUBMITTAL | 2118 HASLETT ROAD, HASLETT, MI 48845 PH: 517-338-1014 FAX: 517-338-8047 | PREPARED BY |
| | Meridian Office Ph: 388-7211-8900 | |
| | New Hope Church of Haslett | |
| | PERVIOUS/IMPERVIOUS PLAN | |
| SCALE: 1" = 60' | DRAWN BY: JLP | APPROVED BY: |
| DATE: 2-29-18 | PLOTTED BY: JLP | SHEET 4 OF 6 |
| AUTHORIZED BY: | | ISS #: |
| NEW HOPE CHURCH OF HASLETT | | 9/22/19 |

SURVEY#002188NLS.TCP

FOR:
NEW HOPE CHURCH OF HASLETT

BOUNDARY & TOPOGRAPHICAL SURVEY

"VACANT LAND M-78 & NEWTON ROAD"

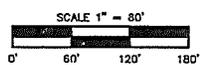
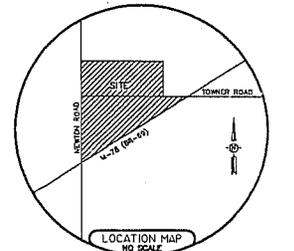
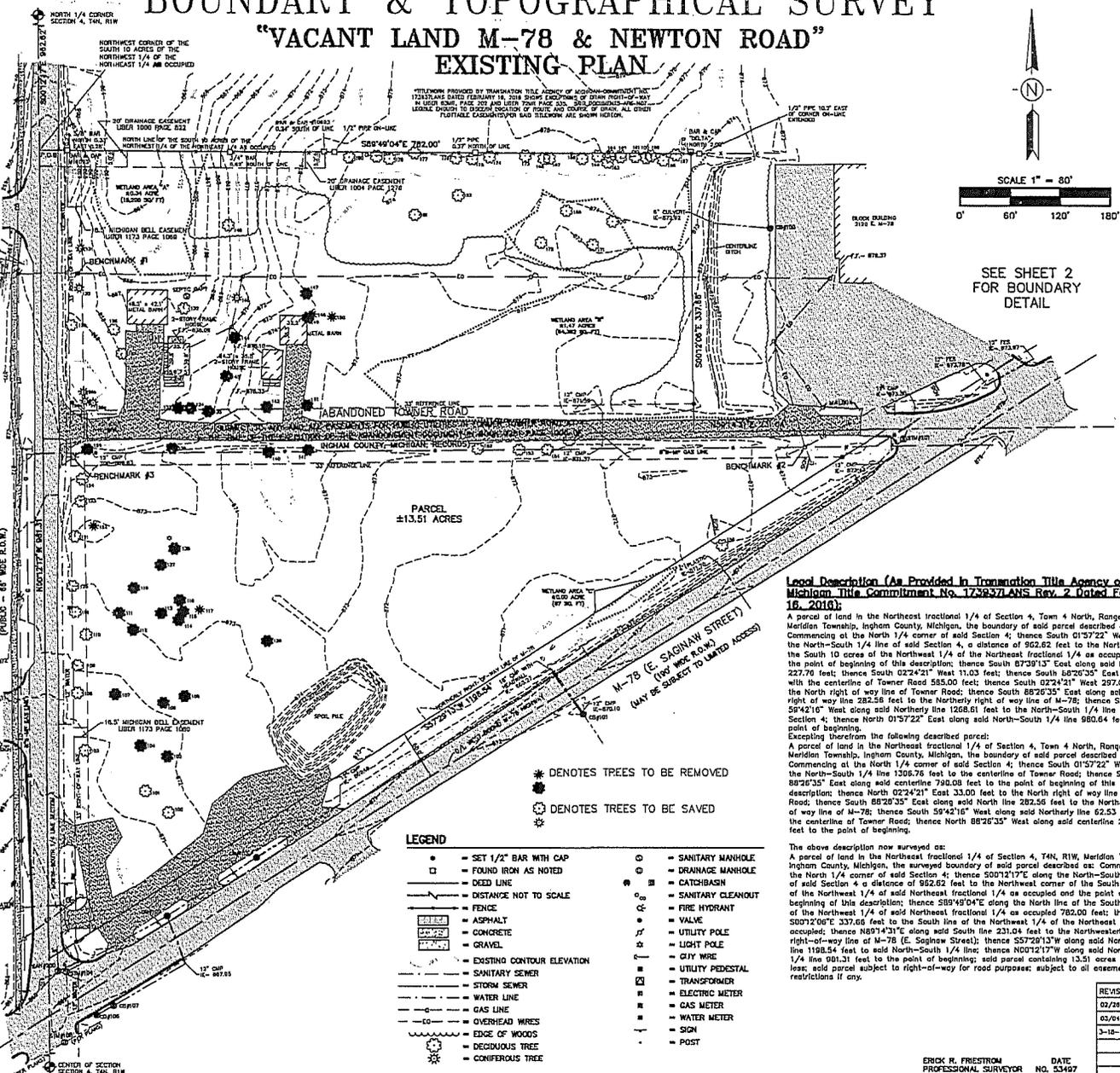
EXISTING PLAN

SURVEYOR'S NOTES:

- Survey prepared from fieldwork performed in February 2016.
- All bearings are Michigan State Plane South Zone grid bearings obtained from GPS observations using corrections obtained from the Local C.O.R.S.
- All dimensions are in feet and decimals thereof.
- By accord map location and graphic plotting only, this property lies entirely within Flood Zone "X" according to the National Flood Insurance Program, Flood Insurance Rate Map for the Charter Township of Meridian, Ingham County, Michigan, Community Panel No. 260083 0043 D, dated August 10, 2011.
- Utility information as shown was obtained from available public records and from supporting field observations, where possible, and is subject to verification in the field by the appropriate authorities prior to use for construction.
- Wellands delineation and tree identification were completed by Gary Marx of Marx Wellands, LLC on February 23, 2016. Trees and welland flagging were located by Kebs, Inc. on February 24, 2016.

Tree count: 85

| LINE | NO. | COMMENTS | BEARING | DISTANCE | AREA | PERCENT |
|------|-----|------------|--------------|----------|------|---------|
| 1 | 101 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 102 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 103 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 104 | Iron Nails | 100° 00' 00" | 1.75 | | |
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| 1 | 117 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 118 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 119 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 120 | Iron Nails | 100° 00' 00" | 1.75 | | |
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| 1 | 138 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 139 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 140 | Iron Nails | 100° 00' 00" | 1.75 | | |
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| 1 | 142 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 143 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 144 | Iron Nails | 100° 00' 00" | 1.75 | | |
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| 1 | 170 | Iron Nails | 100° 00' 00" | 1.75 | | |
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| 1 | 174 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 175 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 176 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 177 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 178 | Iron Nails | 100° 00' 00" | 1.75 | | |
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| 1 | 180 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 181 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 182 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 183 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 184 | Iron Nails | 100° 00' 00" | 1.75 | | |
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| 1 | 198 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 199 | Iron Nails | 100° 00' 00" | 1.75 | | |
| 1 | 200 | Iron Nails | 100° 00' 00" | 1.75 | | |



SEE SHEET 2 FOR BOUNDARY DETAIL

- BENCHMARKS**
- BENCHMARK #1** ELEVATION: 660.01 (NAVD 88) 800 NAIL IN NORTH SIDE OF POWER POLE, 25.2' EAST OF EDGE OF ASPHALT OF NEWTON ROAD, & 300.2' NORTH OF TOWER ROAD.
 - BENCHMARK #2** ELEVATION: 676.54 (NAVD 88) FOUND RAILROAD SPIKE IN SOUTHWEST SIDE OF POWER POLE, APPROXIMATELY 20' SOUTH OF TOWER ROAD & APPROXIMATELY 05' NORTHWESTERLY OF CENTERLINE OF WESTBOUND M-78.
 - BENCHMARK #3** ELEVATION: 673.18 (NAVD 88) TOP OF BIG ASH OF FIRE HYDRANT IN SOUTHEAST QUAD OF TOWER ROAD & NEWTON ROAD.

- SEWER INVENTORIES**
- CATCH BASIN #100** INLET: 674.27 0" PVC WEST- 672.61
 - CATCH BASIN #101** INLET: 671.47 18" RCP S302- 667.86 10" RCP N307- 657.80 12" CMP N307- 670.22
 - CATCH BASIN #102** INLET: 668.67 12" CMP NOTE- 667.67 12" CMP S607- 667.62 12" CMP S172- (UNACCESSIBLE)
 - CATCH BASIN #103** INLET: 668.18 12" CMP NOTE- 668.26 12" CMP S607- 668.17
 - STORM MANHOLE #104** RM- 668.05 12" NORTH- 664.00 12" CMP NORTH- 666.22 12" CMP NOTE- 666.21 12" SOUTH- 663.51
 - STORM MANHOLE #105** RM- 668.81 NO PIPES BOTTOM- 663.41
 - CATCH BASIN #106** INLET: 668.33 12" CMP NOTE- 668.76
 - CATCH BASIN #107** INLET: 668.05 12" CMP NOTE- 666.03 12" CMP S607- 667.05
 - STORM MANHOLE #108** RM- 673.08 12" CMP S607- 672.02 12" RCP S307- 672.02
 - SANITARY MANHOLE #200** RM- 667.04 12" NORTH- 655.81 6" PVC NOTE- 655.66 505'- 657.60 10" VCP S45W- 655.61

Local Description (As Provided in Transaction Title Agency of Michigan Title Commitment No. 1729371ANS REV. 2 Dated February 16, 2010):

A parcel of land in the Northeast fractional 1/4 of Section 4, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the boundary of said parcel described as: Commencing at the North 1/4 corner of said Section 4; thence South 01°37'22" West along the North-South 1/4 line of said Section 4, a distance of 962.62 feet to the North line of the South 10 acres of the Northeast 1/4 of the Northeast fractional 1/4 as occupied and the point of beginning of this description; thence South 87°39'13" East along said North line 227.70 feet; thence South 02°24'21" West 11.03 feet; thence South 88°26'35" East parallel with the centerline of Tower Road 585.00 feet; thence South 02°24'21" West 257.00 feet to the North right of way line of Tower Road; thence South 88°26'35" East along said North right of way line 282.56 feet to the Northern right of way line of M-78; thence South 59°42'16" West along said Northernly line 62.53 feet to the centerline of Tower Road; thence South 88°26'35" West along said centerline 229.94 feet to the point of beginning.

Excepting therefrom the following described parcel:
A parcel of land in the Northeast fractional 1/4 of Section 4, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the boundary of said parcel described as: Commencing at the North 1/4 corner of said Section 4; thence South 01°37'22" West along the North-South 1/4 line 1306.76 feet to the centerline of Tower Road; thence South 88°26'35" East along said centerline 790.08 feet to the point of beginning of this description; thence North 02°24'21" East 33.00 feet to the North right of way line of Tower Road; thence South 88°26'35" East along said North line 282.56 feet to the Northern right of way line of M-78; thence South 59°42'16" West along said Northernly line 62.53 feet to the centerline of Tower Road; thence South 88°26'35" West along said centerline 229.94 feet to the point of beginning.

The above description now surveyed as:
A parcel of land in the Northeast fractional 1/4 of Section 4, T4N, R1W, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the North 1/4 corner of said Section 4; thence South 01°37'22" West along the North-South 1/4 line of said Section 4, a distance of 962.62 feet to the North line of the South 10 acres of the Northeast 1/4 of the Northeast fractional 1/4 as occupied and the point of beginning of this description; thence South 87°39'13" East along said North line 227.70 feet; thence South 02°24'21" West 11.03 feet; thence South 88°26'35" East parallel with the centerline of Tower Road 585.00 feet; thence South 02°24'21" West 257.00 feet to the North right of way line of Tower Road; thence South 88°26'35" East along said North right of way line 282.56 feet to the Northern right of way line of M-78; thence South 59°42'16" West along said Northernly line 62.53 feet to the centerline of Tower Road; thence South 88°26'35" West along said centerline 229.94 feet to the point of beginning.

| REVISIONS | COMMENTS | DATE |
|------------|-----------|------|
| 02/26/2016 | ORIGINAL | |
| 02/04/2016 | AMENDED | |
| 3-18-16 | SUBMITTAL | |

KEBS, INC.
 2116 HASLETT ROAD, HASLETT, MI 48849
 PH: 517-253-2014 FAX: 517-253-2647
 Meridian Office
 Ph: 517-253-2620

DRAWN BY: SSF
 FIELD WORK BY: RF/AH
 SHEET 6 OF 8

ERICK R. PRIESTON DATE
 PROFESSIONAL SURVEYOR NO. 53497

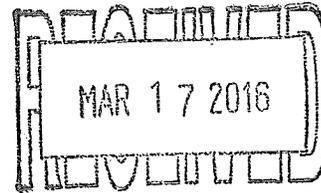


TRAFFIC IMPACT STUDY

For The Proposed

New Hope Church

Meridian Charter Township
Ingham County, MI



March, 2016

Prepared by:

**Traffic Engineering
Associates, Inc.**

PO Box 100 • Saranac, Michigan 48881
517/627-6028 FAX: 517/627-6040

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EXECUTIVE SUMMARY

Traffic Engineering Associates, Inc. (TEA) conducted a traffic impact study to determine the distribution of new traffic generated by the proposed New Hope Church in Meridian Charter Township, Ingham County, Michigan. The project site is located on the northeast corner of Saginaw Highway and Newton Road. The proposed project site is vacant land.

The proposed New Hope Church will consist of a 40,000 square foot church and parking lot. The site plan shows three (3) new driveway access points; one (1) right-in and right-out only on Saginaw Highway and two (2) full access driveways on Newton Road. The site plan also shows two (2) future additions to the building. The proposed additions will be constructed at a future time when the church growth is to the point where the space is needed; therefore, they were not included in this analysis.

TEA, Inc. conducted vehicle counts during the midweek, of a non-holiday week in the month of February, 2016, and also during a non-holiday Sunday morning at the intersection of Saginaw Highway and Newton Road. The weekday AM and PM peak hours of existing traffic on the adjoining road system are 7:15 – 8:15 AM and 4:45 – 5:45 PM, respectively, and the Sunday morning peak time is 11:30 AM – 12:30 PM.

A level of service analysis for existing traffic at the studied intersection during the weekday AM and PM peak hours, and the Sunday peak hour was conducted. All existing turning movements operate at a good level of service (LOS C or better) during both the weekday AM and PM peak hours and the Sunday peak hour.

Discussions with the Meridian Charter Township Planning Department determined that for this project a population growth rate of three percent (3.0%) should be used. All background turning movements at the studied intersection operate at a good level of service (LOS C or better) during both the weekday AM and PM peak hours and the Sunday peak hour.

The trip generation rates for the proposed New Hope Church were derived from the ITE TRIP GENERATION MANUAL (9th edition). The ITE trip generation rates for Church (Land Use Code 560) were selected as representing the proposed 40,000 square foot church. It is projected that the New Hope Church will generate 22 vehicle trips in the weekday AM peak hour, 22 vehicle trips in the weekday PM peak hour and 364 vehicle weekday trips daily. It is projected that the Sunday peak hour traffic will be 461 vehicles.

For future traffic conditions, all existing geometrics and traffic control were used. All future turning movements at the studied intersection are expected to operate at a good level of service (LOS C or better) during both the weekday AM and PM peak hours and the Sunday peak hour.

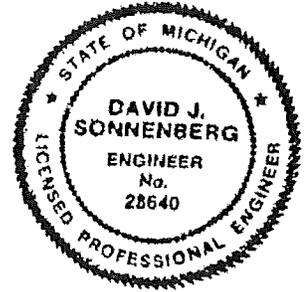
The Ingham County Road Department should consider a northbound right turn taper at both of the site driveways on Newton Road, and the Michigan Department of Transportation should



consider the construction of an exclusive westbound right turn lane on Saginaw Highway at the proposed new site driveway.

Respectfully Submitted,

David J. Sonnenberg
David J. Sonnenberg, PE



INTRODUCTION



PROJECT DESCRIPTION

The purpose of this study is to determine the impact from the new traffic generated by the proposed New Hope Church in Meridian Charter Township, Ingham County, Michigan. The project site is located on the northeast corner of Saginaw Highway and Newton Road. The proposed project site is vacant land.

The proposed New Hope Church will consist of a 40,000 square foot church and parking lot. The site plan shows three (3) new driveway access points; one (1) right-in and right-out only on Saginaw Highway and two (2) full access driveways on Newton Road. The site plan also shows two (2) future additions to the building. The proposed additions will be constructed at a future time when the church growth is to the point where the space is needed; therefore, they were not included in this analysis. The project has an anticipated completion, and full occupancy, by the summer of 2018 (two years).

SCOPE OF WORK

The scope of work contained in this report is as follows:

- Analysis of existing traffic conditions on the adjoining street system including the intersection of Saginaw Highway and Newton Road.
- Analysis of background traffic conditions for the future year (summer of 2018) volumes without the proposed New Hope Church.
- Projection of future traffic volumes to be generated by the proposed New Hope Church.
- Evaluation of the impact of future traffic with the proposed New Hope Church.
- Determination of what roadway and traffic control improvements, if any, will be needed to accommodate future (summer 2018) traffic volumes.





Aerial Photo



EXISTING CONDITIONS



ROADWAYS AND INTERSECTIONS

Roadways

Saginaw Highway is a northeast to southwest four-lane roadway with paved shoulders and a grass boulevard with a posted speed limit of 55 mph in the project area. Saginaw Highway is under the jurisdiction of the Michigan Department of Transportation (MDOT).

Newton Road is a north-south two (2) lane roadway with gravel shoulders and a sidewalk on the west side of the roadway. The posted speed limit is 45 mph. Newton Road is under the jurisdiction of the Ingham County Road Department.

Intersections

The intersection of Saginaw Highway and Newton Road is a four-way intersection, and is stop controlled with Newton Road stopping for Saginaw Highway. The east and west approaches are five (5) lanes with a center boulevard; one (1) exclusive left turn lane, one (1) thru-right lane, one thru lane and two (2) outbound lanes. The north and south approaches on Newton Road are two (2) lanes; one left-thru-right lane and one (1) outbound lane.



LAND USE

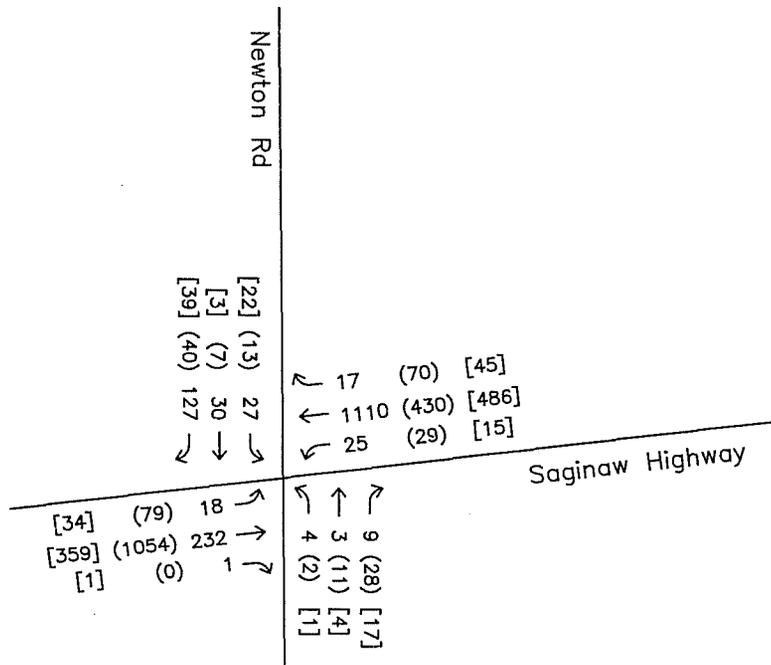
The proposed New Hope Church will be located at the northeast corner of Saginaw Highway and Newton Road. The proposed project site is vacant land. The surrounding land use is mostly residential with some commercial along Saginaw Highway east of Newton Road.

EXISTING TRAFFIC VOLUMES

TEA, Inc. conducted vehicle counts during the midweek, of a non-holiday week in the month of February, 2016, and also during a non-holiday Sunday morning at the intersection of Saginaw Highway and Newton Road.

The weekday AM and PM peak hours of existing traffic on the adjoining road system are 7:15 – 8:15 AM and 4:45 – 5:45 PM, respectively, and the Sunday morning peak time is 11:30 AM – 12:30 PM. The existing peak hour volumes are illustrated in **Figure 1**.





LEVEL OF SERVICE ANALYSIS FOR EXISTING TRAFFIC

The critical intersections defined for this study were analyzed according to the methodologies published in the most recent edition of the *Highway Capacity Manual*. The analysis determines the “Level of Service” of the intersections and is based on factors such as the number and types of lanes, signal timing, traffic volumes, pedestrian activity, etc. The level of service (LOS) is defined by average vehicle delay in seconds created by a traffic control device for a given traffic movement or intersection approach.

| Level of Service | Delay per Vehicle (seconds) | |
|------------------|-----------------------------|------------|
| | Non-Signalized | Signalized |
| A | < 10 | <10 |
| B | 10 to 15 | 10 to 20 |
| C | 15 to 25 | 20 to 35 |
| D | 25 to 35 | 35 to 55 |
| E | 35 to 50 | 55 to 80 |
| F | > 50 | > 80 |

Levels of service are expressed in a range from “A” to “F,” with “A” being the highest LOS and “F” representing the lowest LOS. Level of service “D” is considered the minimum acceptable LOS in an urban area. The above table shows the thresholds for Levels of Service “A” through “F” for non-signalized and signalized intersections, respectively.

All level of service computations contained in this report were based upon the Synchro 8 software package which is approved by the Michigan Department of Transportation (MDOT). Delay per vehicle includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

The level of service analysis for existing traffic at the subject intersection during the weekday AM and PM peak hours is summarized in **Table 1**. The level of service analysis for existing traffic at the subject intersection during the Sunday peak hour is summarized in **Table 2**.

All existing turning movements at the studied intersection operate at a good level of service (LOS C or better) during both the weekday AM and PM peak hours and the Sunday peak hour.



Table 1
Level of Service (LOS) Summary
Existing Weekday AM and PM Peak Hour Traffic

| Location | Movement | Weekday AM Peak Hour | | Weekday PM Peak Hour | |
|------------------------------------|--------------------|----------------------|-----|----------------------|-----|
| | | Avg. Delay | LOS | Avg. Delay | LOS |
| Saginaw Highway and Newton Road | EB Left | Free | - | Free | - |
| | EB Thru-Right | Free | - | Free | - |
| | WB Left | Free | - | Free | - |
| | WB Thru-Right | Free | - | Free | - |
| | NB Left-Thru-Right | 9.0 | A | 14.4 | B |
| | SB Left-Thru-Right | 22.9 | C | 10.7 | B |
| | Intersection | 3.4 | A | 1.5 | A |

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service



Table 2
Level of Service (LOS) Summary
Existing Sunday Peak Hour Traffic

| Location | Movement | Sunday Peak Hour | |
|------------------------------------|--------------------|------------------|-----|
| | | Avg. Delay | LOS |
| Saginaw Highway and Newton Road | EB Left | Free | - |
| | EB Thru-Right | Free | - |
| | WB Left | Free | - |
| | WB Thru-Right | Free | - |
| | NB Left-Thru-Right | 9.7 | A |
| | SB Left-Thru-Right | 11.2 | B |
| | Intersection | 1.3 | A |

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service



BACKGROUND CONDITIONS



BACKGROUND TRAFFIC GROWTH VOLUMES

Background traffic represents future volumes without the traffic generated by the proposed New Hope Church. The target year for completion is the summer of 2018

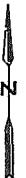
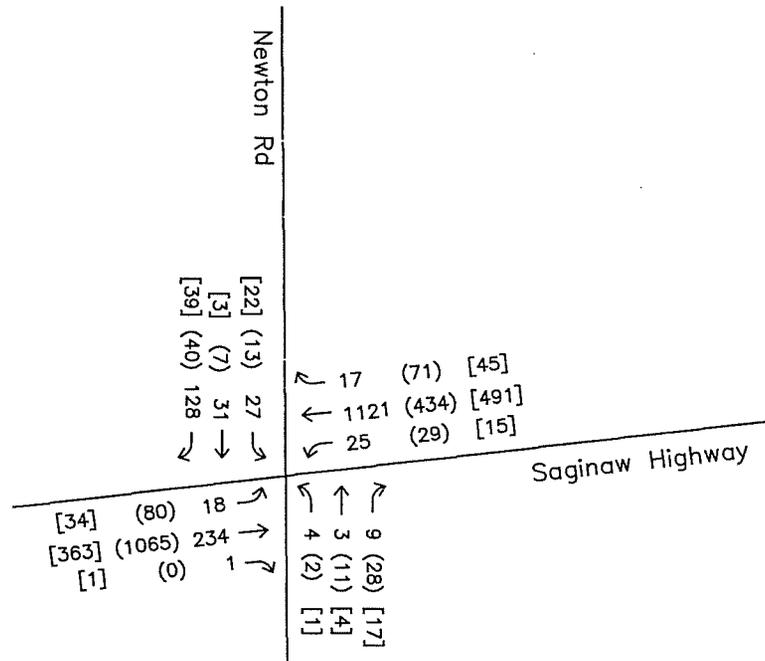
According to the US Census Bureau, the population growth for Ingham County from 2000 to 2010 was zero point five percent (0.5%) over the ten (10) year period. Meridian Charter Township population growth from 2000 to 2010 was one point five percent (1.5%). The US Census Bureau also shows that from 2010 to 2014 Meridian Charter Township had a growth rate of five point three percent (5.3%). Discussions with the Meridian Charter Township Planning Department determined that for this project a population growth rate of three percent (3.0%) would be appropriate.

The 3.0% growth rate was used to determine the annual average rate for the background period (two years to full buildout) to project traffic to the build out date of the summer of 2018. The weekday background traffic growth volumes during the peak hours are shown in **Figure 2**.

BACKGROUND DEVELOPMENT TRAFFIC VOLUMES

There were no new developments with completed traffic impact studies identified by Meridian Charter Township that would have an impact on background development traffic at the Saginaw Highway and Newton Road intersection. Therefore, background development traffic volumes were not included in this study.





TRAFFIC ENGINEERING
ASSOCIATES, INC.
PO Box 100
Saranac, MI 48881
PHONE: (517) 627-6028
FAX: (517) 627-6040

LEGEND
XXX AM Pk Hr (7:15-8:15 AM) Volumes
(XXX) PM Pk Hr (4:45-5:45 PM) Volumes
[XXX] Sunday Pk Hr (11:30-12:30) Volumes

FIGURE 2: Background Traffic – Peak Hours

DATE: March, 2016

SCALE: NTS

PAGE: 13

LEVEL OF SERVICE ANALYSIS FOR BACKGROUND TRAFFIC

For background traffic conditions, all existing geometrics and traffic control were used. The Level of service analysis for background traffic at the subject intersection during the weekday AM and PM peak hours is summarized in **Table 3**. The level of service analysis for background traffic at the subject intersection during the Sunday peak hour is summarized in **Table 4**.

All background turning movements at the studied intersection are expected to operate at a good level of service (LOS C or better) during both the weekday AM and PM peak hours and the Sunday peak hour.



Table 3
Level of Service (LOS) Summary
Background Weekday AM and PM Peak Hour Traffic

| Location | Movement | Weekday AM Peak Hour | | Weekday PM Peak Hour | |
|------------------------------------|--------------------|----------------------|-----|----------------------|-----|
| | | Avg. Delay | LOS | Avg. Delay | LOS |
| Saginaw Highway and Newton Road | EB Left | Free | - | Free | - |
| | EB Thru-Right | Free | - | Free | - |
| | WB Left | Free | - | Free | - |
| | WB Thru-Right | Free | - | Free | - |
| | NB Left-Thru-Right | 9.1 | A | 14.5 | B |
| | SB Left-Thru-Right | 23.4 | C | 10.8 | B |
| | Intersection | 3.4 | A | 1.5 | A |

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service



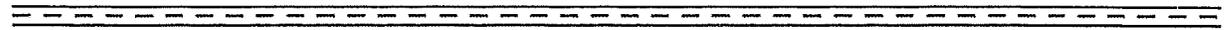
Table 4
Level of Service (LOS) Summary
Background Sunday Peak Hour Traffic

| Location | Movement | Sunday Peak Hour | |
|------------------------------------|--------------------|------------------|-----|
| | | Avg. Delay | LOS |
| Saginaw Highway and Newton Road | EB Left | Free | - |
| | EB Thru-Right | Free | - |
| | WB Left | Free | - |
| | WB Thru-Right | Free | - |
| | NB Left-Thru-Right | 9.8 | A |
| | SB Left-Thru-Right | 11.2 | B |
| | Intersection | 1.3 | A |

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service



FUTURE CONDITIONS



SITE TRAFFIC GENERATION

The proposed New Hope Church will consist of a new 40,000 square foot church and parking lot. There are also two (2) proposed future building additions on the site plan that will be approximately 20,000 square feet. The proposed additions will be constructed at a future time when the church grows to the point where the space is needed; therefore, they were not included in this analysis.

The trip generation rates for the New Hope Church were derived from the ITE TRIP GENERATION MANUAL (9th edition). The ITE trip generation rates for Church (Land Use Code 560) were selected as representing the proposed 40,000 square foot church. The ITE description of Church is as follows:

A church is a building in which a public worship services are held. A church houses an assembly hall or sanctuary; it may also house meeting rooms, classrooms and, occasionally, dining, catering, or party facilities.

It is projected that the New Hope Church will generate 22 vehicle trips in the weekday AM peak hour, 22 vehicle trips in the weekday PM peak hour and 364 vehicle weekday trips daily. It is projected that the Sunday peak hour traffic will be 461 vehicles. The projected traffic to be generated by the proposed development is summarized in **Table 5**.



Table 5
Vehicle Trip Generation Summary
Proposed New Hope Church

| ITE Code | Church (Code 560) |
|-------------------------------|------------------------------|
| Size | 40,000 sq. ft. |
| AM Peak Hour Trips | 22 |
| In | 14 |
| Out | 8 |
| PM Peak Hour Trips | 22 |
| In | 11 |
| Out | 11 |
| Weekday Daily Trips | 364 |
| Sunday Peak Hour Trips | 461 |
| In | 226 |
| Out | 235 |



FUTURE SITE TRAFFIC DISTRIBUTION

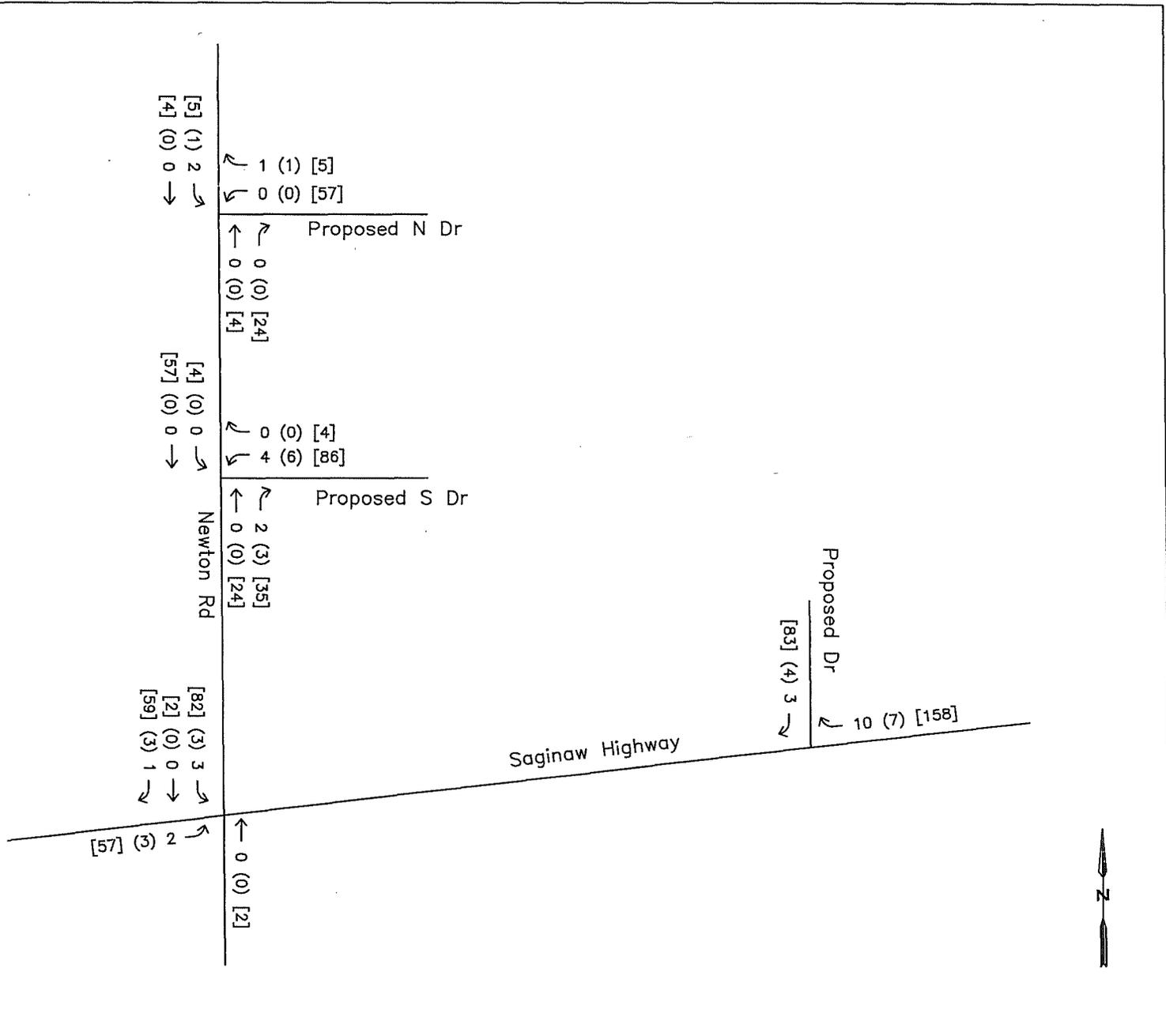
Distribution for the weekday peak hours was based on existing traffic volumes on the surrounding roadway system. Typically, weekday traffic for a church during peak hours is the office and administration staff. Therefore, the weekday traffic distribution was based on traffic volumes that entered the roadway system in the morning and exited the system in the evening.

For the Sunday peak hour, TEA was informed that approximately seventy percent (70%) of the parishioners will travel north on Marsh Road and then west on Saginaw Highway to the proposed New Hope Church; therefore, seventy percent (70%) of the Sunday traffic was distributed to and from the east on Saginaw Highway. The remaining thirty percent (30%) of the Sunday traffic was distributed based on existing traffic volumes on the surrounding roadways.

| Direction of Approach and Departure | AM Peak Hour | PM Peak Hour | Sunday Peak Hour |
|-------------------------------------|--------------|--------------|------------------|
| To/From the NORTH on Newton Road | 10% | 10% | 4% |
| To/From the SOUTH on Newton Road | 2% | 2% | 1% |
| To/From the EAST On Saginaw Highway | 72% | 62% | 70% |
| To/From the WEST On Saginaw Highway | 16% | 26% | 25% |

The distribution of traffic volumes to be generated by the proposed New Hope Church development during the future peak hours is illustrated in **Figure 3**. Adding the site traffic (Figure 3) to the background traffic (Figure 2) generates the total traffic volumes for the future weekday peak hours, which are illustrated in **Figure 4**.





TRAFFIC ENGINEERING ASSOCIATES, INC.
 PO Box 100
 Saranac, MI 48881
 PHONE: (517) 627-6028
 FAX: (517) 627-6040

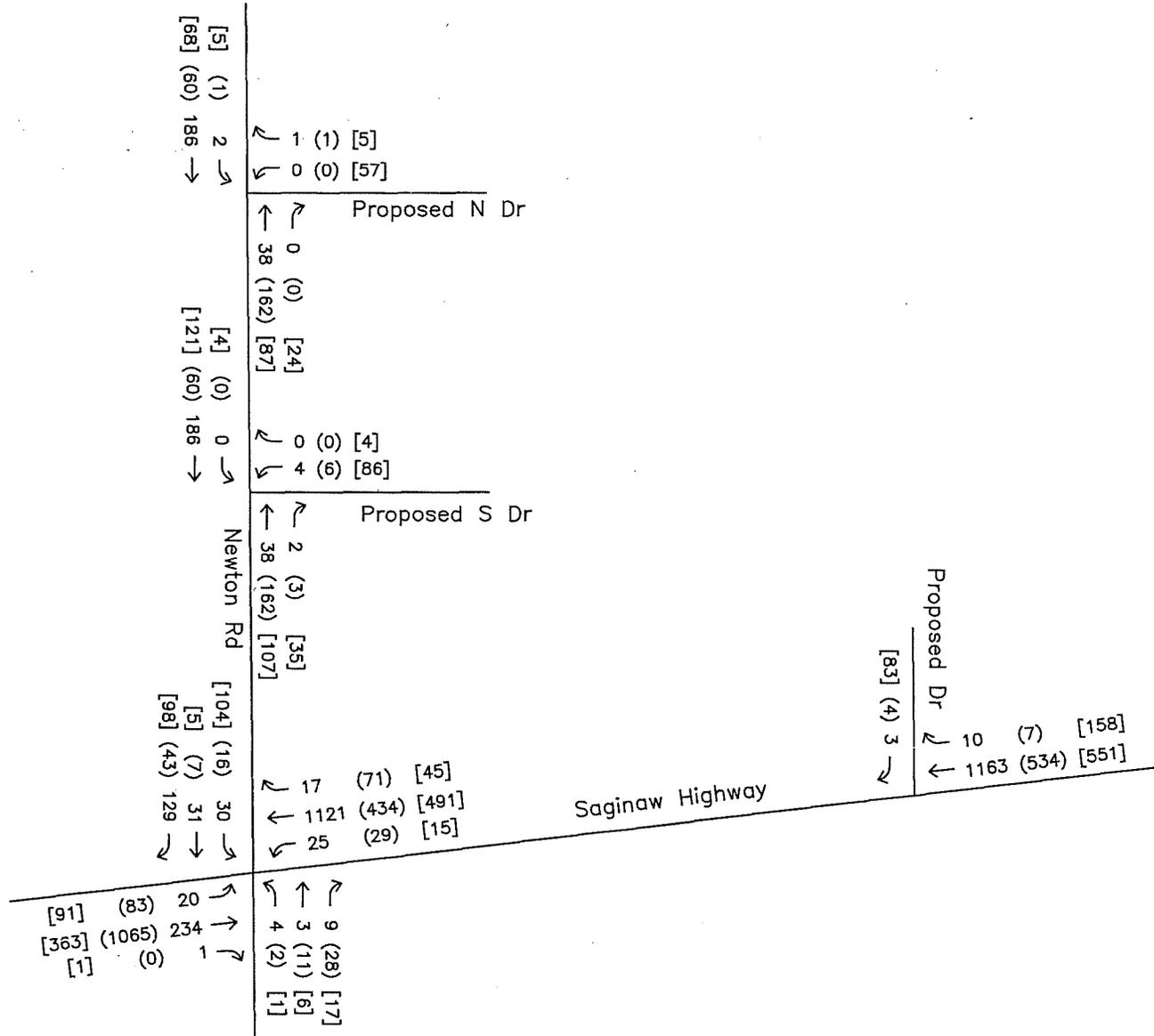
LEGEND
 XXX AM Pk Hr (7:15-8:15 AM) Volumes
 (XXX) PM Pk Hr (4:45-5:45 PM) Volumes
 [XXX] Sunday Pk Hr (11:30-12:30) Volumes

FIGURE 3: Site Traffic - Peak Hours

DATE: March, 2016

SCALE: NTS

PAGE: 21




TRAFFIC ENGINEERING ASSOCIATES, INC.
 PO Box 100
 Saranac, MI 48881
 PHONE: (517) 627-6028
 FAX: (517) 627-6040

LEGEND

XXX AM Pk Hr (7:15-8:15 AM) Volumes
 (XXX) PM Pk Hr (4:45-5:45 PM) Volumes
 [XXX] Sunday Pk Hr (11:30-12:30) Volumes

FIGURE 4: Future Traffic - Peak Hours

| | | |
|-------------------|------------|----------|
| DATE: March, 2016 | SCALE: NTS | PAGE: 22 |
|-------------------|------------|----------|

LEVEL OF SERVICE ANALYSIS FOR FUTURE TRAFFIC

For future traffic conditions, all existing geometrics and traffic control were used. The level of service analysis for future traffic at the subject intersection and proposed site driveways during the weekday AM and PM peak hours is summarized in **Table 6**. The level of service analysis for future traffic at the subject intersection and proposed site driveways during the Sunday peak hour is summarized in **Table 7**.

All future turning movements at the studied intersection and site driveways are expected to operate at a good level of service (LOS C or better) during both the weekday AM and PM peak hours and the Sunday peak hour.



Table 6
Level of Service (LOS) Summary
Future Weekday AM and PM Peak Hour Traffic

| Location | Movement | Weekday AM Peak Hour | | Weekday PM Peak Hour | |
|---|--------------------|----------------------|-----|----------------------|-----|
| | | Avg. Delay | LOS | Avg. Delay | LOS |
| Saginaw Highway and Newton Road | EB Left | Free | - | Free | - |
| | EB Thru-Right | Free | - | Free | - |
| | WB Left | Free | - | Free | - |
| | WB Thru-Right | Free | - | Free | - |
| | NB Left-Thru-Right | 9.1 | A | 14.5 | B |
| | SB Left-Thru-Right | 23.9 | C | 10.8 | B |
| | Intersection | 3.6 | A | 1.6 | A |
| Saginaw Highway and Proposed Driveway | WB Thru-Right | Free | - | Free | - |
| | SB Right | 13.9 | B | 10.1 | B |
| | Intersection | 0.0 | A | 0.1 | A |
| Newton Road and Proposed North Driveway | WB Left-Right | 8.5 | A | 9.5 | A |
| | NB Thru-Right | Free | - | Free | - |
| | SB Left-Thru | 7.3 | A | 7.7 | A |
| | Intersection | 0.1 | A | 0.1 | A |
| Newton Road and Proposed South Driveway | WB Left-Right | 10.0 | B | 10.5 | B |
| | NB Thru-Right | Free | - | Free | - |
| | SB Left-Thru | 0.0 | A | 0.0 | A |
| | Intersection | 0.2 | A | 0.2 | A |

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service



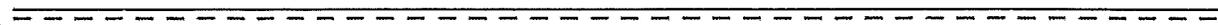
Table 7
Level of Service (LOS) Summary
Future Sunday Peak Hour Traffic

| Location | Movement | Sunday Peak Hour | |
|---|--------------------|------------------|-----|
| | | Avg. Delay | LOS |
| Saginaw Highway and Newton Road | EB Left | Free | - |
| | EB Thru-Right | Free | - |
| | WB Left | Free | - |
| | WB Thru-Right | Free | - |
| | NB Left-Thru-Right | 9.8 | A |
| | SB Left-Thru-Right | 14.3 | B |
| | Intersection | 4.2 | A |
| Saginaw Highway and Proposed Driveway | WB Thru-Right | Free | - |
| | SB Right | 12.5 | B |
| | Intersection | 1.2 | A |
| Newton Road and Proposed North Driveway | WB Left-Right | 10.2 | B |
| | NB Thru-Right | Free | - |
| | SB Left-Thru | 7.5 | A |
| | Intersection | 2.3 | A |
| Newton Road and Proposed South Driveway | WB Left-Right | 11.4 | B |
| | NB Thru-Right | Free | - |
| | SB Left-Thru | 7.6 | A |
| | Intersection | 2.5 | A |

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service



SIGNIFICANT FINDINGS



INTERSECTION IMPROVEMENT CONSIDERATIONS

Saginaw Highway and Newton

There will be no significant changes in the level of service or vehicle delay at this intersection after the New Hope Church is operational in 2018. There are no recommendations for this intersection.

DRIVEWAY ANALYSIS FOR A LEFT TURN LANE OR RIGHT TURN LANE/TAPER

Site Driveways and Newton Road

The Ingham County Road Department (ICRD) has roadway standards to determine the necessity of left turn lanes or right turn lanes/tapers at intersections. These standards are found in their "Rules, Standards and Procedures for Driveways, Banners and Parades Upon or Over Ingham County Road Commission Right of Way". Using these standards an analysis was conducted for the proposed New Hope Church driveways on Newton Road.

Using the ICRD guidelines for right turn lanes or tapers and plotting the future peak hour right turns versus two-way 24 hour volume on the ICRD graph, the results shows that the combination of right turning traffic and the 24 hour volumes justify the consideration of a northbound right turn taper on Newton Road at both of the site driveways.

Using the ICRD guidelines for left turn lanes, and plotting the future peak hour left turns versus two-way 24 hour volume on the ICRD graph, the results shows that the combination of left turning traffic and the 24 hour volumes, do not justify the installation of a southbound left turn lane or left turn passing lane on Newton Road at the two (2) site driveways.

Site Driveway and Saginaw Highway

Using the Michigan Department of Transportation (MDOT) guidelines for right turn lanes, and plotting the future peak hour right turns versus approach volume, the results show that the combination of right turning traffic and the approach volumes justify the consideration of a westbound right turn lane on Saginaw Highway at the site driveway. As Saginaw Highway is a four-lane divided highway with a grass boulevard, a left turn lane analysis was not conducted for the site driveway.

NON-MOTORIZED TRANSPORTATION

Saginaw Highway has a marked paved shoulder on both the east and west side of the roadway which can be used by bicycles. The west side of Newton Road has an existing sidewalk, but no distinguishing paved shoulders for non-motorized transportation.

The proposed New Church site plan shows a new seven (7) foot pathway along the Saginaw Highway frontage and a new five (5) foot sidewalk along the Newton Road frontage.



CONCLUSIONS

The findings of this report are as follows:

- The Ingham County Road Department should consider a northbound right turn taper at both of the site driveways on Newton Road.
- Consideration should be given to the construction of an exclusive westbound right turn lane on Saginaw Highway at the proposed new site driveway.



Martha Wyatt

From: Gary Post <gary@newhopehaslett.com>
Sent: Wednesday, April 06, 2016 2:52 PM
To: Martha Wyatt
Cc: Peter Menser; Gail Oranchak
Subject: Re: Summary of Existing Contamination and Remediation Plans
Attachments: Lifeway Architecture - Parking Ratios.pdf

Greetings, Martha:

You asked me to elaborate on the need for more parking spaces than the township ordinance calls for. The ordinance is based on a 5:1 people-to-car ratio, which may be sufficient for a retail establishment, but will not meet the needs of a church. The proposed floor plan provides for 805 seats in the auditorium. At a 5:1 ratio, that equates to 161 parking spaces, per the ordinance. We have provided for 208 parking spaces in the site plan, which may be insufficient, given the size of the auditorium. The standard recommendation from architects and engineers familiar with church planning is for a ratio closer to 2.5:1; that is, 2.5 people per car. At that ratio, our 805 seat auditorium would require 322 parking spaces. From our experience at New Hope and other churches, the 2.5 to 1 ratio is the reality we see in our parking lots from week to week. While there are those families who come to church with five in a car, there are more who come with just one or two per car. We regularly have weekend attendance of 550-600 of the 750 plus people who call New Hope their church home. The 161 parking spaces provided for under the ordinance, at a 2.5 to 1 ratio, would only allow for 402 people to attend, which is far below our current weekend attendance. We will probably hold two Sunday morning services at the new location to begin with, which will allow us to function for a time with less than 322 parking spaces, but many new churches grow as much as 25 percent in attendance during the first year after a relocation like this, so we may outgrow our 208 space parking capacity over a relatively short period of time.

In the book *Preparing to Build: Practical Tips and Experienced Advice to Prepare Your Church for a Building Program*, Author Stephen Anderson advises, "Plan for one parking space for every 2.25 people on [the church] campus at one time. This is probably more than the minimum parking required by the city or county, but will more accurately reflect *real need*. Initially a church can get away with fewer parking spaces; however, it will need to plan to provide adequate parking to meet the needs of the total design capacity of the facilities, even if the church decides to grow into it over time." (p.120)

Along the same lines, Lifeway Architecture is a division of Lifeway Christian Resources that provides architectural expertise to churches all over the U.S. In their *Rules of Thumb* site planning document (attached), they recommend, "One space for every 2.0 to 2.5 people in attendance on site at one time." I recognize that this ratio is significantly different than the 5:1 ratio prescribed in the ordinance, but we would appreciate the township's consideration for the unique needs for parking capacity that are required by a growing *church*, as opposed to a commercial establishment. I hope this explanation helps. Please contact me with any additional questions you may have.

Gary Post

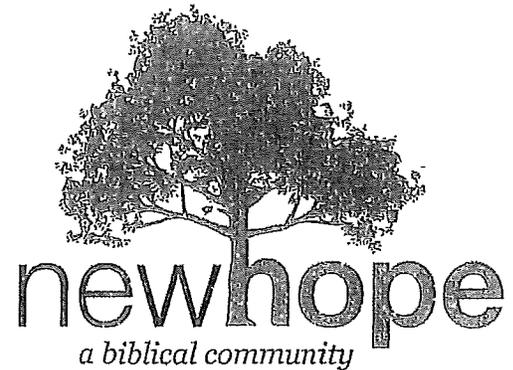
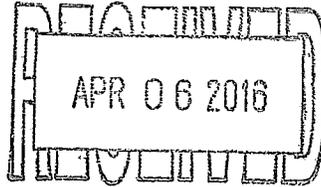
On Wed, Apr 6, 2016 at 1:41 PM, Martha Wyatt <wyatt@meridian.mi.us> wrote:

Thanks Gary.

Mr. Peter Menser
Associate Planner
Meridian Charter Township
5151 Marsh Road
Okemos, MI 48864-1198

April 6, 2016

Dear Mr. Menser:



The following summary is in response to your request for information regarding any known contamination on the property at M-78 and Newton Road that New Hope is proposing to purchase, as well as the remediation plans in place to deal with contamination issues.

AKT Peerless has done extensive investigation into environmental issues on the property at the northeast corner of M-78 and Newton Roads, first as part of their Phase I and Phase II Environmental Site Analyses (ESA) in 2007, and more recently in a March, 2016 Phase I ESA for New Hope Church. In those evaluations, AKT Peerless has identified the presence of 1,2,4-Trimethylbenzene in shallow soil "located beneath the central portion of the subject property," as well as lead in groundwater "located in the west-central portion of the subject property." (See attached sketches.) AKT Peerless has concluded that the contamination is not "migrating" elsewhere, and that there are "no currently known unacceptable exposure risks" at the property that cannot be managed through "reasonable precautions" such as:

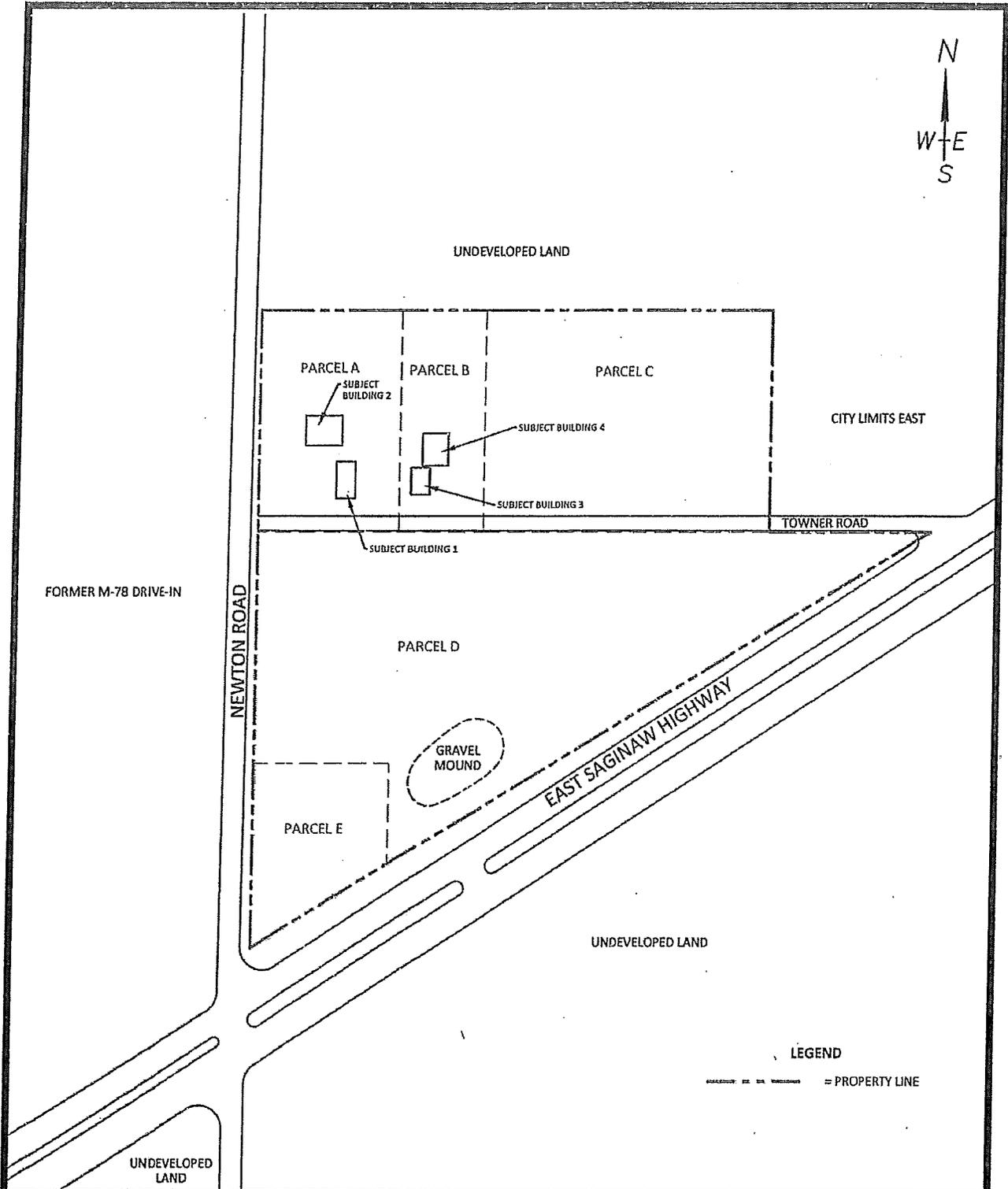
- Transporting excavated soil in the contaminated area to a Type II landfill or replacing it in the same general area on the construction site.
- Providing contractors with a Disclosure Statement to notify workers that certain contamination is present on the site, and that certain activities are restricted.
- Utilizing available public sources of water as opposed to well water.
- Utilizing available public sanitation disposal as opposed to septic tanks.

As part of their 2007 investigation, AKT Peerless also conducted an analysis of the area at the southwest corner of the property (6322 Newton Road address) because of previous reports that a gas station had been located there from 1941 to 1950. Their investigation included a geophysical survey, soil borings, groundwater monitoring wells, and the use of ground penetrating radar to locate any underground tanks. No underground storage tanks (USTs) were discovered and the soil and groundwater samples showed "no detectable concentrations above the MDEQ Part 201 Generic Residential Cleanup Criteria or applicable MDEQ Target Detection Limits (TDLs)." This is the area included in our site plan as a proposed storm water detention area.

If New Hope's proposed purchase of the property proceeds, we anticipate working with AKT Peerless to develop a Due Care Compliance Plan to guide the further development of the property. I hope this summary is helpful in understanding the environmental safeguards that we intend to follow. Please contact me if I can be of further assistance.

Sincerely,

Gary M. Post
Associate Pastor
New Hope Church



AKT PEERLESS

ILLINOIS MICHIGAN OHIO GEORGIA

www.aktpeerless.com

SUBJECT PROPERTY MAP

FIVE PARCELS
 MERIDIAN TOWNSHIP, MICHIGAN
 PROJECT NUMBER : 11061B-1-17

DRAWN BY: OGO
 DATE: 02/26/2016

0 100 200
 SCALE: 1" = 200'

FIGURE 2



| | |
|------------------------|---------------|
| B-4 (2.0-4.0') | |
| 2/19/2007 | |
| 1,2,4-Trimethylbenzene | 700 ug/Kg (1) |

SUBJECT BUILDING 2

B-7/B-1W

B-3/B-3W

B-1/B-1W

B-2/B-3W

SUBJECT BUILDING 1

NEWTON ROAD

LEGEND

- - - - - = PROPERTY LINE
- ⊗ = SOIL BORING

CRITERIA NOTE

(1) - Exceeds Groundwater Surface Water Interface Protection Criteria and RBSTs

AKT PEERLESS

ILLINOIS MICHIGAN OHIO GEORGIA
www.aktpeerless.com

**SITE MAP WITH SOIL RESULTS EXCEEDING
MDEQ NRCC**

2246 TOWNER ROAD
MERIDIAN TOWNSHIP, MICHIGAN
PROJECT NUMBER : 11061B-3-27

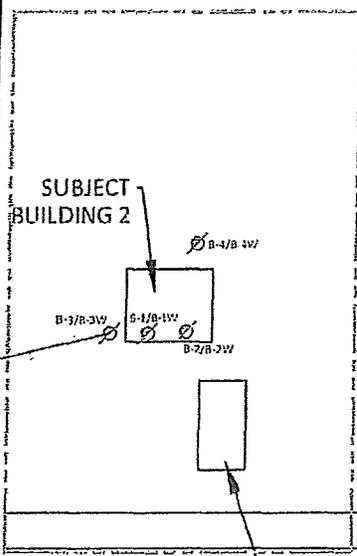
DRAWN BY: OGO
DATE: 03/18/2016

0 50 100
SCALE: 1" = 100'

FIGURE 3



NEWTON ROAD



| |
|----------------|
| B-3W |
| 2/19/2007 |
| Lead 7 ug/L(1) |

LEGEND

- - - - - = PROPERTY LINE
- ⊗ = SOIL BORING

CRITERIA NOTE

(1) - Exceeds Non-Residential Drinking Water Criteria and RBSLs



ILLINOIS MICHIGAN OHIO GEORGIA
www.aktpeerless.com

**SITE MAP WITH GROUNDWATER RESULTS
EXCEEDING MDEQ NRCC**
2246 TOWNER ROAD
MERIDIAN TOWNSHIP, MICHIGAN
PROJECT NUMBER : 11061B-3-27

DRAWN BY: OGO
DATE: 03/18/2016

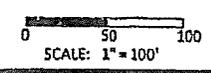


FIGURE 4

Sec. 86-126. Review criteria.

Applications for special use permits shall be reviewed for compliance with the following standards and requirements, where applicable. An application for a special use permit that complies with all the following standards and requirements in this chapter may be approved. The applicant shall assure that:

- (1) The project is consistent with the intent and purposes of this chapter.
- (2) The project is consistent with applicable land use policies contained in the township's comprehensive development plan of current adoption.
- (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.
- (4) The project will not 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.
- (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.
- (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.
- (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.
- (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.

(Code 1974, § 81-3.2(F))

Sec. 86-127. Conditions.

The planning commission may require additional conditions, beyond those specified for the particular special use in this chapter, necessary to accomplish the purposes and intent of this chapter as follows:

- (1) Site conditions including, but not limited to, the following:
 - a. Special yards, open spaces, or buffers.

**Special Use Permit #16041
(Meridian Charter Township)
April 8, 2016**

APPLICANT: Meridian Charter Township
Department of Public Works
5151 Marsh Rd
Okemos, MI 48864

STATUS OF APPLICANT: Charter Township of Meridian

REQUEST: SUP to place 123 cubic yards of fill in the 100-year floodplain of the Smith Consolidated Drain.

CURRENT ZONING: RD (Multiple Family Low Density), RX (One and Two Family Residential) and RR (Single Family Rural Residential).

LOCATION: Approximately 1,000 feet west of Okemos Rd, and 2,800 feet north of Jolly Road.

AREA OF SUBJECT SITE: Approximately 61 acres total, with 2.98 acres impacted.

EXISTING LAND USE: Undeveloped

EXISTING LAND USES IN AREA:
N: Knob Hill Apartments, and undeveloped
S: Undeveloped
E: Knob Hill Apartments
W: Stonebrook Estates, and undeveloped

CURRENT ZONING IN AREA:
N: RD (Multiple Family Low Density)
S: PO (Professional and Office)
E: RD (Multiple Family Low Density) and RX (One and Two Family Residential)
W: RR (Single Family Rural Residential)

FUTURE LAND USE DESIGNATION: Residential 5.0-8.0 du/acre and Residential 8.0-14.0 du/acre

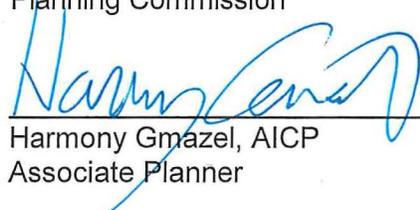
FUTURE LAND USE MAP:
N: Residential 8.0-14.0 du/acre
S: Office and Residential 5.0-8.0 du/acre
E: Residential 5.0-8.0 du/acre and Residential 8.0-14.0 du/acre
W: Residential 1.25-3.5 du/acre, Residential 8.0-14.0 du/acre and Residential 3.5-5.0 du/acre.

CHARTER TOWNSHIP OF MERIDIAN

MEMORANDUM

TO: Planning Commission

FROM:

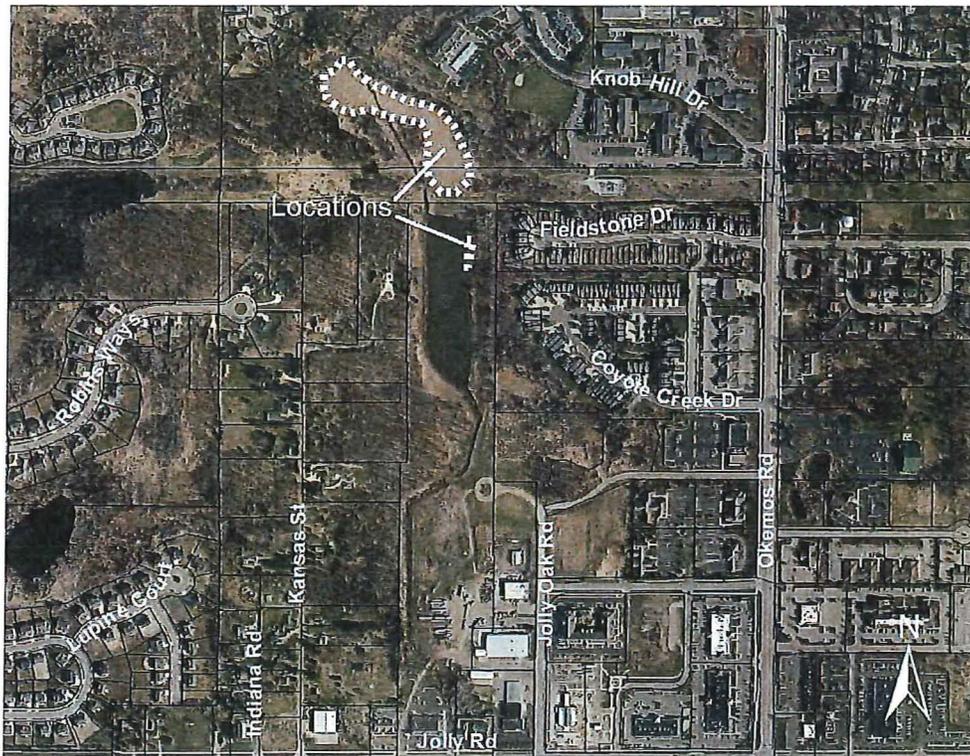

Harmony Gmazel, AICP
Associate Planner

DATE: April 6, 2016

RE: Special Use Permit #16041 (Meridian Charter Township), to work within the 100-year floodplain of the Smith Drain, associated with improvements to the drain.

Meridian Charter Township is applying to fill 123 cubic yards and cut 19,452 cubic yards in the floodplain associated with improvements to the Smith Consolidated Drain. The site is located in Section 33 of the Township, approximately 1,000 feet west of Okemos Road and 2,800 feet north of Jolly Road. The site is undeveloped. This request to work within a floodplain is running concurrently with Wetland Use Permit #16-01 to enhance Township Regulated Wetland 33-2. A complete explanation of the Smith Drain project is attached to this memo. Fill in the floodplain is associated with the wetland mitigation to be located on the east side of the current Smith Drain pond. The cut is associated with the excavation of two areas located on the east and west sides of the Smith Drain.

LOCATION MAP

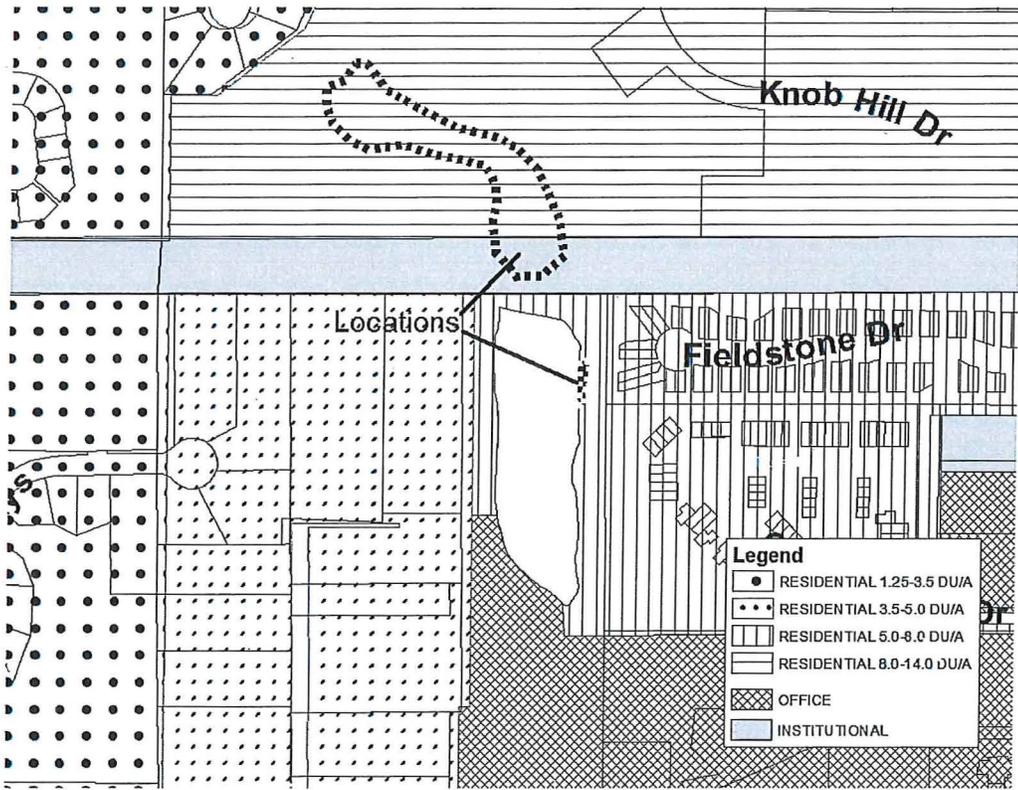


A Meridian Township cross-country pathway is located at the north end of the project area, a small portion of which, near a footbridge, will be temporarily impacted with 0.02 acres of fill to accommodate construction equipment.

Master Plan

The 2005 Master Plan designates the subject site and the surrounding areas to the east as Residential 5.0-8.0 du/acre and Residential 8.0-14.0 du/acre. The site is surrounded by Residential 3.5-5.0 du/acre and Residential 1.25-3.5 du/acre to the west. The gray area is an existing Consumers Energy right-of-way, which is planned as institutional.

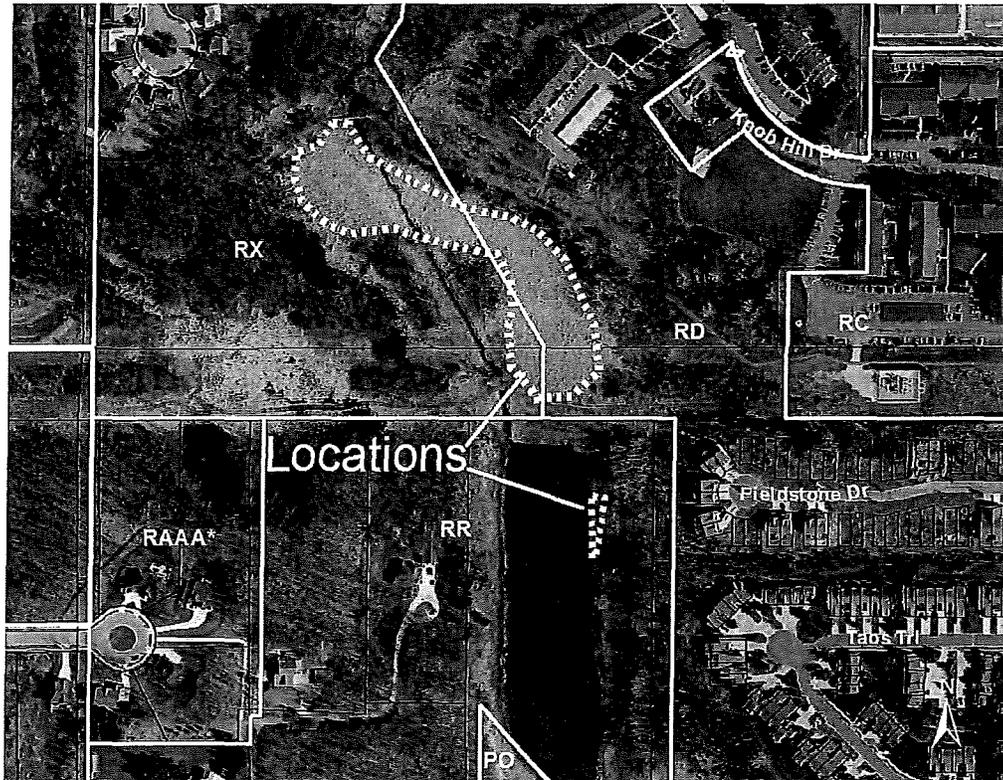
FUTURE LAND USE MAP



Zoning

The site is zoned RD (Multiple Family Low Density), RX (One and Two Family Residential) and RR (Single Family Rural Residential).

ZONING MAP



Physical Features

Currently the site is undeveloped with the Smith Drain dissecting the site flowing from south to north. The site elevation is relatively level, ranging from approximately 860 feet to 865 feet above mean sea level. Vegetation consists of mainly reed canary grass.

Floodplain

The entire project area is located within a 100-year floodplain and related floodway. The applicant proposes to fill in 123 cubic yards (the 0.05 project area near the existing pond) and provide a compensating cut of 19,452 cubic yards (2.9 acres of wetland excavation).

A 100-year floodplain (floodway fringe) is present on the site, indicated by the gray area in the map below. The elevation of the floodplain is 866 feet above mean sea level. The narrow floodway is denoted by the black hatching below.

FLOODPLAIN MAP



Public Utilities and Storm Water Management

The Smith Consolidated Drain flows south to north through this project area. The Ingham County Drain Commissioner's Office has applied to the Michigan Department of Environmental Quality with a Joint Permit to conduct work within a wetland/floodplain. Appropriate soil erosion and sedimentation control measures will be reviewed by all local, state and county authorities.

Staff Analysis

This staff analysis refers to the Proposed Site Map dated February 17, 2016 and the Proposed Meridian Charter Township Wetland Mitigation Site, dated February 17, 2016. Both maps depict details of the proposed work within the floodplain. In summary, the applicant proposes to do the following activities:

SUP #16041 (Meridian Charter Township)
Planning Commission (4/11/16)
Page 5

- Excavation activities (cut) at two locations within the floodplain to create stormwater detention and wetland enhancement. Fill activities at one location on the east edge of the existing pond. Temporary fill activities at the footbridge on the north end of the project area.
- The proposed cut/fill ratio, based on 19,452 cubic yards of cut to 123 cubic yards of fill greatly exceeds the a 1:1 ratio requirement stated in Section 86-436 (Conservancy District) of the Ordinance.

Township regulations require a special use permit to excavate within the 100-year floodplain. The standards for review of the project are contained in Section 86-126 and Section 86-436 of the Code of Ordinances. Specific guidance for review of applications for work in the floodway fringe can be found in Section 86-436(I). Issues to consider include whether the use will be adverse to the purpose of the zoning district or damaging to the public health, safety, or welfare, or impose a financial burden upon the community.

Planning Commission Options

The Planning Commission may approve, approve with conditions or deny the special use permit. A resolution will be provided for a decision at a future meeting.

Attachments

1. Application and Attachments
2. Site Plans, dated February 17, 2016

**CHARTER TOWNSHIP OF MERIDIAN
DEPARTMENT OF COMMUNITY PLANNING AND DEVELOPMENT
5151 MARSH ROAD, OKEMOS, MI 48864
PLANNING DIVISION PHONE: (517) 853-4560, FAX: (517) 853-4095**

SPECIAL USE PERMIT APPLICATION

Before submitting this application for review, an applicant may meet with the Director of Community Planning and Development to discuss the requirements for a special use permit and/or submit a conceptual plan for review to have preliminary technical deficiencies addressed prior to submittal of the application. If the property or land use is located in the following zoning districts RD, RC, RCC, RN then the applicant must meet with the Planning Director to discuss technical difficulties before filing a formal application.

Part I

- A. Applicant Ingham County Drain Commissioner Represented by Meridian Charter Township
Address of Applicant 5151 Marsh Rd. Okemos, MI 48864 Telephone - Work 517-853-4440
Email perry@meridian.mi.us
Interest in property (circle one): Other
(Please attach a list of all persons with an ownership interest in the property.)
- B. Site address / location / parcel number 1,000 ft west of Okemos Rd/2800 ft north of Jolly Rd.
Legal description (please attach if necessary)33-100-024 & 33-100-006 ATTACHED
Current zoning RD/RX Corresponding ordinance number: 86-436
Use for which permit is requested / project: Smith Drain Improvements/Work in the 100-year floodplain
- C. Developer (if different than applicant) Patrick E. Lindemann, Ingham Co. Drain Commissioner Address 707 Buhl, PO Box 220, Mason MI 48854 Telephone – Work 517-676-8395 Fax 517-676-8364
- D. Architect, Engineer Planner or Surveyor responsible for design of project if different from applicant:
Name Mike Nurse, Streamside Ecological Services
Address 3940 Timpson Ave, SE. Lowell, MI 49331 Telephone – Work 586-764-9366
Email- mnurse@streamsideeco.com
- E. Acreage of all parcels in the project: Gross Approx 61
- F. Explain the project and development phases: Improvements to Smith Drain (123 CY of fill and 19,452 CY of compensating cut) DETAILS ATTACHED
- G. Total number of:
Existing: structures _____ bedrooms _____ offices _____ parking spaces _____ carports _____
garages _____ Proposed: structures _____ bedrooms _____ offices _____ parking spaces _____ carports _____
garages _____
- H. Square footage: existing buildings _____ proposed buildings _____
Usable Floor area: existing buildings _____ proposed buildings _____
- I. If employees will work on the site, state the number of full time and part time employees working per shift and hours of operation:
- J. Existing Recreation: Type _____ Acreage _____
Proposed Recreation: Type _____ Acreage _____

Existing Open Space: Type _____ Acreage _____

Proposed Open Space: Type _____ Acreage _____

K. If Multiple Housing:

Total acres of property _____

Acres in floodplain _____ Percent of total _____

Acres in wetland (not in floodplain) _____ Percent of total _____

Total dwelling units _____

Dwelling unit mix: Number of single family detached: for Rent _____ Condo _____

Number of duplexes: for Rent _____ Condo _____

Number of townhouses: for Rent _____ Condo _____

Number of garden style apartments: for Rent _____ Condo _____

Number of other dwellings: for Rent _____ Condo _____

L. The following support materials must be submitted with the application:

1. Nonrefundable Fee.
2. Legal Description of the property.
3. Evidence of fee or other ownership of the property.
4. Site Plan containing the information listed in the attachment to this application.
5. Architectural sketches showing all sides and elevations of the proposed buildings or structures, including the project entrance, as they will appear upon completion. The sketches should be accompanied by material samples or a display board of the proposed exterior materials and colors.
6. A Traffic Study, prepared by a qualified traffic engineer, based on the most current edition of *Evaluating Traffic Impact Studies: A Recommended Practice for Michigan Communities*, published by the State Department of Transportation.
 - a. A traffic assessment will be required for the following:
 - 1) New special uses which could, or expansion or change of an existing special use where increase in intensity would, generate between 50 to 99 directional trips during a peak hour of traffic.
 - 2) All other special uses requiring a traffic assessment as specified in the Township Code of Ordinances, Chapter 86, Article IV, Division 2.
 - b. A traffic impact study will be required for the following:
 - 1) New special uses which would, or expansion or change of an existing special use where increase in intensity would, generate over 100 directional trips or more during a peak hour of traffic, or over 750 trips on an average day.
 - 2) All other special uses requiring a traffic assessment as specified in the Township Code of Ordinances, Chapter 86, Article IV, Division 2.
7. Natural features assessment which includes 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, waterbodies, identified groundwater vulnerable areas, slopes greater than 20 percent, ravines, and vegetative cover types with 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.

The natural features assessment may be waived by the Director of Community Planning and Development in certain circumstances.

- M. Any other information specified by the Director of Community Planning and Development which is deemed necessary to evaluate the application.
- N. In addition to the above requirements, for zoning districts, **RD, RC, RCC, RN, and CV** and **Group Housing Residential Developments** the following is required:
1. Existing and proposed contours of the property at two foot intervals based on United States Geological Survey (USGS) data.
 2. Preliminary engineering reports in accordance with the adopted Township water and sewer standards, together with a letter of review from the Township Engineer.
 3. Ten copies of a report on the intent and scope of the project including, but not limited to: Number, size, volume, and dimensions of buildings; number and size of living units; basis of calculations of floor area and density and required parking; number, size, and type of parking spaces; architectural sketches of proposed buildings.
 4. Seven copies of the project plans which the Township shall submit to local agencies for review and comments.
- O. In addition to the above requirements, a special use application in zoning district **RP** requires the following material as part of the site plan:
1. A description of the operations proposed in sufficient detail to indicate the effects of those operations in producing traffic congestion, noise, glare, air pollution, water pollution, fire hazards or safety hazards or the emission of any potentially harmful or obnoxious matter or radiation.
 2. Engineering and architectural plans for the treatment and disposal of sewerage and industrial waste tailings, or unusable by-products.
 3. Engineering and architectural plans for the handling of any excessive traffic congestion, noise, glare, air pollution, or the emission of any potentially harmful or obnoxious matter or radiation.
- P. In addition to the above requirements, a special use application for a use in the Floodway Fringe of zoning district **CV** requires the following:
1. A letter of approval from the State Department of Environmental Quality.
 2. A location map including existing topographic data at two-foot interval contours at a scale of one inch representing 100 feet.
 3. A map showing proposed grading and drainage plans including the location of all public drainage easements, the limits, extent, and elevations of the proposed fill, excavation, and occupation.
 4. A statement from the County Drain Commissioner, County Health Department, and Director of Public Works and Engineering indicating that they have reviewed and approved the proposal.
- Q. In addition to the above requirements, a special use application for a use in the Groundwater Recharge area or zoning district **CV** requires the following:
1. A location map including existing topographic data at two-foot interval contours.
 2. A map showing proposed grading and drainage plans including the location of all public drainage easements, the limits and extent of the proposed fill, excavation, and occupation.
 3. A statement from the County Drain Commissioner, County Health Department, and Director of Public Works and Engineering indicating that they have reviewed and approved the proposal.

- R. In addition to the above requirements, the Township Code of Ordinances, Article VI, should be reviewed for the following special uses: group housing residential developments, mobile home parks, nonresidential structures and uses in residential districts, planned community and regional shopping center developments, sand or gravel pits and quarries, sod farms, junk yards, sewage treatment and disposal installations, camps and clubs for outdoor sports and buildings greater than 25,000 square feet in gross floor area.

Part II

SUP REQUEST STANDARDS Township Code of Ordinances, Section 86-126

Applications for Special Land Uses will be reviewed with the standards stated below. An application that complies with the standards stated in the Township Ordinance, conditions imposed pursuant to the Ordinance, other applicable Ordinances, and State and Federal statutes will be approved. Your responses to the questions below will assist the Planning Commission in its review of your application.

- (1) The project is consistent with the intent and purposes of this chapter. **This project would positively impact the floodway/floodplain because its proposed to remove a larger volume of material than it would import.**
- (2) The project is consistent with applicable land use policies contained in the Township's Master Plan of current adoption. **This project will protect and enhance the usefulness of the Smith Drain and is consistent with Township land use policies related to floodplain issues.**
- (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 vicinity of the area includes wetland areas, residential and commercial uses. This project will not change the essential character of the area.**
- (4) The project will not adversely affect or be hazardous to existing neighboring uses. **This project would enhance the neighboring uses, not be a hazard to them.**
- (5) The project will not be detrimental to the economic welfare of surrounding properties or the community. **The surrounding properties should be positively affected economically by this project.**
- (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. **This is not applicable to the proposed project.**
- (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 storm water are proposed, they shall be properly designed and capable of handling the longterm needs of the proposed project. **This is not applicable to the proposed project.**
- (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. **This project will not involve the above said uses, nor will it produce the hazards listed above.**
- (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 should positively impact the ecosystem.**

Part III

I (we) hereby grant permission for members of the Charter Township of Meridian's Boards and/or Commissions, Township staff member(s) and the Township's representatives or experts the right to enter onto the above described property (or as described in the attached information) in my (our) absence for the purpose of gathering information including but not limited to the taking and the use of photographs.

Yes No (Please check one)

By the signature(s) attached hereto, I (we) certify that the information provided within this application and accompanying documentation is, to the best of my (our) knowledge, true and accurate



Signature of Applicant

DERIC N. PERRY
Type/Print Name

Fee: _____

3/29/14
Date

Received by/Date: Harmony Gmazel 3.29.16

**Special Use Permit Application Attachment
Site Plan Requirements Per Section 86-124(c)(4)**

- a. A site plan, drawn to a legible scale, containing the following information where applicable:
 - a. Boundaries of the subject property.
 - b. Total area of the subject property.
 - c. Location of all existing and proposed structures.
 - d. Approximate location and distance of all structures within 100 feet of the subject property.
 - e. Uses of existing and proposed buildings, on the subject site.
 - f. Proposed means of vehicular and pedestrian ingress and egress to the subject property.
 - g. Public and private roads and streets, rights-of-way, and easements, indicating names and widths, whichabut or cross the site.
 - h. Existing and proposed parking spaces, and vehicular and pedestrian circulation patterns.
 - i. The buildable area of the subject property indicating all required setbacks, yards and open space.
 - j. Zoning classification of the subject and adjacent properties.
 - k. Existing and proposed fencing, screening, landscaping, and buffers.
 - l. Location and sizes of existing utilities including power lines and towers, both above and below the ground.
 - m. Amount and location of all impervious surfaces.
 - n. The verified boundaries of all natural water features and required setback lines.



February 23, 2016

Mark Kieselbach
Director of Community Planning and Development
Charter Township of Meridian
5151 Marsh Rd.
Okemos MI 48864-1198

RE: Wetland Use Permit Application, Ingham County Drain Commissioner, Smith Consolidated Drain

Dear Mr. Kieselbach:

Enclosed please find a complete permit application requesting approvals to enhance an existing low quality wetland as part of a stormwater management project on the Smith Consolidated Drain. The escrow fee required for review will be submitted upon your request.

The proposed work is the result of a petition to the Ingham County Drain Commissioner by both Meridian and Alaiedon Townships that was found necessary by a statutory Board of Determination. The primary focus of this project is to alleviate flooding near Jolly Road.

As part of the project, the Drain Commissioner must address an immediate and urgent need to replace a failing pipe for the Smith Consolidated Drain beneath Jolly Road. However, coincidental to replacement of the pipe, downstream peak flows must be detained. This detention is proposed within the wetlands and an existing stormwater basin (the subjects of this permit application). Therefore the permit for the wetland enhancement, and structures in the Drain, is integral to replacing the pipe beneath Jolly Road.

The existing pipe has collapsed three times within the last four years, fortunately not yet within the road. This has resulted in serious concern regarding the imminent failure of the pipe and the road which is traveled daily by visitors and commuters to and from Michigan State University, Okemos High School, surrounding businesses, and residential neighborhoods. As such we are requesting an expedited review of this application.

We believe the proposed project represents the most ecologically sensitive alternative to accomplish the work necessary. Impact to woody vegetation has been avoided in the wetland enhancement areas and impacts to native and non-invasive vegetation has been minimized both within and adjacent to the wetlands.

4. Project Purpose, Use and Alternatives

Describe the purpose of the project and its intended use.

The purpose of this project is to address an immediate and urgent need to replace a failing pipe for the Smith Drain beneath Jolly Road. The existing pipe has collapsed three times within the last four years, fortunately not within the road. The existing pipe is 540 feet long of which a portion is 60" CMP pipe, a portion is 72" multi-plate steel pipe, and a portion is 48" by 76" concrete elliptical pipe. Visual inspection of the 540 feet of enclosed pipe has revealed that numerous portions of the 60" diameter CMP pipe had complete section loss along the flow line and that the 72" diameter multi-plate steel pipe (underneath Jolly Road) had numerous 2-3-inch diameter holes in the pipe. This has resulted in serious concern regarding the imminent failure of the pipe and the road which is traveled daily by visitors (ADT: 17,000) and commuters to and from Michigan State University, Okemos High School, surrounding businesses, and residential neighborhoods.

Recent (2012) repairs within this enclosed pipe that included attaching riveted steel plate patches on the failing pipe, were either missing or were pulled away from the pipe and were no longer sealing the pipe. The downstream section of the 5-foot diameter CMP pipe collapsed at Value Tire (located at the Northwest corner of the Jolly Road and Okemos Road intersection) and another sinkhole formed adjacent to their parking lot. This is the third sinkhole in this enclosed portion of the drain. The likelihood of more sinkholes forming is high as the pipe is significantly impaired. The deteriorated nature of the pipe beneath Jolly Road has necessitated an accelerated timeline for improvements as sinkholes occurring over the culvert represent a danger to motorists and pedestrians.

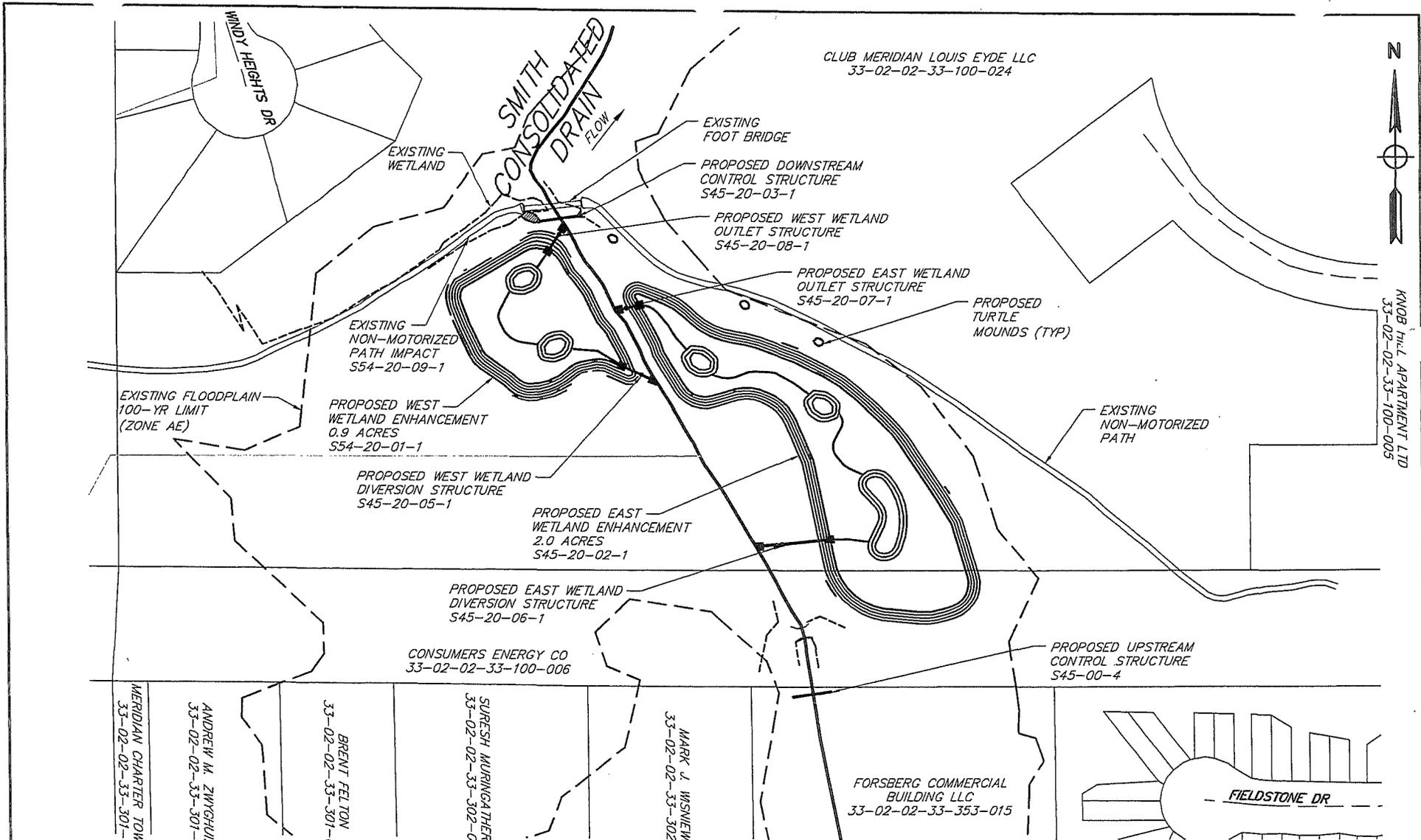
A hydraulic study of the Smith Consolidated Drain was constructed to evaluate the impacts of replacing this pipe. The model shows that the current enclosure of the drain at Jolly Road does not have the capacity to fully pass storm flows and restricts conveyance causing flooding south of Jolly Road. There is significant head loss, or back up water, at the Jolly Road crossing starting with storms as small as a 2 year event. Due to the undersized culvert, flooding has occurred in the commercial area south of Jolly Road during both the July 2011 storm and the August 2015 storm.

The Ingham County Drain Commissioner is in receipt of a two separate petitions to improve the Smith Consolidated Drain from Meridian Charter Township and Alaeidon Township. A Board of Determination was held on December 15, 2015 where it was determined that maintenance and improvements to the Smith Consolidated Drain are necessary and conducive to the public health, convenience or welfare.

The project proposes the replacement of the existing failing and undersized pipe with an 68" x 106" elliptical reinforced concrete pipe. Increasing conveyance downstream will require mitigation of those increased peak flows and higher hydraulic grade lines to ensure no detrimental impacts downstream. Therefore, management of flows downstream is necessary to alleviate the flooding, and manage the increased peak flows.

To manage downstream flows, the Drain Commissioner proposes to utilize an existing in-stream detention pond, and wetlands north of the pond to store water. The project intends to improve use of the in-stream pond (currently not providing originally intended detention for the system) by installing a weir structure that passes normal and routine storm flows, but detains stormwater during larger storm events.

Stormwater detention is also proposed within wet meadow wetlands north of the pond by installing a similar structure at the downstream end of the wetlands. Additional detention is proposed through excavation of the wetland and connecting flows that exceed the ordinary high water mark of the Drain. The purpose to the work in this area is not only to manage flows, but also to enhance the functions and values of the wetland; currently a low quality wet meadow dominated by a monotypic stand of reed canary grass (*Phalaris arundinacea*).



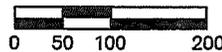
NOTE:

TEMPORARY STOCKPILING WILL OCCUR DURING CONSTRUCTION AND WILL BE ULTIMATELY HAULED AWAY TO UPLAND NON FLOODPLAIN DEPOSIT SITE

SEE NOTIFICATION LIST FOR NEIGHBORING PROPERTY OWNERS

SESC MEASURES WILL BE PERFORMED ACCORDING INGHAM COUNTY DRAIN OFFICE (APA) STANDARDS AND APPROVED PLAN

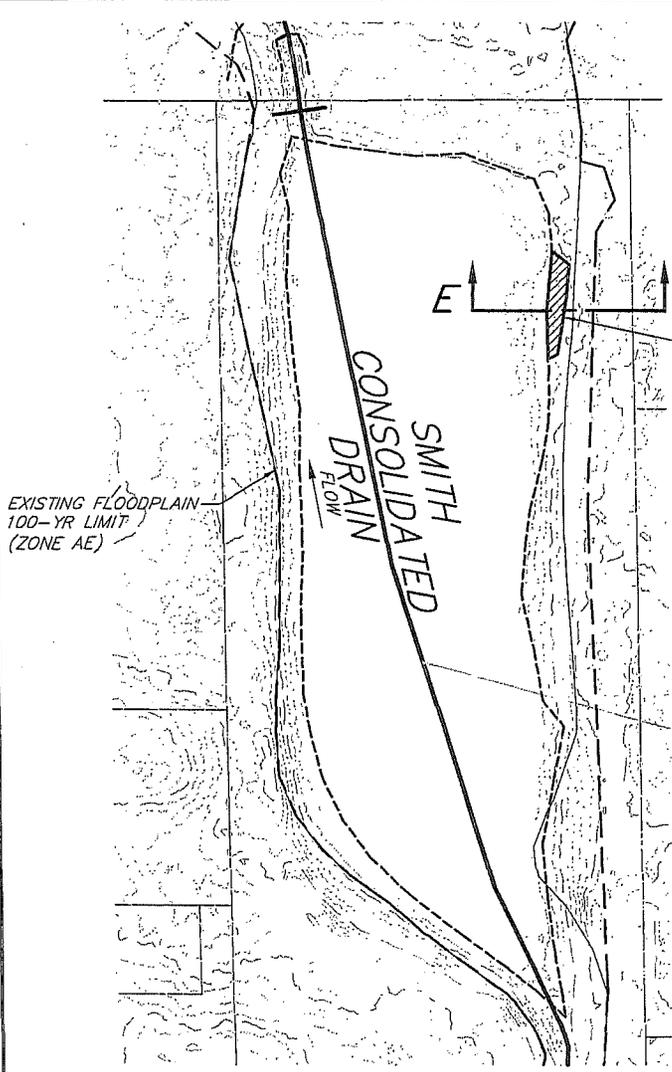
100YR FLOOD PLAIN ELEVATION = 865.9
(SOURCE: FEMA FIS)



REFERENCE DATUM NAVD88

PROPOSED SITE MAP

| | |
|-------------------|----------------------------------|
| APPLICANT: | INGHAM COUNTY DRAIN COMMISSIONER |
| WATERWAY: | SMITH CONSOLIDATED DRAIN |
| CITY: | MERIDIAN TOWNSHIP, MICHIGAN |
| COUNTY: | INGHAM |
| NUMBER OF SHEETS: | 1 OF 1 |
| DATE: | FEBRUARY 17, 2016 |
| EXHIBIT NO: | S45-20-00-1 |



EXISTING FLOODPLAIN
100-YR LIMIT
(ZONE AE)

SMITH
CONSOLIDATED
DRAIN
FLOW

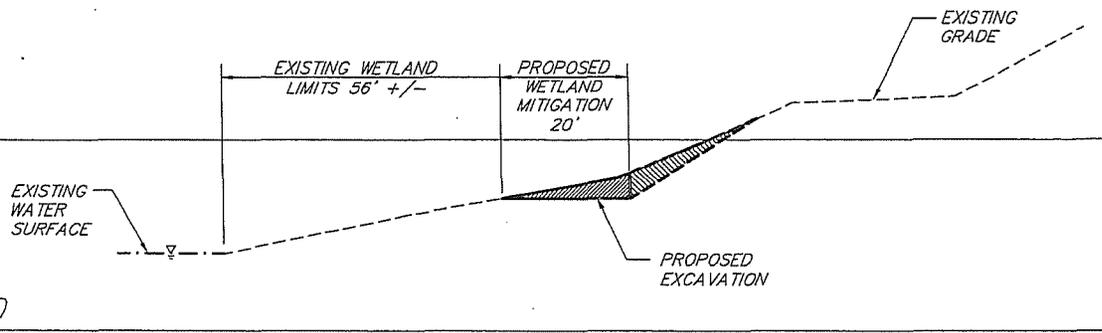
PROPOSED MERIDIAN
CHARTER TOWNSHIP
WETLAND MITIGATION SITE
AREA 0.05 ACRES

NOTE:
OVER EXCAVATE AND REPLACE
EXISTING UPLAND SOIL WITH
WETLAND HYDRAULIC SOILS.

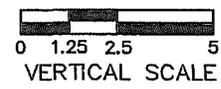
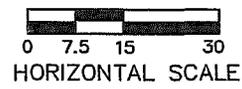
870

865

860



SECTION E-E



100YR FLOOD PLAIN ELEVATION = 865.9
(SOURCE: FEMA FIS)

REFERENCE DATUM NAVD88

NOTE:
TEMPORARY STOCKPILING WILL OCCUR DURING CONSTRUCTION AND WILL BE ULTIMATELY HAULED AWAY TO UPLAND NON FLOODPLAIN DEPOSIT SITE
SEE NOTIFICATION LIST FOR NEIGHBORING PROPERTY OWNERS
SESC MEASURES WILL BE PERFORMED ACCORDING INGHAM COUNTY DRAIN OFFICE (APA) STANDARDS AND APPROVED PLAN

| | |
|---|----------------------------------|
| PROPOSED MERIDIAN CHARTER TOWNSHIP WETLAND MITIGATION SITE | |
| APPLICANT: | INGHAM COUNTY DRAIN COMMISSIONER |
| WATERWAY: | SMITH CONSOLIDATED DRAIN |
| CITY: | MERIDIAN TOWNSHIP, MICHIGAN |
| COUNTY: | INGHAM |
| NUMBER OF SHEETS: | 1 OF 2 |
| DATE: | FEBRUARY 17, 2016 |
| EXHIBIT NO: | S45-20-10-1 |

| | | | |
|------------|----------------------------|---------------|-----------------|
| AGENCY USE | Previous USACE File Number | Date Received | DEQ File Number |
| | USACE File Number | | Fee received \$ |

Validate that all parts of this checklist are submitted with the application package. Fill out application and additional pages as needed.

- All items in Sections 1 through 9 are completed.
- Project-specific Sections 10 through 20 are completed.
- Dimensions, volumes, and calculations are provided for all impact areas.
- All information contained in the headings for the appropriate Sections (1-20) are addressed, and identified attachments (⇒) are included.
- Map, site plan(s), cross sections; one set must be black and white on 8 1/2 by 11 inch paper; photographs.
- Application fee is attached.

1 Project Location Information For Latitude, Longitude, and TRS info anywhere in Michigan see www.mcgl.state.mi.us/wetlands/

| | | | |
|---|-----------------------------------|--|-------------------------|
| Project Address (road, if no street address) <i>Jolly Road, 1,000 ft west of Okemos Road</i> | Zip Code <i>48864</i> | Municipality (Township/Village/City) <i>Meridian Township</i> | County <i>Ingham</i> |
| Property Tax Identification Number(s) <i>See attached list</i> | Latitude <i>42.688556 N</i> | Township/Range/Section (TRS) T <i>4N</i> N or S; R <i>1W</i> E or W; Sec <i>33</i> | |
| Subdivision/Plat and Lot Number <i>NA</i> | Longitude <i>- 84 438029 W</i> | OR Private Claim # _____ | |

2 Applicant and Agent Information

| | |
|---|--|
| Owner/Applicant (individual or corporate name) <i>Patrick E. Lindemann, Ingham County Drain Commissioner</i> | Agent/Contractor (firm name and contact person) <i>Streamside Ecological Services, Mike Nurse</i> |
| Mailing Address <i>707 Buhl, PO Box 220</i> | Mailing Address <i>3940 Timpson Ave SE</i> |
| City <i>Mason</i> State <i>MI</i> Zip Code <i>48854</i> | City <i>Lowell</i> State <i>MI</i> Zip Code <i>49331</i> |
| Contact Phone Number <i>717-676-8395</i> Fax <i>517-676-8364</i> | Contact Phone Number <i>586-764-9366</i> Fax _____ |
| Email <i>cclos@ingham.org</i> | E-mail <i>mnurse@streamsideeco.com</i> |
| <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Is the applicant the sole owner of all property on which this project is to be constructed and all property involved or impacted by this project? ⇒ If no, attach letter(s) of authorization from all property owners including the owner of the disposal site. | |
| Property Owner's Name (If different from applicant) <i>NA</i> | Mailing Address <i>NA</i> |
| Contact Phone Number <i>NA</i> | City <i>NA</i> State <i>NA</i> Zip Code <i>NA</i> |

3 Project Description

| | |
|--|---|
| Project Name <i>Smith Consolidated Drain</i> | Preapplication File Number <i>2BW - B9ZV - AFZ2-P</i> |
| Name of Water body <i>Smith Consolidated Drain</i> | Date project staked/flagged <i>1-27-2016</i> |

| | | |
|--|--|--|
| The proposed project is on, within, or involves (check all that apply) | | Project Use |
| <input type="checkbox"/> an inland lake (5 acres or more) | <input type="checkbox"/> a Great Lake or Section 10 Waters | <input type="checkbox"/> private |
| <input type="checkbox"/> a pond (less than 5 acres) | <input checked="" type="checkbox"/> a wetland | <input type="checkbox"/> commercial |
| <input checked="" type="checkbox"/> a stream, river, ditch or drain | <input checked="" type="checkbox"/> a 100-year floodplain | <input checked="" type="checkbox"/> public/government |
| <input checked="" type="checkbox"/> a legally established County Drain | <input type="checkbox"/> a dam | <input type="checkbox"/> project is receiving federal/state transportation funds |
| Date Drain was established <i>1890</i> | <input type="checkbox"/> a designated high risk erosion area | <input type="checkbox"/> Wetland Restoration |
| <input type="checkbox"/> a channel/canal | <input type="checkbox"/> a designated critical dune area | <input checked="" type="checkbox"/> other <i>Wetland Enhancement</i> |
| <input checked="" type="checkbox"/> 500 feet of an existing water body | <input type="checkbox"/> a designated environmental area | |

Indicate the type of permit being applied for: General Permit Minor Project Individual (All other projects.) ⇒ See Appendix C.

Written Summary of All Proposed Activities *See Attached*

Construction Sequence and Methods *See Attached*

13 Floodplain Activities (See Sample Drawing 5 and others. Complete other applicable sections.)

- For more information go to www.mi.gov/floodplainmanagement. This site also lists the projects and requirements for an expedited floodplain review under "Expedited Review Information for Minor Floodplain Projects."
- Examples of projects proposed within the non-floodway portions of the 100-year-floodplain which may qualify for an expedited review: Open pile decks and boardwalks; residences, commercial/industrial facilities, garages and accessory structures; parking lots; pavilions, gazebos, large community playground structures; residential swimming pools
- Examples of projects proposed within the floodway portions of the floodplain which may qualify for an expedited review: Open pile decks and boardwalks, (non-enclosed) that are anchored to prevent floatation and that do not extend over the bed and bank of a watercourse; parking lots constructed at grade or resurfacing that is no more than 4 inches above the existing grade; dry hydrants that do not require fill placement; scientific structure such as staff gauges, water monitoring devices, water quality testing devices, and core sampling devices which meet specific design criteria and fish structures that meet specific design criteria.
- For expedited review include:
 - ⇒ Photographs of the work site labeled to identify what is being shown and with the direction of the photo clearly indicated. Include photographs of any river or stream adjacent to the project.
 - ⇒ A letter or statement from the local unit of government acknowledging your proposed application. See the website for sample wording.
- A hydraulic analysis or hydrologic analysis may be required to fully assess floodplain impacts.
- The state building code requires an Elevation Certificate for any building construction or addition in a floodplain. A sample form can be found at www.fema.gov/nfip/elvinst.shtm.
 - ⇒ Attach additional sheets or tables for multiple proposed floodplain activities and provide hydraulic calculations.
 - ⇒ Show reference datum used on plans.

| | | |
|-------------------|--|---|
| Proposed Activity | <input checked="" type="checkbox"/> fill <input checked="" type="checkbox"/> excavation or cut <input type="checkbox"/> other | 100-year floodplain elevation (ft) (if known) 865.9 Datum <input type="checkbox"/> NGVD 29 <input checked="" type="checkbox"/> NAVD 88 <input type="checkbox"/> other |
|-------------------|--|---|

Site is 0-4 feet above ordinary high water mark (OHWM) OR observed water level. Date of observation (M/D/Y)

| | |
|--|---|
| Fill volume below the 100-year floodplain elevation (cu yds) 123 cyd (See attached) | Compensating cut volume below the 100-year floodplain elevation (cu yds) 19,452 (See attached) |
|--|---|

| | | |
|----------------------------|---|--|
| Buildings and/or Additions | Type of construction is <input type="checkbox"/> residential <input type="checkbox"/> garage/pole barn <input type="checkbox"/> non residential <input type="checkbox"/> other | |
| | Construction is <input type="checkbox"/> new <input type="checkbox"/> addition AND Served by <input type="checkbox"/> public sewer <input type="checkbox"/> private septic <input type="checkbox"/> other | |
| | Lowest adjacent grade (ft): existing proposed datum <input type="checkbox"/> NGVD 29 <input type="checkbox"/> NAVD 88 <input type="checkbox"/> other | |
| | Existing Structure Information | Proposed Structure Information |
| | Foundation type <input type="checkbox"/> basement <input type="checkbox"/> concrete slab on grade <input type="checkbox"/> pilings <input type="checkbox"/> crawl space <input type="checkbox"/> other | Foundation type <input type="checkbox"/> basement <input type="checkbox"/> concrete slab on grade <input type="checkbox"/> pilings <input type="checkbox"/> crawl space <input type="checkbox"/> other |
| | Foundation floor elevation (ft) | Foundation floor elevation (ft) |
| | Height of crawl space/basement from finished foundation floor to bottom of floor joists (ft) | Height of crawl space/basement from finished foundation floor to bottom of floor joists (ft) |
| | Elevation of 1st floor above basement floor/crawl space (ft) | Elevation of 1st floor above basement floor/crawl space (ft) |
| | For enclosed areas below the flood elevation, such as a crawl space, garages and accessory structures: Area of proposed foundation (sq ft) Elevation of proposed enclosed area (ft) datum <input type="checkbox"/> NGVD 29 <input type="checkbox"/> NAVD 88 <input type="checkbox"/> other | |
| | Number of flood vents | net opening of each vent (sq inches) |