

CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION
AGENDA

REGULAR MEETING

July 22, 2013

Town Hall Room, Meridian Municipal Building
5151 Marsh Road, Okemos, MI 48864

Regular Meeting

1. Call meeting to order at approximately 7:00 p.m.
2. Approval of agenda
3. Approval of minutes
 - A. July 8, 2013 Regular Meeting
4. Public remarks
5. Communications
 - A. Susan Davis RE: MUPUD #13014/SUP #13081 (Capstone)
 - B. Mike Ma RE: 1510 and 1560 Grand River Avenue
6. Public Hearings
 - A. Special Use Permit #13091 (ICDTR), work in the floodplain of the Jeffries Drain associated with improvements to Cornell Road
 - B. Wetland Use Permit #13-01 (ICDTR), impacts to regulated wetlands associated with improvements to Cornell Road
7. Unfinished Business
8. Other Business
9. Township Board, Planning Commission officer, committee chair, and staff comment or reports
10. New Applications
 - A. Zoning Amendment #13040 (Planning Commission), amend zoning ordinance Section 86-2 Definitions to add a definition of Adult Day Care Center; amend the conditions for adult day care centers in Section 86-403(d)(1), Section 86-404(d)(2), and Section 86-405(d)(2); and consider alternative types and locations for adult day care facilities.
11. Site Plans received

Planning Commission Agenda

July 22, 2013

Page 2

12. Site Plans approved
 - A. Site Plan Review #13-98-8 (Eyde), revise the approved site plan to add two access drives at Meridian Crossing located at the northwest corner of Okemos and Jolly Roads.
 - B. Site Plan Review #13-95-10 (Graff), revise the approved site plan to add a 1,750 square foot wash bay to the existing building addressed as 1748 Grand River Avenue.
13. Public Remarks
14. Adjournment

Post Script: Ody Norkin

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**

**August 12, 2013
Regular Meeting 7:00 p.m.**

Regular Meeting

1. Public Hearings

2. Unfinished Business
 - A. Special Use Permit #13091 (ICDTR), work in the floodplain of the Jeffries Drain associated with improvements to Cornell Road

 - A. Wetland Use Permit #13-01 (ICDTR), impacts to regulated wetlands associated with improvements to Cornell Road

 - B. Zoning Amendment #13020 (Planning Commission), request to amend Section 86-2 Definitions and Section 86-564 Yard Encroachments Permitted to update and clarify regulations for decks and patios

3. Other Business

**CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION
REGULAR MEETING MINUTES
July 8, 2013**

DRAFT

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

PRESENT: Commissioners Cordill, Deits, Ianni, Jackson, Norkin, Salehi (7:12 P.M.), Scott-Craig
ABSENT: Commissioners Hildebrandt, Honicky
STAFF: Principal Planner Gail Oranchak

1. Call meeting to order

Chair Jackson called the regular meeting to order at 7:00 P.M.

2. Approval of agenda

Commissioner Cordill moved to approve the agenda. Seconded by Commissioner Scott-Craig.

VOICE VOTE: Motion carried 6-0.

3. Approval of Minutes

Commissioner Scott-Craig moved to approve the Regular Meeting Minutes of June 24, 2013 as amended. Seconded by Commissioner Ianni.

VOICE VOTE: Motion carried 6-0.

4. Public Remarks

Chair Jackson opened the floor for public remarks.

Mark Clouse, Eyde Co., 2852 Eyde Parkway, East Lansing, addressed changes to Mixed Use Planned Unit Development (MUPUD) #13014 made by the applicant as the result of Planning Commissioner and Board member comments.

Neil Bowlby, 6020 Beechwood Drive, Haslett, reiterated Board and Planning Commissioner comments made during the concept plan review of MUPUD #13014 (Capstone) and offered history on the various phases. He displayed pictures of standing water near the area relative to drainage concerns and addressed the current retail space available in the area.

Cindy Carson, 4714 Arapaho Trail, Okemos, expressed concern on behalf of her neighbor, Ron Behl, regarding standing water on his property. She indicated he was questioning whether the state had approved the opening of the North Hannah Drain so the flow to travel north into the Red Cedar River. Ms. Carson noted he was questioning if MUPUD #13014 was true mixed use or more high density student housing. She also stated over the last few years the amount of standing water in her back yard at the corner of Arapaho/Sequoia has dramatically increased. Ms. Carson expressed concern with any potential to open the road at the end of Indian Lakes subdivision.

Sharon Dimmer, 4583 Sequoia Trail, Okemos, expressed concern with "opening up" the area and believed property values are going down as a result of increased development in the area. She also spoke to standing water on her property.

Greg Petru, representative for Capstone, 2116 Haslett Road, Haslett, indicated the developer has committed to sidewalk connectivity along Hannah Boulevard from Hagadorn to the proposed development and five (5) foot sidewalks along Eyde Parkway and Hannah Boulevard for uniformity. He noted the walkway now goes across through the right of way. Mr. Petru stated the proposed north

entrance is no longer on the plan and the Fire Department's request for an emergency access has been complied with. He added the impervious surface has been reduced from 84.16% to 80.32%. Mr. Petru indicated agreement has been reached with the Ingham County Department of Transportation and Roads (ICDTR) for signs and sharrows on the road.

Chair Jackson closed public remarks.

5. Communications

- A. Brian Jackson, Coordinator, Lansing Community College East, 2827 Eyde Parkway, East Lansing; RE: Support for MUPUD #13014 and SUP #13081 (Capstone)
- B. Brett Katz, R & D Hannah Plaza, LLC, 3804 Hawthorn Court, Waukegan, Illinois; RE: Support for the Hannah Lofts
- C. E-mail from Mitch Irwin, Marriott Town Suites Hotel; RE: Support for the Hannah Lofts

6. Public hearings

- A. *Zoning Amendment #13030 (Planning Commission), to add adult day care facilities to Section 86-654(c)(6).

Chair Jackson opened the public hearing at 7:31 P.M.

- Introduction by the Chair (announcement of procedures, time limits and protocols for public participation and applicants)
- Summary of subject matter
Principal Planner Oranchak summarized the proposed zoning amendment as outlined in staff memoranda dated July 5, 2013.
- Public
Leonard Provencher, 5824 Buena Parkway, Haslett, spoke in support of the proposed zoning amendment as it helps enforce the American value of keeping families together.

Danelle Lofton, 5130 Wexford Road, Lansing, requested the rules be suspended to take action on the proposed zoning amendment this evening. She assured the Planning Commission the proposed day care would operate in a safe Office of Services to the Aging (OSA) standard environment for the aging population and the surrounding community.

Susan Davis, 4772 Arapaho Trail, Okemos, inquired if this zoning amendment would make it easier to have a senior retirement center in Hannah Farms.

- Planning Commission discussion:
Commissioner Ianni reiterated the Planning Commission only has the authority to pass a zoning amendment tonight and cannot grant the special use permit this evening. He noted support for either the broad definition of Grand Blanc Township or the specificity of the Independence Charter Township language. He suggested the last sentence of the adult day care definition from Monterey Township be included if the Planning Commission chooses to use the Independence Charter Township definition.

Commissioner Cordill inquired whether the resolution on the zoning amendment and a working definition of adult day care center were two separate actions.

Chair Jackson clarified that in order to move the proposal forward, it would be necessary to agree upon a definition as part of the ordinance.

Principal Planner Oranchak added the definition would be part of the ordinance the Planning Commission is recommending to the Township Board.

Commissioner Deits asked if the Planning Commission passed an ordinance which included the words adult day care center in the ordinance, but dealt with the definition at a later date, if this issue could move forward.

Principal Planner Oranchak explained if the Planning Commission approves the resolution for this zoning amendment tonight, it would be sent to the Township Board. She noted the Planning Commission could make a recommendation that the Board add a definition of adult day care, but creating a definition later would start the process over again.

Commissioner Deits explained he was uncomfortable creating a definition "ad hoc" this evening, while believing there was enough descriptive characteristic in placing the language "adult day care center" into the resolution. He suggested working on the definition at the next Planning Commission meeting, while moving the request forward in order to approve the special use permit as quickly as possible.

Commissioner Cordill expressed concern with moving forward with the proposed zoning amendment without a definition.

Commissioner Salehi believed the Planning Commission should include a definition of adult day care center. He spoke to the allowance of adult day care centers in the commercial district.

Principal Planner Oranchak noted the Planning Commission could follow Commissioner Deits earlier suggestion as there are additional modifications that need to be made to the commercial districts. She indicated if the Planning Commission wishes to initiate that amendment this evening, it can be placed on an upcoming Planning Commission meeting. Principal Planner Oranchak added the possibility of the Township Board creating a definition of adult day care center when it reviews this request.

Commissioner Ianni reminded fellow Commissioners that approving this zoning amendment is only a recommendation to the Township Board

Commissioner Deits believed dealing with the creation of a definition would "hold up" the special use permit and, at the same time, will not benefit the Township dramatically as adult day care is already in the ordinance without a definition. He voiced support for the earlier comment regarding one possible suggestion by staff.

Commissioner Scott-Craig agreed with Commissioner Deits' strategy on moving forward.

Chair Jackson noted there is already precedence for having an ordinance with the term "adult day care" in it and believed it a reasonable approach to define the term at a later date.

Commissioner Salehi noted Independence Charter Township's definition explicitly excludes alcohol or substance abuse rehabilitation centers, residential centers for persons released from or assigned to a correctional facility. He inquired if those types of centers are presently allowed in commercial districts under an adult day care clause.

Principal Planner Oranchak responded they are not listed as types of uses allowed in a commercial district. She believed Independence Charter Township's definition was based on other sections of the state act that specifically mention those types of uses. Principal Planner Oranchak indicated she will provide more background information at a future meeting where this issue is discussed.

Commissioner Deits noted that the aforementioned definition includes within itself exclusion for any other facilities which do not meet the definition.

Commissioner Norkin responded to earlier public comment by noting his belief that the Bennett Road adult day care center has no relevance to the future senior housing on Hannah Boulevard.

Chair Jackson clarified the question posed was if passing the ordinance makes it easier to provide the kind of facility the ordinance describes in that setting.

Principal Planner Oranchak added the land that is east of the drain is zoned residential and could be added to the list of possible uses allowed in residential districts under Section 86-654 Nonresidential structures and uses.

Commissioner Norkin explained his preference to add adult day care centers in the ordinance in order to make it easier for an applicant to apply within any residential zoning in the Township.

Chair Jackson closed the public hearings at 7:59 P.M.

7. Unfinished Business

Commissioner Ianni moved to suspend Planning Commission Bylaw #6.4a to make a decision regarding Zoning Amendment #13030 the same night as the public hearing. Seconded by Commissioner Norkin.

VOICE VOTE: Motion carried 7-0.

A. *Zoning Amendment #13030 (Planning Commission), to add adult day care facilities to Section 86-654(c)(6).

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 Zoning Amendment #13030, to amend Section 86-654 of the Code of Ordinances in order to add adult day care centers as a use permitted in any residential zoning district subject to special use permit approval district. Seconded by Commissioner Norkin.

Planning Commission and staff discussion:

- Planning Commission recommendation to the Board on a definition of adult day care centers
- Need for a definition to be in place prior to applications being accepted
- Possibility of adding a statement to the resolution which indicates the Commission's intent to develop a definition
- Staff report could explain the situation
- Staff report for the Board could include the Planning Commission's intent for a definition recommendation

ROLL CALL VOTE: YEAS: Commissioners Cordill, Deits, Ianni, Norkin, Salehi, Scott-Craig,
Chair Jackson

NAYS: None

Motion carried 7-0.

Commissioner Deits moved to initiate the process to develop a definition of adult day care centers for incorporation into the Code of Ordinances. Seconded by Commissioner Norkin.

Planning Commission discussion:

- Request for staff to provide a definition for the next Planning Commission meeting
- Concern with this type of service being offered in a private residence
- Preference to use language, in large part, from Monterey Township
- Concern with being overly restrictive on the number of adults to be cared for
- Number of clients which constitute a day care center
- Concern with limiting care to functionally impaired elderly persons
- Minimally invasive adult day care in single family residences
- Include this type of center in buildings permitted in nonresidential districts under the ordinance (e.g., churches, nursing homes, etc.)
- Preference for inclusion of language which complies with adult day care standards promulgated by the Michigan Office of Services to the Aging (OSA)
- Inspections, etc. are performed by OSA if the center received OSA funds
- Adult day care facilities v. elderly adult day care facilities
- Specifying a number of adults could determine a center v. care in a single family home
- Definition should make a distinction these types of facilities not be allowed in residential homes
- Use of the word center for child care is different than day care homes which are in private residences
- Language should not preclude three (3) or four (4) elderly people being cared for in a single family home
- Request for staff to provide additional examples of adult day care definitions

VOICE VOTE: Motion carried 7-0.

- B. Mixed Use Planned Unit Development #13014 (Capstone), request to develop Hannah Lofts, a mixed use planned unit development consisting of 12,824 square feet of retail space and 282 multiple family residential units in four buildings.

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 Mixed Use Planned Unit Development #13014, subject to the following conditions:

1. The recommendation for approval is based on the cover sheet dated received by the Township on July 1, 2013, and site plans, elevations, and materials dated received by the Township on June 4, 2013, June 21, 2013, June 22, 2013 and July 3, 2013, subject to revisions as required.
2. MUPUD #13014 (Capstone) to construct a group of four buildings and a two-story parking structure are contingent on the approval of SUP #13081 (Capstone).
3. The applicant should submit materials such as a site analysis that influenced the design, a complete sign program, and comments from the Ingham County Drain Commissioner and the Ingham County Department of Transportation and Roads.

4. Approval is subject to one or more amenities. The applicant proposes the following amenities as identified on the Amenities Plan: park, street side planters, community center/clubhouse, bicycle racks, pool, fountain/plaza, foot sidewalks connecting to Township sidewalks.
5. The applicant and Eyde Company have indicated they will install "sharrows" with the approval of the Ingham County Department of Transportation and Roads. In support of the recently adopted Complete Streets Ordinance, the Township should commit to financing the maintenance of "sharrows."
6. The Eyde Company representative offered to install five foot sidewalks along Hannah Boulevard west of Esoteric Way.
7. Unless building elevations are revised, the applicant will be required to receive a variance from the Zoning Board of Appeals for non-compliance with Section 86-440(f)(2)b.2. stating, "Buildings greater than 50 feet in width shall be divided into increments of no more than 50 feet through articulation of the façade."
8. Masonry products should cover no less than 60 percent of building facades that are either visible from a public street or provide individual entrances to residential units. Other materials, such as vinyl, aluminum or other metal sidings should be avoided.
9. Design and location of site accessories such as railings, benches, trash compactors, trash and recycling receptacles, exterior lighting fixtures for streets and buildings, and bicycle racks should be considered for commercial quality, and being complementary with the building design and style.
10. A plan should be submitted clearly indicating all trees to be preserved on the subject site and consideration should be given to the location and type of street trees and landscaping materials proposed for the site.
11. Buried construction or other materials and debris found on the subject site, and debris resulting from clearing, grading, or construction activities related to the proposed project should be removed from the site and be properly disposed.

Seconded by Commissioner Norkin.

Planning Commission, staff and discussion:

- Belief this phase is market rate housing which will attract several types of people, including students
- Letters of support due to the positive economic impact this project will have on the area
- All current and proposed phases do not represent mixed use
- Need exists for housing for Michigan State University (MSU) students
- Largest piece of development in the community is MSU
- Appreciation to the developers for offering high caliber student housing
- Need for the Township to work with the developers, the Ingham County Department of Transportation and Roads (ICDTR), MSU and the City of East Lansing to fix the problems on Hannah and Hagadorn Roads
- Standing water in the area has existed for many years and this development has very little impact on those unresolved water issues

- Hannah Farms area contributes 3.5% of the stormwater which flows eastward through Indian Lakes Estates into the Red Cedar River
- Approval has been received from the Michigan Department of Environmental Quality (MDEQ) to reopen the direct connection from the Hannah Farm Drain going northward to the Red Cedar River
- After the project to reopen the connection is completed, 80% of the stormwater from the Hannah Farms area will be diverted directly to the north and the remaining 20% will remain in a southeasterly direction, comprising .026% of total overall stormwater contribution in the Herron Creek Drainage District
- Three (3) logjams have been removed and the water level has been reduced two (2) to three (3) feet
- Complete report of the logjam removal and the project to open the Herron Creek Drain to flow directly to the Red Cedar River will be available within two (2) to three (3) weeks
- Standing water in pictures shown this evening has receded since Spring
- Contribution of the Hannah Farms stormwater flow to flooding in the Indian Lakes area will be reduced by 99% once the Herron Creek connection is reopened
- Herron Creek Drain flows from south of the Township under Mount Hope Road through Indian Lakes to the Red Cedar River
- Hannah Farms did not create the water problem in Indian Lakes
- Maintenance of bicycle lanes (restriping) would be the responsibility of the Township
- ICDTR is not amenable to road diets in the Hannah Farms area
- ICDTR compromise is to allow sharrows (painted symbols on the lane which designate shared use by bicycles)
- Development should not be held up because of ICDTR's stance on road diets in the area
- Sharrows on the road are an improvements as the Planning Commission desired to remove the bicycles from traveling on the sidewalk

Commissioner Deits offered the following friendly amendment to condition #5:

- Insert "and continue efforts to promote connectivity and non-motorized transportation throughout the development." after "sharrows,"

The amendment was accepted by the maker and seconder.

Continued Planning Commission discussion:

- Reinforced grass lane is pervious surface
- Impervious surface standards area generally waived for a MUPUD
- "The Big Picture" shows three (3) other parcels which will contribute additional impervious surface
- Planning Commission need to see written responses from Kebs, Inc. letter to the ICDC, ICDTR, the Township and the Meridian Fire Department
- Need for Commissioner's to see the ICDC management plan as noted in the May 15, 2012 Board meeting
- Concern the Commissioners are not receiving the data necessary to make an informed decision
- Traffic as a result of this development is not being addressed
- Belief the placement of sharrows is not the answer to traffic concerns
- Five (5) foot sidewalks are inadequate and should be increased to seven (7) feet
- Request for an explanation for the color coding for sidewalks on the complete streets map
- Suggestion to make the sidewalks seven (7) feet wide along Esoteric Way
- Lack of data to determine the number of trips which will be generated as a result of this development

- Traffic deficiencies still exist with the right turn lanes going north on Hagadorn and the right turn lanes going west on Hannah Boulevard despite the new traffic light on Hagadorn Road as a result of multiple Capstone phases
- Complete traffic study should be performed once Lodges Phases 1 and 2 are functional and students are back in school
- Preference for upscale dense housing close to campus for students, grad students, and young professors
- Preference for sidewalks to be eight (8) feet to ten (10) feet in width
- Due to the large amount of impervious surface, one acre of open space is not adequate
- Preference for the applicant to provide information on land set aside as guaranteed open space for the total development of Hannah Farms
- Addition of a condition requesting the Township Board consider open space and traffic as part of the overall “big picture” instead of on a phase-by-phase basis
- Traffic problems will affect other businesses in the area
- Appreciation to the applicant for providing the Planning Commission with an overall larger view of Hannah Farms
- Difficulty in reading maps provided in the packet
- Impervious surface at Lodges 1 and 2 exceeds the underlying zoning district
- Lodges 1 and 2 were approximately 60-70% pervious due to the wetlands
- Planters will be placed in the island areas on the top of the parking structure
- Gathering areas, benches and statues around portions of the site
- Agreement by the applicant to change the sidewalk width to seven (7) feet around the Lofts as requested
- Cul de sac will not be opened
- Club house “flex space” should not be considered an amenity
- Amenities are in a fluid state before the Planning Commission, but will be required when this request comes before the Board

Commissioner Deits offered the following friendly amendment:

- **Amend condition #4 by removing the phrase “community center/clubhouse” from the list of amenities**

The amendment was accepted by the maker and seconder.

Continued Planning Commission and staff discussion:

- Proposed specified brick or stone products in condition #8, but the maker changed it to masonry products
- Concern with language in condition #3 which recommends the applicant should submit materials he is supposed to submit in the approval
- Language is recommending that the Board receives the documents listed before they approve the MUPUD

Commissioner Deits offered the following friendly amendment:

- **Amend condition #3 by deleting “The applicant should submit” and inserting “The applicant shall submit, prior to Board consideration”**

The amendment was accepted by the maker and seconder.

Continued Planning Commission discussion:

- Condition #3 requires comments from the ICDC and the ICDTR; no approval is necessary
- Appreciation that the applicant has applied smart growth principles for infill development

- Appreciation for the map showing the “big picture”
- Possibility of “undeveloping” some of the land to the west in the future as part of the “big picture”
- Appreciation for the developer’s responsiveness
- Foot and bicycle pathways are listed as an accessibility amenity in the ordinance
- Connection to Township sidewalks and bicycle pathways is the amenity
- Inclusion of covered bicycle parking

Chair Jackson offered the following friendly amendment:

- Amend condition #4 by adding at the end of the condition “The sidewalks on Esoteric and Eyde Parkway will be seven (7) feet rather than five (5) foot as shown on the referenced plan.

The amendment was accepted by the maker and seconder.

Chair Jackson offered the following friendly amendment:

- Amend condition #8 by deleting “Masonry products” and inserting “Brick, stone or masonry products”

The amendment was accepted by the maker and seconder.

Continued Planning Commission discussion:

- Ordinance allows clap board or Hardy board which is cement board material
- Proposed amendment would prevent the use of glass, et.c which is allowable in the MUPUD ordinance
- Inquiry if the intent of the condition was to discourage the applicant from using vinyl
- Vinyl is proposed for use on the back of the building facing the parking structure
- Language indicating at least 60 percent of building façade must be comprised of brick or stone
- Unrealistic at this point to expect the developer to provide a different configuration of greenspace for the 81 acre site
- Potential “cut out” for private bus stopping to pick up students and transport them to MSU
- Possible CATA reconsideration of including these phases on one of its routes
- One acre park includes the fountain
- This approval is not the place to address the issues which pertain to the entire 81 acre site
- Recommendations from the Planning staff on how the Planning Commission can communicate with the Township Board on characteristics of the entire MUPUD
- Concern the bigger picture “drops out” when the entire 81 acres are dealt with in an incremental fashion

ROLL CALL VOTE: YEAS: Commissioners Cordill, Deits, Ianni, Norkin, Scott-Craig, Chair Jackson

NAYS: Commissioner Salehi

Motion carried 6-1.

Without objection, the Chair approved the exception contained in Bylaw 5.14 to allow introduction of agenda items after 10:00 PM.

- C. Special Use Permit #13081 (Capstone), request to construct a group of buildings greater than 25,000 square feet in gross floor area.

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 Special Use Permit #13081 (Capstone) to

construct four buildings and a parking structure totaling more than 25,000 square feet in gross floor area subject to the following conditions:

1. Approval of the special use permit is recommended in accordance with the cover sheet prepared by KEBS, Inc. dated received by the Township July 1, 2013, subject to revisions as required.
2. Special Use Permit #13081 is subject to approval and all conditions placed on Mixed Use Planned Unit Development #13014 (Capstone) by the Township Board.

Seconded by Commissioner Scott-Craig.

Planning Commission discussion:

- Setbacks are consistent with the C-2 commercial district
- Opportunity for additional housing within the community that is of a different nature

ROLL CALL VOTE: YEAS: Commissioners Cordill, Deits, Ianni, Norkin, Scott-Craig, Chair Jackson

NAYS: Commissioner Salehi

Motion carried 6-1.

Commissioner Deits offered the following motion:

- The Planning Commission recommends that the entire Hannah Farms MUPUD be reviewed with respect to future land use, optional open and public spaces and other design elements (including walkability and transportation) before phases beyond the Hannah Lofts Project are approved.

Seconded by Commissioner Norkin.

VOICE VOTE: Motion carried 7-0.

8. Other Business (None)
9. Township Board, Planning Commission officer, committee chair, and staff comment or reports

Commissioner Norkin inquired about progress of the Planning Commission's request for a joint meeting with the Board to discuss the urban services management area.

Chair Jackson responded she has had discussions with the Township Manager and the Board is considering the possibility of a committee of three (3) Board members, four (4) Planning Commissioners, and counsel to meet and begin the discussion. She requested volunteers to represent the Planning Commission in this closed session. Commissioners Deits, Ianni, Norkin and Chair Jackson volunteered their services.

10. New applications

- A. *Special Use Permit #13091 (ICDTR), work in the floodplain of the Jeffries Drain associated with improvements to Cornell Road
- B. *Wetland Use Permit #13-01 (ICDTR), impacts to regulated wetlands associated with improvements to Cornell Road

11. Site plans received (None)
12. Site plans approved (None)
13. Public remarks

Chair Jackson opened and closed public remarks.

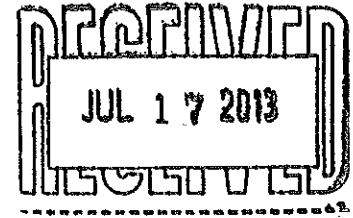
14. Adjournment

Chair Jackson adjourned the regular meeting at 10:40 P.M.

Respectfully Submitted,

Sandra K. Otto
Recording Secretary

Planning Commission
Meridian Township
5151 Marsh Road
Okemos, MI 48864



Planning Commission

Regarding Two Parcels of Land at Powell and Grand River
1560 Grand River 4.53 Acres # 006
1510 Grand River 4.0 Acres # 007
8.53 Acres

Dear Planning Commission,

I understand you are in the process of updating the township's Master Plan. I would respectfully request that you look closely at the area of the plan that covers my property.

The above referenced property is at the N.W corner of Powell Rd & Grand River. The property is currently zoned office and has all public utilities.

The property to the West is zoned office and has Sparrow Hospital. The property to the East is zoned commercial. The property to the South is zoned commercial and has a grocery store. The property to the North is residential with buffered wet lands.

As you discuss the future land use map for the township, I would like for you to consider a different zoning for this property. I think a commercial zoning would make more sense in this location

Although at one time the Grand River corridor was in demand for office use, times have now changed. The office markets now are clearly at the highway interchanges. The economic conditions have also changed since there is over 300,000 sq. ft of vacant office space at most highway interchanges in Lansing ie, Okemos I- 96, Creyts R. I- 496, Lake Lansing, US 127.

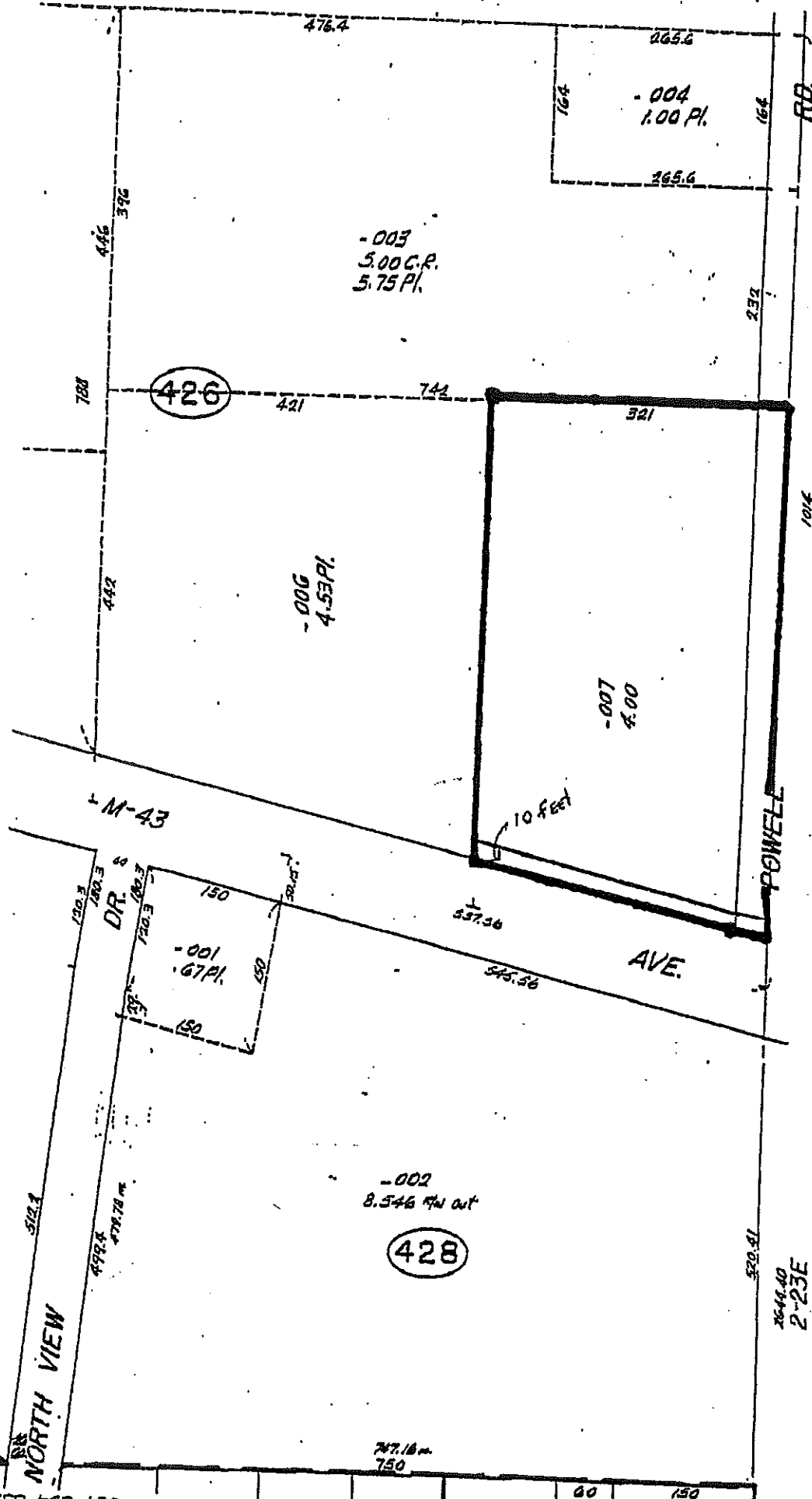
CC. Meridian Twp. Board. -----

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Ma".

Mike Ma, TS & P, LLC
ITS Owner, member.
3752 Chippendale
Okemos, MI 48864
517-349-5267

2-22D

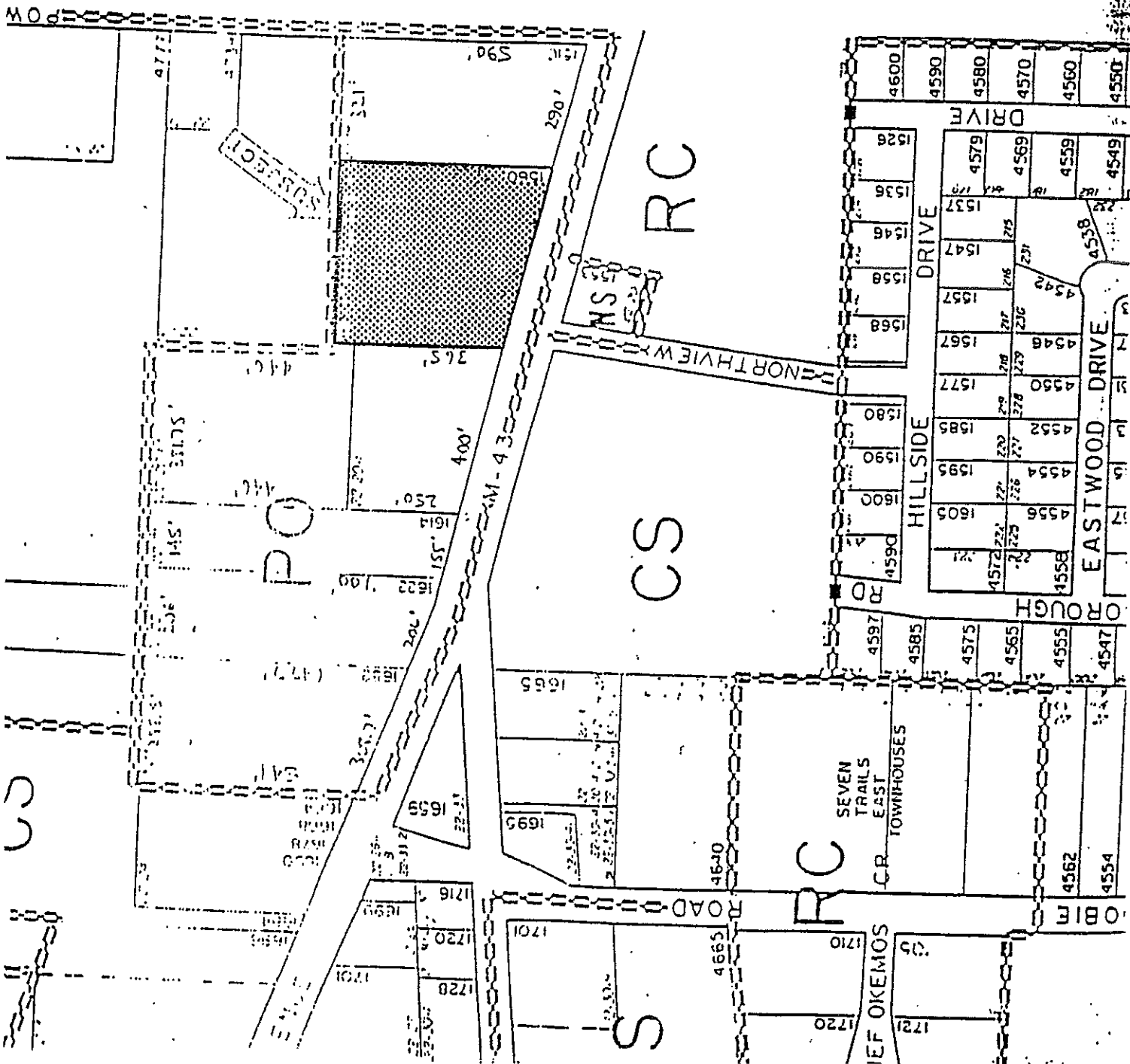


517 694 8338 P. 02/06

1ST PAYER TITLE - HOLT

JAN-25-1999 09:49

1560 East Grand River
4.53 Acres



Here is the letter I just sent to the Meridian Township Planning Commission (some of the formatting was lost in the transmission):

Dear Member of the Meridian Township Planning Commission:

I am writing to urge you to act on the Hannah Farms proposal before you in favor of all residents of Meridian Township, to protect our interests, our property values, and our quality of life.

Severely limit more student apartments. Promote green space. Protect natural areas. Prevent serious congestion. Avoid straining township public services and resources.

Do not be swayed by the claims of the developers who are paid to persuade township planners and board members of the desirability of their proposals, including touting their limited contributions to the township coffers. They are in this to make money for themselves. The present proposed development differs significantly from what the board approved five years ago.¹ Many of those who voted for the original proposal for Hannah Farms never envisioned a solely student housing complex, now well over a thousand, under consideration for over a thousand more student apartments, and eventually potentially approaching four to five thousand students. No one can reasonably endorse this overly dense development of student housing for such a large percentage of the MSU student body in such a small area in close proximity to quiet, attractive regions of single family dwellings, not to mention the effect on the entire township due to increased traffic, the drain on fire, police and other public services.

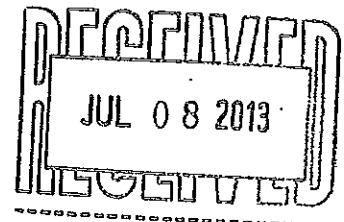
Secondly, and very importantly, regarding the western strip of land of Hannah Farms that borders Indian Lakes, protect the existing wetlands, keep the promise to Indian Lakes not to open a road from Hannah Farms to and through Indian Lakes. Do not permit the building of a retirement home or anything similar in this area. Follow the practice of past board members matched new development to existing development and would never have approved of such construction so close to a neighborhood of single family dwellings.

Thank you for your consideration,

Susan Davis
4772 Arapaho Trail

¹ The present development and the currently proposed development differ significantly from the original proposal that was accepted by the township board five years ago. What was to be a development with different sorts of residences peopled by diverse populations (faculty, retirees, families, grad students, etc.) has become a densely populated student apartment development, now over 1000 students, with the possibility of thousands (thousands!) more students.

<http://web.mail.comcast.net/zimbra/h/printmessage?id=522921&tz=America/Bogota&xim=1> 7/8/201



**Special Use Permit #13091
(Ingham County)
July 18, 2013**

APPLICANT: Ingham County Department of Transportation & Roads
301 Bush Street
P.O. Box 38
Mason, MI 48854

STATUS OF APPLICANT: Property owner

REQUEST: Work in the 100-year floodplain (both floodway and floodway fringe) at the Jeffries and Foster Drains

LOCATION: Cornell Road at the Jeffries and Foster Drains in Section 14 of the Township

EXISTING AREA LAND USES: N: Single-Family Residential
S: Single-Family Residential
E: Single-Family Residential
W: Single-Family Residential and Preservation

CURRENT ZONING IN AREA: N: RA (Single Family-Medium Density)
S: RR (Rural Residential)
E: RR (Rural Residential)
W: RR (Rural Residential) & RA (Single Family-Medium Density)

CHARTER TOWNSHIP OF MERIDIAN

MEMORANDUM

TO: Planning Commission

FROM: Gail Oranchak
Gail Oranchak, AICP
Principal Planner

Richard F. Brown, Jr.
Richard F. Brown, Jr., AICP
Associate Planner

DATE: July 18, 2013

RE: Special Use Permit #13091 (Ingham County), a request to impact the 100-year floodplain as part of the Cornell Road improvement project

The Ingham County Department of Transportation and Roads is requesting a special use permit to impact the 100-year floodplain at two locations along Cornell Road – the crossing of the Jeffries and Foster Drains. The floodplain impacts are associated with proposed improvements to Cornell Road north of Grand River Avenue. Two improvement options are under consideration by the Township Board:

OPTION 1	Grind up existing pavement; resurface the road; narrow the travel lanes to 10 feet; add a new two foot paved shoulder and one foot gravel shoulder; culvert improvements; limited tree removal; install guardrails; and cut the hill near Tihart Road.
OPTION 2	Grind up existing pavement; resurface the road; narrow the travel lanes to 10 feet; culvert improvements; limited tree removal; and possibly cut the hill near Tihart Road.

Floodplain impacts will be the same whether Option 1 or Option 2 is selected.

DRAIN	NET FILL	AREAS IMPACTED
Jeffries	39 cubic yards	Floodway fringe
Foster	42 cubic yards	Floodway and floodway fringe

Impacts at the Jeffries Drain crossing are associated with the removal of the existing 38 foot long culvert and the construction of a new 60 foot long culvert. The fill and culvert replacement is intended to provide cover over the culvert itself and improve the safety of the roadway clear zone. Fill at the Foster Drain crossing is intended to replace the material that has been lost due to erosion, to reestablish stable side slopes, and to provide additional cover over the existing crossing. The applicant has not proposed a location for the required compensating cut for the proposed 81 cubic yards of net fill in the 100-year floodplain.

2005 Master Plan

The 2005 Master Plan's Future Land Use Map indicates with the exception of the far north end of the corridor in Section 11 of the Township, nearly the entire Cornell Road improvement project is located in the Agricultural-Residential 0.0 to 0.5 dwelling units per acre, with Institutional uses identified for a utility substation and Haslett Public Schools property.

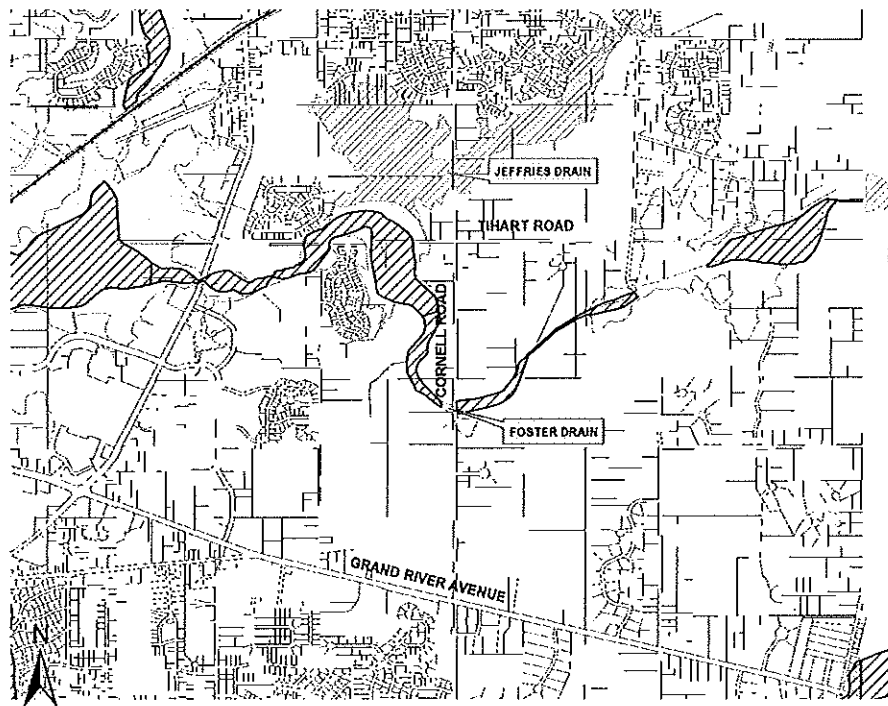
Physical Features

Cornell Road links Haslett Road with Grand River Avenue. It has been designated a Natural Beauty Road by Ingham County since the 1970s. In the vicinity of the Jeffries and Foster Drains Cornell Road is a two-lane paved roadway without shoulders or curb and gutter.

Floodplain

According to the Township's Flood Insurance Rate Map and Study, the elevation of the 100-year floodplain at the Jeffries Drain is approximately 847.1 feet above mean sea level and the 100-year floodplain at the Foster Drain is approximately 852.8 feet above mean sea level.

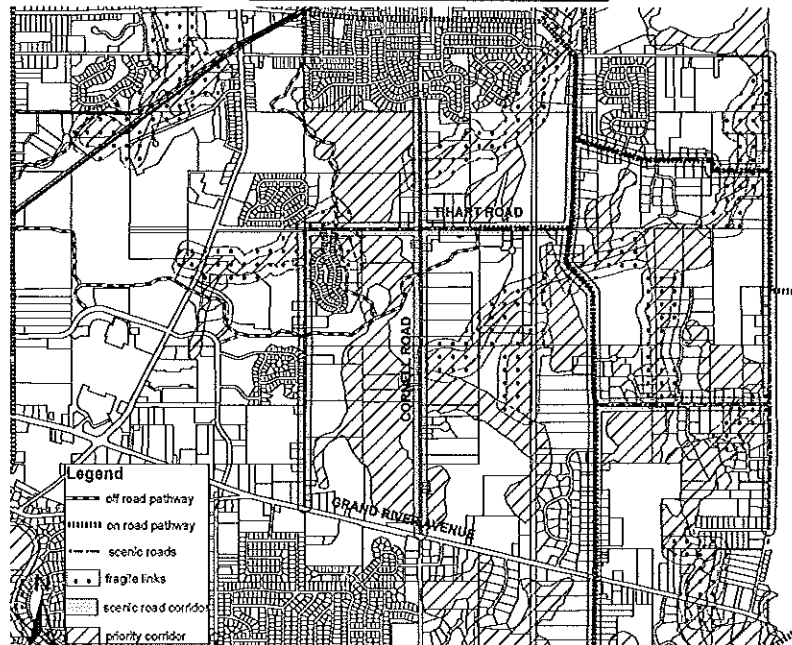
FLOODPLAIN MAP



Greenspace Plan

The Greenspace Plan map shows Cornell Road as both a Scenic Road and a Scenic Road Corridor. Several fragile links and priority conservation corridors exist along the proposed improvement area at both drain crossings.

GREENSPACE PLAN MAP



Staff Analysis

Although advertised for a decision the same night as the public hearing, the decision has been delayed until the Township Board selects one of the options. The Board is expected to make its selection at its July 23, 2013, meeting. Special Use Permit #13091 will be on the August 12, 2013, agenda for action.

The standards for review of the project are contained in Section 86-436 and Section 86-126 of the Code of Ordinances. Guidance for review of applications for work in the floodway may be found in Sections 86-436(g) through (i) while standards for work in the floodway fringe may be found in Sections 86-436(j) through (m). Issues to consider when evaluating a request to work in the floodway and floodway fringe include determining the project will not be adverse to the public health, safety, and welfare; will not impose a substantial financial burden on the Township; will not affect the capacity of the stream or floodway; will have low potential for flood damage; and is designed to offer minimum obstruction to floodwaters.

The applicant has not proposed a compensating cut for the 81 net yards of fill associated with the project. The lack of a compensating cut is inconsistent with the Township Code of Ordinances' required minimum of a 1.00 to 1.00 cut to fill ratio.

To date, a permit application for work in the 100-year floodplain has not been filed with the Michigan Department of Environmental Quality (MDEQ).

Special Use Permit #13091 is being reviewed concurrently with Wetland Use Permit #13-01 for impacts to wetlands adjacent to the project area.

SUP #13091 (Ingham County)
Planning Commission (7/18/13)
Page 5

Planning Commission Options

The Planning Commission may approve, approve with conditions, or deny Special Use Permit #13091. A resolution will be provided for consideration at a future meeting.

Attachments

1. Application materials
2. Letter from the Director of Public Works & Engineering

**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 Department of Transportation and Roads
Address of Applicant 301 Bush Street (P.O. Box 38) Mason, Mi 48854

Telephone - Work _____ Home 517-676-9722 Fax 517-676-2085 Email rpeterson@inghamcra.org
Interest in property (circle one): Owner Tenant Other
(Please attach a list of all persons with an ownership interest in the property.)

B. Site address / location / parcel description Cornell Rd Between Grand River Ave & Orlando Dr
(please attach if necessary)

Current zoning N/A (Roadway)
Use for which permit is requested The reconstruction of Cornell Rd and the Jeffries Drain crossing
Corresponding ordinance number _____

C. Developer (if different than applicant) _____
Address _____
Telephone - Work _____ Home _____ Fax _____

D. Architect, Engineer Planner or Surveyor responsible for design of project if different from applicant:
Name Bergmann Associates Address 1427 W Saginaw St Suite 200 East Lansing, MI 48823
Telephone - Work 517-272-9835 Home _____ Fax _____

E. Acreage of all parcels in the project: Gross _____ Net 14.75

F. Explain the project and development phases: See the attached

G. Total number of:
Existing: structures 0 bedrooms 0 offices 0 parking spaces 0 carports 0
garages 0 Proposed: structures 0 bedrooms 0 offices 0 parking spaces 0 carports
0 garages 0

H. Square footage: existing buildings 0 proposed buildings 0
Usable Floor area: existing buildings 0 proposed buildings 0

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 N/A Acreage N/A
Proposed Recreation: Type N/A Acreage N/A

Existing Open Space:	Type	Roadway and Right-of-Way	Acreage	14.75
Proposed Open Space:	Type	Roadway and Right-of-Way	Acreage	14.75

- 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.
- S.

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.
- (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 storm water 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.

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

Date

Type/Print Name

Fee: 1/9

Received by/Date: R. D. [Signature] 7/9/13

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

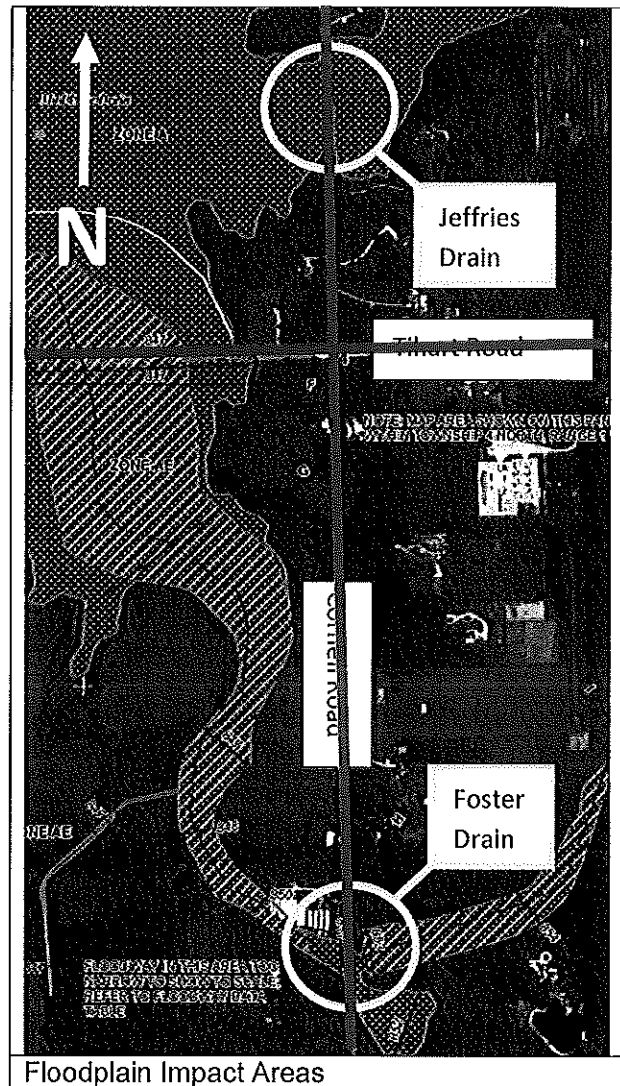
A site plan, drawn to a legible scale, containing the following information where applicable:

- 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.

Attached information for the Charter Township of Meridian Special Use Permit

The proposed reconstruction of Cornell Road between Grand River Ave and Orlando Dr will impact floodplain for the Foster Drain and Jeffries Drain. The impact locations have been noted in the Exhibit to the right.

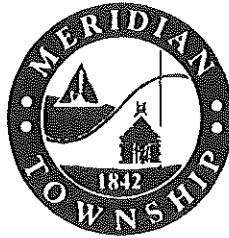
Approximately 42 cyd of floodplain fill is anticipated near the Foster Drain crossing. This fill is intended to replace the material that has been lost due to erosion, to re-establish stable side slopes, and to provide additional cover over the existing crossing. The amount of fill that is proposed has been minimized with the use of 1:3 side slopes. The modified side slopes will allow this area to blend into the surrounding area and be harmonious in appearance. This will not be hazardous to the surrounding properties or be detrimental to the economic welfare of the surrounding properties. Regular earth material will be used as the fill material, so the excessive production of traffic, noise, smoke, fumes, glare, and odors are not expected. 650 sqft of wetland impacts are anticipated as a part of this fill activity. This impact is believed to be insignificant when compared to total wetland size.



The impacts at the Jeffries Drain crossing are associated with the removal of the existing 38' culvert and the construction of a 60' culvert. The total fill and excavation associated with this work is approximately 109 cyd and 70 cyd, respectively. The net floodplain fill associated with this work is 39 cyd. This fill and culvert replacement is intended to provide cover over the proposed culvert and improve the safety of the roadway clear zone. The amount of fill that is proposed has been minimized with the use of 1:3 side slopes. The modified side slopes will allow this area to blend into the surrounding area and be harmonious in appearance. This will not be hazardous to the surrounding properties or be detrimental to the economic welfare of the surrounding properties. Regular earth material will be used as the fill material, so the excessive production of traffic, noise, smoke, fumes, glare, and odors are not expected. 1140 sqft of wetland impacts are anticipated as a part of this fill activity. This impact is believed to be insignificant when compared to total wetland size.

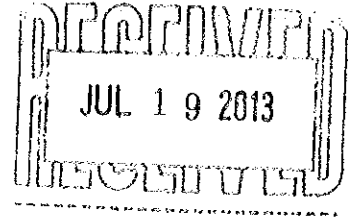
CHARTER TOWNSHIP OF MERIDIAN

Elizabeth Ann LeGoff Supervisor
Brett Dreyfus Clerk
Julie Brixie Treasurer
Frank L. Walsh Manager



Milton L. Scales Trustee
Ronald J. Styka Trustee
John Veenstra Trustee
Angela Wilson Trustee

July 19, 2013



Mr. Richard Brown
Community Planning & Development
Meridian Charter Township
Okemos, MI 48864-1198

**Re: Special Use Permit Application for Pathway
 Cornell Road – SUP 13091**

Dear Mr. Brown:

I have reviewed the construction plans for the proposed improvements to Cornell road from Grand River Avenue to Orlando Drive. The work in the flood plain is at the crossings of the Foster Drain and the Jeffries Drain. The total amount of fill at the two crossings is 81 cubic yards. Although not discussed in the special use permit application a compensating cut, if required, can be accomplished at other locations along the two drains.

The project is feasible, and I approve the project.

Sincerely,

Raymond O. Severy, P.E.
Director of Public Works & Engineering



**Wetland Use Permit #13-01
(Ingham County)
July 18, 2013**

APPLICANT: Ingham County Department of Transportation & Roads
301 Bush Street
P.O. Box 38
Mason, MI 48854

STATUS OF APPLICANT: Property owner

REQUEST: Work in regulated wetlands associated with improvements to
Cornell Road

CURRENT ZONING: RR (Rural Residential)

LOCATION: Cornell Road from Orlando Drive on the north to Grand
River Avenue on the south

EXISTING AREA LAND USES: N: Single-Family Residential
S: Single-Family Residential
E: Single-Family Residential
W: Single-Family Residential and Preservation

CURRENT ZONING IN AREA: N: RA (Single Family-Medium Density)
S: RR (Rural Residential)
E: RR (Rural Residential)
W: RR (Rural Residential) & RA (Single Family-Medium
Density)

**CHARTER TOWNSHIP OF MERIDIAN
MEMORANDUM**

TO: Planning Commission

FROM: *Gail Oranchak*
Gail Oranchak, AICP
Principal Planner

R. F. Brown, Jr.
Richard F. Brown, Jr., AICP
Associate Planner

DATE: July 18, 2013

RE: Wetland Use Permit #13-01 (Ingham County), request to work in regulated wetlands associated with improvements to Cornell Road

The Ingham County Department of Transportation and Roads is requesting a wetland use permit to impact portions of as many as 14 regulated wetlands. The impacts are associated with proposed improvements to Cornell Road from Orlando Drive on the north to Grand River Avenue on the south. Two improvement options are under consideration by the Township Board:

OPTION 1	Grind up existing pavement; resurface the road; narrow the travel lanes to 10 feet; add a new two foot paved shoulder and one foot gravel shoulder; culvert improvements; limited tree removal; install guardrails; and cut the hill near Tihart Road.
OPTION 2	Grind up existing pavement; resurface the road; narrow the travel lanes to 10 feet; culvert improvements; limited tree removal; and possibly cut the hill near Tihart Road.

If Option 2 is chosen, wetland impacts will be substantially reduced and likely only occur at or near the drain crossings. The following chart identifies the wetlands impacted and the extent of the impact(s) under Option 1:

TOWNSHIP WETLAND #	FILL AREA (SQ.FT.)	FILL AREA (ACRES)
14-1	3,681	0.08
14-3A	2,138	0.05
14-4	390	0.01
14-7	131	< 0.01
14-8	798	0.02
14-9	193	< 0.01
14-12	1,408	0.03
14-17	7,165	0.16
23-2A	2,429	0.06
23-2B	288	0.01
23-2C	3,612	0.08
23-14	1,875	0.04
23-15A	1,179	0.03
23-15B	2,798	0.06
TOTAL IMPACTS	28,085	0.65

WETLAND MAP



The Township Wetland Map is only 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.

Wetland Use Permit #13-01 is being reviewed concurrent with Special Use Permit #13091 for work proposed within the 100-year floodplain of the Jeffries and Foster Drains.

Staff Analysis

There are eleven general criteria provided in the Wetland Protection Ordinance, Section 22-157(2) of the Code of Ordinances, that must be considered when deciding whether to grant a wetland use permit. These include (paraphrased):

- a. The relative extent of public and private need for the proposed activity.
- b. Availability of prudent and feasible alternatives.
- c. Extent and permanence of beneficial or detrimental effects from the activity.
- d. Probable impact of the proposal in relation to the cumulative effect by other activities in the watershed.
- e. Probable impact on recognized historic, cultural, scenic, ecological, or recreational values, as well as on public health and safety or fish and wildlife.
- f. Economic value of the proposed land change.
- g. The size and quality of the wetland being considered.
- h. The findings of necessity for the proposed activity by other agencies.
- i. Amount of wetland remaining in the general area and proximity to a waterway.

- j. Proximity to any water body.
- k. Extent to which upland soil erosion adjacent to the wetland is controlled.

The Township's Environmental Consultant visited the site in August 2011 to delineate wetlands along Cornell Road. Below are its findings regarding Wetland Use Permit #13-01:

- The proposed road construction project is in the public interest and the wetland use permit is necessary to realize certain public benefits.
- Cornell Road traverses an area rich with wetlands. Road fill will impinge upon the edge of 14 wetland complexes containing emergent, scrub-shrub, and forested wetlands, as well as open water.
- Wetland impacts were minimized by minimizing the grade raise for the roadbed and maintaining a 1:3 side slope.
- The project will result in a loss of 0.65 acre of regulated wetland.
- The project places extensive wetland areas at risk of soil erosion and deposition during site construction.
- A mitigation plan has not been submitted.
- Information provided does not include plans for soil erosion and sedimentation control.

Based on these findings, the Township's Environmental Consultant recommends that if Wetland Use Permit #13-01 is to be approved, the following conditions should be included:

- Require a wetland mitigation plan for the construction of 0.975 acres of mitigation wetland either before issuance of the wetland use permit or prior to the commencement of any work associated with the project.
- Require wetland mitigation which consists of 0.3 acre scrub-shrub wetland and 0.675 acre of emergent wetland.
- Require the wetland mitigation be constructed in accordance with MDEQ wetland mitigation construction standards and monitored annually for five years.
- Require a soil erosion and sedimentation plan for review and approval by the Township to protect contiguous wetlands from soil deposition during construction.
- Require appropriate erosion and sedimentation control measures during construction to ensure there are no impacts to contiguous wetlands as a result of soil erosion.
- Require periodic inspection of the site for the first year after construction to identify and correct side slope erosion issues adjacent to wetlands.

Ingham County Department of Transportation and Roads staff, Township personnel and consultants have met to discuss the project. The applicant has indicated soil erosion control

**WUP #13-01 (Ingham County)
Planning Commission (7/18/13)
Page 4**

measures will be established and a mitigation plan will be prepared and submitted once one of the two construction options is selected by the Township Board.

The Environmental Commission at its July 17, 2013 meeting voted to recommend denial of Wetland Use Permit #13-01 for the following reasons:

- The lack of a wetland mitigation plan.
- The lack of a proposed location for wetland mitigation.
- Lack of a soil erosion plan.

Although a decision was requested for the same night as the public hearing, a decision has been delayed until the Township Board selects one of the options. The Board is expected to make its selection at its July 23, 2013, meeting. Wetland Use Permit #13-01 will be on the August 12, 2013, agenda for action.

Planning Commission Options

Pursuant to Section 22-157(1) of the Code of Ordinances, the Planning Commission has the option to approve, approve with conditions, or deny Wetland Use Permit #13-01. Based on the original submittal date and the 90 day review timeline established in the State Wetland Act and the Township's Wetland Ordinance, the deadline for action is October 7, 2013. The applicant has requested expedited action on the permit so the project may be completed in 2013. A resolution will be provided for consideration at a future meeting.

Attachments

1. Application materials
2. Environmental Consultant's report
3. Memorandum from the Environmental Commission

g:\planning\brown\environmental issues\wetlands\wup1301.pc1.doc



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.mcqi.state.mi.us/wetlands/

Project Address (road, if no street address) <i>Cornell Rd over Jeffries Drain</i>	Zip Code <i>48864</i>	Municipality (Township/Village/City) <i>Meridian Twp</i>	County <i>Ingham</i>
Property Tax Identification Number(s) <i>n/a</i>	Latitude <i>42.73753 N</i>	Township/Range/Section (TRS) <i>T 4N N or S; R 1W E or W;</i>	
Subdivision/Plat and Lot Number	Longitude <i>- 84 39298 W</i>	Sec <i>14</i> OR Private Claim # _____	

2 Applicant and Agent Information

Owner/Applicant (individual or corporate name) <i>Ingham Department of Transportation and Roads</i>	Agent/Contractor (firm name and contact person) <i>Bergmann Associates, Inc.</i>
Mailing Address <i>301 Bush Street (P.O. Box 38)</i>	Mailing Address <i>1427 W Saginaw Street, Suite 200</i>
City <i>Mason</i> State <i>MI</i> Zip Code <i>48854</i>	City <i>East Lansing</i> State <i>MI</i> Zip Code <i>48823</i>
Contact Phone Number <i>517-676-9722</i> Fax <i>517-676-2085</i>	Contact Phone Number <i>517-272-9835</i> Fax <i>517-272-9836</i>
Email <i>rpeterson@inghamcra.org</i>	E-mail <i>cmccollum@bergmannpc.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)	Mailing Address
Contact Phone Number	City State Zip Code

3 Project Description

Project Name <i>Cornell Rd resurfacing Grand River to Orlando Dr</i>	Preapplication File Number <i>-- -- -P</i>
Name of Water body <i>Jeffries Drain</i>	Date project staked/flagged

- The proposed project is on, within, or involves (check all that apply)
- | | | |
|---|--|---|
| <input type="checkbox"/> an inland lake (5 acres or more) | <input type="checkbox"/> a Great Lake or Section 10 Waters | Project Use
<input type="checkbox"/> private
<input type="checkbox"/> commercial
<input checked="" type="checkbox"/> public/government
<input type="checkbox"/> project is receiving federal/state transportation funds
<input type="checkbox"/> Wetland Restoration
<input type="checkbox"/> other |
| <input type="checkbox"/> a pond (less than 5 acres) | <input type="checkbox"/> a wetland | |
| <input checked="" type="checkbox"/> a stream, river, ditch or drain | <input checked="" type="checkbox"/> a 100-year floodplain | |
| <input type="checkbox"/> a legally established County Drain
Date Drain was established | <input type="checkbox"/> a dam | |
| <input type="checkbox"/> a channel/canal | <input type="checkbox"/> a designated high risk erosion area | |
| <input type="checkbox"/> 500 feet of an existing water body | <input type="checkbox"/> a designated critical dune area | |
| | <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 the attached information packet (Item 3a).*

Construction Sequence and Methods *See the attached information packet (Item 3b).*



4 Project Purpose, Use and Alternatives <i>Attach additional sheets as necessary.</i>					
Describe the purpose of the project and its intended use; include any new development or expansion of an existing land use. <i>See the attached information packet (Item 4a).</i>					
Describe the alternatives considered to avoid or minimize resource impacts. Include factors such as, but to limited to, alternative locations, project layout and design, and construction technologies. For utility crossings include alternative routes and construction methods. <i>See the attached information packet (Item 4b).</i>					
5 Locating Your Project Site <i>Attach a legible black and white map with a North arrow.</i>					
Names of roads of closest intersection <i>Grand River Ave / Cornell Rd to Orlando Dr / Cornell Rd</i>					
Directions from main intersection to the project site, with distances from the best and nearest visible landmark and water body <i>This project extends from Grand River Ave in a northerly direction along Cornell Rd for 1.844 mile to Orlando Rd. Jeffries Drain is located approximately 1550 ft south of Orlando Dr / Cornell Rd intersection</i>					
Description of buildings on the site (<i>color; 1 or 2 story, other</i>)			Description of adjacent landmarks or buildings (<i>address; color; etc</i>) <i>The existing culvert conveying the Jeffries Drain is projecting and is visible.</i>		
How can your site be identified if there is no visible address? <i>Jeffries Drain is the only defined channel within the surrounding wetland area</i>					
6 Easements and Other Permits					
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Is there a conservation easement or other easement, deed restriction, lease, or other encumbrance upon the property? ➔ If yes, attach a copy. Provide copies of court orders and legal lake levels if applicable.					
List all other federal, interstate, state, or local agency authorizations including required assurances for Critical Dune Area projects.					
Agency	Type of Approval	Number	Date Applied	Date approved /denied	Reason for denial
7 Compliance					
If a permit is issued, when will the activity begin? (M/D/Y) <i>8/1/2013</i>			Proposed completion date (M/D/Y) <i>11/15/2013</i>		
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Has any construction activity commenced or been completed in a regulated area? ➔ If Yes, identify the portion(s) underway or completed on drawings or attach project specifications and give completion date(s).					
<input type="checkbox"/> No <input type="checkbox"/> Yes Were the regulated activities conducted under a DEQ and/or USACE permit? ➔ If Yes, list the permit numbers					
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Are you aware of any unresolved violations of environmental law or litigation involving the property? ➔ If Yes, attach explanation.					
8 Adjacent Property Owners <i>Provide current mailing addresses. Attach additional sheets/labels for long lists.</i>					
<input type="checkbox"/> Established Lake Board	Contact Person	Mailing Address	City	State and Zip Code	
<input type="checkbox"/> Lake Association					
List all adjacents. If you own the adjacent lot, provide the requested information for the first adjacent parcel that is not owned by you.					
Property Owner's Name		Mailing Address	City	State and Zip Code	
<i>See the attached site plan</i>					
9 Applicant's Certification <i>Read carefully before signing.</i>					



I am applying for a permit(s) to authorize the activities described herein. I certify that I am familiar with the information contained in this application; that it is true and accurate; and, to the best of my knowledge, that it is in compliance with the State Coastal Zone Management Program. I understand that there are penalties for submitting false information and that any permit issued pursuant to this application may be revoked if information on this application is untrue. I certify that I have the authority to undertake the activities proposed in this application. By signing this application, I agree to allow representatives of the DEQ, USACE, and/or their agents or contractors to enter upon said property in order to inspect the proposed activity site before and during construction and after the completion of the project. I understand that I must obtain all other necessary local, county, state, or federal permits and that the granting of other permits by local, county, state, or federal agencies does not release me from the requirements of obtaining the permit requested herein before commencing the activity. I understand that the payment of the application fee does not guarantee the issuance of a permit.

<input type="checkbox"/> Property Owner <input checked="" type="checkbox"/> Agent/Contractor <input type="checkbox"/> Corp. or Public Agency / Title	Printed Name <i>Robert Peterson</i>	Signature	Date 7/8/13
--	--	-----------	----------------



10 Projects Impacting Inland Lakes, Streams, Great Lakes, Wetlands or Floodplains

- Complete only those sections A through M applicable to your project.
- If your project impacts wetlands also complete Section 12. If your project impacts regulated floodplains also complete Section 13.
- To calculate volume in cubic yards (cu yd), multiply the average length in feet (ft) times the average width (ft) times the average depth (ft) and divide by 27. Example: (25 ft long x 10 ft wide x 2 feet deep) / 27 = 18.5 cubic yards
- Some projects on the Great Lakes require an application for conveyance prior to Joint Permit Application completeness.
 - ➔ Provide a black and white overall site plan, with cross-section and profile drawings. Show existing lakes, streams, wetlands, and other water features; existing structures; and the location of all proposed structures, land change activities and soil erosion and sedimentation control measures. Review Appendix B and EZ Guides for aid in providing complete site-specific drawings.
 - ➔ Provide tables for multiple impact areas or multiple activities such as multiple fill areas or multiple culverts. Include your calculations.

Water Level Elevation
 On inland waters NGVD 29 NAVD 88 other Observed water elevation (ft) 841.9 date of observation (M/D/Y) 3/27/13
 On a Great Lake IGLD 85 surveyed converted from observed still water elevation.

A. PROJECTS REQUIRING FILL (See All Sample Drawings)
 ➔ Attach a site plan and cross-section views to scale showing maximum and average fill dimensions with calculations.
 ➔ For multiple impact areas on a site provide a table with location, dimensions and volumes for each fill area.

Purpose bioengineered shore protection boat ramp boat well bridge or culvert crib dock
 riprap seawall swim area other

Dimensions of fill (ft) Length 60 Width 32 Maximum Depth 6.75	Total volume (cubic yards) 109 (for culvert replacement only)	Volume below OHWM (cubic yards) 20 (for culvert replacement only)
--	--	--

Maximum water depth in fill area (ft) 2	Area filled (sq ft) 2048 (for culvert replacement only)	Will filter fabric be used under proposed fill? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (If Yes, type) Geotextile
---	---	--

Fill will extend 18 feet into the water from the shoreline and upland 17 feet out of the water.

Type of clean fill peastone % sand % gravel % other Regular Earth

Source of clean fill commercial on-site ➔ If on-site, show location on site plan.
 other ➔ If other, attach description of location.

B. PROJECTS REQUIRING DREDGING OR EXCAVATION (See Sample Drawings)
 • Refer to www.mi.gov/jointpermit for spoils disposal and authorization requirements.
 ➔ Attach a site plan and cross-section views to scale showing maximum and average dredge or excavation dimensions with calculations.
 ➔ For multiple impact areas on a site provide a table with location, dimensions and volumes for each dredge/excavation area.

Purpose boat ramp boat well bridge or culvert maintenance dredge
 navigation pond/basin other

Dimensions (ft) Length 60 Width 32 Maximum Depth 6.25	Total volume (cu yds) 70 (for culvert replacement only)	Volume below OHWM (cu yds) 19 (for culvert replacement only)
--	--	---

Has this same area been previously dredged? No Yes If Yes, provide date and permit number:

Will the previously dredged area be enlarged? No Yes If Yes, when and how much?

Is long-term maintenance dredging planned? No Yes If Yes, how often?

Dredge or Excavation Method Hydraulic Mechanical other

Spoils Disposal	Dredged or excavated spoils will be placed <input type="checkbox"/> on-site <input type="checkbox"/> landfill <input type="checkbox"/> USACE confined disposal facility <input checked="" type="checkbox"/> other upland off-site For disposal, provide a ➔ Detailed spoils disposal area location map and site plan with property lines. ➔ Letter of authorization from property owner of spoils disposal site, if disposed off-site.
	For volumes less than 5,000 cu yards, has proposed dredge material been tested for contaminants within the past 10 years? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ➔ If Yes, provide test results with a map of sampling locations.

C. PROJECTS REQUIRING RIPRAP (See Sample Drawings 2, 3, 8, 12, 14, 22, and 23)

Riprap water ward of the ordinary high water mark: dimensions (ft) length 10 width 16.5 depth 1	Volume(cu yd) 6
---	-----------------

Riprap landward of the ordinary high water mark: dimensions (ft) length 10 width 16.5 depth 1	Volume(cu yd) 6
---	-----------------

Type and size of riprap (inches) <input checked="" type="checkbox"/> field stone < 8" <input checked="" type="checkbox"/> angular rock < 8" <input type="checkbox"/> other	Will filter fabric or pea stone be used under proposed riprap? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, Type geotextile
---	--



<input type="checkbox"/> D. SHORE PROTECTION PROJECTS (See EZ Guides and Sample Drawings 2, 3, and 17. Complete Sections 10A, B, and/or C.) ➔ For bioengineering projects include the list of native plants/seeds, if available.			
Type and length (ft)	<input type="checkbox"/> bioengineering (ft)	<input type="checkbox"/> revetment (ft)	<input type="checkbox"/> riprap (ft) <input type="checkbox"/> seawall/bulkhead (ft)
Structure is <input type="checkbox"/> new <input type="checkbox"/> repair <input type="checkbox"/> replacement of an existing structure		Will the existing structure be removed? <input type="checkbox"/> No <input type="checkbox"/> Yes	
Proposed Toe Stone (linear feet)		Distance of project from adjacent property lines (ft)	
Distance of project from an obvious fixed structure (example - 50 ft from SW corner of house)			
For bioengineering projects indicate the structure type <input type="checkbox"/> brush bundles <input type="checkbox"/> coir log <input type="checkbox"/> live stakes <input type="checkbox"/> tree revetment <input type="checkbox"/> other			
<input type="checkbox"/> E. DOCK - PIER – MOORING PILINGS (See Sample Drawing 10) ➔ Attach a copy of the property legal description, mortgage survey, or a property boundary survey report.			
Dock Type <input type="checkbox"/> open pile <input type="checkbox"/> filled <input type="checkbox"/> crib <input type="checkbox"/> floating <input type="checkbox"/> cantilevered <input type="checkbox"/> spring piles <input type="checkbox"/> piling clusters <input type="checkbox"/> other			
Is the structure within the applicant's riparian area interest area? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ Show parcel property lines on the site plan.			
Proposed structure dimensions (ft) length width		Use <input type="checkbox"/> private <input type="checkbox"/> public <input type="checkbox"/> commercial	
Dimensions of nearest adjacent structures (ft) length width		Distance of dock from adjacent property lines (ft)	
<input type="checkbox"/> F. BOAT WELL (See EZ Guide. Complete Sections 10A and 10B)			
Dimensions (ft) length width depth		Number of boats	
Type of sidewall stabilization <input type="checkbox"/> concrete <input type="checkbox"/> riprap <input type="checkbox"/> steel <input type="checkbox"/> vinyl <input type="checkbox"/> wood <input type="checkbox"/> other			
Volume of backfill behind sidewall stabilization (cu yd)		Distance of boat well from adjacent property lines (ft)	
<input type="checkbox"/> G. BOAT RAMP (See EZ Guide. Complete sections 10A, 10B, and 10C for mattress and pavement fill, dredge, and riprap)			
Type <input type="checkbox"/> new <input type="checkbox"/> existing <input type="checkbox"/> maintenance/improvement		Use <input type="checkbox"/> private <input type="checkbox"/> public <input type="checkbox"/> commercial	
Existing overall boat ramp dimensions (ft) length width depth		Type of construction material <input type="checkbox"/> concrete <input type="checkbox"/> wood <input type="checkbox"/> stone <input type="checkbox"/> other	
Proposed overall ramp dimensions (ft) length width depth		Proposed ramp dimensions (ft) below ordinary high water mark length width depth	
Number of proposed skid piers	Proposed skid pier dimensions (ft) length width		Distance of ramp from adjacent property lines (ft)
<input type="checkbox"/> H. BOAT HOIST – ROOFS (See EZ Guide)			
Type <input type="checkbox"/> cradle <input type="checkbox"/> side lifter <input type="checkbox"/> other		Located on <input type="checkbox"/> seawall <input type="checkbox"/> dock <input type="checkbox"/> bottomlands	
Hoist dimensions, including catwalks (ft) length width			
Area occupied, including cat walks (sq ft)		Distance of hoist from adjacent property lines (ft)	
Permanent Roof <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ If Yes, how is the roof supported?		Maximum Roof Dimensions (ft): length width height	
<input type="checkbox"/> I. BOARDWALKS and DECKS in WETLANDS or FLOODPLAINS (See Sample Drawings 5 and 6. Complete Sections 12 and/or 13) ➔ Provide a table for multiple boardwalks and decks proposed in one project; include locations and dimensions.			
Wetlands		Floodplains	
Boardwalk <input type="checkbox"/> on pilings <input type="checkbox"/> on fill	Deck <input type="checkbox"/> on pilings <input type="checkbox"/> on fill	Boardwalk <input type="checkbox"/> on pilings <input type="checkbox"/> on fill	Deck <input type="checkbox"/> on pilings <input type="checkbox"/> on fill
Dimensions (ft) length width	Dimensions (ft) length width	Dimensions (ft) length width	Dimensions (ft) length width
<input type="checkbox"/> J. INTAKE PIPES (See Sample Drawing 16) or OUTLET PIPES (See Sample Drawing 22)			
If outlet pipe, discharge is to <input type="checkbox"/> inland lake <input type="checkbox"/> stream, drain or river <input type="checkbox"/> overland flow <input type="checkbox"/> Great Lake <input type="checkbox"/> wetland <input type="checkbox"/> other			
Number of pipes	Pipe diameters and invert elevations	Does pipe discharge below the OHWM?	<input type="checkbox"/> No <input type="checkbox"/> Yes
		Is the water treated before discharge?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Type <input type="checkbox"/> headwall <input type="checkbox"/> end section <input type="checkbox"/> other		Dimensions of headwall OR end section (ft) length width height	



<input type="checkbox"/> K. MOORING and NAVIGATION BUOYS (See EZ Guide for Sample Drawing)			
➔ Provide a site plan showing the distances between each buoy and from the shore to each buoy, and depth (ft) of water at each location. ➔ Provide cross-section drawing(s) showing anchoring system(s) and dimensions.			
Purpose of buoy <input type="checkbox"/> mooring <input type="checkbox"/> navigation <input type="checkbox"/> scientific structures <input type="checkbox"/> swimming <input type="checkbox"/> other			
Number of buoys	Dimensions of buoys (ft) width height swing radius chain length		Boat Lengths Type of anchor system
Buoy Location: Latitude N Longitude -- W. ➔ Provide a table for multiple buoys.			
Do you own the property along the shoreline?		<input type="checkbox"/> No <input type="checkbox"/> Yes	➔ If No, attach an authorization letter from the property owner(s).
Do you own the bottomlands?		<input type="checkbox"/> No <input type="checkbox"/> Yes	➔ If No, attach an authorization letter from the property owner(s).
<input type="checkbox"/> L. FENCES			
➔ Provide an overall site plan showing the proposed fencing through streams, wetlands or floodplains. ➔ Provide a drawing of fence profile showing the design, dimension, post spacing, mesh, and distance from ground to bottom of fence.			
Purpose of fence <input type="checkbox"/> Airport <input type="checkbox"/> Cervidae <input type="checkbox"/> Livestock <input type="checkbox"/> Residential <input type="checkbox"/> Security <input type="checkbox"/> Other			
Total length (ft) of fence through streams wetlands floodplains		Fence height (ft)	Fence type and material
<input type="checkbox"/> M. OTHER - e.g., structure removal, maintenance or repair, aerator, dry fire hydrant, gold prospecting, habitat structures, scientific measuring devices, soil borings, or survey activities.			
Structure description, dimensions and volumes. Complete Sections 10A-C as applicable.			
<input checked="" type="checkbox"/> Expansion of an Existing or Construction of a New Lake or Pond (See Sample Drawings 4 and 15)			
➔ Complete Section 10J for outlets and Section 17 for water control structures. ➔ Provide elevations, cross-sections and profiles of outlets, dams, dikes, water control structures and emergency spillways to nearest water bodies.			
Which best describes your proposed water body use (check all that apply)			
<input type="checkbox"/> mining <input type="checkbox"/> recreation <input type="checkbox"/> storm water retention basin <input type="checkbox"/> wastewater basin <input type="checkbox"/> wildlife <input type="checkbox"/> other			
Water source for lake/pond			
<input type="checkbox"/> groundwater <input type="checkbox"/> natural springs <input type="checkbox"/> Inland Lake or Stream <input type="checkbox"/> storm water runoff <input type="checkbox"/> pump <input type="checkbox"/> sewage <input type="checkbox"/> other			
Location of the lake/basin/pond <input type="checkbox"/> floodplain <input type="checkbox"/> wetland <input type="checkbox"/> stream (inline) <input type="checkbox"/> upland			
Maximum dimensions (ft) length width depth		Maximum Area: <input type="checkbox"/> acres <input type="checkbox"/> sq ft	
Has the there been a hydrologic study performed on the site?		<input type="checkbox"/> No <input type="checkbox"/> Yes	➔ If Yes, provide a copy.
Has the DEQ conducted a wetland assessment for this parcel?		<input type="checkbox"/> No <input type="checkbox"/> Yes	➔ If Yes, provide a copy or WIP number:
Has a professional wetland delineation been conducted for this parcel?		<input type="checkbox"/> No <input type="checkbox"/> Yes	➔ If Yes, provide a copy with data sheets.
Spoils Disposal	Dredged or excavated spoils will be placed <input type="checkbox"/> on-site <input type="checkbox"/> landfill <input type="checkbox"/> USACE confined disposal facility <input type="checkbox"/> other upland off-site		
	For disposal, provide a ➔ Detailed spoils disposal area location map and site plan with property lines. ➔ Letter of authorization from property owner of spoils disposal site, if disposed off-site.		



12 Activities That May Impact Wetlands (See Sample Drawings 8 & 9). Complete other Sections as applicable.

- Locate your site and wetland information with the DEQ Wetlands Map Viewer at www.mcgl.state.mi.us/wetlands/
- For information on the DEQ's Wetland Identification Program (WIP) visit www.mi.gov/wetlands.
 - ⇒ Provide a detailed site plan with labeled property lines, upland and wetland areas, and dimensions and volumes of wetland impacts.
 - ⇒ Complete the wetland dredge and wetland fill dimension information below for each impacted wetland area.
 - ⇒ Attach tables for multiple impact areas or activities.
 - ⇒ Attach at least one cross-section for each wetland dredge and/or fill area; show wetland and upland boundaries on the cross-section.

Has the DEQ conducted a wetland assessment for this parcel?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	⇒ If Yes, provide a copy or WIP number:
Has a professional wetland delineation been conducted for this parcel?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	⇒ If Yes, provide a copy with data sheets
Is there a recorded DEQ easement on the property?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	⇒ If Yes, provide the easement number
Did the applicant purchase the property before October 1, 1980?	<input type="checkbox"/> No <input type="checkbox"/> Yes	⇒ If Yes, provide documentation.
Is any grading or mechanized land clearing proposed?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	⇒ If Yes, label the locations on the site plan.
Has any of the proposed grading or mechanized land clearing been completed?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	⇒ If Yes, label the locations on the site plan

Proposed Activity	<input type="checkbox"/> boardwalk or deck (Section 10I)	<input type="checkbox"/> bridges and culverts (Section 14)	<input type="checkbox"/> designated environmental area
	<input type="checkbox"/> dewatering	<input type="checkbox"/> draining surface water	<input checked="" type="checkbox"/> driveway / road
	<input type="checkbox"/> fences (Section 10L)	<input type="checkbox"/> fill or dredge	<input type="checkbox"/> restoration
	<input type="checkbox"/> septic system	<input type="checkbox"/> stormwater discharge (Section 10J)	<input type="checkbox"/> other

	Dimensions maximum length (ft) <i>Varies</i> maximum width (ft) <i>Varies</i>	Area <input type="checkbox"/> acres <input checked="" type="checkbox"/> sq ft <i>See attached wetland impact sheets</i>	Average depth (ft) <i>See Attached</i>	Volume (cu yd) <i>See attached wetland impact sheets</i>
FILL				
DREDGE				

Spoils Disposal	Dredged or excavated spoils will be placed <input type="checkbox"/> on-site <input type="checkbox"/> landfill <input type="checkbox"/> USACE confined disposal facility <input checked="" type="checkbox"/> other upland off-site
	For disposal, provide a ⇒ Detailed spoils disposal area location map and site plan with property lines. ⇒ Letter of authorization from property owner of spoils disposal site, if disposed off-site.

Septic System	The proposed project will be serviced by: <input type="checkbox"/> public sewer <input type="checkbox"/> private septic system ⇒ Show system on plans.	If a private septic system is proposed, has an application for a permit been made to the County Health Department? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, has a permit been issued? <input type="checkbox"/> No <input type="checkbox"/> Yes ⇒ Provide a copy of the permit.
---------------	--	---

Describe the wetland impacts, the proposed use or development, and the alternatives considered:
2 ft shoulders are being added to the existing roadway to improve safety and pavement stability. The increased road width and proposed side slopes will cause an impact to the existing wetlands. This alternative was selected because it re-establishes a stable pavement section while minimizing impacts to the wetlands

Does the project impact more than 1/3 acre of wetland? No Yes
 ⇒ If Yes, submit a Mitigation Plan with the type and amount of mitigation proposed. For more information go to www.mi.gov/wetlands

Describe how impacts to waters of the United States will be avoided and minimized:
Impacts were minimized with the use of 1:3 sideslopes and a minimal grade raise

Describe how the impact to waters of the United States will be compensated. OR Explain why compensatory mitigation should not be required for the proposed impacts.
All of the impacted wetlands are within the existing Right-of-Way of the roadway. Under the Meridan Twp Ordinance 22-152-a.12 these activities do not need to be permitted. Additionally there are not suitable sites within the vicinity of this project to preform wetland mitigation.





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) <i>847 (FEMA mapping)</i> Datum <input type="checkbox"/> NGVD 29 <input checked="" type="checkbox"/> NAVD 88 <input type="checkbox"/> other
-------------------	--	--

Site is 0 feet above ordinary high water mark (OHWM) OR observed water level. Date of observation (M/D/Y) *3/27/13*

Fill volume below the 100-year floodplain elevation (cu yds) <i>109 (for culvert replacement only)</i>	Compensating cut volume below the 100-year floodplain elevation (cu yds) <i>70 (for culvert replacement only)</i>
--	---

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 Serviced 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)	lowest elevation of flood vents (ft)



14 Bridges and Culverts Including Foot and Cart Bridges. (See EZ Guides and Sample Drawings 5, 14A, 14B, 14C, 14D.)

- Complete other applicable Sections, including 10A-C.
- A hydraulic analysis or hydrologic analysis may be required to fully assess impacts. ➔ Attach hydraulic calculations.
- High Water Elevation - describe reference point and highest known water level above or below reference point and date of observation.
 - ➔ Attach additional sheets for multiple bridges and/or culverts.
 - ➔ Provide detailed site-specific drawings of existing and proposed Plan and Elevation View at a scale adequate for detailed review.
 - ➔ Provide all information in the boxes below; do not write in a reference to plan sheets. Show reference datum used on plans.

Stream Information	The site has a high water elevation (ft) 847 <input type="checkbox"/> above or <input type="checkbox"/> below the Reference Point of _____ Date observed FEMA mapping		
	Reference datum used <input type="checkbox"/> NGVD 29 <input checked="" type="checkbox"/> NAVD 88 <input type="checkbox"/> IGLD 85 (Great Lakes coastal areas) <input type="checkbox"/> other		
	Average stream width (ft) at the ordinary high water mark (OHWM) outside the influence of any ponding or scour holes around the structure	Upstream Downstream	4 4
	Cross-sectional area of primary channel (sq ft) 4.5 (See Sample Drawing 14C for more information)		
	The width of the stream where the water begins to overflow its banks. Bankfull width (ft) 6		
	The invert of the stream 100-feet from structure (ft)	Upstream Downstream	841.00 841.00
	Is the existing culvert perched? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If Yes, provide a profile of the channel bottom at the high and low points for a distance of 200 feet upstream and downstream of the culvert.		

		Existing	Proposed	
Complete this form for each bridge / culvert location.				
Bridge	Number of bridge spans			
	Bridge type (concrete box beam, concrete I-beam, timber, etc.)			
	Bridge span (length perpendicular to stream) (ft)			
	Bridge width (parallel to stream) (ft)			
	Bottom of bridge beam (ft)	Upstream Downstream		
	Stream invert elevation at bridge (ft)	Upstream Downstream		
	Bridge rise from bottom of beam to streambed (ft)			
	Culvert	Number of culverts	1	1
Culvert type (arch, bottomless, box, circular, elliptical, etc.)		elliptical	arch	
Culvert material (concrete, corrugated metal, plastic, etc.)		CMP	CMP	
Culvert length (ft)		38	60	
Culvert <input checked="" type="checkbox"/> width <input type="checkbox"/> diameter (ft)		5	5.5	
Culvert height prior to any burying (ft)		4.5	4.25	
Depth culvert will be buried (ft)		0.25	0.25	
Elevation of culvert crown (ft)		Upstream Downstream	845.48 845.58	845.30 845.20
Higher elevation of <input checked="" type="checkbox"/> culvert invert OR <input type="checkbox"/> streambed within culvert (ft)		Upstream Downstream	840.98 841.08	841.05 840.95
Complete for both Bridges and Culverts		Entrance design (mitered, projecting, wingwalls, etc.)	Projecting	Projecting
	Total structure waterway opening above streambed (sq ft)	17.3	19.0	
	Total structure waterway area below the 100-year elevation (sq ft) (if known)	17.3	19.0	
	Elevation of road grade at structure (ft)	847.02	847.02	
	Elevation of low point in road (ft)	846.73	846.73	
	Distance from low point of road to mid-point of bridge crossing (ft)	90	90	
	Length of approach fill from edge of bridge/culvert to existing grade (ft)	Varies	Varies	
	A Licensed Professional Engineer may certify that your project will not cause a harmful interference for a range of flood discharges up to and including the 100-year flood discharge. The "Required Certification Language" is found under "forms" on the "maps, forms and documents" link from the www.mi.gov/jointpermit page or a copy may be requested by phone, email, or mail. A hydraulic report supporting this certification may also be required.			
Is Certification Language attached? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes				



15 Stream, River, or Drain Construction, Relocation and Enclosure Activities

- Complete Section 10C for riprap activities.
- If side casting or other proposed activities will impact wetlands or floodplains, complete Sections 12 and 13, respectively.
 - ➔ Provide a scaled overall site plan showing existing lakes, streams, wetlands, and other water features; existing structures; and the location of all proposed structures and land change activities.
 - ➔ Provide scaled cross-section (elevation) drawings necessary to clearly show existing and proposed conditions.
 - ➔ For activities on legally established county drains, provide original design and proposed dimensions and elevations.

Stream Information	Water elevation (ft) 841.9 datum <input type="checkbox"/> NGVD 29 <input checked="" type="checkbox"/> NAVD 88 <input type="checkbox"/> IGLD 85 (Great Lakes coastal areas) <input type="checkbox"/> other ➔ Show elevation on plans with description.	
	Dimensions (ft) of existing stream/drain channel (ft) length 60 (existing 38 ft enclosed)	width 4 depth 1
	Existing channel average water depth in a normal year (ft) 1.1	
Proposed Activity <input type="checkbox"/> enclosure <input type="checkbox"/> improvement <input type="checkbox"/> maintenance <input type="checkbox"/> new drain <input type="checkbox"/> relocation <input type="checkbox"/> wetlands <input checked="" type="checkbox"/> other culvert replacement		
If an enclosed structure is proposed, check material type <input type="checkbox"/> concrete <input checked="" type="checkbox"/> corrugated metal <input type="checkbox"/> plastic <input type="checkbox"/> other		
Dimensions (ft) of the structure: diameter 5.5 by 4.25 length 60		Volume of fill (cu yds) 109 (for culvert replacement only)
Will old/enclosed stream channel be backfilled to top of bank grade? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Length of channel to be abandoned (ft) 0		Volume of fill (cu yds) 0
Dimensions (ft) of improved, maintained, new, relocated or wetland stream/drain channel. length width depth		Volume of dredge/excavation (cu yds) 70 (for culvert replacement only)
How will slopes and bottom be stabilized? <i>The flat nature of drain makes the bottom stable. The slopes will be restored and will become vegetated</i>		Proposed side slopes (vertical / horizontal) <i>Varies</i>
Spoils Disposal	Dredged or excavated spoils will be placed <input type="checkbox"/> on-site <input type="checkbox"/> landfill <input type="checkbox"/> USACE confined disposal facility <input checked="" type="checkbox"/> other upland off-site For disposal, provide a ➔ Detailed spoils disposal area location map and site plan with property lines. ➔ Letter of authorization from property owner of spoils disposal site, if disposed off-site.	

16 Drawdown of an Impoundment

- If wetlands will be impacted, complete Section 12.

Type of drawdown <input type="checkbox"/> over winter <input type="checkbox"/> temporary <input type="checkbox"/> one-time event <input type="checkbox"/> annual event <input type="checkbox"/> permanent (dam removal) <input type="checkbox"/> other		
Reason for drawdown		
Has there been a previous drawdown? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, provide date (M/D/Y)		Previous DEQ permit number, if known
Does waterbody have established legal lake level? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Not Sure		Dam ID Number, if known
Extent of vertical drawdown (ft)	Impoundment design head (ft)	Number of adjacent or impacted property owners
Date drawdown would start (M/D/Y)	Date drawdown would stop (M/D/Y)	Rate of drawdown (ft/day)
Date refilling would start (M/D/Y)	Date refill would end (M/D/Y)	Rate of refill (ft/day)
Type of outlet discharge structure to be used <input type="checkbox"/> surface <input type="checkbox"/> bottom <input type="checkbox"/> mid-depth	Impoundment area at normal water level (acres)	Sediment depth behind impoundment discharge structure (ft)



17 Dam, Embankment, Dike, Spillway, or Control Structure Activities (See Sample Drawing 15)

- For more information go to www.mi.gov/damsafety. If wetlands will be impacted, complete Section 12.
- Information on removing a dam is available at www.mi.gov/damsafety and following the Related Link – DEQ Dam Removal web site.
 - ⇒ Attach site-specific conceptual plans for construction of a new dam, reconstruction of a failed dam, or enlargement of an existing dam for resource impact review. Detailed engineering plans are required once the activity has been determined to be permissible.
 - ⇒ Attach detailed signed and sealed engineering plans for a Part 315 dam repair, dam alteration, dam abandonment, or dam removal.
 - ⇒ Part 315 Dam Safety application fees are added to all other application fees.

Proposed Activity	<input type="checkbox"/> abandonment	<input type="checkbox"/> alteration	<input type="checkbox"/> enlargement of an existing dam
	<input type="checkbox"/> removal	<input type="checkbox"/> repair	<input type="checkbox"/> reconstruction of a failed dam
	<input type="checkbox"/> new dam construction	<input type="checkbox"/> other	

Dam ID Number, if known	Type of outlet discharge structure <input type="checkbox"/> surface <input type="checkbox"/> bottom <input type="checkbox"/> mid-depth
-------------------------	--

Will proposed activities require a drawdown of the waterbody to complete the work? No Yes ⇒ If Yes, complete Section 16.

Does the structure allow complete drainage of the waterbody? <input type="checkbox"/> No <input type="checkbox"/> Yes	Impoundment size (acres)
---	--------------------------

Benchmark elevation (ft) Describe the benchmark and show on the plans	Datum <input type="checkbox"/> NGVD 29 <input type="checkbox"/> NAVD 88 <input type="checkbox"/> Local <input type="checkbox"/> other
--	--

Dredging/excavation volume (cu yd)	Fill volume (cu yd)	Riprap volume (cu yd)
------------------------------------	---------------------	-----------------------

Have you engaged the services of a Licensed Professional Engineer? No Yes

Engineer's Name	Registration Number	Mailing Address
-----------------	---------------------	-----------------

Will a water diversion during construction be required? No Yes

If Yes, describe how the stream flow will be controlled through the dam construction area during the proposed project activities:

Complete the following for a new dam, reconstruction of a failed dam or enlargement of an existing dam

Describe the type of dam and how you will design the dam and embankment to control seepage through and underneath the dam.

Embankment top elevation (ft)	Streambed elevation at downstream embankment toe (ft)
-------------------------------	---

Structural height (difference between embankment top elevation and streambed elevation at downstream embankment toe) (ft)

Embankment dimensions	length (ft)	top width (ft)	bottom width (ft)	slopes (vertical / horizontal)	
				Upstream	Downstream

Proposed normal pool elevation (ft)	Impoundment flood elevation (ft)
-------------------------------------	----------------------------------

Maximum vertical drawdown capability (ft) Attach operational procedure of the proposed structure, if available.

Have soil borings been taken at dam location?	<input type="checkbox"/> No <input type="checkbox"/> Yes	⇒ If Yes, attach results.
---	--	---------------------------

Will a cold water underspill be provided?	<input type="checkbox"/> No <input type="checkbox"/> Yes	⇒ If Yes, provide the invert elevation (ft)
---	--	---

Do you have flowage rights to all proposed flooded property at the design flood elevation?	<input type="checkbox"/> No <input type="checkbox"/> Yes	⇒ If No, provide a letter of authorization from the property owner.
--	--	---



18 Utility Crossings (See Sample Drawings 12 and 13, and EZ Guide)

- If side casting is proposed, complete Sections 10A and 10B. If spoils will be placed in or impact wetlands, complete Section 12.
 - ⇒ Attach additional sheets or tables with the requested information as needed for multiple crossings.
 - ⇒ For wetland crossings using the open trench method show clay plugs at the wetland/upland boundaries on the plans.

Crossing of Inland Lake or Stream floodplain Great Lake wetlands (also complete Section 12)

What method will be used to construct the crossings? directional boring jack and bore open trench plow / knife flume

Utility Type	Number of lake or stream crossings	Number of wetland crossings	Pipe diameter with casing (in)	Pipe length per crossing (ft)	Distance below streambed or wetland (in)	Trench width (ft)
<input type="checkbox"/> sanitary sewer						
<input type="checkbox"/> storm sewer						
<input type="checkbox"/> watermain						
<input type="checkbox"/> cable						
<input type="checkbox"/> electric						
<input type="checkbox"/> fiber optic cable						
<input type="checkbox"/> oil/gas pipeline						

19 Marina Construction, Expansion and Reconfiguration (See Sample Drawing 21)

- For more information go to www.mi.gov/marinas
- Marinas located on the Great Lakes, including Lake St. Clair, may be required to secure leases or conveyances from the state of Michigan to place structures on the bottomlands. If a conveyance is necessary, an application must be submitted before the Joint Permit Application can be determined complete.
 - ⇒ Fully complete Section 10 E. For multiple structures provide a table with the requested information.
 - ⇒ Enclose a copy of any current pump-out agreement with another marina facility, if on-site sanitary pump out facilities are not available.
 - ⇒ Attach a copy of the property legal description, mortgage survey, or a property boundary survey to your application.
 - ⇒ The WRD may require a riparian interest area (RIA) estimate survey, sealed by a licensed surveyor, in order to determine whether the proposed project will adversely impact riparian rights. Include any available sealed RIA estimate survey and/or written authorizations from affected adjacent riparian owners with your application.

Proposed Marina Activity New construction Expansion Reconfiguration

Do you have an existing Great Lake Conveyance? No Yes For more information visit www.mi.gov/deqgreatlakes.

Are sanitary pump-out facilities available? No Yes Is there a pump out agreement? No Yes If Yes, provide a copy.

Marina Description	Current Count	Final Count
Number of boat slips/wells (do not include broadside dockage or mooring buoys)		
Lineal feet of broadside dockage		
Maximum number of boats at broadside dockage		
Number of mooring buoys		
Number of launch ramps/lanes		



20 Critical Dune Areas and High Risk Erosion Areas (See Sample Drawings 19 and 20, also Sample Drawing 9 for wetlands)

Critical Dune Areas (See Sample Drawing 20)

- For more information go to www.mi.gov/deqsanddunes/
- All property boundaries, proposed structure corners including decks, septic system, water well, driveway, grading, and terrain alteration locations must be staked before the WRD site inspection.
- Scaled overhead and cross-section plans that include all property boundaries, location and dimensions of all structures and terrain alterations, and construction access must be included. Cross-sections must show existing and proposed grades including foundations.
- Additional information may be required to complete the application review.
 - ➔ Construction in critical dune areas requires the following written assurances submitted with the application:
 - 1) permit or letter from County Enforcing Agent stating project complies with Part 91 (Soil Erosion and Sedimentation Control),
 - 2) permit or letter from County Health Department for work on a septic system, and
 - 3) a copy of the assurance letter received from the local Conservation District indicating your project has been reviewed and the prepared instructions or plans for vegetation removal will be followed during and after the construction process.
- Construction in critical dune areas on slopes greater than 33 percent (1 vertical: 3 horizontal) is prohibited without a special exception.
- Construction in critical dune areas on slopes that measure from 25 percent (1 vertical: 4 horizontal) to less than 33 percent requires plans prepared by a registered architect or licensed professional engineer.

High Risk Erosion Areas (See Sample Drawing 19)

- For more information go to www.mi.gov/jointpermit, select HREA under "related links"
- All property boundaries and proposed structure corners and septic system locations must be staked before the WRD site inspection.
- Scaled overhead plans that include all property boundaries, and the location and dimensions of all structures and septic systems must be included.
- Additional information, including the building construction plans, may be required to complete the application review.

Complete for all Critical Dune Areas and/or High Risk Erosion Areas	Parcel dimensions (ft) width depth		Date project staked (M/D/Y)	
	Property is a <input type="checkbox"/> platted lot <input type="checkbox"/> unplatted parcel		Year current property boundaries created	
	Type of construction activities <input type="checkbox"/> addition <input type="checkbox"/> driveway <input type="checkbox"/> garage <input type="checkbox"/> home <input type="checkbox"/> renovation <input type="checkbox"/> septic <input type="checkbox"/> other			
	The proposed project will be serviced by <input type="checkbox"/> public sewer <input type="checkbox"/> private septic system. ➔ On the plans show the location and dimensions of the private septic system. If a private septic system is proposed has application been made to the County Health Department for a permit? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, has a permit been issued? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ If Yes, provide a copy of the permit for all Critical Dune Area projects.			
	If in a High Risk Erosion Area provide the number of individual living-units in the proposed building			
Critical Dune Areas	Utility Installation		Proposed New Construction	
	Installation Method <input type="checkbox"/> directional bore <input type="checkbox"/> plowing in <input type="checkbox"/> open trench <input type="checkbox"/> other		Foundation type <input type="checkbox"/> basement <input type="checkbox"/> concrete slab <input type="checkbox"/> pilings <input type="checkbox"/> crawl space <input type="checkbox"/> other	
	➔ Show utility locations and dimensions on the site plan.		Area of existing structure (sq ft)	
	➔ Show construction access route on the site plan.		Area of proposed structure (sq ft)	
	➔ Show existing and proposed grades on the cross-section.		Area of existing deck (sq ft)	
➔ Show locations of vegetation to be removed on the site plan.		Area of proposed deck (sq ft)		
High Risk Erosion Areas	Existing Structure Information		Proposed New Construction	
	Foundation type <input type="checkbox"/> basement <input type="checkbox"/> concrete slab <input type="checkbox"/> pilings <input type="checkbox"/> crawl space <input type="checkbox"/> other		Foundation type <input type="checkbox"/> basement <input type="checkbox"/> concrete slab <input type="checkbox"/> pilings <input type="checkbox"/> crawl space <input type="checkbox"/> other	
	Material above foundation wall <input type="checkbox"/> block <input type="checkbox"/> log <input type="checkbox"/> stud frame <input type="checkbox"/> other		Material above foundation wall <input type="checkbox"/> block <input type="checkbox"/> log <input type="checkbox"/> stud frame <input type="checkbox"/> other	
	Siding material <input type="checkbox"/> block <input type="checkbox"/> vinyl <input type="checkbox"/> wood <input type="checkbox"/> other		Siding material <input type="checkbox"/> block <input type="checkbox"/> vinyl <input type="checkbox"/> wood <input type="checkbox"/> other	
	Area of the foundation, excluding attached garage (sq ft)		Area of the foundation, excluding attached garage (sq ft)	
	Area of the garage foundation (sq ft)		Area of garage foundation (sq ft)	
	If renovating or restoring an existing structure, indicate the renovation or restoration cost \$			
	Current structure replacement value \$			
Tax assessed value of existing structure excluding land value \$		Assessment Year		

Cornell from Grand River Ave to Orlando Dr (including Cornell Road over Jeffries Drain)

MDEQ Information Packet

Jeffries Drain under Cornell Road
Job Number: 210 800930

7/2/13

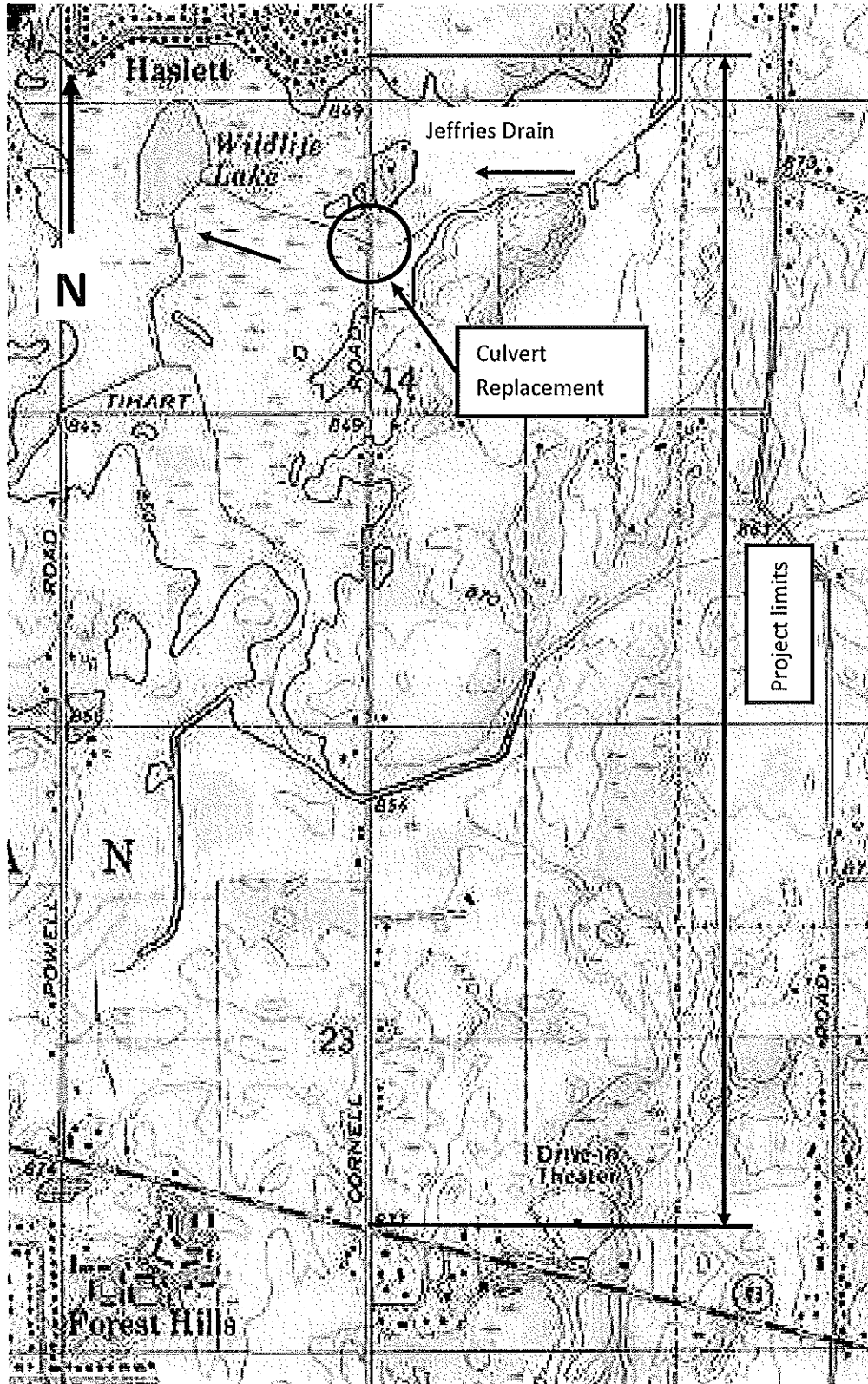
Item 3 Proposed Activities and Construction Sequence and Methods:

- a. The existing 60" X 54" elliptical cmp culvert conveying Jeffries Drain under Cornell Road will be removed and replaced in kind with an equivalent 66" span X 51" rise pipe-arch in conjunction with the proposed reconstruction of Cornell Road. The proposed culvert will be longer than the existing culvert to improve clear zone safety.
- b. The Jeffries Drain will be temporarily diverted to allow for "in the dry" construction with typical techniques. The existing culvert will be removed with typical excavation equipment such as a backhoe. Culvert bed material and the proposed culvert will be placed in the trench used to remove the existing culvert with standard construction equipment. The proposed culvert will be backfilled and the proposed roadway will be constructed above the culvert.

Item 4 Justification of Proposed Work and Efforts Taken to Minimize Environmental Impacts:

- a. The proposed reconstruction of Cornell Road will restore the ride quality of the roadway and improve safety. To minimize environmental impacts, 1:2 (with guardrail) and 1:3 side slopes have been proposed throughout the corridor. The deteriorated condition and insufficient length of the existing culvert warrants replacement. The proposed culvert will be longer than the existing culvert to shift the outlets away from the roadway, which will improve the clear zone safety.
- b. The environmental impacts associated with the reconstruction of Cornell Road have been minimized with the use of 1:2 (with guardrail) and 1:3 side slopes. These side slopes restrict the extent of impacts outside of the existing footprint of the roadway. The environmental impacts associated with replacing the existing culvert conveying Jeffries Drain will be minimal because the limits of construction will be isolated to the excavation/construction trench and the modified approaches. Sand bags (or a suitable replacement) will be placed to isolate the work zone from the surrounding features and to temporarily divert the Jeffries Drain. Geotextile silt fence will be placed to limit the amount of sediment transport during construction and impacts to Jeffries Drain.

Item 5 Location map showing the proposed culvert reconstruction site.





Existing inlet relative to the clear zone



Existing inlet in relation to the roadway



Approaching waterway



Existing outlet relative to the clear zone



Existing outlet in relation to the roadway



Departing water

Item 10 Culvert crossing plans

- Plan view
- Elevation
- Cross section

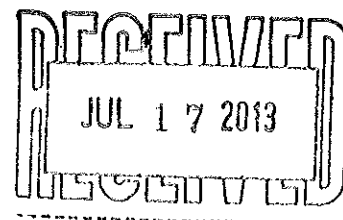
Item 12 Wetland impact maps

Wetland	Fill Volume (cyd)	Average Depth (ft)	Area (sq ft)	Area (Acre)
23-14	28.6	0.4	1875	0.04
23-15A	17.7	0.4	1179	0.03
23-2C	33.2	0.2	3612	0.08
23-15B	66.6	0.6	2798	0.06
23-2A	136.2	1.5	2429	0.06
23-2B	3.6	0.3	288	0.01
14-17	365.7	1.4	7165	0.16
14-12	19.6	0.4	1408	0.03
14-9	15.4	2.1	193	0.00
14-8	15.8	0.5	798	0.02
14-7	0.8	0.2	131	0.00
14-4	0.03	0	390	0.01
14-3A	51.5	0.7	2138	0.05
14-1	99.8	0.7	3681	0.08
Total	854.5	-	28085	0.65



July 17, 2013
Project No. G110660

Mr. Rick Brown
Charter Township of Meridian
5151 Marsh Road
Okemos, MI 48864



Re: Wetland Use Permit Review
Wetland Use Permit #13-01 Application
Ingham County Department of Transportation and Roads
Cornell Road Reconstruction

Dear Mr. Brown:

The Ingham County Department of Transportation and Roads (ICDTR) proposes to reconstruct Cornell Road between Grand River Avenue and Orlando Drive. Reconstruction will result in wetland and floodplain impacts along the roadway and at culverts associated with the Foster and Jeffries Drains. In addition, the existing 38-foot Jeffries Drain culvert will be replaced with a 60-foot culvert.

At the request of the Charter Township of Meridian (Township), FTCH reviewed the ICDTR's Wetland Use Permit (WUP) request. FTCH staff is familiar with the project area, since it completed wetland delineation of this area on August 23 and 25, 2011. We assume the project design and anticipated wetland impacts are based upon the 2011 delineated wetland boundaries, since the submitted design drawings appear consistent with them. Our WUP review is based upon ICDTR's July 8, 2013, Michigan Department of Environmental Quality Joint Permit Application, its Township Special Use Permit Application, submitted construction plans, and email correspondence between Mr. Rick Brown, Township Associate Planner; Mr. Ray Severy, Township Director of Public Works & Engineering; and Mr. William Conklin of ICDTR.

This report provides a brief description of the resources that would be impacted by the proposed work, evaluates WUP Application #13-01 according to review standards in the Township Wetland Protection Ordinance (Article IV of Chapter 22 of the Code of Ordinances of the Charter Township of Meridian), and makes recommendations to the Township regarding issuance or denial of the WUP.

Overview of Proposed Wetland Impacts

The proposed road reconstruction traverses the entire length of Section 14, the northern 4/5 of Section 23, and approximately the southern 375 feet of Section 11 of the Charter Township of Meridian, T4N, R1W, Ingham County, Michigan. The Applicant proposed to widen the existing roadway to provide 3-foot-wide shoulders for non-motorized traffic, consisting of 2 feet of pavement and 1 foot of gravel, as desired by the Township Board. The Applicant did not provide a thorough alternative analysis to justify the proposed design. As indicated by Mr. Severy in a July 10, 2013 email to Mr. Brown, the proposed road design minimizes wetland impacts as compared to an earlier design approach, and reduces loss of trees 6-inches-diameter and larger to 12 trees. All proposed road improvements are located within the existing road right-of-way; therefore, there are no impacts to wetlands or natural features on Township Land Preservation parcels.

Wetland fill is proposed as a result of both minor road widening, drain maintenance at Foster Drain, and drain construction at Jeffries Drain. Road reconstruction will result in roadbed side slopes of 1:2 (areas with guardrail)



and 1:3 (areas without guardrail). Reviewed construction drawings indicate wetland fill along the edge of the roadbed at the toe of slope. In general, fill extends up to 10 feet into the wetland on each side of Cornell Road, and impacts 14 wetlands (as noted on Township wetland maps) at 36 locations. The total proposed fill area is 0.65 acre, comprised of 854.5 cubic yards of soil.

Review of WUP Application

The review standards used to evaluate WUP applications are found in Section 22-157 of Article IV (Wetland Protection) of Chapter 22 of the Township's Code of Ordinances. WUPs are not to be issued unless the proposed activity is found to be in the public interest, the permit is necessary to realize the benefits from the activity, and the proposed activity is otherwise lawful in all respects. Section 22-157(2) lists eleven general criteria to be considered when evaluating whether or not a proposed activity is in the public interest. An evaluation of the proposed activity, according to each of the eleven criteria, is as follows:

Section 22-157(2)(a) *The relative extent of the public and private need for the proposed activity.*

- FTCH has received limited information regarding the extent of the public and private need for road reconstruction. Mr. Severy's email stated the Township Board desires paved shoulders along Cornell Road for non-motorized traffic. FTCH concurs that Cornell Road is a fairly heavily trafficked road and that providing paved shoulders would improve safety for pedestrians and non-motorized vehicles.

Section 22-157(2)(b) *The availability of feasible and prudent alternative locations and methods to accomplish the expected benefits from the activity.*

- Mr. Severy's July 10, 2013 email to Mr. Brown indicated the initial road design resulted in more extensive wetland impact and removal of many mature trees. Wetland impacts were minimized by minimizing the grade raise for the roadbed (thus minimizing the overall roadbed footprint) and maintaining a 1:3 side slope. Reconstructing the roadway without widening it does not provide the desired safety benefit offered by paved shoulders.

Section 22-157(2)(c) *The extent and permanence of the beneficial or detrimental effects which the proposed activity may have on the public and private uses to which the area is suited, including the benefits the wetlands provide.*

- Cornell Road is a well-used artery connecting two major thoroughfares in the Township: Grand River Avenue and Haslett Road. Improving the condition and safety of this road has significant value to the residents and businesses in the Township.
- Wetland impacts will occur along the road edge. The project results in permanent filling and loss of 0.65 acre of regulated wetland. These wetlands provide natural functions including storm water treatment and storage, and wildlife habitat. No mitigation of these wetland impacts has been proposed by ICDTR.

Section 22-157(2)(d) *The probable impact of each proposal in relation to the cumulative effect created by other existing and anticipated activities in the watershed.*

- FTCH is not aware of other existing and anticipated activities in the watershed that would contribute to the cumulative effect of the proposed activities, with regard to wetland impact.



Section 22-157(2)(e) *The probable impact on recognized historic, cultural, scenic, ecological, or recreational values and on the public health or safety, or fish or wildlife.*

- FTCH has no direct information pertaining to historic and cultural value at the project site.
- The proposed road reconstruction is not likely to significantly impact (positively or negatively) the scenic value of the site. It is likely to improve the recreational value of Cornell Road by allowing safer access to non-motorized vehicles and pedestrians.
- The proposed road reconstruction is likely to improve public health and safety due to the introduction of paved shoulders, which will benefit both motorized and non-motorized vehicles and pedestrians.
- No impacts on fish are apparent. Wetland fill will result in permanent loss of 0.65 acre of wildlife habitat.

Section 22-157(2)(f) *Economic value, both public and private, of the proposed land change to the general township area.*

- The question of economic value associated with the proposed activity is beyond the scope of the issues FTCH was retained to address. Accordingly, FTCH offers no opinion, recommendations, or advice with respect to this criterion.

Section 22-157(2)(g) *The size and quality of the wetland being considered.*

- Cornell Road traverses through an area rich with wetlands. Road fill will impinge upon the edge of 14 wetland complexes, as noted in Township wetland maps. These complexes encompass a total area of approximately 283 acres and contain emergent, scrub-shrub, and forested wetlands, as well as open water. FTCH's 2011 wetland investigation determined that emergent wetlands at the north end of road reconstruction area were low quality emergent wetlands dominated by reed canarygrass (*Phalaris arundinacea*), whereas the remaining wetlands adjacent to the roadway were of fair to good quality.

Section 22-157(2)(h) *The findings of necessity for the proposed activity which have been made by other agencies.*

- FTCH is not aware of any findings of necessity for the proposed activity which have been made by other agencies.

Section 22-157(2)(i) *Amount of wetland remaining in the general area and proximity to a waterway.*

- According to the Township wetland maps for Sections 14 and 23, significant amounts of wetlands are present in the vicinity of the project location, as described above in Section 22-157(2)(g).
- The project affects the Foster and Jeffries Drains. Approximately 42 cubic yards of floodplain fill will be placed near the Foster Drain crossing to replace material lost to erosion, reestablish stable side slopes, and provide additional cover over the existing crossing. It is anticipated that 650 square feet of wetland will be impacted by these improvements. The culvert at the Jeffries Drain crossing will be removed and replaced, and side slopes will be modified. A total 1,140 square feet of wetland impact is anticipated as part of these activities.

Section 22-157(2)(j) *Proximity to any waterbody.*

- Wetlands within the project area are adjacent to the Jeffries Drain, which discharges into Mud Lake (also known as Wildlife Lake), located approximately 0.26 mile west of Cornell Road.

Section 22-157(2)(k) *Extent to which upland soil erosion adjacent to the protected wetland is controlled.*



- FTCH verified, during its 2011 wetland investigation, that Cornell Road embankments adjacent to the delineated wetlands were well vegetated and stable. Some erosion and deposition was observed in the Foster Drain floodplain. Proposed activities include buildup of the roadbed, road widening, and creation of 1:2 and 1:3 side slopes. All of these activities place adjacent wetlands at risk of soil deposition. Removal and replacement of the Jeffries Drain culvert will also disturb soils and create opportunities for soil erosion and deposition into the adjacent wetland.
- ICDTR proposes to utilize sandbags (or a suitable replacement) to isolate the culvert work zone from surrounding features and to temporarily divert the drain. Geotextile silt fence will be utilized to limit sediment transport during drain construction.
- None of the information reviewed by FTCH indicated that ICDTR will prepare a soil erosion and sedimentation control plan that addresses construction activities. Reviewed design drawings and project documentation did not indicate that silt fence would be installed at the slope stake line to prevent soil deposition into adjacent wetlands.

Recommendations

FTCH concurs the proposed road reconstruction project is in the public interest, and the WUP permit is necessary to realize certain public benefits. However, the project will result in a net loss of 0.65 acre of regulated wetland. The project also places extensive wetland areas at risk of soil erosion and deposition during site construction. Therefore, FTCH recommends the following WUP conditions be included should a WUP be issued, as proposed:

- Submit a wetland mitigation plan to the Township for its review and approval prior to commencement of any portion of work associated with this project. Alternatively, the Township may require submittal of an acceptable wetland mitigation plan *before* issuance of the WUP. Either way, FTCH recommends that wetland mitigation be required for compensation of wetland loss resulting from the proposed project.
- Construct 0.975 acre of mitigation wetland, consisting of 0.3 acre scrub-shrub wetland and 0.675 acre emergent wetland. Construct the mitigation wetland in accordance with MDEQ wetland mitigation construction standards and monitor annually for 5 years (http://www.michigan.gov/documents/deq/lwm-wetlands-wetmitchecklist_263019_7.pdf).
- Submit annual wetland mitigation monitoring reports to the Township for its review and approval.
- Submit a soil erosion and sedimentation control plan to the Township for its review and approval. The plan must protect contiguous wetlands from soil deposition during construction activities.
- Implement appropriate erosion and sedimentation control measures during construction to ensure there are no impacts to contiguous wetlands as a result of soil erosion.
- Periodically inspect the site the first year after construction to identify and correct side slope erosion issues adjacent to wetlands.

Mr. Rick Brown
Page 5
July 17, 2013



We appreciate the opportunity to assist in the review of this file. If you have any questions or require additional information, please contact me at 616-464-3738 or ehtripp@ftch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

A handwritten signature in black ink that reads "Elise Hansen Tripp".

Elise Hansen Tripp

pmb
By email

MEMORANDUM

TO: Planning Commission

FROM: Environmental Commission

DATE: July 18, 2013

RE: Wetland Use Permit #13-01 (Ingham County) – Cornell Road

At the July 17, 2013, regular meeting of the Environmental Commission, the following motion was approved 5-0:

"To recommend denial of Wetland Use Permit #13-01 (Ingham County) due to an incomplete application, the lack of a specific location for wetland mitigation, and the lack of a soil erosion plan."

"Furthermore, based on a review of submitted materials and an on-site visit by the Wetland Committee, the Environmental Commission has the following observations and concerns about the project/permit.

- The DEQ permit application is pertinent only to the reconstruction at Jeffries Drain. Impacts to other wetlands along Cornell Road, including Foster Drain, are not addressed in the permit application. Therefore, the applicant should also submit an application for a township wetland permit. This application needs to address impacts to wetlands over the entire route.*
- The attached pages to the application MDEQ Information Packet refers to the road reconstruction between Grand River Avenue and Orlando Drive, but does not specifically address potential impacts to wetland along the route. This is confusing, particularly regarding impact assessment and mitigation.*
- Regarding construction at Jeffries Drain, it is ironic that the width of the cut and fill extends to 32 feet (page 1), one foot short of the edge of the 33-foot ROW from centerline of the road. It is also unlikely that there will be no impacts from construction runoff into surrounding wetlands.*
- The permit application does not provide sufficient information about runoff locations, volumes, or rate of flow during either construction or operation to adequately determine the magnitude or duration of impacts to wetlands.*
- Under Project Description (page 1), it is assumed that Jeffries Drain is a legally established county drain and should be identified as such. The project area should also be checked as a designated wetland.*
- What is the applicant's definition of clean fill (page 4)? If the fill to be used in the wetland potentially contains the seeds or other vegetative materials of noxious and invasive plants, placing this fill in the wetland is not recommended.*
- The description of mitigation either onsite or offsite is inadequate. Impacts will require mitigation.*

- *The township wetland application needs to consider impacts to wetlands along the entire route.*
- *The applicant must provide information regarding runoff locations, volumes, or rate of flow during both construction and operation. Runoff volumes will be marginally increased by the greater combined width of the pavement and shoulders.*
- *The conveyance of runoff by ditching and other mechanisms should be mapped, and discharge points into wetlands should be located on the maps as well.*
- *Vegetated swales as an alternative to ditches can be used to handle runoff. These can be placed anywhere within the ROW, with runoff diverted from the road by perpendicular piping or ditching. Vegetation in the swales will help filter sediments and pollutants before the runoff is discharged into wetlands.*
- *The applicant needs to work with the township to locate and establish (i.e., fund) additional wetland mitigation banks.*
- *Traffic, in general, was traveling at or above the posted speed limit. Many drivers did not bother to move over for pedestrians, including those wearing day glow green safety vests.*
- *Other than the obviously dead trees, few, if any, live trees should be removed. The applicant's definition of "clear zone" as implied in the Jeffires Drain permit application needs to be modified in light of the Task Force Conceptual Plan with the recommendation for minimal tree removal.*
- *If the applicant wants to be indemnified in the event the two hills are not cut, would they also seek indemnification for all the trees left standing in the "clear zone" as these trees will remain a hazard to driver error.*
- *The need for extensive guard rails is questionable. If the speed limit is reduced to 35 mph and enforced, the incidence and severity of traffic accidents would be reduced.*
- *If the speed limit is not reduced, the two hills will remain a safety hazard.*
- *The extensive re-engineering of the road surface and shoulder is also questionable. Reducing the speed limit, providing narrower lanes (9 feet), and limiting the size of commercial vehicles could have a positive effect on both durability and longevity of the pavement. On the other hand, an argument can be made that keeping the width of the road at 20 feet will provide adequate safety for bikers, and possibly pedestrians. If both motorists and bike riders obey traffic laws and the rules of the road, safety should not be an issue. If the speed limit is also reduced, the margin of safety should increase."*

Cc: Ingham County Department of Roads & Transportation
 Holly Vickers, MDEQ
 Ray Severy, PE