



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF AGRICULTURE  
AND RURAL DEVELOPMENT

JAMIE CLOVER ADAMS  
DIRECTOR

**DATE:** September 9, 2014

**TO:** Michigan Commission of Agriculture and Rural Development

**FROM:** Richard Harlow, Farmland Preservation Program Manager  
Environmental Stewardship Division 

**SUBJECT:** Request for Approval to Release 3.05 acres from a Permanent Conservation Easement (Saginaw County for MDOT Bridge Project)

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At the Commission meeting of July 22, 2014 it was requested that the Michigan Department of Transportation provide additional documents regarding the request to release land from a Permanent Conservation Easement in Saginaw County. The additional items requested included the following:

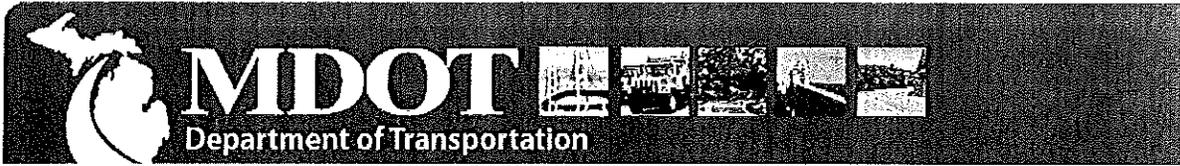
1. A letter of support from Spaulding Township.
2. Updated figures regarding the cost of the two alternatives for the project.
3. A letter of support from the landowner.

Attached is a copy of the letter of support from Spaulding Township as well as the revised construction estimates for the two alternatives. We are currently waiting for a letter of support from the current landowner and hope to have that letter prior to the Commission meeting.

I also wish to share a point of clarification regarding the testimony I gave at the Commission meeting on July 22<sup>nd</sup>. At that meeting I indicated that the land was being purchased via land contract from Mr. Leach, the landowner that entered into the conservation easement with the Department. Following the meeting it came to my attention that the purchase of the land has been completed and the land is now owned by William and Cherie Bremer. I apologize for the misstatement.

Attachments  
RAH:lls

M-13 Flint River and Birch Run Outlet  
Alignment Alternatives



Bay Region  
55 East Morley Drive  
Saginaw, MI 48601

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Horizontal Alignment Alternatives

B04 & B05 of 73051  
M-13 over Flint River and Birch Run Outlet Drain  
Saginaw County



November 20, 2012

M-13 Flint River and Birch Run Outlet  
Alignment Alternatives

## OVERVIEW

M-13 over the Flint River and Birch Run Outlet Drain bridges have been slated for replacement due to their deteriorating condition, their existing location in relation to the rivers they span, and concerns over scour and flooding. The existing site features residences in the southeast quadrant of the Flint River, levees that have been placed mitigate flooding of farmland, and property on the west side of M-13 that is currently classified as 'non development' property in a United States Department of Agriculture (USDA) land bank.

Due to hydraulic requirements, the proposed Flint River bridge will need to be raised approximately 6 to 8 feet from the existing vertical alignment. This change in grade, along with other existing site conditions, has led to the development of two main alternatives in design:

- Construct the bridges on the existing alignment; affecting the residences in the southeast quadrant.
- Construct the bridges on a proposed alignment approximately 70' west of the existing; resulting in avoiding the aforementioned residences, but affecting other adjacent site conditions.

Each alternative has benefits and drawbacks. The following lists a comparative summary of outcomes for each alternative.

### ALTERNATIVE 1: CONSTRUCT BRIDGES ON EXISTING ALIGNMENT

#### ADVANTAGES

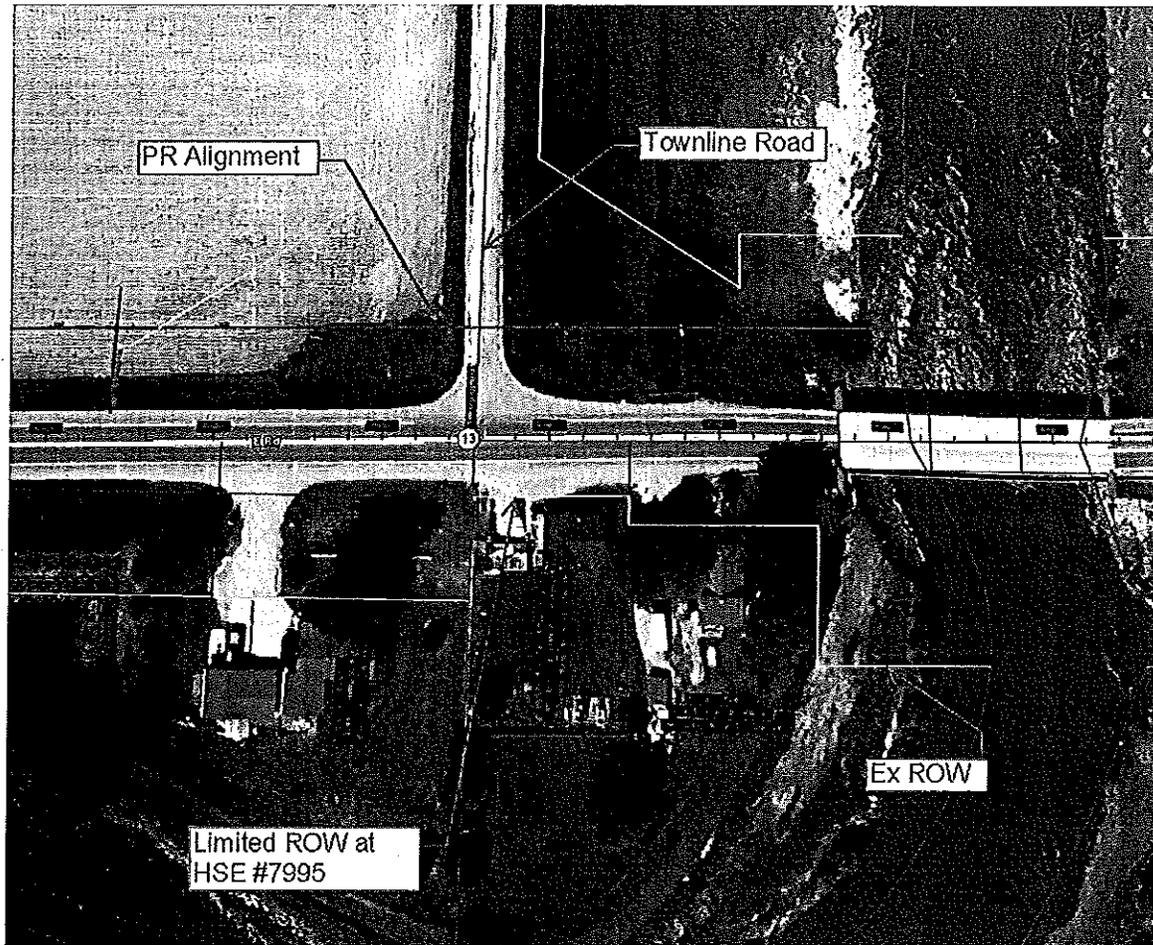
- Road Work
  - Minimizes the amount of reconstructed roadway leading to the structures.
  - Roadwork estimated at \$2,338,233.47.
- Mobility
  - A reasonable detour route is available.
- Site Conditions
  - Certain site issues can be minimized.
    - Townline Road horizontal alignment would remain unchanged.
    - Proposed toe of slope would simply be pushed out from existing.
      - Minimizes work outside of existing ROW.
    - Minimizes aerial electric conflicts.

#### DISADVANTAGES

- ROW – Residence Condemnation
  - Due to the significant grade change, reasonable access cannot be made at the first two residences (and possibly the third residence) in the southwest quadrant of the Flint River.
    - The embankment due to the grade change would, theoretically, be within the limits of the building.
  - ROW cost to condemn these residences is estimated at \$400,000.00.
  - Social impact of house condemnation on residents.
    - Current residents would prefer to remain in their homes.

M-13 Flint River and Birch Run Outlet  
Alignment Alternatives

ALTERNATIVE 1 DISADVANTAGES CONTINUED



- Mobility Cost
  - Detour route improvements are proposed.
    - Cost estimated at \$690,000.00 to upgrade detour route.
  - Transportation Management Plan
    - Travel times will be approximately 2.8 minutes longer than normal travel.
    - User delay cost is estimated at \$6,318/day. Assuming typical bridge construction methods, the user delay cost for the project could be greater than \$550,000.00 (for 90 calendar days).
- Hydraulics
  - Leaving the Flint River structure on the existing alignment means that the current bend in the river, and associated damaging high water velocities on the outside of the bend, will remain close to the proposed structure.

**ALTERNATIVE 2: CONSTRUCT BRIDGES ON PROPOSED ALIGNMENT 70' WEST OF  
EXISTING ALIGNMENT**

**ADVANTAGES**

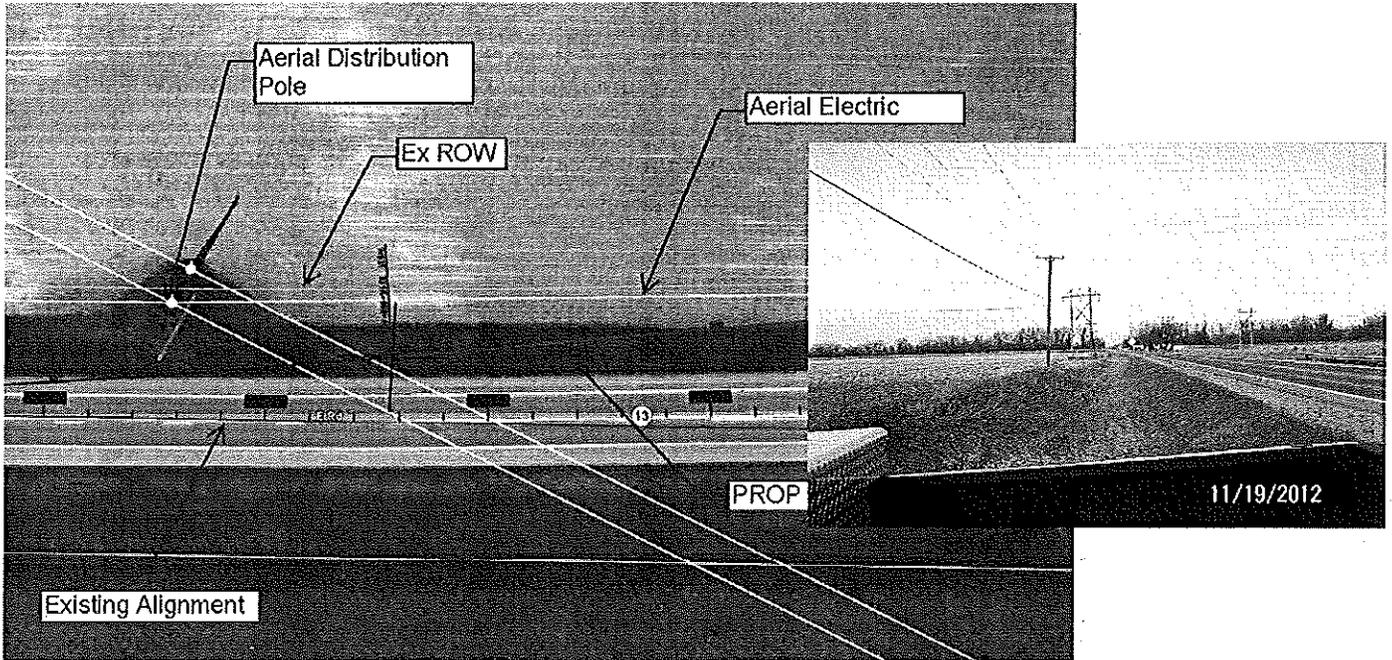
- Mobility
  - No disruption to traffic during most of the proposed construction. Flag control may be required when tying-in to proposed alignment from the existing.
- ROW
  - Does not require condemnation of existing residences.
    - Aligns with preference of the residents.
      - Positive social impact by saving houses.
      - Reasonable access can be made to all properties.
    - Provides greater roadway offset for existing homes.
- Hydraulic
  - By constructing on the proposed alignment, the structure will be moved slightly downstream away from the bend in the river, where the outer bank will be less susceptible to scour.

**DISADVANTAGES**

- ROW Acquisition
  - Existing property required to be taken for the proposed alignment is part of USDA 'no-development' land bank.
    - Process to release the property is expected to take 6 to 12 months. This process has not been done to date.
  - Could be considered a negative impact to farmland owners and USDA due to prime farmland take.
  - The total cost of ROW acquisition, including reimbursement for release of 'no-development' rights to the USDA, is estimated at \$230,000.00.
- Geometry
  - The proposed profile is 70' west of the existing profile. While measures have been taken to maximize safety and reduce superelevation on the proposed alignment, it is not as ideal as the existing straight horizontal profile.

**ALTERNATIVE 2 DISADVANTAGES CONTINUED**

- Utility Relocation
  - Aerial electric distribution lines cross M-13 south of the Flint River. The existing alignment will place the edge of the southbound lane approximately 21' from the south pole carrying the lines.
  - Aerial electric that currently run along M-13 will require relocation.
  - Cost to relocate estimated at \$100,000.00.



**COST COMPARISON**

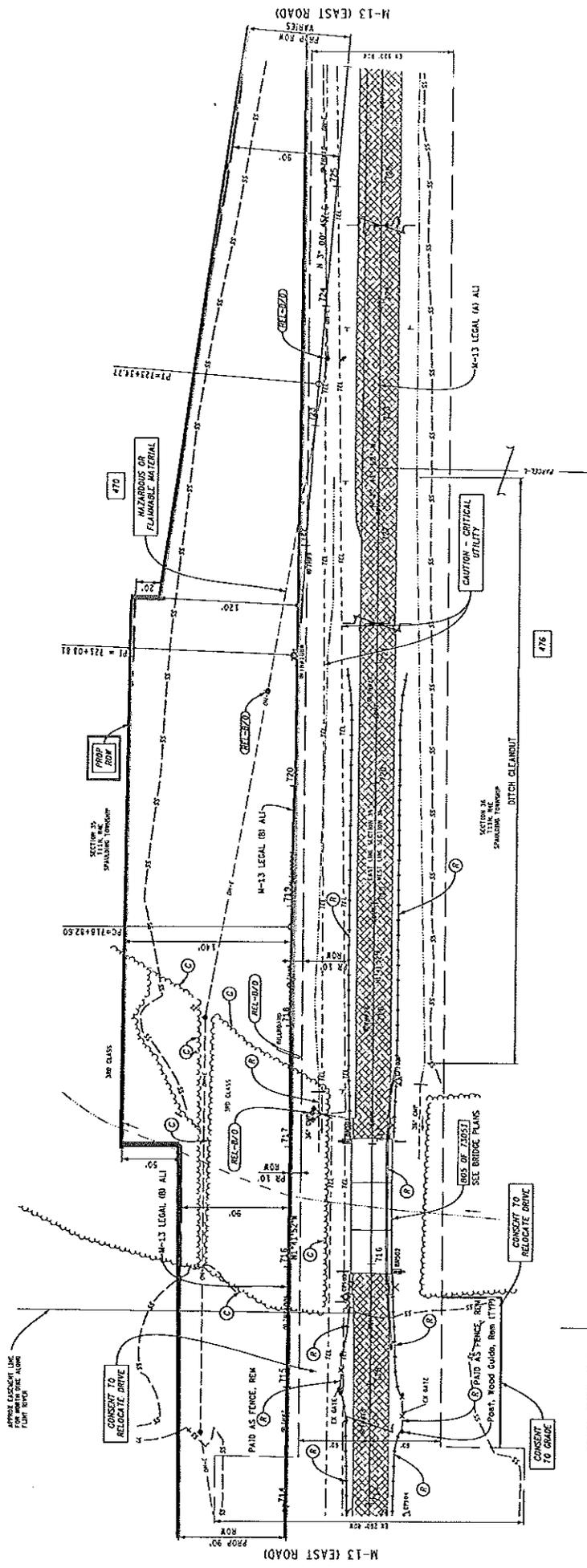
Using the above mentioned costs, here is the comparison in alternatives:

	<b>ALTERNATIVE 1</b>	<b>ALTERNATIVE 2</b>
Road Cost	\$ 2,980,000.00	\$ 3,550,000.00
ROW	\$ 400,000.00	\$ 150,000.00
Detour Route	\$ 600,000.00 (1 year)	\$10,000 (6 weeks)
Utilities	N/A	\$ 100,000.00
<b>TOTAL</b>	<b>\$ 3,980,000</b>	<b>\$ 3,810,000.00</b> Revised Estimate August 2014

The above cost comparison also does not take into account user delay costs estimated to be \$550,000.00 for Alternative 1 (the above cost comparison is for direct MDOT program costs). Conversely, no user delay costs are associated with Alternative 2.



BIRCH RUN OUTLET DRAIN



CONTROL SECTION 73051  
 JOB NUMBER 110522A  
 BEGINS STA 715+50.00  
 M-13 LEGAL (B) A.U.  
 CS WP 2320  
 CR WP 2320  
 PR WP 2498

CONTROL SECTION 73051  
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 BEGINS STA 715+50.00  
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BIRCH RUN OUTLET DRAIN

NO.	DATE	AUTH	DESCRIPTION	NO.	DATE	AUTH	DESCRIPTION
1	01/27/14		REVISED ROW SWEEP COMMENTS	1	01/27/14		REVISED ROW SWEEP COMMENTS
2	04/23/14		REVISED ROW CRITICAL ISSUES	2	04/23/14		REVISED ROW CRITICAL ISSUES

FINAL ROW PLAN REVISIONS	SUBMITTAL DATE: 10/02/13
<p>CONTROL SECTION 73051                  JOB NUMBER 110522A                  BEGINS STA 715+50.00                  M-13 LEGAL (B) A.U.                  CS WP 2320                  CR WP 2320                  PR WP 2498</p>	

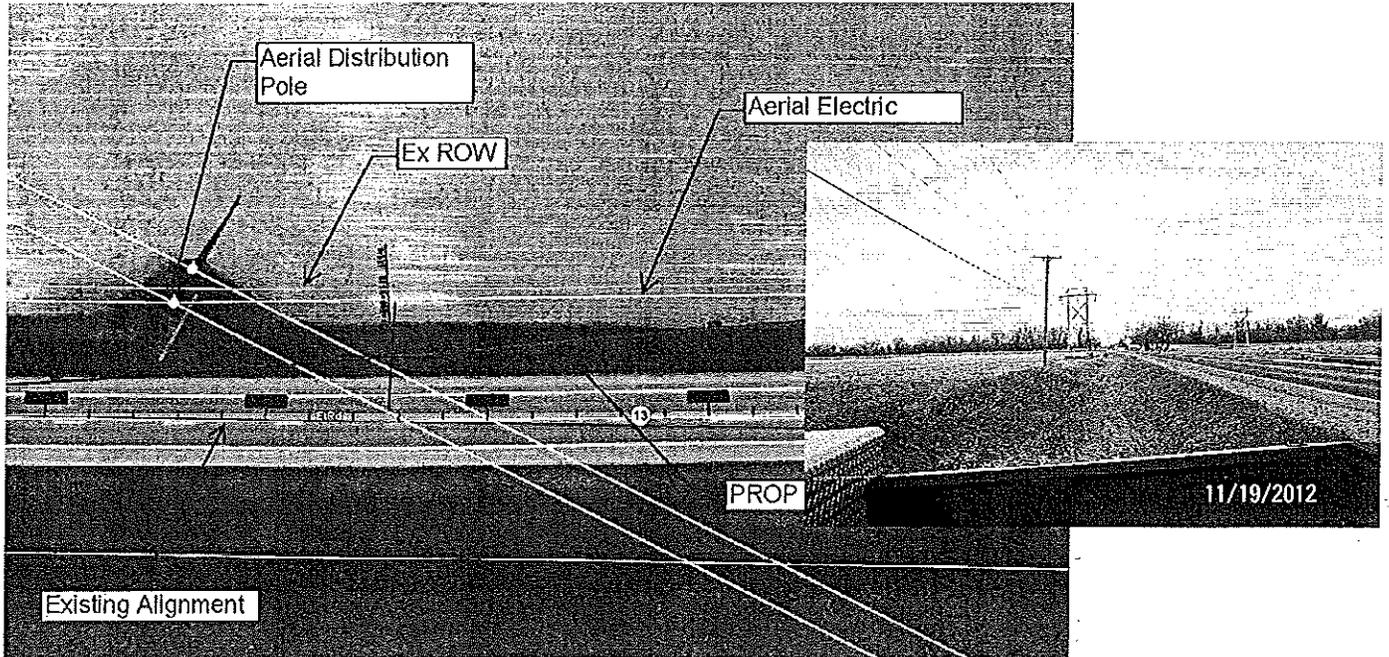
DATE: 04/23/14	CS: 73051	REMOVAL SHEET
DESIGN UNIT: WEIDEL	JN: 110522B, 110523B, 113237B	
FILE: 118922, Rev. 714.dgn	115898B, 115897B	
HORIZ. (FT) 80	M-13 STA 714+00 TO STA 715+50 (PDE)	DRAWING SHEET
	STA 715+50 (POB) TO STA 726+00.00	M-13 ROW
		REV. 004
		529





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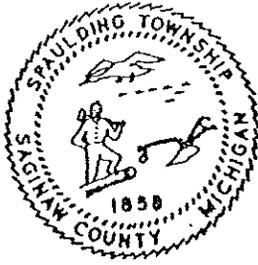


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SPAULDING TOWNSHIP

5025 EAST ROAD  
SAGINAW, MI 48601

Phone: (989) 777-0950

Fax: (989) 777-1522

[www.spauldingtwp.com](http://www.spauldingtwp.com)

July 29, 2014

Andrew Philp  
M-DOT  
55 East Morley Drive  
Saginaw, MI 48601

Dear Mr. Philp,

Please accept this letter as verification that Spaulding Township is in favor of the Flint River bridge project.

If further information is needed, please do not hesitate to contact me.

Sincerely,

Gerald Fox  
Spaulding Township Supervisor

*Spaulding Township is an equal opportunity employer and provider.*

RECEIVED  
AUG 04 2014  
M.D.O.T.  
PROJECT DEVELOPMENT