



ANDERSON, ECKSTEIN & WESTRICK, INC.
CIVIL ENGINEERS - SURVEYORS - ARCHITECTS

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MEMORANDUM

TO: Frank Schulte, City Administrator
Jim Kowalski, Director of Public Services

FROM: Scott Lockwood, Consulting City Engineer

DATE: April 20, 2022

SUBJECT: **Mack and Vernier Intersection Improvements**
AEW Project No. 0160-0455

Per our discussion over the past several months there have been a number of proposed improvements to the Mack and Vernier intersection which initially stemmed from a request from Wayne County on potential cost share projects using American Rescue Plan Act(ARPA) funds. The proposed scope and funding sources has expanded as we have researched crash data and observed vehicular and pedestrian movements (particularly during morning and afternoon rush hour/school start and end times).

Improvement Summary

Highlights of the proposed improvements include:

1. Replace all signals with new black mast arm signals
2. Improve pedestrian crossings including new push buttons and improved striping of crossings
3. Remove direct left movements at the intersection (I.e. all lefts will be Michigan lefts)
4. Provide a larger center island and landscaping
5. Reconfigure and re-landscape median islands west of Mack Avenue
6. Improvements to Sunningdale Park Drive by providing
 - a. A new black mast arm signal
 - b. A dedicated left turn lane for westbound Vernier onto Sunningdale Park
 - c. A new pedestrian crossing at Sunningdale Park
 - d. Removing the westbound Vernier turnaround just west of Sunningdale park

Attached is a schematic drawing of the proposed revisions.

Community Support

The proposed improvements will improve vehicular movements at the intersection. More importantly, the proposed improvements will greatly improve safety of



pedestrians (particularly school children) crossing the intersections at Mack and Vernier and Sunningdale Park.

Several years ago Grosse Pointe Public Schools (GPPS) had a study completed to identify ways to improve the safety of their students' commute to school. The recommended proposed improvements coincide with improvements identified in the GPPS study. We have met with GPPS and they will be pursuing Safe Routes to School grants to help offset the cost of the project. They have also provided a letter of support for the project.

We have met with traffic officials from Wayne County and they are in full support of the proposed project and will be providing a letter of support.

Cost Summary

Following is a cost estimate with breakdown by potential funding sources:

Total Project Cost	\$1,750,000
Wayne County (ARPA)	\$660,000 *
GPW	\$340,000 *
Safety Grant	\$750,000

- * Wayne County and GPW amounts are subject to reduction if GPPS successfully receive Safe Routes to Schools funding, max available \$440,000.

Recommendation

The cost information above is based on successful acquisition of an MDOT Safety Grant. \$750,000 is the maximum amount allowed for a Safety Grant. Based on traffic counts, accident data, amount of pedestrian traffic (mostly school children) and the antiquated signals and turning movements at the existing intersection we feel this is a very good application for Safety Grant funding. The next application for Safety Grants are due May 1, 2022. If approved, it is anticipated this project would be completed Summer, 2024. We will complete the application on behalf of the City for a cost of \$2,000.



Office of Superintendent of Schools

Dr. M. Jon Dean

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April 13, 2022

Mr. Frank Schulte, City Administrator
City of Grosse Pointe Woods
20025 Mack Plaza Drive
Grosse Pointe Woods, Michigan 48236

Reference: Vernier and Mack Safety Grant Application

Dear Mr. Schulte:

The purpose of this letter is to express the support of the Grosse Pointe Public School System (GPPSS) for the proposed signal upgrade at the intersection of Mack Avenue and Vernier Road from diagonal span to mast arm with signal phasing improvements and upgrade in turn movements using typical Michigan lefts in lieu of direct lefts. In addition, GPPSS supports the new signal installation at the intersection of Vernier Road and Sunningdale Park Drive.

It is understood these projects are being submitted for an MDOT Safety Program Grant by the City of Grosse Pointe Woods. Proposed improvements are also included in the GPPSS Safe Routes to Schools Study and are very much in line with the GPPSS vision for making our students' commute safer.

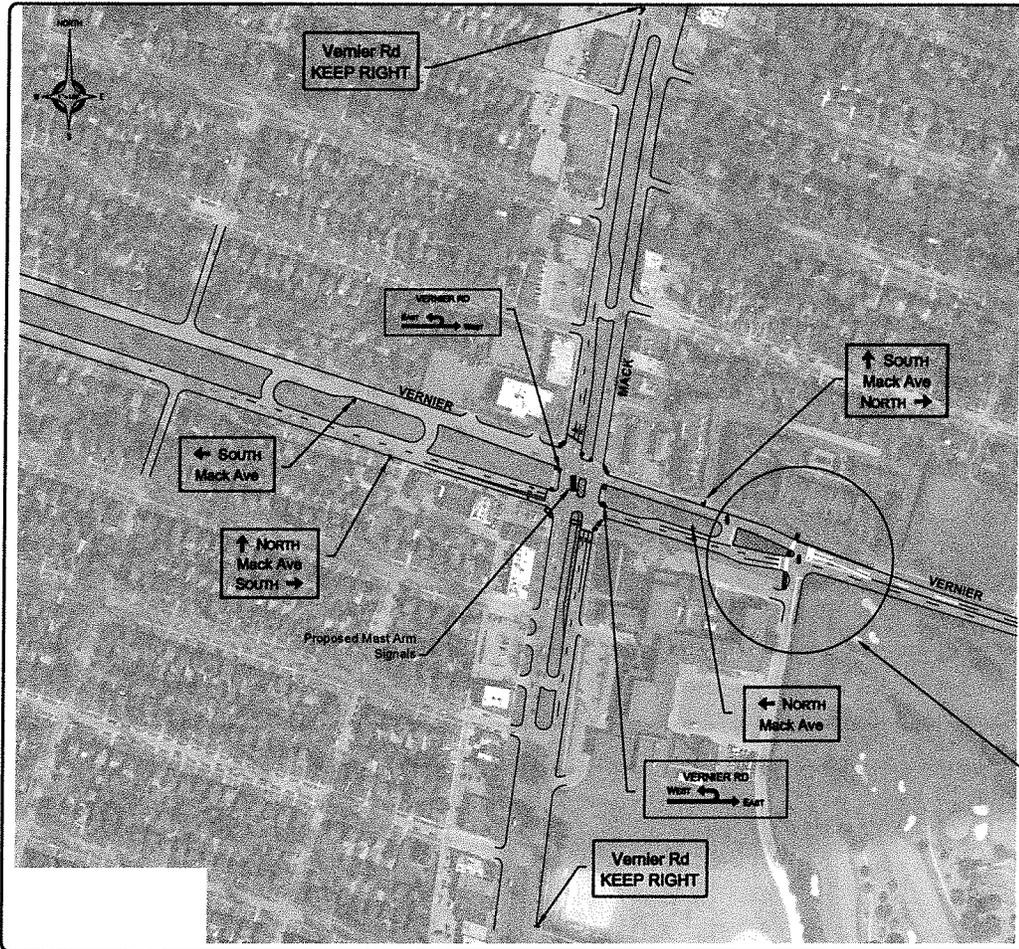
Please feel free to contact me if you require additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. Jon Dean', is written over the word 'Sincerely,'.

Dr. M. Jon Dean
Superintendent

cc: Jim Kowalski, Director of Public Services
Scott Lockwood, AEW



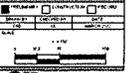
SEE PAGE 3 FOR MAST ARM SIGNAL EXAMPLE

SEE PAGE 2 FOR SUNNINGDALE INTERSECTION IMPROVEMENTS

VERNIER ROAD IMPROVEMENTS

PROPOSED CONDITIONS - SB & EB LEFT TURNS PROHIBITED W/ NEW GEOMETRY

CITY OF GROUSE POINT WOODS

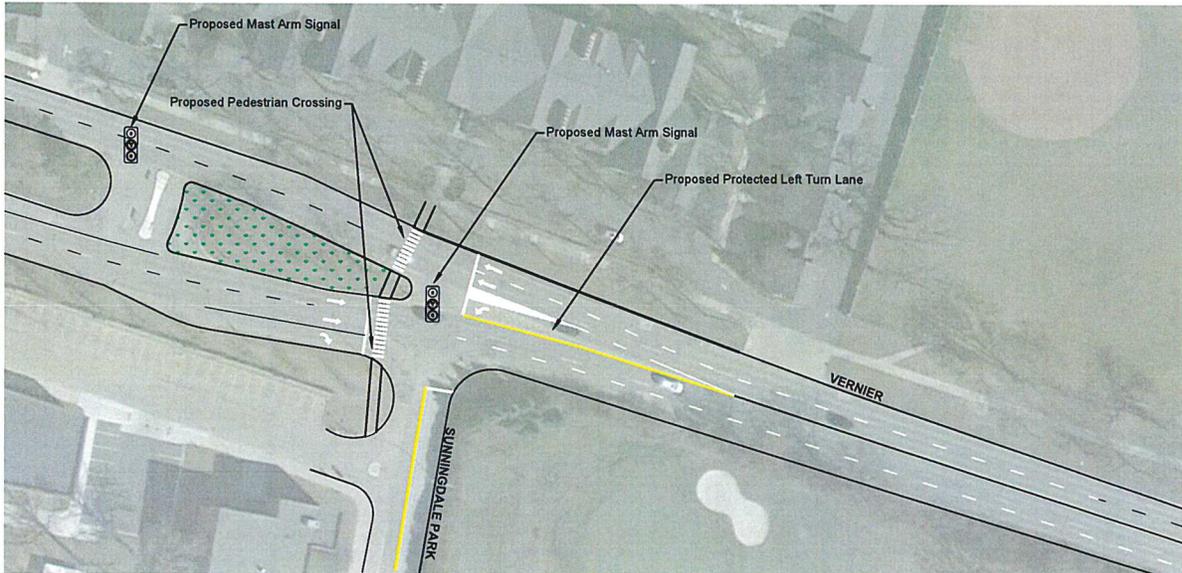


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SEE PAGE 3 FOR MAST ARM
SIGNAL EXAMPLE



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ENGINEERING STRONG COMMUNITIES

DATE	DATE

VERNIER ROAD
IMPROVEMENTS

PROPOSED
CONDITIONS - LT
LANE AT
SUNNINGDALE PARK

CITY OF GROSSE POINTE WOODS

PROJECT NO.	17-001-001
DATE	04/20/17
SCALE	AS SHOWN

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PLEASE READ THESE NOTES CAREFULLY. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF GROSSE POINTE WOODS AND THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE STATE OF CALIFORNIA.



AEW
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 ENGINEERING STRONG COMMUNITIES

DATE	REVISION

VERNIER ROAD IMPROVEMENTS

EXAMPLE MAST ARM

CITY OF GROESBECK WOODS

PREPARED BY	CHECKED BY	DATE

SCALE: 1" = 10'

811 Know what's below. Call 811 before you dig.
 CALL 811 OR VISIT 811.CITYOFGROESBECK.WOODS