

PRINCIPALS

Robert J. Michaud, P.E.  
Ronald D. Desrosiers, P.E., PTOE  
Daniel J. Mills, P.E., PTOE

July 21, 2016

Chris Claussen  
2134 Sevilla Way  
Naples, FL 34109

**Subject: Sudbury Station 40B Residential Development – Sudbury MA**

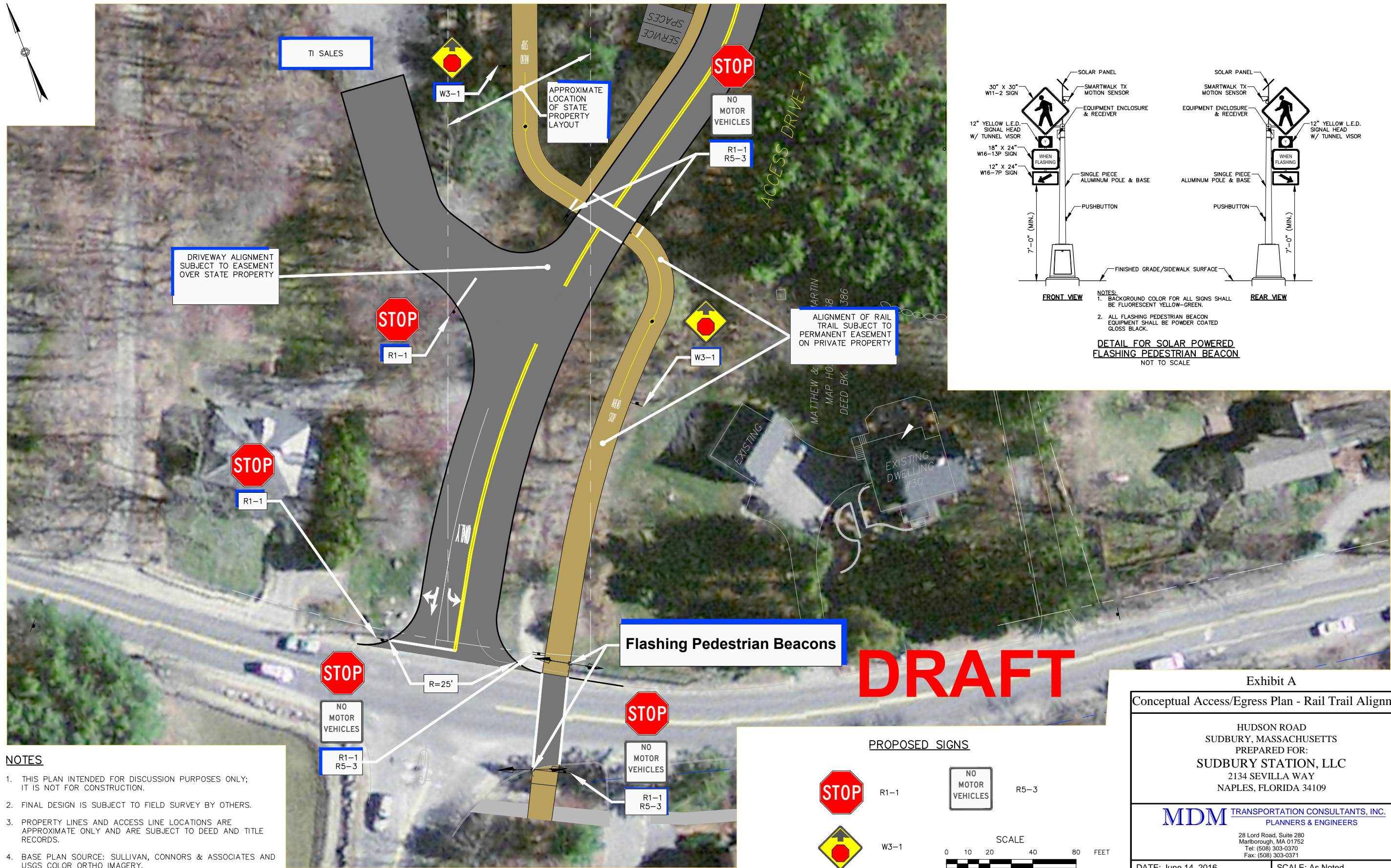
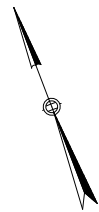
Dear Chris:

This letter summarizes design options for driveway access to/from the Sudbury Station 40B development including (a) Peter's Way at Concord Road, and (b) Hudson Road access. The most recently proposed designs presented and discussed at the June ZBA hearing meet applicable engineering design criteria for safety and location and have been subject to peer review through the Town's ZBA under the Comprehensive Permit process. Alternative design is considered in this letter summary to address further input from the Town's Fire Department and the ZBA.

**Hudson Road at Site Driveway**

The currently proposed Site Plan includes an unsignalized full-access driveway along Hudson Road just east of Peakham Road. This driveway location will meet applicable sight-line criteria based on regulatory travel speeds and measured 85<sup>th</sup> percentile travel speeds, provides adequate maneuvering area for the Town's emergency response apparatus and will operate with adequate capacity based on MDM's prior submitted technical analyses during the 40B process. Likewise, this segment of Hudson Road including the Peakham Road intersection and TI sales driveway are not listed as high-crash locations in the most current MassDOT database and are not subject to safety countermeasures as part of the ongoing Town Center roadway improvements. Design of the driveway includes a pedestrian crosswalk on Hudson Road with an alignment that is consistent with the future Bruce Freeman Rail Trail alignment which is currently under design by the Town, thereby connecting the Sudbury Station development sidewalk system with existing Town sidewalk on the south side of Hudson Road. The Applicant further commits to installing a rapid flash pedestrian beacon for the crossing to alert motorists of pedestrian crossing activity.

The Sudbury Zoning Board of Appeals has advanced an alternative design concept for site access opposite Peakham Road. In response, MDM has prepared such an alternative, and it was submitted to the Town by the project Counsel (William C. Henchy, P.C.) in correspondence dated June 17, 2016. A copy of the alternative design concept prepared by MDM and dated June 14, 2016 is included as **Exhibit A** for reference. Notwithstanding MDM's opinion that the currently proposed driveway location is appropriate and meets the safety and operating needs of the project and public travel along Hudson Road, this alternate driveway



- NOTES**
1. THIS PLAN INTENDED FOR DISCUSSION PURPOSES ONLY; IT IS NOT FOR CONSTRUCTION.
  2. FINAL DESIGN IS SUBJECT TO FIELD SURVEY BY OTHERS.
  3. PROPERTY LINES AND ACCESS LINE LOCATIONS ARE APPROXIMATE ONLY AND ARE SUBJECT TO DEED AND TITLE RECORDS.
  4. BASE PLAN SOURCE: SULLIVAN, CONNORS & ASSOCIATES AND USGS COLOR ORTHO IMAGERY.

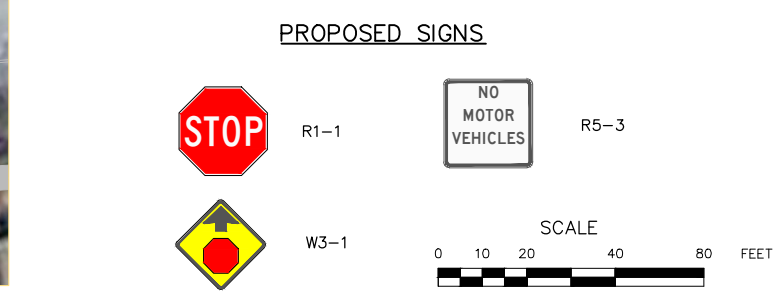


Exhibit A  
 Conceptual Access/Egress Plan - Rail Trail Alignment

HUDSON ROAD  
 SUDBURY, MASSACHUSETTS  
 PREPARED FOR:  
 SUDBURY STATION, LLC  
 2134 SEVILLA WAY  
 NAPLES, FLORIDA 34109

**MDM** TRANSPORTATION CONSULTANTS, INC.  
 PLANNERS & ENGINEERS

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 Marlborough, MA 01752  
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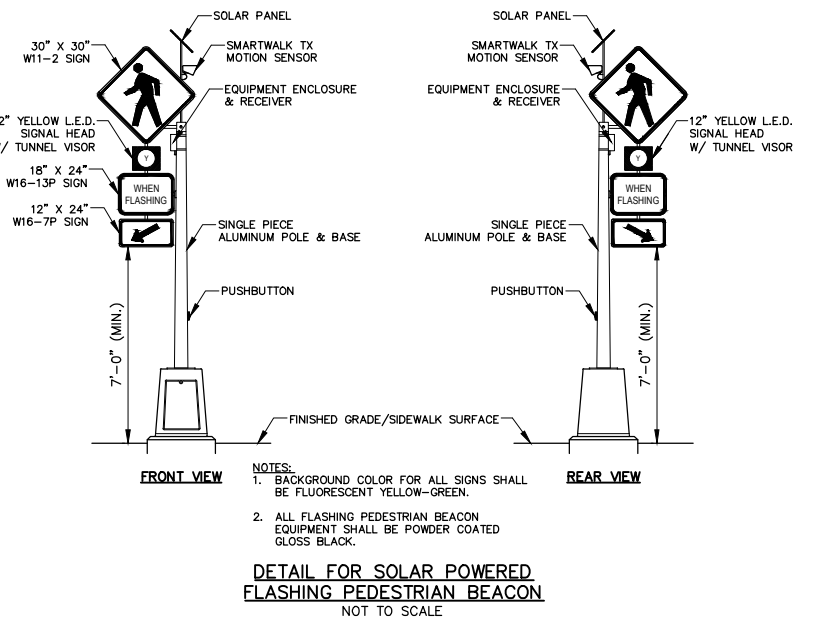
DATE: June 14, 2016      SCALE: As Noted  
 PROJECT No. 814      File: 814 Concept Plan at Peakham (6-14-2016)2013.dwg      Sheet 1 of 1

alignment allows the possibility for signaling the Hudson Road intersection at Peakham Road should the Town so choose, subject to meeting applicable warrant criteria. The driveway alignment is also subject to easements over private and state property and associated design modifications to the rail trail alignment.

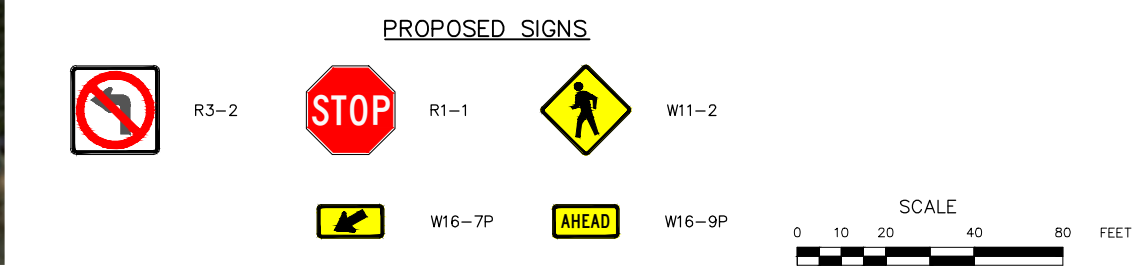
### **Concord Road at Peter's Way**

The originally proposed design for Peter's Way at Concord Road included an unsignalized full-access driveway. This driveway location will meet applicable sight-line criteria based on regulatory travel speeds and measured 85<sup>th</sup> percentile travel speeds, provides adequate maneuvering area for the Town's emergency response apparatus and will operate with adequate capacity based on MDM's prior submitted technical analyses during the 40B process. Likewise, this segment of Concord Road is not listed as a high-crash location in the most current MassDOT database and are not subject to safety countermeasures as part of the ongoing Town Center roadway improvements. Design of the Peter's Way intersection includes improving the pedestrian crosswalk on Concord Road, thereby connecting the Sudbury Station development sidewalk system with existing Town sidewalk on the West and East sides of Concord Road. The Applicant further commits to installing a rapid flash pedestrian beacon for the crossing to alert motorists of pedestrian crossing activity.

Following input during the 40B review process including peer review, MDM developed an alternative design concept that restricted left-turn movements from Peter's Way by means of a raised delineating island and applicable regulatory signs as presented in **Exhibit 1**. The design includes a scored concrete apron that reinforces the turn restriction exiting Peter's Way while also providing the ability for emergency response vehicles (ambulances) to turn left toward Emerson Hospital if required during a response episode. This design has been subject to peer review with concurrence that it reasonably and properly addresses the design intent to restrict turns while also addressing sight line restrictions that periodically occur due to queues from the Town Center signal. The attached **Exhibit 2** presents the turning path of a responding ambulance under this design alternative demonstrating that the design will appropriately accommodate these vehicle types during an emergency response episode.



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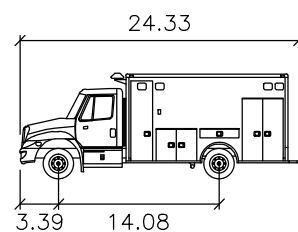
**Exhibit 1**  
**Concord Road/Peter's Way Improvements**

CONCORD ROAD  
SUDBURY, MASSACHUSETTS  
PREPARED FOR:  
SUDBURY STATION, LLC  
2134 SEVILLA WAY  
NAPLES, FLORIDA 34109

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DATE: June 15, 2016      SCALE: As Noted  
PROJECT No. 814      File: 814 Concept Plan Concord - Expanded Island.dwg      Sheet 1 of 1



Medtec AD-170

- Width : 8.0 FT.
- Track : 7.79 FT.
- Lock to Lock Time : 6.0 SEC.
- Steering Angle : 46.4°

Site Plan Source: Sullivan, Connors & Associates



Chris Claussen

July 21, 2016

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Following review of the above design alternative, and in response to comments made by the Fire and Police Chiefs, a third design option has been advanced by MDM that eliminates the raised island feature and includes a left-turn restriction for movements exiting Peter's Way by means of regulatory signs as presented in **Exhibit 3**. The restriction would apply to weekday morning and evening peak hours when vehicle queues extending from the Town Center signal are most likely to extend to or near Peter's Way. These peak hours generally occur 7 AM to 9 AM and 4PM to 6 PM. All other elements of the design including the improved crosswalk and rapid flash beacon assembly remain unchanged. We anticipate that this design alternative addresses the Fire Department desire to eliminate any physical restriction of left-turn movements for emergency response episodes while also addressing the need to restrict left-turns for general resident/visitor traffic when queues along Concord Road impede sight lines. In light of all public comment and peer review, this would be the applicant's preferred alternative at this location, but either alternative desired by the Zoning Board of Appeals is acceptable and meets all applicable safety and design criteria.

Sincerely,

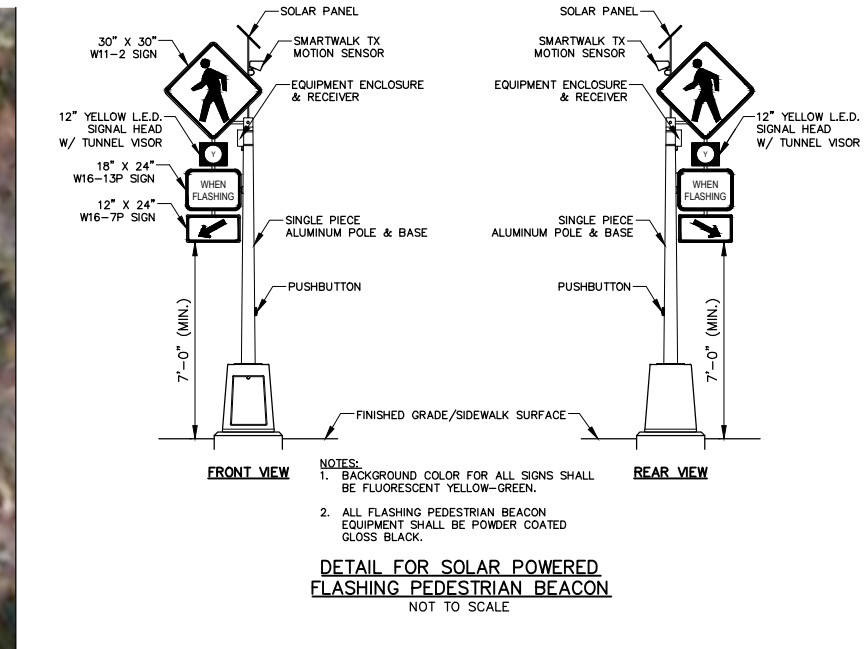
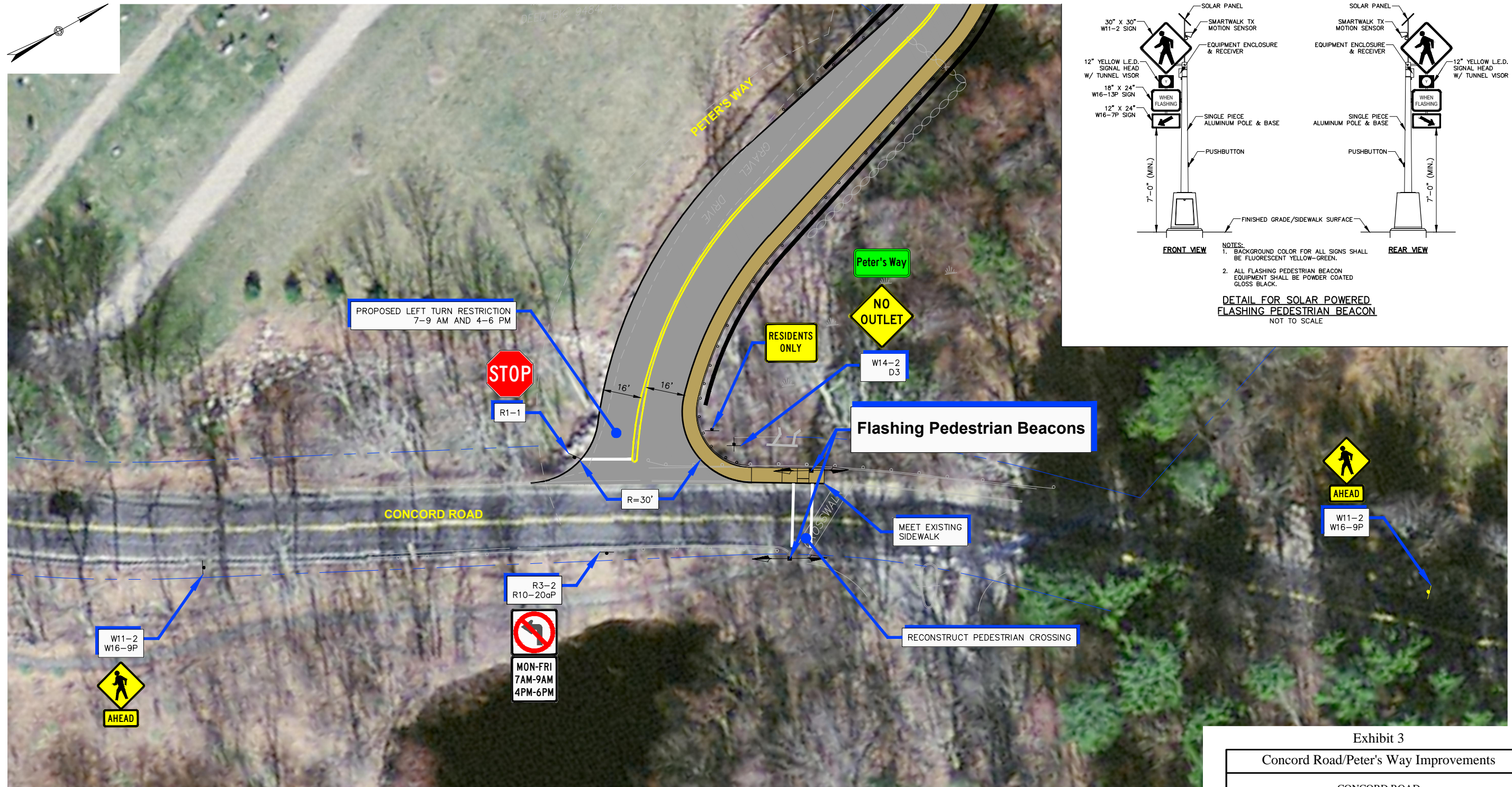
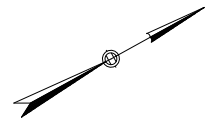
MDM TRANSPORTATION CONSULTANTS, INC.



Robert J. Michaud, P.E.

Managing Principal

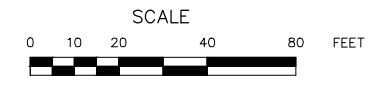
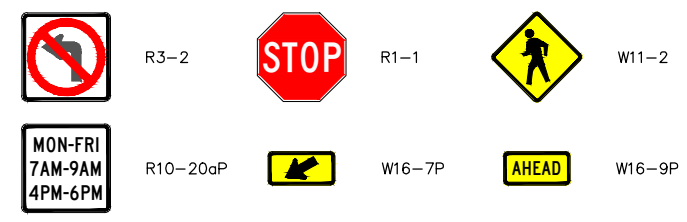
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**PROPOSED SIGNS**



**Exhibit 3**

**Concord Road/Peter's Way Improvements**

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 SUDBURY, MASSACHUSETTS  
 PREPARED FOR:  
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 NAPLES, FLORIDA 34109

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DATE: July 20, 2016      SCALE: As Noted  
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