



CITY COUNCIL WORK SESSIONS AGENDA

Hanover Parkway Bikeway Facility Feasibility Study

Municipal Building

Council Chambers

25 Crescent Road

Monday, March 02, 2020

8:00 PM

Work Session Packet - *Agenda*

- *Introductions*
- *Council Discussion*
- *Questions and Answers*
- *Other Items*

Hanover Parkway Bikeway Feasibility Study and Concept Designs

[Hanover Parkway Staff Report.pdf](#)

[Concept Designs for Hanover Parkway Bike Facility.pdf](#)

[APB Report Bicycle Facilities on Hanover Parkway.pdf](#)

[Green ACES recommendations re: Hanover Pkwy bike path.pdf](#)

City Council Work Sessions Agenda Item Report

Meeting Date: March 2, 2020

Submitted by: Molly Porter

Submitting Department:

Item Type: Work Session Item

Agenda Section:

Subject:

Hanover Parkway Bikeway Feasibility Study and Concept Designs

Suggested Action:

Attachments:

[Hanover Parkway Staff Report.pdf](#)

[Concept Designs for Hanover Parkway Bike Facility.pdf](#)

[APB Report Bicycle Facilities on Hanover Parkway.pdf](#)

[Green ACES recommendations re: Hanover Pkwy bike path.pdf](#)

CITY OF GREENBELT, MARYLAND
MEMORANDUM

TO: Nicole Ard, City Manager

FROM: Molly Porter, Community Planner I

VIA: Terri Hruby, Director of Planning and Community Development

DATE: February 26, 2020

SUBJECT: Hanover Parkway Bikeway Feasibility Study and Design Plans

Background:

In November 2017, the City was awarded grant funding from the Maryland Department of Transportation Bikeways Program for the Hanover Parkway Bikeway Feasibility Study and Design Plans Project.

This project includes a feasibility study of bicycle facilities in the Hanover Parkway corridor between Mandan Road and Good Luck Road and 30% designs of bicycle facilities on a priority area of Hanover Parkway between the Spellman Overpass and Greenbrook Drive.

This priority area is a missing trail link, as identified in the Maryland Department of Transportation's statewide trail network vision document, "Maryland Trails: A Greener Way to Go". Gaining access to the Spellman Overpass is crucial for Greenbelt East residents to access Historic Greenbelt and a cross-city bicycle route which ultimately connects to the wider Anacostia regional trail network.

Project Progress

Following the RFP process the City contracted with Sabra & Associates who City staff have been working with to complete this project. As part of this project two (2) alternatives for bicycle facilities on Hanover Parkway were developed. One of these alternatives is primarily an on-road option, while the other is an off-road option.

The on-road alternative would provide modest traffic calming on parts of Hanover Parkway and would require less stormwater management, assuming medians are planted. This option, however, would have a negative impact on the level of service on side streets and would require cyclists to transition from an on-road facility to an off-road facility.

The off-road alternative would provide for a uniform facility that does not require transitioning from on-road to off-road and would not require cyclists to cross Hanover Parkway. This alternative would also not impact existing traffic patterns on Hanover Parkway. This option, however, would have greater impervious surface impacts.

Several design assumptions were established during the creation of the alternatives. These include, protecting and separating the bicycle facility from all vehicles, designing an all ages

facility, retaining trees to the greatest extent possible, and designing bicycle facilities with consideration of continuing maintenance.

These alternatives have been presented to the Advisory Planning Board, GreenACES, Greenbriar Condominiums (Phase I, Phase II, and Greenbriar Community Association Board of Directors), and at a Community Meeting. The information about the project, including the alternatives, was shared with the Greenbelt East Advisory Coalition. These alternatives have also been discussed with the Department of Public Works and the Police Department.

A main area of conversation during these presentations was a concern about the impact an on-road bicycle lane would have on traffic near Eleanor Roosevelt High School, particularly when students are arriving and departing from the school or during events. Other areas of conversation during these presentations were cyclist safety, impact on the traffic on Hanover Parkway, and the ease with which cyclists could use the bicycle facilities.

Staff is seeking direction from City Council regarding the preferred alternative for bicycle facilities on Hanover Parkway.

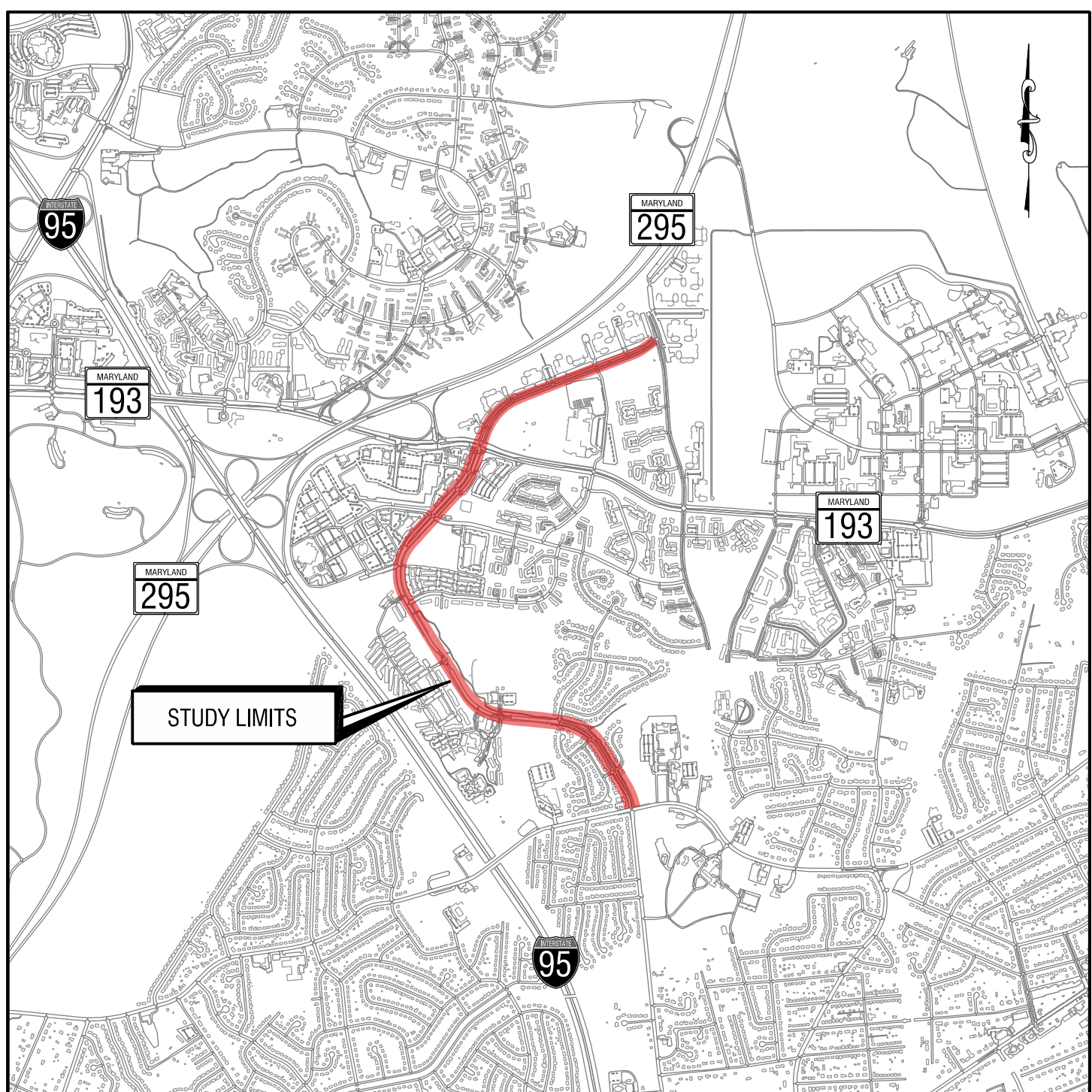
CITY OF GREENBELT

BIKEWAY FACILITY CONCEPT PLAN

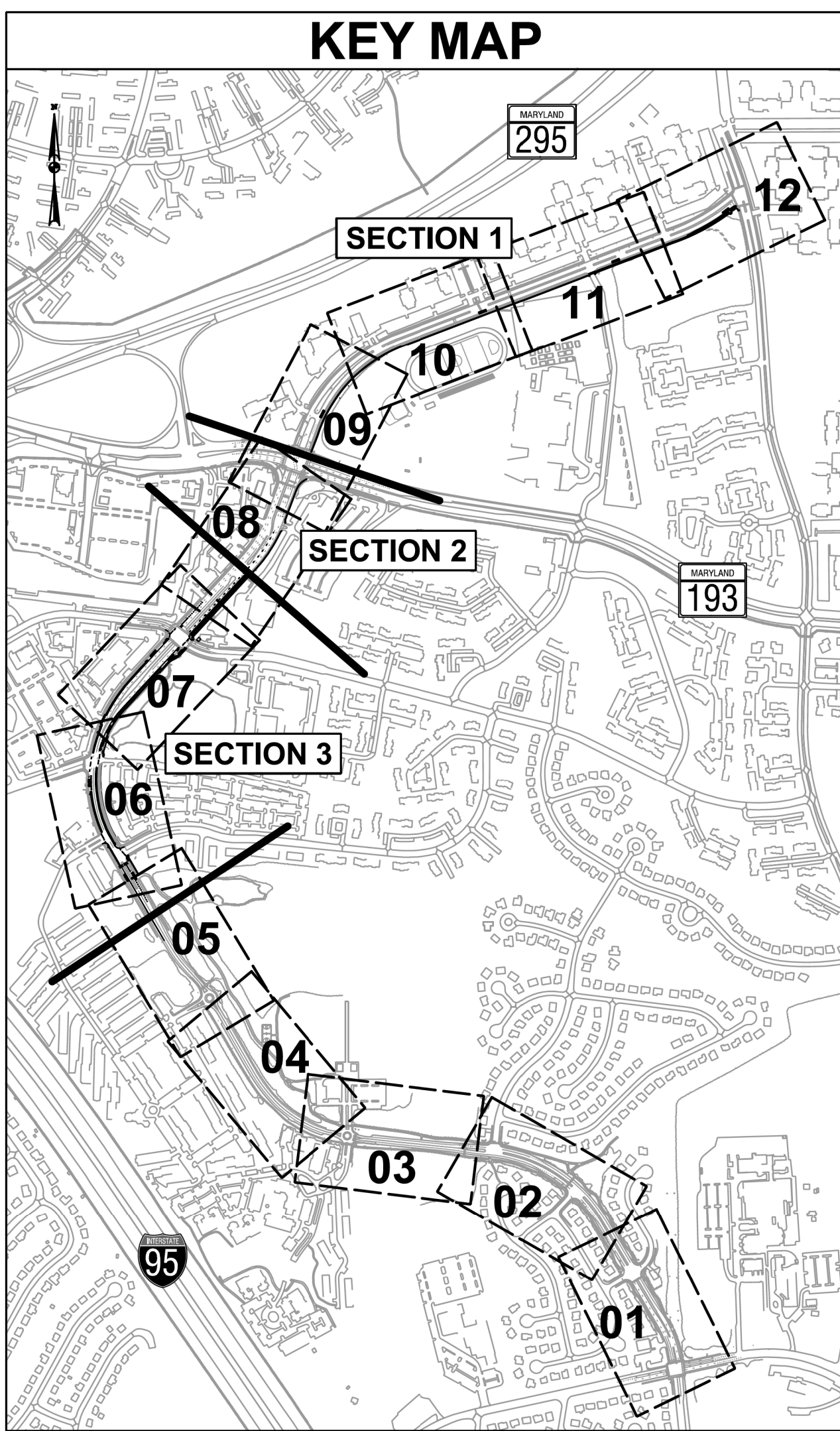
HANOVER PARKWAY
FROM GOODLUCK ROAD TO MANDAN ROAD
PROJECT LENGH 1.9 MILES

INDEX OF SHEETS

- 01. EXISTING CONDITIONS
- 02. EXISTING CONDITIONS
- 03. EXISTING CONDITIONS
- 04. EXISTING CONDITIONS
- 05A. PROPOSED CONCEPT OPTION A: ON-STREET OPTION (SECTION 3)
- 06A. PROPOSED CONCEPT OPTION A: ON-STREET OPTION (SECTION 3)
- 07A. PROPOSED CONCEPT OPTION A: ON-STREET OPTION (SECTION 3)
- 08A. PROPOSED CONCEPT OPTION A: ON-STREET OPTION (SECTIONS 3 & 2)
- 09A. PROPOSED CONCEPT OPTION A: ON-STREET OPTION (SECTIONS 2 & 1)
- 10A. PROPOSED CONCEPT OPTION A: ON-STREET OPTION (SECTION 1)
- 11A. PROPOSED CONCEPT OPTION A: ON-STREET OPTION (SECTION 1)
- 12A. PROPOSED CONCEPT OPTION A: ON-STREET OPTION (SECTION 1)
- 05B. PROPOSED CONCEPT OPTION B: OFF-STREET OPTION (SECTION 3)
- 06B. PROPOSED CONCEPT OPTION B: OFF-STREET OPTION (SECTION 3)
- 07B. PROPOSED CONCEPT OPTION B: OFF-STREET OPTION (SECTION 3)
- 08B. PROPOSED CONCEPT OPTION B: OFF-STREET OPTION (SECTIONS 3 & 2)
- 09B. PROPOSED CONCEPT OPTION B: OFF-STREET OPTION (SECTIONS 2 & 1)
- 10B. PROPOSED CONCEPT OPTION B: OFF-STREET OPTION (SECTION 1)
- 11B. PROPOSED CONCEPT OPTION B: OFF-STREET OPTION (SECTION 1)
- 12B. PROPOSED CONCEPT OPTION B: OFF-STREET OPTION (SECTION 1)
- 13. BIKE LANE PROTECTION DETAILS
- 14. SIGNING AND MARKING DETAILS
- 15. STANDARD DETAILS



VICINITY MAP
SCALE : 1"= 2000'

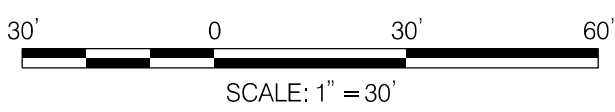


KEY MAP

OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:08 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg pSN - P001_HanoverPkw.dgn



Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Existing Conditions



DWG. NO. 01

EXISTING LEGEND:

PROPERTY LINE

EDGE OF PAVEMENT

PAVEMENT MARKINGS

CONCRETE SIDEWALK

ASPHALT PATHWAY

UTILITY POLE AND BACK GUY

GROUND-MOUNTED SIGN

LIGHT POLE

INLETS

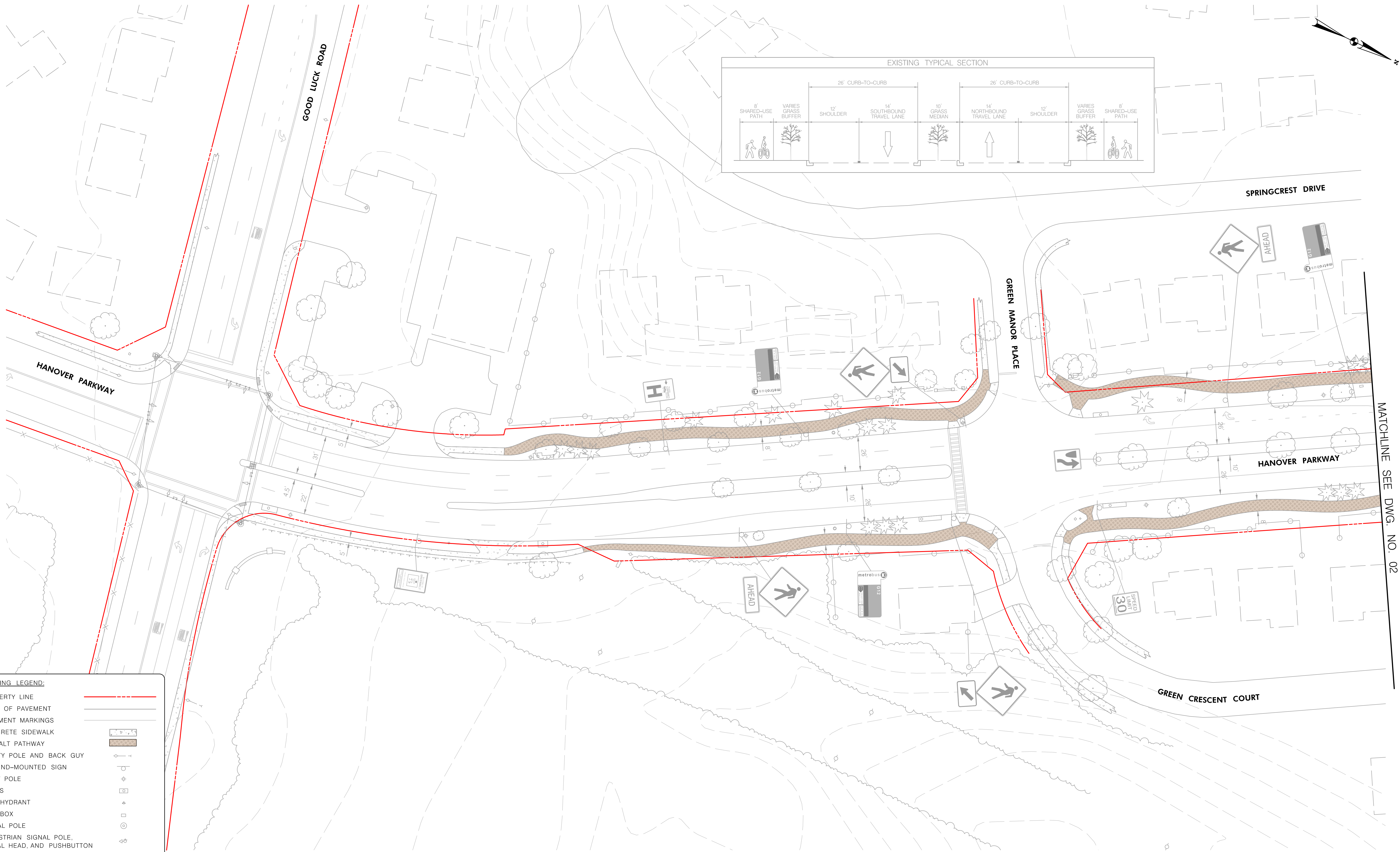
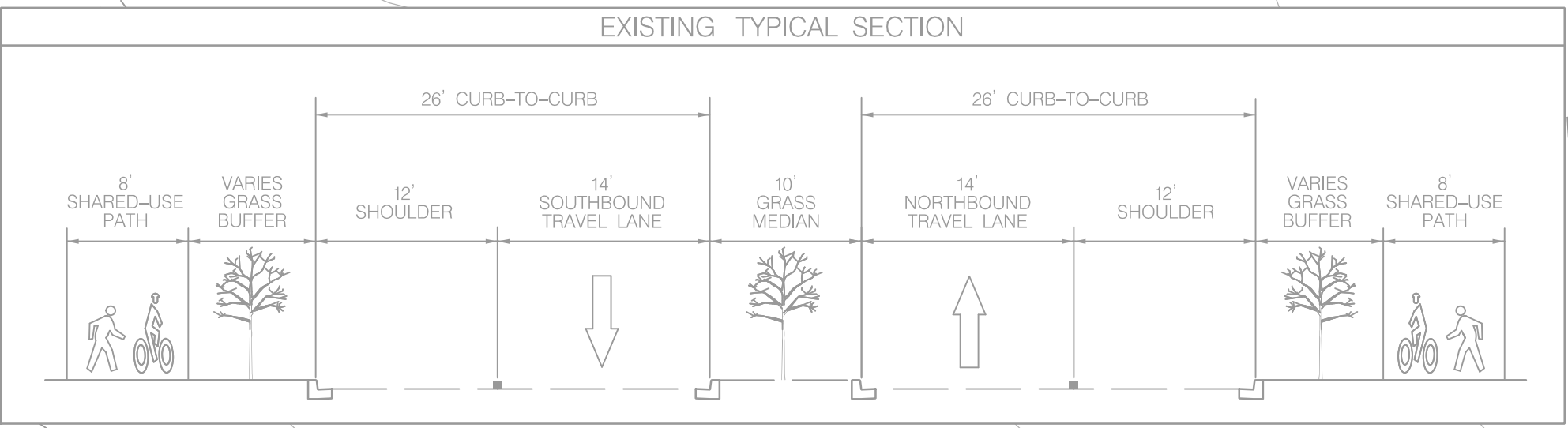
FIRE HYDRANT

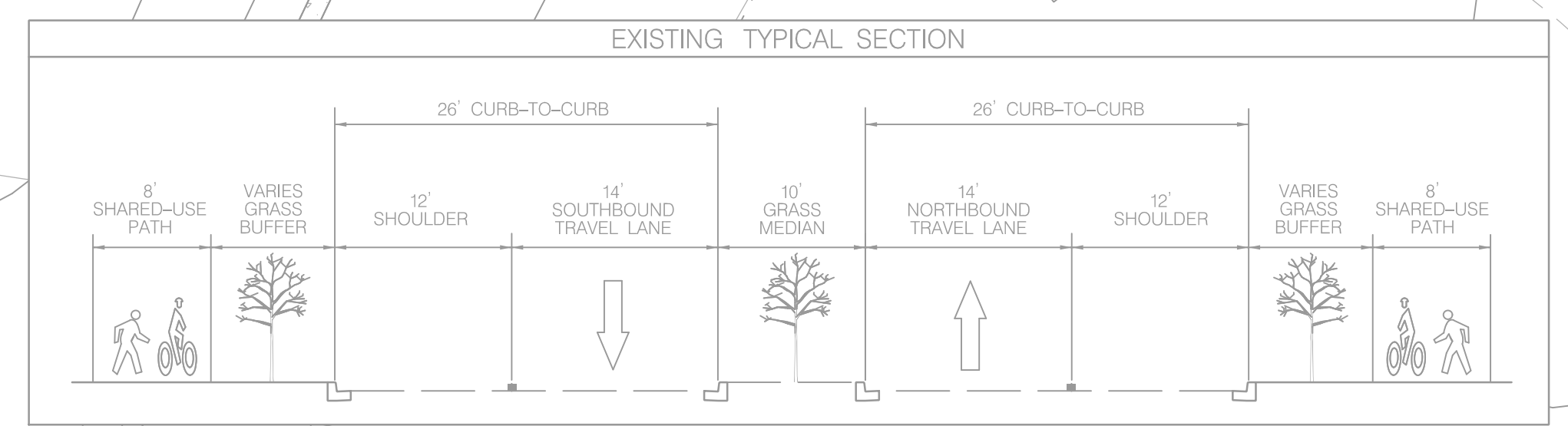
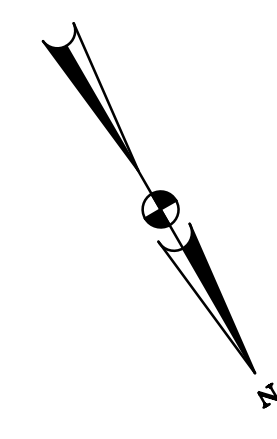
HANDBOX

SIGNAL POLE

PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON

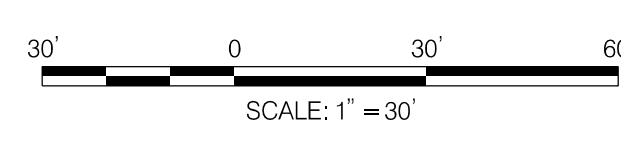
MAN HOLE





- EXISTING LEGEND:
- PROPERTY LINE
 - EDGE OF PAVEMENT
 - PAVEMENT MARKINGS
 - CONCRETE SIDEWALK
 - ASPHALT PATHWAY
 - UTILITY POLE AND BACK GUY
 - GROUND-MOUNTED SIGN
 - LIGHT POLE
 - INLETS
 - FIRE HYDRANT
 - HANDBOX
 - SIGNAL POLE
 - PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON
 - MAN HOLE

Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Existing Conditions



DWG. NO. 02

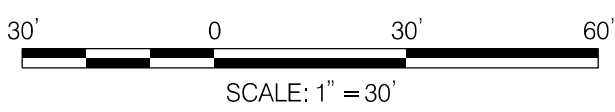
OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:09 AM
FILE NAME: \\2019\\B_City of Greenbelt\\Hanover Parkway_060K\\dwg\\p002_HanoverPkw.dgn



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:09 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K\\dwg\\PSN-P003_HanoverPkw.dgn

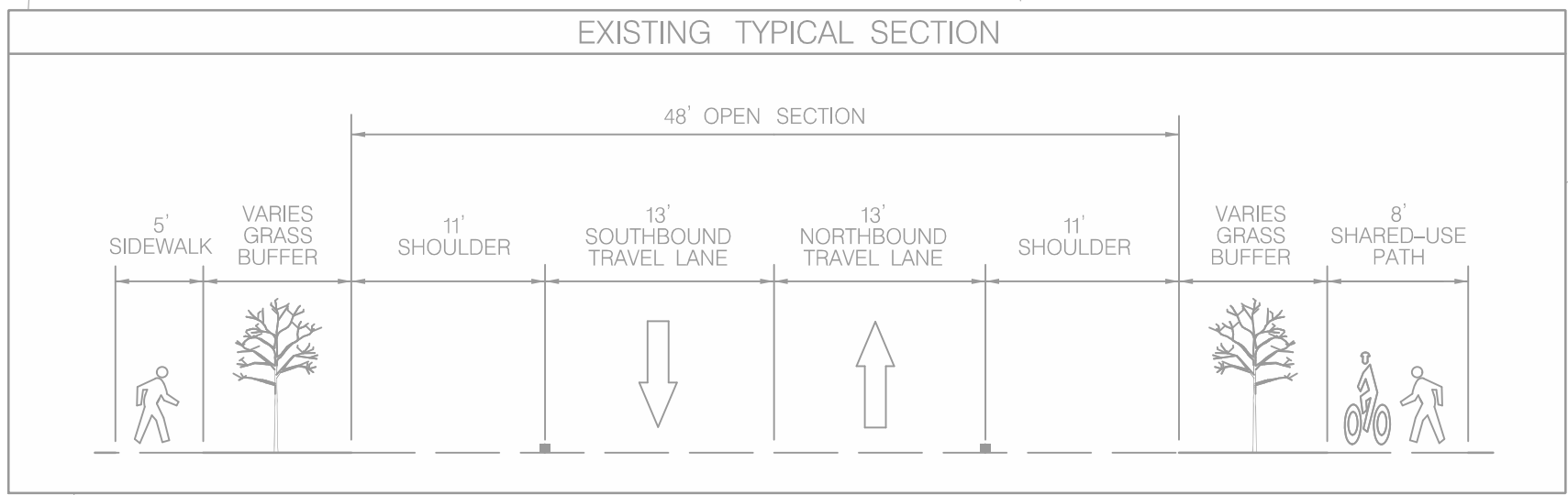
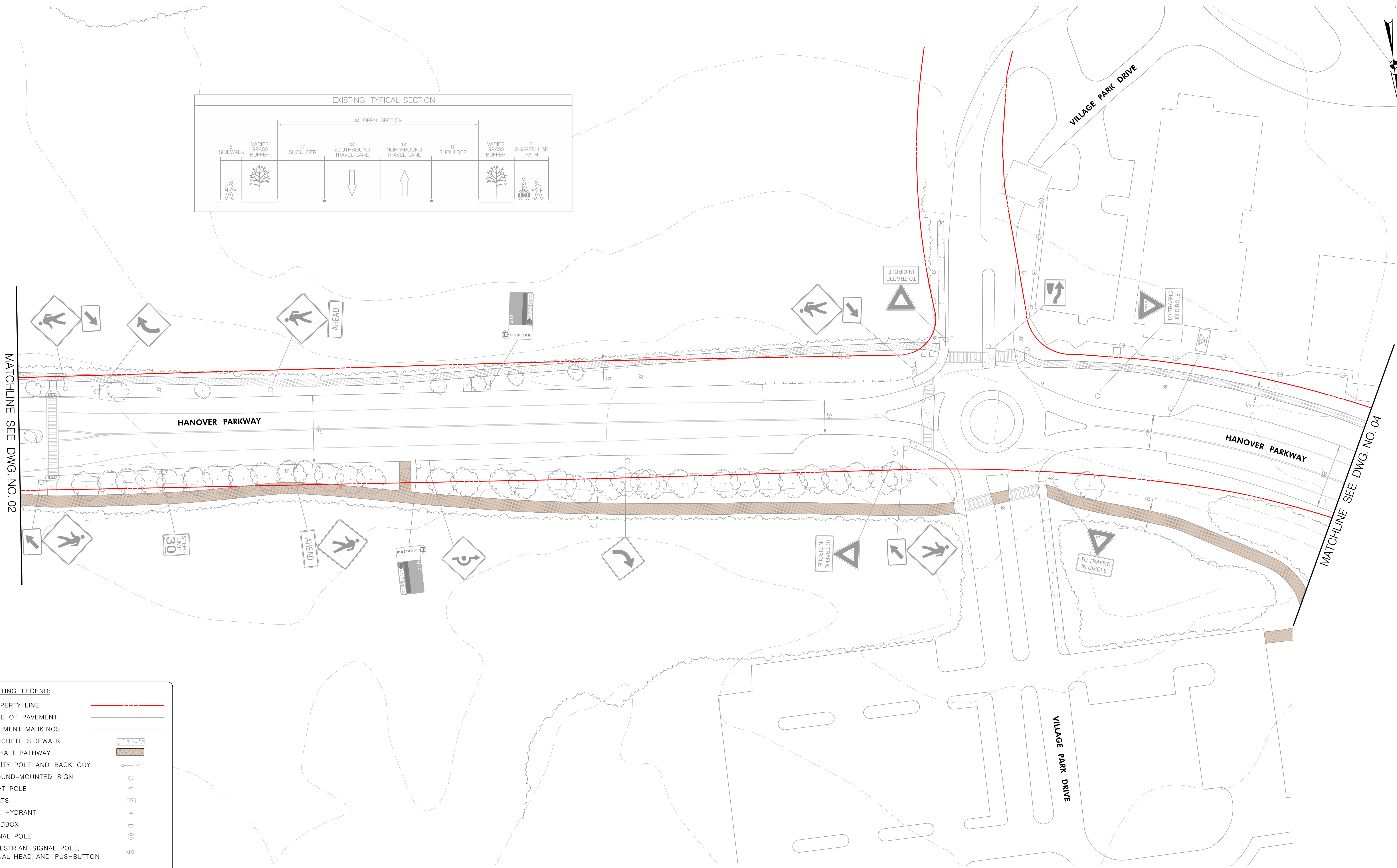


Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Existing Conditions



DWG. NO. 03

EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:09 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K\\dwg\\PSN-P004_HanoverPkw.dgn

EXISTING LEGEND:

PROPERTY LINE

EDGE OF PAVEMENT

PAVEMENT MARKINGS

CONCRETE SIDEWALK

ASPHALT PATHWAY

UTILITY POLE AND BACK GUY

GROUND-MOUNTED SIGN

LIGHT POLE

INLETS

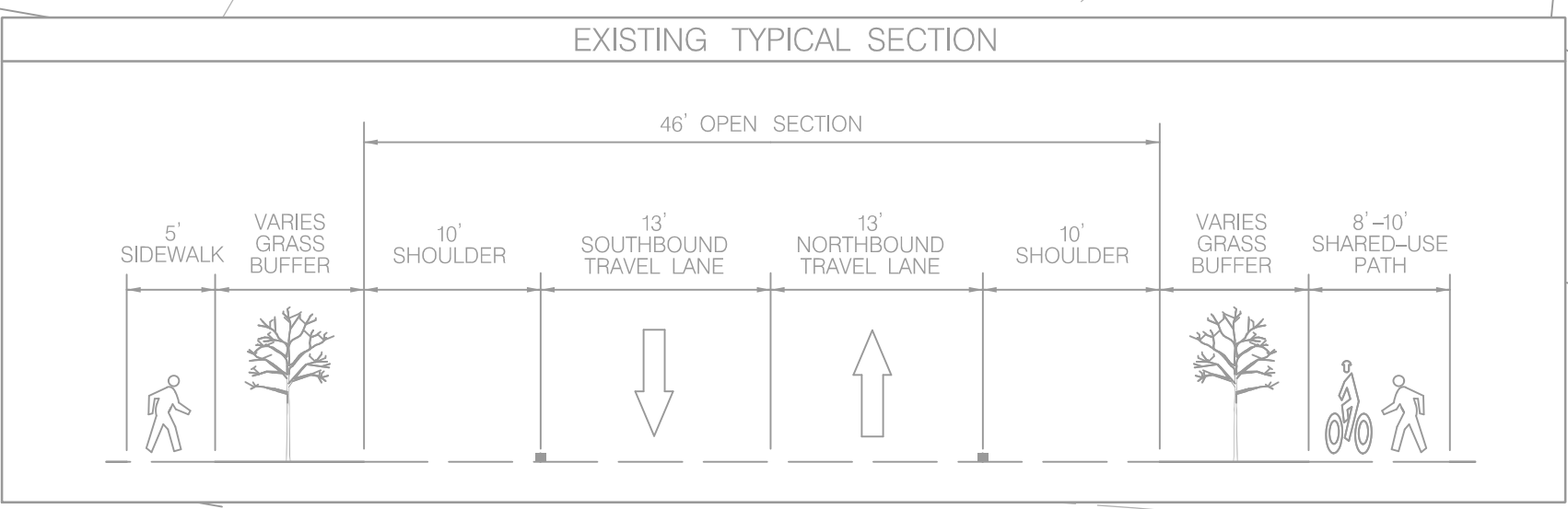
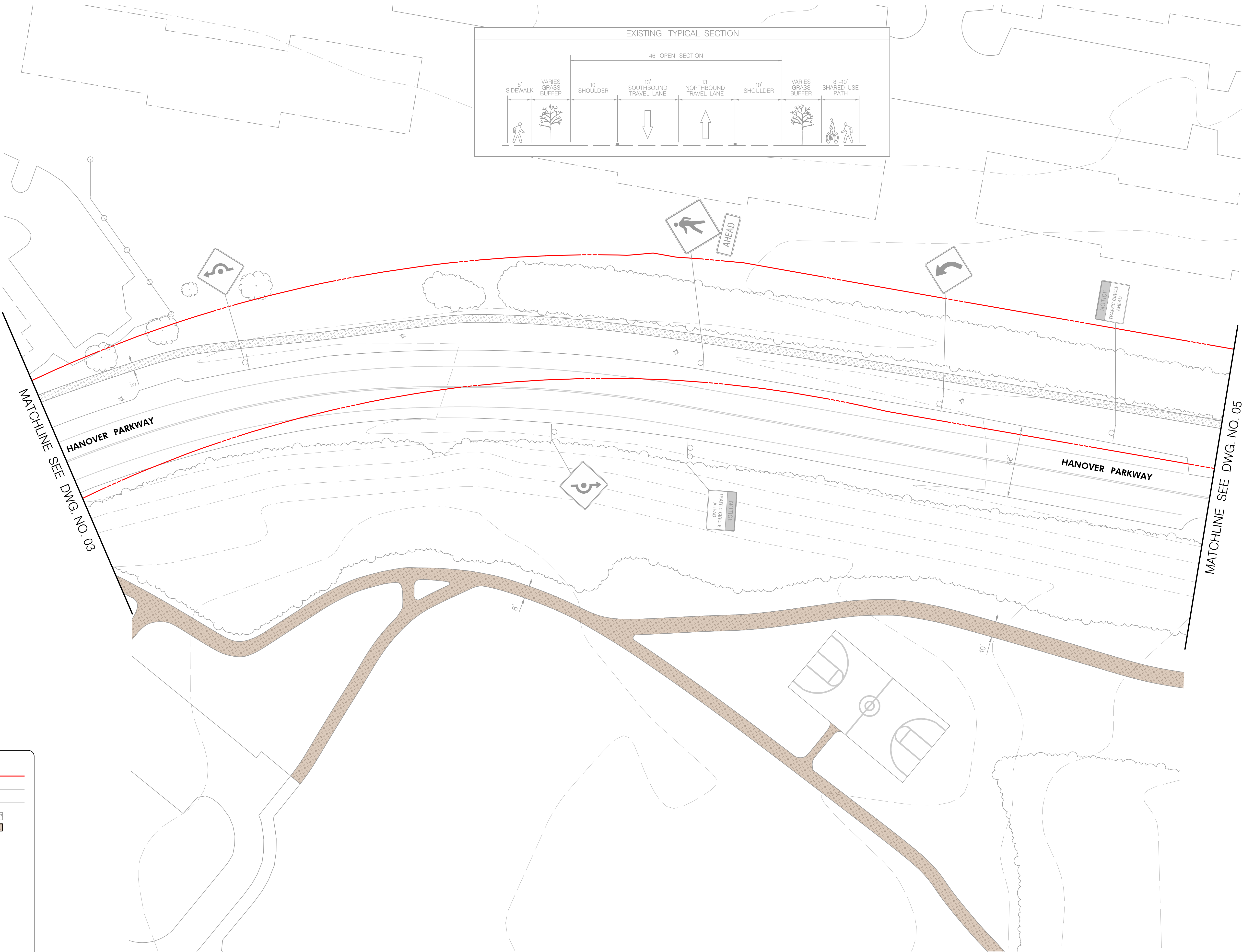
FIRE HYDRANT

HANDBOX

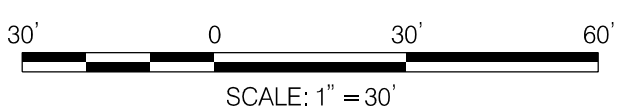
SIGNAL POLE

PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON

MAN HOLE



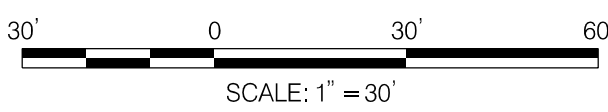
Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Existing Conditions



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:16 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg\\PSN-P05A_HanoverPkw.dgn



Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option A



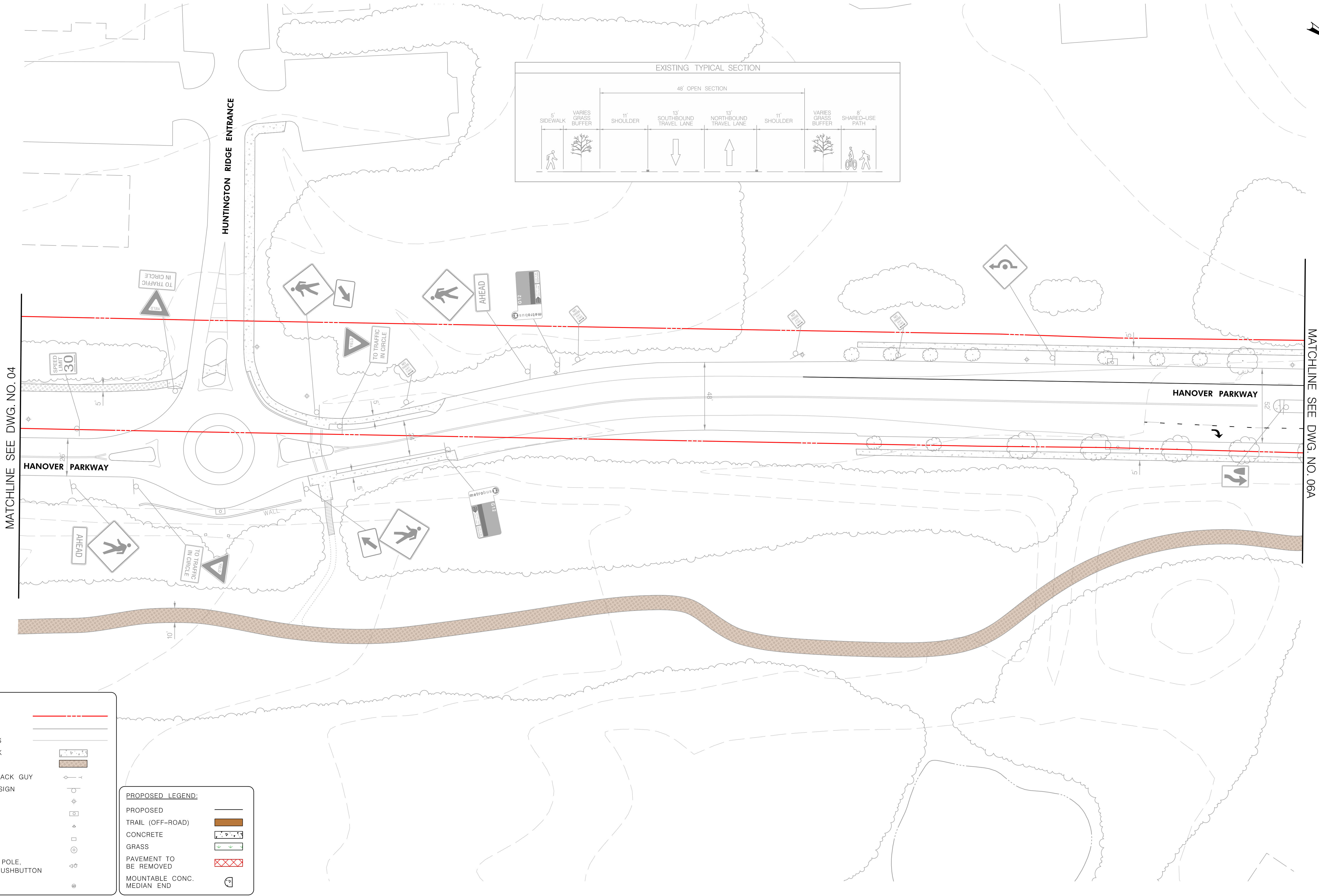
DWG. NO. 05A

EXISTING LEGEND:

- PROPERTY LINE
- EDGE OF PAVEMENT
- PAVEMENT MARKINGS
- CONCRETE SIDEWALK
- ASPHALT PATHWAY
- UTILITY POLE AND BACK GUY
- GROUND-MOUNTED SIGN
- LIGHT POLE
- INLETS
- FIRE HYDRANT
- HANDBOX
- SIGNAL POLE
- PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON
- MAN HOLE

PROPOSED LEGEND:

- PROPOSED
- TRAIL (OFF-ROAD)
- CONCRETE
- GRASS
- PAVEMENT TO BE REMOVED
- MOUNTABLE CONC. MEDIAN END



MATCHLINE SEE DWG. NO. 06A

MATCHLINE SEE DWG. NO. 04

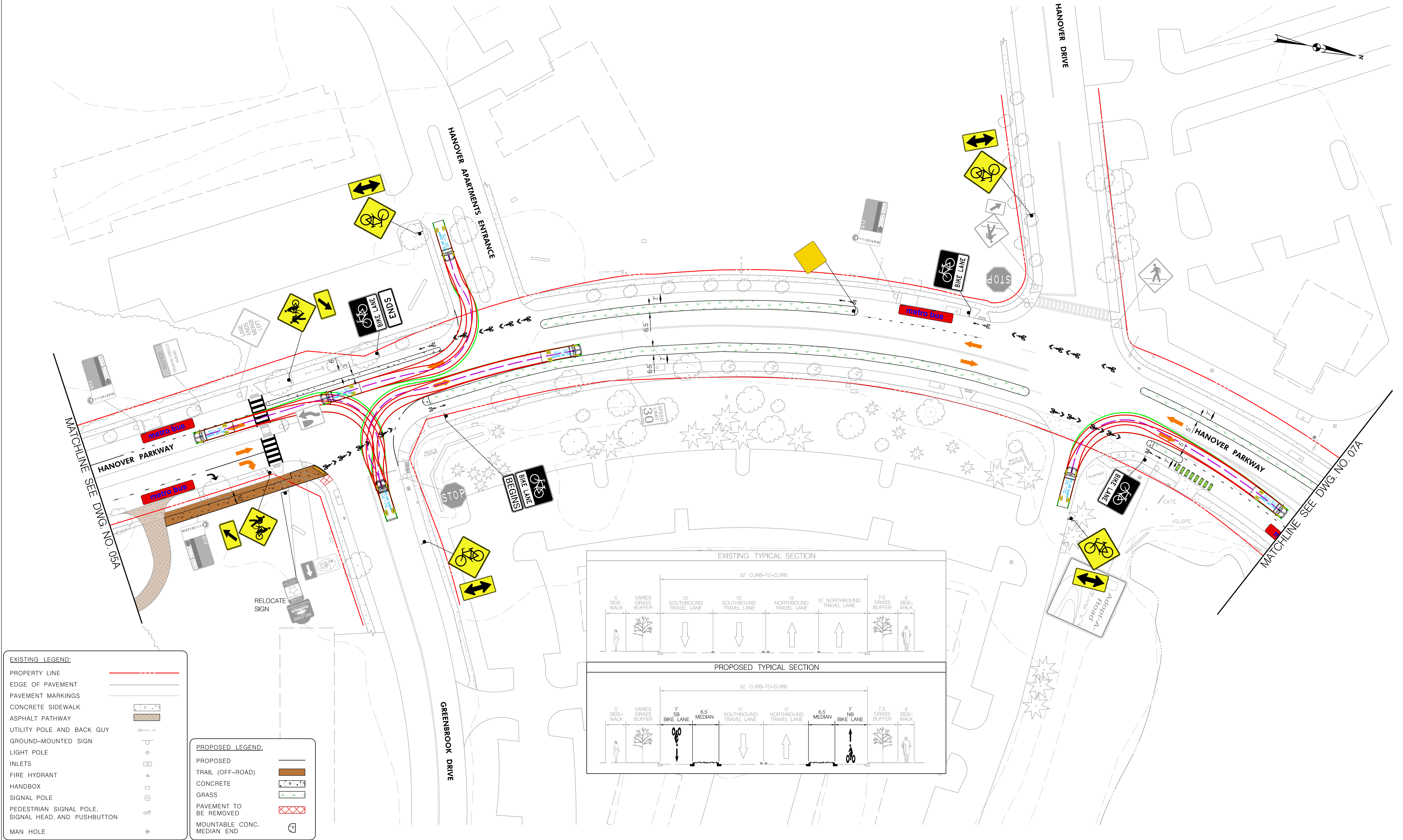
OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:16 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg P:\\SN-P06A_HanoverPky.dgn



Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option A

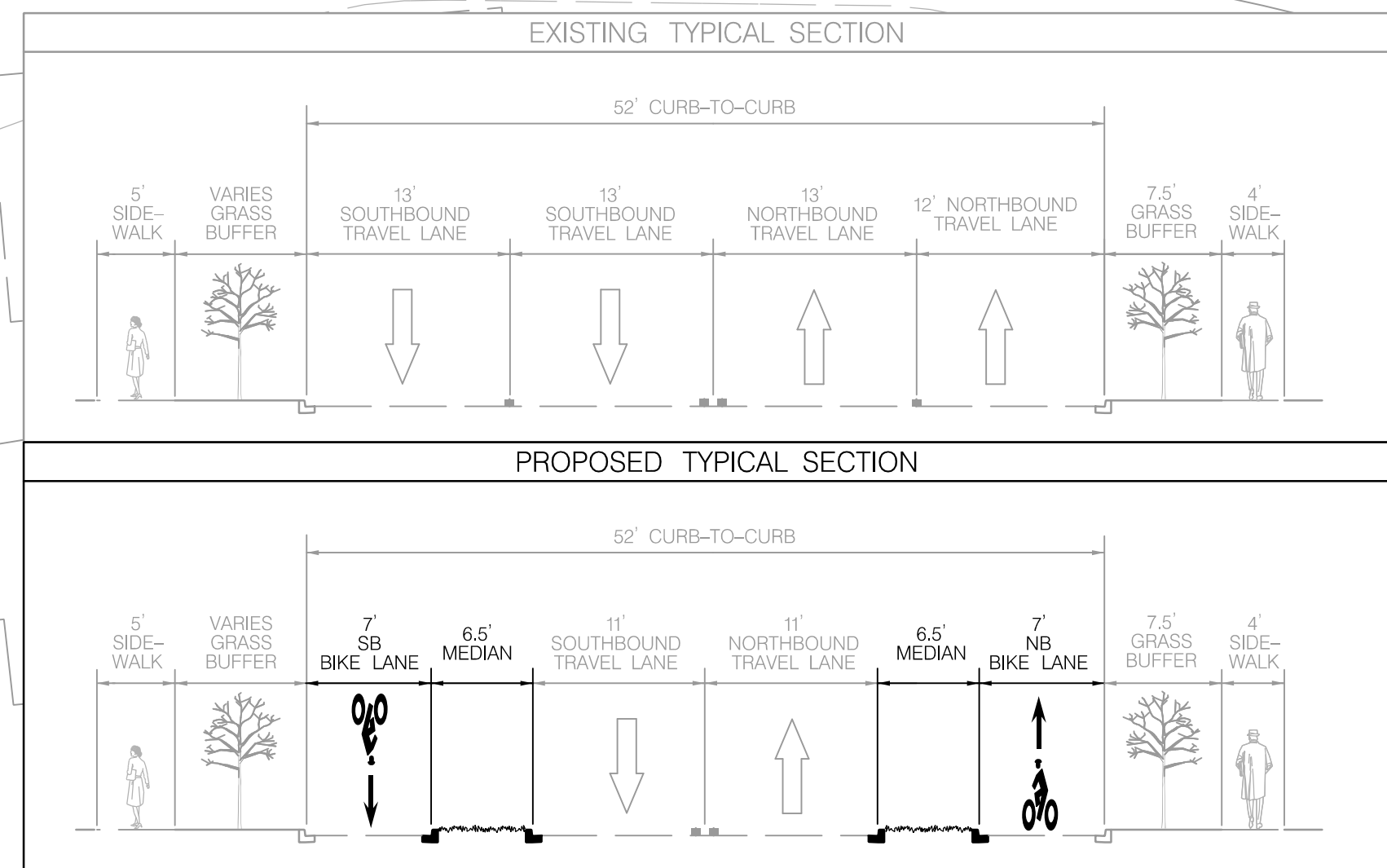


DWG. NO. 06A



EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:	
PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:17 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg P07A_HanoverPky.dgn



Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option A

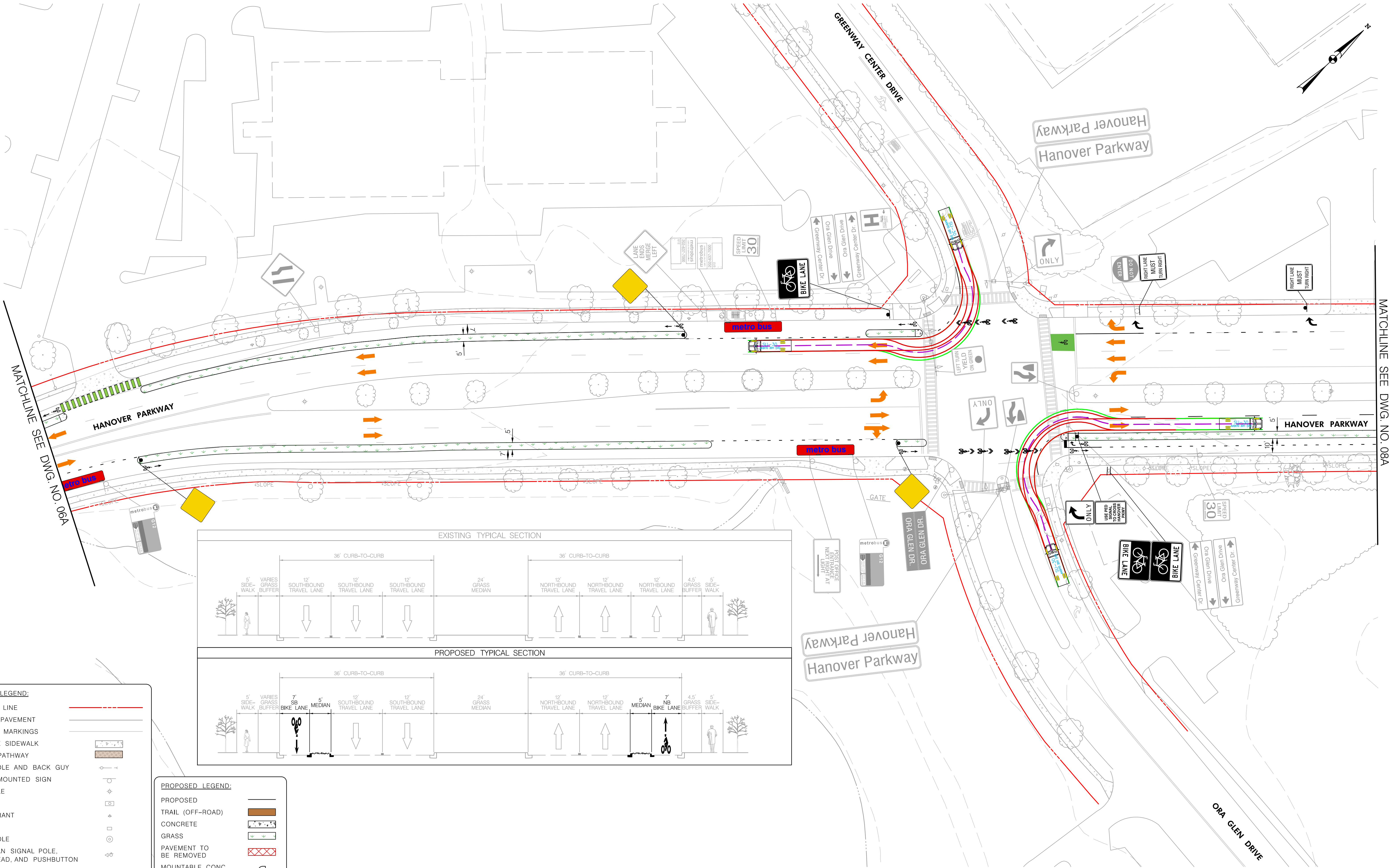
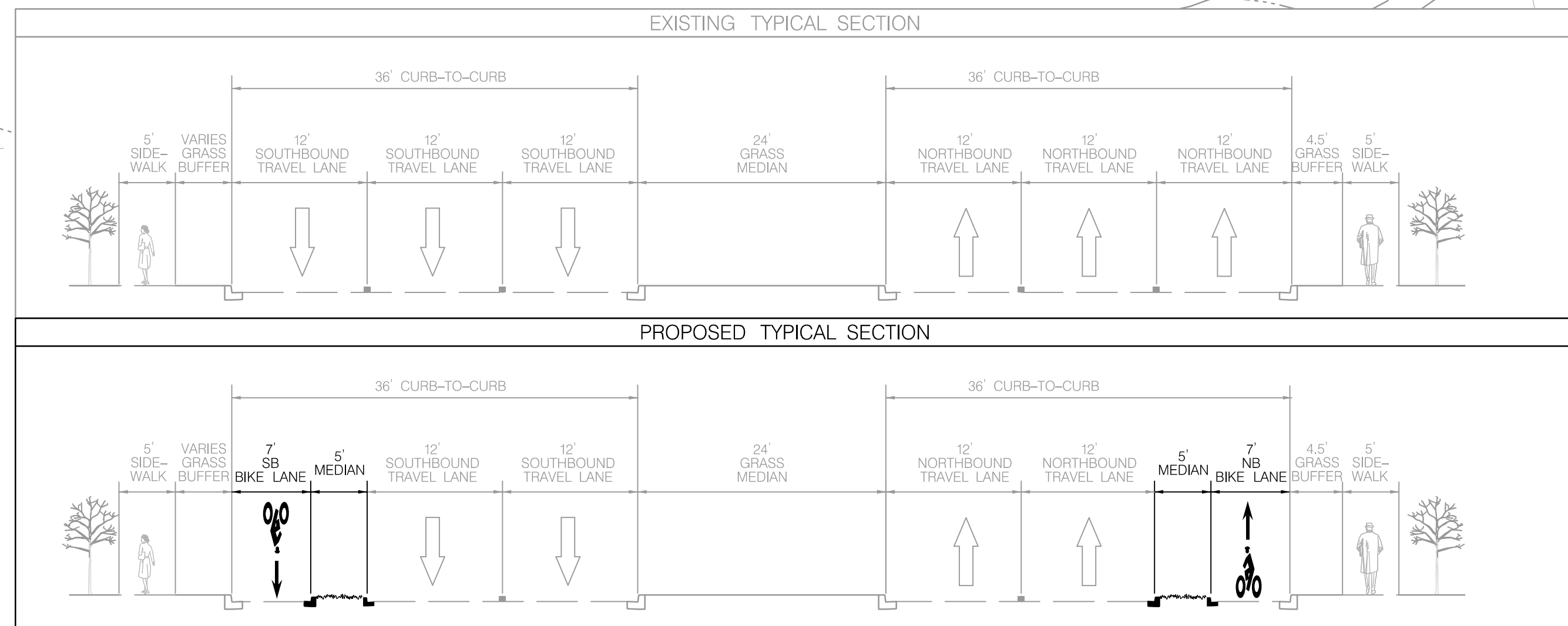
30' 0 30' 60'
SCALE: 1" = 30'

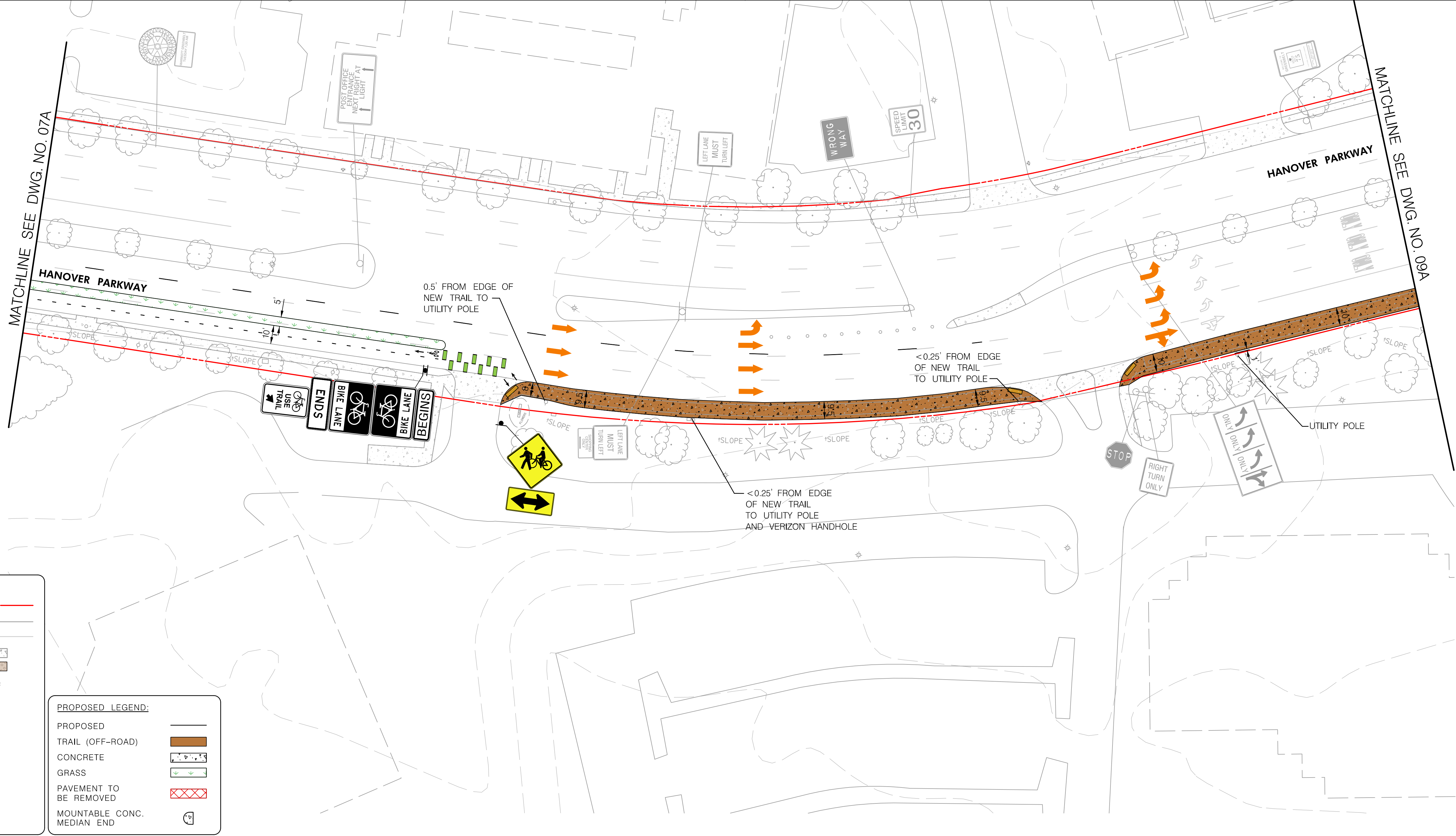
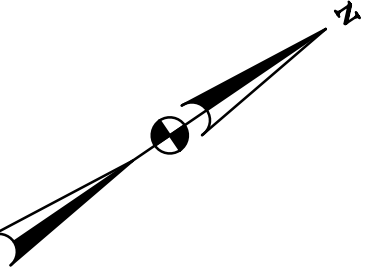
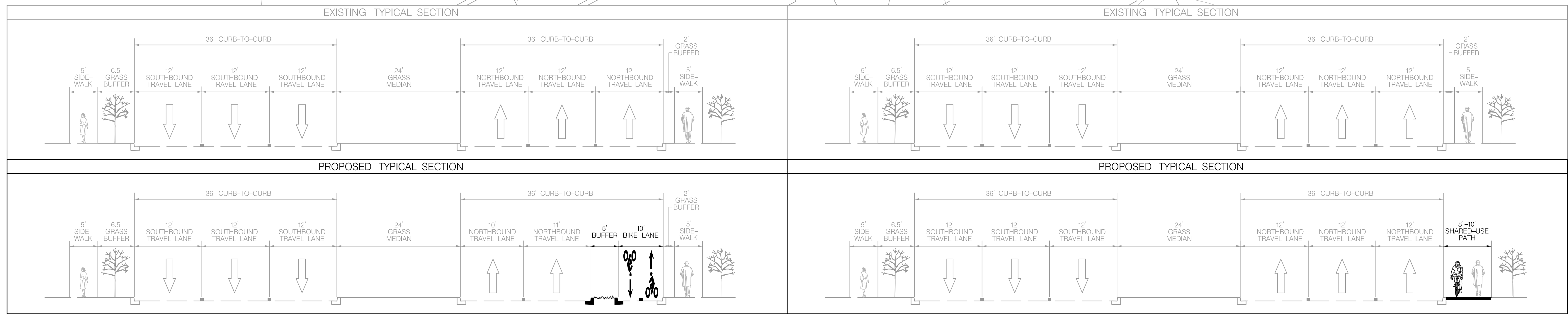
DWG. NO. 07A

12

EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:	
PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---





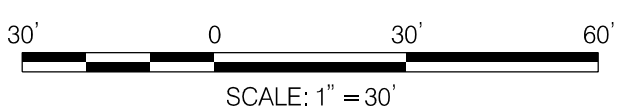
EXISTING LEGEND:

PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:

PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---

Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option A



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:17 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg P09A_HanoverPkwy.dgn



Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option A

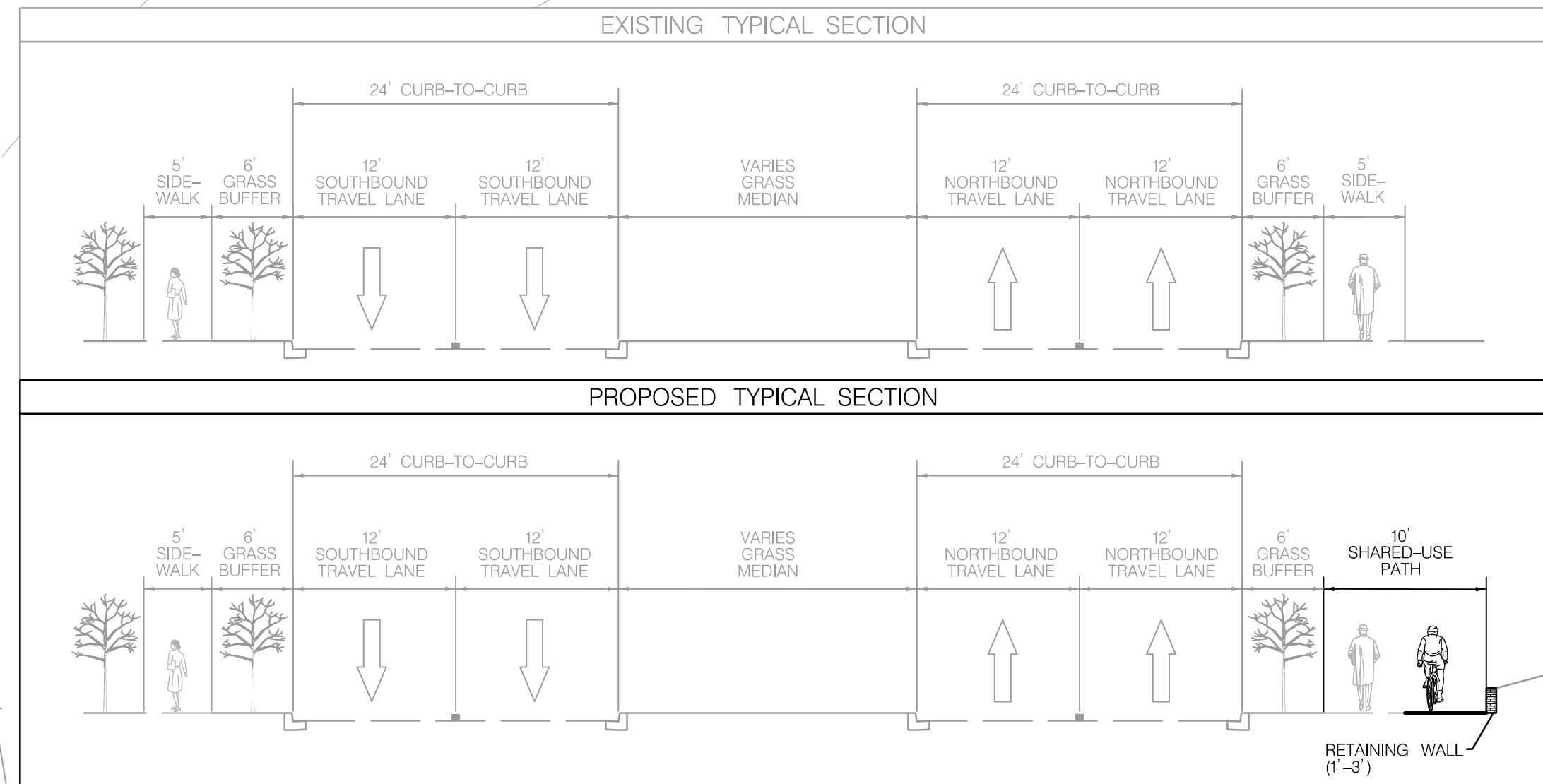
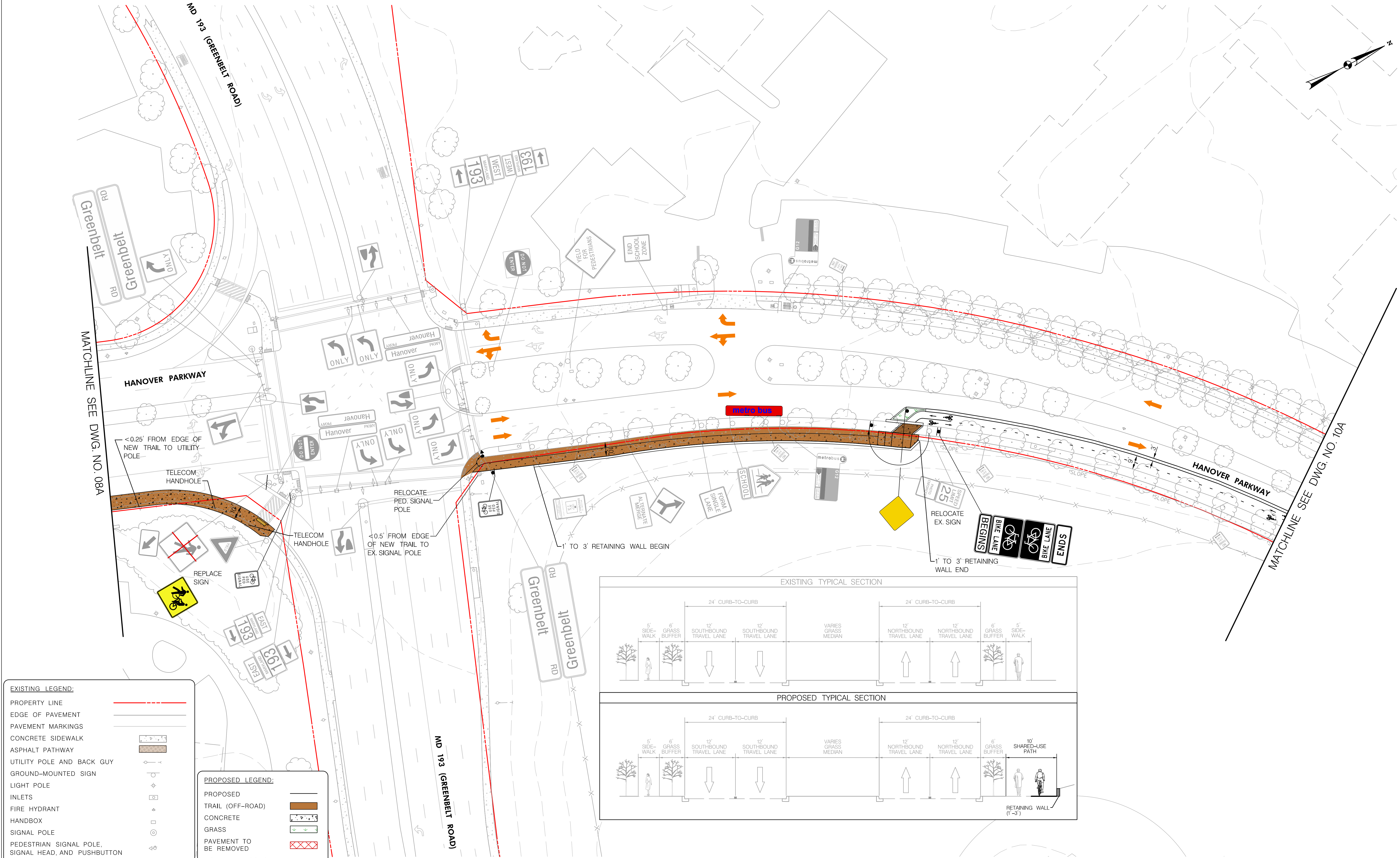
30' 0 30' 60'
SCALE: 1" = 30'

DWG. NO. 09A

14

EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:	
PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:17 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_560K.dwg User: P10A_HanoverPkw.dgn



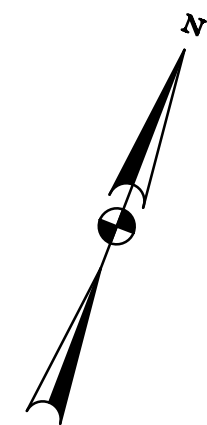
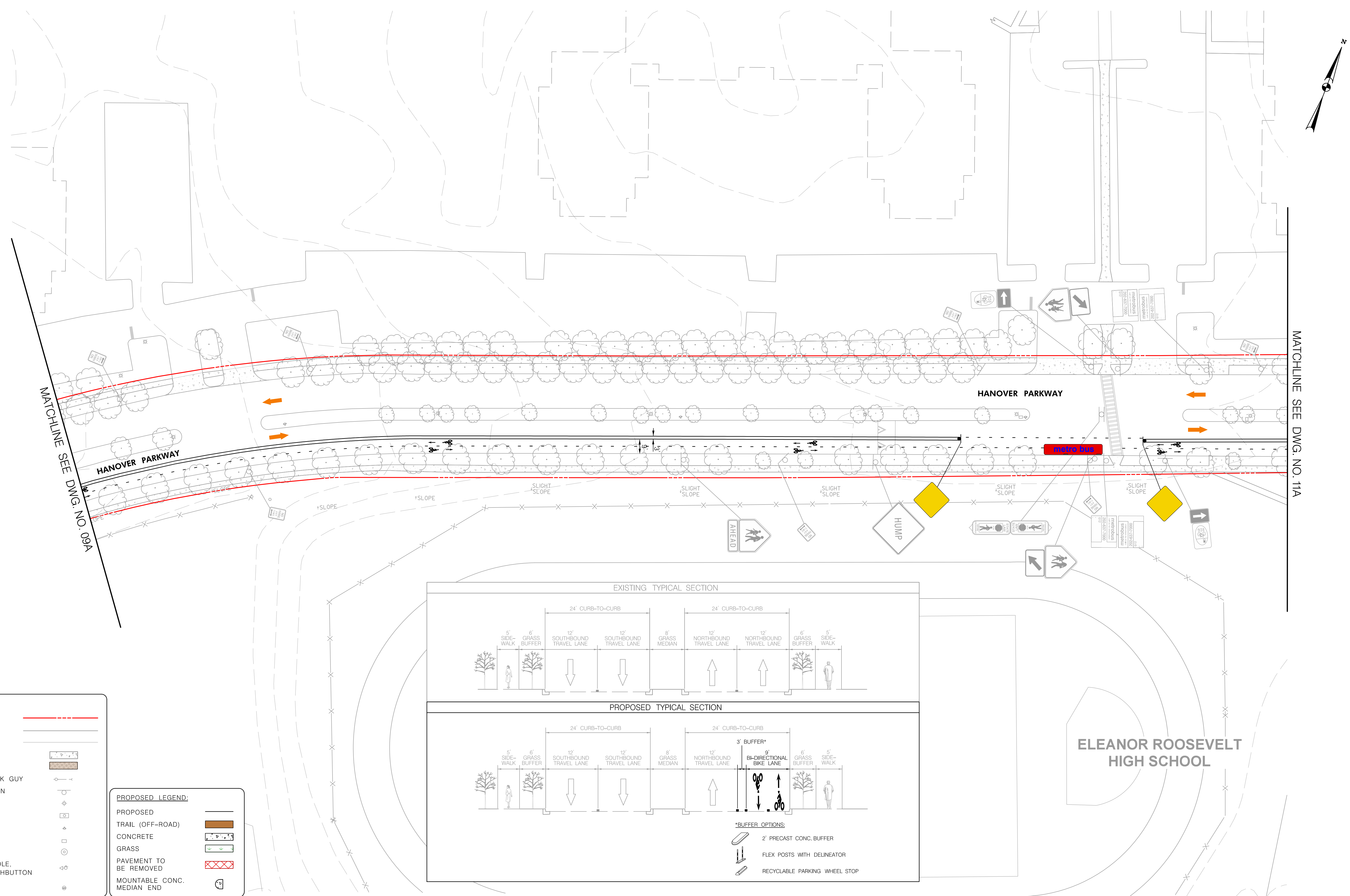
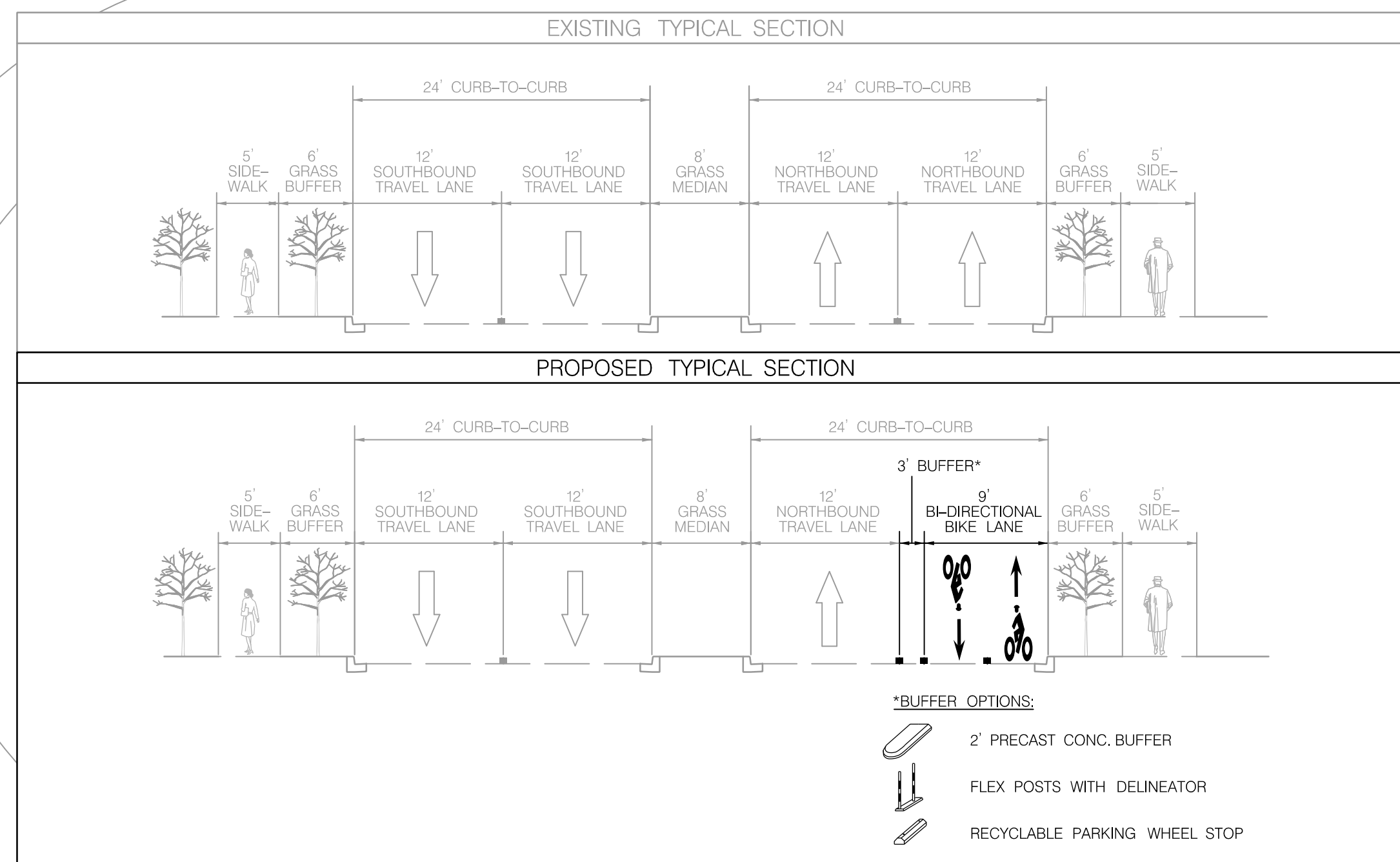
Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option A

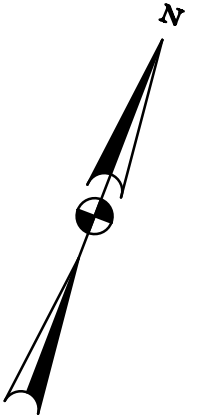


DWG. NO. 10A

EXISTING LEGEND:	
PROPERTY LINE	
EDGE OF PAVEMENT	
PAVEMENT MARKINGS	
CONCRETE SIDEWALK	
ASPHALT PATHWAY	
UTILITY POLE AND BACK GUY	
GROUND-MOUNTED SIGN	
LIGHT POLE	
INLETS	
FIRE HYDRANT	
HANDBOX	
SIGNAL POLE	
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	
MAN HOLE	

PROPOSED LEGEND:	
PROPOSED	
TRAIL (OFF-ROAD)	
CONCRETE	
GRASS	
PAVEMENT TO BE REMOVED	
MOUNTABLE CONC. MEDIAN END	





MATCHLINE SEE DWG. NO. 10A

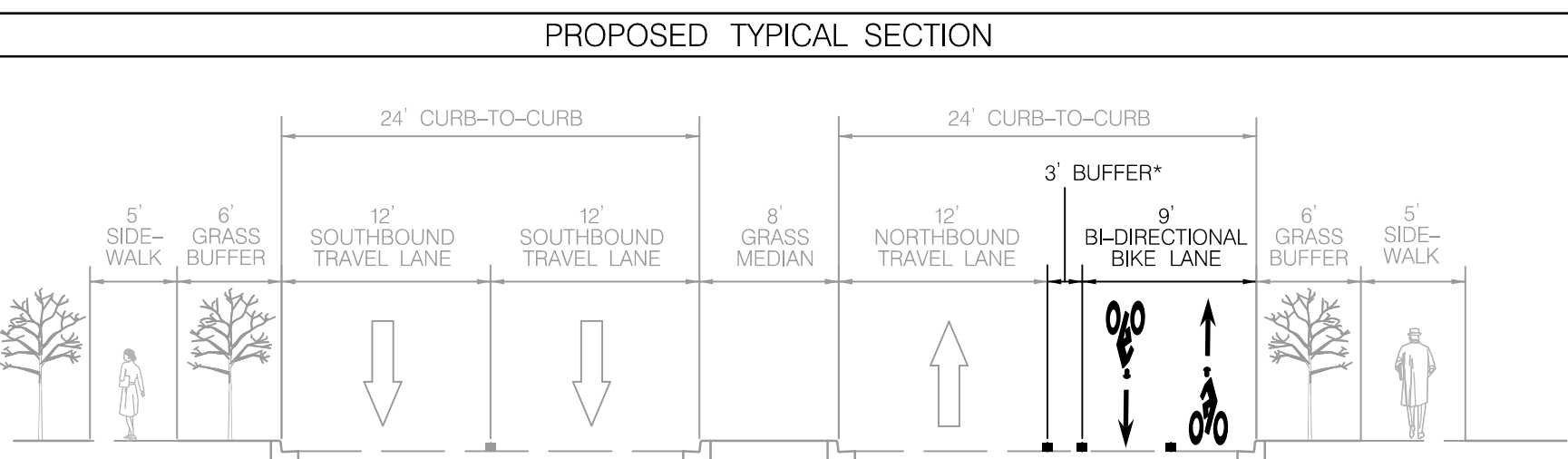
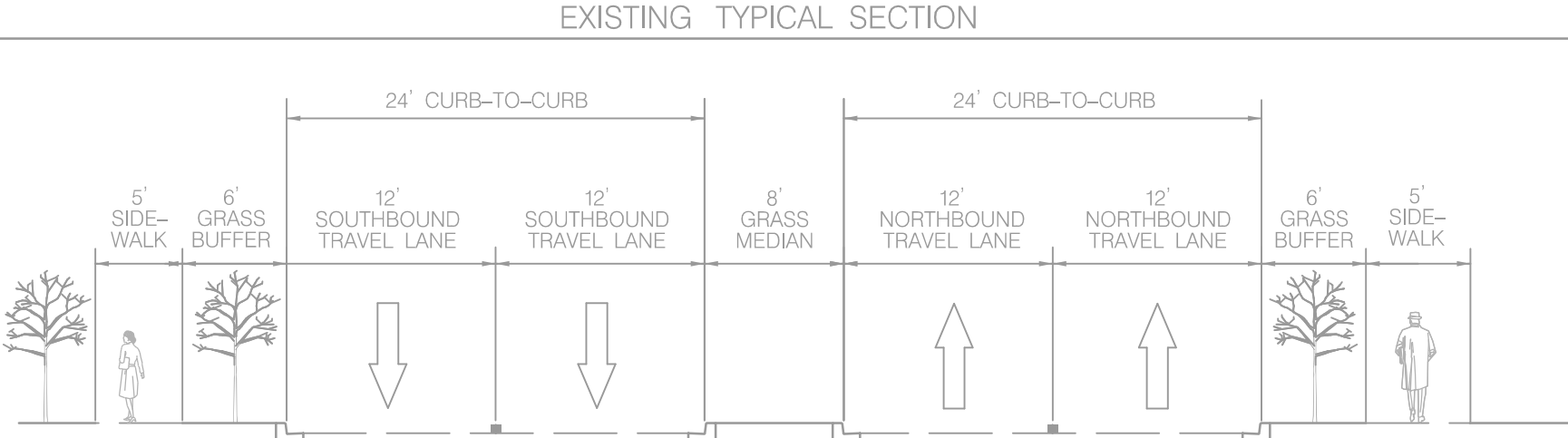
MATCHLINE SEE DWG. NO. 12A

HANOVER PARKWAY

HANOVER PARKWAY

ELEANOR ROOSEVELT H.S. ENTRANCE

ELEANOR ROOSEVELT
HIGH SCHOOL



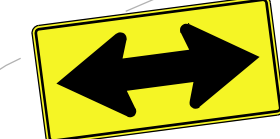
- *BUFFER OPTIONS:
- 2' PRECAST CONC. BUFFER
 - FLEX POSTS WITH DELINEATOR
 - RECYCLABLE PARKING WHEEL STOP

- EXISTING LEGEND:
- PROPERTY LINE
 - EDGE OF PAVEMENT
 - PAVEMENT MARKINGS
 - CONCRETE SIDEWALK
 - ASPHALT PATHWAY
 - UTILITY POLE AND BACK GUY
 - GROUND-MOUNTED SIGN
 - LIGHT POLE
 - INLETS
 - FIRE HYDRANT
 - HANDBOX
 - SIGNAL POLE
 - PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON
 - MAN HOLE

- PROPOSED LEGEND:
- PROPOSED
 - TRAIL (OFF-ROAD)
 - CONCRETE
 - GRASS
 - PAVEMENT TO BE REMOVED
 - MOUNTABLE CONC. MEDIAN END

SPEED LIMIT 25

STOP



median line

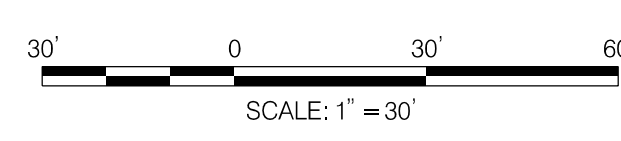
SLIGHT SLOPE

SLIGHT SLOPE

SLIGHT SLOPE



Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option A

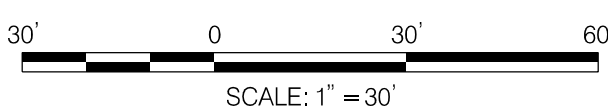


DWG. NO. 11A

OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:18 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg P12A_HanoverPkw.dgn



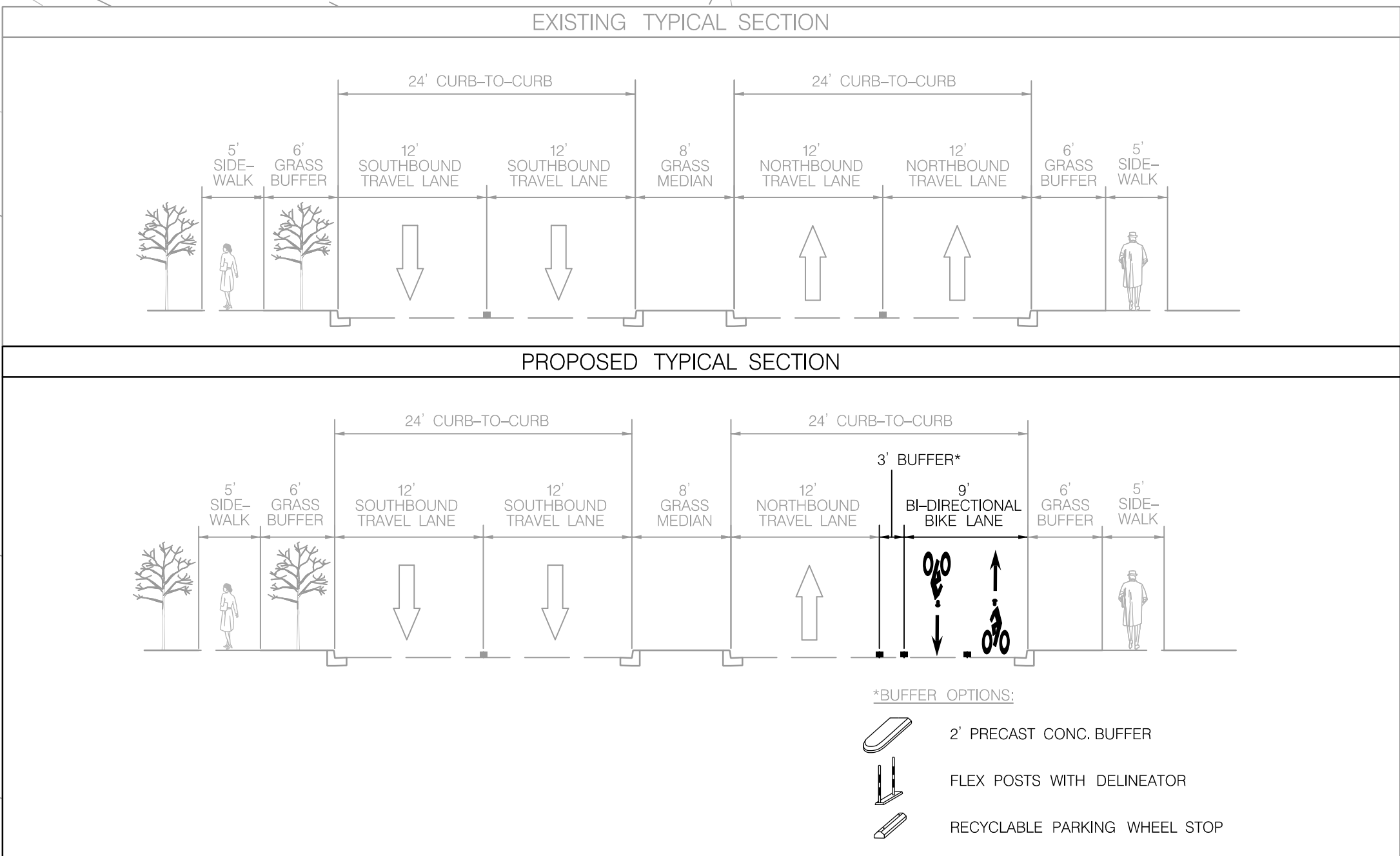
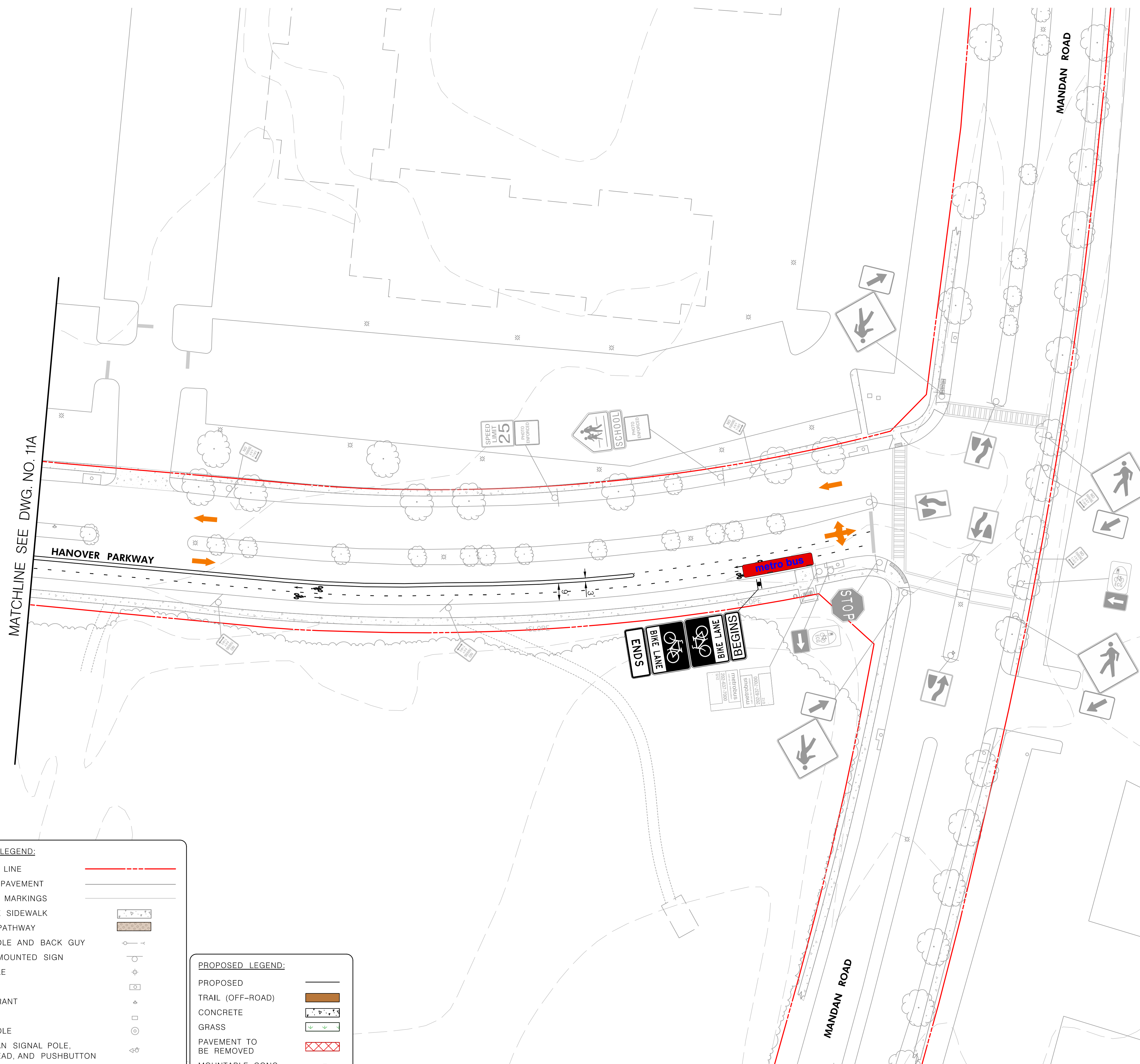
Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option A



DWG. NO. 12A

EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

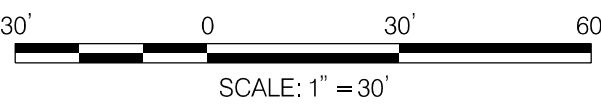
PROPOSED LEGEND:	
PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:21 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg P:\\SN-P05B_HanoverPkw.dgn



Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option B



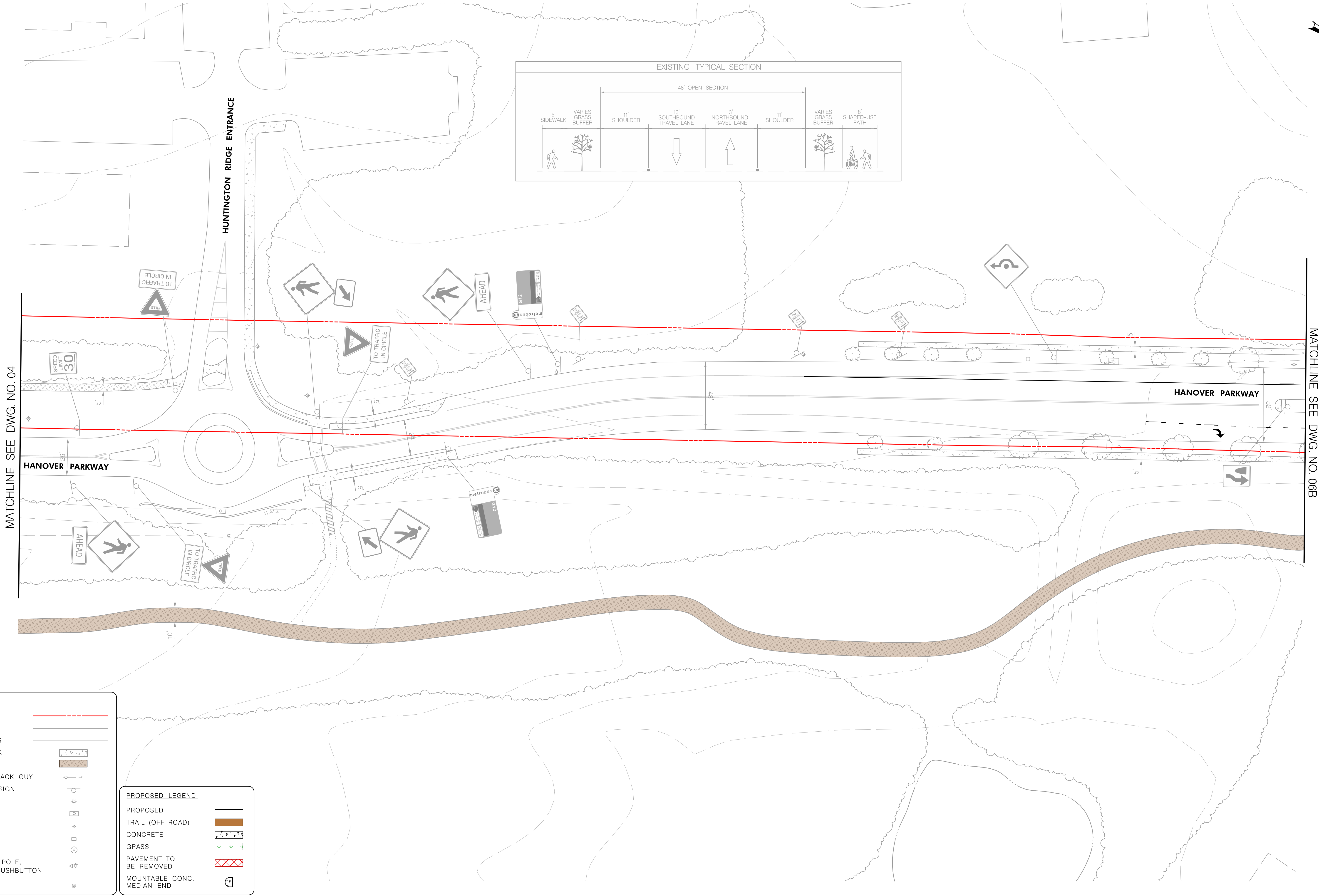
DWG. NO. 05B

EXISTING LEGEND:

- PROPERTY LINE
- EDGE OF PAVEMENT
- PAVEMENT MARKINGS
- CONCRETE SIDEWALK
- ASPHALT PATHWAY
- UTILITY POLE AND BACK GUY
- GROUND-MOUNTED SIGN
- LIGHT POLE
- INLETS
- FIRE HYDRANT
- HANDBOX
- SIGNAL POLE
- PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON
- MAN HOLE

PROPOSED LEGEND:

- PROPOSED
- TRAIL (OFF-ROAD)
- CONCRETE
- GRASS
- PAVEMENT TO BE REMOVED
- MOUNTABLE CONC. MEDIAN END



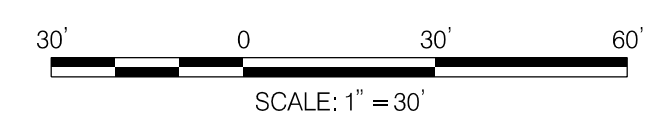
MATCHLINE SEE DWG. NO. 06B

MATCHLINE SEE DWG. NO. 04

OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:21 AM
FILE NAME: \\2019\\18 City of Greenbelt Hanover Parkway \$60K.dwg P:\\SN-P08B_HanoverPky.dgn



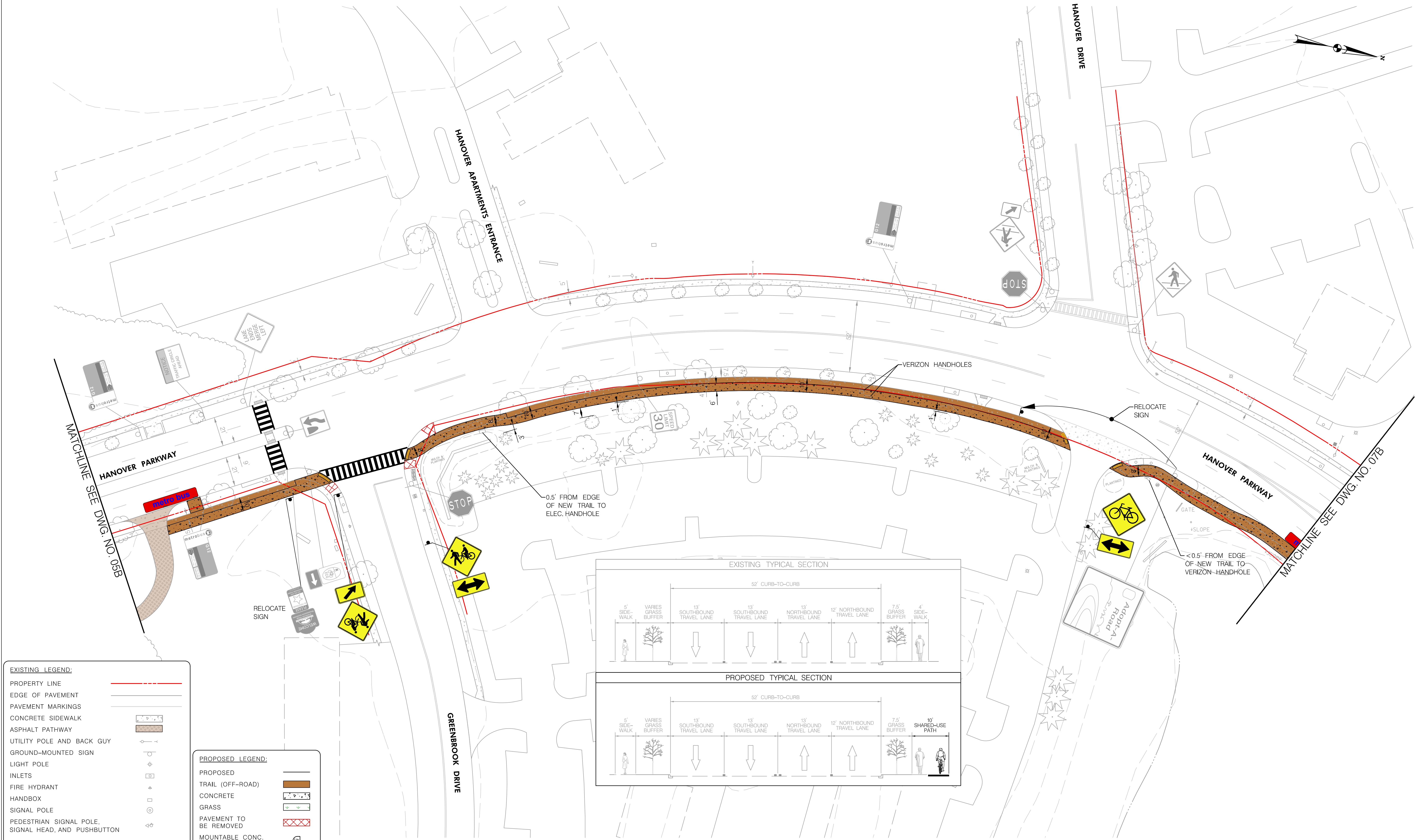
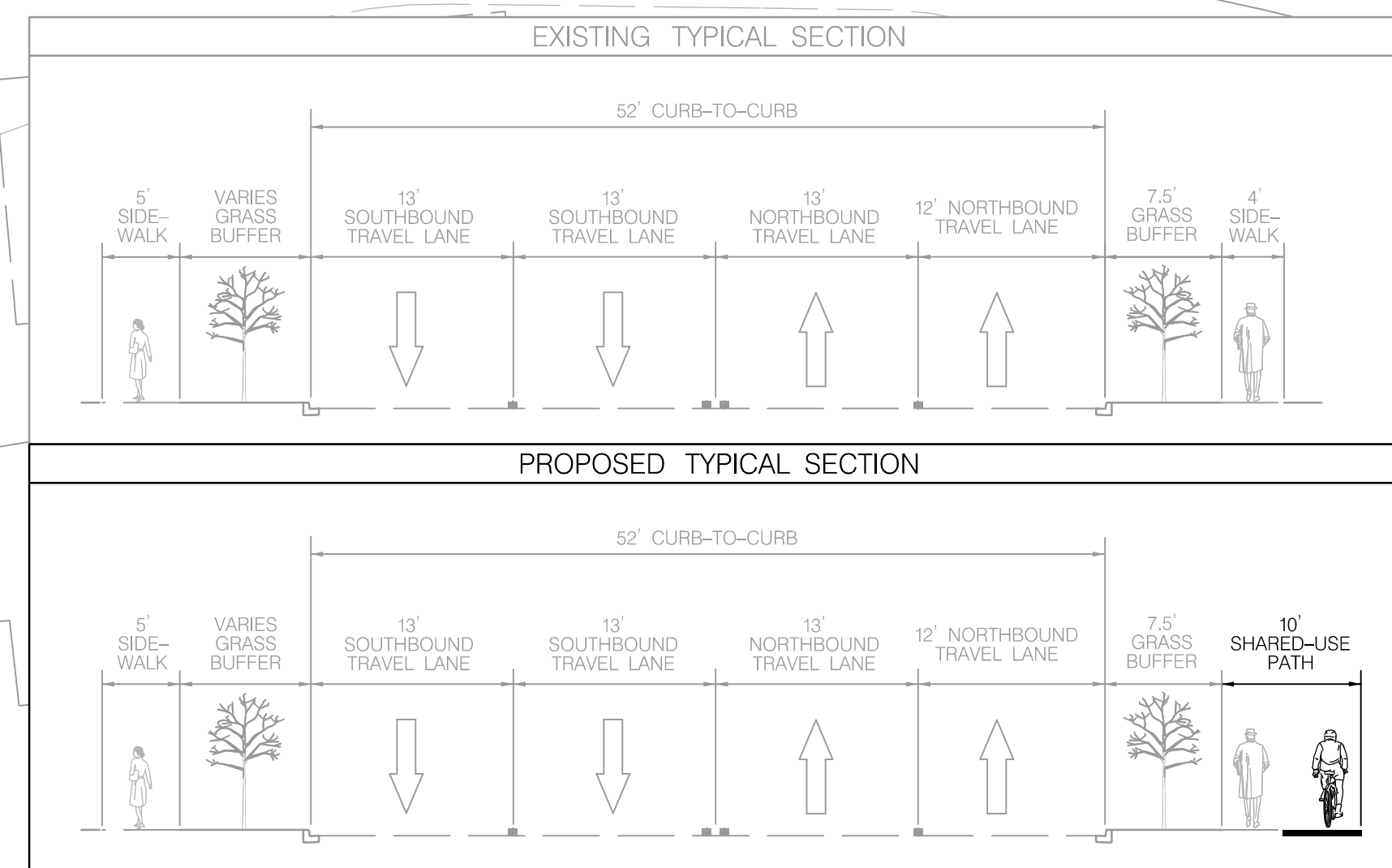
Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option B



DWG. NO. 06B

EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:	
PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:20 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg User: P07B_HanoverPkw.dgn



Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option B

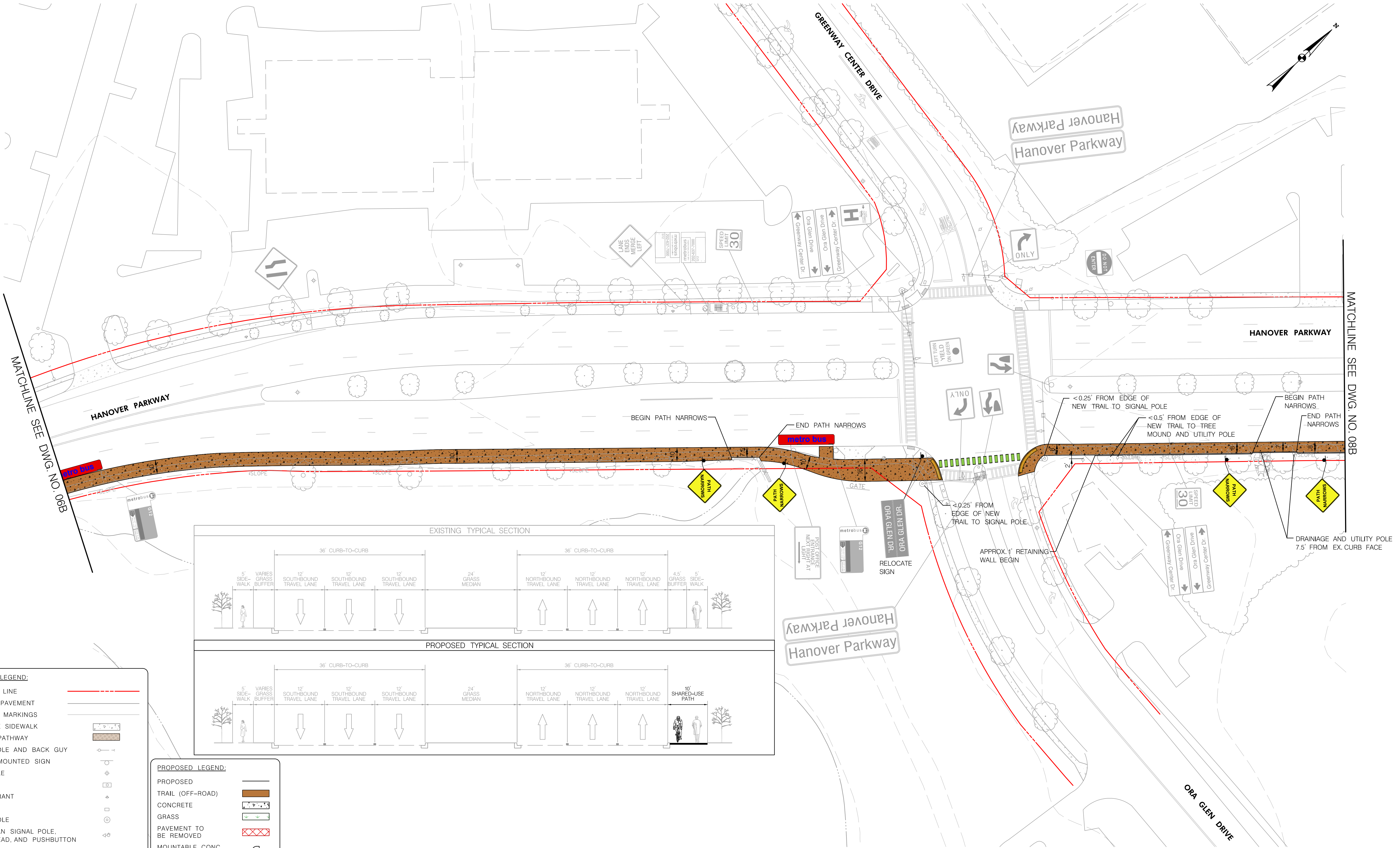
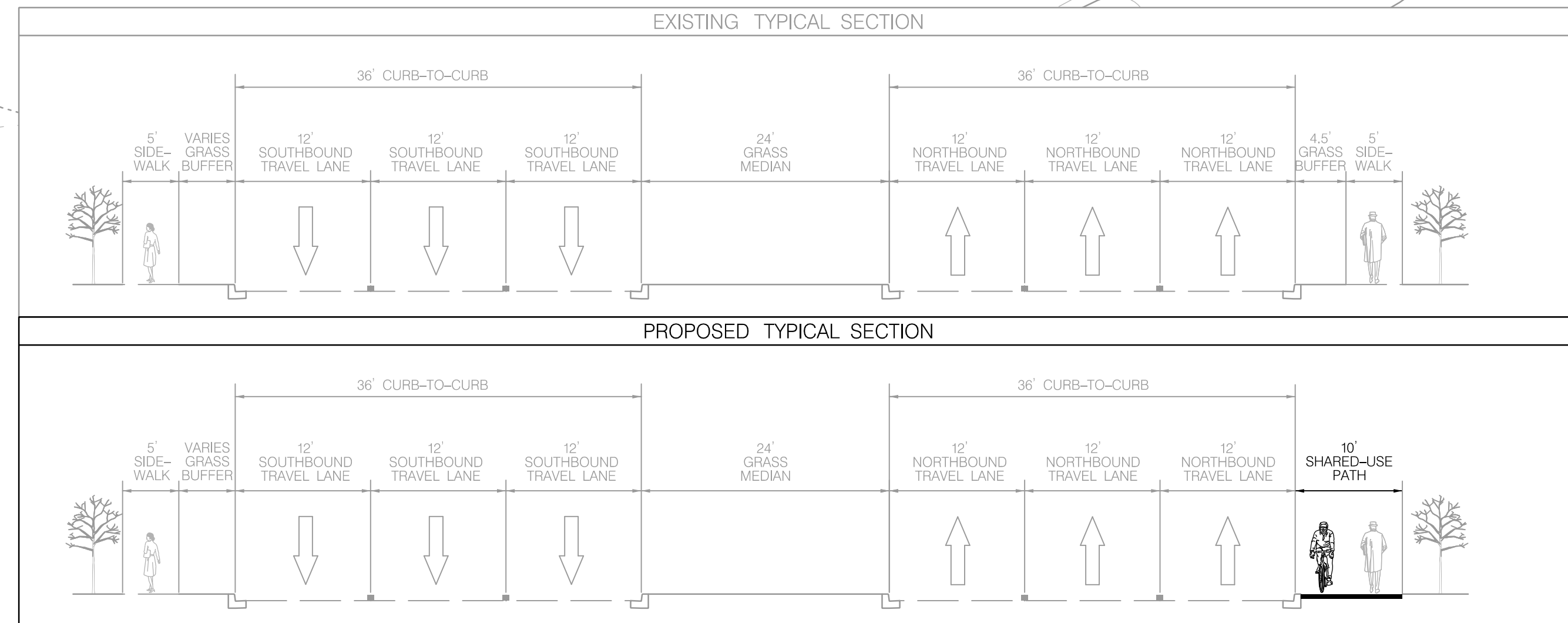
30' 0 30' 60'
SCALE: 1" = 30'

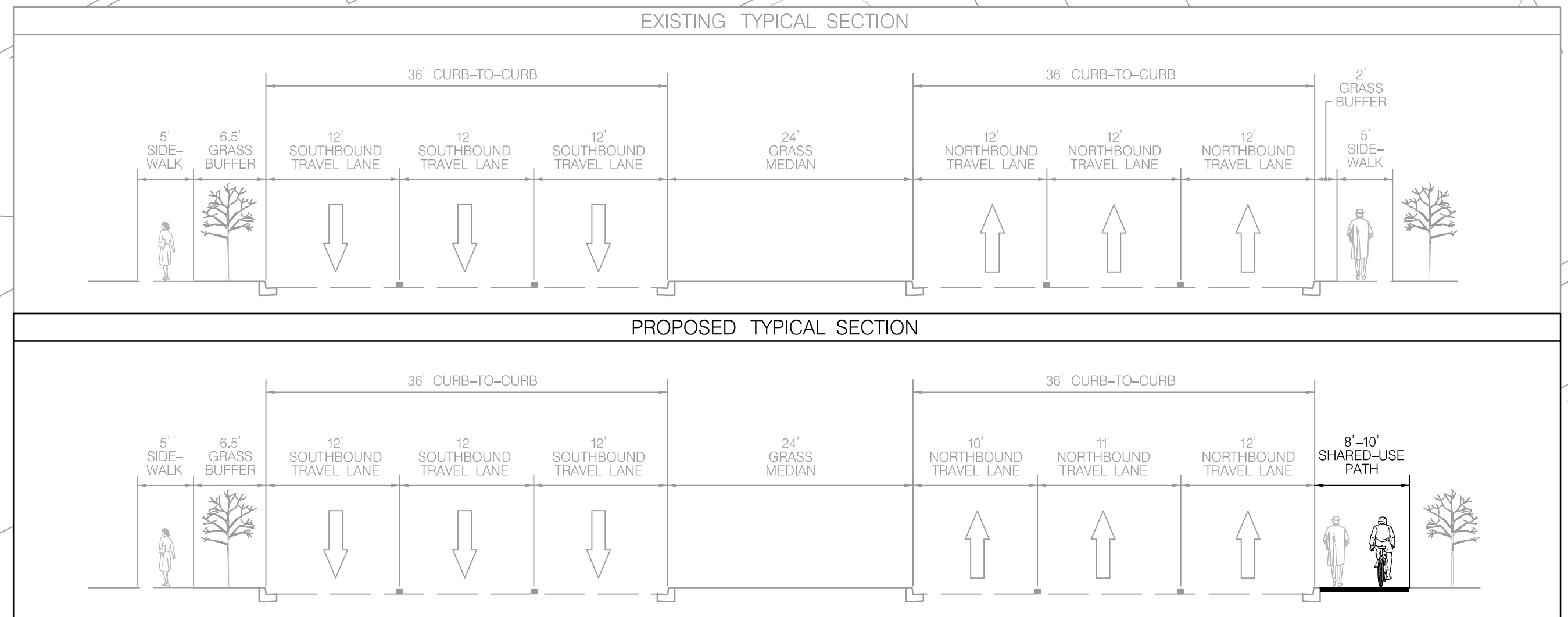
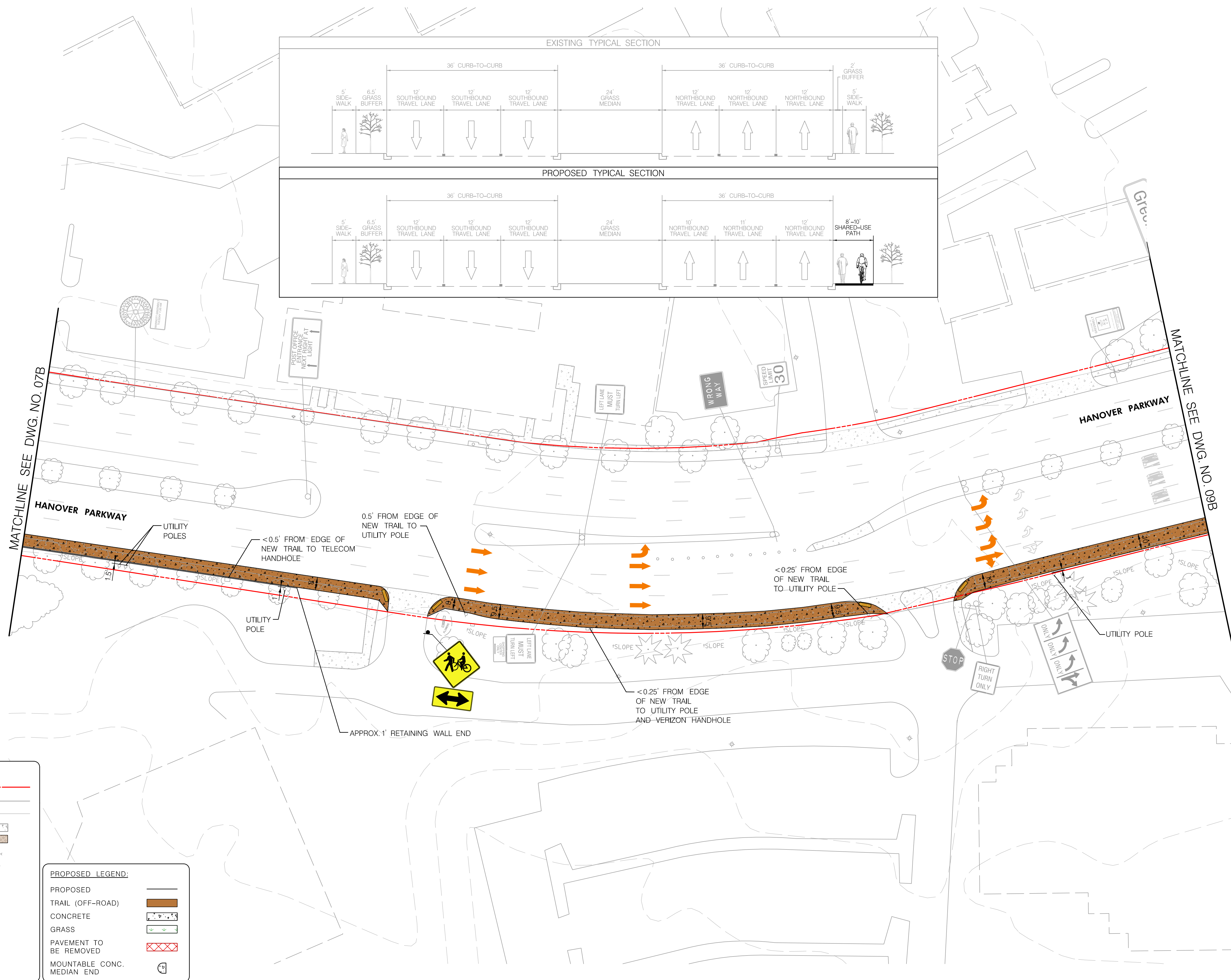
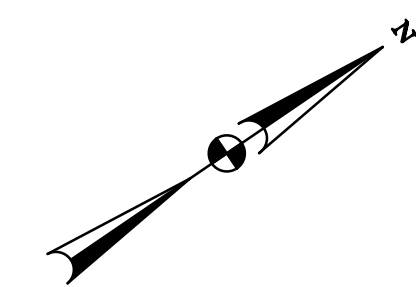
DWG. NO. 07B

20

EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:	
PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---





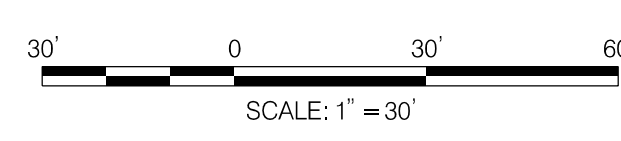
EXISTING LEGEND:

PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:

PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---

Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option B

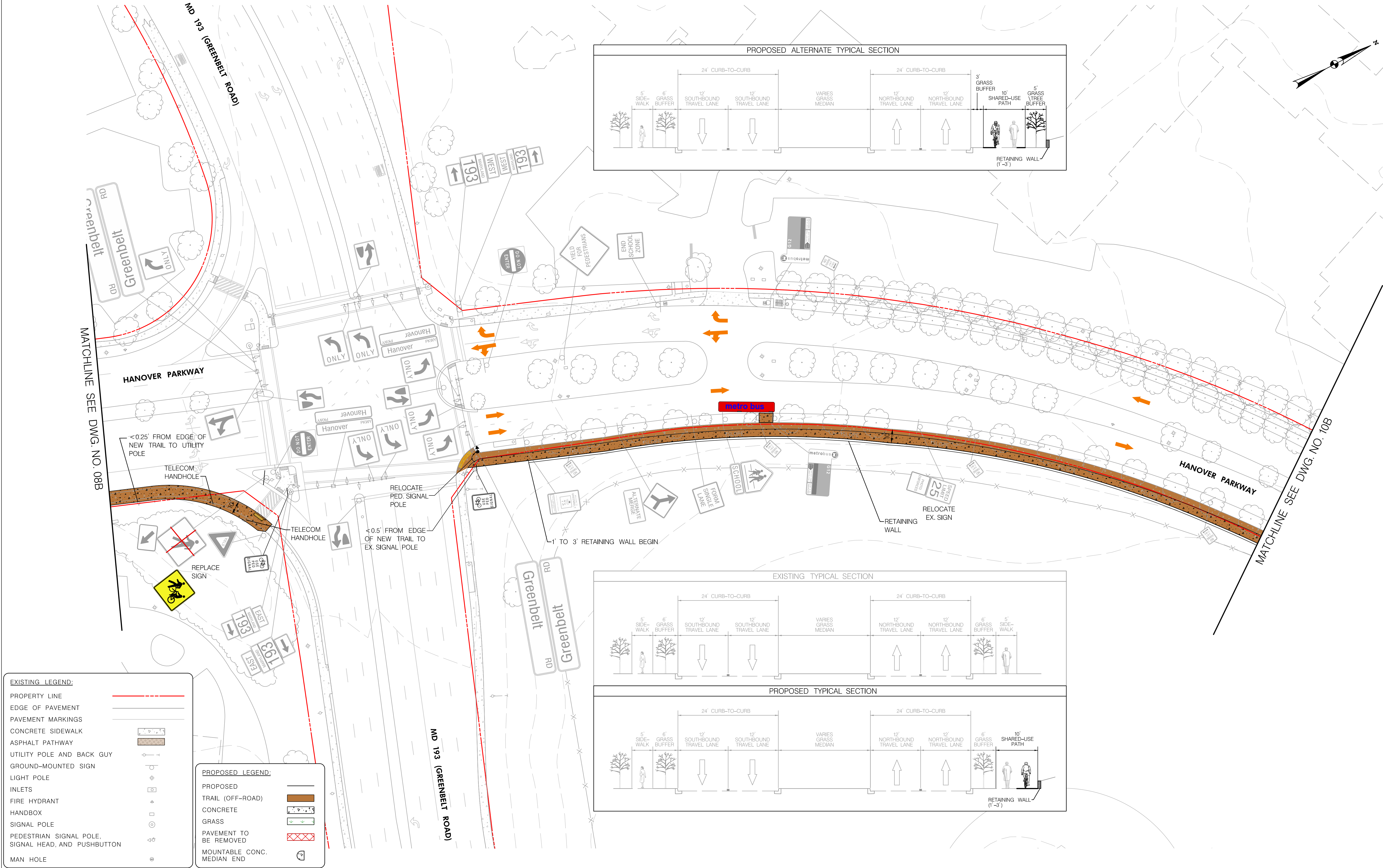


OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:20 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_080K.dwg User: P08B_HanoverPkw.dgn

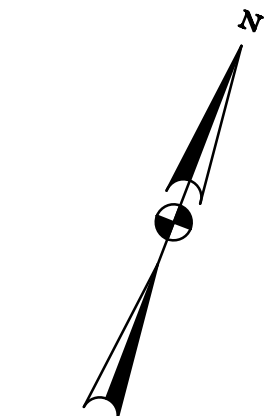
OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:20 AM
FILE NAME: \\2019\18_City of Greenbelt_Hanover Parkway_560K.dwg User: P09B_HanoverPky.dgn

EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:	
PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---

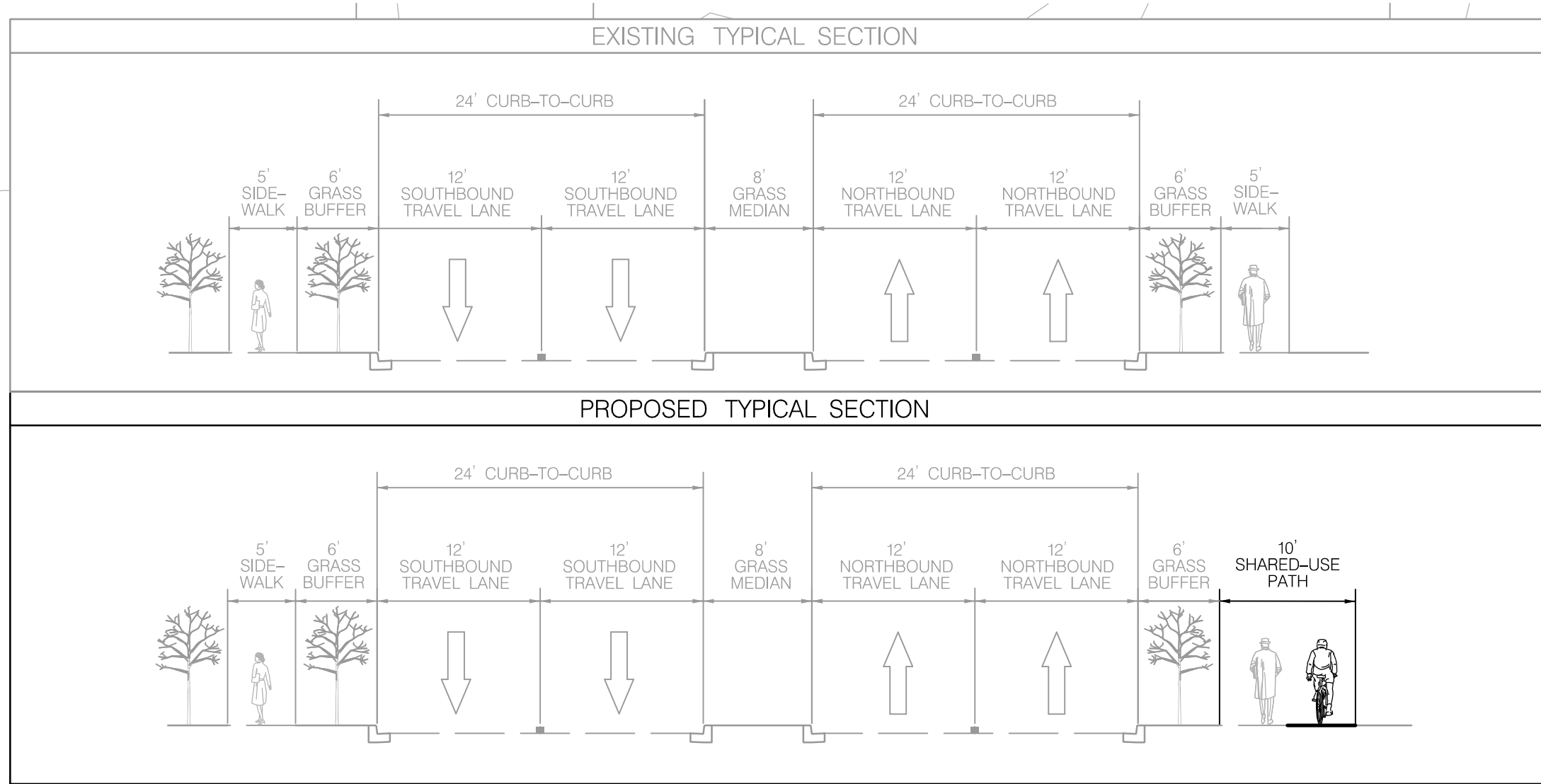
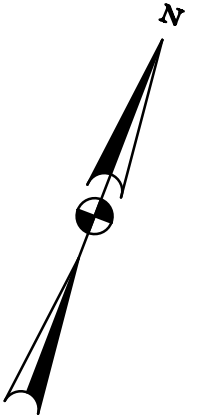


Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option B



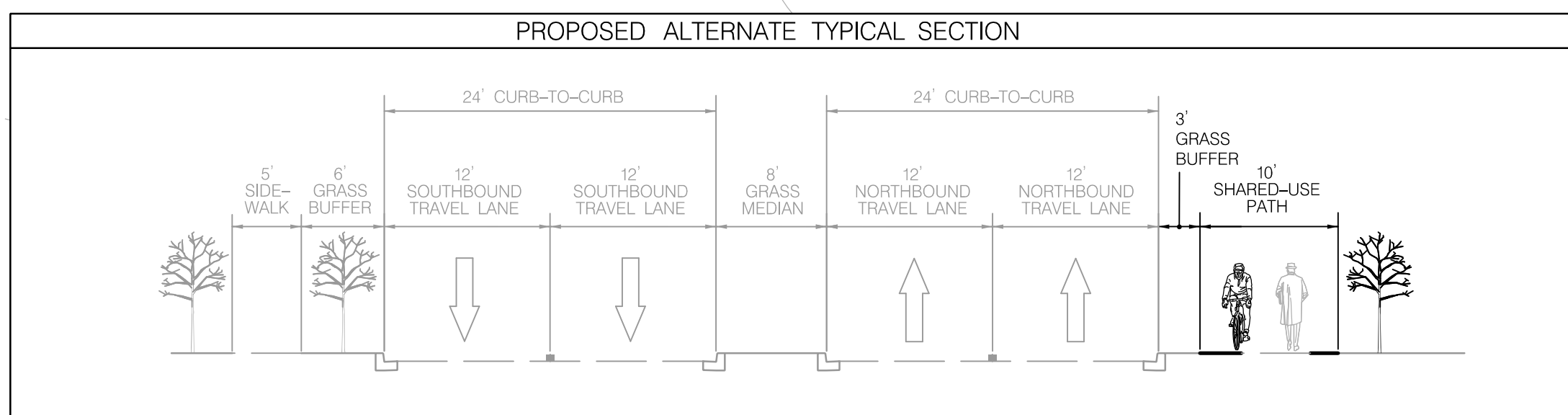
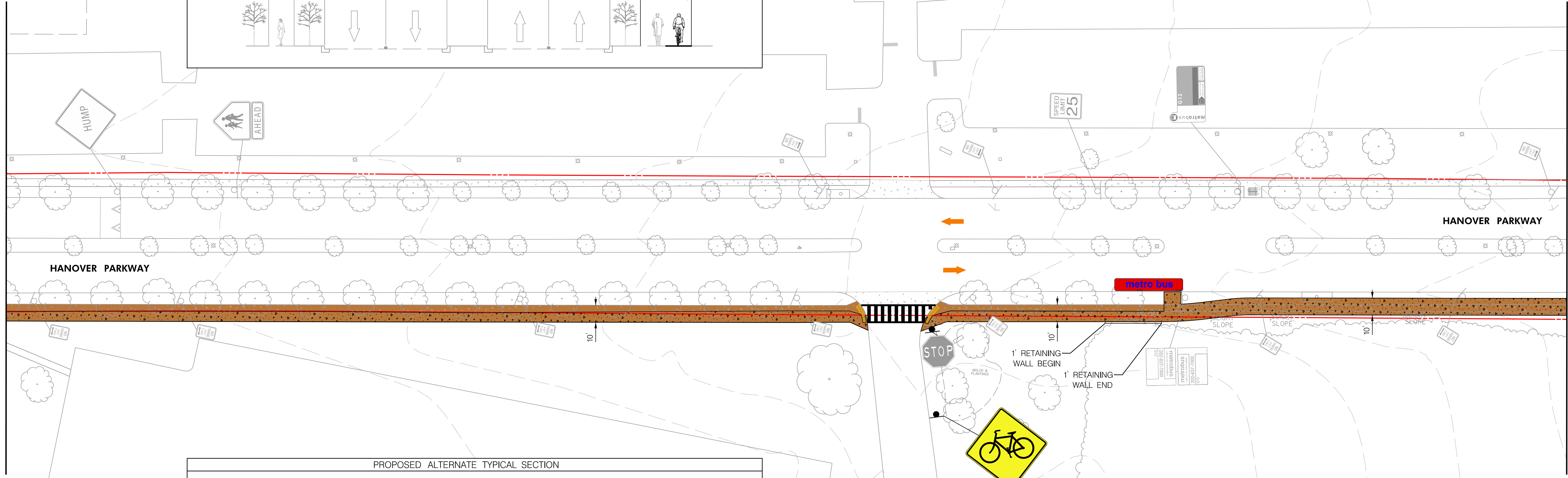
30' 0 30' 60'

SCALE: 1" = 30'



MATCHLINE SEE DWG. NO. 10B

MATCHLINE SEE DWG. NO. 12B



**ELEANOR ROOSEVELT
HIGH SCHOOL**

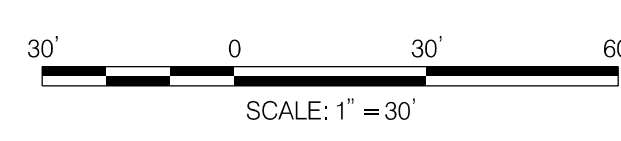
EXISTING LEGEND:

PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

PROPOSED LEGEND:

PROPOSED	---
TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---

*Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option B*



OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:18 AM
FILE NAME: \\2019\\18_City of Greenbelt_Hanover Parkway_360K.dwg P12B_HanoverPkwy.dgn



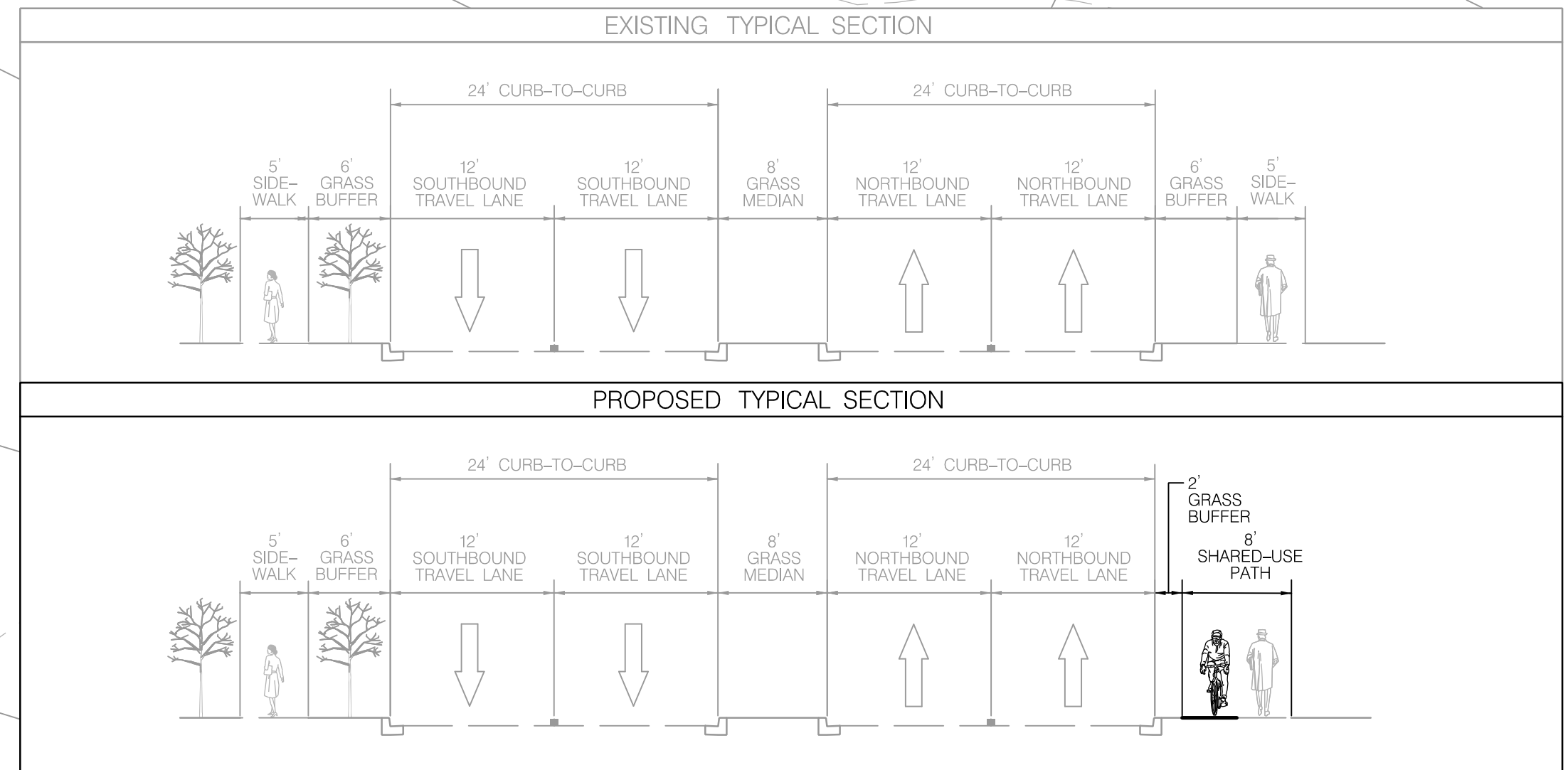
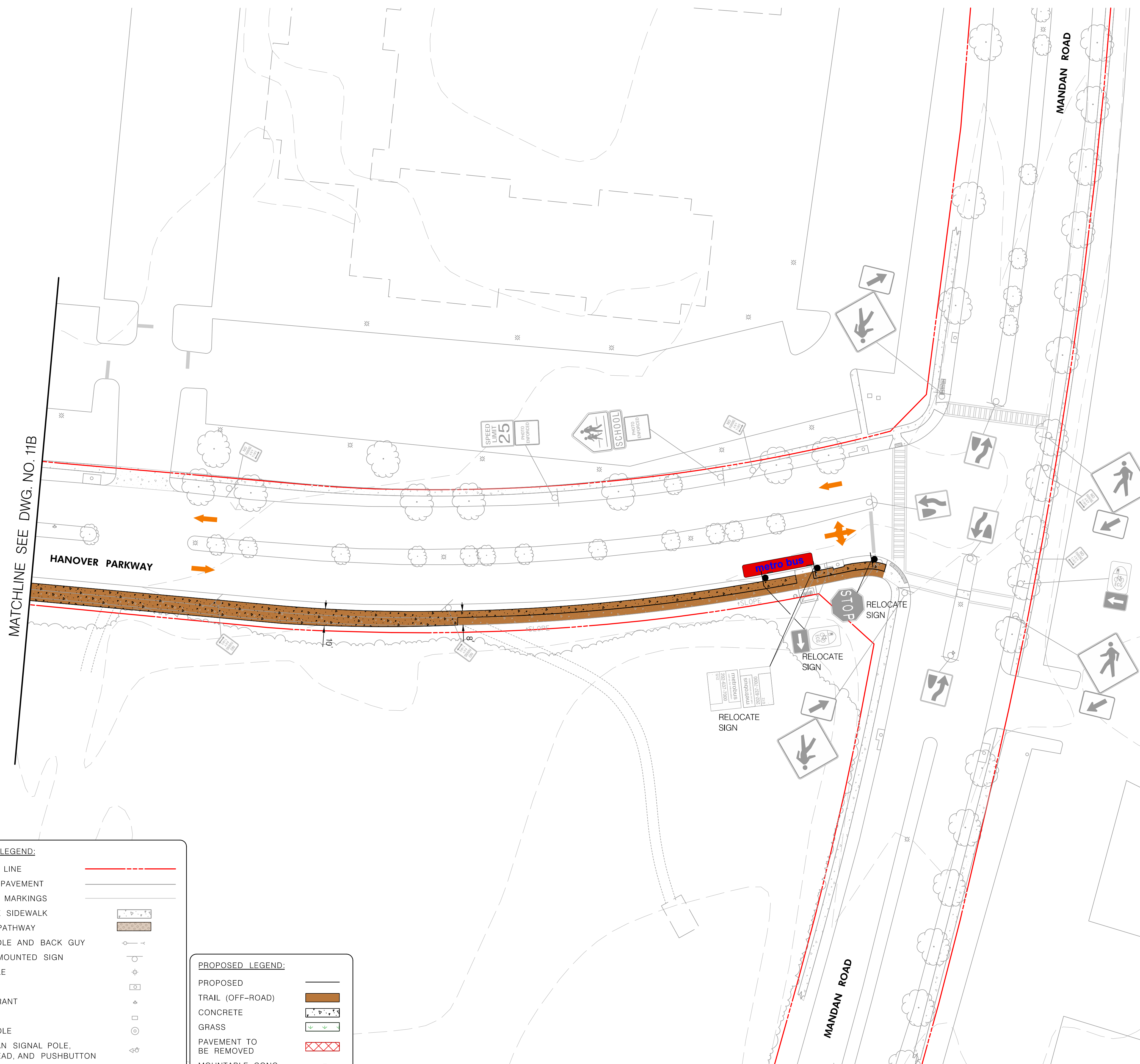
Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Option B

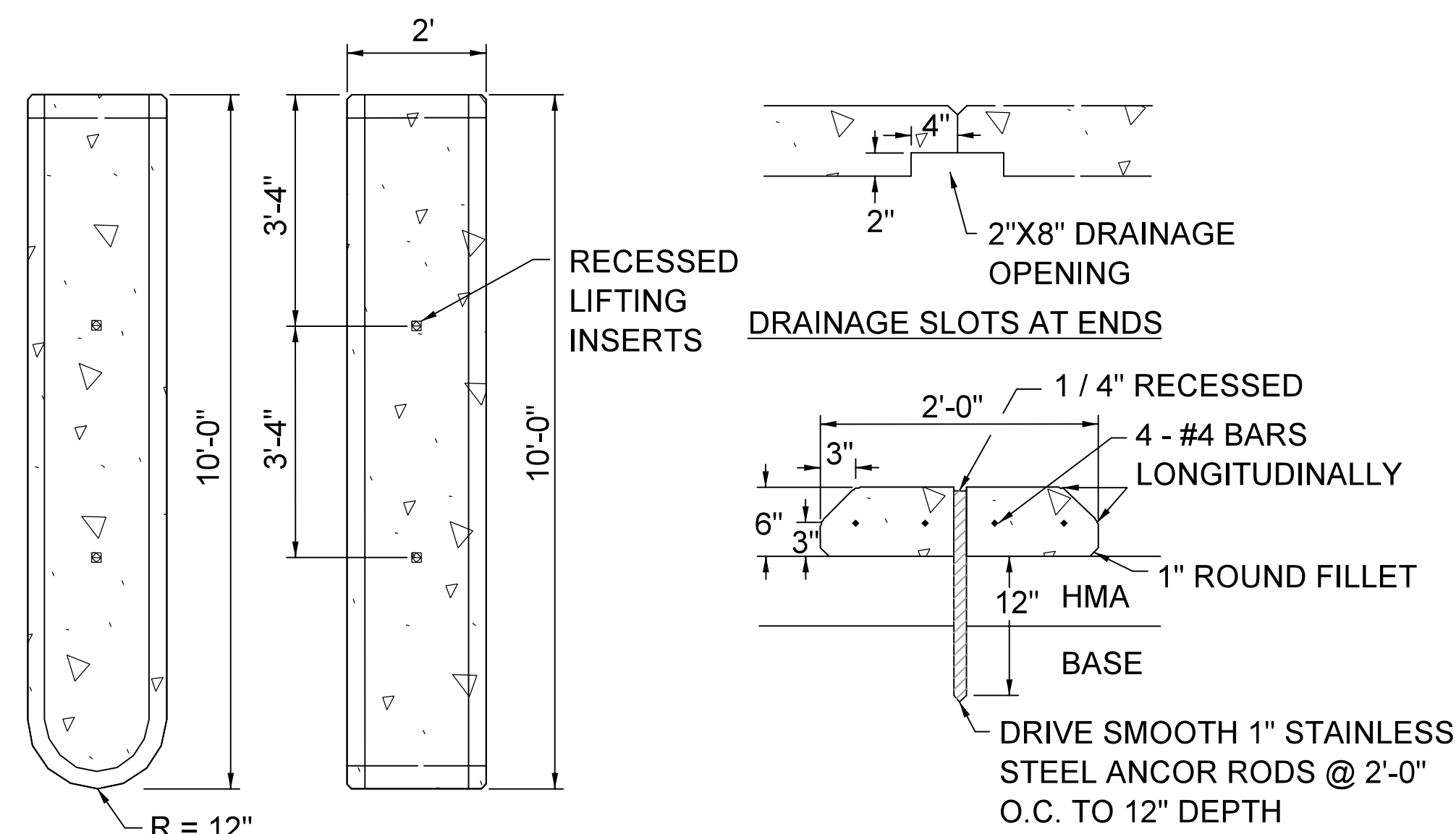
30' 0 30' 60'
SCALE: 1" = 30'

DWG. NO. 12B

EXISTING LEGEND:	
PROPERTY LINE	---
EDGE OF PAVEMENT	---
PAVEMENT MARKINGS	---
CONCRETE SIDEWALK	---
ASPHALT PATHWAY	---
UTILITY POLE AND BACK GUY	---
GROUND-MOUNTED SIGN	---
LIGHT POLE	---
INLETS	---
FIRE HYDRANT	---
HANDBOX	---
SIGNAL POLE	---
PEDESTRIAN SIGNAL POLE, SIGNAL HEAD, AND PUSHBUTTON	---
MAN HOLE	---

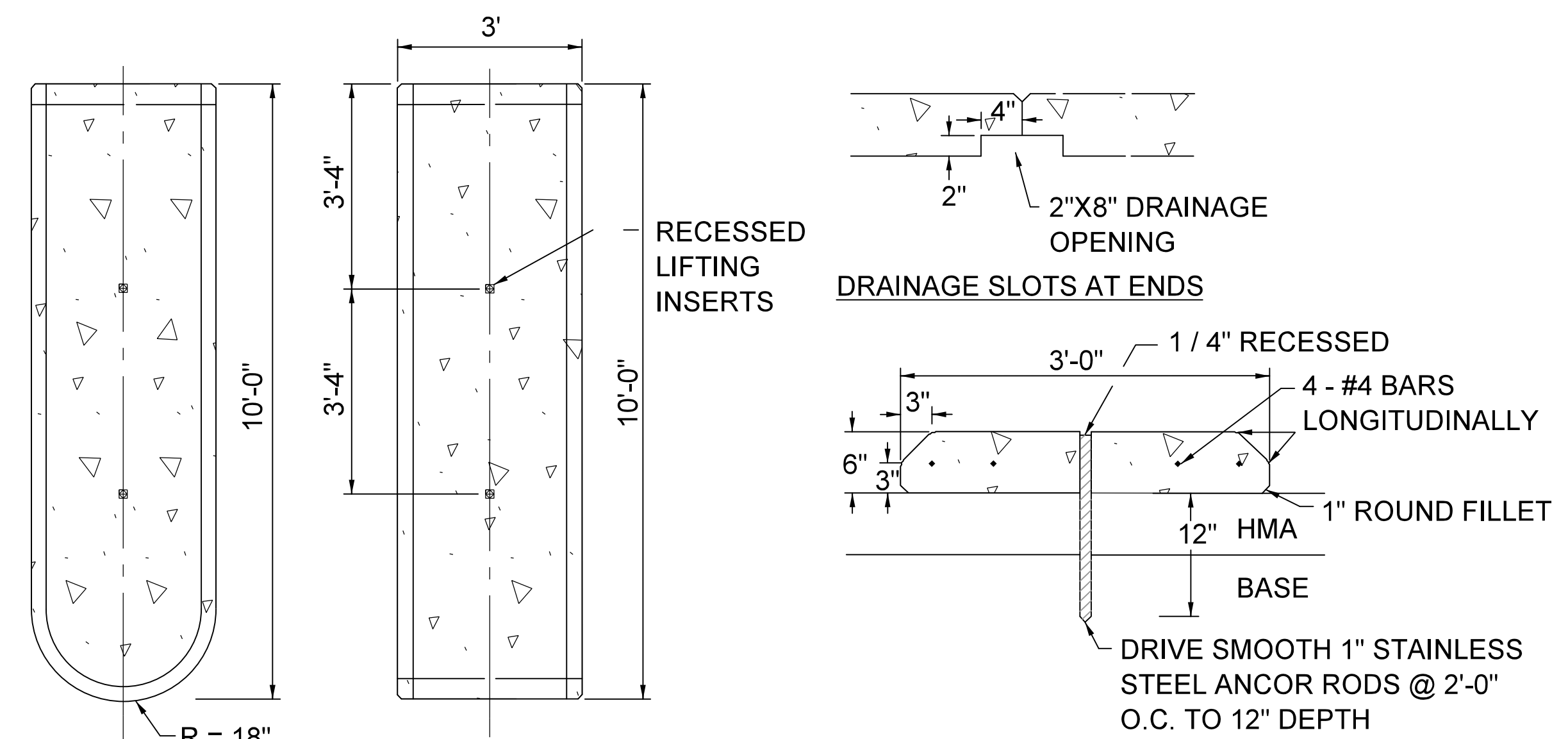
PROPOSED LEGEND:	
PROPOSED TRAIL (OFF-ROAD)	---
CONCRETE	---
GRASS	---
PAVEMENT TO BE REMOVED	---
MOUNTABLE CONC. MEDIAN END	---





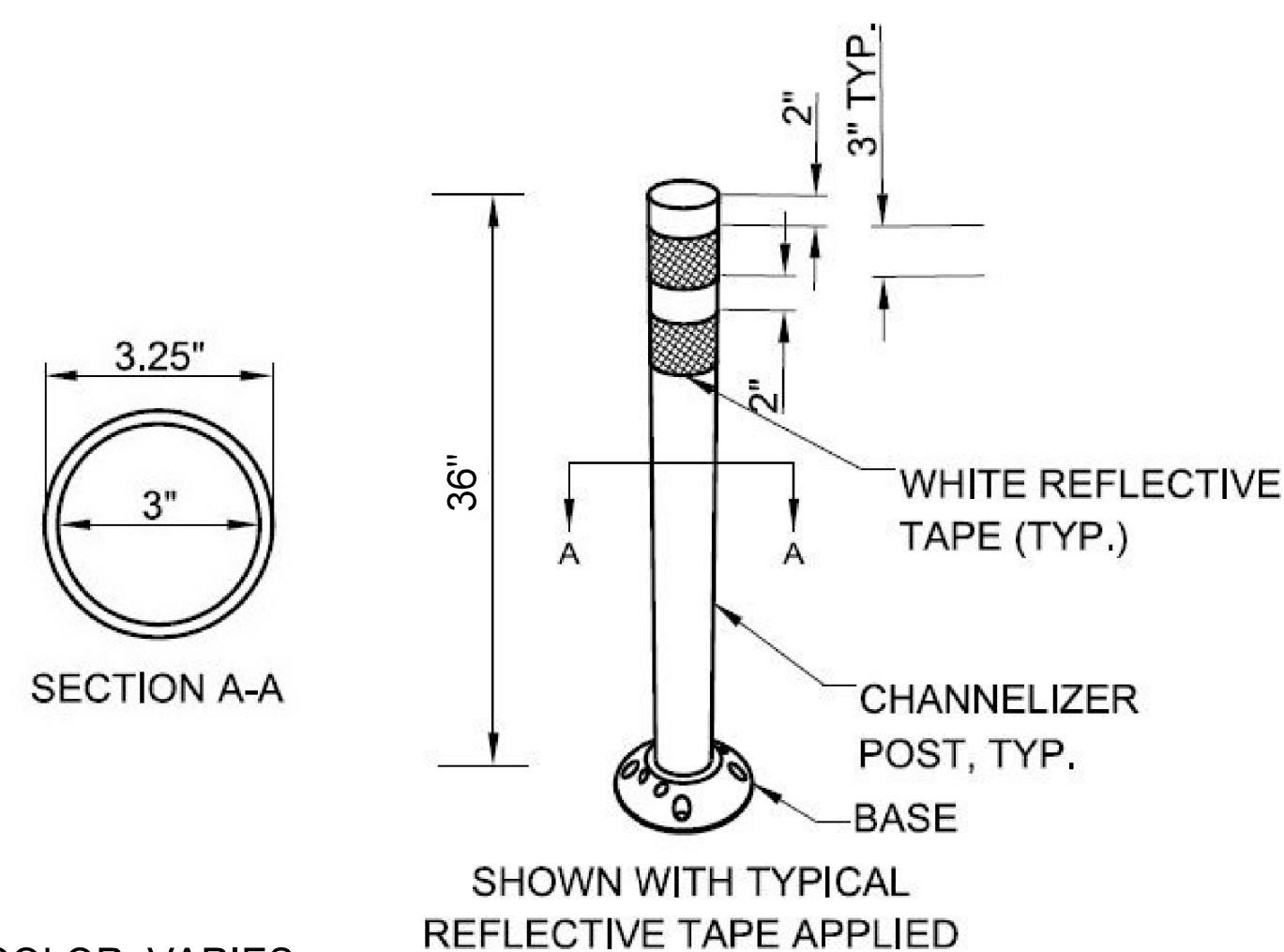
END UNIT STANDARD UNIT
PLAN

DETAIL 'A1' - PRECAST CONCRETE CURB
N.T.S.



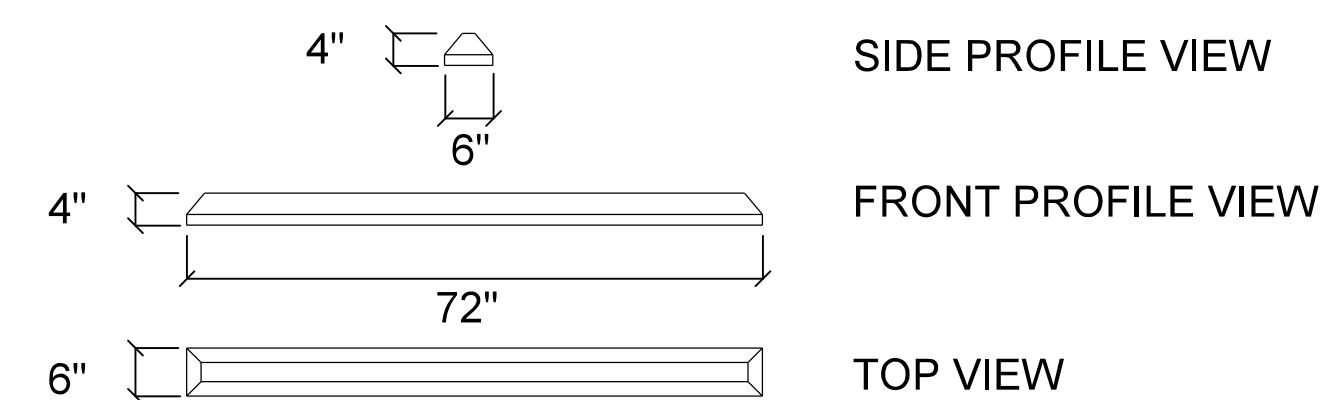
END UNIT STANDARD UNIT
PLAN

DETAIL 'A2' - PRECAST CONCRETE CURB
N.T.S.

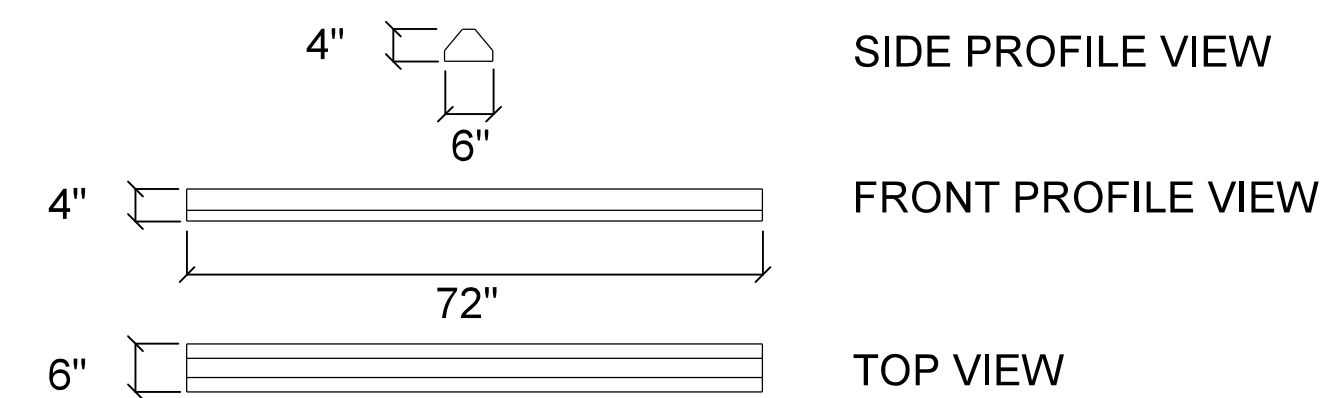


COLOR: VARIES
SPACING: 20 FEET ON CENTER

DETAIL 'B' - WHITE FLEX POST
N.T.S.

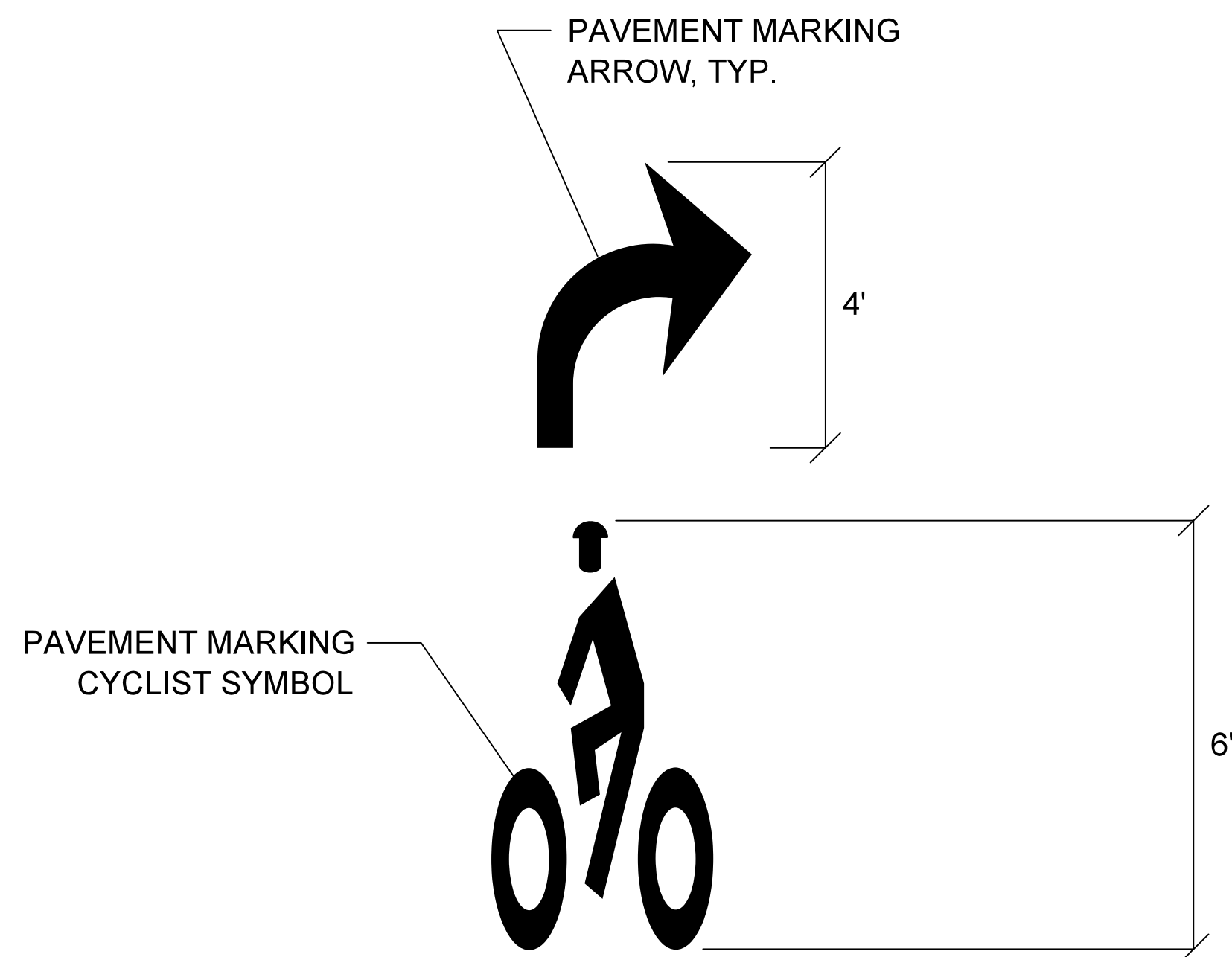


DETAIL 'C-OPTION 2' - PARKING STOP
N.T.S.

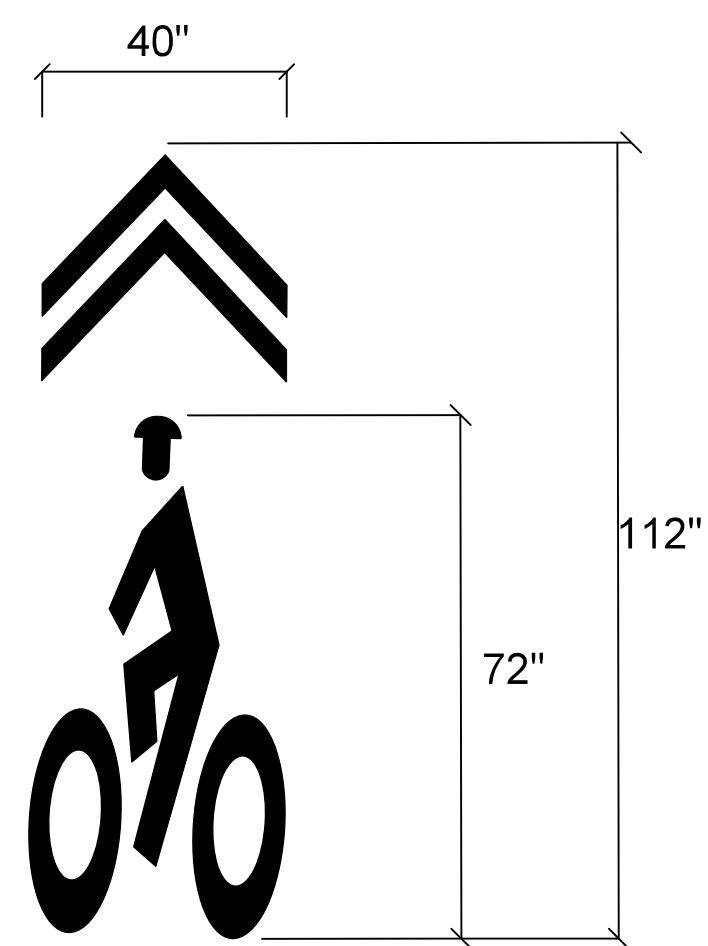


DETAIL 'C-OPTION 3' - PARKING STOP
N.T.S.

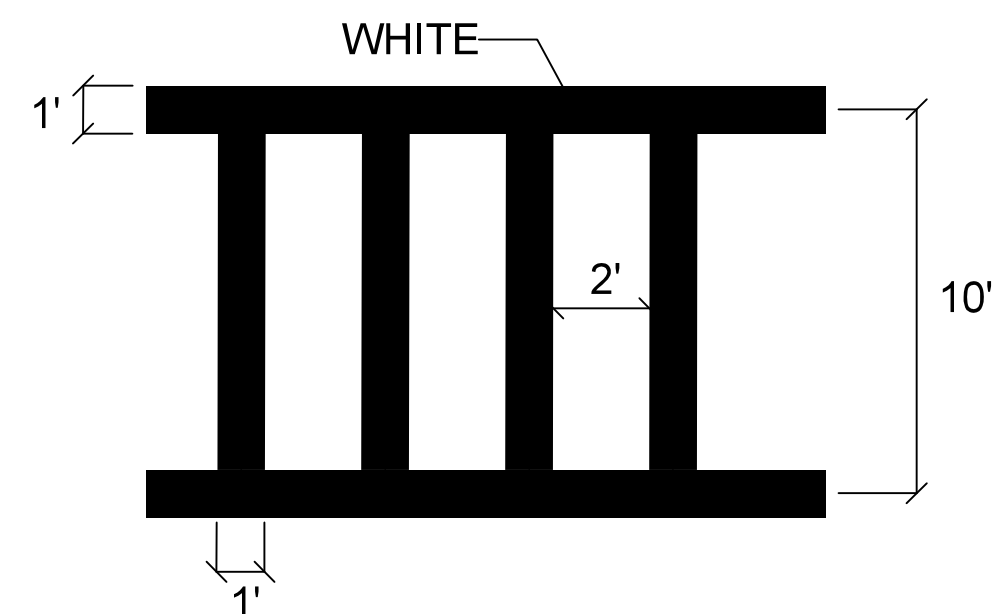
Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Bike Lane Protection Details



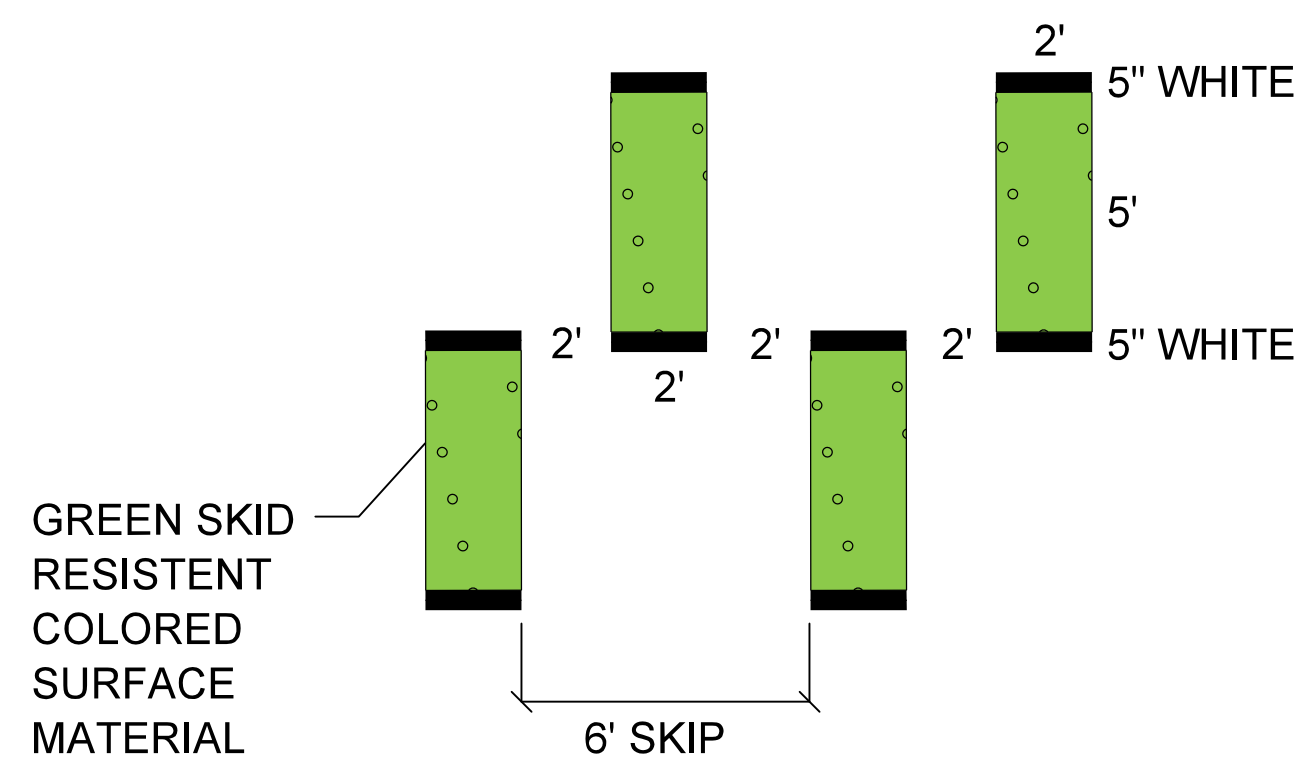
DETAIL 'D' - BICYCLE TURN-LANE SYMBOL
N.T.S.



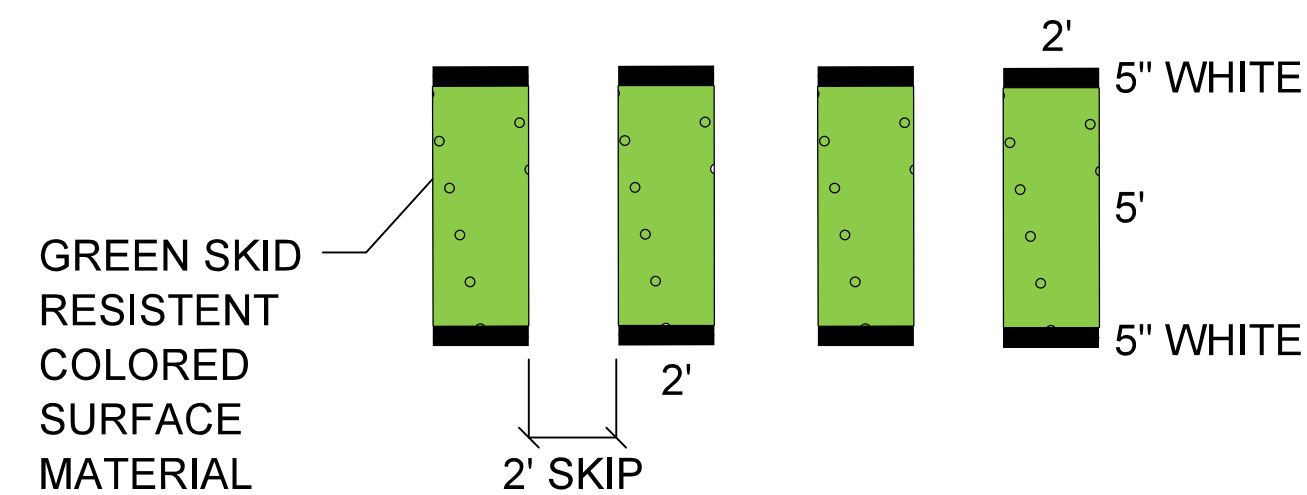
DETAIL 'E' - INTERSECTION CROSSING SYMBOL
N.T.S.



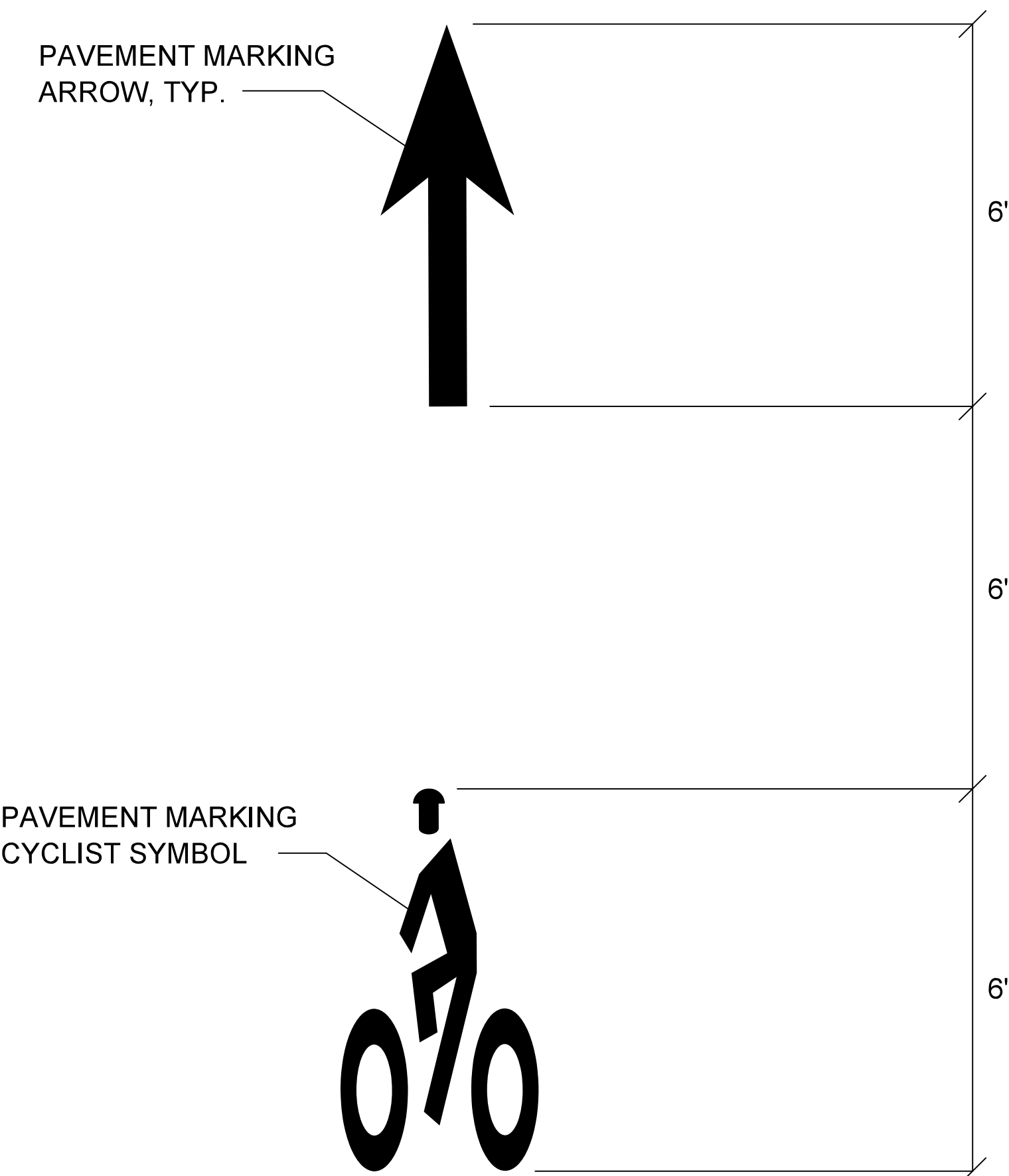
DETAIL 'G' - CROSSWALK
N.T.S.



DETAIL 'H' - BICYCLE CROSSING
N.T.S.



DETAIL 'J' - BICYCLE CROSSING
N.T.S.



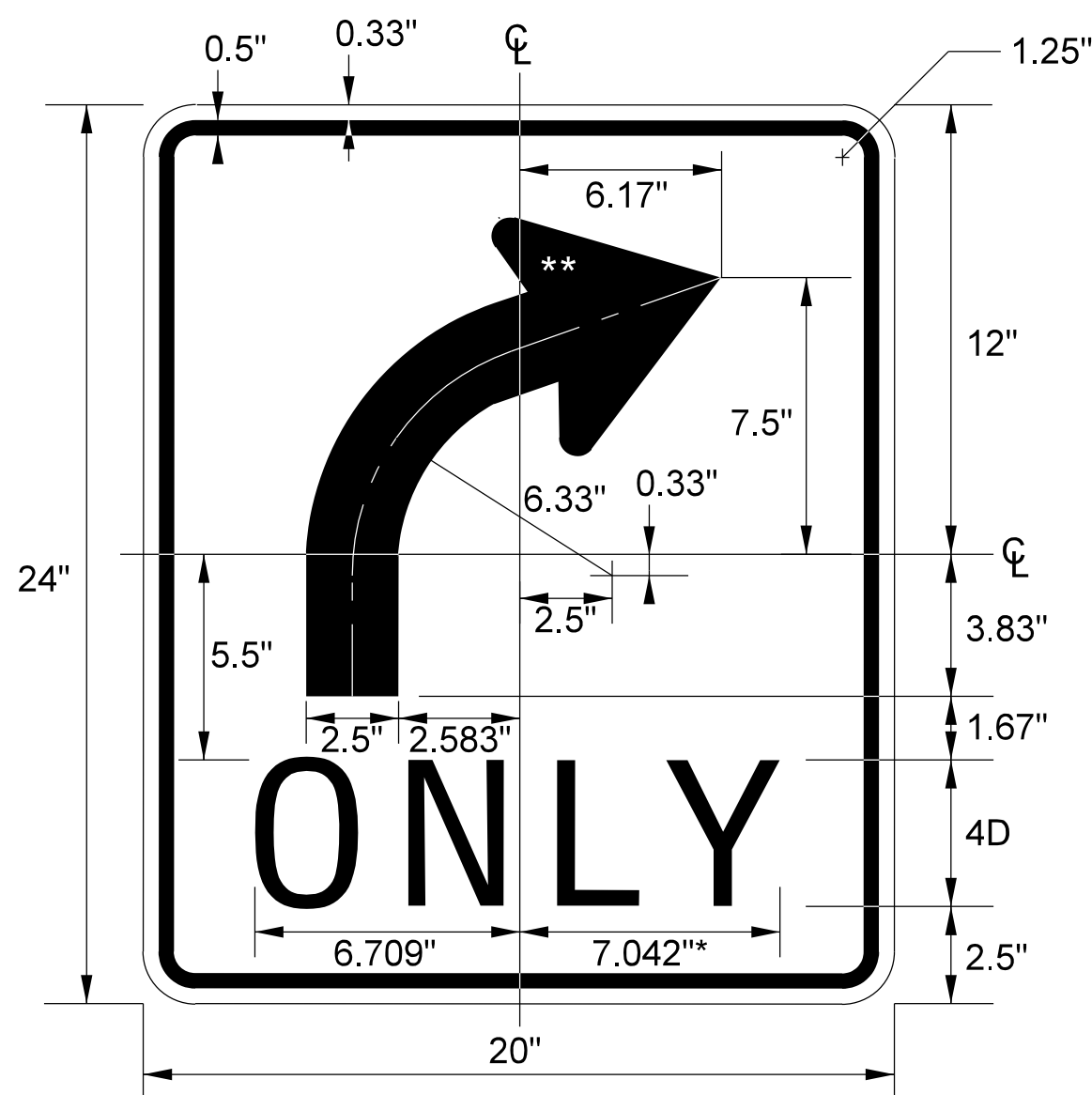
DETAIL 'F' - BICYCLE LANE SYMBOL
N.T.S.

SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR MORE DETAILS.

BICYCLE LANE SYMBOL PLACEMENT NOTES:
1. DO NOT PLACE SYMBOL ON LANE LINES.
2. PLACE BICYCLE LANE SYMBOLS WITHIN CENTER OF BICYCLE LANE.
3. SEE PLAN SHEETS FOR SYMBOL LOCATIONS.



DETAIL 'K' - R3-6(MOD)
N.T.S.



DETAIL 'L' - R3-5R(MOD)
N.T.S.



DETAIL 'M' - R3-6(MOD)
N.T.S.

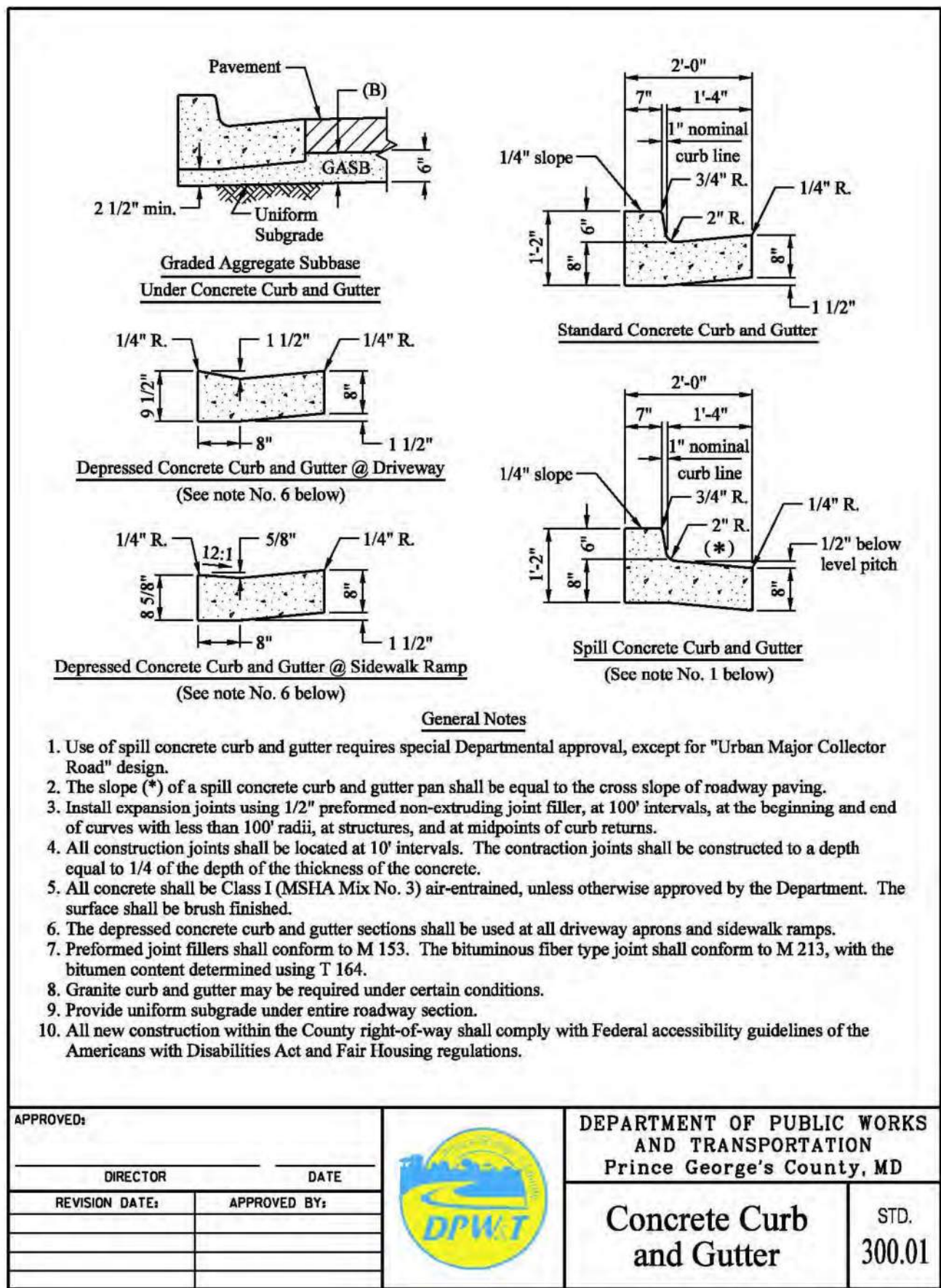
*REDUCE SPACING TO FIT.

**FOR ARROWHEAD DIMENSIONS REFER TO STANDARD ARROW DETAILS IN APPENDIX-ARROWS SECTION FROM FHWA'S STANDARD HIGHWAY SIGNS BOOK-APPENDIX SECTION.

***FOR SYMBOL DESIGN REFER TO THE APPENDIX-GRID SECTION FROM FHWA'S STANDARD HIGHWAY SIGNS BOOK-APPENDIX SECTION.

Hanover Parkway: from Good Luck Road to Mandan Road
Bikeway Facility Concept: Signing and Marking Details

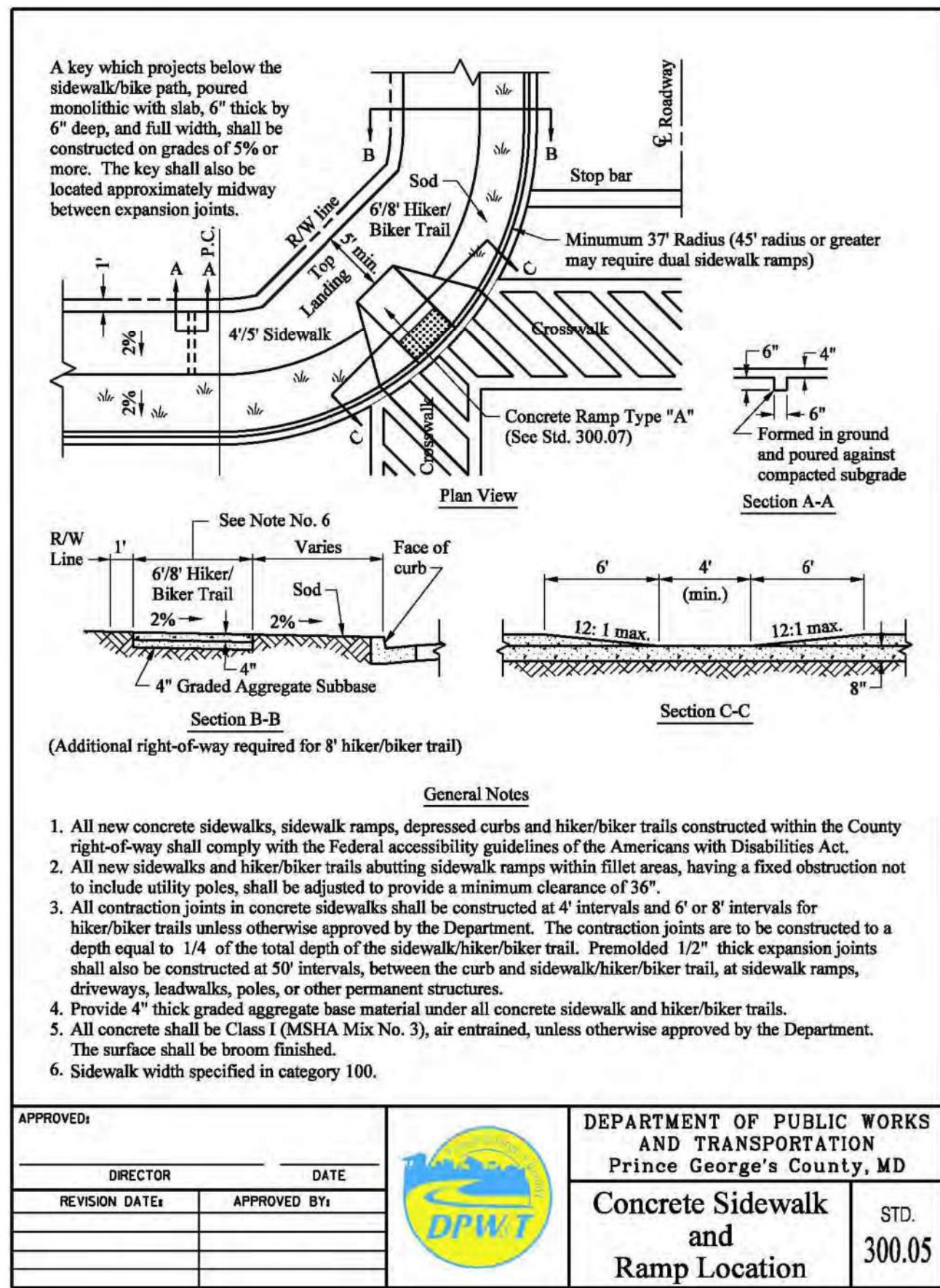
OPERATOR02430 - PLOTTED: Friday, February 14, 2020 AT 10:26 AM
FILE NAME: \\2019\\18-City of Greenbelt-Hanover Parkway-360K.dwg User: P003-HanoverPkw.dgn



Revision 03/14/12

Specifications and Standards for Roadways and Bridges

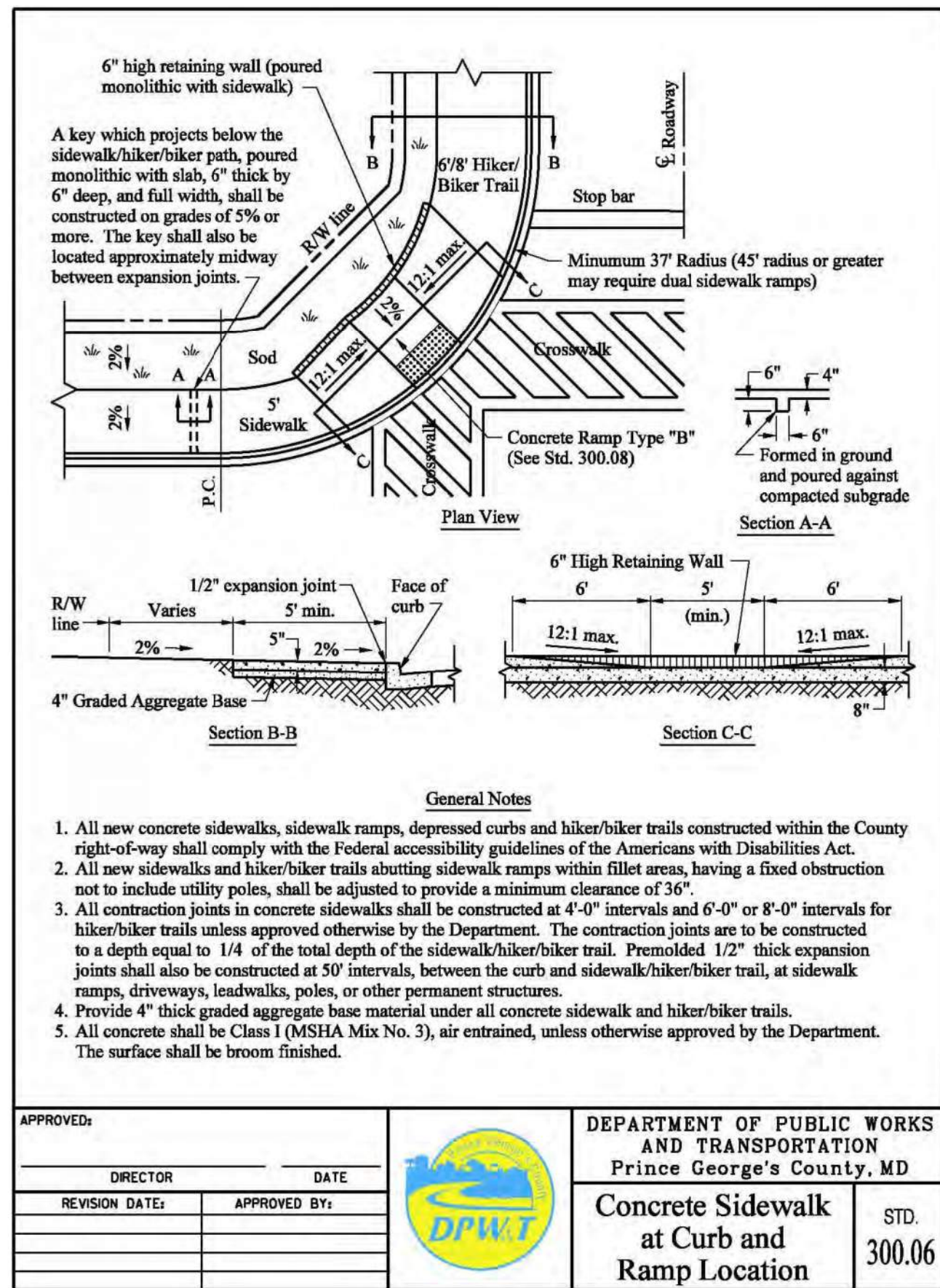
Section III - 45



Revision 03/14/12

Specifications and Standards for Roadways and Bridges

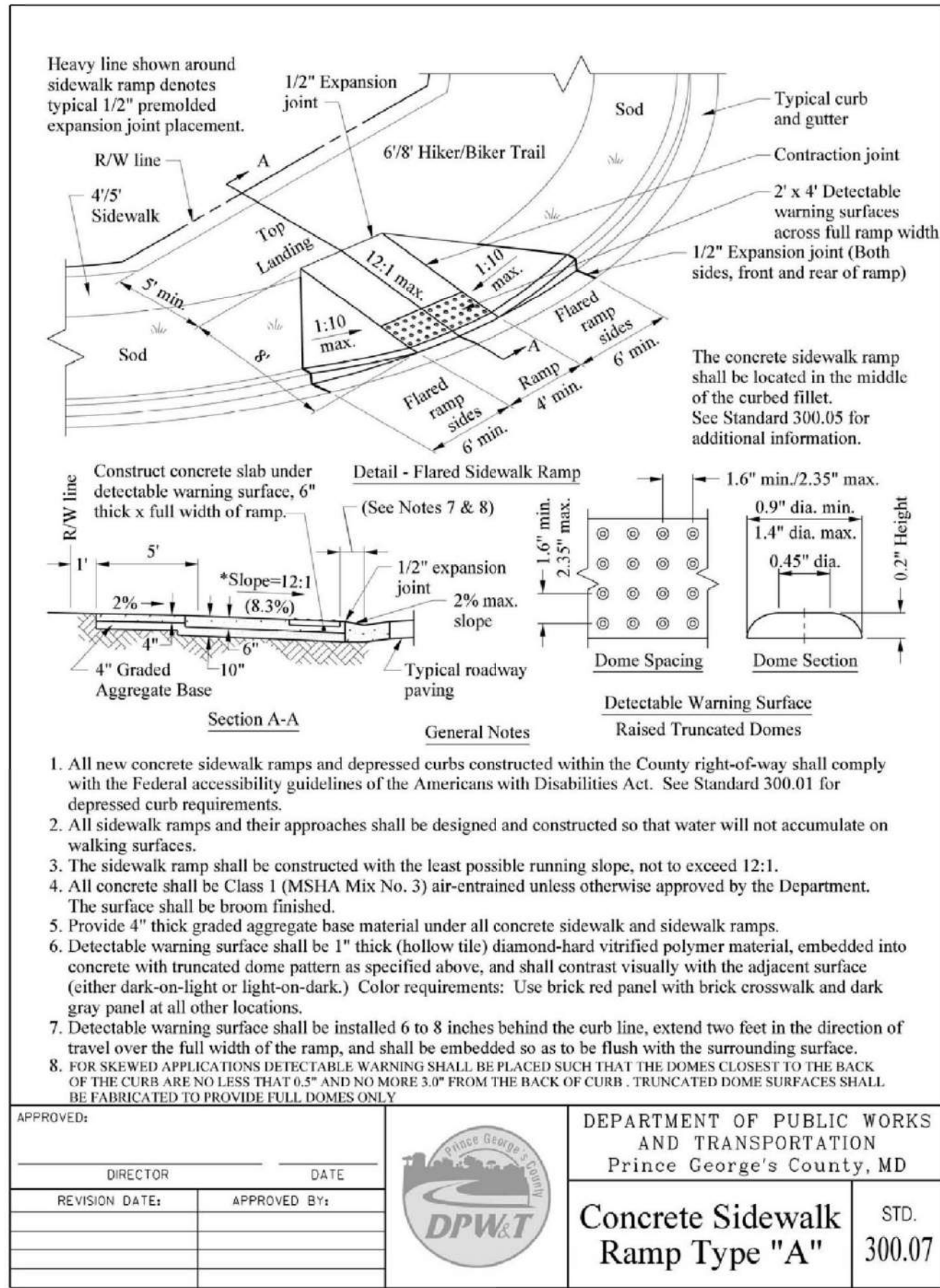
Section III - 49



Revision 03/14/12

Specifications and Standards for Roadways and Bridges

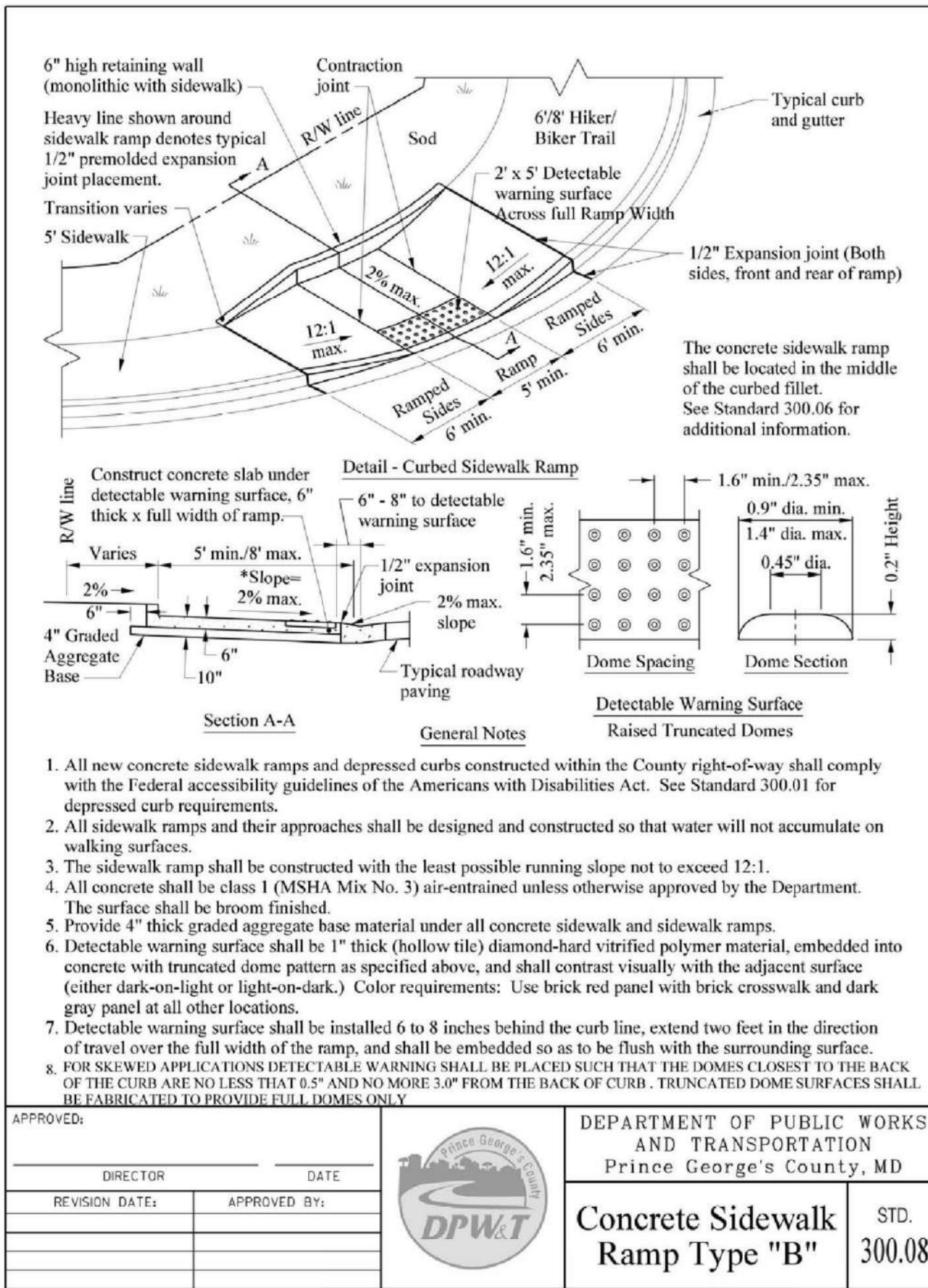
Section III - 50



Revision 03/14/12

Specifications and Standards for Roadways and Bridges

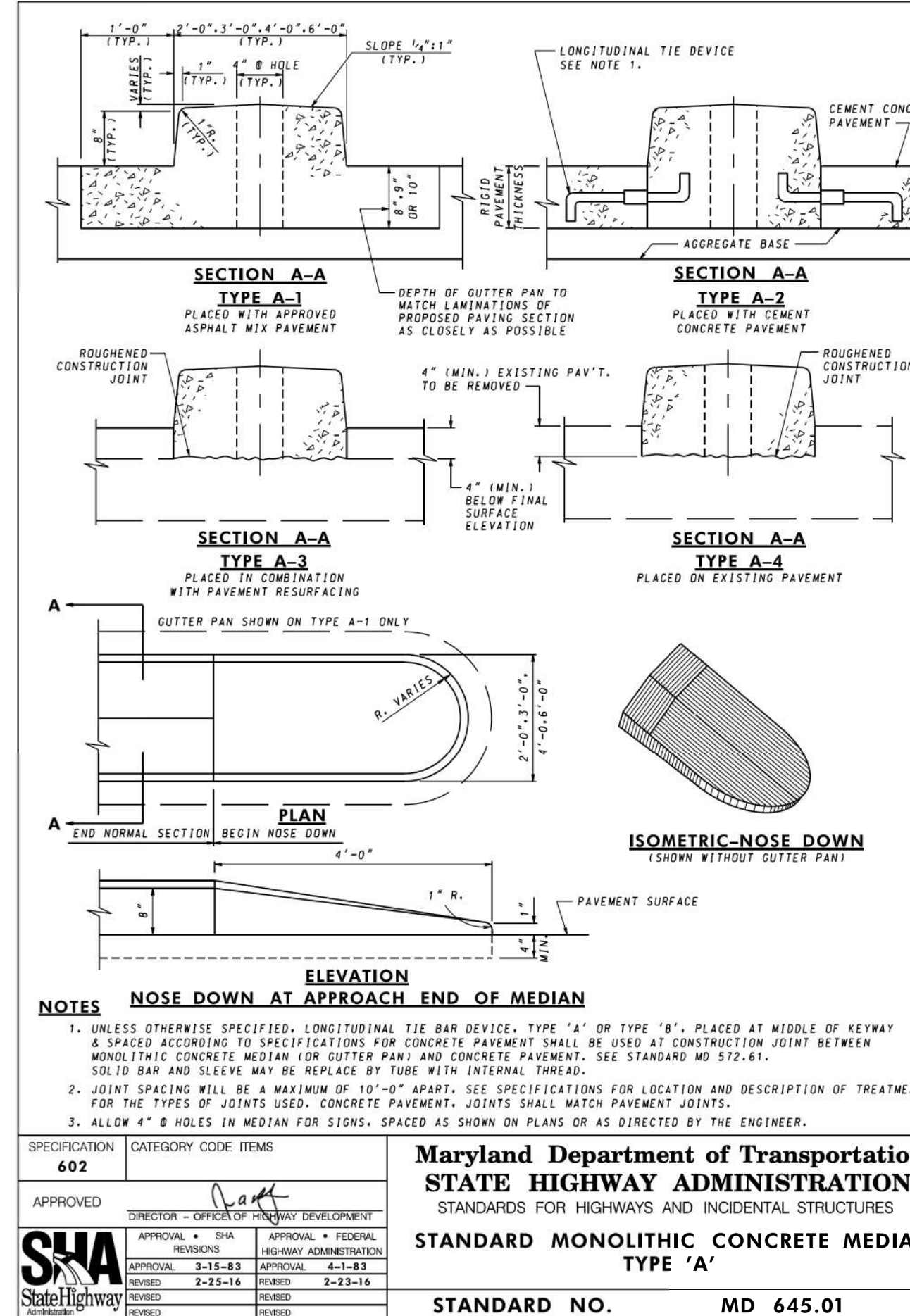
Section III - 51



Revision 03/14/12

Specifications and Standards for Roadways and Bridges

Section III - 52



**ADVISORY PLANNING BOARD
REPORT TO COUNCIL**

**REPORT NO. 2019-09
Date: 8/27/2019**

SUBJECT: Hanover Parkway Bicycle Facilities Alternatives

BACKGROUND:

On August 21, 2019 the Board received a presentation from Sabra & Associates regarding alternatives for bicycle facilities on Hanover Parkway. These alternatives span from just south of Greenbrook Drive to past the Spellman Overpass. Bicycle facilities on Hanover Parkway would provide a link between Greenbelt East and Historic Greenbelt. The alternatives presented included an on-road option and an off-road shared used path option.

ANALYSIS:

After the presentation of both alternatives, the Board discussed the advantages and disadvantages of each option. Two of the topics that were heavily discussed during this conversation were the ease with which a cyclist could use each option and the safety each option provided to cyclists.

With respect to the ease of use, the Board discussed how the on-road option includes a small section where cyclists would use an off-road path near the intersection of Hanover Parkway and Greenbelt Road. The Board felt this may cause some confusion about how to use the bike trail.

The off-road option is a continuous path for the entire corridor which would minimize confusion about use. The Board also felt that the off-road option would offer an increased level of safety for cyclists using bicycle facilities on Hanover Parkway.

RECOMMENDATION:

The Board voted unanimously (4-0) to recommend that City Council support the production of 30% design plans for the off-road shared use path option for bicycle facilities on Hanover Parkway.

Respectfully Submitted,

Keith Chernikoff
Chair

Molly Porter

From: ecolivingmag@aol.com
Sent: Tuesday, November 12, 2019 1:49 PM
To: Molly Porter
Cc: Luisa Robles
Subject: Green ACES recommendations re: Hanover Pkwy bike path

Hi, Molly.

I'm sorry about not getting back to you sooner.

Green ACES discussed the two alternate routes for the bike path on Hanover Parkway that were presented by SABRA & Associates at the August Green ACES meeting. We don't recommend either of the routes per se, but prefer a hybrid version consisting of parts of each.

North of Greenbelt Road, Green ACES recommends the on-road path adjacent to Eleanor Roosevelt High School property, where the right lane disappears, because this location currently causes problems, especially during school hours. Drivers try to make this two lanes where it is designed to be one. Also, for safety reasons, Green ACES recommends one of the rigid barrier options, such as one of the concrete curb options.

On the opposite side of Greenbelt Road, south from Greenbelt Road toward Greenway Center Drive and Ora Glen Drive, we recommend the off-road path, near the sidewalk, that meanders in front of or behind the tree line, depending on the space and where the trees are now. Although this part of the bike route would be more impactful and require more maintenance, we believe that this is well worth it because of safety reasons. Also, the on-road option would cause congestion on Hanover Parkway.

I hope I've described this properly. If you have any questions, please let me know.

Best,

John

John Lippert

Chair, Greenbelt Advisory Committee on Environmental Sustainability (Green ACES) / Green Team

~~XXXXXXXXXXXX~~

Greenbelt, MD 20770

~~XXXXXXXXXXXX~~