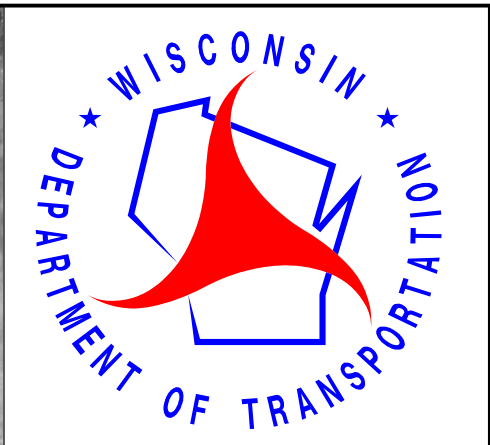
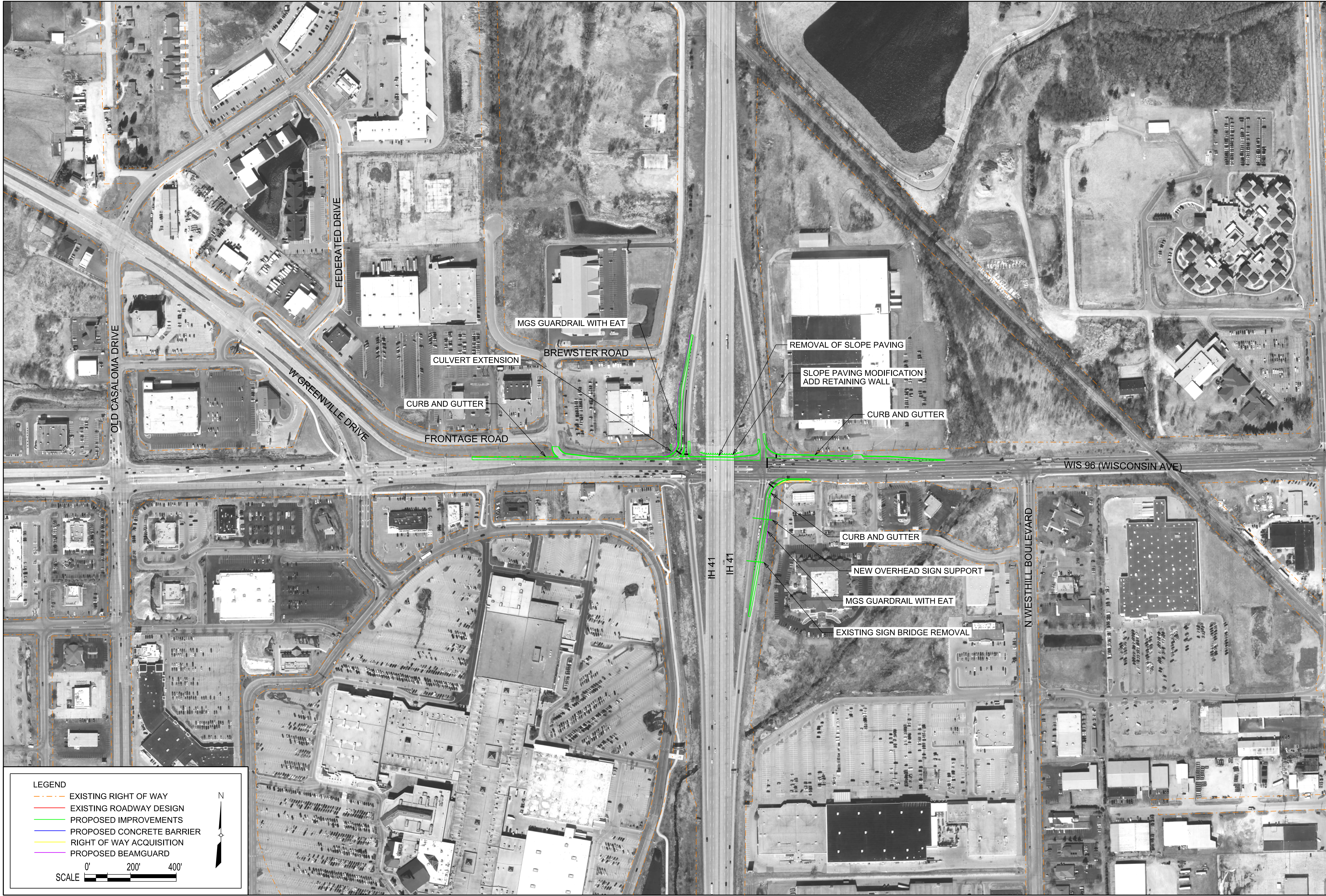


APPENDIX R

Year 2028 & Year 2048 Improvements' Roadway Design Exhibits



AUGUST 2019

IH 41 - WIS 96 INTERCHANGE

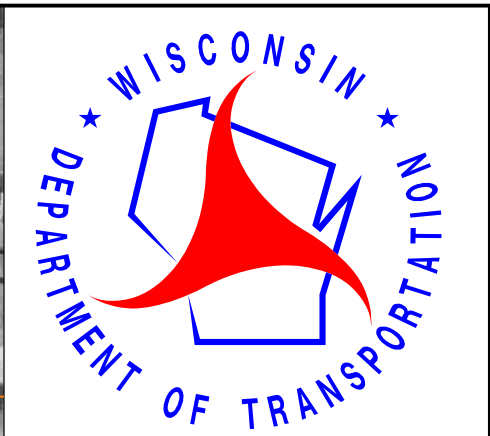
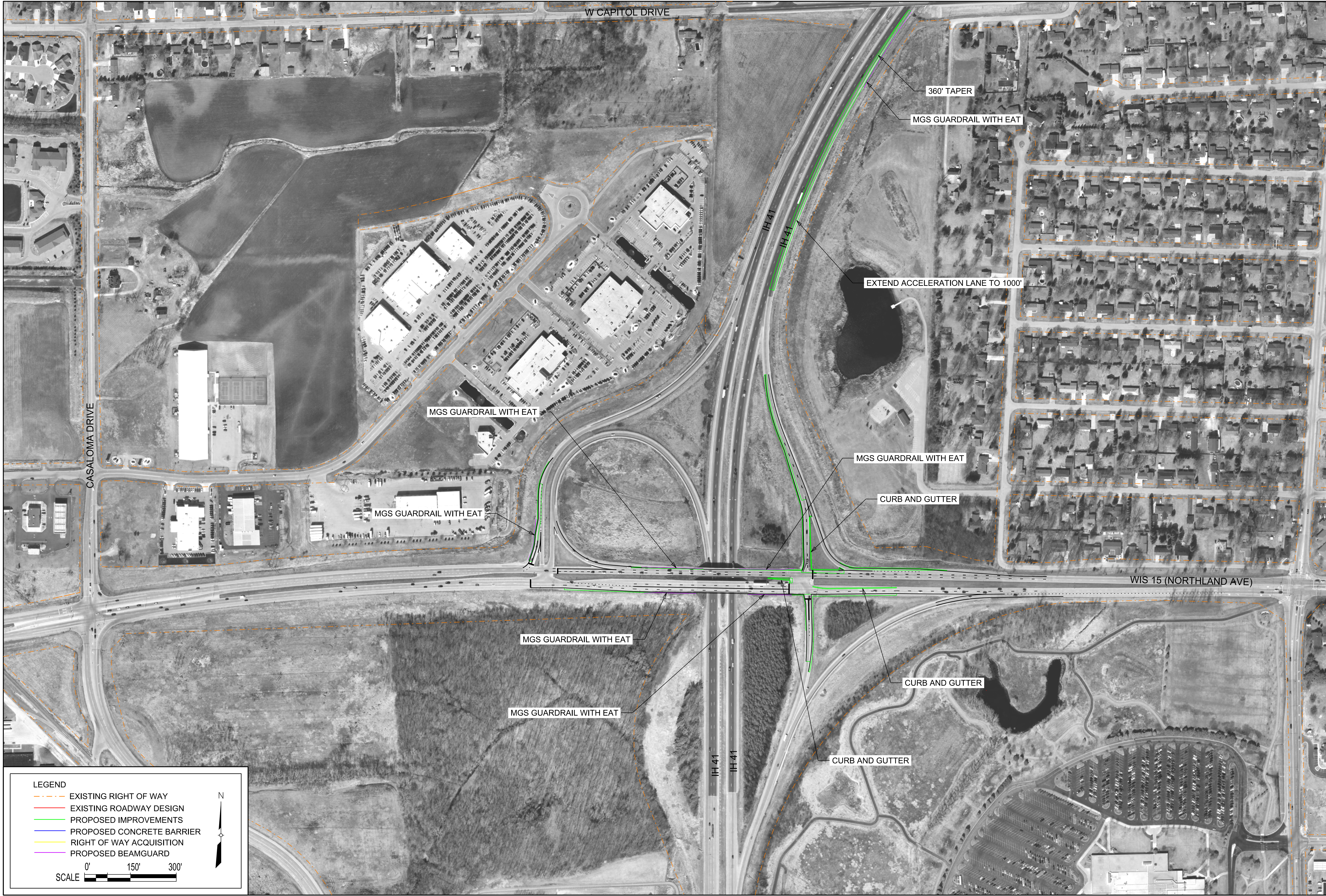
SHORT TERM IMPROVEMENTS

HNTB

Exhibit

IH 41/WIS 96
OUTAGAMIE COUNTY

Sheet 1 of 1



AUGUST 2019

IH 41 - WIS 15 INTERCHANGE

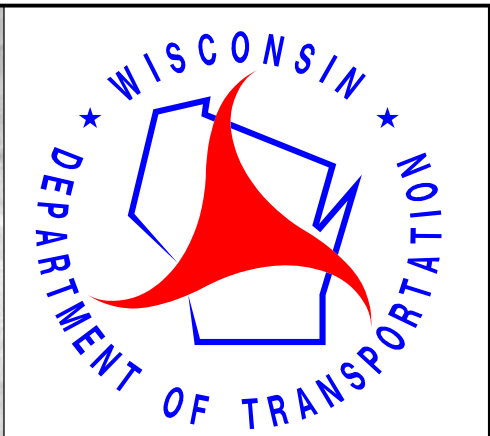
SHORT TERM IMPROVEMENTS

HNTB

Exhibit

IH 41/WIS 15
OUTAGAMIE COUNTY

Sheet 1 of 1



AUGUST 2019

IH 41 - WIS 47 INTERCHANGE

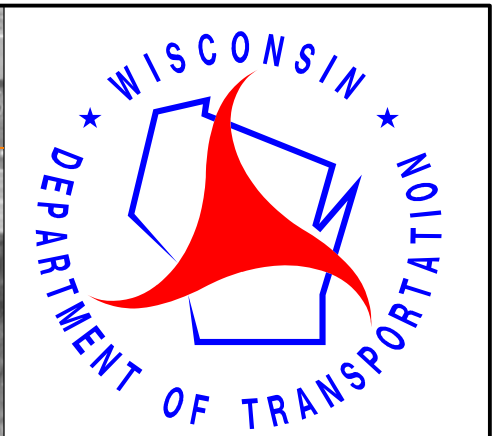
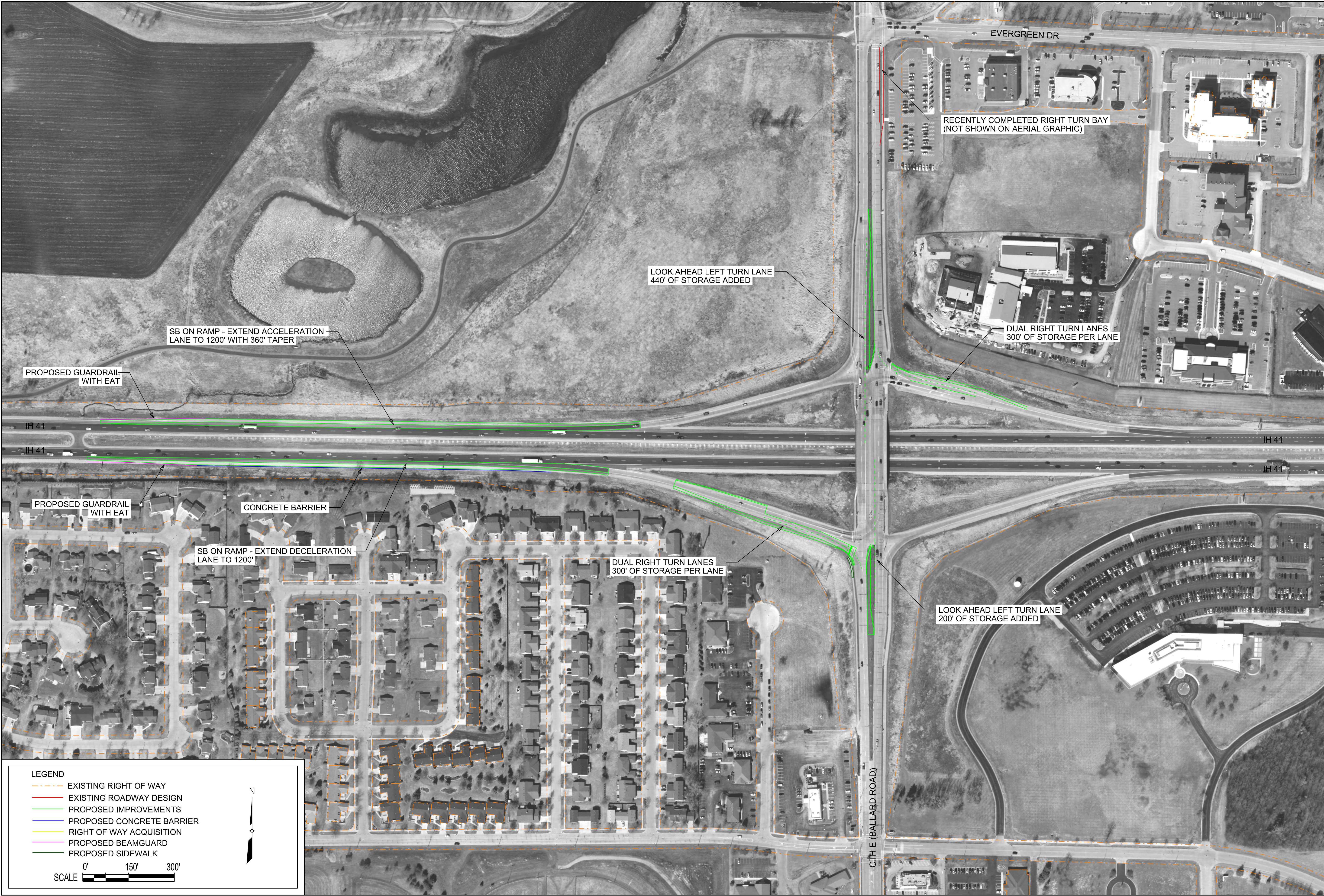
SHORT TERM IMPROVEMENTS

HNTB

Exhibit

IH 41/WIS 47
OUTAGAMIE COUNTY

Sheet 1 of 1



AUGUST 2019

IH 41 - CTH E INTERCHANGE

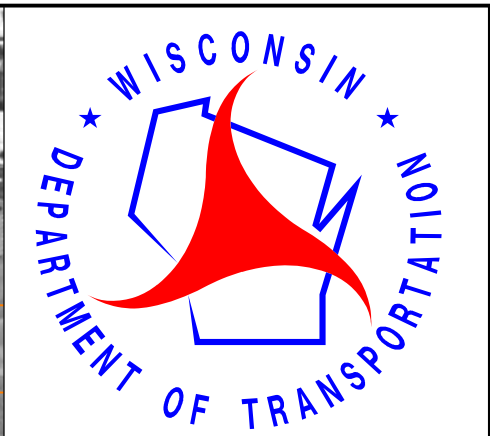
SHORT TERM IMPROVEMENTS

HNTB

Exhibit

IH 41/CTH E
OUTAGAMIE COUNTY

Sheet 1 of 1



AUGUST 2019

IH 41 - CTH N INTERCHANGE

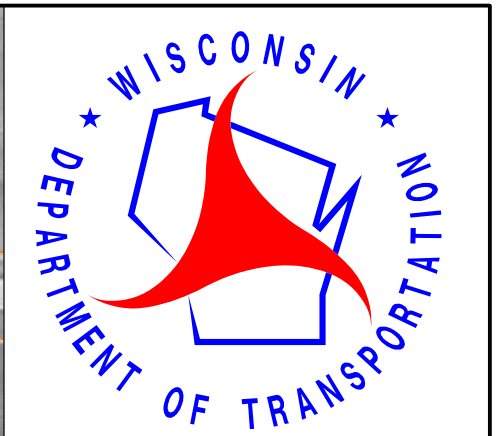
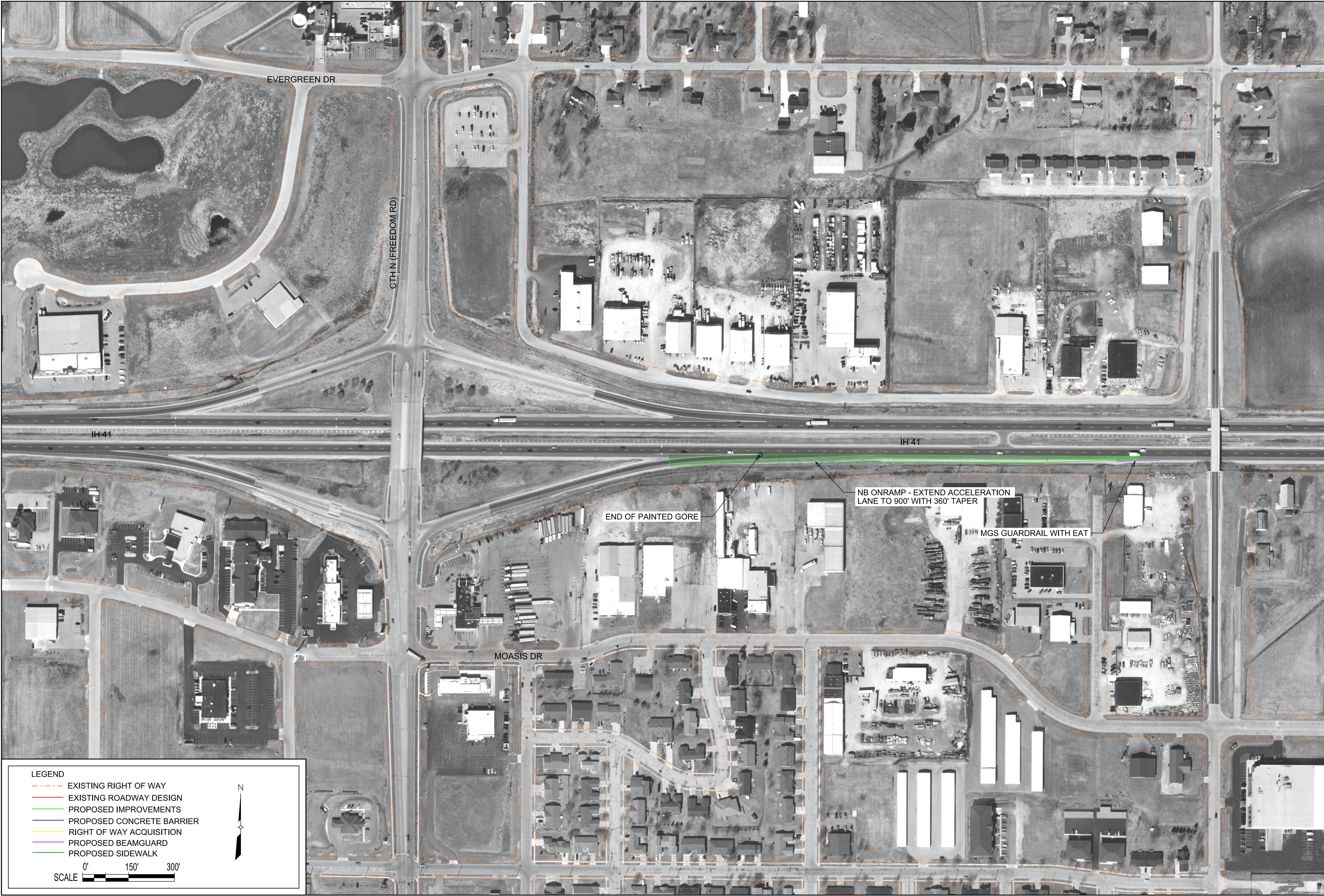
SHORT TERM IMPROVEMENTS

HNTB

Exhibit

IH 41/CTH N
OUTAGAMIE COUNTY

Sheet 1 of 2



AUGUST 2019

IH 41 - CTH N INTERCHANGE

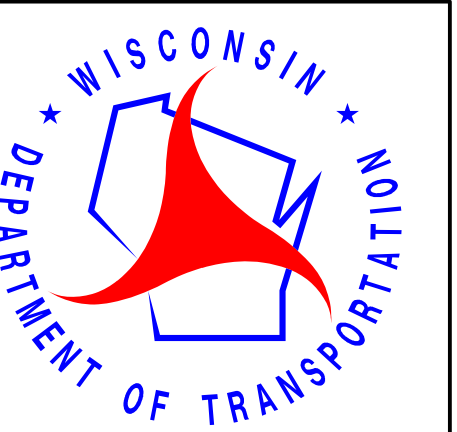
SHORT TERM IMPROVEMENTS

HNTB

Exhibit

IH 41/CTH N
OUTAGAMIE COUNTY

Sheet 2 of 2



AUGUST 2019

IH 41 - CTH S INTERCHANGE

SHORT TERM IMPROVEMENTS

HNTB

Exhibit

IH 41/CTH S
BROWN
COUNTY

Sheet 1 of 1



LEGEND

- EXISTING RIGHT OF WAY
- EXISTING ROADWAY DESIGN
- PROPOSED IMPROVEMENTS
- PROPOSED CONCRETE BARRIER
- RIGHT OF WAY ACQUISITION
- PROPOSED BEAMGUARD
- PROPOSED SIDEWALK

0' 150' 300'
SCALE

IH 41 Ramps and Auxiliary lanes (2-1-A): The County BB Northbound on-ramp is a single-lane parallel type on-ramp that when reconstructed will impact the golf course along the east side. See Right-of-way impacts discussion below for further information.

IH 41 RAMP AND AUXILIARY LANES (2-1-B): THE COUNTY BB SOUTHBOUND OFF-RAMP IS A SINGLE-LANE TAPERED TYPE OFF-RAMP CONFIGURATION THAT DEVELOPS INTO A DUAL RIGHT TURN AND SINGLE THRU/LEFT TURN LANE AT THE RAMP TERMINAL. ADDITIONAL RIGHT-OF-WAY WILL BE REQUIRED ALONG THE OUTSIDE OF THE RAMP AND ALONG THE NORTH SIDE OF CTH BB TO ACCOMMODATE THE REQUIRED OFF RAMP CONFIGURATION. SEE RIGHT-OF-WAY IMPACTS DISCUSSION BELOW FOR FURTHER INFORMATION.

FRONTAGE ROADS (2-1-E): NORTHERN ROAD LOCATED TO THE SOUTHEAST OF THE COUNTY BB INTERCHANGE IS SHOWN TO BE RECONSTRUCTED TO MOVE THE ROADWAY FURTHER TO THE EAST ALLOWING ROOM FOR IH 41 EXPANSION AND COUNTY BB INTERCHANGE RECONSTRUCTION INCLUDING THE NORTHBOUND OFF-RAMP.

RIGHT-OF-WAY IMPACTS (2-1-I): THE IH 41 NORTHBOUND ON-RAMP AT COUNTY BB WILL IMPACT THE GOLF COURSE PROPERTY ALONG THE EAST SIDE OF IH 41. THE GOLF COURSE IS A PRIVATE GOLF COURSE AND IS NOT ANTICIPATED TO BE A 4F OR 6F ENVIRONMENTAL CONCERN. APPROXIMATELY 1.0 ACRE WILL BE IMPACTED. NO IMPACT TO GOLF COURSE LAYOUT IS ANTICIPATED.

RIGHT-OF-WAY IMPACTS (2-1-J): THE IH 41 SOUTHBOUND OFF-RAMP AT COUNTY BB WILL IMPACT RIGHT-OF-WAY ALONG THE OUTSIDE OF THE RAMP AND ALONG THE NORTH SIDE OF COUNTY BB. STRIP TAKINGS ARE ANTICIPATED FROM MULTIPLE BUSINESSES SUCH AS MOBILE GAS STATION, FOX CONVENIENCE, WITH SIGNIFICANT IMPACTS SHOWN TO THE VAN ZEELAND'S AUTO CARE CENTER PARKING LOT. APPROXIMATELY 0.4 ACRES WILL BE IMPACTED INCLUDING EXISTING FLUME DRAINAGE STRUCTURE. SEE FURTHER ANALYSIS RECOMMENDATIONS.

END SEGMENT 1

2-1-J

B-70-135
RECONSTRUCT

2-1-AB

2-1-B

IH 41 SB OFF RAMP

IH 41 SB

IH 41 NB

2-1-A IH 41 NB ON RAMP

2-1-I

GEOMETRIC DEFICIENCY (2-1-G):
DEFICIENT SUPERELEVATION
ACTUAL 4.1%
DESIRED 4.5%

UTILITIES (2-1-O)

UTILITIES (2-1-Q)

UTILITIES (2-1-M)

UTILITIES (2-1-L): THE TOWN OF MENASHA HAS A 12-INCH WATER LINE CROSSING IH 41 AT THE COUNTY BB INTERCHANGE.

UTILITIES (2-1-M): TDS METROCOM HAS A BURIED FIBER OPTIC LINE CROSSING IH 41 JUST NORTH OF THE COUNTY BB INTERCHANGE.

UTILITIES (2-1-N): TIME WARNER HAS A BURIED CABLE LINE CROSSING IH 41 JUST NORTH OF THE COUNTY BB INTERCHANGE.

UTILITIES (2-1-O): WE ENERGIES HAS AN OVERHEAD ELECTRIC CROSSING APPROXIMATELY 100 FEET NORTH OF THE COUNTY BB INTERCHANGE.

UTILITIES (2-1-P): WE ENERGIES HAS A BURIED GAS LINE CROSSING AT APPROXIMATELY THE COUNTY BB INTERCHANGE.

UTILITIES (2-1-Q): TIME WARNER HAS AN OVERHEAD LINE CROSSING IH 41 APPROXIMATELY 100 FEET NORTH OF THE COUNTY BB INTERCHANGE.

FURTHER ANALYSIS RECOMMENDATIONS (2-1-AB): FURTHER STUDY IS RECOMMENDED TO MINIMIZE IMPACTS TO THE NORTHWEST QUADRANT OF THE CTH BB INTERCHANGE DUE TO THE COUNTY BB INTERCHANGE SOUTHBOUND OFF RAMP. THERE IS ADDITIONAL OPEN SPACE TO THE SOUTHWEST SIDE OF THE INTERCHANGE. REVIEW ROUNDABOUT GEOMETRY TO DETERMINE IF THE WEST SIDE ROUNDABOUT CAN BE LOCATED FURTHER TO THE SOUTH MINIMIZING IMPACTS TO THE NORTH PROPERTIES. A CONSTRAINT IS THE SKEW DEVELOPED BETWEEN THE WEST AND EAST SIDE ROUNDABOUTS WHICH IMPACTS ROUNDABOUT EXIT AND APPROACH GEOMETRY. ANY REDUCTION IN IMPACTS WILL NEED TO BE BALANCED WITH ANY IMPACTS RESULTING IN THE OTHER SOUTHWEST QUADRANT TO THE COMMERCIAL OFFICE BUILDING OR NORTHEAST QUADRANT WITH THE PRIVATE GOLF COURSE. ANOTHER CONSIDERATION IS TO INCLUDE RETAINING WALLS ALONG THE RAMPS TO MINIMIZE RIGHT-OF-WAY NEEDED FOR EMBANKMENT SLOPE CONSTRUCTION AND LONG TERM DRAINAGE MAINTENANCE.

RIGHT-OF-WAY IMPACTS (2-1-AD): POTENTIAL IMPACT TO FIRST BUSINESS CENTER PROPERTY.

LEGEND

- APPROXIMATE UTILITY CROSSING
- EXISTING ROW
- PROPOSED ROW
- EXISTING ROADWAYS
- PROPOSED LOCAL ROADS
- PROPOSED IH 41
- PROPOSED STRUCTURE
- PROPOSED CONCRETE BARRIER
- PROPOSED LOCAL SIDEWALK
- ROADWAY OBLITERATION
- PROPOSED NOISE WALL



0' 100' 200'



DRAFT

FRONTAGE ROADS (2-1-F): SOUTH WESTLAND DRIVE ABUTS THE IH 41 MAINLINE ALONG THE EAST SIDE AND IS SHOWN TO BE RECONSTRUCTED TO MOVE THE FRONTAGE ROADWAY FURTHER TO THE EAST ALLOWING ROOM FOR IH 41 EXPANSION. RIGHT-OF-WAY STRIP TAKINGS ARE ANTICIPATED ALONG SOUTH WESTLAND DRIVE. THE CUL-DE-SAC RECONSTRUCTION LOCATED AT THE SOUTH END OF SOUTH WESTLAND DRIVE NEAR WEST GOLF TERRACE IS ANTICIPATED TO IMPACT RIGHT-OF-WAY DUE TO A LARGER RADIUS REQUIREMENT TO MEET CURRENT DESIGN STANDARDS. SEE RIGHT-OF-WAY IMPACTS DISCUSSION BELOW.

RIGHT-OF-WAY IMPACTS (2-1-K): SOUTH WESTLAND DRIVE WILL REQUIRE STRIP TAKINGS FOR THE FRONTAGE ROAD AND CUL-DE-SAC AREAS. NO RELOCATIONS OR ACQUISITIONS ARE ANTICIPATED, ONLY STRIP TAKINGS. SOME COMMERCIAL BUSINESSES AND PRIVATE RESIDENTS WILL BE IMPACTED AND INCLUDE THE FOLLOWING: AMERICAN MOTOR INN, RJ KAMPO PLUMBING AND HEATING, GROW BIG HYDROPONICS, CROSS FIT APPLETON, BBR CONTRACTING, DIVER'S REALM, U HAUL NEIGHBORHOOD DEALER, PROTECTIVE COATING SPECIALISTS, MACCO'S FLOOR COVERING CENTER. OTHER COMMERCIAL BUSINESSES AND PRIVATE RESIDENTS ALONG SOUTH WESTLAND DRIVE WERE NOT ABLE TO BE IDENTIFIED AND WILL REQUIRE FURTHER RESEARCH TO IDENTIFY. APPROXIMATELY 0.6 ACRES WILL BE IMPACTED ALONG SOUTH WESTLAND DRIVE AND WEST GOLF TERRACE.

UTILITIES (2-1-R): TIME WARNER HAS A BURIED CABLE CROSSING IH 41 APPROXIMATELY JUST SOUTH OF PINE STREET.

UTILITIES (2-1-S): WE ENERGIES HAS AN OVERHEAD ELECTRIC CROSSING IH 41 APPROXIMATELY JUST SOUTH OF PINE STREET.

UTILITIES (2-1-T): WE ENERGIES HAS A BURIED GAS LINE CROSSING IH 41 APPROXIMATELY JUST NORTH OF PINE STREET.

S. NICOLET RD

S. VAN DYKE RD

BOARDWALK CT

GEOMETRIC DEFICIENCY (2-1-H):
APPROXIMATE END OF DEFICIENT
VERTICAL GRADE
ACTUAL 0.19%
DESIRED 0.5%
MINIMUM 0.3%

PROPOSED IH 41

IH 41 SB

IH 41 NB

S. WESTLAND DR

2-1-F

2-1-K

UTILITIES (2-1-T)

UTILITIES (2-1-S)

UTILITIES (2-1-R)

EXISTING RIGHT OF WAY

W. GOLF TERRACE CT

GEOMETRIC DEFICIENCY (2-1-H):
APPROXIMATE START OF
DEFICIENT VERTICAL GRADE
ACTUAL 0.19%
DESIRED 0.5%
MINIMUM 0.3%

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED IH 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL



0 100' 200'



S. TIMMERS LN

PLOT SCALE : 100:1







IH 41 RAMPS AND AUXILIARY LANES (2-2-C): THE IH 41 SOUTHBOUND OFF-RAMP AT WIS 125 IS A DUAL-LANE TAPERED TYPE OFF-RAMP CONFIGURATION THAT AFTER THE GORE AREA QUICKLY DEVELOPS INTO A MULTIPLE 5-LANE RAMP SECTION. THE RAMP HAS AN EXISTING BOX CULVERT THAT RUNS UNDERNEATH AND CONTINUES UNDER THE IH 41 MAINLINE. IT SHOULD BE REVIEWED FURTHER TO DETERMINE ITS CONDITION AND WHAT OVERALL IMPACTS WILL OCCUR DUE TO THE RAMP RECONSTRUCTION. RETAINING WALLS ARE ANTICIPATED TO MINIMIZE IMPACTS TO THE ADJACENT MUD CREEK. THE BOX CULVERT WAS ASSUMED TO NEED RECONSTRUCTION WITHIN THE COST ESTIMATE.


B-44-163
RECONSTRUCT


LEGEND

- - - APPROXIMATE UTILITY CROSSING
- EXISTING ROW
- PROPOSED ROW
- EXISTING ROADWAYS

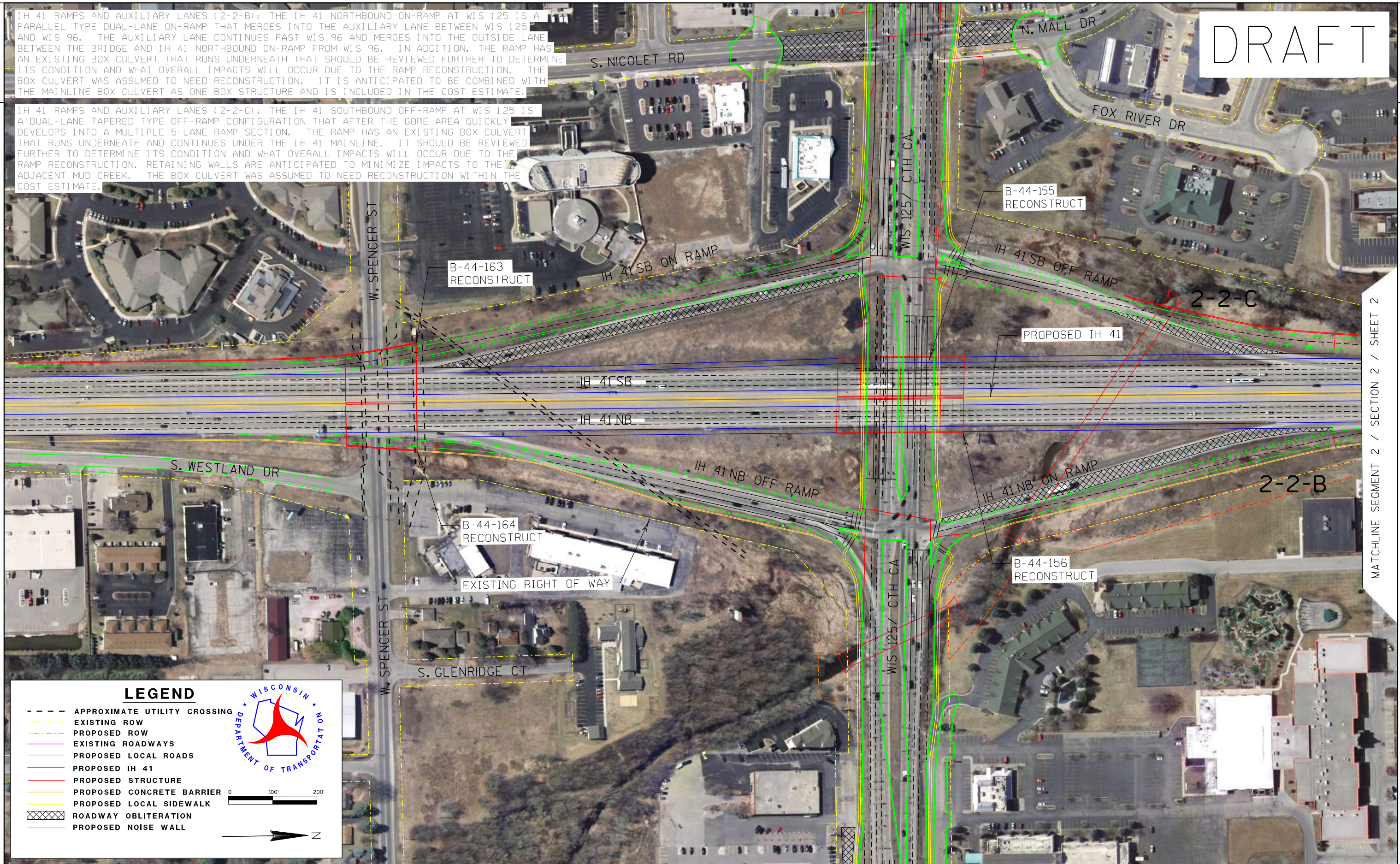
WISCONSIN DEPARTMENT OF TRANSPORTATION

 PROPOSED LOCAL ROADS
 PROPOSED STRUCTURE
 PROPOSED CONCRETE BARRIER
 PROPOSED LOCAL SIDEWALK
 ROADWAY OBLITERATION
 PROPOSED NOISE WALL

0 100' 200'
 N



DRAFT



MATCHLINE SEGMENT Z / SECTION Z / SHEET Z

2
IH 41 ALIGNMENT (2-2-A): THIS SECTION OF IH 41 FROM WIS 125 TO WIS 96 IS SHOWN ON EXISTING ALIGNMENT. THIS ALIGNMENT IS CONSTRAINED WITH COMMERCIAL PROPERTY CLOSE TO THE EAST RIGHT-OF-WAY AND MUD CREEK ALONG THE WEST SIDE OF IH 41. TWO EXISTING MUD CREEK BOX CULVERTS RUN UNDERNEATH THE IH 41 MAINLINE NORTHBOUND AND SOUTHBOUND LANES. THE FIRST IS APPROXIMATELY 350-FOOT NORTH OF WIS 125 AT A 38-DEGREE LEFT FORWARD SKEW (REFER TO EXHIBIT 2-4). THE SECOND IS APPROXIMATELY 1200-FOOT SOUTH OF WIS 96 AT A 34-DEGREE RIGHT FORWARD SKEW. RETAINING WALLS ALONG IH 41 MAINLINE AT THESE BOX CULVERT LOCATIONS HAVE BEEN INCORPORATED INTO THE COST ESTIMATE ALONG WITH RECONSTRUCTION OF THESE BOX CULVERTS.

IH 41 RAMPS AND AUXILIARY LANES (2-2-D): THE IH 41 SOUTHBOUND ON-RAMP AT WIS 96 IS A PARALLEL TYPE DUAL-LANE ON-RAMP THAT DEVELOPS INTO THE AUXILIARY LANE BETWEEN WIS 96 AND WIS 125. RETAINING WALLS ARE ANTICIPATED ALONG THE OUTSIDE OF THE AUXILIARY RAMP MINIMIZING IMPACTS TO THE ADJACENT MUD CREEK AND CONNECTING INTO THE MUD CREEK BOX CULVERTS. THE AUXILIARY LANE CONTINUES PAST WIS 125 AND MERGES INTO THE OUTSIDE LANE BETWEEN THE BRIDGE AND IH 41 SOUTHBOUND ON-RAMP FROM WIS 125.

IH 41 RAMPS AND AUXILIARY LANES (2-2-E): THE IH 41 NORTHBOUND OFF-RAMP AT WIS 96 IS A SINGLE-LANE TAPERED TYPE OFF-RAMP CONFIGURATION THAT AFTER THE GORE AREA QUICKLY DEVELOPS INTO A MULTIPLE 5-LANE RAMP SECTION.

FRONTAGE ROADS (2-2-F): THE ONLY FRONTAGE ROAD WITHIN THIS STRETCH OF IH 41 IS THE MALL CIRCULATION ROADWAY AT THE FOX RIVER MALL ALONG THE WEST SIDE OF IH 41 MAINLINE AND THE IH 41 SOUTHBOUND ON-RAMP AT WIS 96. NO IMPACTS ARE ANTICIPATED WITH THE FOX RIVER MALL FRONTAGE ROAD SYSTEM.

MATCHLINE SEGMENT 2 / SECTION 2 / SHEET 1



RIGHT-OF-WAY IMPACTS (2-2-G): THE RIGHT-OF-WAY LINE IS EXTREMELY CLOSE BETWEEN IH 41 SOUTHBOUND MAINLINE AND MUD CREEK. A BERM SECTION IS LOCATED JUST OFF THE IH 41 RIGHT-OF-WAY LINE BETWEEN THE MAINLINE AND MUD CREEK. APPROXIMATELY 1.5 ACRES OF RIGHT-OF-WAY ACQUISITION IS SHOWN BEING NEEDED WITHIN THIS AREA. FURTHER REVIEW OF RIGHT-OF-WAY IMPACTS, RETAINING WALLS (SEE IH 41 ALIGNMENT DISCUSSION ABOVE) AND MAINLINE SIDE SLOPE REQUIREMENTS ARE NEEDED IN THIS AREA TO MINIMIZE THE ENVIRONMENTAL IMPACTS TO MUD CREEK. IN ADDITION, SEE FURTHER ANALYSIS RECOMMENDATIONS BELOW.

RIGHT-OF-WAY IMPACTS (2-2-H): ALONG IH 41 NORTHBOUND MAINLINE, APPROXIMATELY 1.9 ACRES IS SHOWN AS REQUIRED ACQUISITION WITHIN TWO LOCATIONS. THESE LOCATIONS ARE IN TIGHT RIGHT-OF-WAY AREAS WHERE ADDITIONAL STRIP TAKINGS ARE NEEDED TO AVOID ADDITIONAL COSTLY RETAINING WALLS FOR IH 41.

RIGHT-OF-WAY IMPACTS (2-2-I): ALONG WIS 96 NORTHBOUND OFF-RAMP, A RETAINING WALL AND CONCRETE BARRIER WALL IS REQUIRED ALONG THE RAMP OUTSIDE SHOULDER TO MINIMIZE IMPACTS TO THE ADJACENT KWIK TRIP AND COMFORT SUITES APPLETON AIRPORT COMMERCIAL PARCELS. APPROXIMATELY 0.3 ACRES IS SHOWN AS REQUIRED FOR DRAINAGE AND MAINTENANCE NEEDS IN FRONT OF THE WALL AND BARRIER.

FURTHER ANALYSIS RECOMMENDATIONS (2-2-L): CONSIDER SHIFTING THE IH 41 MAINLINE ALIGNMENT TO THE EAST TO AVOID FURTHER IMPACTS TO MUD CREEK. BY SHIFTING THE ALIGNMENT TO THE EAST, ADDITIONAL RIGHT-OF-WAY IMPACTS MAY OCCUR TO THE FOLLOWING COMMERCIAL PROPERTIES ALONG IH 41: COMFORT SUITES APPLETON AIRPORT, BURLINGTON COAT FACTORY, WOODMAN'S FOOD MARKET, GANDER MOUNTAIN, UNIVERSITY OF PHOENIX, AND THE LA QUINTA. IN ADDITION TO SHIFTING IH 41 ALIGNMENT TO THE EAST, ANOTHER CONSIDERATION IS TO INCLUDE RETAINING WALLS ALONG THE AUXILIARY LANE TO MINIMIZE RIGHT-OF-WAY NEEDED FOR EMBANKMENT SLOPE CONSTRUCTION AND LONG TERM DRAINAGE MAINTENANCE.

DRAFT

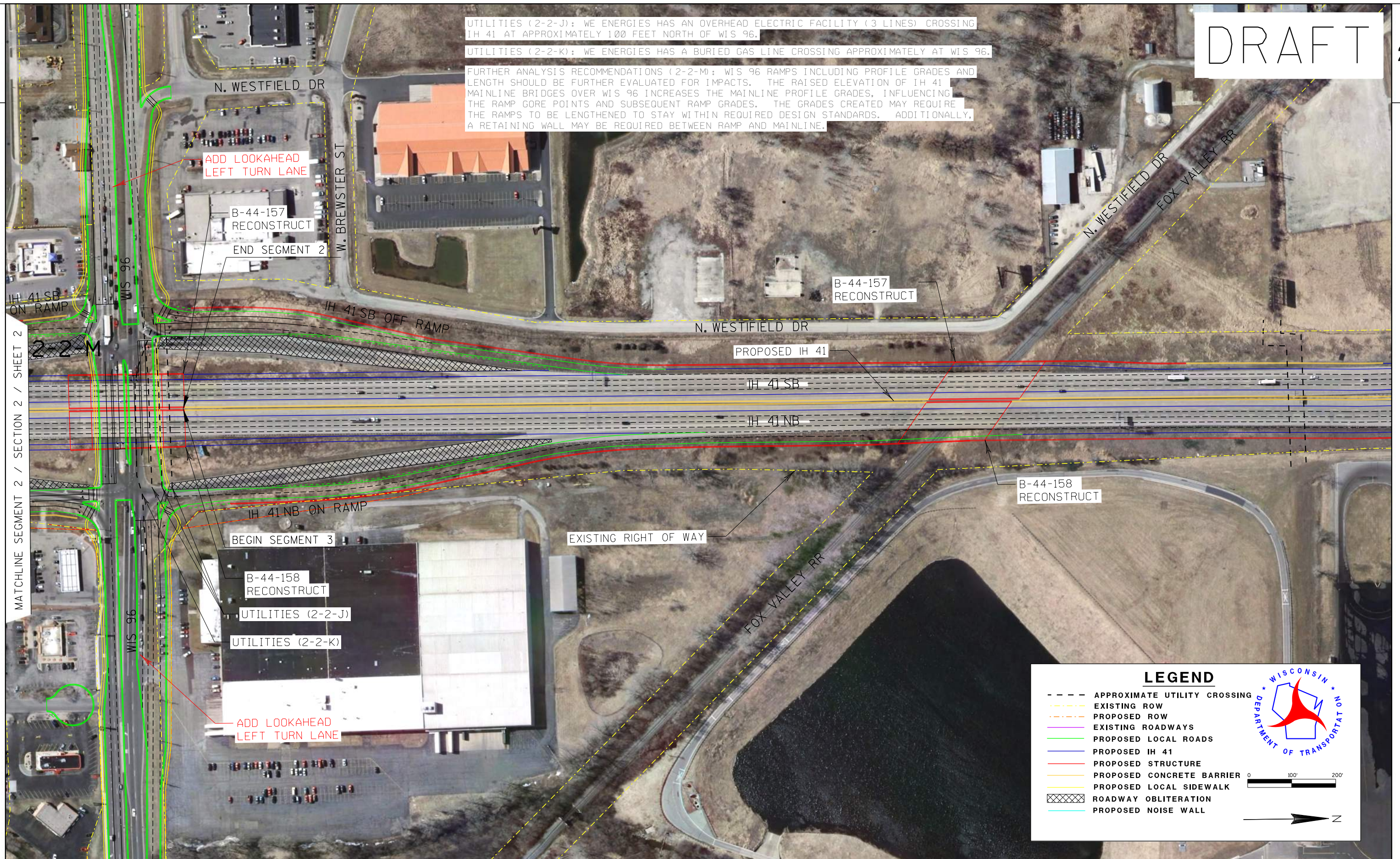
MATCHLINE SEGMENT 2 / SECTION 2 / SHEET 3

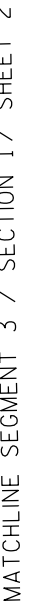
DRAFT

UTILITIES (2-2-J): WE ENERGIES HAS AN OVERHEAD ELECTRIC FACILITY (3 LINES) CROSSING IH 41 AT APPROXIMATELY 100 FEET NORTH OF WIS 96.

UTILITIES (2-2-K): WE ENERGIES HAS A BURIED GAS LINE CROSSING APPROXIMATELY AT WIS 96.

FURTHER ANALYSIS RECOMMENDATIONS (2-2-M): WIS 96 RAMPs INCLUDING PROFILE GRADES AND LENGTH SHOULD BE FURTHER EVALUATED FOR IMPACTS. THE RAISED ELEVATION OF IH 41 MAINLINE BRIDGES OVER WIS 96 INCREASES THE MAINLINE PROFILE GRADES, INFLUENCING THE RAMP GORE POINTS AND SUBSEQUENT RAMP GRADES. THE GRADES CREATED MAY REQUIRE THE RAMPs TO BE LENGTHENED TO STAY WITHIN REQUIRED DESIGN STANDARDS. ADDITIONALLY, A RETAINING WALL MAY BE REQUIRED BETWEEN RAMP AND MAINLINE.





FRONTAGE ROADS & MULTI-USE PATHS (3-1-D): BRIDGE B-44-190 IS A PEDESTRIAN AND BICYCLE BRIDGE OVER IH 41 MAINLINE. DUE TO THE WIDENING OF IH 41, THE BRIDGE ABUTMENT SLOPE PAVING WILL NEED TO BE REMOVED AND REPLACED WITH RETAINING WALLS TO ALLOW FOR WIDENING INCLUDING OUTSIDE SHOULDERS AND PROTECTIVE CONCRETE BARRIER ALONG BOTH IH 41 NORTHBOUND AND SOUTHBOUND LANES.

DRAFT

MATCHLINE SEGMENT 3 / SECTION 1 / SHEET 1

TYPICAL SECTION (SEE FIGURE 3-2)

EXISTING RIGHT OF WAY

3-1-D

PROPOSED IH 41

B-44-190
REHABILITATEB-44-177
REHABILITATE

END SEGMENT 3

BEGIN SEGMENT 4

IH 41 SB
ON RAMPB-44-178
REHABILITATEIH 41 NB
ON RAMP

GEOMETRIC DEFICIENCY (3-1-E):
APPROXIMATE START OF
DEFICIENT VERTICAL GRADE
ACTUAL 0.21%
DESIRED 0.50%
MINIMUM 0.3%

GEOMETRIC DEFICIENCY (3-1-E):
APPROXIMATE END OF
DEFICIENT VERTICAL GRADE
ACTUAL 0.21%
DESIRED 0.50%
MINIMUM 0.3%

LEGEND

- APPROXIMATE UTILITY CROSSING
- EXISTING ROW
- PROPOSED ROW
- EXISTING ROADWAYS
- PROPOSED LOCAL ROADS
- PROPOSED IH 41
- PROPOSED STRUCTURE
- PROPOSED CONCRETE BARRIER
- PROPOSED LOCAL SIDEWALK
- ROADWAY OBLITERATION
- PROPOSED NOISE WALL

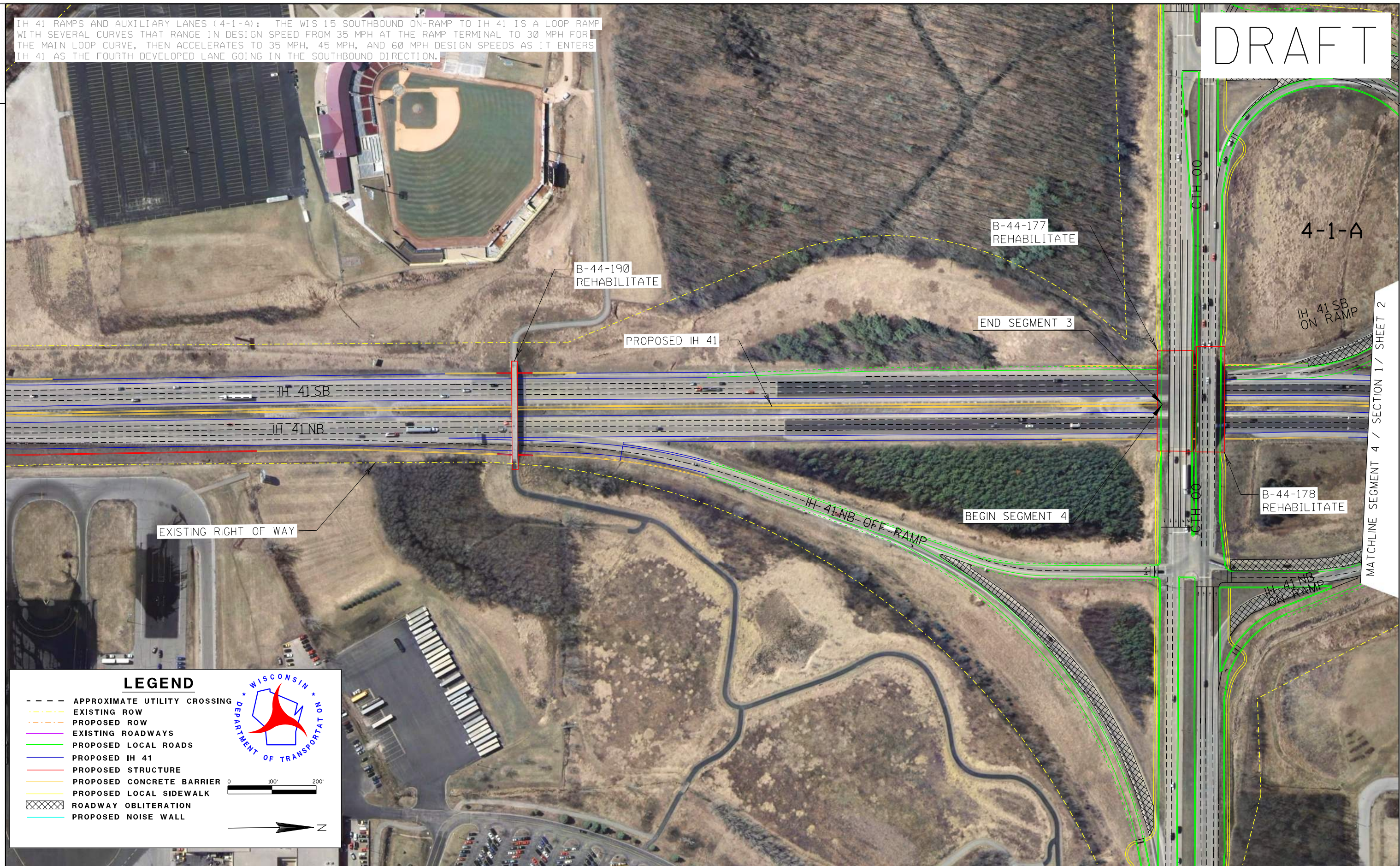


0 100' 200'



IH 41 RAMPS AND AUXILIARY LANES (4-1-A): THE WIS 15 SOUTHBOUND ON-RAMP TO IH 41 IS A LOOP RAMP WITH SEVERAL CURVES THAT RANGE IN DESIGN SPEED FROM 35 MPH AT THE RAMP TERMINAL TO 30 MPH FOR THE MAIN LOOP CURVE, THEN ACCELERATES TO 35 MPH, 45 MPH, AND 60 MPH DESIGN SPEEDS AS IT ENTERS IH 41 AS THE FOURTH DEVELOPED LANE GOING IN THE SOUTHBOUND DIRECTION.

DRAFT



4-1-B

4-1-B: IH 41 RAMP AND AUXILIARY LANES (4-1-B): THE WIS 15 SOUTHBOUND OFF-RAMP FROM IH 41 IS A TAPERED OFF-RAMP CONFIGURATION THAT RUNS PARALLEL WITH A PORTION OF THE WIS 15 SOUTHBOUND LOOP ON-RAMP. THE RAMP DESIGN SPEED AT THE TAPER EXIT IS 60 MPH, THEN STAGGER STEPS DOWN TO 50 MPH AND 45 MPH AS IT APPROACHES THE WIS 15 RAMP TERMINAL INTERSECTION. SINCE THE OFF-RAMP IS LOCATED WITHIN THE IH 41 MAINLINE CURVE, A LONG PARALLEL DECELERATION LANE WAS ADDED.

4-1-C

4-1-C: IH 41 RAMP AND AUXILIARY LANES (4-1-C): THE WIS 15 NORTHBOUND ON-RAMP TO IH 41 IS A PARALLEL TYPE CONFIGURATION. THE RAMP ENTRY LIES WITHIN A MAINLINE HORIZONTAL CURVE. A LONGER PARALLEL RAMP WAS ADDED THROUGH THE MAINLINE CURVE AND MERGES IN NEAR THE END OF THE MAINLINE CURVE TANGENT POINT.

4-1-F

4-1-F: FRONTAGE ROADS (4-1-F): NORTH RIFLE RANGE ROAD/ WEST GRAND CHUTE BOULEVARD IS A FRONTAGE ROAD ALONG THE NORTHWEST SIDE OF IH 41 MAINLINE JUST NORTH OF CAPITOL DRIVE. THE FRONTAGE ROAD IS SHOWN COMBINED WITH THE IH 41 RIGHT-OF-WAY. THE WIDER IH 41 MAINLINE CROSS SECTION WITH TRAVERSABLE EMBANKMENT SIDE SLOPES MAY IMPACT THE FRONTAGE ROADS. THEREFORE, CONCRETE BARRIER WITH STEEPER SIDE SLOPES FOR DRAINAGE MAY BE NEEDED ALONG THE OUTSIDE SHOULDER OF IH 41 MAINLINE TO MINIMIZE IMPACTS TO THE FRONTAGE ROAD AND PROVIDE ROOM FOR DRAINAGE DITCHES.

4-1-H

4-1-H: UTILITIES (4-1-H): TIME WARNER HAS AN OVERHEAD ELECTRIC CROSSING AT APPROXIMATELY JUST NORTH OF CAPITOL DRIVE.

4-1-I

4-1-I: UTILITIES (4-1-I): WE ENERGIES HAS AN OVERHEAD ELECTRIC FACILITY AT APPROXIMATELY JUST NORTH OF CAPITOL DRIVE.

4-1-G

4-1-G: GEOMETRIC DEFICIENCY (4-1-G): APPROXIMATE END OF DEFICIENT SUPERELEVATION
ACTUAL 4.2%
DESIRED 4.5%

4-1-H

4-1-H: UTILITIES (4-1-H):

4-1-I

4-1-I: UTILITIES (4-1-I):

B-44-24
RECONSTRUCT

PROPOSED IH 41

IH 41 SB

IH 41 NB

4-1-G

4-1-G: GEOMETRIC DEFICIENCY (4-1-G): APPROXIMATE END OF DEFICIENT VERTICAL GRADE
ACTUAL 0.20%
DESIRED 0.50%
MINIMUM 0.30%

EXISTING RIGHT OF WAY

4-1-I

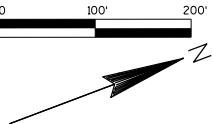
4-1-I: UTILITIES (4-1-I):

4-1-G

4-1-G: GEOMETRIC DEFICIENCY (4-1-G): APPROXIMATE START OF DEFICIENT VERTICAL GRADE
ACTUAL 0.20%
DESIRED 0.50%
MINIMUM 0.30%

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED IH 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXX ROADWAY OBLITERATION
- PROPOSED NOISE WALL



4-1-Q

4-1-Q: FURTHER ANALYSIS RECOMMENDATIONS (4-1-Q): THE WIS 15 SOUTHBOUND OFF-RAMP AND WIS 15 NORTHBOUND ON-RAMP ARE RECOMMENDED FOR FURTHER EVALUATION OF RAMP (AUXILIARY LANE) NEEDED AROUND IH 41 MAINLINE HORIZONTAL CURVE.

N. ABENDROTH ST

N. HERITAGE AVE

N. PARKRIDGE AVE

W. CAPITOL DR

CAPITOL DR

N. RIFLE RANGE RD

CAPITOL DR

N. CAPITOL CT

FRONTAGE ROADS (4-1-F): 4-1-F: NORTH RIFLE RANGE ROAD/ WEST GRAND CHUTE BOULEVARD IS A FRONTAGE ROAD ALONG THE NORTHWEST SIDE OF IH 41 MAINLINE JUST NORTH OF CAPITOL DRIVE. THE FRONTAGE ROAD IS SHOWN COMBINED WITH THE IH 41 RIGHT-OF-WAY. THE WIDER IH 41 MAINLINE CROSS SECTION WITH TRAVERSABLE EMBANKMENT SIDE SLOPES MAY IMPACT THE FRONTAGE ROADS. THEREFORE, CONCRETE BARRIER WITH STEEPER SIDE SLOPES FOR DRAINAGE MAY BE NEEDED ALONG THE OUTSIDE SHOULDER OF IH 41 MAINLINE TO MINIMIZE IMPACTS TO THE FRONTAGE ROAD AND PROVIDE ROOM FOR DRAINAGE DITCHES.

UTILITIES (4-1-J): WE ENERGIES HAS AN OVERHEAD ELECTRIC FACILITY AT APPROXIMATELY NORTH BLUEMOUND DRIVE.

DRAFT

MATCHLINE SEGMENT 4 / SECTION 1 / SHEET 2

MATCHLINE SEGMENT 4 / SECTION 1 / SHEET 4

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED IH 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXX ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL

0 100' 200'

WISCONSIN DEPARTMENT OF TRANSPORTATION

UTILITIES (4-1-K): TIME WARNER HAS AN OVERHEAD ELECTRIC CROSSING AT APPROXIMATELY 150 FEET WEST OF COUNTY A.

UTILITIES (4-1-L): WE ENERGIES HAS AN OVERHEAD ELECTRIC FACILITY AT APPROXIMATELY 120 FEET WEST OF COUNTY A.

DRAFT

UTILITIES (4-1-K):

UTILITIES (4-1-L):

B-44-140
REHABILITATE

GEOMETRIC DEFICIENCY (4-1-G):
APPROXIMATE END OF
DEFICIENT VERTICAL GRADE
ACTUAL 0.28%
DESIRED 0.50%
MINIMUM 0.30%

PROPOSED IH 41

IH 41 SB

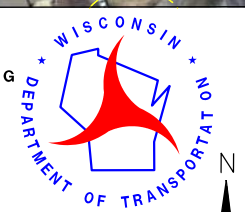
IH 41 NB

EXISTING RIGHT OF WAY

GEOMETRIC DEFICIENCY (4-1-G):
APPROXIMATE START OF
DEFICIENT VERTICAL GRADE
ACTUAL 0.28%
DESIRED 0.50%
MINIMUM 0.30%

LEGEND

- - - - - APPROXIMATE UTILITY CROSSING
- - - - - EXISTING ROW
- - - - - PROPOSED ROW
- - - - - EXISTING ROADWAYS
- - - - - PROPOSED LOCAL ROADS
- - - - - PROPOSED IH 41
- - - - - PROPOSED STRUCTURE
- - - - - PROPOSED CONCRETE BARRIER
- - - - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - - - PROPOSED NOISE WALL



N

0 100' 200'

MATCHLINE SEGMENT 4 / SECTION 1 / SHEET 3

MATCHLINE SEGMENT 4 / SECTION 1 / SHEET 5

UTILITIES (4-1-M): TIME WARNER HAS A BURIED CABLE CROSSING IH 41 AT APPROXIMATELY GILLETTE STREET.
UTILITIES (4-1-N): WE ENERGIES HAS OVERHEAD ELECTRIC FACILITY AT APPROXIMATELY GILLETTE STREET.
UTILITIES (4-1-O): WE ENERGIES HAS A BURIED GAS CROSSING IH 41 AT APPROXIMATELY GILLETTE STREET.
UTILITIES (4-1-P): ANR PIPELINE HAS A BURIED GAS CROSSING UNDER IH 41 LOCATED APPROXIMATELY 630 FEET EAST OF N. GILLETTE STREET.

DRAFT

MATCHLINE SEGMENT 4 / SECTION 1 / SHEET 4



MATCHLINE SEGMENT 4 / SECTION 1 / SHEET 6

IH 41 RAMPS AND AUXILIARY LANES (4-1-D): THE WIS 47 SOUTHBOUND ON-RAMP TO IH 41 IS A PARALLEL TYPE CONFIGURATION. PORTIONS OF THE WIS 47 SOUTHBOUND ON-RAMP FROM CURVE PT TO RAMP TERMINAL WILL BE CONSTRUCTED WITH PROJECT ID 1130-33-00 IN 2014. THE PARALLEL RAMP AND CURVE PORTIONS OF THE ON-RAMP ARE TO BE CONSTRUCTED WITH THE FUTURE EXPANSION PROJECT.

IH 41 RAMPS AND AUXILIARY LANES (4-1-E): THE WIS 47 NORTHBOUND OFF-RAMP FROM IH 41 IS A PARALLEL TYPE CONFIGURATION. PORTIONS OF THE IH 41 NORTHBOUND OFF-RAMP FROM CURVE PT TO RAMP TERMINAL INCLUDING THE CRASH INVESTIGATION SITE PAVEMENT WIDENING WILL BE CONSTRUCTED WITH PROJECT ID 1130-33-00 IN 2014. THE PARALLEL RAMP AND CURVE PORTIONS OF THE OFF-RAMP ARE TO BE CONSTRUCTED WITH THE FUTURE EXPANSION PROJECT.

MATCHLINE SEGMENT 4 / SECTION 1 / SHEET 5

MATCHLINE SEGMENT 2 / SECTION 4 / SHEET 1

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED IH 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- - - ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL

0 100' 200'

WISCONSIN DEPARTMENT OF TRANSPORTATION

PROJECT NO: 1130-31-00

HWY: IH 41

COUNTY: OUTAGAMIE

PLAN: IH 41 SEGMENT 4 / SECTION 1 / SHEET 6

PAGE

E

FILE NAME : J:\44386\1\Short Term Solutions\Amendment #5\CDS\0237_PO.dgn

PLOT DATE : 8/30/2019

PLOT BY : nbennett

PLOT NAME :

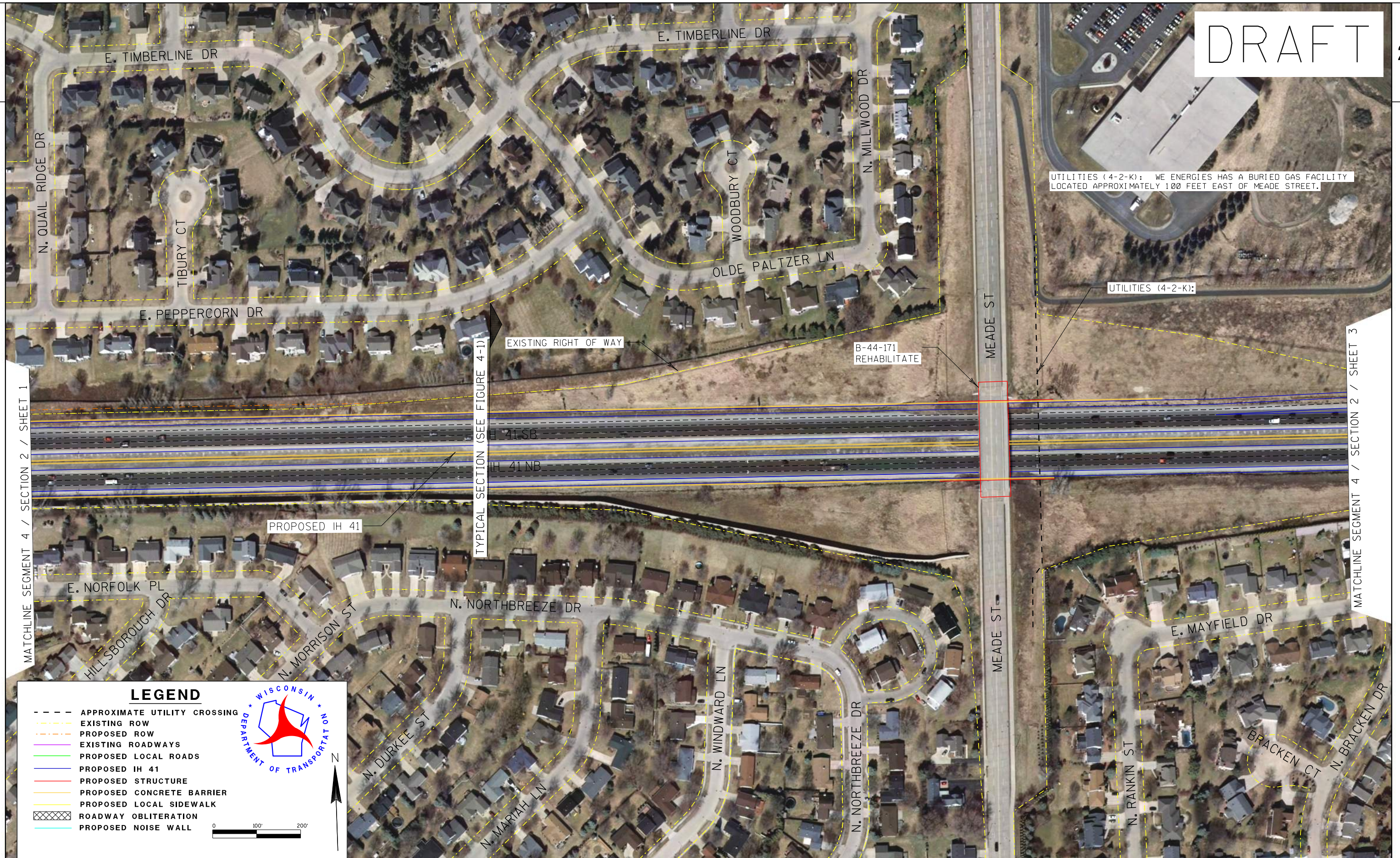
PLOT SCALE : 100:1

DRAFT

UTILITIES (4-2-J): TIME WARNER HAS AN OVERHEAD ELECTRIC CROSSING AT APPROXIMATELY 135 FEET EAST OF WIS 47.

--	--

PLOT SCALE : 100:1

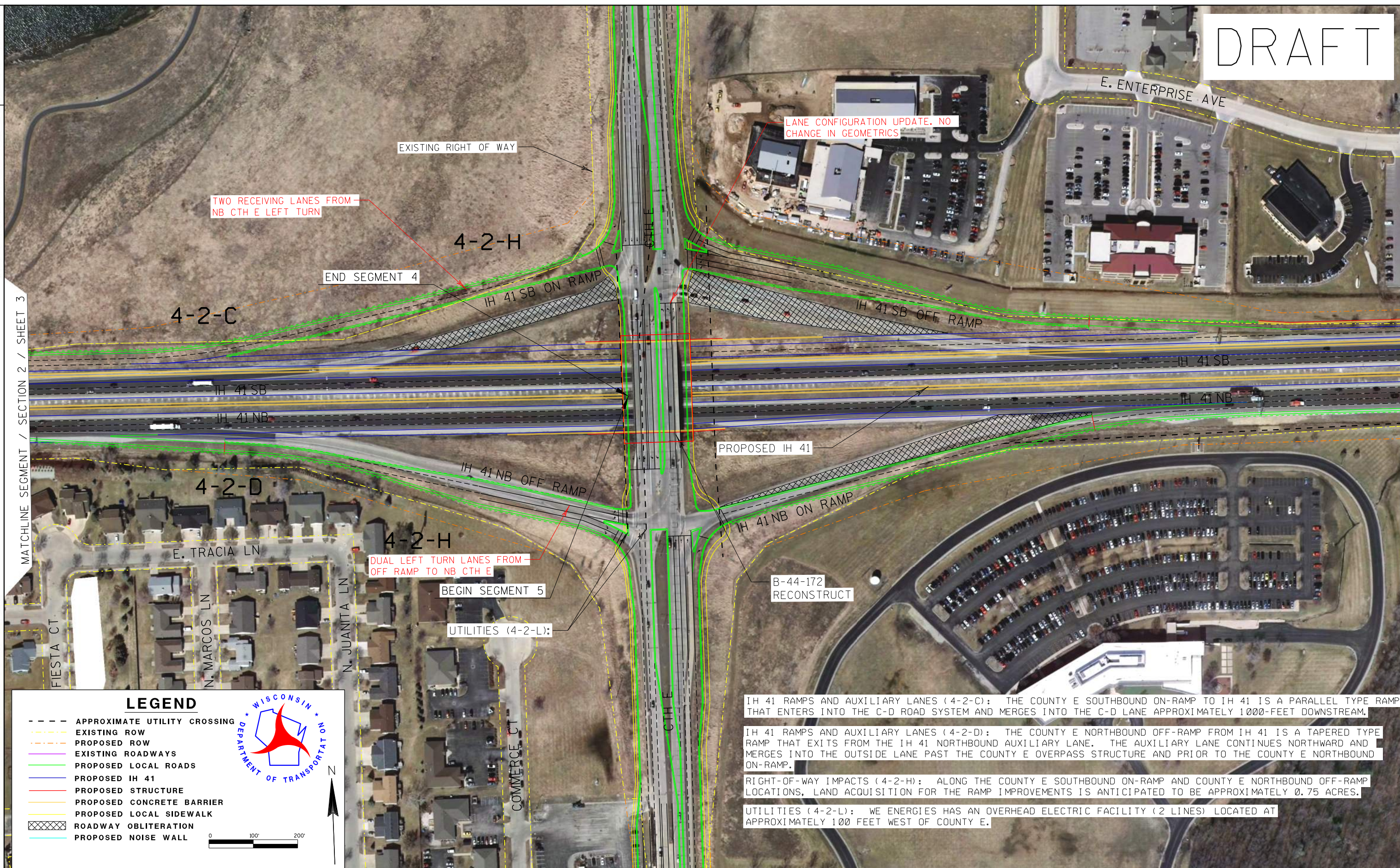


FURTHER ANALYSIS RECOMENDATIONS (4-2-M): FURTHER REVIEW OF THE C-D ROAD SYSTEM WILL DETERMINE IF THE APPLE CREEK TRAIL WILL BE ACTUALLY IMPACTED OR COULD BE AVOIDED THROUGH FURTHER DESIGN REFINEMENTS.

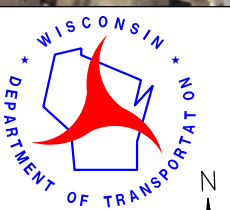
GEOMETRIC DEFICIENCY (4-2-F):
APPROXIMATE START OF DEFICIENT VERTICAL GRADE
ACTUAL = 0.10%
DESIRED = 0.50%
MINIMUM = 0.30%

MATCHLINE SEGMENT 4 / SECTION 2 / SHEET 4

N

**LEGEND**

- - - - - APPROXIMATE UTILITY CROSSING
- - - - - EXISTING ROW
- - - - - PROPOSED ROW
- - - - - EXISTING ROADWAYS
- - - - - PROPOSED LOCAL ROADS
- - - - - PROPOSED IH 41
- - - - - PROPOSED STRUCTURE
- - - - - PROPOSED CONCRETE BARRIER
- - - - - PROPOSED LOCAL SIDEWALK
- - - - - ROADWAY OBLITERATION
- - - - - PROPOSED NOISE WALL



0 100' 200'

IH 41 TYPICAL SECTION (5-1-D): THE MAINLINE TYPICAL SECTION TO THE EAST OF COUNTY E CONSISTS OF A 36.5' MEDIAN (14' INSIDE SHOULDERS WITH 56-INCH SINGLE FACE BARRIERS). THE NORTHBOUND MAINLINE HAS 3 - 12' LANES AND 1 - 12' AUXILIARY LANE. THE SOUTHBOUND MAINLINE HAS 3 - 12' LANES. THE SEPARATION BETWEEN THE SOUTHBOUND MAINLINE AND THE C-D ROAD CONSIST OF A 26.5' MEDIAN (14' OUTSIDE MAINLINE SHOULDER AND 6' INSIDE C-D ROAD SHOULDER WITH 42-INCH SINGLE FACE BARRIERS AT A MINIMUM). THE NORTHBOUND MAINLINE AND C-D ROAD EACH HAS 12' OUTSIDE SHOULDERS WITH BARRIER OR RETAINING WALLS FOR PORTIONS OF THE TYPICAL SECTION DUE TO TIGHT RIGHT-OF-WAY CONSTRAINTS.

IH 41 RAMPS, C-D ROADS AND AUXILIARY LANES (5-1-E): THE COUNTY E NORTHBOUND ON-RAMP TO IH 41 IS A PARALLEL ENTRANCETYPE THAT TURNS INTO AN AUXILIARY LANE TO THE NORTH SYSTEM INTERCHANGE IH 41 NORTHBOUND TO WIS 441 SOUTHBOUND RAMP.

DRAFT

5-1-N

TWO RECEIVING LANES FROM
NB CTH E LEFT TURN

END SEGMENT 4

IH 41 SB ON RAMP

EXISTING RIGHT OF WAY

LANE CONFIGURATION UPDATE. NO
CHANGE IN GEOMETRICSGEOMETRIC DEFICIENCY (5-1-O):
START OF DEFICIENT
VERTICAL GRADE
ACTUAL 0.10%
DESIRED 0.50%
MINIMUM 0.30%GEOMETRIC DEFICIENCY (5-1-O):
END OF DEFICIENT
VERTICAL GRADE
ACTUAL 0.10%
DESIRED 0.50%
MINIMUM 0.30%

5-1-D

IH 41 SB OFF RAMP

IH 41 SB

IH 41 NB

IH 41 NB

IH 41 NB OFF RAMP

PROPOSED IH 41

IH 41 NB ON RAMP

5-1-E

UTILITIES (5-1-U):

GEOMETRIC DEFICIENCY (5-1-O):
DEFICIENT VERTICAL CURVE
GRADE CHANGE 0.30%

UTILITIES (5-1-W):

B-44-172
RECONSTRUCTDUAL LEFT TURN LANES FROM
OFF RAMP TO NB CTH E

BEGIN SEGMENT 5

E. TRACIA LN

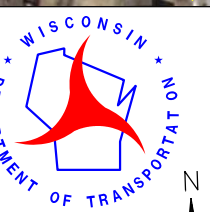
N. MARCOS LN

N. JUANITA LN

COMMERCE CT

LEGEND

- APPROXIMATE UTILITY CROSSING
- EXISTING ROW
- PROPOSED ROW
- EXISTING ROADWAYS
- PROPOSED LOCAL ROADS
- PROPOSED IH 41
- PROPOSED STRUCTURE
- PROPOSED CONCRETE BARRIER
- PROPOSED LOCAL SIDEWALK
- ROADWAY OBLITERATION
- PROPOSED NOISE WALL



0 100' 200'

2
IH 41 ALIGNMENT (5-1-A): BOTH THE IH 41 NORTHBOUND AND SOUTHBOUND ALIGNMENTS ARE SEPARATED THRU THE INTERCHANGE TO CREATE ENOUGH MEDIAN CLEARANCE FOR THE WIS 441 NORTHBOUND FLYOVER RAMP PIER FOUNDATION. ALL OF THE IH 41 SOUTHBOUND CURVE RADII THRU THE INTERCHANGE ARE 14,000- FEET ALLOWING THE TYPICAL SECTION TO REMAIN AS A NORMAL CROWN SECTION.

IH 41 ALIGNMENT (5-1-B): THE IH 41 NORTHBOUND'S SHARPEST CENTER CURVE RADIUS THRU THE INTERCHANGE IS 3500- FEET (4.9% SUPERELEVATION) WITH THE OTHER TWO CURVE RADII AT 14,000- FEET ALLOWING TRANSITION TO A NORMAL CROWN SECTION. FURTHER EVALUATION FOR THE IH 41 NORTHBOUND CENTER CURVE INDICATED THAT A 6,000- FOOT (3.2% SUPERELEVATION) WOULD WORK WHILE STILL PROVIDING ENOUGH MEDIAN CLEARANCES FOR WIS 441 NORTHBOUND FLYOVER RAMP PIER FOUNDATIONS.

IH 41 RAMPS, C-D ROADS AND AUXILIARY LANES (5-1-F): THE NORTH SYSTEM INTERCHANGE IH 41 NORTHBOUND TO WIS 441 SOUTHBOUND RAMP AS SHOWN HAS A MINIMUM RADIUS OF 1340', MEETING A 60-MPH DESIGN SPEED AND HAS A 6.0% MAXIMUM SUPERELEVATION. THE RAMP WILL REQUIRE A 1700' LONG RETAINING WALL THAT VARIES IN HEIGHTS AS TALL AS 15' ALONG THE ENTIRE LENGTH TO MINIMIZE THE RIGHT-OF-WAY IMPACTS IN THE SOUTHWEST QUADRANT OF THE INTERCHANGE (APPROXIMATELY 20,900 SF OF WALL FACE).

IH 41 RAMPS, C-D ROADS AND AUXILIARY LANES (5-1-J): THE STRETCH OF C-D ROAD BETWEEN THE SOUTHBOUND IH 41 TO SOUTHBOUND WIS 441 LOOP RAMP AND THE NORTHBOUND WIS 441 TO SOUTHBOUND IH 41 FLYOVER RAMP IS APPROXIMATELY 2000- FEET LONG MEASURED FROM THE DIVERGE GORE OF THE LOOP RAMP TO THE MERGE GORE WITH THE FLYOVER RAMP. THE C-D CONTAINS TWO CURVES. THE FIRST AN 8000- FOOT RADIUS CURVE WITH REVERSE CROWN SLOPE AND THE SECOND IS A 3500- FOOT RADIUS CURVE WITH 4% SUPERELEVATION THE OPPOSITE DIRECTION FROM THE FIRST CURVE. THE TWO CURVES ARE SEPARATED BY A 480- FOOT TANGENT SEGMENT THAT WILL PROVIDE SUPERELEVATION TRANSITION FROM ONE CURVE TO THE OTHER.

GEOMETRIC DEFICIENCY (5-1-O):
START OF DEFICIENT
VERTICAL GRADE
ACTUAL 0.25%
DESIRED 0.50%
MINIMUM 0.30%

PROPOSED IH 41

5-1-J

EXISTING RIGHT OF WAY

E. ENTERPRISE AVE

N. PROVIDENCE AVE

DRAFT

5-1-A

IH 41 SB

IH 41 NB

UTILITIES (5-1-U):

IH 41 CENTERLINE LOCATION REQUIRES FURTHER
DESIGN REFINEMENT TO OPTIMIZE REAL ESTATE
AND CONSTRUCTION COSTS FOR THE 41-441
SYSTEM INTERCHANGE AND CD LANE SYSTEM

5-1-L

5-1-K

5-1-B

5-1-F

IH 41 RAMPS, C-D ROADS AND AUXILIARY LANES (5-1-K): THE WIS 441 NORTHBOUND FLYOVER RAMP IS PRIMARILY ON STRUCTURE WITH LONG RETAINING WALLS ON EITHER BRIDGE END EMBANKMENT. THE STRUCTURE IS ANTICIPATED TO BE SIMILAR TO THE BROWN COUNTY IH 41/WIS 29 INTERCHANGE TUB GIRDER STRUCTURES OR SIMILAR TO WINNEBAGO COUNTY US 10/WIS 441 INTERCHANGE CURVED GIRDER STRUCTURE WITH SPAN LENGTHS UP TO 260- FEET. LENGTHS ARE NEEDED TO SPAN ACROSS THE 68- FOOT IH 41 SOUTHBOUND AND 66- FOOT IH 41 NORTHBOUND ROADWAY CROSS SECTION AT A LARGE SKEW ANGLE. THE RAMP MAINTAINS A CONSISTENT CROSS SECTION OF 8' INSIDE SHOULDER, 15' RAMP LANE, AND 10' OUTSIDE SHOULDER WIDTHS. THE RAMP LAYOUT AS SHOWN MAINTAINS A 60 MPH DESIGN SPEED (1340' MINIMUM RADIUS) WITH 6.0% SUPERELEVATION.

IH 41 RAMPS, C-D ROADS AND AUXILIARY LANES (5-1-L): THE WIS 441 NORTHBOUND FLYOVER RAMP WEST ABUTMENT IS DIRECTLY ADJACENT TO IH 41 SOUTHBOUND MAINLINE ON THE SOUTH SIDE AND DIRECTLY ADJACENT TO THE C-D ROAD ON THE NORTH SIDE. THE RAMP REQUIRES TWO RETAINING WALLS WITH CONCRETE BARRIER, ONE ON EITHER SIDE OF THE RAMP EMBANKMENT FILL. THE NORTHBOUND FLYOVER RAMP SUPERSTRUCTURE THICKNESS IS ANTICIPATED TO BE 10- FEET REQUIRING A 27- FOOT DISTANCE FROM PROFILE GRADE LINE TO CRITICAL CLEARANCE POINT ALONG THE IH 41 SOUTHBOUND LANES (ASSUMED TO BE ALONG IH 41 SOUTHBOUND OUTSIDE SHOULDER). THE RAMP GRADE IS PROJECTED TO BE APPROXIMATELY 3.0% AND WILL REQUIRE A MINIMUM OF 630- FOOT LONG RETAINING WALLS ALONG BOTH SIDES OF THE EMBANKMENT TO CLIMB TO THE REQUIRED BRIDGE GRADE. IT IS ANTICIPATED THAT THE C-D ROAD PROFILE ALONG THE NORTH SIDE OF THE FLYOVER RETAINING WALL WILL BE RAISED ON FILL TO MATCH INTO THE FLYOVER RAMP PROFILE MORE QUICKLY TO THE EAST. THIS WILL ALLOW THE ONE LANE OF THE C-D AND THE ONE LANE OF THE FLYOVER MERGE INTO A COMBINED TWO- LANE SECTION SOONER, MAXIMIZING THE WEAVE SECTION DISTANCE BETWEEN THE MERGE POINT AND THE COUNTY E OFF- RAMP. THE RETAINING WALL LOCATED BETWEEN THE FLYOVER RAMP AND IH 41 SOUTHBOUND LANES WILL BE A TALLER RETAINING WALL WITH HEIGHTS APPROACHING THE FLYOVER RAMP PROFILE MINUS THE IH 41 SOUTHBOUND LANES PROFILE (~27 FEET). THE RETAINING WALL LOCATED BETWEEN THE FLYOVER RAMP AND THE C-D ROAD WILL BE A SHORTER RETAINING WALL WITH HEIGHTS RANGING FROM THE FLYOVER RAMP PROFILE TO THE C-D ROAD PROFILE. OUTSIDE OF THE C-D ROAD, ANOTHER SHORTER RETAINING WALL WILL BE REQUIRED TO REDUCE RIGHT-OF-WAY IMPACTS TO SEVERAL INDUSTRIAL PARCELS ALONG THE NORTH PROPERTY LINE.

IH 41 RAMPS, C-D ROADS AND AUXILIARY LANES (5-1-M): THE C-D ROAD BETWEEN THE WIS 441 NORTHBOUND FLYOVER RAMP MERGE AREA AND THE COUNTY E OFF- RAMP ACTS AS A TWO- LANE WEAVE SECTION FOR APPROXIMATELY 1200- FEET. BY PLACING THE NORTHBOUND FLYOVER RAMP ADJACENT TO THE IH 41 SOUTHBOUND LANES, THE MAJORITY OF THE TRAFFIC FROM THE SINGLE C-D LANE ENTRANCE WILL ALREADY BE IN THE CORRECTLY ASSIGNED LANE FOR EXITING AT COUNTY E. THE SIGNIFICANT WEAVE MOVEMENT WILL BE FOR NORTHBOUND FLYOVER RAMP TRAFFIC TO MERGE INTO THE OUTSIDE C-D ROAD LANE TO EXIT AT COUNTY E. ONLY A VERY FEW ERRANT VEHICLES ON THE C-D ROAD SYSTEM ARE ANTICIPATED TO WEAVE THE OPPOSITE DIRECTION TO GET BACK ONTO IH 41 SOUTHBOUND. A RETAINING WALL ALONG THE OUTSIDE SHOULDER FOR THE C-D ROAD SYSTEM IS ANTICIPATED TO MINIMIZE RIGHT-OF-WAY IMPACTS TO THE COMMERCIAL INDUSTRIAL PARCELS ALONG THE IH 41 NORTH SIDE.

UTILITIES (5-1-U): TDS METROCOM HAS BURIED A FIBER OPTIC FACILITY LOCATED ALONG THE SOUTHERLY R/W LINE BETWEEN COUNTY E AND THE NORTH SYSTEM INTERCHANGE.

LEGEND

- - - - - APPROXIMATE UTILITY CROSSING
- - - - - EXISTING ROW
- - - - - PROPOSED ROW
- - - - - EXISTING ROADWAYS
- - - - - PROPOSED LOCAL ROADS
- - - - - PROPOSED IH 41
- - - - - PROPOSED STRUCTURE
- - - - - PROPOSED CONCRETE BARRIER
- - - - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - - - PROPOSED NOISE WALL



N

0 100' 200'

RIGHT-OF-WAY IMPACTS (5-1-P): THE IH 41 NORTHBOUND TO WIS 441 SOUTHBOUND SYSTEM RAMP IMPACTS MULTIPLE BUSINESSES WITHIN THE SOUTHWEST QUADRANT OF THE INTERCHANGE. STRIP ACQUISITIONS TOTALING APPROXIMATELY 1.8 ACRES FROM LAMINATIONS, C3 CORPORATION, AND GANNETT WISCONSIN NEWSPAPERS ARE REQUIRED FOR CONSTRUCTION OF THE RAMP AND ASSOCIATED RETAINING WALL STRUCTURES. IN ADDITION TO STRIP ACQUISITION, THE PARKING LOT AND CIRCULATION AREA FOR GANNETT WISCONSIN NEWSPAPERS IS IMPACTED BY THE RAMP AND RETAINING WALL.

RIGHT-OF-WAY IMPACTS (5-1-T): WITH THE ADDITION OF THE C-D ROAD SYSTEM BETWEEN COUNTY E AND THE IH 41 SOUTHBOUND TO WIS 441 SOUTHBOUND LOOP RAMP, APPROXIMATELY 2.0 ACRES IS REQUIRED ALONG THE NORTH SIDE OF IH 41 SOUTHBOUND MAINLINE. PROPERTIES IMPACTED CONSIST OF COMMERCIAL AND INDUSTRIAL PARCELS. RETAINING WALLS WILL BE REQUIRED ALONG THE RIGHT-OF-WAY TO MINIMIZE IMPACTS TO THE PARCELS.

UTILITIES (5-1-U): TDS METROCOM HAS BURIED A FIBER OPTIC FACILITY LOCATED ALONG THE SOUTHERLY R/W LINE BETWEEN COUNTY E AND THE NORTH SYSTEM INTERCHANGE.

UTILITIES (5-1-V): WE ENERGIES HAS A BURIED ELECTRIC LINE UNDER THE NW QUADRANT RAMPS AT THE IH 41 & WIS 441 INTERCHANGE.

FURTHER ANALYSIS RECOMMENDATIONS (5-1-AB): FURTHER REVIEW IS RECOMMENDED TO DETERMINE IF SHIFTING THE MAINLINE ALIGNMENT TO THE SOUTH SLIGHTLY WOULD BALANCE C-D ROAD IMPACTS ALONG THE NORTH RIGHT-OF-WAY LINE BETWEEN THE NORTH SYSTEM INTERCHANGE AND THE COUNTY E INTERCHANGE.

FURTHER ANALYSIS RECOMMENDATIONS (5-1-AC): THE IH 41 NORTHBOUND TO WIS 441 SOUTHBOUND SYSTEM RAMP IMPACTS COULD BE MINIMIZED BY REDUCING THE DESIGN SPEED FOR THE CENTER PORTION OF THE RAMP TO 55 MPH (1065-FOOT RADIUS CURVE) WHILE STILL MAINTAINING 60 MPH DESIGN SPEEDS AT THE INITIAL IH 41 NORTHBOUND EXIT CURVE AND WIS 441 SOUTHBOUND ENTRANCE CURVE. ALL SUPERELEVATION WOULD STILL BE A MAXIMUM OF 6.0%. ALTHOUGH STILL LOCATED TO THE OUTSIDE OF THE EXISTING RAMP, THIS ALTERNATIVE WOULD MINIMIZE THE RIGHT-OF-WAY ACQUISITION, PARKING LOT IMPACTS, AND RETAINING WALL NEEDS ALONG THE OUTSIDE OF THE RAMP.

DRAFT

UTILITIES (5-1-V):

N. PROVIDENCE AVE

E. ENTERPRISE AVE

EXISTING RIGHT OF WAY

5-1-T

PROPOSED IH 41

IH 41 SB

IH 41 NB

UTILITIES (5-1-U):

IH 41 CENTERLINE LOCATION REQUIRES FURTHER DESIGN REFINEMENT TO OPTIMIZE REAL ESTATE AND CONSTRUCTION COSTS FOR THE 41-441 SYSTEM INTERCHANGE AND CD LANE SYSTEM

5-1-AB

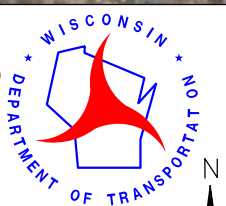
GEOMETRIC DEFICIENCY (5-1-0):
START OF DEFICIENT
VERTICAL GRADE
ACTUAL 0.25%
DESIRED 0.50%
MINIMUM 0.30%

5-1-R

5-1-AC

LEGEND

- APPROXIMATE UTILITY CROSSING
- EXISTING ROW
- PROPOSED ROW
- EXISTING ROADWAYS
- PROPOSED LOCAL ROADS
- PROPOSED IH 41
- PROPOSED STRUCTURE
- PROPOSED CONCRETE BARRIER
- PROPOSED LOCAL SIDEWALK
- ROADWAY OBLITERATION
- PROPOSED NOISE WALL



0 100' 200'

MATCHLINE SEGMENT 5 / SECTION 1 / SHEET 1

MATCHLINE SEGMENT 5 / SECTION 1 / SHEET 3

IH 41 RAMPS, C-D ROADS AND AUXILIARY LANES (5-1-H): APPROXIMATELY 3500' EAST OF THE NORTH SYSTEM INTERCHANGE ALONG IH 41 SOUTHBOUND LANES, A SINGLE LANE TAPERED OFF-RAMP STARTS A C-D ROAD WITH A 60 MPH DESIGN SPEED. ACCESS TO BOTH WIS 441 SOUTHBOUND AND COUNTY E WILL BE PROVIDED FROM SOUTHBOUND IH 41 VIA THE C-D SYSTEM. IN TOTAL, THE C-D SYSTEM CONNECTS THE FOLLOWING FIVE MOVEMENTS:

- (1) IH 41 SOUTHBOUND TO WIS 441 SOUTHBOUND
- (2) WIS 441 NORTHBOUND TO IH 41 SOUTHBOUND
- (3) IH 41 SOUTHBOUND TO COUNTY E OFF-RAMP
- (4) WIS 441 NORTHBOUND TO COUNTY E OFF-RAMP
- (5) COUNTY E ON-RAMP TO IH 41 SOUTHBOUND

UTILITIES (5-1-U): TDS METROCOM HAS BURIED A FIBER OPTIC FACILITY LOCATED ALONG THE SOUTHERLY R/W LINE BETWEEN COUNTY E AND THE NORTH SYSTEM INTERCHANGE.

UTILITIES (5-1-AA): WE ENERGIES HAS A 138 KV OVERHEAD ELECTRIC LINE APPROXIMATELY 2600 FEET EAST OF FRENCH ROAD AND ABOUT 2600 FEET WEST OF HOLLAND ROAD.

MATCHLINE SEGMENT 5 / SECTION 1 / SHEET 3

MATCHLINE SEGMENT 5 / SECTION 2 / SHEET 1

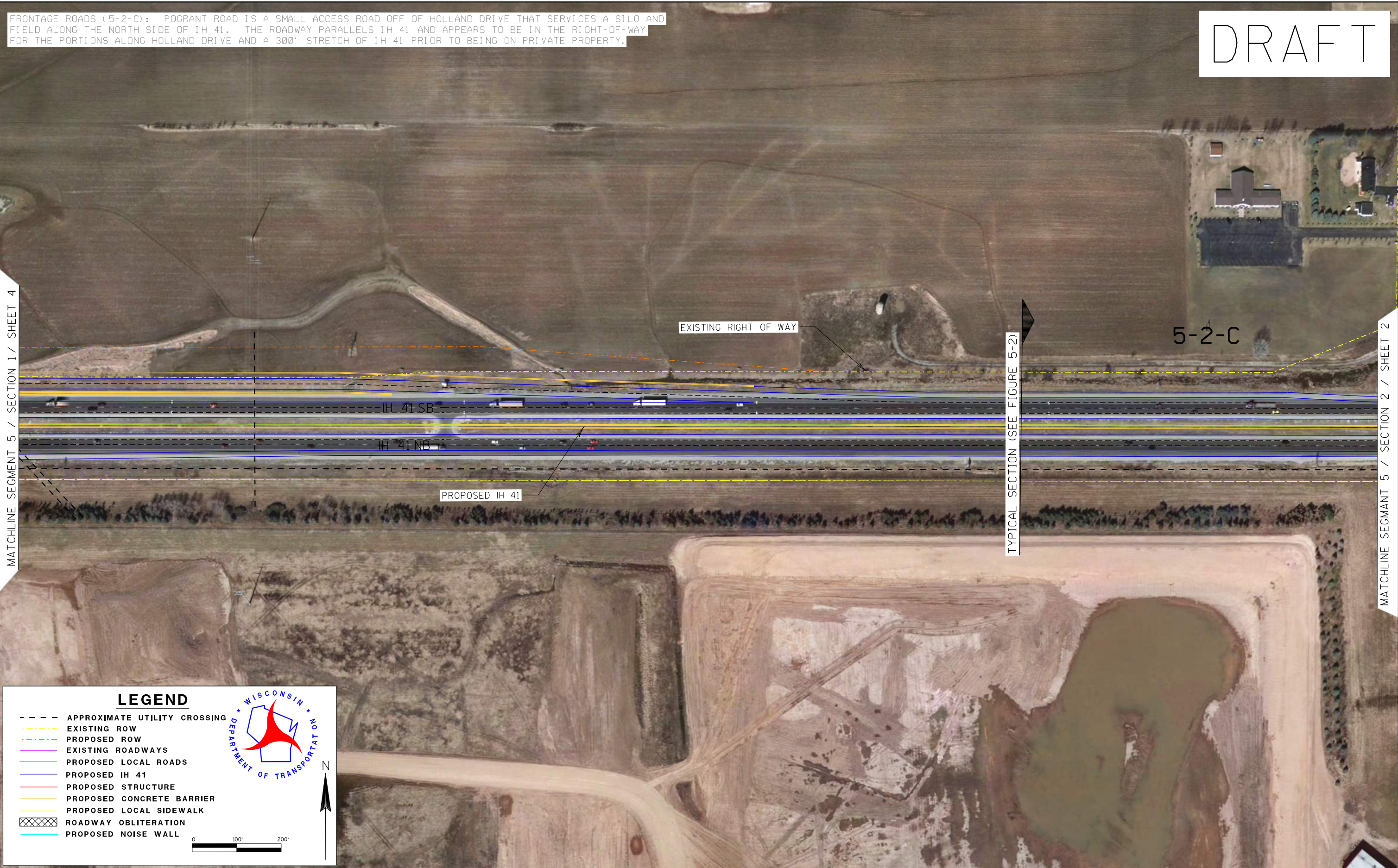


FRONTAGE ROADS (5-2-C): POGRANT ROAD IS A SMALL ACCESS ROAD OFF OF HOLLAND DRIVE THAT SERVICES A SILO AND FIELD ALONG THE NORTH SIDE OF IH 41. THE ROADWAY PARALLELS IH 41 AND APPEARS TO BE IN THE RIGHT-OF-WAY FOR THE PORTIONS ALONG HOLLAND DRIVE AND A 300' STRETCH OF IH 41 PRIOR TO BEING ON PRIVATE PROPERTY.

DRAFT

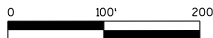
MATCHLINE SEGMENT 5 / SECTION 1 / SHEET 4

MATCHLINE SEGMENT 5 / SECTION 2 / SHEET 2



LEGEND

- - - - - APPROXIMATE UTILITY CROSSING
- - - - - EXISTING ROW
- - - - - PROPOSED ROW
- - - - - EXISTING ROADWAYS
- - - - - PROPOSED LOCAL ROADS
- - - - - PROPOSED IH 41
- - - - - PROPOSED STRUCTURE
- - - - - PROPOSED CONCRETE BARRIER
- - - - - PROPOSED LOCAL SIDEWALK
- - - - - ROADWAY OBLITERATION
- - - - - PROPOSED NOISE WALL



UTILITIES (5-2-E): ATT LEGACY HAS BURIED FIBER OPTIC LOCATED APPROXIMATELY 100 FEET EAST OF HOLLAND ROAD.

UTILITIES (5-2-F): WE ENERGIES HAS A BURIED GAS FACILITY APPROXIMATELY 120 FEET EAST OF HOLLAND ROAD.

FURTHER ANALYSIS RECOMMENDATIONS (5-2-G): IF THE SMALL ACCESS ROAD OFF HOLLAND DRIVE IS STILL REQUIRED, IT IS RECOMMENDED TO RELOCATE THE ACCESS ROAD FURTHER TO THE NORTH OUT OF THE EXISTING IH 41 RIGHT-OF-WAY.

DRAFT

MATCHLINE SEGMENT 5 / SECTION 2 / SHEET 1

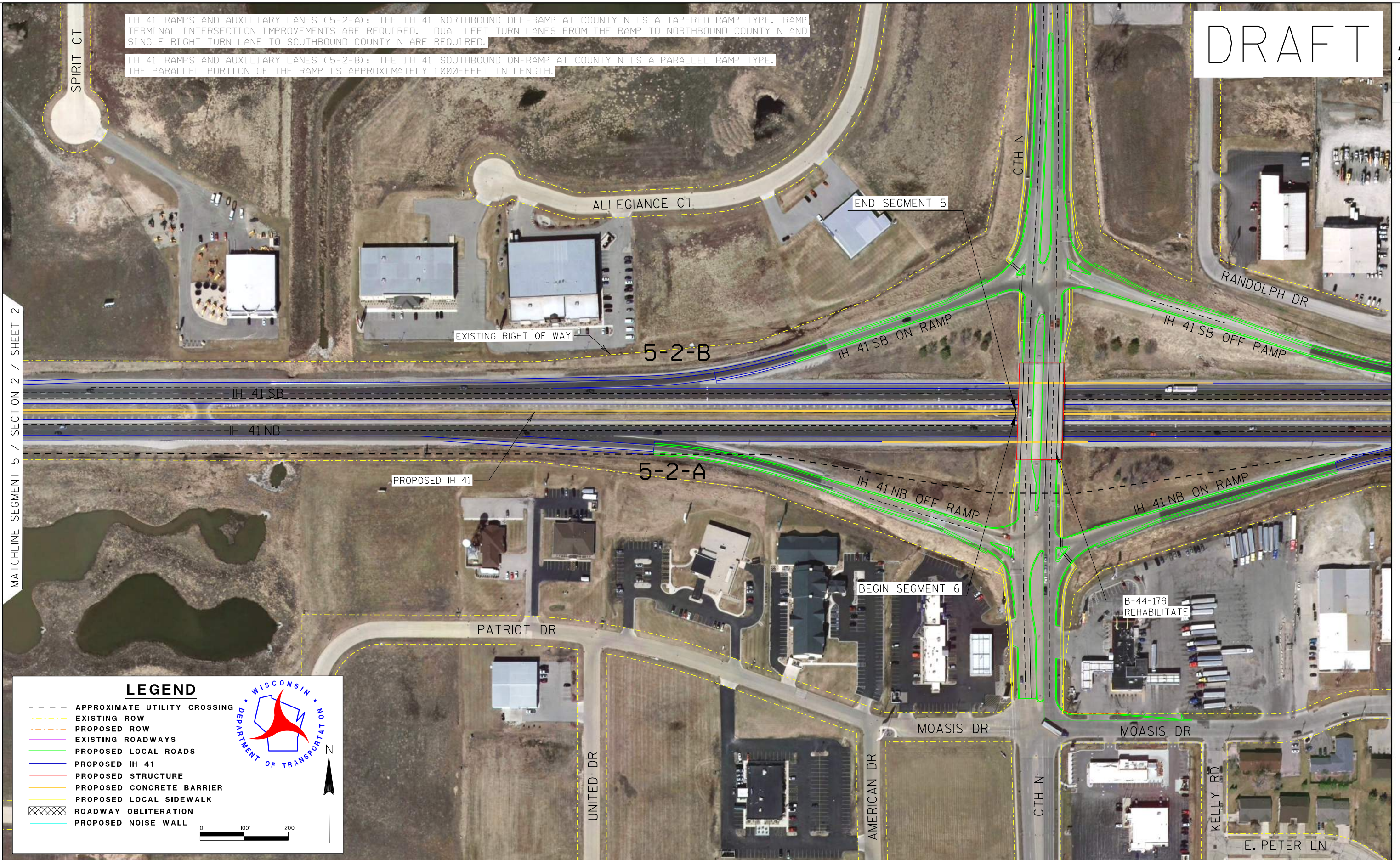
MATCHLINE SEGMENT 5 / SECTION 2 / SHEET 3



IH 41 RAMPS AND AUXILIARY LANES (5-2-A): THE IH 41 NORTHBOUND OFF-RAMP AT COUNTY N IS A TAPERED RAMP TYPE. RAMP TERMINAL INTERSECTION IMPROVEMENTS ARE REQUIRED. DUAL LEFT TURN LANES FROM THE RAMP TO NORTHBOUND COUNTY N AND SINGLE RIGHT TURN LANE TO SOUTHBOUND COUNTY N ARE REQUIRED.

IH 41 RAMPS AND AUXILIARY LANES (5-2-B): THE IH 41 SOUTHBOUND ON-RAMP AT COUNTY N IS A PARALLEL RAMP TYPE. THE PARALLEL PORTION OF THE RAMP IS APPROXIMATELY 1000-FEET IN LENGTH.

MATCHLINE SEGMENT 5 / SECTION 2 / SHEET 2



DRAFT

UTILITIES (5-3-Q): ATT LEGACY HAS BURIED FIBER OPTIC CABLE AT THE RR TRACKS NORTH OF WIS 96.

UTILITIES (5-3-R): WE ENERGIES HAS A BURIED ELECTRIC FACILITY NEAR THE RR TRACKS APPROXIMATELY 330 FEET NORTH OF STH 96.

UTILITIES (5-3-S): WE ENERGIES HAS A BURIED ELECTRIC FACILITY APPROXIMATELY 1060 FEET NORTH OF STH 96.

UTILITIES (5-3-T): WE ENERGIES HAS A BURIED GAS MAIN FACILITY APPROXIMATELY 960 FEET NORTH OF STH 96.

END SEGMENT 8

BEGIN SEGMENT 5

5-3-D

5-3-A

5-3-I

5-3-E

5-3-K

5-3-J

B-44-128

RECONSTRUCT

B-44-127

RECONSTRUCT

EXISTING RIGHT OF WAY

5-3-O

5-3-P

WIS 441 ALIGNMENT (5-3-A): THE WIS 441 ALIGNMENT IS ON EXISTING ALIGNMENT FROM THE STRUCTURE, THROUGH COUNTY 00 (NORHLAND AVENUE) INTERCHANGE.

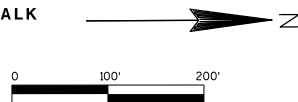
WIS 441 TYPICAL SECTION (5-3-D): THE EXISTING WIS 441 MAINLINE TYPICAL SECTION JUST NORTH OF THE FOX RIVER BRIDGE THAT WILL BE TIED INTO CONSISTS OF A 28'-4" MEDIAN (MATCHING 12' INSIDE SHOULDERS WITH 56-INCH SINGLE FACE BARRIERS) AND 3-12' LANES IN THE NORTHBOUND AND SOUTHBOUND DIRECTIONS. BOTH NORTHBOUND AND SOUTHBOUND HAVE 12' OUTSIDE SHOULDERS.

WIS 441 TYPICAL SECTION (5-3-E): AS SHOWN ON THE EXHIBITS, THE 28'-4" MEDIAN SECTION WAS HELD FROM THE FOX RIVER BRIDGE TO APPROXIMATELY 1800' SOUTH OF COUNTY 00. FROM THAT POINT THE MEDIAN SECTION INCREASES TO 39-FOOT (12' INSIDE SHOULDERS WITH CONCRETE BARRIER) AND CONTINUES THROUGH TO THE SEPARATION POINT OF THE TWO RAMP MOVEMENTS.

WIS 441 RAMPS (5-3-I): THE WIS 441 SOUTHBOUND ON-RAMP IMPROVEMENTS SHOWN AT COUNTY 00 IS A DUAL LANE PARALLEL TYPE ON-RAMP HAVING 300-FOOT OF ACCELERATION DISTANCE PLUS 360-FOOT TAPER ON THE OUTSIDE LANE. THE INSIDE LANE 960-FOOT OF ACCELERATION DISTANCE PLUS 360-FOOT TAPER

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED IH 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL



WIS 441 RAMPS (5-3-J): THE WIS 441 NORTHBOUND OFF- AND ON-RAMPS FOR COUNTY 00 HAVE BEEN SHOWN RELOCATED FURTHER TO THE SOUTH. DUE TO THE NEW SYSTEM RAMP DEVELOPMENT WITHIN THE NORTH SYSTEM INTERCHANGE STUDY ALTERNATIVE, THERE IS NOT ENOUGH DISTANCE BETWEEN THE EXISTING COUNTY 00 NORTHBOUND ON-RAMP GORE TO WIS 441 NORTHBOUND TO IH 41 SOUTHBOUND MOVEMENT. THIS MOVEMENT NEEDS TO BE A SIGNIFICANT DISTANCE DOWNSTREAM OF THE WIS 441 NORTHBOUND THREE-LANE TO FOUR-LANE TRANSITION TO ALLOW VEHICLES TIME TO WEAVE INTO THE MIDDLE LANE AND USE THE FLYOVER RAMP. THE NORTHBOUND ON-RAMP BECOMES A LOOP RAMP THAT PROVIDES APPROXIMATELY 900' FROM THE RAMP GORE LOCATION TO THE START OF THE WIS 441 NORTHBOUND TRANSITION. THIS ON-RAMP BECOMES A WIS 441 NORTHBOUND ADD-LANE. THE RAMP HAS AN ENTRANCE DESIGN SPEED OF 50-MPH, A DESIGN SPEED THAT IS 10-MPH LOWER THAN THE MAINLINE DESIGN SPEED.

WIS 441 RAMPS (5-3-K): DUE TO THE RELOCATION OF THE WIS 441 NORTHBOUND ON-RAMP FOR COUNTY 00, THE COUNTY 00 NORTHBOUND OFF-RAMP FROM WIS 441 WAS ALSO MOVED SIGNIFICANTLY DOWNSTREAM TO A LOCATION JUST NORTH OF THE WIS 441 NORTHBOUND FOX RIVER BRIDGE. THIS RAMP IS A PARALLEL TYPE OFF-RAMP THAT PARALLELS THE NORTHBOUND LOOP ON-RAMP TERMINATING AT COUNTY 00. THE RAMP HAS AN INITIAL CURVE 50-MPH DESIGN SPEED.

RIGHT-OF-WAY IMPACTS (5-3-M): THE COUNTY 00 SOUTHBOUND ON-RAMP TO WIS 441 SOUTHBOUND REQUIRES APPROXIMATELY 0.80 ACRES OF ADDITIONAL RIGHT-OF-WAY. THE PROPOSED RIGHT-OF-WAY LINE WILL BE VERY CLOSE TO AN EXISTING BUILDING ON ADJACENT PARCEL.

RIGHT-OF-WAY IMPACTS (5-3-O): THE RELOCATED COUNTY 00 NORTHBOUND OFF AND ON-RAMPS WILL REQUIRE SIGNIFICANT RIGHT-OF-WAY ACQUISITION FOR THE NEW GEOMETRY. IT WILL ALSO INCLUDE THE ACQUISITION OF A PORTION OF THE EXISTING FRENCH ROAD. APPROXIMATELY 18 ACRES WILL BE NEEDED.

RIGHT-OF-WAY IMPACTS (5-3-P): DUE TO THE COUNTY 00 NORTHBOUND RAMP RELOCATIONS, FRENCH ROAD WILL NEED TO BE RELOCATED FURTHER TO THE EAST TO PROVIDE THE PROPER DESIGN DISTANCE BETWEEN INTERCHANGE TERMINAL AND ADJACENT SIGNALIZED INTERSECTION. RELOCATION OF FRENCH ROAD WILL REQUIRE 3.3 ACRES SOUTH OF COUNTY 00 AND 8.4 ACRES NORTH OF COUNTY 00 (11.7 ACRES TOTAL).

DRAFT

MATCHLINE SEGMENT 5 / SECTION 3 / SHEET 1

MATCHLINE SEGMENT 5 / SECTION 1 / SHEET 3

5-3-N

5-3-H

5-3-B

5-3-6

WIS 441 SB

WIS 441 NB

5-3-F

5-3-J

5-3-0

EXISTING RIGHT OF WAY

PROPOSED WIS 441

FRENCH RD


RIGHT-OF-WAY IMPACTS (5-3-N): THE COUNTY 00 SOUTHBOUND OFF-RAMP FROM WIS 441 SOUTHBOUND REQUIRES APPROXIMATELY 0.20 ACRES OF ADDITIONAL RIGHT-OF-WAY. NO SIGNIFICANT IMPACTS ARE ANTICIPATED FROM THE ACQUISITION.

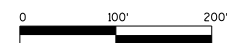
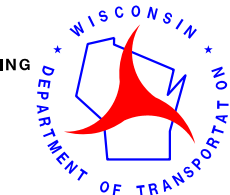
WIS 441 RAMPS (5-3-J): THE WIS 441 NORTHBOUND OFF- AND ON-RAMPS FOR COUNTY OO HAVE BEEN SHOWN RELOCATED FURTHER TO THE SOUTH. DUE TO THE NEW SYSTEM RAMP DEVELOPMENT WITHIN THE NORTH SYSTEM INTERCHANGE STUDY ALTERNATIVE, THERE IS NOT ENOUGH DISTANCE BETWEEN THE EXISTING COUNTY OO NORTHBOUND ON-RAMP GORE TO WIS 441 NORTHBOUND TO IH 41 SOUTHBOUND MOVEMENT. THIS MOVEMENT NEEDS TO BE A SIGNIFICANT DISTANCE DOWNSTREAM OF THE WIS 441 NORTHBOUND THREE-LANE TO FOUR-LANE TRANSITION TO ALLOW VEHICLES TIME TO WEAVE INTO THE MIDDLE LANE AND USE THE FLYOVER RAMP. THE NORTHBOUND ON-RAMP BECOMES A LOOP RAMP THAT PROVIDES APPROXIMATELY 900' FROM THE RAMP GORE LOCATION TO THE START OF THE WIS 441 NORTHBOUND TRANSITION. THIS ON-RAMP BECOMES A FOURTH LANE ON WIS 441 NORTHBOUND. THE RAMP HAS AN ENTRANCE DESIGN SPEED OF 50-MPH, A DESIGN SPEED THAT IS 10-MPH LOWER THAN THE MAINLINE DESIGN SPEED.

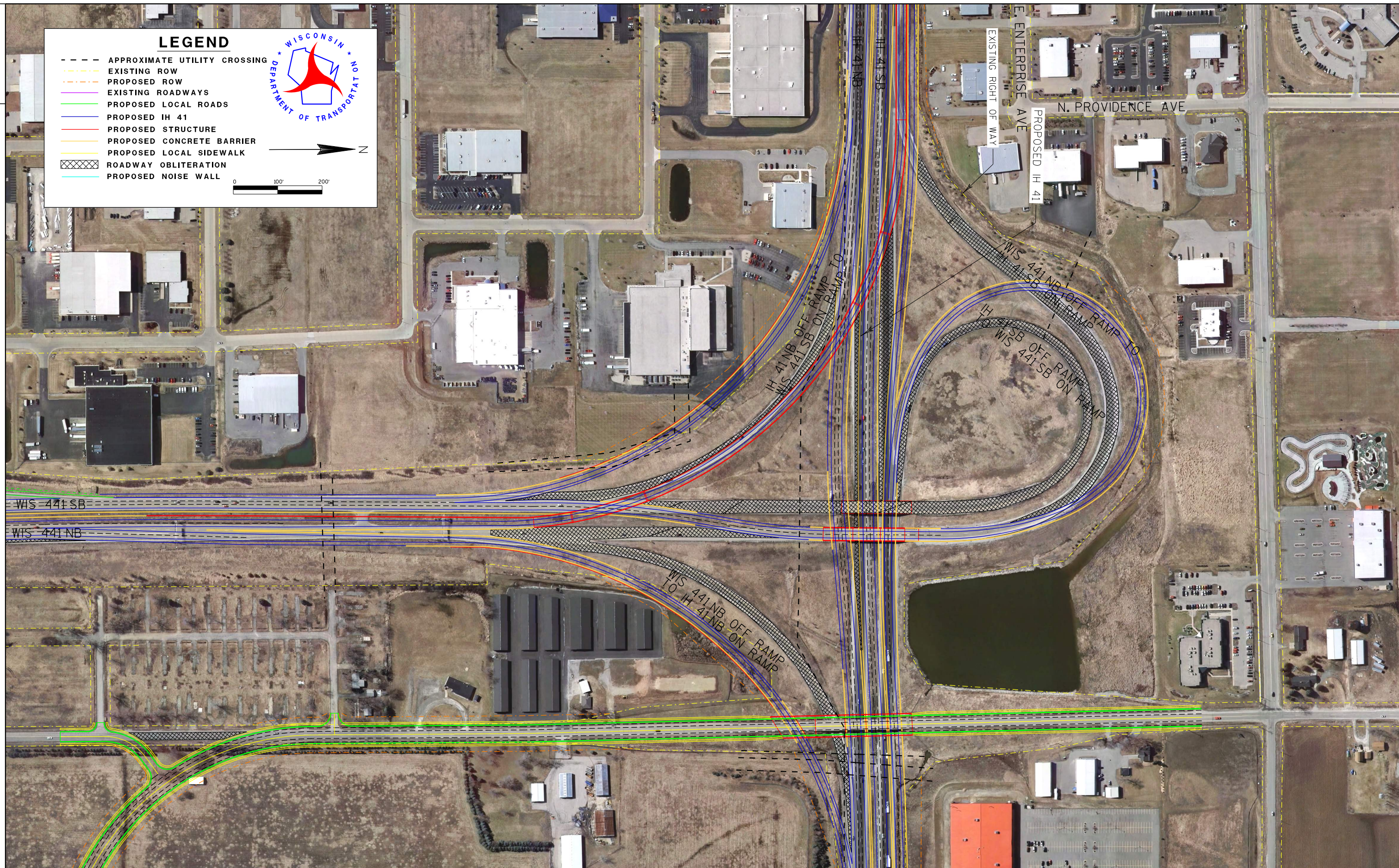
WIS 441 TYPICAL SECTION (5-3-G): THE PROPOSED WIS 441 SOUTHBOUND SECTION STARTS AT THE NORTH END BY COMBINING THE TWO LANES FROM THE IH 41 SOUTHBOUND TO WIS 441 SOUTHBOUND SYSTEM LOOP RAMP ALONG WITH THE IH 41 NORTHBOUND TO WIS 441 SOUTHBOUND SYSTEM RAMP CREATING A THREE-LANE ROADWAY SECTION. THERE WILL BE ONE SIGNIFICANT WEAVE MOVEMENT THROUGH THIS SECTION. THE SOUTHBOUND TRAFFIC ORIGINATING FROM THE LOOP RAMP THAT NEEDS TO EXIT AT COUNTY 00 WILL MERGE INTO THE OUTSIDE LANE. LOOP RAMP TRAFFIC FOR DESTINATIONS SOUTH OF COUNTY 00 WOULD STAY IN THE INSIDE LANE. THE IH 41 NORTHBOUND TO WIS 441 SOUTHBOUND SYSTEM RAMP TRAFFIC DESIRING DESTINATIONS SOUTH OF COUNTY 00 COULD MERGE INTO THE CENTER LANE RIGHT AWAY OR REMAIN IN THE OUTSIDE LANE.

WIS 441 RAMPS (5-3-H): THE WIS 441 SOUTHBOUND OFF-RAMP AT COUNTY DD IS A TAPERED TYPE OFF-RAMP. AN ADDITIONAL LEFT-TURN LANE IS REQUIRED FOR OPERATIONS AT THE RAMP TERMINAL.

LEGEND

- - - - - APPROXIMATE UTILITY CROSSING
 EXISTING ROW
 - - - - - PROPOSED ROW
 _____ EXISTING ROADWAYS
 _____ PROPOSED LOCAL ROADS
 _____ PROPOSED IH 41
 _____ PROPOSED STRUCTURE
 _____ PROPOSED CONCRETE BARRIER
 _____ PROPOSED LOCAL SIDEWALK
 ROADWAY OBLITERATION
 _____ PROPOSED NOISE WALL





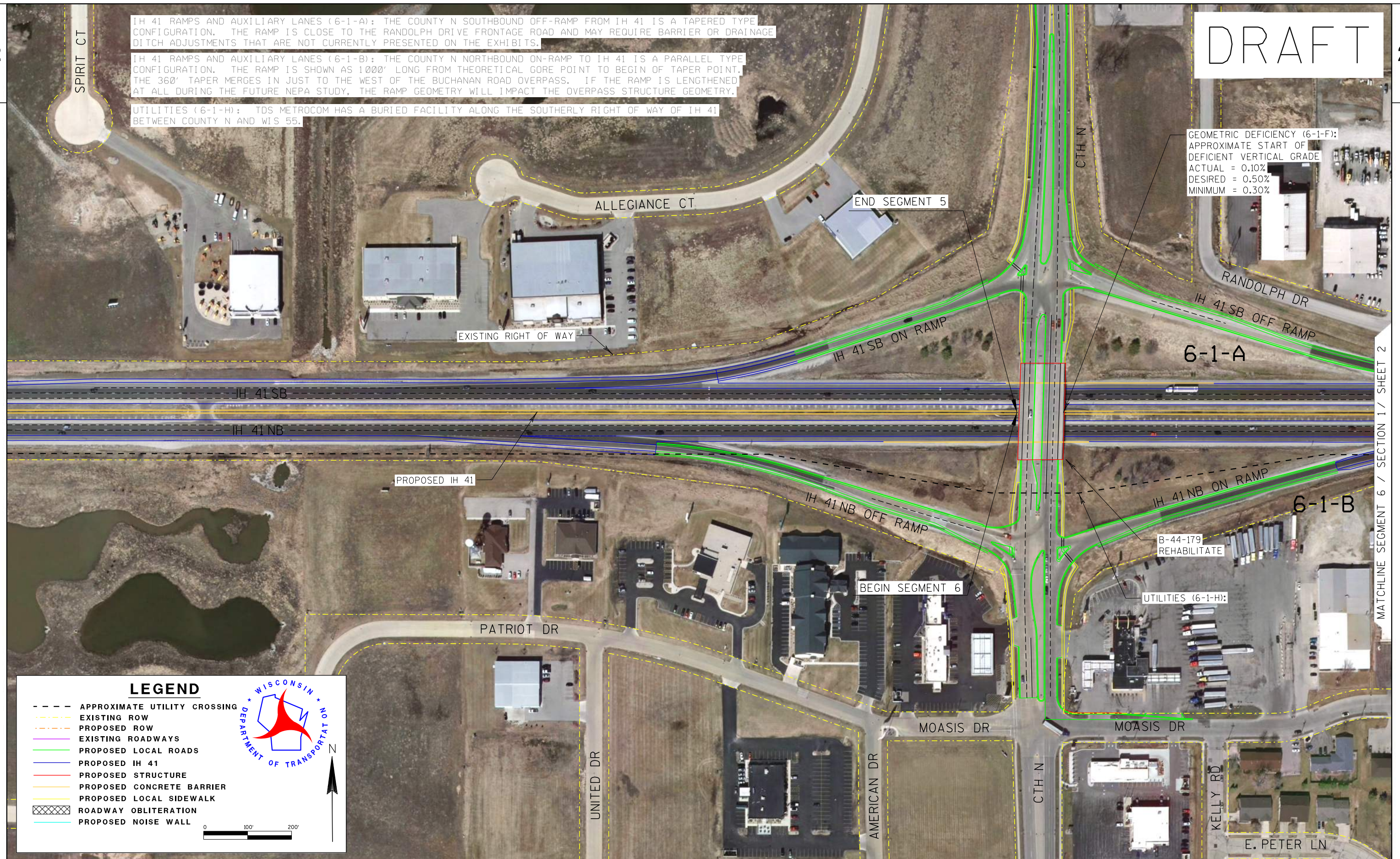
6-1-A) IH 41 RAMP AND AUXILIARY LANES (6-1-A): THE COUNTY N SOUTHBOUND OFF-RAMP FROM IH 41 IS A TAPERED TYPE CONFIGURATION. THE RAMP IS CLOSE TO THE RANDOLPH DRIVE FRONTAGE ROAD AND MAY REQUIRE BARRIER OR DRAINAGE DITCH ADJUSTMENTS THAT ARE NOT CURRENTLY PRESENTED ON THE EXHIBITS.

6-1-B) IH 41 RAMP AND AUXILIARY LANES (6-1-B): THE COUNTY N NORTHBOUND ON-RAMP TO IH 41 IS A PARALLEL TYPE CONFIGURATION. THE RAMP IS SHOWN AS 1000' LONG FROM THEORETICAL GORE POINT TO BEGIN OF TAPER POINT. THE 360' TAPER MERGES IN JUST TO THE WEST OF THE BUCHANAN ROAD OVERPASS. IF THE RAMP IS LENGTHENED AT ALL DURING THE FUTURE NEPA STUDY, THE RAMP GEOMETRY WILL IMPACT THE OVERPASS STRUCTURE GEOMETRY.

6-1-H) UTILITIES (6-1-H): TDS METROCOM HAS A BURIED FACILITY ALONG THE SOUTHERLY RIGHT OF WAY OF IH 41 BETWEEN COUNTY N AND WIS 55.

DRAFT

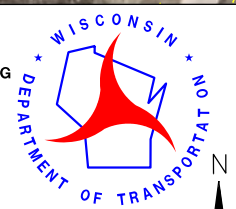
6-1-F) GEOMETRIC DEFICIENCY (6-1-F):
APPROXIMATE START OF
DEFICIENT VERTICAL GRADE
ACTUAL = 0.10%
DESIRED = 0.50%
MINIMUM = 0.30%



LEGEND

- APPROXIMATE UTILITY CROSSING
- EXISTING ROW
- PROPOSED ROW
- EXISTING ROADWAYS
- PROPOSED LOCAL ROADS
- PROPOSED IH 41
- PROPOSED STRUCTURE
- PROPOSED CONCRETE BARRIER
- PROPOSED LOCAL SIDEWALK
- ROADWAY OBLITERATION
- PROPOSED NOISE WALL

0 100' 200'



E

DRAFT

UTILITIES (6-1-H): TDS METROCOM HAS A BURIED FACILITY ALONG THE SOUTHERLY RIGHT OF WAY OF IH 41 BETWEEN COUNTY N AND WIS 55.

UTILITIES (6-1-K): TIME WARNER HAS AN OVERHEAD FACILITY CROSSING IH 41 APPROXIMATELY 75 FEET WEST OF COUNTY CC.

GEOMETRIC DEFICIENCY (6-1-F):
APPROXIMATE END OF
DEFICIENT VERTICAL GRADE
ACTUAL = 0.15%
DESIRED = 0.50%
MINIMUM = 0.30%

GEOMETRIC DEFICIENCY (6-1-F):
APPROXIMATE START OF
DEFICIENT VERTICAL GRADE
ACTUAL = 0.13%
DESIRED = 0.50%
MINIMUM = 0.30%

UTILITIES (6-1-K):

B-44-39
RECONSTRUCT

UTILITIES (6-1-H):

PROPOSED IH 41

TYPICAL SECTION (SEE FIGURE 6-1)

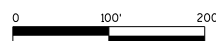
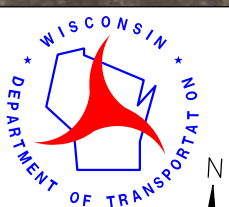
EXISTING RIGHT OF WAY

MATCHLINE SEGMENT 6 / SECTION 1 / SHEET 2

MATCHLINE SEGMENT 6 / SECTION 1 / SHEET 4

LEGEND

- - - - - APPROXIMATE UTILITY CROSSING
- - - - - EXISTING ROW
- - - - - PROPOSED ROW
- - - - - EXISTING ROADWAYS
- - - - - PROPOSED LOCAL ROADS
- - - - - PROPOSED IH 41
- - - - - PROPOSED STRUCTURE
- - - - - PROPOSED CONCRETE BARRIER
- - - - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - - - PROPOSED NOISE WALL



STEPHEN ST

C. AND NW TRANS. RR

BOHM DR

LYNN ST

COUNTY CC / ROSE HILL RD

WEYENBERG RD

IH 41 RAMP AND AUXILIARY LANES (6-1-C): THE WIS 55 SOUTHBOUND ON-RAMP IS A PARALLEL TYPE CONFIGURATION. THE RAMP ENTRY LIES WITHIN A MAINLINE HORIZONTAL CURVE. A LONGER PARALLEL RAMP, APPROXIMATELY 1600-Feet, WAS ADDED THROUGH THE MAINLINE CURVE AND MERGES IN NEAR THE END OF THE MAINLINE CURVE TANGENT POINT. PORTIONS OF THE IH 41 SOUTHBOUND ON-RAMP FROM CURVE PT TO RAMP TERMINAL IS BEING CONSTRUCTED WITH PROJECT ID 4650-08-71 IN 2014. THE PARALLEL RAMP AND CURVE PORTIONS OF THE ON-RAMP ARE TO BE CONSTRUCTED WITH THE FUTURE EXPANSION PROJECT.

IH 41 RAMP AND AUXILIARY LANES (6-1-D): WIS 55 NORTHBOUND OFF-RAMP FROM IH 41 IS A PARALLEL TYPE CONFIGURATION. THE RAMP ENTRY LIES WITHIN A MAINLINE HORIZONTAL CURVE. A LONGER PARALLEL RAMP, APPROXIMATELY 2100-Feet, WAS ADDED THROUGH THE MAINLINE CURVE. PORTIONS OF THE IH 41 SOUTHBOUND ON-RAMP FROM CURVE PT TO RAMP TERMINAL IS BEING CONSTRUCTED WITH PROJECT ID 4650-08-71 IN 2014. THE PARALLEL RAMP AND CURVE PORTIONS OF THE ON-RAMP ARE TO BE CONSTRUCTED WITH THE FUTURE EXPANSION PROJECT.

UTILITIES (6-1-H): TDS METROCOM HAS A BURIED FACILITY ALONG THE SOUTHERLY RIGHT OF WAY OF IH 41 BETWEEN COUNTY N AND WIS 55.

DRAFT

GEOMETRIC DEFICIENCY (6-1-F):
APPROXIMATE END OF
DEFICIENT VERTICAL GRADE
ACTUAL = 0.13%
DESIRED = 0.50%
MINIMUM = 0.30%

EXISTING RIGHT OF WAY

IH 41 SB

IH 41 NB

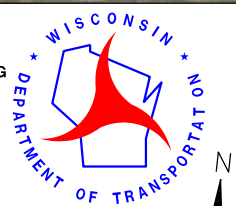
PROPOSED IH 41

UTILITIES (6-1-H):

GEOMETRIC DEFICIENCY (6-1-G):
DEFICIENT SUPERELEVATION
ACTUAL = 2.8%
DESIRED = 3.4%

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED IH 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL



0 100' 200'



MATCHLINE SEGMENT 6 / SECTION 1 / SHEET 3

6-1-C

6-1-D

MATCHLINE SEGMENT 6 / SECTION 1 / SHEET 5

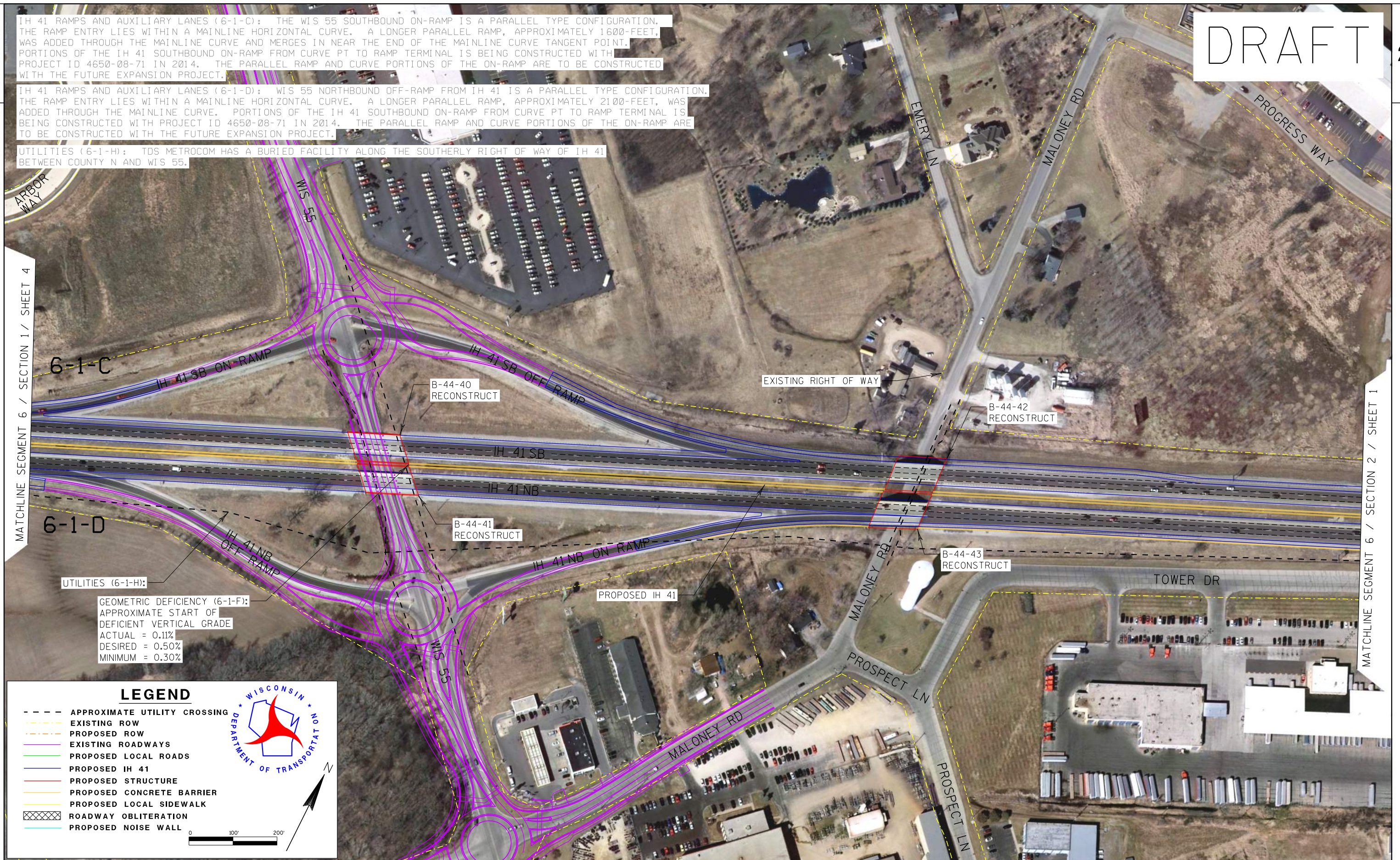
2
IH 41 RAMPS AND AUXILIARY LANES (6-1-C): THE WIS 55 SOUTHBOUND ON-RAMP IS A PARALLEL TYPE CONFIGURATION. THE RAMP ENTRY LIES WITHIN A MAINLINE HORIZONTAL CURVE. A LONGER PARALLEL RAMP, APPROXIMATELY 1600-FEET, WAS ADDED THROUGH THE MAINLINE CURVE AND MERGES IN NEAR THE END OF THE MAINLINE CURVE TANGENT POINT. PORTIONS OF THE IH 41 SOUTHBOUND ON-RAMP FROM CURVE PT TO RAMP TERMINAL IS BEING CONSTRUCTED WITH PROJECT ID 4650-08-71 IN 2014. THE PARALLEL RAMP AND CURVE PORTIONS OF THE ON-RAMP ARE TO BE CONSTRUCTED WITH THE FUTURE EXPANSION PROJECT.

2
IH 41 RAMPS AND AUXILIARY LANES (6-1-D): WIS 55 NORTHBOUND OFF-RAMP FROM IH 41 IS A PARALLEL TYPE CONFIGURATION. THE RAMP ENTRY LIES WITHIN A MAINLINE HORIZONTAL CURVE. A LONGER PARALLEL RAMP, APPROXIMATELY 2100-FEET, WAS ADDED THROUGH THE MAINLINE CURVE. PORTIONS OF THE IH 41 SOUTHBOUND ON-RAMP FROM CURVE PT TO RAMP TERMINAL IS BEING CONSTRUCTED WITH PROJECT ID 4650-08-71 IN 2014. THE PARALLEL RAMP AND CURVE PORTIONS OF THE ON-RAMP ARE TO BE CONSTRUCTED WITH THE FUTURE EXPANSION PROJECT.

2
UTILITIES (6-1-H): TDS METROCOM HAS A BURIED FACILITY ALONG THE SOUTHERLY RIGHT OF WAY OF IH 41 BETWEEN COUNTY N AND WIS 55.

MATCHLINE SEGMENT 6 / SECTION 1 / SHEET 4

MATCHLINE SEGMENT 6 / SECTION 2 / SHEET 1



2
IH 41 RAMPS AND AUXILIARY LANES (6-2-A): THE WIS 55 SOUTHBOUND OFF-RAMP FROM IH 41 IS A TAPERED TYPE CONFIGURATION. THE RAMP ENTRY LIES WITHIN THE IH 41 SOUTHBOUND BRIDGE OVER MALONEY ROAD. PORTIONS OF THE WIS 55 SOUTHBOUND OFF-RAMP FROM CURVE PT TO RAMP TERMINAL IS BEING CONSTRUCTED WITH PROJECT ID 4650-08-71 IN 2014. THE TAPERED AND CURVE PORTIONS OF THE OFF-RAMP ARE TO BE CONSTRUCTED WITH THE FUTURE EXPANSION PROJECT.

IH 41 RAMPS AND AUXILIARY LANES (6-1-B): WIS 55 NORTHBOUND ON-RAMP TO IH 41 IS A PARALLEL TYPE CONFIGURATION. THE RAMP ENTRY LIES WITHIN THE IH 41 NORTHBOUND BRIDGE OVER MALONEY ROAD. THE BRIDGE IS WITHIN THE TAPERED PORTION OF THE PARALLEL RAMP. PORTIONS OF THE WIS 55 NORTHBOUND ON-RAMP FROM CURVE PT TO RAMP TERMINAL IS BEING CONSTRUCTED WITH PROJECT ID 4650-08-71 IN 2014. THE TAPERED AND CURVE PORTIONS OF THE OFF-RAMP ARE TO BE CONSTRUCTED WITH THE FUTURE EXPANSION PROJECT.

FRONTAGE ROADS (6-2-C): TOWER DRIVE IS A FRONTAGE ROAD LOCATED JUST NORTHEAST OF MALONEY ROAD AND RUNS TO EAST LINE ROAD. IT IS APPROXIMATELY 55' TO 85' OFFSET FROM EDGE OF IH 41 NORTHBOUND LANE TO EDGE OF TOWER DRIVE LANE. THIS DISTANCE IS ADEQUATE, ALTHOUGH CONSIDERATION SHOULD BE GIVEN FOR ROADSIDE DESIGN GUIDE REQUIREMENTS FOR DRAINAGE IMPROVEMENTS AND CLEAR ZONE TRAVERSABLE SIDE SLOPES.

UTILITIES (6-2-F): TDS METROCOM HAS BURIED FACILITIES ALONG THE SOUTHERLY RIGHT OF WAY ALONG IH 41 BETWEEN WIS 55 AND COUNTY J.

UTILITIES (6-2-G): WE ENERGIES HAS BURIED GAS LINE CROSSING IH 41 AT WIS 55.

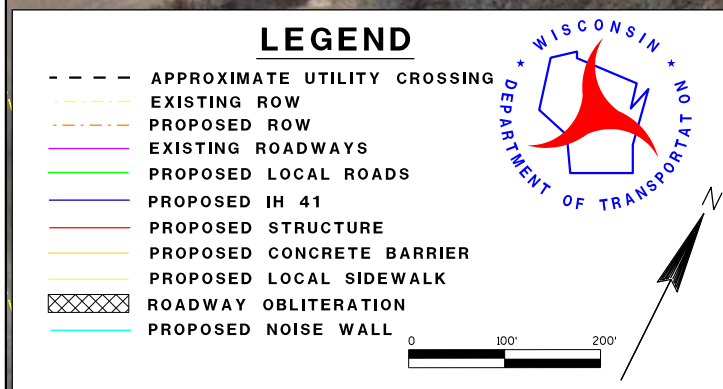
UTILITIES (6-2-H): TIME WARNER HAS AN UNDERGROUND FACILITY LOCATED APPROXIMATELY 50 FEET EAST OF WIS 55, COUNTY J.

UTILITIES (6-2-I): WE ENERGIES HAS A PAIR OF BURIED GAS LINES CROSSING IH 41 AT MALONEY ROAD, J.

DRAFT

MATCHLINE SEGMENT 6 / SECTION 1 / SHEET 5

MATCHLINE SEGMENT 6 / SECTION 2 / SHEET 2



FRONTAGE ROADS (6-2-C): TOWER DRIVE IS A FRONTAGE ROAD LOCATED JUST NORTHEAST OF MALONEY ROAD AND RUNS TO EAST LINE ROAD. IT IS APPROXIMATELY 55' TO 85' OFFSET FROM EDGE OF IH 41 NORTHBOUND LANE TO EDGE OF TOWER DRIVE LANE. THIS DISTANCE IS ADEQUATE, ALTHOUGH CONSIDERATION SHOULD BE GIVEN FOR ROADSIDE DESIGN GUIDE REQUIREMENTS FOR DRAINAGE IMPROVEMENTS AND CLEAR ZONE TRAVERSABLE SIDE SLOPES.

UTILITIES (6-2-F): TDS METROCOM HAS BURIED FACILITIES ALONG THE SOUTHERLY RIGHT OF WAY ALONG IH 41 BETWEEN WIS 55 AND COUNTY J.

DRAFT

MATCHLINE SEGMENT 6 / SECTION 2 / SHEET 1



US 41 RAMPS (7-1-A): THE SB AND NB OFFRAMPS WILL REQUIRE SOME RECONFIGURATION DUE TO THE EXIT RAMP GEOMETRICS. THE REMAINING RAMPS MATCH INTO THE EXISTING CONFIGURATION WITH ONLY MINOR CHANGES. BOTH ON RAMPS HAVE PARALLEL CONFIGURATIONS HAVING 1,200 FOOT PARALLEL SECTIONS WITH A 360 FOOT TAPER.

UTILITIES (7-1-I): TDS METROCOM HAS AN EXISTING FIBER OPTIC FACILITY WITHIN THE US 41 RIGHT OF WAY (SOUTH OF US 41 MAINLINE) STARTING AT THE BALLARD STREET CROSSING AND ENDING AT THE COUNTY J CROSSING WHERE THE FIBER OPTIC CROSSES UNDER US 41 ALONG COUNTY J.

UTILITIES (7-1-J): AMERICAN TRANSMISSION COMPANY (ATC) HAS AN EXISTING 138KV OVERHEAD POWER LINE THAT CROSSES OVER US 41 APPROXIMATELY 900 FEET EAST NORTHEAST OF THE COUNTY J OVERPASS. ATC ALSO HAS AN EXISTING 345KV OVERHEAD POWER LINE THAT CROSSES OVER US 41 APPROXIMATELY 1,600 FEET SOUTH SOUTHWEST OF THE WRIGHTSTOWN ROAD CROSSING.

DRAFT

GEOMETRIC DEFICIENCY (7-1-D):
APPROXIMATE START OF
DEFICIENT VERTICAL GRADE
ACTUAL: 0.24%
DESIRED: 0.50%
MINIMUM: 0.30%

END SEGMENT 6

US 41 SB ON RAMP

US 41 SB

US 41 NB

7-1-A

US 41 NB OFF RAMP

US 41 NB ON RAMP

US 41 SB OFF RAMP

7-1-A

PROPOSED US 41

UTILITIES (7-1-J)

MATCH LINE

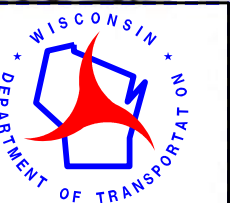
EXISTING RIGHT OF WAY

CONSTRUCTION
EASEMENTADD PARTIAL
BYPASS LANE

GEOMETRIC DEFICIENCY (7-1-D):
APPROXIMATE END OF
DEFICIENT VERTICAL GRADE
ACTUAL: 0.24%
DESIRED: 0.50%
MINIMUM: 0.30%

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED US 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL

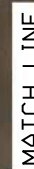


0 100' 200'












US 41 FRONTAGE ROADS (7-1-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE WEST 41 FRONTAGE ROAD OR EAST 41 FRONTAGE ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

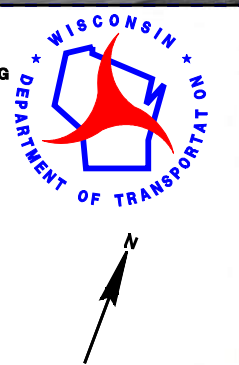
UTILITIES (7-1-K): TIME WARNER HAS BURIED FACILITIES CROSSING US 41 APPROXIMATELY 2554 FEET NORTHWEST OF COUNTY J.

EXHIBIT 7-2 OPTIONAL CONCRETE BARRIER QUANTITY = 2,740 LF
QUANTITY IS NOT INCLUDED IN THE ESTIMATE; 0 LF REQUIRED



LEGEND

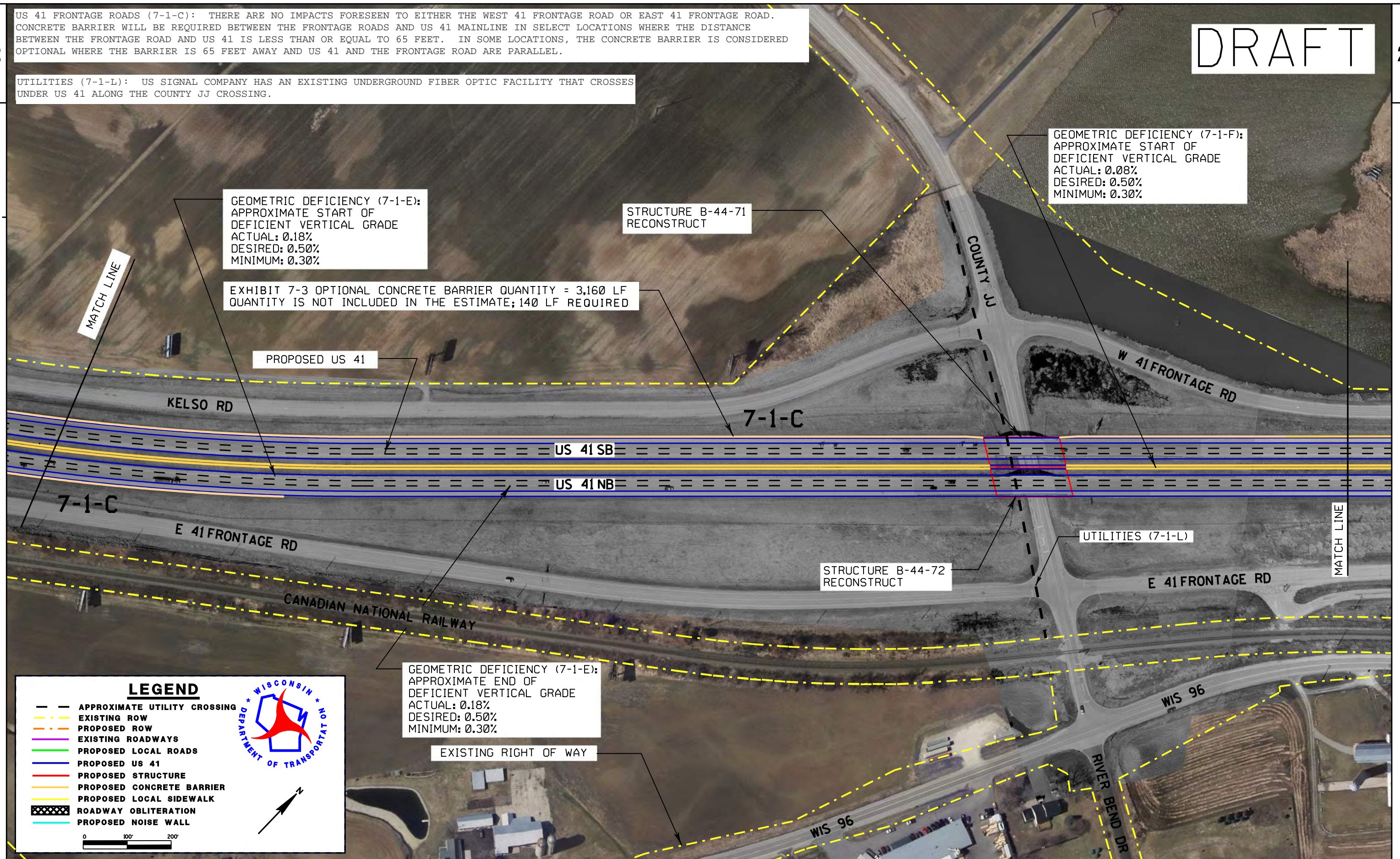
-  APPROXIMATE UTILITY CROSSING
 EXISTING ROW
 PROPOSED ROW
 EXISTING ROADWAYS
 PROPOSED LOCAL ROADS
 PROPOSED US 41
 PROPOSED STRUCTURE
 PROPOSED CONCRETE BARRIER
 PROPOSED LOCAL SIDEWALK
 ROADWAY OBLITERATION
 PROPOSED NOISE WALL



US 41 FRONTAGE ROADS (7-1-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE WEST 41 FRONTAGE ROAD OR EAST 41 FRONTAGE ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

UTILITIES (7-1-L): US SIGNAL COMPANY HAS AN EXISTING UNDERGROUND FIBER OPTIC FACILITY THAT CROSSES UNDER US 41 ALONG THE COUNTY JJ CROSSING.

DRAFT



DRAFT

US 41 FRONTAGE ROADS (7-1-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE WEST 41 FRONTAGE ROAD OR EAST 41 FRONTAGE ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

UTILITIES (7-1-M): TIME WARNER HAS BURIED FACILITIES CROSSING US 41 APPROXIMATELY 3450 FEET NORTHWEST OF COUNTY JJ.

GEOMETRIC DEFICIENCY (7-1-F):
APPROXIMATE END OF
DEFICIENT VERTICAL GRADE
ACTUAL: 0.08%
DESIRED: 0.50%
MINIMUM: 0.30%

EXHIBIT 7-4 OPTIONAL CONCRETE BARRIER QUANTITY = 1,170 LF
QUANTITY IS NOT INCLUDED IN THE ESTIMATE; 3,510 LF REQUIRED

UTILITIES (7-1-M)

PROPOSED US 41

W 41 FRONTAGE RD

US 41 SB

US 41 NB

7-1-C

E 41 FRONTAGE RD

E 41 FRONTAGE RD

CANADIAN NATIONAL RAILWAY

TOWN CLUB RD

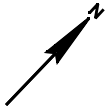
WIS 96

TOWN CLUB RD

EXISTING RIGHT OF WAY

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED US 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXX ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL

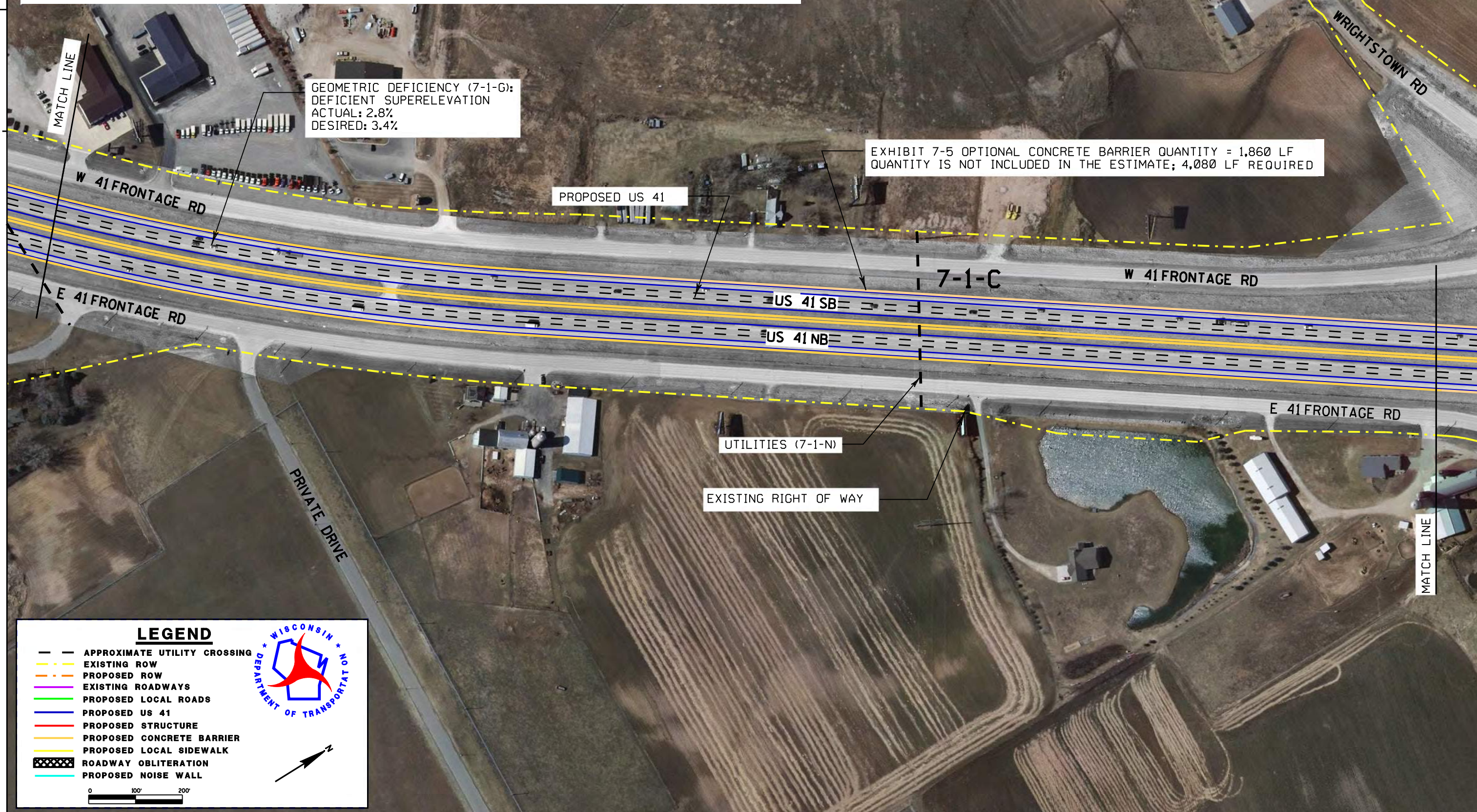


0 100' 200'

US 41 FRONTAGE ROADS (7-1-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE WEST 41 FRONTAGE ROAD OR EAST 41 FRONTAGE ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

UTILITIES (7-1-N): ATC HAS AN EXISTING 345KV OVERHEAD POWER LINE THAT CROSSES OVER US 41 APPROXIMATELY 1,600 FEET SOUTH SOUTHWEST OF THE WRIGHTSTOWN ROAD CROSSING.

DRAFT

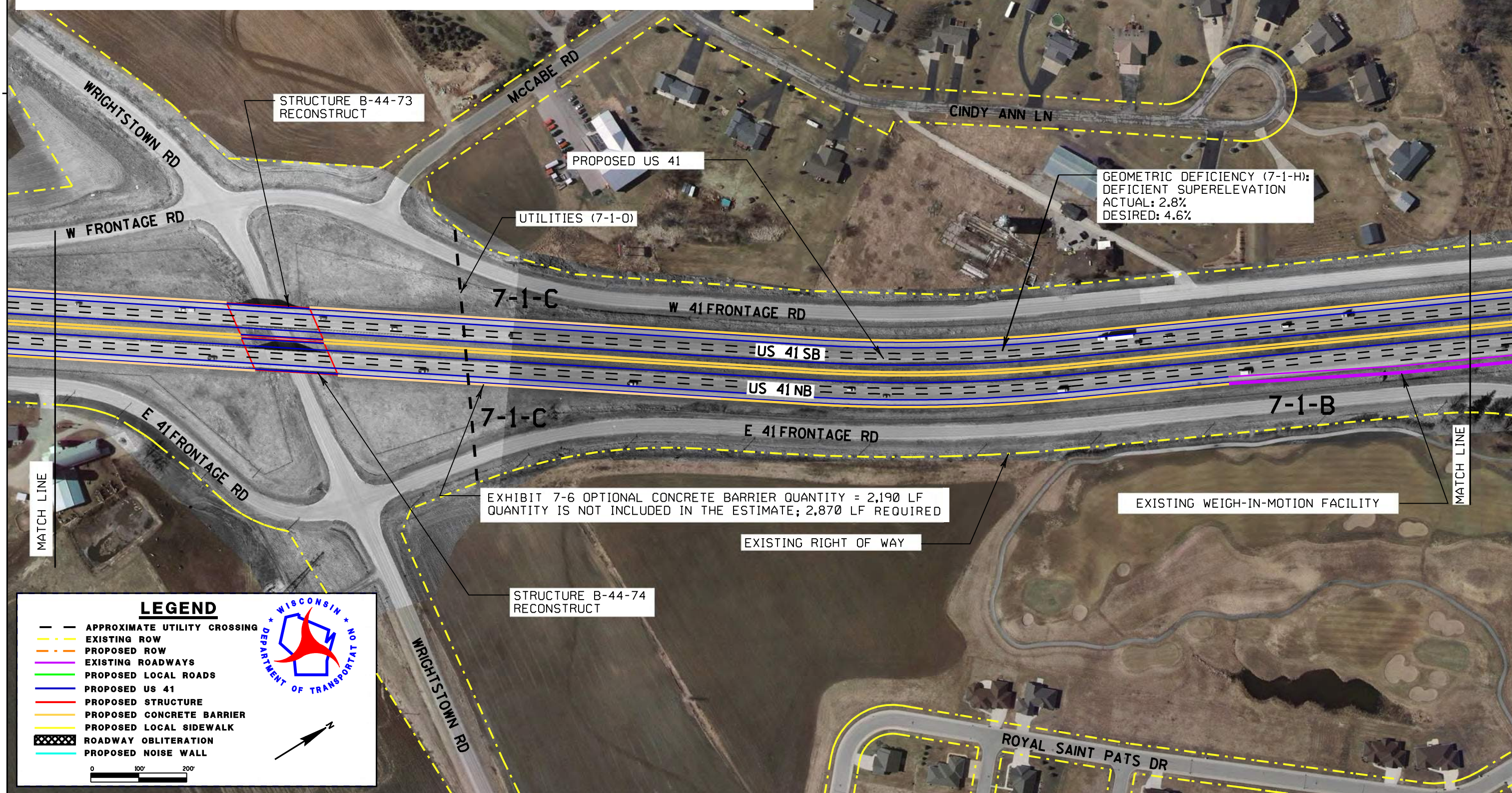


US 41 EXISTING WEIGH IN MOTION FACILITY (7-1-B): US 41 NB FROM THE WEIGH IN MOTION FACILITY TO JUST NORTH OF COUNTY U INTERCHANGE WILL BE RECONFIGURED TO INCLUDE AN AUXILIARY LANE TO IMPROVE MERGING MOVEMENTS BETWEEN TRAFFIC ENTERING US 41 FROM THE WEIGH IN MOTION FACILITY AND VEHICLES EXITING US 41 NB ONTO COUNTY U. THE LENGTH OF THE PROPOSED AUXILIARY LANE IS APPROXIMATELY 3,400 FEET AND IT EXTENDS OVER THE COUNTY U OVERPASS.

US 41 FRONTAGE ROADS (7-1-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE WEST 41 FRONTAGE ROAD OR EAST 41 FRONTAGE ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

UTILITIES (7-1-O): TIME WARNER HAS A BURIED FACILITIES CROSSING US 41 APPROXIMATELY 380 FEET NORTHEAST OF WRIGHTSTOWN RD

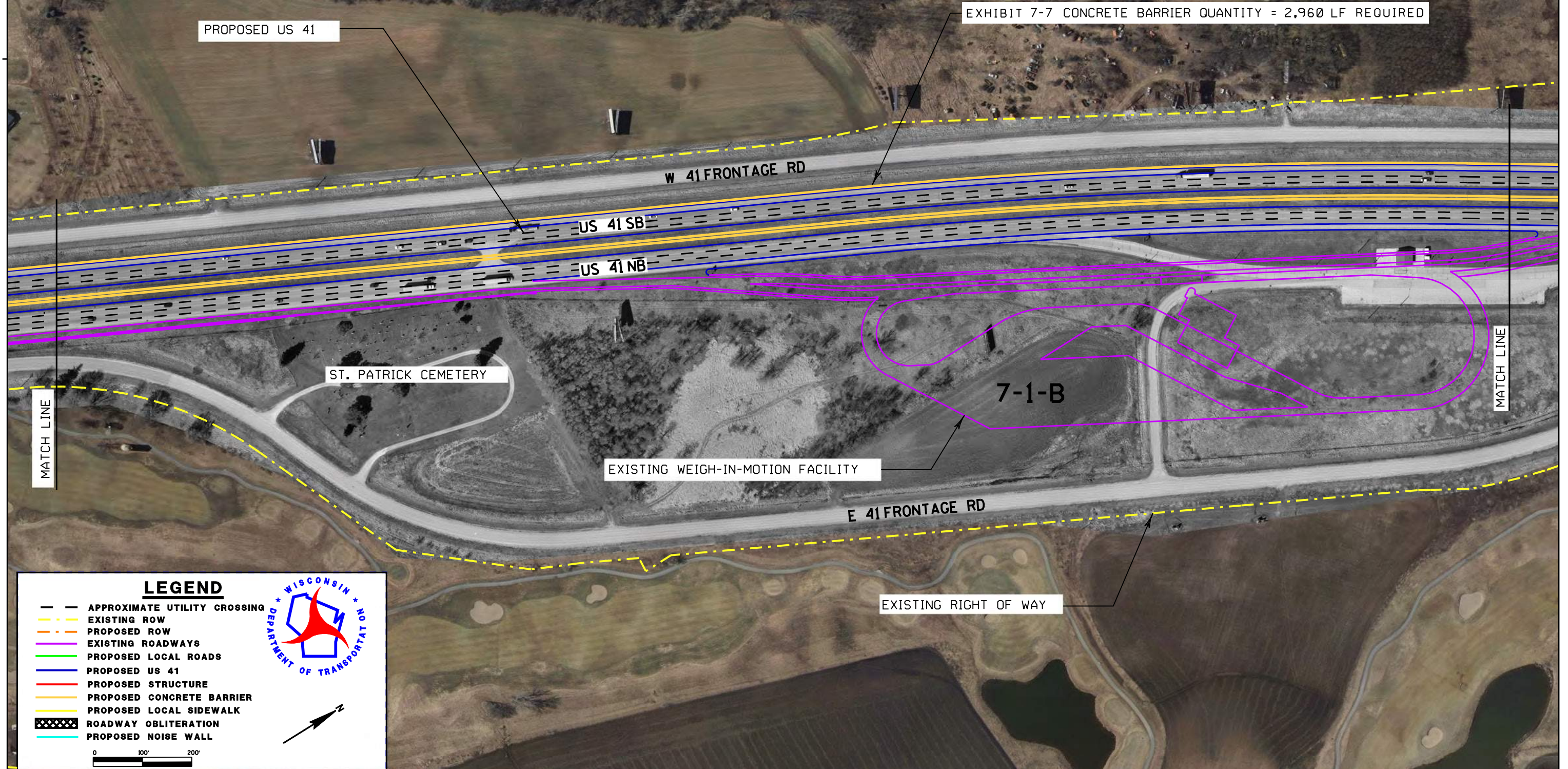
DRAFT



US 41 EXISTING WEIGH IN MOTION FACILITY (7-1-B): US 41 NB FROM THE WEIGH IN MOTION FACILITY TO JUST NORTH OF COUNTY U INTERCHANGE WILL BE RECONFIGURED TO INCLUDE AN AUXILIARY LANE TO IMPROVE MERGING MOVEMENTS BETWEEN TRAFFIC ENTERING US 41 FROM THE WEIGH IN MOTION FACILITY AND VEHICLES EXITING US 41 NB ONTO COUNTY U. THE LENGTH OF THE PROPOSED AUXILIARY LANE IS APPROXIMATELY 3,400 FEET AND IT EXTENDS OVER THE COUNTY U OVERPASS.

US 41 FRONTAGE ROADS (7-1-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE WEST 41 FRONTAGE ROAD OR EAST 41 FRONTAGE ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

DRAFT



US 41 EXISTING WEIGH IN MOTION FACILITY (7-1-B): US 41 NB FROM THE WEIGH IN MOTION FACILITY TO JUST NORTH OF COUNTY U INTERCHANGE WILL BE RECONFIGURED TO INCLUDE AN AUXILIARY LANE TO IMPROVE MERGING MOVEMENTS BETWEEN TRAFFIC ENTERING US 41 FROM THE WEIGH IN MOTION FACILITY AND VEHICLES EXITING US 41 NB ONTO COUNTY U. THE LENGTH OF THE PROPOSED AUXILIARY LANE IS APPROXIMATELY 3,400 FEET AND IT EXTENDS OVER THE COUNTY U OVERPASS.

US 41 FRONTAGE ROADS (7-1-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE WEST 41 FRONTAGE ROAD OR EAST 41 FRONTAGE ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

UTILITIES (7-1-P): ANR PIPELINE HAS AN EXISTING 30-INCH PIPELINE FACILITY THAT CROSSES UNDER US 41 APPROXIMATELY 2,200 FEET SOUTH OF SOUTH SOUTHWEST OF THE COUNTY U OVERPASS STRUCTURE.

DRAFT

UTILITIES (7-1-P)

EXHIBIT 7-8 OPTIONAL CONCRETE BARRIER QUANTITY = 1,070 LF
QUANTITY IS NOT INCLUDED IN THE ESTIMATE; 1,900 LF REQUIRED

PROPOSED US 41

W 41 FRONTAGE RD

7-1-C

US 41 SB ENTRANCE RAMP

US 41 SB

US 41 NB

E 41 FRONTAGE RD

7-1-C

US 41 NB EXIT RAMP

7-1-B

EXISTING WEIGH-IN-MOTION FACILITY

EXISTING RIGHT OF WAY

MATCH LINE

MATCH LINE

LEGEND

- — APPROXIMATE UTILITY CROSSING
- — EXISTING ROW
- — PROPOSED ROW
- — EXISTING ROADWAYS
- — PROPOSED LOCAL ROADS
- — PROPOSED US 41
- — PROPOSED STRUCTURE
- — PROPOSED CONCRETE BARRIER
- — PROPOSED LOCAL SIDEWALK
- XXXX ROADWAY OBLITERATION
- — PROPOSED NOISE WALL

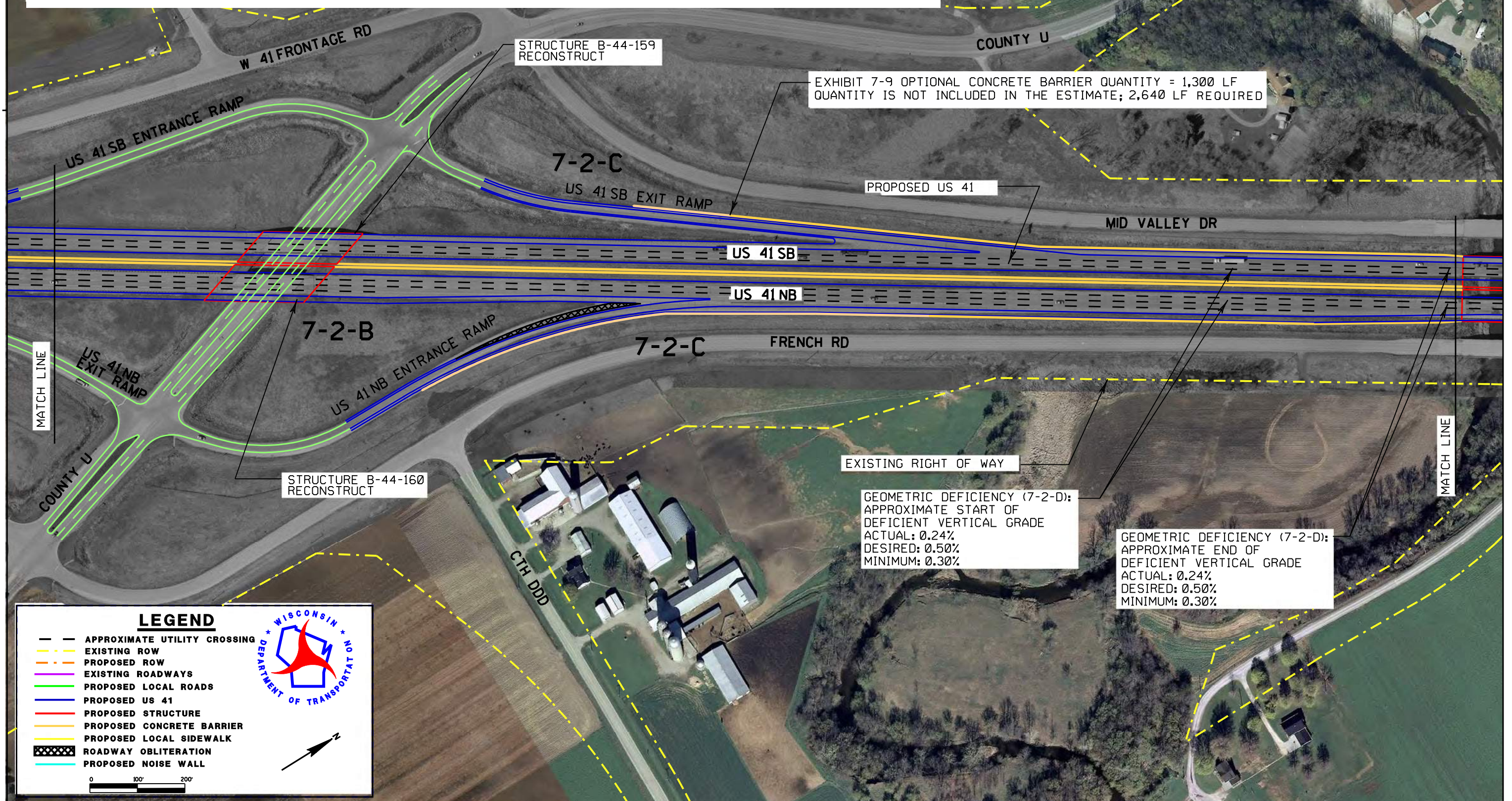


0 100' 200'

US 41 EXISTING WEIGH IN MOTION FACILITY (7-2-B): US 41 NB FROM THE WEIGH IN MOTION FACILITY TO JUST NORTH OF COUNTY U INTERCHANGE WILL BE RECONFIGURED TO INCLUDE AN AUXILIARY LANE TO IMPROVE MERGING MOVEMENTS BETWEEN TRAFFIC ENTERING US 41 FROM THE WEIGH IN MOTION FACILITY AND VEHICLES EXITING US 41 NB ONTO COUNTY U. THE LENGTH OF THE PROPOSED AUXILIARY LANE IS APPROXIMATELY 3,400 FEET AND IT EXTENDS OVER THE COUNTY U OVERPASS.

US 41 FRONTAGE ROADS (7-2-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE MID VALLEY DRIVE OR FRENCH ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

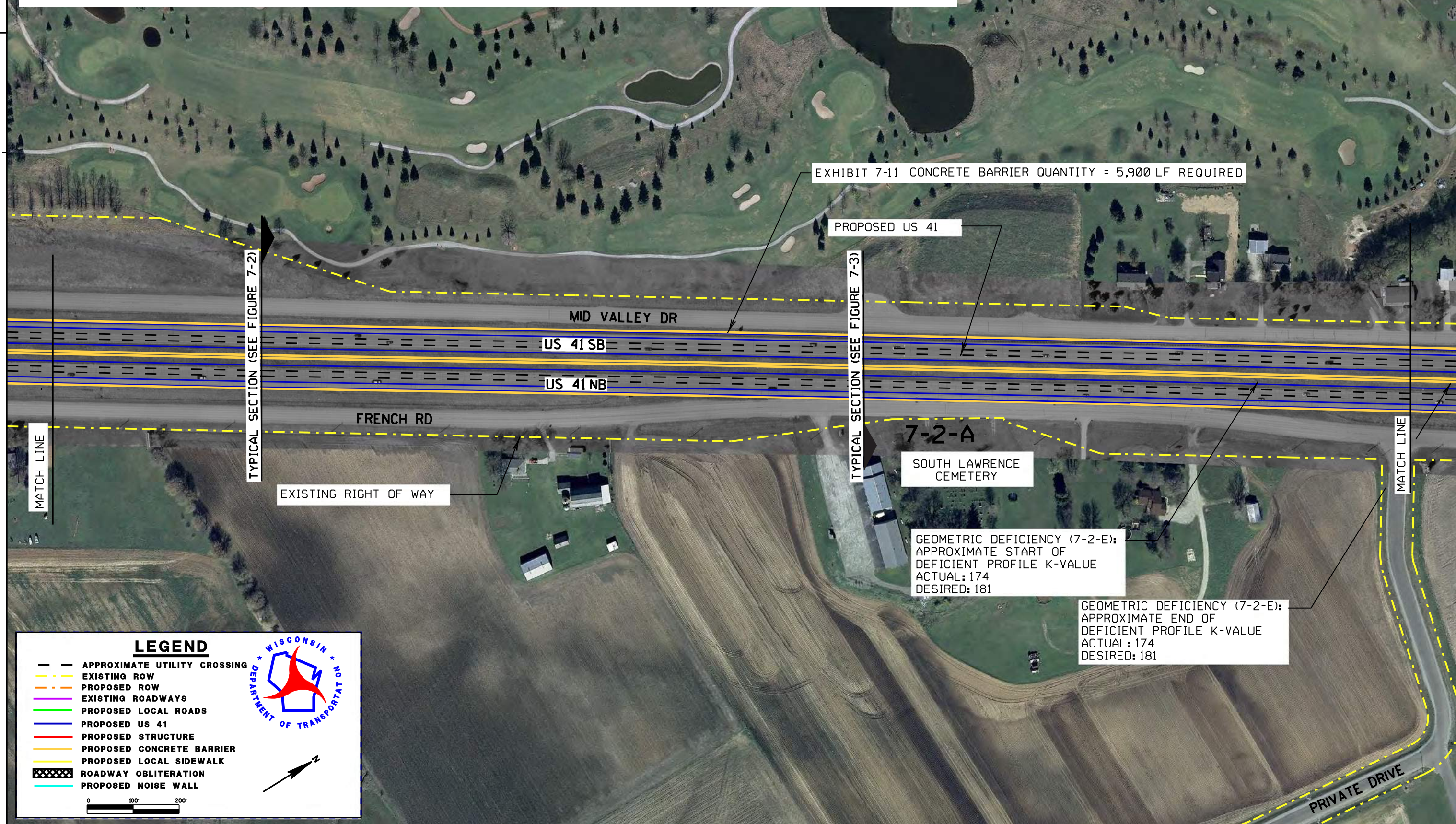
DRAFT





US 41 HORIZONTAL ALIGNMENT & TYPICAL SECTION (7-2-A): ADJACENT TO THE ST. LAWRENCE CEMETERY (APPROX. 3,000 FEET TOTAL AND 1,000 FOOT TAPERS) THE HORIZONTAL ALIGNMENT JOGS WEST TO APPROXIMATELY 4 FEET PAST THE EXISTING HORIZONTAL ALIGNMENT TO MAINTAIN THE SAME NB OUTSIDE BARRIER LOCATION. THE ALIGNMENT JOGS BACK TO THE EAST TO MATCH UP WITH THE EXISTING HORIZONTAL ALIGNMENT ONCE PAST THE CEMETERY.

DRAFT

**LEGEND**

- — APPROXIMATE UTILITY CROSSING
- — EXISTING ROW
- — PROPOSED ROW
- — EXISTING ROADWAYS
- — PROPOSED LOCAL ROADS
- — PROPOSED US 41
- — PROPOSED STRUCTURE
- — PROPOSED CONCRETE BARRIER
- — PROPOSED LOCAL SIDEWALK
- XXXX ROADWAY OBLITERATION
- — PROPOSED NOISE WALL



0 100' 200'

UTILITIES (7-2-G): TIME WARNER HAS BURED FACILITIES CROSSING US 41 AT GOLDEN GLOW RD.

UTILITIES (7-2-H): AMERICAN TRANSMISSION COMPANY (ATC) HAS AN EXISTING 138KV OVERHEAD POWER LINE THAT CROSSES 1,430 FEET NORTHEAST OF GOLDEN GLOW ROAD (138KV).

DRAFT



DRAFT

US 41 FRONTAGE ROADS (7-2-C): THERE ARE NO IMPACTS FORESEEN TO EITHER THE MID VALLEY DRIVE OR FRENCH ROAD. CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

EXHIBIT 7-13 OPTIONAL CONCRETE BARRIER QUANTITY = 480 LF
QUANTITY IS NOT INCLUDED IN THE ESTIMATE; 4,640 LF REQUIRED

PROPOSED US 41

MID VALLEY DR

US 41 SB

US 41 NB

FRENCH RD

7-2-C

7-2-C

EXISTING RIGHT OF WAY

FRENCH RD

MATCH LINE

MATCH LINE

LEGEND

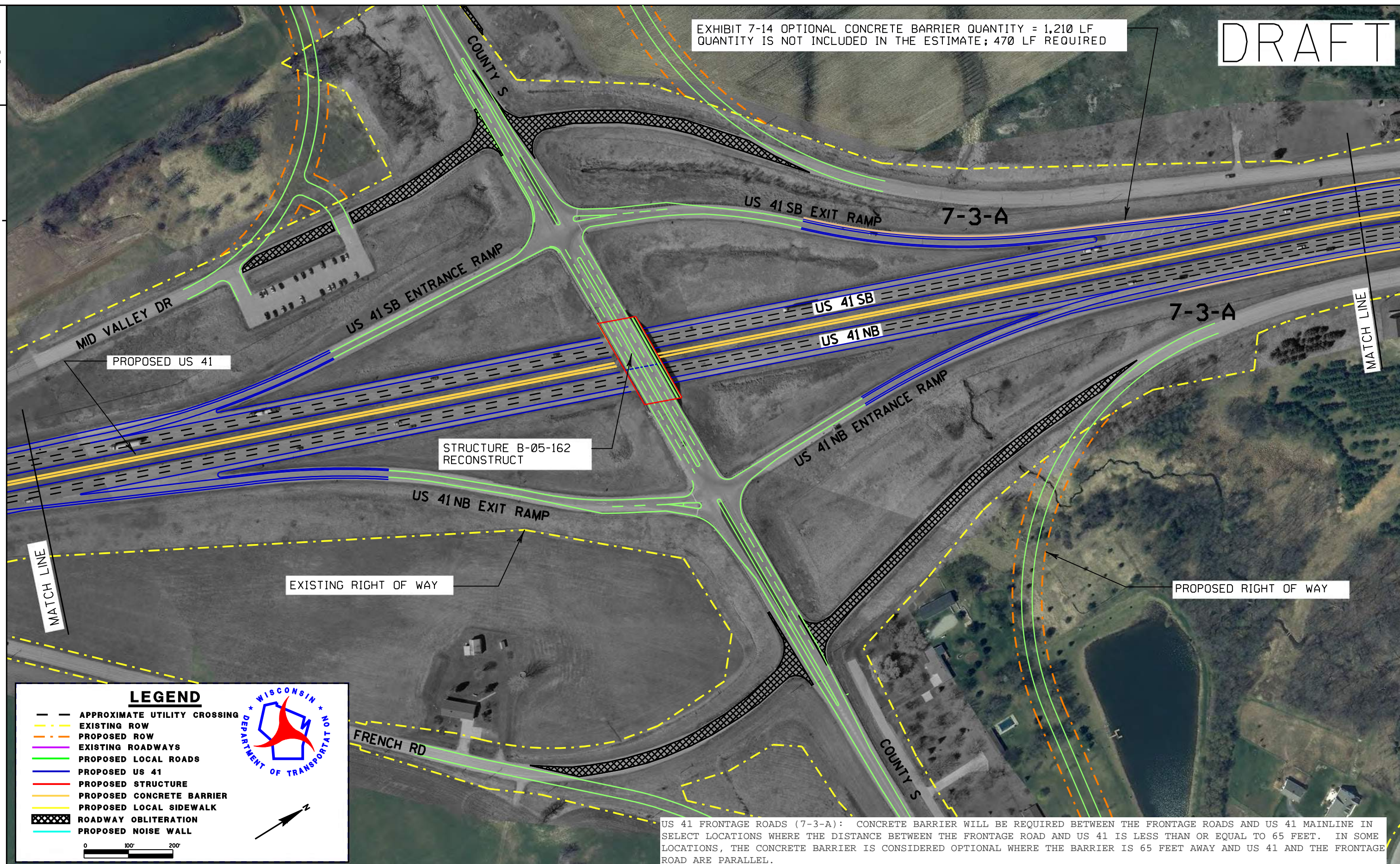
- APPROXIMATE UTILITY CROSSING
- EXISTING ROW
- PROPOSED ROW
- EXISTING ROADWAYS
- PROPOSED LOCAL ROADS
- PROPOSED US 41
- PROPOSED STRUCTURE
- PROPOSED CONCRETE BARRIER
- PROPOSED LOCAL SIDEWALK
- ROADWAY OBLITERATION
- PROPOSED NOISE WALL



0 100' 200'

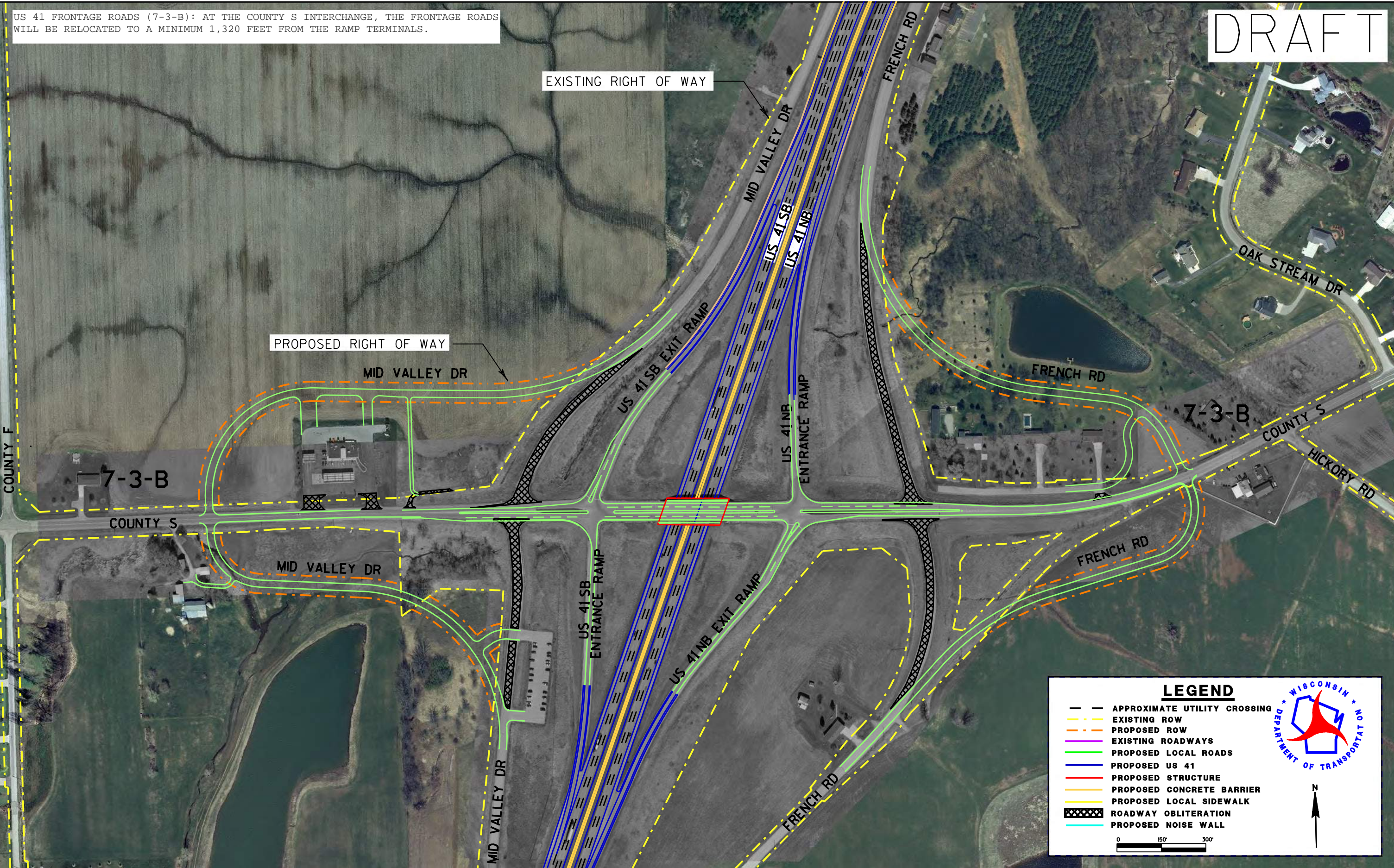
DRAFT

EXHIBIT 7-14 OPTIONAL CONCRETE BARRIER QUANTITY = 1,210 LF
QUANTITY IS NOT INCLUDED IN THE ESTIMATE; 470 LF REQUIRED

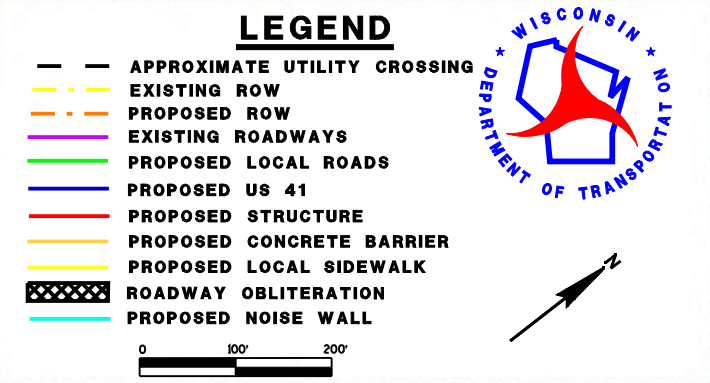


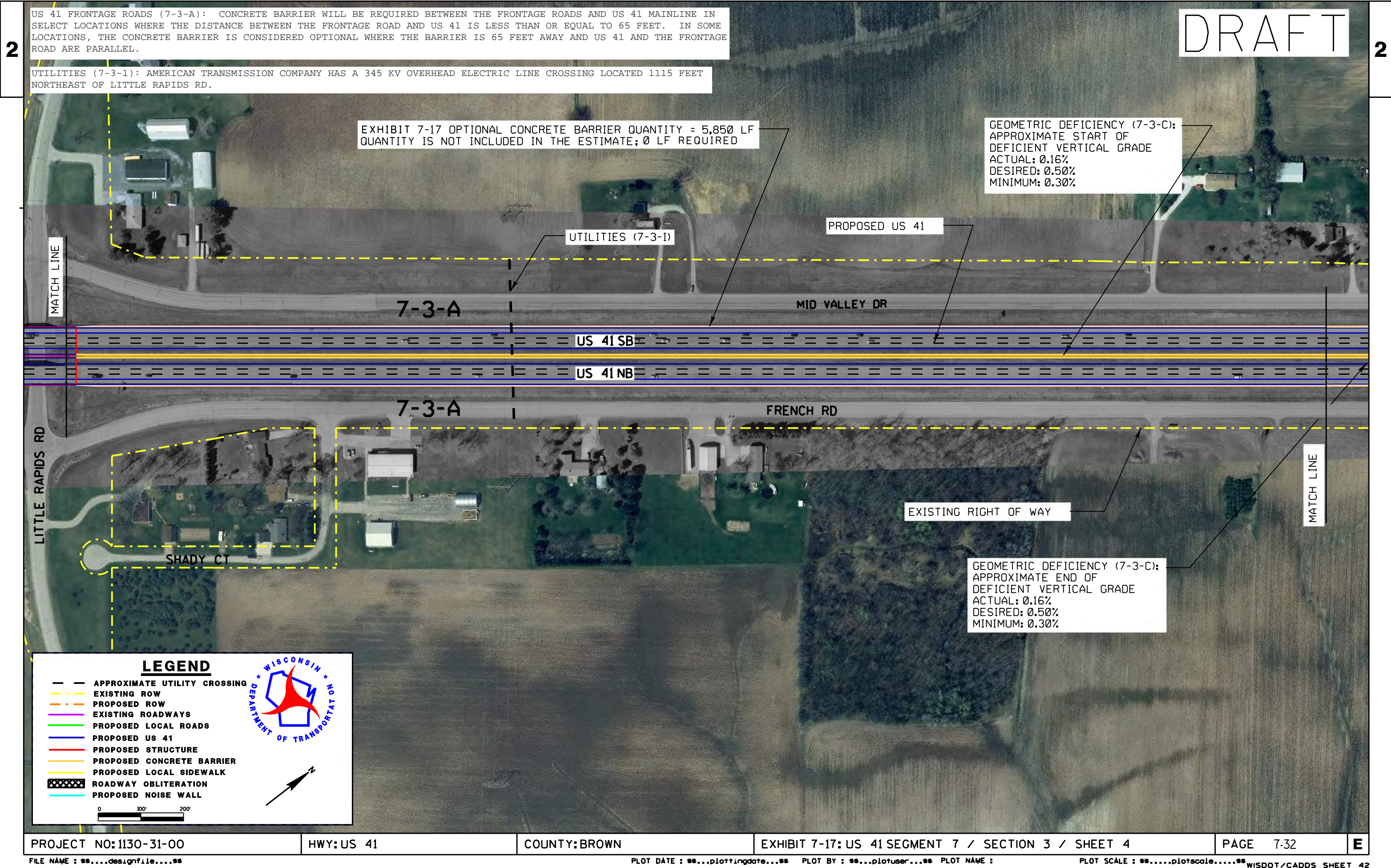
US 41 FRONTAGE ROADS (7-3-B): AT THE COUNTY S INTERCHANGE, THE FRONTAGE ROADS WILL BE RELOCATED TO A MINIMUM 1,320 FEET FROM THE RAMP TERMINALS.

DRAFT



UTILITIES (7-3-H): ANR PIPELINE COMPANY HAS BURIED GAS CROSSINGS (6-INCH AND 8-INCH) LOCATED 2,100 FEET NORTHEAST OF CTH S.





DRAFT

US 41 FRONTAGE ROADS (7-3-A): CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

EXHIBIT 7-18 OPTIONAL CONCRETE BARRIER QUANTITY = 5,900 LF
QUANTITY IS NOT INCLUDED IN THE ESTIMATE; 0 LF REQUIRED

GEOMETRIC DEFICIENCY (7-3-D):
APPROXIMATE END OF
DEFICIENT VERTICAL GRADE
ACTUAL: 0.14%
DESIRED: 0.50%
MINIMUM: 0.30%

PROPOSED US 41

MATCH LINE

7-3-A

MID VALLEY DR

US 41 SB

US 41 NB

7-3-A

FRENCH RD

LARRY LN

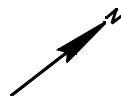
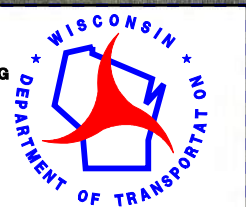
EXISTING RIGHT OF WAY

MATCH LINE

GEOMETRIC DEFICIENCY (7-3-D):
APPROXIMATE START OF
DEFICIENT VERTICAL GRADE
ACTUAL: 0.14%
DESIRED: 0.50%
MINIMUM: 0.30%

LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED US 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL



0 100' 200'

DRAFT

US 41 FRONTAGE ROADS (7-3-A): CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

EXHIBIT 7-19 OPTIONAL CONCRETE BARRIER QUANTITY = 5,900 LF
QUANTITY IS NOT INCLUDED IN THE ESTIMATE; 0 LF REQUIRED

MATCH LINE

7-3-A

BIRCHWOOD RD

MID VALLEY DR

PROPOSED US 41

US 41 SB

US 41 NB

7-3-A

FRENCH RD

GEOMETRIC DEFICIENCY (7-3-E):
APPROXIMATE START OF
DEFICIENT VERTICAL GRADE
ACTUAL: 0.11%
DESIRED: 0.50%
MINIMUM: 0.30%

FRENCH CT

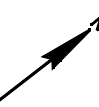
MATCH LINE

GEOMETRIC DEFICIENCY (7-3-E):
APPROXIMATE END OF
DEFICIENT VERTICAL GRADE
ACTUAL: 0.11%
DESIRED: 0.50%
MINIMUM: 0.30%

EXISTING RIGHT OF WAY

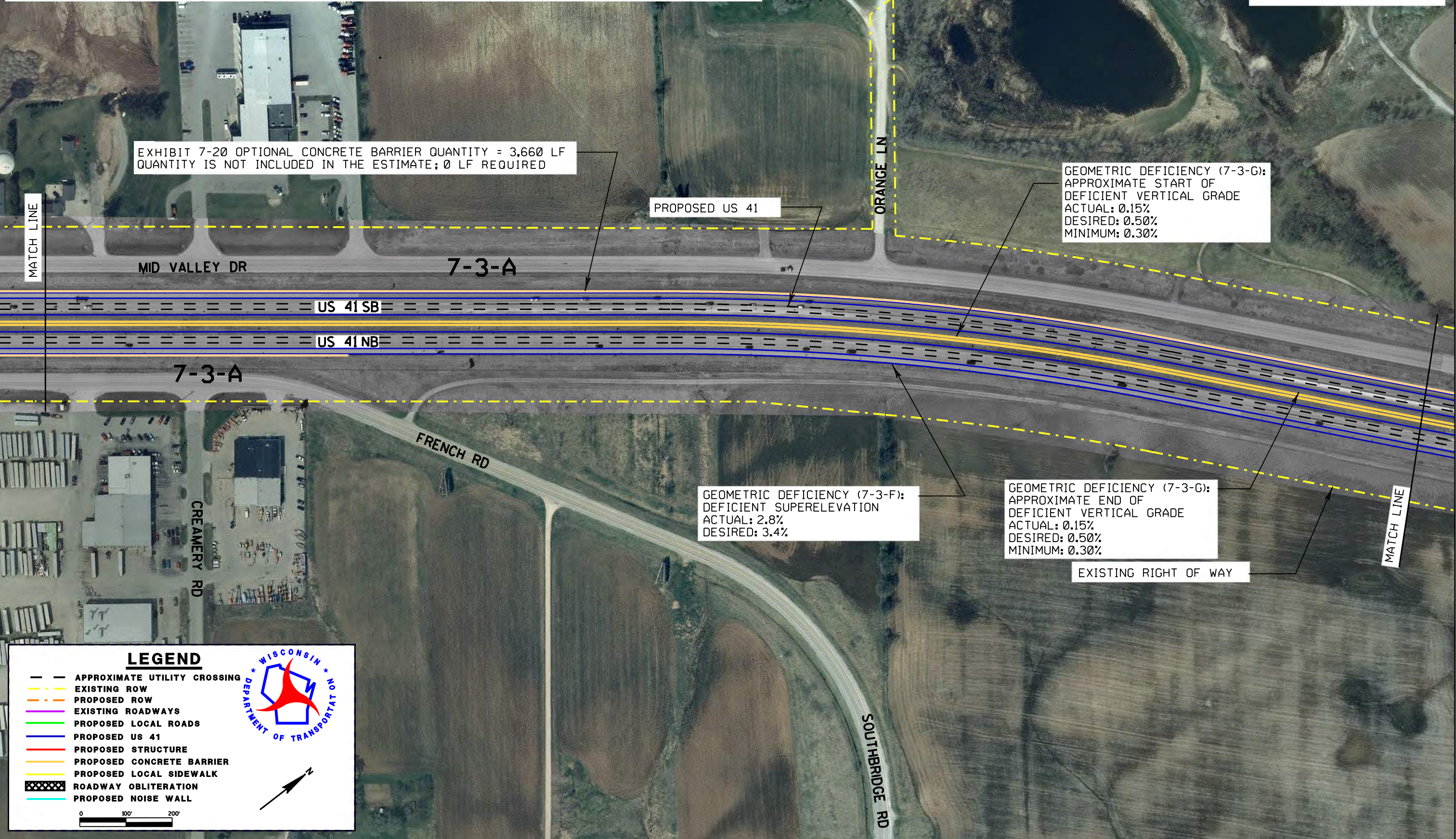
LEGEND

- APPROXIMATE UTILITY CROSSING
- - - EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING ROADWAYS
- - - PROPOSED LOCAL ROADS
- - - PROPOSED US 41
- - - PROPOSED STRUCTURE
- - - PROPOSED CONCRETE BARRIER
- - - PROPOSED LOCAL SIDEWALK
- XXXXX ROADWAY OBLITERATION
- - - PROPOSED NOISE WALL



US 41 FRONTAGE ROADS (7-3-A): CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

DRAFT



LEGEND

- APPROXIMATE UTILITY CROSSING
- EXISTING ROW
- PROPOSED ROW
- EXISTING ROADWAYS
- PROPOSED LOCAL ROADS
- PROPOSED US 41
- PROPOSED STRUCTURE
- PROPOSED CONCRETE BARRIER
- PROPOSED LOCAL SIDEWALK
- XXXX ROADWAY OBLITERATION
- PROPOSED NOISE WALL

US 41 FRONTAGE ROADS (7-3-A): CONCRETE BARRIER WILL BE REQUIRED BETWEEN THE FRONTAGE ROADS AND US 41 MAINLINE IN SELECT LOCATIONS WHERE THE DISTANCE BETWEEN THE FRONTAGE ROAD AND US 41 IS LESS THAN OR EQUAL TO 65 FEET. IN SOME LOCATIONS, THE CONCRETE BARRIER IS CONSIDERED OPTIONAL WHERE THE BARRIER IS 65 FEET AWAY AND US 41 AND THE FRONTAGE ROAD ARE PARALLEL.

DRAFT

EXHIBIT 7-21 OPTIONAL CONCRETE BARRIER QUANTITY = 480 LF
QUANTITY IS NOT INCLUDED IN THE ESTIMATE; 0 LF REQUIRED

MATCH PROJECT 1133-06-71

7-3-A

MATCH LINE

PROPOSED US 41

MID VALLEY DR

US 41 SB

US 41 NB

PDO DR

EXISTING RIGHT OF WAY

LEGEND

- — APPROXIMATE UTILITY CROSSING
- — EXISTING ROW
- — PROPOSED ROW
- — EXISTING ROADWAYS
- — PROPOSED LOCAL ROADS
- — PROPOSED US 41
- — PROPOSED STRUCTURE
- — PROPOSED CONCRETE BARRIER
- — PROPOSED LOCAL SIDEWALK
- ROADWAY OBLITERATION
- PROPOSED NOISE WALL

0 100' 200'