FDOT DDI Design Webinar Series
DDI Plans Detailing & Public Involvement

September 7, 2021

FDOT DDI Design Webinar Series

- **Florida Department of Transportation (FDOT) will be hosting a webinar series focused on design and analysis of Diverging Diamond Interchanges (DDI). This series will present guidance on the major elements of DDI project development, including Geometric Design, Signing and Pavement Markings, Traffic Operations, Signalization, Plan Detailing, and Public Involvement.**
- **FDOT Developmental Design Criteria, D217 Diverging Diamond Interchanges, will be covered as well as national design guidance and industry best practices.**
- **Intended Audience: The intended audience for this training includes transportation professionals involved in the planning, design, and review of Diverging Diamond Interchanges.**
- **Schedule:**

DDI Overview	June 15, 2021	2p-5p
DDI Geometric Design	June 29, 2021	2p-3p
DDI Signing and Pavement Marking	July 16, 2021	2p-3p
DDI Traffic Operations	August 10, 2021	2p-3p
DDI Multimodal Accommodations	August 24, 2021	2p-3p
DDI Plans Detailing & Public Involvement	September 7, 2021	2p-3p

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DDI Plans Detailing & Public Involvement	**September 7, 2021**	**2p-3p**

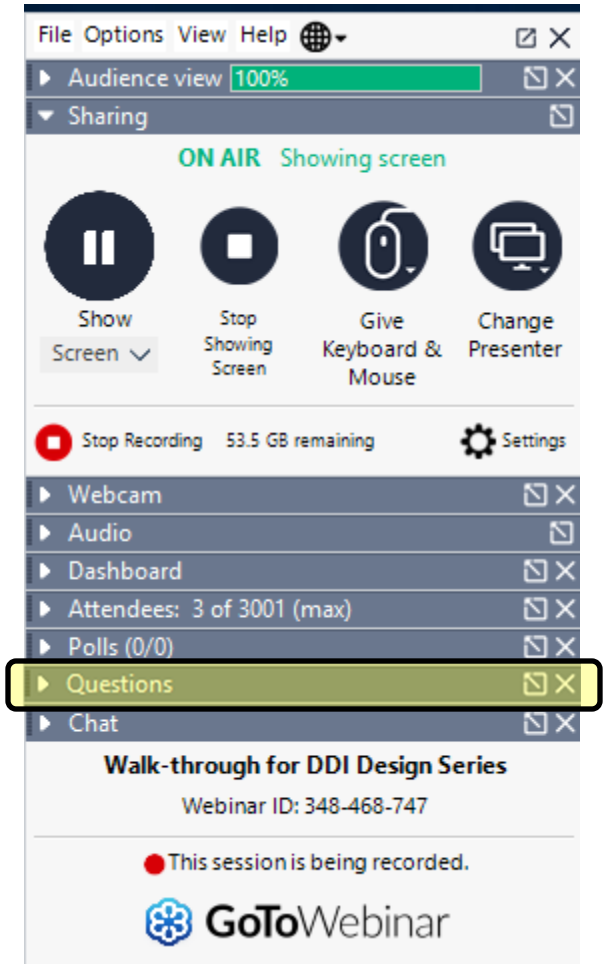
DDI Overview – Webinar Instructors

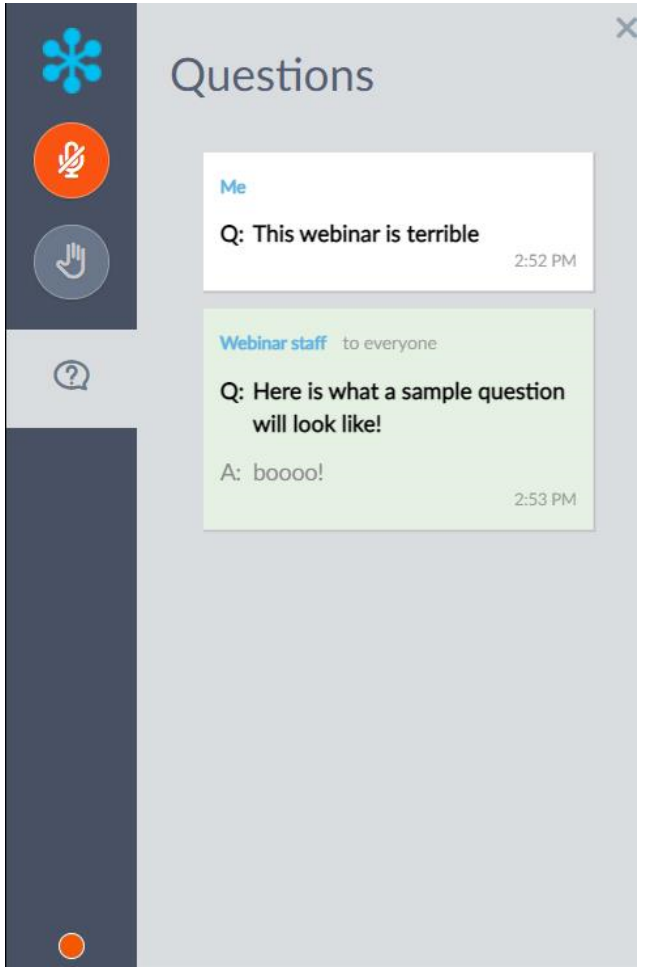
David Amato, PE
FDOT Roadway Design Engineer
850.414.4792
david.amato@dot.state.fl.us

Brian Toombs, PE
Burgess & Niple, Inc.
614.459.2050
brian.toombs@burgessniple.com

DDI Overview – Webinar Logistics

- You are MUTED upon entry
- Please ask questions via *Questions* dialogue box





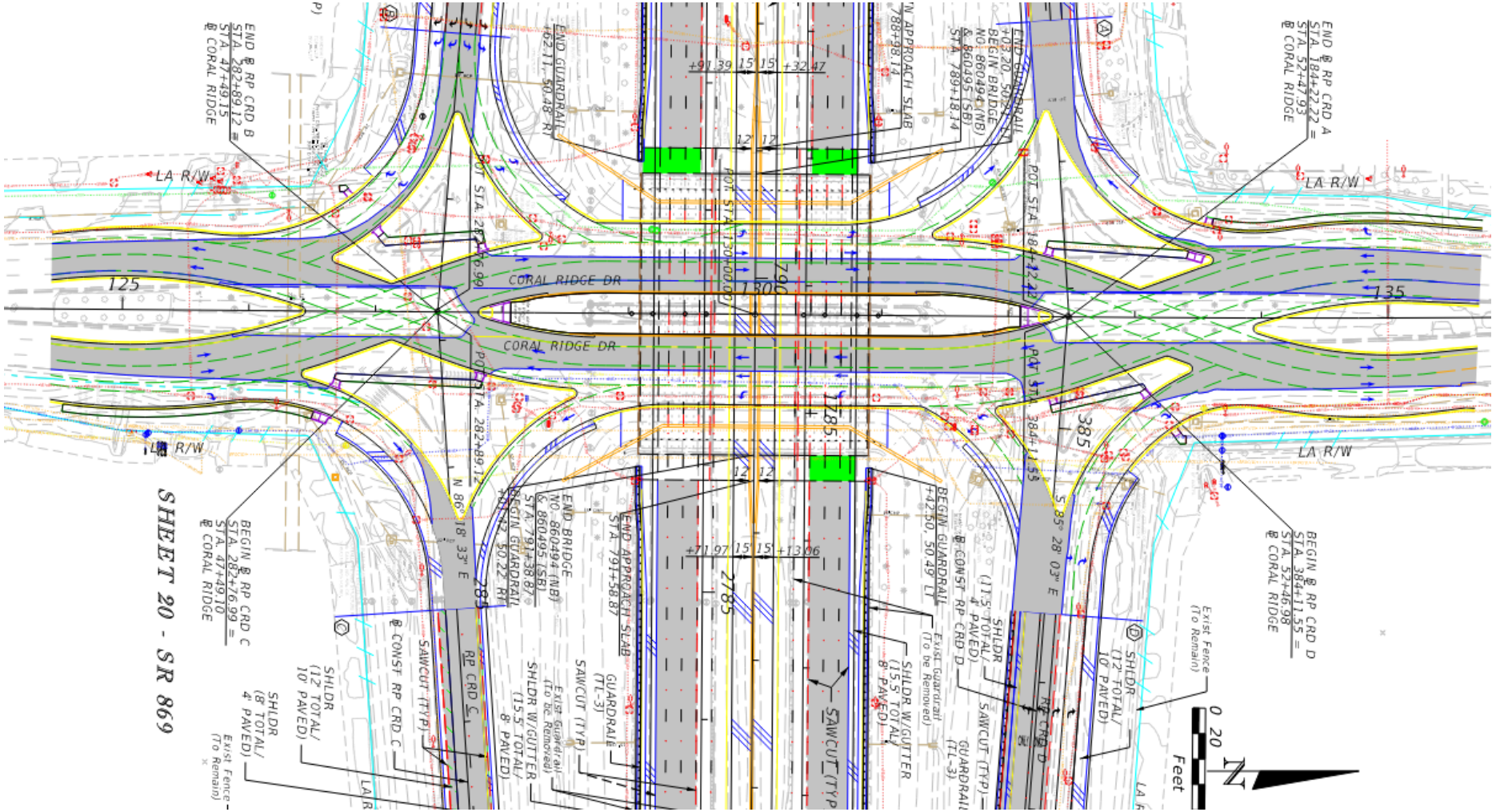
DDI Plans Detailing and Public Involvement - AGENDA

- **Plan Detailing**
  - Examples of Best Practices
- **Constructability**
  - Construction Phasing
  - Maintenance and Operations
- **Public Outreach**
  - Public Education
  - Public Involvement
- **“Clean Up”**
- **Additional DDI Resources**

PLAN DETAILING

Plan Detailing

- **Plan Content**
  - Early Reviews
    - Horizontal and vertical geometry
    - Truck turn exhibits (see FDOT Developmental Design Criteria)
    - Traffic analysis
    - Signing plan
    - Large roll plot schematic – show entire DDI on one sheet



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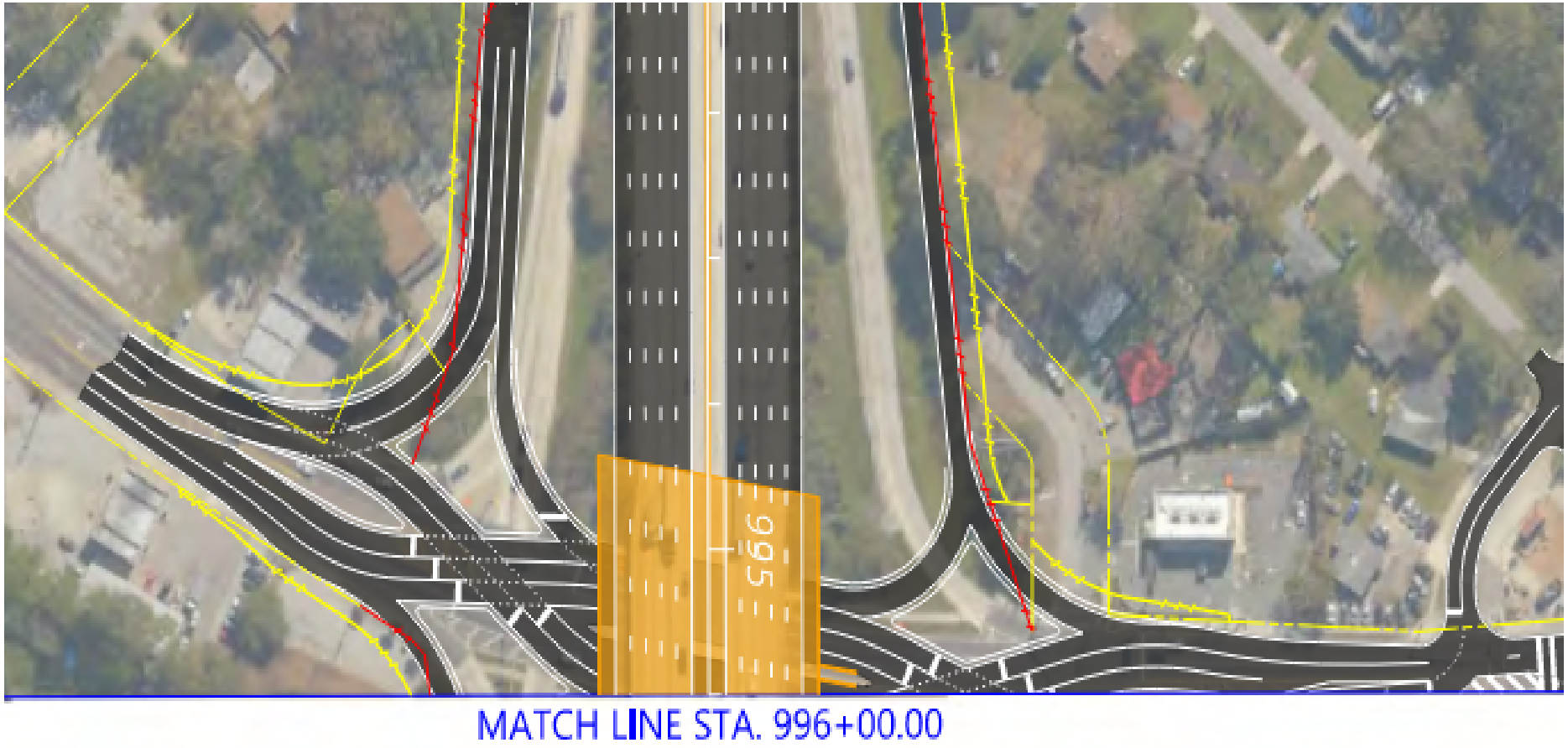

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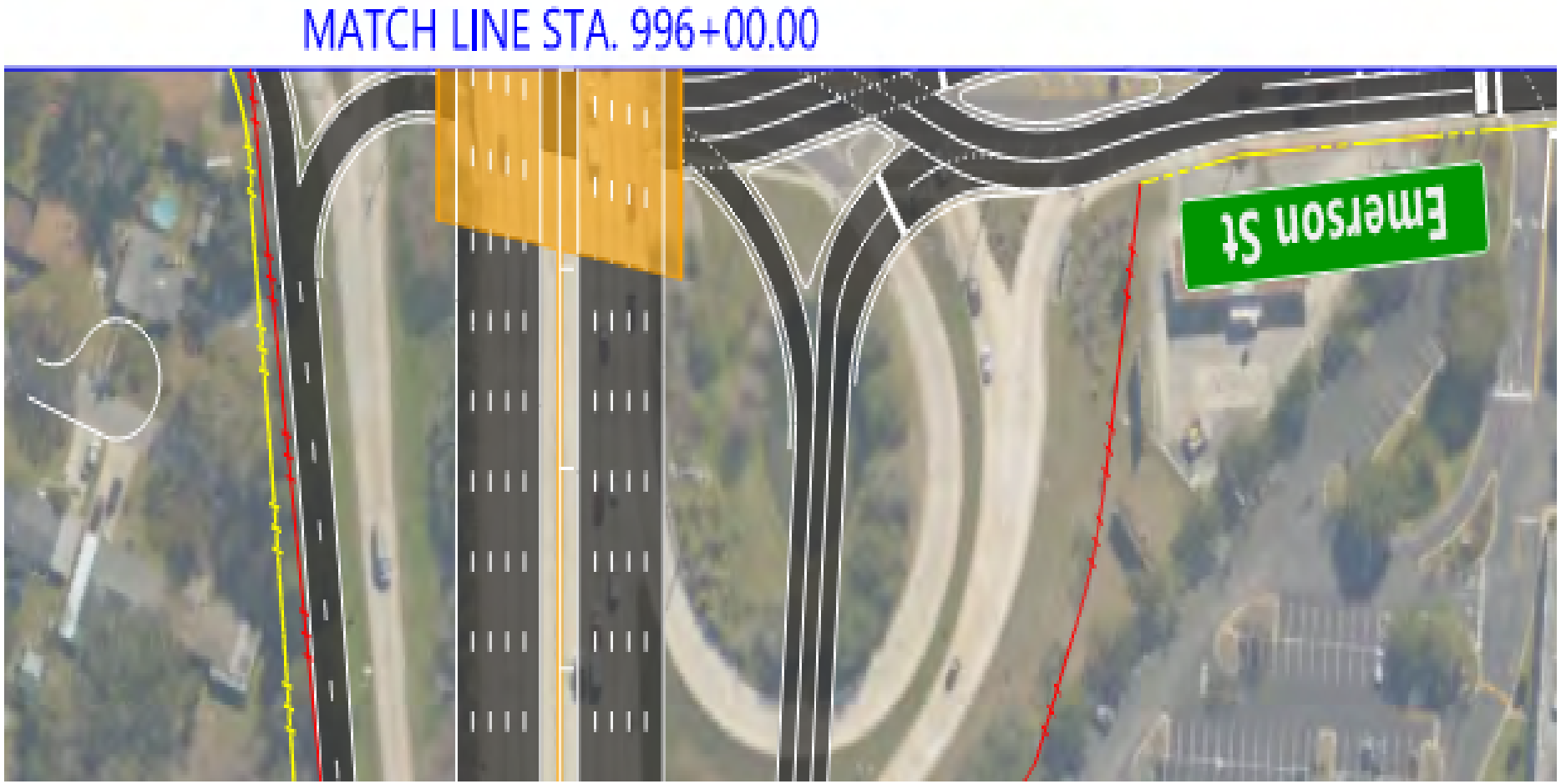
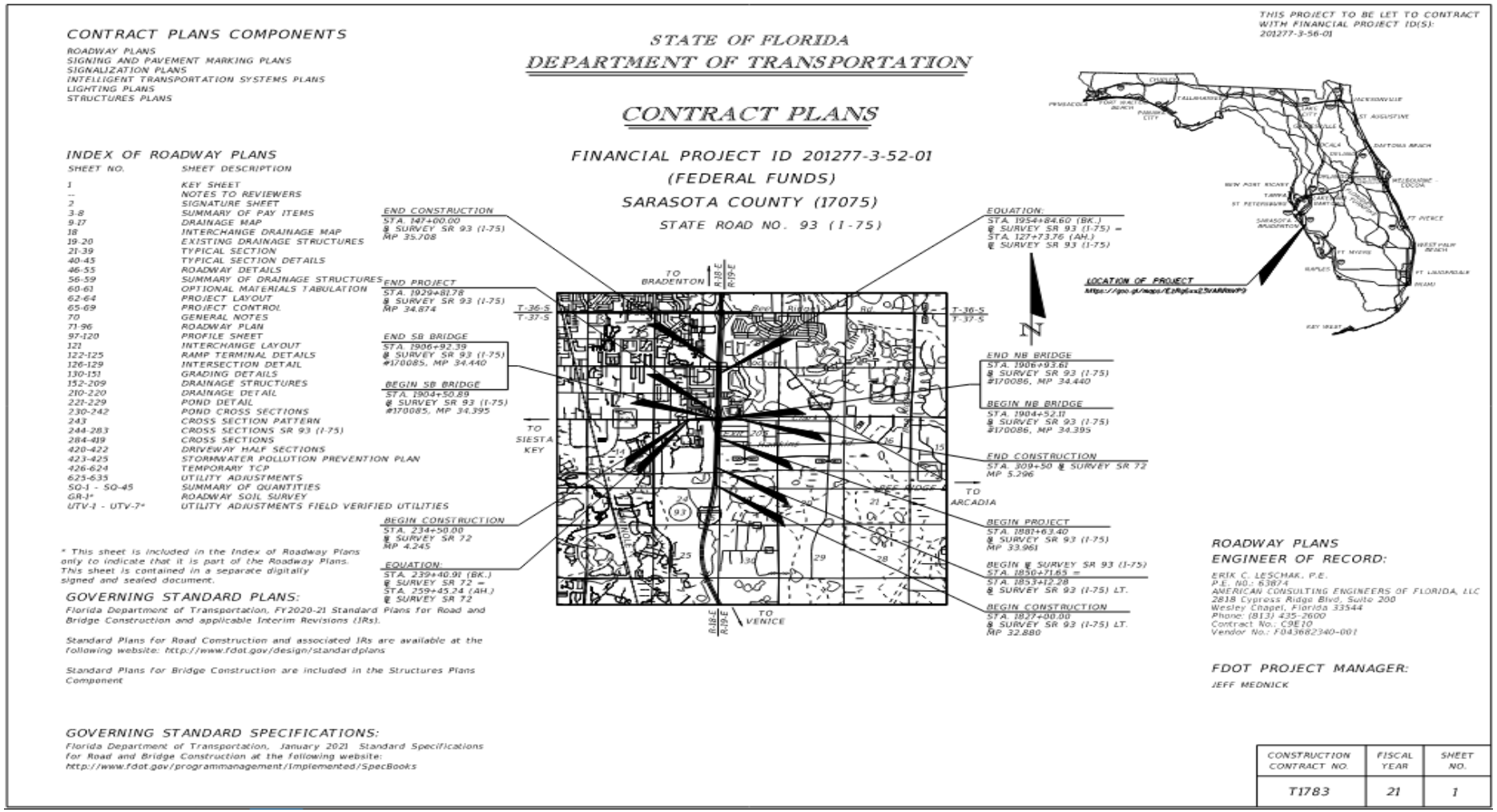


Plan Detailing

- **Plan Content**
  - Final Plans
    - Reduce duplication of information



CONTRACT PLANS COMPONENTS

ROADWAY PLANS
SIGNING AND PAVEMENT MARKING PLANS
SIGNALIZATION PLANS
INTELLIGENT TRANSPORTATION SYSTEMS PLANS
LIGHTING PLANS
STRUCTURES PLANS

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DEPARTMENT OF TRANSPORTATION

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FINANCIAL PROJECT ID 201277-3-52-01
(FEDERAL FUNDS)
SARASOTA COUNTY (17075)
STATE ROAD NO. 93 (I-75)

THIS PROJECT TO BE LET TO CONTRACT WITH FINANCIAL PROJECT ID(S):
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END CONSTRUCTION
STA. 147+00.00
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MP 35.708

END PROJECT
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@ SURVEY SR 93 (I-75)
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MP 33.961

BEGIN @ SURVEY SR 93 (I-75)
STA. 1850+71.65 =
STA. 185+12.28
@ SURVEY SR 93 (I-75) LT.

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STA. 1827+00.00
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TO BRADENTON
TO SIESTA KEY
TO ARCADIA
TO VENICE
T-36-S
T-37-S
R-18-E
R-19-E

LOCATION OF PROJECT

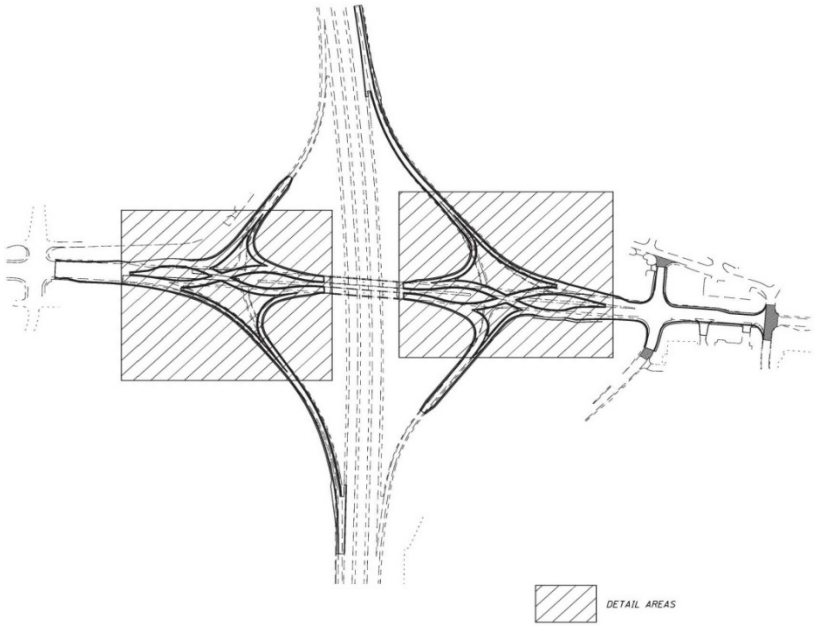
ROADWAY PLANS
ENGINEER OF RECORD:
ERIK C. LESCHAK, P.E.
P.E. NO.: 63874
AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
2818 Cypress Ridge Blvd, Suite 200
Wesley Chapel, Florida 33544
Phone: (813) 435-2600
Contract No.: C9E10
Vendor No.: F043682340-001

FDOT PROJECT MANAGER:
JEFF MEDNICK

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
T1783	21	1

Plan Detailing

- **Plan Content**
  - Final Plans
    - Reduce duplication of information



THE INFORMATION BELOW IS LISTED IN THE SHEETS AS MARKED IN THIS CHART. SEE THE DETAIL ON THIS SHEET FOR THE LOCATIONS THIS INFORMATION IS INTENDED TO DETAIL.	SCHEMATIC PLAN (3 - 4)	TYPICAL SECTIONS (6 - 20)	PLAN SHEETS (126 - 171)	RAMP SCHEMATIC DETAILS (263 - 264)	SUPERELEVATION TABLES (254 - 262)	INTERSECTION DETAIL (265 - 266)	MEDIAN DETAILS (277 - 278)	GORE DETAILS (269 - 274)	TRAFFIC CONTROL (323 - 337)
BASELINE CURVE DATA	X		X	X					
PAVEMENT TAPERS		X	X						
PAVEMENT WIDTHS		X	X	X		X		X	
STRIPING TAPERS									X
STRIPING WIDTHS									X
CURVE DATA / ℄ OF CONST. AND REFERENCE ℄ STATIONING FOR EDGE OF PAVEMENTS				X					
CURVE DATA / ℄ OF CONST. STATIONING FOR STRIPING									X
ELEVATIONS (EDGE OF PAVEMENT, SHOULDER, FACE OF CURB)					X	X		X	
MEDIAN DETAILS							X		

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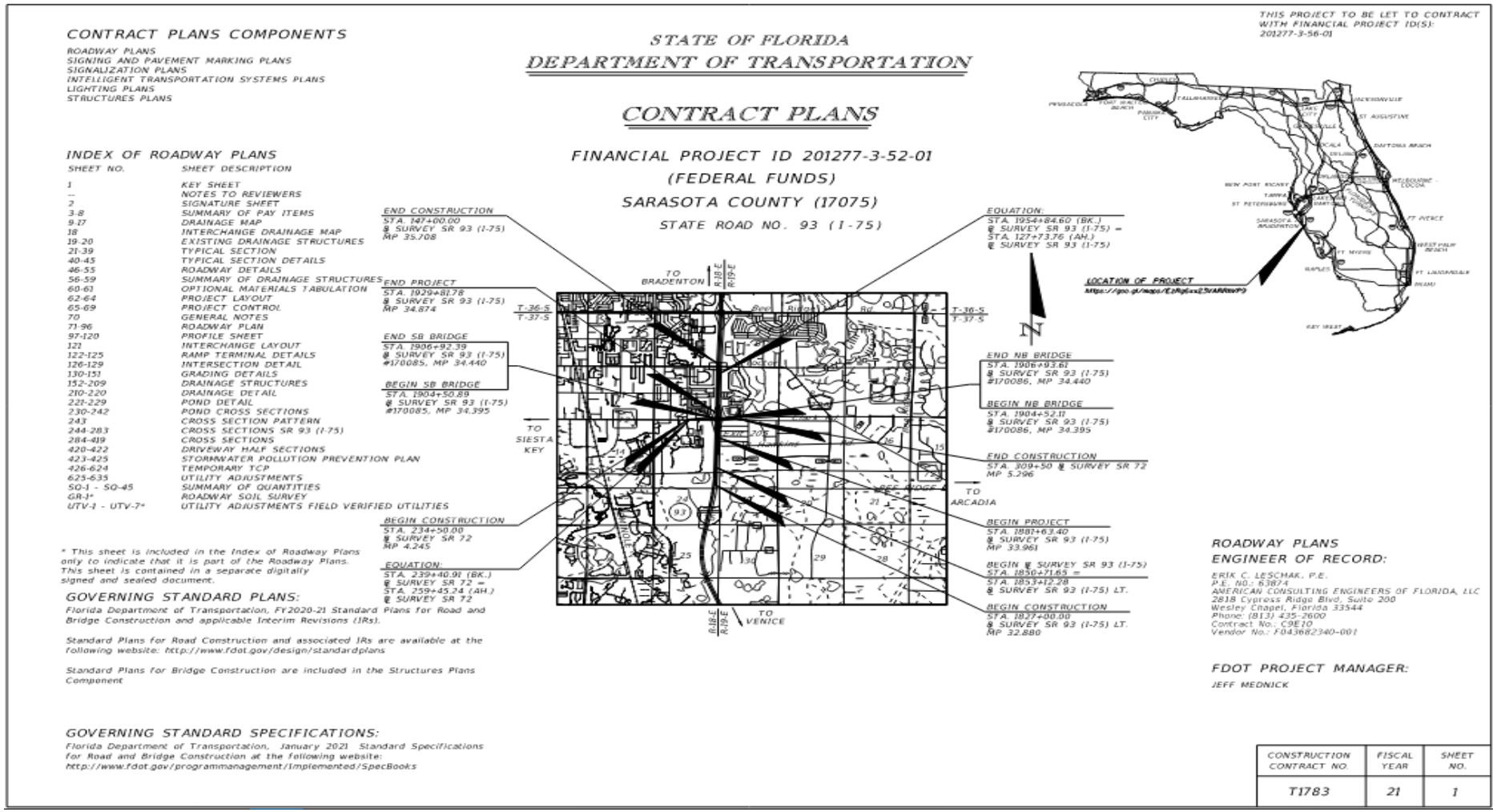

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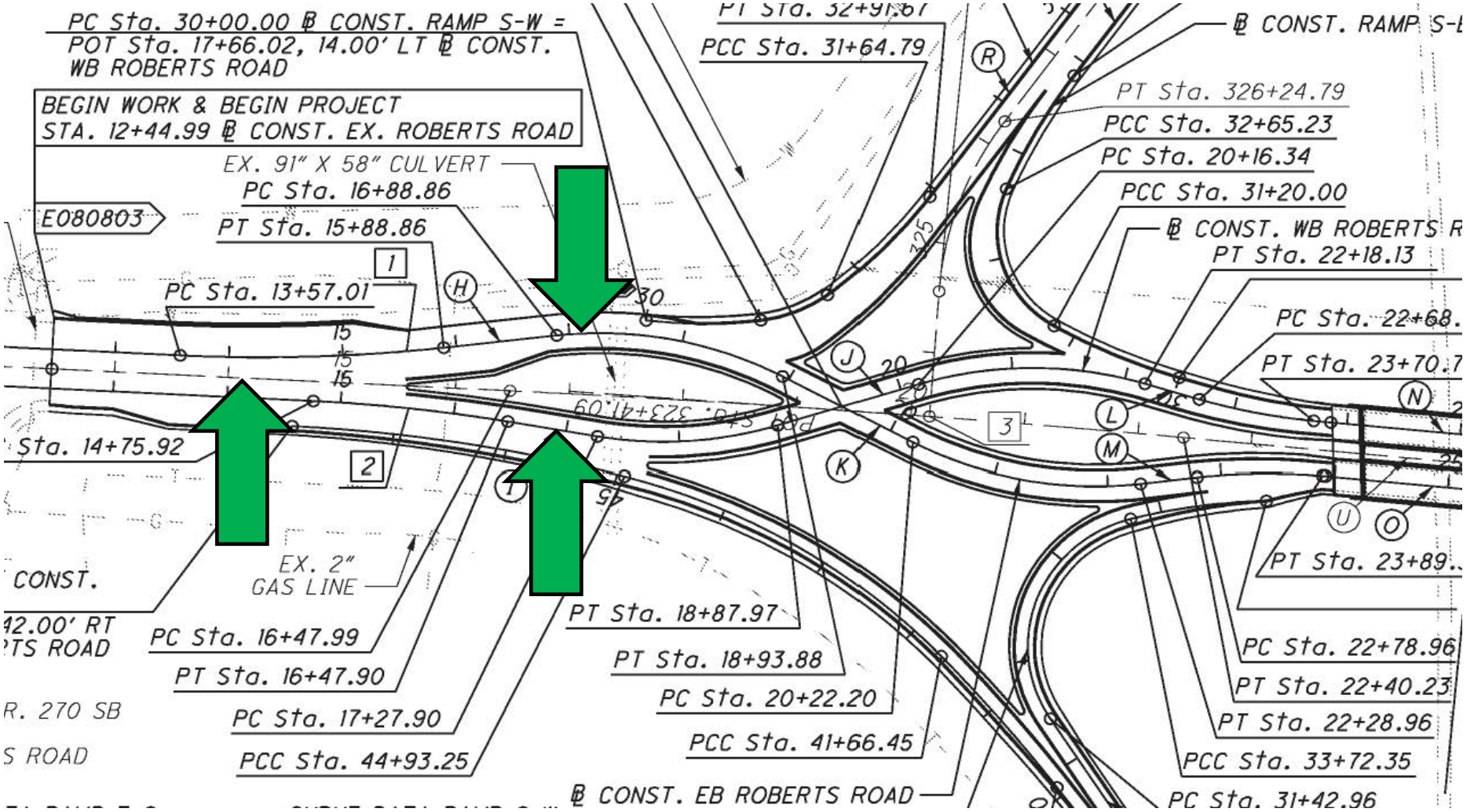

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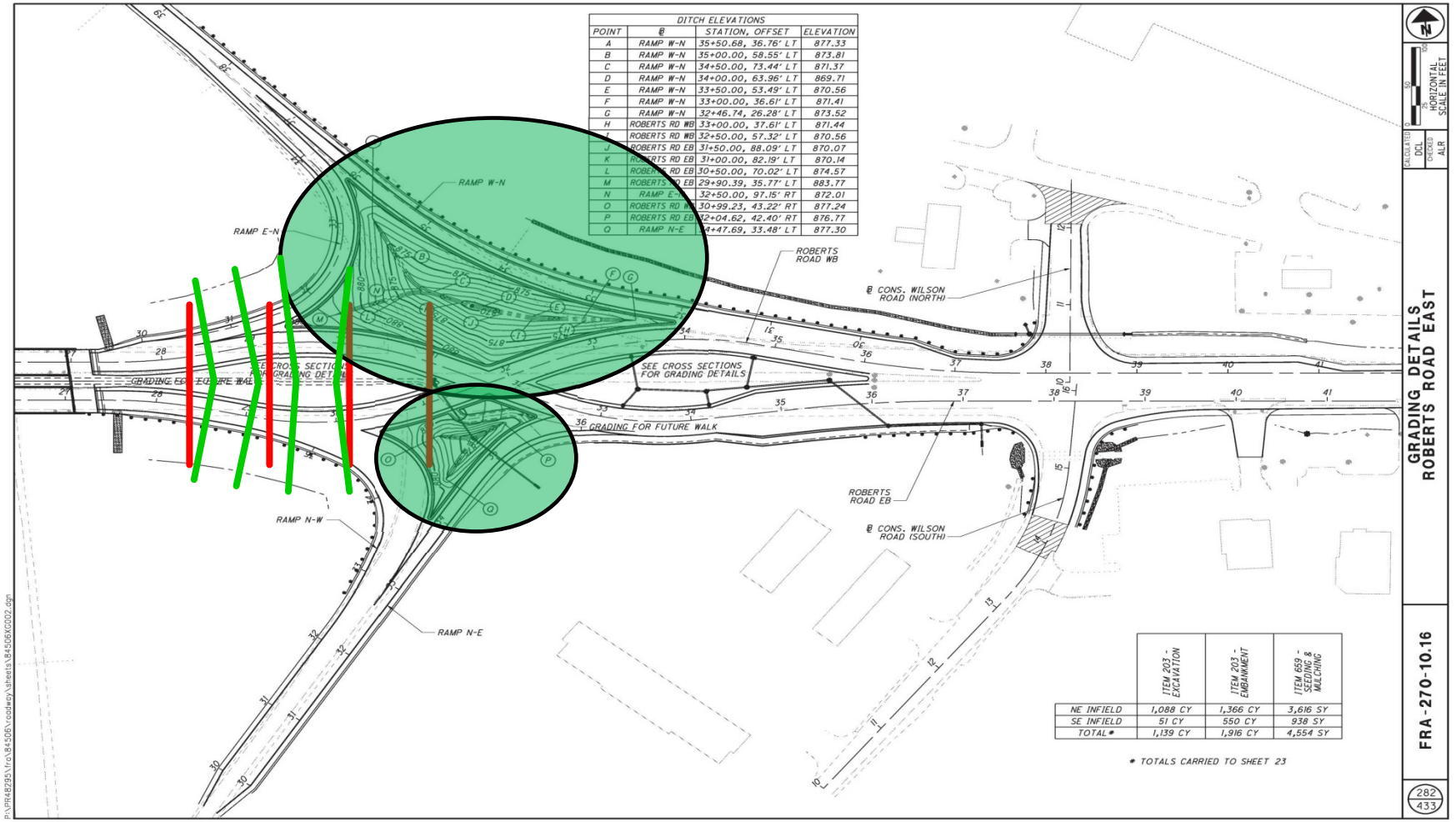

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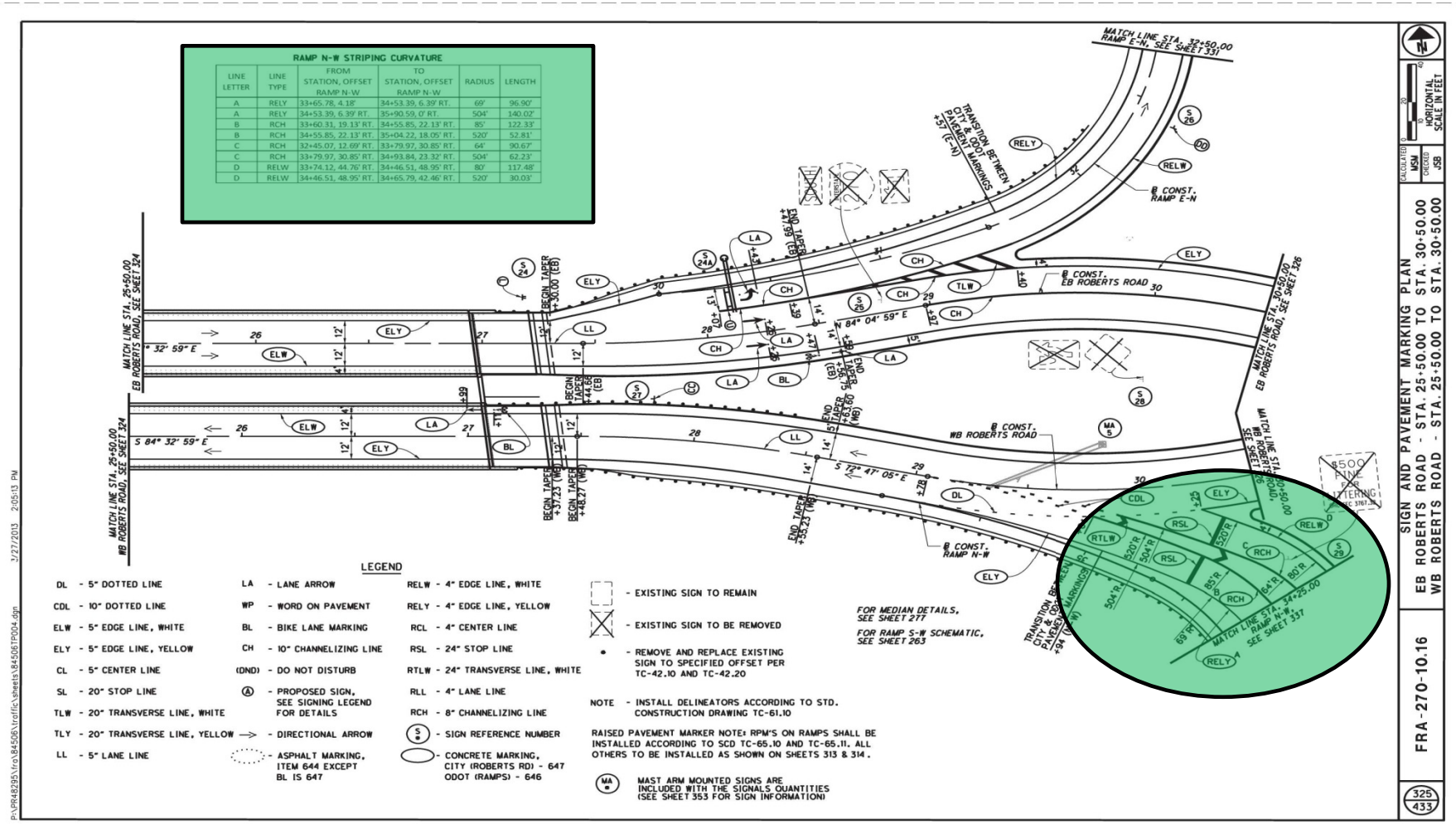

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RAMP N-W STRIPING CURVATURE

LINE LETTER	LINE TYPE	FROM STATION, OFFSET RAMP N-W	TO STATION, OFFSET RAMP N-W	RADIUS	LENGTH
A	RELY	33+65.78, 4.18'	34+53.39, 6.39' RT.	69'	96.90'
A	RELY	34+53.39, 6.39' RT.	35+90.59, 0' RT.	504'	140.02'
B	RCH	33+60.31, 19.13' RT.	34+55.85, 22.13' RT.	85'	122.33'
B	RCH	34+55.85, 22.13' RT.	35+04.22, 18.05' RT.	520'	52.81'
C	RCH	32+45.07, 12.69' RT.	33+79.97, 30.85' RT.	64'	90.67'
C	RCH	33+79.97, 30.85' RT.	34+93.84, 23.32' RT.	504'	62.23'
D	RELW	33+74.12, 44.76' RT.	34+46.51, 48.95' RT.	80'	117.48'
D	RELW	34+46.51, 48.95' RT.	34+65.79, 42.46' RT.	520'	30.03'

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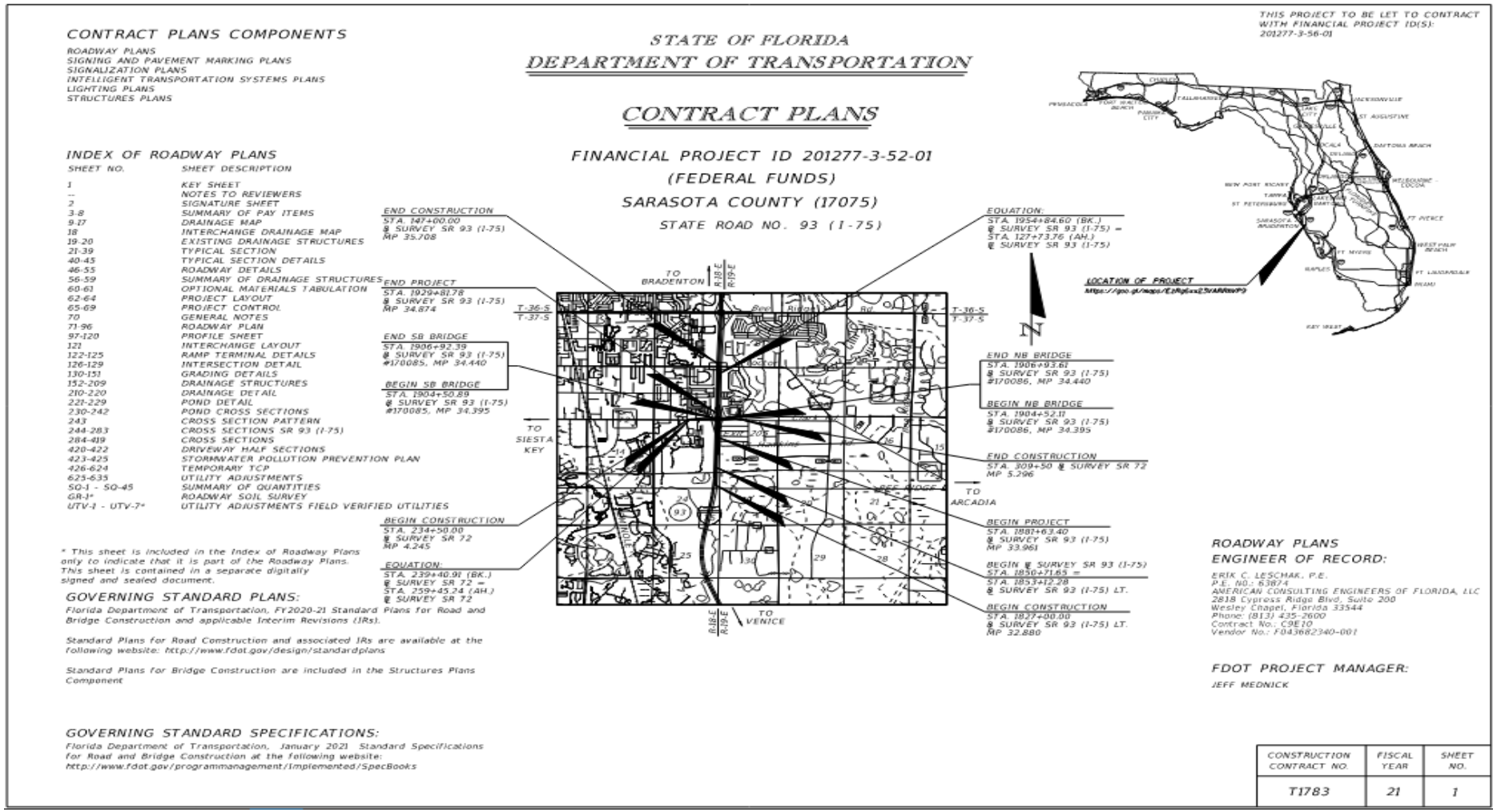
    - Utilize proposed surfaces to convey grading, drainage, etc.



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2818 Cypress Ridge Blvd, Suite 200
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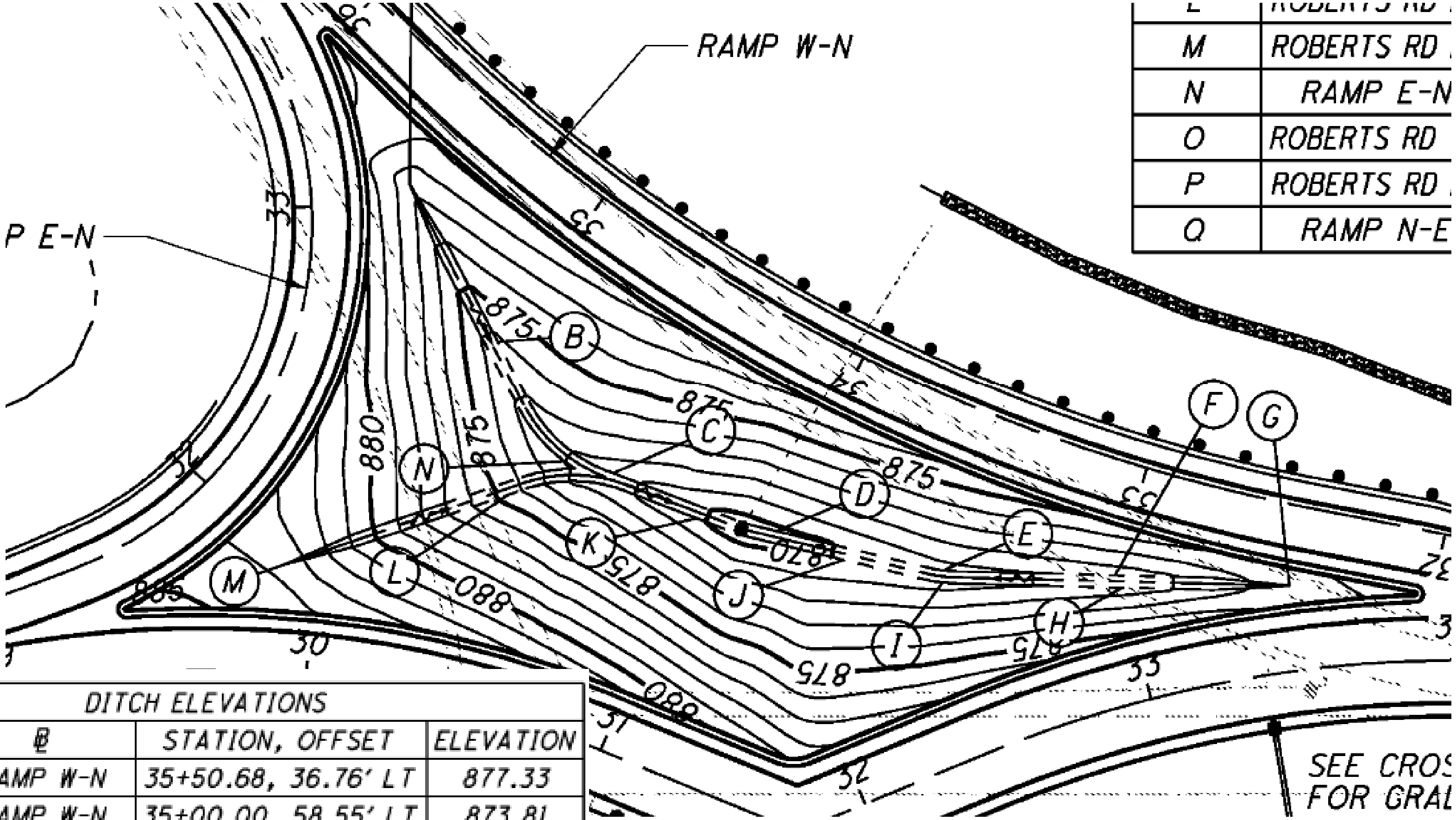
Contract No.: C9E10
Vendor No.: F043682340-001

FDOT PROJECT MANAGER:
JEFF MEDNICK

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
T1783	21	1

Plan Detailing

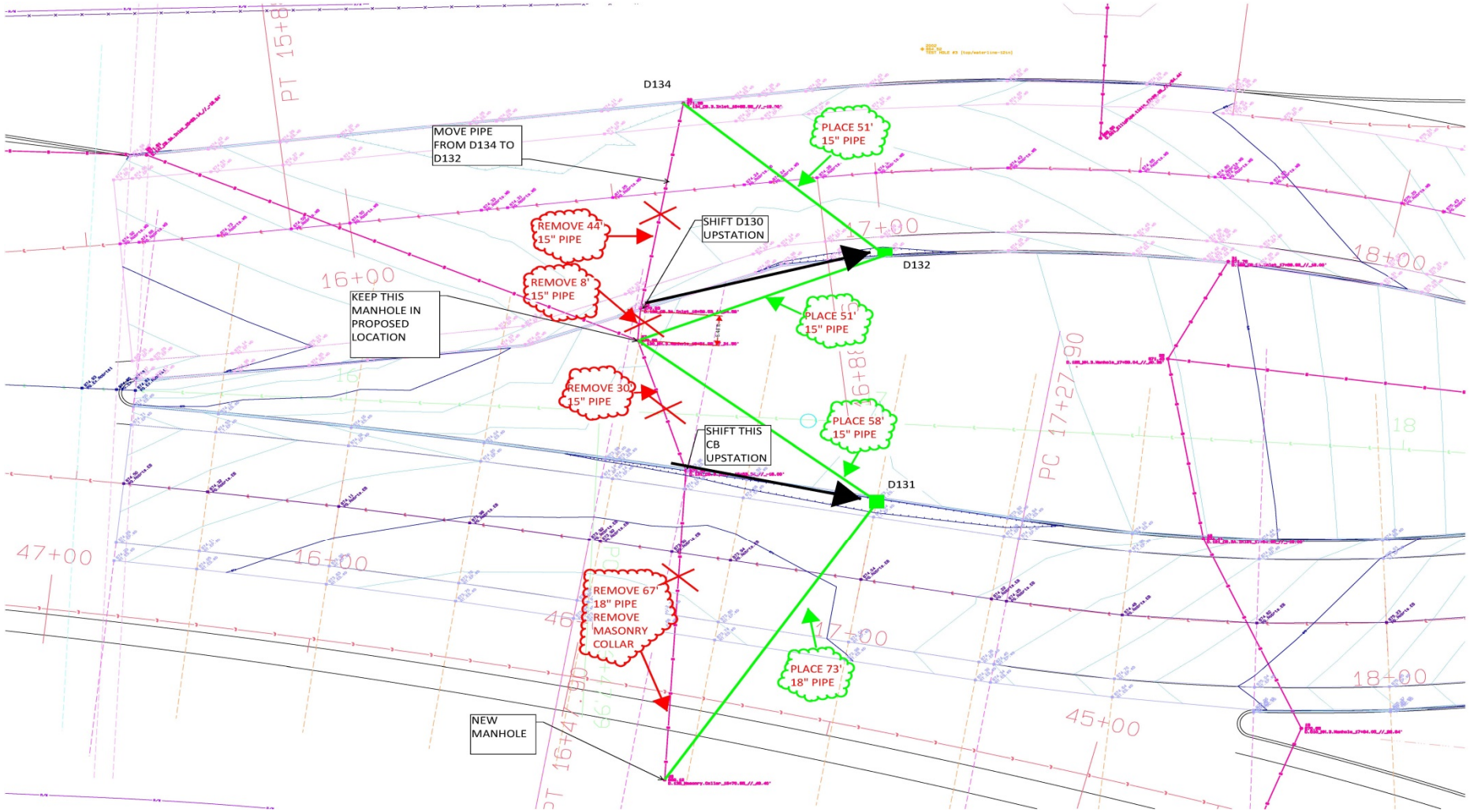
- **Plan Content**
  - Final Plans
    - Reduce duplication of information
    - Reduce confusion
    - Utilize proposed surfaces to convey grading, drainage, etc.



DITCH ELEVATIONS			
POINT	℄	STATION, OFFSET	ELEVATION
A	RAMP W-N	35+50.68, 36.76′ LT	877.33
B	RAMP W-N	35+00.00, 58.55′ LT	873.81
C	RAMP W-N	34+50.00, 73.44′ LT	871.37
D	RAMP W-N	34+00.00, 63.96′ LT	869.71
E	RAMP W-N	33+50.00, 53.49′ LT	870.56
F	RAMP W-N	33+00.00, 36.61′ LT	871.41
G	RAMP W-N	32+46.74, 26.28′ LT	873.52
H	ROBERTS RD WB	33+00.00, 37.61′ LT	871.44

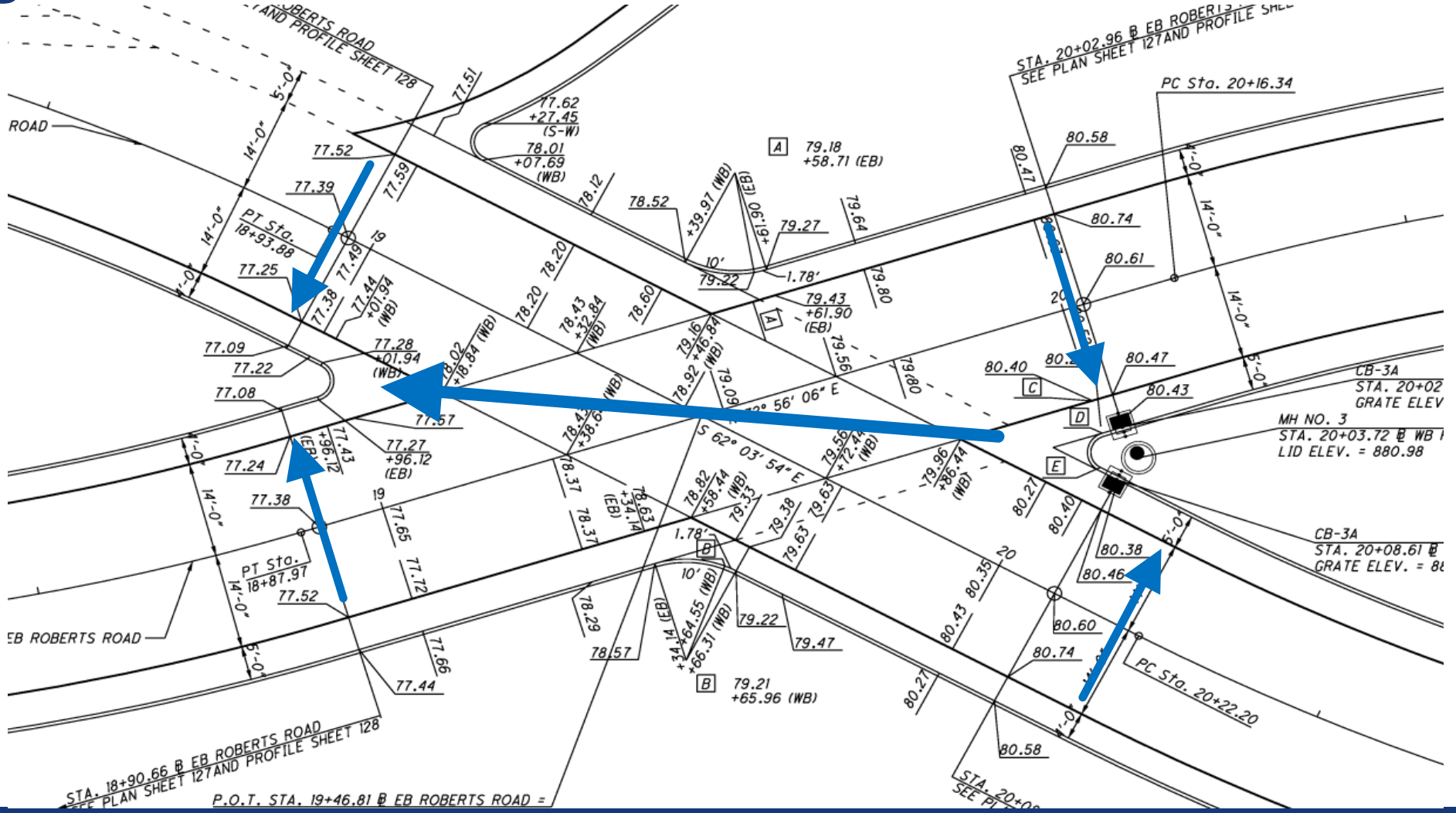
Plan Detailing

- **Plan Content**
  - Final Plans
    - Reduce duplication of information
    - Reduce confusion
    - Utilize proposed surfaces to convey grading, drainage, etc.



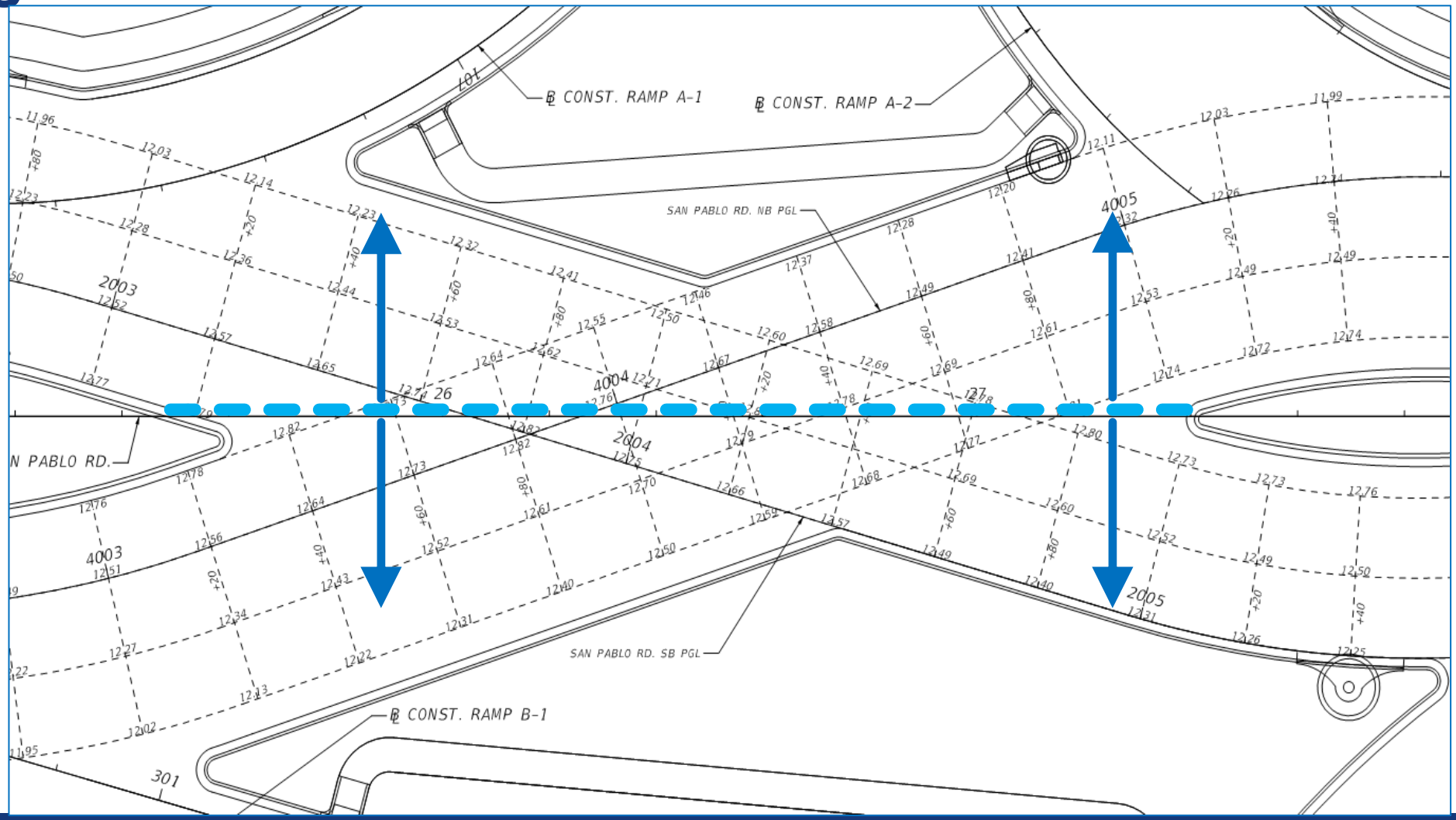
Plan Detailing

- **Crossover Intersection Vertical Geometry**
  - "Table Top" the crossover intersection



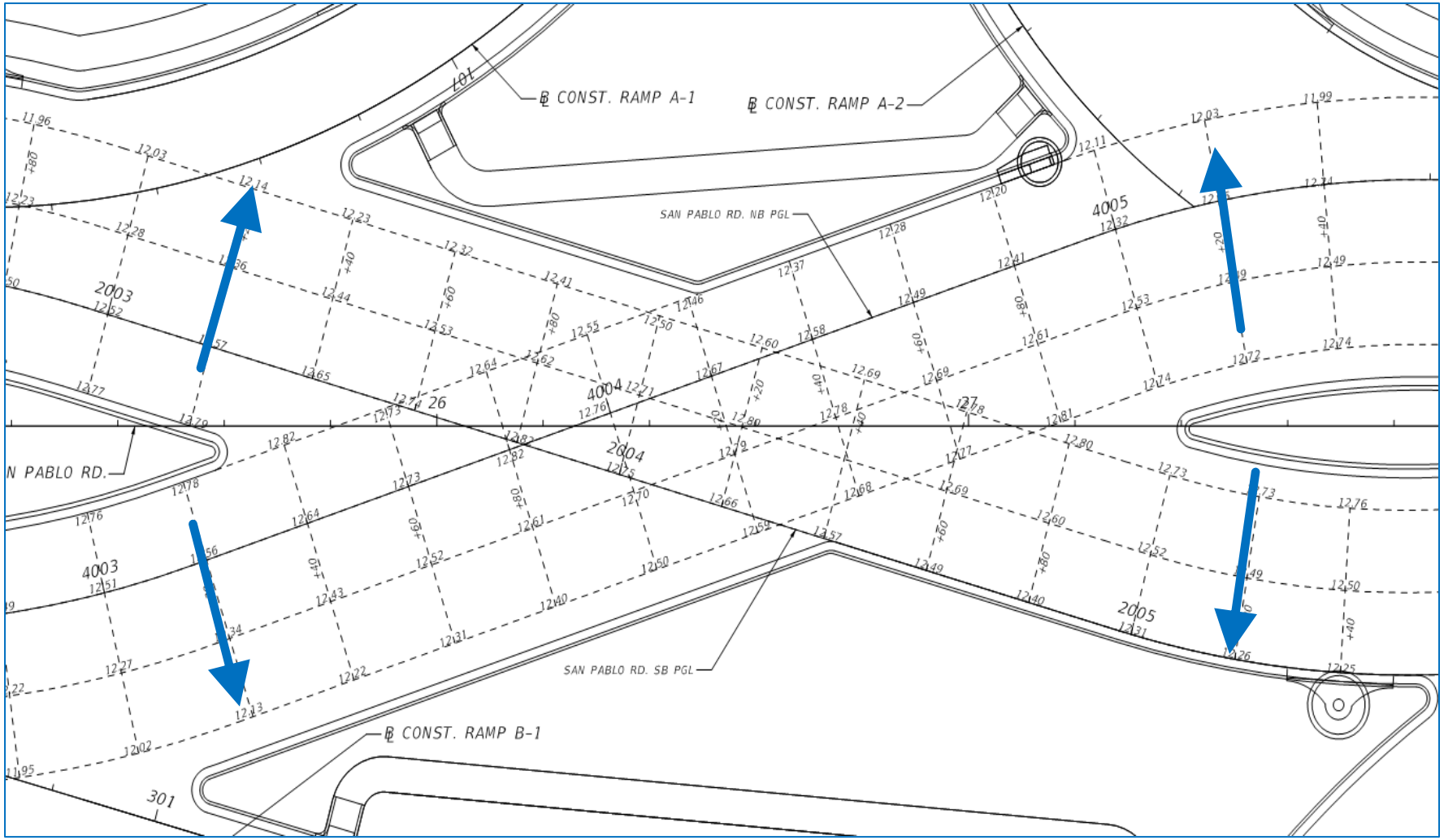
Plan Detailing

- **Crossover Intersection Vertical Geometry**
  - "Table Top" the crossover intersection
  - Crown about the center of the intersection



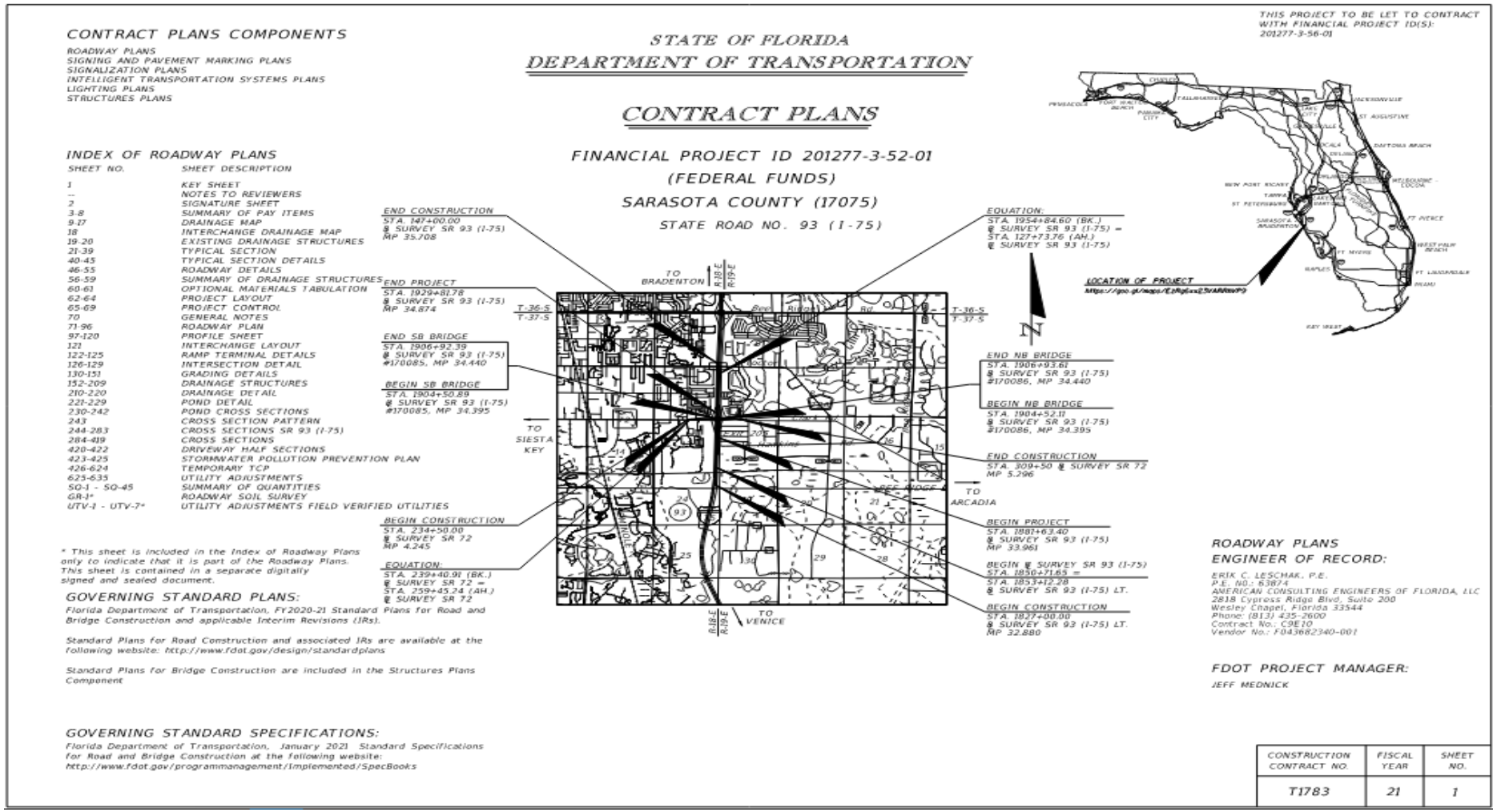
Plan Detailing

- **Crossover Intersection Vertical Geometry**
  - "Table Top" the crossover intersection
  - Crown about the center of the intersection



Plan Detailing

- **Plan Content**
  - Final Plans
    - Reduce duplication of information
    - Reduce confusion
    - Utilize proposed surfaces to convey grading, drainage, etc.
    - Utilize proposed surfaces to reduce construction cost and improve constructability



CONTRACT PLANS COMPONENTS

ROADWAY PLANS
SIGNING AND PAVEMENT MARKING PLANS
SIGNALIZATION PLANS
INTELLIGENT TRANSPORTATION SYSTEMS PLANS
LIGHTING PLANS
STRUCTURES PLANS

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
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--	NOTES TO REVIEWERS
2	SIGNATURE SHEET
3-8	SUMMARY OF PAY ITEMS
9-17	DRAINAGE MAP
18	INTERCHANGE DRAINAGE MAP
19-20	EXISTING DRAINAGE STRUCTURES
21-39	TYPICAL SECTION
40-45	TYPICAL SECTION DETAILS
46-55	ROADWAY DETAILS
56-59	SUMMARY OF DRAINAGE STRUCTURES
60-61	OPTIONAL MATERIALS TABULATION
62-64	PROJECT LAYOUT
65-69	PROJECT CONTROL
70	GENERAL NOTES
71-96	ROADWAY PLAN
97-120	PROFILE SHEET
121	INTERCHANGE LAYOUT
122-125	RAMP TERMINAL DETAILS
126-129	INTERSECTION DETAIL
130-151	GRADING DETAILS
152-209	DRAINAGE STRUCTURES
210-220	DRAINAGE DETAIL
221-229	POND DETAIL
230-242	POND CROSS SECTIONS
243	CROSS SECTION PATTERN
244-283	CROSS SECTIONS SR 93 (I-75)
284-419	CROSS SECTIONS
420-422	DRIVEWAY HALF SECTIONS
423-425	STORMWATER POLLUTION PREVENTION PLAN
426-624	TEMPORARY TCP
625-635	UTILITY ADJUSTMENTS
SQ-1 - SQ-45	SUMMARY OF QUANTITIES
GR-1*	ROADWAY SOIL SURVEY
UTV-1 - UTV-7*	UTILITY ADJUSTMENTS FIELD VERIFIED UTILITIES

* This sheet is included in the Index of Roadway Plans only to indicate that it is part of the Roadway Plans. This sheet is contained in a separate digitally signed and sealed document.

GOVERNING STANDARD PLANS:
Florida Department of Transportation, FY2020-21 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

Standard Plans for Bridge Construction are included in the Structures Plans Component

GOVERNING STANDARD SPECIFICATIONS:
Florida Department of Transportation, January 2021 Standard Specifications for Road and Bridge Construction at the following website:
http://www.fdot.gov/programmanagement/Implemented/SpecBooks

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

FINANCIAL PROJECT ID 201277-3-52-01
(FEDERAL FUNDS)
SARASOTA COUNTY (17075)
STATE ROAD NO. 93 (I-75)

THIS PROJECT TO BE LET TO CONTRACT WITH FINANCIAL PROJECT ID(S):
201277-3-56-01

END CONSTRUCTION
STA. 147+00.00
℄ SURVEY SR 93 (I-75)
MP 35.708

END PROJECT
STA. 1929+81.78
℄ SURVEY SR 93 (I-75)
MP 34.874

END SB BRIDGE
STA. 1906+92.39
℄ SURVEY SR 93 (I-75)
#170085, MP 34.440

BEGIN SB BRIDGE
STA. 1904+50.89
℄ SURVEY SR 93 (I-75)
#170085, MP 34.395

BEGIN CONSTRUCTION
STA. 234+50.00
℄ SURVEY SR 72
MP 4.245

EQUATION:
STA. 239+40.91 (BK.)
℄ SURVEY SR 72 =
STA. 259+45.24 (AH.)
℄ SURVEY SR 72

EQUATION:
STA. 1954+84.60 (BK.)
℄ SURVEY SR 93 (I-75) =
STA. 127+73.76 (AH.)
℄ SURVEY SR 93 (I-75)

END NB BRIDGE
STA. 1906+93.61
℄ SURVEY SR 93 (I-75)
#170086, MP 34.440

BEGIN NB BRIDGE
STA. 1904+52.11
℄ SURVEY SR 93 (I-75)
#170086, MP 34.395

END CONSTRUCTION
STA. 309+50 ℄ SURVEY SR 72
MP 5.296

BEGIN PROJECT
STA. 1881+63.40
℄ SURVEY SR 93 (I-75)
MP 33.961

BEGIN ℄ SURVEY SR 93 (I-75)
STA. 1850+71.65 =
STA. 1853+12.28
℄ SURVEY SR 93 (I-75) LT.

BEGIN CONSTRUCTION
STA. 1827+00.00
℄ SURVEY SR 93 (I-75) LT.
MP 32.880

TO BRADENTON
TO SIESTA KEY
TO ARCADIA
TO VENICE
T-36-S
T-37-S
R-18-E
R-19-E

LOCATION OF PROJECT

ROADWAY PLANS
ENGINEER OF RECORD:
ERIK C. LESCHAK, P.E.
P.E. NO.: 67874
AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
2818 Cypress Ridge Blvd, Suite 200
Wesley Chapel, Florida 33544
Phone: (813) 435-2600
Contract No.: C9E10
Vendor No.: F043682340-001

FDOT PROJECT MANAGER:
JEFF MEDNICK

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Plan Detailing

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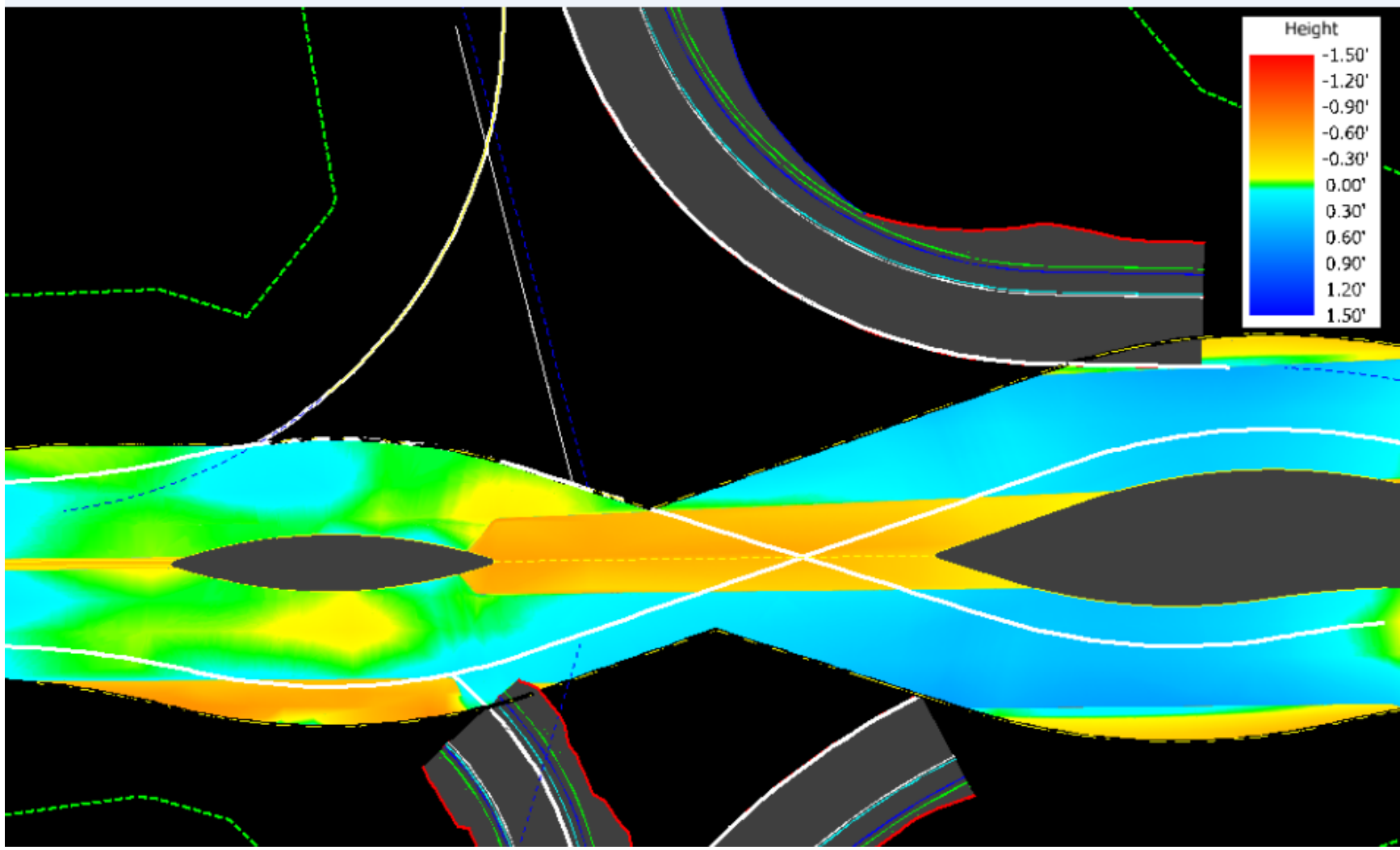
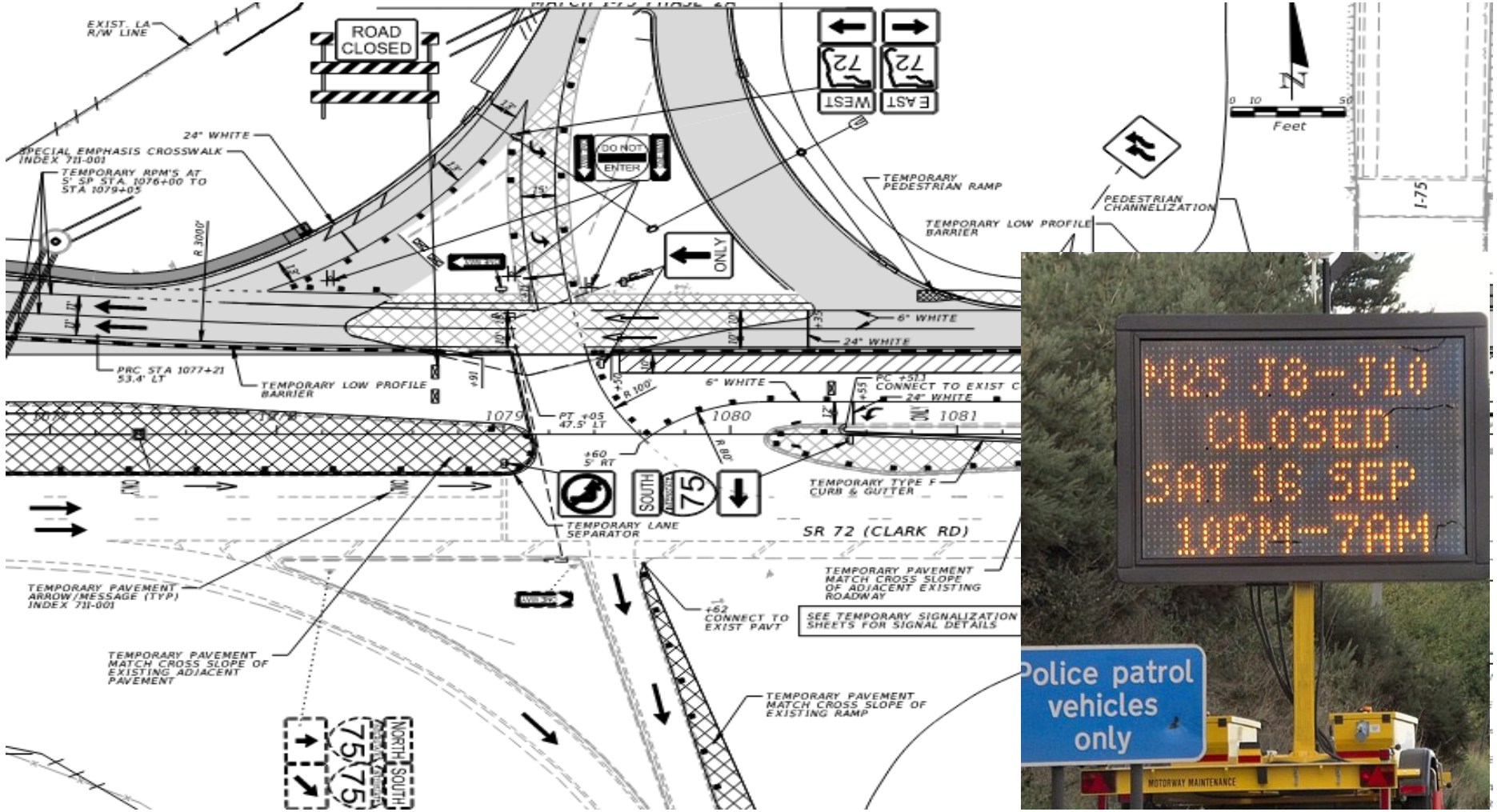


CONSTRUCTABILITY

Constructability

- **Construction Phasing**
  - Many options for maintaining traffic
    - Site specific
  - <u>Recommendation:</u> All options have weekend full closure before opening as a DDI
    - Signal testing
    - Final pavement markings

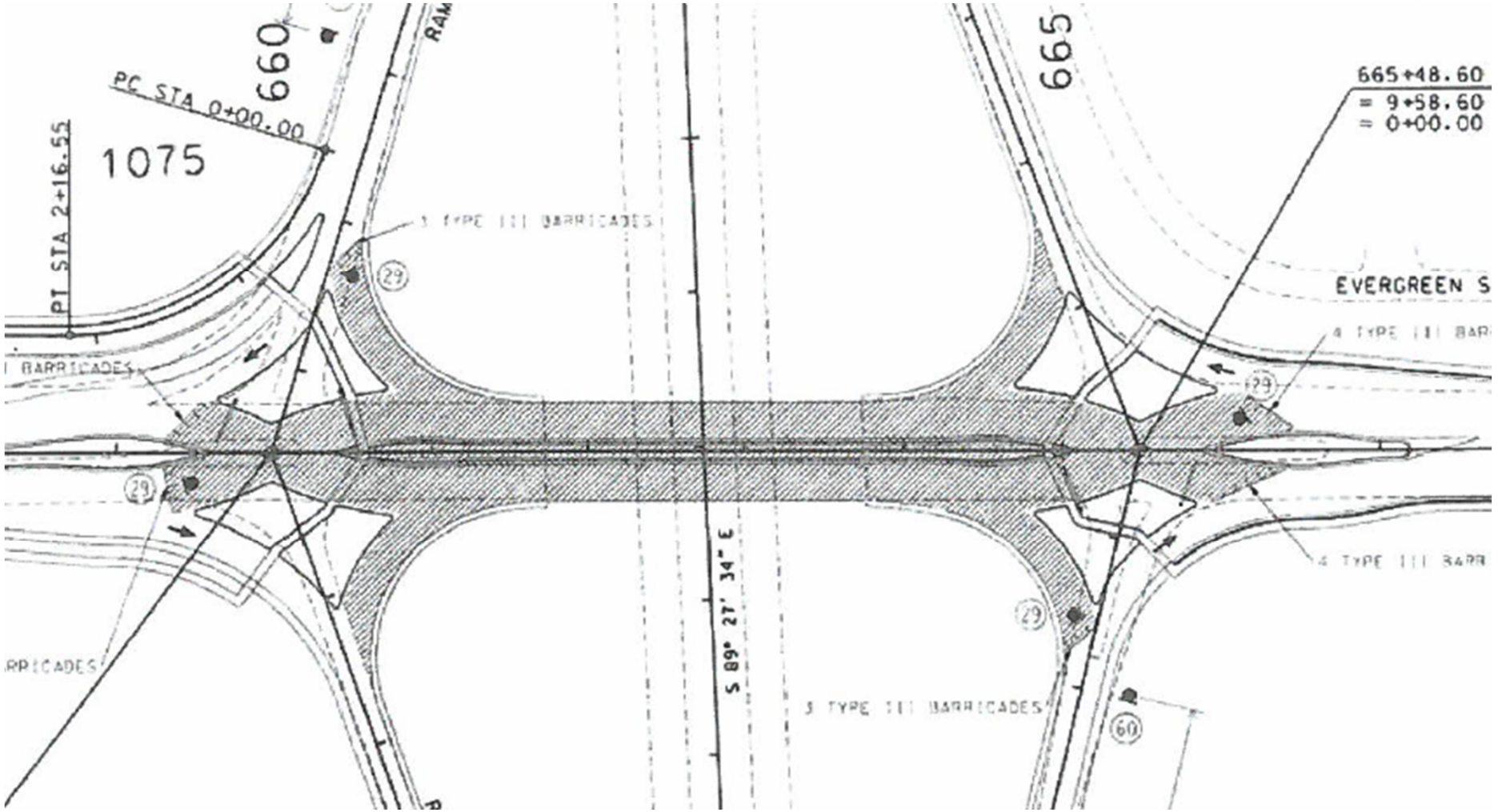


Constructability

- **Construction Phasing**
  - *Questions to consider when developing temporary traffic control plans*:
    - Can the interchange be closed?
    - Is there an appropriate detour available?
    - Is the existing pavement going to be used or replaced?
    - Is additional cross section necessary to accommodate future traffic
    - When are the best times to switch traffic between various stages of the project?

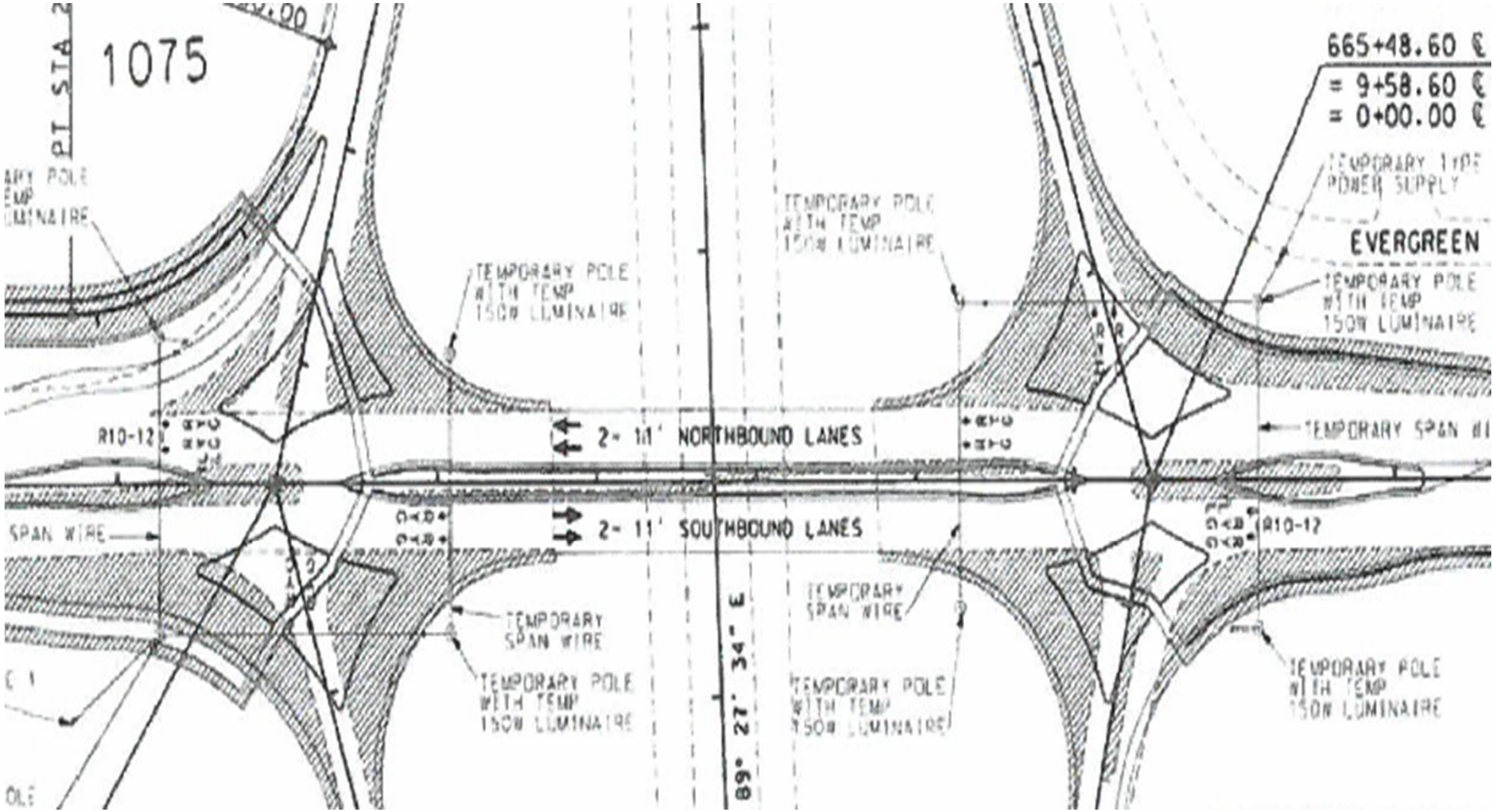
Constructability

- **Construction Phasing**
  - Options for maintaining traffic
    - Closure between crossover intersections



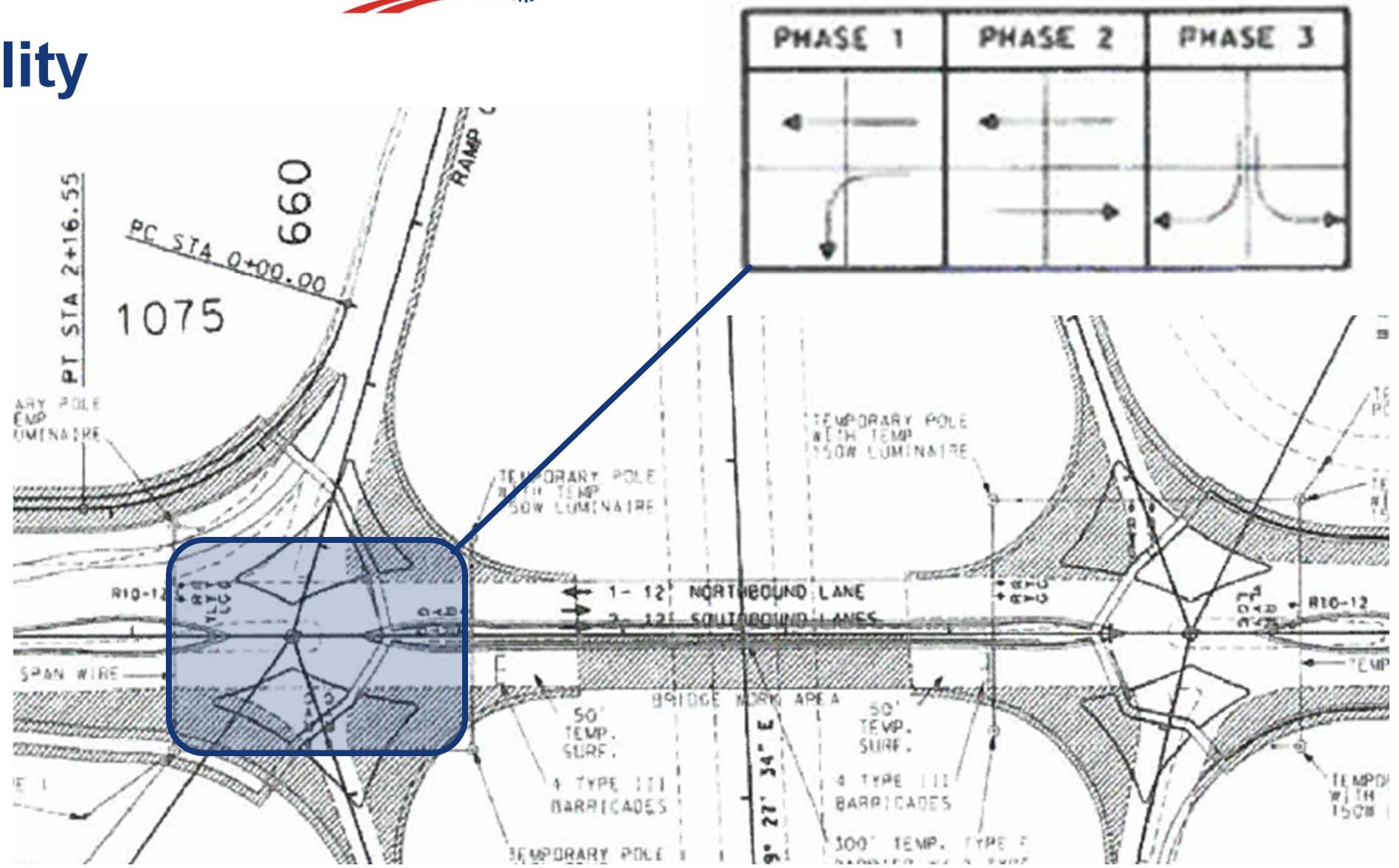
Constructability

- **Construction Phasing**
  - Options for maintaining traffic
    - Closure between crossover intersections
    - Off-line construction



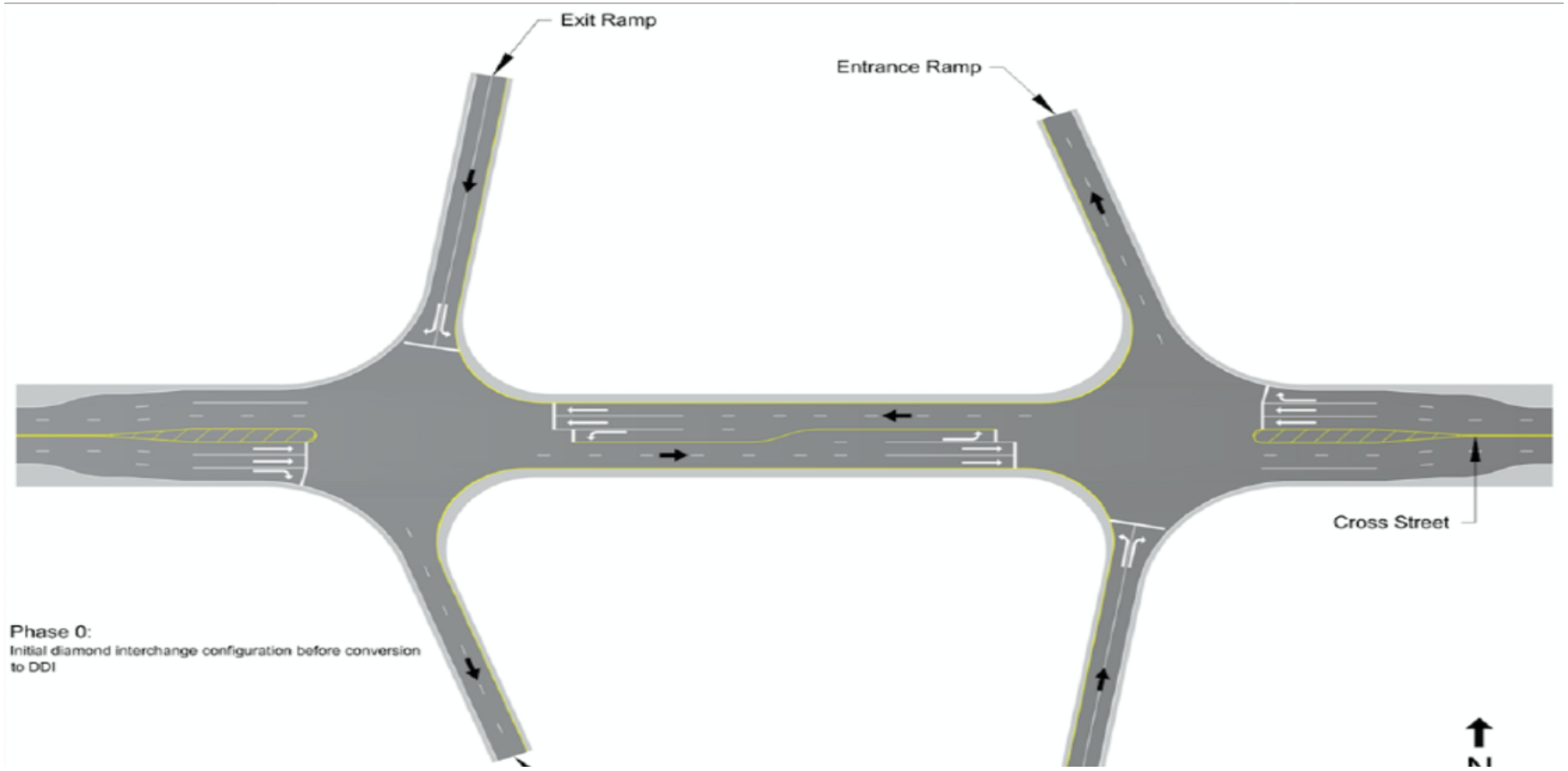
Constructability

- **Construction Phasing**
  - Options for maintaining traffic
    - Closure between crossover intersections
    - Off-line construction
    - Part-width construction



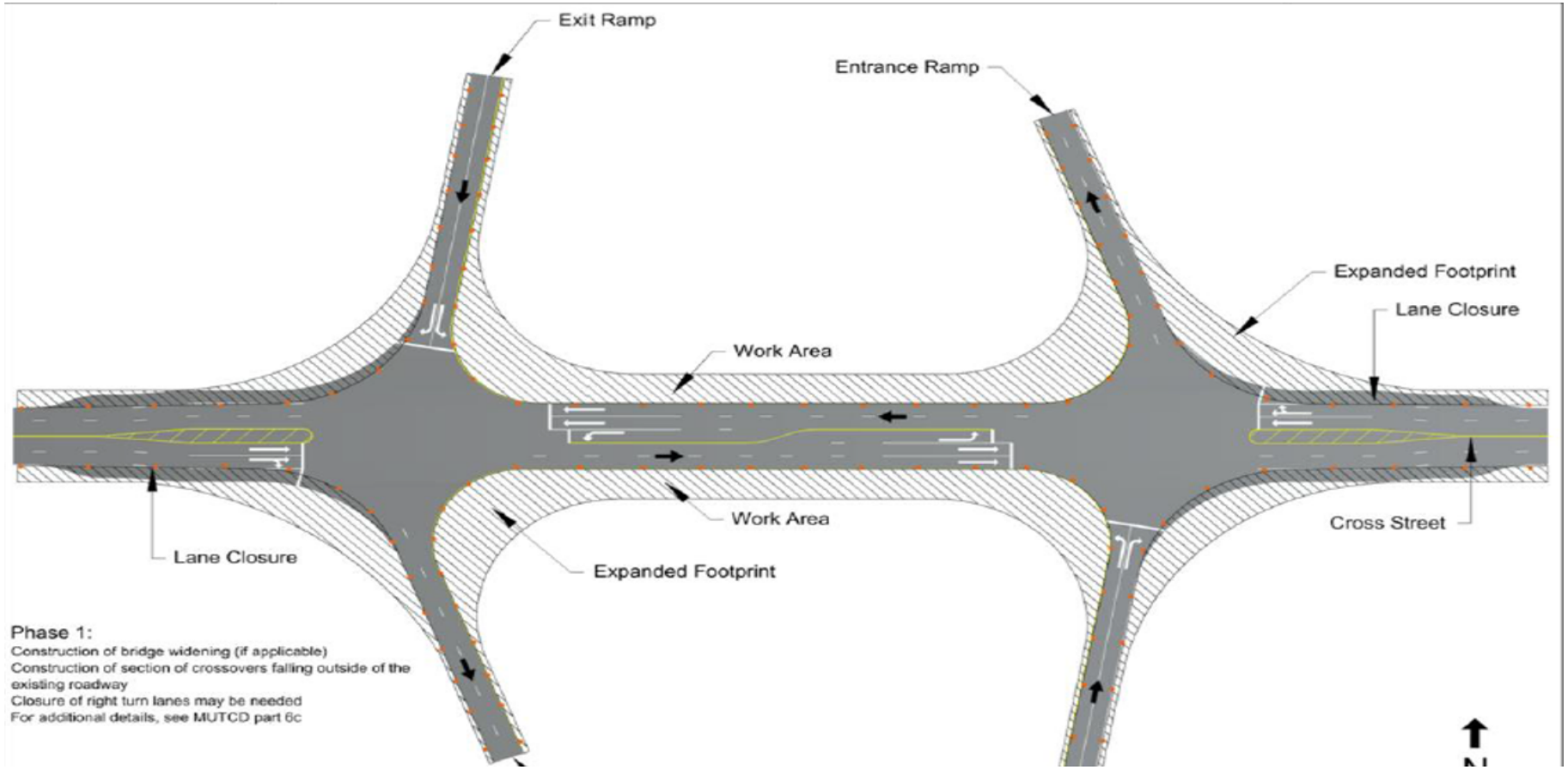
Constructability

- **Construction Phasing – Traditional Part-Width Construction**
  - **Existing Condition**
  - Two through lanes and a back-to-back left turn lane between the ramps



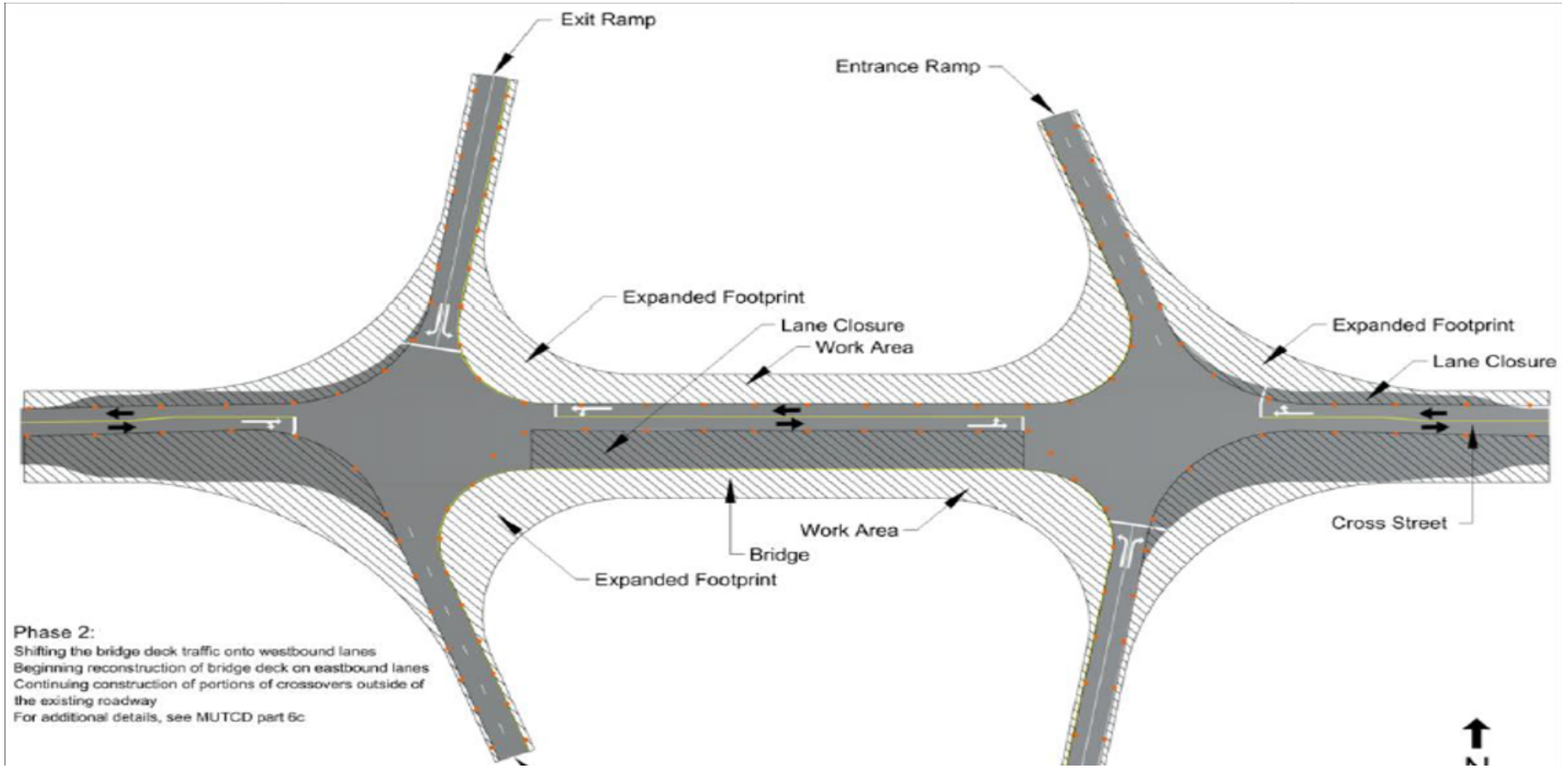
Constructability

- **Construction Phasing – Traditional Part-Width Construction**
  - **Phase 1**
  - Maximize off-line construction
  - May require lane closures such as right turn lanes



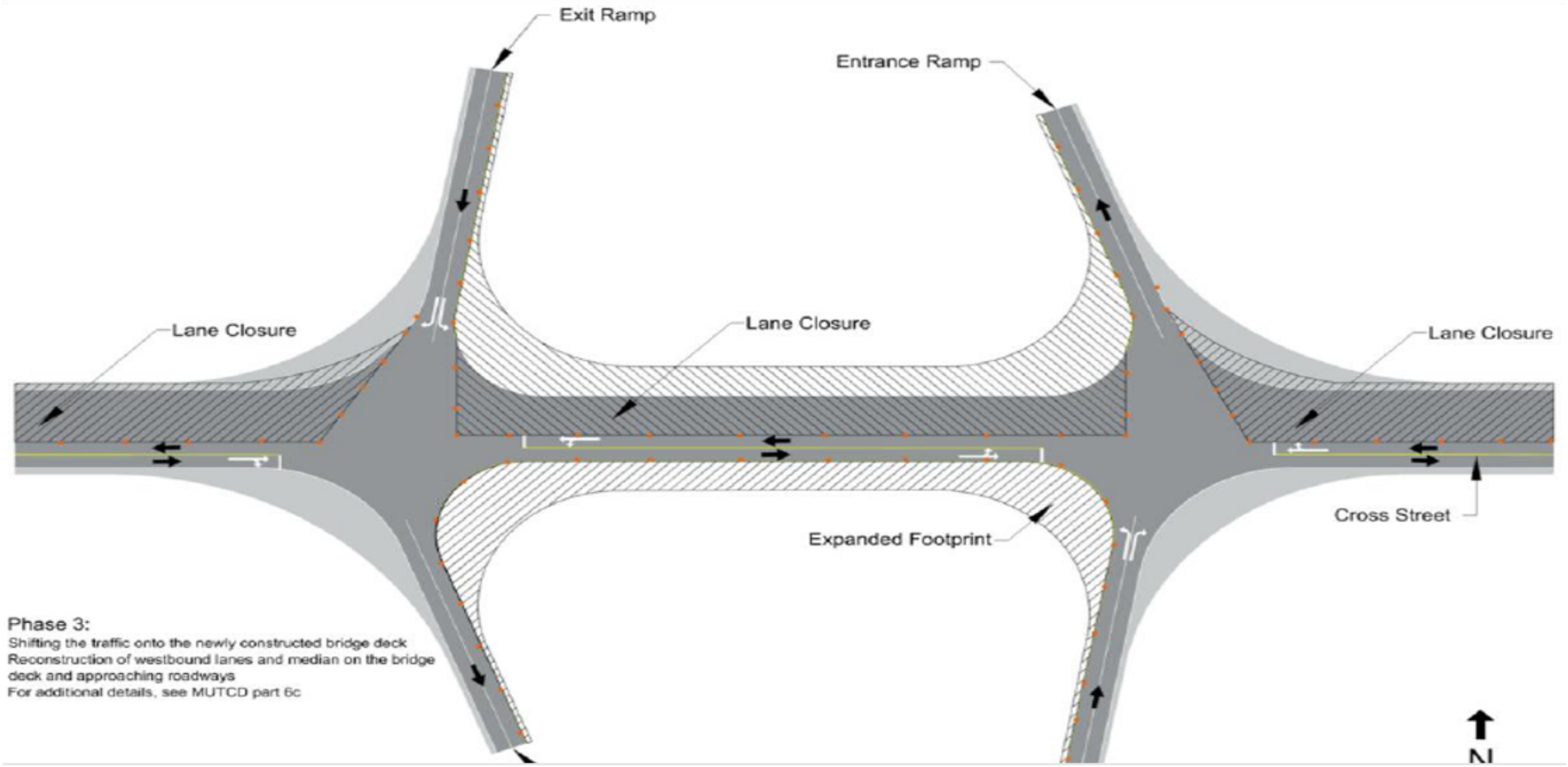
Constructability

- **Construction Phasing – Traditional Part-Width Construction**
  - **Phase 2**
  - Shift the traffic to the north half of the interchange
  - Construct south half through the interchange core
  - Likely deficient number of lanes maintained in this scenario



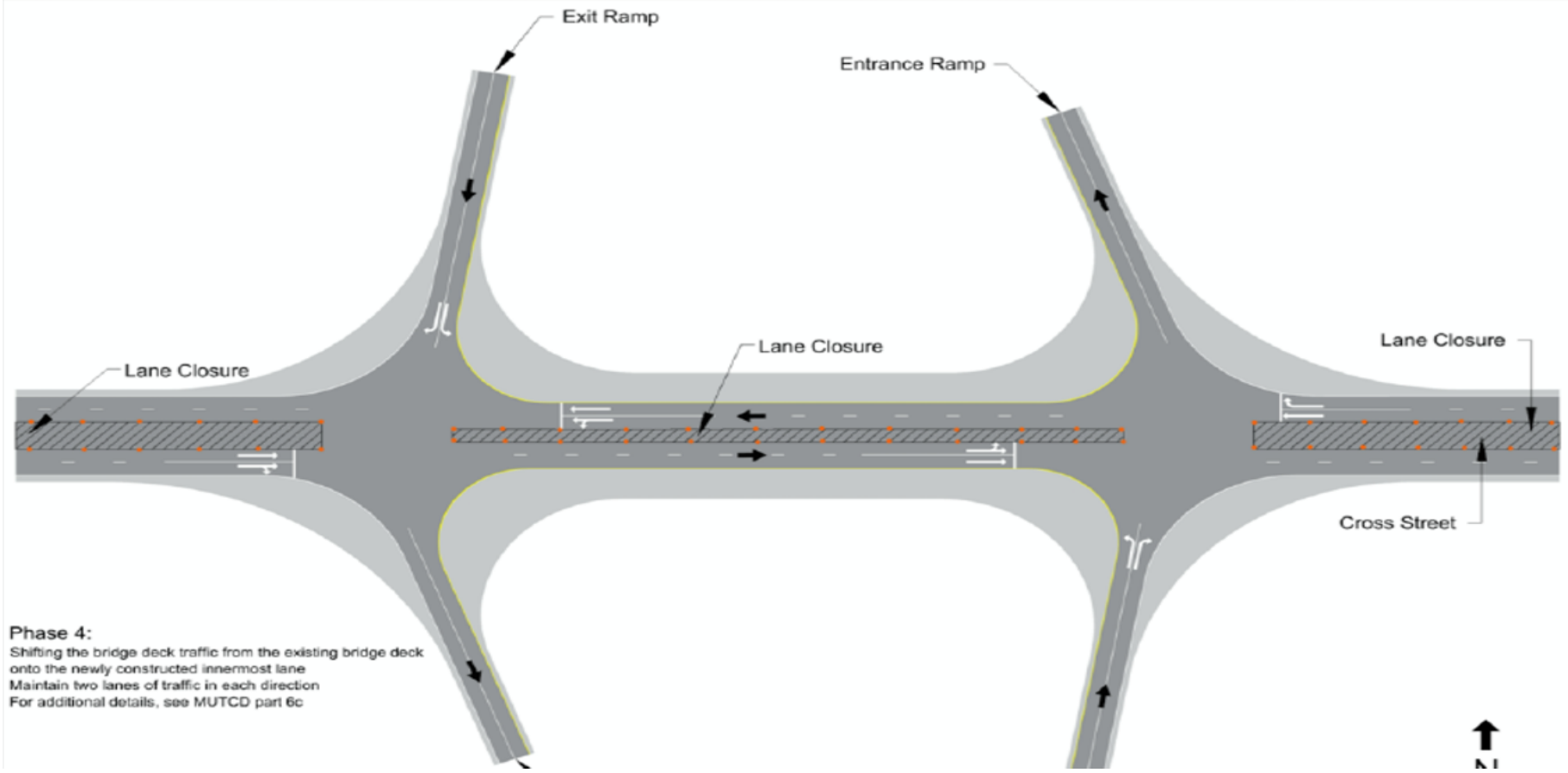
Constructability

- **Construction Phasing – Traditional Part-Width Construction**
  - **Phase 3**
  - Shift the traffic to the south half of the interchange
  - Construct north half through the interchange core
  - Likely deficient number of lanes maintained in this scenario



Constructability

- **Construction Phasing – Traditional Part-Width Construction**
  - **Phase 4**
  - Shift the traffic to the outer edge of the interchange
  - Construct center island
  - Likely deficient number of lanes maintained in this scenario

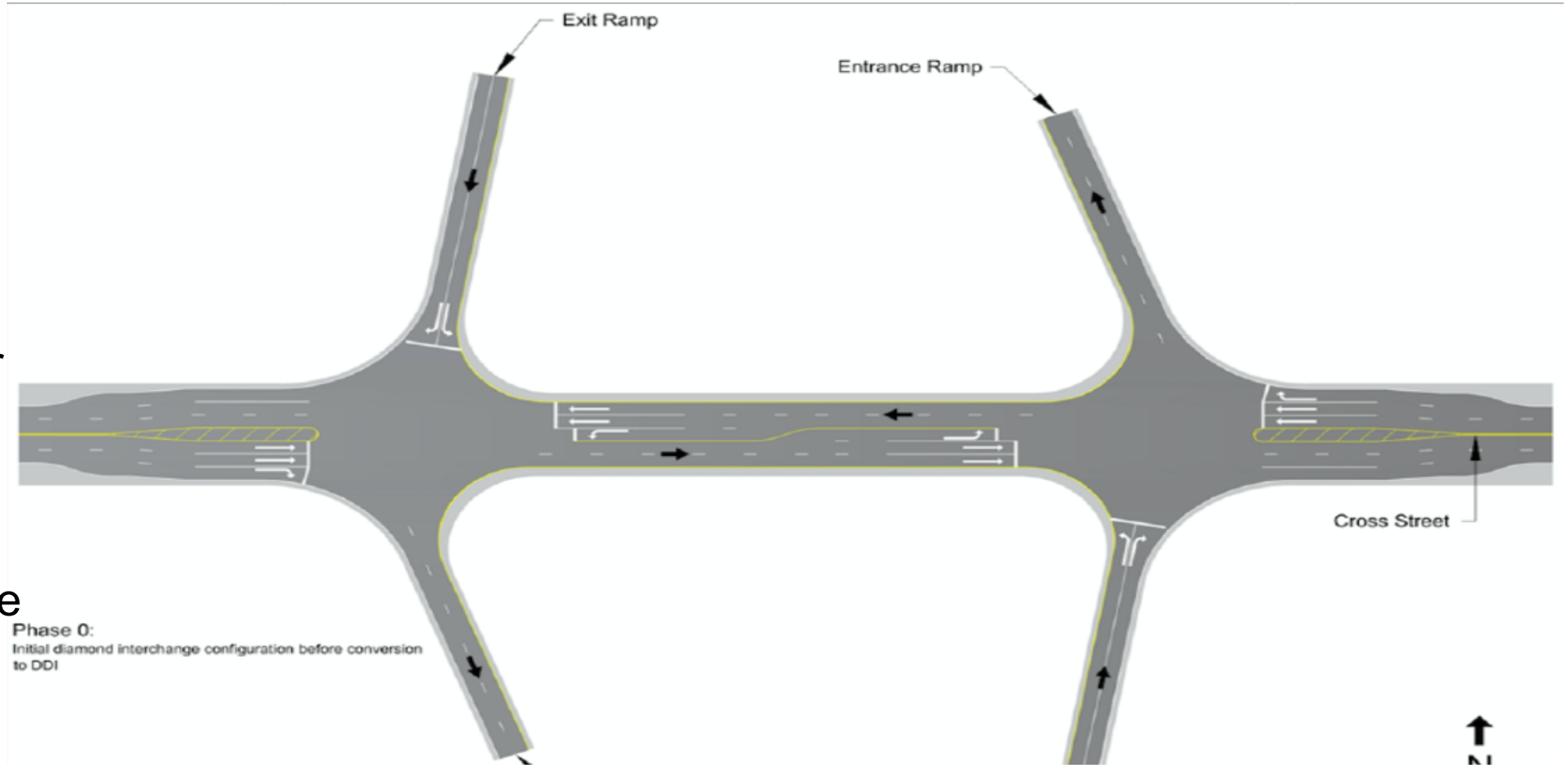


Constructability

- **Construction Phasing – Traditional Part-Width Construction**
  - **Phase 5**
  - Weekend Closure
  - Finish the transition to the final DDI
  - Finish surface course and striping
  - Finish curb in the crossover intersections
  - Test the new signal timing for the DDI

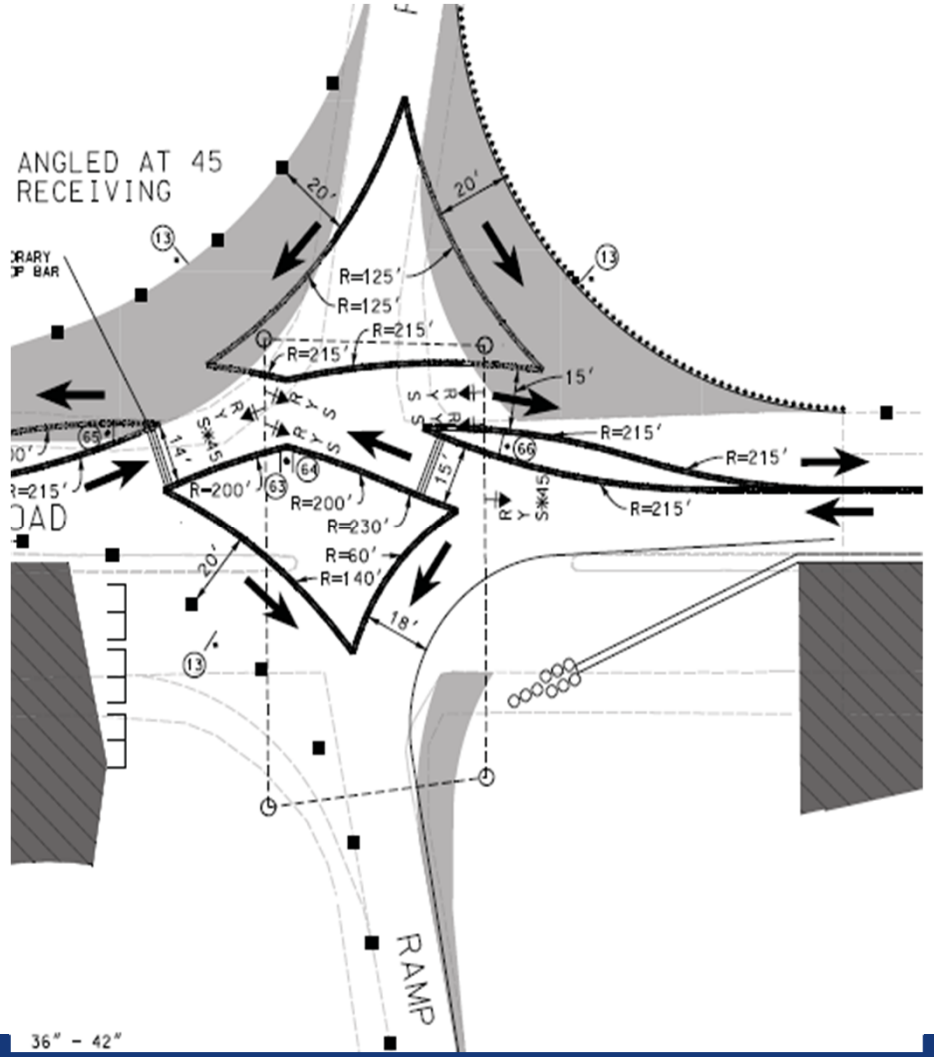
Constructability

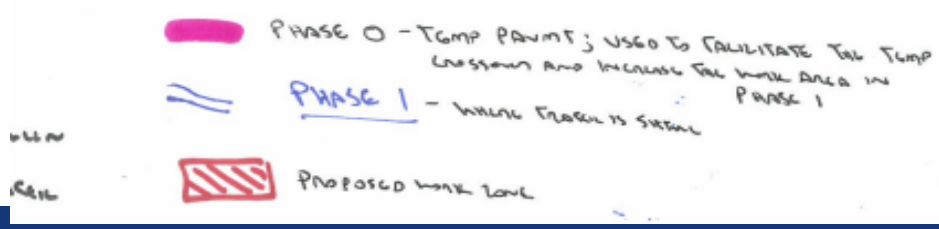
- **Construction Phasing**
  - **What if……..?**
    - ….we could gain the efficiency of the DDI earlier during construction?
    - ….reduce the number of traffic shifts during construction?
    - ….we could educate drivers on how to drive a DDI earlier?



Constructability

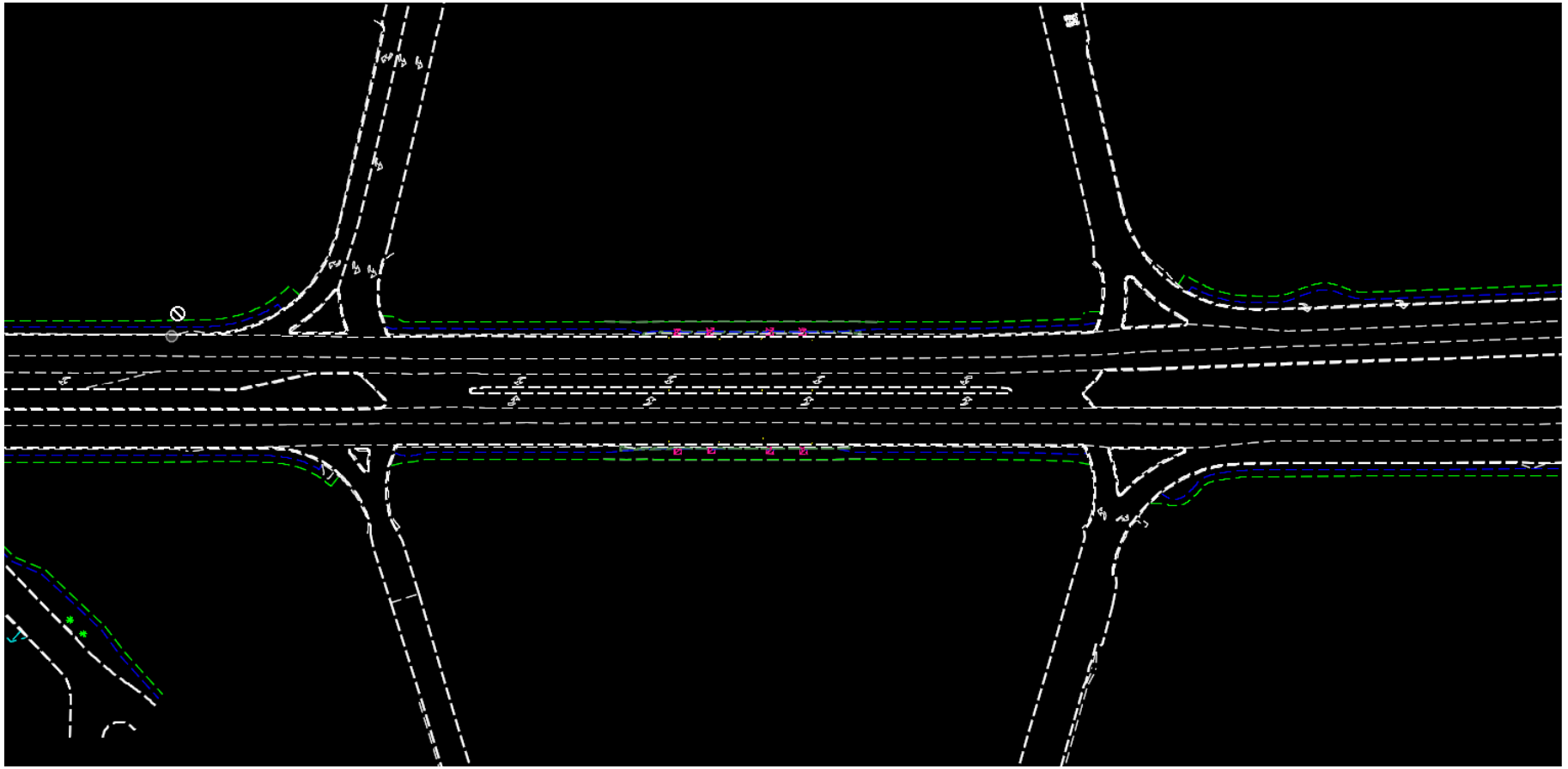
- **Construction Phasing**
  - Options for maintaining traffic
    - Closure between crossover intersections
    - Off-line construction
    - Part-width construction
    - **Operate as a DDI during construction**





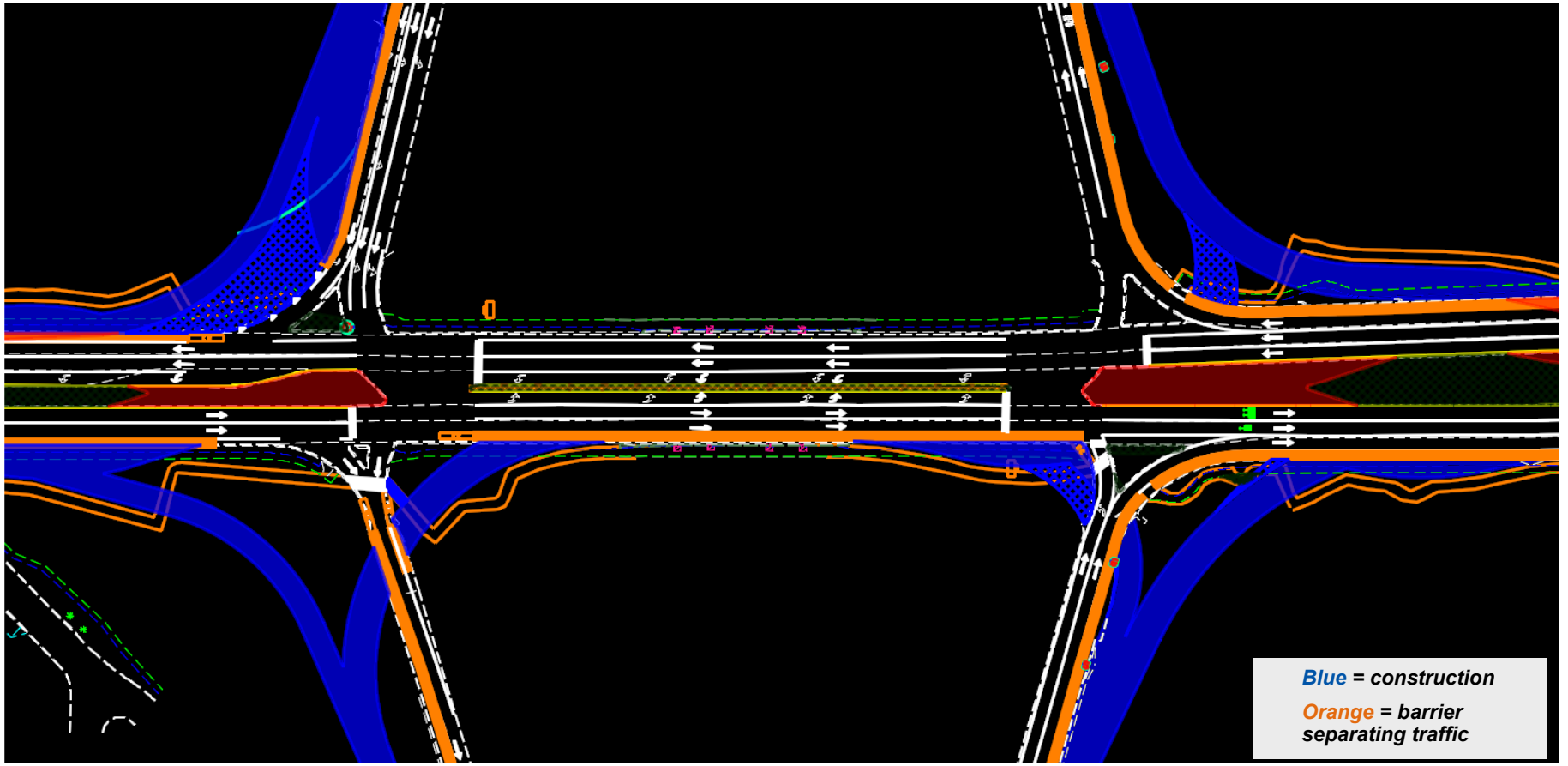
Constructability

- Construction Phasing – DDI during construction
  - Existing Condition



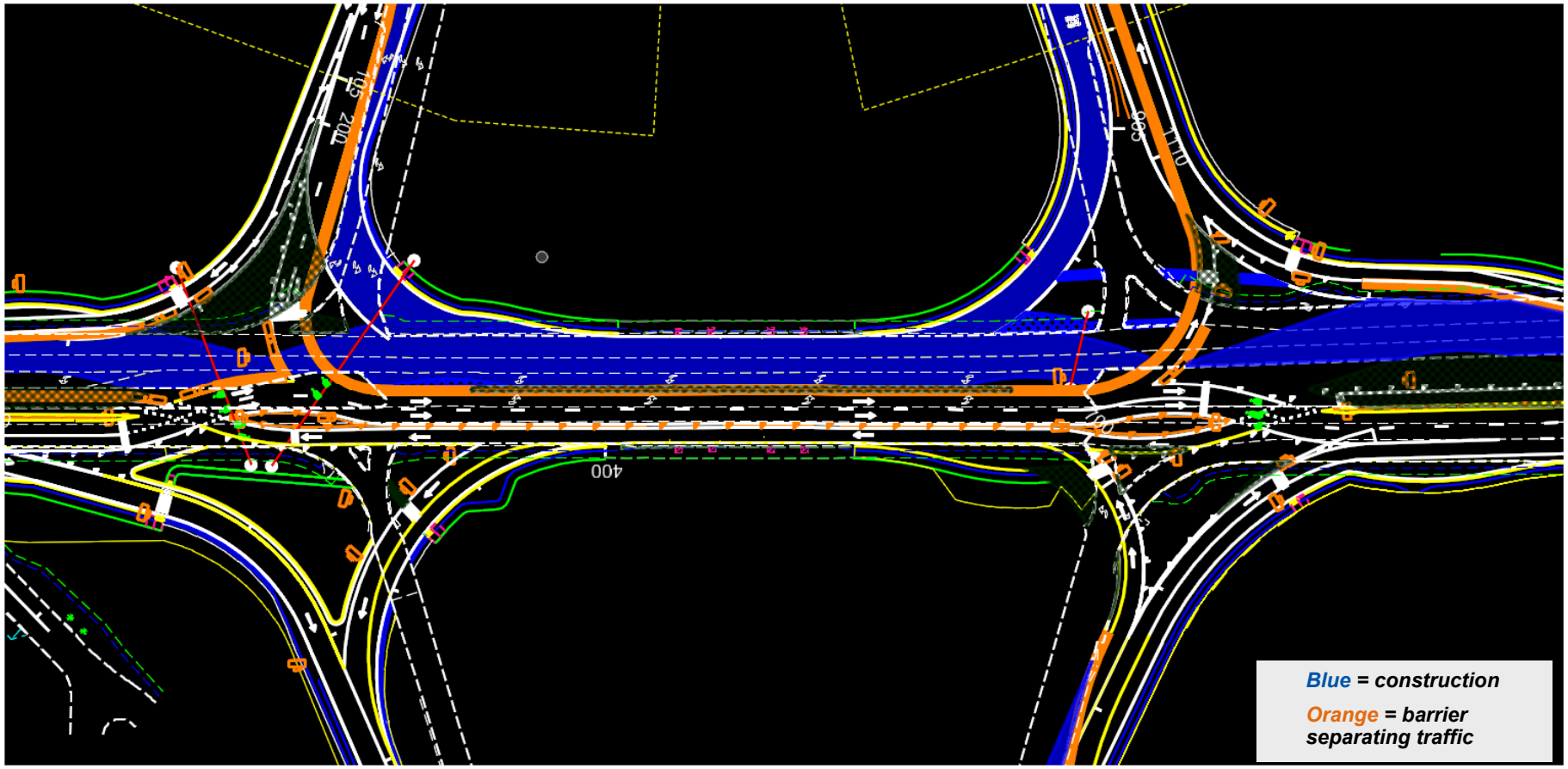
Constructability

- **Construction Phasing – DDI during construction**
  - **Phase 1**
  - Maximize off-line construction
  - Median pavement construction



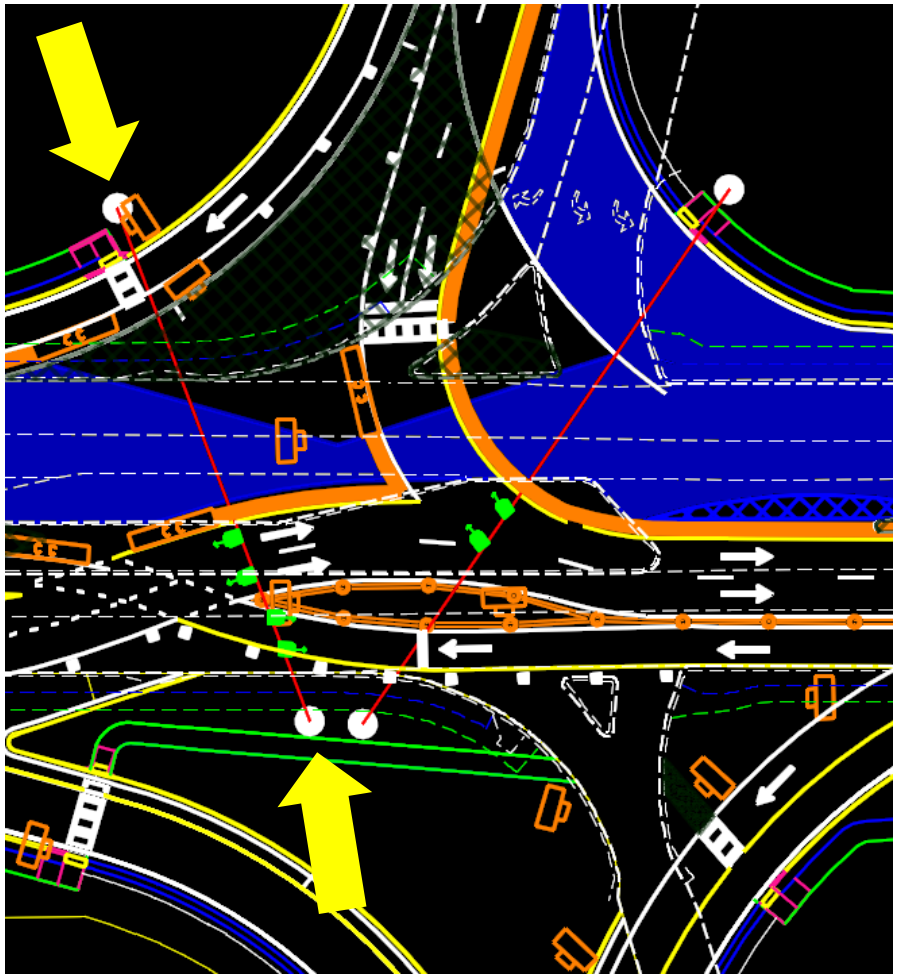
Constructability

- **Construction Phasing – DDI during construction**
  - **Phase 2**
  - Part-width construction
  - Construct north half
  - Operate DDI on the south half
  - Utilize efficiencies of a DDI



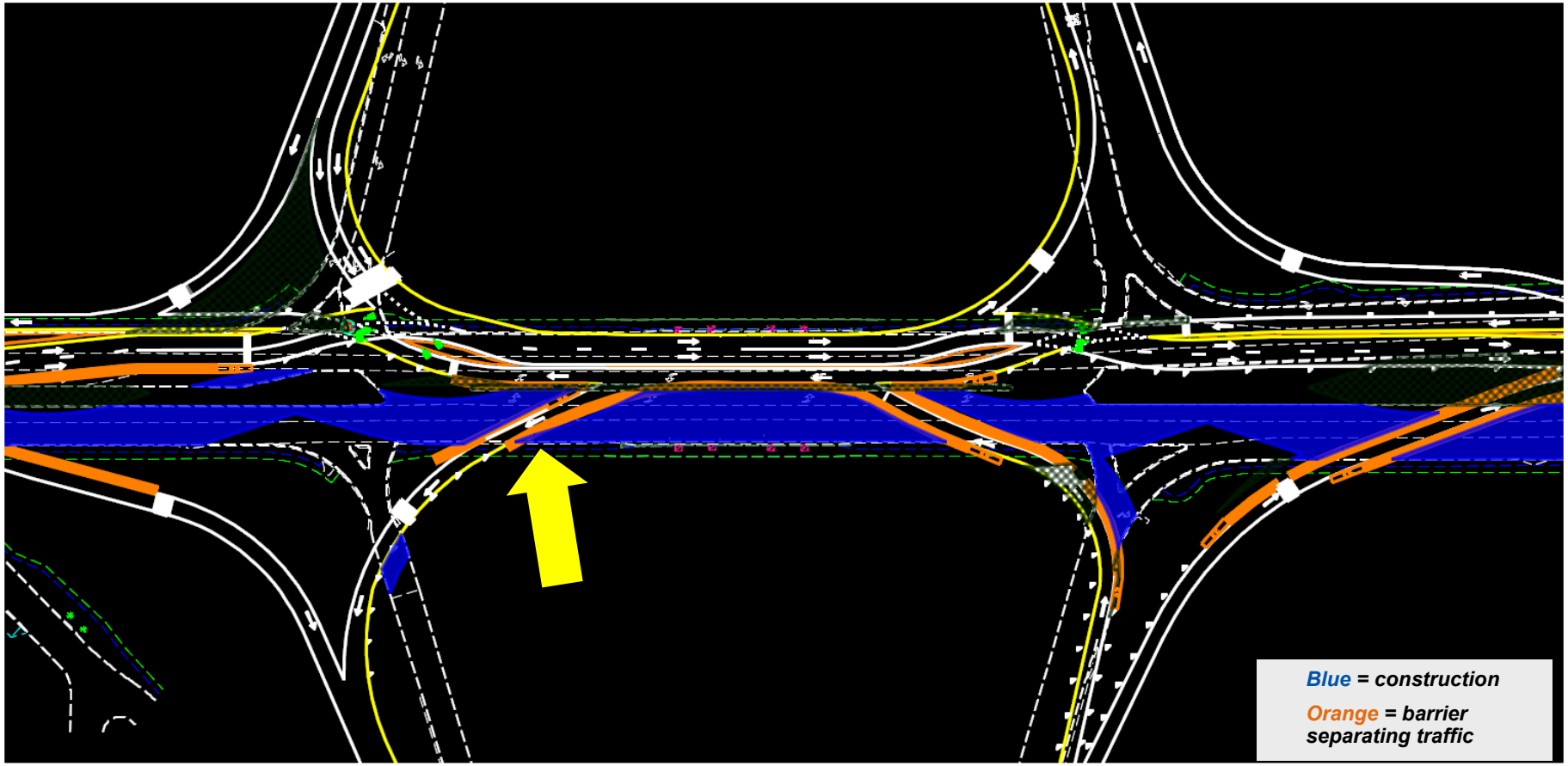
Constructability

- **Construction Phasing – DDI during construction**
  - **Phase 2**
  - Position signal foundations out of future traffic phase pavement
  - Place either permanent or temporary signal poles depending on available space
  - If temporary poles, try to not move the poles between phases but just allow the signal heads to slide along the span wire from one phase to the next



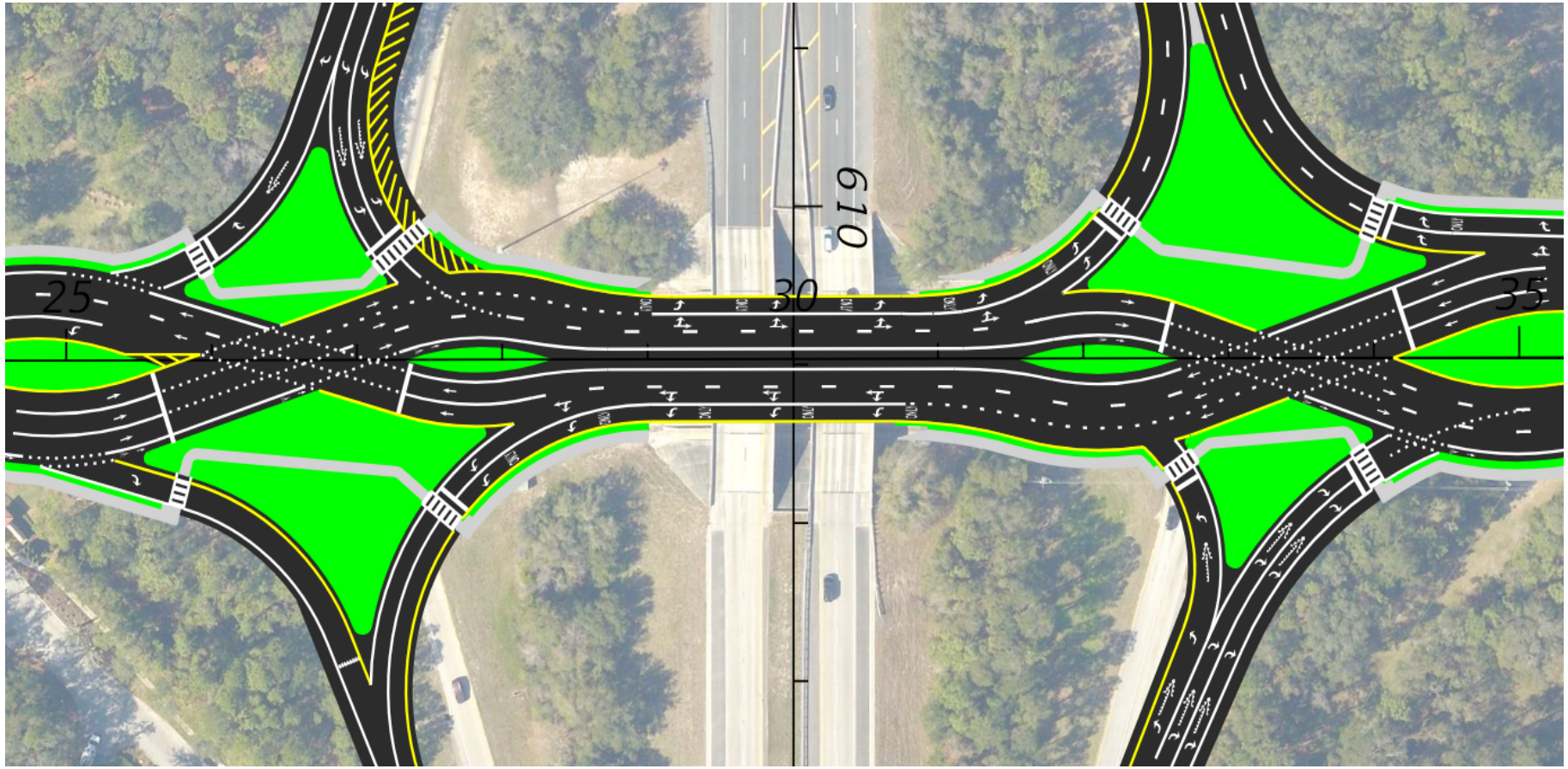
Constructability

- **Construction Phasing – DDI during construction**
  - **Phase 3**
  - Part-width construction
  - Construct south half
  - Operate DDI on the north half
  - Minor shift of traffic to accommodate the left turn movement through the work zone



Constructability

- **Construction Phasing – DDI during construction**
  - **Phase 4**
  - Weekend Closure
  - Finish the transition to the final DDI
  - Finish surface course and striping
  - Finish curb in the crossover intersections
  - Test the signal timing

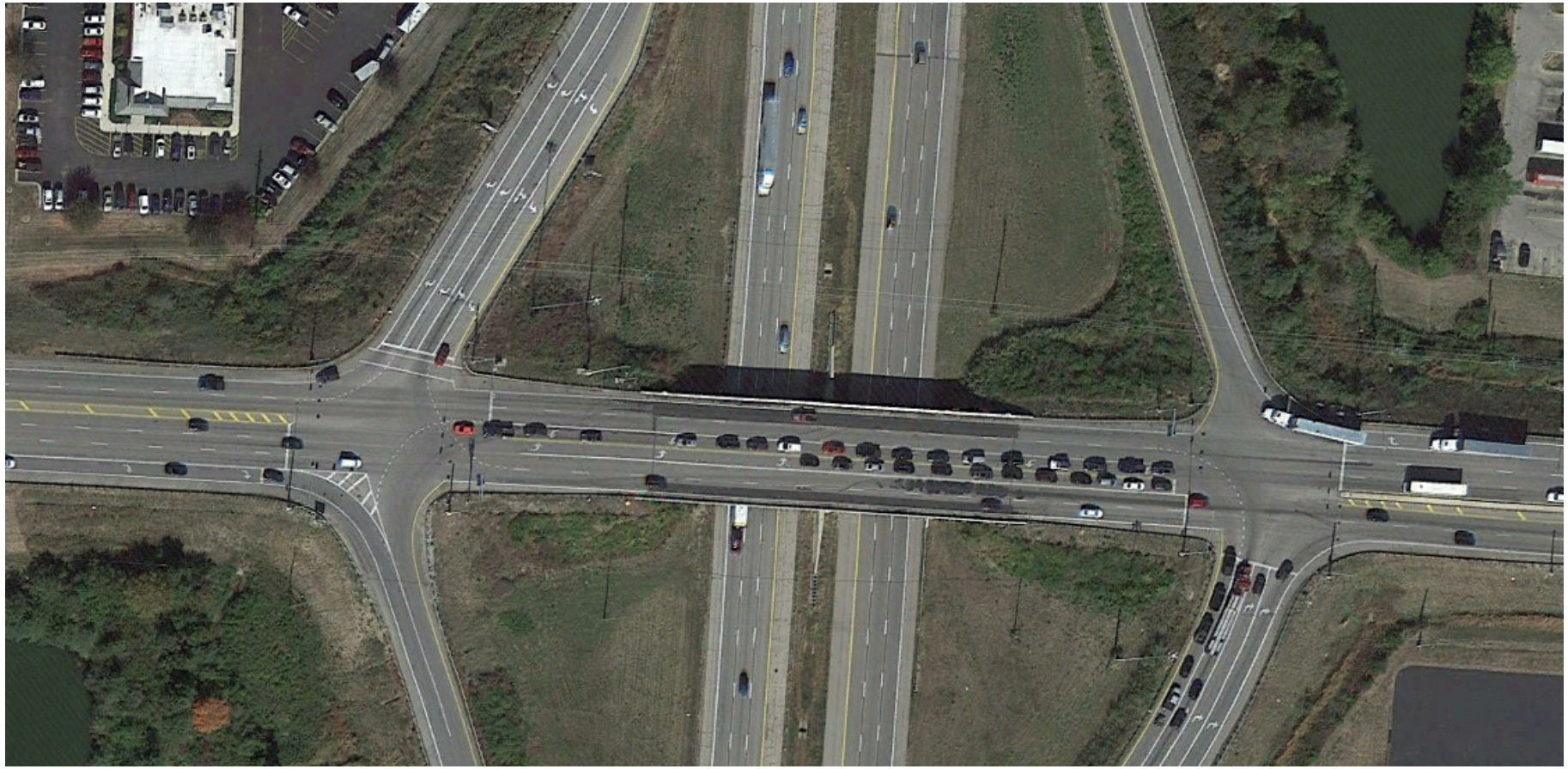


Constructability

- **Construction Phasing – DDI during construction**
  - **Phase 4**
  - Weekend Closure
  - Finish the transition to the final DDI
  - Finish surface course and striping
  - Finish curb in the crossover intersections
  - Test the signal timing

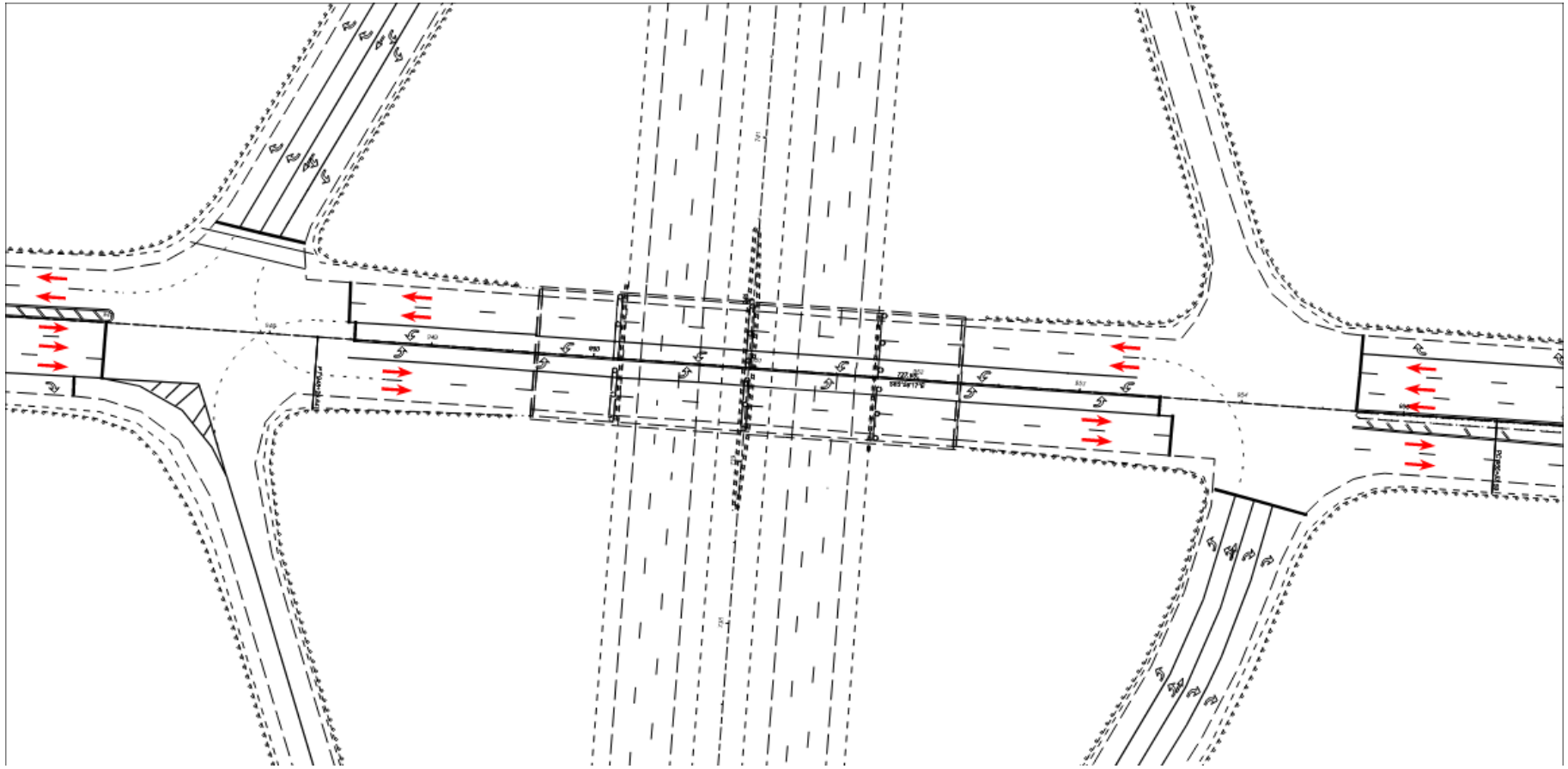
Constructability

- **Construction Phasing**
  - **What if……..?**
  - ….we could gain the efficiency of the DDI even if a DDI isn't being constructed?
  - ….we could operate as a DDI for a bridge replacement project?
  - **Anything stopping us???**



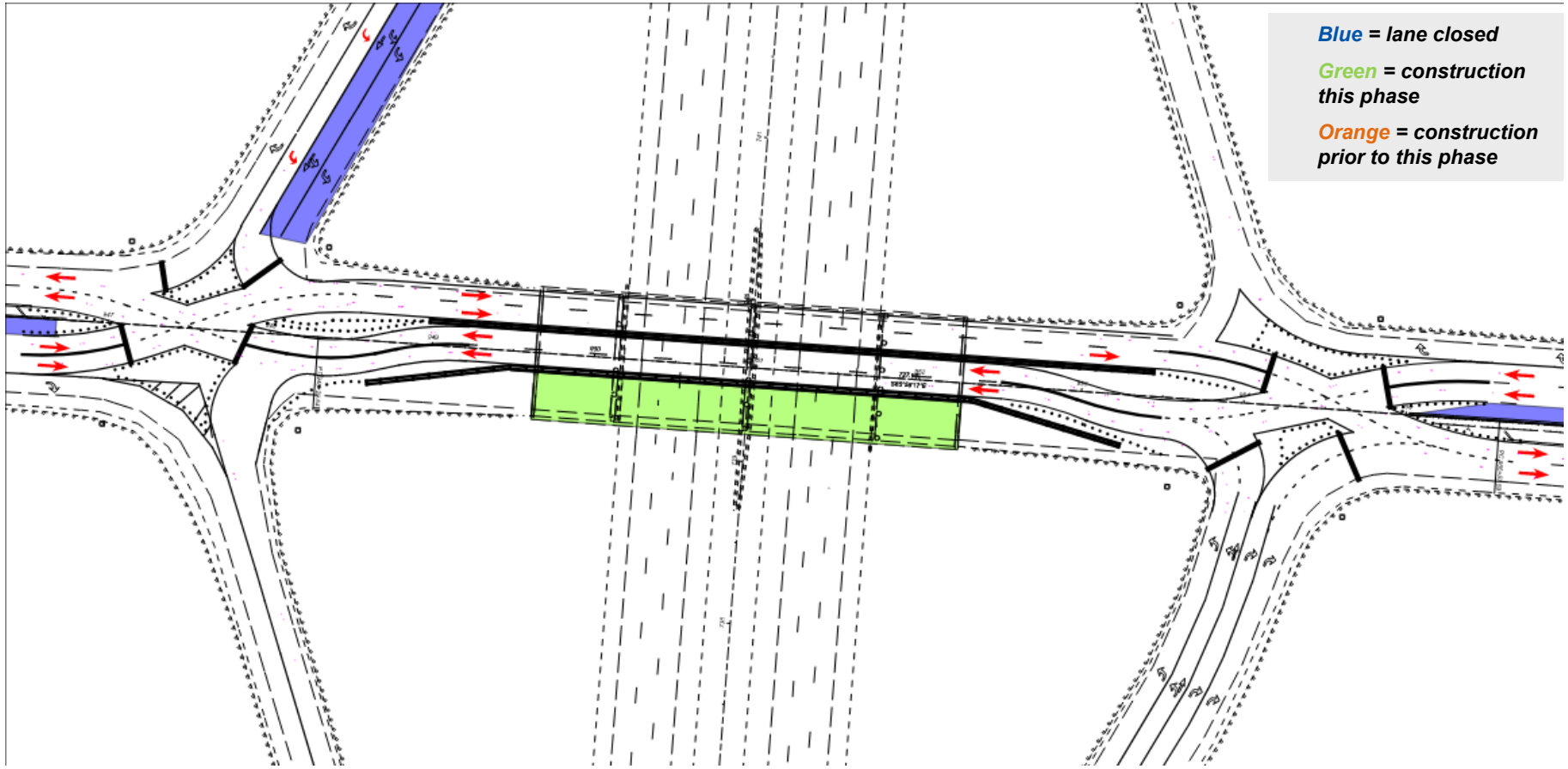
Constructability

- **Construction Phasing – Innovative use of DDI during construction**
  - **Existing Condition**
  - Two through lanes and a full-length side-by-side left turn lane between the ramps



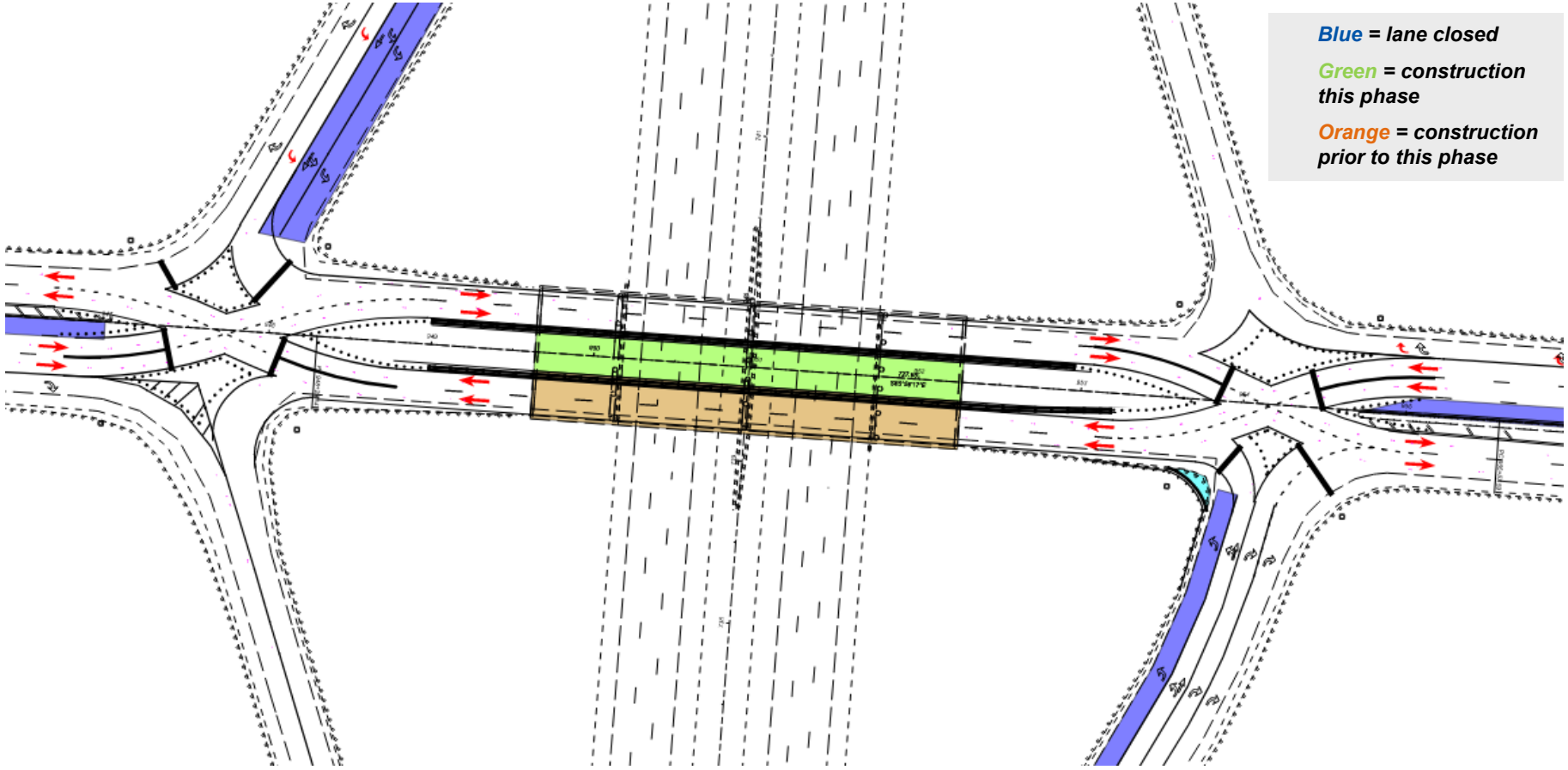
Constructability

- **Construction Phasing – Innovative use of DDI during construction**
  - **Phase 1**
  - Operate as a DDI; use the existing intersections to create the crossover intersections
  - Construct the southern third of the new bridge deck
  - Maintain two through lanes in each direction



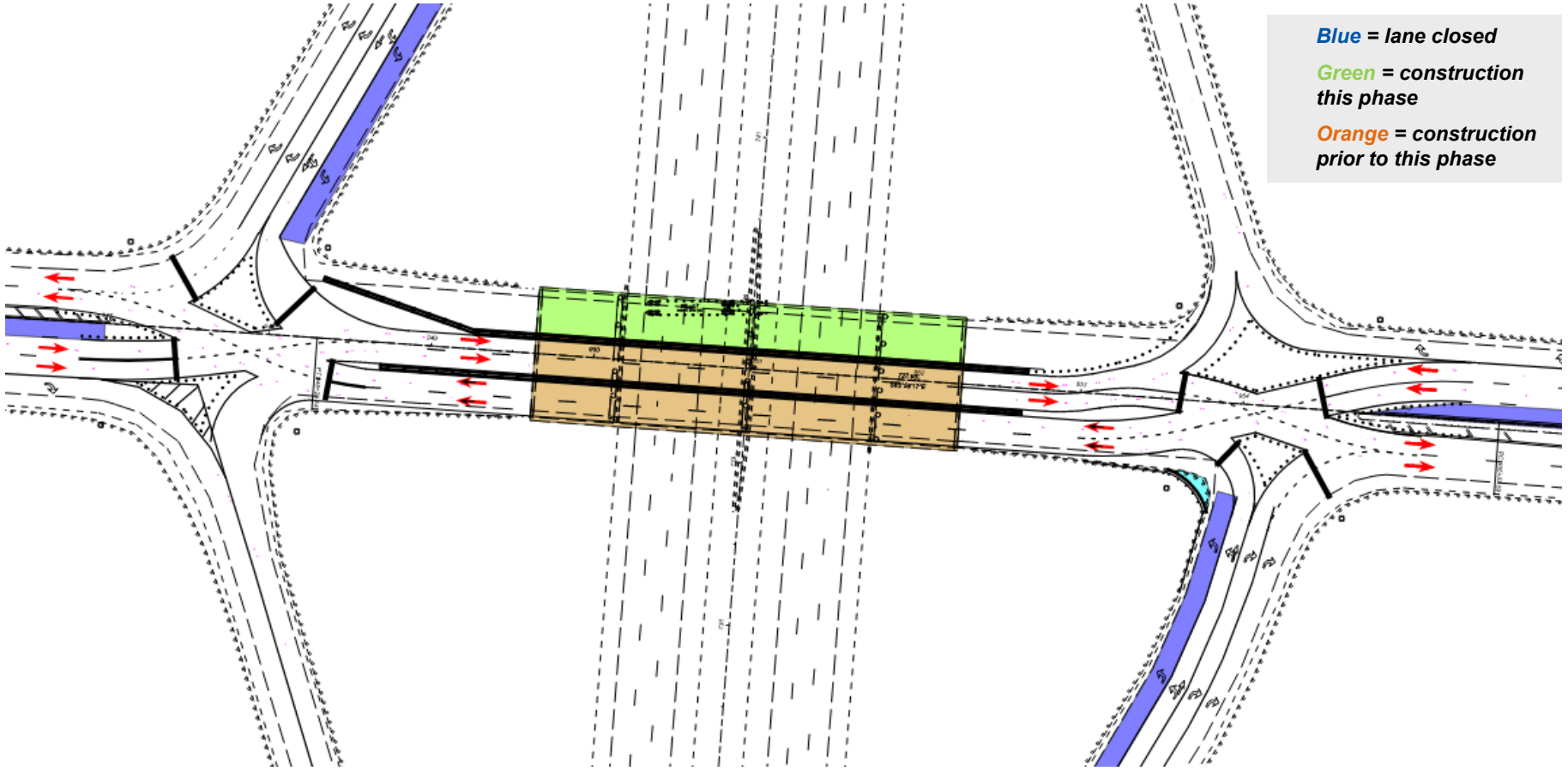
Constructability

- **Construction Phasing – Innovative use of DDI during construction**
  - **Phase 2**
  - Operate as a DDI; use the existing intersections to create the crossover intersections
  - Construct the middle third of the new bridge deck
  - Maintain two through lanes in each direction



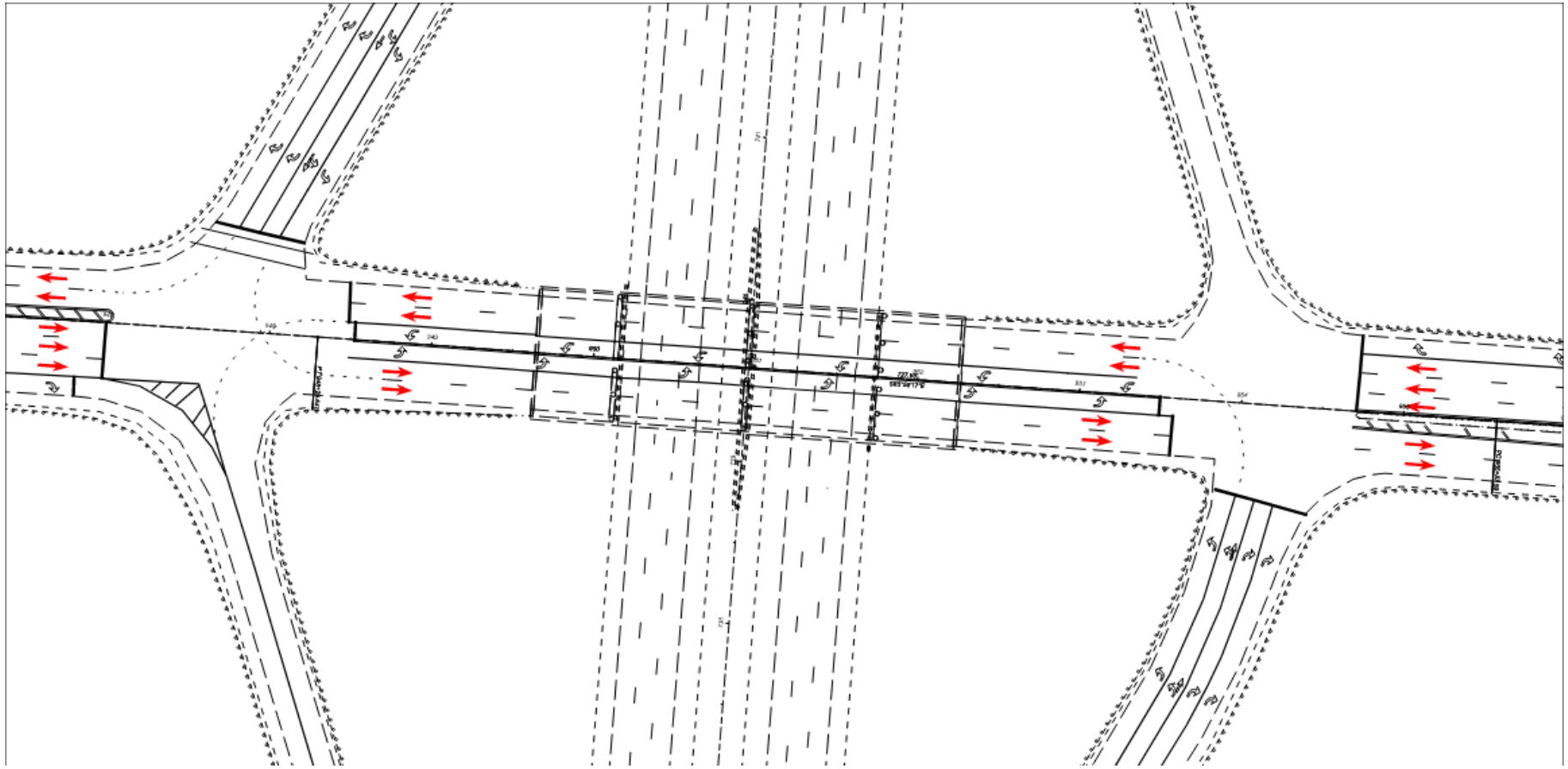
Constructability

- **Construction Phasing – Innovative use of DDI during construction**
  - **Phase 3**
  - Operate as a DDI; use the existing intersections to create the crossover intersections
  - Construct the northern third of the new bridge deck
  - Maintain two through lanes in each direction



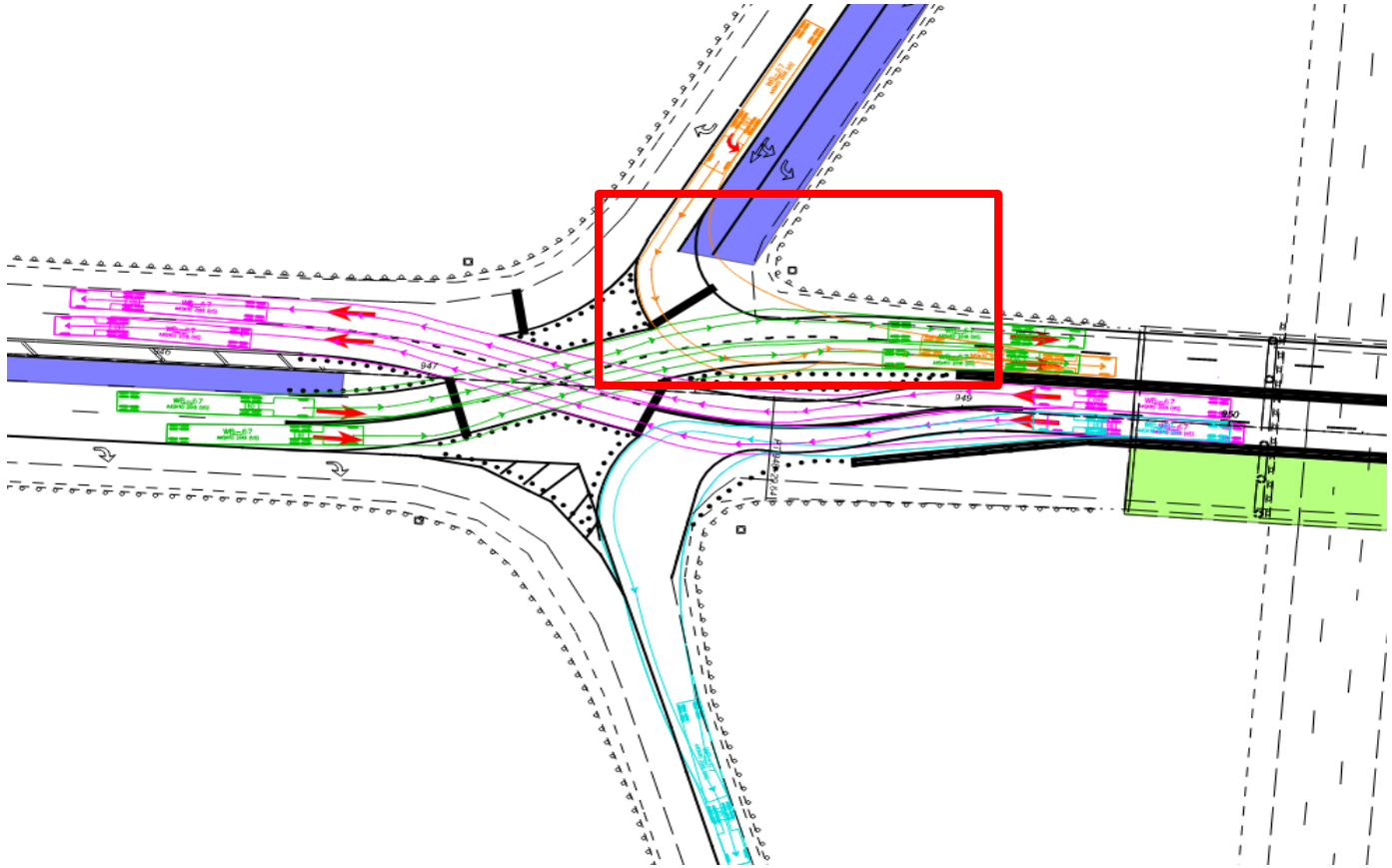
Constructability

- **Construction Phasing – Innovative use of DDI during construction**
  - **Final Condition**
  - Back to a Traditional Diamond Interchange



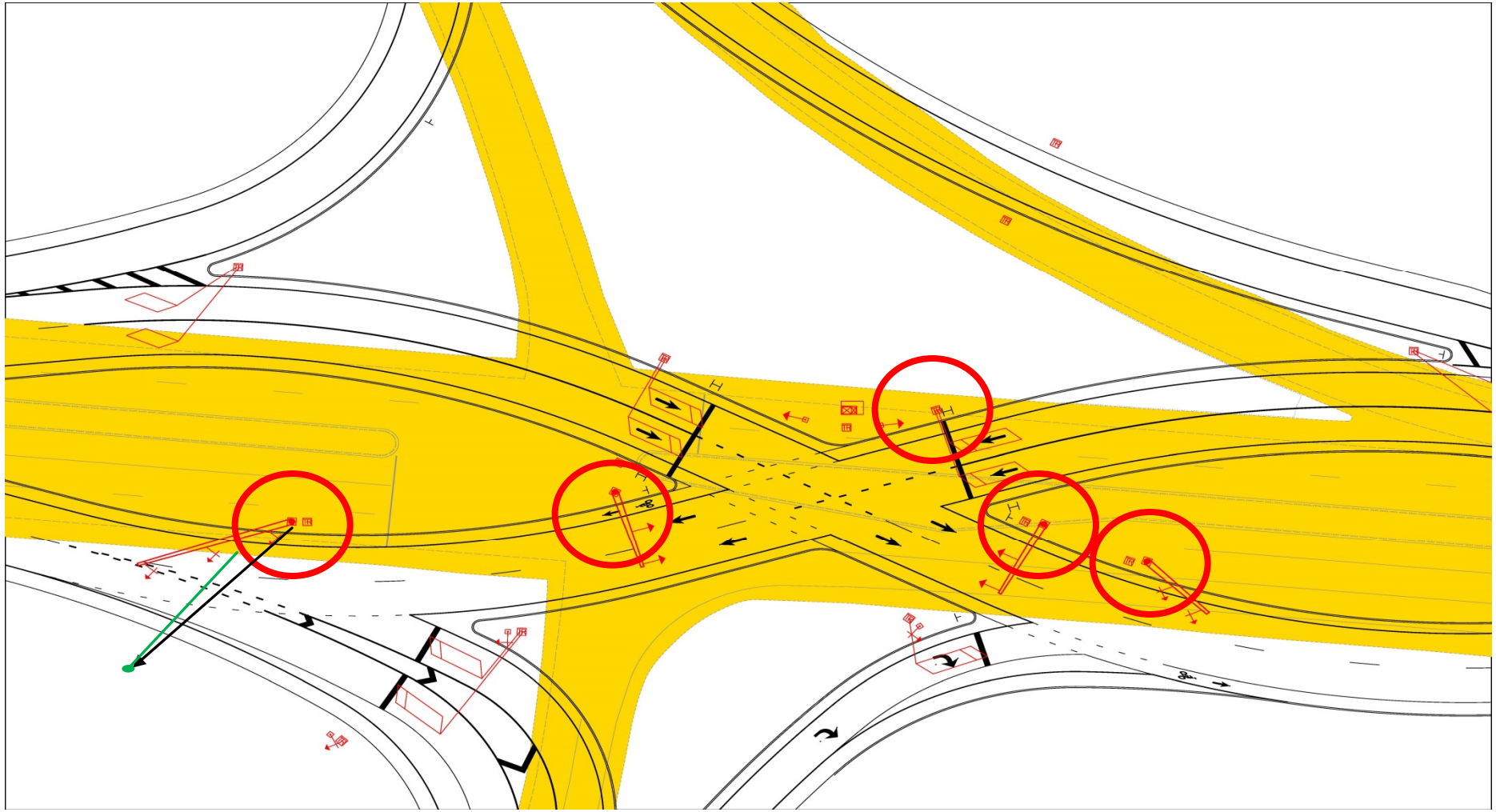
Constructability

- **Construction Phasing – Innovative use of DDI during construction**
  - **Lesson Learned**
    - Watch truck turns
    - Minimize temporary widening
    - How to message this project to the public when it operates better DURING construction than AFTER??



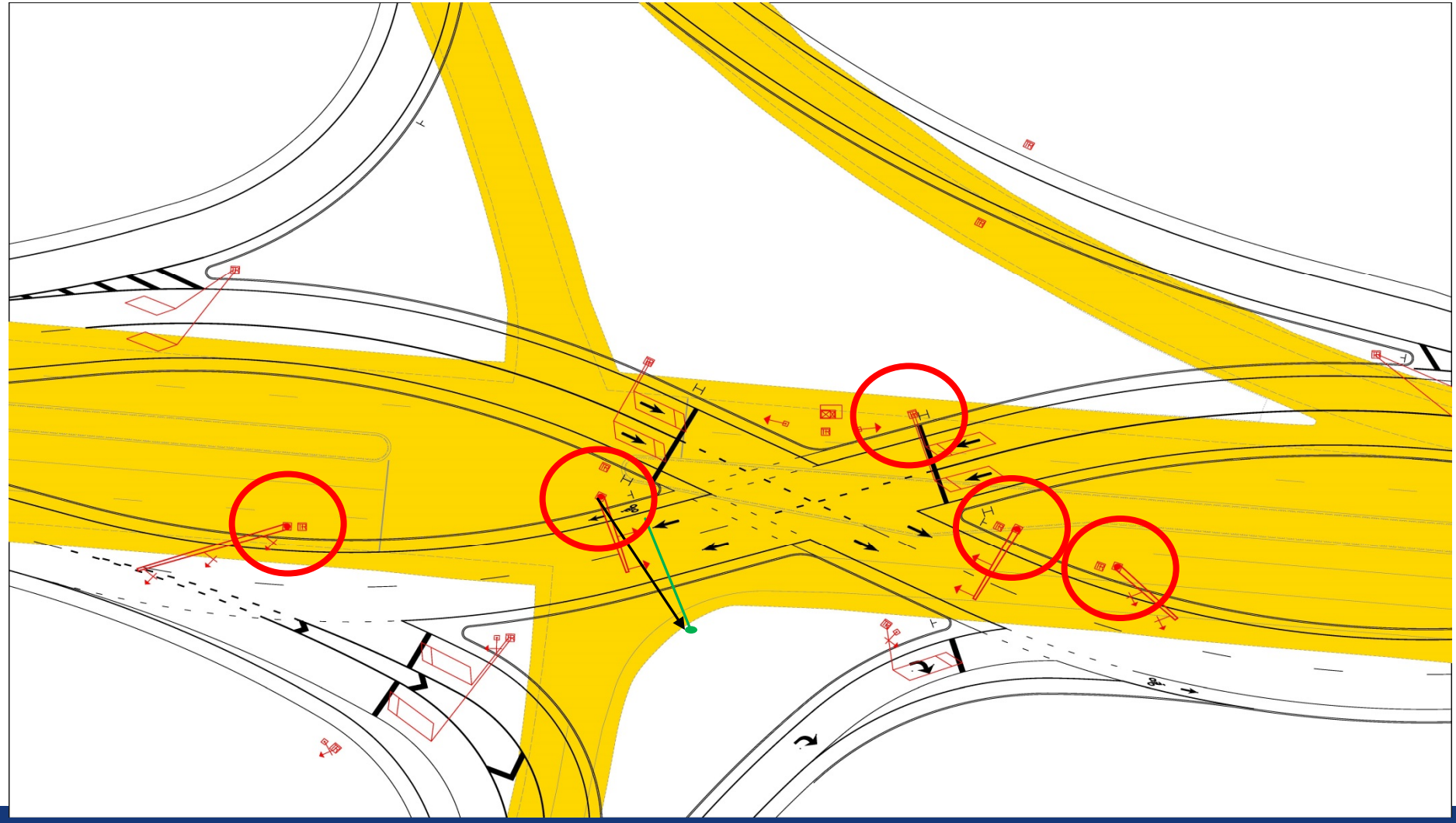
Constructability

- **Proposed vs Existing**
  - Proposed Signal Poles – avoid existing pavement if possible
  - Show existing pavement when developing design to avoid conflicts that can delay construction



Constructability

- **Proposed vs Existing**
  - Proposed Signal Poles – avoid existing pavement if possible
  - Show existing pavement when developing design to avoid conflicts that can delay construction



Constructability

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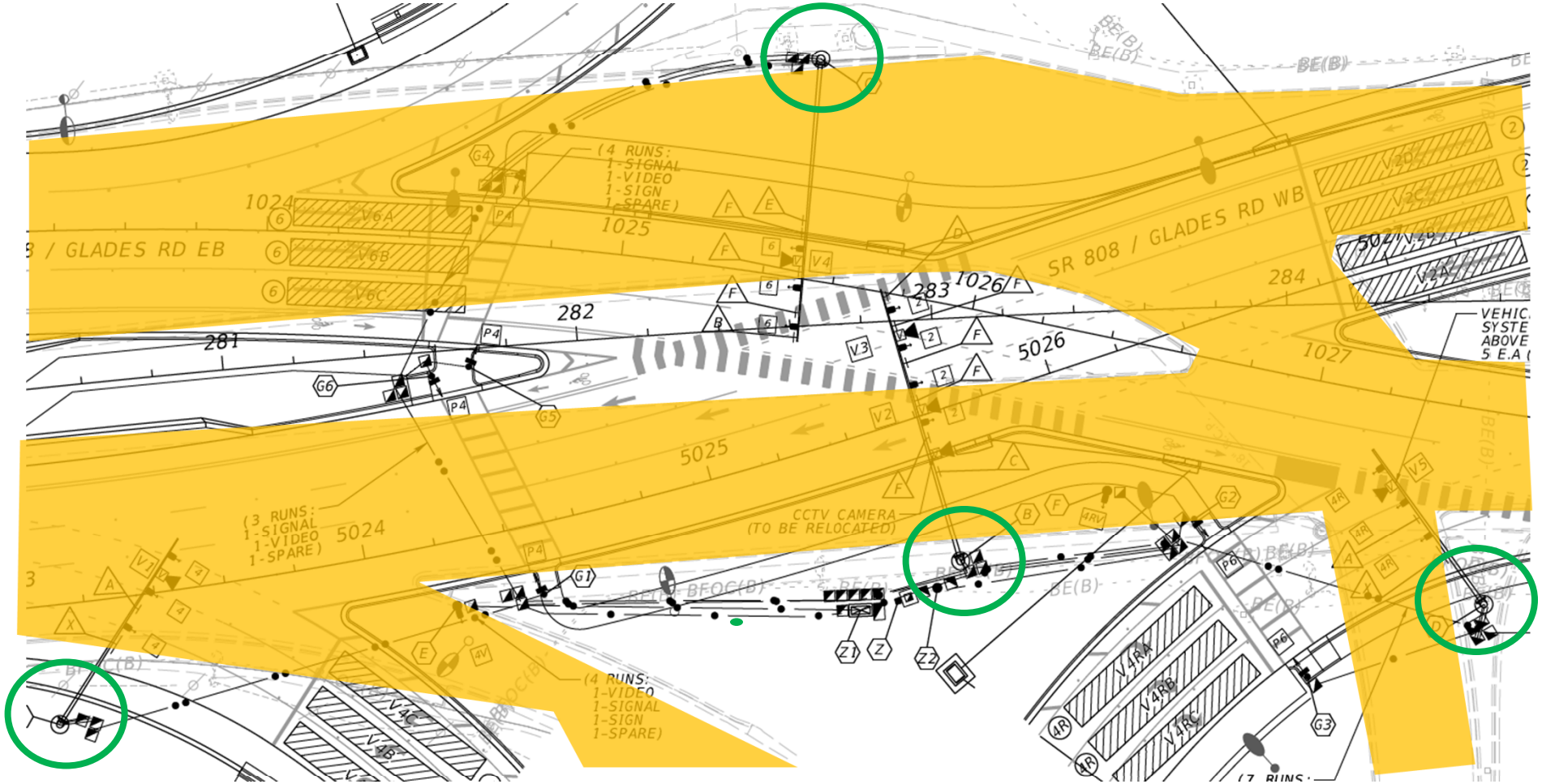
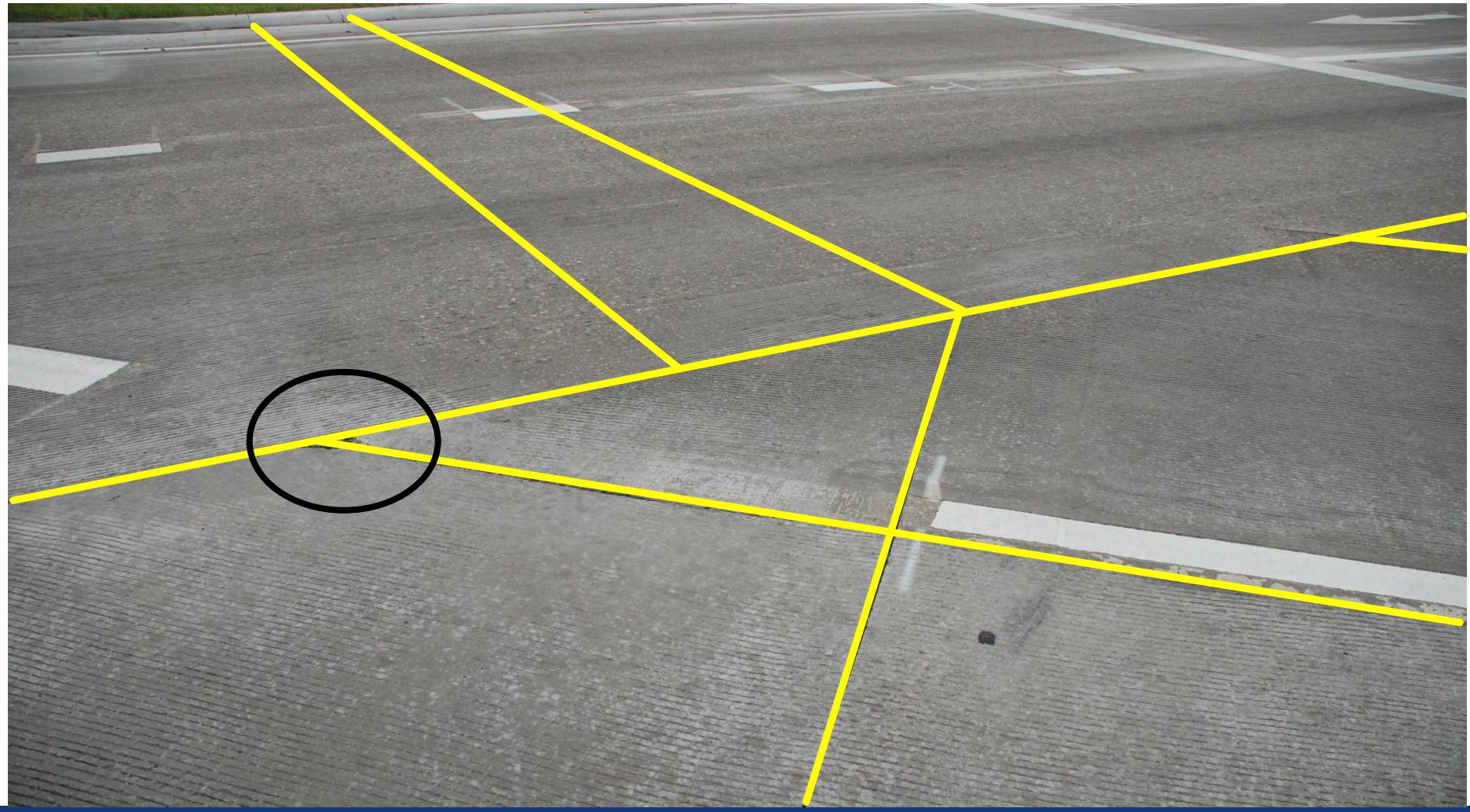


Constructability

- **Pavement Joints**
  - Concrete Pavement
  - Acute angles create joint issues



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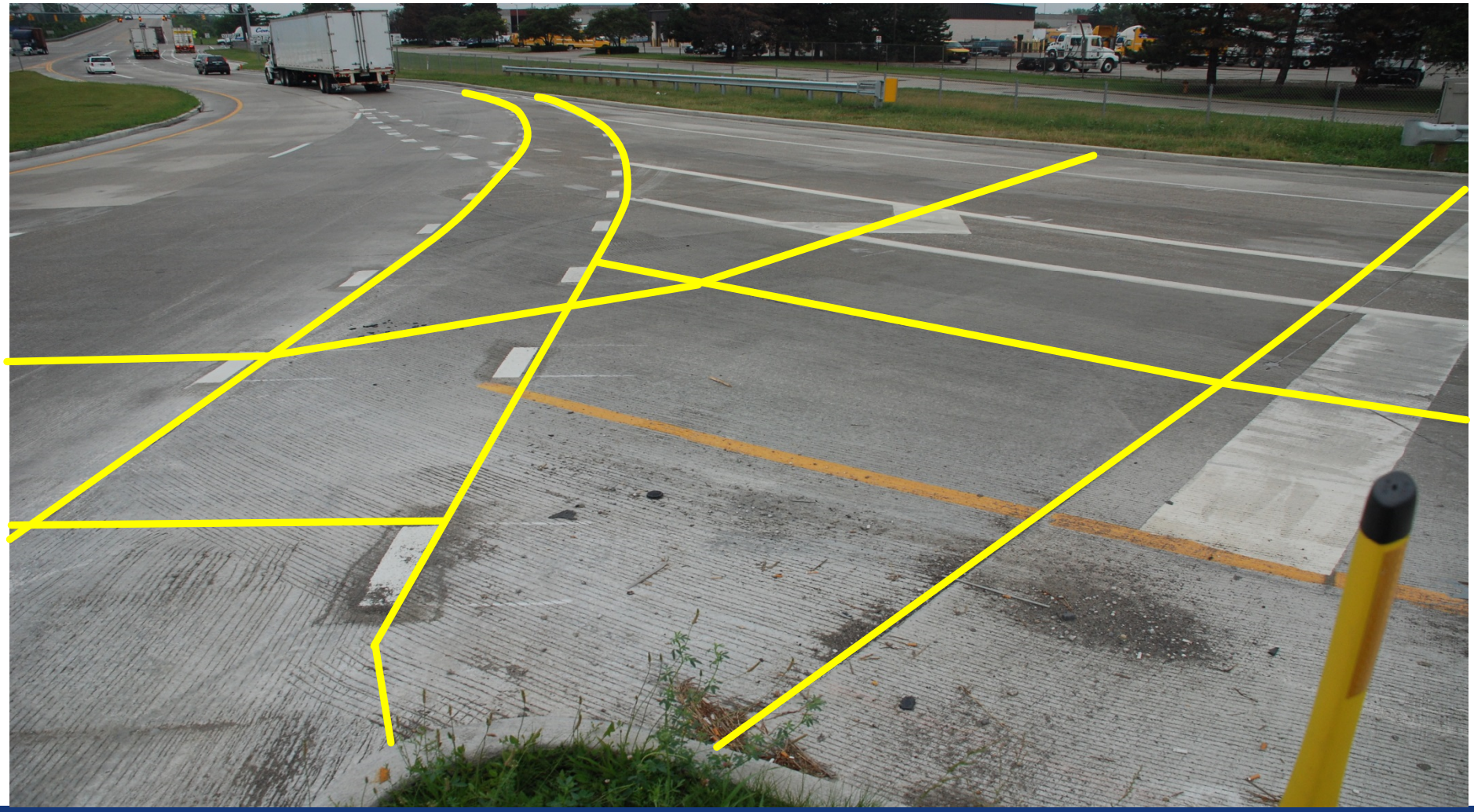
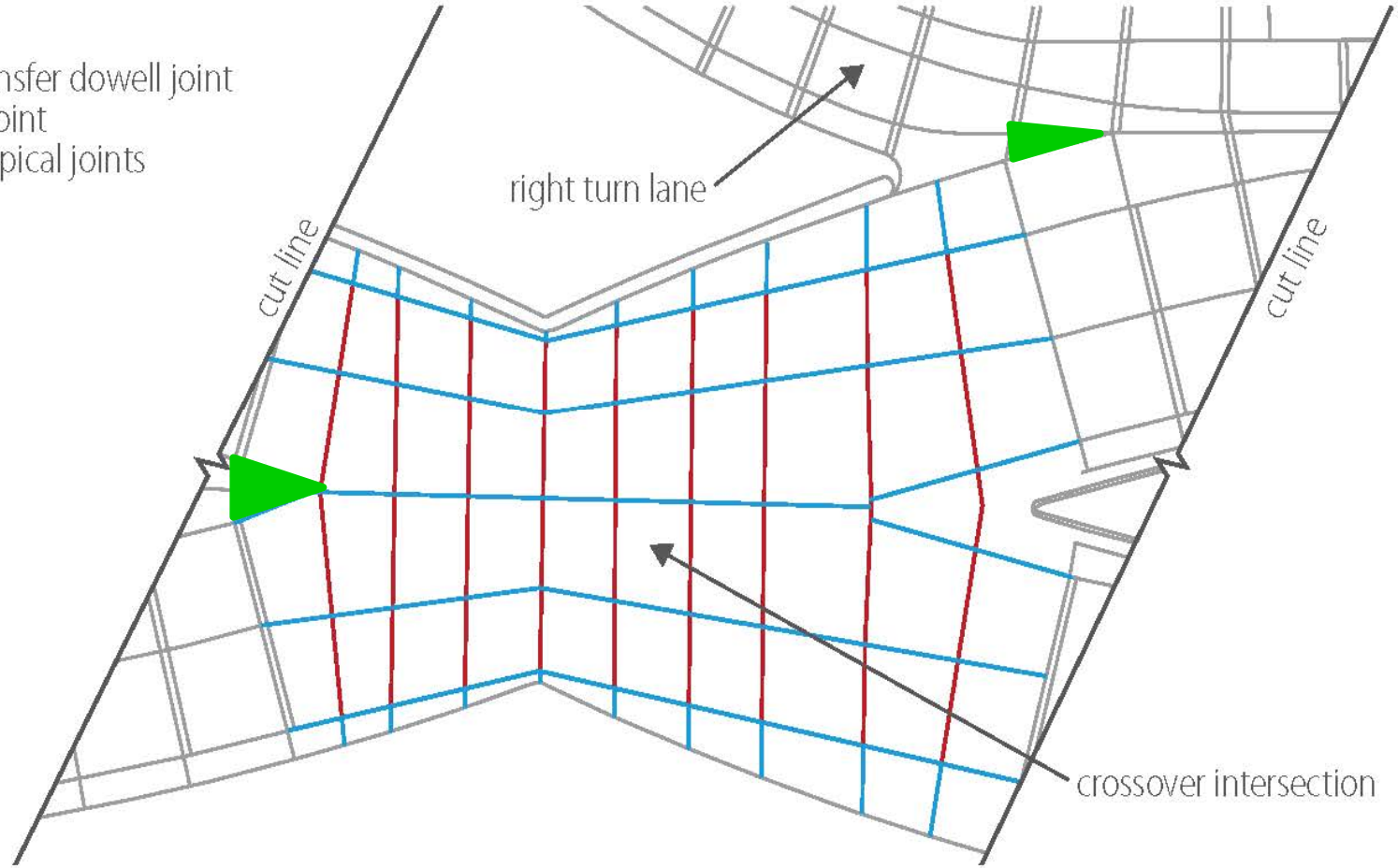


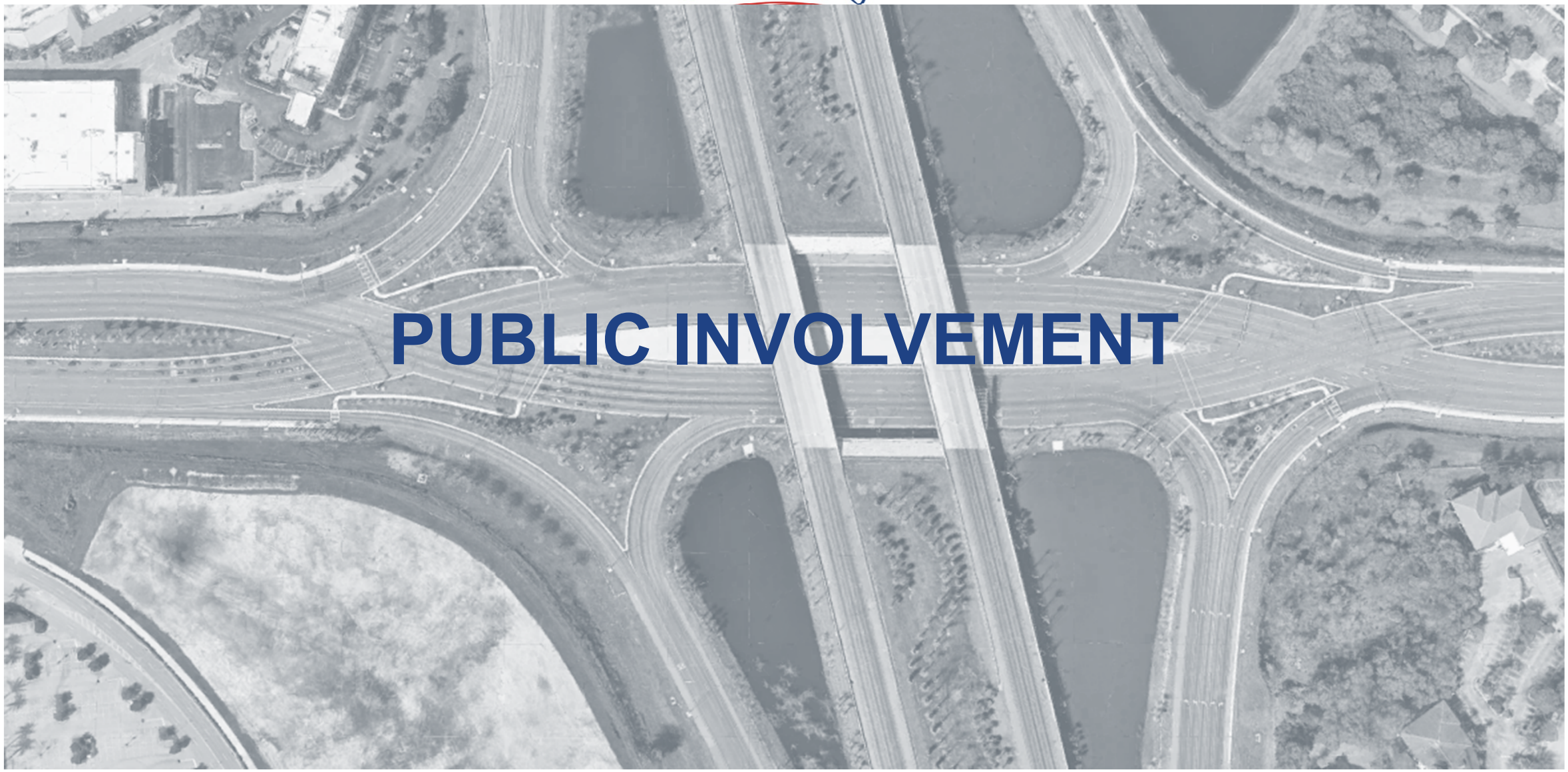
Constructability

- **Pavement Joints**
  - Concrete Pavement
  - Acute angles create joint issues

exhibit 5-2: pccp sample joint layout



Source: UDOT DDI Guideline – June 2014



PUBLIC INVOLVEMENT

Public Involvement and Education

- **Public Education**
  - Don’t re-invent the wheel!
  - A lot of information has been developed – review what is available first

Public Involvement and Education

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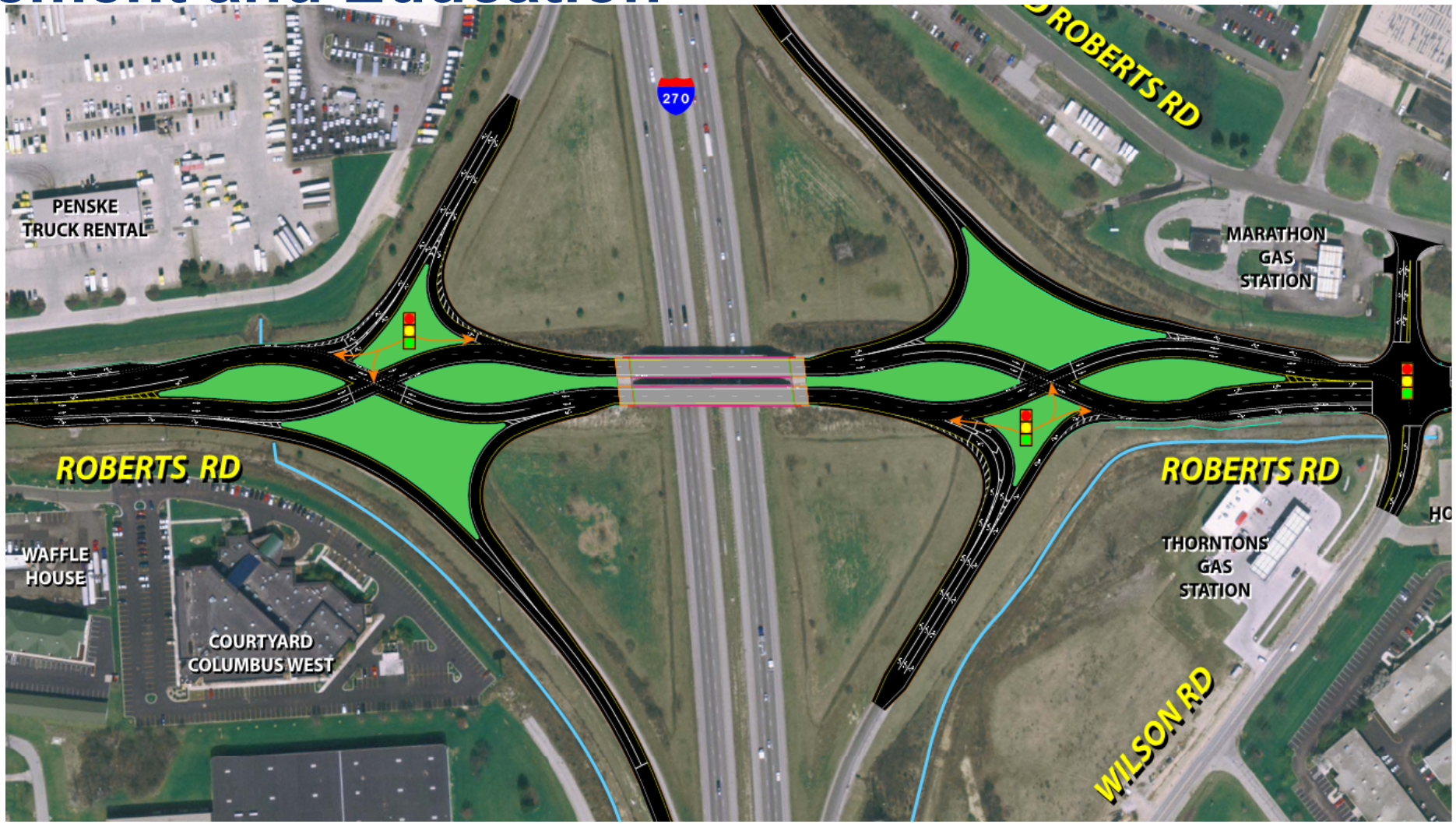
KEYS TO SUCCESS

The success of the Ashford Dunwoody DDI was predicated by a comprehensive public information campaign spearheaded by the Perimeter Community Improvement Districts (PCID). Focused on combating concerns about the proposed change in traffic patterns, PCID used creative communications and outreach methods—such as ongoing media campaigns and public and private stakeholder participation in town hall meetings—to promote acceptance of the innovative design.

The PCID's campaign included the eye-catching graphic and slogan, "Can You DDI? Arrive, Crossover, Drive." Because of the efforts of the PCID to engage all who might be affected by the project's implementation, the Ashford Dunwoody DDI was not only successfully implemented, but the GDOT projects that it could become a model for congested interchanges throughout the State.

Public Involvement and Education

- **Public Involvement**
  - Reduce confusion
  - Keep it simple!
    - Public is often not engineers or traffic analysts



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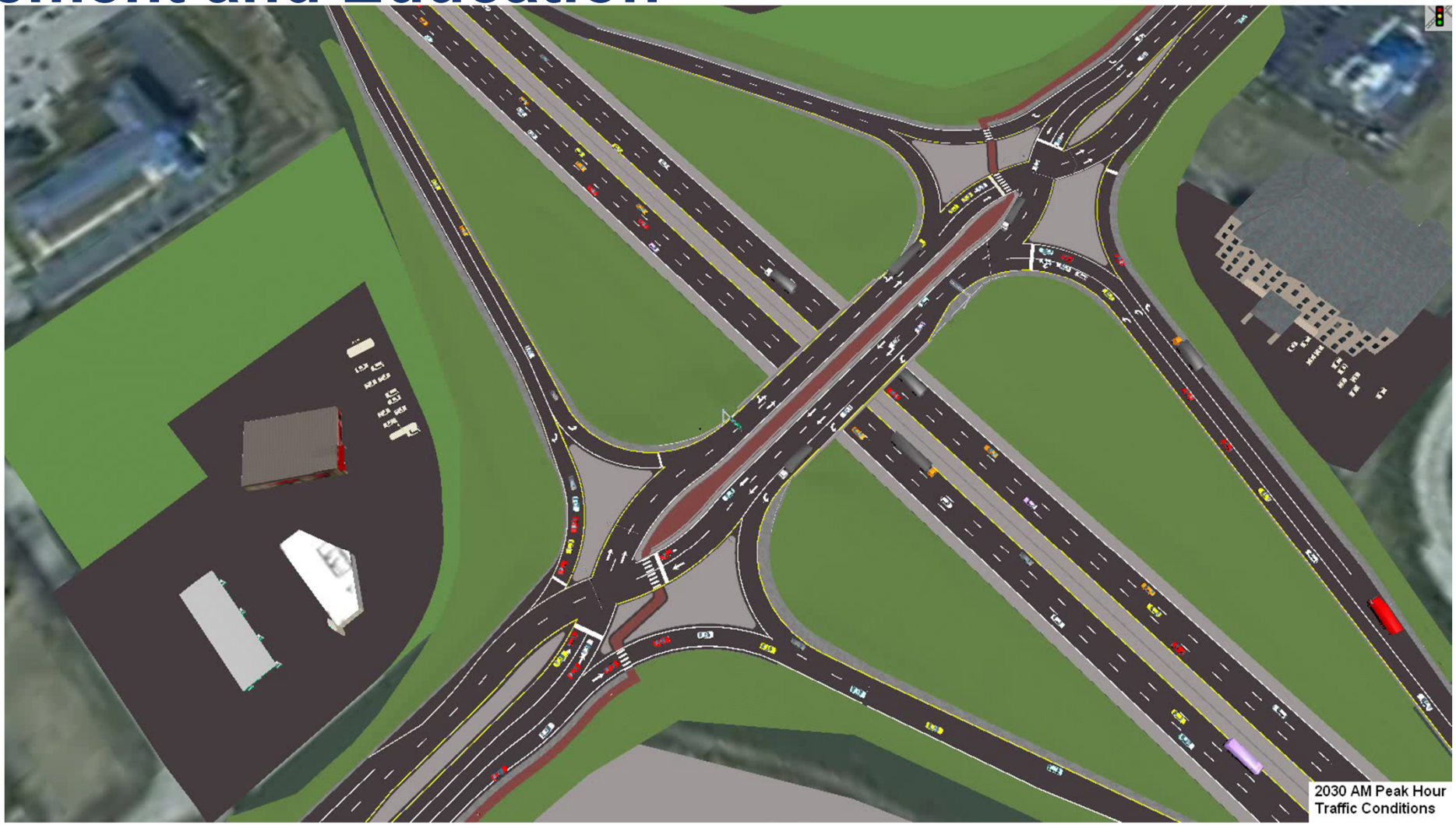


Public Involvement and Education

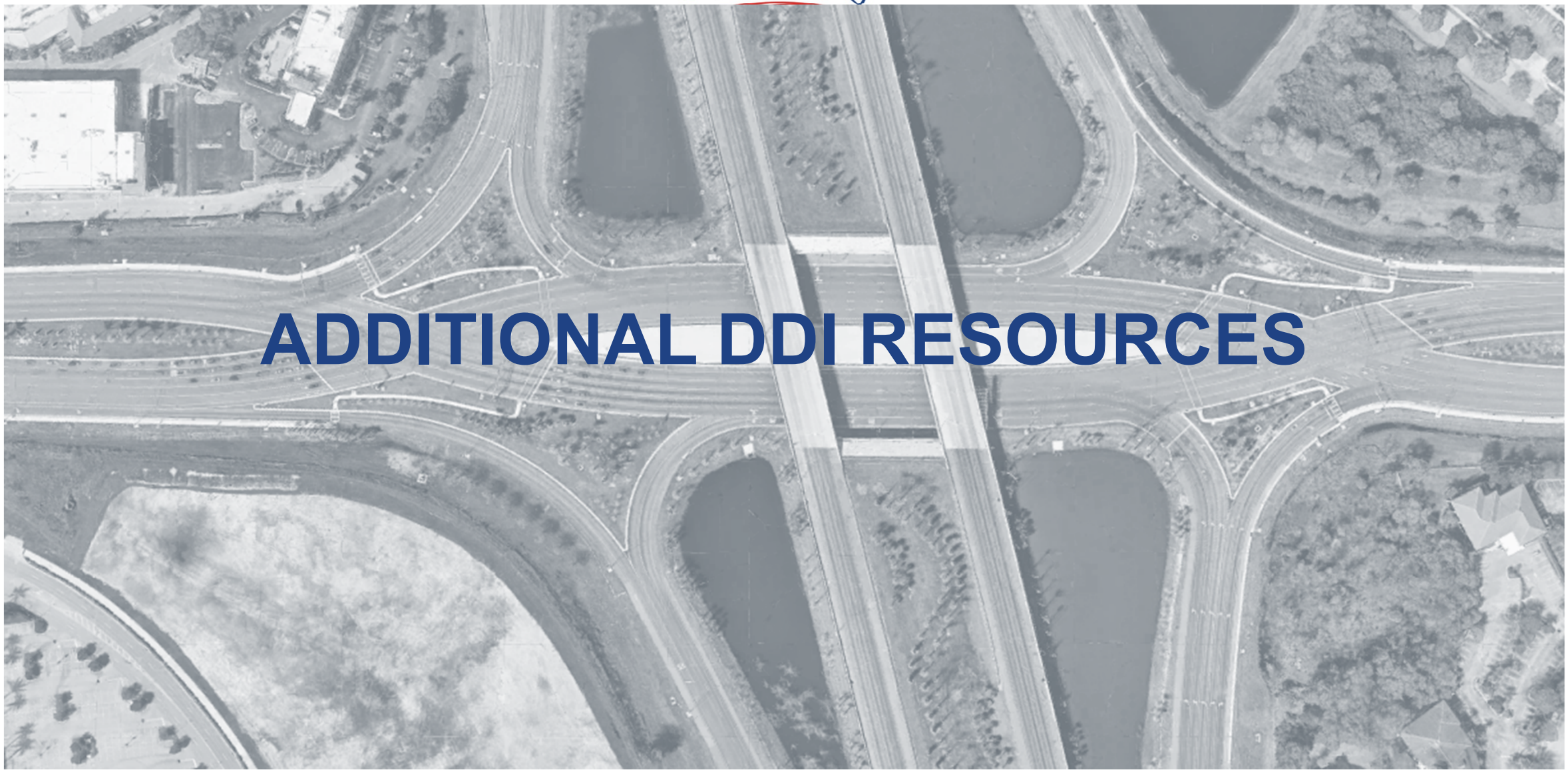
- **Public Involvement**
  - Focus on the advantages of the DDI
    - Emphasize increased safety and improved traffic flow
    - Describe how they are functional for all vehicles and modes of travel
  - Promote cost savings as opportunity to apply more funds to other locations that require improvement


“CLEAN UP”

FDOT DDI Design Webinar Series

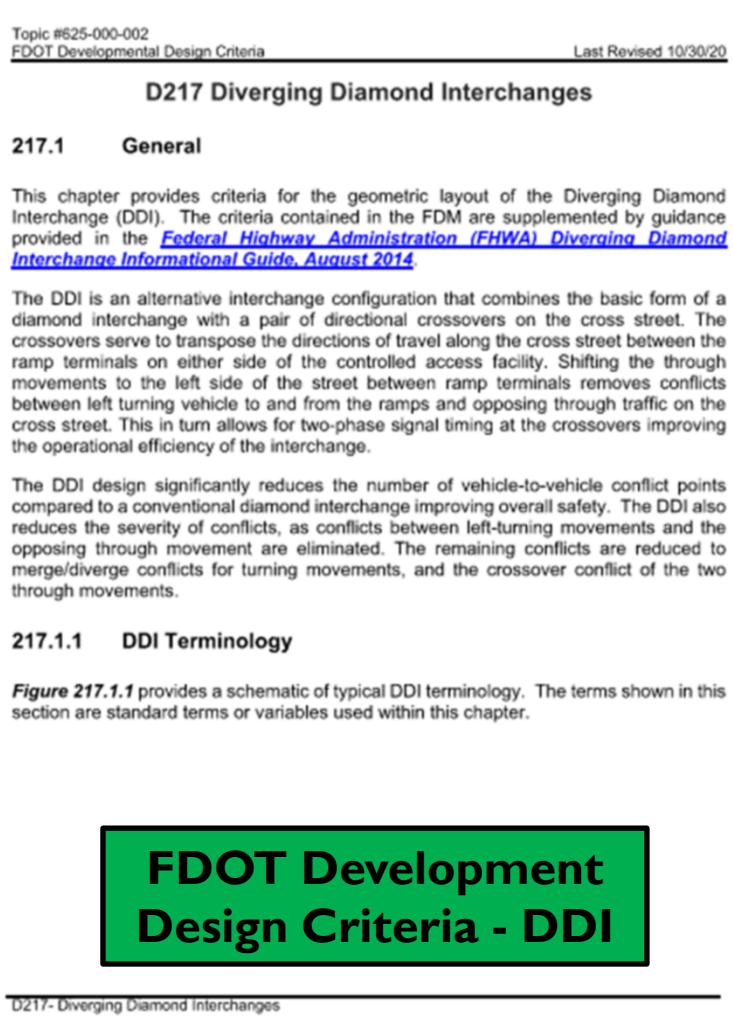
- **Schedule:**

DDI Overview	June 15, 2021	2p-5p
DDI Geometric Design	June 29, 2021	2p-3p
DDI Signing and Pavement Marking	July 16, 2021	2p-3p
DDI Traffic Operations	August 10, 2021	2p-3p
DDI Multimodal Accommodations	August 24, 2021	2p-3p
DDI Plans Detailing & Public Involvement	September 7, 2021	2p-3p



ADDITIONAL DDI RESOURCES

Additional DDI Resources


Topic #625-000-002
FDOT Developmental Design Criteria Last Revised 10/30/20

D217 Diverging Diamond Interchanges

217.1 General

This chapter provides criteria for the geometric layout of the Diverging Diamond Interchange (DDI). The criteria contained in the FDM are supplemented by guidance provided in the *Federal Highway Administration (FHWA) Diverging Diamond Interchange Informational Guide, August 2014*.

The DDI is an alternative interchange configuration that combines the basic form of a diamond interchange with a pair of directional crossovers on the cross street. The crossovers serve to transpose the directions of travel along the cross street between the ramp terminals on either side of the controlled access facility. Shifting the through movements to the left side of the street between ramp terminals removes conflicts between left turning vehicle to and from the ramps and opposing through traffic on the cross street. This in turn allows for two-phase signal timing at the crossovers improving the operational efficiency of the interchange.

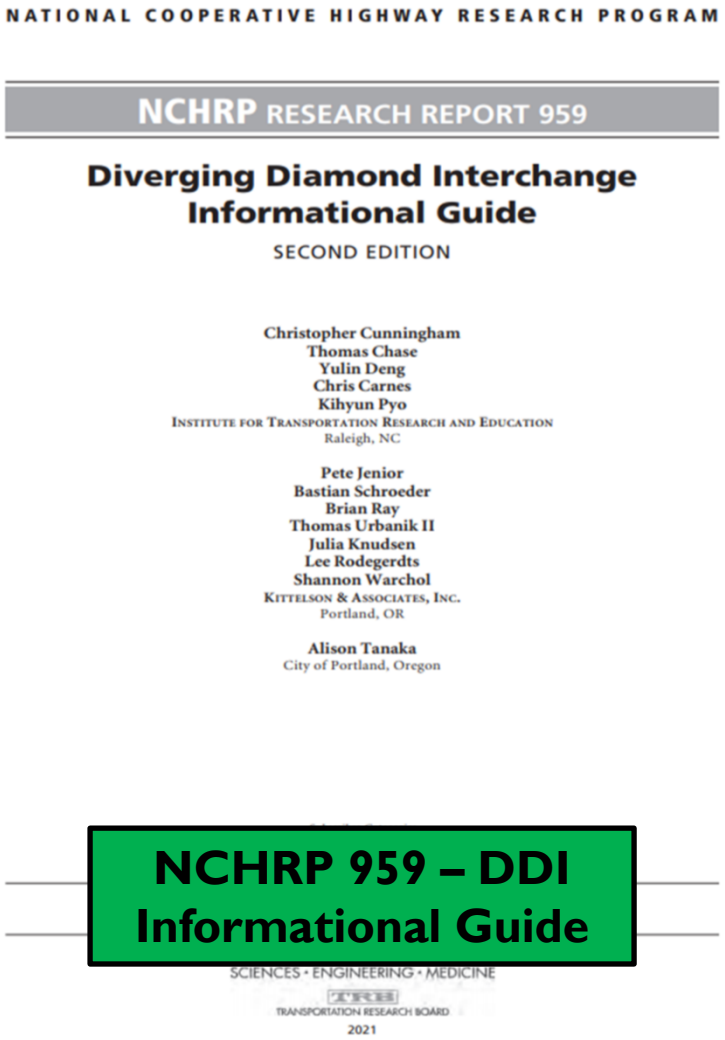
The DDI design significantly reduces the number of vehicle-to-vehicle conflict points compared to a conventional diamond interchange improving overall safety. The DDI also reduces the severity of conflicts, as conflicts between left-turning movements and the opposing through movement are eliminated. The remaining conflicts are reduced to merge/diverge conflicts for turning movements, and the crossover conflict of the two through movements.

217.1.1 DDI Terminology

Figure 217.1.1 provides a schematic of typical DDI terminology. The terms shown in this section are standard terms or variables used within this chapter.

D217- Diverging Diamond Interchanges

FDOT Development Design Criteria - DDI


NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

NCHRP RESEARCH REPORT 959

Diverging Diamond Interchange Informational Guide

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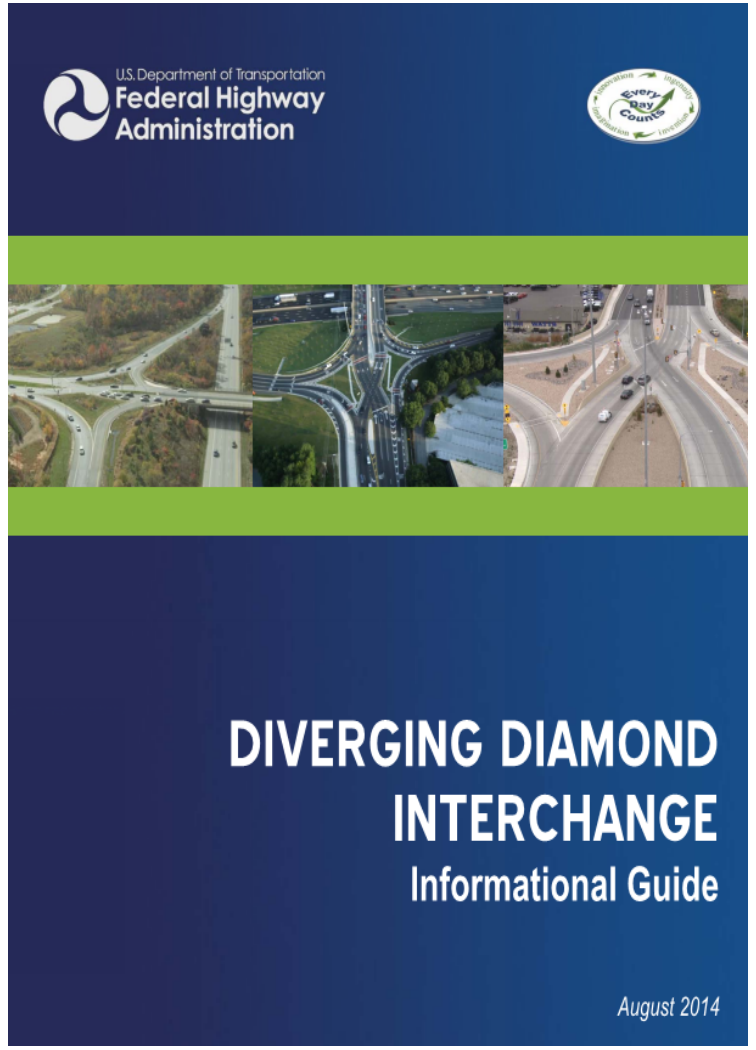
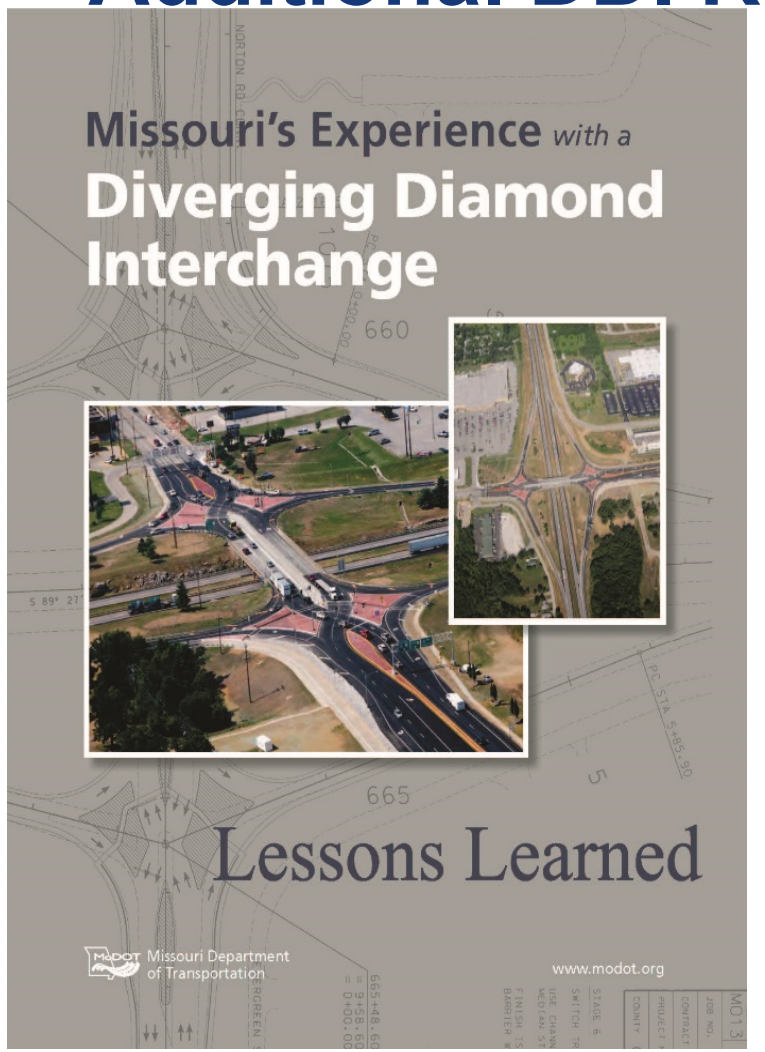
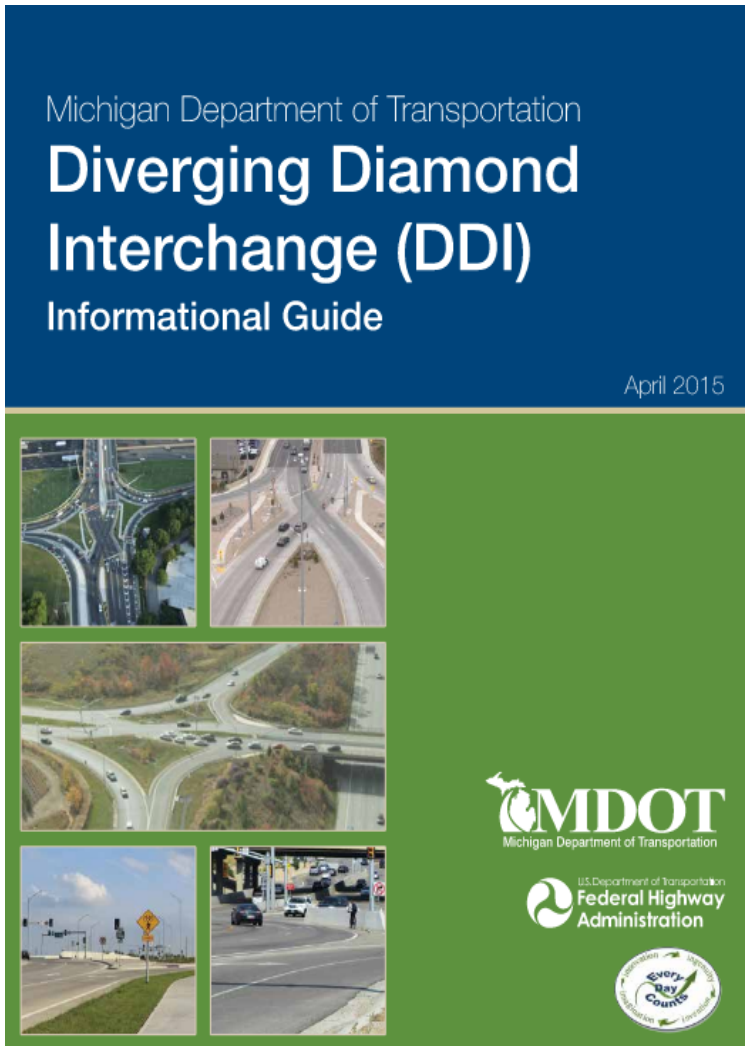


Additional DDI Resources





Questions?

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