Subject: I-4 Beyond the Ultimate; Orange Co. Typical Section Package Revisions

Date: 03/21/18

To: Su Hao, PE; FDOT Project Manager

From: Bill Liatsos, PE

**Background/Purpose:** In February of 2017, a PD&E Typical Section Package was submitted to the FDOT for I-4 Beyond the Ultimate. The purpose of this memo is to identify revisions made to the I-4 Beyond the Ultimate Typical Section Package within the Orange County project area. Revisions and proposed typicals are listed as follows.

<table>
<thead>
<tr>
<th>Sheet No.</th>
<th>Revisions/Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1B-3 R1</td>
<td>Updated the station limits using PD&amp;E Stationing, to omit the portion of I-4 that is covered by the new typical section Sheet 1B-3 A R1 and Sheet 1B-5 A R1.</td>
</tr>
<tr>
<td>1B-3 A R1</td>
<td>A new section was developed to show the omitted station range from Sheet 1B-3 R1. It shows EB GUL on fill and 2-lane CD’s on both EB and WB through the SR 536 interchange.</td>
</tr>
<tr>
<td>1B-5 R1</td>
<td>The section was revised to separate the DCP ramp and the EB GUL onto their own hammerhead piers.</td>
</tr>
<tr>
<td>1B-5 A R1</td>
<td>A new section was developed (similar to Sheet 1B-3 A R1) to show the WBCD, WB GUL on fill, and EB off ramp B_CFP.</td>
</tr>
<tr>
<td>1B-6 R1</td>
<td>The section was revised to show the EB GUL and the EB XL on a single structure.</td>
</tr>
<tr>
<td>1B-8 R1</td>
<td>The ramps, design speeds and movement descriptions in the typical section were updated based on the Line &amp; Grade typical sections.</td>
</tr>
<tr>
<td>1B-9 R1</td>
<td>The ramps, design speeds and movement descriptions in the typical section were updated based on the Line &amp; Grade typical sections.</td>
</tr>
<tr>
<td>1B-10 R1</td>
<td>The ramps, design speeds and movement descriptions in the typical section were updated based on the Line &amp; Grade typical sections.</td>
</tr>
<tr>
<td>1B-11 R1</td>
<td>The ramps, design speeds and movement descriptions in the typical section were updated based on the Line &amp; Grade typical sections.</td>
</tr>
<tr>
<td>1B-12 R1</td>
<td>The ramps, design speeds and movement descriptions in the typical section were updated based on the Line &amp; Grade typical sections.</td>
</tr>
<tr>
<td>1B-17 R1</td>
<td>The inside CD shoulders (EB and WB) were reduced to an 8-foot width. The outside CD lanes (EB and WB) were labeled as “AUX”.</td>
</tr>
<tr>
<td>1B-24 R1</td>
<td>The section was revised to a single span bridge, the median width was reduced to 30-feet, and the bike lane was removed in the SB direction and replaced with a 10-foot Multi-Use Trial.</td>
</tr>
<tr>
<td>1B-25 R1</td>
<td>The bike lane in the SB direction was removed and replaced with a 10-foot Multi-Use Trail. The inside barrier wall was removed on SB lefts and replaced with curb &amp; gutter.</td>
</tr>
<tr>
<td>1B-26 R1</td>
<td>The NB and SB sidewalks were revised to 10-foot Multi-Use Trails. The SB turn lane was revised to a 3.5% slope.</td>
</tr>
<tr>
<td>1B-28 R1</td>
<td>An additional 11-foot lane was added to the inside. The outside lane was labeled as “AUX”.</td>
</tr>
<tr>
<td>1B-29 R1</td>
<td>The right sidewalk was adjusted to a 10-foot Multi-Use Trail. The left sidewalk was removed. Both sides have a 16-foot minimum from the curb &amp; gutter.</td>
</tr>
<tr>
<td>1B-30 R1</td>
<td>The right sidewalk was adjusted to a 10-foot Multi-Use Trail, with 4 feet between the curb &amp; gutter and the trail. The left sidewalk was removed.</td>
</tr>
<tr>
<td>1B-31 R1</td>
<td>The outside shoulder on the elevated turn lanes was adjusted to a 6-foot width.</td>
</tr>
<tr>
<td>1B-44 R1</td>
<td>The section was revised to match the Interim DCP typical. This includes 12-foot lanes, 4-foot inside bike lanes, 5-foot inside shoulders, and ±10.3-foot outside shoulders.</td>
</tr>
</tbody>
</table>
Proposed Roadway TYPICAL SECTION

FROM 1 MILE EAST OF SR 400 TO 1/2 MILE EAST OF SR 417

PROJECT DESCRIPTION
WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 417 KIRKMAN ROAD AND

LIMITS/MILEPOST  MP 0.000 – 9.528
ROAD DESIGNATION  SR 400 (I-4)

PROJECT IDENTIFICATION

Financial Project ID: 432100-1-22-01
County Name: Orange
N/A
Federal Aid Project No.
PROPOSED ROADWAY TYPICAL SECTION

FROM I MILE EAST OF SR 44 TO 1/2 MILE EAST OF SR 422

PROJECT DESCRIPTION
WIDTHING SR 440 (1-4) FROM NORTH OF CR 332 TO WEST OF SR 445 KIRKMAN ROAD AND
LIMITS/MILEPOST MP 0.000 - 9.528
ROAD DESIGNATION
SR 440 (1-4)

COUNTRY NAME
ORANGE

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID
43100-1-22-01

FEDERAL AID PROJECT NO.
N/A

PROJECT DISTRICT DESIGN Engineer

MARIO BITZIA, P.E.

FHWA DISTRICT DESIGN Engineer

DATE

FHWA CONCUERENCE

DATE

FHWA TRANSPORTATION ENGINEER

DATE

STATE OF

VACILO'S LATRES

NO. 67440

CPR OF WRTH ON BL15

(907) 422-0533

4720 W. 14TH AVENUE

P.O. BOX 32801

500 A GRADE AVE

CLEVELAND, OH 44101

APPROVED BY

3415 PM

COMMUNICATIONS: 216/221-2056
PROJECT NO.

43100-1-22-01

SMALL PROJECT NO.

5-A-22-04
STA 1168+50 TO STA 1288+000

DESIGN SPEED = 70 MPH

PROPOSED ROADWAY TYPICAL SECTION

FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 432

WIDENING SR 400 (1-4) FROM WEST OF CR 522 TO WEST OF SR 435 KIRKMAN ROAD AND

LIMITS/MILEPOST: MP 0.000 - 9.288

ROAD DESIGNATION: SR 400 (1-4)

COUNTY NAME: ORANGE

FEDERAL AID PROJECT NO: N/A

PROJECT IDENTIFICATION

STATE OF FLORIDA

ADMN No. ORANGE CO

BABCOCK WILSON FOUNDATION, INC.

ENVIRONMENTAL SERVICES

COUNTY AGENCY

PROJECT NO.

FINANCIAL PROJECT NO.

STATE OF FLORIDA

ADMN No. ORANGE CO

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ENVIRONMENTAL SERVICES

COUNTY AGENCY

PROJECT NO.

FINANCIAL PROJECT NO.
PROPOSED ROADWAY TYPICAL SECTION

Two Lane Ramp
SR 400 (I-4)

Proposed Roadway Typical Section

Project Identification

Road Description

 Limits/Milepost: MP 0.000 - 9.28

Section No.

Financial Project ID:

Federal Aid Project No.

County Name

Orange

Project Name

Design Speed

 Movement

Mph

EB CP to EB Cul

50

Mph

Ave

CP to EB Cul

50

Mph

Ramp

CP to EB Cul

50

Mph

Design Speed

 Movement

Mph

EB CP to EB Cul

50

Mph

Average

CP to EB Cul

50

Mph

Ramp

CP to EB Cul

50

Mph

Project Description

Widening SR 400 (I-4) from west of CR 532 to west of SR 455, Kirkman Road and

N/A
THREE LANE RAMPS
SR 400 (1-4)

PROPOSED ROADWAY TYPICAL SECTION

PROJECT IDENTIFICATION

PM 0.000 - 9.528
SR 400 (1-4)

PROJECT NO.

COUNTY NAME

ORANGE

FEDERAL AID PROJECT NO.

N/A

SECTION NO.

75280

ROAD DESIGNATION

WIDENING SR 400 TO 1/2 MILE EAST OF SR 439

LIMITS/MILEPOST

FROM EAST TO 1/2 MILE EAST OF SR 439

MOVEMENT

DEISGN SPEED

MP 0.000 - 9.528

SR 400 (1-4)

FROM WEST TO SR 432 TO WEST OF SR 435 KIRKMANN ROAD AND
PROJECT IDENTIFICATION

PROJECT DESCRIPTION
WIDENING SR 400 (I-4) FROM WEST OF CR 522 TO WEST OF SR 435 KIRKMAN ROAD AND
LIMITS/MILEPOST MP 0.000 - 9.228

SECTION NO. 72280

COUNTY NAME ORANGE

FEDERAL AID PROJECT NO. N/A

PROJECT IDENTIFICATION

Proposed Structure Typical Section

Concrete Barrier

One Lane Bridge Ramp
SR 400 (I-4)
TWO LANE BRIDGE RAMP
SR 400 (1-4)

PROPOSED STRUCTURE TYPICAL SECTION

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 43200-1-22-01

COUNTY NAME ORANGE

SECTION NO. 75280

ROAD DESIGNATION SR 400 (1-4)

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 445 KIRKMAN ROAD AND LIMITS/MILEPOST WP 0.000 - 9.528

MILEPOST 42.95 T/O EB 14 CUL

MILEPOST 42.95 T/O EB 14 CUL

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MILEPOST 42.95 T/O EB 14 CUL
Proposed Roadway Typical Section

From I Mile East of SR 430 to I/2 Mile East of SR 432

Project Description Widen SR 400 (I-4) from west of CR 52 to west of SR 435 Kanner Highway

Limits/Milepost MP 0.000 - 9.528 Road Designation SR 400 (I-4)

County Name Orange

Federal Aid Project No. N/A

Financial Project ID 043200-1.22-01

Project Identification
SR 535 ROADWAY SECTION UNDER SR 400 (1-4)
DESIGN SPEED = 45 MPH

PROJECT ROADWAY TYPICAL SECTION

FROM I MILE EAST OF SR 444 TO 1/2 MILE EAST OF SR 412.

PROJECT DESCRIPTION
WIDENING SR 440 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
LIMITS/MILEPOST   SR 440 (1-4)
               MP 0.000 - 9.528

COUNTY NAME   ORANGE
N/A

PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 432100-1-22-01
SR 535 Roadway Section with Elevated SB
Design Speed = 45 MPH

Proposed Roadway Typical Section

FROM 1 MILE EAST OF SR 434 TO 1/2 EAST OF SR 432
WIDENING SR 400 (I-4) FROM WEST OF CR 539 TO WEST OF SR 435 KIRKMAN ROAD AND
LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION
ROAD DESIGNATION
SR 400 (I-4)
SECTION NO.
75280
COUNTY NAME
ORANGE
FEDERAL AID PROJECT NO.
497100-122-01

PROJECT IDENTIFICATION
Apopka Vineland Road Roadway Section with Elevated NB
Design Speed = 45 MPH

Proposed Roadway Typical Section

FROM 1 MILE EAST OF SR 434 TO I-2 EAST OF SR 472.
WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
MP 0.000 - 9.528

PROJECT DESCRIPTION

SECTION NO. 7280

Road Designation
SR 400 (1-4)

LIMITS/MILEPOST

Federal Aid Project No.

N/A

Project Identification

County Name
Orange

Financial Project ID
432100-1-22-01

MARK MASSANO, P.E.
District Design Engineer

MARK MASSANO, P.E.
District P.E.

STATE OF FLORIDA
COUNTY OF ORANGE
APPROVED BY

Vicente & Latos

O.67440
SR 335 SB Bridge Section Over Vineland Avenue

Design Speed = 45 MPH

Proposed Structure Typical Section

Project Identification

State of Florida Department of Transportation Project No. 43200-1-22-01

Financial Aid Project No. O/A

County Name Orange

Section No. 92139

Road Designation SR 400 (1-4)

Widthing SR 400 (1-4) from West of CR 532 to West of SR 435 Kirkman Road and SR 400 (1-4)

Limits/Milepost MP 0.000 - 7.885

From 1 Mile East of SR 434 to 1/2 Mile East of SR 472

PUBLIC WORKS DIRECTOR
MARK MASSANO, P.E.

DATE __________

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

DATE __________

DEPARTMENT OF TRANSPORTATION

MARK MASSANO, P.E.

DATE __________

DEPARTMENT OF TRANSPORTATION

MARK MASSANO, P.E.

DATE __________

DEPARTMENT OF TRANSPORTATION

MARK MASSANO, P.E.

DATE __________

DEPARTMENT OF TRANSPORTATION

MARK MASSANO, P.E.
Proposed Roadway Typical Section

Project Description

Widening SR 400 (1-4) from west of CR 252 to west of SR 435 Kirkman Road and
SR 400 (1-4)

Limits/Milepost: MP 0.000 - 9.28

Section No. 75280

County Name Orange

Financial Project ID 432100-1-22-01

Federal Aid Project No. N/A
Proposed Roadway Typical Section

FROM I MILE EAST OF SR 434 TO I/2 EAST OF SR 432

Project Description Widening SR 434 (I-4) FROM WEST OF CR 332 TO WEST OF SR 435 KIRKMAN ROAD AND

LIMITS MILEPOST: MP 0.000 TO 0.528

Road Designation SR 434 (I-4)

SECTION NO. 75280

COUNTY NAME: ORANGE

Federal Aid Project No. N/A

PROJECT IDENTIFICATION
DIVIDING DIAMOND INTERCHANGE
DARL CARTER PARKWAY
DESIGN SPEED = 40 MPH

EXISTING STRUCTURE TYPICAL SECTION

FROM 1 MILE EAST OF SR 434 TO 1/2 EAST OF SR 412,
PROJECT DESCRIPTION: WIDENING SR 434 (I-4) FROM WEST OF CR 332 TO WEST OF SR 435/IRMA ROAD AND
LIMITS/MILEPOST: MP 4.000 - 9.328
ROAD DESIGNATION: SR 434 (I-4)
SECTION NO. 75280
COUNTY NAME: ORANGE

PROJECT IDENTIFICATION

FEDERAL AID PROJECT NO. N/A
FINANCIAL PROJECT NO. 43200-1-22-01