SECTION PROPERTIES

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<th>AREA</th>
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<th>MD</th>
<th>TT</th>
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<th>S5</th>
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<tr>
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BENDING DIAGRAMS

(All dimensions are out-to-out)

<table>
<thead>
<tr>
<th>MARK</th>
<th>TYPE</th>
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<th>B</th>
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Modified AASHTO 4 (160/162)

(Out to out)

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<tr>
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Modified AASHTO 4 (165/167)

(Out to out)

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<tr>
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<td>F403</td>
<td>3</td>
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<td>4</td>
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Modified AASHTO 4 (172/177)

(Out to out)

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<td>4</td>
<td>455</td>
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</table>

SHEET 1 NOTES AND LEGEND

10) One longitudinal bar from the bottom half of deck reinforcing shall be placed under each rib. This bar is included in payment with the deck reinforcing and shall be epoxy coated.

11) The WWR shall be provided as shown. Additional reinforcing bars may be added in places required by analysis. Additional bars shall be placed symmetrically about the web and meet all AASHTO requirements.

12) Shown is 4 of 10 for AASHTO requirements.

13) Shall be epoxy coated.

14) The minimum longitudinal reinforcement shall be provided as shown. Additional longitudinal bars may be added in places required by analysis. Additional longitudinal bars shall be determined by analysis.

All reinforcing steel may be replaced with equivalent WWR.

WWR = Welded Wire Reinforcement.
ANCHORAGE ZONE REINFORCING STEEL
STRANDS NOT SHOWN FOR CLARITY

SECTION A-A
- 401 bars not shown for clarity.
- If utilized in WF girders, these strands shall be spaced.

SECTION B-B
- 401 bars not shown for clarity.
- If utilized in WF girders, these strands shall be spaced.

SECTION C-C
- 401 bars not shown for clarity.
- If utilized in WF girders, these strands shall be spaced.

ANCHORAGE ELEMENTS
- 401 bar shall be epoxy coated.
- 401 bar spacing shall be determined by analysis to achieve composite design.

ANCHORAGE ZONE REINFORCEMENT SHALL BE SHOWN IN STRUCTURE PLANS AND SHALL BE DESIGNER TO MIN 5.30.10.

DISCONTINUITY 30 OR 405 BAR AT A DISTANCE OF 1.5 TIMES THE DEPTH OF THE BEAM BEHIND THE TERMINATION OF STRAND (SECOND).

THREE COAT OF TOP SLANGE SMOOTH, APPLY TWO COATS OF EPOXY 100.07.
TYPE I OR II MEMBRANE CURING COMPOUND WITH A ROLLER TO ACT AS A BOND BREAKER.
NOTE TO BOND BREAKER FOR TOP PLAINS NOT ON SHEET 10 OR 15.

SEALS OF FASCIA BEAMS
APPLIES TO MODIFIED 401 AND WF GIRDERS ONLY

SHIPPING HOLES (F)
- 900 G, 850 & 777 BEAMS
- 401 bars not shown for clarity

SEALING LIMITS
SEALING LIMITS

TOP FLANGE FINISHING
- 90° INTENSITY YOUDEN 85°
EXPANSION ABUTMENT PARTIAL PLAN

EXPANSION JOINT END DIAPHRAGM

FOR USE WITH EXH-06

BEARING ORIENTATION AT ABUTMENTS
APPLIES TO EXPANSION JOINT AND SEMI-INTEGRAL ABUTMENTS

SHEET 8 NOTES AND LEGEND

ALL VERTICAL BARS SHALL BE PLACED PARALLEL TO BEAMS.

10 - DIAPHRAGM CONCRETE TO FOLLOW THE OUTSIDE EDGE OF EXTERIOR COURSES.

10 - SEE STANDARD DRAWING EXH-06 FOR DIMENSION DEFINITION.

10 - FOR BEAM SPACINGS EXCEEDING 6'-0", USE 4-#8 BARS.

10 - DISTANCE SHALL BE MEASURED FROM THE CENTER OF THE TOP OR BOTTOM FLANGE WIDTH.

10 - THIS DIMENSION IS MEASURED FROM THE VERTICAL FACE OF THE END DIAPHRAGM TO THE NEAREST POINT ON THE END OF THE BEAM.

19 - MEASURED TO STEEL LOAD PLATE

10 - TOP FLANGE MAY BE CLIPPED A MAXIMUM OF 6".

N = LARGER OF \[
\frac{F}{k} \cdot \sin \theta + \frac{F}{k} \cdot \cos \theta
\]

# = LARGER OF THE TOP OR BOTTOM FLANGE WIDTH, ACCOUNTING FOR ANY CLIP.

T = THICKNESS OF WEB
BENDING DIAGRAMS

<table>
<thead>
<tr>
<th>MARK</th>
<th>TYPE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>0.60</td>
<td>0.40</td>
<td>0.16</td>
</tr>
</tbody>
</table>

All dimensions are out-to-out.

ALG SIZE IS INDIcATED IN THE BAR MARK. THE FIRST DOTTED LINE ON THE BAR IS THE ULTIMATE DESIGN LENGTH. ALL STEEL SHALL BE EXTRUDED.

ADJACENT CONSTRUCTION JOINTS ARE SEPARATED BY 16 INCH CONCRETE JUNCTIONS.

EXPANDABLE POLYSTYRENE FILLER OR REMOVABLE FORMS.

SECTION

Dimensions will vary with skew.

Semi-integral diaphragm

Semi-integral abutment partial plan

Semi-integral abutment partial plan (at skewed abutment)

Notes and legend:
10 = SEE PROJECT PLANS
11 = 2 5401 & 5402 BARS FOR CORNERS 54" OR LESS. 
    3 5401 & 5402 BARS FOR 65" & 80" DECK BEAMS. 
    4 5402 BARS MAY BE MOVED TO ACCOMMODATE D Effie STRANDS.
12 = PLACE CONSTRUCTION JOINT 6" ABOVE BOTTOM OF BEAM.
13 = TOP FLANGE MAY BE CLIPPED A MAXIMUM OF 6".
14 = LARGER OF <0.30 OR A.
15 = LARGER OF TOP OR BOTTOM FLANGE.
16 = THICKNESS OF WEB
17 = N.F. = NEAR FACE
18 = F.R. = FAR FACE
19 = ALL VERTICAL BARS SHALL BE PLACED PARALLEL TO BEAMS.
DESIGN STRESSES;
PRESTRESSED CONCRETE – FPC – 2 – 40-DAY FC2 79.68\* (22.2 MPa)

REINFORCING STEEL – MIN. YIELD STRENGTH = 60 KSI

WILLOWS MORE REINFORCEMENT – MIN. YIELD STRENGTH = 70 KSI

PRESTRESSED STRAND – SURPLUS MATERIAL, CONSISTING OF 7 WIRE STRAND CONCEIVED TO BE USED FOR CONSTRUCTION PURPOSES. SEVEN WIRE STRAND – STRENGTH SHALL BE 0.68 DIA. DIAMETER WITH A TOTAL CROSS-SECTIONAL AREA OF 0.212 IN².

STRUCTURAL STEEL – ASTM A605, GRADE 36 OR 50

**THE DESIGNER SHALL SPECIFY A 28-DAY COMPRESSIVE STRENGTH IN THE RANGE OF 50 PSI TO 70 PSI FOR PRECAST PLATE WORMHOLD AND LIST THE VALUE IN THE STRUCTURE’S GENERAL NOTES.**

**THE DESIGNER SHALL SPECIFY A REINFORCEMENT STRENGTH IN THE RANGE OF 4000 PSI MINIMUM TO 6000 PSI MAXIMUM AND LIST THE VALUE IN THE STRUCTURE’S GENERAL NOTES.**

DECK REINFORCEMENT: THE DESIGNER SHALL DESIGN THE DECK REINFORCEMENT OVER THE PIERS TO RESIST THE NEGATIVE MOMENTS INDUCED IN DECK LOADS AND LIVE LOADS, ASSURING THE SUPERSTRUCTURE IS FULLY CONTINUOUS.

DECK REINFORCEMENT IS REQUIRED TO PROVIDE STRENGTH AND SPACING OF DECK REINFORCEMENT TO RESIST LIVE LOADS AND LIVE LOADS, ASSURING THE SUPERSTRUCTURE IS FULLY CONTINUOUS.

FABRICATION AND CONSTRUCTION REQUIREMENTS:
EXCUTION PROCESSING: THE CONTRACTOR SHALL SUBMIT PLANS FOR ERECTION AND HANDLING PROCESSES ACCORDING TO 509.25.

EXHIBITION AND ELEVATION DEVICES: THE CONTRACTOR SHALL ENSURE THAT THE EXHIBITION AND ELEVATION DEVICES ARE ACCURATE FOR THE PROJECT AND THAT THE DEVICES ARE PROPERLY MARKED AND LABELED FOR STORAGE AND USE.

TEMPORARY STABILITY FOR DECK PLACEMENT: THE ERECTION PROCEDURE SHALL INCLUDE ANY ADDITIONAL TEMPORARY STABILITY MEASURES NEEDED TO ASSURE THE DECK PLACEMENT WILL STAND UP UNTIL THE DECK PLACED.

LAYOUT AND ALIGNMENT: THE CONTRACTOR SHALL PROVIDE LAYOUT AND ALIGNMENT INFORMATION TO ASSURE THE DECK IS PLACED IN THE CORRECT LOCATION.

CONCRETE PLACEMENT: THE CONTRACTOR SHALL PROVIDE CONCRETE PLACEMENT INFORMATION TO ASSURE THE DECK IS PLACED IN THE CORRECT LOCATION.

ALL STRUCTURAL STEEL, INCLUDING ROOF, SUPPORTS, WIND LOADS, AND LIVE LOADS WITHIN 30 DAYS AFTER CONSTRUCTION COMPLETION GUIDELINES, INC.атель and CONTRACTOR.

CONCRETE PLACEMENT: ALL CONCRETE PLACEMENT GUIDELINES, INCLUDING ROOF, SUPPORTS, WIND LOADS, AND LIVE LOADS WITHIN 30 DAYS AFTER CONSTRUCTION COMPLETION GUIDELINES, INC.атель and CONTRACTOR.