### ATRIP Bridge Presentations
#### October 21-31, 2013

<table>
<thead>
<tr>
<th>Location</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Division</td>
<td>20</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Division</td>
<td>34</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; Division</td>
<td>36</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; Division</td>
<td>34</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; Division</td>
<td>21</td>
</tr>
<tr>
<td>6&lt;sup&gt;th&lt;/sup&gt; Division</td>
<td>30</td>
</tr>
<tr>
<td>7&lt;sup&gt;th&lt;/sup&gt; Division</td>
<td>28</td>
</tr>
<tr>
<td>SWR - Grove Hill</td>
<td>14</td>
</tr>
<tr>
<td>SWR - Mobile</td>
<td>38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>255</strong></td>
</tr>
</tbody>
</table>
INTRODUCTION
ATRIP BRIDGE CONSULTANT MANAGEMENT
AND DESIGN SECTION

Left to Right: Brad Williams, Hilary Gilbert, Randall Mullins, Brooke Prince, Tony Bradshaw, and Yong Pan
AGENDA

- HYDRAULIC INVESTIGATION
- WAIVERS
- BIN REQUEST
- TS&L SUBMITTAL
- FOUNDATION INVESTIGATION
- BRIDGE BUREAU REVIEW
- CONSTRUCTION BUREAU REVIEW
- OFFICE ENGINEER REVIEW
- SHOP DRAWINGS
- CONSTRUCTION ISSUES
HYDRAULIC INVESTIGATION

- PERFORMED BY ALDOT OR CONSULTANT
  - IF COMPLETED BY A CONSULTANT, MUST BE STAMPED BY THE HYD ENGR. OF RECORD

- CULVERT OR BRIDGE OPTION
  - SPONSOR SUBMITS IN WRITING THE PREFERRED STRUCTURE TYPE TO BRIDGE ENGINEER

- OVERTOPPING FLOOD DATA (MUST BE INCLUDED ON ALL ATRIP BRIDGE PLANS)
  - OVERTOPPING FLOOD EQUALS ( ) / EXCEEDS ( ) THE _____ YEAR FLOOD.
  - UPSTREAM STAGE ELEVATION _____
OVERTOPPING FLOOD DATA

• IF HYDRAULIC REPORT IS COMPLETED BY ALDOT, THEN CONTACT THE STATE HYDRAULIC ENGINEER FOR OVERTOPPING FLOOD DATA
  • POINT OF CONTACT:
    • MR. TOM FLOURNOY
    • 334-242-6598

• IF HYDRAULIC REPORT IS COMPLETED BY A CONSULTANT, THEN THE CONSULTANT NEEDS TO PROVIDE THE OVERTOPPING FLOOD DATA FOR THE STRUCTURE.
ATRIP HYDRAULIC DESIGN STANDARDS

- DESIGN YEAR
  - 25 YEAR FLOOD EVENT – COUNTY ROUTE

- FREEBOARD
  - MINIMUM 2 FEET OF FREEBOARD MUST BE PROVIDED ABOVE 25 YEAR DESIGN FLOOD STAGE ELEVATION TO THE LOWEST GIRDER ELEVATION
WAIVERS

- **TYPES OF WAIVERS**
  - DESIGN FLOOD EVENT
  - FREEBOARD
  - OVERTOPPING

- **PROCESS**
  - **SPONSOR REQUESTS WAIVER(S) THROUGH DIVISION CO. TRANS. ENGR WITH TS&L SUBMITTAL**
  - BRIDGE BUREAU GRANTS WAIVER WITH APPROVING SIGNATURES

- **GFO 3-39 (PENDING)**
  - ALLOWS FOR A REDUCTION IN FLOOD EVENT BASED ON TYPE OF ROUTE AND ADT
EXAMPLE WAIVER

ALABAMA DEPARTMENT OF TRANSPORTATION
Bridge Bureau
1405 Coliseum Blvd. Montgomery, AL 36104-9000
Phone: (334) 240-6004 Fax: (334) 353-6052
Internet: http://www.dot.state.al.us

Robert Bentley
Governor

John R. Cooper
Transportation Director

September 21, 2012

Mr. ________________ P.E.
County Engineer
P.O. Box 478
Marion, Alabama 36756

Dear Mr. ________________,

RE: [Project No.]

__________ County - OR ______ Bridge Replacement over ________

This office has reviewed your [date] request to waive the Department's policy of providing freeboard above the design stage flood elevation for recommended bridge replacement. Your request is to maintain the current grade of elevation for the replacement structure. Your request was forwarded to this office by the IR Bureau on [date].

Before this office forwards your request to the Chief Engineer's office for consideration, I did want to explain to you ALDOT's reasons for requiring a minimum of two feet of freeboard on bridge structures whenever it is feasible to do so as well as the potential consequences of waiving that requirement.

Providing freeboards above the design flood event (minimum of two feet desirable) does allow some opportunity for drift, debris (logs, limbs, trash, etc) to pass under and clear the bridge without obstructions. Providing this minimum amount of freeboard above the design flood event and most of the States have a similar policy for establishing minimum finish grade for bridge structures over streams.

AASHTO Standard Specifications Article 3.18.1.3 addresses drift lodged against piers. It states, "Where a significant amount of drift lodged against a pier is anticipated, the effects of the drift build-up shall be considered in the design of the bridge opening and the bridge components. AASHTO LRFD Specification commentary to Article 3.7.3 states "Where a significant amount of driftwood is carried, water pressure shall also be allowed for a driftwood raft lodged against the pier. The size of the raft is a matter of judgment .......". The LRFD Specification does provide a diagram for calculating the dimensions of this "raft" but nonetheless, the term "judgment" remains.

Additionally, collection of debris on the bridge can induce stresses into the structure (especially during flood flow) that may or may not have been accurately reflected and accounted for during the original design since engineering "judgment" must be applied in determining when and where to design for drift.

As Bridge Engineer, I want to be certain that your County Commissioners and your office are fully aware of our reasons for this requirement of providing a minimum of two feet of freeboard above the design flood stage whenever possible and feasible to do so. As explained, this is not an arbitrary policy but an effort to provide an additional measure of safety to your structure during flooding events by allowing opportunity for drift/debris to pass under the structure and not obstruct flow.

With your acknowledgement of this discussion by signature below, this office will forward your request to the Chief Engineer's office for concurrence consideration.

Sincerely,

John F. Black, PE
State Bridge Engineer

Statement of Acknowledgement

I have read and fully understand the content of this letter and ALDOT's policy and reasons for establishing finish grade based on a minimum of two (2) feet of freeboard. As County Engineer, being fully knowledgeable of this site, I do not foresee drift/debris collection on this structure as a major concern and therefore request that ALDOT's policy to provide a minimum of two (2) feet of freeboard for the replacement structure for this project be waived.

[Signature]

(County engineer name), PE Date

Recommended for Concurrence: ________ Date: ________

Bridge Bureau

Concurrence: ________ Date: ________

Chief Engineer's Office

[Signature] – freeboard waiver dec
BIN REQUEST

- SPONSOR SUBMITS “FORM BI-1” TO COUNTY TRANSPORTATION BUREAU FOR BIN REQUEST
  - THIS IS THE ONLY TIME THAT COUNTY TRANSPORTATION BUREAU IS INVOLVED IN THE ATRIP PROCESS

- ATRIP BRIDGE PROJECTS DO NOT FOLLOW THE COUNTY PROCEDURAL GUIDELINES

- REQUEST PRIOR TO TS&L SUBMITTAL
FORM BI-1

- SUBMITTED TO COUNTY TRANSPORTATION BUREAU, BRIDGE INSPECTION & COUNTY RD MAINTENANCE SECTION
  - POINT OF CONTACT
    - JAMES BOYER
    - 334-242-6619

TS&L SUBMITTAL

- SENT THROUGH DIVISION COUNTY TRANSPORTATION ENGINEER

- REQUIRED ITEMS
  - ROADWAY PLANS
    - TITLE SHEET, TYPICAL SECTION, PLAN & PROFILE AND UTILITY SHEET INVOLVING BRIDGE
  - HYDRAULIC REPORT
  - GENERAL PLAN AND ELEVATION VIEW OF THE BRIDGE
    - PRECAST (ELEVATION VIEW ONLY)
  - TYPICAL SECTION
    - APPLICABLE FOR AASHTO DESIGN GIRDERS ONLY
  - REQUESTED WAIVER(S) FROM SPONSOR
AASHTO PRESTRESSED SPECIAL DRAWINGS

- 28’ ROADWAY WIDTH

- REQUESTED THROUGH BRIDGE BUREAU ON A PROJECT BY PROJECT BASIS
  - BRIDGE BUREAU RETAINS “ORIGINALS”
  - NOT IN STANDARD DRAWING BOOK
  - CALLED OUT ON PLANS IN REQUIRED ITEMS
  - A NOTE WILL BE PLACED ON EACH SHEET OF THE STANDARDS WITH THIS IDENTIFYING INFORMATION ALONG WITH A STATEMENT THAT THE SELECTED STANDARD DRAWING(S) IS/ARE FOR USE ON THAT PROJECT ONLY.

- REQUIRES SUBSTRUCTURE DESIGN ONLY
# AASHTO PRESTRESSED SPECIAL DRAWINGS

<table>
<thead>
<tr>
<th>SPECIAL DRAWING NUMBER</th>
<th>SPAN LENGTH</th>
<th>GIRDER TYPE</th>
<th>SKEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-2840-P</td>
<td>40’</td>
<td>TYPE I</td>
<td>0°</td>
</tr>
<tr>
<td>S-2840-P-30</td>
<td>40’</td>
<td>TYPE I</td>
<td>30°</td>
</tr>
<tr>
<td>S-2860-P</td>
<td>60’</td>
<td>TYPE II</td>
<td>0°</td>
</tr>
<tr>
<td>S-2860-P-30</td>
<td>60’</td>
<td>TYPE II</td>
<td>30°</td>
</tr>
<tr>
<td>S-2880-P</td>
<td>80’</td>
<td>TYPE III</td>
<td>0°</td>
</tr>
<tr>
<td>S-2885-P</td>
<td>85’</td>
<td>TYPE III</td>
<td>0°</td>
</tr>
<tr>
<td>S-28100-P</td>
<td>100’</td>
<td>BT-54</td>
<td>0°</td>
</tr>
<tr>
<td>S-28115-P</td>
<td>115’</td>
<td>BT-63</td>
<td>0°</td>
</tr>
<tr>
<td>S-28130-P</td>
<td>130’</td>
<td>BT-72</td>
<td>0°</td>
</tr>
</tbody>
</table>

IF THE FOUNDATION REPORT WILL BE DONE BY ALDOT, THE COUNTY ENGINEER NEEDS TO CONTACT M&T BUREAU GEOTECHNICAL SECTION PRIOR TO TS&L SUBMITTAL

- POINT OF CONTACT:
  - BRYAN ORANGE
  - 334-206-2257

- SUBMIT BORING REQUEST THROUGH BRIDGE BUREAU

- IF BORINGS ARE COMPLETED BY A CONSULTANT, SPONSOR MUST HAVE APPROVED TS&L FROM THE BRIDGE BUREAU PRIOR TO BORING REQUEST
BORING REQUEST

- **REQUIRED ITEMS**
  - APPROVED TS&L
    - FROM BRIDGE BUREAU
  - ELECTRONIC COPY OF TS&L
    - .DGN or .DWG FILE TYPE
  - MAP/LOCATION OF BRIDGE LOCATION
  - BIN
  - HYDRAULIC REPORT
  - POINT OF CONTACT
  - LETTING DATE
  - CHARGE NUMBER
FOUNDATION INVESTIGATION

- **GFO 3-70**
  - PRECAST BRIDGE STANDARDS WITH PILE BENT

- **ALDOT 398**
  - AASHTO PRESTRESSED BRIDGES WITH PILE BENTS, PILE FOOTINGS, SPREAD FOOTINGS AND DRILLED SHAFTS

- **SCOUR ANALYSIS**
  - MUST BE PERFORMED FOR ALL STRUCTURES OVER ANY TYPE OF WATER SOURCE
**MINIMUM BORINGS FOR PRECAST BRIDGES WITH PILE BENTS**

<table>
<thead>
<tr>
<th>Number of Spans</th>
<th>Minimum Number of Borings</th>
<th>Boring(s) Required at the following Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Between Abutment and Stream</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>At One Abutment and Bent</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>At Each Abutment and One Bent</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>At Each Abutment and One Bent</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>At Each Abutment and One Bent</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>At Each Abutment and Two Bents</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>At Each Abutment and Two Bents</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>At Each Abutment and Two Bents</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>At Each Abutment and Two Bents</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>At Each Abutment and Three Bents</td>
</tr>
</tbody>
</table>

MINIMUM BORINGS FOR STRUCTURAL DESIGNS OF AASHTO BRIDGES WITH PILE BENTS, PILE FOOTINGS, SPREAD FOOTINGS AND DRILLED SHAFTS

- ONE (1) BORING PER SUBSTRUCTURE UNIT

LINK:
PILE TIP REQUIREMENTS

- **ABUTMENTS** - ESTIMATED PILE TIPS
- **BENTS** - ESTIMATED AND MINIMUM PILE TIPS
- **PRECAST ABUTMENT ONLY**
  - ABUTMENT AND TIE BACK PILES
    - ESTIMATED PILE TIPS
  - **WING PILES**
    - DRIVEN TO REFUSAL OR 20 FEET (MAX). MINIMUM PENETRATION NOT LESS THAN 10 FEET INTO NATURAL GROUND.
FOUNDATION REPORT

- LOAD TESTS
  - STATIC
    - REQUIRED WHEN ESTIMATED AND MINIMUM TIPS ARE RECOMMENDED
  - DYNAMIC
    - ONLY WHEN RECOMMENDED BY GEOTECHNICAL EOR

- IF “DRIVE TO REFUSAL INTO ROCK”, LOAD TEST AND TEST PILE IS NOT NEEDED
# BRIDGE PLAN REVIEW PROCESS

**ATRIP Bridge Plan Review Process V.2 - (June 10, 2013)**

<table>
<thead>
<tr>
<th>BRIDGE BUREAU PLAN REVIEW</th>
<th>CONSTRUCTION BUREAU REVIEW</th>
<th>OFFICE ENGINEER SUBMITTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SPONSOR (BRIDGE DESIGNER OF RECORD) SUBMITS BRIDGE PLANS &amp; SUPPORTING DOCUMENTATION (BRIDGE PACKAGE) TO DIVISION COUNTY TRANSPORTATION ENGINEER</td>
<td>7. THE BRIDGE ENGINEER STAMPS TWO (2) SETS OF BRIDGE PLANS INDICATING PLANS ARE READY FOR CONSTRUCTION BUREAU REVIEW THEN TRANSMITS STAMPED BRIDGE PLANS BY LETTER TO INNOVATIVE PROGRAMS BUREAU FOR THEIR USE IN A CONSTRUCTION BUREAU SUBMITTAL.</td>
<td>12. WHEN CONSTRUCTION BUREAU IS SATISFIED WITH DISPOSITION OF COMMENTS AND REVISED PRINTS, CONSTRUCTION BUREAU NOTIFIES INNOVATIVE PROGRAMS BUREAU AND INNOVATIVE PROGRAMS BUREAU REQUESTS ALL MYLARS FROM THE DIVISION COUNTY TRANSPORTATION ENGINEER.</td>
</tr>
<tr>
<td>2. DIVISION COUNTY TRANSPORTATION ENGINEER SUBMITS BRIDGE PACKAGE TO BRIDGE ENGINEER FOR REVIEW</td>
<td>8. INNOVATIVE PROGRAMS BUREAU COMBINES ROADWAY PLANS AND STAMPED BRIDGE PLANS AND SUBMITS TO CONSTRUCTION BUREAU FOR REVIEW</td>
<td>13. DIVISION COUNTY TRANSPORTATION ENGINEER REQUESTS STAMPED/SIGNED MYLARS FROM DESIGNER OF RECORD AND SUBMITS ALL MYLARS TO INNOVATIVE PROGRAMS BUREAU.</td>
</tr>
<tr>
<td>3. ONCE BRIDGE BUREAU REVIEW IS COMPLETED, THE BRIDGE BUREAU RETURNING MARKED BRIDGE PLANS (EMAIL/PDFS) TO BRIDGE DESIGNER OF RECORD FOR CORRECTIONS, AND COPIES DIVISION COUNTY TRANSPORTATION ENGINEER WITH EMAIL.</td>
<td>9. ONCE CONSTRUCTION BUREAU REVIEW IS COMPLETE, CONSTRUCTION BUREAU PROVIDES COMMENTS BY LETTER TO INNOVATIVE PROGRAMS BUREAU &amp; BRIDGE BUREAU</td>
<td>14. INNOVATIVE PROGRAMS BUREAU FORWARDS BRIDGE MYLARS TO THE BRIDGE ENGINEER FOR REVIEW AND SIGNATURE.</td>
</tr>
<tr>
<td>4. BRIDGE DESIGNER OF RECORD MAKES CORRECTIONS, THEN SUBMITS REVISED PDFS TO BRIDGE BUREAU FOR REVIEW</td>
<td>10. BRIDGE BUREAU FORWARDS (BY EMAIL) CONSTRUCTION BUREAU COMMENTS TO BRIDGE DESIGNER OF RECORD FOR CORRECTIONS</td>
<td>15. BRIDGE ENGINEER SIGNS BRIDGE MYLARS AND RETURNS MYLARS WITH BRIDGE COST ESTIMATE TO INNOVATIVE PROGRAMS BUREAU FOR SUBMITTAL TO OFFICE ENGINEER.</td>
</tr>
<tr>
<td>5. IF REVISED BRIDGE PLANS HAVE NOT BEEN CORRECTED TO THE SATISFACTION OF THE BRIDGE BUREAU’S REVIEWING ENGINEER THEN STEPS 3 THROUGH 4 WILL BE REPEATED.</td>
<td>11. ONCE ALL CONSTRUCTION BUREAU COMMENTS HAVE BEEN SATISFACTORY ADDED, THE BRIDGE DESIGNER OF RECORD SUBMITS EMAIL TO BRIDGE BUREAU AND COPIES INNOVATIVE PROGRAMS BUREAU AND CONSTRUCTION BUREAU WITH DISPOSITION OF COMMENTS AND INCLUDES REVISED PRINTS.</td>
<td>16. INNOVATIVE PROGRAMS BUREAU SUBMITS COMPLETE MYLAR ASSEMBLY TO OFFICE ENGINEER FOR LETTING.</td>
</tr>
</tbody>
</table>

Page 1 of 2...

*Bridge package includes, as a minimum, all of the Information Listed in Memorandum from Bridge Bureau to Innovative Programs Bureau dated June 10, 2013 as shown on Page 2 of 2 of this document.*

BRIDGE BUREAU REVIEW SUBMITTAL

- THREE (3) HALF SIZE SETS OF BRIDGE PLANS
- COMPLETED CHECKLIST OF THE BRIDGE PLANS DETAILING MANUAL
- CURRENT ROADWAY PLANS
  - TITLE SHEET, TYPICAL SECTION, PLAN AND PROFILE SHEET, AND UTILITY SHEET AFFECTING BRIDGE
- FOUNDATION REPORT
  - STAMPED BY EOR
- FINALIZED WAIVERS
  - IF APPLICABLE
BRIDGE BUREAU REVIEW SUBMITTAL

- HYDRAULIC REPORT
  - UNLESS PREVIOUSLY SUBMITTED WITH TS&L

- SCOUR ANALYSIS
  - FOR ALL WATER SOURCE CROSSINGS

- STRUCTURAL DESIGN CALCULATIONS
  - STAMPED BY EOR

- PRECAST-PILE STABILITY ANALYSIS
  - STAMPED BY EOR
SUBSEQUENT SUBMITTALS

- **SUBSEQUENT REVIEWS**
  - SUBMITTED VIA EMAIL (.PDF) TO BRIDGE EOR UNTIL BRIDGE PLANS ARE APPROVED FOR CONSTRUCTION REVIEW

- **BRIDGE SHEET NO. 1**
  - WITH SUMMARY OF QUANTITIES, STANDARDS AND SPECIAL DRAWINGS NEEDS TO BE SUBMITTED TO ROADWAY EOR FOR COMPARISON AND UPDATE PRIOR TO CONSTRUCTION BUREAU REVIEW SUBMITTAL
CONSTRUCTION REVIEW SUBMITTAL

- EOR SUBMITS TO BRIDGE BUREAU
- THREE (3) HALF SIZE, UNSTAMPED BRIDGE PLAN SETS
  - TWO (2) SETS OF PLANS TO CONSTRUCTION BUREAU
  - ONE (1) SET OF PLANS TO BRIDGE RATING AND LOAD TESTING
- ONE (1) ADDITIONAL COPY OF FOUNDATION REPORT
  - FOR CONSTRUCTION BUREAU REVIEW & RECORDS
- SPECIAL PROVISIONS
  - IF APPLICABLE
- RAILROAD AGREEMENT
  - IF APPLICABLE
  - AGREEMENT MUST BE SIGNED BY RAILROAD, BUT DOES NOT HAVE TO BE EXECUTED
CONSTRUCTION REVIEW PROCESS

- **CONSTRUCTION BUREAU REVIEW**
  - REVIEWED FOR CONSTRUCTABILITY AND CORRECTNESS

- **COMMENTS SENT TO EOR**
  - CONSTRUCTION BUREAU COMMENTS WILL BE SENT VIA EMAIL AND LETTER TO BRIDGE EOR FOR CORRECTIONS

- **DISPOSITION OF COMMENTS**
  - ONCE ALL COMMENTS HAVE BEEN ADDRESSED, THE BRIDGE EOR WILL FORWARD DISPOSITION OF COMMENTS AND UPDATED PLAN SHEETS TO BRIDGE BUREAU FOR REVIEW

- **CONSTRUCTION BUREAU APPROVAL**
  - BRIDGE BUREAU WILL FORWARD DISPOSITION OF COMMENTS AND UPDATED PLAN SHEETS TO CONSTRUCTION BUREAU FOR APPROVAL
  - ONCE CONSTRUCTION BUREAU APPROVES OF THE CHANGES, THEN BRIDGE BUREAU WILL REQUEST MYLARS FROM THE BRIDGE EOR
MYLAR SUBMITTAL

- EOR SUBMITS MYLARS TO DIVISION COUNTY TRANSPORTATION ENGINEER

- QUANTITIES AND PAY ITEMS
  - ENSURE QUANTITIES ON ROADWAY PLANS ARE UPDATED WITH THE BRIDGE PLANS PRIOR TO SUBMITTAL OF MYLARS

- OFFICE ENGINEER REVIEW
  - OFFICE ENGINEER COMMENTS WILL BE EMAILED TO BRIDGE EOR FOR CORRECTIONS
  - EOR SUBMITS REVISED MYLARS DIRECTLY TO OFFICE ENGINEER DUE TO SHORT SUSPENCE
SHOP DRAWING REVIEW PROCESS

- FABRICATOR SUBMITS SHOP DRAWINGS TO CONTRACTOR

- CONTRACTOR SUBMITS SHOP DRAWINGS TO BRIDGE BUREAU

- BRIDGE BUREAU SUBMITS SHOP DRAWINGS TO BRIDGE EOR FOR REVIEW / APPROVAL
  - **EXCEPTIONS:** STEEL GIRDER AND MISCELLANEOUS STEEL WILL BE REVIEWED BY THE BRIDGE BUREAU
  - BRIDGE EOR NEEDS TO WORK DIRECTLY WITH FABRICATOR TO MAKE ANY CHANGES TO THE SHOP DRAWINGS

- BRIDGE EOR SUBMITS APPROVED DRAWINGS TO ALDOT FOR DISTRIBUTION
SHOP DRAWING APPROVAL STAMP EXAMPLE

- SHOP DRAWING STAMP MUST SPECIFICALLY SAY "APPROVED"

---

**SHOP DRAWING REVIEW**

<table>
<thead>
<tr>
<th>Consulting Engineer’s Review</th>
<th>Response Required of Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Approved</td>
<td>☐ Confirm</td>
</tr>
<tr>
<td>☐ Note Markings</td>
<td>☐ Resubmit</td>
</tr>
<tr>
<td>☐ Rejected</td>
<td></td>
</tr>
<tr>
<td>☐ Comments Attached</td>
<td></td>
</tr>
</tbody>
</table>

Consulting Engineer’s Review is for general conformance with the design concept and contract documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the contract plans and specifications nor departure therefrom. The Contractor remains responsible for details and accuracy for confirming and correlating all quantities and dimensions for selecting fabrication process for techniques of assembly and for performing his work in a safe manner.

Company Name

By: _________________________ Date: __________________
CONSTRUCTION ISSUES ADDRESSED THROUGH CIM 3-2006

- CONSTRUCTION SUBMITTALS FOR COUNTY PROJECTS APPLIES TO ATRIP PROJECTS

- REQUIRED SUBMITTALS
  - DRILLED SHAFT INSTALLATION PLAN
  - PILE HAMMER FORMS
  - PROPOSED CORRECTIONS FOR WORK NOT PERFORMED IN ACCORDANCE WITH CONTRACT REQUIREMENTS
  - ANY WORK THAT COULD POTENTIALLY MODIFY THE CONTRACT

- CIM 3-2006
  - [http://www.dot.state.al.us/conweb/cims.htm](http://www.dot.state.al.us/conweb/cims.htm)
Construction Submittal Procedure for County Projects

(Attachment to CIM 3-2006)

1. Construction Submittal sent to County from contractor (see definition of Construction Submittal in CIM).

2. Expert review -
   a. If Designer of Record (geotechnical engineer, bridge designer, other) is a consultant, submittal sent to consultant for review with copy of cover letter to Division. Response from consultant should be to the County. Payment for services should be made by the County. When recommendation received go to Step 2(d).
   b. If County Engineer is Designer of Record, submittal reviewed by County Engineer. Go to Step 2(d).
   c. If ALDOT is Designer of Record, go to Step 2(d).
   d. If a railroad is involved, County obtains railroad approval if required. Go to Step 3. (Railroad Issues will be worked through I.P. Bureau)

3. County Engineer recommendation submitted to Division Office with any consultant or railroad concurrence/comments.

4. Division recommendation with correspondence from County submitted to Construction Bureau.

5. Construction Bureau secures and reviews recommendations from ALDOT experts (Bridge Bureau, Bureau of Materials and Tests, etc.), reviews contractual components of submittal and provides direction to the Division Office.

6. Division Office forwards direction from Construction Bureau to County.

7. County forwards direction to contractor.
CONSTRUCTION ISSUES SUBMITTED DIRECTLY TO CONSTRUCTION BUREAU

- EXTRA WORK (REF. GFO 4-3, >$100K)
  - FORCE ACCOUNT
  - SUPPLEMENTAL AGREEMENTS

- WORKING DRAWINGS
  - STANDARD SPECIFICATIONS - 105.02(c)

- ANY OTHER CONSTRUCTION PROCESSES NOTED IN THE PLANS OR SPECIFICATIONS

- ALDOT GUIDELINE FOR OPERATIONS
CONCLUSION

- **CULVERTS**
  - **STANDARD**
    - CALLED OUT IN PLANS
  - **NON STANDARD**
    - REQUIRES DESIGN CHECK BY BRIDGE BUREAU, MISCELLANEOUS STRUCTURES SECTION
- **POINT OF CONTACT:**
  - PAUL FROEDE
  - 334-242-6955

- **PILE BENT STANDARD (PENDING)**
  - VARIABLE PILE LENGTHS AND SIZES

- **ATRIP PROCEDURAL GUIDELINES (PENDING)**
CONCLUSION

- REFERENCES
  - ALL REFERENCES FOR THIS PRESENTATION ARE LOCATED AT THE BELOW WEBSITE

- BRIDGE BUREAU ATRIP CONSULTANT MANAGEMENT AND DESIGN SECTION WEBSITE
  - [http://www.dot.state.al.us/brweb/atrip.htm](http://www.dot.state.al.us/brweb/atrip.htm)
QUESTIONS ?
# BRIDGE BUREAU

## ATRIP CONSULTANT MANAGEMENT AND DESIGN SECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randall Mullins, P.E.</td>
<td>Section Supervisor</td>
<td>334-242-6743</td>
<td><a href="mailto:mullinsr@dot.state.al.us">mullinsr@dot.state.al.us</a></td>
</tr>
<tr>
<td>Tony Bradshaw, P.E.</td>
<td>Bridge Designer</td>
<td>334-242-6643</td>
<td><a href="mailto:bradshawt@dot.state.al.us">bradshawt@dot.state.al.us</a></td>
</tr>
<tr>
<td>Hilary Gilbert, E.I.</td>
<td>Bridge Designer</td>
<td>334-242-6019</td>
<td><a href="mailto:gilberth@dot.state.al.us">gilberth@dot.state.al.us</a></td>
</tr>
<tr>
<td>Brooke Prince, P.E.</td>
<td>Bridge Designer</td>
<td>334-353-6564</td>
<td><a href="mailto:princeb@dot.state.al.us">princeb@dot.state.al.us</a></td>
</tr>
<tr>
<td>Yong Pan, P.E.</td>
<td>Bridge Designer</td>
<td>334-242-6015</td>
<td><a href="mailto:pany@dot.state.al.us">pany@dot.state.al.us</a></td>
</tr>
<tr>
<td>Brad Williams, P.E.</td>
<td>Bridge Designer</td>
<td>334-242-6347</td>
<td><a href="mailto:williamsbr@dot.state.al.us">williamsbr@dot.state.al.us</a></td>
</tr>
</tbody>
</table>