



Florida Department of Transportation

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GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

November 17, 2008

Dr. Leslie McCarthy, PhD, P.E.
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 5
Proposed Specification: 0050104 Control of the Work – Beam and Girder Temporary
Bracing

Dear Dr. McCarthy:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

These changes were proposed by Rafiq Darji of the State Construction Office to clarify direction to the Contractor when Construction Affecting Public Safety is specified.

Please review and transmit your comments, if any, within four weeks. Comments should be sent via Email to ST986RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4110.

Sincerely,

Signature on File

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/ft
Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

CONTROL OF THE WORK – BEAM AND GIRDER TEMPORARY BRACING.
(REV ~~9-24-07~~~~10-27~~~~30-08~~) (~~FA 8-21-08~~) (~~1-09~~)

SUBARTICLE 5-1.4.1 (k) (of the Supplemental Specification) is deleted and the following substituted:

(k) Bracing is a temporary *structural* member(s) ~~provided~~*placed* between beams, girders, piles, *columns*, etc. to provide stability *during construction activities*.

SUBARTICLE 5-1.4.5.6 (of the Supplemental Specification) is deleted and the following substituted:

5-1.4.5.6 Beam and Girder Temporary Bracing: ~~For construction affecting public safety, submit calculations for stability for all beams and girders.~~ The Contractor is solely responsible for ensuring stability of beams and girders during all handling, storage, shipping and erection. Adequately brace beams and girders to resist wind, ~~or other weather related forces and~~ weight of forms and other temporary loads, especially those eccentric to the vertical axis of the products, considering actual beam geometry and support conditions during all stages of erection and deck construction. Develop the required designs following the AASHTO Guide Design Specifications for Bridge Temporary Works and Construction Handbook for Bridge Temporary Works and the Contract Documents.

For Construction Affecting Public Safety, submit signed and sealed calculations for stability for all beams and girders.

SUBARTICLE 5-1.4.5.7 (of the Supplemental Specification) is deleted and the following substituted:

5-1.4.5.7 Erection Plan: Submit, for the Engineer's review, an Erection Plan that meets the specific requirements of Sections 450, 452 and 460 and this section. *Refer to Index 600 for construction activities not permitted over traffic.* ~~The following construction activities are not allowed over the active traffic:~~

- ~~_____ (a) Beam, girder and segment placement.~~
- ~~_____ (b) Deck form placement and removal.~~
- ~~_____ (c) Concrete deck placement.~~
- ~~_____ (d) Railing construction when railing is located at edge of deck.~~
- ~~_____ (e) Structure demolition.~~

SUBARTICLE 5-1.5.4 (of the Supplemental Specification) is deleted and the following substituted:

5-1.5.4 Erection: For ~~Structures-Construction affecting~~ *Affecting public* ~~Public safety~~ *Safety*, submit an erection plan signed and sealed by the Specialty Engineer to the Engineer at least four (4) weeks prior to erection commencing. Include as part of this submittal signed and sealed calculations and details for any falsework, bracing or other connection(s) supporting the structural elements shown in the erection plan.

At least two (2) weeks prior to beginning erection, conduct a Pre-erection meeting with the Specialty Engineer and Engineer to review details of the plan.

After erection of the elements but prior to ~~allowing the~~ *public opening of the roadway* below the structure, ensure that ~~the a~~ Specialty Engineer has personally inspected the erected member(s) and certified to the Engineer that the structure has been erected ~~and constructed~~ in accordance with ~~its~~ *the* signed and sealed erection plan.

~~Perform daily inspections of the erected structural members until completion of the deck concrete placement.~~ *Perform daily inspections of the erected structural systems. For structures without temporary supports but with temporary girder bracing systems, perform inspections until all the diaphragms and cross frames are in place. For structures with temporary supports, perform inspections until the temporary supports are no longer needed as indicated in the erection plans.* Provide written documentation of the inspections to the Engineer within 24 hours of the inspection

**CONTROL OF THE WORK – BEAM AND GIRDER TEMPORARY BRACING.
(REV 10-30-08)**

SUBARTICLE 5-1.4.1 (k) (of the Supplemental Specification) is deleted and the following substituted:

(k) Bracing is a temporary structural member(s) placed between beams, girders, piles, columns, etc. to provide stability during construction activities.

SUBARTICLE 5-1.4.5.6 (of the Supplemental Specification) is deleted and the following substituted:

5-1.4.5.6 Beam and Girder Temporary Bracing: The Contractor is solely responsible for ensuring stability of beams and girders during all handling, storage, shipping and erection. Adequately brace beams and girders to resist wind, weight of forms and other temporary loads, especially those eccentric to the vertical axis of the products, considering actual beam geometry and support conditions during all stages of erection and deck construction. Develop the required designs following the AASHTO Guide Design Specifications for Bridge Temporary Works and Construction Handbook for Bridge Temporary Works and the Contract Documents.

For Construction Affecting Public Safety, submit signed and sealed calculations for stability for all beams and girders.

SUBARTICLE 5-1.4.5.7 (of the Supplemental Specification) is deleted and the following substituted:

5-1.4.5.7 Erection Plan: Submit, for the Engineer's review, an Erection Plan that meets the specific requirements of Sections 450, 452 and 460 and this section. Refer to Index 600 for construction activities not permitted over traffic.

SUBARTICLE 5-1.5.4 (of the Supplemental Specification) is deleted and the following substituted:

5-1.5.4 Erection: For Construction Affecting Public Safety, submit an erection plan signed and sealed by the Specialty Engineer to the Engineer at least four (4) weeks prior to erection commencing. Include as part of this submittal signed and sealed calculations and details for any falsework, bracing or other connection(s) supporting the structural elements shown in the erection plan.

At least two (2) weeks prior to beginning erection, conduct a Pre-erection meeting with the Specialty Engineer and Engineer to review details of the plan.

After erection of the elements but prior to opening of the roadway below the structure, ensure that a Specialty Engineer has personally inspected the erected member(s) and certified to the Engineer that the structure has been erected in accordance

with the signed and sealed erection plan.

Perform daily inspections of the erected structural systems. For structures without temporary supports but with temporary girder bracing systems, perform inspections until all the diaphragms and cross frames are in place. For structures with temporary supports, perform inspections until the temporary supports are no longer needed as indicated in the erection plans. Provide written documentation of the inspections to the Engineer within 24 hours of the inspection