Form 000021wd
4-96

IOWA DEPARTMENT OF TRANSPORTATION

To Office Bridges and Structures Date November 8, 2005

Attention All Employees Ref No. 521.1

From Gary Novey

Office Bridges and Structures

Subject Method's Memo No. 142(LRFD Plan specification notes)

The following notes and commentary should be used in situations where the complete superstructure (beams and deck) will be designed using LRFD. Substructures will continue to be designed using the AASHTO Standard Specifications.

E50C

SPECIFICATIONS:
DESIGN: SUBSTRUCTURE: AASHTO SERIES OF 1996.
SUPERSTRUCTURE: AASHTO LRFD SERIES OF 2004.

CONSTRUCTION: IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2001, PLUS APPLICABLE GENERAL SUPPLEMENTAL SPECIFICATIONS, DEVELOPMENTAL SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON THIS PROJECT.
?
?

DESIGN STRESSES:
DESIGN STRESSES FOR THE FOLLOWING MATERIALS ARE IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SERIES OF 1996 AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SERIES OF 2004.

REINFORCING STEEL IN ACCORDANCE WITH STANDARD AASHTO SECTION 8 AND LRFD AASHTO SECTION 5, GRADE 60.

CONCRETE IN ACCORDANCE WITH STANDARD AASHTO SECTION 8 AND LRFD AASHTO SECTION 5, f'c = 3,500 PSI.

PRESTRESSED CONCRETE BEAMS, SEE DESIGN SHEET ?.

STRUCTURAL STEEL IN ACCORDANCE WITH STANDARD AASHTO SECTION 10 AND LRFD AASHTO SECTION 6. ASTM A709 GRADE 36, GRADE 50, AND GRADE 50W (AASHTO M270 GRADE 36, GRADE 50, AND GRADE 50W).

These standard bridge design notes are to be used on the front estimate sheet where the superstructure is designed using LRFD and the substructure is designed using the Standards Specification.

E104C

THE BRIDGE SUBSTRUCTURE IS DESIGNED FOR HS20-44 LOADING, PLUS 20 LBS. PER SQUARE FOOT OF ROADWAY FOR FUTURE WEARING SURFACE.

THE BRIDGE SUPERSTRUCTURE IS DESIGNED FOR HL-93 LOADING, PLUS 20 LBS. PER SQUARE FOOT OF ROADWAY FOR FUTURE WEARING SURFACE.

Use these notes for the design live load requirement for all new bridges on primary highways, where the superstructure is designed using LRFD and the substructure is designed using the Standards Specification.

GAN:dgb:bj