STRUCTURAL STEEL NOTES

1. Camber ordinates, as shown, are computed to compensate for all dead load

deflections and for the curvature of the finished grade profile.

*~ The following note is used when more than one steel design is provided. ~*

2. Dimensions and elevations omitted from the Bottom of Slab Elevations table,

the Camber Diagram, and the Stress Diagram will be provided to the Contractor

for the structural steel option that has been selected.

*~ The following notes are used for welded girders only. ~*

3. No transverse butt weld splices will be allowed in the flange plates or web

plates within 10 feet or 10 percent of the span length (whichever is greater)

from the points of maximum negative moment or maximum positive moment. Butt weld

splices in flanges shall be not less than 1 foot from transverse butt welds in

the web plates and no transverse web or flange butt welds shall be located

within 1 foot of other transverse welds (e.g. connection plates to web welds) on

either flange or web. No transverse butt weld splices will be allowed in areas

of stress reversal.

4. Sections of flange plates or web plates between transverse shop splices or

between a transverse shop splice and a field splice shall be at least XX feet in

length unless otherwise shown on the Plans.

*~ The following note is used with haunched welded girders only. ~*

5. One longitudinal butt weld splice will be allowed in the web of the haunched

sections of the girders. Feathered edges between the longitudinal welds and the

bottom flanges will not be allowed.

6. Bearing stiffeners shall be plumb after erection and dead loading of the

structure. Intermediate web stiffeners may be either plumb or normal to the top

flange.

7. Intermediate crossframe or diaphragm connection plates may be either plumb

or normal to the top flange.

*~ The following note is used only with designs using A709, Grade 50, painted*

*Grade 50W, or painted Grade HPS 70 W. ~*

8. Filler plates may be steel conforming to the requirements of ASTM A709,

Grade 36.

*~ Diaphragm bolt type/grade is typically called out on the title sheet, but if*

*there are multiple grades of bolts used, additional notes to clarify should be*

*added. If the diaphragms/cross frames are primary members, specify whether*

*threads should be excluded from the shear plane in the bolts. ~*

9. At locations marked with an asterisk (\*), the designated diaphragms shall be

changed to a Type A (C) (D) diaphragm as required to accommodate the

Contractor's deck placement sequence. No extra compensation will be allowed for

any diaphragms so substituted, and any additional costs will be considered

incidental to Contract items.

*~ The following note is used when a single span rolled beam with 3 inches or*

*more camber is used. ~*

10. The Contractor may substitute welded plate girders in place of the rolled

beams shown on the plans, as approved by the Resident. The fabricator shall

determine the plate thicknesses based upon the depth and moment of inertia of

the rolled section.

*~ Use the following two notes when weathering steel girders are used ~*

11. Coat girder ends and cross frames to a distance of 10 feet from each

Abutment centerline of bearing in accordance with Standard Specifications

Section 506, Shop Applied Protective Coating - Steel (Zinc Rich Coating System),

except NEPCOAT Qualified Products List C may be used. Payment for the coating

will be incidental to Pay Item 504.702.

12. After placement of the superstructure concrete, thoroughly clean the

abutments [and piers] of all stains with a method approved by the Resident.

Payment will be considered incidental to related Contract items.

*~ If a drip bar is proposed, include the following note. Drip bars should be*

*located on the high side of each substructure element on all girders. ~*

13. Provide a drip bar on the high side of each pier and abutment on all

girders in accordance with Standard Detail 504(10).

14. Structural steel was designed with a vertical construction load of 50 lb/sf

and a lateral wind velocity during construction of XX mph.

*~ Use the following note when structural steel is coated with Hot-Dip*

*Galvanizing or Thermal Spray Coating ~*

15. All bolts, nuts, and washers shall be hot dip galvanized in accordance with

ASTM A153.

*~ Use the following notes where bolted field splice connections are used ~*

16. Bolted field splice connections shall be made using XX inch ASTM F3125,

Grade A325 Type X high strength bolts. Bolt hole size shall be XX inch diameter.

Field splice bolt threads shall be excluded from the shear plane.

17. The splice was designed with a Class X slip coefficient.

18. Repairs to the Thermal Spray Coating that modify the surface roughness in

the area of the faying surfaces shall not be performed without the approval of

the Fabrication Engineer.

19. Ends of girder webs shall be vertical under full dead load.

*~ Use one of the following two notes if metallized structural steel is proposed.*

*If the bridge contains a splice, use the first note so the slip coefficient of*

*the faying surface is not affected ~*

20. At the Contractor's option, the Diaphragms and Cross Frames may be

Hot-Dipped Galvanized in accordance with Standard Specifications Section 506,

Shop Applied Protective Coating, as approved by the Resident. Payment will be

considered incidental to Item 506.9104, Thermal Spray Coating (Shop Applied), no

separate payment will be made.

21. At the Contractor's option, all Structural Steel may be Hot-Dipped

Galvanized in accordance with Standard Specifications Section 506, Shop Applied

Protective Coating, as approved by the Resident. Double Hot-Dipped galvanizing

shall be approved by the Resident. Payment will be considered incidental to Item

506.9104, Thermal Spray Coating (Shop Applied), no separate payment will be

made.