Chapter 00
GENERAL (GEN)
GENERAL NOTES

SPECIFICATIONS: MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JULY 20XX.


LOADING: HL-93 WITH PROVISIONS FOR FUTURE 2" WEARING SURFACE AND 15 psf/60 ft. FOR USE OF STEEL BRIDGE DECK FORMS WHICH REMAIN IN PLACE.

NL-93

LOAD RESTRICTIONS: THERE ARE RESTRICTIONS FOR PLACING EQUIPMENT AND MATERIALS ON EXISTING AND NEW STRUCTURES. REFER TO SECTION T6.64.

CONCRETE:

- BOTTOM OF Prestressed Concrete Girders shall have a minimum 3 IN. of compressive strength at transfer.
- Top of Bridge Deck Slabs shall have a minimum 4 000 psi for elements using Mix No. 6.
- Column Steel extending into cap shall have a minimum 6000 psi.

REINFORCING STEEL:

- Bottom flange of prestressed concrete girders shall have a minimum 0.75 of the ultimate strength of the steel.
- Top of Bridge Deck Slabs shall have a minimum 3500 psi.

PRESTRESSED CONCRETE:

- Prestressed Concrete shall conform to ASTM a 615.
- Column Spacings shall be 2400 psi containing synthetic fibers (see Section 902.15).
- All other structure shall be Mix No. 3 (3500 psi).

GENERAL NOTE GUIDANCE/COMMENTARY

- This note shall be used for spiral reinforcing in pier columns.
- This note shall be used for retaining walls to be modified as necessary.
- This note shall be used for all concrete overlays on prestressed concrete girders and slabs (except shoulders).
- This note shall be used for all normal weight concrete bridges.
- This note shall be used for new bridges or major rehabilitations.
- This note shall be used for all latex modified concrete overlays on bridge superstructures.
- This note shall be used for all prestressed concrete slab bridges.
- This note shall be used for box culverts with 1'-6" of cover or greater.
- This note shall be used for box culverts with less than 1'-6" of cover.
- This note shall be used for all concrete overlays on prestressed concrete slab bridges.
- This note shall be used for box culverts with less than 1'-6" of cover.
- This note shall be used for bridge widenings...

Reinforcing in the following locations shall be epoxy coated in the details contained on the contract plans.

- Entire superstructure (including piers, piers, and sidewalks)
  - Abutment backwalls
  - Abutment bridge seats
  - Expansion joint cross beams
  - Portions of the expansion joint cross beam support columns.
  - Parapet portions of wing walls
  - Concrete overlay
  - Top of curbs with less than 1'-6" of cover
  - Bars extending into top of box culverts with less than 1'-6" of cover
  - For widenings and rehabilitations, all exposed uncoated bars extending into area with epoxy coated bars.

The chart shall be modified for the conditions in the structure.
PRETENSIONING STEEL:
   PRETENSIONING STEEL SHALL CONSIST OF 1/4 DIAMETER 7-WIRE BRIGHT LOW RELAXATION STRANDS, CONFORMING TO THE REQUIREMENTS OF M 270 GRADE 470. EACH STRAND SHALL BE PRETENSIONED TO 1,000 TO 1,075 TONS (9.2 TO 10.0 TONS). USE 7-WIRE BRIGHT LOW RELAXATION STRANDS WITH A YIELD STRENGTH OF 37,200 TO 43,000 TONS.

STRUCTURAL STEEL:
   NEW STRUCTURAL STEEL SHALL CONFORM TO A 709 GRADE 50, INCLUDING THE ADDITIONAL REQUIREMENTS FOR CHAP10 V-NOCH TESTING OF M 275 FOR PRIMARY LOAD CARRYING MEMBERS. REFER TO SECTION 809.01.
   EXISTING STRUCTURAL STEEL CONFORMS TO LIST SPECIFICATION AND GRADE IF KNOWN, A 709 GRADE 36.
   NEW STRUCTURAL STEEL SHALL CONFORM TO A 709 GRADE 50 FOR ALL NEW STRUCTURAL STEEL, INCLUDING THE ADDITIONAL REQUIREMENTS FOR CHAP10 V-NOCH TESTING OF M 275 FOR PRIMARY LOAD CARRYING MEMBERS. REFER TO SECTION 809.01. ALL EXISTING STRUCTURAL STEEL CONFORMS TO XX LIST SPECIFICATION AND GRADE IF KNOWN, A 709 GRADE 36.

CLEANING AND PAINTING:
   REFER TO MD SPECIFICATION SECTION 435 FOR NEW STRUCTURAL STEEL OR 436 FOR EXISTING STRUCTURAL STEEL.
   THE COLOR FOR THE FINISH COAT SHALL MATCH USE MARYLAND STANDARD NO. 6400 GR 26251 (GREY) OR 25183 (BLUE) OR 20045 (BROWN) PAINT SYSTEM XX.

TIMBER:
   ALL TIMBER SHALL BE PRESSURE TREATED SOUTHERN YELLOW PINE SELECT STRUCTURAL OR BETTER. UNLESS OTHERWISE NOTED, ALL TIMBER SHALL BE OF NORMAL SIZE. CROSS SECTION AS INDICATED ON THE PLANS WITH MINIMUM STRENGTH VALUES OF:
   Fv = *** psi
   E = *** psi

ROUND TIMBER PILES:
   ALL TIMBER PILES SHALL BE PRESSURE TREATED WITH THE EXCEPTION OF PILES USED IN BURIED FOUNDATIONS.

FRACtURE CRITICAL MEMBERS:
   THIS STRUCTURE CONTAINS FRACTURE CRITICAL MEMBERS. SEE SHEET(S) XXX FOR IDENTIFICATION OF THESE MEMBERS. THIS STRUCTURE W ill require additional requirements for THESE MEMBERS.

THE FOLLOWING NOTES SHALL BE INCLUDED WITH THE GENERAL NOTES WHEN SUCH WORK IS INCLUDED IN THE CONTRACT.

CONCRETE:
   FOR SURFACE CONCRETE REPAIRS TO ADDRESS SPALLING, USE MIX NO. 5 (1,500 PSI) CONCRETE OR EQUAL FOR SMALL REPAIRS, AND MIX NO. 6 (4,500 PSI) CONCRETE OR EQUAL FOR LARGE REPAIRS OR SEVERAL REPLACEMENT.

WELDING:
   ALL WELDING SHALL CONFORM TO SPECIFICATION SECTIONS 410.03.19 AND 410.03.20. ALL FIELD WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF M 203. REQUIREMENTS SHALL BE ADHERED TO EXCEPT THE REQUIREMENTS FOR RADIOGRAPHIC AND ULTRASONIC INSPECTION MAY BE WAIVED IF A VISUAL INSPECTION BY THE ENGINEER INDICATES THE WELDS ARE SATISFACTORY FOR THE PURPOSE INTENDED.

JACKING:
   JACKING MAY NOT BE PERFORMED UNDER TRAFFIC. JAKING SHALL have a minimum safe capacity of 10 TONS.

PRESTRESSING BARS:
   Prestressing bars shall be 1/8 X 1/8 DIAMETER 7-WIRE BRIGHT LOW RELAXATION STRANDS CONFORMING TO THE REQUIREMENTS OF M 203 GRADE 270. each strand shall be prestressed to 1,000 TO 1,075 TONS (9.2 TO 10.0 TONS). Use 7-WIRE BRIGHT LOW RELAXATION STRANDS WITH A YIELD STRENGTH OF 37,200 TO 43,000 TONS.

MAINTENANCE OF TRAFFIC:
   REFER TO DETOUR ON SHEET XX.
   USE MARYLAND STANDARD NO. MD-104.05-01.

REFERENCES:
   REFER TO TRAFFIC CONTROL PLAN ON SHEET XX. ALL MOTOR VEHICLES, TRUCKS, TRAILERS, AND SEMI-TRAILERS MUST BE DIVERTED AROUND THE CONSTRUCTION SITE.

CONSTRUCTION NOTES:
   ALL DIMENSIONS AFFECTED BY THE GEOMETRY AND/OR LOCATION OF THE STRUCTURES, EXCEPT STRUCTURES) SHALL BE CHECKED IN THE FIELD BY THE CONSTRUCTION ENGR. BEFORE ANY MATERIAL IS ORDERED OR FABRICATED OR CONSTRUCTION BEGINS.
   NO CONSTRUCTION EQUIPMENT SHALL BE PERMITTED TO PASS OVER THE CULVERT/PIPE UNTIL A MINIMUM OF 3 FEET OF COMPACTED FILL HAS BEEN PLACED OVER THE CULVERT/PIPE.