

FOR BOLT CONNECTION

SEE TYPICAL BOLT WITH DTI ASSEMBLY DETAIL

STRUCTURAL STEEL NOTES

ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL INTERMEDIATE DIAPHRAGM STEEL AND CONNECTOR PLATES SHALL BE AASHTO M270 GRADE 50 OR APPROVED EQUAL.

TENSION ON THE ASTM A325 BOLTS THROUGH THE ANGLE MEMBER SHALL BE CALIBRATED USING DIRECT TENSION INDICATOR WASHERS IN

TENSION ON THE ASTM A449 BOLTS THROUGH THE GIRDER WEB SHALL BE SNUG TIGHTENED FOLLOWED BY AN ADDITIONAL 1/4 TURN.

THE PLATES, BENT PLATES, AND ANGLES SHALL BE GALVANIZED OR METALLIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. FOR THERMAL SPRAYED COATINGS (METALLIZATION), SEE SPECIAL PROVISIONS.

FOR METALLIZATION, APPLY A THERMAL SPRAYED COATING WITH A SEAL COAT TO ALL STEEL DIAPHRAGM SURFACES IN ACCORDANCE WITH THE DEPARTMENTS THERMAL SPRAYED COATINGS (METALLIZATION) PROGRAM, THERMAL SPRAYED COATINGS SPECIAL PROVISION AND SECTION 442 OF THE STANDARD SPECIFICATIONS.

GALVANIZE THE HIGH STRENGTH BOLTS, NUTS, WASHERS AND DIRECT TENSION INDICATORS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

USE AN ASTM F436 HARDENED WASHER WITH STANDARD AND SLOTTED HOLES UNDER EACH BOLT HEAD AND NUT.

FOR BOLTS THROUGH THE GIRDER WEB, PROVIDE SUFFICIENT LENGTH OF THREADS ON ALL BOLTS TO ACCOMMODATE WASHERS AND THE THICKNESS OF CONNECTING MEMBER PLUS AT LEAST $\frac{1}{4}$ " PROJECTION BEYOND THE NUT.

INTERMEDIATE DIAPHRAGM ASSEMBLY SHALL COMPLY WITH SECTION 1072 OF THE STANDARD SPECIFICATIONS.

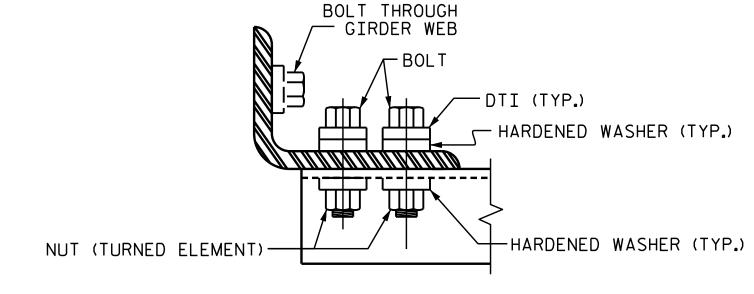
SUBMIT TWO SETS OF WORKING DRAWINGS FOR THE INTERMEDIATE DIAPHRAGM ASSEMBLY FOR REVIEW, COMMENTS AND ACCEPTANCE. AFTER REVIEW, COMMENTS, AND ACCEPTANCE, SUBMIT SEVEN SETS FOR DISTRIBUTION.

IN THE EXTERIOR BAYS, PLACE TEMPORARY STRUTS BETWEEN PRESTRESSED GIRDERS ADJACENT TO THE STEEL DIAPHRAGMS. STRUTS SHALL REMAIN IN PLACE 3 DAYS AFTER CONCRETE IS PLACED.

THE COST OF THE STEEL DIAPHRAGMS AND ASSEMBLIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE GIRDERS.

TABLE

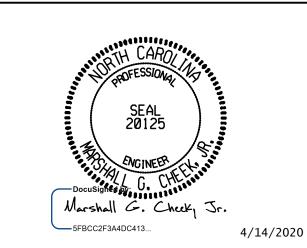
GIRDER TYPE	DIM "A"	DIM "B"	DIM "C"	DIM "L"
72" BULB TEE	1′-6′′	1′-10′′	1'-2''	4′-2′′



BOLT WITH DTI ASSEMBLY DETAIL

PROJECT NO. B-5825 YADKIN/FORSYTH COUNTY STATION: 34+65.50 -L-

SHEET 7 OF 7



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD INTERMEDIATE STEEL DIAPHRAGMS FOR 63" & 72" MODIFIED BULB TEE PRESTRESSED CONCRETE **GIRDERS**

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS TGS ENGINEERS

706 HILLSBOROUGH STREET
SUITE 200

RALEIGH, NC 27603
PH (919) 773–8887
CORP. LICENSE NO.: C-0275 BY: DATE: BY:

DATE : 1/20 ASSEMBLED BY : ZCS 1/20 CHECKED BY: DATE: MAA/GM MAA/THC REV. 10/1/11 REV. 12/17 DRAWN BY: RWW II/09 CHECKED BY : GM II/09

6"X ½"₽—— SEE TABLE FOR LENGTH "L" (TYP.)

SECTION A-A

2/18/2020 X:\NCDOT\B-5825\Structures\Str. *1 - 34+65.50 -L-\FinalPlans\DGNs\401_055_B-5825_SMU_G7_980035.dgn

SECTION B-B

L 8 X 6 X 1/2 OR 8"X6" X 1/2" BENT P
SEE TABLE FOR LENGTH "L" (TYP.)

½ 1/8" Ø H.S. BOLT, —

2 HARDENED WASHERS AND DTI (TYP.)

CONNECTION DETAILS

 $-L 3 X 3 X \frac{5}{16}$

— @ 1″Ø H.S. BOLT AND —

2 HARDENED WASHERS (TYP.)

DATE:

SHEET NO

S-26

TOTAL SHEETS

60