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DATE: 2/9/2023
TIME: 10:26:04 PM

USER: cotter.m
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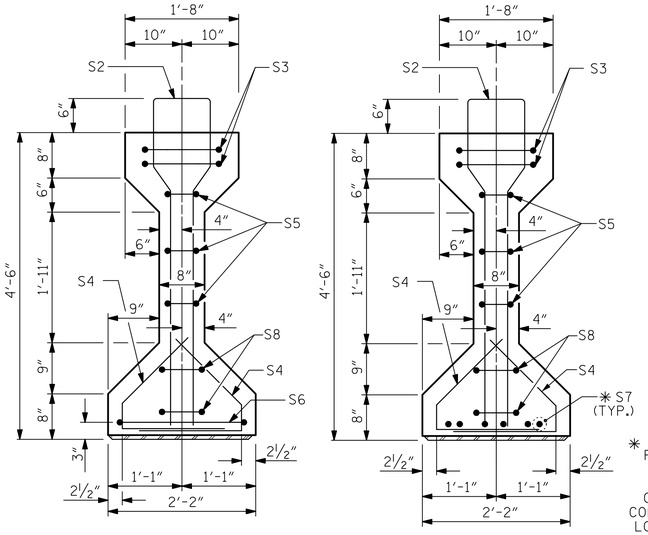
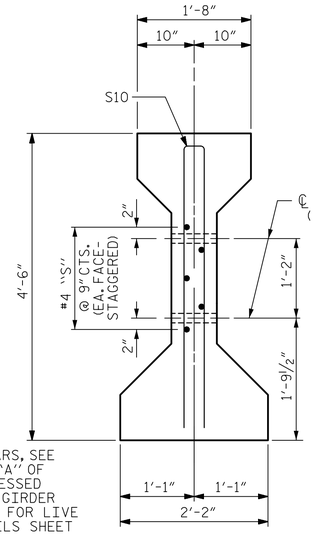



SECTION A-A

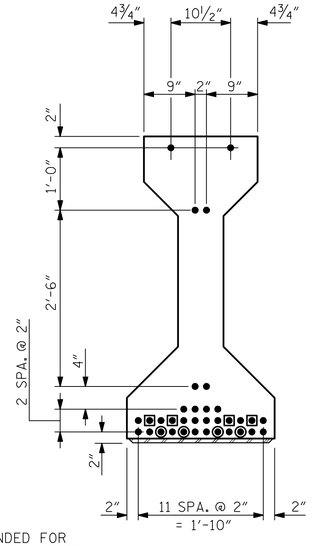



SECTION B-B

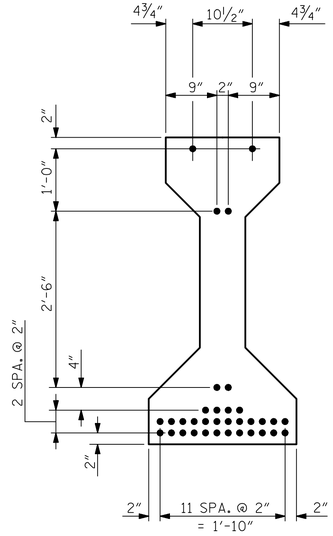



SECTION C-C
(S1 BARS NOT SHOWN)

✳ FOR S7 BARS, SEE DETAIL "A" OF PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS SHEET




AT END OF GIRDER




AT ℄ OF GIRDER

● STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER

◉ STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER

0.6" Ø LOW RELAXATION STRAND LAYOUT

## 0.6" Ø L. R. GRADE 270 STRANDS

| AREA (SQUARE INCHES) | ULTIMATE STRENGTH (LBS. PER STRAND) | APPLIED PRESTRESS (LBS. PER STRAND) |
|---|---|---|
| 0.217 | 58,600 | 43,950 |

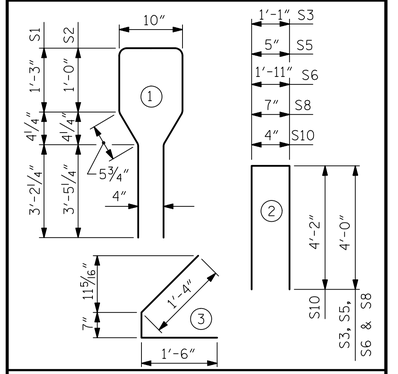
## REINFORCING STEEL FOR ONE GIRDER

| BAR | NUMBER | SIZE | TYPE | LENGTH | WEIGHT |
|---|---|---|---|---|---|
| S1 | 75 | #4 | 1 | 10'-8" | 534 |
| S2 | 16 | #6 | 1 | 10'-8" | 256 |
| S3 | 4 | #4 | 2 | 9'-1" | 24 |
| S4 | 80 | #4 | 3 | 3'-5" | 183 |
| S5 | 6 | #4 | 2 | 8'-5" | 34 |
| S6 | 1 | #4 | 2 | 9'-11" | 7 |
| ✳S7 | 6 | #5 | STR | 3'-8" | 23 |
| S8 | 4 | #4 | 2 | 8'-7" | 23 |
| S9 | 1 | #3 | STR | 1'-10" | 1 |
| S10 | 2 | #5 | 2 | 8'-8" | 18 |
| S11 | 5 | #4 | STR | 7'-0" | 23 |

✳ NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

## BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT

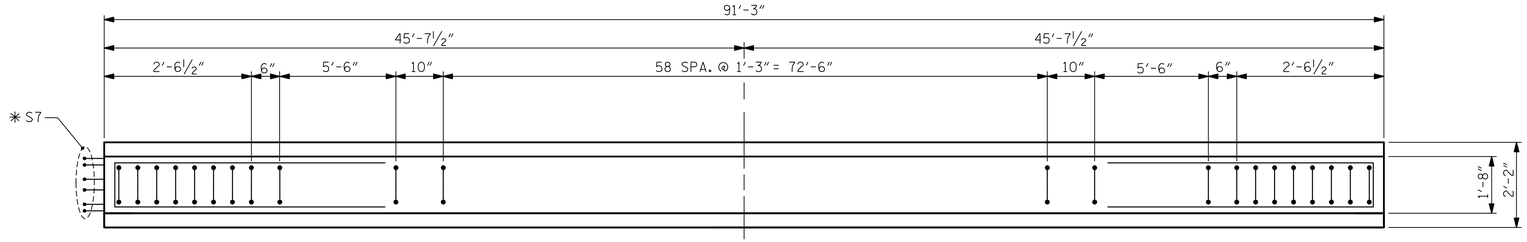



## QUANTITIES FOR ONE GIRDER

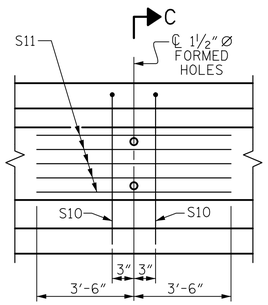
| | REINFORCING STEEL | 8,000 PSI CONCRETE | 0.6" Ø L. R. STRANDS |
|---|---|---|---|
| | LB. | C.Y. | No. |
| GIRDER 1, 2 & 3 | 1,126 | 18.5 | 34 |

## GIRDERS REQUIRED

| NUMBER | LENGTH | TOTAL LENGTH |
|---|---|---|
| 3 | 91'-3" | 273'-9" |

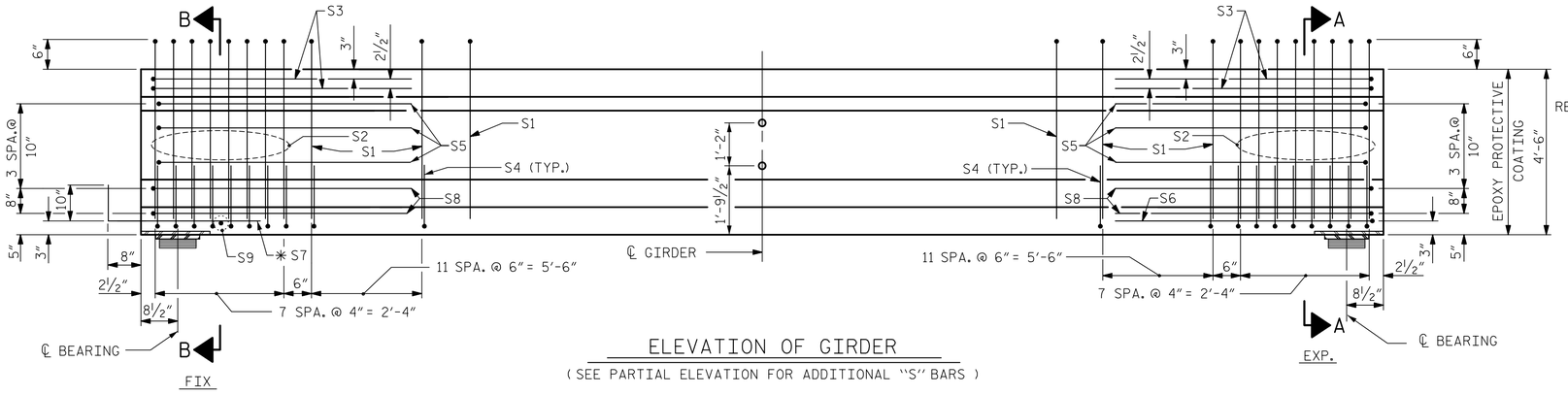



PLAN OF GIRDER




PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER Nos. 1, 2 & 3




ELEVATION OF GIRDER

( SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS )

PROJECT NO. U-5748

WAKE COUNTY

STATION: 24+88.00 -L-



AECOM
AECOM TECHNICAL SERVICES OF NC, INC.
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RALEIGH, NC 27607
(919) 854-6200 www.aecom.com
AECOM License No. F-0342

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD
AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
SPAN B

| ASSEMBLED BY : M. CATER | DATE : 10/2020 |
|---|---|
| CHECKED BY : J.C. MORRISON | DATE : 05/2021 |

| DRAWN BY : ELR 8/91 | REV. 10/1/11 MAA/GM |
|---|---|
| CHECKED BY : GRP 8/91 | REV. 1/15 MAA/TMG |
| | REV. 12/17 MAA/THC |

NORTH CAROLINA PROFESSIONAL SEAL 030474 ENGINEER JOHN C. MORRISON

DocuSigned by: John C. Morrison 2/10/2023
A2FDE142C82F4AB...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

| REVISIONS | | | | | | SHEET NO. |
|---|---|---|---|---|---|---|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S2-19 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 119 |

STD. NO. PCG6