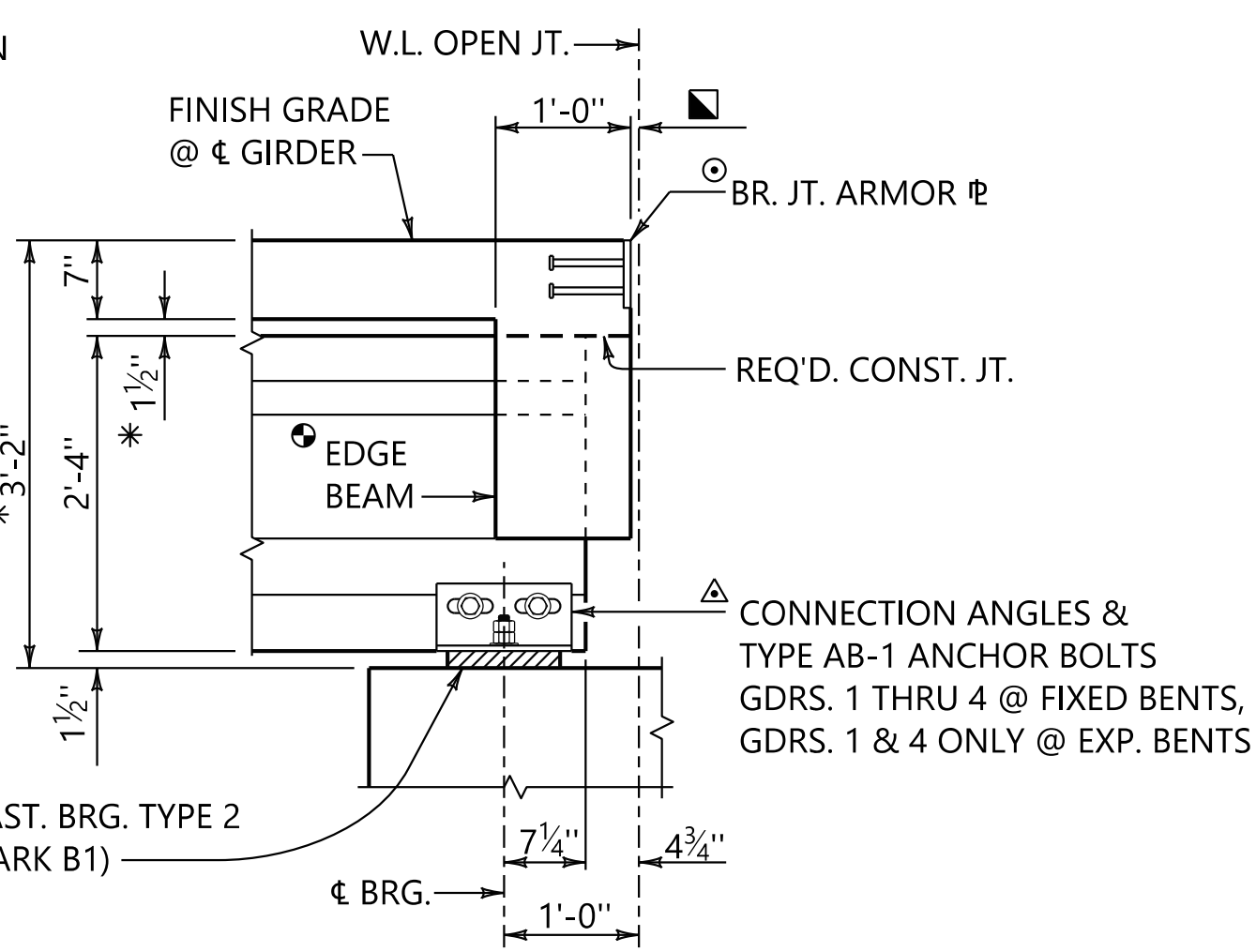
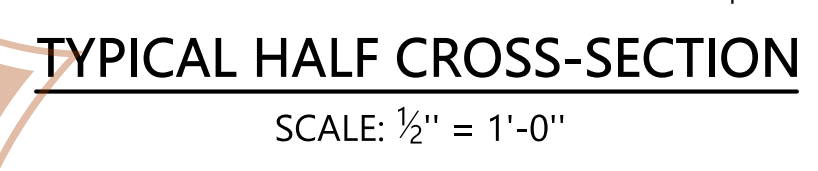
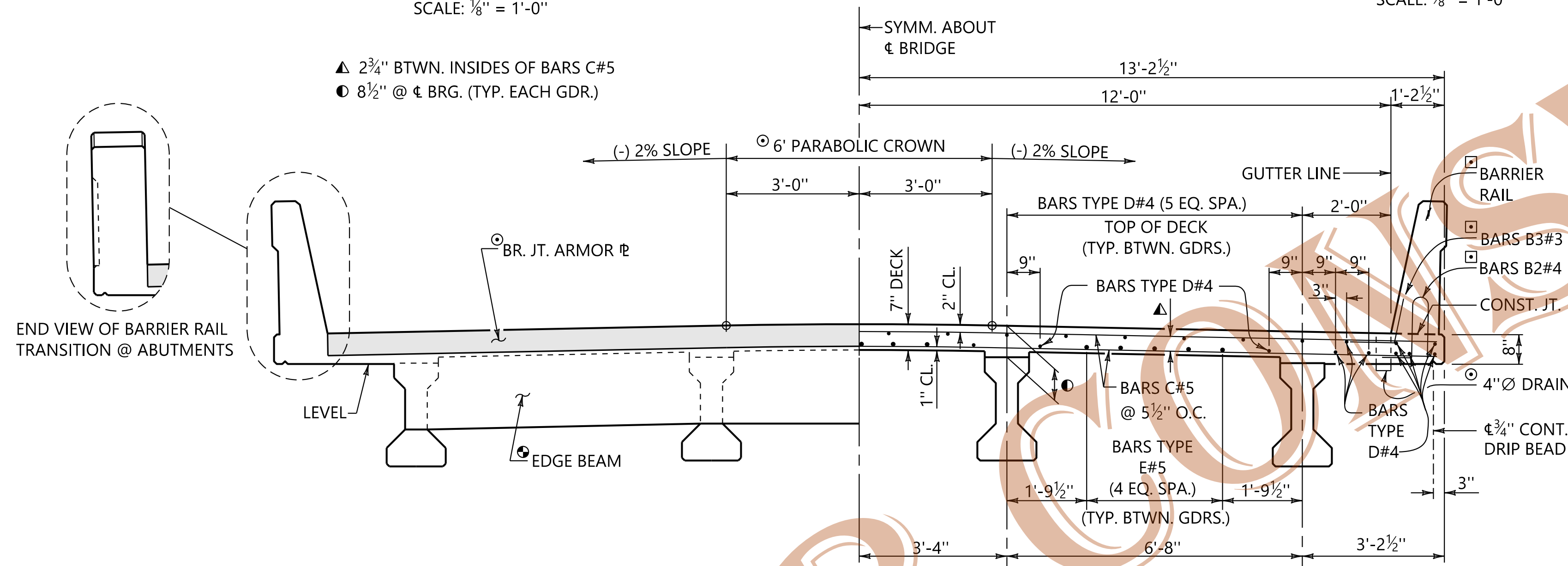
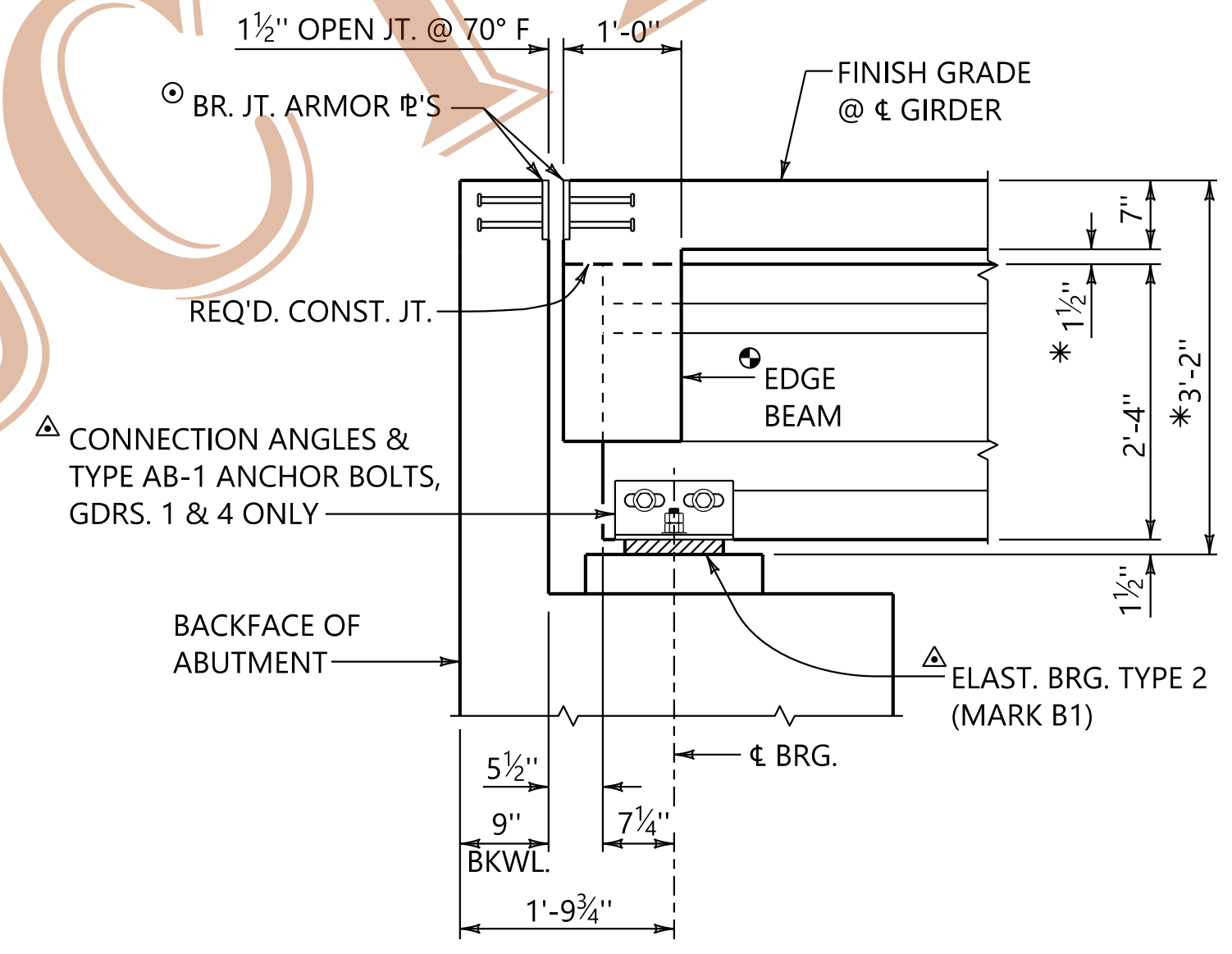
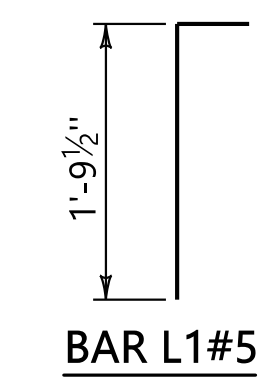
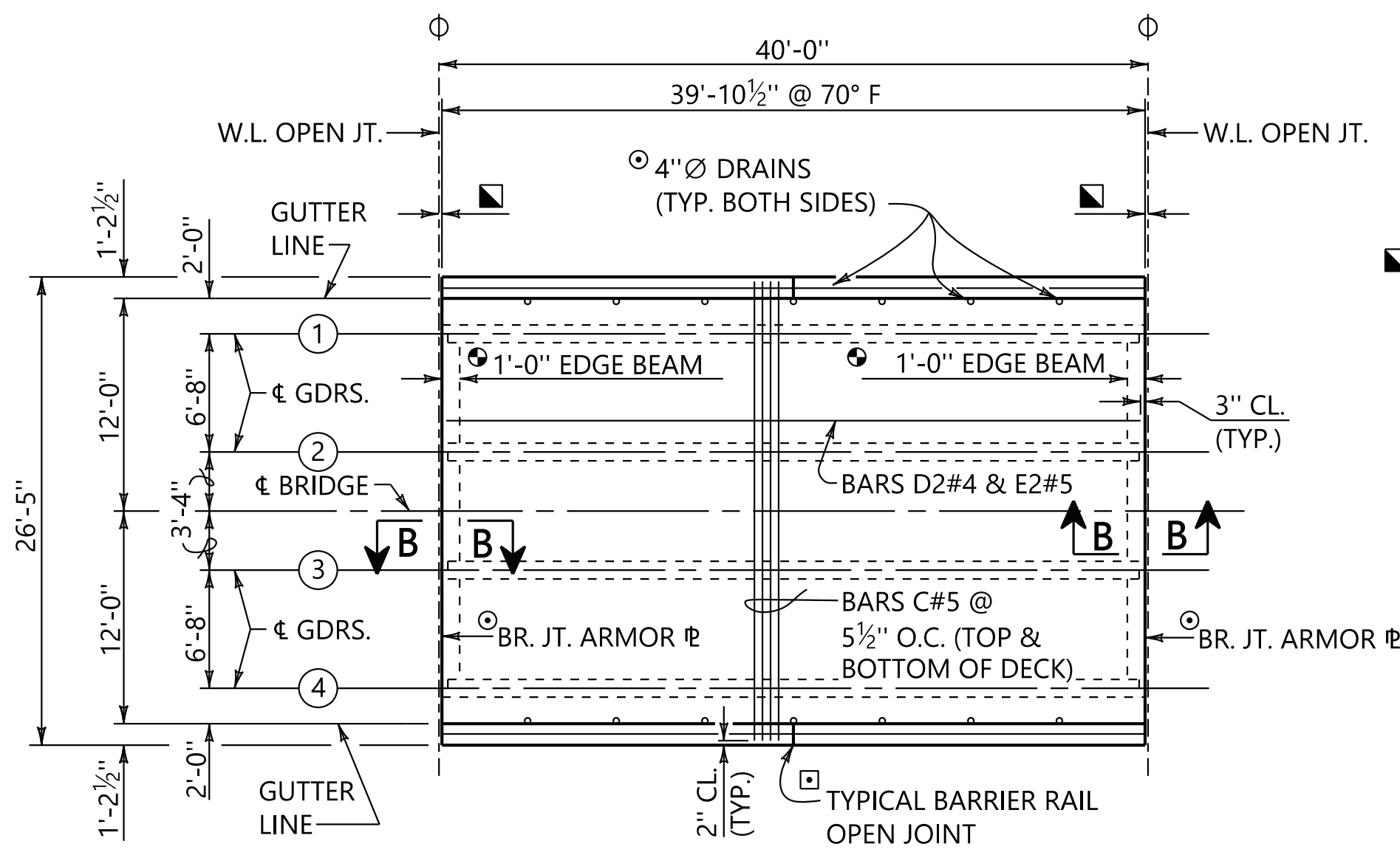
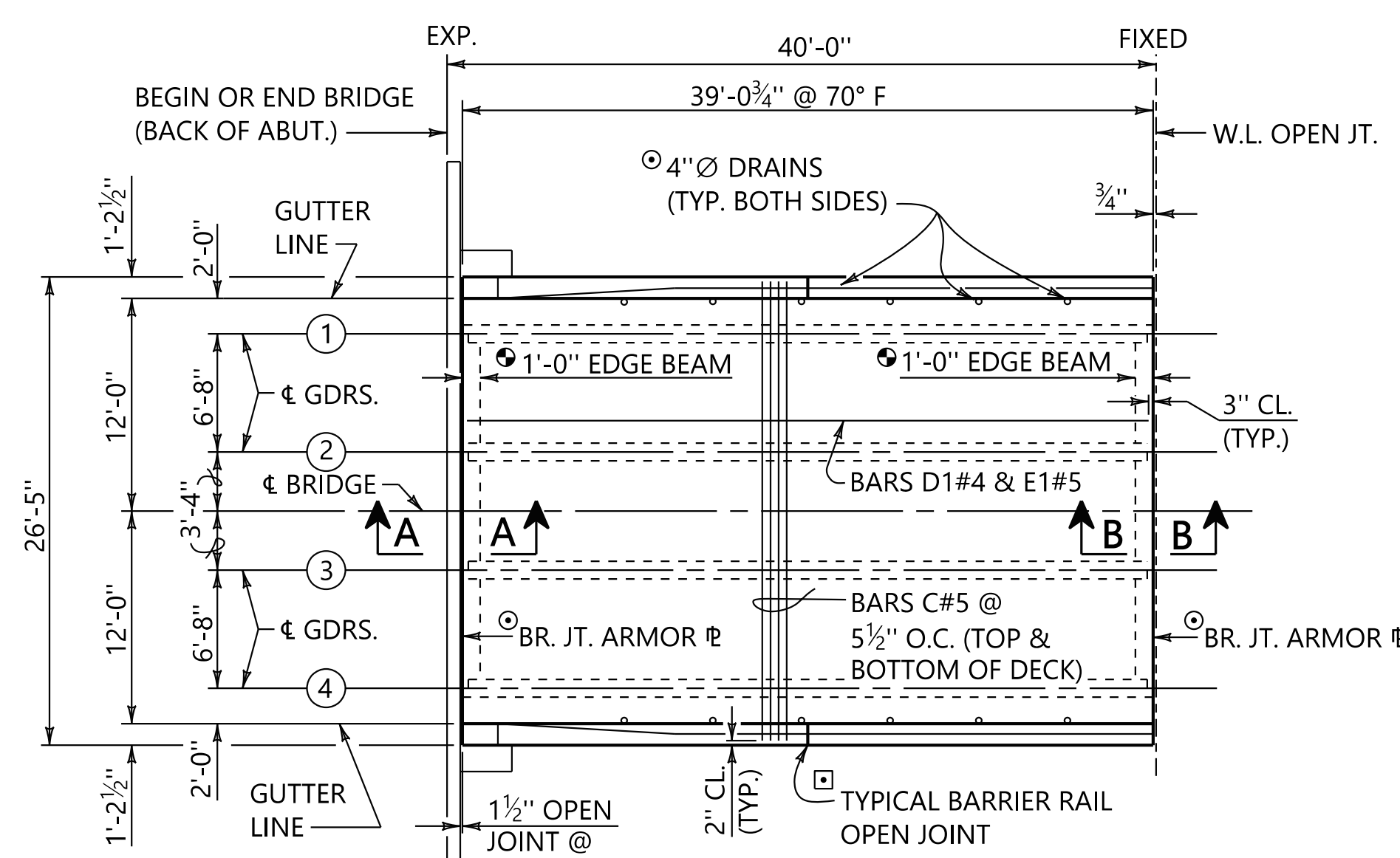


NOTES

- 1. FOR LOCATION OF FIXED AND EXPANSION ENDS, SEE THE GENERAL PLAN AND ELEVATION SHEET.
- * 2. DIMENSIONS SHOWN ARE AT ϵ BEARING ONLY. (SEE SHT. 2 OF 2)
- 3. FOR GUARDRAIL ANCHOR REQUIREMENTS, SEE ROADWAY PLANS AND BR. SPEC. PROJ. DWG. BBR-2. QUANTITIES NOT INCLUDED ON THIS SPECIAL DRAWING.
- 4. SEE BR. SPEC. PROJ. DWG. SBD-1 FOR DETAILS.
- 5. SEE BR. SPEC. PROJ. DWG. BBR-2 FOR DETAILS.
- 6. SEE BR. SPEC. PROJ. DWG. EBW1 FOR DETAILS.
- 7. SEE BR. SPEC. PROJ. DWG. SPGD-1 FOR DETAILS.
- 8. STRUCTURAL STEEL QUANTITIES INCLUDE CONNECTION ANGLES, ANCHOR BOLTS AND BRIDGE JOINT ARMOR ϕ 'S.



SUPERSTRUCTURE DEADLOAD REACTIONS

EXTERIOR GIRDERS 1 & 4:	23.6 KIPS
INTERIOR GIRDERS 2 & 3:	24.5 KIPS

DESIGN PARAMETERS

SUPERSTRUCTURE CONCRETE: 4,000 PSI
STEEL REINFORCEMENT: GRADE 60

DESIGN CONFORMS TO THE 7TH EDITION OF THE AASHTO LRFD DESIGN SPECIFICATIONS.

GEOMETRIC PARAMETERS

ALIGNMENT: TANGENT GRADE: 0.00%
CROSS-SLOPE: 2.0% w/ 6' PARABOLIC CROWN

ADAPTATIONS TO THIS DRAWING MAY BE REQUIRED FOR OTHER GEOMETRIC CONDITIONS.

ESTIMATED QUANTITIES

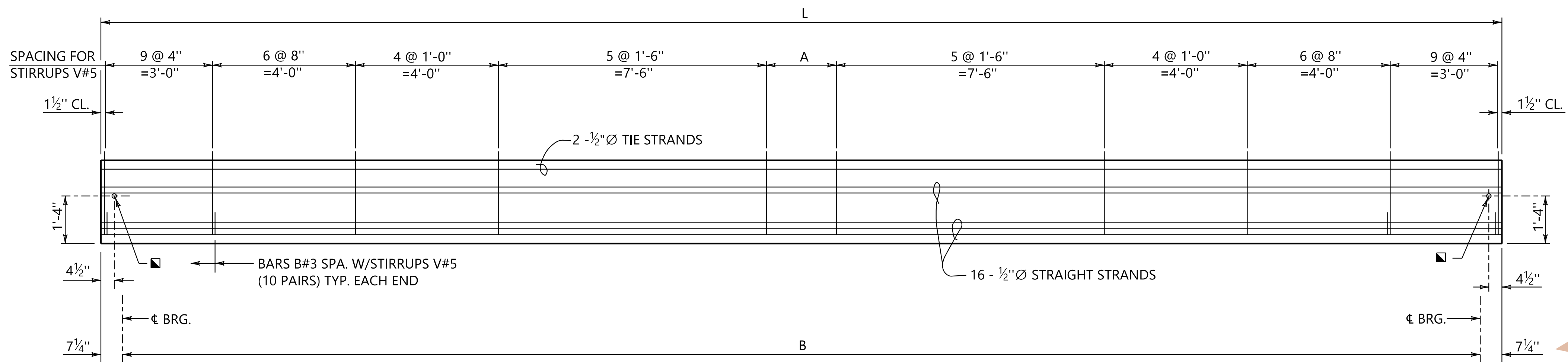
END SPAN	INT. SPAN				
8,150	8,270	POUNDS	502B	STEEL REINF. FOR BR. SUPERSTR.	
956	956	POUND	508A	STRUCTURAL STEEL	
33.9	34.1	CUBIC YARDS	510C	BRIDGE CONCRETE SUPERSTR.	

BILL OF REINFORCEMENT

MARK	SIZE	NUMBER PER SPAN		LENGTH	BENDING
		END	INT.		
BARRIER RAIL					
BL	4	16	16	□	STRAIGHT
B1	4	156	160	6'-0"	□
B2	4	156	160	3'-8 3/4"	□
B3	3	40	40	2'-0"	□
DECK					
C	5	172	174	26'-1"	STRAIGHT
D1	4	38	---	38'-6 3/4"	STRAIGHT
D2	4	---	38	39'-4 1/2"	STRAIGHT
E1	5	15	---	38'-6 3/4"	STRAIGHT
E2	5	---	15	39'-4 1/2"	STRAIGHT
EDGE BEAM					
L1	5	8	8	2'-3 1/2"	SEE DIAG.
R1	8	4	4	4'-6"	STRAIGHT
S1	5	36	36	5'-4"	SEE DIAG.
W1	5	4	4	20'-2"	STRAIGHT
W2	5	12	12	5'-10"	STRAIGHT

ASSISTANT BRIDGE ENGINEER: *[Signature]* 11/20/2020
BRIDGE ENGINEER: *[Signature]* 11/20/2020

PLOTTED: 19-Nov-20 at 13:25



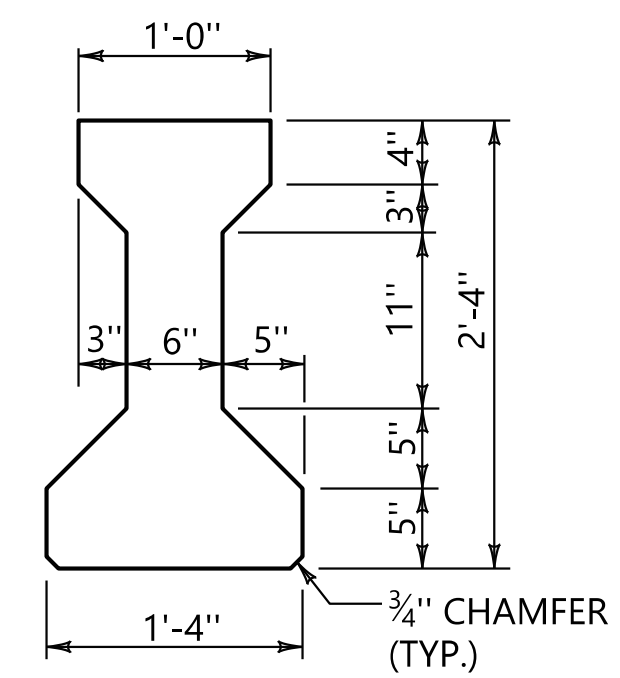
*** TYPICAL GIRDER ELEVATION**
SCALE: 1/2" = 1'-0"

▲ 2 STRAIGHT 1/2" Ø PRESTRESSED STRANDS WITH INITIAL TENSION OF 5,000 LBS. PER STRAND. STIRRUPS V#5 SHALL BE TIED IN PLACE TO THESE STRANDS.

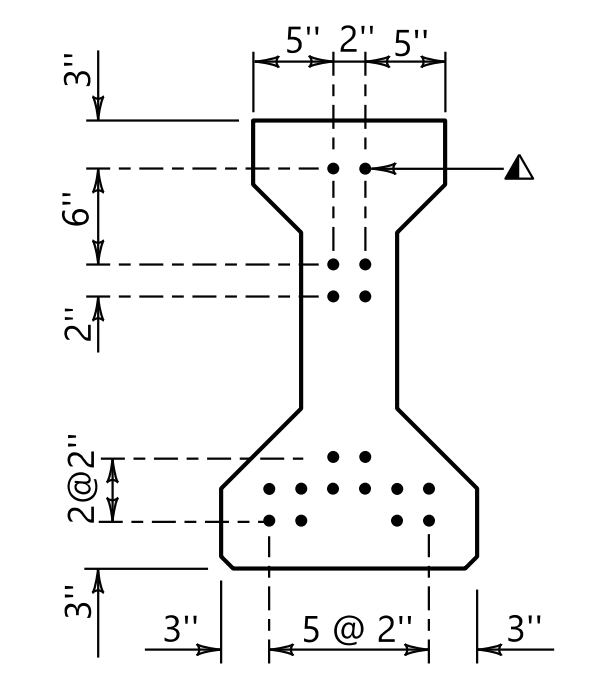
■ 1 1/2" Ø HOLE (GDRS. 2 & 3) OR 1" Ø THREADED INSERT (INSIDE FACE ONLY, GDRS. 1 & 4)
* DIMENSIONS SHOWN ARE ALONG CL GIRDER

NOTES

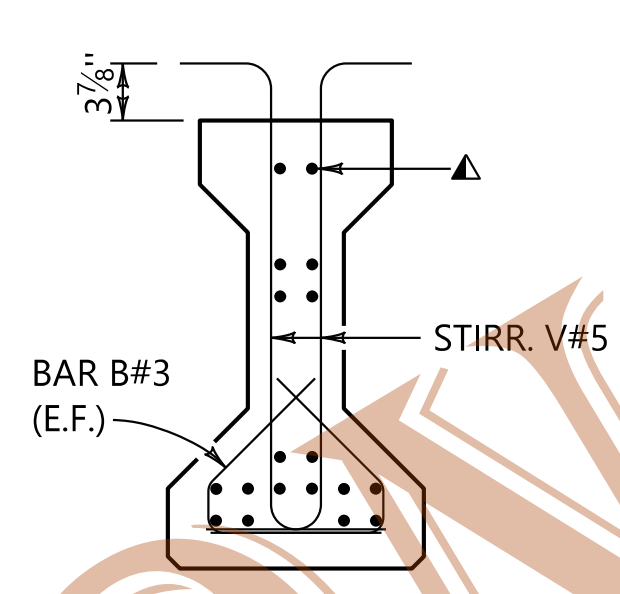
- PRESTRESSING STRANDS SHALL BE 1/2" DIAMETER 270,000 PSI LOW RELAXATION WITH AN INITIAL TENSION OF 30,983 LBS./STRAND UNLESS OTHERWISE NOTED.
- ALL STRANDS NOT TO BE ENCASED IN CONCRETE SHALL BE CUT FLUSH AT EACH END OF THE GIRDER. COAT GIRDER ENDS WHERE STRANDS ARE CUT WITH AN APPROVED EPOXY COATING. STRANDS TO BE ENCASED IN CONCRETE MAY EXTEND 2" FROM THE END OF THE GIRDER.
- THE GIRDER CONCRETE SHALL HAVE A MINIMUM OF 4,500 PSI COMPRESSIVE STRENGTH PRIOR TO RECEIVING PRESTRESSING FORCE AND A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI.
- THREADED BARS R2 AND THREADED INSERTS SHALL BE INCLUDED IN THE BID ITEM 513B, PRETENSIONED-PRESTRESSED CONCRETE GIRDERS, TYPE I.
- GIRDER ENDS SHALL BE VERTICAL IN FINAL ERECTED POSITION.
- UNLESS OTHERWISE SHOWN, STIRRUPS AND CONFINEMENT STEEL SHALL BE SECURELY TIED TO THE PRESTRESSING STRANDS TO PROVIDE A MINIMUM OF 1" CONCRETE COVER.
- CONNECTION ANGLES ARE REQUIRED ON BOTH FACES OF ALL GIRDERS AT THE FIXED END AND BOTH FACES OF THE EXTERIOR GIRDERS ONLY AT THE EXPANSION END. SEE BRIDGE SPECIAL PROJECT DWG. SPGD-1 FOR DETAILS.
- THE ENGINEER WILL CONSIDER ALTERNATE GIRDER REINFORCING UTILIZING WELDED WIRE FABRIC IN LIEU REINFORCING FOR BARS B. THE EQUIVALENT AREA OF STEEL AND SPACING OF BARS SHALL BE MAINTAINED.



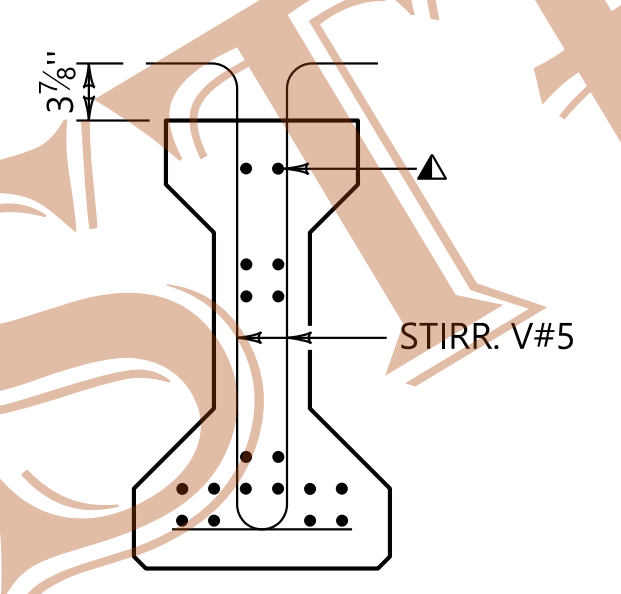
AASHTO TYPE I GIRDER
SCALE: 1" = 1'-0"



STRAND PATTERN
SCALE: 1" = 1'-0"

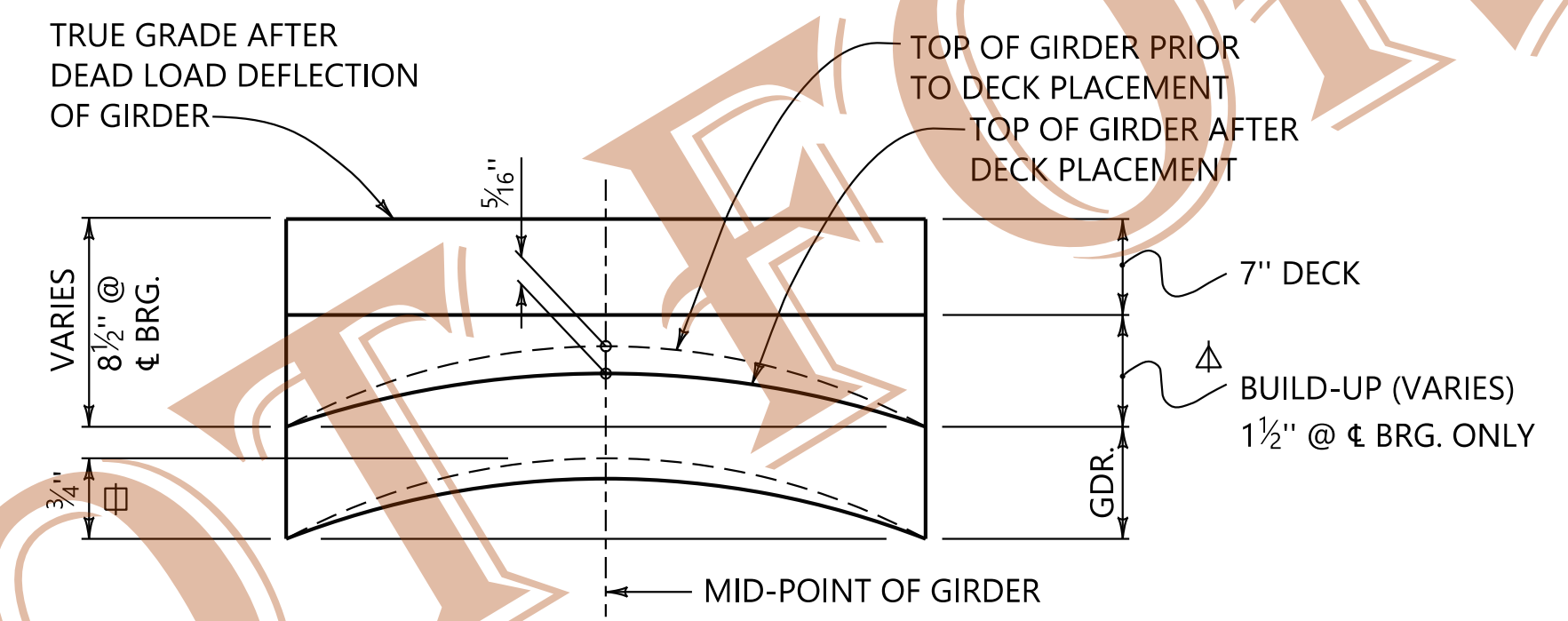
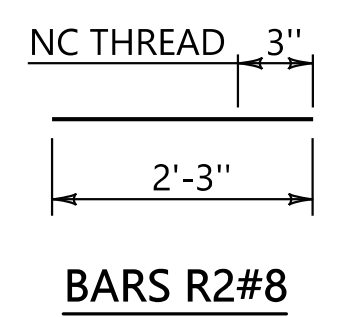
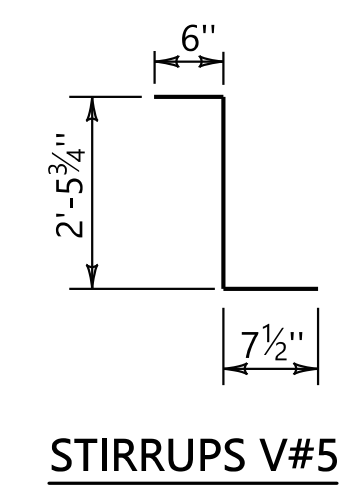


SECTION @ END OF GIRDER
SCALE: 1" = 1'-0"



SECTION ALONG GIRDER
SCALE: 1" = 1'-0"

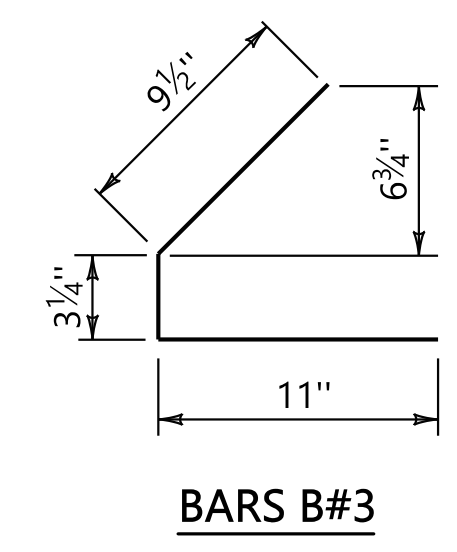
	END SPANS	INT. SPANS
L	38'-4 3/4"	39'-2 1/2"
B	37'-2 1/4"	38'-0"
A	1'-1 3/4"	2 SPA. @ 11 3/4"



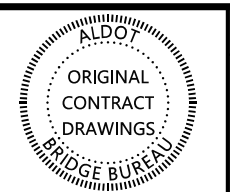
DETAIL OF BUILD-UP BETWEEN BOTTOM OF DECK AND TOP OF GDR. (ALONG CL GDR.)
NO SCALE

□ THEORETICAL CAMBER (UPWARD DEFLECTION) SHOWN. ACTUAL CAMBER OF GIRDER MAY VARY AND SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS AND SETTING FORMS.

▲ ADJUSTMENT TO BUILD-UP MAY BE REQUIRED IF USED FOR BRIDGES IN EXTREME CREST OR SAG VERTICAL CURVE GRADES.



PLOTTED: 19-Nov-20 at 13:26



REVISIONS

THIS BRIDGE SPECIAL PROJECT DRAWING FOR USE ONLY ON:
PROJECT NO. _____
COUNTY(S) _____

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40'-0" SIMPLE AASHTO TYPE I GIRDER SPANS
HL 93 LOADING