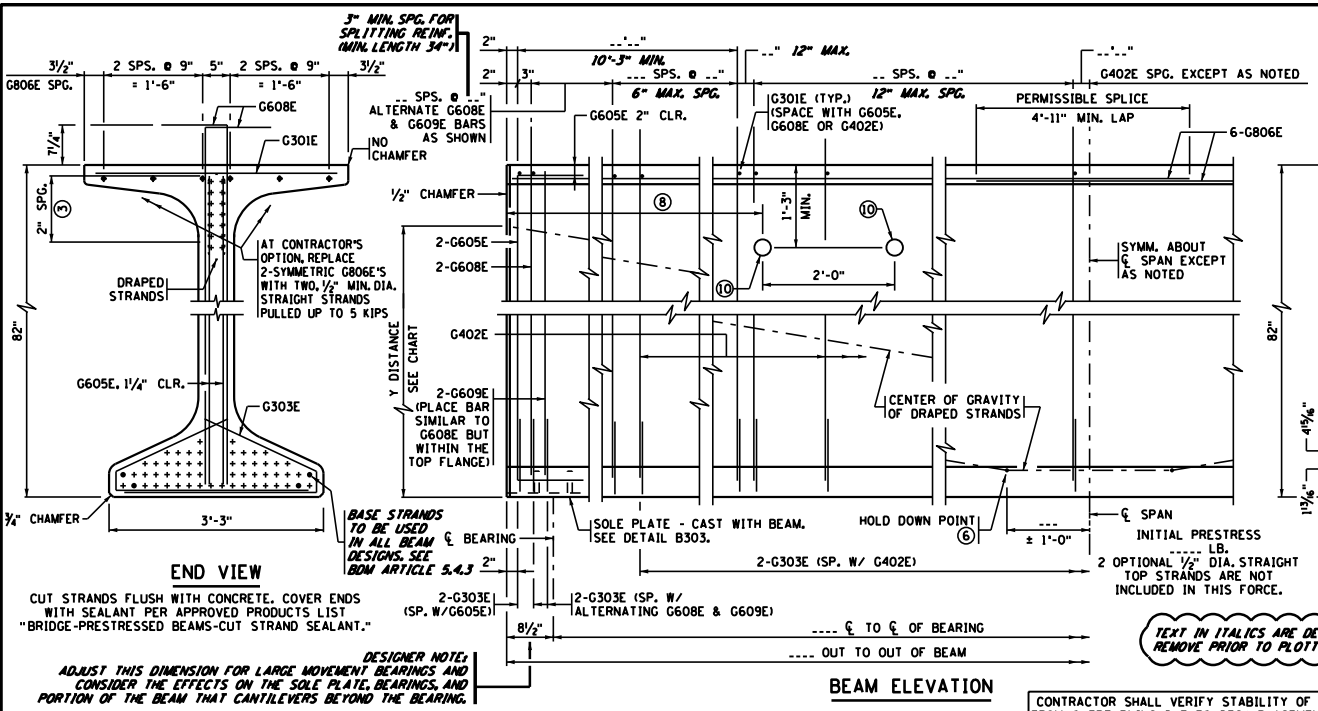
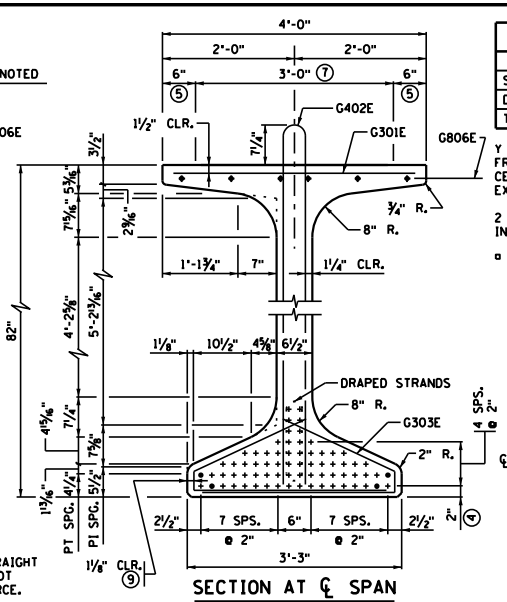


END VIEW

CUT STRANDS FLUSH WITH CONCRETE. COVER ENDS WITH SEALANT PER APPROVED PRODUCTS LIST "BRIDGE-PRESTRESSED BEAMS-CUT STRAND SEALANT."

DESIGNER NOTE: ADJUST THIS DIMENSION FOR LARGE MOVEMENT BEARINGS AND CONSIDER THE EFFECTS ON THE SOLE PLATE, BEARINGS, AND PORTION OF THE BEAM THAT CANTILEVERS BEYOND THE BEARING.

BEAM ELEVATION



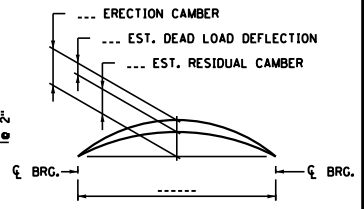
SECTION AT ℄ SPAN

Y DISTANCES (INCHES)	NO.	℄ SPAN	END
STRAIGHT STRANDS	---	---	⊠
DRAPED STRANDS	---	---	--- □
TOTAL STRANDS	---	---	⊠

Y = DISTANCE TO CENTER OF GRAVITY OF STRANDS FROM BOTTOM OF BEAM. ALL STRANDS SPACED 2" CENTER TO CENTER, HORIZONTALLY AND VERTICALLY, EXCEPT AS NOTED.

2 OPTIONAL ½" DIA. STRAIGHT STRANDS ARE NOT INCLUDED IN THIS TABLE.

□ A TOLERANCE OF ± 1" WILL BE PERMITTED IN THIS DIMENSION.



CAMBER DIAGRAM

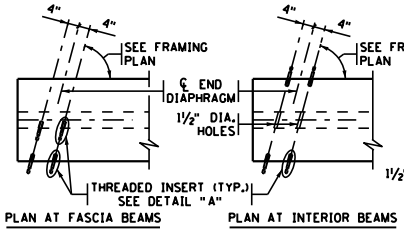
ERECTION CAMBER SHOWN IS AFTER DIAPHRAGMS ARE IN PLACE.

DEAD LOAD DEFLECTION SHOWN IS FOR WEIGHT OF SLAB, WEARING COURSE, BARRIER, SIDEWALK AND MEDIAN WHERE APPLICABLE.

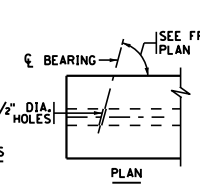
CONTRACTOR WILL TAKE ELEVATIONS AT TOP OF BEAMS AFTER ERECTION AND WILL ALLOW FOR DEFLECTION SHOWN TO ENABLE BUILDING FORMS TO CORRECT GRADE AND SPECIFIED SLAB THICKNESS. PROVIDE COPY OF ELEVATIONS TO THE ENGINEER.

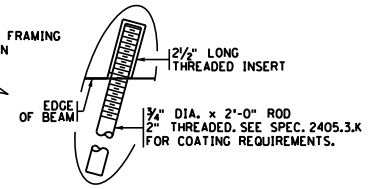
TEXT IN ITALICS ARE DESIGNER NOTES. REMOVE PRIOR TO PLOTTING FINAL PLAN.

CONTRACTOR SHALL VERIFY STABILITY OF FASCIA BEAMS FROM OVERTURNING DUE TO DECK PLACEMENT OPERATIONS. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING.

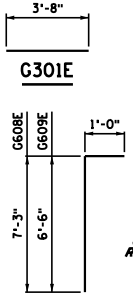


DESIGNER NOTE: MIN. DISTANCE BETWEEN THREADED INSERT AND END OF BEAM IS 3".





DETAIL "A"

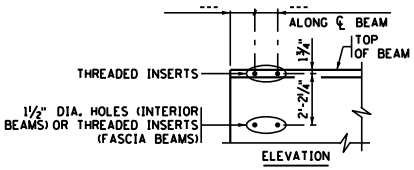


G608E & G609E

CALCULATED PRESTRESS LOSSES	
ELASTIC SHORTENING LOSS	--- KSI
LONG TERM LOSSES	--- KSI
TOTAL LOSSES	--- KSI

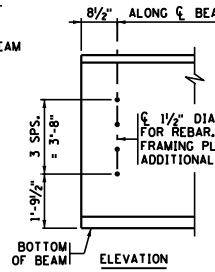
MINIMUM CONCRETE STRENGTH - KSI	
① f'cI	② f'c
--- KSI	--- KSI

DESIGNER NOTE: INDICATE MIN. REQUIRED CONCRETE STRENGTH. ROUND CONCRETE STRENGTH TO ONE TENTH KSI.



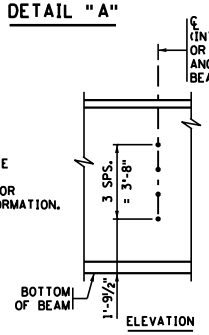
CONCRETE END DIAPHRAGM

PARAPET ABUTMENT
(SEE DETAIL B814 FOR DIAPHRAGM DETAILS)



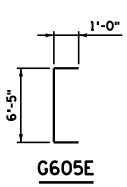
CONCRETE END DIAPHRAGM

SEMI-INTEGRAL ABUTMENT
SEE SUPERSTRUCTURE DETAILS AND REINFORCEMENT FOR DIAPHRAGM DETAILS.

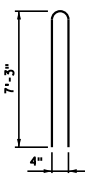


STEEL INTERMEDIATE DIAPHRAGM

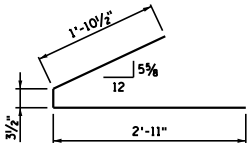
(SEE DETAIL B412 FOR DIAPHRAGM DETAILS)



G605E



G402E



G303E

GENERAL NOTES

PROVIDE HANDLING HOOKS OR DEVICES AS REQUIRED BY CONTRACTOR.

MARK EACH BEAM SHOWING BRIDGE NUMBER, CASTING DATE, AND INDIVIDUAL IDENTIFICATION LETTERS AND NUMBERS ON THE FACE OF THE BEAM, NEAR THE END, SO LOCATED THAT THEY WILL BE EXPOSED AFTER THE END DIAPHRAGMS HAVE BEEN CAST. MARK FASCIA BEAMS ON THE INSIDE FACE. ENSURE ALL MARKINGS ARE STENCILLED AND CLEARLY LEGIBLE. FOR LOCATION OF BEAMS, SEE FRAMING PLAN.

ALL MATERIAL AND WORK SHOWN OR NOTED ON THIS SHEET IS INCLUDED IN UNIT PRICE BID FOR PRESTRESSED CONCRETE BEAMS. SEE SPEC. 2405.

SEE FRAMING PLAN FOR BEAM END MARKED "X" AND DIAPHRAGM SPACING.

AS AN ALTERNATE TO THE END DIAPHRAGM ANCHORAGES SHOWN, THE CONTRACTOR MAY SUBMIT DETAILS OF A CAST-IN-PLACE ANCHORAGE TO THE ENGINEER FOR APPROVAL. ANCHORAGE MUST PROVIDE AN ULTIMATE PULL OUT STRENGTH OF 24 KIPS PER ANCHORAGE.

USE 0.6" DIA. 7-WIRE LOW RELAXATION PRESTRESSING STRAND, CONFORMING TO ASTM A416, GRADE 270.

APPLY AN APPROVED SEALER TO THE SIDES OF THE BEAM NEAR EACH END PER THE SPECIAL PROVISIONS.

① MINIMUM CONCRETE STRENGTH AT TIME OF PRESTRESS TRANSFER.

② MINIMUM CONCRETE STRENGTH WHEN BEAM CAN BE TRANSPORTED AND INSTALLED.

③ DRAPED STRANDS.

④ STRAIGHT STRANDS.

⑤ STEEL TROWEL TO SMOOTH FINISH AND APPLY BOND BREAKER PER APPROVED PRODUCTS LIST.

⑥ CENTER OF GRAVITY OF HOLD DOWNS WHEN MULTIPLE HOLD DOWNS ARE USED.

⑦ ROUGH FLOAT AND BROOM TRANSVERSELY FOR BOND IN ACCORDANCE WITH SPEC. 2405.3D.

⑧ DIMENSION DETERMINED BY CONTRACTOR. MAINTAIN 2" MINIMUM CLEAR FROM STRANDS.

⑨ TYP. CLR. FOR ENTIRE BOTTOM FLANGE.

⑩ OPTIONAL: 3" MAX. DIA. SLEEVE FOR HAULING (AFTER INSTALLATION, COAT WITH APPROVED EPOXY BONDING AGENT & FILL WITH APPROVED NON-SHRINK GROUT).

REVISED: JUNE 12, 2019

APPROVED: JANUARY 13, 2015
Nancy Dreibelbis
STATE BRIDGE ENGINEER

CERTIFIED BY _____ LICENSED PROFESSIONAL ENGINEER _____ DATE
NAME: _____ LIC. NO. _____

TITLE: 82MW PRESTRESSED CONCRETE BEAM (PRETENSIONED) 82MW-

BEAMS

FIG. 5-397.531

DES: DR: CHK: CHK: APPROVED:

SHEET NO. OF SHEETS

BRIDGE NO.