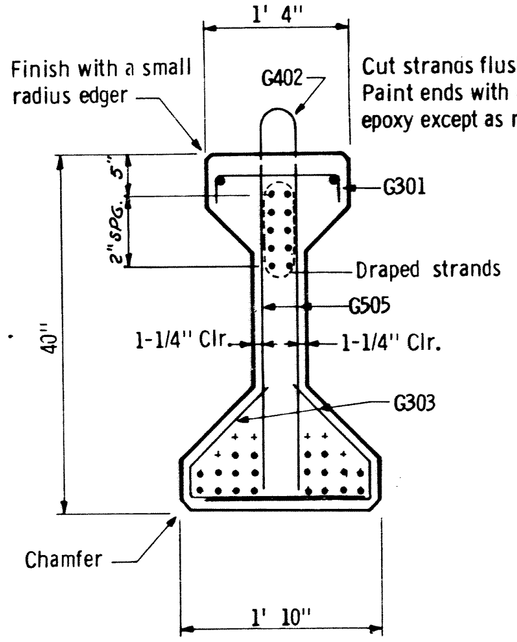
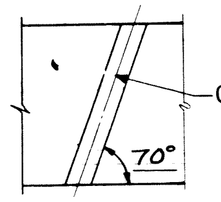


Details not shown are the same as the SECTION AT ℄ BEAM

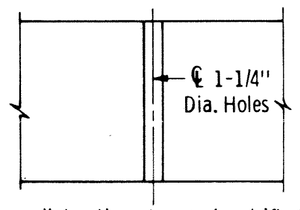
END VIEW



See FRAMING PLAN for skew direction. Intermediate stirrups may be shifted the minimum distance required to clear holes or inserts for intermediate diaphragms.

SECTION Y-Y

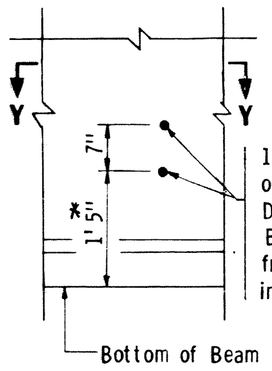
FOR USE WITH CONCRETE END DIAPHRAGMS WITH PILE BENT ABUTMENTS



Intermediate stirrups may be shifted the minimum distance required to clear holes or inserts for intermediate diaphragms.

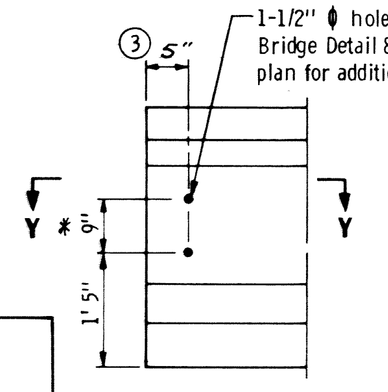
SECTION Y-Y

USE AT INTERIOR BEAM WITH STEEL DIAPHRAGM

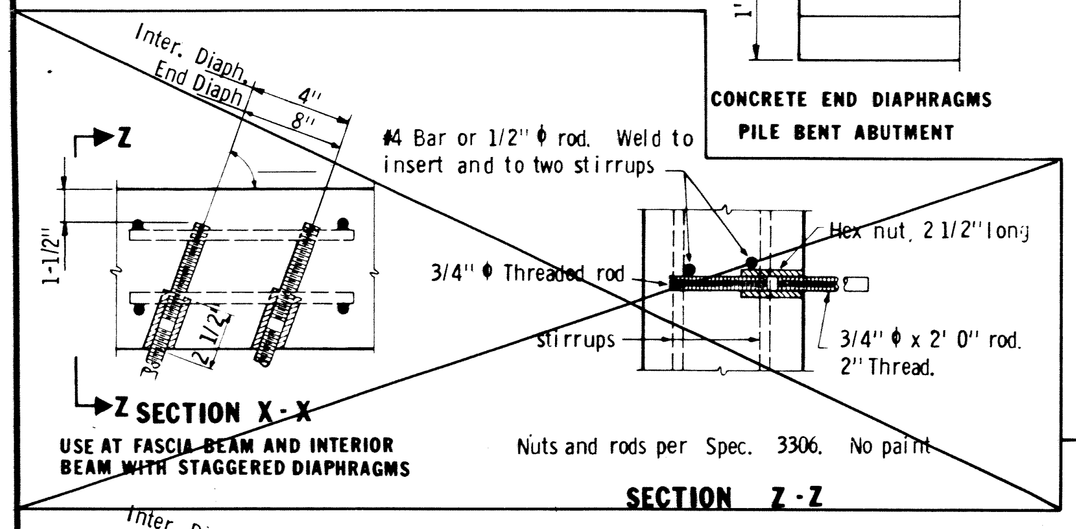


1 1/4" ϕ hole for 7/8" bolts or Anchorage for 7/8" Diameter Bolts. See Bridge Detail B403 and framing plan for additional information.

FOR USE WITH STEEL INTERMEDIATE DIAPHRAGM



CONCRETE END DIAPHRAGMS PILE BENT ABUTMENT

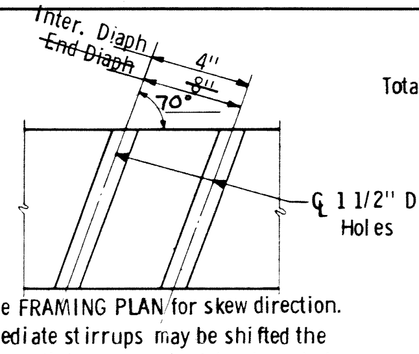


SECTION X-X

USE AT FASCIA BEAM AND INTERIOR BEAM WITH STAGGERED DIAPHRAGMS

Nuts and rods per Spec. 3306. No paint

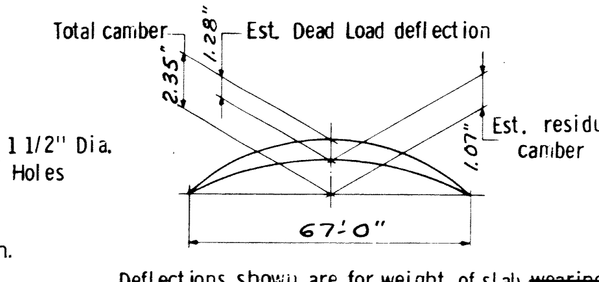
SECTION Z-Z



See FRAMING PLAN for skew direction. Intermediate stirrups may be shifted the minimum distance required to clear holes or inserts for intermediate diaphragms.

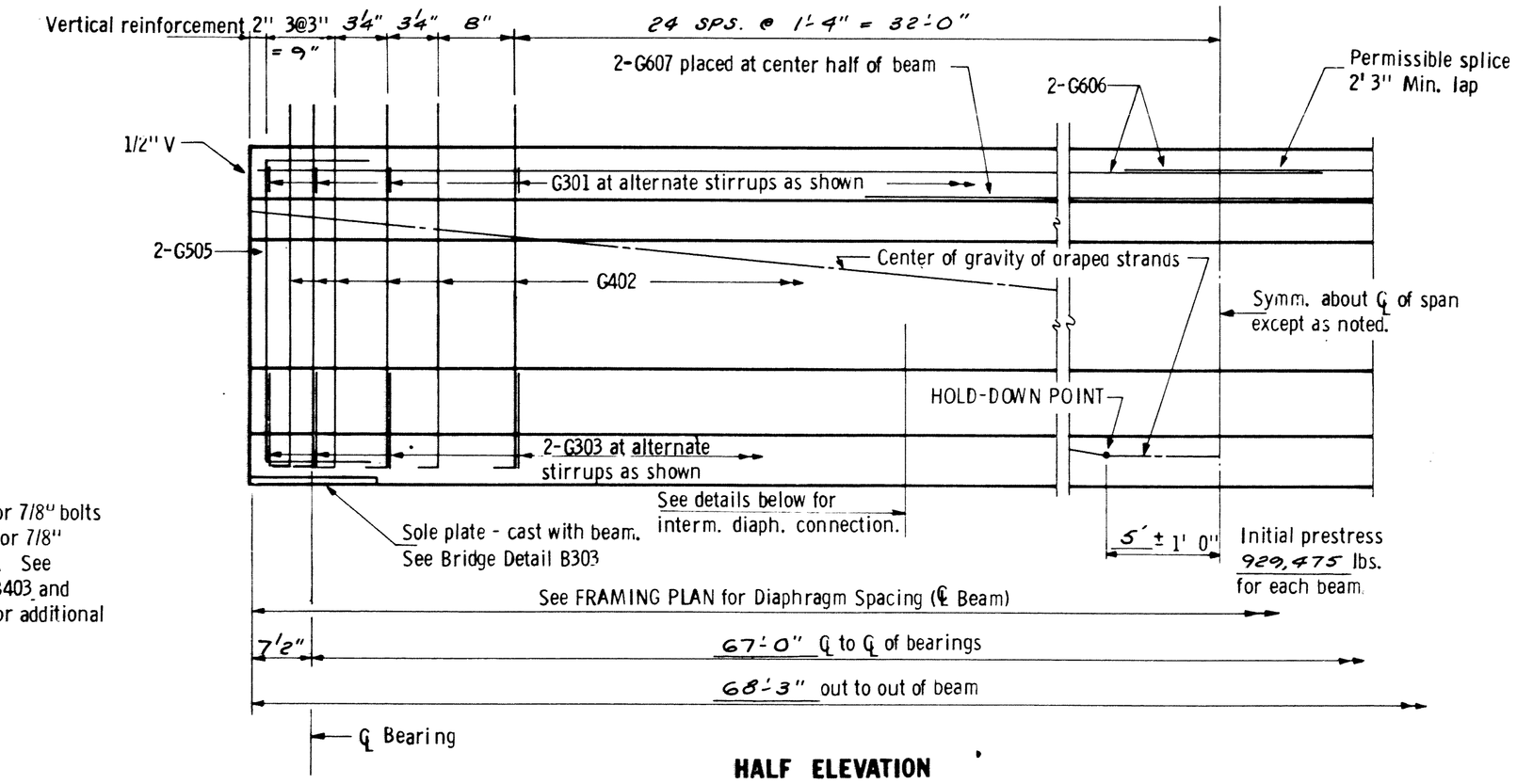
SECTION X-X

USE AT INTERIOR BEAM WITH CONTINUOUS CONCRETE DIAPHRAGM



Deflections shown are for weight of slab, ~~wearing course~~, railing, ~~sidewalk~~, ~~median~~ and diaphragms only. Engineer will take elevations at top of beams after erection and will allow for deflections shown to enable contractor to build forms to correct grade and specified slab thickness.

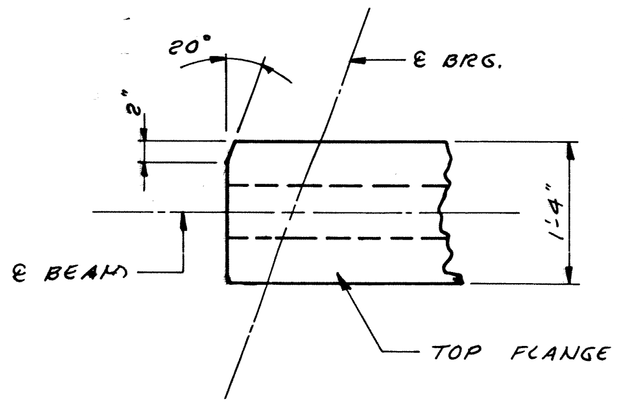
CAMBER DIAGRAM



HALF ELEVATION

Bar	Wt.
G 301	.56 lb.
G 402	5.12 lb.
G 303	1.00 lb.
G 505	5.13 lb.
G 606	
G 607	

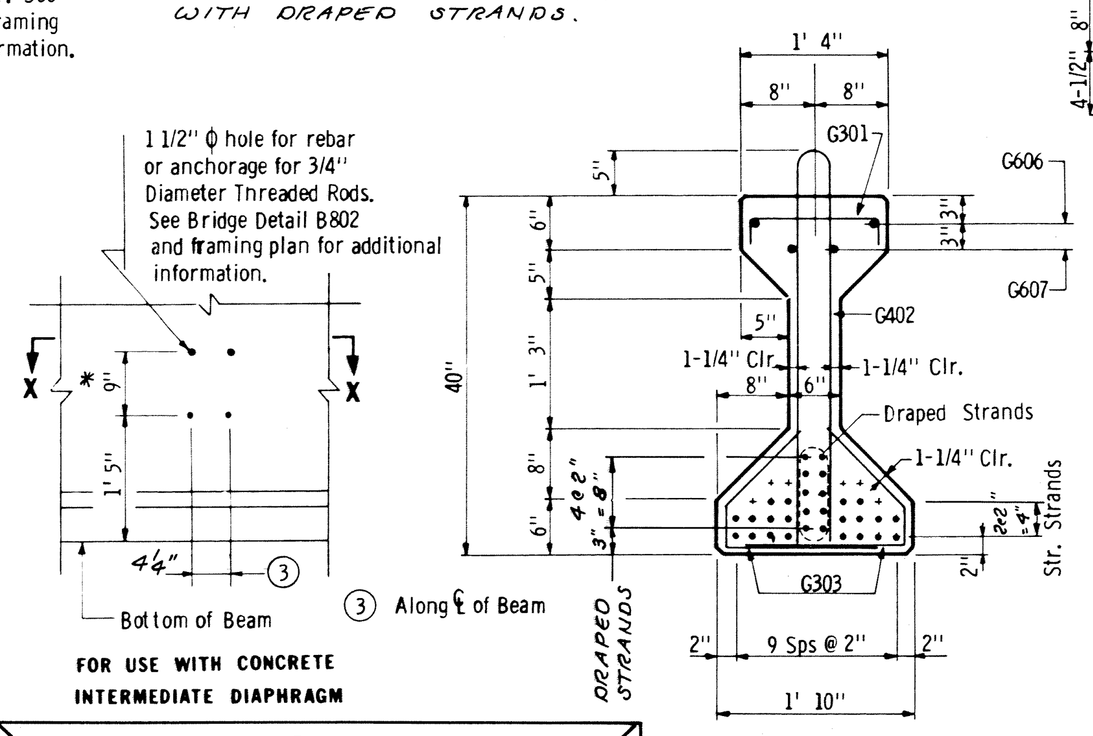
Girder Section Data
Wt./Ft. = 505 lbs.
Cross sec. area at ℄ of span = 485 in.^{2}
C. G. (from bottom) = 17.88 in.
I = 87,690 in.^{4}
S_B = 4,904 in.^{3}
1/2" ϕ 270k strand wt./ft. = .525 lb.
1/2" ϕ 270k strand area = .1531 sq. in.
LOCAL STRANDS



TOP FLANGE BEVEL DETAIL

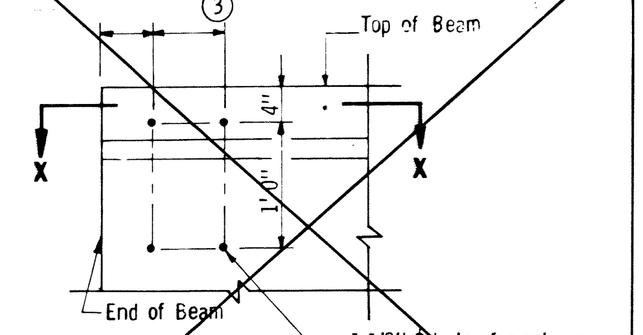
SCALE: 1" = 1'-0"

* ADJUST THIS DIMENSION AS NECESSARY TO AVOID INTERFERENCE WITH DRAPED STRANDS.

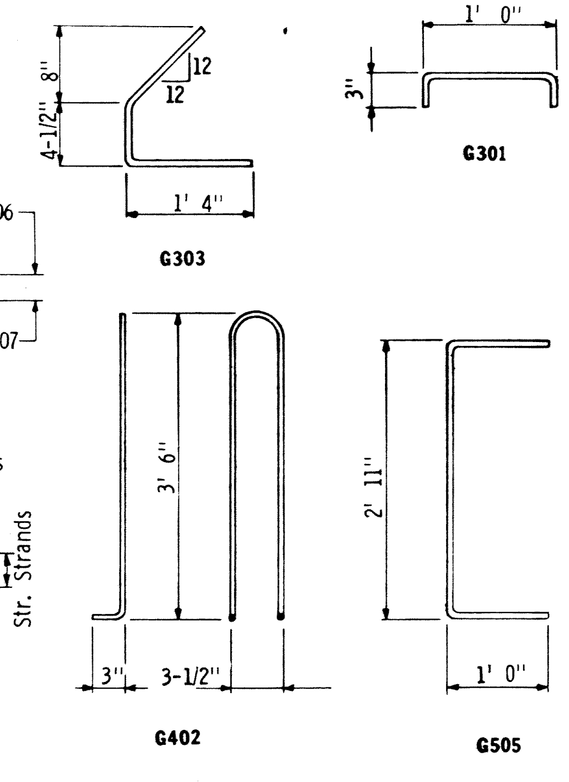


FOR USE WITH CONCRETE INTERMEDIATE DIAPHRAGM

SECTION AT ℄ BEAM



CONCRETE END DIAPHRAGMS PARAPET ABUTMENT



First digit of bar mark indicates bar size. All bar dimensions are out-to-out.

Y DISTANCES (IN INCHES)			
	NO.	℄ SPAN	END
Straight strands	20	3.60	
Draped strands	10	7.00	31.00 [D]
Total strands	30	4.73	

Y = distance of Center of Gravity of strands from bottom of beam. All strands spaced 2" c-c, horizontally and vertically except as noted.

All strands 1/2 ϕ 270 kip, ultimate strength.

[D] A tolerance of ± 2" will be permitted in this dimension.

S.A.P. 02-622-20

GENERAL NOTES:

Tops of beams shall be rough floated and broomed transversely for bond.

Provide handling hooks or devices as required by Contractor. Hooks or devices provided will be subject to approval of Engineer and shall be installed within 4' 0" of the end of beam.

A modified strand pattern or a bundled strand pattern which does not change center of gravity of strands may be submitted to the Engineer for approval.

A post-tensioned beam may be used as an alternate for the pretensioned design shown. DESIGNER WILL PROVIDE PLANS FOR THE POST-TENSIONED ALTERNATE ON REQUEST.

Each beam shall be marked, showing bridge number, casting date, and individual identification letters and numbers. Markings shall be made on the face of the beam, near the end, so located that they will be exposed after the end diaphragms have been cast. Fascia beams shall be marked on an inside face. All markings shall be stencilled and be clearly legible. For location of beams, see framing plan.

All material and work shown or noted on this sheet shall be included in unit price bid for prestressed concrete beams. See Spec. 2405.

See framing plan for beam ends marked "X".

Approximate weight of beam 17.2 tons.

As an alternate to the 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 15 kips per anchorage.

MINIMUM CONCRETE STRENGTH - P.S.I.		
	① f'ci	② f'c
Required min. Concrete Strength	5600	6000

① Minimum concrete strength at time of prestress transfer.

② Minimum concrete strength when curing can be discontinued and beam transported and installed.

Fig. 5-397.503

Revised: December 29, 1977 Approved: May 18, 1977

BEAMS B1-B5

TITLE: 40" PRESTRESSED CONCRETE BEAM (PRETENSIONED) TYPE 40-69	DES:	DR:	APPROVED: 5-6-87	Bridge No. 02548
	CHK:	CHK:	Sheet No. 58 of 64 Sheets	