

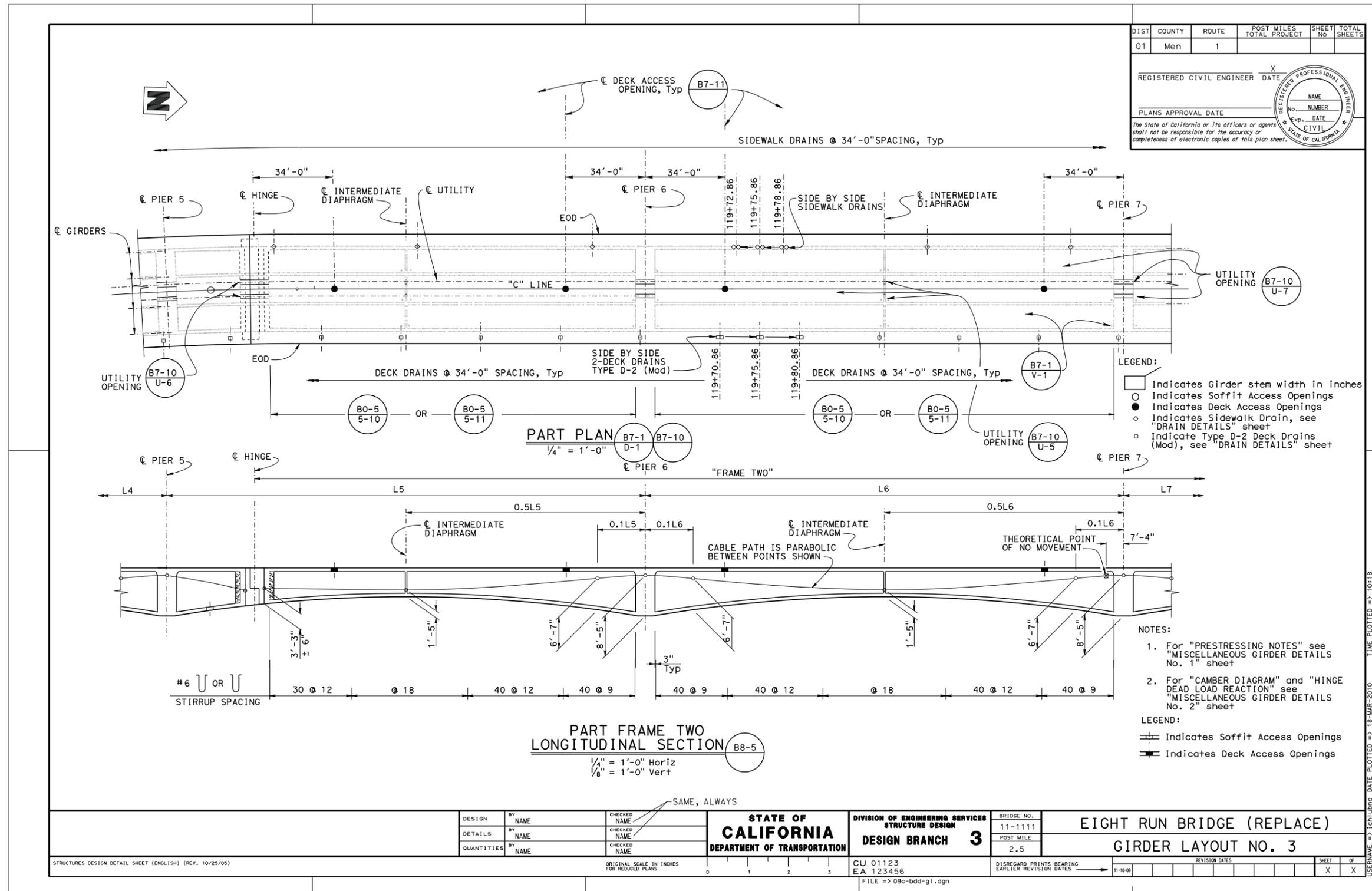
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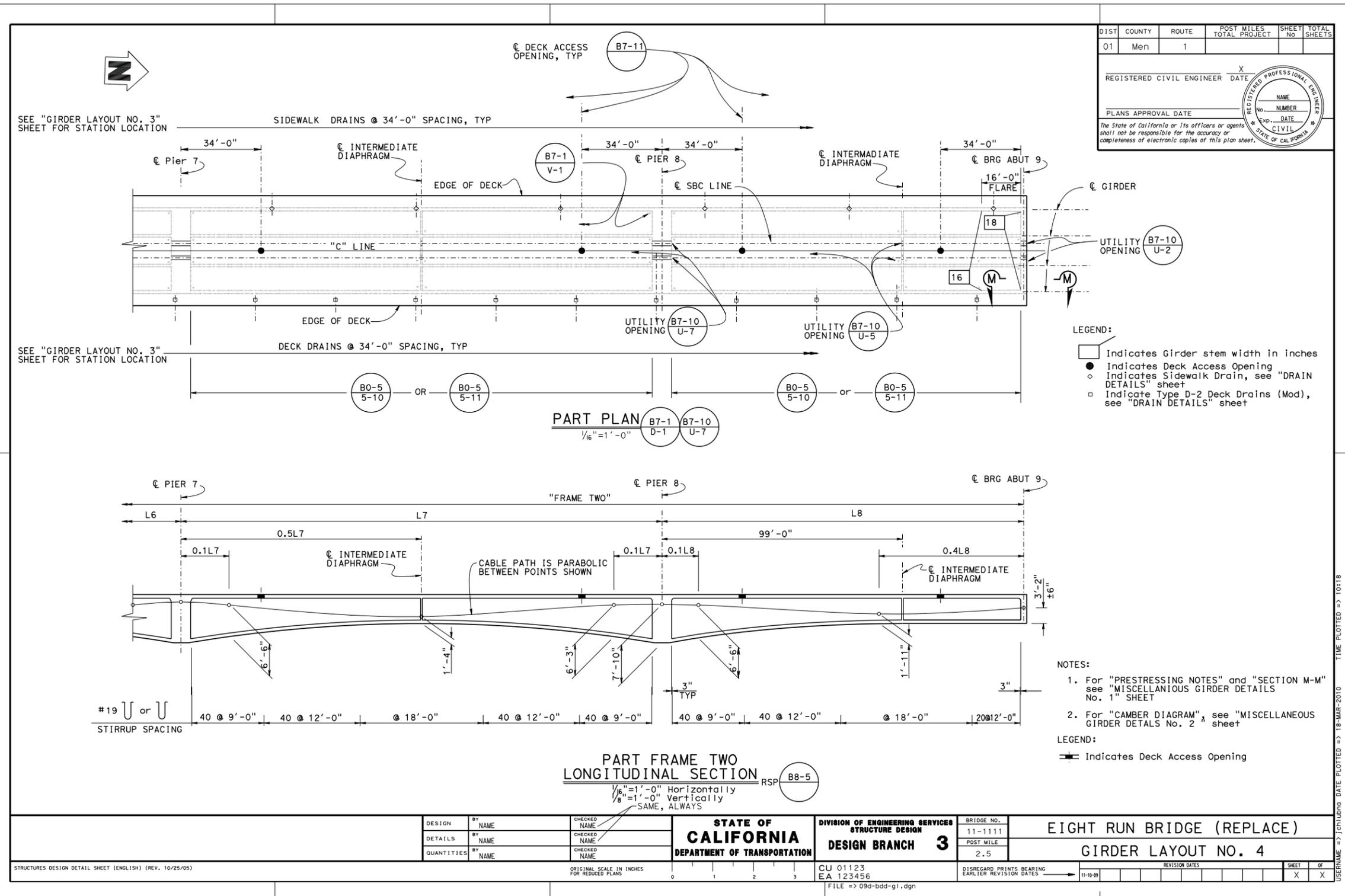
REGISTERED CIVIL ENGINEER DATE _____

PLANS APPROVAL DATE _____

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USERNAME => JGIBLING DATE PLOTTED => 19-APR-2010





DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO	TOTAL SHEETS
01	Men	1			

REGISTERED CIVIL ENGINEER DATE _____ X

PLANS APPROVAL DATE _____

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- LEGEND:
- Indicates Girder stem width in inches
 - Indicates Deck Access Opening
 - ◇ Indicates Sidewalk Drain, see "DRAIN DETAILS" sheet
 - Indicates Type D-2 Deck Drains (Mod), see "DRAIN DETAILS" sheet

- NOTES:
- For "PRESTRESSING NOTES" and "SECTION M-M" see "MISCELLANEOUS GIRDER DETAILS No. 1" SHEET
 - For "CAMBER DIAGRAM" see "MISCELLANEOUS GIRDER DETAILS No. 2" sheet

- LEGEND:
- Indicates Deck Access Opening

DESIGN	BY NAME	CHECKED NAME
DETAILS	BY NAME	CHECKED NAME
QUANTITIES	BY NAME	CHECKED NAME

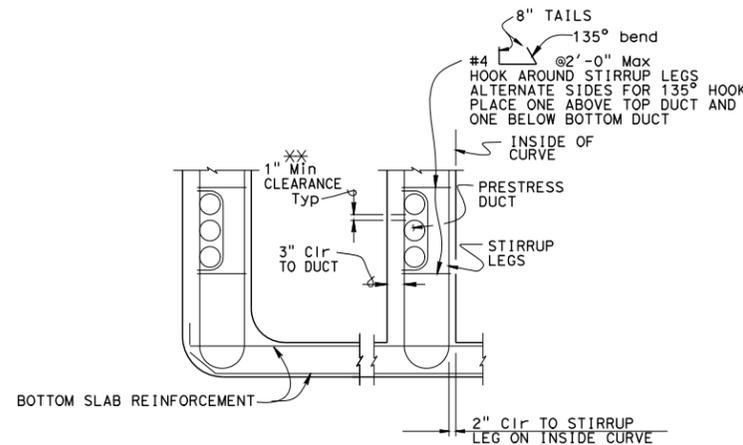
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO. 11-1111
POST MILE 2.5
EIGHT RUN BRIDGE (REPLACE)
GIRDER LAYOUT NO. 4

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	CU 01123 EA 123456	DISREGARD PRINTS BEARING EARLIER REVISION DATES	11-10-09	REVISION DATES	SHEET X OF X
--	--	---------	-----------------------	---	----------	----------------	--------------

USERNAME = JONHUBB DATE PLOTTED = 18-MAR-2010 TIME PLOTTED = 10:18



NOTE: Details shown are for a curve to the right with the section taken looking ahead on station. These details supersede duct patterns shown in



XX For duct size over 4 1/2" OD

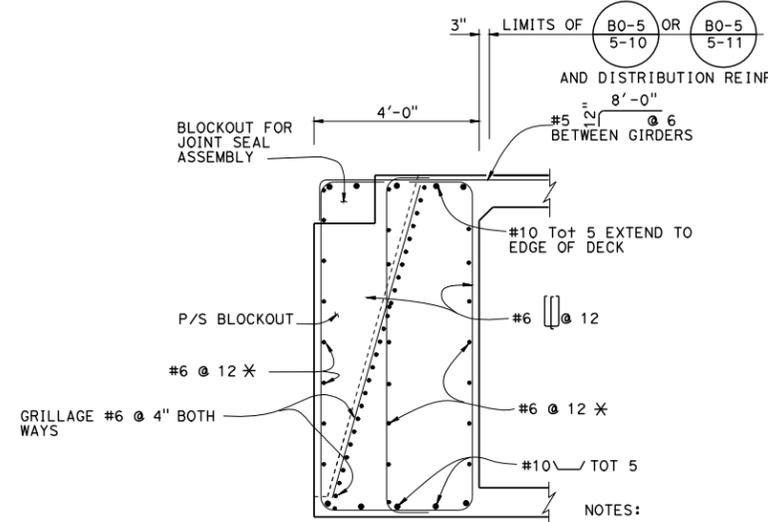
PART GIRDER SECTION

NO SCALE

FRAME 1

**FRAME 1
PRESTRESSING NOTES**

35 Psi Low Relaxation Strands:
 Pjack = 10,950 kips
 Anchor Set = 3/8 In
 Total Number of Girders = 4
 Friction curvature coefficient $\mu = 20 \times 10^{-2}(1/\text{rad})$
 Friction wobble coefficient $K = 0.0002 (1/Ft)$
 Distribution of prestress force (Pjack) between girders shall not exceed the ratio of 3:2
 Maximum final force variation between girders shall not exceed 725 kips
 Concrete: $f'_c = 4500$ Psi @ 28 days
 $f'_ci = 3600$ Psi @ time of stressing
 Contractor shall submit elongation calculations based on initial stress at $\alpha = 0.850$ times jacking stress
 Two end stressing shall be performed



- NOTES:
- * Bars may be spliced or bent to clear prestress anchorage as directed by the Engineer
 - For location of "SECTION M-M" see "GIRDER LAYOUT No. 1" and "GIRDER LAYOUT No. 4" sheets

SECTION M-M

NO SCALE

**FRAME 2
PRESTRESSING NOTES**

35 Psi Low Relaxation Strands:
 Pjack = 10,500 kips
 Anchor Set = 3/8 In
 Total Number of Girders = 4
 Friction curvature coefficient $\mu = 20 \times 10^{-2}(1/\text{rad})$
 Friction wobble coefficient $K = 0.0002 (1/Ft)$
 Distribution of prestress force (Pjack) between girders shall not exceed the ratio of 3:2
 Maximum final force variation between girders shall not exceed 725 kips
 Concrete: $f'_c = 4500$ Psi @ 28 days
 $f'_ci = 3600$ Psi @ time of stressing
 Contractor shall submit elongation calculations based on initial stress at $\alpha = 0.870$ times jacking stress
 Two end stressing shall be performed

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Men	1			

REGISTERED CIVIL ENGINEER		DATE	X
PLANS APPROVAL DATE			

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DESIGN	BY NAME	CHECKED NAME
DETAILS	BY NAME	CHECKED NAME
QUANTITIES	BY NAME	CHECKED NAME

SAME, ALWAYS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 3

BRIDGE NO. 11-1111
 POST MILE 2.5
EIGHT RUN BRIDGE (REPLACE)
MISCELLANEOUS GIRDER DETAILS NO. 1

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

CU 01123
 EA 123456

DISREGARD PRINTS BEARING EARLIER REVISION DATES

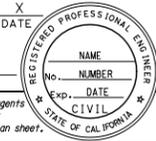
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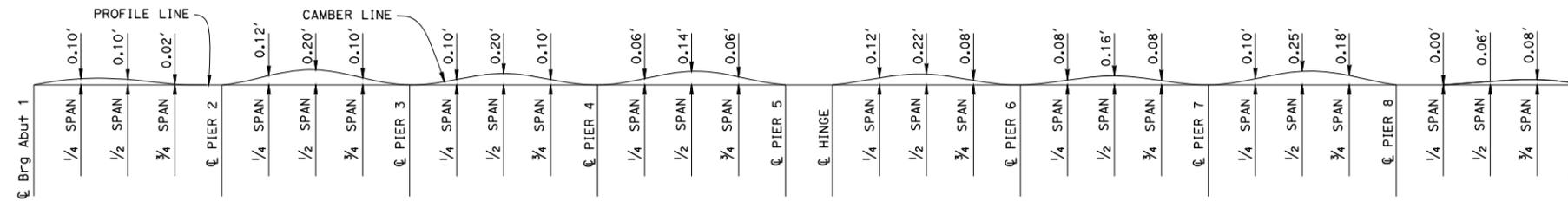
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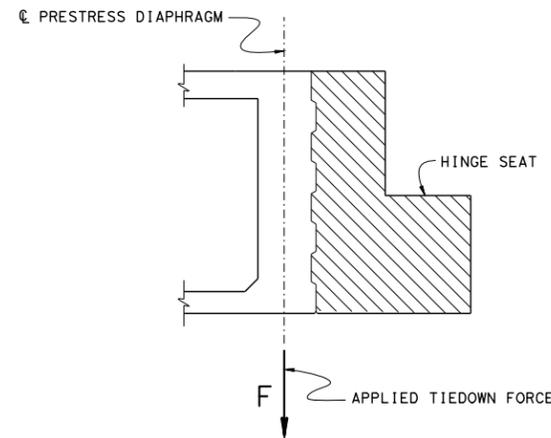


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Men	1			
X REGISTERED CIVIL ENGINEER DATE					
					
PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



CAMBER DIAGRAM

No Scale
DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT



NOTES:

- Contractor to provide tie-down system to prevent hinge seat curl. Minimum capacity of tie-downs shall be 1.2 x Dead Load Reaction (F)
- Maximum tie-down stress due to 1.2 x Dead Load Reaction (F), shall not exceed 0.75fu of prestressing steel
- Contractor shall apply only Dead Load Reaction (F) to the tie-down system. Additional adjustments to the tie-down system may be required periodically to maintain grade and profile
- No tension is allowed on tie-downs until superstructure has been stressed

DEAD LOAD REACTION @ HINGE (kips)
F
940

No Scale

DESIGN	BY NAME	CHECKED NAME
DETAILS	BY NAME	CHECKED NAME
QUANTITIES	BY NAME	CHECKED NAME

SAME, ALWAYS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 3

BRIDGE NO.	11-1111
POST MILE	2.5

EIGHT RUN BRIDGE (REPLACE)
MISCELLANEOUS GIRDER DETAILS NO. 2

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

CU 01123
EA 123456
FILE => 09f-bdd-gl.dgn

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REVISION DATES									
SHEET	X								
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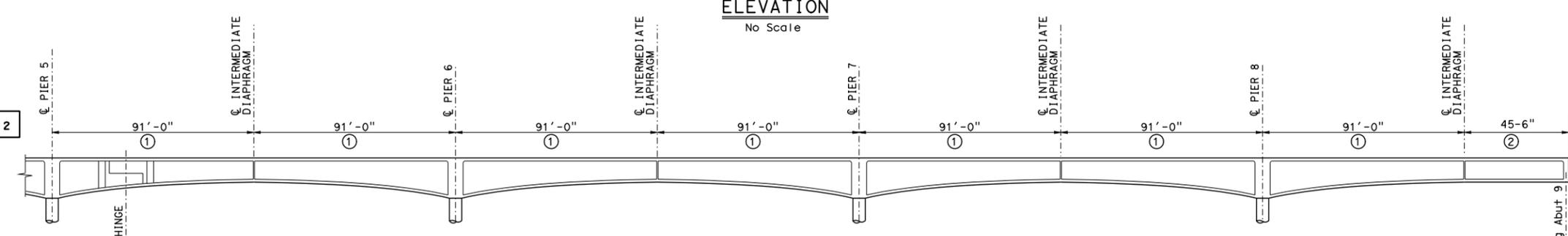
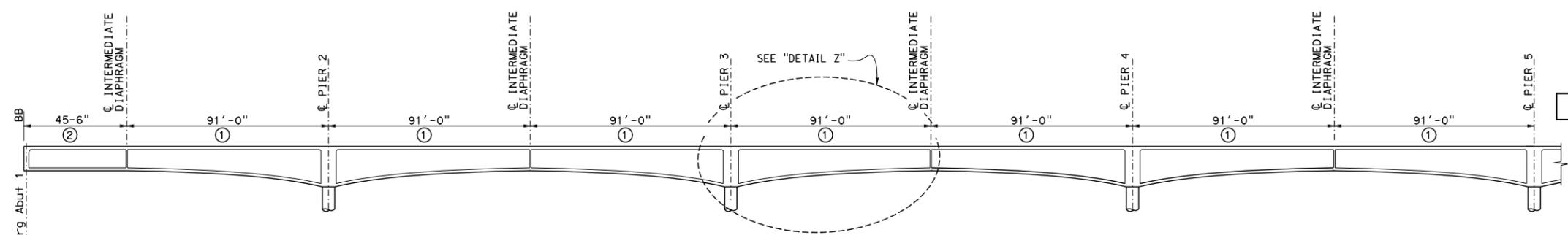
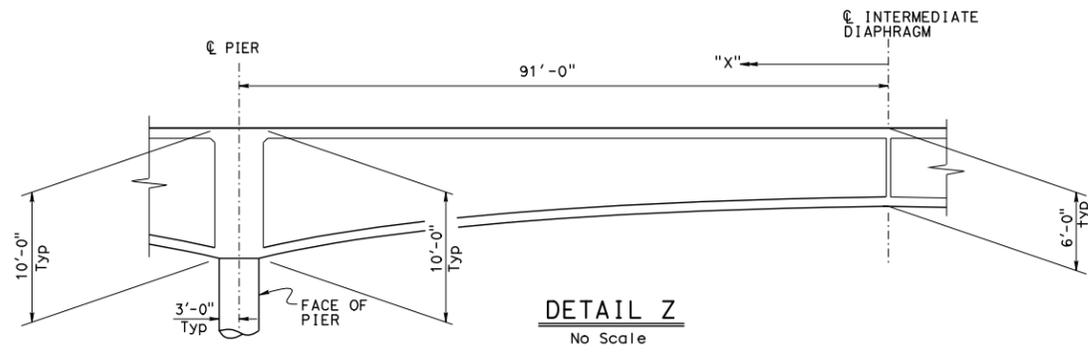
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO	TOTAL SHEETS
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REGISTERED CIVIL ENGINEER	X	DATE
PLANS APPROVAL DATE		

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DESIGN BY NAME	CHECKED NAME	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 3	BRIDGE NO.	EIGHT RUN BRIDGE (REPLACE) SUPERSTRUCTURE GEOMETRICS
DETAILS BY NAME	CHECKED NAME			11-1111	
QUANTITIES BY NAME	CHECKED NAME			2.5	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

CU 01123 EA 123456

DISREGARD PRINTS BEARING EARLIER REVISION DATES: 11-10-09

REVISION DATES	SHEET	OF
	X	X

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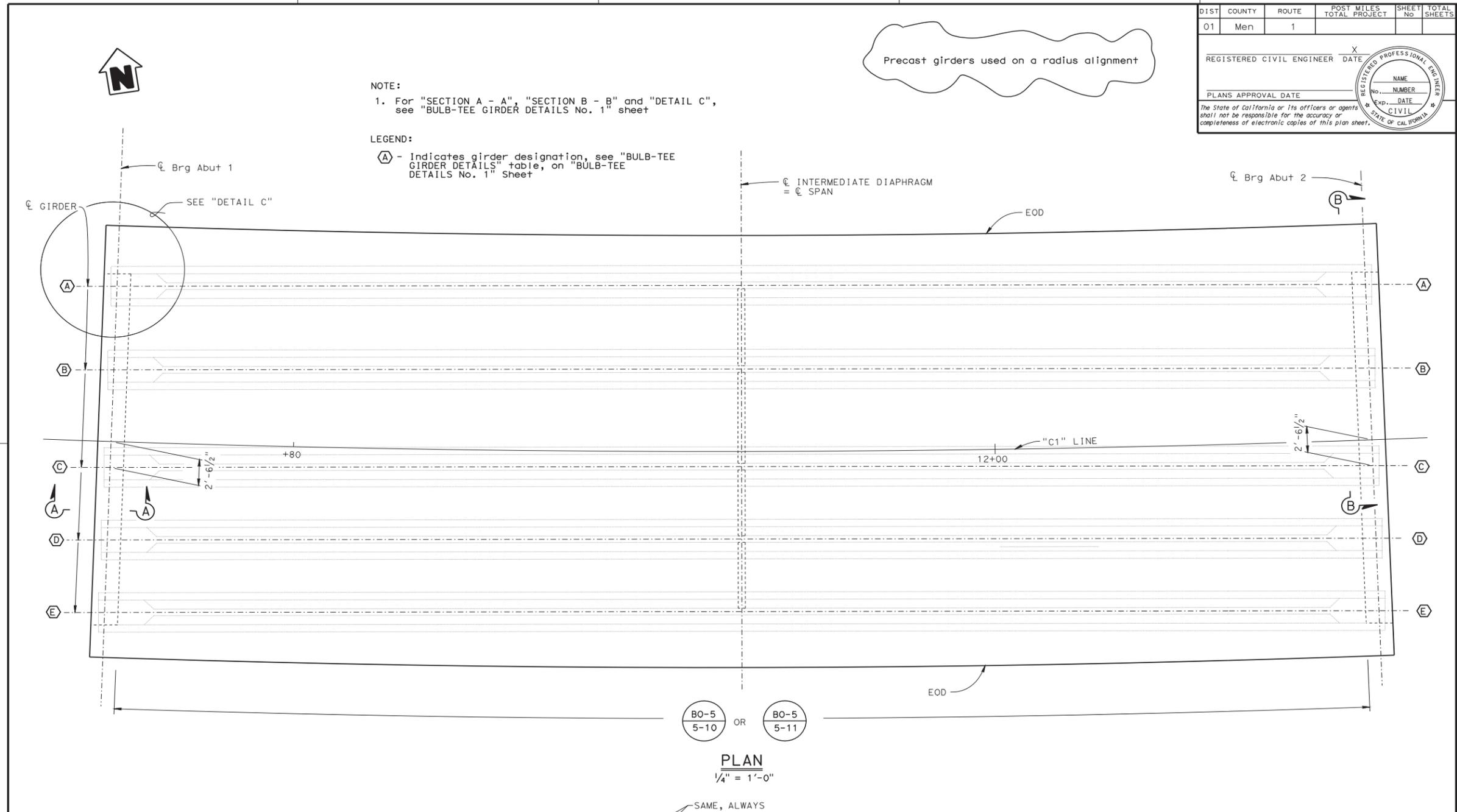


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Men	1			

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	NAME
	NUMBER
	EXP. DATE
	CIVIL
STATE OF CALIFORNIA	

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DESIGN BY NAME	CHECKED NAME	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH	BRIDGE NO.	11-1111	DORRY AVENUE BRIDGE GIRDER LAYOUT
DETAILS BY NAME	CHECKED NAME			POST MILE	2.5	
QUANTITIES BY NAME	CHECKED NAME			CU 01123 EA 123456	REVISION DATES	

STRUCUTRES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

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REVISION DATES

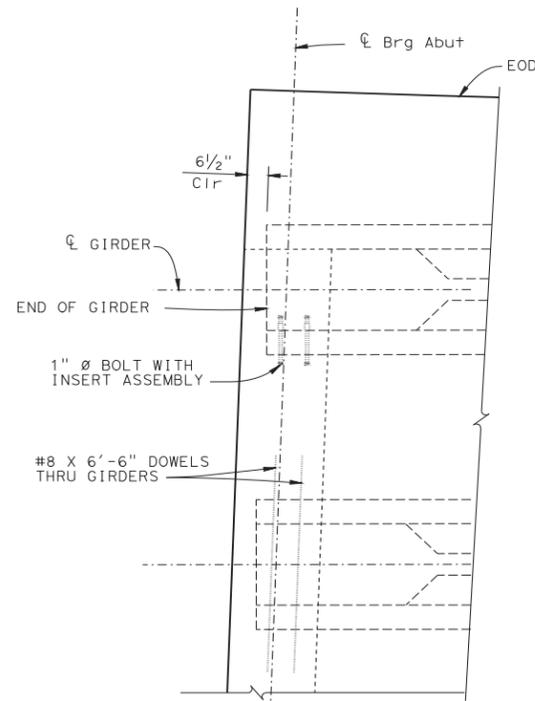
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TIME PLOTTED => 07:46
DATE PLOTTED => 19-APR-2010
USERNAME => JCHUDNO

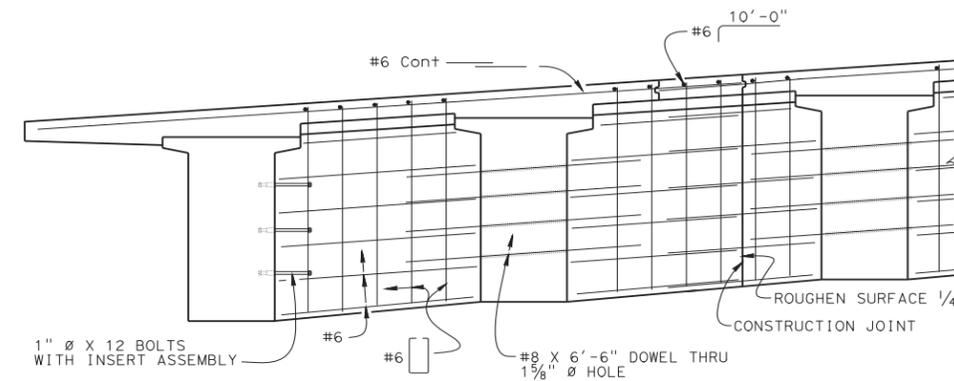
BULB-TEE GIRDER DETAILS								
Girder Designation	Girder Bearing	Girder Length (ft)	'x' Distance from bottom of girder to CG of PS steel	Mid-Span Pf = Working Force in kips	Concrete Strength		Mid-Span Deflection Components	
					Stressing Psi f'ci	Final Psi f'c	Deck Dead Load	Rail Dead Load
A	S81°24'52"E	119.78	6"	1420	4500	4790	1 3/8"	1/2"
B	"	120.42	6"	1410	4500	4790	1 3/8"	1/2"
C	"	121.15	5 1/2"	1380	4060	4790	1 3/8"	3/8"
D	"	121.70	5 1/2"	1211	4060	4790	1 1/2"	3/8"
E	"	122.25	6"	1434	4500	4930	1 1/2"	3/8"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Men	1			
REGISTERED CIVIL ENGINEER DATE					X
PLANS APPROVAL DATE					
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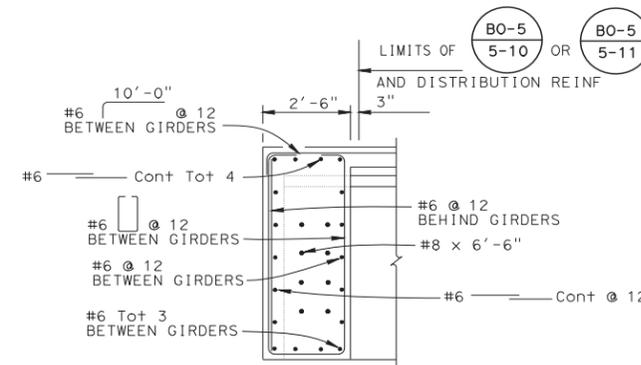


DETAIL "C"
1" = 1'-0"

NOTE:
1. Abutment 1 shown, Abutment 2 similar



SECTION B-B
1" = 1'-0"

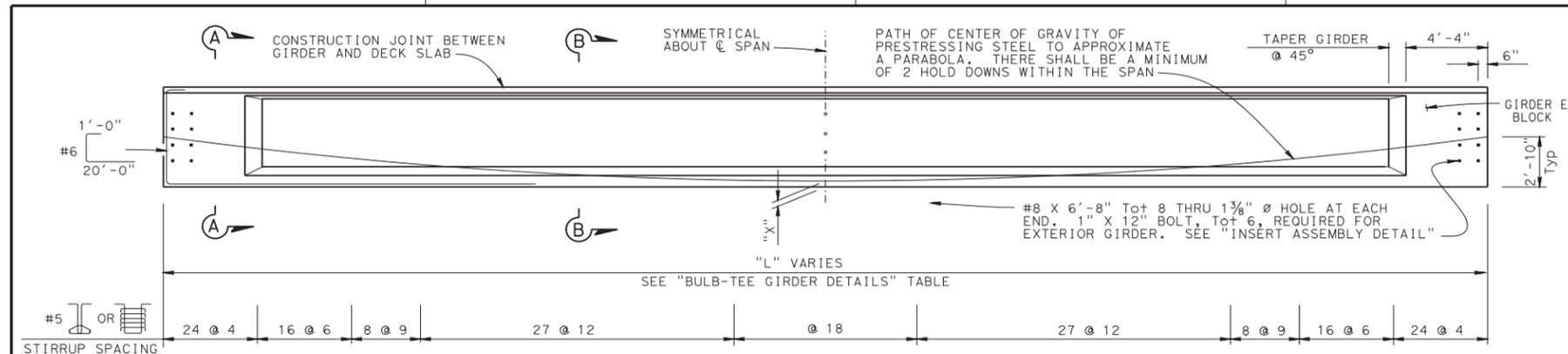


SECTION A-A
1" = 1'-0"

NOTE:
1. For details not shown, see "BULB-TEE GIRDER DETAILS NO. 2" sheet

DESIGN BY NAME	CHECKED NAME	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH	BRIDGE NO.	DORRY AVENUE BRIDGE	
DETAILS BY NAME	CHECKED NAME			11-1111		
QUANTITIES BY NAME	CHECKED NAME			2.5	BULB-TEE GIRDER DETAILS NO. 1	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				CU 01123 EA 123456	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET OF
				FILE => 09b2-bdd-g1-bt.dgn	11-19-09	X X

USERNAME => JCHUBBO DATE PLOTTED => 19-APR-2010 TIME PLOTTED => 07:46



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Men	1			

REGISTERED CIVIL ENGINEER DATE _____

PLANS APPROVAL DATE _____

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REGISTERED PROFESSIONAL ENGINEER
NAME _____
No. _____
DATE _____
CIVIL
STATE OF CALIFORNIA

PRESTRESSING NOTES

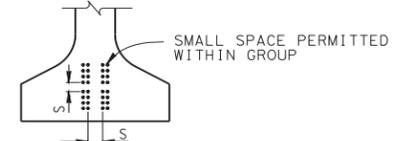
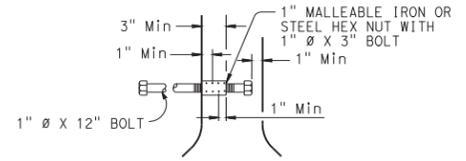
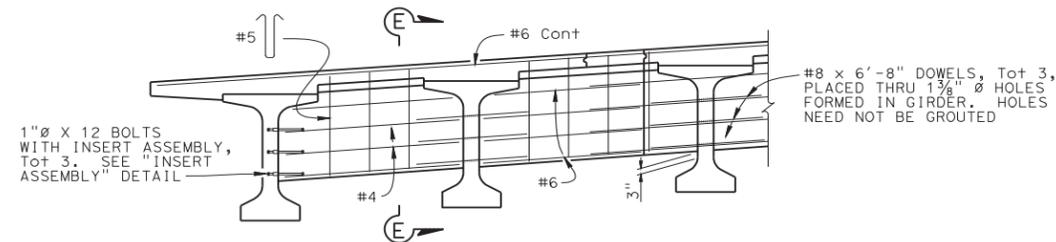
Working force: The force required at specific location after all losses.

Concrete strength: f'_{ci} is at time of initial stressing, f'_c is at 28 days
See "BULB-TEE GIRDER DETAILS" Table, "BULB-TEE GIRDER DETAILS No. 1" sheet

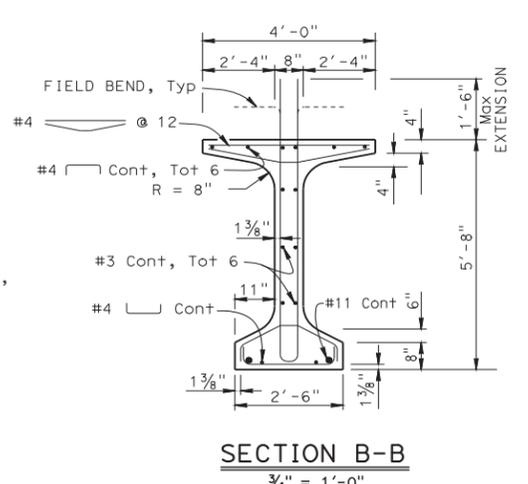
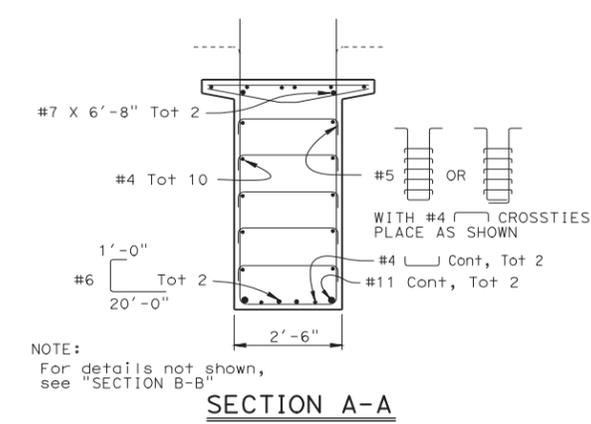
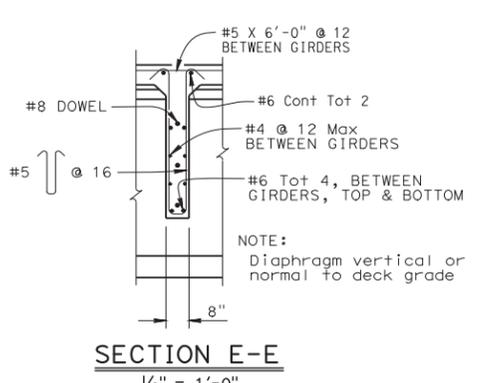
Deflection components: Informational - to be used in setting screed line elevations

Screed line elevations for deck concrete will be determined by the Engineer

Details shown are for pretensioned girders. The Contractor may submit details for post-tensioning or prestressing steel which shall be subject to the approval of the Engineer

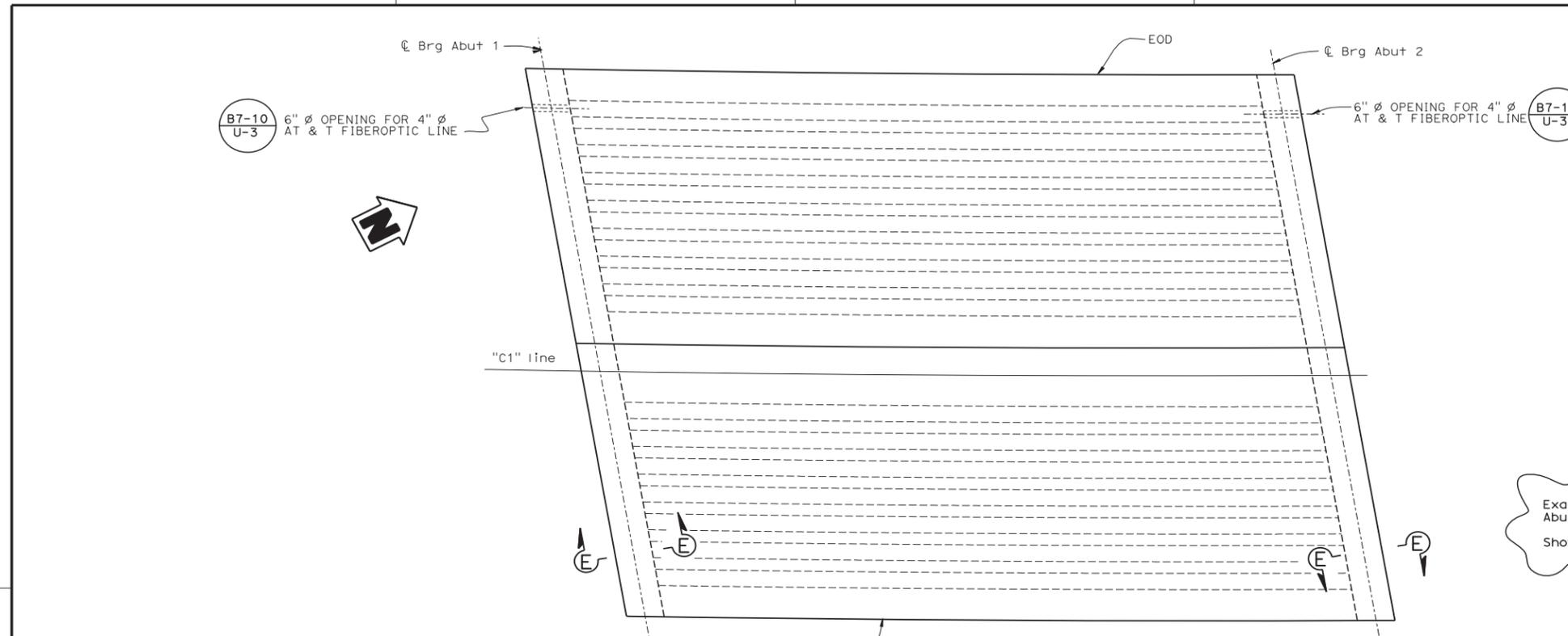


- Strands may be bundled in groups consisting of 4 vertically, 2 horizontally, and separated at the ends
- The Min distance "S" between groups or individual strands is 1 3/8" for 3/8" strands, 1 1/2" for 1/2" and 3/4" strands and 2" for 1 1/4" strands
- "S" is measured between centers of adjacent strands
- Approval of Engineer is required for deviation



DESIGN BY NAME	CHECKED NAME	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH	BRIDGE NO.	DORRY AVENUE BRIDGE	
DETAILS BY NAME	CHECKED NAME			11-1111		
QUANTITIES BY NAME	CHECKED NAME			POST MILE	BULB-TEE GIRDER DETAILS NO. 2	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			CU 01123 EA 123456	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET OF
			FILE => 09b3-bdd-gl-bt.dgn	11-10-09		X X

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DATE PLOTTED => 19-APR-2010
USERNAME => jchubbano



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01	Hum	101			

REGISTERED CIVIL ENGINEER	X	DATE
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER

Name: _____

No. _____

Exp. Date: _____

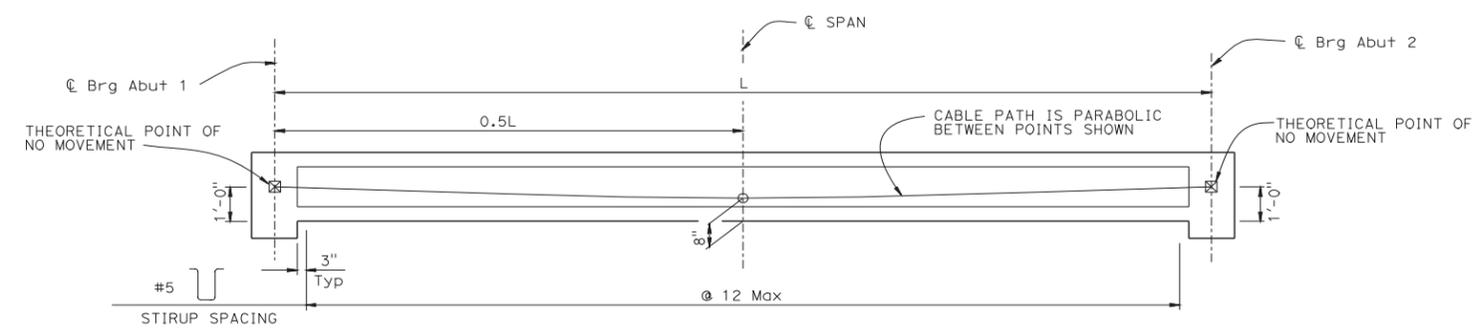
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STATE OF CALIFORNIA

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Example of a Prestressed Diaphragm Abutment Bridge
 Show "STIRRUP SPACING" and "CABLE PATH"

GIRDER LAYOUT
 1/4" = 1'-0"

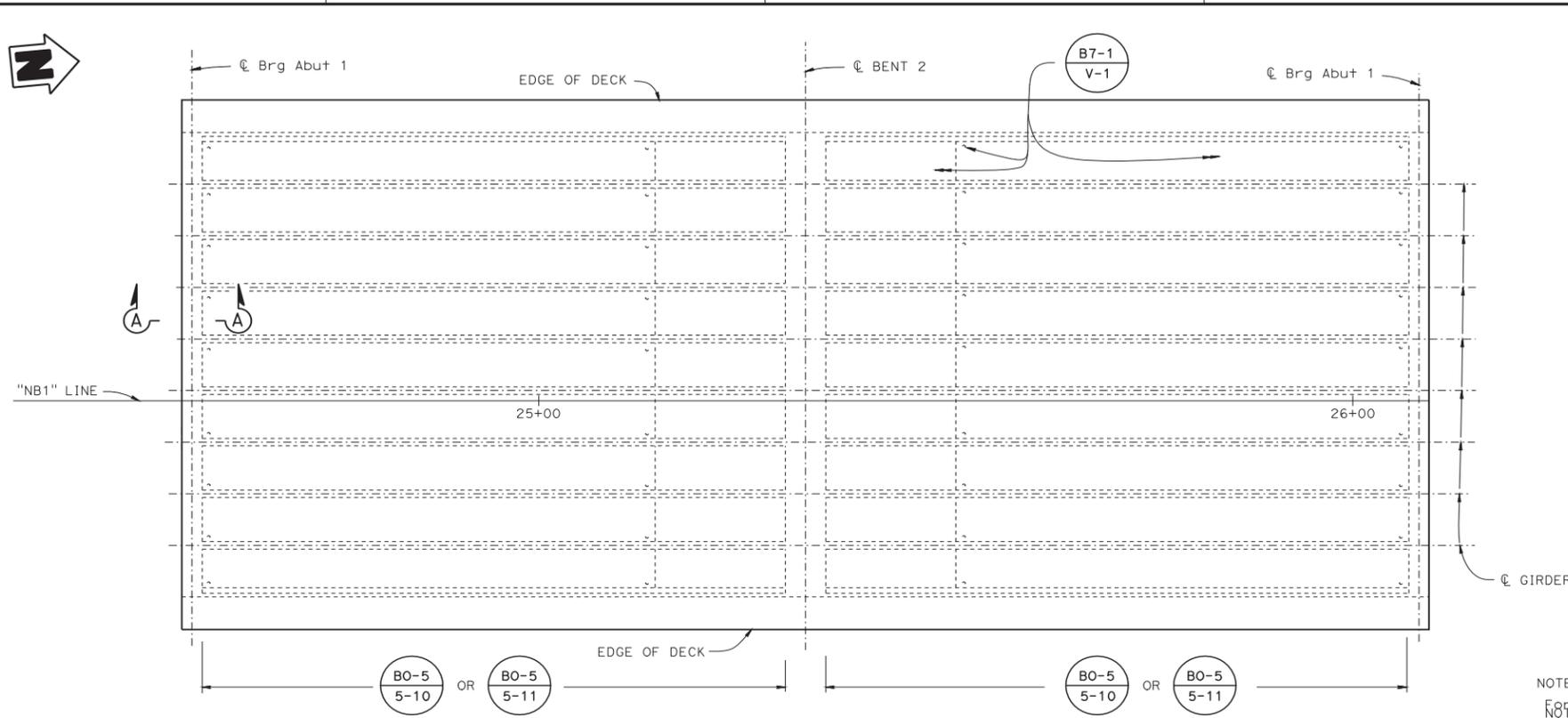


NOTE:
 1. For "SECTION E-E", see "GIRDER LAYOUT NO 2" sheet

LONGITUDINAL SECTION
 Horz 1/4" = 1'-0"
 Vert 1/2" = 1'-0"

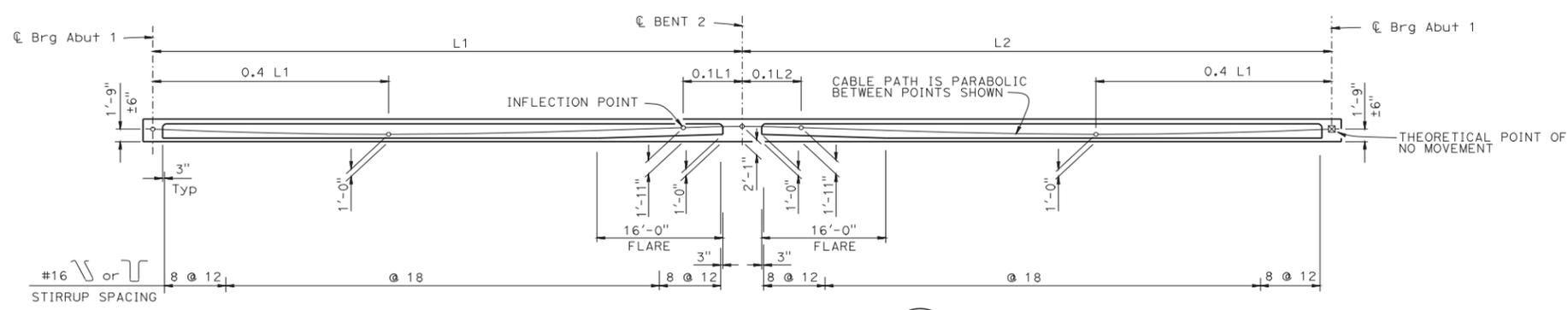
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DESIGN	BY Name	CHECKED Name											
DETAILS	BY Name	CHECKED Name											
QUANTITIES	BY Name	CHECKED Name											
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3			CU 01 EA 2345 FILE => 09c1-bdd-gl.dgn	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: _____ SHEET OF: - X									

USERNAME => jchubing DATE PLOTTED => 19-APR-2010 TIME PLOTTED => 07:46



PLAN
1/8" = 1'-0"

NOTE:
FOR "SECTION A-A" AND "PRESTRESSING NOTES", see "GIRDER DETAILS" sheet



LONGITUDINAL SECTION B8-5
1/8" = 1'-0"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
02	Sha	299			

REGISTERED CIVIL ENGINEER	DATE
Name	
No. 12345	
PLANS APPROVAL DATE	
Exp. 6-30-10	

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DESIGN BY Name	CHECKED Name	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH X	BRIDGE NO.	66TH STREET ARCH BRIDGE GIRDER LAYOUT
DETAILS BY Name	CHECKED Name			X	
QUANTITIES BY Name	CHECKED Name			POST MILE	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU X EA X FILE => 09d1-bdd-g1.dgn	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES

TIME PLOTTED => 07:46
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