

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	301	439

Leon Valla 5-11-09
REGISTERED CIVIL ENGINEER DATE

6-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER

LEON VALLA

No. 45351

Exp. 09-30-10

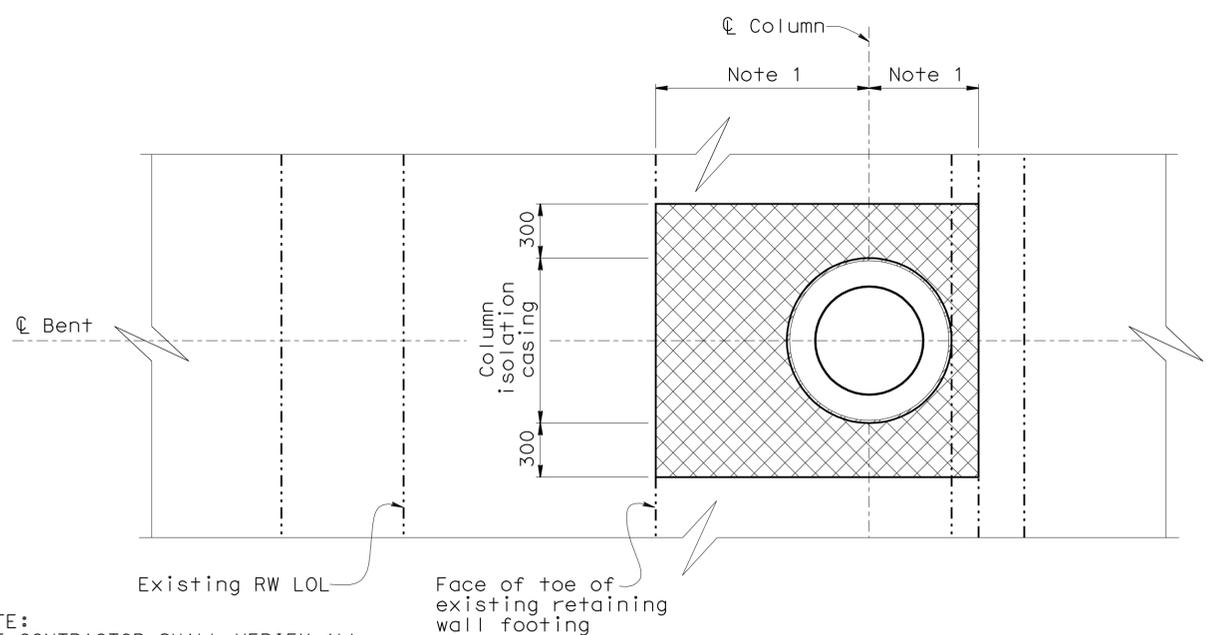
CIVIL

STATE OF CALIFORNIA

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Notes:

- Lean concrete backfill at all required locations as noted in table on "Lean Concrete Backfill No. 1" sheet:
R = Required
NR = Not Required



- Indicates limits of structure excavation bridge
- Indicates limits of lean concrete backfill unless not required at locations shown in table on "Lean Concrete Backfill No. 1" sheet.

NOTE:
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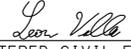
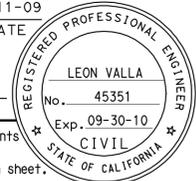
SECTION B-B
1:20

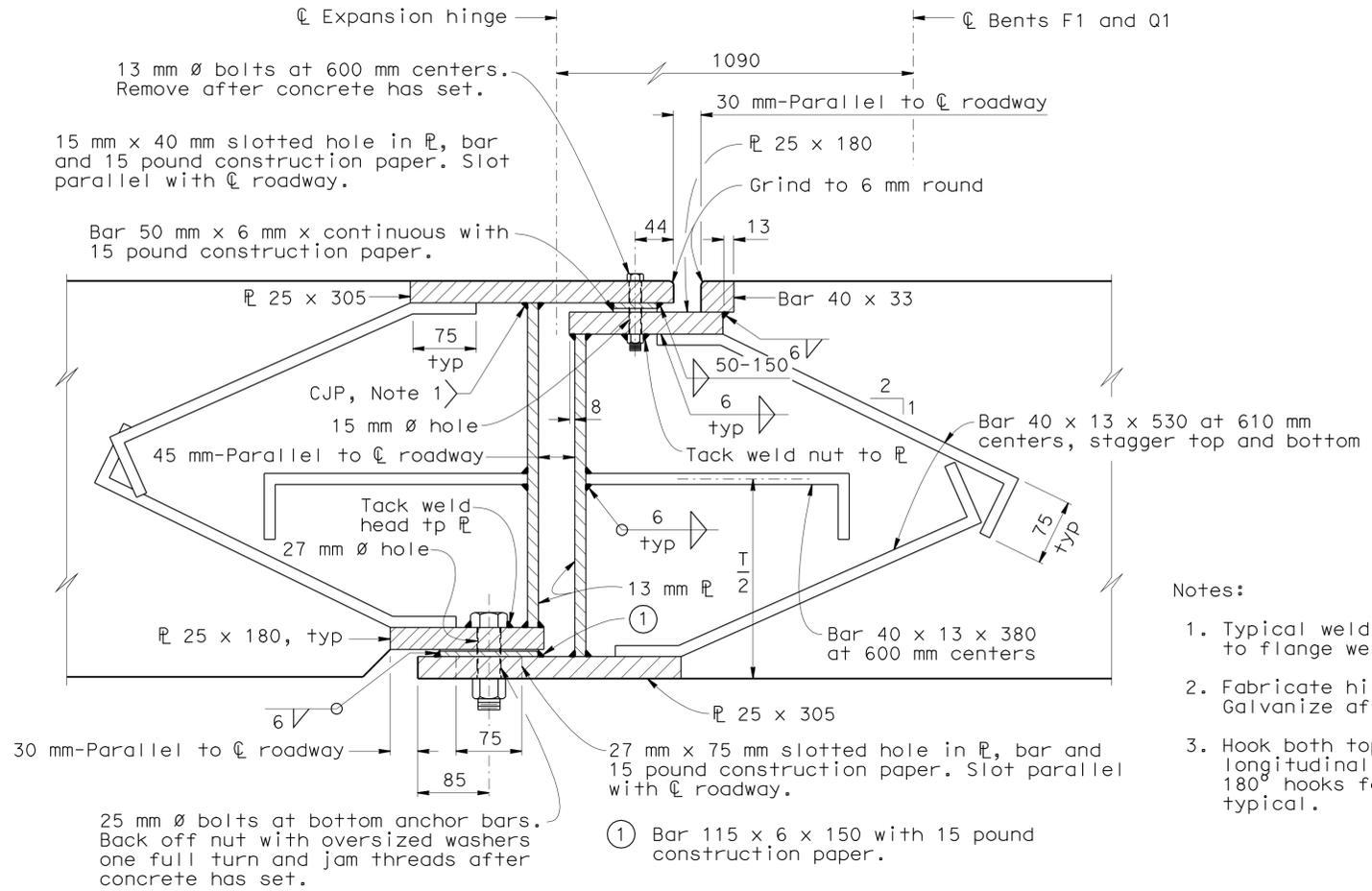
RC SLAB BRIDGE	
CENTINELA AVE UC (WIDEN)	
LEAN CONCRETE BACKFILL NO. 2	

	DESIGN BY <i>L. Valla</i>	CHECKED <i>M. Fustak</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	
	DETAILS BY <i>Various</i>	CHECKED <i>M. Fustak/L. Valla</i>			KILOMETER POST 40.76	
QUANTITIES BY <i>C. Hensel</i>			CHECKED <i>C. Elbo</i>		CU 07 EA 241301	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
					REVISION DATES 07-24-08 07-29-08 08-11-08 08-14-08 11-26-08 11-11-08 11-18-08 5-13-09	
						SHEET 64 OF 134

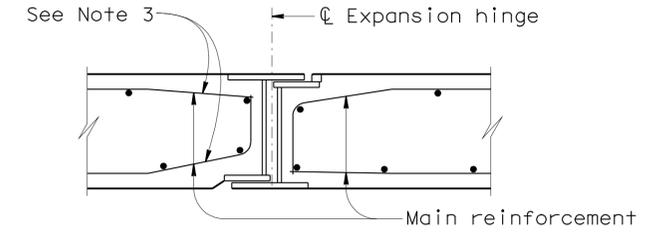
STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 16:39

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	302	439
			5-11-09		
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			PLANS APPROVAL DATE		
					
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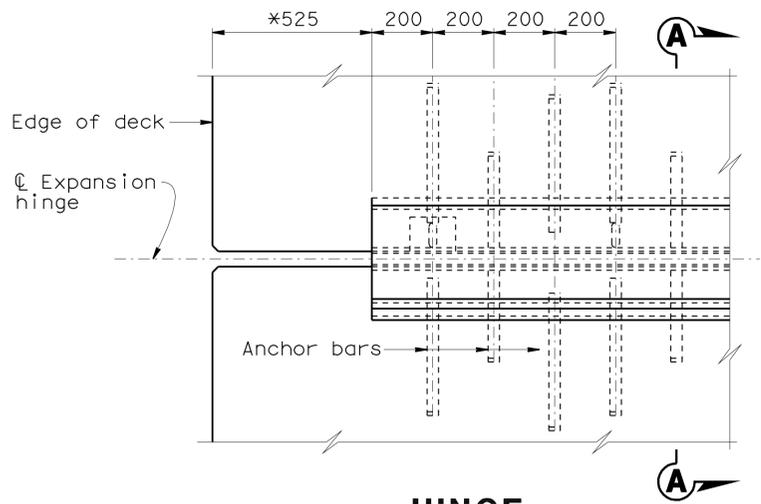


- Notes:
1. Typical welding for all 13 mm web plate to flange welds.
 2. Fabricate hinge in 4260 mm max lengths. Galvanize after fabrication.
 3. Hook both top and bottom main reinforcement longitudinal #32 bars as shown typical. Use 180° hooks for all size bars #25 and less, typical.



MAIN REINFORCEMENT AT HINGE
No Scale

SECTION A-A
No Scale



HINGE
No Scale

- Notes:
1. All anchor bars shall be placed parallel to centerline of roadway.
- * (Base width of concrete barrier +50 mm.) +25 mm

NO SCALE	
RC SLAB BRIDGE	
CENTINELA AVE UC (WIDEN)	
SLAB HINGE DETAILS	

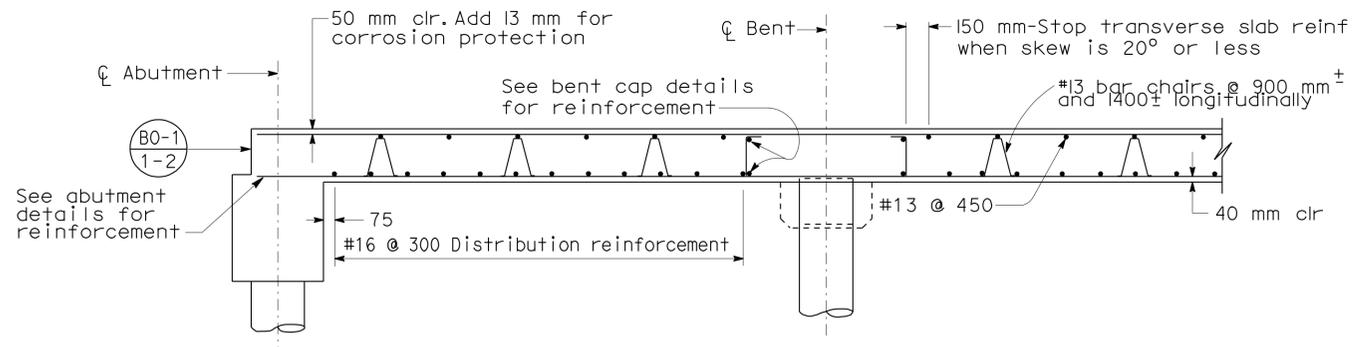


DESIGN	BY C. Hensel	CHECKED L. Valla
DETAILS	BY Various	CHECKED L. Valla
QUANTITIES	BY C. Hensel	CHECKED C. Elbo

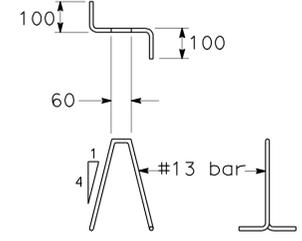
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253
		KILOMETER POST 40.76

CU 07	EA 241301	BRIDGE NO.	53-1253	SHEET	65	OF	134
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES			

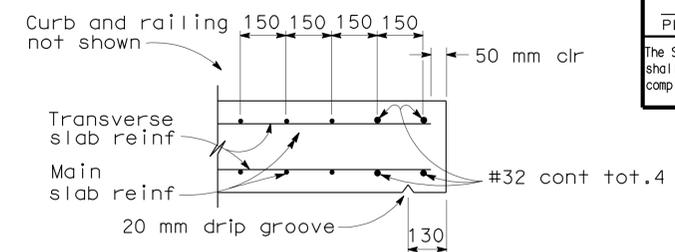




LONGITUDINAL SECTION



BAR CHAIR DETAIL

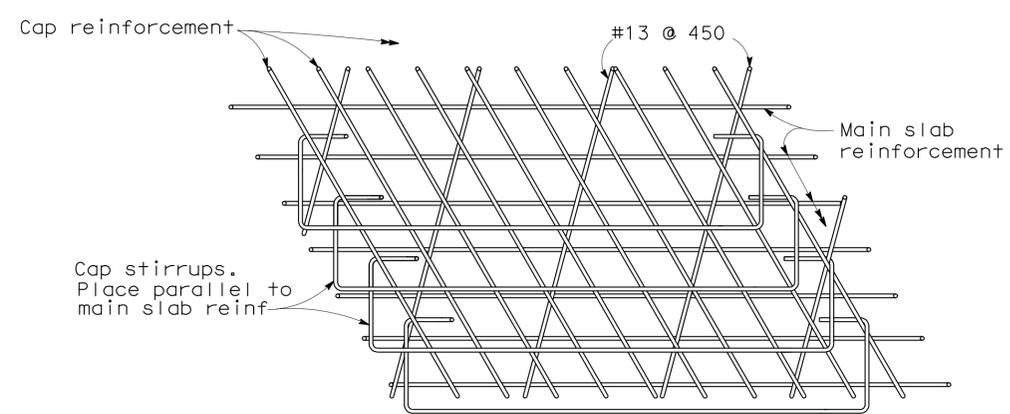


EDGE OF SLAB DETAILS

BAR SPLICE LENGTH							
Bar size	#13	#16	#19	#22	#25	#29	#32 #36
All bars, except top bars in spans over 7 m	580	710	860	990	1140	1730	1930 2160
Top bars in spans over 7 m	580	710	860	1350	1520	1960	2460 3050

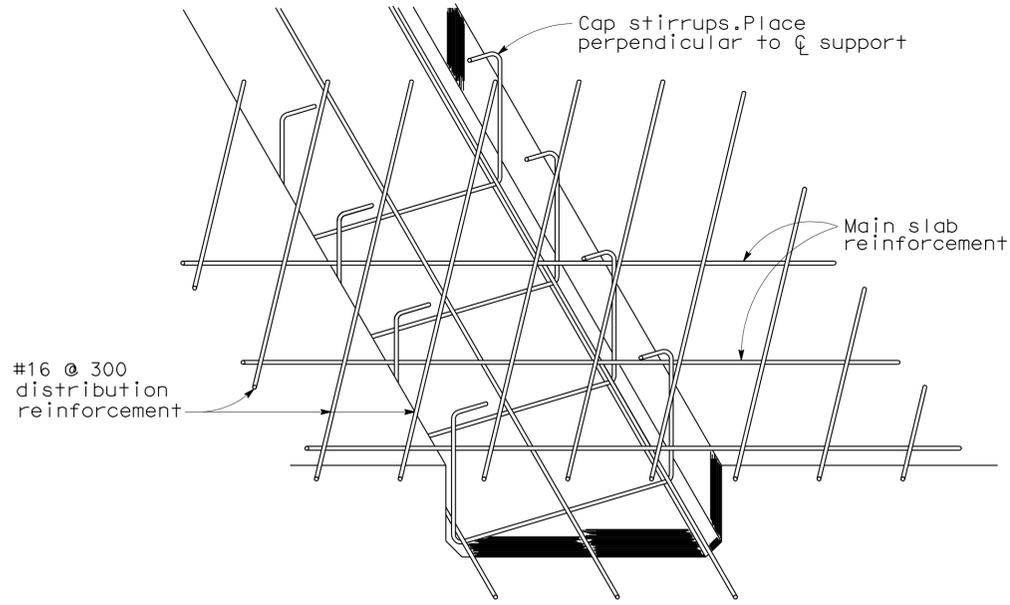
Reinforcement Notes:

- Splices in top main bars to be located near center of span, see Note 1.
- Splices in bottom main bars to be located near bent, see Note 1.
- Spacing of all transverse bars is measured along ϕ roadway.
- Skew 0° to 20°: Place all transverse bars radial to "CEOB1" Line.
- Skew over 20°: Place transverse slab bars perpendicular to ϕ bridge. See details at right and below.

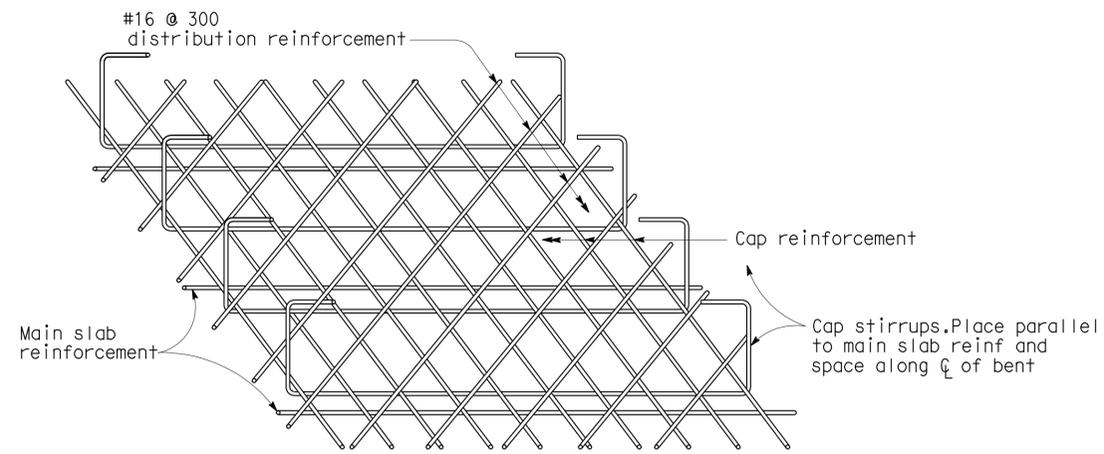


TOP SLAB REINFORCEMENT AT BENT

Note: View for main span over 7 m.
Bar placement similar for spans under 7 m.



DROPPED CAP



FLUSH CAP

Note:

- 1. For all main longitudinal continuous reinforcement splices, see all "Top Main Slab Reinforcement" and "Bottom Main Slab Reinforcement" sheets.

Indicates bridge removal portion

NO SCALE

BOTTOM SLAB REINFORCEMENT AT BENT

RC SLAB BRIDGE

CENTINELA AVE UC (WIDEN)

SLAB REINFORCEMENT DETAILS

BRIDGE NO.	53-1253
KILOMETER POST	40.76



DESIGN	BY C. Hensel	CHECKED L. Valla
DETAILS	BY Various	CHECKED L. Valla
QUANTITIES	BY C. Hensel	CHECKED C. Elbo

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 12

BRIDGE NO. 53-1253
 KILOMETER POST 40.76

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



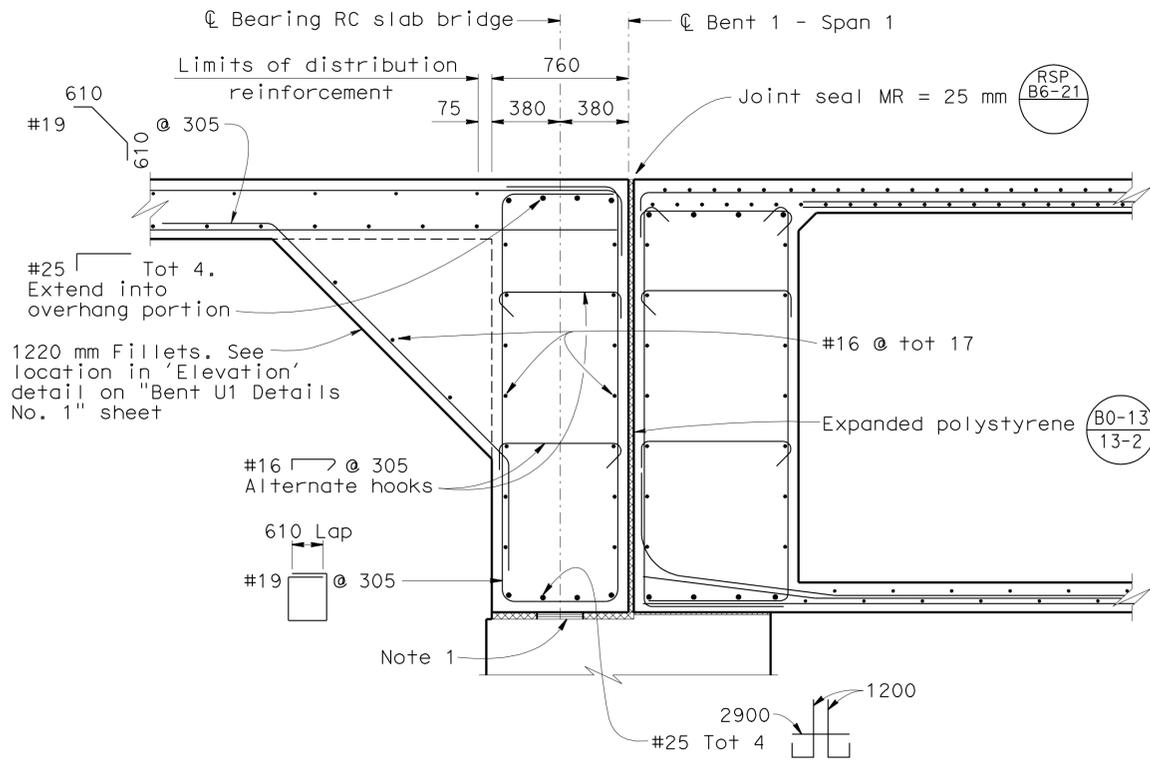
CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	11-18-07	3-4-08	4-1-08					
SHEET	66	OF		134				

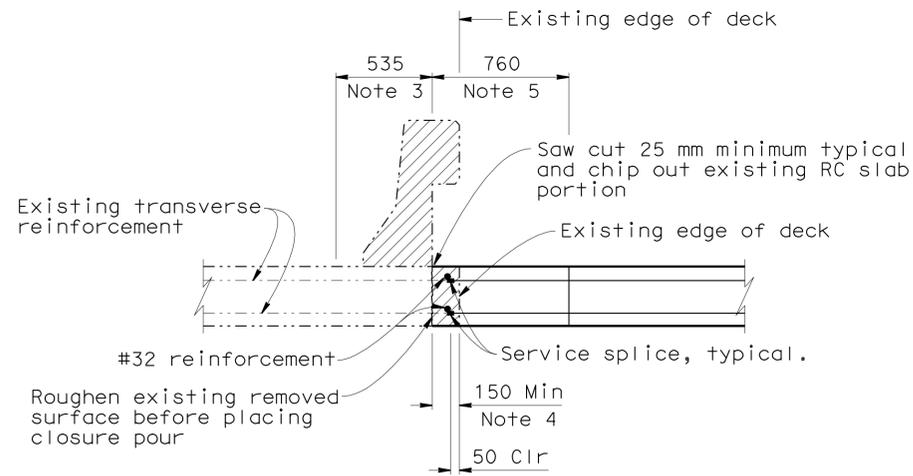
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	304	439
			5-11-09		
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			PLANS APPROVAL DATE		
LEON VALLA			No. 45351		
CIVIL			Exp. 09-30-10		
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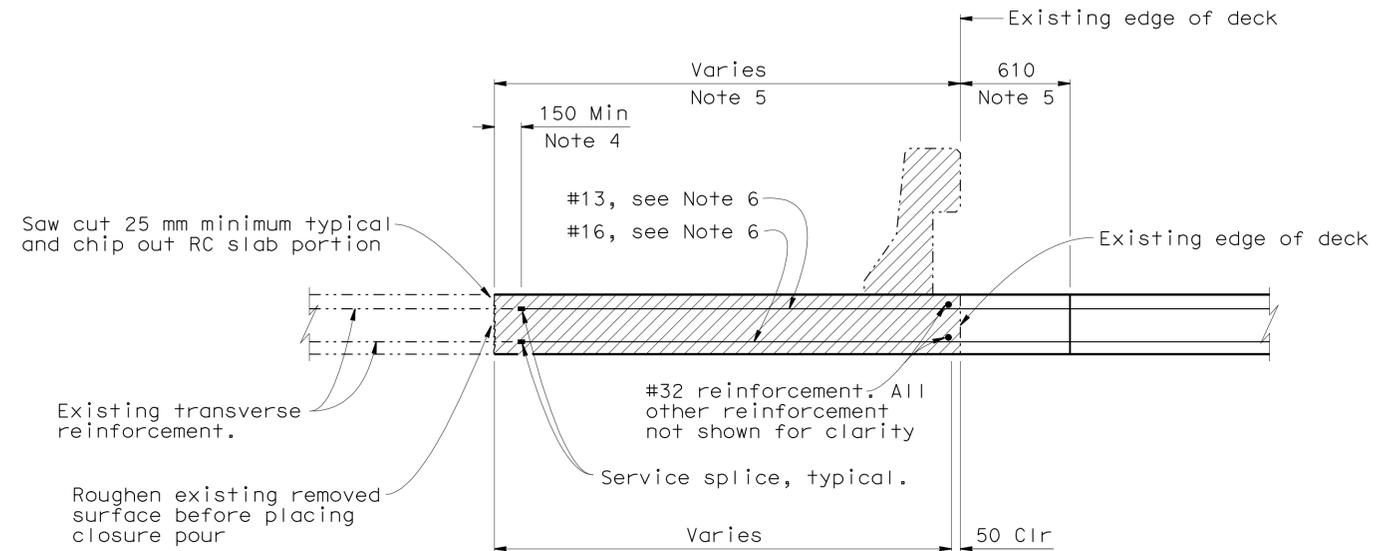
END DIAPHRAGM AT BENT 1 DETAILS

Note 2 **1:20**



SECTION A-A

Typical unless shown otherwise



SECTION B-B

Typical unless shown otherwise

Legend:

- Indicates limits of expanded polystyrene
- Indicates limits of expansion joint filler
- Indicates limits of bridge removal portion.

Notes:

1. See "Bearing Pad Detail" on "Bent 1 Details No. 2" sheet.
2. For details not shown see "Girder Details No. 1" sheet.
3. Limits of refinished bridge deck.
4. All existing transverse reinforcement to be left exposed and undamaged.
5. Limits of closure pour.
6. Replace and extend existing reinforcement.



DESIGN	BY C. Hensel	CHECKED M. Fustak
DETAILS	BY Various	CHECKED M. Fustak/L. Valla
QUANTITIES	BY C. Hensel	CHECKED C. Elbo

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

RC SLAB BRIDGE	
CENTINELA AVE UC (WIDEN)	
MISCELLANEOUS DETAILS	

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	10-18-07	1-14-09	11-4-09	3-27-08	4-18-08	06-28-08	07-18-08	07-21-08	12-18-08
SHEET									67
OF									134

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

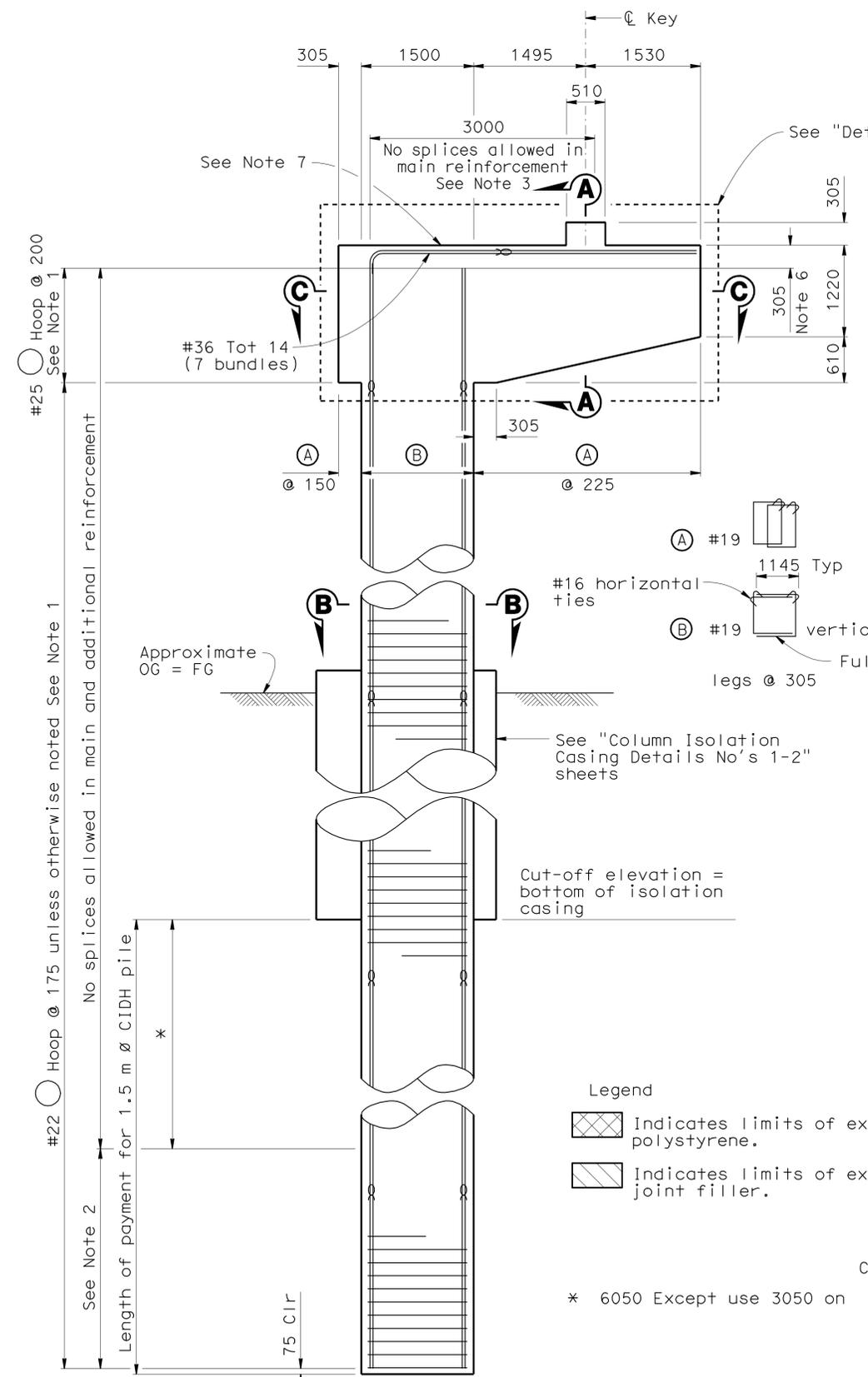
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DIST	COUNTY	ROUTE	KILOMETER TOTAL PROJECT	POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
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REGISTERED CIVIL ENGINEER	DATE
6-7-10	5-11-09
PLANS APPROVAL DATE	

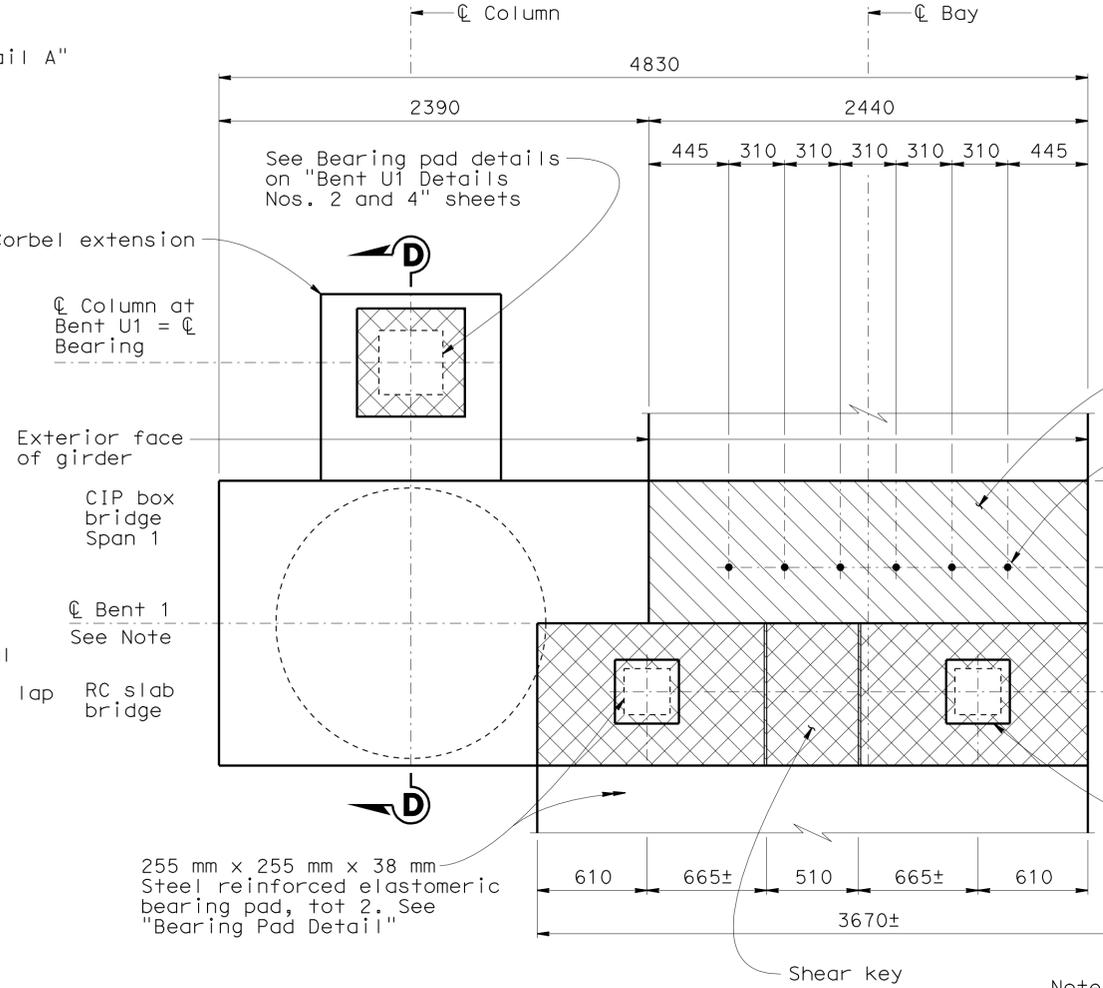
LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

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ELEVATION
1:40

NOTE:
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PLAN
1:20

Note: Cent Bent 1 is normal to "CE0B1" Line.

"CE0B1" Line

13 mm Expansion joint filler

#36 x 3100 mm galvanized dowel total 6. See "Support Detail At Shear Key" on "Miscellaneous Girder Details No. 1" sheet.

BB

EB

Cent Bearing

Edge of deck

355 mm x 355 mm x 2 mm Galvanized sheet metal over bearing pad, typical. Coat top of pad with silicone grease prior to placing sheet metal.

- Notes:
1. All hoops are "Ultimate" butt spliced continuous.
 2. Only staggered "Ultimate" butt splices are allowed in main CIDH pile reinforcement. Use bundled #22 hoops @ 300 max between "Ultimate" butt splices so splices fit between hoops.
 3. No splices allowed in continuous dropped bent cap reinforcement; use only staggered "Ultimate" butt splices outside the "No splices allowed" zone in continuous dropped bent cap reinforcement.
 4. For "Pile Data Table" see "Pile Data Table No. 3" sheet.
 5. ∞ Indicates bundled bars.
 6. Clearance for ● main column reinforcement.
 7. Cross slope not shown for clarity.
 8. For "Bearing Pad Detail", "Section A-A", and "Section B-B" see "Bent 1 Details No. 2" sheet.
 9. For bent cap reinforcement see "Detail A" on "Bent 1 Details No. 2" sheet.
 10. For "Section C-C" and "Section D-D" see "Bent 1 Details No. 3" sheet.

	DESIGN	BY M. Kattaa	CHECKED W. A/L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 1 DETAILS NO. 1				
	DETAILS	BY Various	CHECKED W. A/L. Valla			KILOMETER POST	40.76					
	QUANTITIES	BY F. Tannous	CHECKED M. Kattaa									
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN								ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 7-10-07 2-24-09 3-26-09 5-12-09 8-11-09 9-24-07 4-15-08 5-28-08 1-21-09	SHEET 68 OF 134

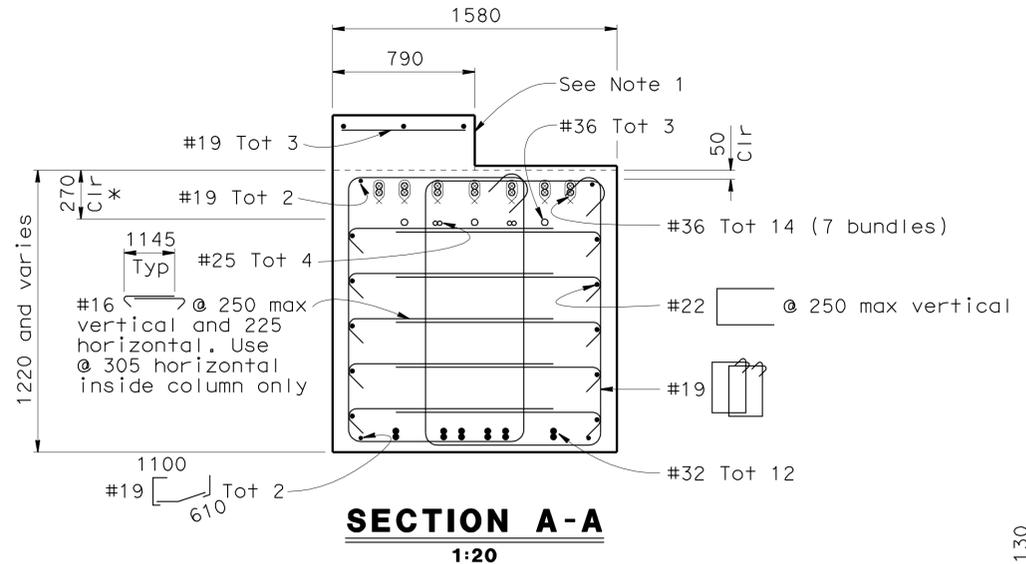
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STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

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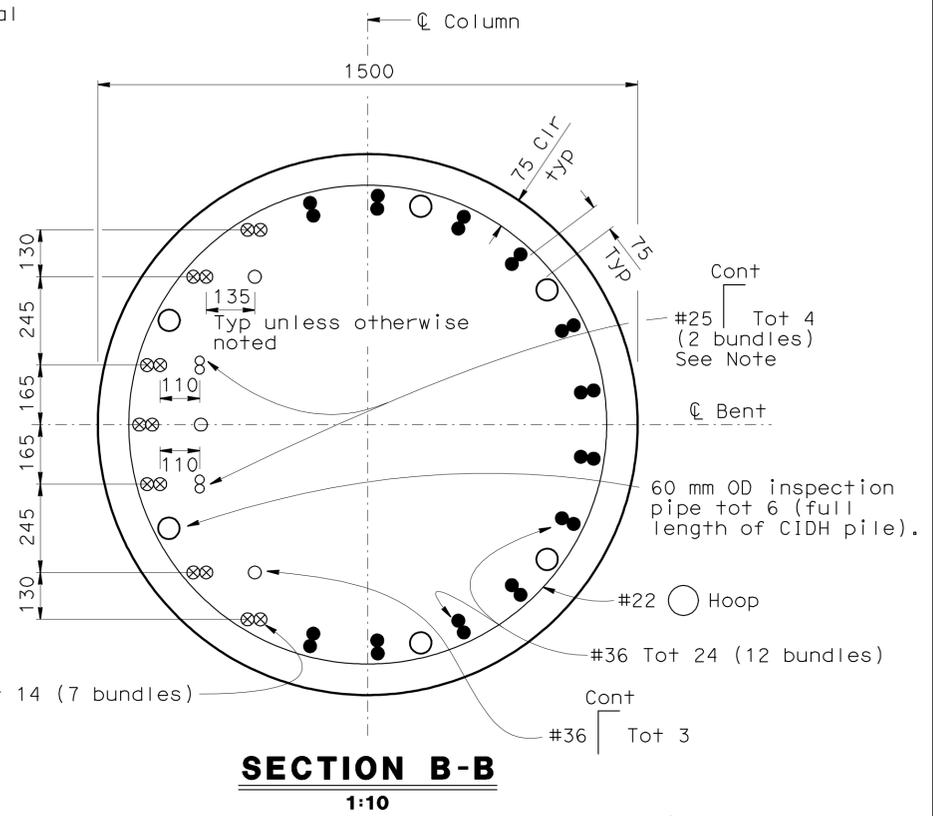
REGISTERED CIVIL ENGINEER	DATE
6-7-10	5-11-09
PLANS APPROVAL DATE	

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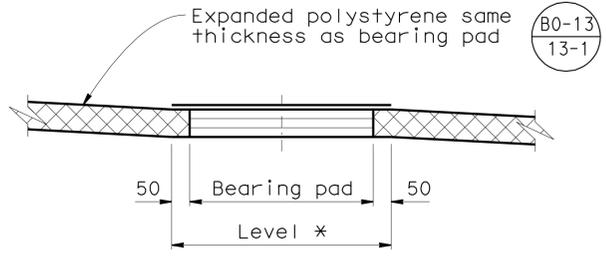
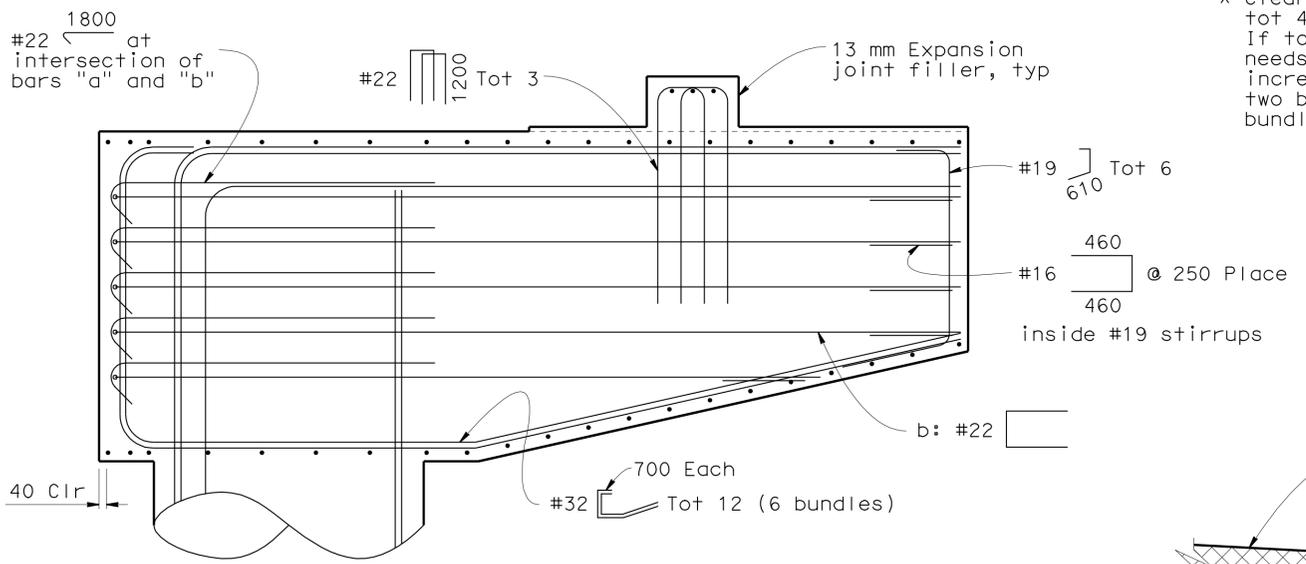


Note: Longitudinal slope not shown for clarity.

* Clearance from top #36 total 3 and #25 tot 4 layer of additional reinforcement. If top #36 dropped bent cap reinforcement needs to be "Ultimate" butt spliced, increase clearance as required to maintain two bar diameters of #36 clear between bundled and adjacent parallel bars.



Note: C of #25 bundle = C of #36 bundle



* Level both transversely and longitudinally

- Legend:
- Additional #36 and #25 extends from bottom of CIDH and bends into dropped bent cap continuous.
 - ⊗ Main column reinforcement bundled #36 extends from bottom of CIDH and bends into dropped bent cap continuous.
 - Main column reinforcement extends from bottom of CIDH into dropped bent cap.

Note:
1. Shear key must be constructed monolithically.

NOTE:
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	DESIGN BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 1 DETAILS NO. 2
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa				

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS: 0 10 20 30 40 50 60 70 80 90 100

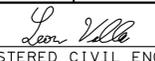
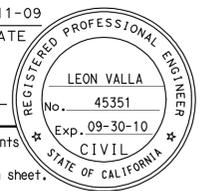
CU 07 EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

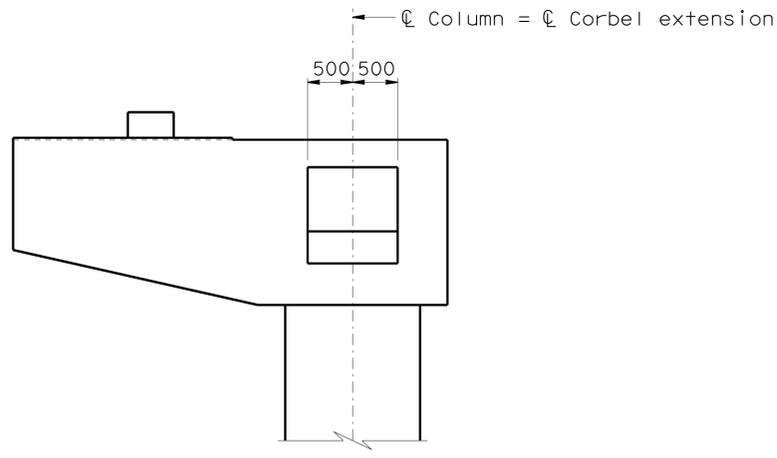
REVISION DATES	SHEET	OF
1-10-07 2-24-09 3-26-09 4-1-09 8-24-07 9-24-07 4-15-08 5-28-08 1-28-09	69	134

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

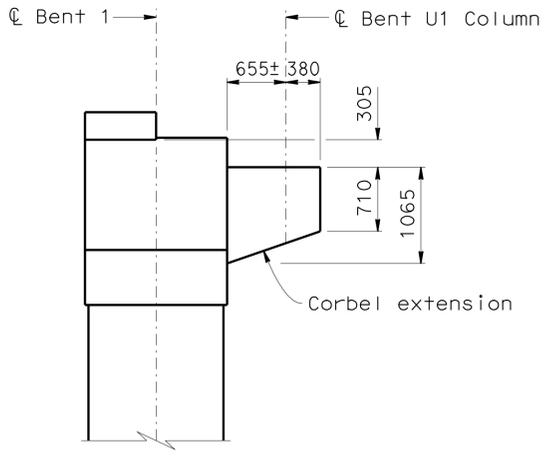
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	307	439

 REGISTERED CIVIL ENGINEER DATE 5-11-09	
PLANS APPROVAL DATE 6-7-10	

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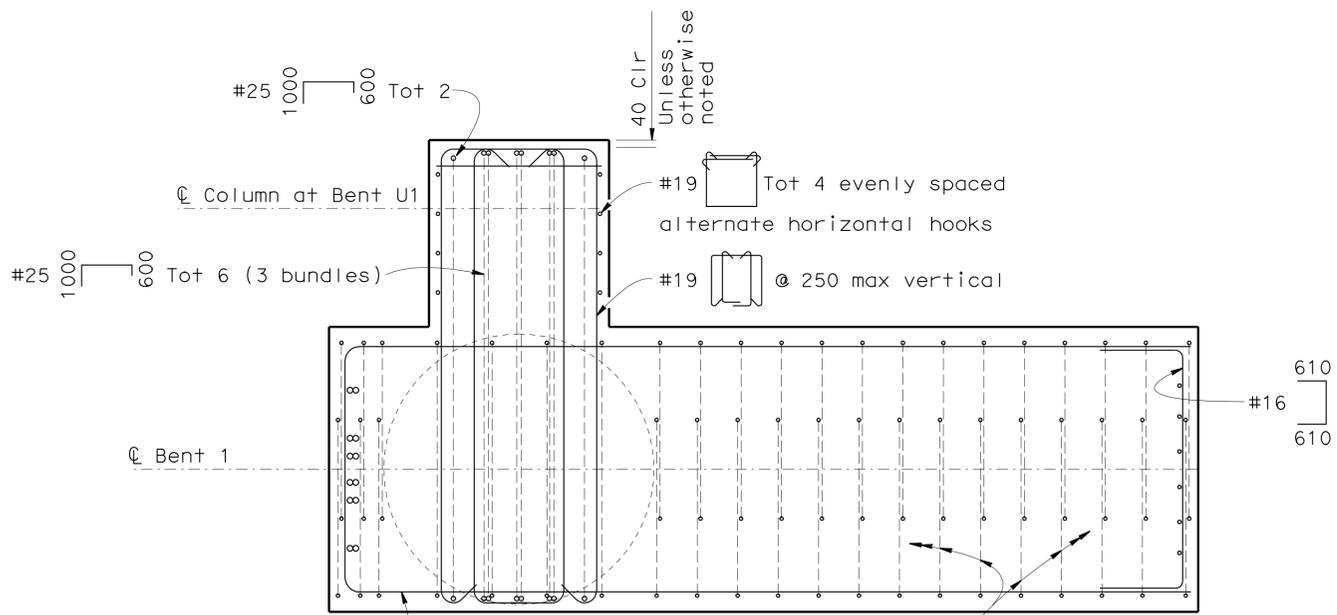


PARTIAL ELEVATION
1:40



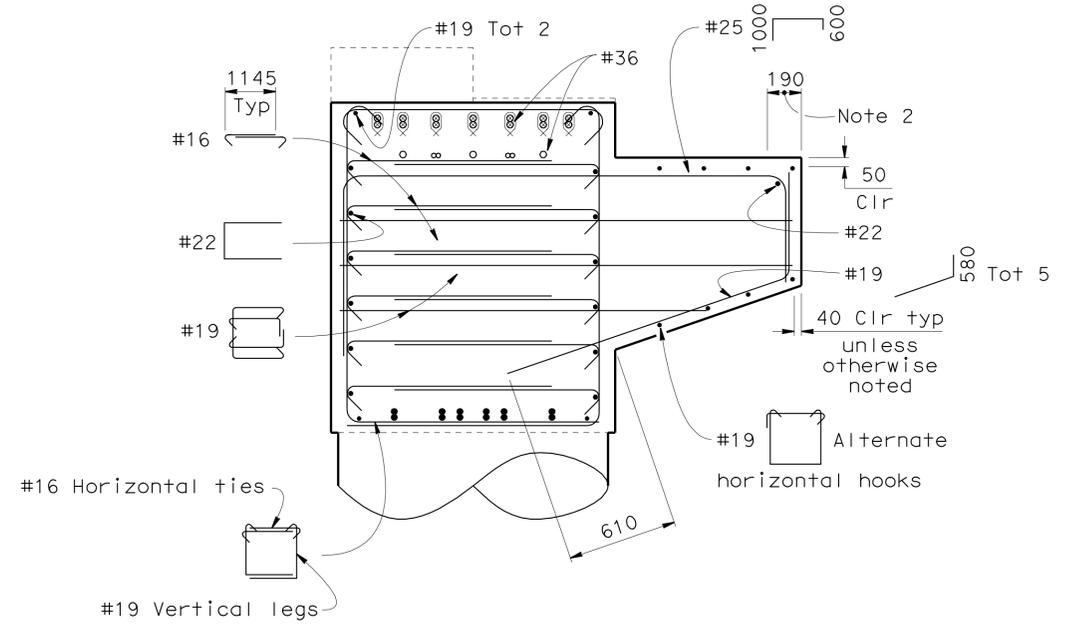
SIDE VIEW
1:40

- Notes:
1. Cross slope and longitudinal slope not shown for clarity.
 2. For dimensions not shown see "Bent 1 Details No. 1" sheet.



SECTION C-C
1:20

Note: #16 omitted at column location for clarity.



SECTION D-D
1:20

- Notes:
1. For details not shown see "Section A-A" on "Bent 1 Details No. 2" sheet.
 2. Horizontal straight portion of #25 reinforcement must start no more than the dimension shown from the face of corbel extension.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 1 DETAILS NO. 3
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 70 OF 134

FILE => 53-1253-2h-bnt01c.dgn

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	309	439

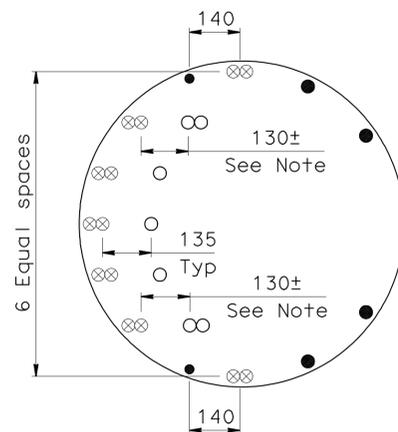
5-11-09
DATE

REGISTERED CIVIL ENGINEER

6-7-10
PLANS APPROVAL DATE

LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

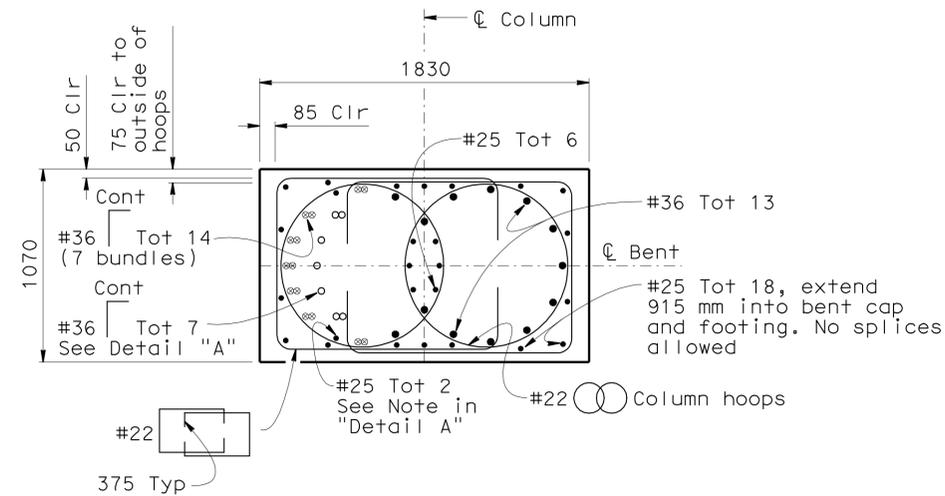
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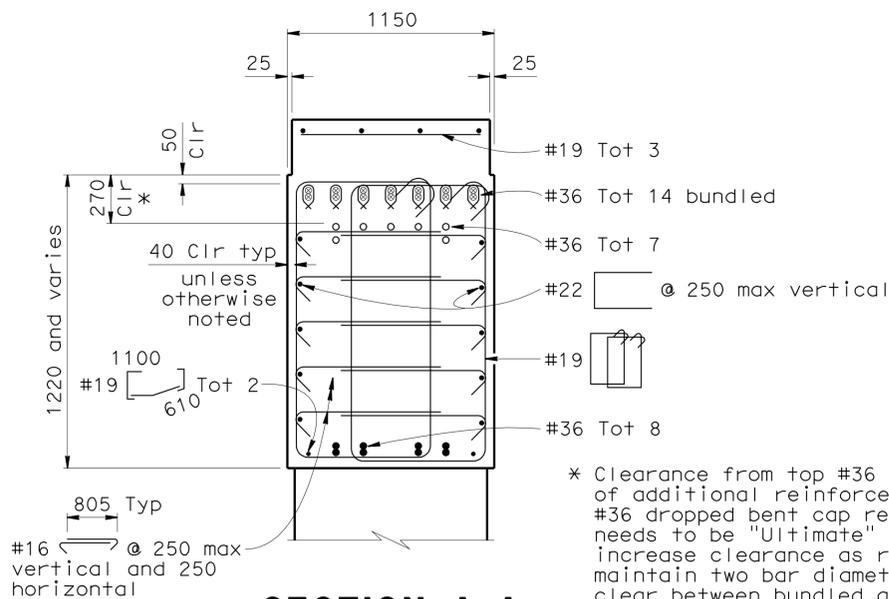
DETAIL A
1:10

Note:

Two bar diameters of #36 must be obtained between all bundled and any size of adjacent parallel bars.



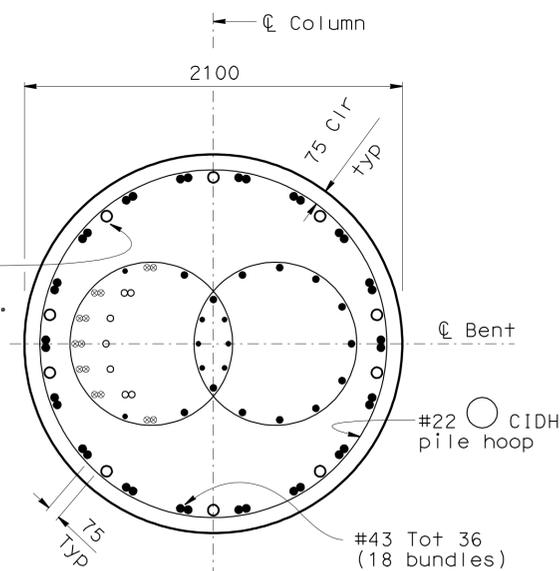
SECTION B-B
1:20



SECTION A-A
1:20

Note: Longitudinal slope not shown for clarity.

60 mm OD inspection pipe tot 10 (full length of CIDH pile). Space bundled reinforcement evenly starting at \varnothing bent.



SECTION C-C
1:20

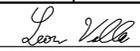
See Section "B-B" reinforcement

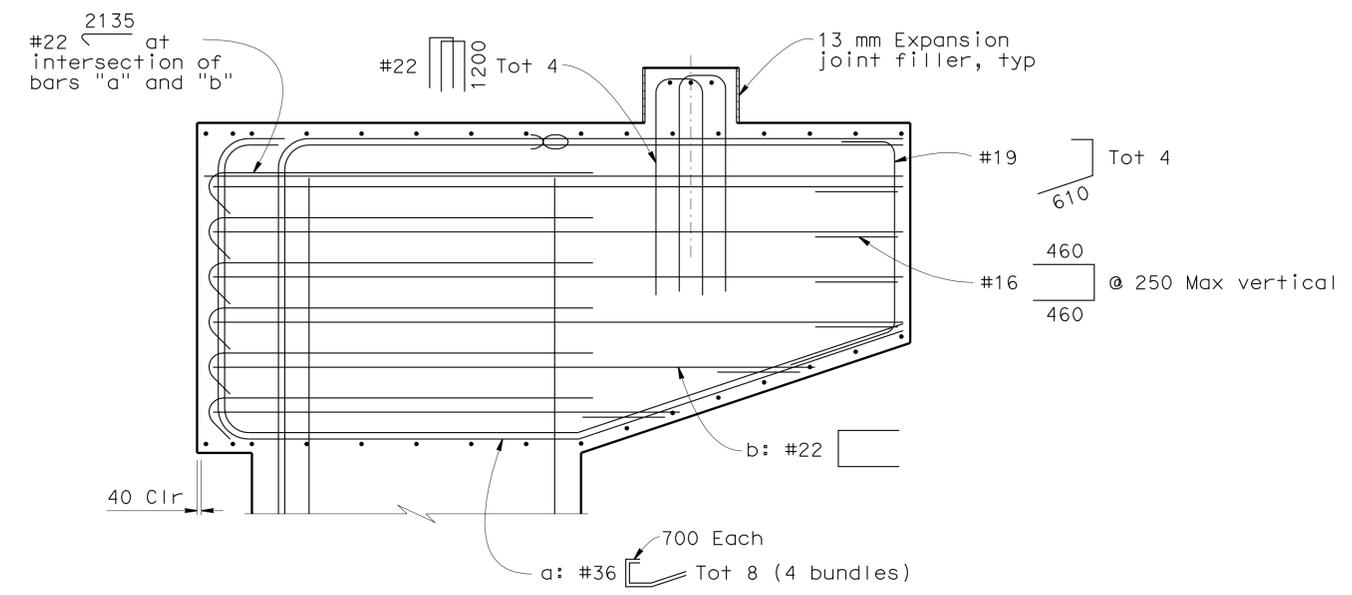
- Legend:
- \circ Additional #36 extends from bottom of CIDH and bends into dropped bent cap continuous.
 - \otimes Main column reinforcement bundled #36 extends from bottom of CIDH and bends into dropped bent cap continuous.
 - \bullet Main column reinforcement extends from bottom of CIDH into dropped bent cap including #25 tot 6 and #25 tot 2.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY M. Kattaa	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 2 DETAILS NO. 2													
	DETAILS	BY Various	CHECKED W. A./L. Valla			KILOMETER POST	40.76														
	QUANTITIES	BY F. Tannous	CHECKED M. Kattaa			SHEET	72		OF	134											
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS		CU 07 EA 241301		DISREGARD PRINTS BEARING EARLIER REVISION DATES													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">REVISION DATES</th> </tr> <tr> <td style="font-size: x-small;">8-28-07</td> <td style="font-size: x-small;">3-26-09</td> </tr> <tr> <td style="font-size: x-small;">5-28-09</td> <td style="font-size: x-small;">4-1-09</td> </tr> <tr> <td style="font-size: x-small;">5-28-08</td> <td style="font-size: x-small;">2-5-09</td> </tr> <tr> <td style="font-size: x-small;">2-5-09</td> <td style="font-size: x-small;">2-24-09</td> </tr> <tr> <td style="font-size: x-small;">3-28-09</td> <td style="font-size: x-small;">3-28-09</td> </tr> </table>								REVISION DATES		8-28-07	3-26-09	5-28-09	4-1-09	5-28-08	2-5-09	2-5-09	2-24-09	3-28-09	3-28-09	STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)	
REVISION DATES																					
8-28-07	3-26-09																				
5-28-09	4-1-09																				
5-28-08	2-5-09																				
2-5-09	2-24-09																				
3-28-09	3-28-09																				

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	310	439

 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 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.



DETAIL B
1:20

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY M. Kattaa	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 2 DETAILS NO. 3
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 2-4-09 2-24-09 3-26-09 4-1-09	SHEET 73 OF 134

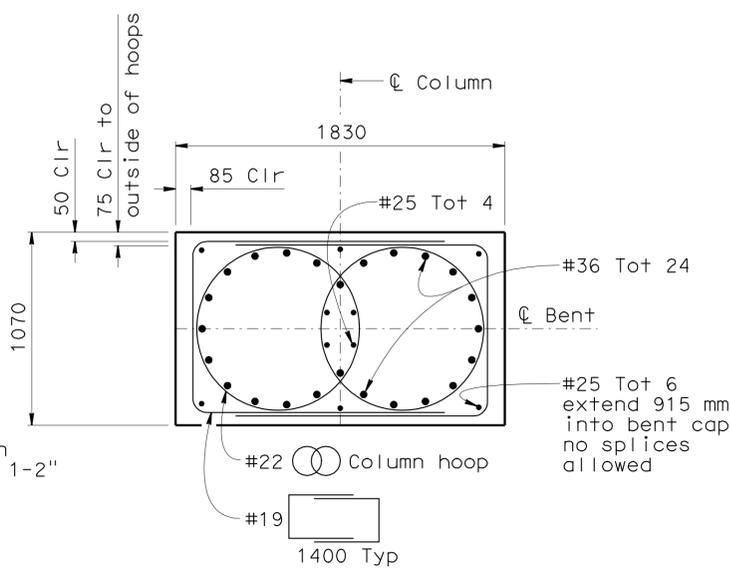
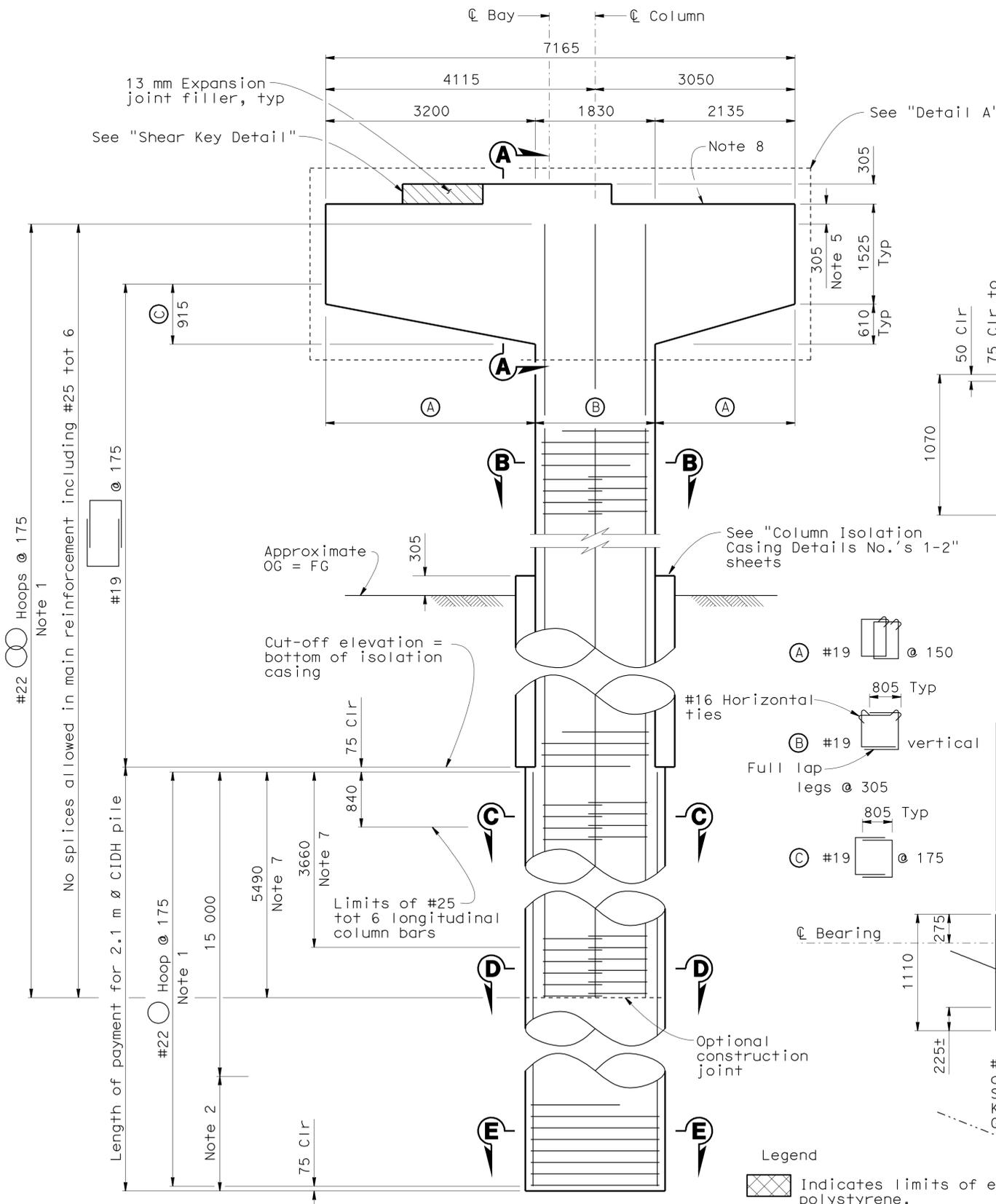
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN
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USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 16:40

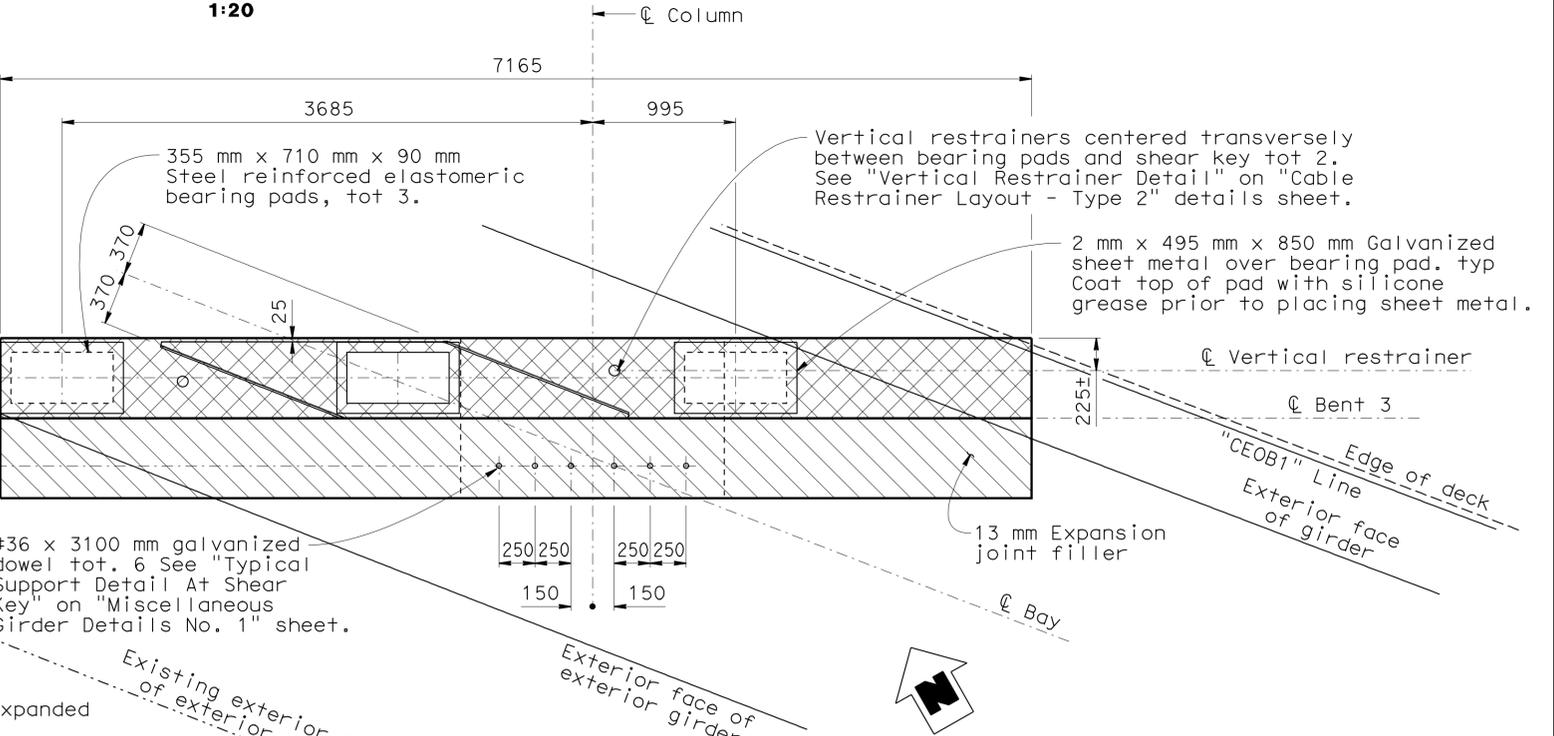
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	311	439

5-11-09	DATE
6-7-10	PLANS APPROVAL DATE

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- Notes:
- All hoops are "Ultimate" butt spliced continuous.
 - Only staggered "Ultimate" butt splices are allowed in main CIDH pile reinforcement.
 - For "Pile Data Table" see "Pile Data Table No. 3" sheet.
 - ∞ Indicates bundled bars.
 - Clearance for main column reinforcement including #25 tot 4 column bars.
 - For sections "A-A", "C-C", "D-D" and "E-E" see "Bent 3 Details No. 2" sheet.
 - Alternate cutoff lengths of main column reinforcement excluding #25 tot 4.
 - Cross slope not shown for clarity.



- Legend
- Indicates limits of expanded polystyrene.
 - Indicates limits of expansion joint filler.

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 3 DETAILS NO. 1
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES: 8-28-07, 5-12-09, 8-11-09, 9-21-07, 4-24-08, 6-3-08, 2-9-09, 2-24-09, 5-20-09	SHEET 74 OF 134

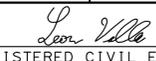
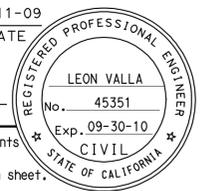
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

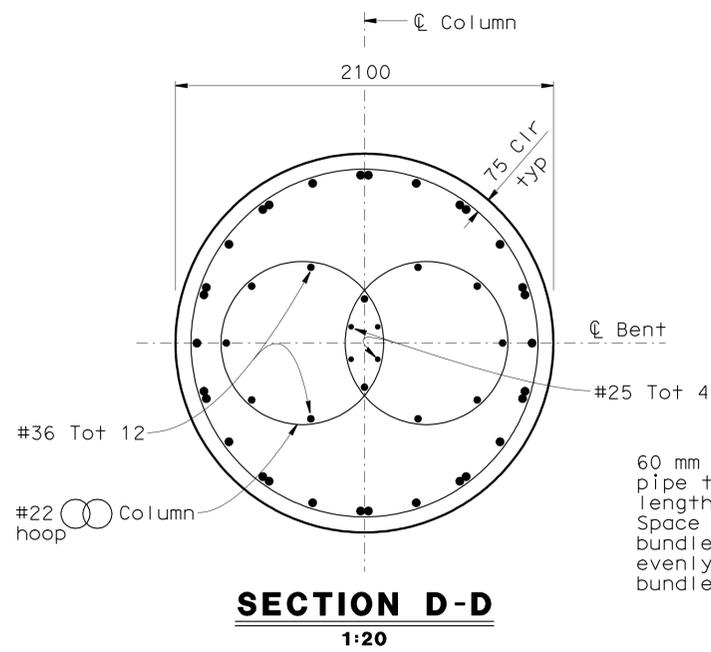
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FILE => 53-1253-2h-bnt03a.dgn

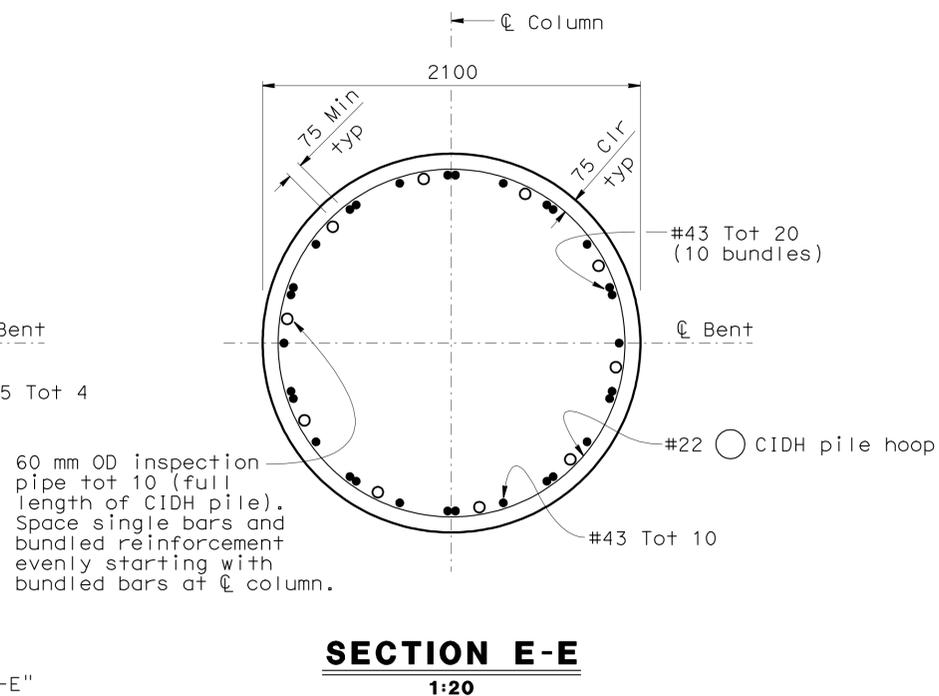
STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
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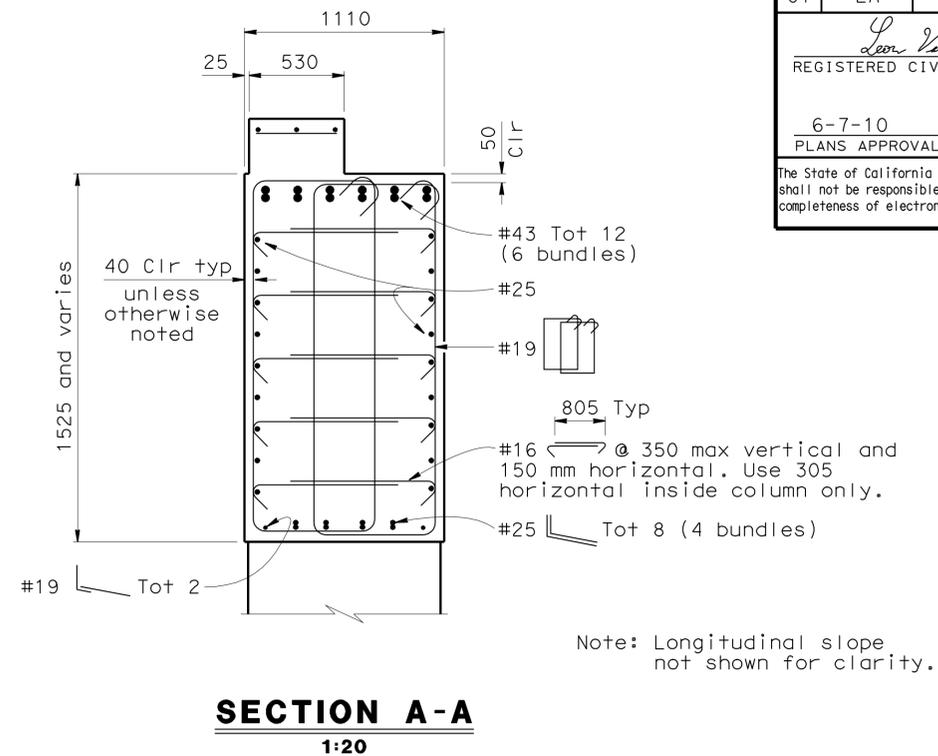
 REGISTERED CIVIL ENGINEER DATE 5-11-09		
PLANS APPROVAL DATE 6-7-10		
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>		



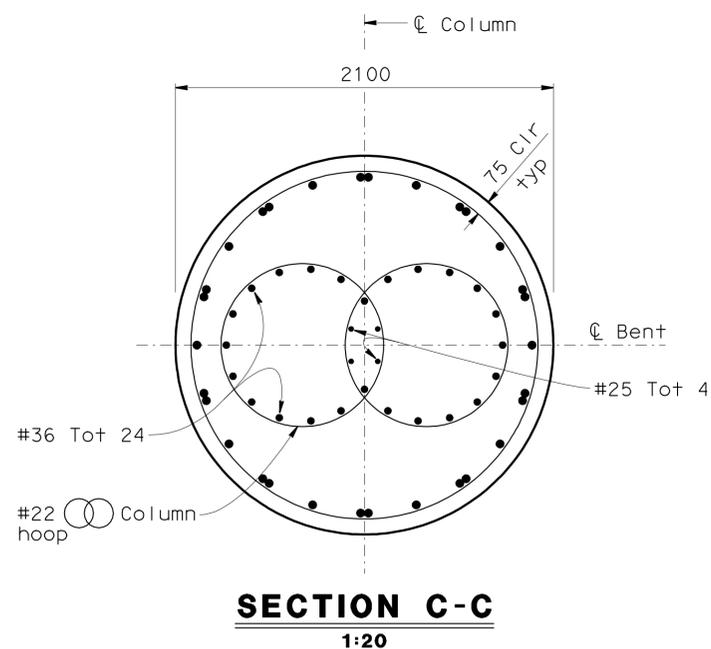
Note: For details not shown see "Section E-E"



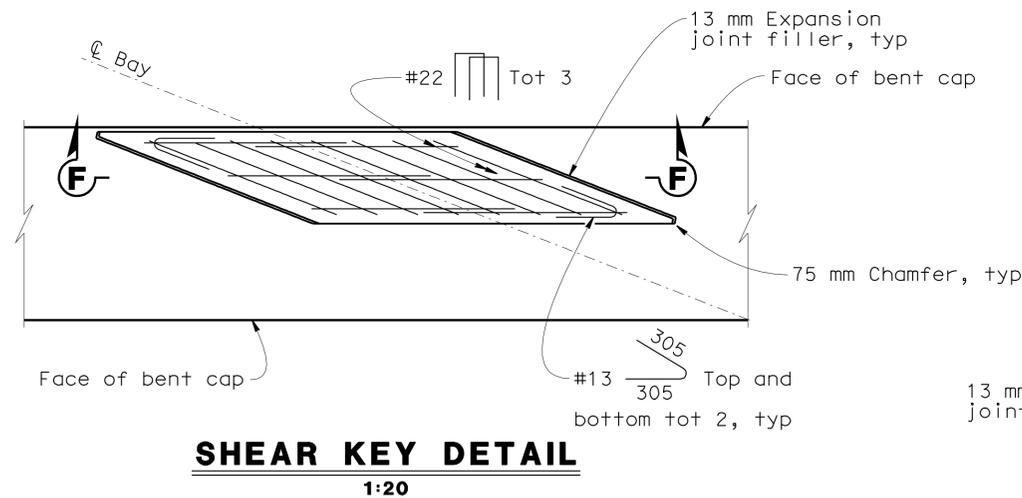
60 mm OD inspection pipe tot 10 (full length of CIDH pile). Space single bars and bundled reinforcement evenly starting with bundled bars at \varnothing column.



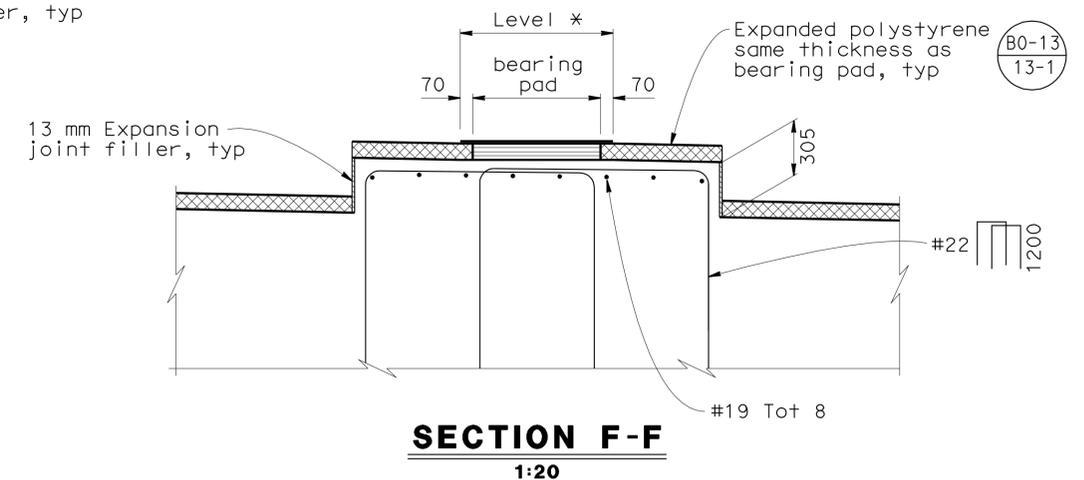
Note: Longitudinal slope not shown for clarity.



Note: For details not shown see "Section E-E"



Note: Shear key must be constructed monolithically.



* Level both transversely and longitudinally



DESIGN	BY M. Kattaa	CHECKED W. A./L. Valla
DETAILS	BY Various	CHECKED W. A./L. Valla
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
BENT 3 DETAILS NO. 2

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



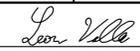
CU 07
EA 241301

REVISION DATES	6-28-07	3-3-09	3-28-09	3-30-09	4-14-08	4-21-08	6-3-08	6-30-08	2-3-09
SHEET	75								
OF	134								

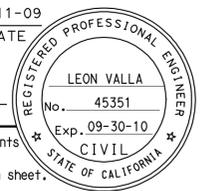
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USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 16:41

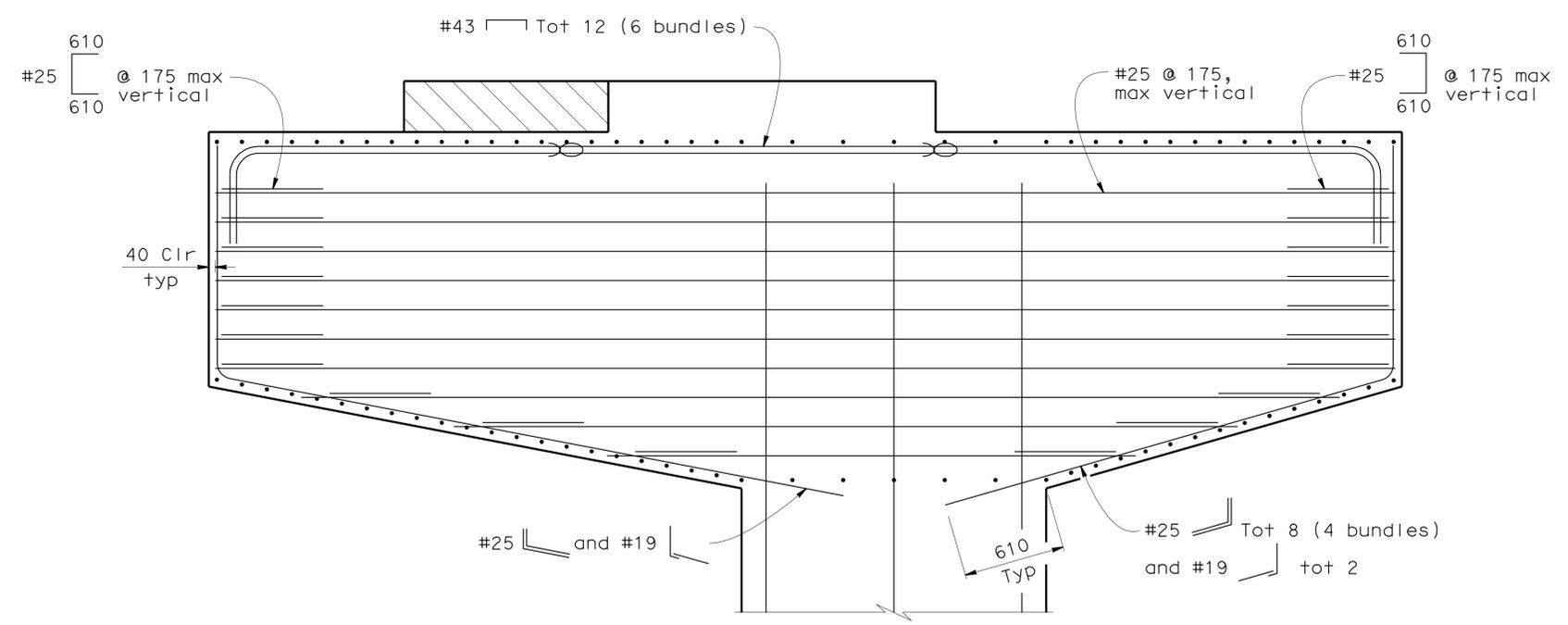
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	313	439

 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE

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 Indicates limits of expansion joint filler



SECTION A-A
1:20

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 3 DETAILS NO. 3	
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76		
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa					
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
						REVISION DATES 2-3-09 5-12-09	SHEET 76 OF 134

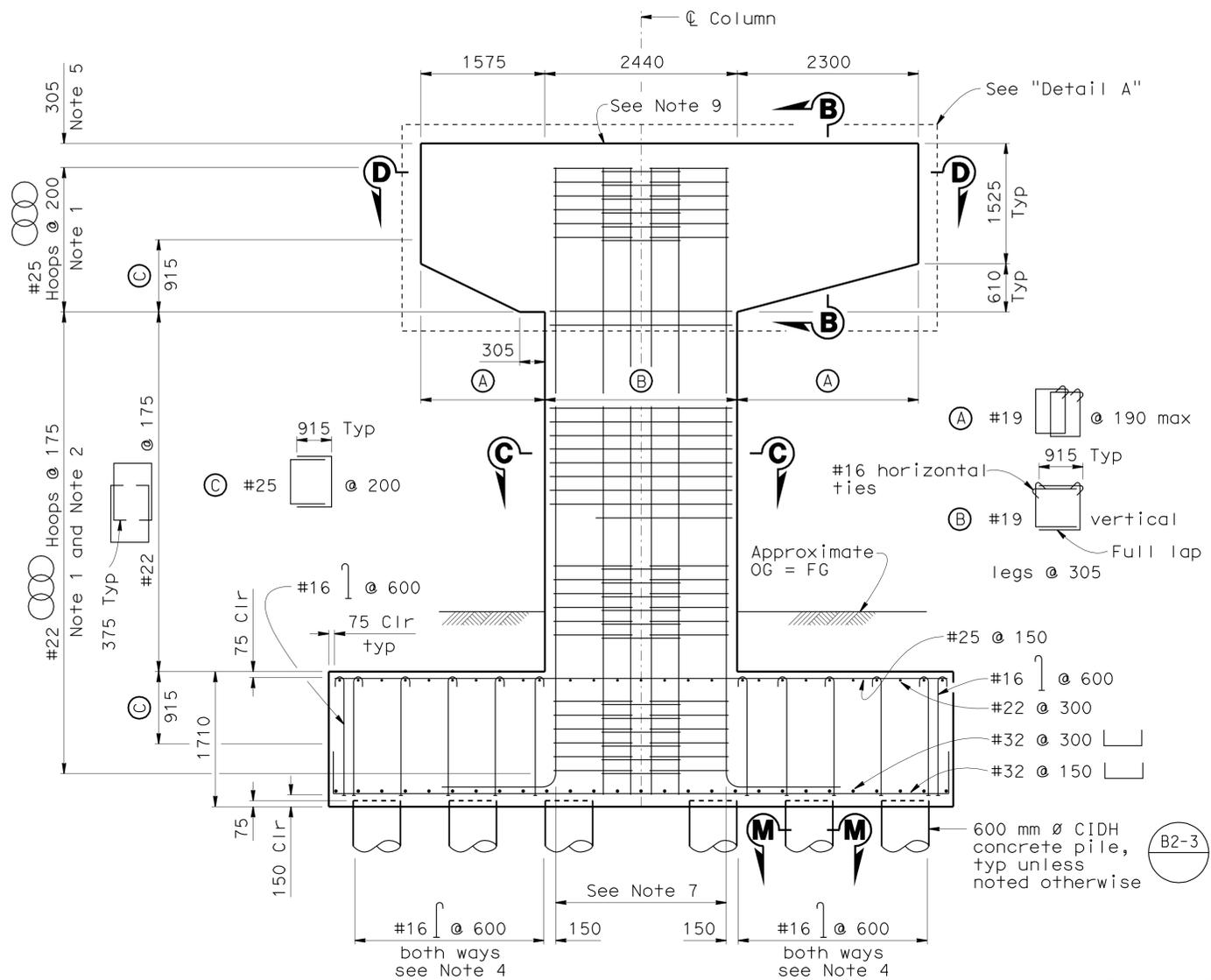
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STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

USERNAME => hrttght DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 16:41

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	314	439

REGISTERED CIVIL ENGINEER DATE 5-11-09
 LEON VALLA No. 45351 Exp. 09-30-10
 PLANS APPROVAL DATE 6-7-10
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ELEVATION
1:40

Note: Existing piles not shown for clarity.

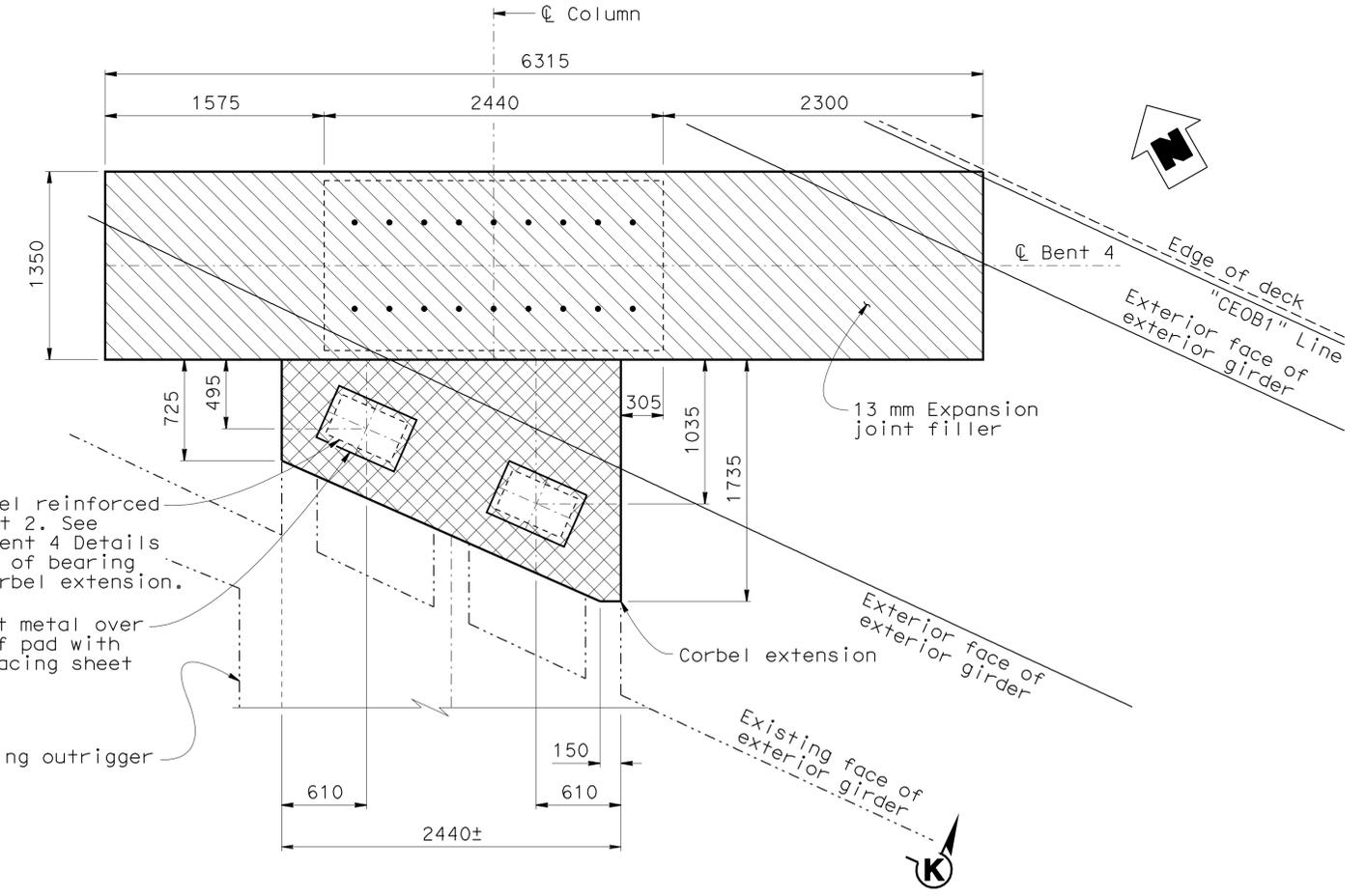
305 mm x 510 mm x 75 mm Steel reinforced elastomeric bearing pads tot 2. See "Bearing Pad Details" on "Bent 4 Details No. 3" sheet. Orient length of bearing pads parallel to face of corbel extension.

405 mm x 610 mm x 2 mm sheet metal over bearing pad typ. Coat top of pad with silicone grease prior to placing sheet metal.

- Notes:
- All hoops are "Ultimate" butt spliced continuous.
 - No splices allowed in main column reinforcement including #25 tot 12.
 - For "Pile Data Table" see "Pile Data Table No. 3" sheet.
 - See "Stirrup Tie Bar Detail" on "Bent 4 Details No. 3" sheet.
 - Clearance for main column reinforcement including #25 tot 12.
 - For "Section B-B" and "Section D-D" see "Bent 4 Details No. 2" sheet.
 - Limits of #16 @ 600 both ways omitted under column only.
 - For "Section C-C" see "Bent 4 Details No. 4" sheet.
 - Cross slope not shown for clarity.
 - For "View K-K" see "Bent 4 Details No. 3" sheet.
 - For "Section M-M" see "Bent 4 Details No. 5" sheet.
 - For pay limits of structure excavation and backfill see "Bent 5 Details No. 8" sheet.

Legend

- Indicates limits of expanded polystyrene.
- Indicates limits of expansion joint filler.



PLAN
1:25

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY M. Kattaa	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 4 DETAILS NO. 1
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 8-13-07, 3-18-08, 4-1-08, 5-1-08, 8-11-08, 10-15-08, 2-17-09, 2-23-09, 3-3-09	SHEET 77 OF 134

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS: 0 10 20 30 40 50 60 70 80 90 100

FILE => 53-1253-2h-bnt04a.dgn

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
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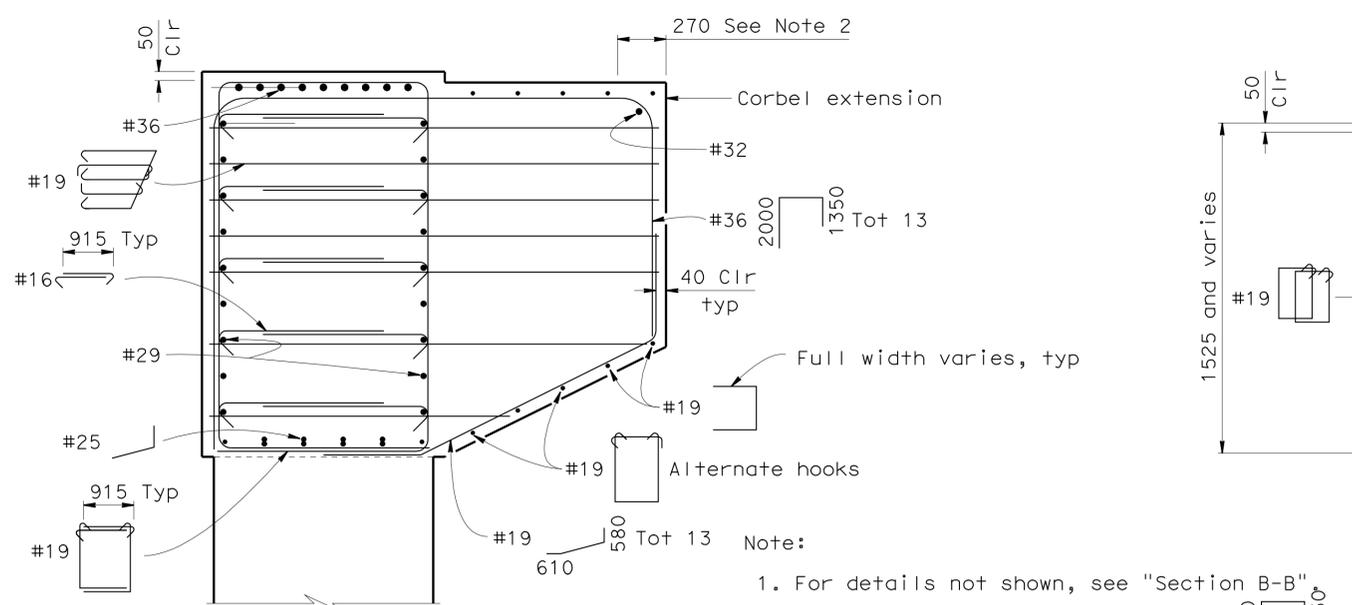
5-11-09
DATE

REGISTERED CIVIL ENGINEER

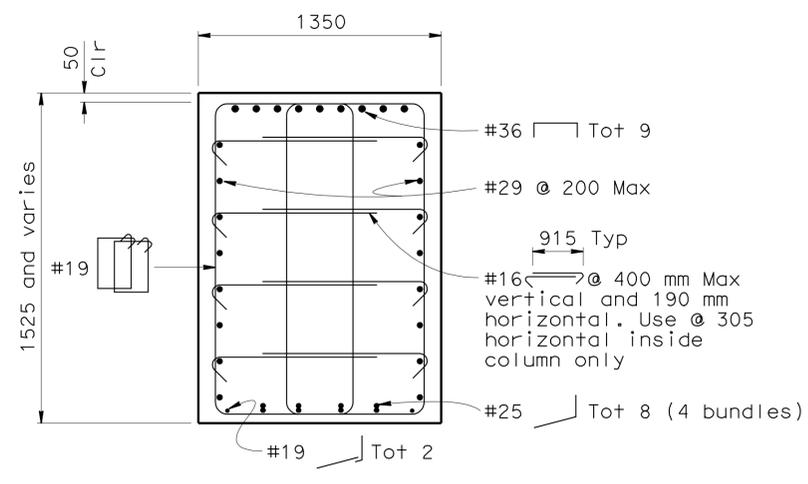
6-7-10
PLANS APPROVAL DATE

LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

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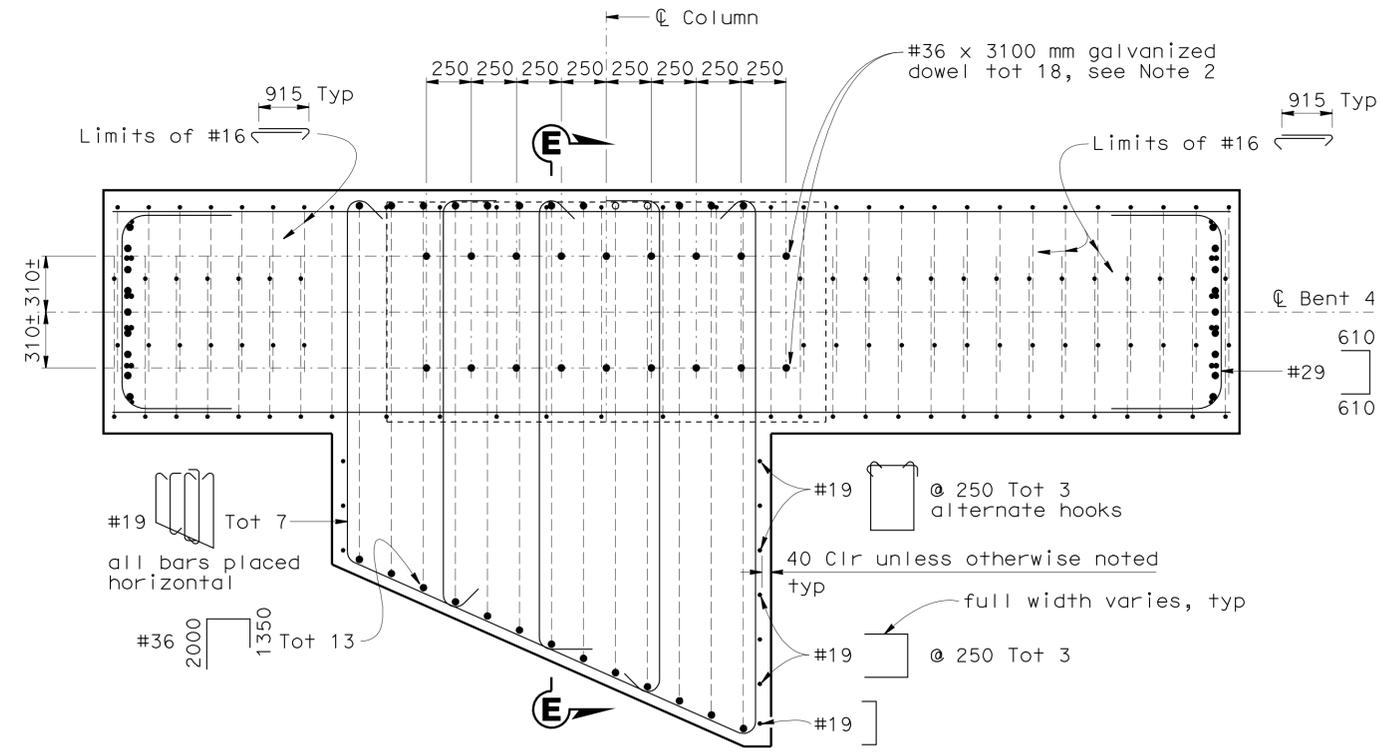


SECTION E-E
1:20

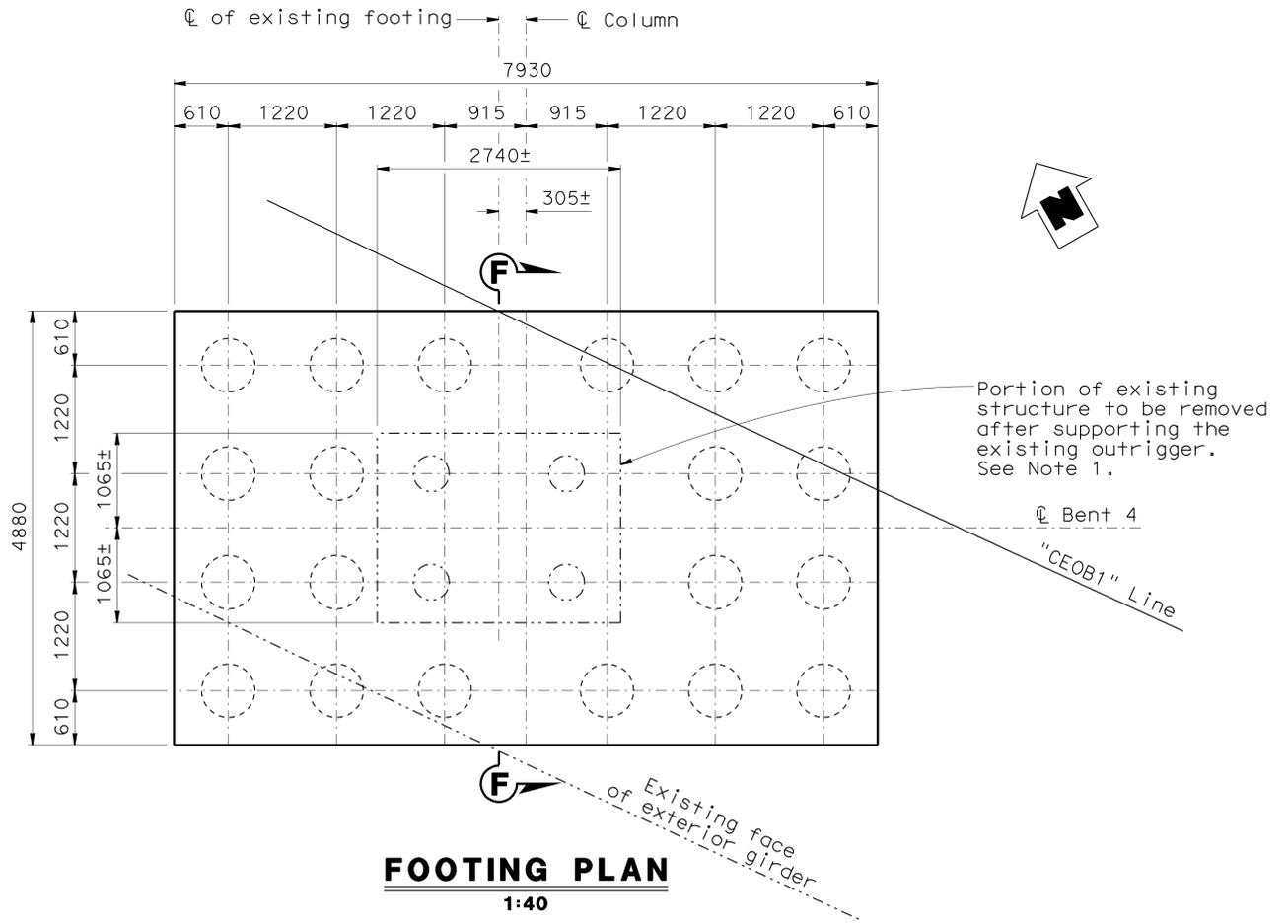


SECTION B-B
1:20

- Notes:
- For "Section F-F" and "Bridge Removal And Temporary Support Detail" see "Bent 4 Details No. 5" sheet.
 - See "Typical Support Detail At Shear Key" on "Miscellaneous Girder Details No. 1" sheet.



SECTION D-D
1:20



FOOTING PLAN
1:40

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

Note: #16 bars omitted at corbel location for clarity.

	DESIGN	BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 4 DETAILS NO. 2			
	DETAILS	BY Various	CHECKED W. A./L. Valla			KILOMETER POST	40.76				
	QUANTITIES	BY F. Tannous	CHECKED M. Kattaa			CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: x-small;">REVISION DATES</th> <th style="font-size: x-small;">SHEET</th> <th style="font-size: x-small;">OF</th> </tr> <tr> <td style="font-size: x-small;"> 6-18-07 6-28-07 5-1-08 6-9-08 6-18-08 7-14-08 5-3-09 5-18-09 5-7-09 </td> <td style="text-align: center; font-size: small;">78</td> <td style="text-align: center; font-size: small;">134</td> </tr> </table>	REVISION DATES	SHEET
REVISION DATES	SHEET	OF									
6-18-07 6-28-07 5-1-08 6-9-08 6-18-08 7-14-08 5-3-09 5-18-09 5-7-09	78	134									

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

FILE => 53-1253-2h-bnt04b.dgn

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	316	439

5-11-09
DATE

REGISTERED CIVIL ENGINEER

6-7-10
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER

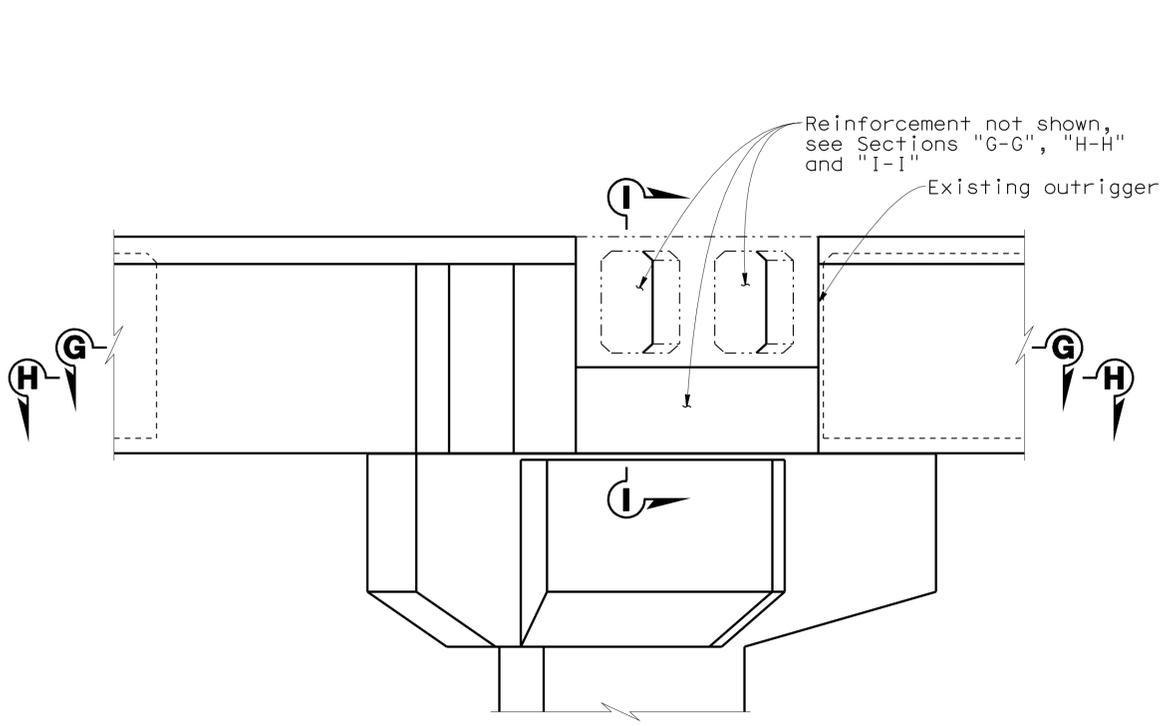
LEON VALLA

No. 45351

Exp. 09-30-10

CIVIL

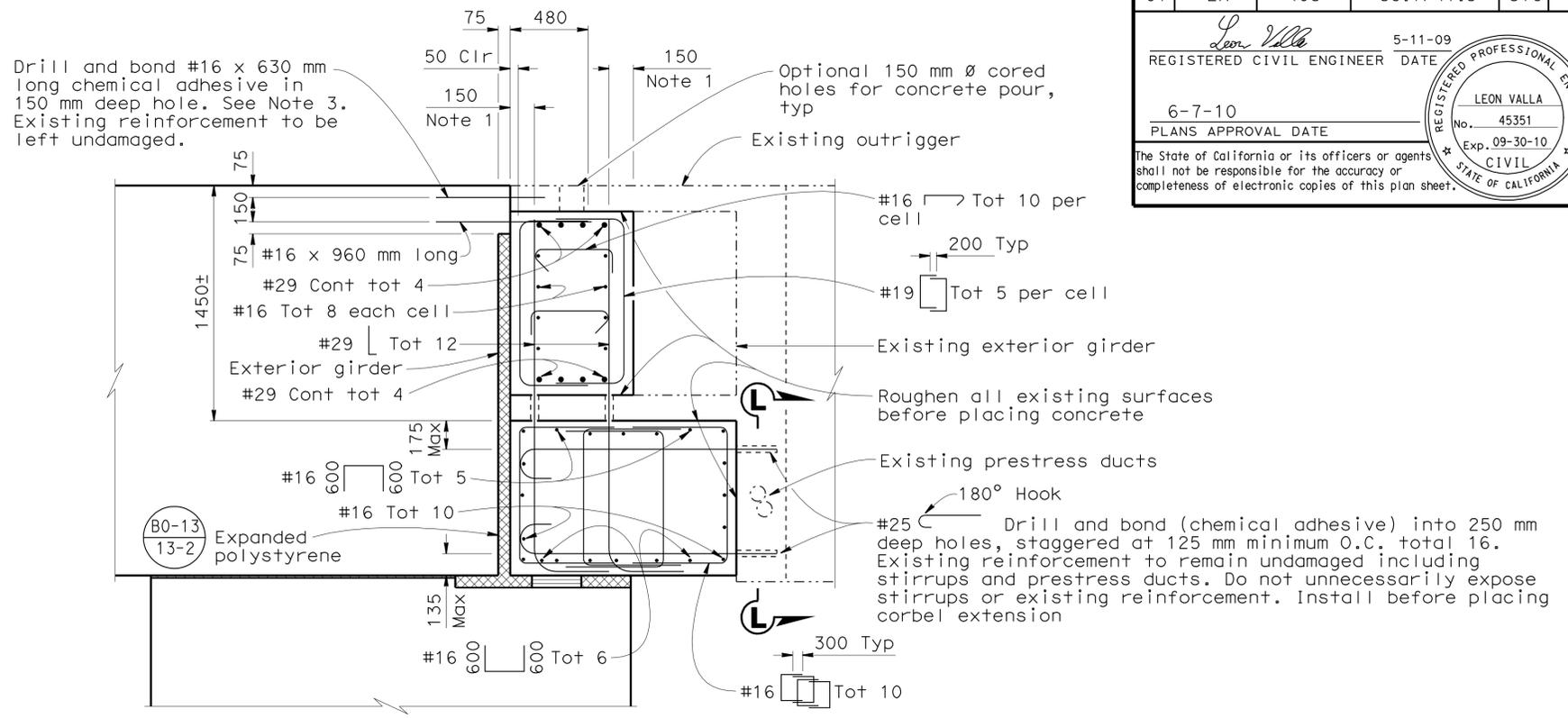
STATE OF CALIFORNIA



VIEW K-K

OUTRIGGER BOLSTER AT BENT 4

1:40

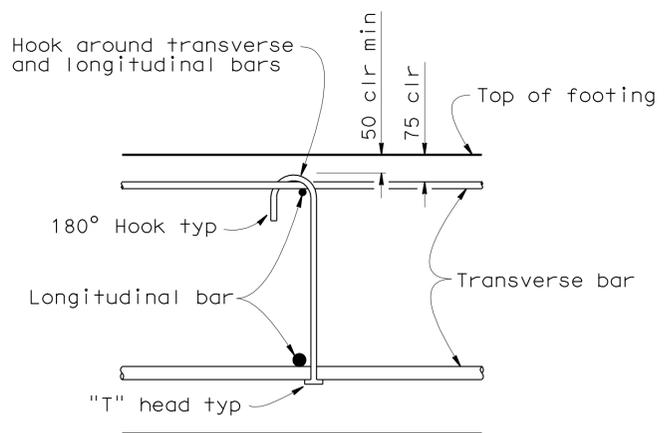


SECTION I-I

1:20

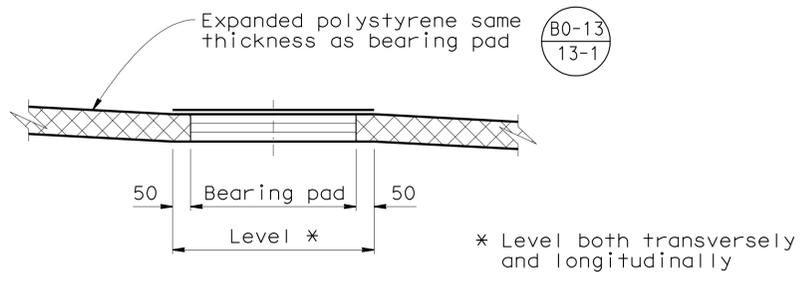
Legend

Indicates limits of expanded polystyrene.



STIRRUP TIE BAR DETAIL

No scale



BEARING PAD DETAIL

No scale

- Notes:
- Ø of #29 L reinforcement to face of concrete in 40 mm Ø cored holes. Pressure grout and install before placing corbel extensions.
 - For "Section G-G", "Section H-H" and "Section L-L" see "Bent 4 Details No. 4" sheet.
 - Stagger at 200 mm with #16 x 960 mm long bottom reinforcement. See "Section F-F" on "Girder Details No. 10" sheet along with Note 6 on "Girder Details No. 9" sheet.

NOTE:
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DESIGN	BY M. Kattaa	CHECKED W. Addlespurger
DETAILS	BY Various	CHECKED W. A./L. Valla
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

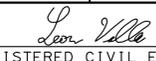
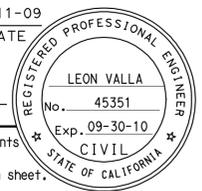
CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
BENT 4 DETAILS NO. 3

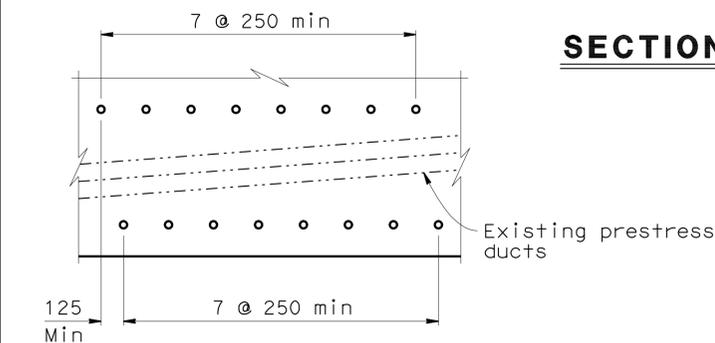
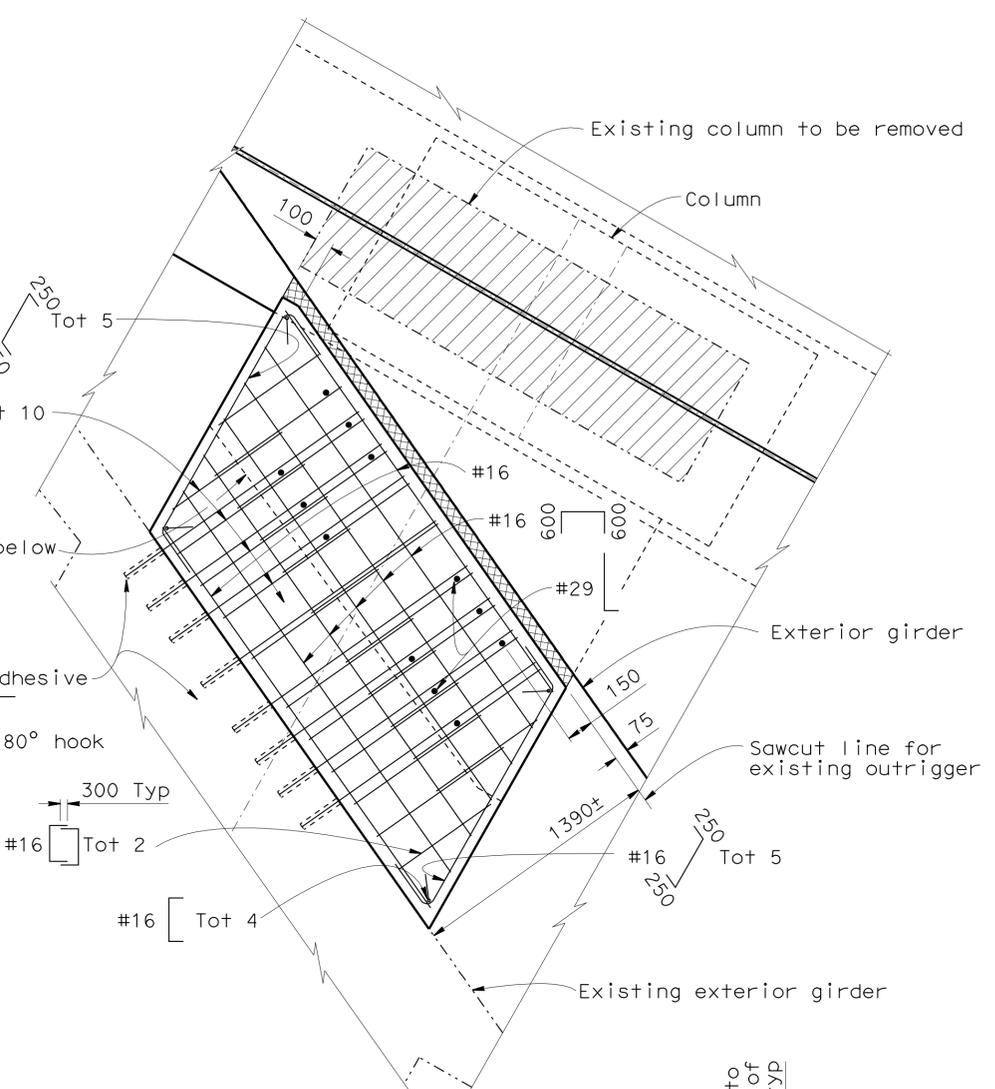
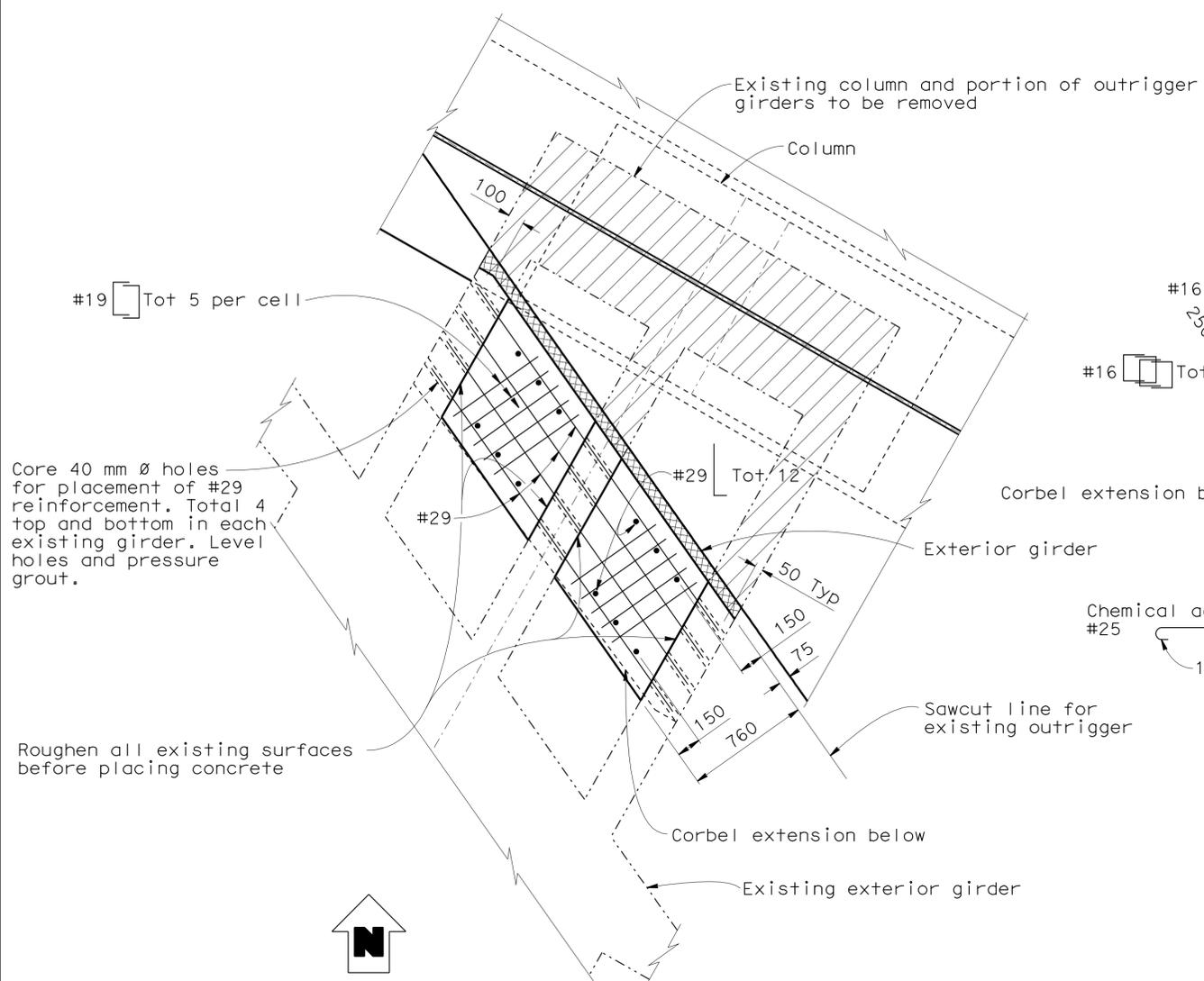
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	2-25-08 8-11-09 6-18-08 6-11-08 7-09-08 7-25-08 5-2-09 3-18-09 5-12-09	79	134

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	317	439
			5-11-09	DATE	
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			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>					

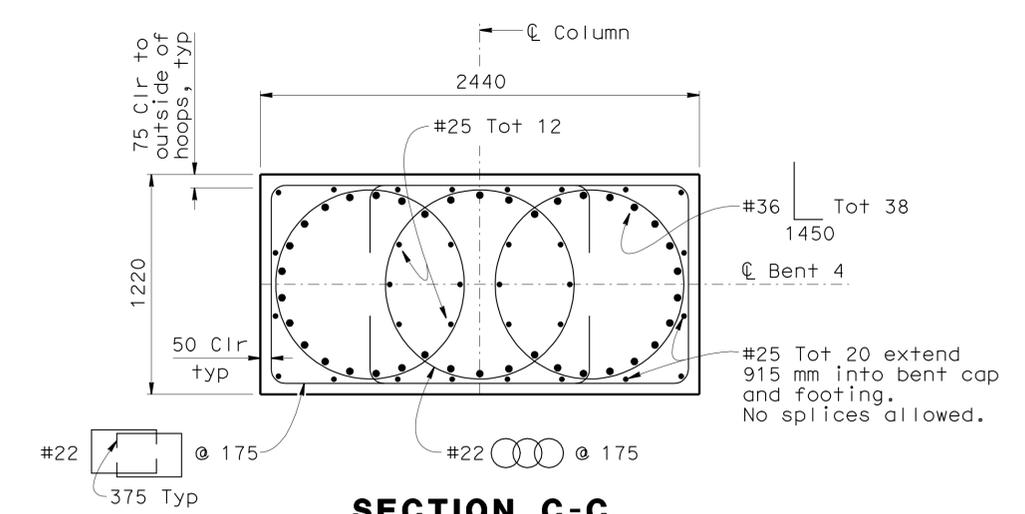


SECTION G-G

OUTRIGGER BOLSTER AT BENT 4
1:20

- Legend
-  Indicates limits of expanded polystyrene.
 -  Indicates bridge removal portion.

SECTION H-H



SECTION C-C
1:20

NOTE:
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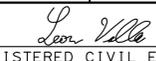
	DESIGN BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 4 DETAILS NO. 4
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	FILE => 53-1253-2h-bnt04d.dgn	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 2-20-08, 8-11-08, 5-1-08, 6-5-08, 2-28-09, 3-3-09, 3-18-09, 4-1-09, 5-12-09	SHEET 80 OF 134

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS: 0 10 20 30 40 50 60 70 80 90 100

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	318	439

		5-11-09
REGISTERED CIVIL ENGINEER	DATE	
6-7-10		
PLANS APPROVAL DATE		

LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

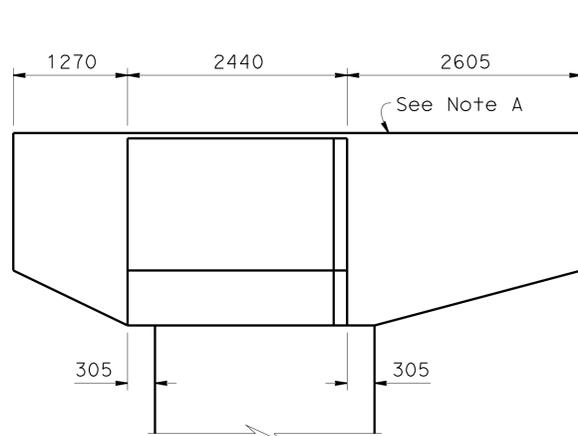
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Temporary Support Notes:

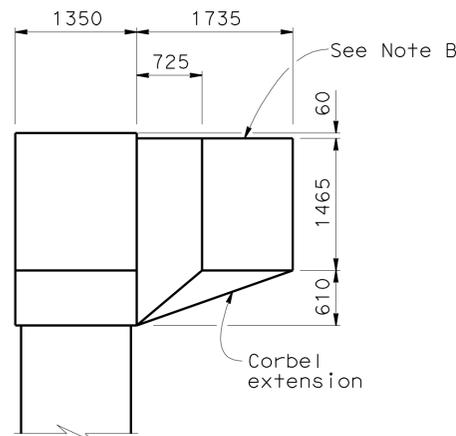
- Initial jacking loads are estimated forces that should be applied to the structure at jacking points before demolition to achieve a zero load condition in the columns. Initial jacking loads shown are due to existing structure design dead load only.
- Minimum temporary support design load is equal to 1.5 times initial jacking load (design dead load) plus 1.0 times AASHTO live load with 30% impact.
- The minimum lateral temporary support design value for the horizontal load shall be 10% of the initial jacking load.
- The allowable concrete bearing pressure at jacking point is 1500 psi.
- Jacking loads must be transferred evenly with load path to and throughout all existing outrigger girders and diaphragm in CIP P/S concrete box girder.

Temporary Support Loads		
location	Initial Jacking Load (KN)	Minimum Temporary Support Design Load (KN)
Bent 4	1900	3800
Bent 5	2100	4150

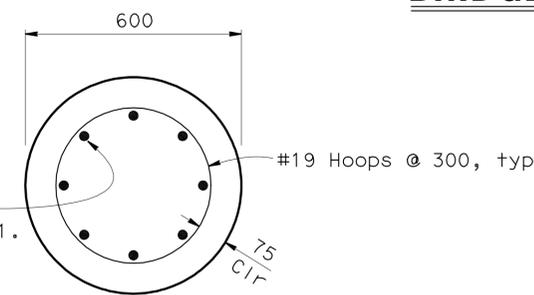
Saw cut line per "Bent 4 Details No. 4" sheet and "Bent 5 Details No. 7" sheet. Saw cut existing outrigger deck, soffit and both faces of exterior and interior girders.



PARTIAL ELEVATION
1:40



SIDE VIEW
1:40



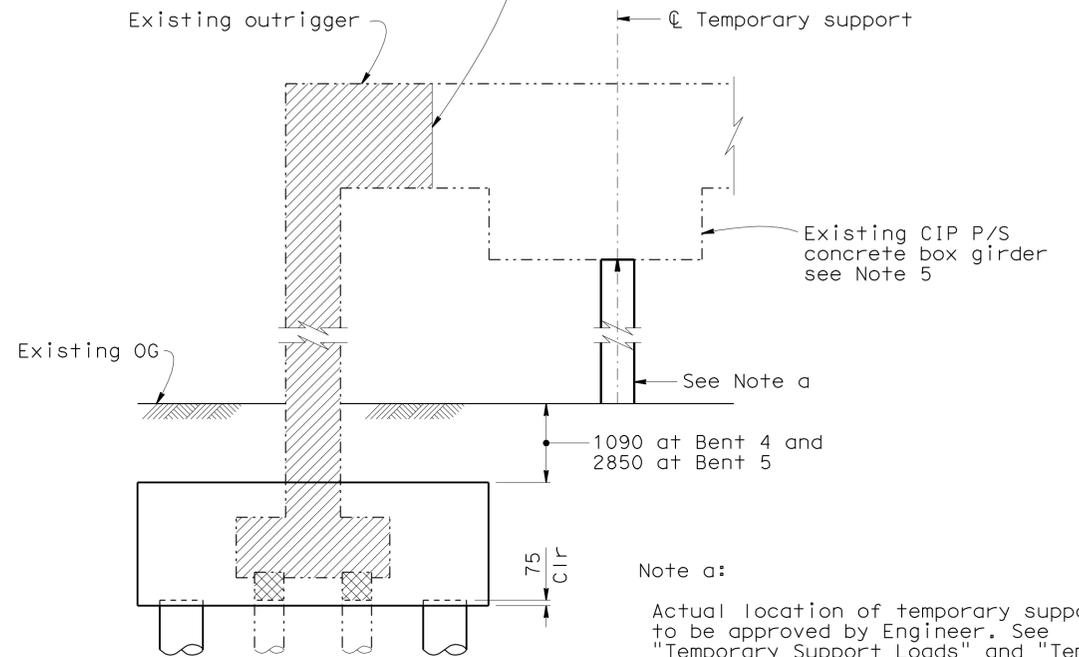
SECTION M-M
1:10

Notes:

- Detail to be used in lieu of Standard Plan if longitudinal pile reinforcement requires splicing.
- "Section M-M" taken from "Bent 4 Details No. 1" sheet.

B2-3

SECTION F-F
BRIDGE REMOVAL AND TEMPORARY SUPPORT DETAIL
No scale



-  Indicates bridge removal portion, typical.
-  Indicates existing 400 mm ± pile removal portion.

Note a:
Actual location of temporary support to be approved by Engineer. See "Temporary Support Loads" and "Temporary Support Notes".

Notes:

- Cross slope not shown for clarity.
- Longitudinal slope not shown for clarity.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



DESIGN	BY M. Kattaa	CHECKED W. A./L. Valla
DETAILS	BY Various	CHECKED W. A./L. Valla
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE	
CENTINELA AVE UC (WIDEN)	
BENT 4 DETAILS NO. 5	

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



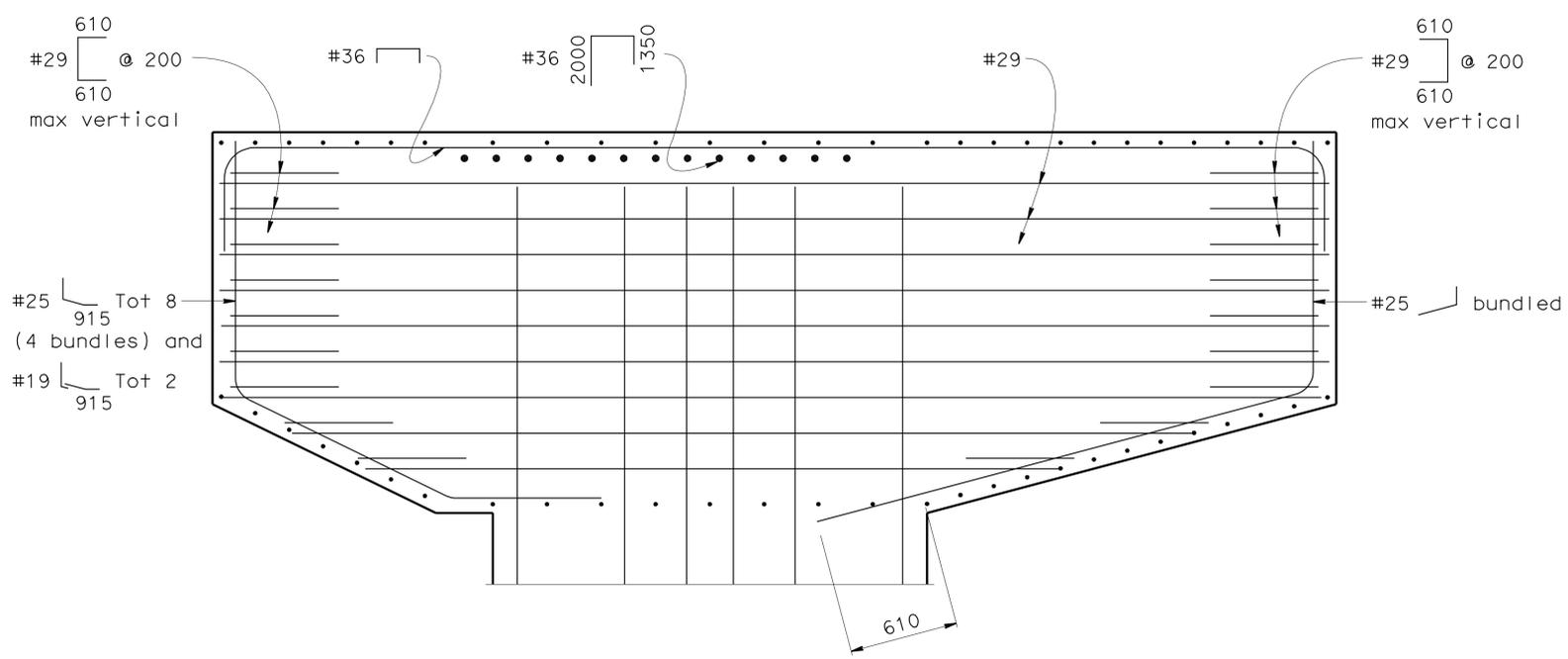
CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

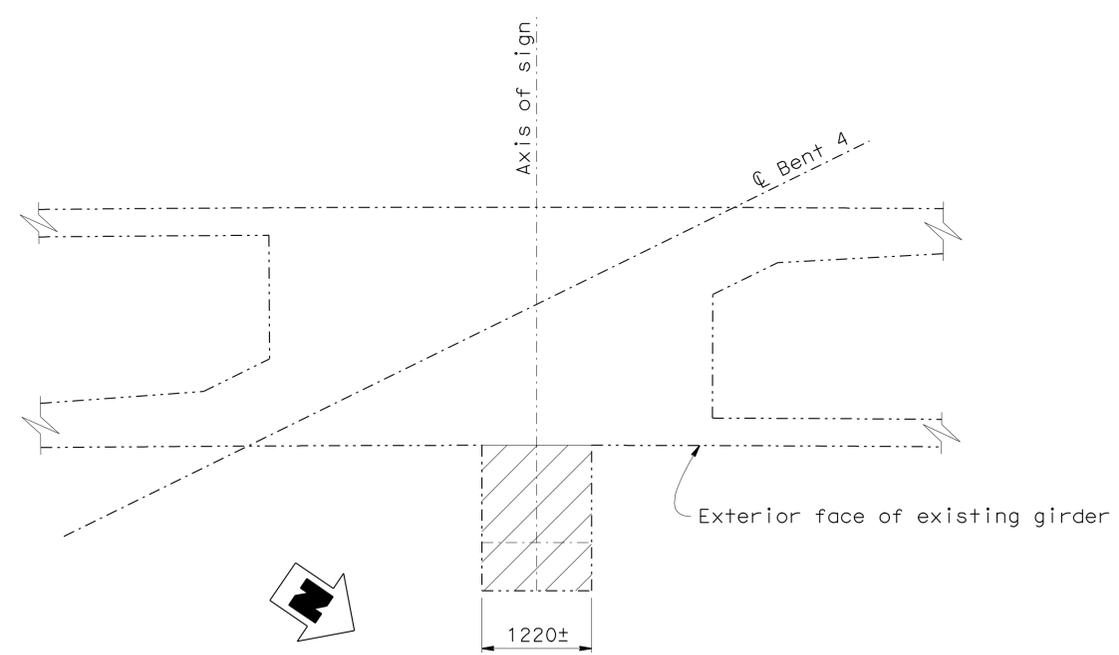
REVISION DATES	SHEET	OF
2-28-08 3-18-08 3-30-08 5-12-08 6-14-08 7-14-08 8-14-08 9-24-08 10-24-08	81	134

DIST	COUNTY	ROUTE	KILOMETER TOTAL PROJECT	POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
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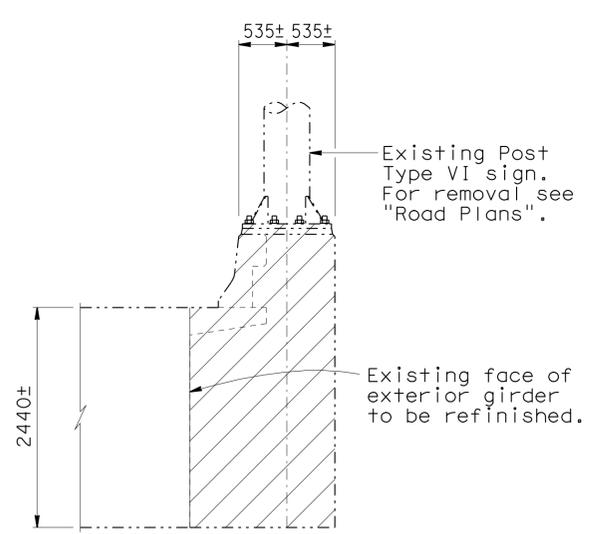
Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
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DETAIL A
1:20



PLAN



ELEVATION

EXISTING SIGN PEDESTAL REMOVAL DETAILS
1:40

Indicates limits of bridge removal portion.

NOTE:
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DESIGN	BY M. Kattaa	CHECKED W. A./L. Valla
DETAILS	BY Various	CHECKED W. A./L. Valla
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
BENT 4 DETAILS NO. 6

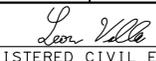
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 82 OF 134
	6-11-08, 2-3-09, 2-24-09, 3-3-09, 5-12-09	

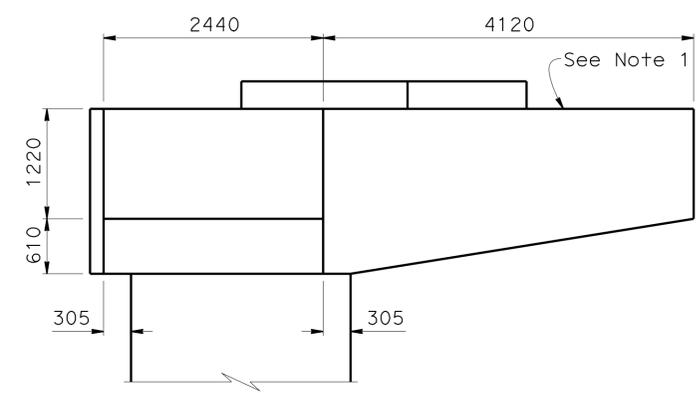
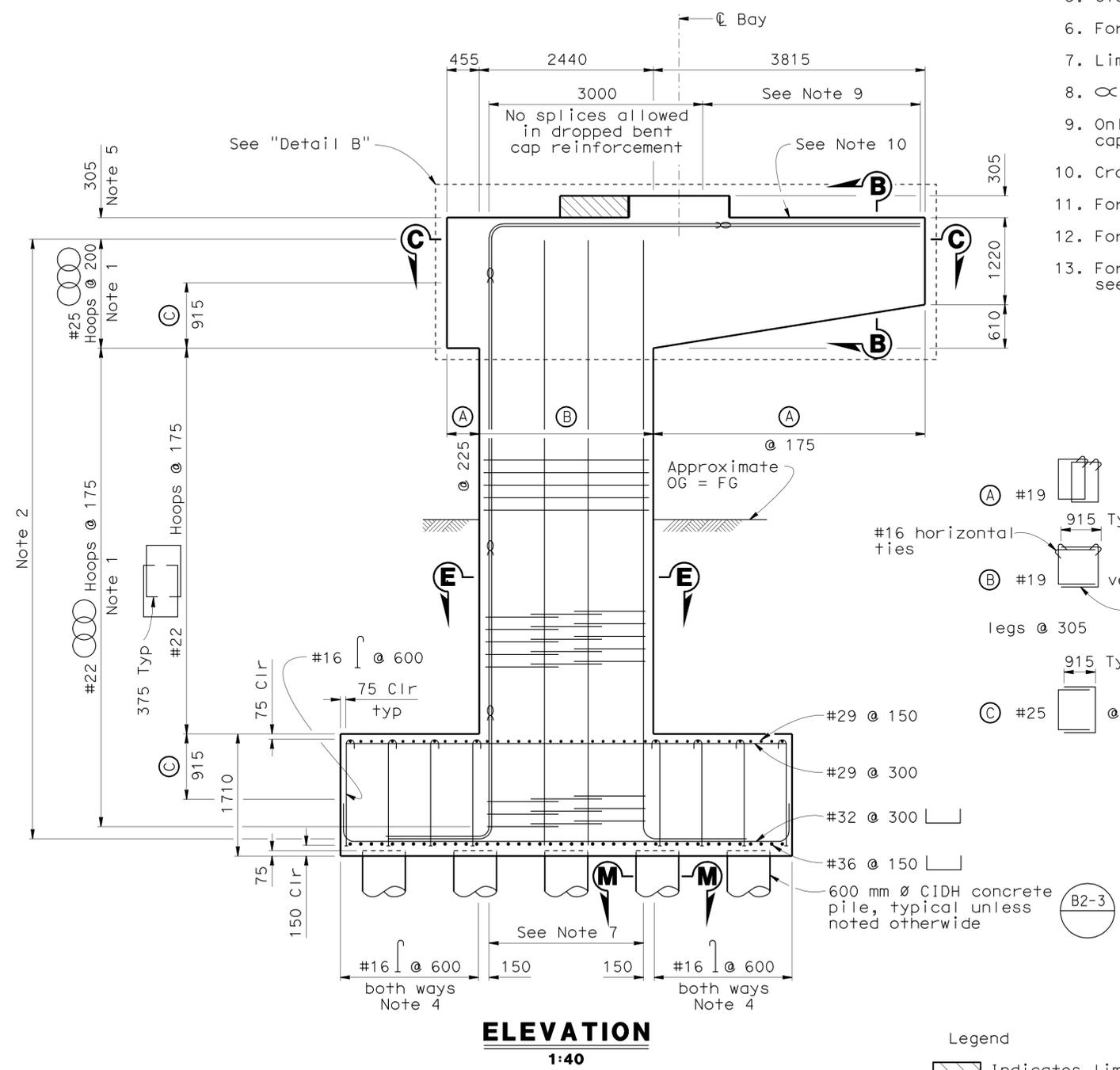
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	320	439

		5-11-09
REGISTERED CIVIL ENGINEER	DATE	
6-7-10		
PLANS APPROVAL DATE		

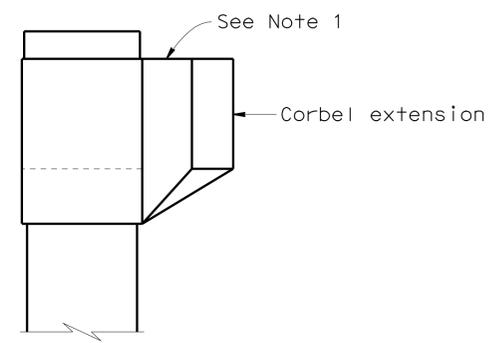
LEON VALLA
No. 45351
Exp. 09-30-10
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STATE OF CALIFORNIA

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- Notes:
- All hoops are "Ultimate" butt spliced continuous.
 - No splices allowed in main column reinforcement including #25 tot 12.
 - For "Pile Data Table" see "Pile Data Table No. 3" sheet.
 - See "Stirrup Tie Bar Detail" on "Bent 4 Details No. 3" sheet.
 - Clearance for main column reinforcement including #25 tot 12.
 - For Sections "B-B", "C-C", and "E-E", see "Bent 5 Details No. 3" sheet.
 - Limits of #16 @ 600 both ways omitted under column only.
 - ∞ Indicates bundled bars.
 - Only staggered "Ultimate" butt splices are allowed in continuous dropped bent cap reinforcement.
 - Cross slope not shown for clarity.
 - For "Section M-M" see "Bent 4 Details No. 5" sheet.
 - For "Detail B" see "Bent 5 Details No. 4" sheet.
 - For pay limits of structure excavation and backfill see "Bent 5 Details No. 8" sheet.



PARTIAL ELEVATION



SIDE VIEW

- Notes:
- Cross slope and longitudinal slope not shown for clarity.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

Note: Existing piles not shown for clarity.

	DESIGN BY M. Kattaa	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 5 DETAILS NO. 1
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa				

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN	ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1"> <tr> <th>REVISION DATES</th> <th>SHEET</th> <th>OF</th> </tr> <tr> <td>1-28-07 8-1-08 3-11-09 3-18-09 4-1-09 5-12-09 8-12-09 10-15-09 1-20-08</td> <td>83</td> <td>134</td> </tr> </table>	REVISION DATES	SHEET	OF	1-28-07 8-1-08 3-11-09 3-18-09 4-1-09 5-12-09 8-12-09 10-15-09 1-20-08	83	134
REVISION DATES	SHEET	OF								
1-28-07 8-1-08 3-11-09 3-18-09 4-1-09 5-12-09 8-12-09 10-15-09 1-20-08	83	134								

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

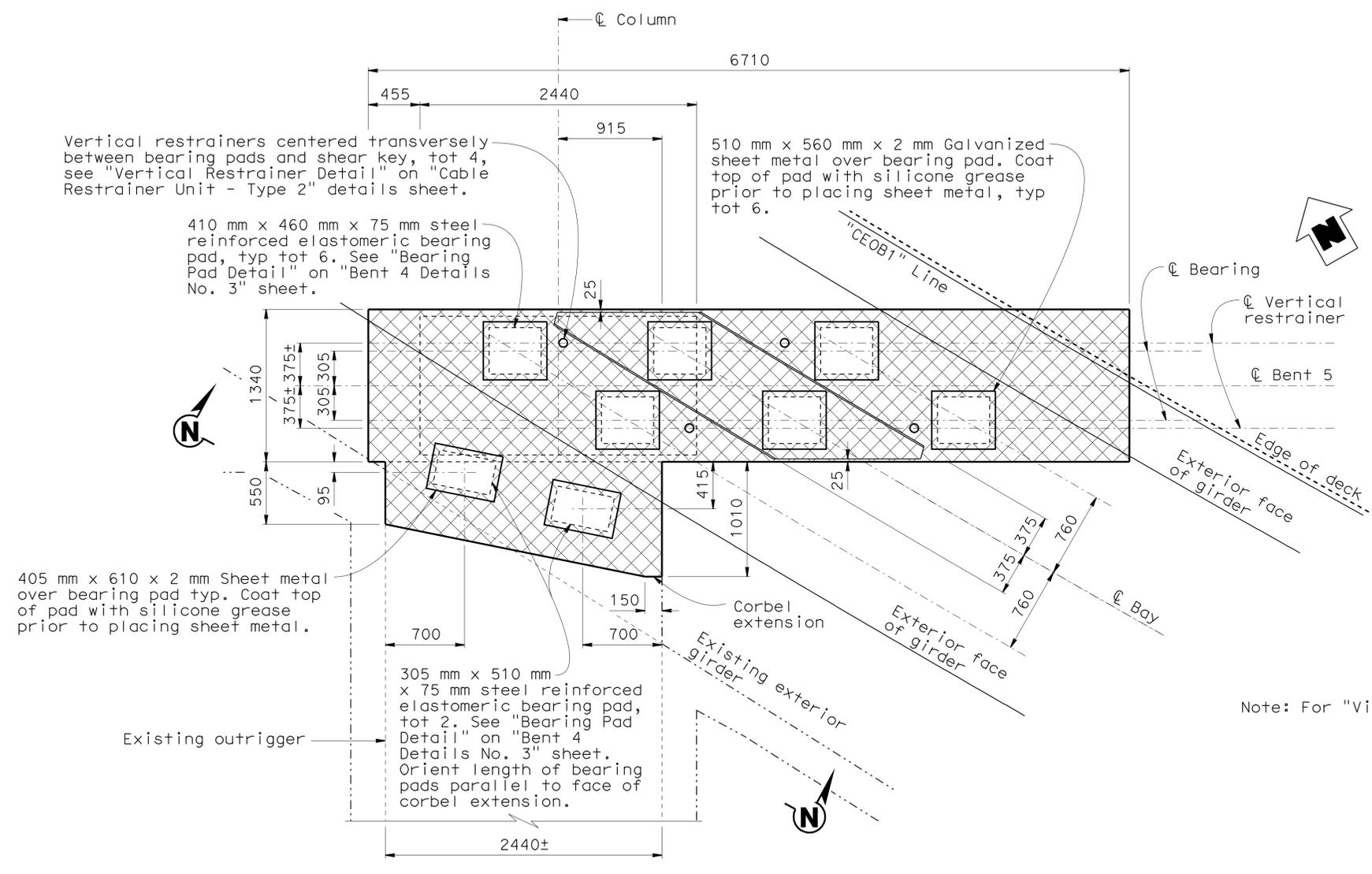
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	321	439

5-11-09
 REGISTERED CIVIL ENGINEER DATE

6-7-10
 PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA



Note: For "View N-N" see "Bent 5 Details No. 6" sheet.

Legend

Indicates limits of expanded polystyrene.

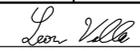
PLAN
1:25

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 5 DETAILS NO. 2													
	DETAILS	BY Various	CHECKED W. A./L. Valla			KILOMETER POST	40.76														
	QUANTITIES	BY F. Tannous	CHECKED M. Kattaa																		
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS				CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1" style="font-size: 8px;"> <tr> <th>REVISION DATES</th> </tr> <tr> <td>1-28-07</td> </tr> <tr> <td>1-28-08</td> </tr> <tr> <td>4-30-08</td> </tr> <tr> <td>6-4-08</td> </tr> <tr> <td>3-12-09</td> </tr> <tr> <td>3-18-09</td> </tr> <tr> <td>3-18-09</td> </tr> <tr> <td>3-20-09</td> </tr> <tr> <td>5-12-09</td> </tr> </table>	REVISION DATES	1-28-07	1-28-08	4-30-08	6-4-08	3-12-09	3-18-09	3-18-09	3-20-09	5-12-09	SHEET OF 84 134
REVISION DATES																					
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STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

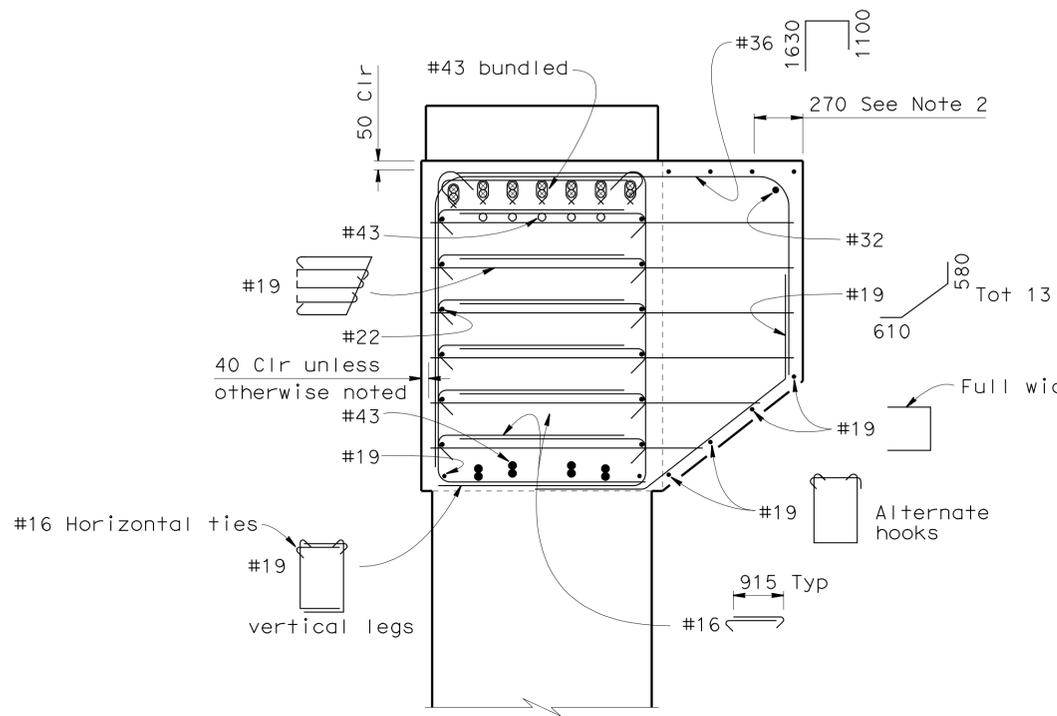
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	323	439

 5-11-09
 REGISTERED CIVIL ENGINEER DATE

6-7-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
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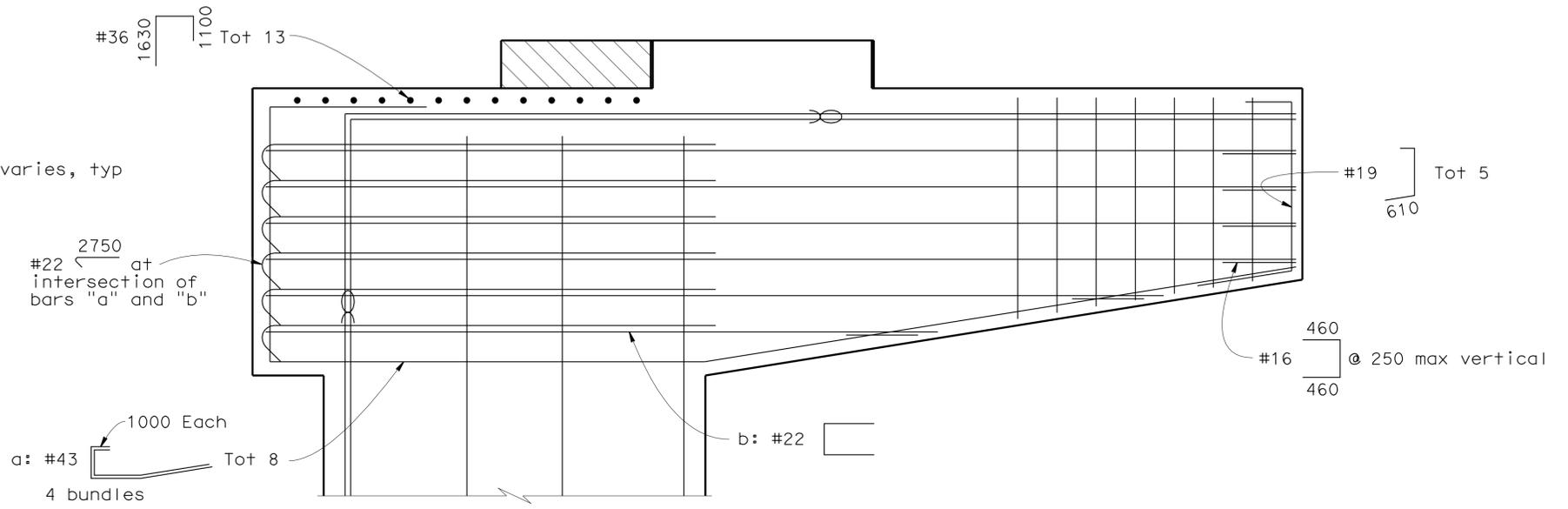
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SECTION D-D
1:20

Note:

- For details not shown, see "Section B-B".
- Horizontal straight portion of #36  must start no more than the dimension shown normal from the face of corbel extension.



DETAIL B
1:20

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 5 DETAILS NO. 4							
	DETAILS	BY Various	CHECKED W. A./L. Valla			KILOMETER POST	40.76								
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS		CU 07	EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: x-small;">REVISION DATES</th> <th style="font-size: x-small;">SHEET</th> <th style="font-size: x-small;">OF</th> </tr> <tr> <td style="font-size: x-small;"> 2-20-08 3-18-09 3-20-09 3-21-09 3-30-09 4-1-09 08-08-08 3-17-09 3-18-09 </td> <td style="text-align: center; font-size: x-small;">86</td> <td style="text-align: center; font-size: x-small;">134</td> </tr> </table>	REVISION DATES	SHEET	OF	2-20-08 3-18-09 3-20-09 3-21-09 3-30-09 4-1-09 08-08-08 3-17-09 3-18-09	86	134
REVISION DATES	SHEET	OF													
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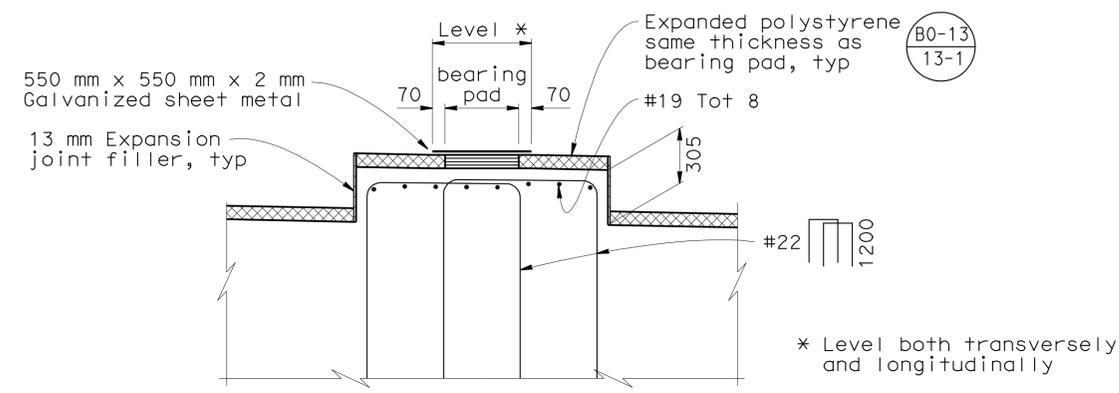
STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

USERNAME => hrrtght DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 16:43

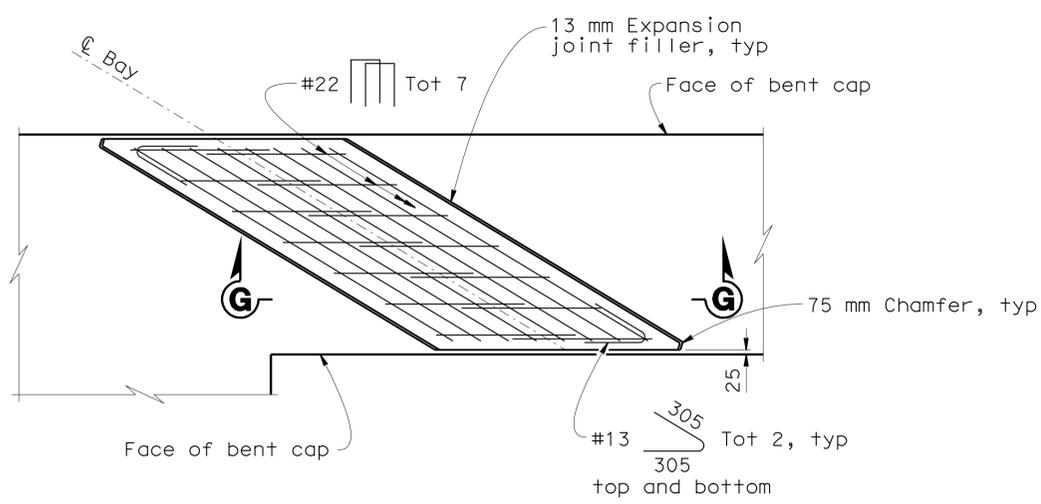
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	324	439

REGISTERED CIVIL ENGINEER DATE 5-11-09
 PLANS APPROVAL DATE 6-7-10
 LEON VALLA
 No. 45351
 Exp. 09-30-10
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SECTION G-G
1:20

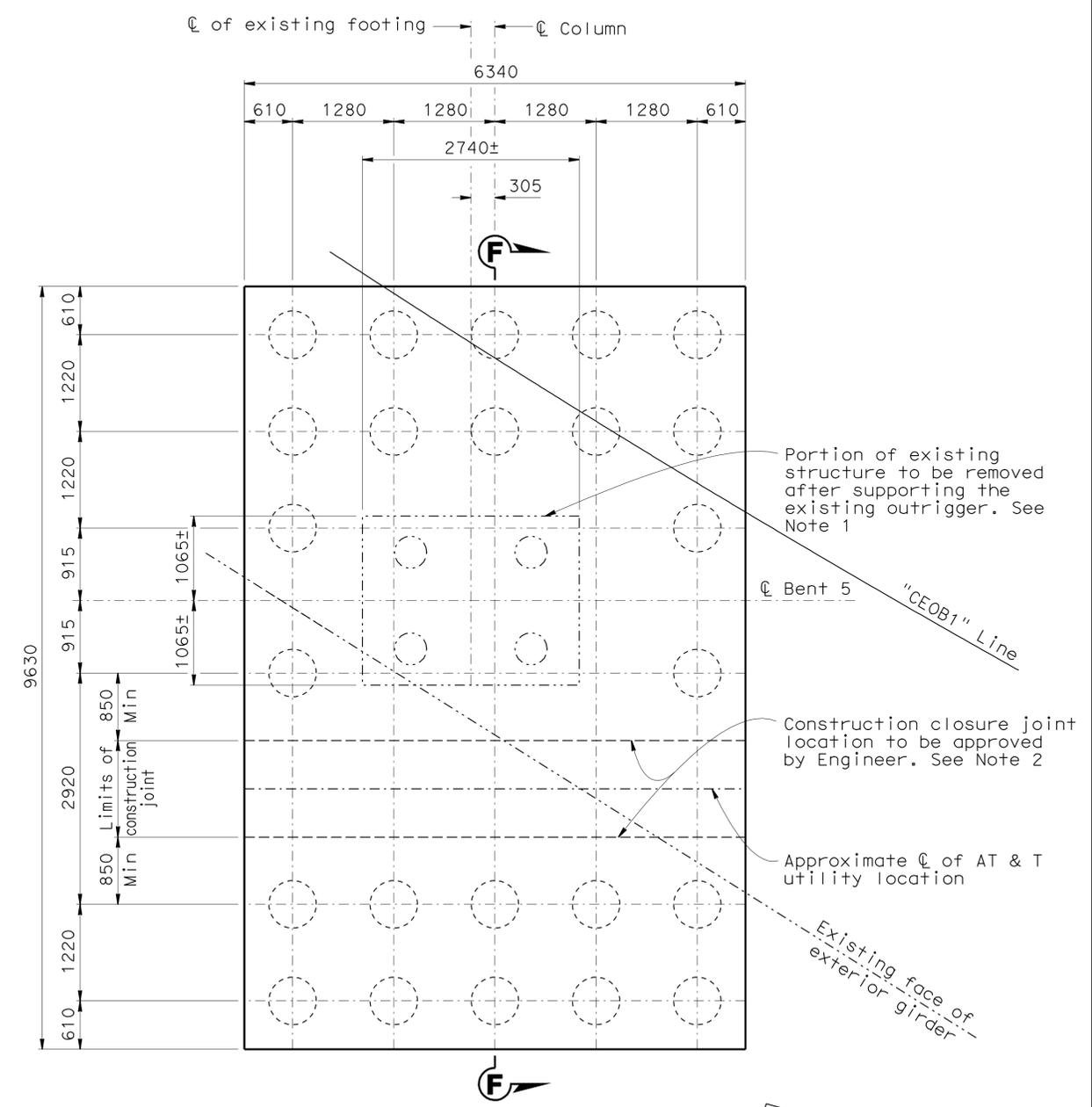


SHEAR KEY DETAIL
1:20

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

Note: Shear key must be constructed monolithically

- Notes:
- For "Section F-F" "Bridge Removal And Temporary Support Detail" see "Bent 4 Details No. 5" sheet.
 - Service splice all top #29 @ 150 mm and bottom #36 @ 150 mm reinforcement at this location.



FOOTING PLAN
1:40

CIP BOX BRIDGE	
CENTINELA AVE UC (WIDEN)	
BENT 5 DETAILS NO. 5	

	DESIGN BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 5 DETAILS NO. 5
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	FILE => 53-1253-2h-bnt05e.dgn	REVISION DATES	SHEET 87 OF 134

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

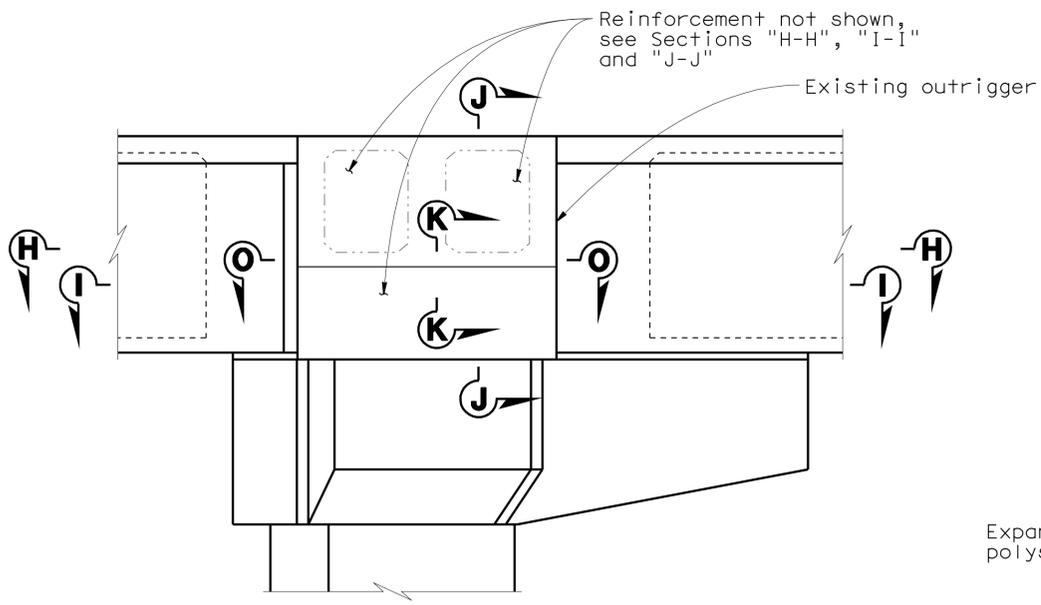
DISREGARD PRINTS BEARING EARLIER REVISION DATES

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

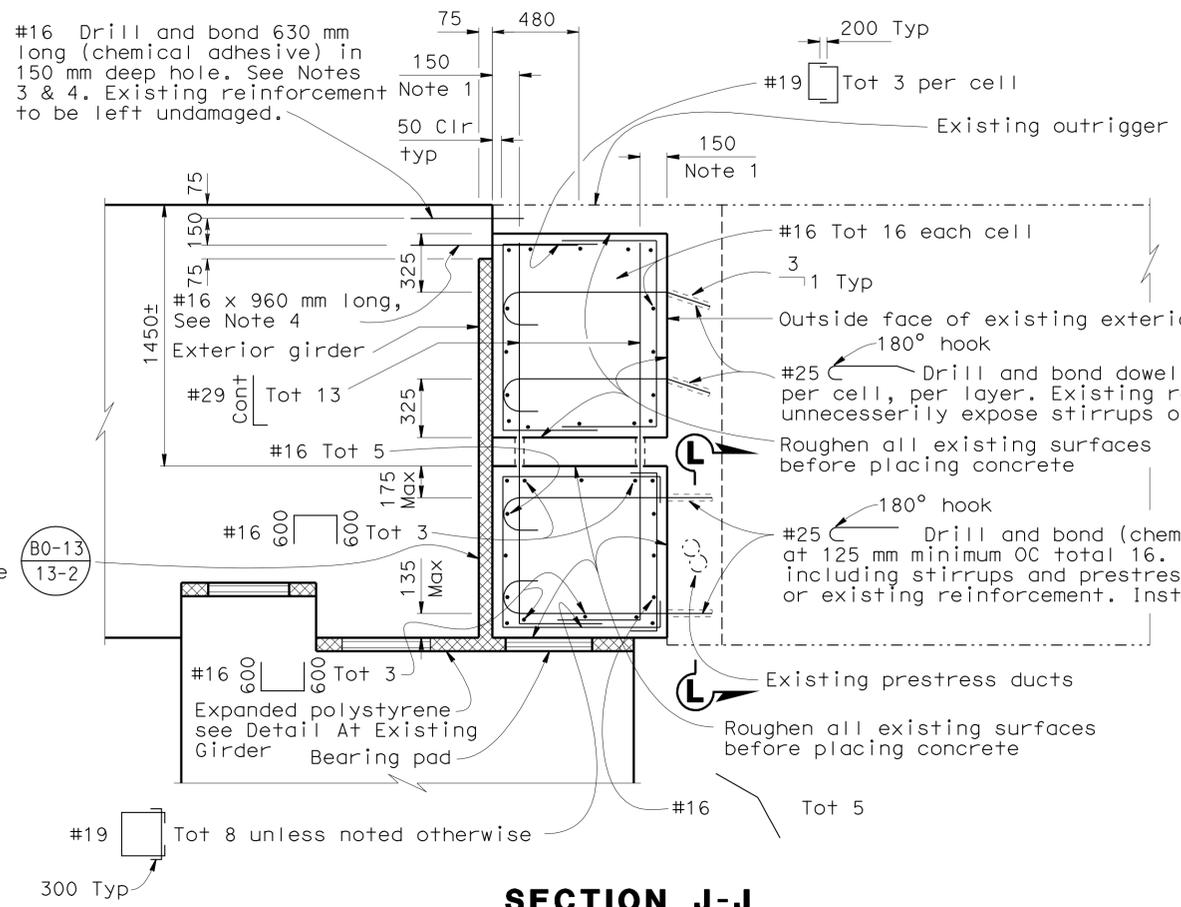
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	325	439

5-11-09 REGISTERED CIVIL ENGINEER DATE	6-7-10 PLANS APPROVAL DATE

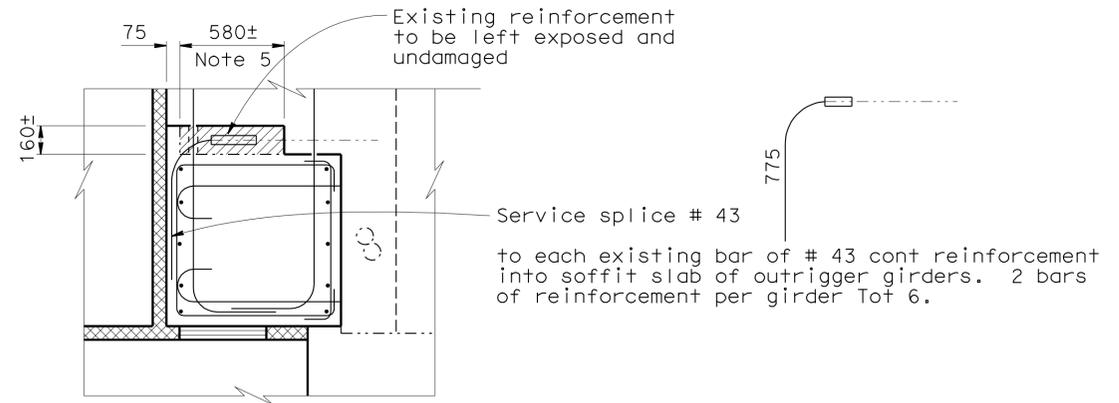
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**VIEW N-N
OUTRIGGER BOLSTER AT BENT 5**
1:40

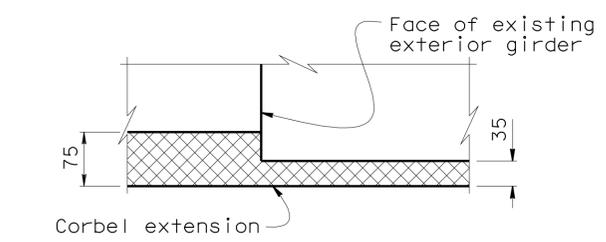


SECTION J-J
1:20



SECTION K-K
1:20

Note: For details not shown. See "Section J-J".



DETAIL AT EXISTING GIRDER

- Legend:
- Indicates bridge removal portion.
 - Indicates limits of expanded polystyrene.

- Notes:
- Centerline of # 29 reinforcement to face of concrete in 40 mm diameter cored holes. Pressure grout and install before placing corbel extensions.
 - For "Section H-H", "Section I-I" and "Section O-O" see "Bent 5 Details No. 7" sheet.
 - Stagger @ 200 with #16 x 960 mm long bottom reinforcement. See "Section F-F" on "Girder Details No. 14" sheet along with Note 6 on "Girder Details No. 15" sheet.
 - Use standard 90° hook if steel cannot be extended 480 mm into location outside of existing outrigger.
 - Remove concrete as required to service splice existing reinforcement with #43 90° hook as shown. See length of removal limits in "Section O-O" on "Bent 5 Details No. 7" sheet.
 - For "Section L-L" see "Bent 4 Details No. 4" sheet.

NOTE:
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	DESIGN BY M. Kattaa	CHECKED W. A./L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 5 DETAILS NO. 6
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa				

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS: 0 10 20 30 40 50 60 70 80 90 100

CU 07 EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
2-20-08 3-20-08 3-21-08 5-12-08 8-12-08 08-08-08 08-08-08 9-18-08 9-18-08	88	134

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	326	439

<i>Leon Valla</i>		5-11-09
REGISTERED CIVIL ENGINEER	DATE	
6-7-10		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER

LEON VALLA

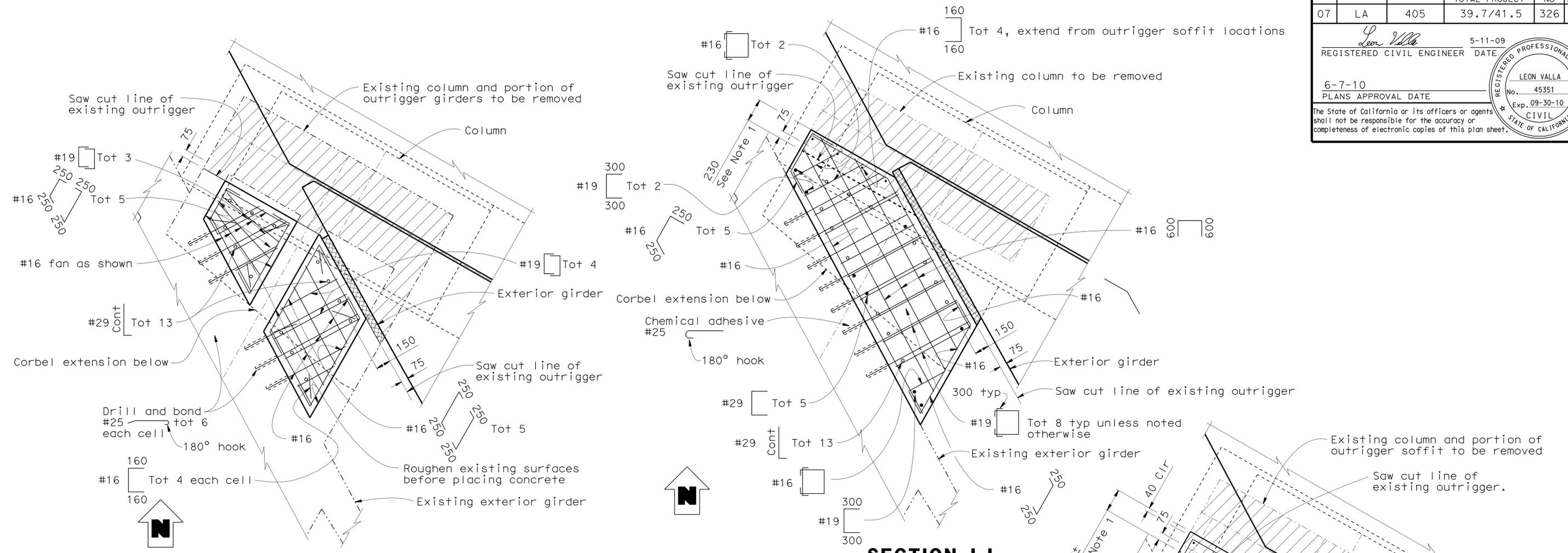
No. 45351

Exp. 09-30-10

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SECTION H-H

OUTRIGGER BOLSTER AT BENT 5
1:20

SECTION I-I

SECTION O-O

Notes:

1. Bolster and portion of outrigger soffit to be over poured beyond saw cut line to accommodate # 43 90° hook service splice.
2. Concrete cannot be removed beyond face of existing exterior girder.

- Legend
- Indicates limits of expanded polystyrene.
 - Indicates bridge removal portion

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY M. Kattaa	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BENT 5 DETAILS NO. 7						
	DETAILS BY Various	CHECKED W. A./L. Valla			KILOMETER POST 40.76							
QUANTITIES BY F. Tannous			CHECKED M. Kattaa	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: 6px;">REVISION DATES</th> <th style="font-size: 6px;">SHEET</th> <th style="font-size: 6px;">OF</th> </tr> <tr> <td style="font-size: 6px;"> 2-20-08 5-12-08 08-08-08 3-17-09 3-18-09 3-18-09 3-20-09 3-21-09 3-22-09 </td> <td style="text-align: center; font-size: 8px;">89</td> <td style="text-align: center; font-size: 8px;">134</td> </tr> </table>	REVISION DATES	SHEET	OF	2-20-08 5-12-08 08-08-08 3-17-09 3-18-09 3-18-09 3-20-09 3-21-09 3-22-09	89	134
REVISION DATES	SHEET	OF										
2-20-08 5-12-08 08-08-08 3-17-09 3-18-09 3-18-09 3-20-09 3-21-09 3-22-09	89	134										

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

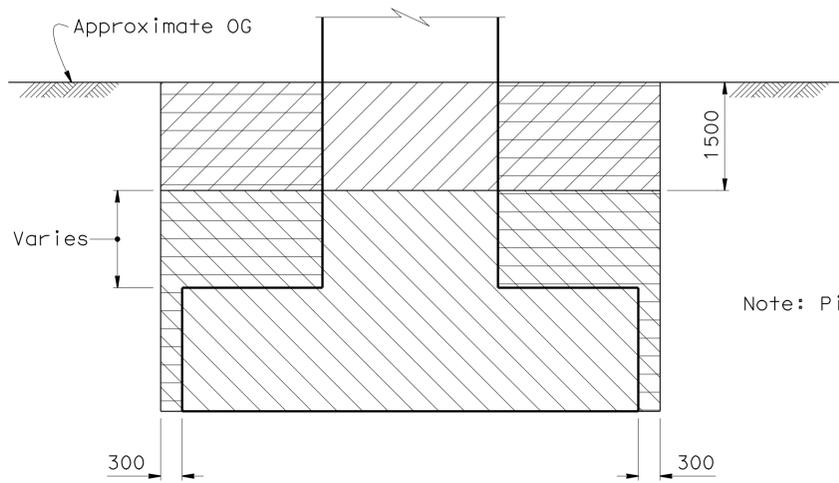
ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

FILE => 53-1253-2h-bnt05g.dgn

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	327	439

Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA
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Note: Piles not shown for clarity.

PAY LIMITS FOR STRUCTURE EXCAVATION AND BACKFILL
 1:50

- Legend:
- Structure excavation (Bridge)
 - Structure Excavation (Type Y-1) aerially deposited lead, see Note
 - Structure backfill (Bridge)

Note:
 Any excess Type (Y-1) material that cannot be reused on site or along the corridor shall be classified as Type (Z-2).

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY M. Kattaa	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	CIP BOX BRIDGE	
	DETAILS	BY Various	CHECKED W. A./L. Valla			53-1253	CENTINELA AVE UC (WIDEN)	
	QUANTITIES	BY F. Tannous	CHECKED M. Kattaa			KILOMETER POST	BENT 5 DETAILS NO. 8	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN						CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES
						3-4-09 3-17-09	SHEET 90 OF 134	
STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)								

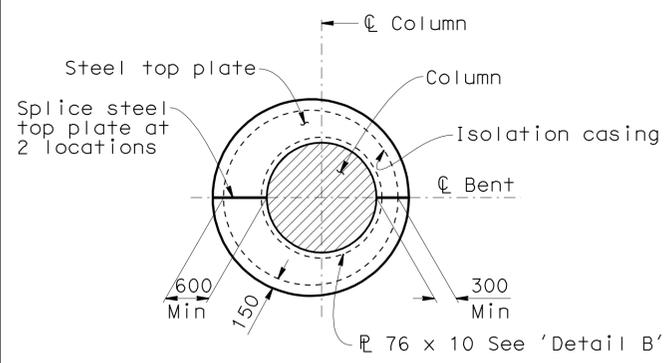
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07	LA	405	39.7/41.5	328	439

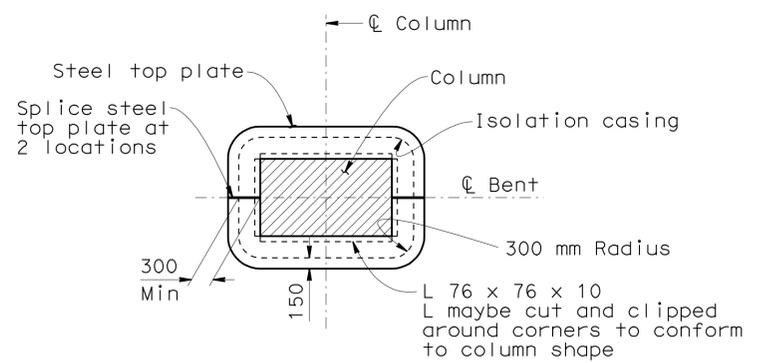
5-11-09	
REGISTERED CIVIL ENGINEER	DATE
6-7-10	
PLANS APPROVAL DATE	

LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

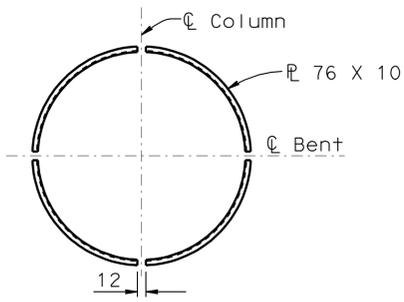
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



VIEW A-A
1:50
Bent 1



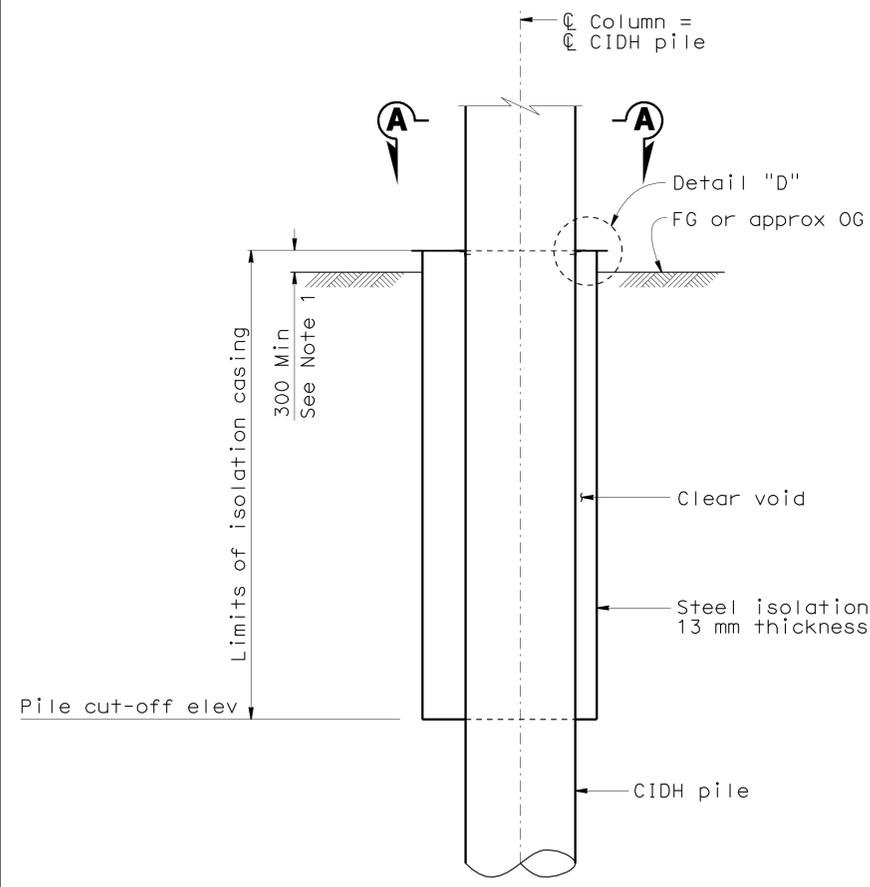
VIEW B-B
1:50
Bents 2 and 3



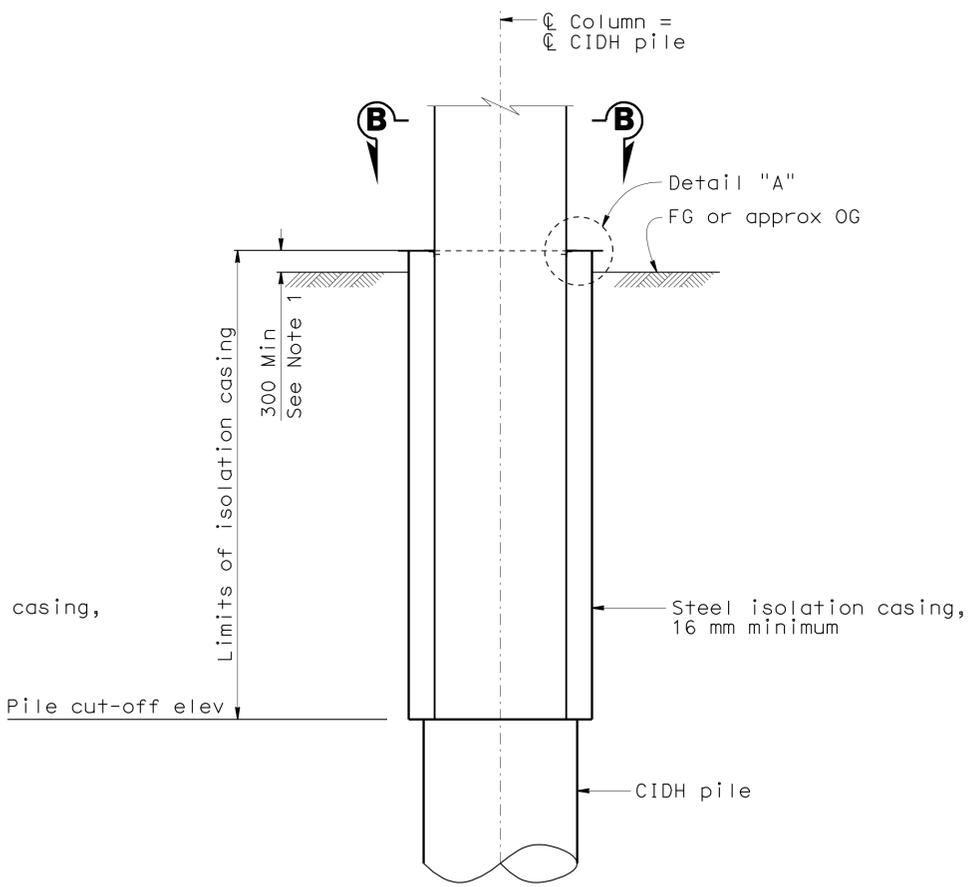
DETAIL "B"
No Scale

- Legend:
- Indicates limits of structure excavation (Bridge)
 - Indicates limits of structure excavation (Type Y-1) Aerially Deposited Lead. See Note 4
 - Indicates limits of structure excavation (Type D)

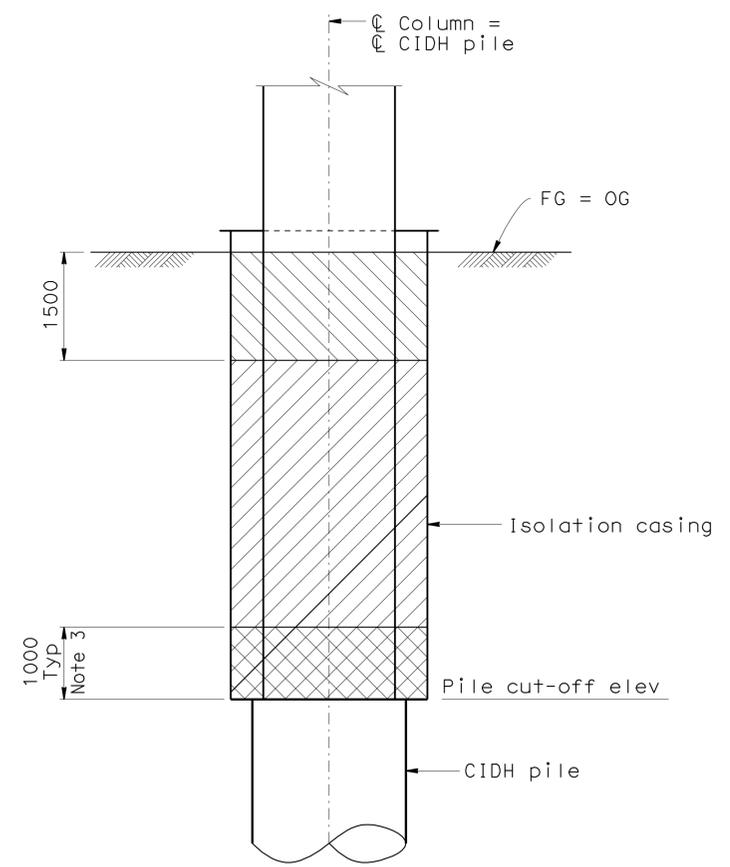
- Notes:
- Limits of clean and paint column isolation casing including top plate.
 - For 'Detail A' and 'Detail D' See " Column Isolation Casing Details No. 3" Sheet.
 - Type D structure excavation at Bent 1 only. 3.6 m ground water elevation.
 - Any excess Type (Y-1) material that cannot be reused on site at along the corridor shall be classified as Type (Z-2).
 - For additional structure excavation and backfill requirements at Bents 1-2 see "Lean Concrete Backfill No.s 1-2" sheets.



COLUMN ISOLATION CASING
1:50
Bent 1



COLUMN ISOLATION CASING
No scale
Bents 2 and 3



PAY LIMITS FOR STRUCTURE EXCAVATION FOR COLUMN ISOLATION CASING
No Scale
Bents 1 - 3
Note 5

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY M. Kattaa	CHECKED W. Adalapurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELLA AVE UC (WIDEN) COLUMN ISOLATION CASING DETAILS NO. 1
	DETAILS BY Various	CHECKED WA/LV			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa				
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES 	SHEET 91 OF 134

FILE => 53-1253-2j-c1c01.dgn

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	329	439

<i>Leon Valla</i>		5-11-09
REGISTERED CIVIL ENGINEER	DATE	
6-7-10		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER

LEON VALLA

No. 45351

Exp. 09-30-10

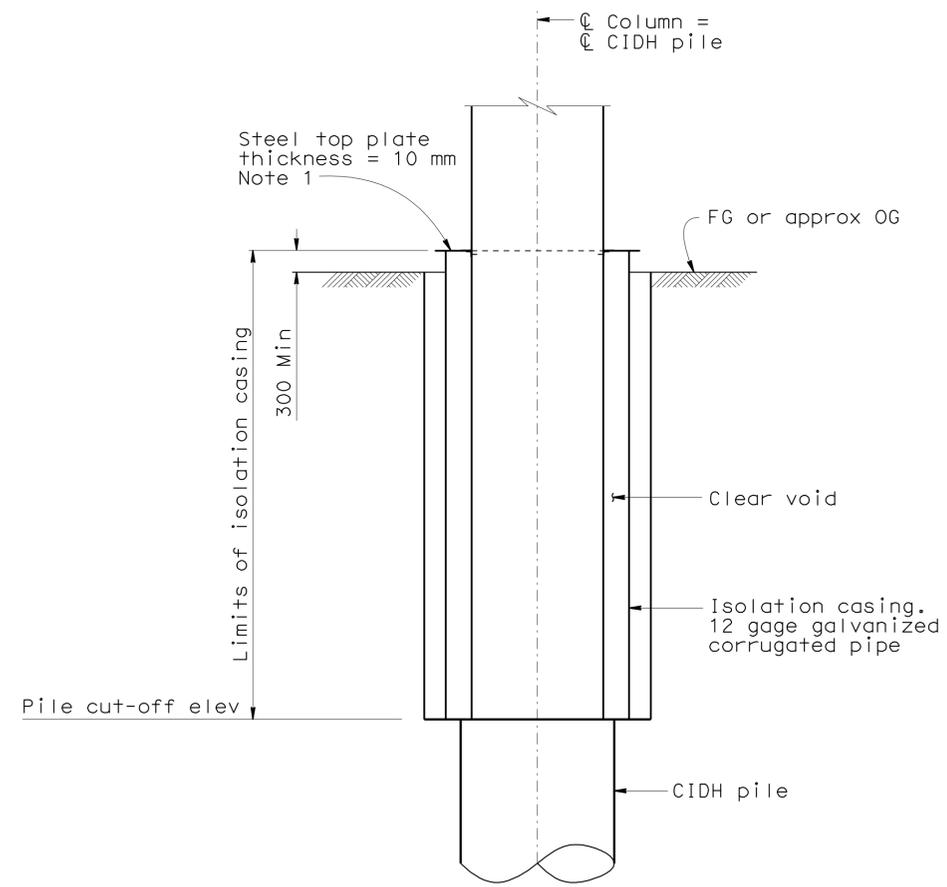
CIVIL

STATE OF CALIFORNIA

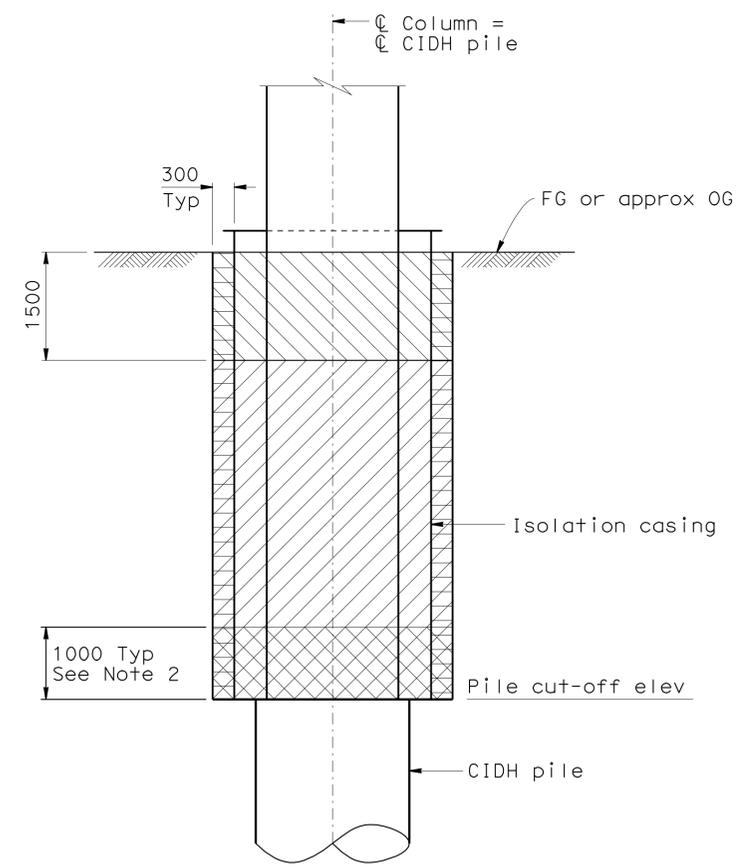
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

- Legend:**
- Indicates limits of structure excavation (Bridge)
 - Indicates limits of structure excavation (Type Y-1) Aerially Deposited Lead. See Note 3
 - Indicates limits of lean concrete backfill
 - Indicates limits of structure excavation (Type D)

- Notes:**
1. Limits of clean and paint column isolation casing including top plate.
 2. Type D structure excavation at Bent 1 only. 3.6 m ground water elevation.
 3. Any excess Type (Y-1) material that cannot be reused on site at along the corridor shall be classified as Type (Z-2).
 4. For additional structure excavation and backfill requirements at Bents 1-2 see "Lean Concrete Backfill No.s 1-2" sheets.



COLUMN ISOLATION CASING ALTERNATIVE
 No scale
 Bents 1 - 3



PAY LIMITS FOR STRUCTURE EXCAVATION AND BACKFILL FOR COLUMN ISOLATION CASING ALTERNATIVE
 No Scale
 Bents 1 - 3
 Note 4



DESIGN	BY M. Kattaa	CHECKED W. Addlespurger
DETAILS	BY Various	CHECKED WA/LV
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELLA AVE UC (WIDEN)
COLUMN ISOLATION CASING DETAILS NO. 2

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES							SHEET	OF
8-28-07	9-20-07	9-21-07	3-28-08	06-21-08	12-24-08	5-13-09	92	134

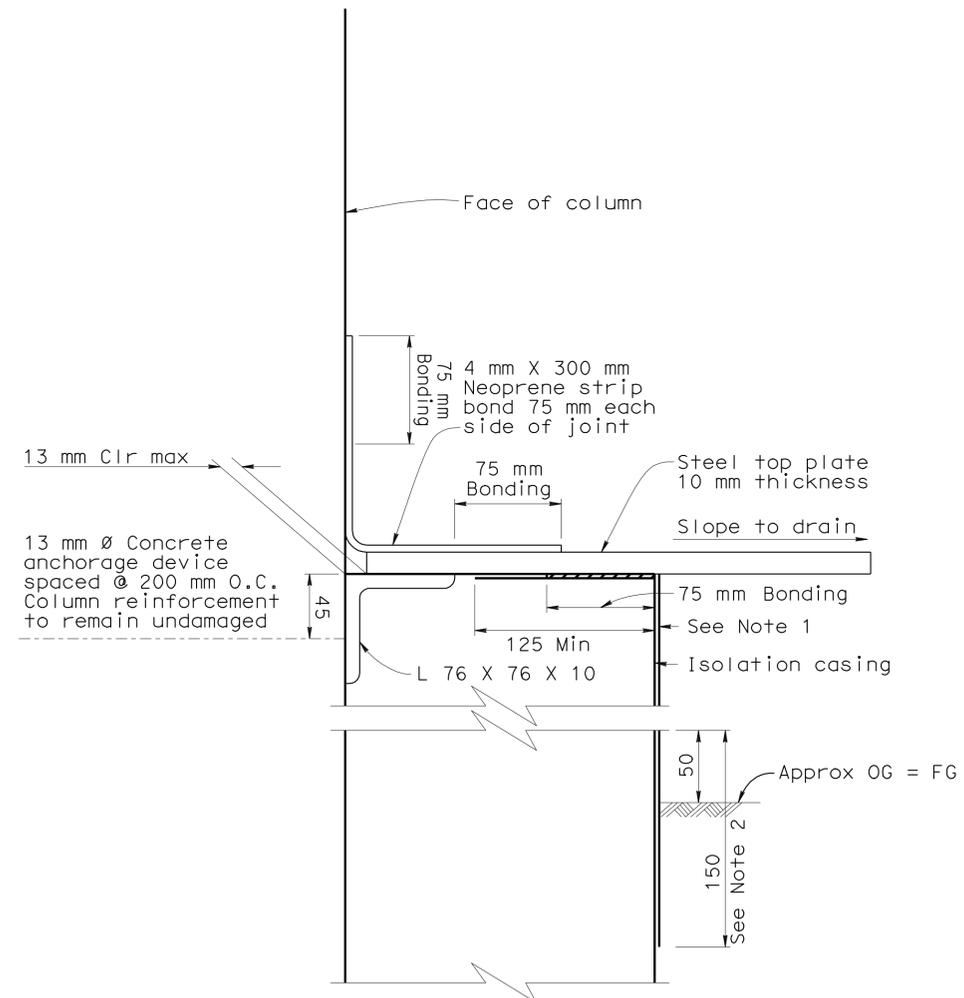
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	330	439

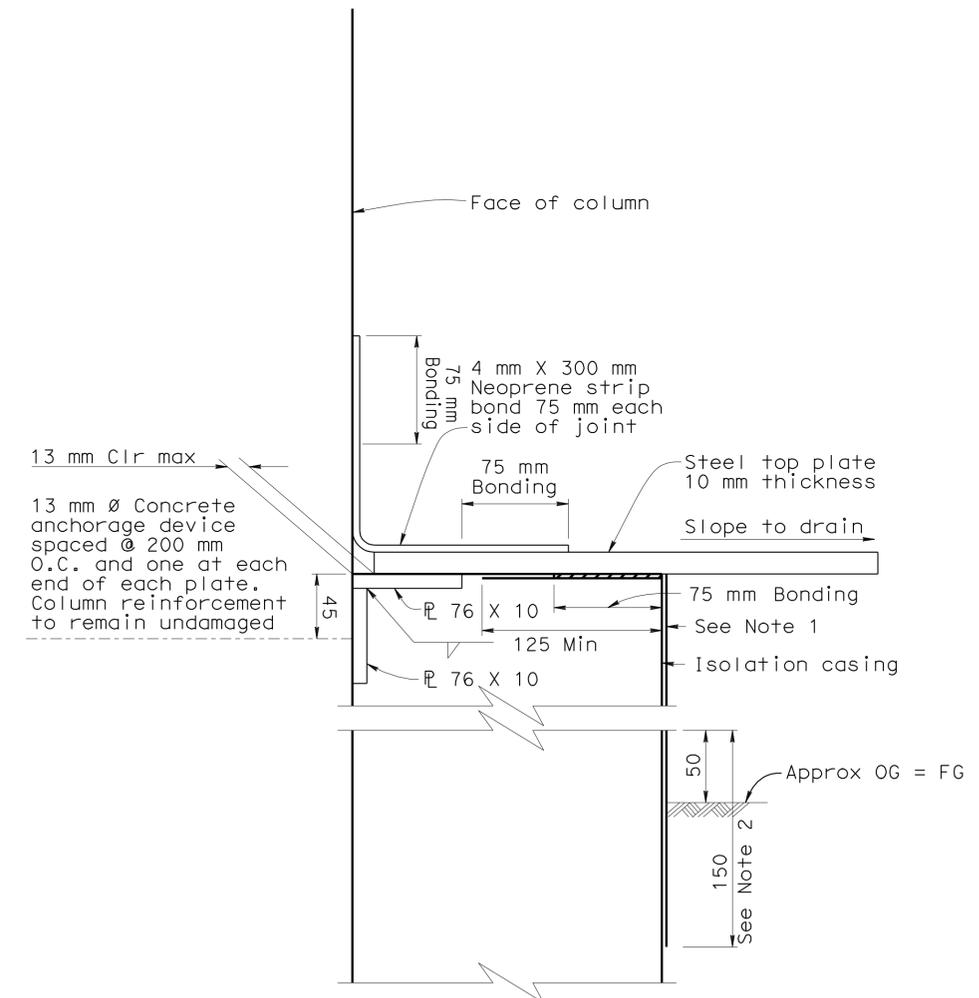
Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Notes:

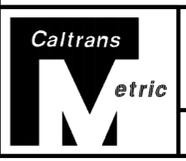
- 26 gage galvanized colored trim to be used on 12 gage galvanized corrugated pipe isolation casing alternative only. Bond top of trim with 75 mm of epoxy resin. Color of trim to match paint on 10 mm thickness isolation casing.
- Asphalt membrane waterproofing limits unless trim is embedded in concrete sidewalk or other roadway material.



DETAIL A
1:2.5



DETAIL D
1:2.5



DESIGN	BY M. Kattaa	CHECKED W. Adlespurger
DETAILS	BY Various	CHECKED WA/LV
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELLA AVE UC (WIDEN)
COLUMN ISOLATION CASING DETAILS NO. 3

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET 93	OF 134
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	332	439

5-11-09
DATE

REGISTERED CIVIL ENGINEER

6-7-10
PLANS APPROVAL DATE

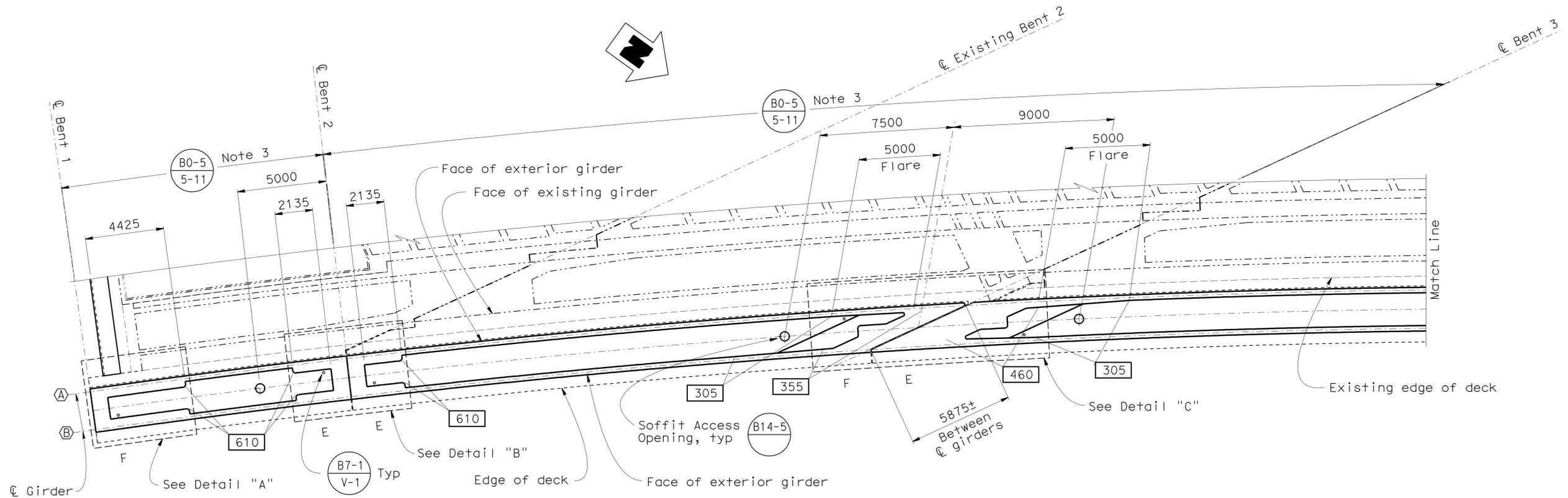
LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

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.

Notes:

- For "End Diaphragm Details", see "Girder Details No. 1" sheet.
- Indicates girder stem width in millimeters.
- Transverse typical section reinforcement unless shown otherwise on "Girder Details No.s. 2-7" sheets
- For "Detail A" see "Girder Details No. 2" sheet.
- For "Detail B" see "Girder Details No.s 3-4" sheets.
- For "Detail C" see "Girder Details No.s 5-7" sheets.

E = Expansion side
F = Fixed side



PLAN
1:125

B7-1 RSP
B8-5

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



DESIGN	BY F. Tannous/M. Kattaa	CHECKED W. A./L. V.
DETAILS	BY Various	CHECKED L. Valla
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
GIRDER LAYOUT NO. 1

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES		SHEET	OF
4-30-07	5-8-07	95	134

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

FILE => 53-1253-21-gir01.dgn

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 17:56

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07	LA	405	39.7/41.5	333	439

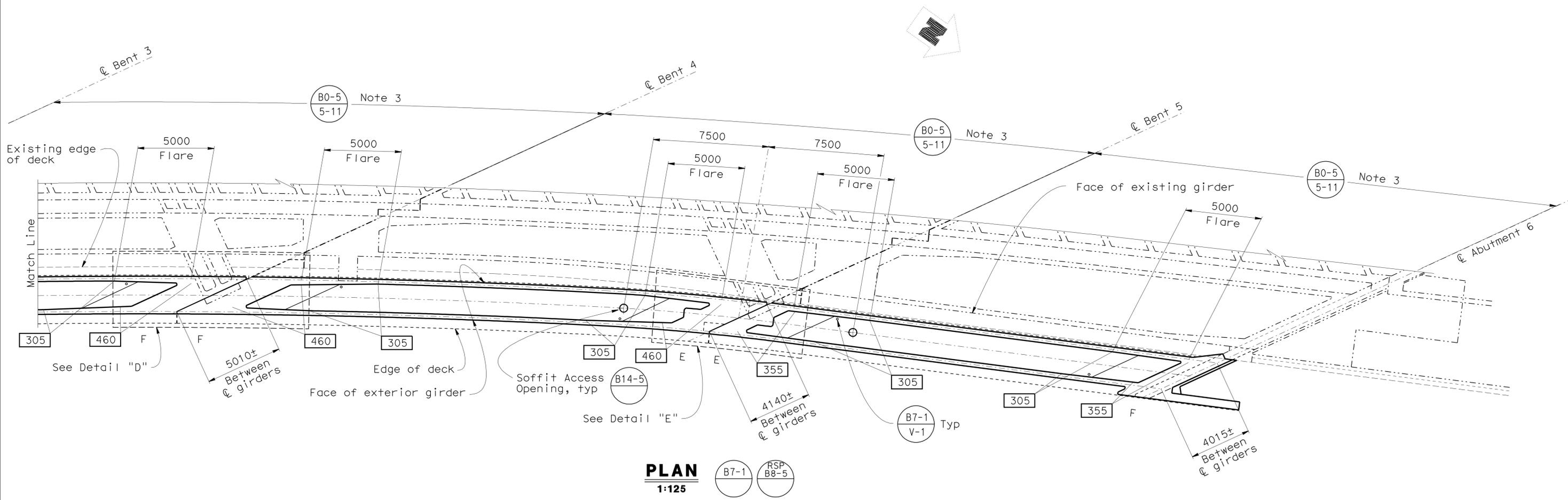
Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE

6-7-10
 PLANS APPROVAL DATE

LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

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.

- Notes:
- For "End Diaphragm Details", see "Girder Details No. 1" sheet.
 - Indicates top girder stem width in millimeters.
 - Transverse typical section reinforcement unless shown otherwise on "Girder Details Nos. 8-15" sheets.
 - For "Detail D" see "Girder Details Nos. 8-11" sheets.
 - For "Detail E" see "Girder Details Nos. 12-15" sheets.
- E = Expansion side
 F = Fixed side



NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY F. Tannous/M. Kattaa	CHECKED W. A./L. V.	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER LAYOUT NO. 2									
	DETAILS BY Various	CHECKED L. Valla			KILOMETER POST 40.76										
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 		DISREGARD PRINTS BEARING EARLIER REVISION DATES										
			CU 07 EA 241301 FILE => 53-1253-21-gir02.dgn		REVISION DATES <table border="1" style="font-size: x-small;"> <tr> <td>4-30-07</td> <td>5-21-09</td> <td>10-3-07</td> <td>11-13-07</td> <td>5-6-08</td> <td>7-29-08</td> <td>8-4-08</td> <td>12-22-08</td> <td>2-24-09</td> </tr> </table>		4-30-07	5-21-09	10-3-07	11-13-07	5-6-08	7-29-08	8-4-08	12-22-08	2-24-09
4-30-07	5-21-09	10-3-07	11-13-07	5-6-08	7-29-08	8-4-08	12-22-08	2-24-09							
						SHEET 96 OF 134									

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:14

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	334	439

5-11-09
DATE

REGISTERED CIVIL ENGINEER

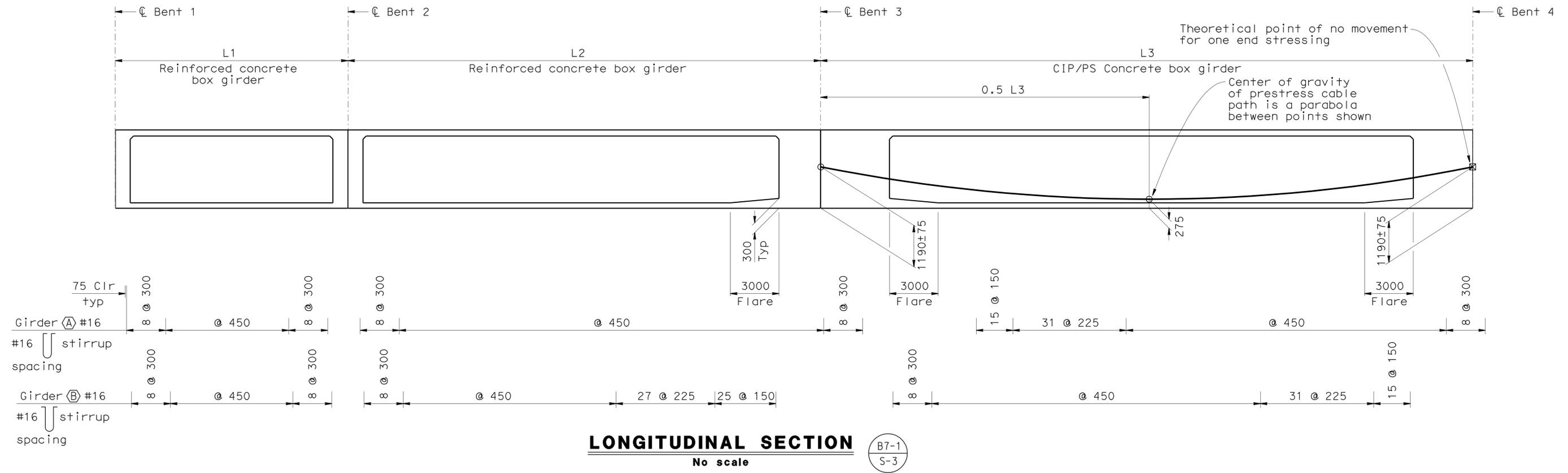
6-7-10
PLANS APPROVAL DATE

LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

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Notes:

1. For "Camber Diagram" and falsework notes see "Miscellaneous Girder Details No. 4" sheet.
2. For prestressing notes see "Miscellaneous Girder Details No. 3" sheet.



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY F. Tannous/M. Kattaa	CHECKED W. A./L. V.	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER LAYOUT NO. 3
	DETAILS BY Various	CHECKED L. Valla			KILOMETER POST 40.76	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		CU 07 EA 241301	
			FILE => 53-1253-21-gir03.dgn		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
			REVISION DATES		SHEET 97 OF 134	
			STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)			

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 17:57

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	335	439

<i>Leon Valla</i>	5-11-09
REGISTERED CIVIL ENGINEER	DATE

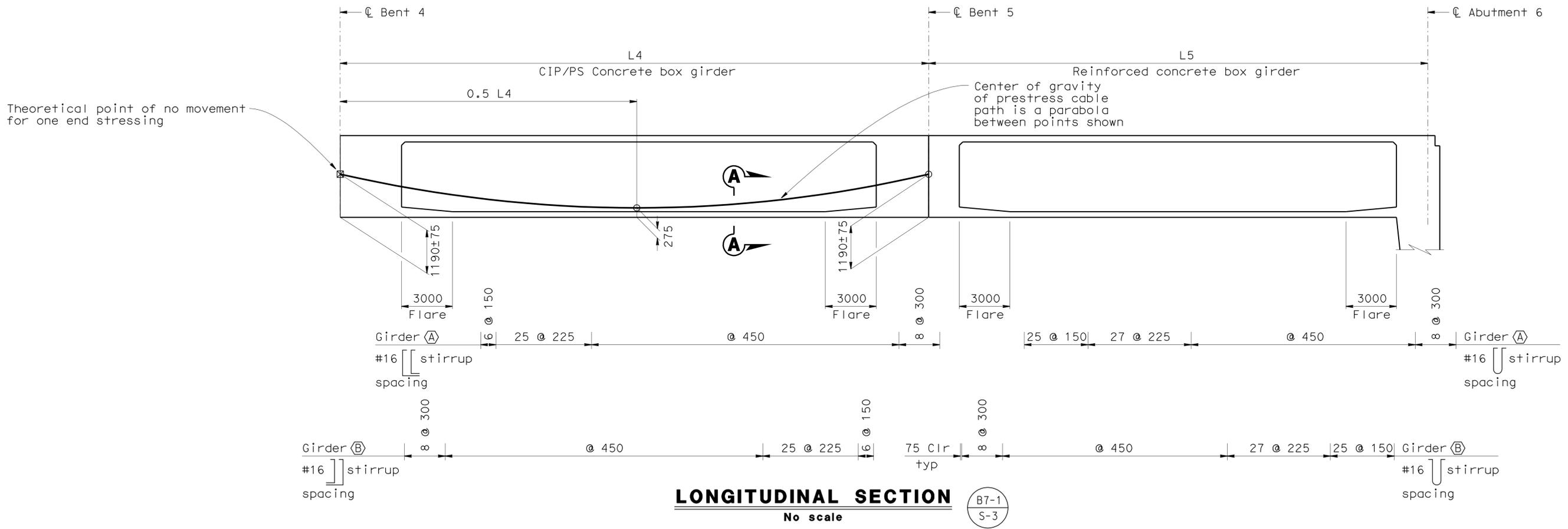
6-7-10
PLANS APPROVAL DATE

LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

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.

Notes:

1. For "Camber Diagram" and falsework notes see "Miscellaneous Girder Details No. 4" sheet.
2. For prestressing notes see "Miscellaneous Girder Details No. 3" sheet.
3. For "Section A-A" see "Girder Layout No. 5" sheet.



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



DESIGN	BY F. Tannous/M. Kattaa	CHECKED W. A./L. V.
DETAILS	BY Various	CHECKED L. Valla
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
GIRDER LAYOUT NO. 4

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



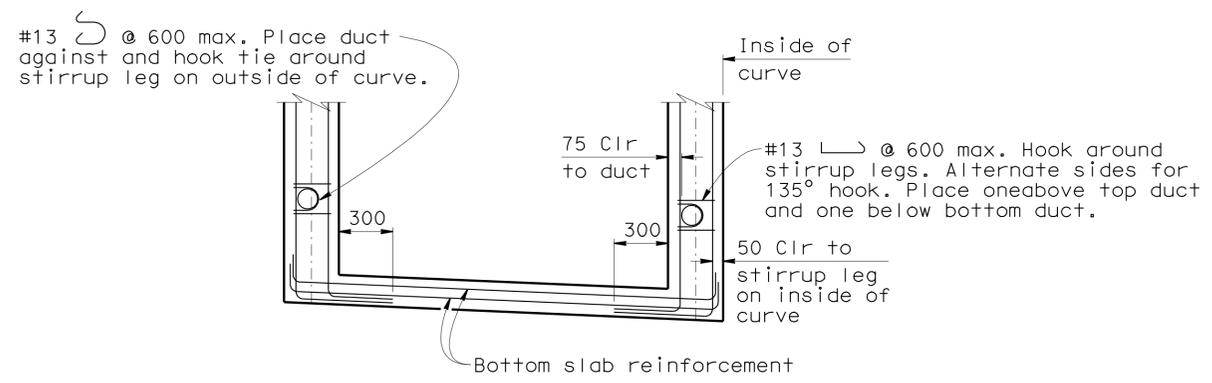
CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES	4-30-07	5-21-07	10-3-07	11-13-07	5-6-08	7-24-08	8-1-08	12-22-08	2-24-09	SHEET 98 OF 134
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USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 17:57

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	336	439

Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA
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SECTION A-A
1:20
Part Girder Section

Note: These details supersede duct patterns shown in Standard Plans B8-5

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

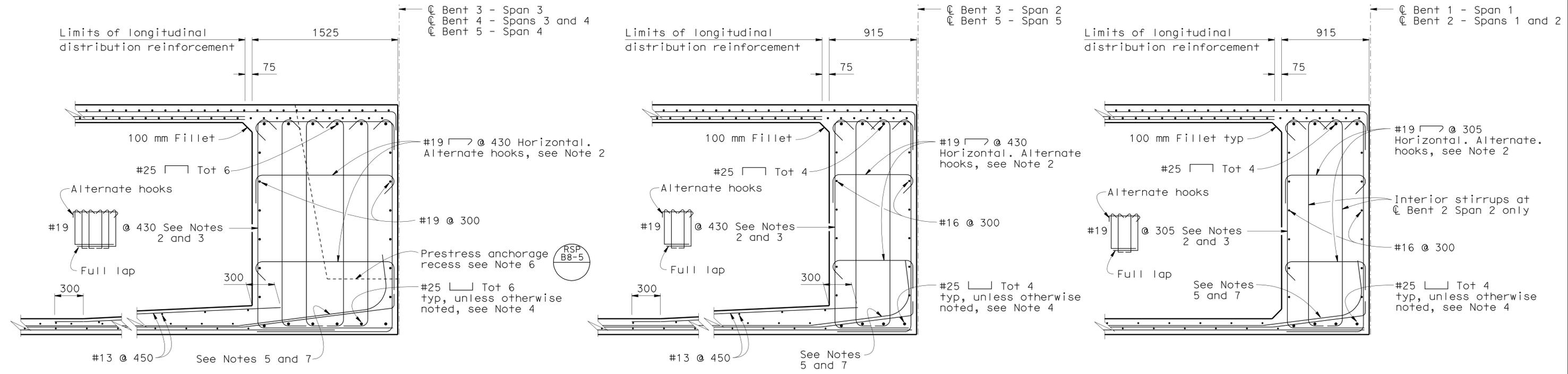
		DESIGN BY F. Tannous/M. Kattaa CHECKED W. A./L. V.	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER LAYOUT NO. 5
		DETAILS BY Various CHECKED L. Valla			KILOMETER POST 40.76	
		QUANTITIES BY F. Tannous CHECKED M. Kattaa	ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		DISREGARD PRINTS BEARING EARLIER REVISION DATES 2-24-09	SHEET OF 99 134
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				FILE => 53-1253-21-gir05.dgn	STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)	

USERNAME => hrttght DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:14

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	337	439
			5-11-09	DATE	
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			PLANS APPROVAL DATE		
LEON VALLA			No. 45351		
CIVIL			Exp. 09-30-10		
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.					

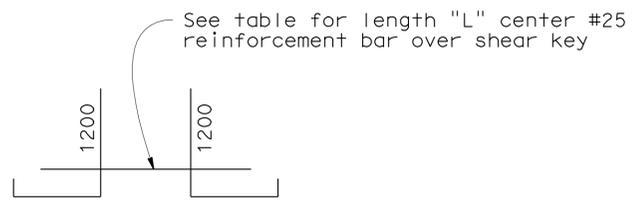
Notes:

- All details are typical unless otherwise shown on "Girder Details No.s 2 through 13" sheets.
- Place parallel to \bar{C} of girder and space along \bar{C} of bents.
- Foreshorten stirrups over shear keys, see "Support Detail At Shear Key" on "Miscellaneous Girder Details No. 1" sheet.
- Use "Detail A" at Bent 2 spans 1 and 2, Bent 3 span 3, and Bent 5 spans 4 and 5.
- Bend girder reinforcement up higher as required to clear shear keys.
- Service splice all #19 vertical stirrups and horizontal ties in P/S blackout locations as approved by the Engineer. Spacing and adjustments of #19 vertical stirrups and horizontal ties in P/S blackout locations to be approved by the Engineer.
- Use 90° hooks on main bottom girder reinforcement typical.



END DIAPHRAGM DETAILS

1:20



DETAIL A

1:20

Bent	Spans	L (mm)
2	1 and 2	2340
3	3	3965
5	4 and 5	3200



DESIGN	BY F. Tannous/L V	CHECKED W. Addlespurger
DETAILS	BY Various	CHECKED F. Tannous/ L. Valla
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
GIRDER DETAILS NO. 1

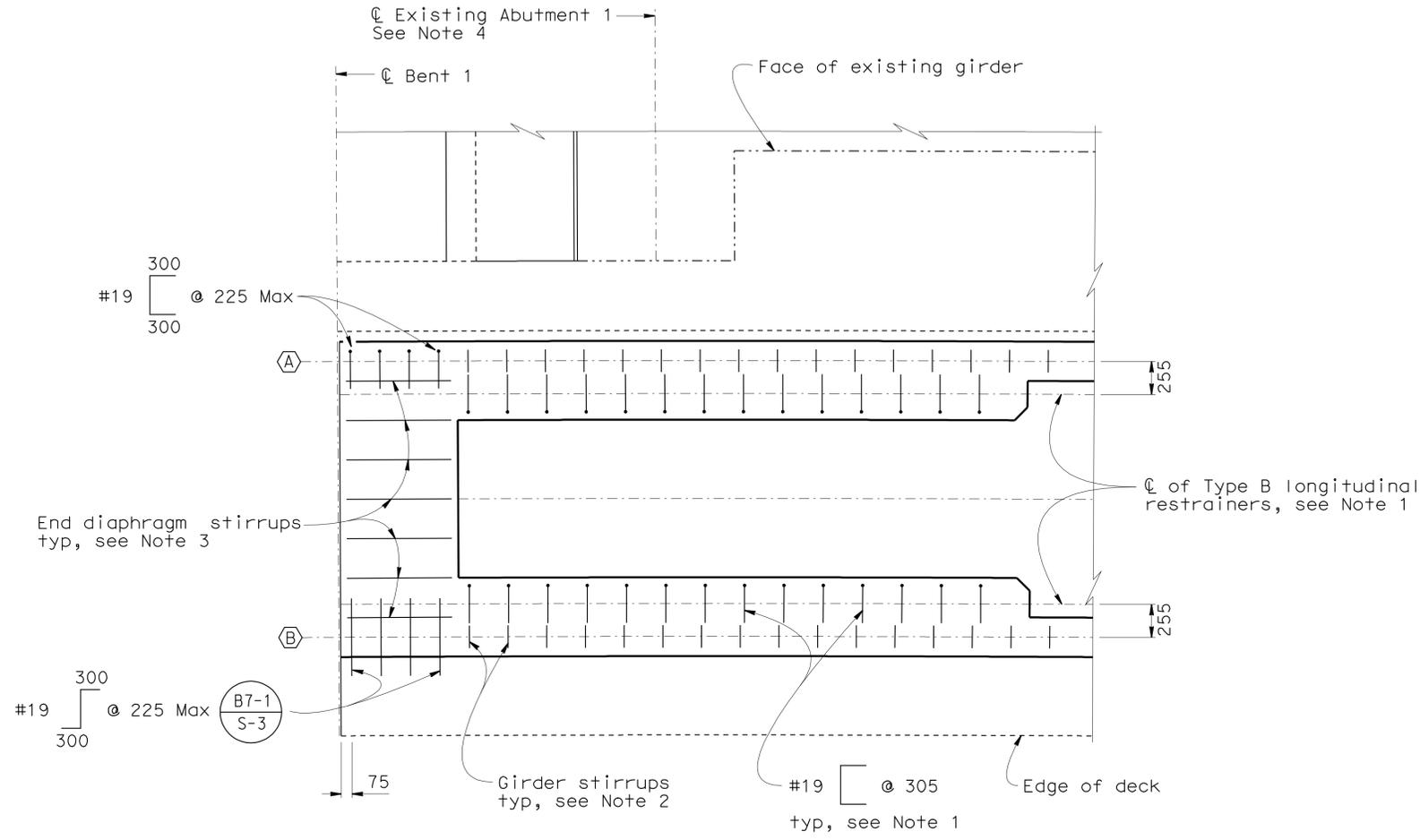
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES	4-24-07	5-21-09	10-4-07	5-5-08	6-18-08	07-08-08	07-28-08	7-31-08	12-28-08	SHEET 100 OF 134
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	338	439
			5-11-09		
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			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>					



DETAIL A
1:25

Notes:

1. For details and reinforcement not shown, see "Section A-A" on "Cable Restrainer Unit - Type 2" sheet.
2. For girder stirrup spacing see "Girder Layout No. 3" sheet.
3. For end diaphragm stirrup spacing and details see "Girder Details No. 1" sheet.
4. For closure pour at existing Abutment 1 see "Plan View For Closure Pour At Existing Abutment 1" on "Miscellaneous Girder Details No. 3" sheet.

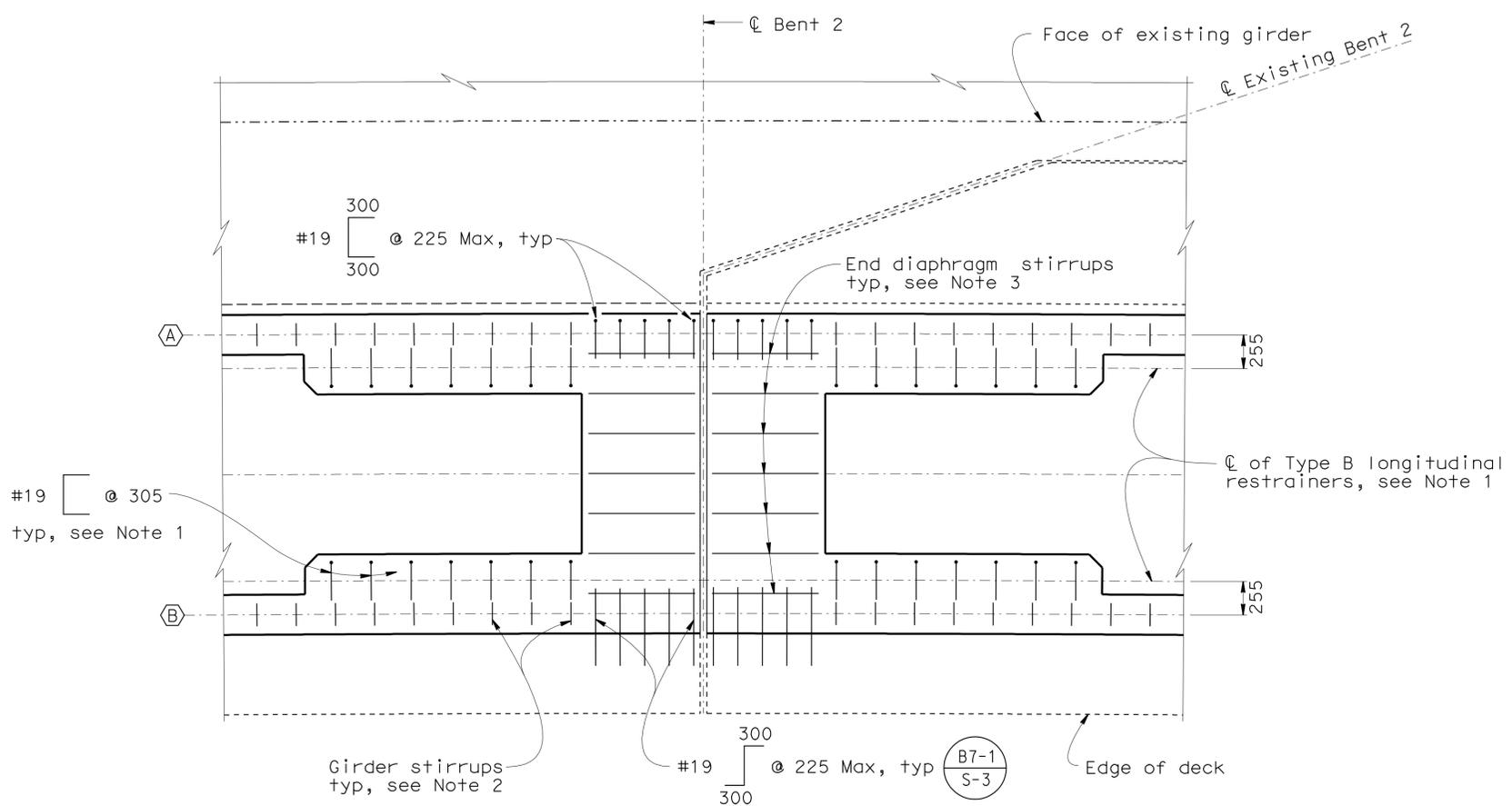
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY L. Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 2
	DETAILS BY Various	CHECKED L V/M K			53-1253	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa			KILOMETER POST	
					40.76	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES
					REVISION DATES 6-19-08 7-20-08 12-23-08	SHEET 101 OF 134
STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)						

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 17:57

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	339	439

Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA
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DETAIL B
 1:25
END DIAPHRAGM AND GIRDER STEEL

Notes:

1. For details and reinforcement not shown, see "Section A-A" on "Cable Restrainer Unit - Type 2" sheet.
2. For girder stirrup spacing see "Girder Layout No. 3" sheet.
3. For end diaphragm stirrup spacing and details see "Girder Details No. 1" sheet.

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

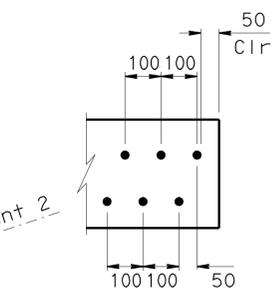
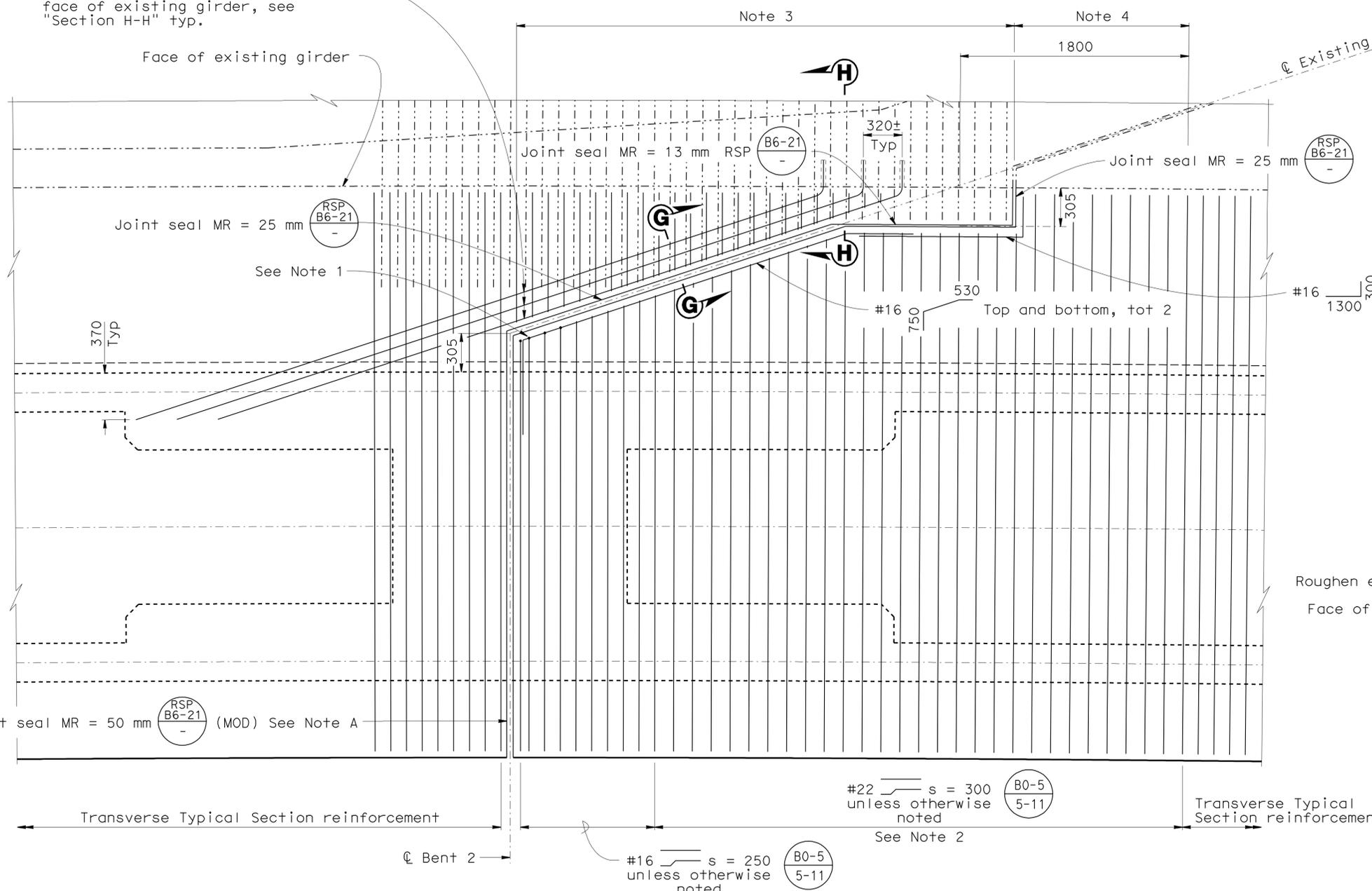
	DESIGN BY L. Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 3
	DETAILS BY Various	CHECKED L V/M K			KILOMETER POST 40.76	
QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 6-20-08 7-20-08 7-30-08 12-23-08	SHEET 102 OF 134

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN
 ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100
 FILE => 53-1253-21-gir08.dgn
 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

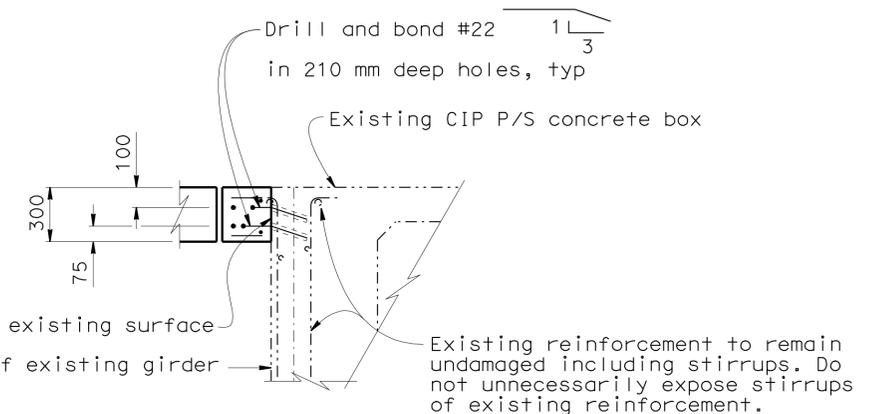
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	340	439
		5-11-09		DATE	
		6-7-10		DATE	
		LEON VALLA		REGISTERED CIVIL ENGINEER	
		No. 45351		Exp. 09-30-10	
		CIVIL		STATE OF CALIFORNIA	

2 - #22 @ 100 Top and bottom tot 6.
See "Section G-G" Drill and bond to face of existing girder, see "Section H-H" typ.



SECTION G-G
No scale



SECTION H-H
1:20

Notes:

1. Use standard 180° hooks if top #16 transverse reinforcement cannot be extended 400 mm into closure pour beyond face of girder, typical.
2. Limits of # 22 transverse reinforcement includes all bars extending into closure pour beyond face of girder over 530 mm long.
3. Retain existing reinforcement. Extend existing top and bottom #16 transverse reinforcement beyond existing overhang limits with 800 mm lap splice same as typical section. Use #16 @ 250 transverse reinforcement at bottom of closure pour.
4. Use 180° hooks on bottom #22 transverse reinforcement bars at face of existing girder similar to typical section.

DETAIL B DECK STEEL
1:20

Note: Not all existing transverse reinforcement shown for clarity.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

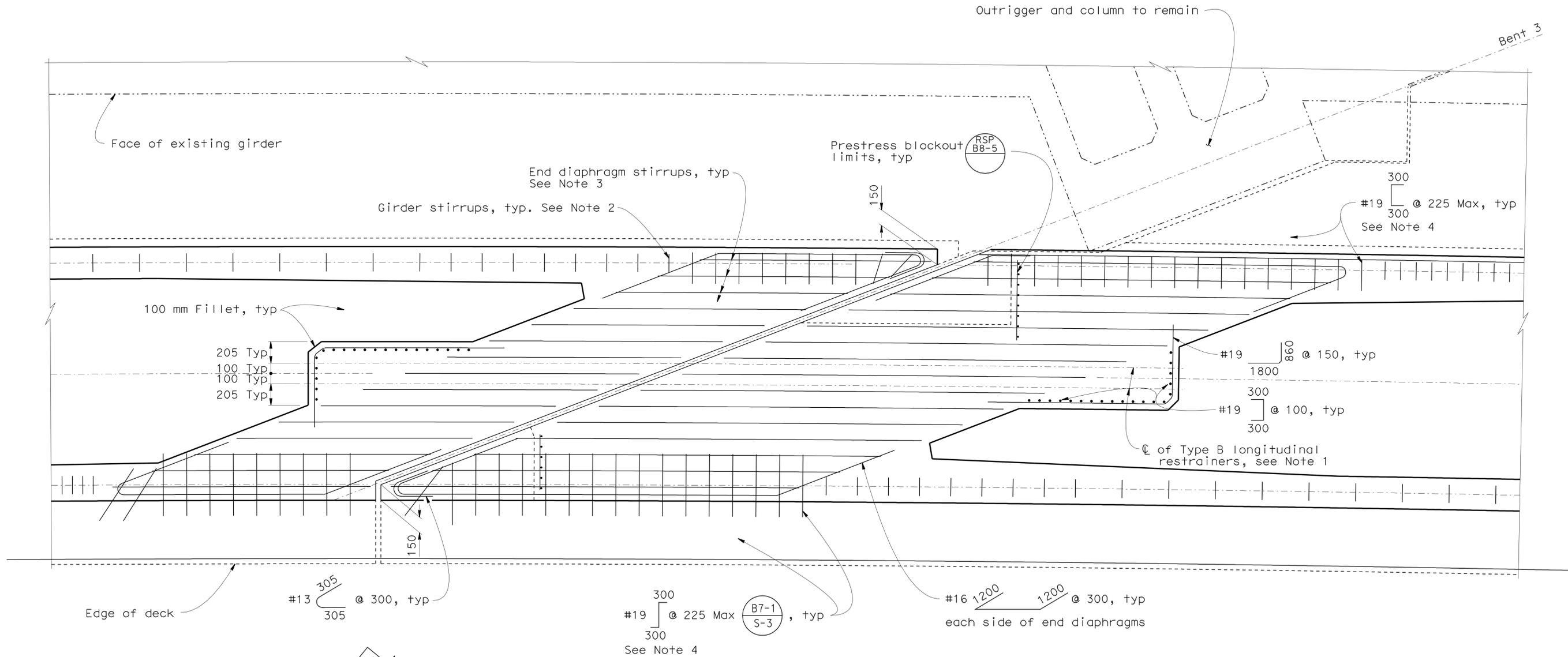
	DESIGN BY L. Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 4
	DETAILS BY Various	CHECKED L V/W A			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa				
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 7-10-08, 7-20-08, 7-30-08, 7-31-08, 1-5-09, 5-11-09	
			CU 07 EA 241301		SHEET 103 OF 134 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)	

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	341	439

Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
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Notes:

1. For details not shown, see "Cable Restrainer Unit - Type 2" sheet.
2. For girder stirrup spacing see "Girder Layout " sheet.
3. For end diaphragm stirrup spacing and details see "Girder Details No. 1" sheet.
4. Fan and adjust bars to fit in corners as shown. Move closer to face of girders if needed to maintain clearance.



**DETAIL C
END DIAPHRAGM AND GIRDER STEEL**

1:20



DESIGN	BY L. Valla	CHECKED W. Addlespurger
DETAILS	BY Various	CHECKED L V/W A
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
GIRDER DETAILS NO. 5

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



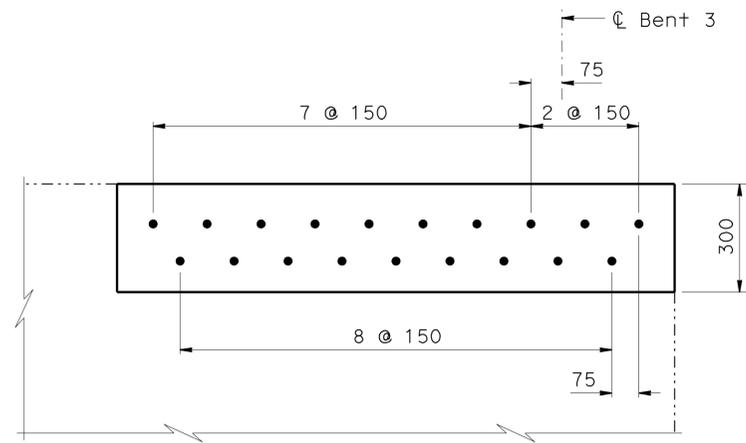
CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES					SHEET	OF
7-24-08	7-28-08	12-30-08	5-21-09	10-15-09	104	134

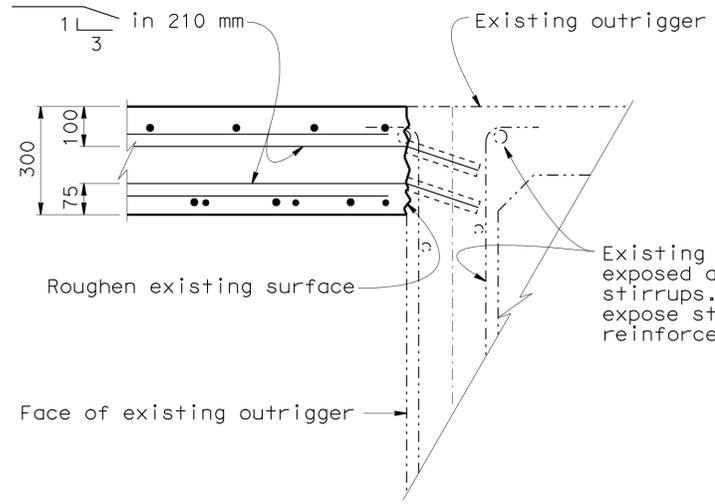
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	343	439
			5-11-09		
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			PLANS APPROVAL DATE		
REGISTERED PROFESSIONAL ENGINEER LEON VALLA No. 45351 Exp. 09-30-10 CIVIL STATE OF CALIFORNIA					
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SECTION A-A
No scale

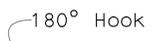
Drill and bond #22 deep holes, typ



SECTION B-B
1:10

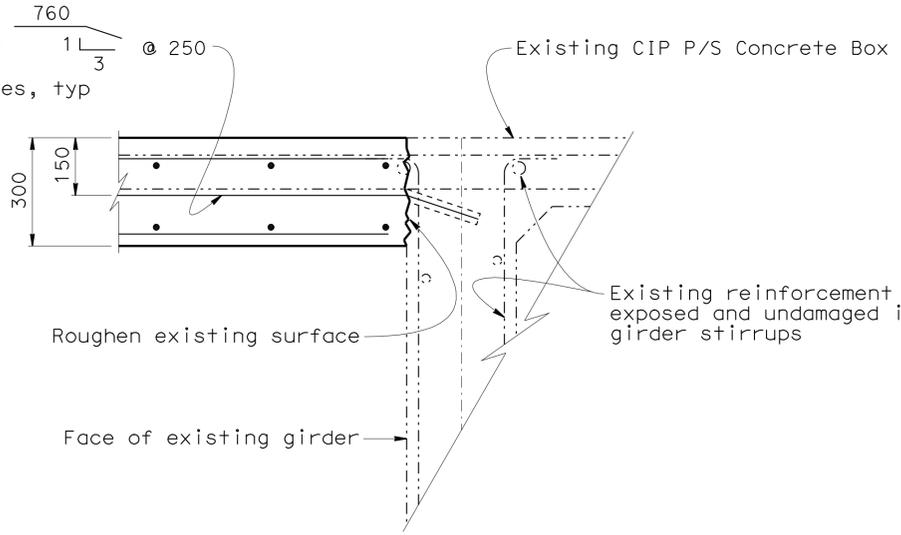
Existing reinforcement to remain exposed and undamaged including stirrups. Do not unnecessarily expose stirrups at existing reinforcement.

Notes:

- Use standard 90° hook if reinforcement cannot be extended 460 mm into end diaphragm beyond face of girder, typical. Place with stem and soffit pour if 90° hook conflicts in deck pour. 90° hook placement to be approved by Engineer.
- Limits of #22 transverse reinforcement includes all bars extending in closure pour beyond face of girder over 530 mm long.
- Use standard 180° hooks if top #16 transverse reinforcement cannot be extended 400 mm into closure pour beyond face of girder, typical. Ignore hook when extension is less than 150 mm.
- Joint seal MR = 13 mm  inside face of existing girder.
- Chamfer existing outrigger column as required to accommodate joint. Chamfering to be approved by Engineer.
- Limits of #19 drill and bond @ 250 mm total 7 per "Section D-D".
- Retain existing reinforcement. Use #16 @ 250 mm transverse reinforcement at bottom of closure pour.
- Use 180° hooks on bottom #22 transverse reinforcement bars at face of existing girder similar to Typical Section.
- Use  #16 @ 250 mm transverse reinforcement at bottom of closure pour similar to Typical Section. Varies 450 max
- Use #16 tot 10 (5 bundles) top and bottom longitudinal reinforcement in closure pour in lieu of "Typical Section".

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

Drill and bond #19 in 150 mm deep holes, typ



SECTION D-D
1:10

Existing reinforcement to remain exposed and undamaged including girder stirrups



DESIGN	BY L. Valla	CHECKED W. Addlespurger
DETAILS	BY Various	CHECKED L V/W A
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
GIRDER DETAILS NO. 7

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
7-15-08 7-28-08 7-30-08 1-5-09 1-7-09 1-7-09 1-13-09 3-18-09 5-11-09	106	134

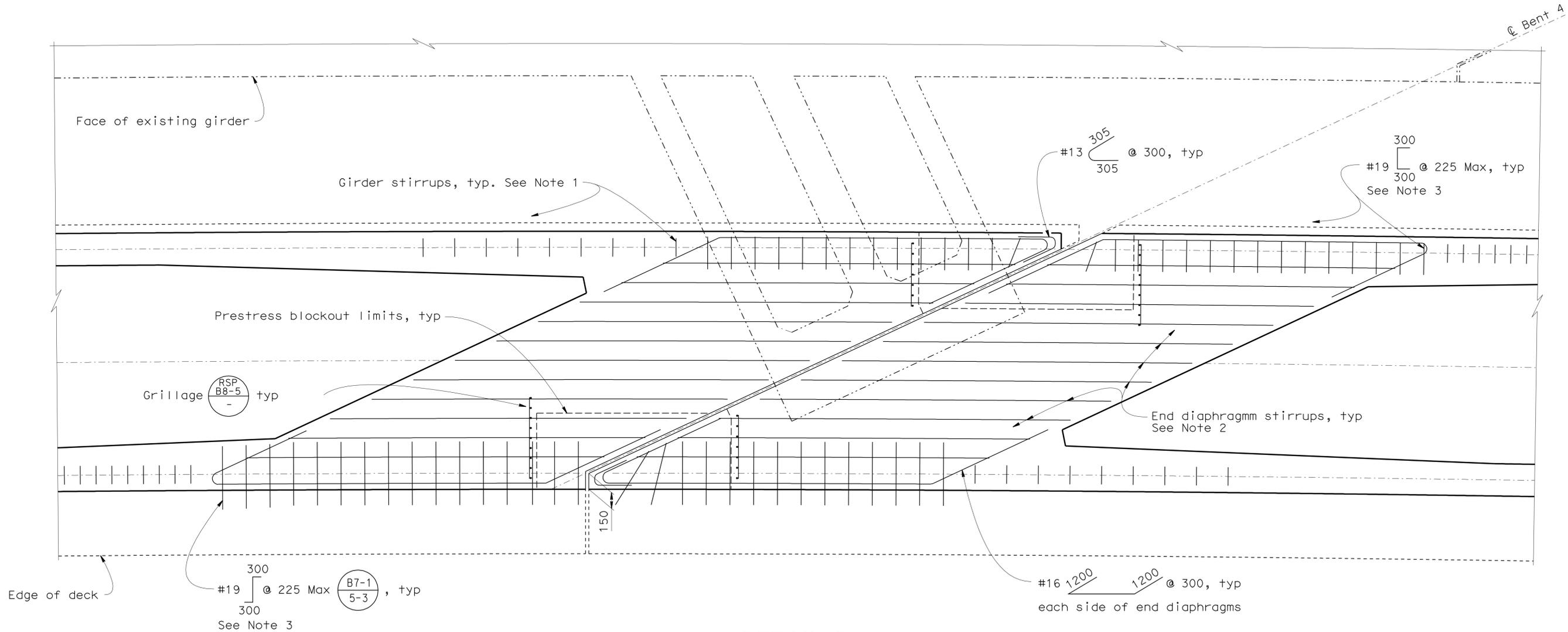
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	344	439

Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA
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Notes:

1. For girder stirrup spacing see "Girder Layout " sheet.
2. For end diaphragm stirrup spacing and details see "Girder Details No. 1" sheet.
3. Fan and adjust bars to fit in corners as shown. Move closer to face of girders if needed to maintain clearance.



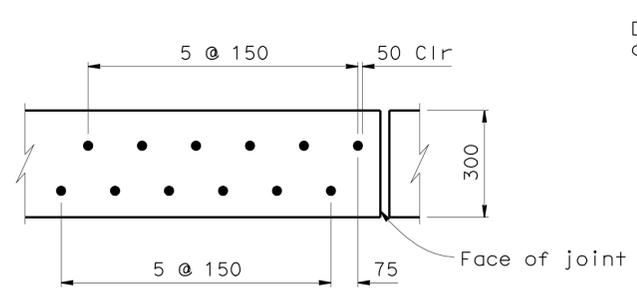
DETAIL D
END DIAPHRAGM AND GIRDER STEEL
 1:20

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

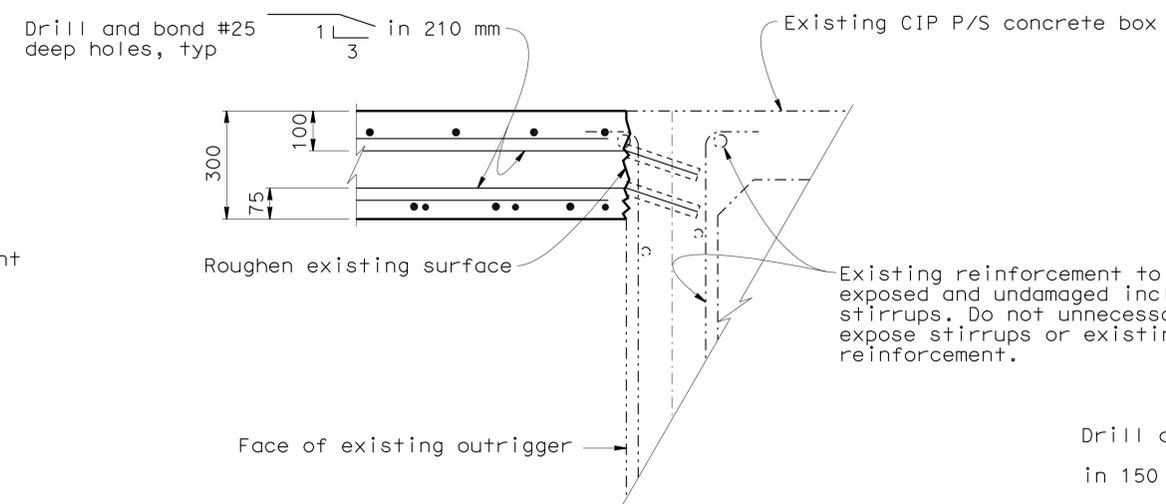
	DESIGN BY L.Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 8
	DETAILS BY Various	CHECKED L V/W A			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	FILE => 53-1253-21-gir13.dgn	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 7-15-08, 7-29-08, 1-14-09, 1-17-09, 5-21-09	SHEET 107 OF 134 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 17:58

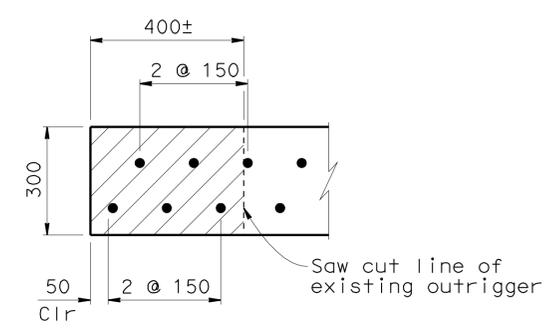
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	346	439
			REGISTERED CIVIL ENGINEER DATE 5-11-09 PLANS APPROVAL DATE 6-7-10 No. 45351 Exp. 09-30-10 CIVIL STATE OF CALIFORNIA		



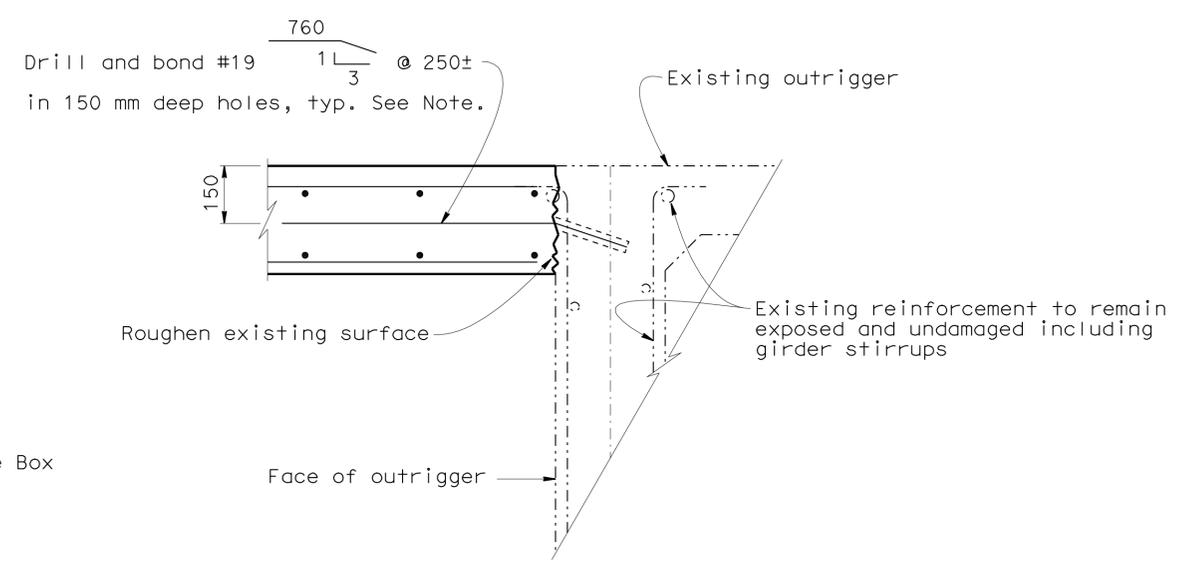
SECTION A-A
No scale



SECTION B-B
1:10



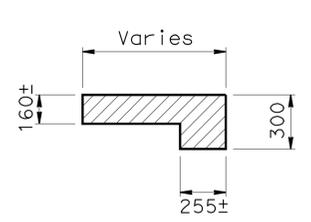
SECTION C-C
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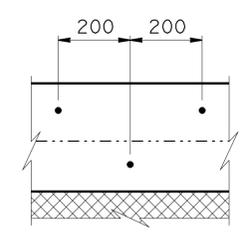
SECTION G-G
1:10

Note: Place with deck pour if bar won't fit into closure pour.

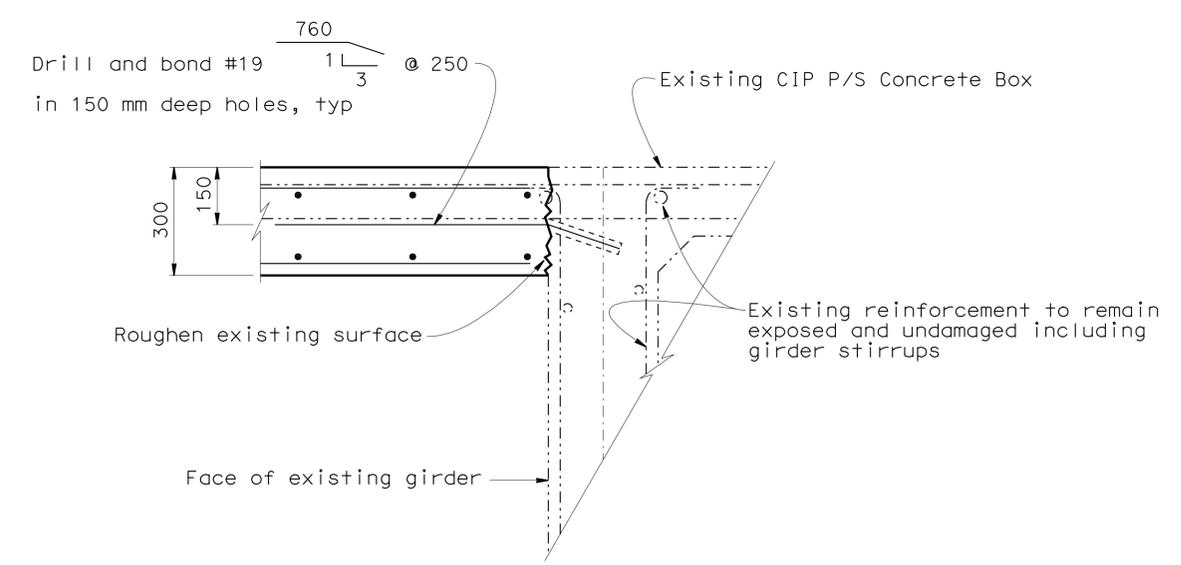
- Indicates bridge removal portion.
- Indicates limits of expanded polystyrene.



SECTION E-E
No scale



SECTION F-F
No scale



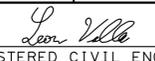
SECTION D-D
1:10

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY L. Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 10
	DETAILS BY Various	CHECKED L V/W A			KILOMETER POST 40.76	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100	CU 07 EA 241301	REVISION DATES 7-15-08 7-29-08 1-7-09	SHEET 109 OF 134

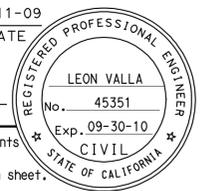
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	347	439

 5-11-09
 REGISTERED CIVIL ENGINEER DATE

6-7-10
 PLANS APPROVAL DATE

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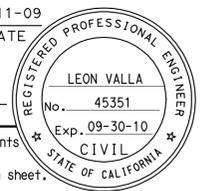
Notes:

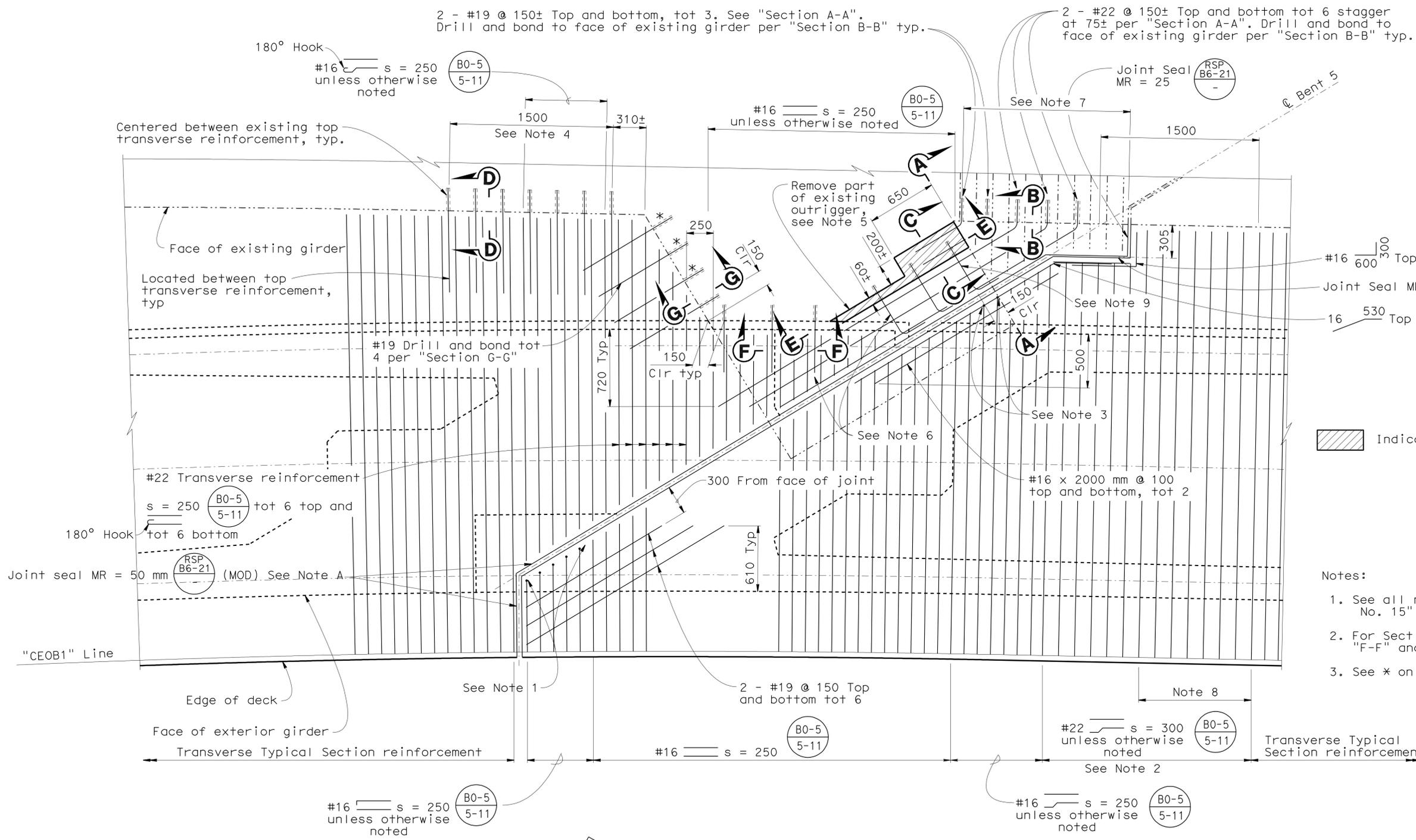
1. Use standard 90° hooks if reinforcement cannot be extended 460 mm into end diaphragm beyond face of girder, typical. Place with stem and soffit pour if 90° hook conflicts in deck pour. 90° hook placement to be approved by Engineer.
 2. Limits of #22 transverse reinforcement includes all bars extending into closure pour beyond face of girder over 530 mm long.
 3. Use standard 180° hooks if top #16 transverse reinforcement cannot be extended 400 mm into closure pour beyond face of girder, typical. Ignore hook when extension is less than 150 mm.
 4. Limits of #19 drill and bond @ 250 mm total 7 per "Section D-D".
 5. Remove existing outrigger as required to place #25 bars per "Section C-C" and "Section E-E". Existing reinforcement to be left exposed and undamaged. Service splice #25 bars to closure pour and end diaphragm to make bars continuous as shown. Concrete for removal portion shown must be placed with concrete pour of outrigger bolsters.
 6. Stagger #16 drill and bond (chemical adhesive) total 7 top and #16 x 960 mm long total 6 bottom per detail shown in "Section F-F".
 7. Retain existing reinforcement. Extend existing top and bottom #16 transverse reinforcement beyond existing overhang limits with 800 mm lap splice same as Typical Section. Use #16 @ 250 transverse reinforcement at bottom of closure pour. Use 180° hooks on #16 @ 250 transverse reinforcement bars at face of existing girder similar to Typical Section when closure pour spans are 1000 millimeters or greater.
 8. Use 180° hooks on bottom #22 transverse reinforcement bars at face of existing girder similar to Typical Section.
- * Proposed #19 drill and bond dowel may be omitted if existing #19 x 355 mm drill and bond dowels can be retained.

		DESIGN BY L. Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 11		
		DETAILS BY Various	CHECKED L V/W A			KILOMETER POST 40.76			
		QUANTITIES BY F. Tannous	CHECKED M. Kattaa						
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN		ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS				CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 	SHEET 110 OF 134
FILE => 53-1253-21-gir16.dgn STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)									

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 17:59

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	349	439

	
REGISTERED CIVIL ENGINEER	DATE
6-7-10	5-11-09
PLANS APPROVAL DATE	
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 Indicates bridge removal portion.

- Notes:
1. See all numbered "Notes" on "Girder Details No. 15" sheet.
 2. For Sections "A-A", "B-B", "C-C", "D-D", "E-E", "F-F" and "G-G" see "Girder Details No. 14" sheet.
 3. See * on "Girder Details No. 15" sheet.

**DETAIL E
DECK STEEL**
1:20

Note:
A. See (MOD) detail on "Miscellaneous Girder Details No. 2" sheet.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

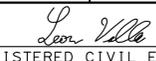
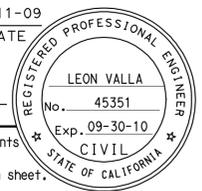
	DESIGN BY L. Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 13
	DETAILS BY Various	CHECKED L V/W A			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	FILE => 53-1253-21-gir18.dgn	REVISION DATES	SHEET 112 OF 134

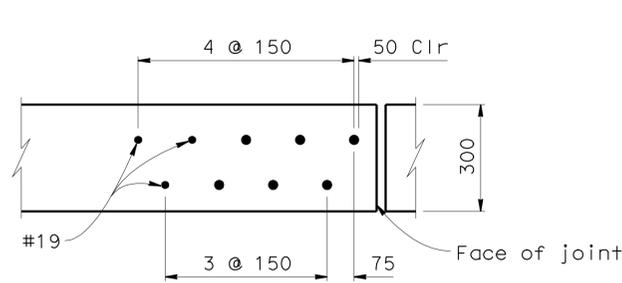
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

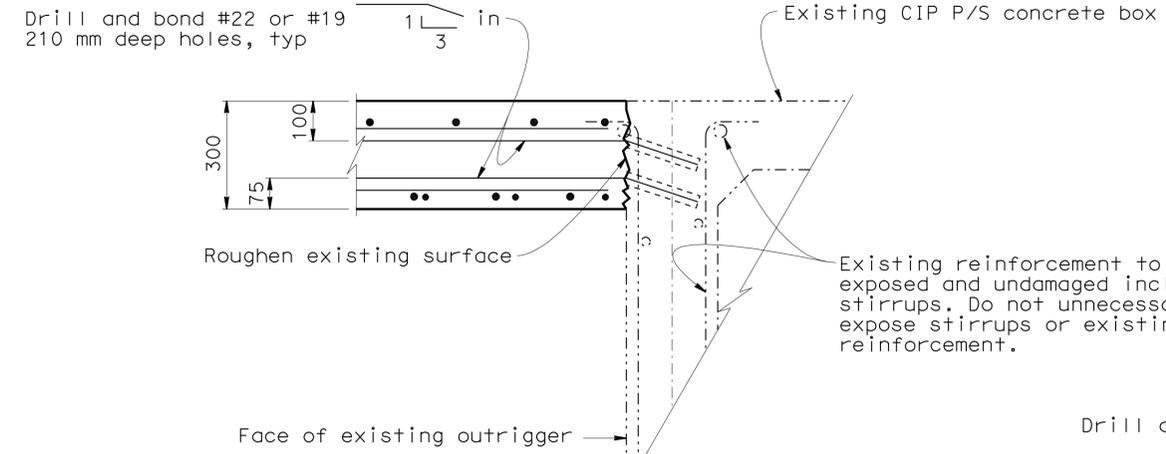
DISREGARD PRINTS BEARING EARLIER REVISION DATES

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

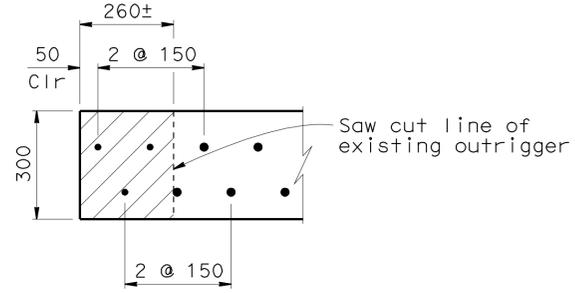
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	350	439
 REGISTERED CIVIL ENGINEER			5-11-09	DATE	
6-7-10 PLANS APPROVAL DATE					
					
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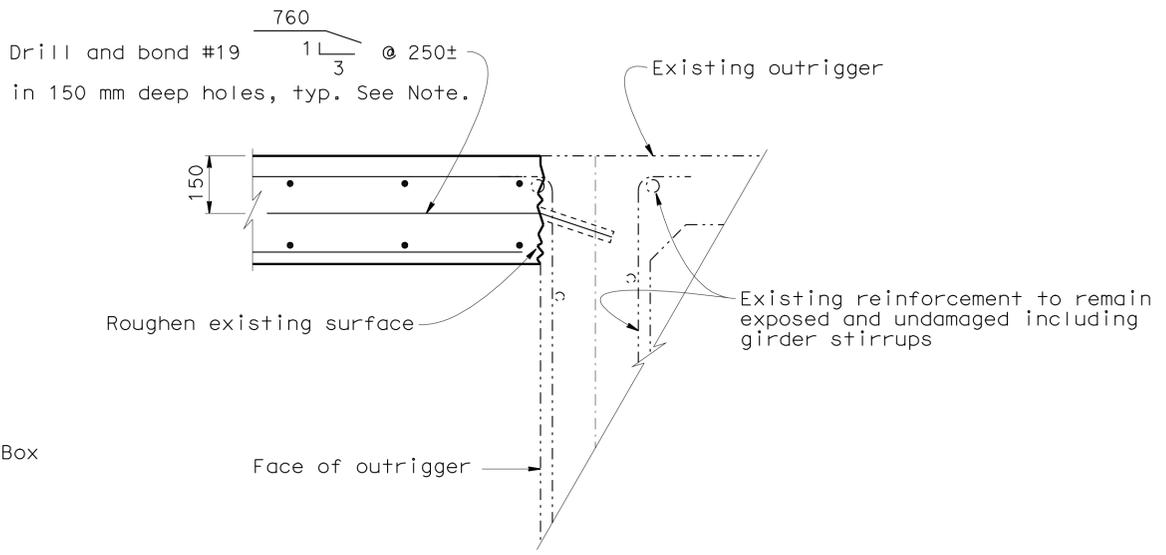
SECTION A-A
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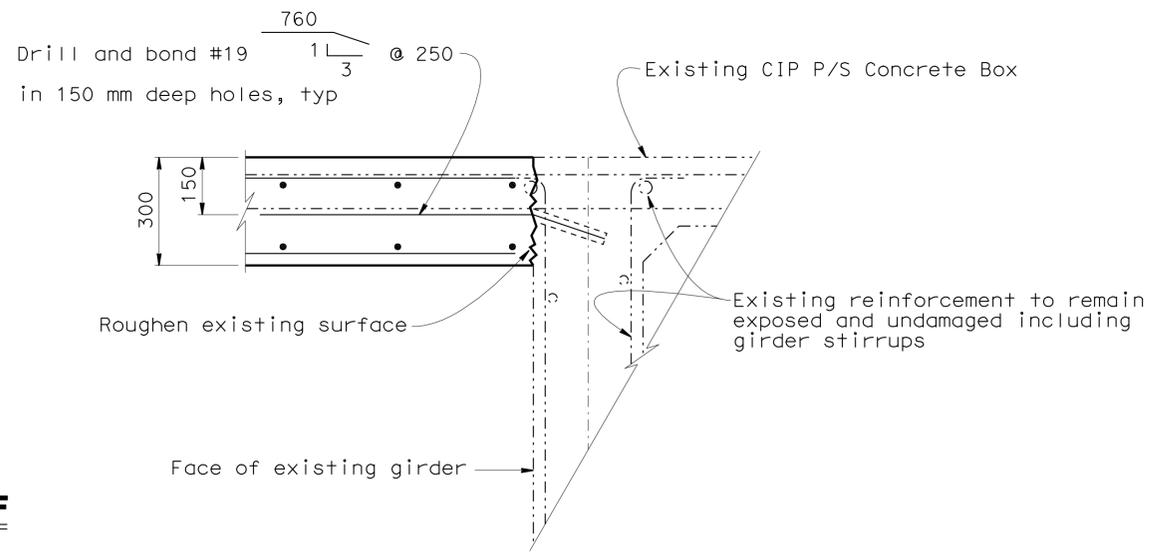
SECTION B-B
1:10



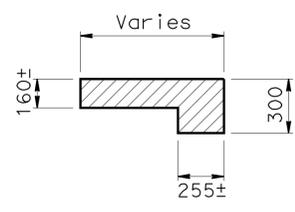
SECTION C-C
No scale



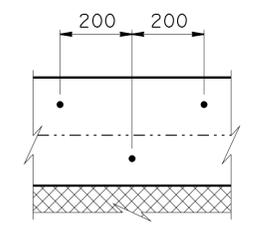
SECTION G-G
1:10



SECTION D-D
1:10



SECTION E-E
No scale



SECTION F-F
No scale

 Indicates bridge removal portion.
 Indicates limits of expanded polystyrene.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY L. Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 14
	DETAILS	BY Various	CHECKED L V/W A			KILOMETER POST	40.76	
	QUANTITIES	BY F. Tannous	CHECKED M. Kattaa					
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES 		SHEET 113 OF 134 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 17:59

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	351	439

Leon Valla 5-11-09
REGISTERED CIVIL ENGINEER DATE

6-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

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Notes:

1. Use standard 90° hooks if reinforcement cannot be extended 460 mm into end diaphragm beyond face of girder, typical. Place with stem and soffit pour if 90° hook conflicts in deck pour. 90° hook placement to be approved by Engineer.
 2. Limits of #22 transverse reinforcement includes all bars extending into closure pour beyond face of girder over 530 mm long.
 3. Use standard 180° hooks if top #16 transverse reinforcement cannot be extended 400 mm into closure pour beyond face of girder, typical. Ignore hook when extension is less than 150 mm.
 4. Limits of #19 drill and bond @ 250 mm total 7 per "Section D-D".
 5. Remove existing outrigger as required to place #19 and #22 bars per "Section C-C" and "Section E-E". Existing reinforcement to be left exposed and undamaged. Service splice #22 bars to closure pour or end diaphragm to make bars continuous as shown. Concrete for removal portion shown must be placed with concrete pour of outrigger bolsters.
 6. Stagger #16 drill and bond (chemical adhesive) total 6 top and #16 x 960 mm long total 5 bottom per detail shown in "Section F-F".
 7. Retain existing reinforcement. Use #16 @ 250 transverse reinforcement at bottom of closure pour.
 8. Use 180° hooks on bottom #22 transverse reinforcement bars at face of existing girder similar to Typical Section.
 9. Use standard 90° hook and place with deck pour if #16 drill and bond dowel won't fit into closure pour.
- * Proposed #19 drill and bond dowel may be omitted if existing #19 x 355 mm drill and bond dowels can be retained.

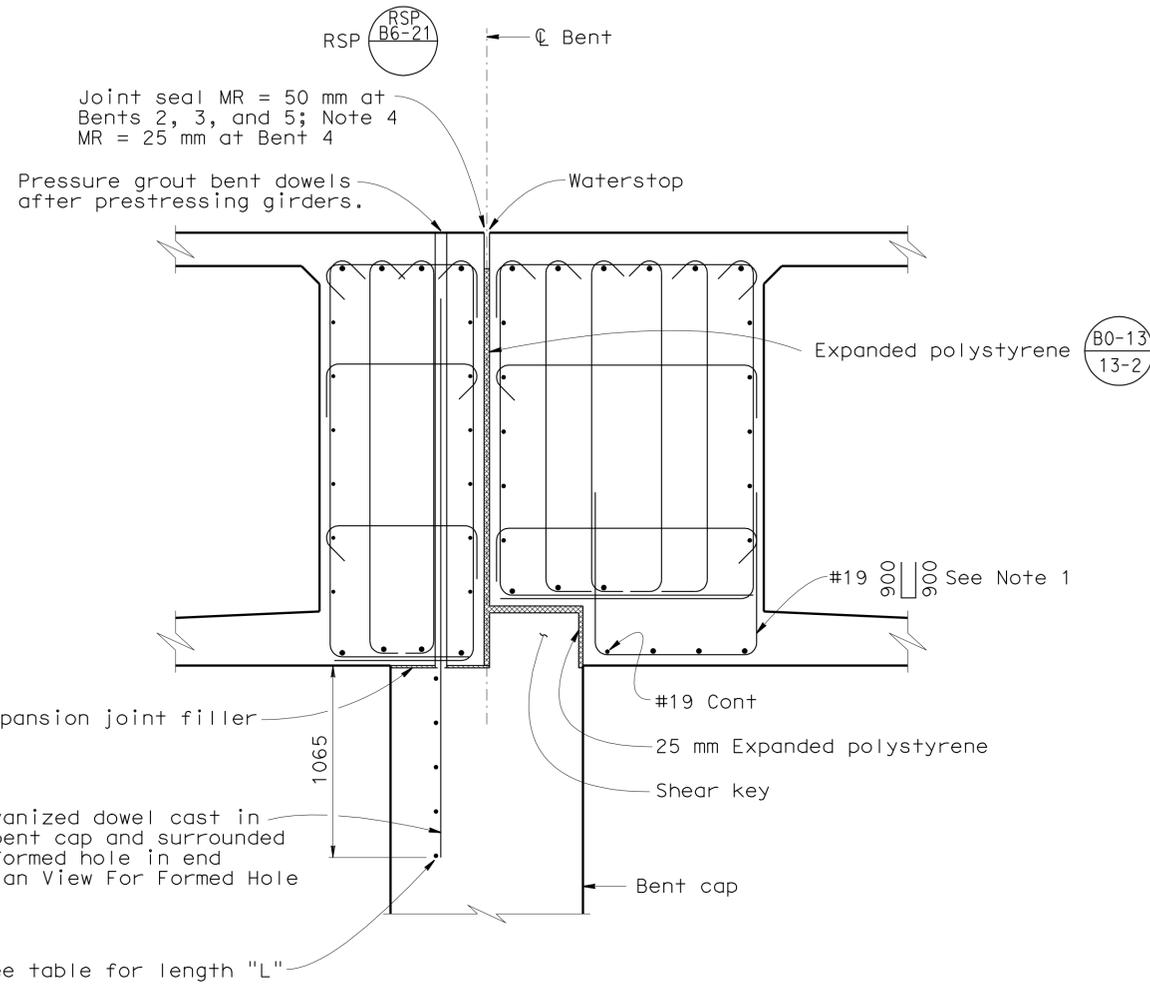
		DESIGN BY L. Valla	CHECKED W. Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) GIRDER DETAILS NO. 15		
		DETAILS BY Various	CHECKED L V/W A			KILOMETER POST 40.76			
		QUANTITIES BY F. Tannous	CHECKED M. Kattaa						
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN		ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS				CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 	SHEET 114 OF 134
FILE => 53-1253-21-gir20.dgn STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)									

USERNAME => H11enard DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 17:29

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	352	439

REGISTERED CIVIL ENGINEER DATE 5-11-09
 PLANS APPROVAL DATE 6-7-10
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

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SUPPORT DETAIL AT SHEAR KEY
1:20

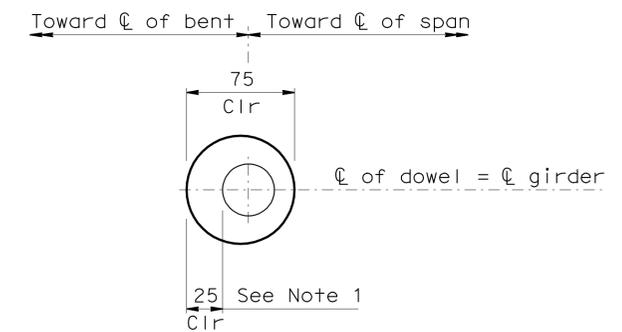
Bent	Spans	L (mm)
1	1	2340
3	2	3130
4	3 and 4	3830

Notes:

1. Match same spacing and location as end diaphragm stirrups.
2. For all details not shown see "Girder Details No. 1" sheet.
3. Note Bent 3 shown, other locations similar.
4. See Type A Seal (mod) (RSP B6-21) (MOD) detail for MR=50 mm on "Miscellaneous Girder Details No. 2" sheet.

Legend:

- Indicates limits of expanded polystyrene.
- Indicates limits of expansion joint filler.



PLAN VIEW FOR FORMED HOLE IN END DIAPHRAGM
1:5

Notes:

1. #36 dowel must be located offset as shown to inside of tubular section.

	DESIGN BY L. Valla/M K	CHECKED W A	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) MISCELLANEOUS GIRDER DETAILS NO. 1
	DETAILS BY Various	CHECKED L. Valla/M K			KILOMETER POST 40.76	
QUANTITIES BY F. Tannous	CHECKED M. Kattaa	CU 07 EA 241301	ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS		DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 6-23-08, 7-31-08, 2-5-09, 3-2-09, 5-11-09, 5-20-09, 5-26-09, 8-12-09, 10-15-09	SHEET 115 OF 134

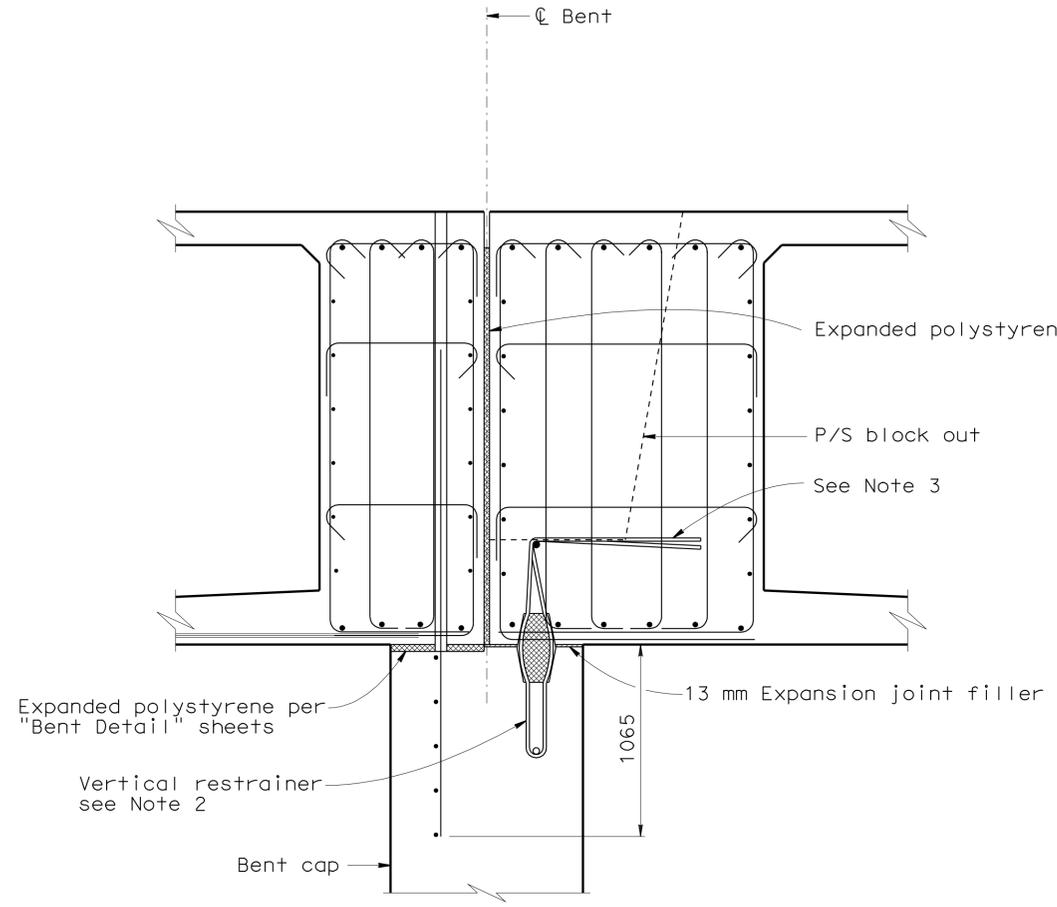
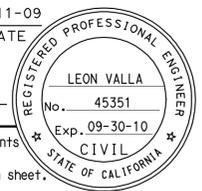
FILE => 53-1253-21-gir21.dgn STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	353	439

<i>Leon Valla</i>	5-11-09
REGISTERED CIVIL ENGINEER	DATE

6-7-10
PLANS APPROVAL DATE

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B0-13
13-2

Notes:

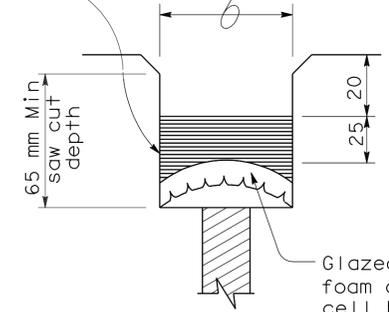
- For all details not shown see "Miscellaneous Girder Details No. 1" sheet.
- See "Cable Restrainer Unit - Type 2" sheet.
- Bend vertical restrainer bars to inside of end diaphragms if needed for clearance.
- Note Bent 3 shown, other locations similar.

Legend:

- Indicates limits of expanded polystyrene.
- Indicates limits of expansion joint filler.

Prime concrete contact surfaces when required by manufacturer.

Pourable Silicone Seal Only : 50-100 mm (MR ≤ 50 mm)



SUPPORT DETAIL OUTSIDE OF SHEAR KEY
1:20

For details not shown see "Support Detail At Shear Key"

TYPE A SEAL (MOD) ^{RSP} _{B6-21} (MOD)
Movement rating : Silicone = 50 mm Max



DESIGN	BY L. Valla/M K	CHECKED W A
DETAILS	BY Various	CHECKED L. Valla/M K
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE	
CENTINELA AVE UC (WIDEN)	
MISCELLANEOUS GIRDER DETAILS NO. 2	

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

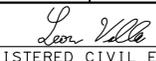


CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

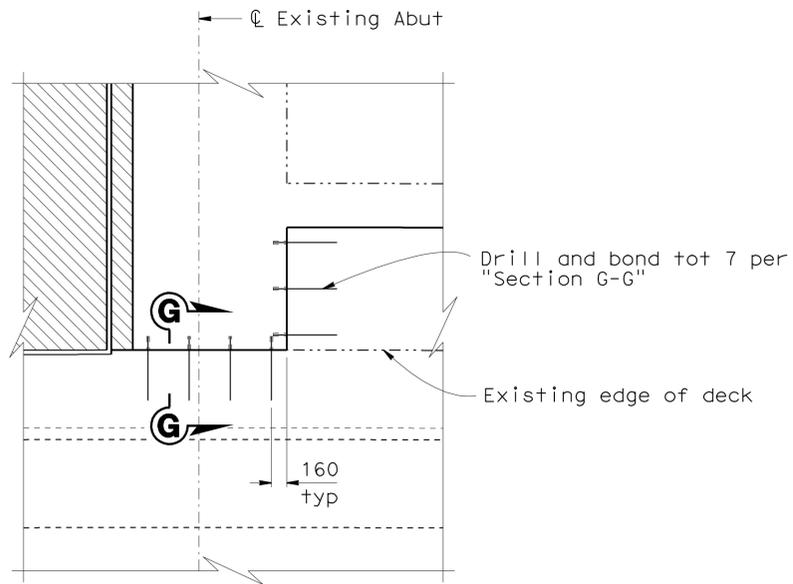
REVISION DATES	6-23-08	7-30-08	7-31-08	1-13-09	10-15-09	SHEET 116 OF 134
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USERNAME => fhmikes DATE PLOTTED => 10-JUN-2010 TIME PLOTTED => 08:39

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	354	439
		 REGISTERED CIVIL ENGINEER DATE 5-11-09			
		PLANS APPROVAL DATE 6-7-10			
<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>					

PRESTRESSING NOTES - SPAN 3

1860 MPa Low Relaxation Strands:
 Pjack = 11 120 kN
 Anchor Set = 10 mm
 Total Number of Girders = 2
 Friction curvature coefficient $\mu = 15 \times 10^{-2}(1/\text{rad})$
 Friction wobble coefficient $K = 6.6 \times 10^{-4}(1/\text{m})$
 Distribution of prestress force (Pjack) between girders shall not exceed the ratio of 3:2.
 Maximum final force variation between girders shall not exceed 500 kN.
 Concrete: $f'_c = 28 \text{ Mpa @ 28 days}$
 $f'_{ci} = 25 \text{ Mpa @ time of stressing}$
 Contractor shall submit elongation calculations based on initial stress at $\square = 0.965$ times jacking stress
 One end stressing shall be performed from bent 3 end

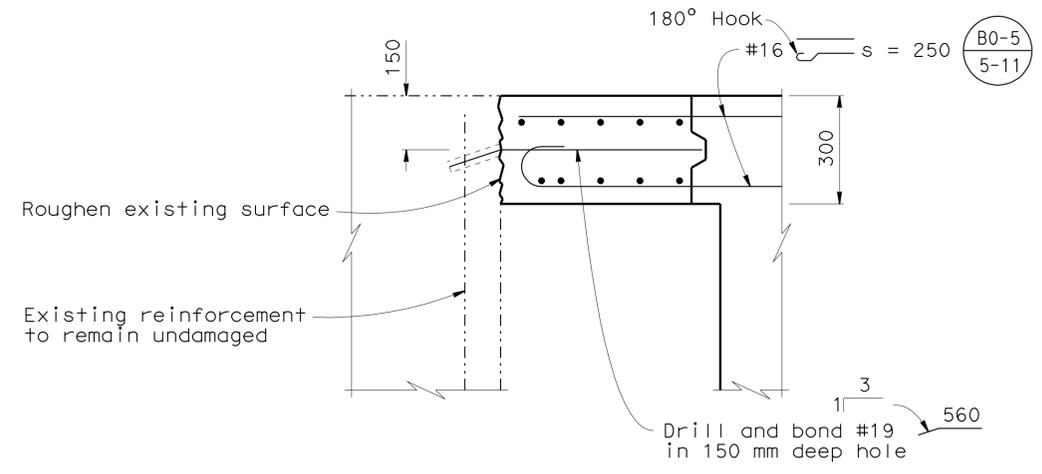


PLAN VIEW FOR CLOSURE POUR AT EXISTING ABUTMENT 1
 1:25

 Indicates removed portion and replaced section.

PRESTRESSING NOTES - SPAN 4

1860 MPa Low Relaxation Strands:
 Pjack = 8320 kN
 Anchor Set = 10 mm
 Total Number of Girders = 2
 Friction curvature coefficient $\mu = 15 \times 10^{-2}(1/\text{rad})$
 Friction wobble coefficient $K = 6.6 \times 10^{-4}(1/\text{m})$
 Distribution of prestress force (Pjack) between girders shall not exceed the ratio of 3:2.
 Maximum final force variation between girders shall not exceed 400 kN.
 Concrete: $f'_c = 28 \text{ Mpa @ 28 days}$
 $f'_{ci} = 25 \text{ Mpa @ time of stressing}$
 Contractor shall submit elongation calculations based on initial stress at $\square = 0.957$ times jacking stress
 One end stressing shall be performed from bent 5 end



SECTION G-G
 1:10

Note: For all details not shown see "Part Typical Section" on "Typical Section Sheet".



DESIGN	BY M. Kattaa	CHECKED F. Tannous
DETAILS	BY Various	CHECKED F. Tannous/L. Valla
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
MISCELLANEOUS GIRDER DETAILS NO. 3

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
 EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	4-24-07	5-3-08	6-21-08	8-4-08	1-18-09	2-28-09	10-15-09	SHEET 117 OF 134
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USERNAME => HSTFK DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:01

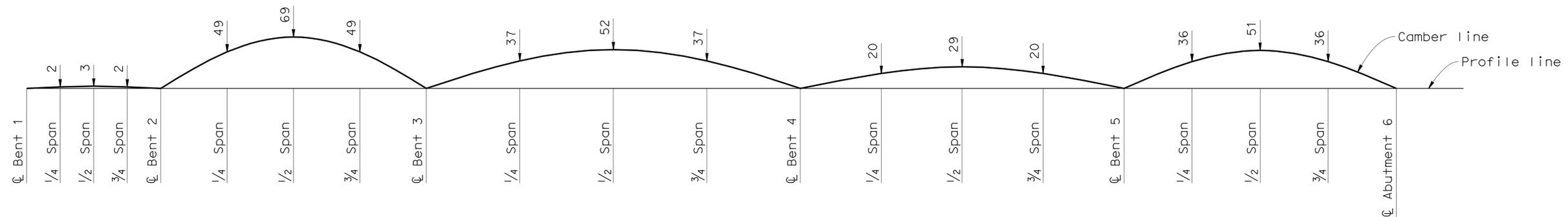
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	355	439

Leon Valla 5-11-09
REGISTERED CIVIL ENGINEER DATE

6-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

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CAMBER DIAGRAM

No scale

Does not include allowance for falsework settlement.

Falsework Release

Alternative 1:
Falsework shall be released as soon as permitted by the specifications. Closure pour shall not be placed sooner than 60 days after the falsework has been released.

Alternative 2:
Falsework shall not be released less than 28 days after the last concrete has been placed. Closure pour shall not be placed sooner than 14 days after the falsework has been released.

When Falsework Release Alternative 2 is used, camber values are 0.75 times those shown.



DESIGN	BY M. Kattaa	CHECKED F. Tannous
DETAILS	BY Various	CHECKED F. Tannous
QUANTITIES	BY F. Tannous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE

CENTINELA AVE UC (WIDEN)

MISCELLANEOUS GIRDER DETAILS NO. 4

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES								SHEET	OF
4-20-07	4-28-07	6-1-07	9-20-07	5-8-08	8-4-08			118	134

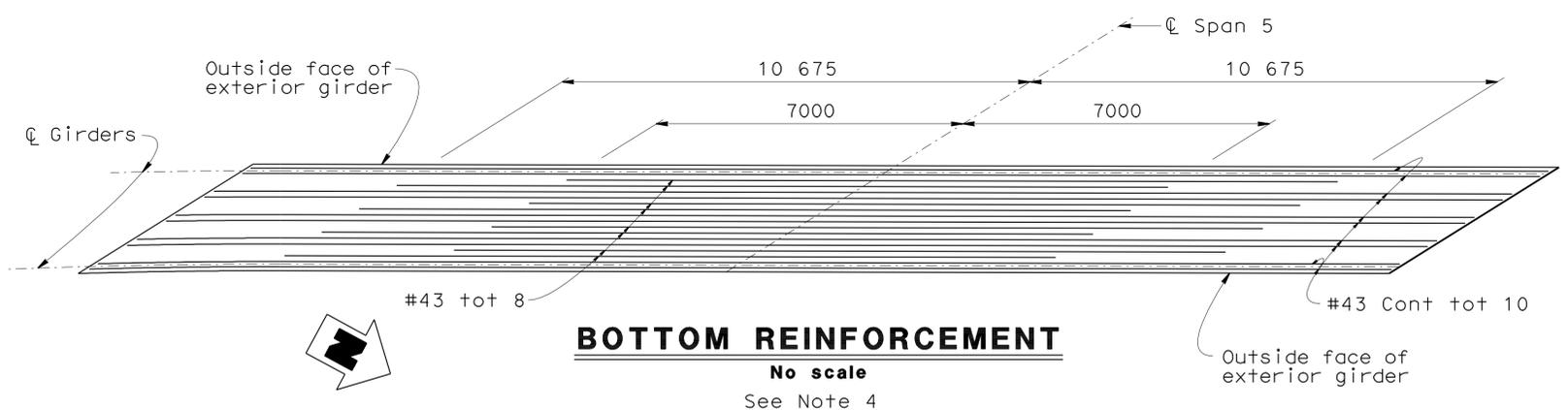
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DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	356	439

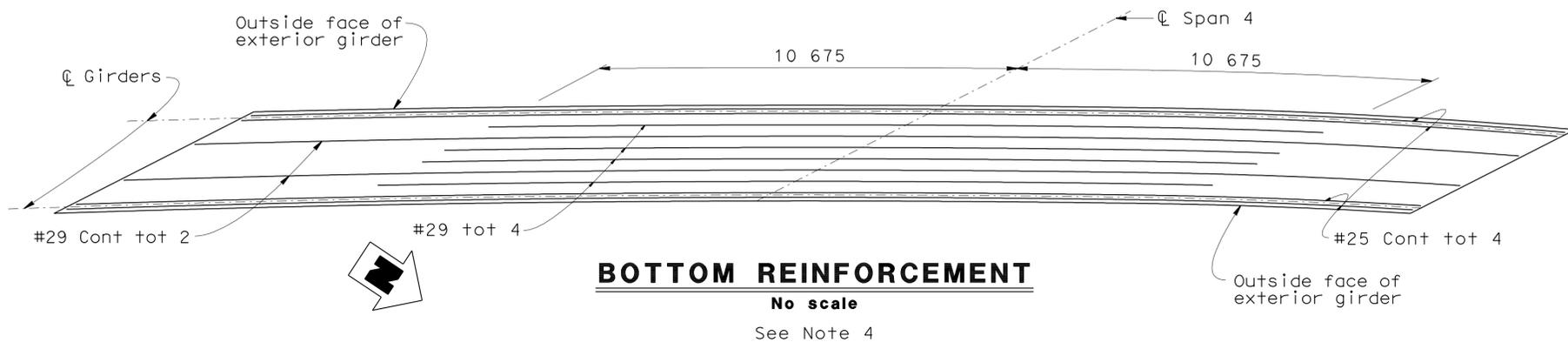
<i>Leon Valla</i>		5-11-09
REGISTERED CIVIL ENGINEER	DATE	
6-7-10		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

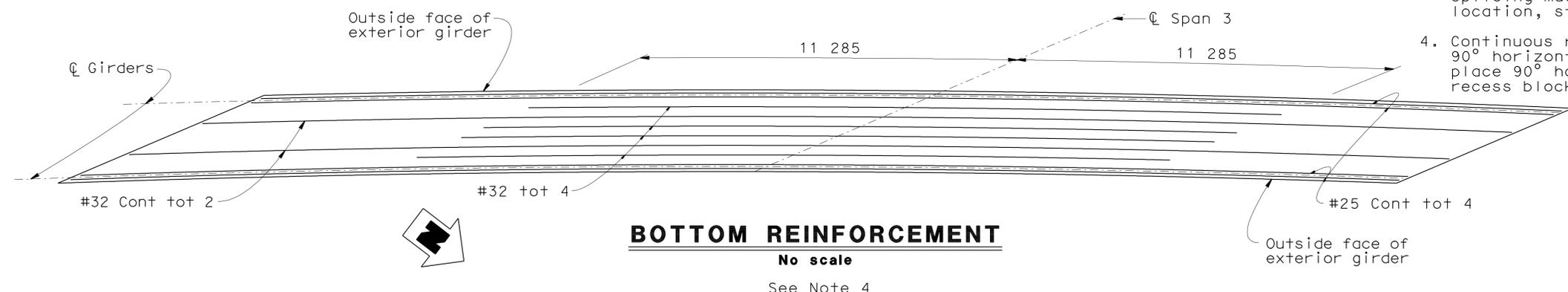
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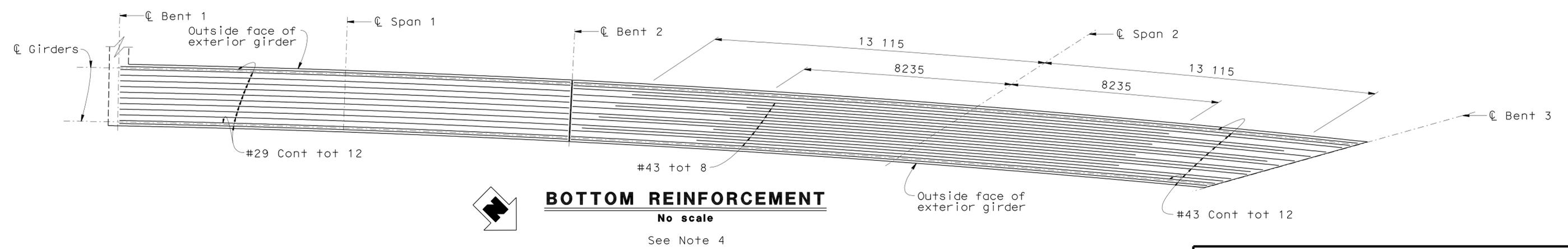
BOTTOM REINFORCEMENT
 No scale
 See Note 4



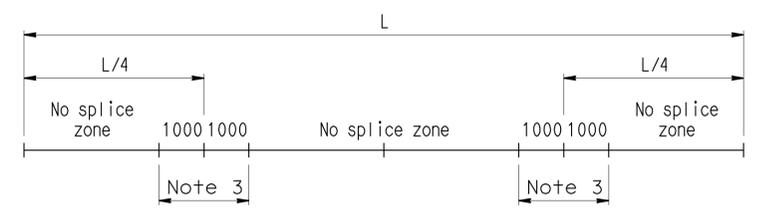
BOTTOM REINFORCEMENT
 No scale
 See Note 4



BOTTOM REINFORCEMENT
 No scale
 See Note 4



BOTTOM REINFORCEMENT
 No scale
 See Note 4



REINFORCEMENT SPLICING REQUIREMENTS
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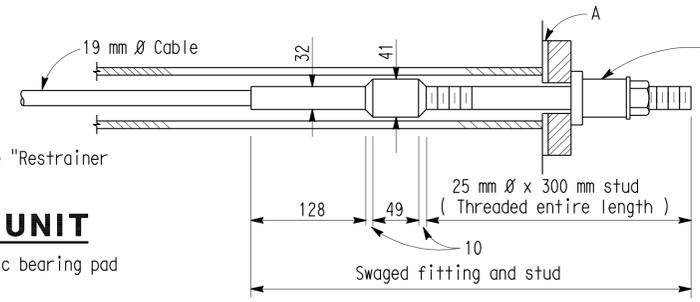
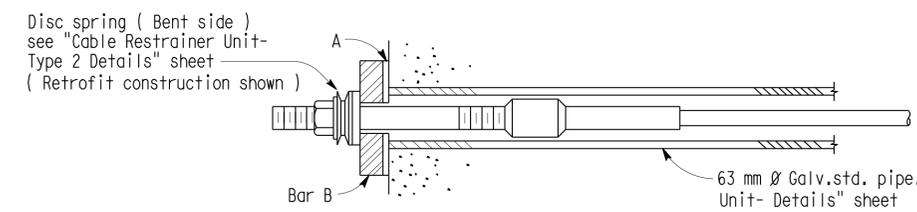
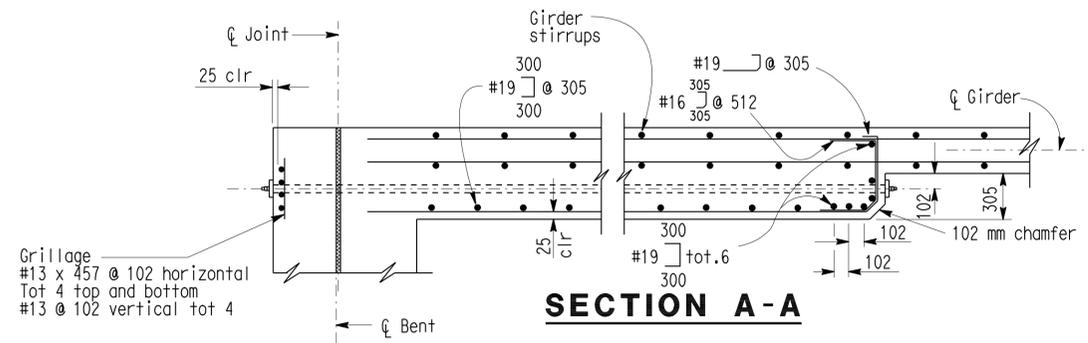
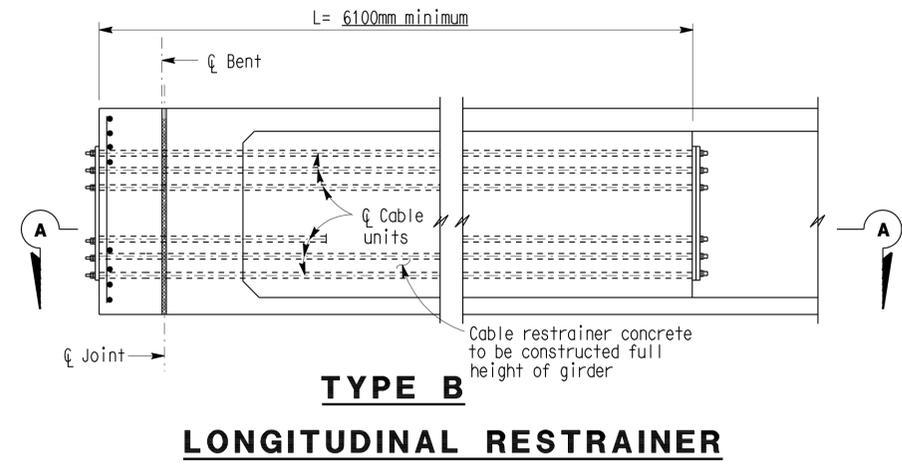
- Notes:
1. All continuous bottom girder reinforcement is service spliced.
 2. All bars shall be evenly spaced between girders as shown.
 3. Only location of service splices allowed. All splicing must be done within the 2000 mm splice location, staggered 1000 mm apart typical as shown.
 4. Continuous reinforcement to terminate at each end with 90° horizontal hooks into diaphragm supports except place 90° hooks horizontal to avoid prestress anchorage recess blockouts.

	DESIGN BY Mostafa Kattaa	CHECKED F. Tannous/L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) BOTTOM GIRDER REINFORCEMENT
	DETAILS BY Various	CHECKED F. Tannous/L. Valla			KILOMETER POST 40.76	
	QUANTITIES BY F. Tannous	CHECKED M. Kattaa			SHEET 119 OF 134	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS		CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 5-31-07, 6-1-07, 6-18-07, 9-28-07, 5-8-08, 6-24-08, 1-14-09, 2-24-09, 3-3-09
 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	357	439

5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA
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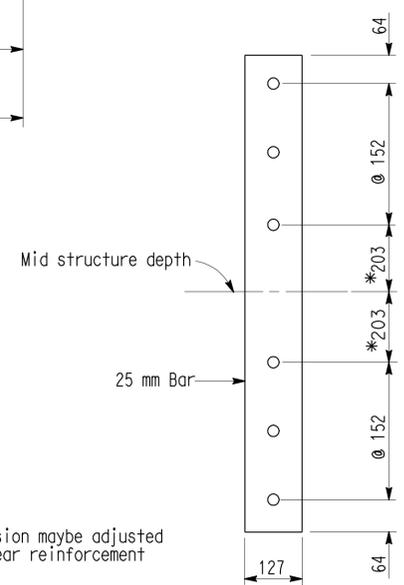


Cable Yield Indicator (Hinge side) see "Cable Restrainer Unit-Type 2 Details" sheet (Retrofit construction shown)

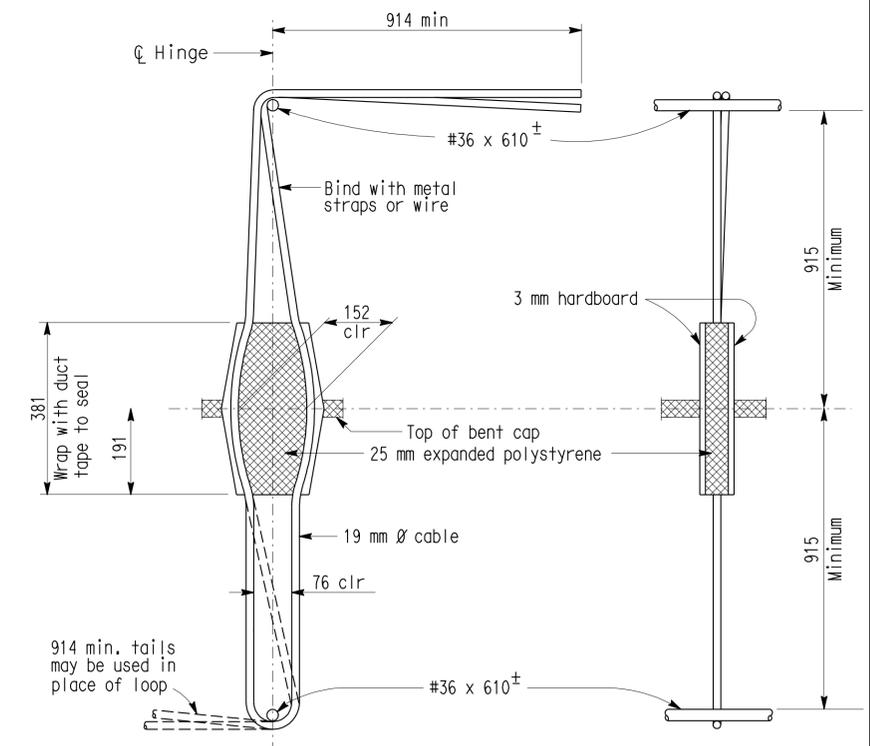
CABLE UNIT
A = 6 mm elastomeric bearing pad

NOTES:
 Restrainer units to be on tangent alignment.
 Anchor nuts shall not be set until 30 days following completion of prestressing for CIP prestressed bridges.
 See other sheets for location and number of longitudinal and vertical hinge restrainers, and table of joint openings.
 Contractor may install restrainers in horizontal arrangement with approval of the Engineer. The location shall be in the middle 1/3 depth of the structure.
 An alternative is to place restrainers in two horizontal layers, equally located above and below the mid structure depth. The number of restrainers in each layer shall not differ by more than one.

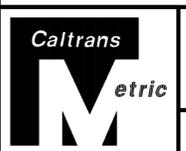
Denotes limits of expanded polystyrene



* Dimension maybe adjusted to clear reinforcement



VERTICAL RESTRAINER



DESIGN	BY L. Valla	CHECKED W. Addlespurger
DETAILS	BY Various	CHECKED L. Valla
QUANTITIES	BY F. Tanous	CHECKED M. Kattaa

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CIP BOX BRIDGE
CENTINELA AVE UC (WIDEN)
CABLE RESTRAINER UNIT - TYPE 2

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



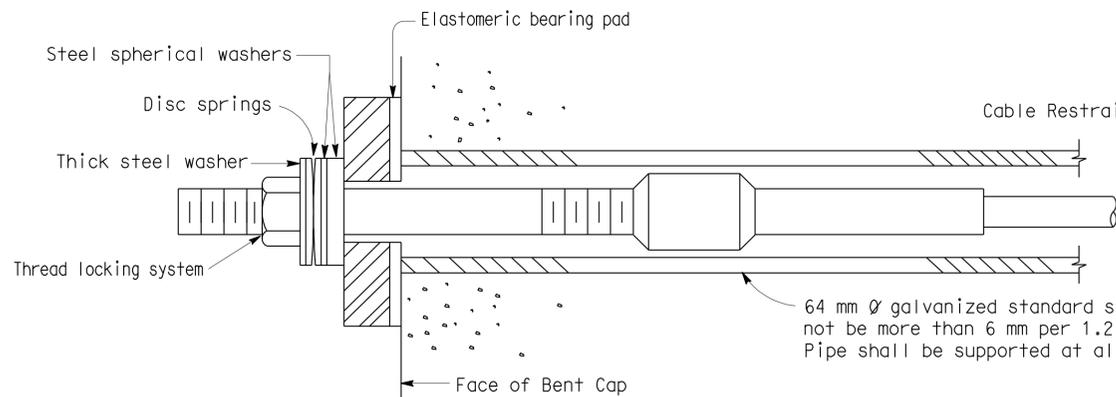
CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	12-18-08	SHEET 120	OF 134
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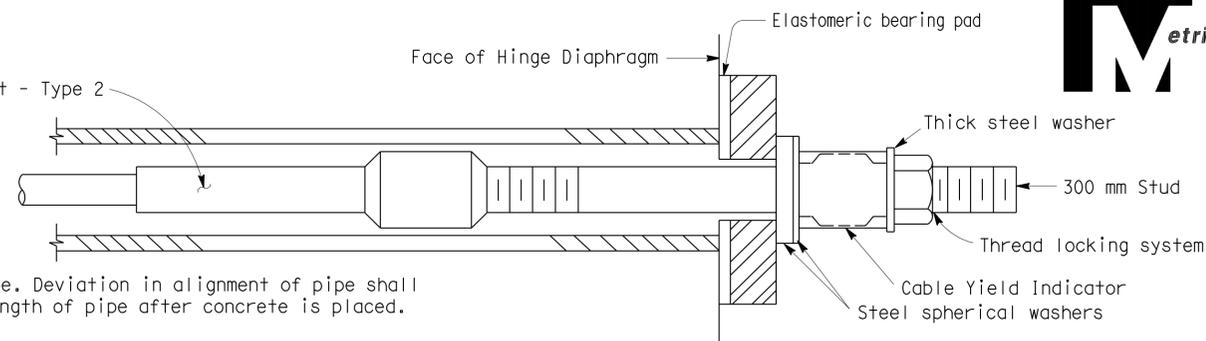


DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	405	39.7/41.5	358	439
			5-11-09		
REGISTERED ENGINEER - CIVIL					
6-7-10					
PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



BENT SIDE

(Retrofit construction shown)



HINGE SIDE

(Retrofit construction shown)

64 mm Ø galvanized standard steel pipe. Deviation in alignment of pipe shall not be more than 6 mm per 1.2 m of length of pipe after concrete is placed. Pipe shall be supported at all ends.

CABLE UNIT

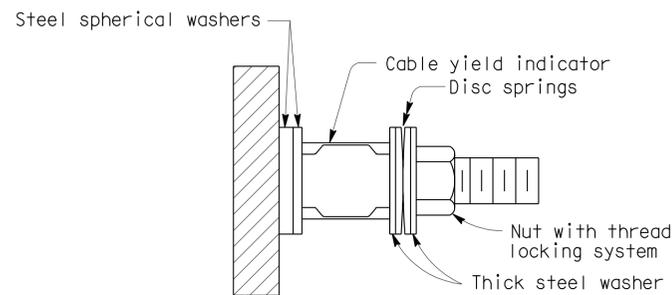
DISC SPRINGS AND WASHERS

"All dimensions in mm, except as noted"

L* (m)	DISC SPRING					STEEL SPHERICAL WASHER			THICK WASHER		
	ID	OD	t	H	COLOR CODE	ID	OD	Nom thick.	ID	OD	t**
0 - 7.6	25	50	1.6	3.3	WHITE	30	57	13	26	50	6.3
7.7 - 9.7	25	50	2.0	3.4	RED	30	57	13	26	50	6.3
9.8 - 11.5	25	50	2.4	3.6	BLUE	30	57	13	26	50	6.3
11.6 - 13.7	31	63	2.5	4.5	YELLOW	33	64	13	29	57	6.3

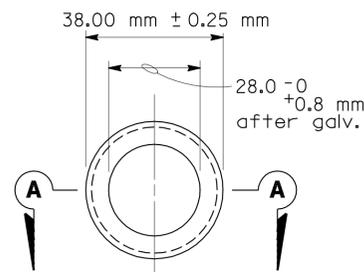
*For length L (m), see "Cable Restrainer Unit - Type 2" sheet **Minimum value

NOTE: All OD and ID dimensions for washers and disc springs shall meet the dimensional tolerances for harden steel washers, ASTM F436

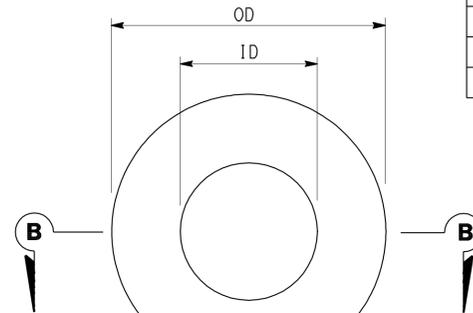


ADJUSTMENT END

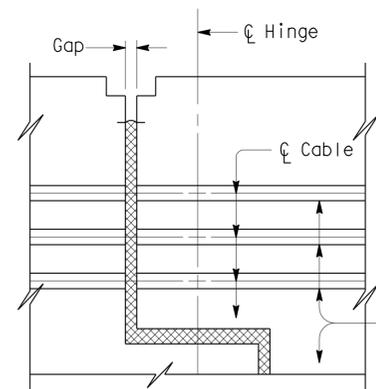
(New construction shown)



END VIEW



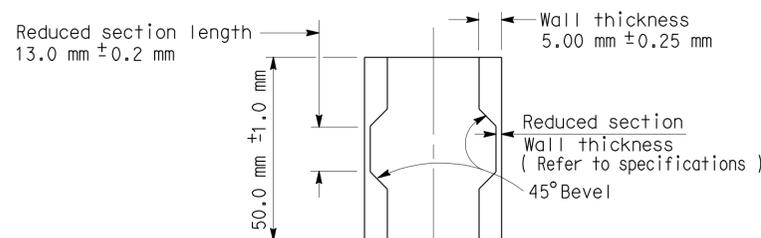
PLAN



HINGE DETAIL

NOTES:

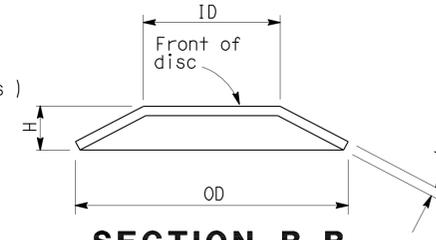
- A. The ends of pipe shall be covered or capped to prevent concrete and debris from entering the pipe until hinge concrete is placed.
- B. Care should be taken to align the pipes on each side of the hinge.
- C. All ends of pipes must be flush with or slightly recessed from the concrete. The inside edges of the pipes must be smooth to prevent fraying of cables.



SECTION A-A

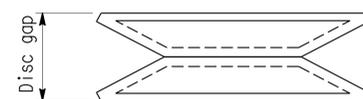
CABLE YIELD INDICATOR

All dimensions are before galvanizing except as noted.



SECTION B-B

(Single spring)



AS INSTALLED ON STUD

DISC SPRING

Note: For dimensions not shown, see table

RESTRAINER UNIT INSTALLATION PROCEDURE

NEW CONSTRUCTION:

1. Install Cable Yield Indicator, spherical washers, disc springs, nut and washers on the hinge side of restrainers as shown in "Adjustment End" detail. Disc springs shall be installed front to front as shown in "Disc Spring" detail.
2. Place only nut and washer on bent side of restrainers. Place thread locking system on bent side stud prior to installing nut and washers, and prior to setting the cable.
3. Tighten nut on the cable from the adjustment end of restrainer until the disc springs collapse and there is no disc gap remaining between the discs. The cable should be approximately straight with no sag.
4. See Item 5 of Retrofit Construction.

RETROFIT CONSTRUCTION:

1. Install disc springs on bent side of cable system using spherical washers to align discs to stud. Discs shall be installed front to front as shown in "Disc Spring" detail. Install Cable Yield Indicator, spherical washers, nut and washer on the hinge side of restrainers as shown in "Cable Unit" detail.
2. If existing retrofit cables are being reused, 300 mm studs shall be installed.
3. Place thread locking system on bent side stud prior to installing nut and washers, and prior to setting the cable.
4. Tighten the cable from hinge side of restrainer until the disc springs at the opposite end collapse, and there is no disc gap remaining between the discs. The cable should be approximately straight with no sag.
5. Place thread locking system on hinge side stud after tightening the cable, but before backing off the nut. Back off the nut at hinge side a distance equal to maximum additional amount that the hinge joint is expected to open, relative to existing ambient conditions, as shown on the plans for movement rating.

NOTE: If the cable needs to be secured from turning while tightening, use double nut locking technique on the stud to protect the threads.

NO SCALE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

STANDARD DRAWING

RELEASE DATE	4/20/98	DESIGN BY	S. SAHS	CHECKED	R.J. ZELINSKI	RELEASED BY	
FILE NO.	xs7-420	DETAILS BY	R. YEE	CHECKED	R.J. ZELINSKI		
		SUBMITTED BY	R.J. ZELINSKI	DRAWING DATE	4/98	OFFICE CHIEF	

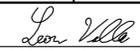
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.	53-1253
KILOMETER POST	40.76

CENTINELA AVE UC (WIDEN)
CABLE RESTRAINER UNIT - TYPE 2 DETAILS

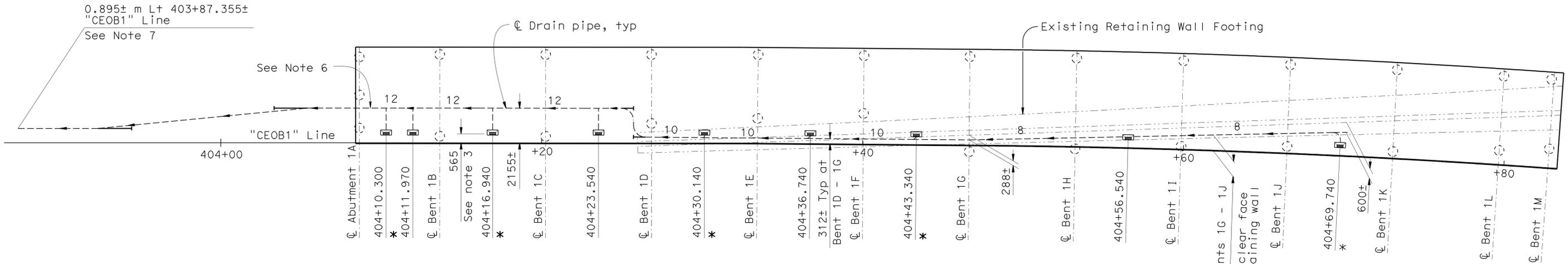
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	359	439


 5-11-09
 REGISTERED CIVIL ENGINEER DATE

6-7-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 9-30-10
 CIVIL
 STATE OF CALIFORNIA

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PLAN SECTION 1
1:125



Legend:

 Indicates deck drain Type A. B7-5
7-1

 Indicates nominal pipe size and direction of flow.

Notes:

1. Deck drain station indicates ϕ of drain.
2. Concrete Barrier not shown for clarity.
3. Typical offset from "CEOB1" Line to ϕ deck drain Type A.
4. All bends shall be smooth at the following minimum radius:
 NPS 6 R = 450
 NPS 8 R = 600
 NPS 10 R = 750
 NPS 12 R = 900
5. All drainage pipes must have expansion coupling at deck joints per B7-8.
6. Drainage pipe must pass under abutment stem and clear column isolation casing by 200 mm.
7. For drain outlet connection, see "Road Plans".
8. All piping shall be galvanized steel schedule 10 except NPS 12 shall be 6.35 mm minimum thickness.
9. Minimum pipe slope = 2.0% for all NPS 6 and larger.
10. *, — Denotes drain pipe cleanout locations.

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY F. Tannous	CHECKED L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	RC SLAB BRIDGE	
	DETAILS	BY Various	CHECKED F. Tannous/LV			53-1253	CENTINELA AVE UC (WIDEN)	
	QUANTITIES	BY C. Hensel	CHECKED C. Elbo			40.76	DECK DRAINAGE LAYOUT NO. 1	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 4-24-07 10-22-07 07-28-08 01-18-08 01-24-08 12-30-08 5-11-09 10-18-09 10-19-09	SHEET 122 OF 134

FILE => 53-1253-2q-dd01.dgn STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

USERNAME => HSTFK DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:02

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	360	439

<i>Leon Valla</i>		5-11-09
REGISTERED CIVIL ENGINEER	DATE	
6-7-10		
PLANS APPROVAL DATE		

LEON VALLA	
No. 45351	Exp. 09-30-10
CIVIL	
STATE OF CALIFORNIA	

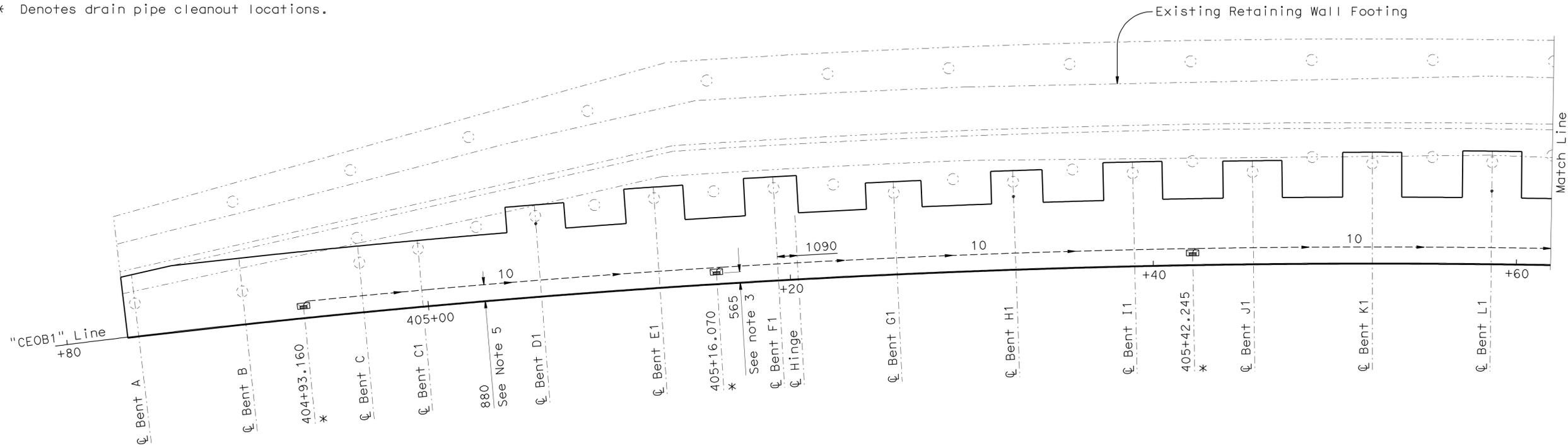
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Notes:

- Deck drain station indicates ϕ of drain.
- Concrete Barrier not shown for clarity.
- Typical offset from "CEOB1" Line to ϕ deck drain Type A.
- All bends shall be smooth at the following minimum radius:
 NPS 6 R = 450
 NPS 8 R = 600
 NPS 10 R = 750
 NPS 12 R = 900
- Typical offset from "CEOB1" Line to ϕ drain pipe.
- All drainage pipes must have expansion coupling at deck joints per. ϕ B7-8
- All piping shall be galvanized steel schedule 10.
- Minimum pipe slope:
 NPS 6 = 2.0%
 NPS 10 and larger = 1.0%
- * Denotes drain pipe cleanout locations.

Legend:

- Indicates deck drain Type A. ϕ B7-5 / 7-1
- ϕ 10 \rightarrow Indicates nominal pipe size and direction of flow.
- \bullet Indicates existing Type B deck drains to be removed.



PLAN SECTION 2

1:125

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



DESIGN	BY F. Tannous	CHECKED L. Valla
DETAILS	BY Various	CHECKED F. Tannous/LV
QUANTITIES	BY C. Hensel	CHECKED C. Elbo

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 12

BRIDGE NO.	53-1253
KILOMETER POST	40.76

RC SLAB BRIDGE
CENTINELA AVE UC (WIDEN)
DECK DRAINAGE LAYOUT NO. 2

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

CU 07
 EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	10-23-07	10-26-07	07-28-08	07-18-08	01-18-08	07-28-08	10-19-09	10-19-09	
SHEET	123							OF	134

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

USERNAME => HSTFK DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:02

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	361	439

Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

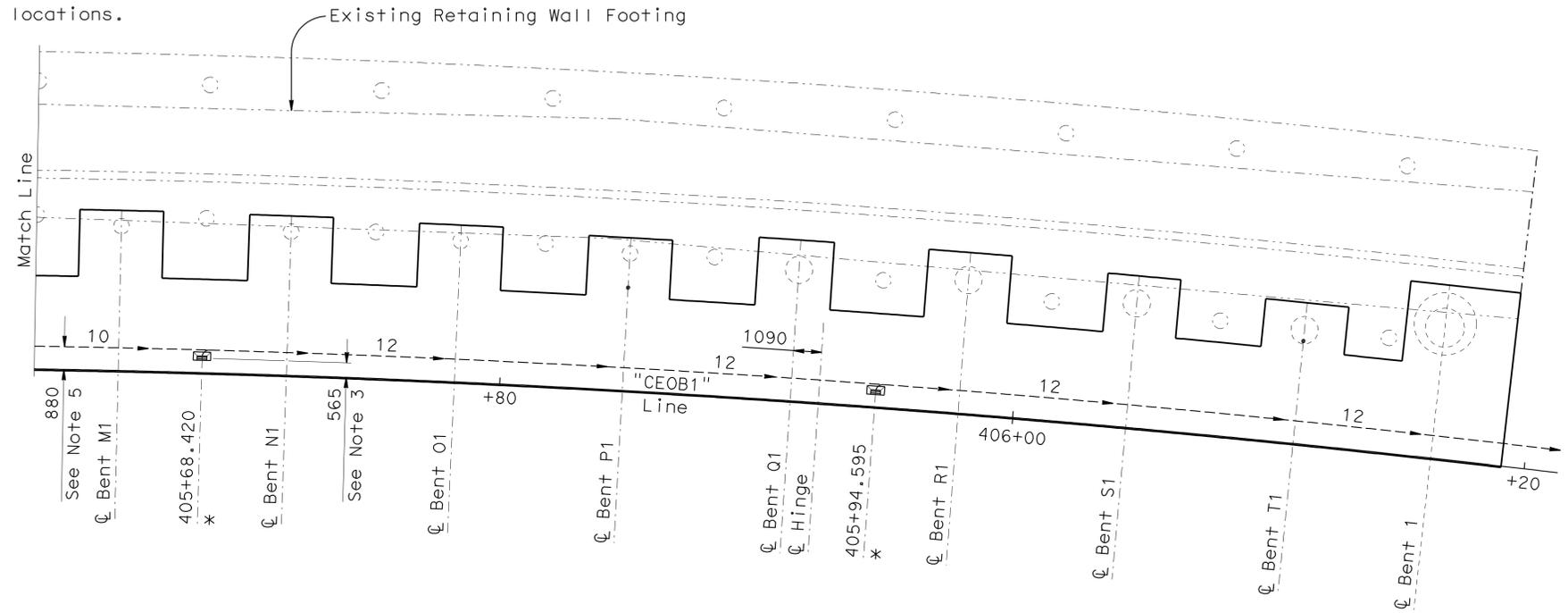
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Notes:

- Deck drain station indicates ϕ of drain.
- Concrete Barrier not shown for clarity.
- Typical offset from "CEOB1" Line to ϕ deck drain Type A.
- All bends shall be smooth at the following minimum radius:
 NPS 6 R = 450
 NPS 8 R = 600
 NPS 10 R = 750
 NPS 12 R = 900
- Typical offset from "CEOB1" Line to ϕ drain pipe.
- All drainage pipes must have expansion coupling at deck joints per. $\text{\textcircled{B7-8}}$
- All piping shall be galvanized steel schedule 10 except NPS 12 shall be 6.35 mm minimum thickness.
- Minimum pipe slope:
 NPS 6 = 2.0%
 NPS 10 and larger = 1.0%
- * Denotes drain pipe cleanout locations.

Legend:

- Indicates deck drain Type A. $\text{\textcircled{B7-5}}$
7-1
- $\text{\textcircled{10}}$ Indicates nominal pipe size and direction of flow.
- \bullet Indicates existing Type B deck drains to be removed.



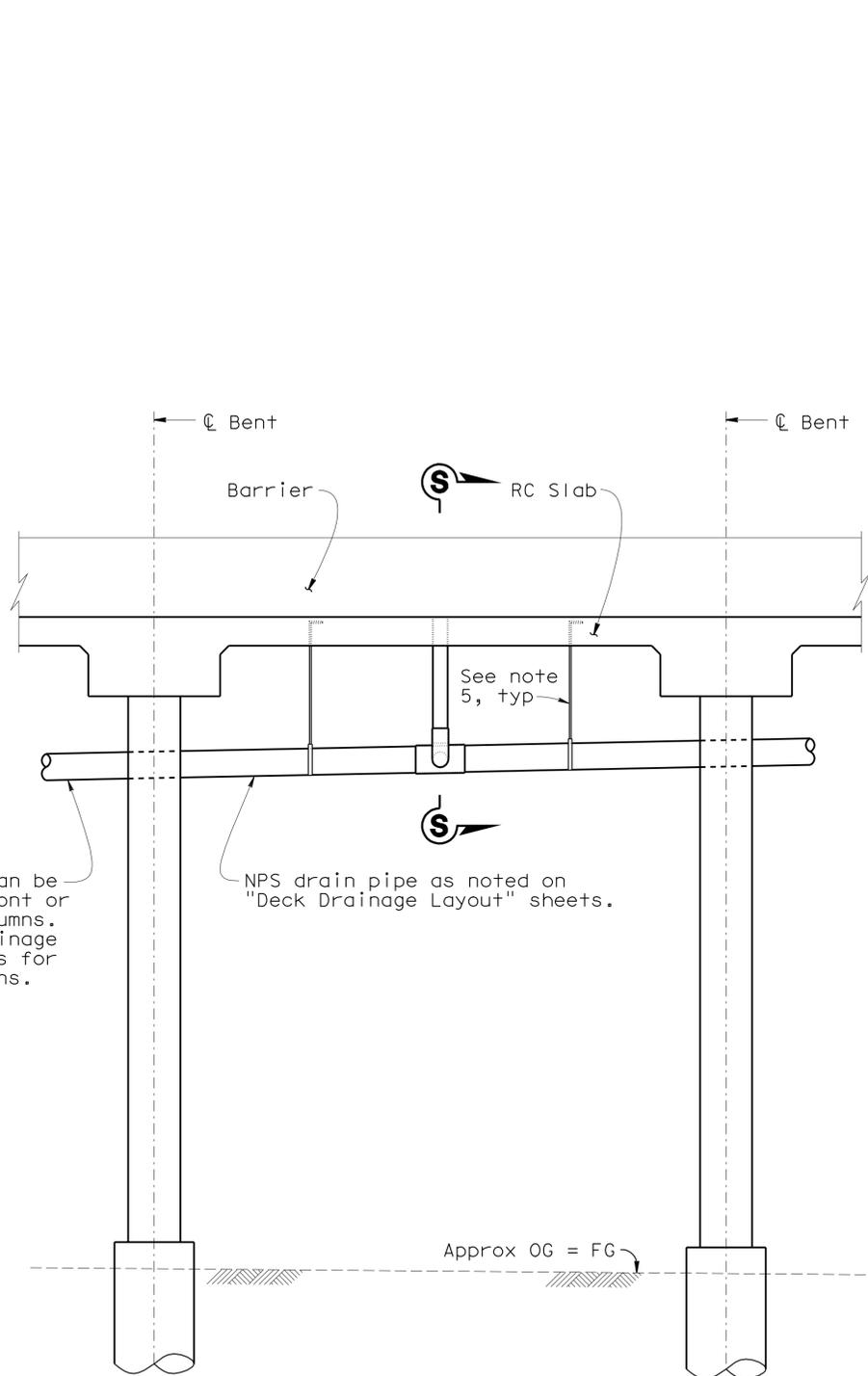
PLAN SECTION 2
1:125

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY F. Tannous	CHECKED L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1253	RC SLAB BRIDGE CENTINELA AVE UC (WIDEN) DECK DRAINAGE LAYOUT NO. 3
	DETAILS	BY Various	CHECKED F. Tannous/LV			KILOMETER POST	40.76	
	QUANTITIES	BY C. Hensel	CHECKED C. Elbo			CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 10-23-07, 10-26-07, 07-18-08, 07-18-08, 07-28-08, 10-15-09	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS: 0 10 20 30 40 50 60 70 80 90 100		STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)		

USERNAME => HSTFK DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:02

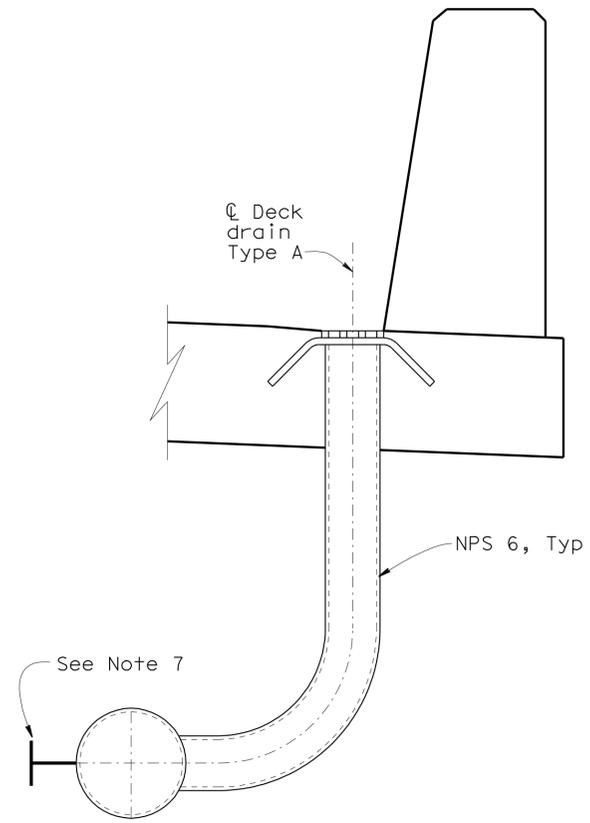
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	362	439
			5-11-09		
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			PLANS APPROVAL DATE		
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DECK DRAIN PIPE ELEVATION
1:40

Station 404+10.300 through 405+94.595

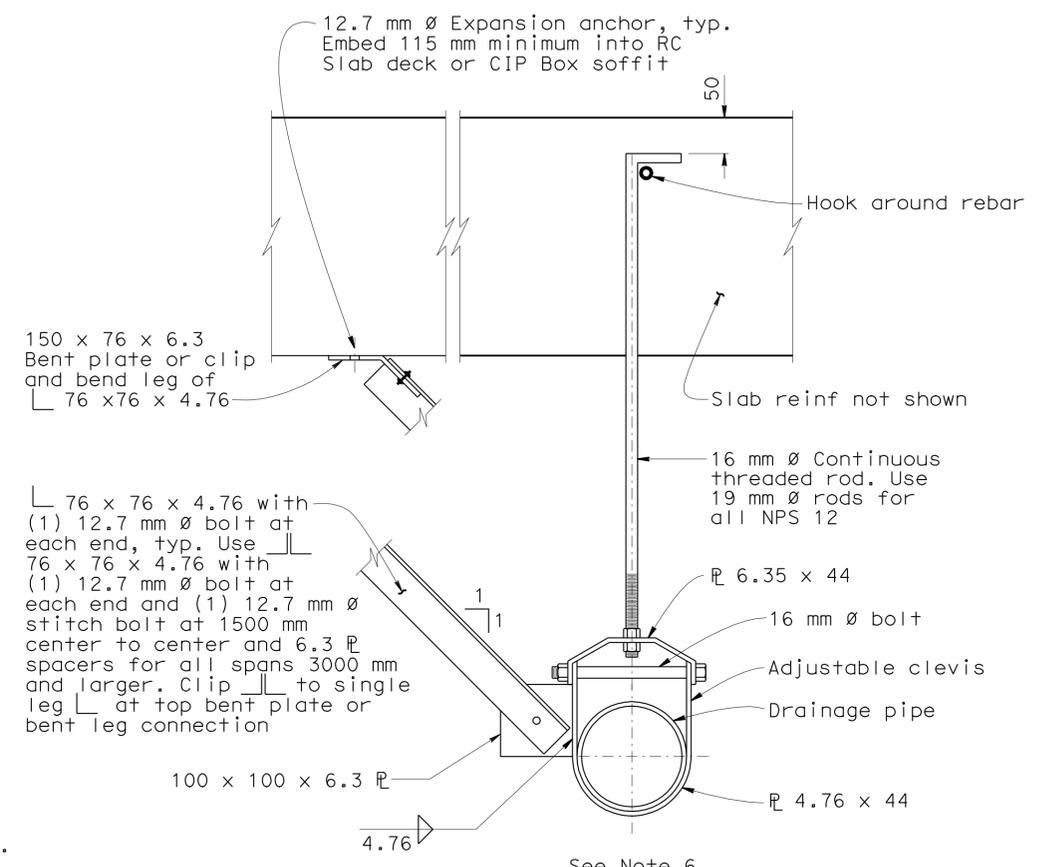
Drain pipes can be located in front or behind of columns. See "Deck Drainage Layout" sheets for exact locations.



SECTION S-S
1:10

Notes:

1. All drain pipe shall be NPS 6 unless noted.
2. All NPS bends shall be smooth with a minimum radius per note 4 on "Deck Drainage Layout" sheets.
3. For all general notes, pipe alignment, sleeve connection and details not shown see (B7-6).
4. Minimum pipe slope is as noted on "Deck Drainage Layout" sheets.
5. Vertical drainage pipe supports @ 3 m maximum centers. Minimum of two supports required to each span of RC Slab. See 'Vertical Drainage Pipe Support' detail.
6. The Contractor may Fabricate or Purchase Pipe Support Hangers and Brackets as Approved by the Engineer. Pipe supports and Brackets shall be Capable of Supporting Drain Pipe Loads. Vertical drainage pipe supports must be laterally braced as well.
7. Cleanouts where shown and noted per * on "Deck Drainage Layout" sheets.



VERTICAL DRAINAGE PIPE SUPPORT
1:5

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY F. Tannous	CHECKED L. Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1253	RC SLAB BRIDGE CENTINELA AVE UC (WIDEN) DECK DRAINAGE DETAILS NO. 1		
	DETAILS	BY Various	CHECKED F. Tannous/LV			KILOMETER POST	40.76			
	QUANTITIES	BY C. Hensel	CHECKED C. Elbo			CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES		<table border="1"> <tr> <td>10-11-07</td> <td>01-11-08</td> <td>07-15-08</td> <td>07-28-08</td> <td>10-15-09</td> </tr> </table>	10-11-07
10-11-07	01-11-08	07-15-08	07-28-08	10-15-09						
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN								ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 	FILE => 53-1253-2q-dd04.dgn STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)	

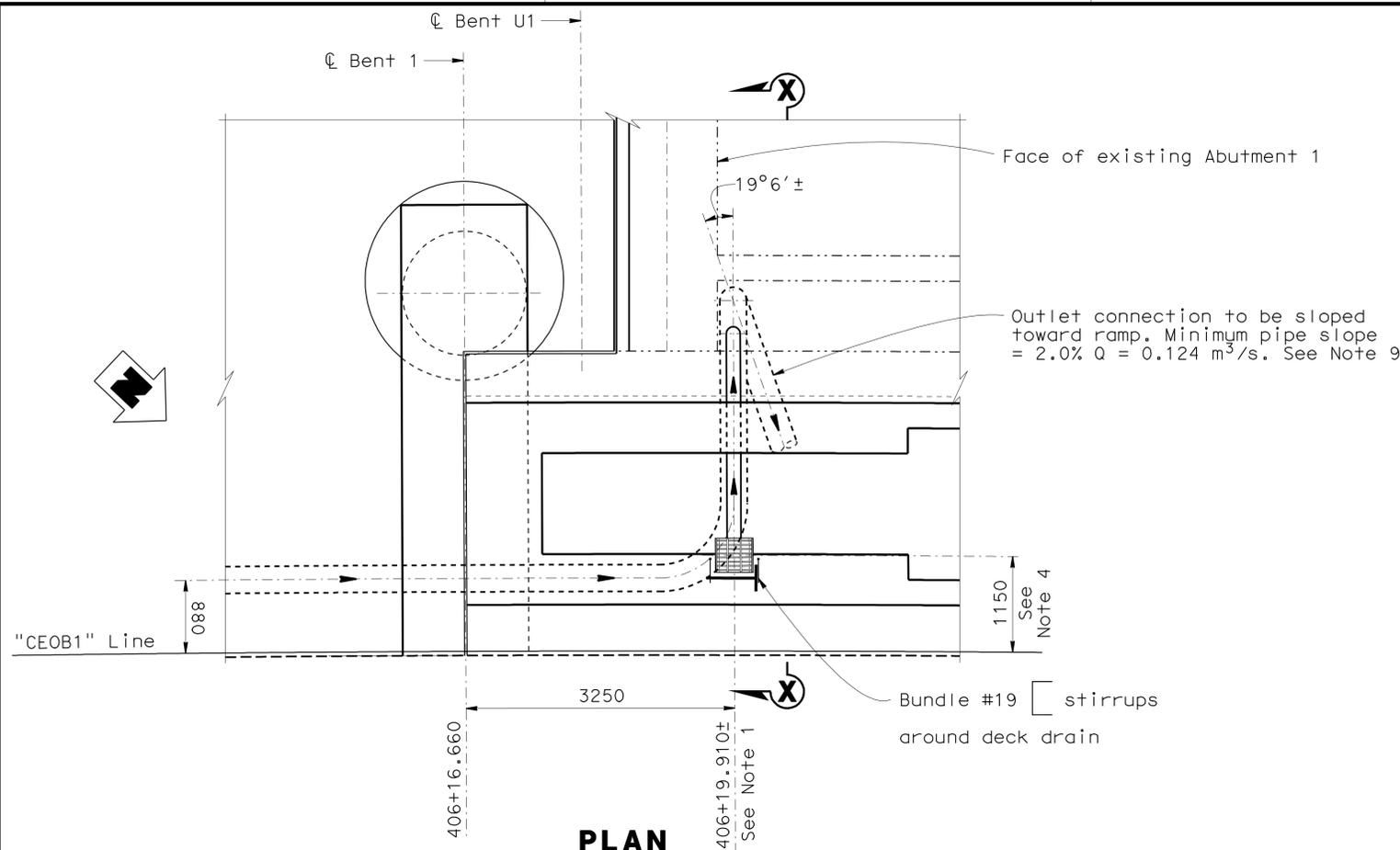
USERNAME => HSTFK DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:02

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	363	439

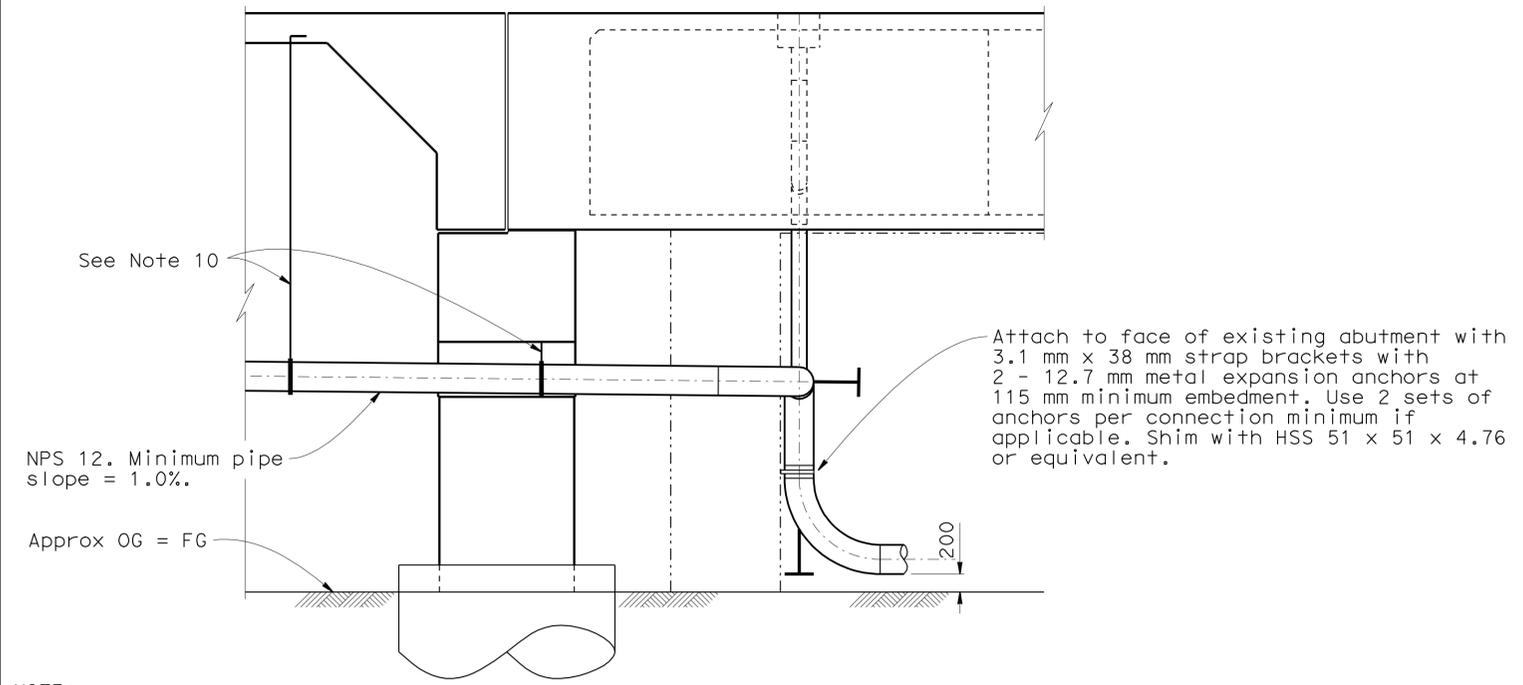
<i>Leon Valla</i>		5-11-09
REGISTERED CIVIL ENGINEER	DATE	
6-7-10		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

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PLAN
1:40

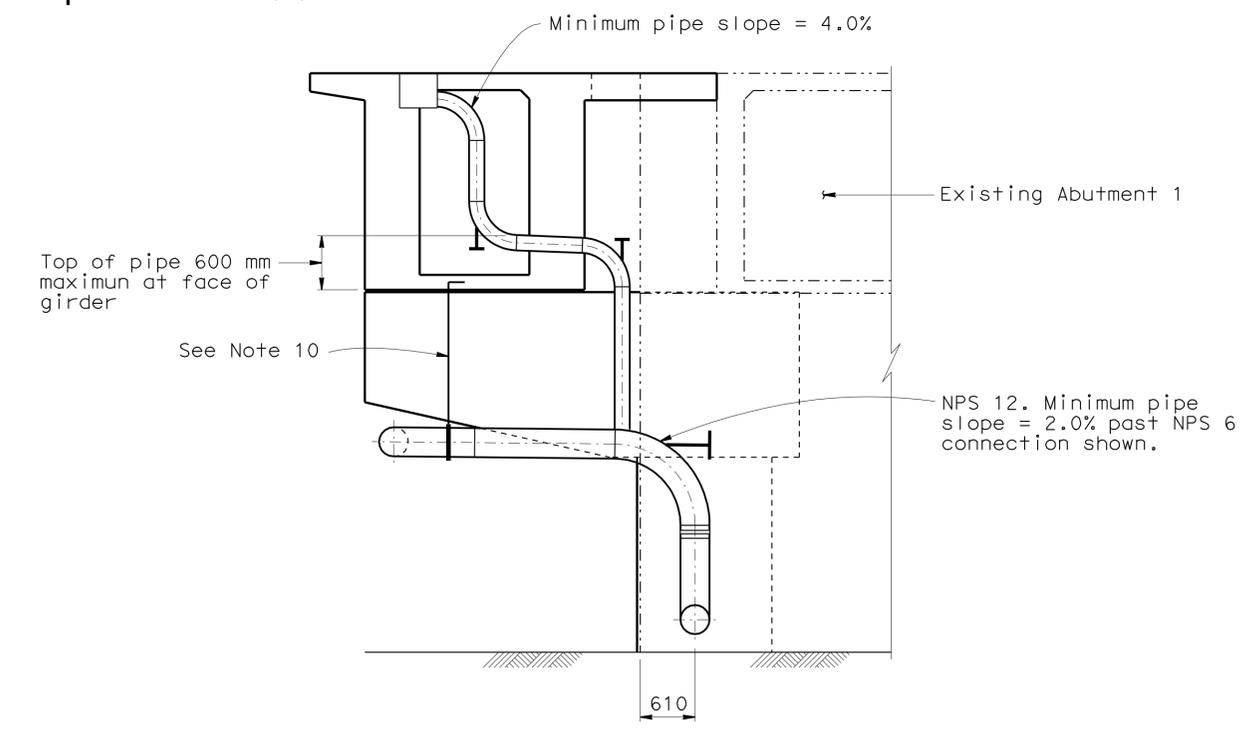


ELEVATION
1:40

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

Note:

- Deck drain station indicates ϕ of drain.
- Concrete barrier not shown for clarity in plan.
- Indicates deck drain Type D-1. $\frac{B7-6}{7-7}$
- Offset from "CEOB1" Line to ϕ deck drain Type D-1.
- All drain pipe shall be NPS 6 unless noted.
- All NPS bends shall be smooth with a minimum radius per Note 4 on "Deck Drainage Layout" sheets.
- For all general notes, pipe alignment, sleeve connection and details not shown see $\frac{B7-6}{-}$
- Minimum pipe slope is as noted.
- For drain outlet connections see "Road Plans".
- The Contractor may fabricate or purchase pipe support hangers and brackets as approved by the Engineer. Pipe supports and brackets shall be capable of supporting drain pipe loads. Vertical drainage pipe supports must be laterally braced as well.
- Indicates direction of flow.
- All NPS 12 shall be 6.35 mm minimum thickness.
- Denotes drain pipe cleanouts.



VIEW X-X
1:40

	DESIGN BY L. Valla CHECKED F. Tannous	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) DECK DRAINAGE DETAILS NO. 2
	DETAILS BY Various CHECKED L. Valla			KILOMETER POST 40.76	
QUANTITIES BY F. Tannous CHECKED M. Kattaa/L. Valla	ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS		CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 8-1-08, 8-1-08, 5-18-09, 8-12-09, 10-15-09
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN					SHEET 126 OF 134

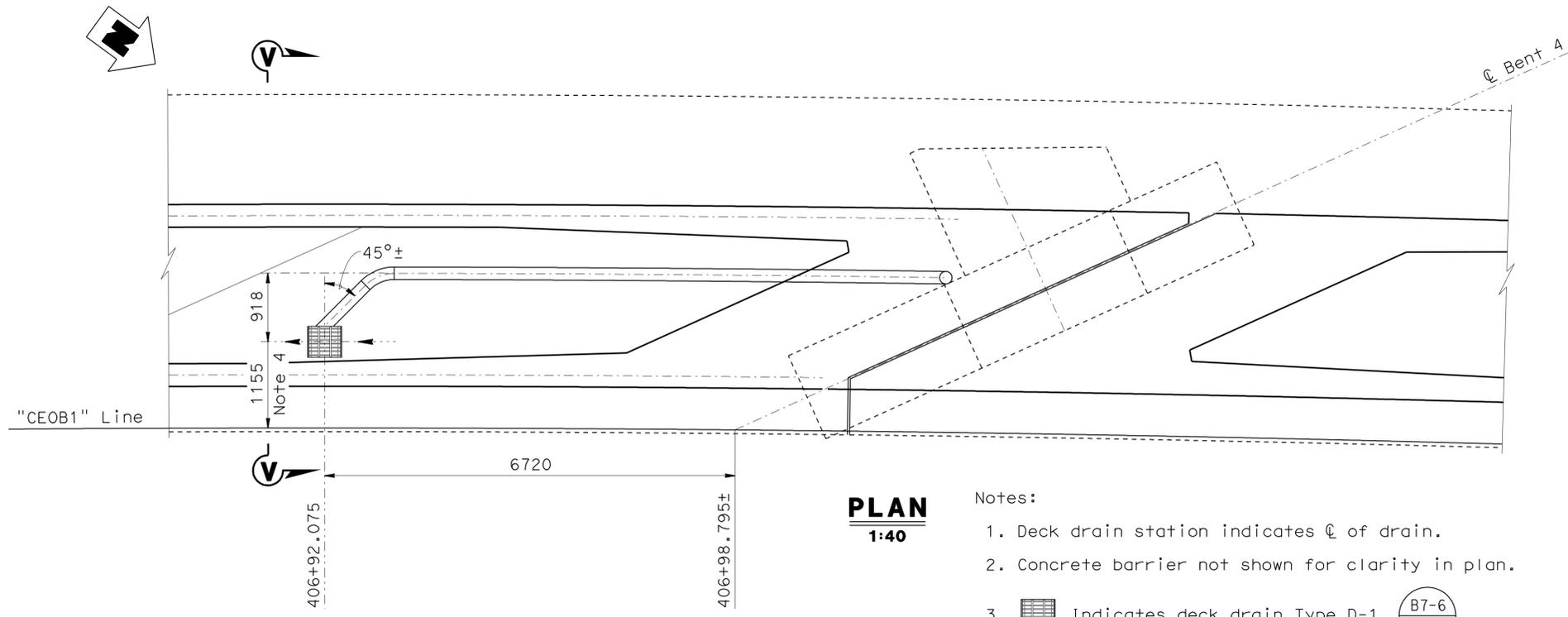
STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	364	439

<i>Leon Valla</i>		5-11-09
REGISTERED CIVIL ENGINEER	DATE	
6-7-10		
PLANS APPROVAL DATE		

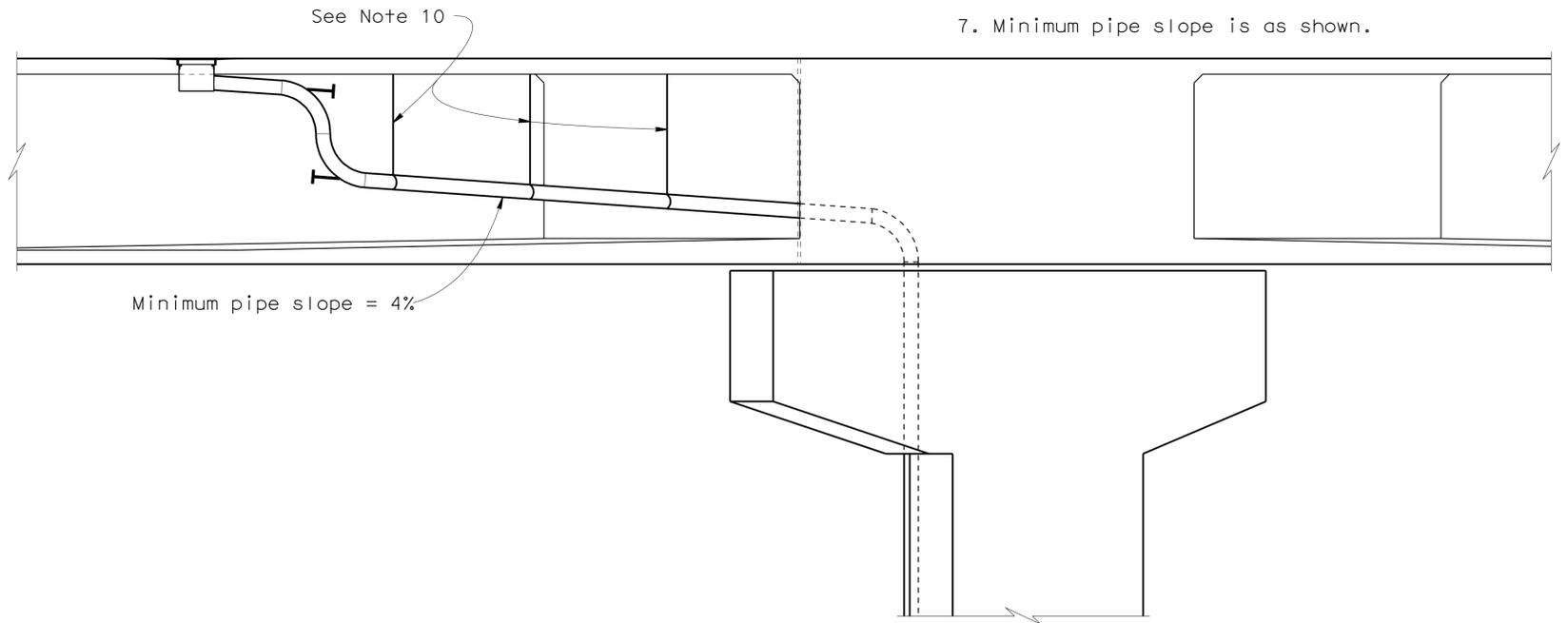
REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
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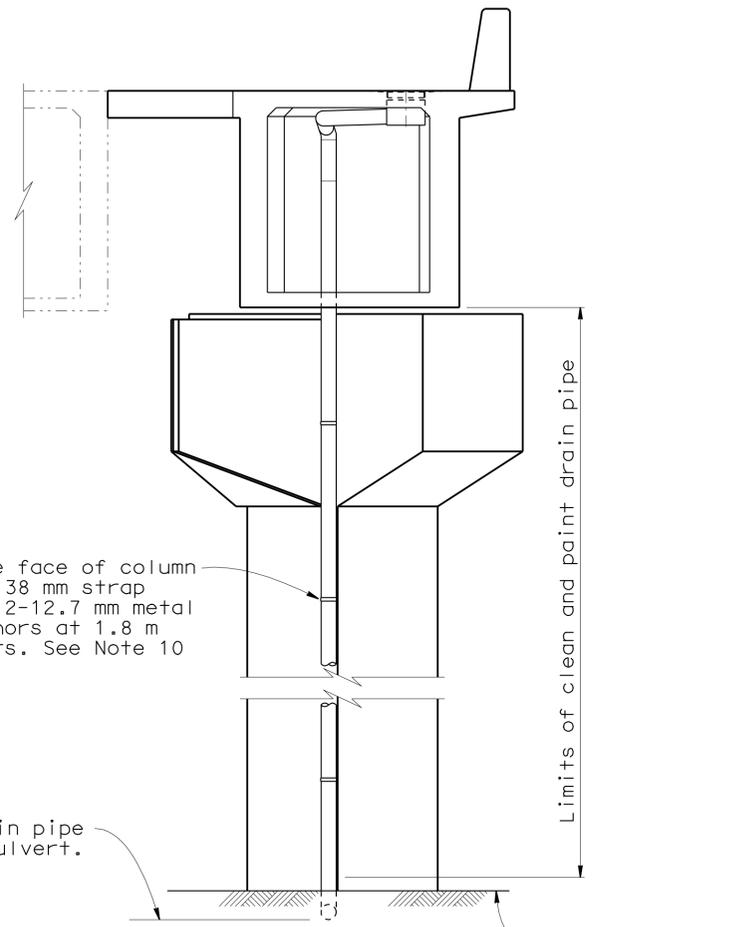
PLAN
1:40

- Notes:
- Deck drain station indicates \oslash of drain.
 - Concrete barrier not shown for clarity in plan.
 - Indicates deck drain Type D-1. (B7-6 / 7-7)
 - Offset from "CEOB1" Line to \oslash deck drain Type D-1.
 - All drain pipe shall be NPS 6.
 - All NPS 6 bends shall be smooth with a minimum radius of 460 mm.
 - Minimum pipe slope is as shown.



ELEVATION
1:40

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



VIEW V-V
1:40

- Notes Cont:
- For all general notes, pipe alignment, sleeve connection and details not shown see (B7-6 / -)
 - For drain outlet connections see "Road Plans".
 - The Contractor may fabricate or purchase pipe support hangers and brackets as approved by the Engineer. Pipe supports and brackets shall be capable of supporting drain pipe loads.
 - Indicates direction of flow.
 - Denotes drain pipe cleanout.

	DESIGN BY F. Tannous	CHECKED Leon Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) DECK DRAINAGE DETAILS NO. 3
	DETAILS BY Various	CHECKED F. Tannous/L.Valla			KILOMETER POST 40.76	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES
					5-20-08 1-11-08 5-12-09 10-15-09	SHEET 127 OF 134

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

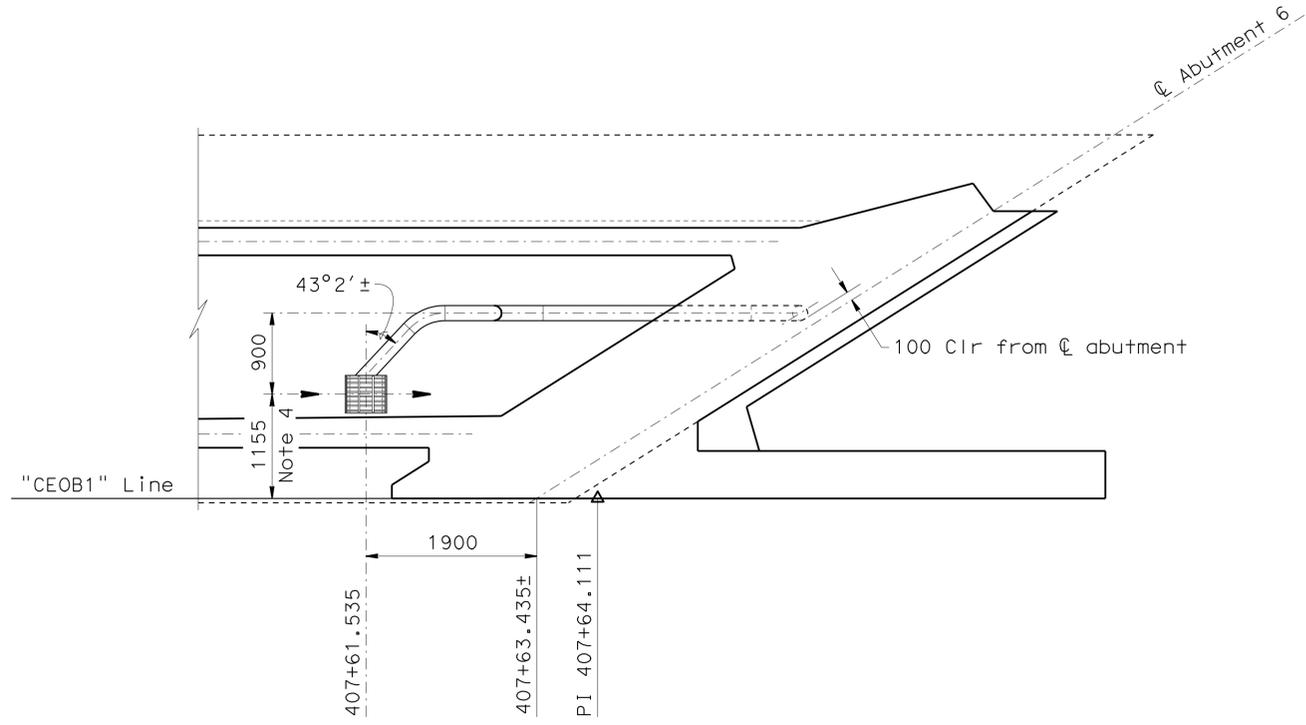
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	365	439

Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE

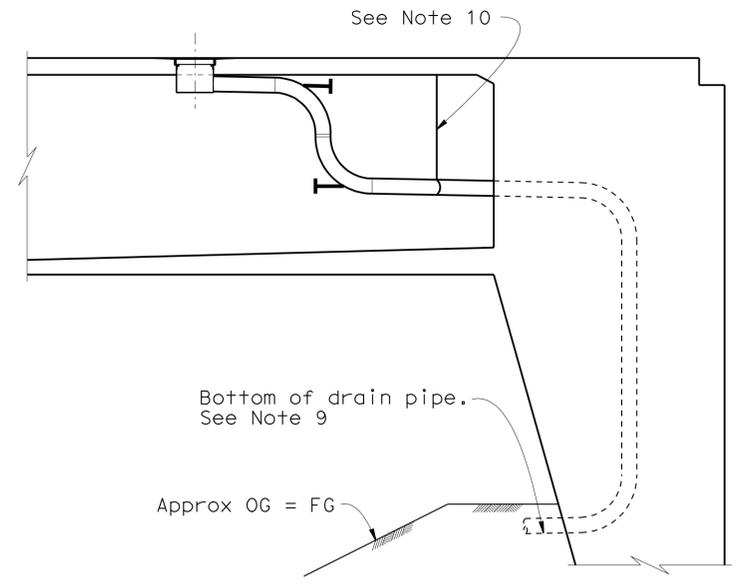
6-7-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
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 STATE OF CALIFORNIA

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PLAN
1:40



ELEVATION
1:40

Notes:

1. Deck drain station indicates ϕ of drain.
2. Concrete barrier not shown for clarity in plan.
3. Indicates deck drain Type D-1. $\frac{B7-6}{7-7}$
4. Offset from "CEOB1" Line to ϕ deck drain Type D-1.
5. All drain pipe shall be NPS 6.
6. All NPS 6 bends shall be smooth with a minimum radius of 460 mm.
7. For all general notes, pipe alignment, sleeve connection and details not shown see $\frac{B7-6}{-}$
8. Minimum pipe slope is 2%.
9. For drain outlet connections see "Road Plans".
10. The Contractor may fabricate or purchase pipe support hangers and brackets as approved by the Engineer. Pipe supports and brackets shall be capable of supporting drain pipe loads.
11. Indicates direction of flow.
12. Indicates drain pipe cleanouts.

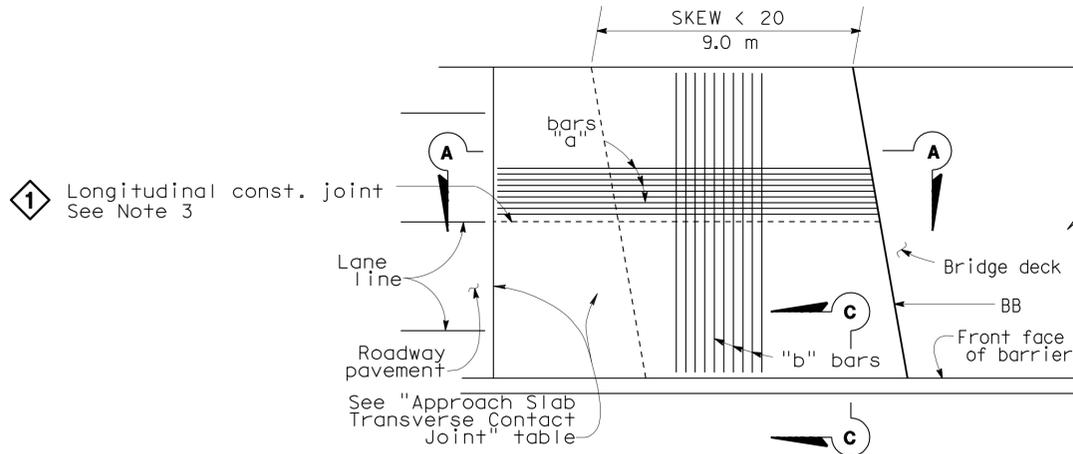
NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY F. Tannous CHECKED Leon Valla	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) DECK DRAINAGE DETAILS NO.4
	DETAILS BY Various CHECKED F. Tannous/L. Valla			KILOMETER POST 40.76	
QUANTITIES BY Fayek Tannous CHECKED M. Katad		ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		DISREGARD PRINTS BEARING EARLIER REVISION DATES 5-7-08 7-10-08 8-12-09 10-15-09	SHEET OF 128 134

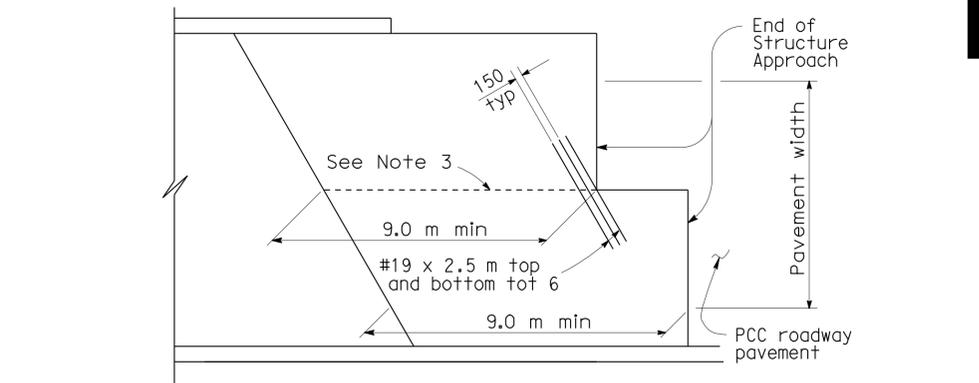
FILE => 53-1253-2q-dd07.dgn
 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)



DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	405	39.7/41.5	366	439
				5-11-09	
		REGISTERED ENGINEER - CIVIL			
		6-7-10		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>					

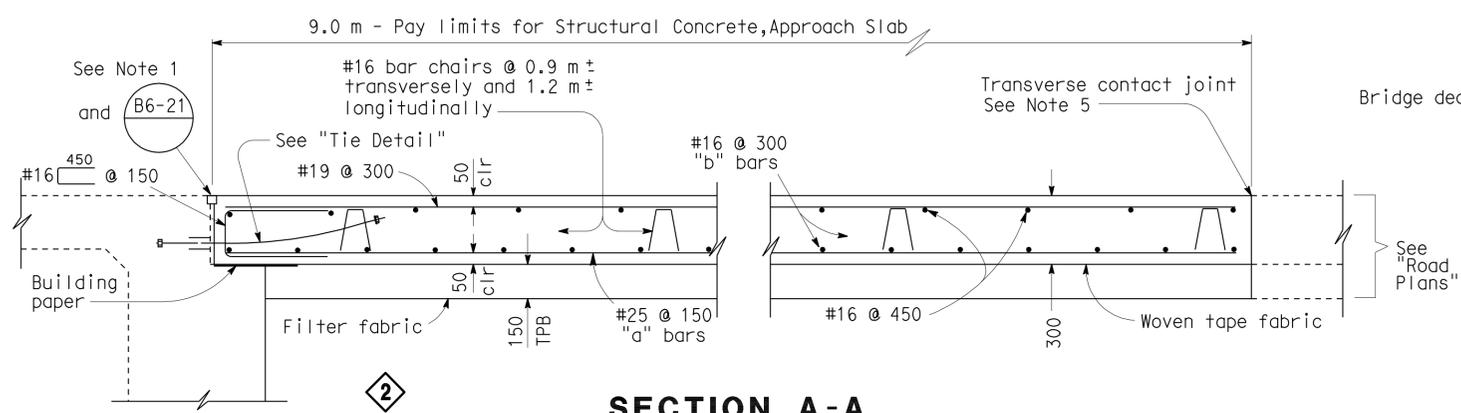


PLAN

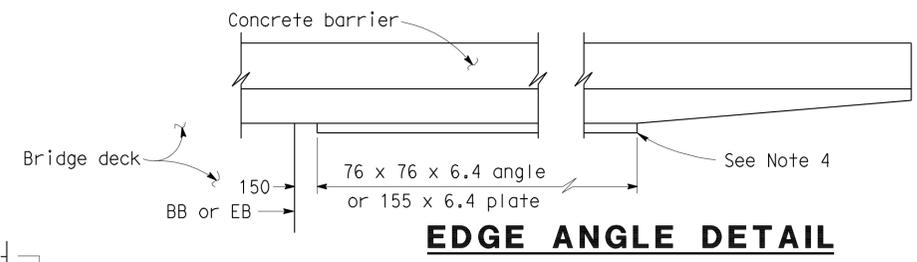


STRUCTURE APPROACH - END STAGGER DETAIL

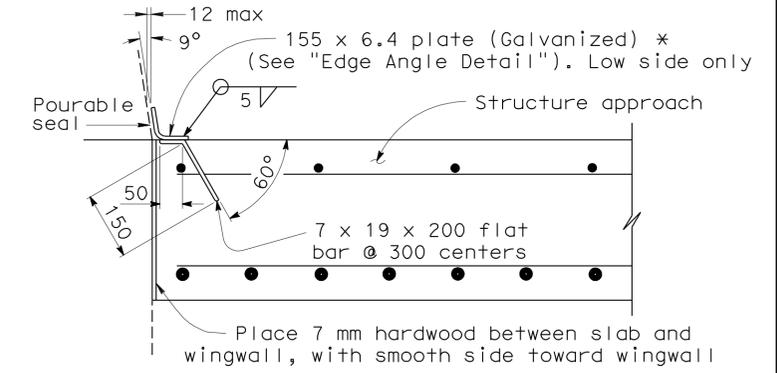
APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 20°	Parallel to face of paving notch	Parallel to face of paving notch
20° - 45°	Parallel to face of P N use (Detail A)	Stagger lines 7.2 m to 10.8 m apart
> 45°	Parallel to face of P N use (Detail A)	Stagger at each lane line



SECTION A-A



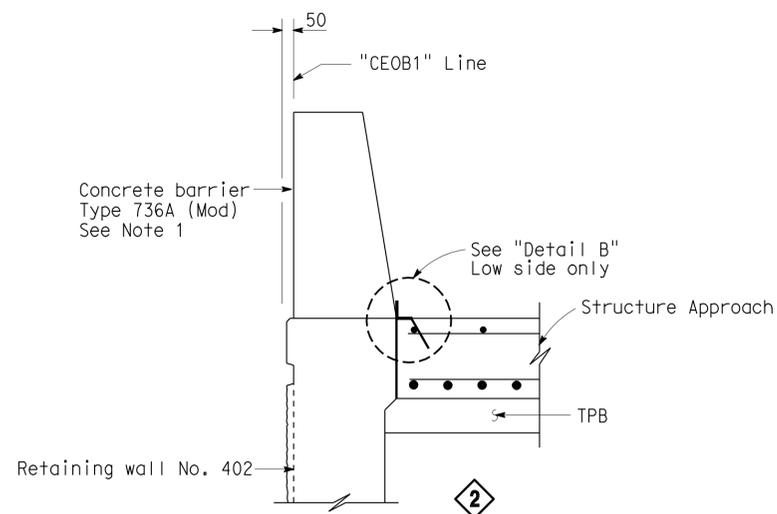
EDGE ANGLE DETAIL



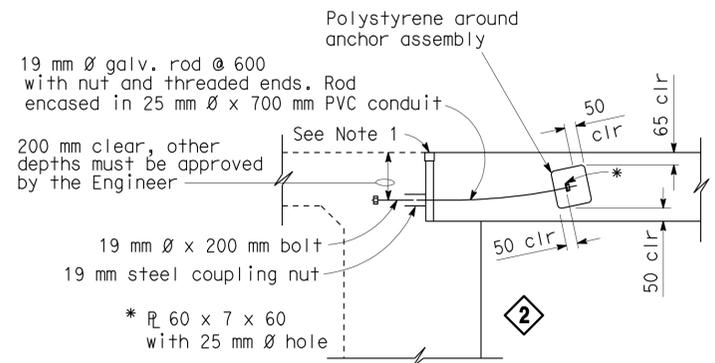
DETAIL B

***(TO BE USED WITH TYPE 732 OR TYPE 736 CONCRETE BARRIER)**

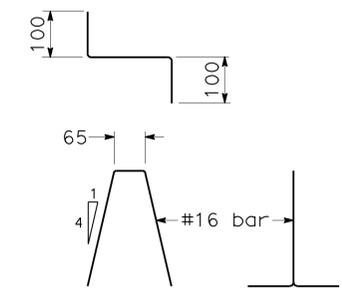
- NOTES:**
- For details not noted or shown, see Structure Plans.
 - For drainage details, see "Abutment 1A Details No. 1" sheet
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines.
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach, as applicable.
 - For transverse contact joint with new PCC paving, refer to Standard Plan RSP P10.
 - At the contractor's option, approach slab transverse reinforcement may be placed parallel to paving notch. Spacing of transverse reinforcement is measured along roadway.



SECTION C-C



TIE DETAIL



BAR CHAIR DETAIL

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

STANDARD DRAWING			
RELEASE DATE	DESIGN BY	CHECKED	RELEASED BY
Revised	M. TRAFFALIS	E. THORKILDSEN	
FILE NO.	DETAILS BY	CHECKED	
xs3-180	R. YEE	E. THORKILDSEN	
	SUBMITTED BY	DRAWING DATE	OFFICE CHIEF
	M. HA	4/98	

- 1 Deleted detail
- 2 Modified detail
- 3 Modified note

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES

NO SCALE

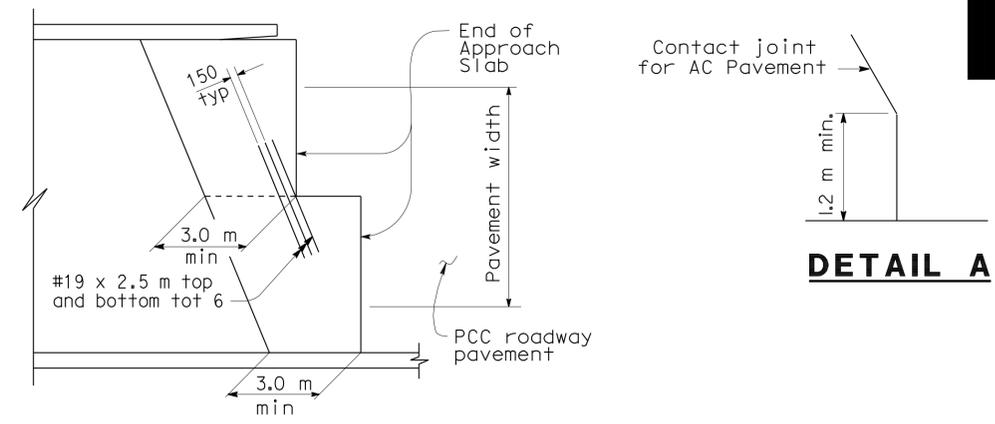
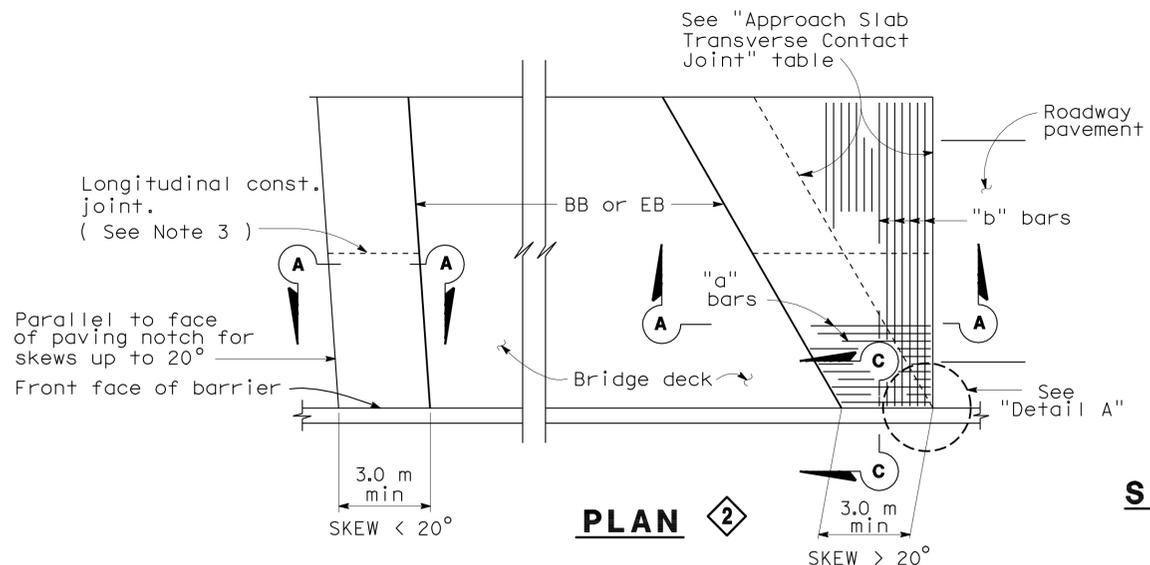
BRIDGE NO.	53-1253
KILOMETER POST	40.76

RC SLAB BRIDGE
CENTINELA AVE UC (WIDEN)
STRUCTURE APPROACH TYPE N(9D)

DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:03

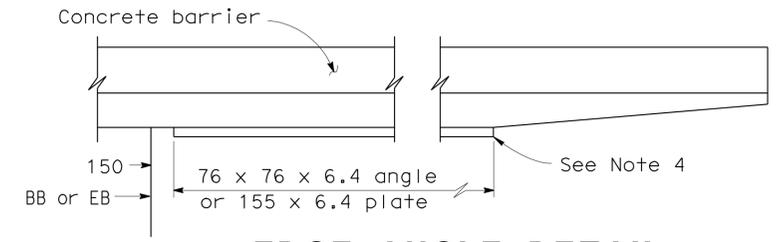


DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	405	39.7/41.5	367	439
			5-11-09		
REGISTERED ENGINEER - CIVIL					
6-7-10					
PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

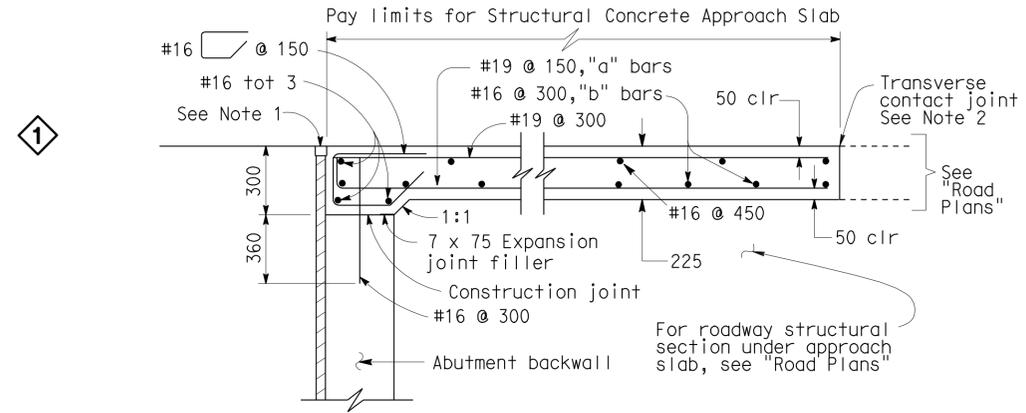


STRUCTURE APPROACH - END STAGGER DETAIL

APPROACH SLAB TRANSVERSE CONTACT JOINT		
STRUCTURE SKEW	AC APPROACH PAVEMENT	PCC APPROACH PAVEMENT
< 20°	Parallel to face of paving notch	Parallel to face of paving notch
20°- 45°	Parallel to face of P N use (Detail A)	Stagger lines 7.2 m to 10.8 m apart
> 45°	Parallel to face of P N use (Detail A)	Stagger at each lane line



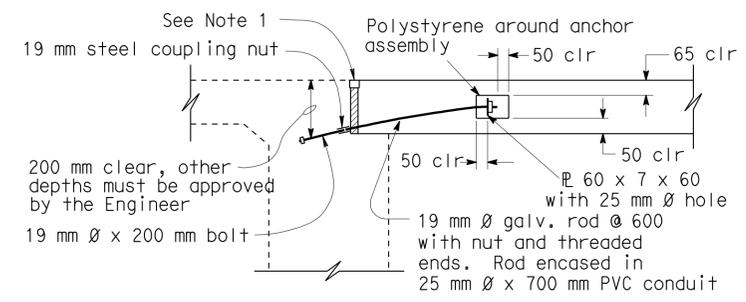
EDGE ANGLE DETAIL



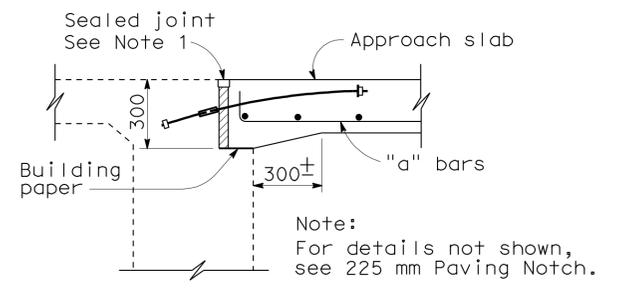
SEAT TYPE ABUTMENT SECTION A-A

MR ≤ 50 mm

Note: Seat Type Abutment shown, for Diaphragm Type Abutment, see "Abutment Tie Details".

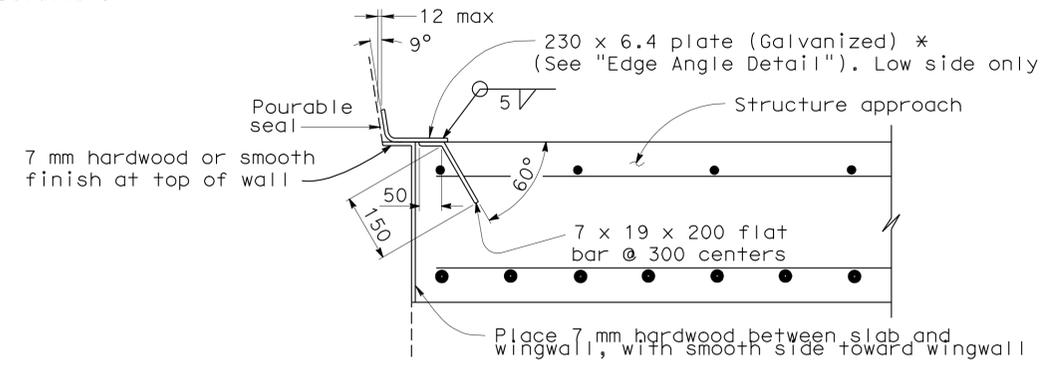


225 mm PAVING NOTCH



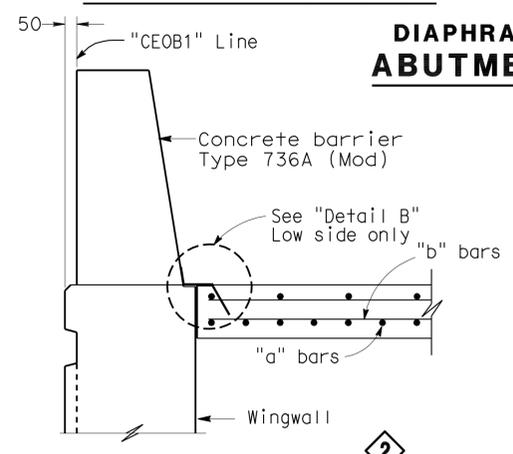
300 mm PAVING NOTCH

Note: For details not shown, see 225 mm Paving Notch.



*(TO BE USED WITH TYPE 732 OR TYPE 736 CONCRETE BARRIER)

DETAIL B



SECTION C-C

DIAPHRAGM TYPE ABUTMENT ABUTMENT TIE DETAILS

NOTES:

- For details not noted or shown, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required.
- For transverse contact joint with new PCC paving, refer to Standard Plan P10.
- Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines.
- End angle or plate at beginning of barrier transition, end of wing wall or end of structure approach as applicable.
- At the contractor's option, approach slab transverse reinforcement may be placed parallel to paving notch. Spacing of transverse reinforcement is measured along ϕ roadway.
- For drainage details, see Structure Plans.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

STANDARD DRAWING			
RELEASE DATE	DESIGN BY	CHECKED	RELEASED BY
3/14/05	M. TRAFFALIS	E. THORKILDSEN	
FILE NO.	DETAILS BY	CHECKED	
xs3-150	R. YEE	E. THORKILDSEN	
	SUBMITTED BY	DRAWING DATE	OFFICE CHIEF
	M. HA	6/93	

- 1 Deleted detail
- 2 Modified detail

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES

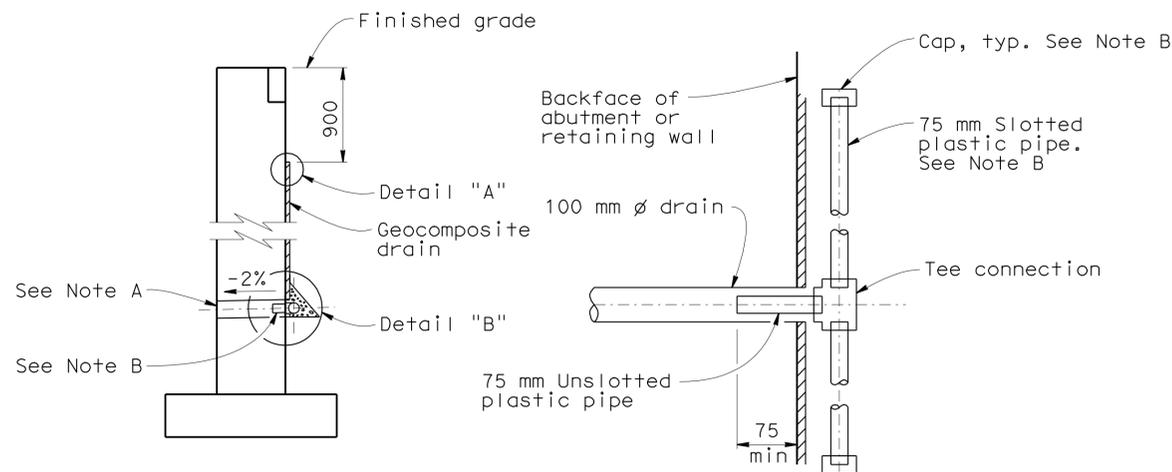
NO SCALE		BRIDGE NO. 53-1253		CIP BOX BRIDGE	
		KILOMETER POST 40.76		CENTINELA AVE UC (WIDEN)	
				STRUCTURE APPROACH TYPE EQ(3)	



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	368	439

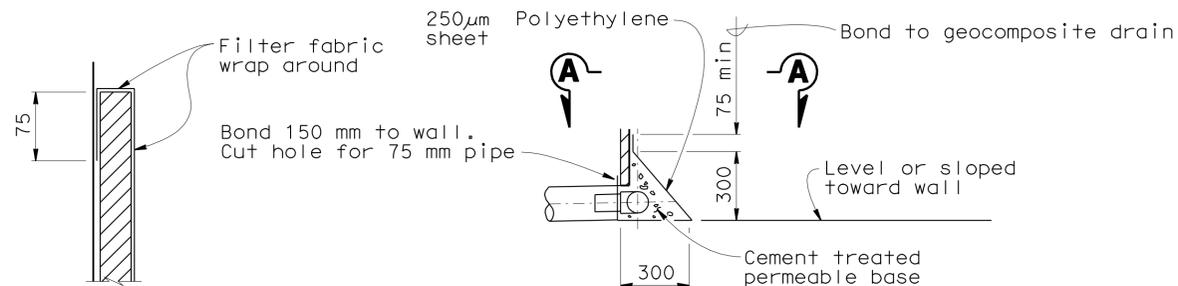
REGISTERED CIVIL ENGINEER *Leon Valla* DATE 5-11-09
 PLANS APPROVAL DATE 6-7-10
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

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WALL SECTION

SECTION A-A



DETAIL "A"

DETAIL "B"

WEEP HOLE AND GEOCOMPOSITE DRAIN

No scale

ALTERNATIVE TO BRIDGE DETAIL B0-3
3-1

Notes:

- A. 100 mm ϕ drains at intermediate sag points and at 7.60 meters center to center (2.75 meters c-c for Type 3 and 2.80 meters c-c for Type 4 retaining walls). For walls adjacent to sidewalks or curbs, provide 100 mm cast iron or asbestos cement pipe under the sidewalk to discharge through curb face. Exposed wall drains shall be located 75 \pm mm above finished grade.
- B. Geocomposite drain, cement treated permeable base, and 75 mm ϕ slotted plastic pipe continuous behind retaining wall or abutment. Cap ends of pipe. Provide "Tee" connection at each 100 mm ϕ drain.
- C. Connect the low end of plastic pipe to the main outlet pipe as applicable.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

DESIGN	BY L.Valla	CHECKED W. Addlespurger
DETAILS	BY Various	CHECKED L.Valla
QUANTITIES	BY F.Tannous	CHECKED M. Kattaa

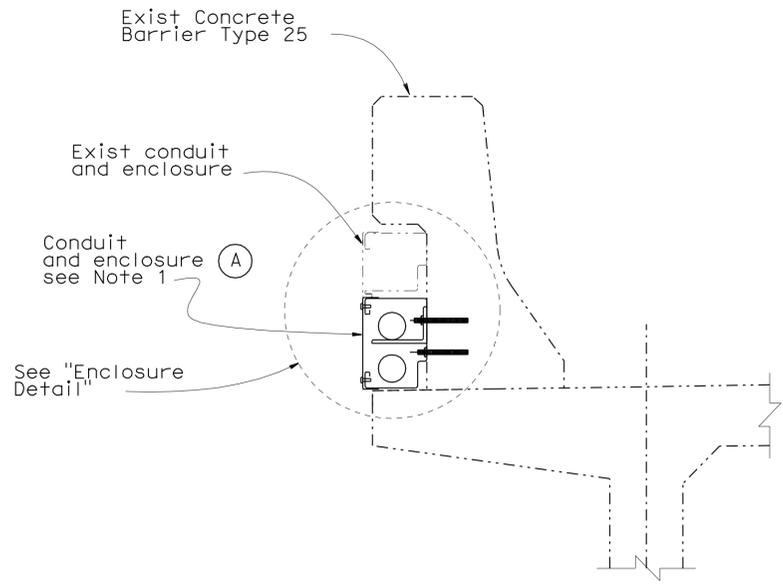
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN 12

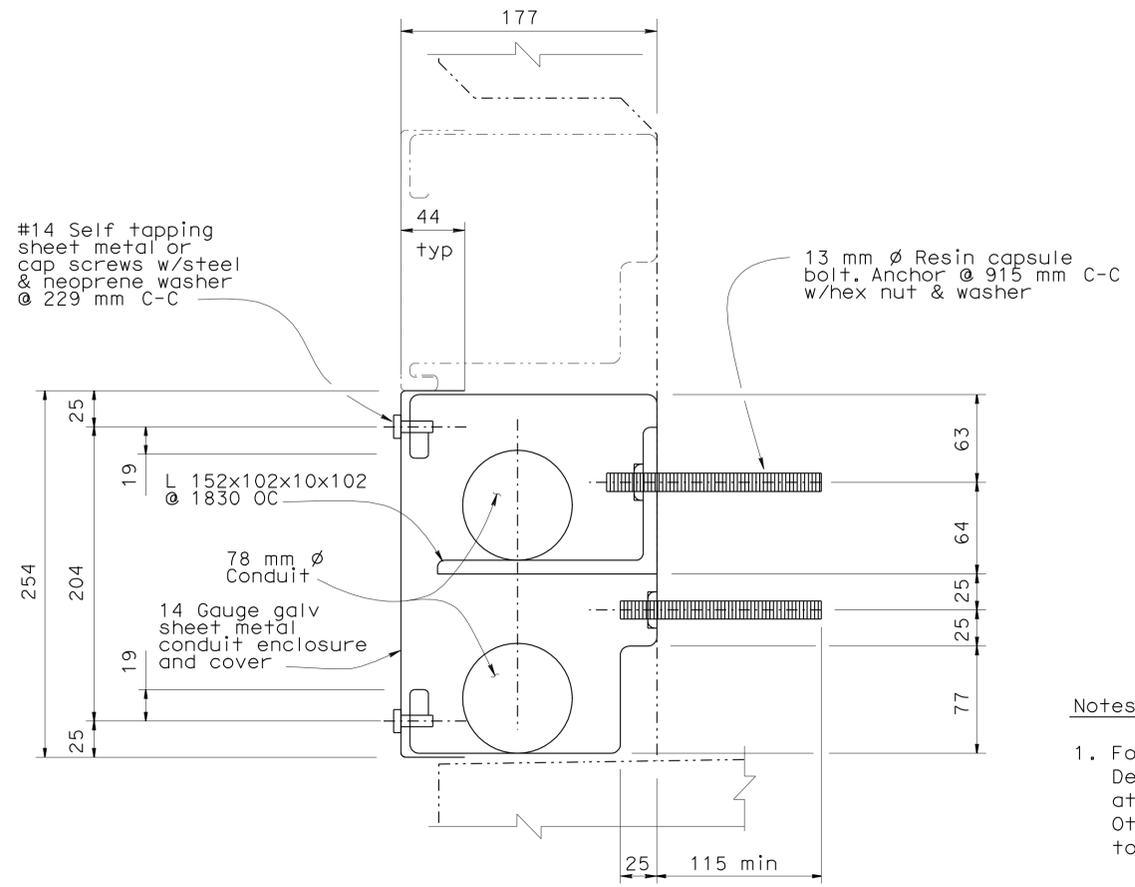
BRIDGE NO.	53-1253
KILOMETER POST	40.76

CENTINELA AVE UC (WIDEN)
GEOCOMPOSITE DRAINAGE ALTERNATIVE

USERNAME => HSTFK DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:03



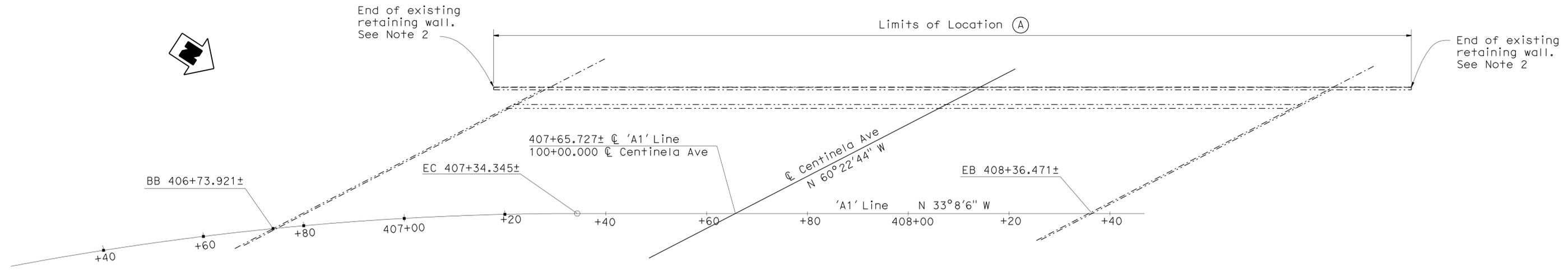
TYPICAL DETAIL FOR CONDUIT AT EXISTING BARRIER
1:10



ENCLOSURE DETAIL
1:2.5

UTILITY OPENINGS			
LOCATION	UTILITY	OWNER	CONDUIT SIZE
(A)	(2) Fiber Optic Cable	Caltrans	78 mm ϕ

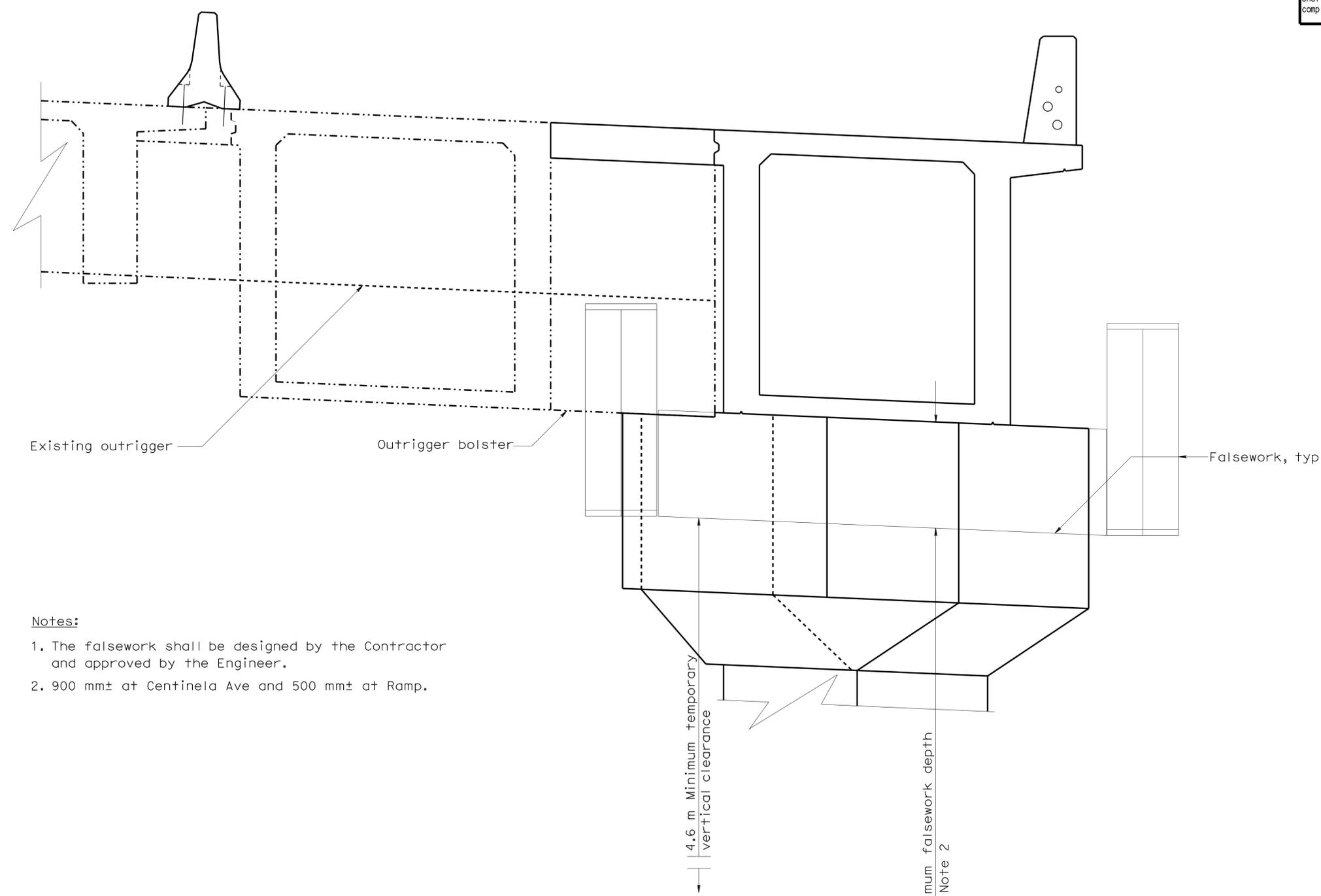
- Notes:
- For conduit expansion fitting, see Standard Plan RSP ES-9B Detail X. Provide for a minimum movement or 38 mm (T+13 mm) at each abutment where no expansion joints are located. Other expansion assemblies shall provide movements according to adjacent expansion joint size.
 - For details of conduits outside limits of location (A), see "Roadway Communication System Plan E" sheets.
 - For location (A) quantity and specifications, see "Roadway Communication System Plan E" sheets.



PLAN
1:400

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	370	439

Leon Valla 5-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 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.



- Notes:**
1. The falsework shall be designed by the Contractor and approved by the Engineer.
 2. 900 mm± at Centinela Ave and 500 mm± at Ramp.

FALSEWORK SECTION
1:20

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY Leon Valla	CHECKED Bill Addlespurger	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1253	CIP BOX BRIDGE CENTINELA AVE UC (WIDEN) ALLOWABLE FALSEWORK PLACEMENT LIMITS
	DETAILS BY Leon Valla	CHECKED Bill Addlespurger			KILOMETER POST 40.76	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS		CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES: 03-02-07, 01-28-08, 02-04-08, 10-15-09, 09-11-07, 09-28-07, 10-23-07, 11-21-07, 12-26-07						SHEET 133 OF 134

FILE => 53-1253-2u-misc02.dgn

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

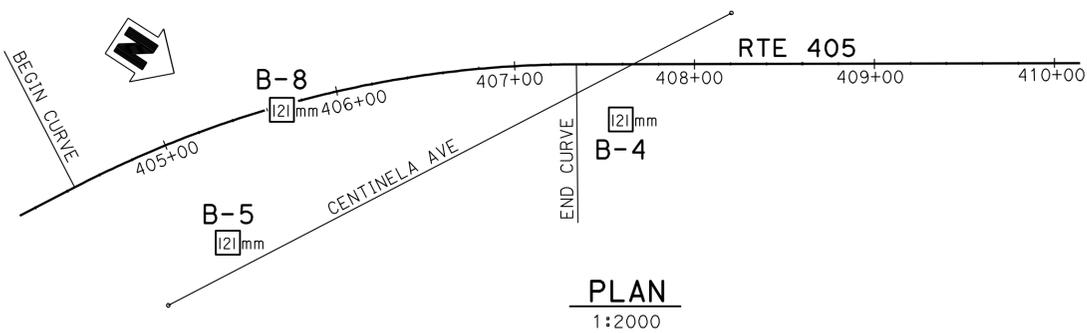
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DIST	COUNTY	ROUTE	KILOMETER TOTAL PROJECT	POST TOTAL	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5		371	439

REGISTERED CIVIL ENGINEER
 5-11-09
 6-7-10
 PLANS APPROVAL DATE
 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.

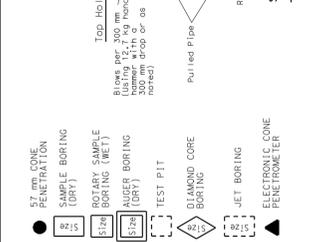
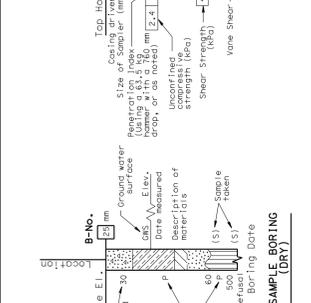
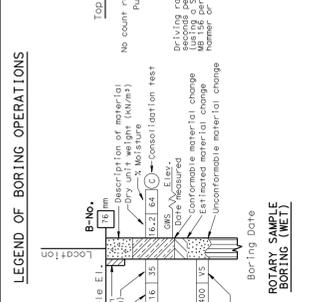
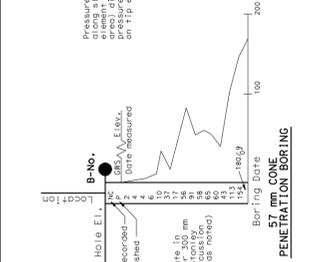
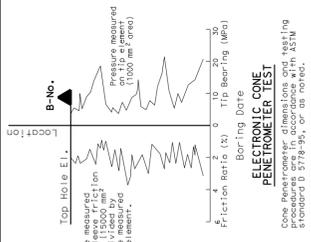
Notes:

Bridge Number	Borehole Number	Drill Rig	Hammer Type	Avg. Hammer Efficiency, ETR (%)
53-1253	B-4	CME85	Auto	87
	B-5	CME85	Auto	87
	B-8	CME85	Auto	87



BENCH MARK

BM Elev. 10.662 m
 Fd PK nail & tin in C AC median of Centinela Ave.
 E/O Bristol Pkwy.
 N 553,287.328
 E 1,963,766.752



LEGEND OF EARTH MATERIALS

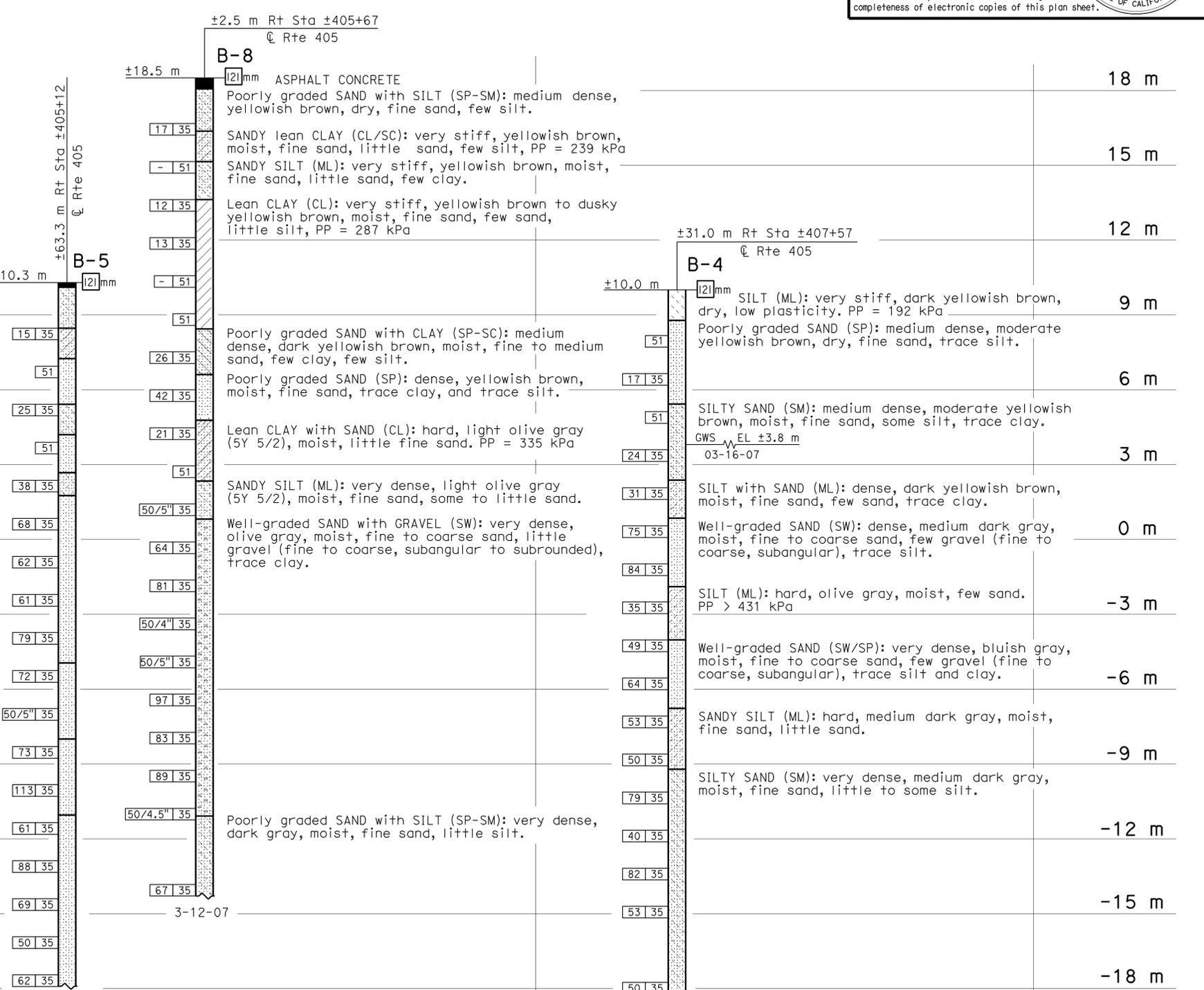
GRAVEL	CLAYEY SILT
SAND	PEAT and/or ORGANIC MATTER
SILT	COBBLES and/or Boulders
CLAY	SEDIMENTARY ROCK
SANDY CLAY or CLAYEY SAND	METAMORPHIC ROCK
SANDY SILT or SILTY SAND	
SILTY CLAY	

CONSISTENCY CLASSIFICATION FOR SOILS

SPT N-value (0-30)	Consistency
0-4	Very Loose
5-10	Loose
11-30	Medium Dense
31-50	Dense
>50	Very Dense

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

Depth (m)	Soil Description	Soil Strength (kPa)
9 m	ASPHALT CONCRETE SILTY SAND (SM): medium dense, yellowish brown, dry, fine sand.	
6 m	SANDY lean CLAY (CL/SC): very stiff, yellowish brown, moist, fine sand, few silt, PP = 388 kPa Poorly graded SAND (SP): medium dense, yellowish brown, moist, fine sand, trace silt.	
3 m	SANDY lean CLAY (CL): hard, yellowish brown, moist, fine sand, some sand, few silt, PP = 431 kPa Poorly graded SAND (SP): medium dense, yellowish brown, moist, fine sand, trace silt.	
0 m	Poorly graded SAND with SILT (SP-SM): dense, dark yellowish brown, moist, fine sand, few to little silt. Well-graded SAND (SW): very dense, pale brown, moist, fine to coarse sand, few to little gravel, trace clay.	
-3 m	Well-graded SAND with GRAVEL (SW): very dense, olive gray, moist, fine to coarse sand, some gravel (fine to coarse, subangular to subrounded), trace clay.	
-6 m	Poorly graded SAND (SP): very dense, olive gray, moist, fine sand, trace silt.	
-9 m	SILTY SAND (SM): very dense, dark gray, moist, fine sand, little to some silt.	
-12 m	SANDY SILT (ML): very dense, medium dark gray, moist, fine sand, little to some silt.	
-15 m	Poorly graded SAND with SILT (SP-SM): very dense, dark gray, moist, fine sand, little silt.	
-18 m		



ENGINEERING SERVICES GEOTECHNICAL SERVICES

FIELD INVESTIGATION BY: H. Liu

DRAWN BY: I.G-Remmen 1/08

CHECKED BY: H. Liu

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH

BRIDGE NO. 53-1253

KILOMETER POST 40.66

CU 07 EA 241301

CENTINELA AVE UC (WIDENING)

LOG OF TEST BORINGS

REVISION DATES (PRELIMINARY STAGE ONLY)

05-02-08							
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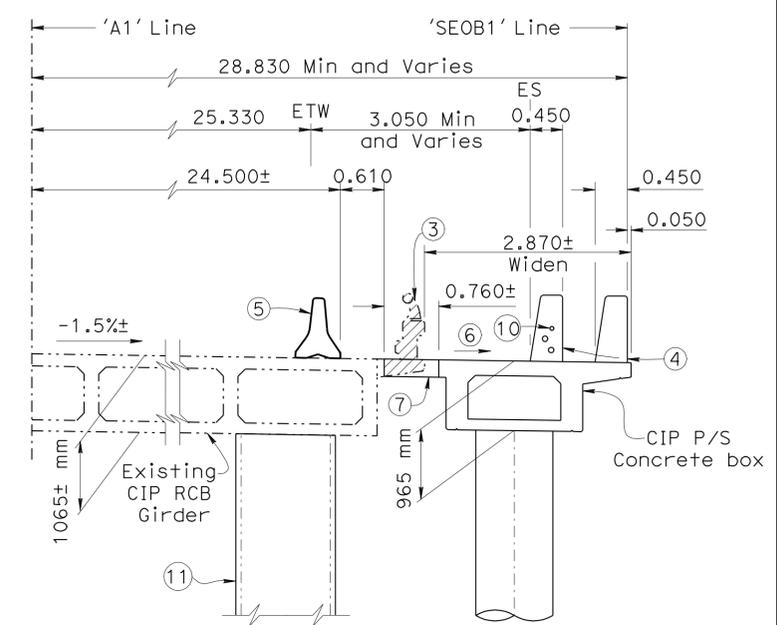
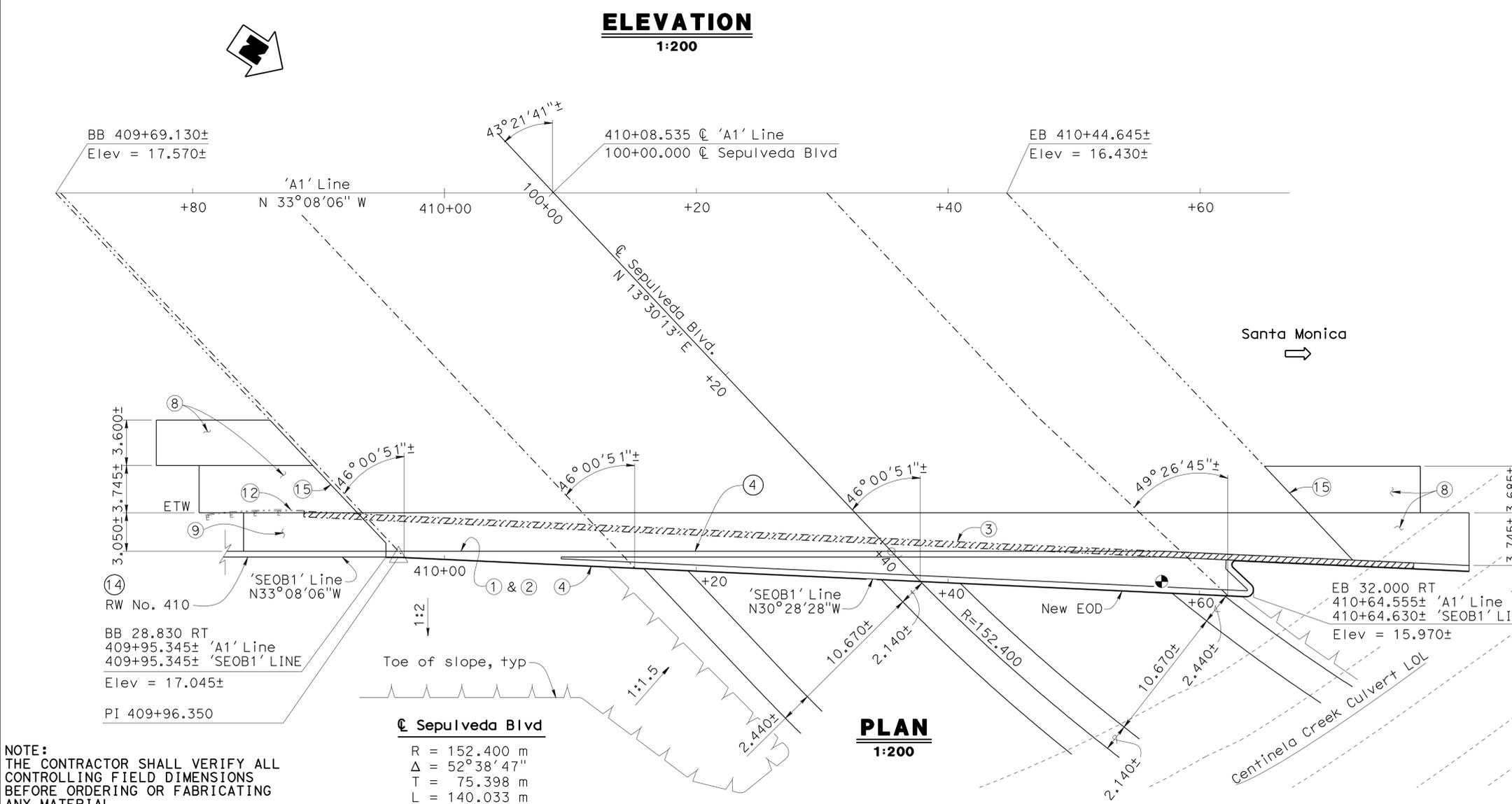
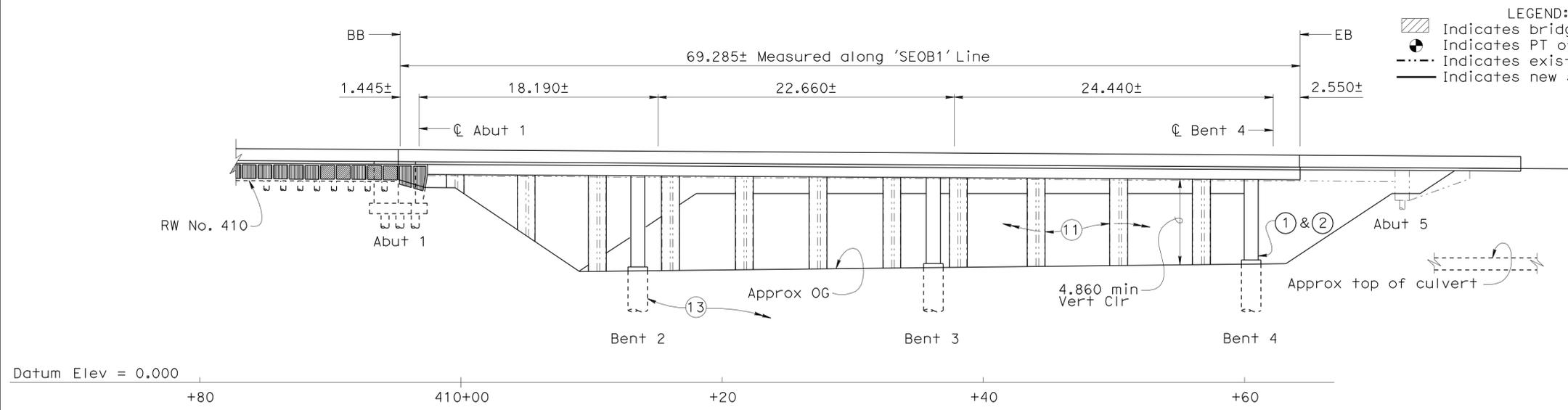
SHEET 134 OF 134

DIST	COUNTY	ROUTE	KILOMETER TOTAL PROJECT	POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5		372	439

REGISTERED CIVIL ENGINEER	DATE
Leon Valla	05-11-08
PLANS APPROVAL DATE	
6-7-10	

PROFESSIONAL ENGINEER	LEON VALLA
No.	45351
Exp.	09-30-10
CIVIL	

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.



TYPICAL SECTION
1:50

- NOTES:
- Paint "BRIDGE NO. 53-1254".
 - Paint "SEPULVEDA BLVD UC".
 - Remove exist Type 1 barrier and overhang portion.
 - Type 736 mod concrete barrier.
 - Temporary railing Type K, see "Road Plans".
 - Match existing grade and cross slope.
 - Closure Pour.
 - Structure Approach Type R(9D).
 - Structure Approach Type N(9D).
 - Fiber optic cable and electrical conduit, see "Typical Section" sheet and "Road Plans".
 - Column casing class "P/F" typ, see "Steel Column Casing Layout" sheet.
 - Remove existing MBGR, see "Road Plans".
 - Column isolation casing typ, see "Column Isolation Casing Details" sheet.
 - For RW No. 410, see "Retaining Wall No. 410" plans.
 - Replace existing joint seal

For 'General Notes', 'Index To Plans', 'Standard Plans', 'Pile Data Table' and 'Quantities', see "Index To Plans" sheet
For deck drain, see "Deck Drain Details" sheet.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

R = 152.400 m
Δ = 52°38'47"
T = 75.398 m
L = 140.033 m

	DESIGN	BY Leon Valla	CHECKED Richard Schendel	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) GENERAL PLAN
	DETAILS	BY Anthony Valdez/TD	CHECKED Leon Valla	LAYOUT	BY Leon Valla			CHECKED Richard Schendel	KILOMETER POST	
QUANTITIES	BY Leon Valla	CHECKED Richard Schendel	SPECIFICATIONS	BY Theresa Nedwick	CHECKED Theresa Nedwick	PLANS AND SPECS COMPARED	CU 07	EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

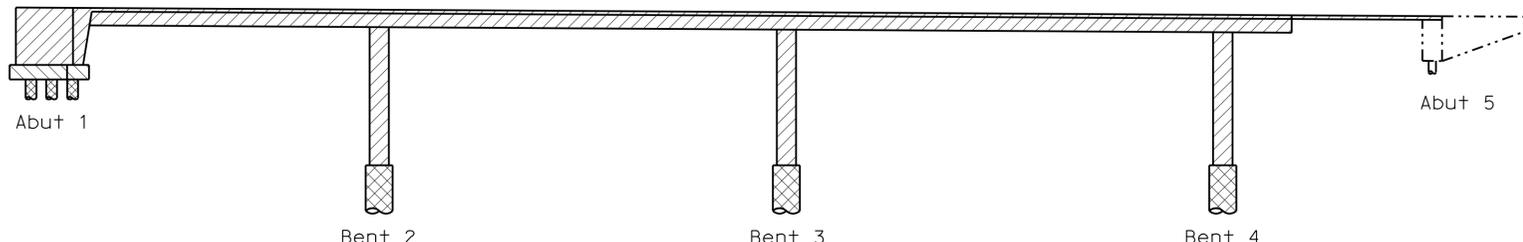
ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

0 10 20 30 40 50 60 70 80 90 100

CU 07 EA 241301

FILE => 53-1254-a-gp.dgn

STRUCTURES DESIGN GENERAL PLAN SHEET (METRIC) (REV.03-17-04)



- Structural Concrete, Bridge (35 MPa @ 28 days)
- Structural Concrete, Bridge Footing (28 MPa @ 28 days)
- Cast In Drilled Hole Concrete Pile (28 MPa @ 28 days)
- STANDARD PLAN SHEET No.
- DETAIL No.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	373	439

05-11-09
 REGISTERED CIVIL ENGINEER DATE

6-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 LEON VALLA
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

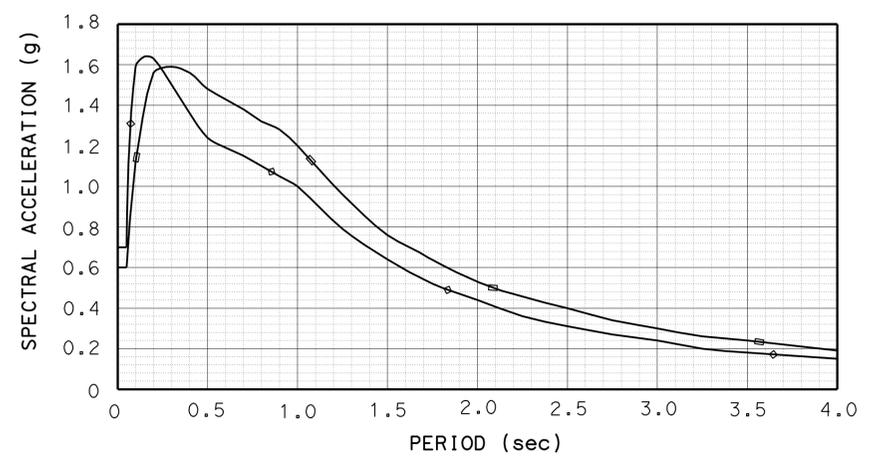
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CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

PILE DATA TABLE								
LOCATION	PILE TYPE	DESIGN LOADING	NOMINAL RESISTANCE		APPROX FG ±	CUT-OFF ELEVATIONS	DESIGN TIP ELEVATIONS	SPECIFIED TIP ELEVATIONS
			COMPRESSION	TENSION				
Abut 1	600 mm CIDH	750 kN	1500 kN	0 kN	14.800 m	N/A	0.650 m (1)	0.650 m
Bent 2	1500 mm CIDH	N/A	5250 kN	0 kN	10.300 m	5.500 m	-12.500 m (1) -8.000 m (2)	-12.500 m
Bent 3	1500 mm CIDH	N/A	5250 kN	0 kN	10.500 m	5.500 m	-12.500 m (1) -8.000 m (2)	-12.500 m
Bent 4	1500 mm CIDH	N/A	5250 kN	0 kN	10.600 m	5.500 m	-12.500 m (1) -8.000 m (2)	-12.500 m

Design tip elevations are controlled by the following demands: (1) Compression, (2) Lateral



- Modified ARS based on CNK & soil profile Type D, MCE=6.500, PBA=0.700g
- Modified ARS based on NIE & soil profile Type D, MCE=7.000, PBA=0.600g

GENERAL NOTES

LOAD FACTOR DESIGN

DESIGN: BRIDGE DESIGN SPECIFICATIONS (1996 AASHTO with Interims and Revisions by CALTRANS)

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC) Version 1.4 June 2006

DEAD LOAD: Includes 1.700 kPa for future wearing surface

LIVE LOADING: HS20-44 and Alternative and Permit Design Load

RAIL LOAD: 240kN traffic collision load (LFD loading) applied laterally at the top of barrier and distributed over a longitudinal distance of 3.048 meters.

SEISMIC LOADING: See 'Site Specific ARS Curve'

REINFORCED CONCRETE: $f_y = 420$ MPa
 $f'_c =$ See concrete strength and type limits

PRESTRESSED CONCRETE: See 'Prestressing Notes' on "Girder Layout" sheet.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

QUANTITIES	LUMP SUM
BRIDGE REMOVAL (PORTION), LOCATION B	174 m ³
STRUCTURE EXCAVATION (BRIDGE)	6 m ³
STRUCTURE EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)	115 m ³
STRUCTURE BACKFILL (BRIDGE)	5 m ³
AGGREGATE BASE (APPROACH SLAB)	38 m
600 MM CAST-IN-DRILLED-HOLE CONCRETE PILING	54 m
1.5 M CAST-IN-DRILLED-HOLE CONCRETE PILING	54 m
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP SUM
STRUCTURAL CONCRETE, BRIDGE FOOTING	6 m ³
STRUCTURAL CONCRETE, BRIDGE	153 m ³
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	10 m ³
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	50 m ³
PAVING NOTCH EXTENSION	2 m ³
ARCHITECTURAL TREATMENT	6 m ²
DRILL AND BOND DOWEL	20 m
JOINT SEAL (MR 40 MM)	21 m
JOINT SEAL (MR 50 MM)	5 m
BAR REINFORCING STEEL (BRIDGE)	59 422 kg
ASPHALT MEMBRANE WATERPROOFING	180 m ²
COLUMN CASING	72 430 kg
ISOLATION CASING	6327 kg
MISCELLANEOUS METAL (BRIDGE)	1774 kg
BRIDGE DECK DRAINAGE SYSTEM	174 kg
CONCRETE BARRIER (TYPE 736 MODIFIED)	145 m

INDEX TO PLANS

SHEET NO.	TITLE
1.	GENERAL PLAN
2.	INDEX TO PLANS
3.	FOUNDATION PLAN
4.	ABUTMENT 1 LAYOUT
5.	ABUTMENT 1 DETAILS NO. 1
6.	ABUTMENT 1 DETAILS NO. 2
7.	BENT 2 AND 3 LAYOUT
8.	BENT 2 AND 3 DETAILS
9.	BENT 4 LAYOUT
10.	BENT 4 DETAILS
11.	COLUMN DETAILS
12.	COLUMN ISOLATION CASING DETAILS
13.	STEEL COLUMN CASING LAYOUT
14.	STEEL COLUMN CASING DETAILS
15.	STEEL COLUMN CASING (SEISMIC RETROFIT)
16.	TYPICAL SECTION
17.	GIRDER LAYOUT
18.	GIRDER DETAILS NO. 1
19.	GIRDER DETAILS NO. 2
20.	GIRDER REINFORCEMENT
21.	DECK DRAINAGE DETAILS
22.	STRUCTURE APPROACH TYPE N(9D)
23.	STRUCTURE APPROACH TYPE R(9D)
24.	CONCRETE BARRIER TYPE 736 MOD DETAILS
25.	CONDUIT AT EXISTING BARRIER DETAILS
26.	ALLOWABLE FALSEWORK PLACEMENT LIMITS
27.	LOG OF TEST BORINGS 1 OF 2
28.	LOG OF TEST BORINGS 2 OF 2

SITE SPECIFIC ARS CURVE

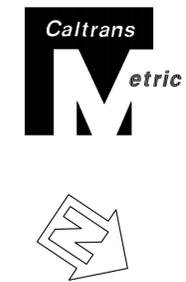
NO SCALE

STANDARD PLANS (Dated July 2004)

A10A	ACRONYMS AND ABBREVIATIONS (A-L)
A10B	ACRONYMS AND ABBREVIATIONS (M-Z)
A10C	SYMBOLS (SHEET 1 OF 2)
A10D	SYMBOLS (SHEET 2 OF 2)
A62B	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE SURCHARGE AND WALL
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
BO-1	BRIDGE DETAILS
BO-3	BRIDGE DETAILS
BO-5	BRIDGE DETAILS
BO-13	BRIDGE DETAILS
B2-3	400 mm AND 600 mm CAST-IN-DRILLED-HOLE CONCRETE PILE
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 50 mm)
B7-1	BOX GIRDER DETAILS
B7-6	DECK DRAINS TYPE D-1 AND D-2
RSP B8-5	CAST-IN-PLACE PRESTRESSED GIRDER DETAILS
B11-56	CONCRETE BARRIER TYPE 736
B14-3	COMMUNICATION AND SPRINKLER CONTROL CONDUITS (CONDUIT LESS THAN SIZE 103 mm)
RSP ES-9A	ELECTRICAL SYSTEMS (ELECTRICAL DETAILS STRUCTURE INSTALLATIONS)
RSP ES-9B	ELECTRICAL SYSTEMS (ELECTRICAL DETAILS STRUCTURE INSTALLATIONS)
RSP P10	CONCRETE PAVEMENT-DOWEL BAR DETAILS

	DESIGN BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) INDEX TO PLANS
	DETAILS BY Ton Doan	CHECKED Leon Valla			KILOMETER POST 40.97	
	QUANTITIES BY Leon Valla	CHECKED Richard Schendel				

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN
 ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS
 CU 07 EA 241301
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 10-08-07, 05-14-09, 8-12-09, 11-4-09, 11-16-09, 11-08-08, 2-24-09, 05-06-09, 05-12-09
 SHEET 2 OF 28
 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

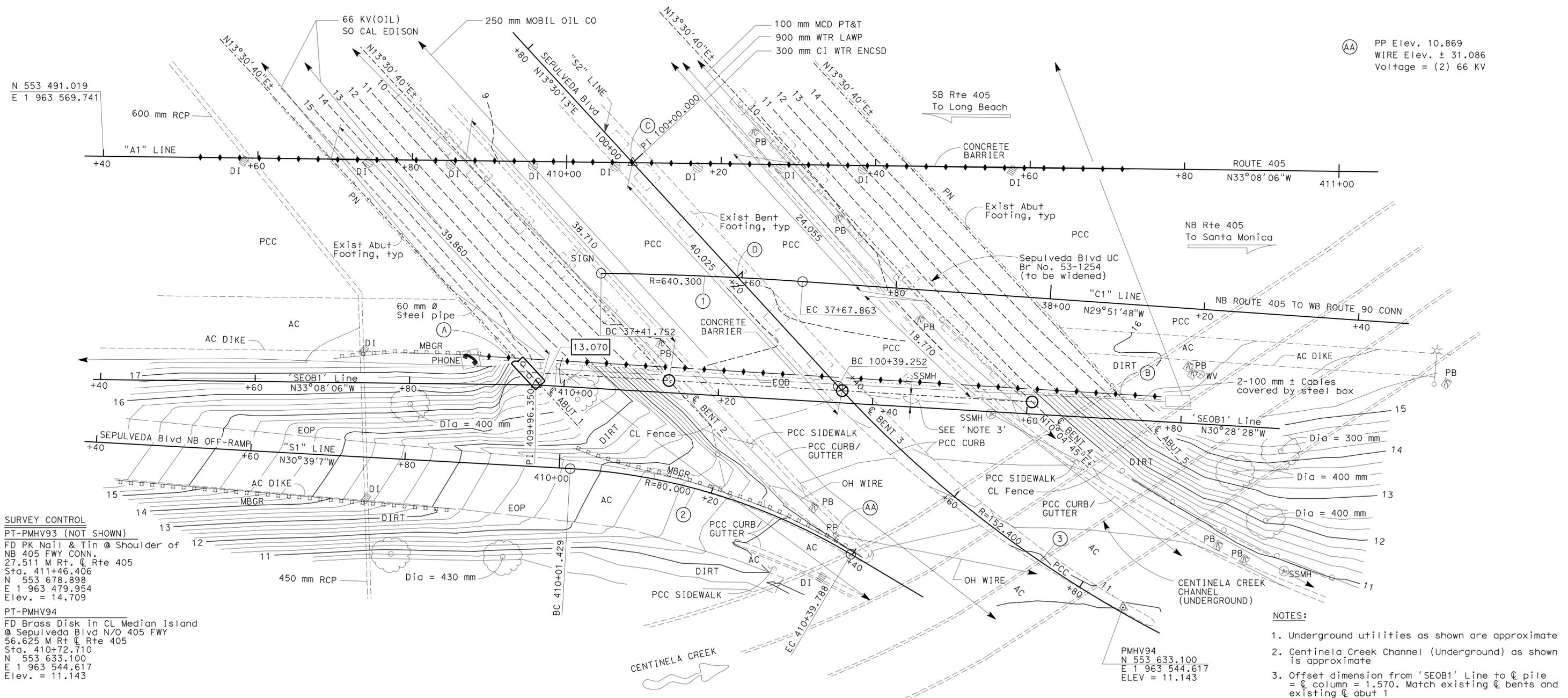


DIST	COUNTY	ROUTE	KILOMETER TOTAL PROJECT	POST TOTAL PROJECT	SHEET No	TOTAL
07	LA	405	39.7/41.5		374	439

Leon Valla
 REGISTERED CIVIL ENGINEER
 05-11-09
 6-7-10
 PLANS APPROVAL DATE
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CURVE DATA				
No.	R	Δ	T	L
①	640.300	02°43'39"	12.413	24.822
②	80.000	27°27'20"	19.555	38.359
③	152.400	52°38'47"	75.398	140.033

Bridge Location
 A - 25.330 Rt. "A1" LINE, Sta 409+92.767, Elev.=17.127 ±
 B - 29.120 Rt. "A1" LINE, Sta 410+72.160, Elev.=15.899 ±
 C - Sta. 410+08.535 "A" LINE = Sta. 100+00.000 "S2" LINE
 D - Sta. 37+59.521 "C" LINE = Sta. 100+20.181 "S2" LINE



SURVEY CONTROL
 PT-PMHV93 (NOT SHOWN)
 FD PK Nail & Tin @ Shoulder of 12
 NB 405 FWY CONN.
 27.511 M Rt. @ Rte 405
 Sta. 411+46.406
 N 553 678.898
 E 1 963 479.954
 Elev. = 14.709
 PT-PMHV94
 FD Brass Disk in CL Median Island
 @ Sepulveda Blvd N/O 405 FWY
 56.625 M Rt @ Rte 405
 Sta. 410+72.710
 N 553 633.100
 E 1 963 544.617
 Elev. = 11.143

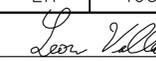
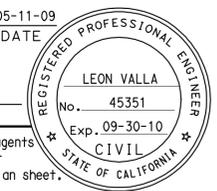
- NOTES:**
- Underground utilities as shown are approximate
 - Centinel Creek Channel (Underground) as shown is approximate
 - Offset dimension from 'SEOB1' Line to @ pile = @ column = 1.570. Match existing @ bents and existing @ abut 1

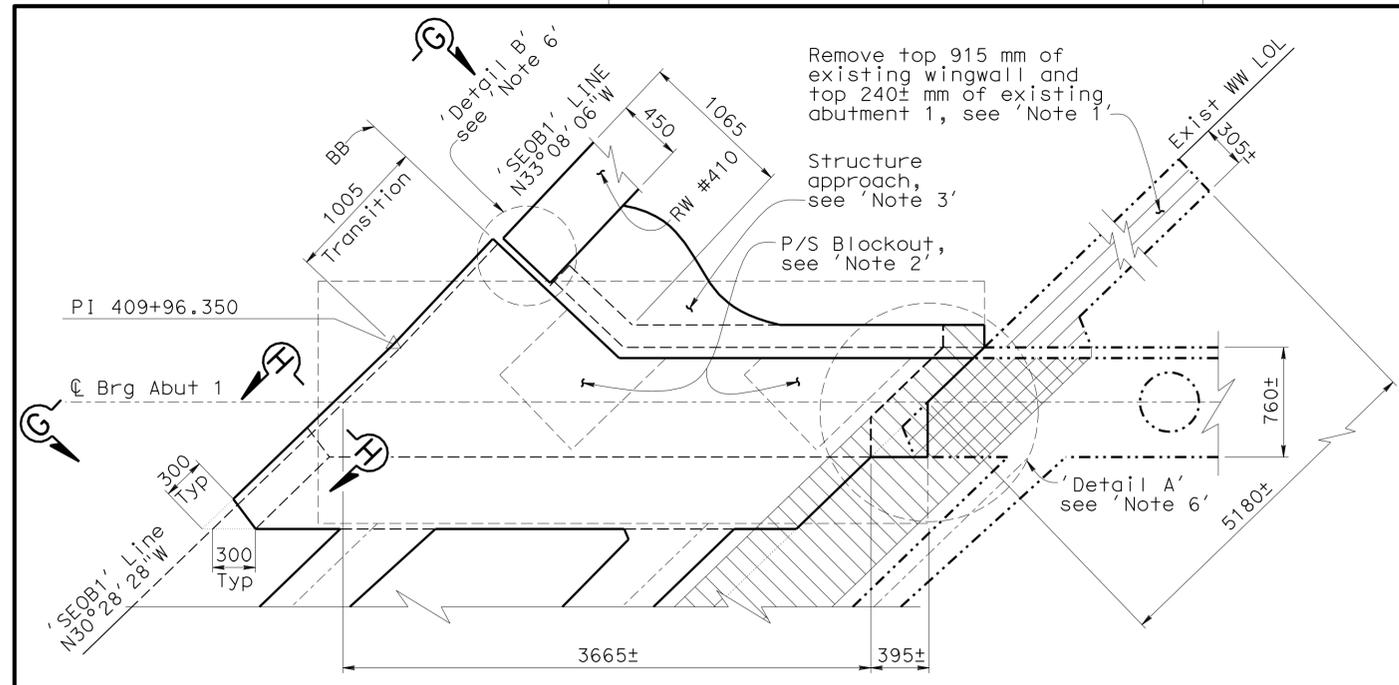
□ Denotes bottom of footing elevation
 ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PRELIMINARY INVESTIGATION SECTION				DESIGN BY Leon Valla CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. 53-1254 KILOMETER POST 40.97	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) FOUNDATION PLAN		
SCALE VERT. DATUM NAVD 88 1:250 ALIGNMENT TIES Dist., Trav. Sheets	PHOTOGRAMMETRY AS OF: SURVEYED BY COAST SURVEY 01-07 FIELD CHECKED BY L. ZHOU 01-07	DRAFTED BY L. ZHANG 01-07 CHECKED BY L. ZHOU 01-07	DETAILS BY Ton Doan CHECKED Leon Valla	DIVISION OF STRUCTURES STRUCTURE DESIGN 12		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES (PRELIMINARY STAGE ONLY) 05-06-09 05-24-07 10-01-07 11-26-07 12-12-07 01-24-08 02-04-08 11-08-08	SHEET 3 OF 28
STRUCTURES FOUNDATION PLAN SHEET (METRIC) (REV. 4/20/00)				QUANTITIES BY Leon Valla CHECKED Richard Schendel		CU 07 EA 241301		FILE => 53-1254-e-fp.dgn	

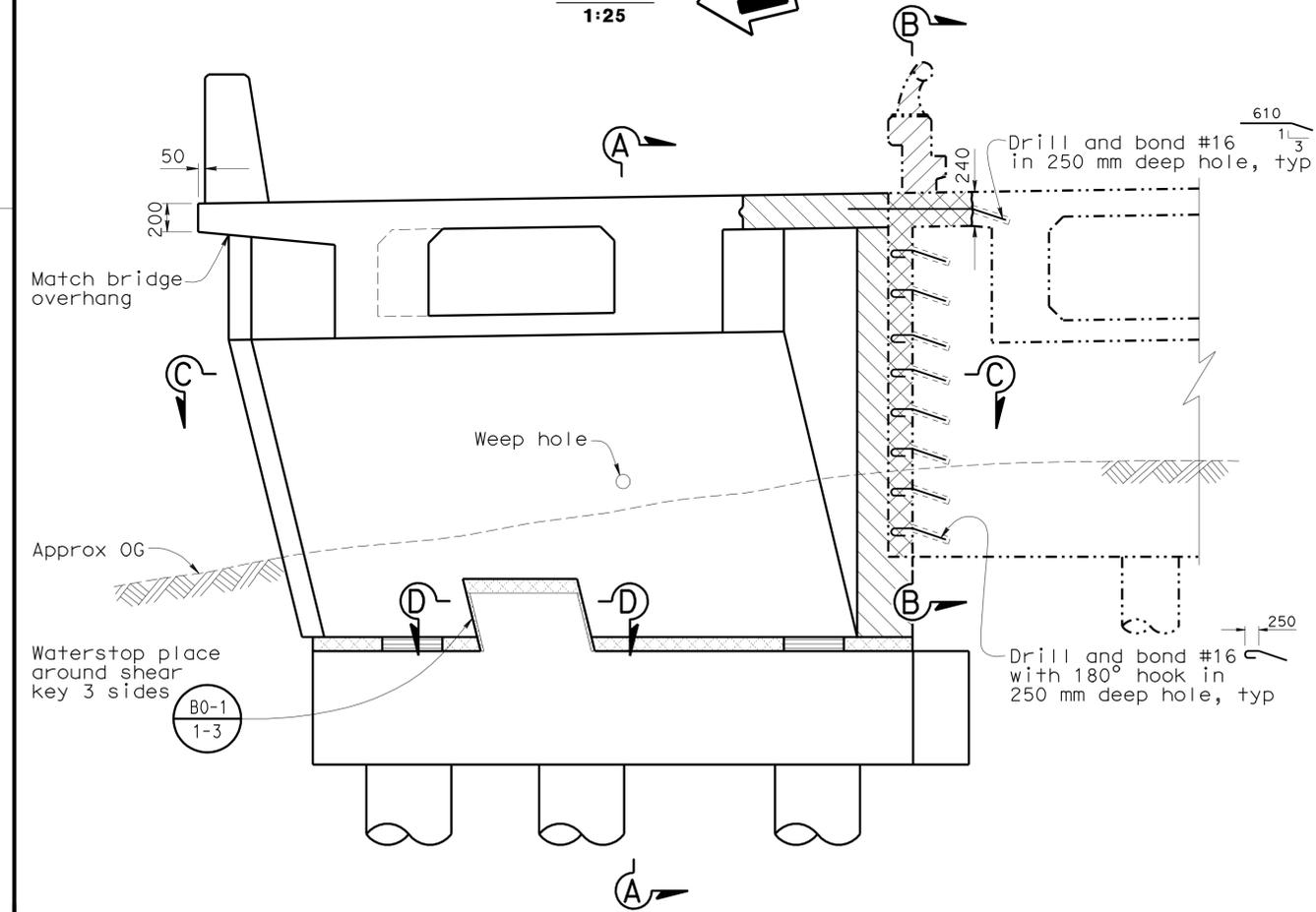


USERNAME => HSTFK DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:22

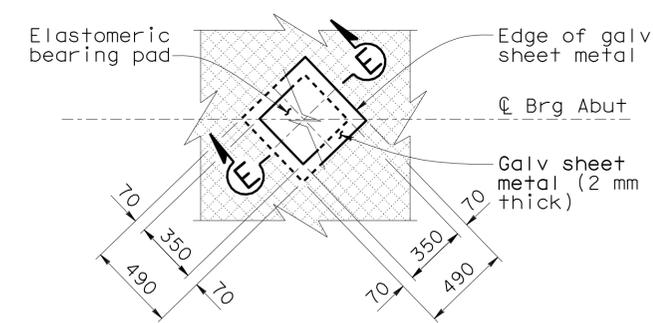
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	375	439
			05-11-09		
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			PLANS APPROVAL DATE		
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PLAN
1:25

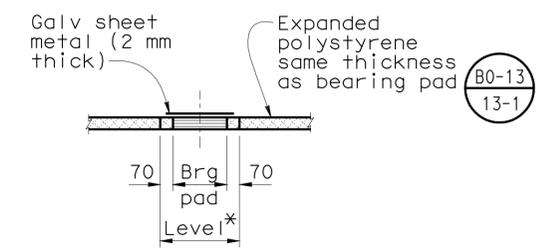


ELEVATION
1:25



Note:
Coat top of bearing pad with silicone grease prior to placing sheet metal

PLAN



* Level both transversely and longitudinally

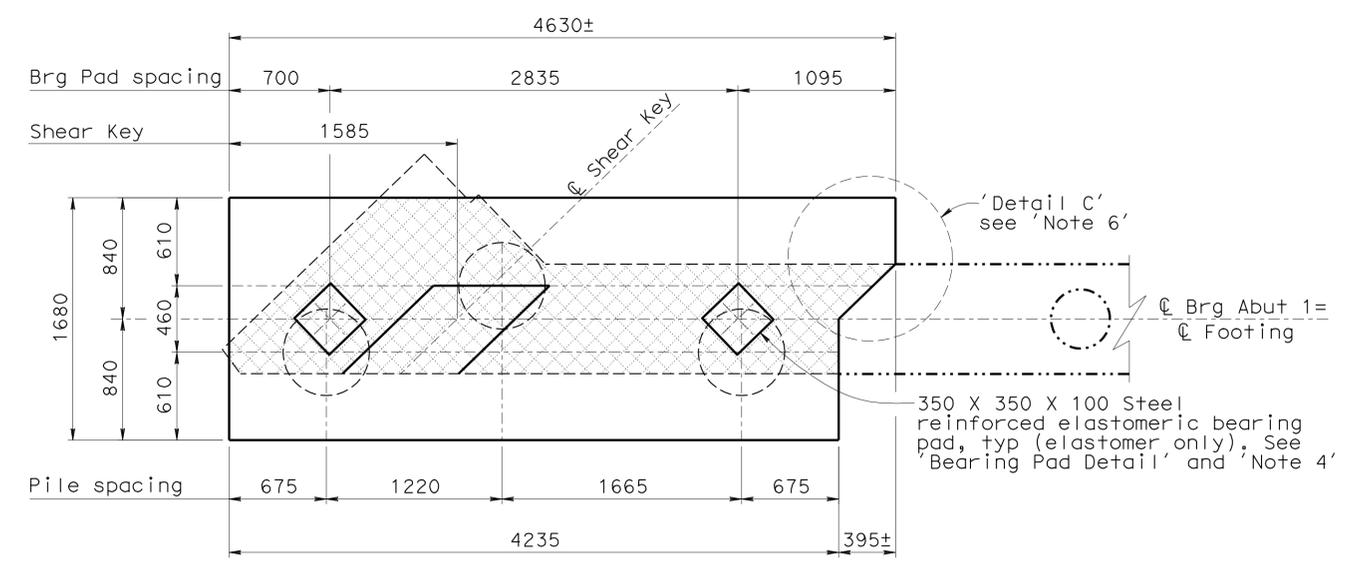
SECTION E-E

BEARING PAD DETAIL
1:20

Details typical for all bearing pads

Legend:

-  Indicates limits of existing type 1 barrier, existing wing wall and abutment removal portion
-  Indicates limits of closure pour
-  Indicates limits of expanded polystyrene



FOOTING PLAN
1:25

	DESIGN	BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) ABUTMENT 1 LAYOUT	
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97		
	QUANTITIES	BY Leon Valla	CHECKED Richard Schendel	CU 07	EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 05-29-07 05-06-09 11-28-07 12-12-07 01-24-08 02-04-08 05-16-08 11-05-08 2-25-09	SHEET 4 OF 28

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

0 10 20 30 40 50 60 70 80 90 100

FILE => 53-1254-f-a01_lo.dgn

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	376	439

Leon Valla	05-11-09
REGISTERED CIVIL ENGINEER	DATE
6-7-10	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER

LEON VALLA

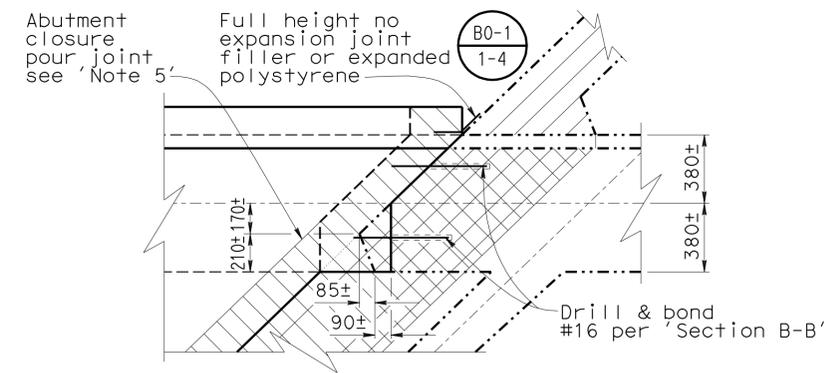
No. 45351

Exp. 09-30-10

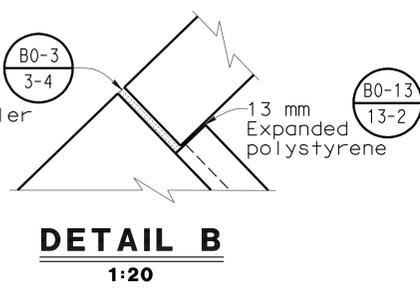
CIVIL

STATE OF CALIFORNIA

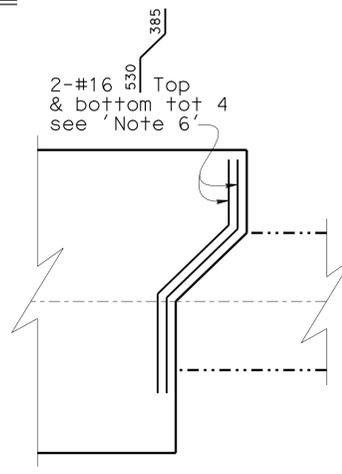
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DETAIL A
1:20



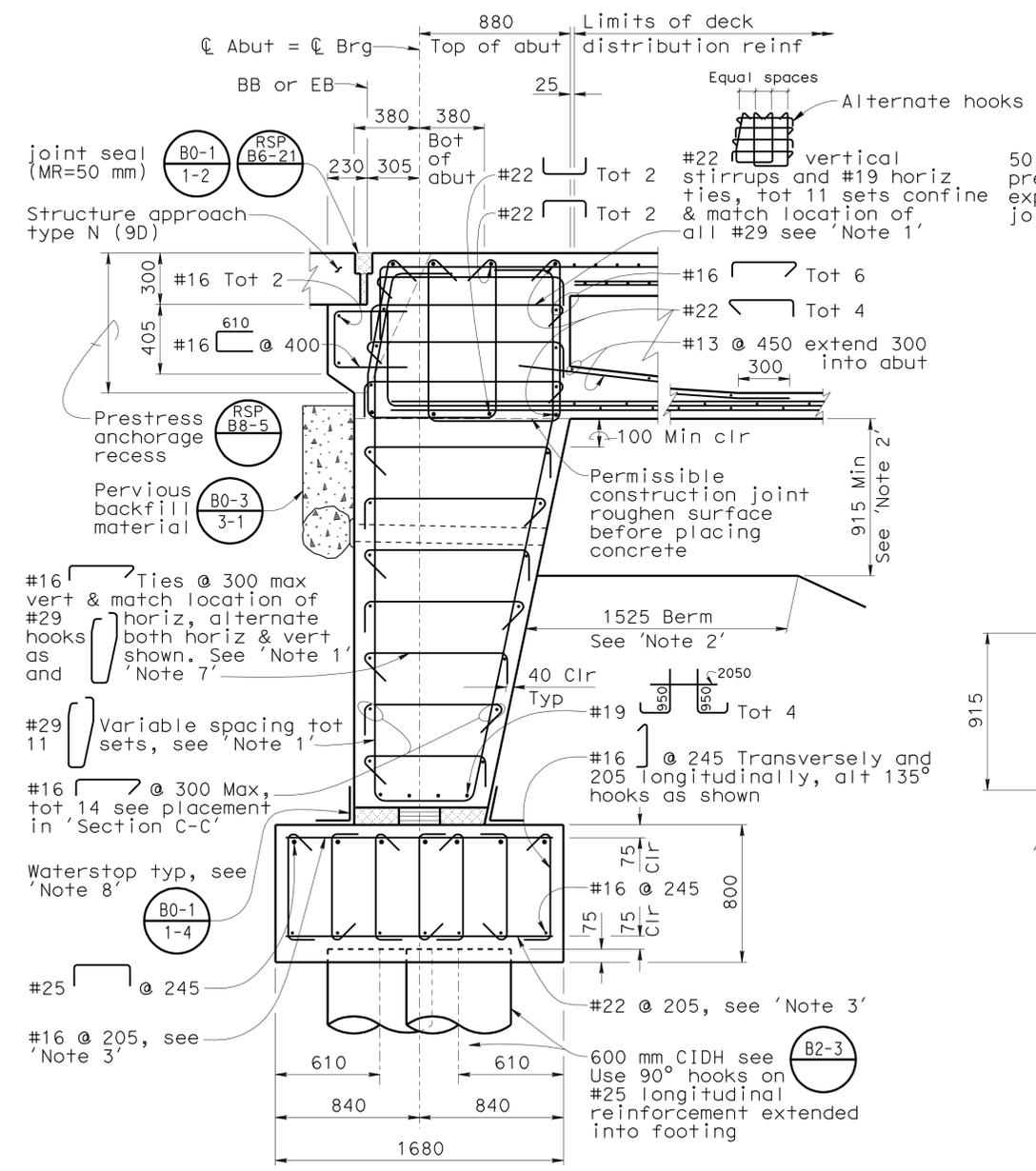
DETAIL B
1:20



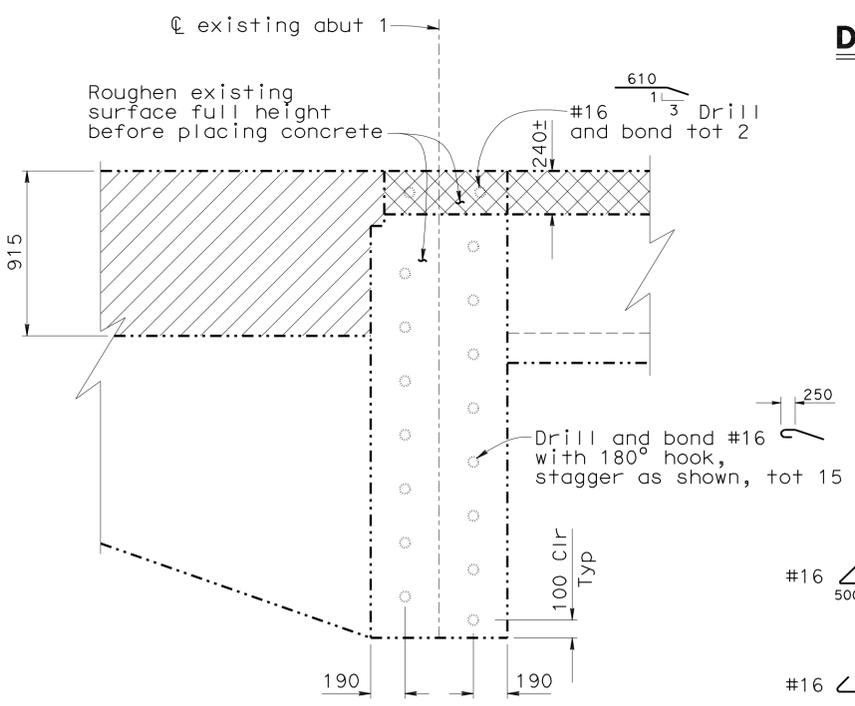
DETAIL C
1:20

- Legend:**
- Indicates limits of existing type 1 barrier, existing wing wall and abutment removal portion
 - Indicates limits of closure pour
 - Indicates limits of expanded polystyrene

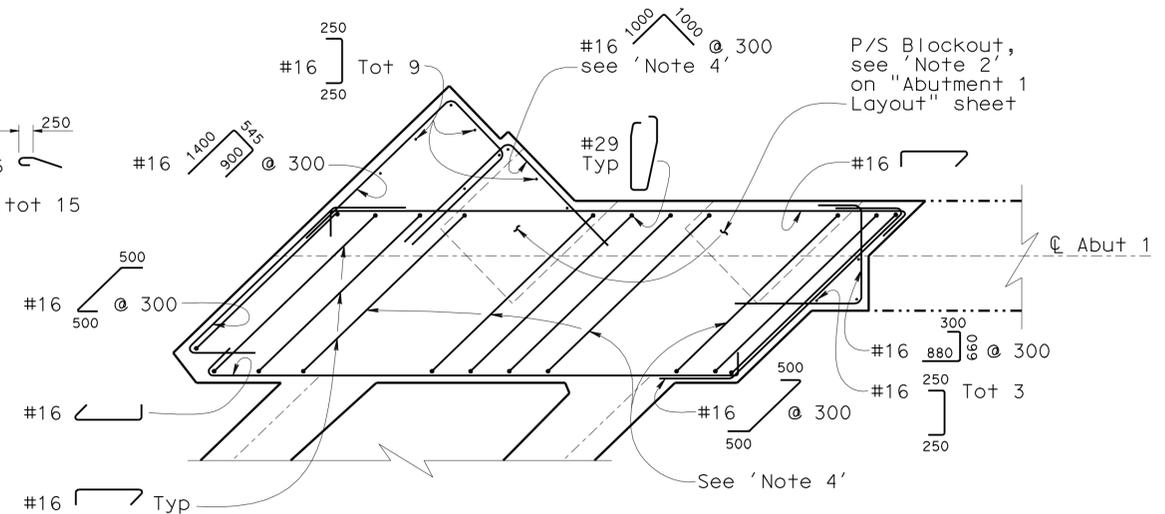
- Notes:**
1. Place parallel to ϕ of girders and space normal to ϕ of girder, see 'Section C-C'
 2. Match existing conditions as close as possible
 3. Foreshorten bars on corner
 4. Space reinforcement to avoid prestress anchorage recess blockouts and/or shear key
 5. Roughen surface of abutment closure pour joint before placing concrete for closure pour
 6. Reinforcement is in addition to all bars shown in 'Section A-A'
 7. All ties at bar intersections to hook all bars. All bars to be adjusted for positive contact and snug fit
 8. 3 mm x 400 mm neoprene strip. Place neoprene around entire abutment to footing interface



SECTION A-A
1:20



SECTION B-B
1:20



SECTION C-C
1:25

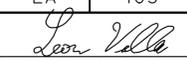
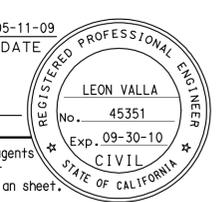
	DESIGN	BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) ABUTMENT 1 DETAILS NO. 1
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97	
	QUANTITIES	BY Leon Valla	CHECKED Richard Schendel			CU 07	EA 241301	

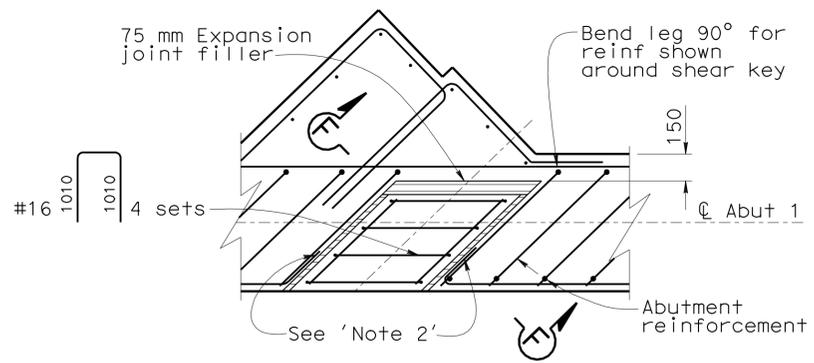
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

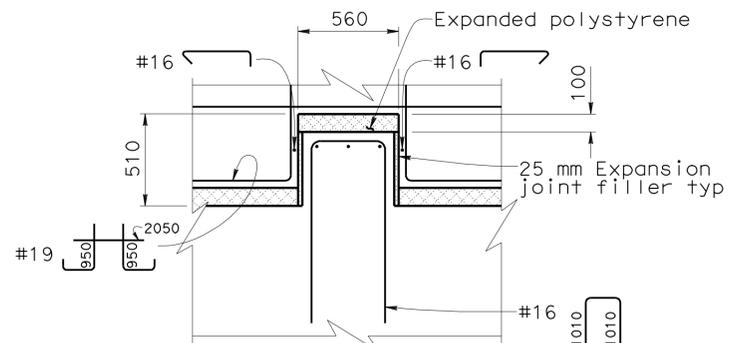
REVISION DATES		SHEET	OF
01-18-07	02-28-09	02-26-09	05-06-09
12-18-07	01-24-08	02-04-08	05-11-08
11-08-08			
		5	28

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

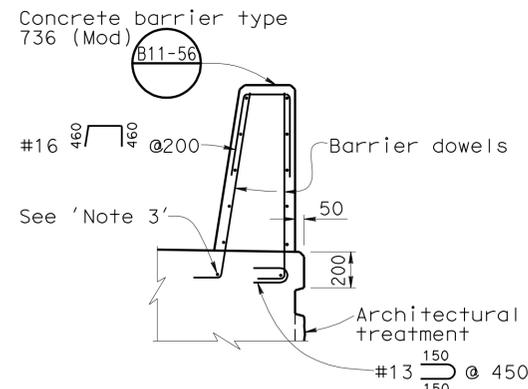
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	377	439
 REGISTERED CIVIL ENGINEER DATE 05-11-09					
PLANS APPROVAL DATE 6-7-10 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



SECTION D-D
1:20



SECTION F-F
1:20

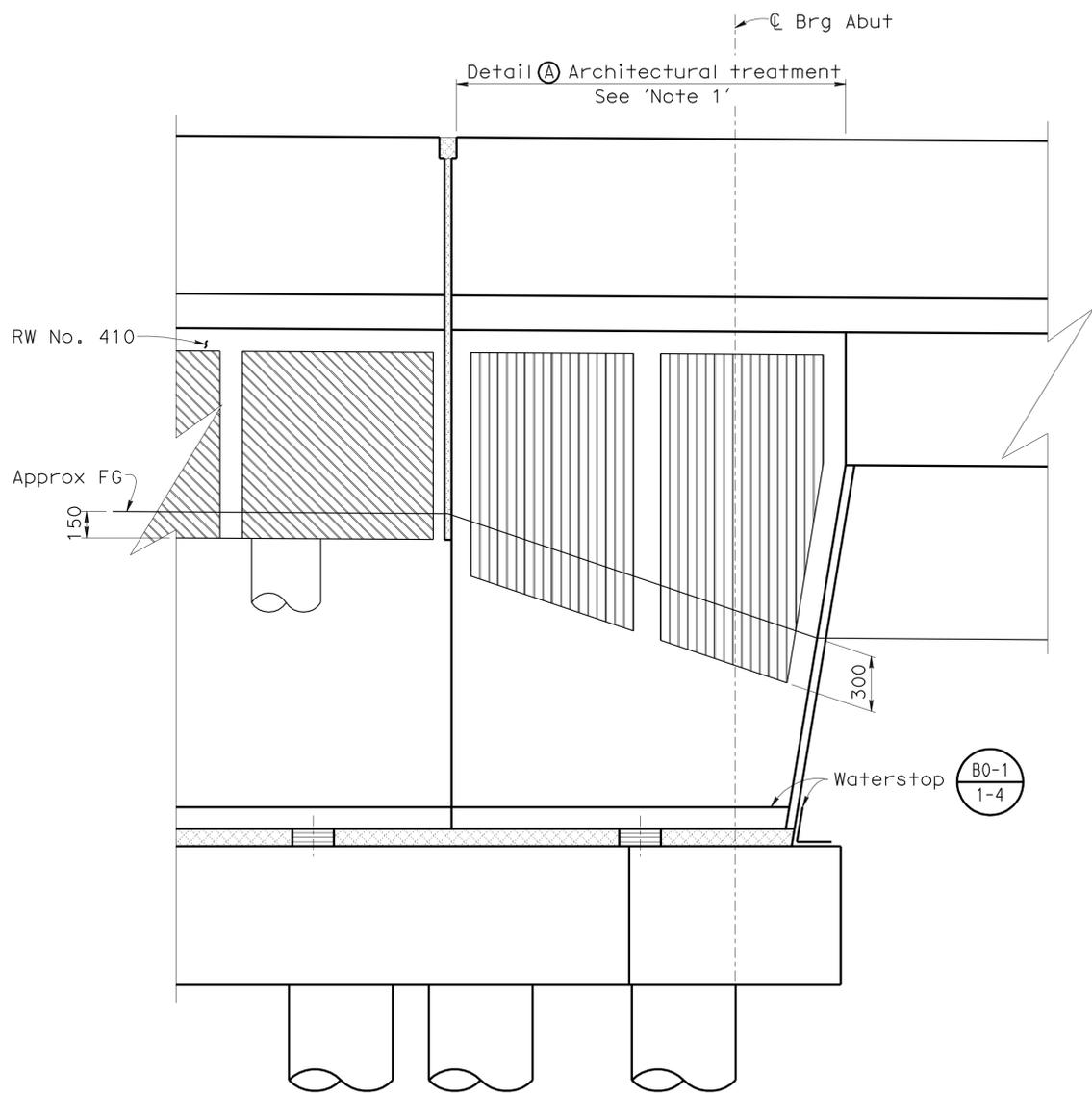


SECTION H-H
1:20

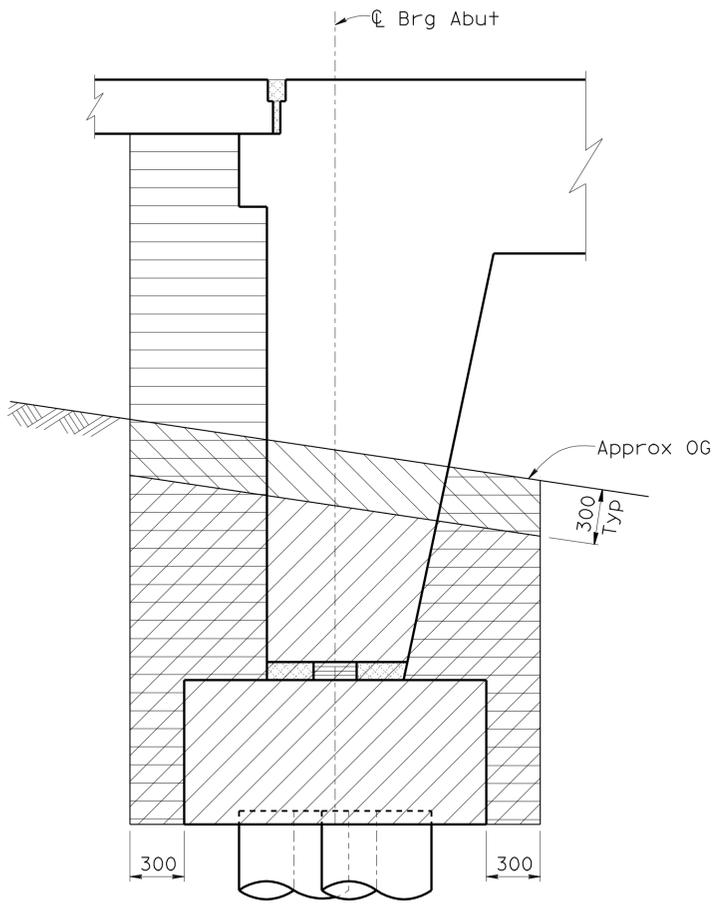
- Legend:**
-  Indicates limits of expanded polystyrene
 -  Structure excavation (Type Y-2) Aerially deposited lead
 -  Structure excavation (Bridge)
 -  Structure backfill (Bridge)

Note:
Any excess Type (Y-2) material that cannot be reused on site or along the corridor shall be classified as Type (Z-2)

- Notes:**
- For architectural treatment, see "Architectural Treatment Details" sheet on "Retaining Wall No. 410" plans
 - Standard 90° hook where longitudinal steel terminates around shear key
 - For reinforcement and/or details not shown, see 



VIEW G-G
1:20



PAY LIMITS FOR STRUCTURE EXCAVATION AND BACKFILL AT ABUTMENT 1
1:20



DESIGN	BY Leon Valla	CHECKED Richard Schendel
DETAILS	BY Ton Doan	CHECKED Leon Valla
QUANTITIES	BY Leon Valla	CHECKED Richard Schendel

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1254
KILOMETER POST	40.97

SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)
ABUTMENT 1 DETAILS NO. 2

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

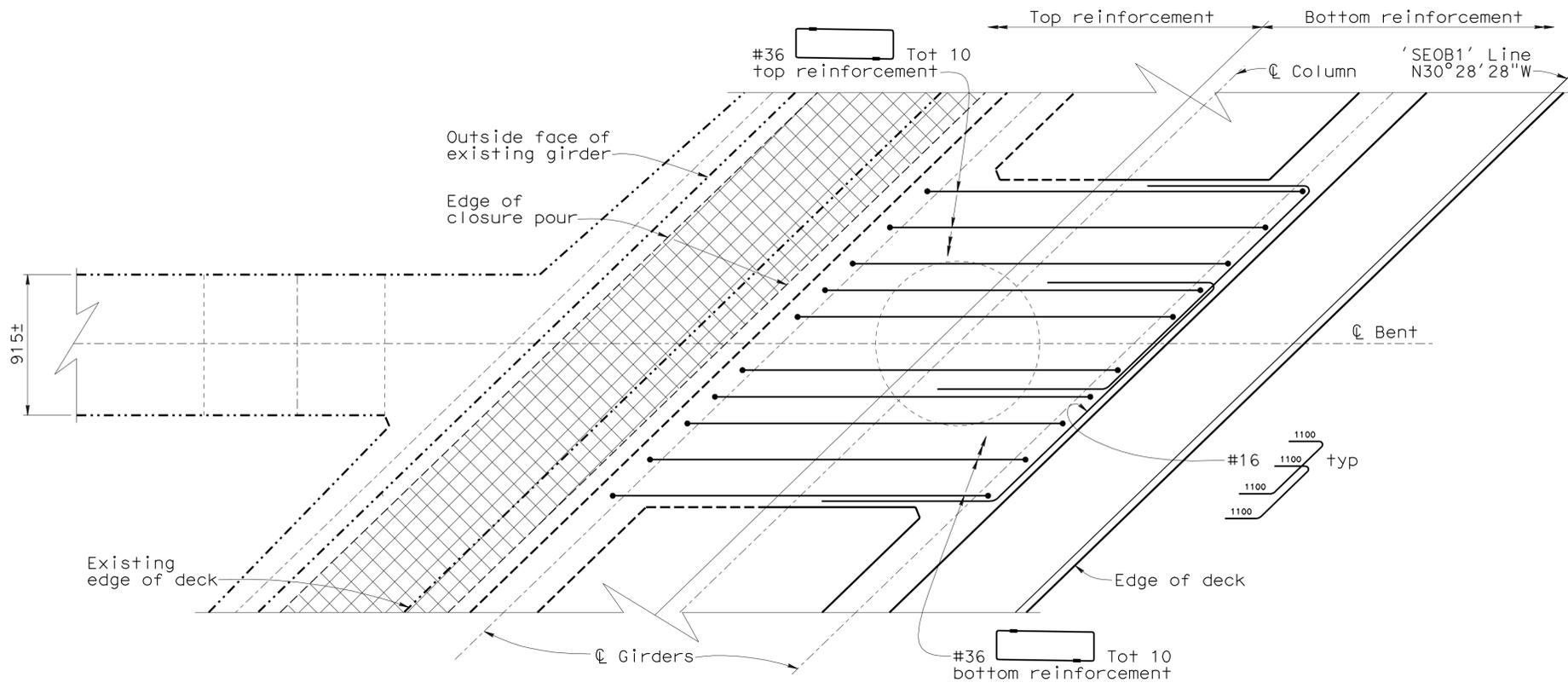


CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
07-18-07 11-08-08 05-06-09 8-12-09 01-08-08 01-17-08 01-28-08 02-04-08 07-21-08	6	28

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	378	439
<i>Leon Valla</i> REGISTERED CIVIL ENGINEER DATE 05-11-09					
PLANS APPROVAL DATE 6-7-10					
<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>					

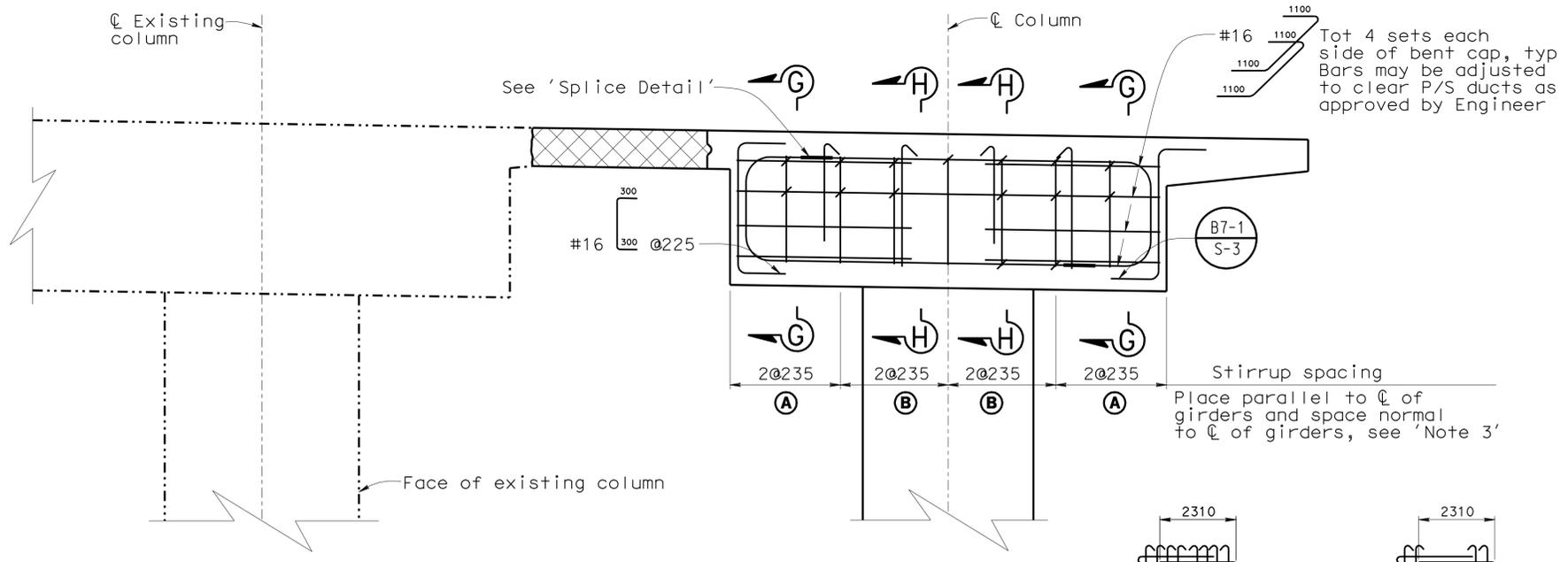


PLAN
1:20

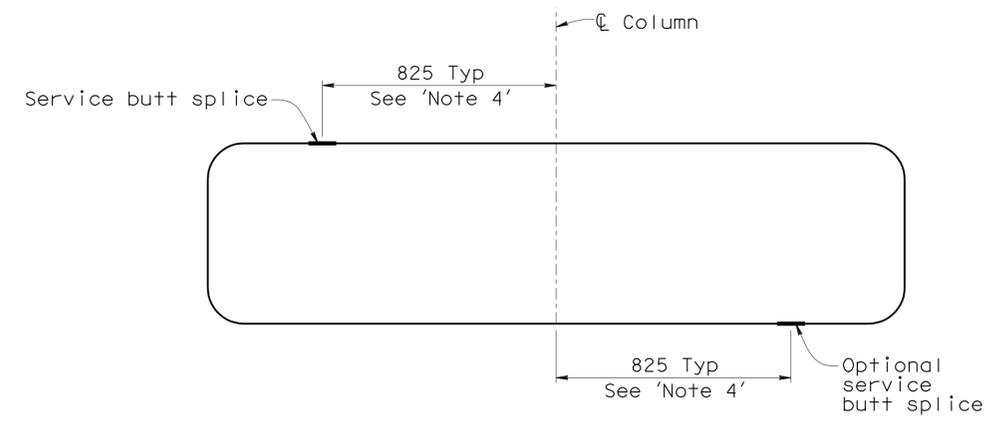
- Notes:**
1. No splices allowed in top and bottom reinforcement except as shown in 'Splice Detail'
 2. For 'Section G-G' and 'Section H-H', see "Bent 2 And 3 Details" sheet
 3. Start all stirrup spacing from \O column
 4. All splicing of #36 continuous reinforcement must be done with service butt splices. Stagger splices about \O column, typical

Legend:

Indicates limits of closure pour



ELEVATION
1:20

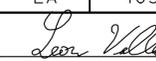


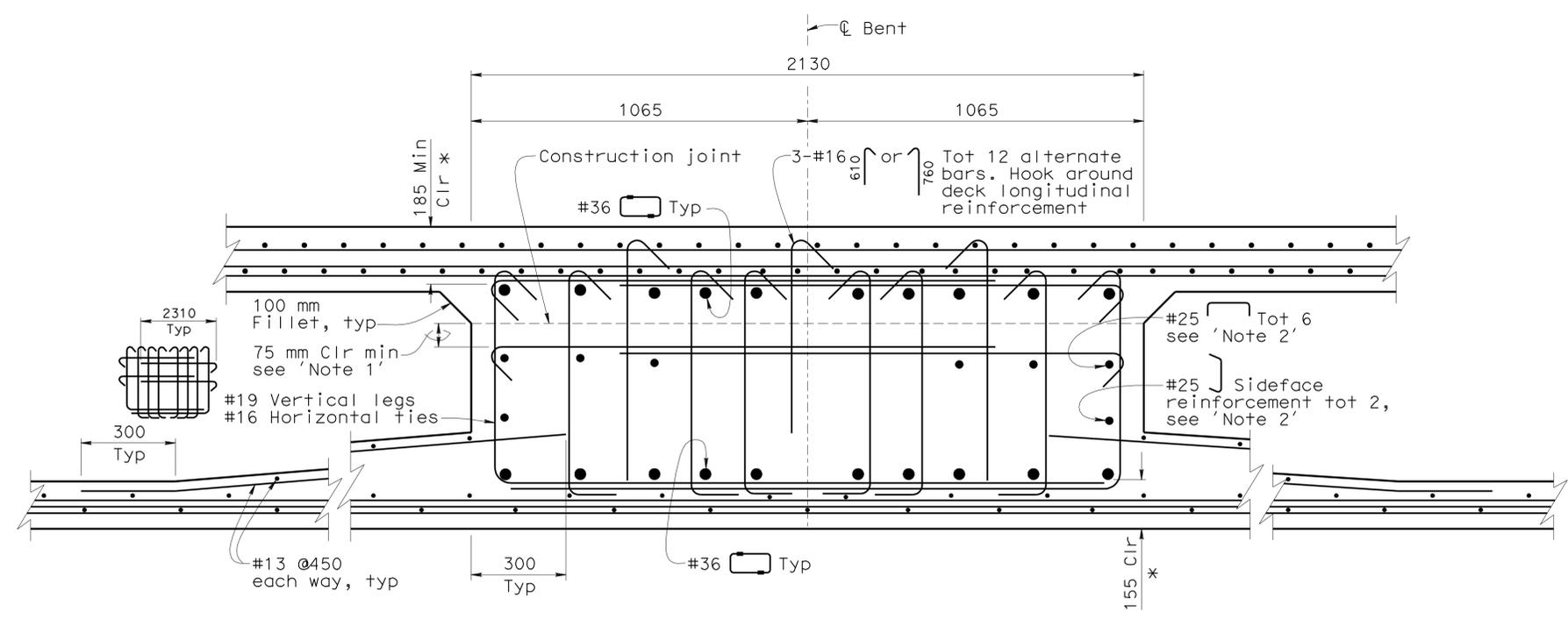
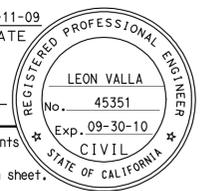
SPLICE DETAIL
NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

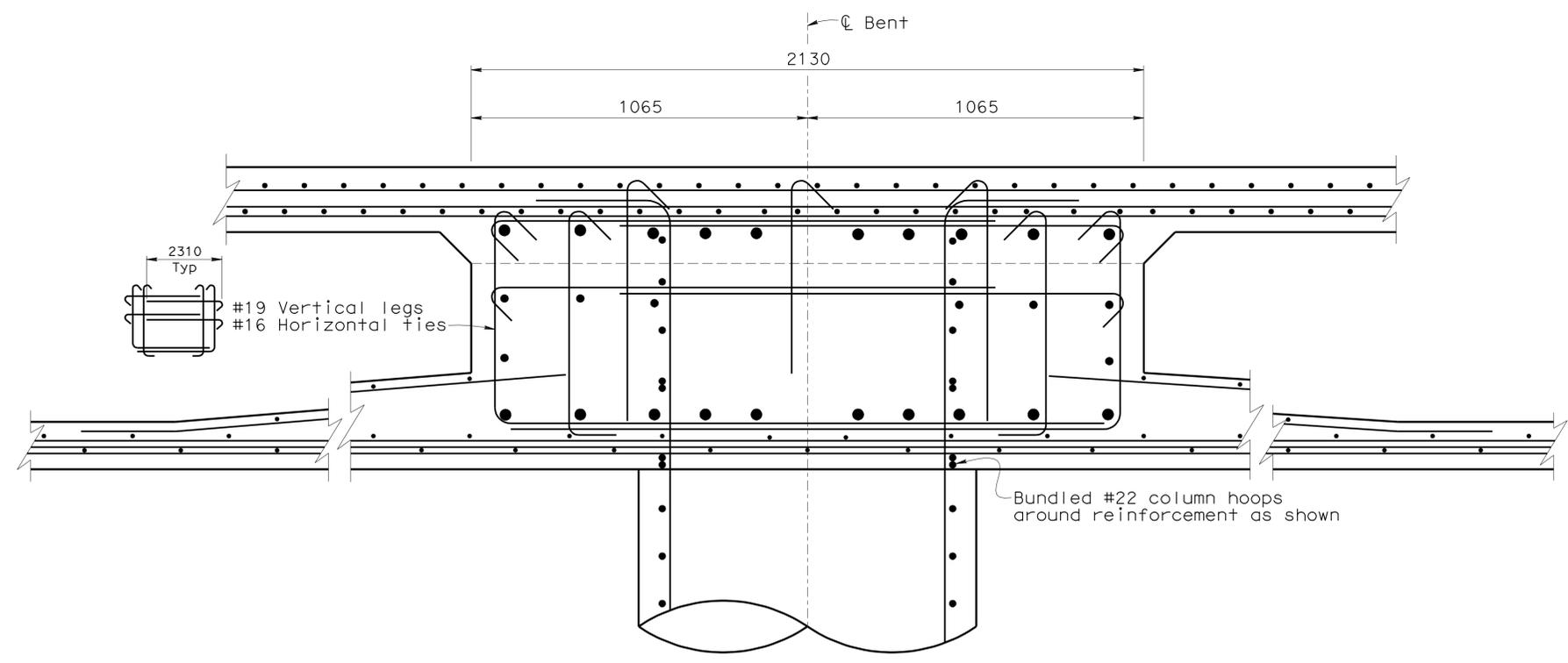
	DESIGN	BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) BENT 2 AND 3 LAYOUT						
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97							
	QUANTITIES	BY Leon Valla	CHECKED Richard Schendel			CU 07 EA 241301	REVISION DATES		<table border="1"> <tr> <td>08-02-07</td> <td>08-06-08</td> <td>09-14-07</td> <td>09-21-07</td> <td>10-31-07</td> <td>11-28-07</td> <td>12-14-07</td> <td>01-28-08</td> <td>06-11-08</td> </tr> </table>	08-02-07	08-06-08	09-14-07	09-21-07	10-31-07
08-02-07	08-06-08	09-14-07	09-21-07	10-31-07	11-28-07	12-14-07	01-28-08	06-11-08						
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		DISREGARD PRINTS BEARING EARLIER REVISION DATES		SHEET 7 OF 28						

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:56

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	379	439
 REGISTERED CIVIL ENGINEER			05-11-09	DATE	
6-7-10 PLANS APPROVAL DATE					
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.					



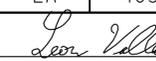
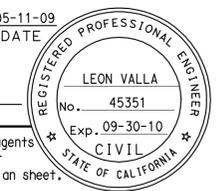
- Notes:**
1. Reinforcement shall be adjusted as necessary to accommodate prestress ducts as directed by the Engineer
 2. Bend legs inside #36 continuous reinforcement

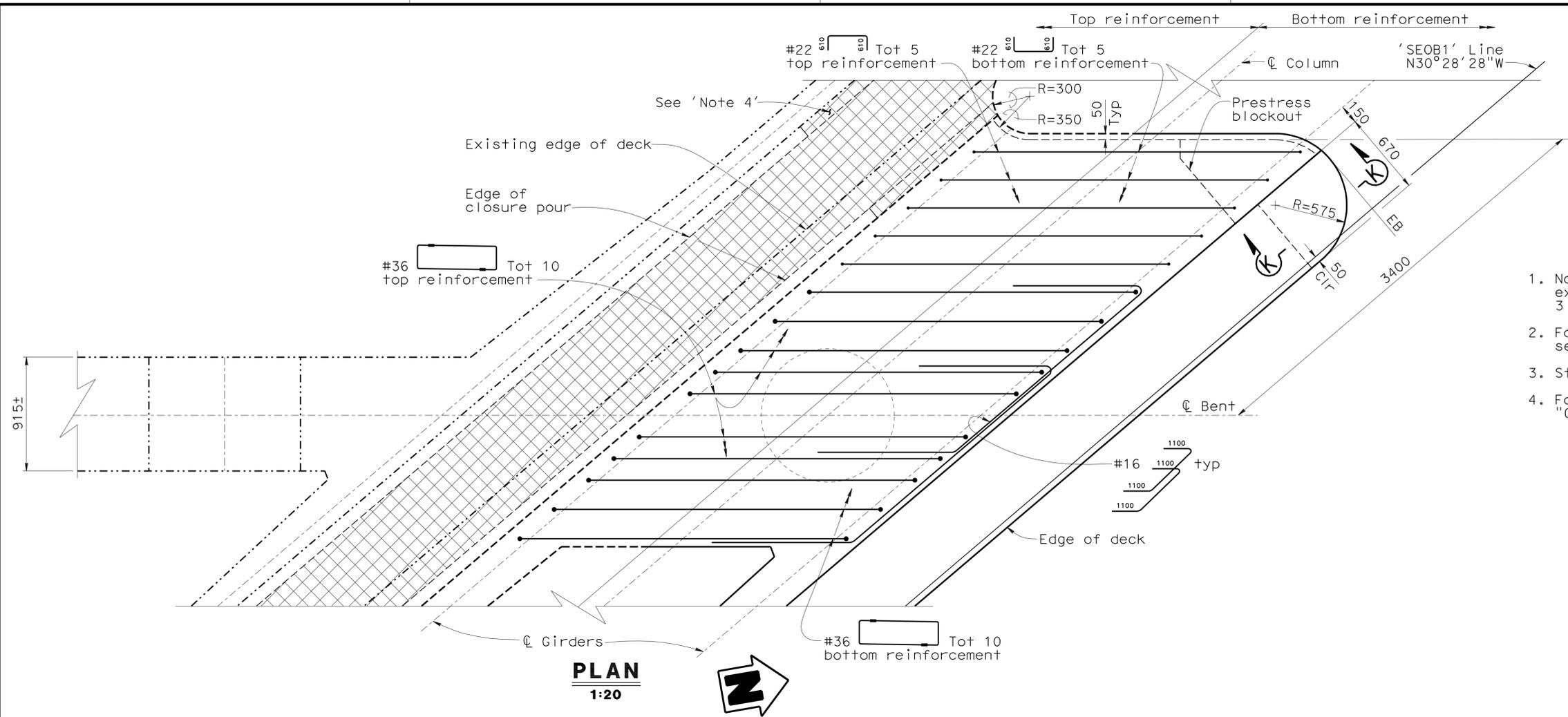


For details not shown, see 'Section G-G'

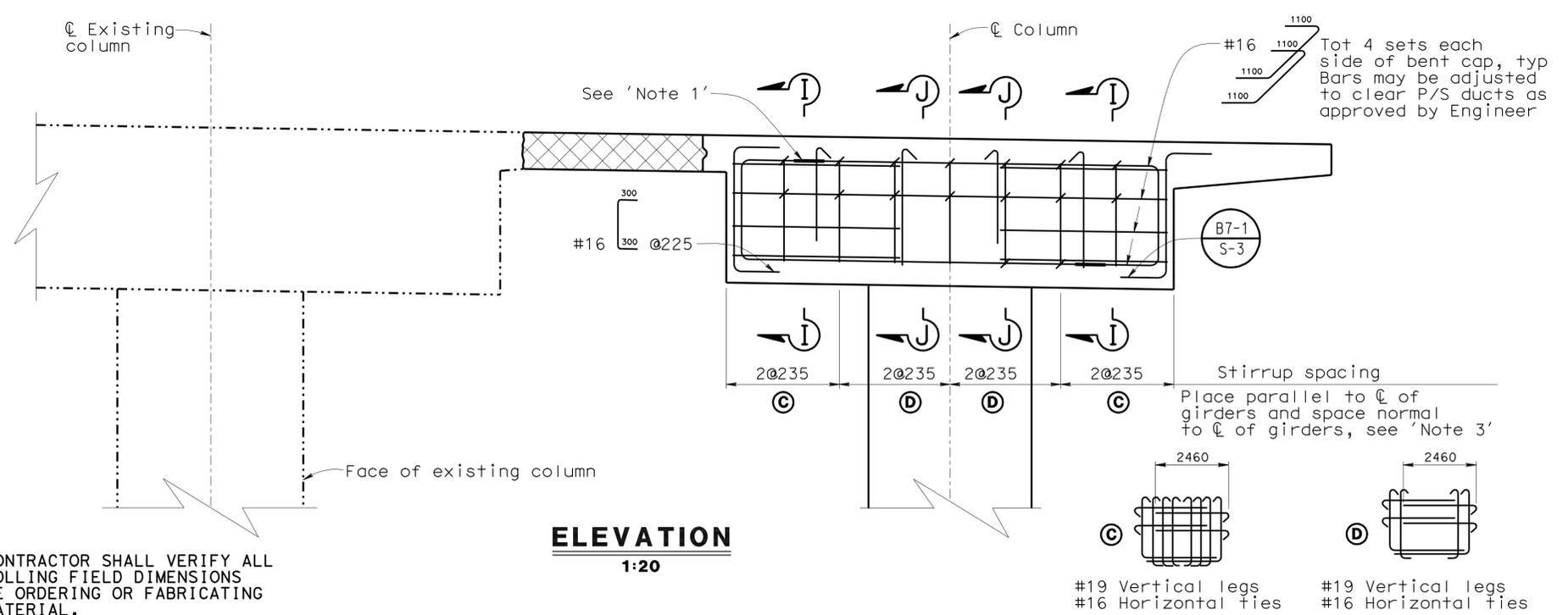
	DESIGN	BY Leon Valla	CHECKED Richard Shendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) BENT 2 AND 3 DETAILS
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS		CU 07 EA 241301		DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES: 07-26-07, 08-06-08, 09-14-07, 09-21-07, 11-01-07, 11-28-07, 12-14-07, 01-25-08, 06-11-08								SHEET 8 OF 28

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:56

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	380	439
		 REGISTERED CIVIL ENGINEER DATE 05-11-09			
		PLANS APPROVAL DATE 6-7-10			
<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>					



- Notes:**
1. No splices allowed in top and bottom reinforcement except as shown in 'Splice Detail' on "Bent 2 And 3 Layout" sheet
 2. For 'Section I-I', 'Section J-J' and 'Section K-K' see "Bent 4 Details" sheet
 3. Start all stirrup spacing from C column
 4. For details not shown, see 'Detail G' on "Girder Details No. 1" sheet



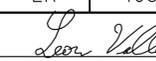
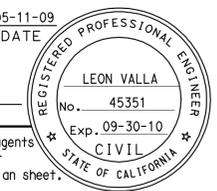
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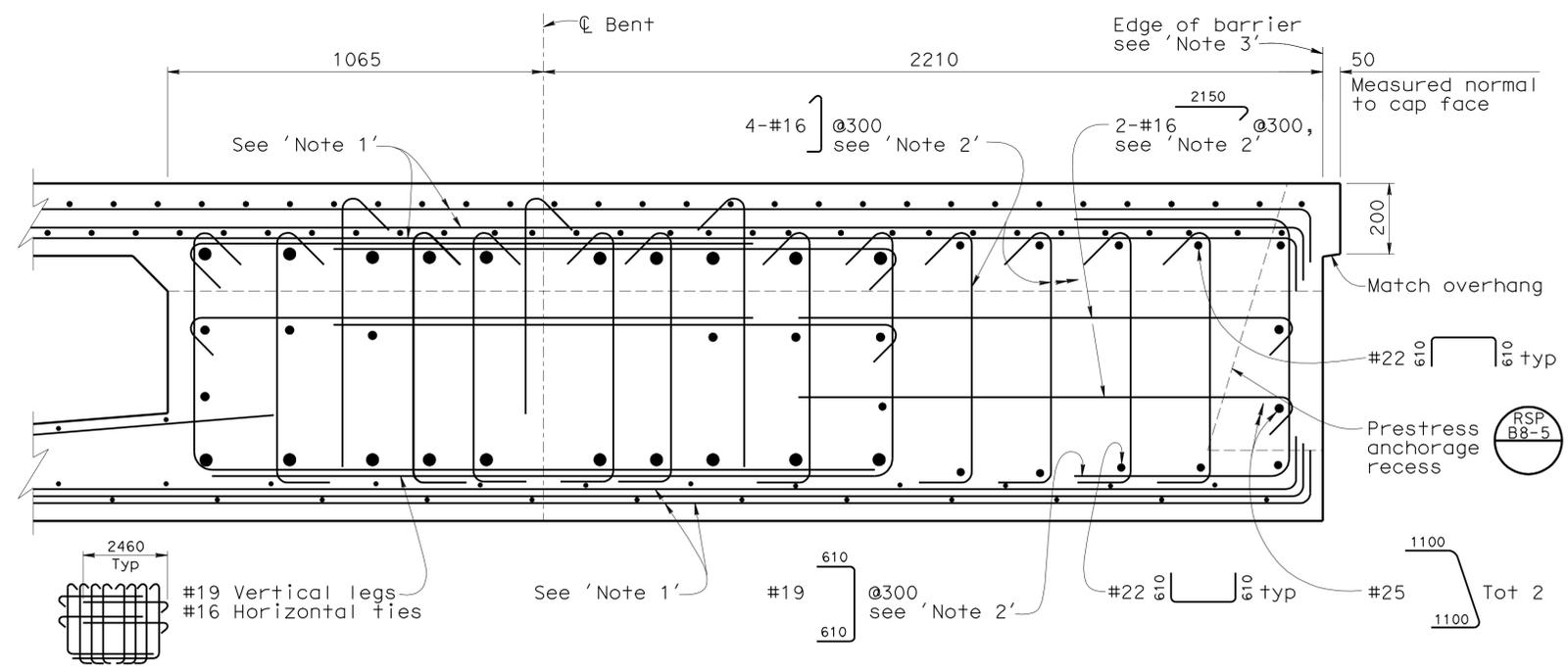
 Indicates limits of closure pour

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) BENT 4 LAYOUT
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97	
	QUANTITIES	BY Leon Valla	CHECKED Richard Schendel			CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 08-17-07, 05-06-09, 09-21-07, 11-26-07, 11-26-07, 12-19-07, 01-28-08, 06-12-08, 08-06-08	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS: 0 10 20 30 40 50 60 70 80 90 100		SHEET 9 OF 28		

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:57

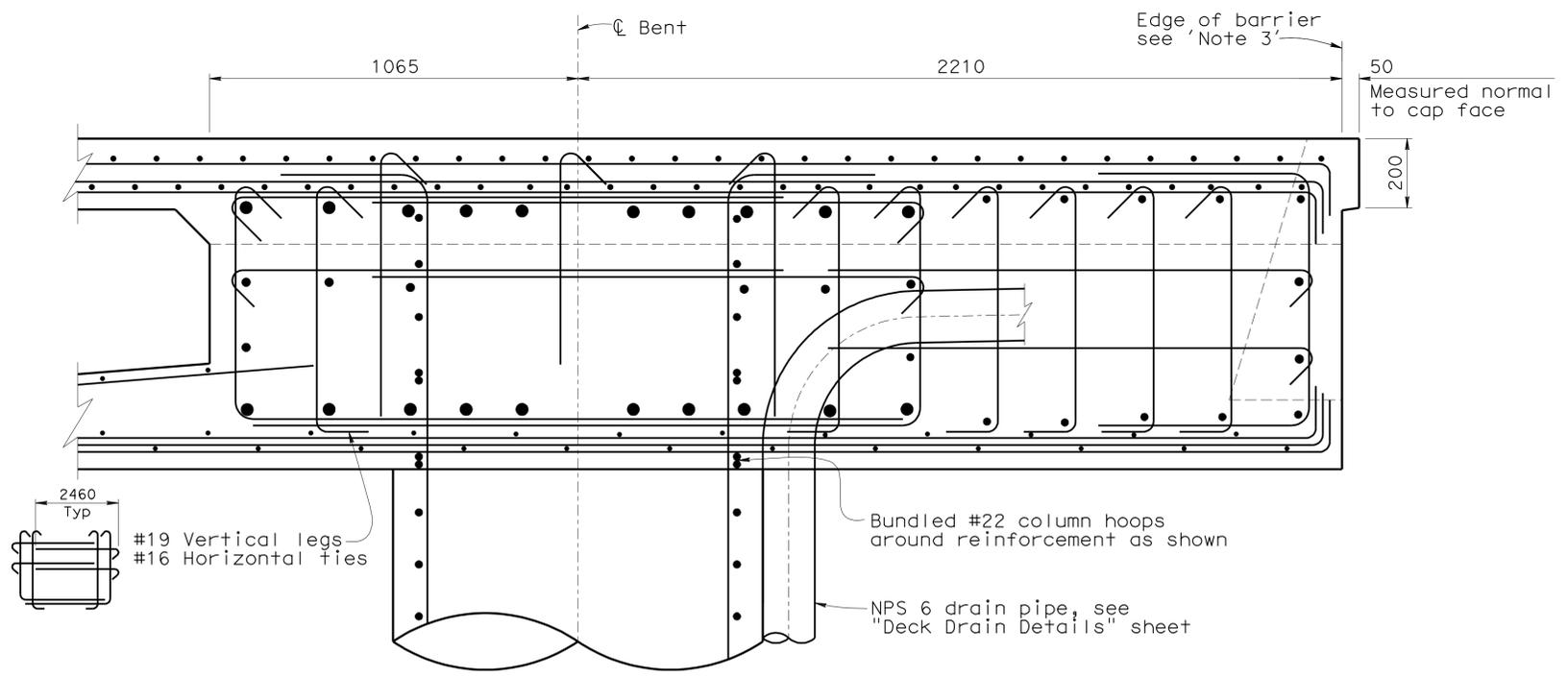
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	381	439
 REGISTERED CIVIL ENGINEER DATE 05-11-09					
PLANS APPROVAL DATE 6-7-10 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



For details not shown, see 'Section G-G', and 'Note 1' on "Bent 2 And 3 Details" sheet

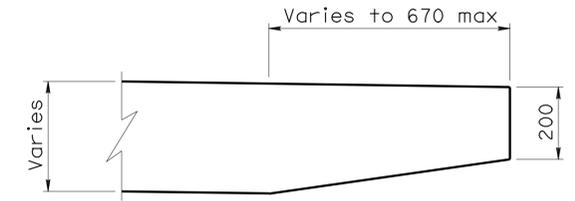
SECTION I-I
1:10

- Notes:**
1. Use 90° hooks at ends of all longitudinal reinforcement as shown
 2. Place parallel to ϕ of girders and space normal to ϕ of girders. Adjust for prestress ducts and anchorage
 3. Concrete barrier rail not shown for clarity. See "Concrete Barrier Type 736 Mod Details" sheet



For details not shown, see 'Section I-I' along with 'Section G-G', and 'Note 1' on "Bent 2 And 3 Details" sheet

SECTION J-J
1:10



Overhang transition
SECTION K-K
1:10

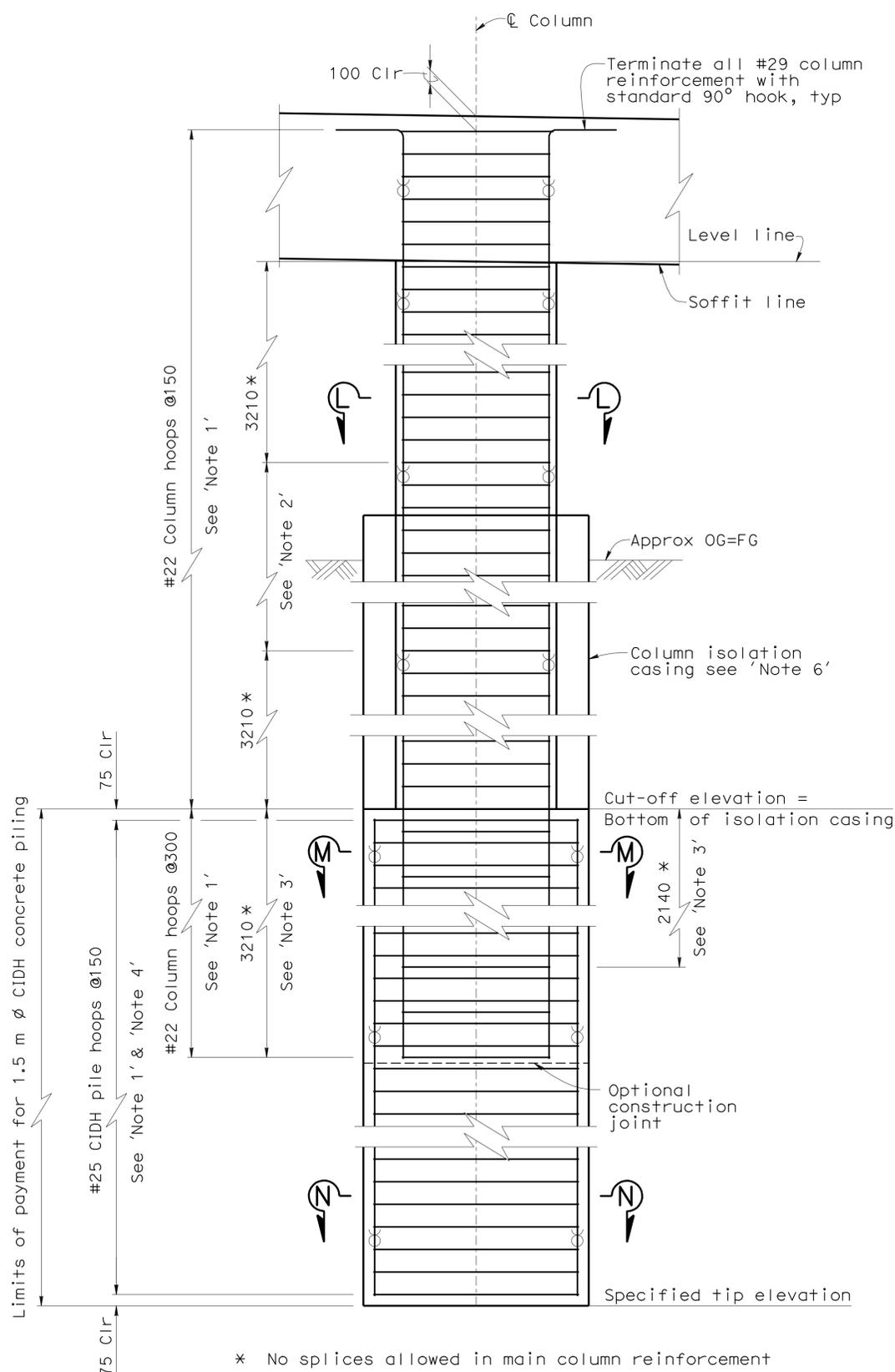
	DESIGN BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) BENT 4 DETAILS
	DETAILS BY Ton Doan	CHECKED Leon Valla			KILOMETER POST 40.97	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		REVISION DATES: 08-27-07, 09-14-07, 09-21-07, 11-09-07, 11-26-07, 12-19-07, 01-29-08, 05-12-08, 08-06-08	
CU 07 EA 241301				DISREGARD PRINTS BEARING EARLIER REVISION DATES		SHEET 10 OF 28

FILE => 53-1254-h-b04dt.dgn

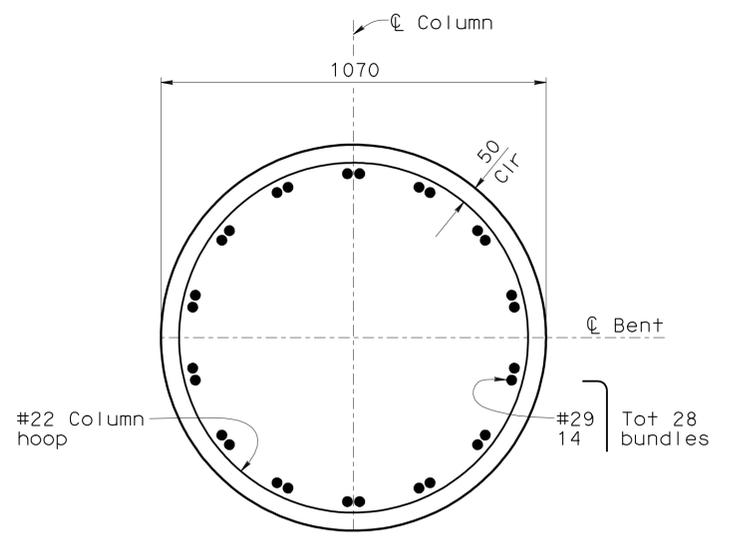
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	382	439

Leon Valla
 REGISTERED CIVIL ENGINEER DATE 05-11-09
 PLANS APPROVAL DATE 6-7-10
 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.

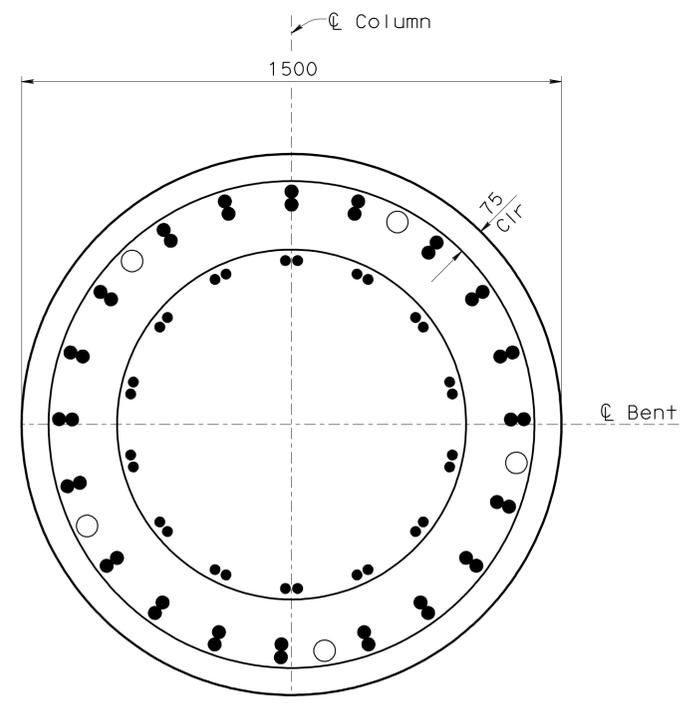
REGISTERED PROFESSIONAL ENGINEER
LEON VALLA
No. 45351
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA



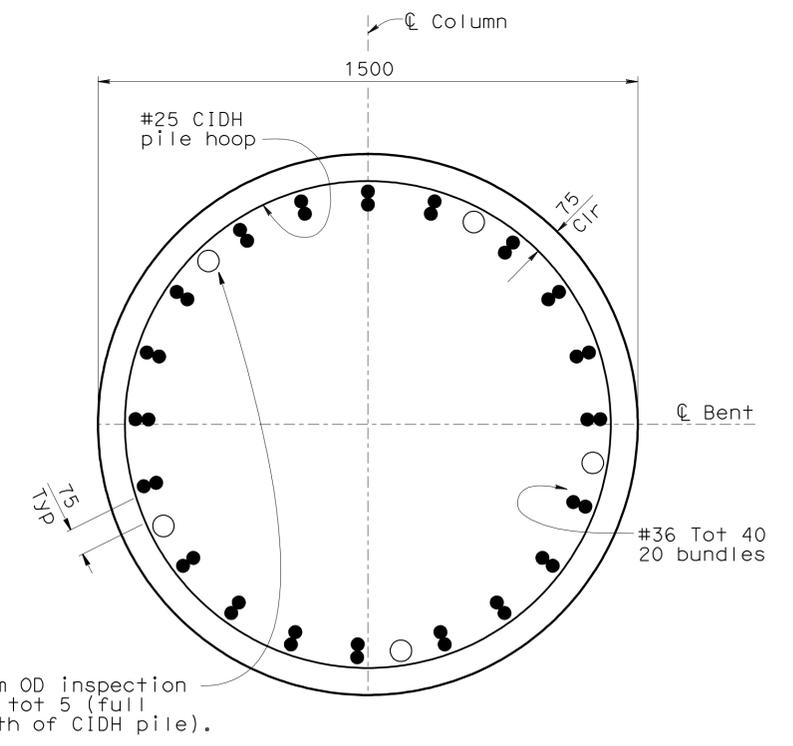
BENT ELEVATION
1:20



SECTION L-L
1:10



SECTION M-M
1:10



SECTION N-N
1:10

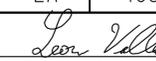
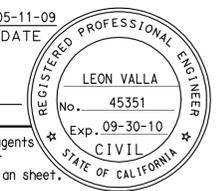
- Notes:**
1. All hoops are 'Ultimate' butt spliced continuous
 2. Only staggered 'Ultimate' butt splices are allowed in main column reinforcement in this zone
 3. Alternate cut-off lengths of main column reinforcement
 4. Only staggered 'Ultimate' butt splices are allowed in main CIDH pile reinforcement
 5. For 'Pile Data Table', see "Index To Plans" sheet
 6. For column isolation details, see "Column Isolation Casing Details" sheet
- ⊗ Indicates bundled bars

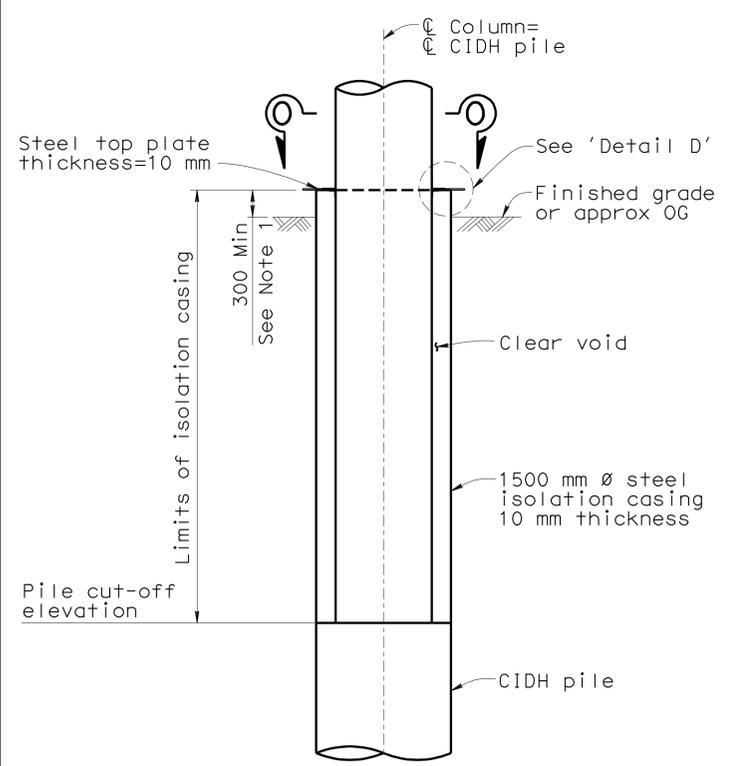
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

* No splices allowed in main column reinforcement

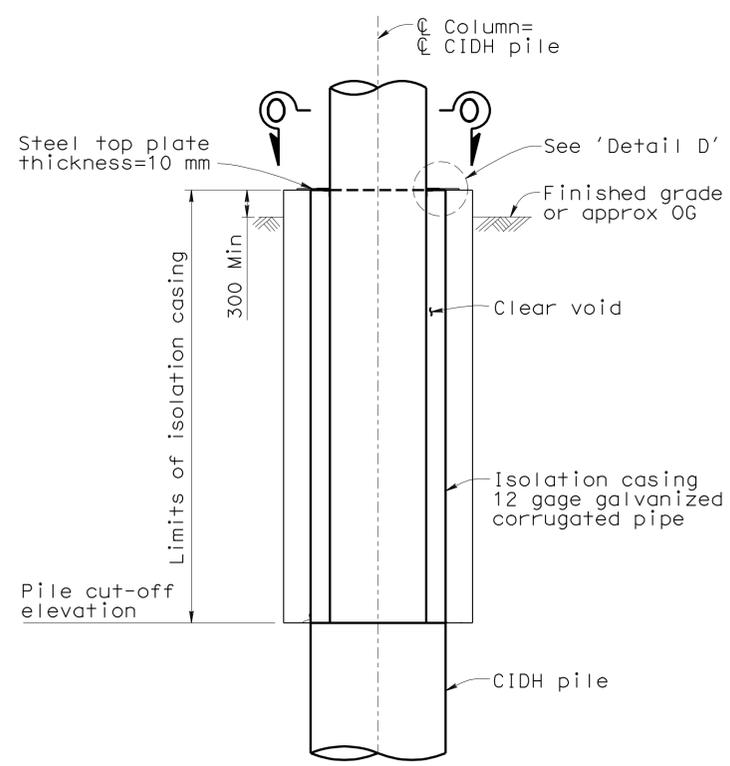
For details not shown see 'Section L-L' and 'Section N-N'

	DESIGN	BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) COLUMN DETAILS						
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97							
	QUANTITIES	BY Leon Valla	CHECKED Richard Schendel			CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES		<table border="1"> <tr> <td>05-24-07</td> <td>06-18-08</td> <td>11-05-08</td> <td>02-28-09</td> <td>05-28-09</td> <td>05-06-09</td> <td>01-28-08</td> <td>02-14-08</td> <td>06-13-08</td> </tr> </table>	05-24-07	06-18-08	11-05-08	02-28-09	05-28-09
05-24-07	06-18-08	11-05-08	02-28-09	05-28-09	05-06-09	01-28-08	02-14-08	06-13-08						
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN								ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 	SHEET 11 OF 28 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)					

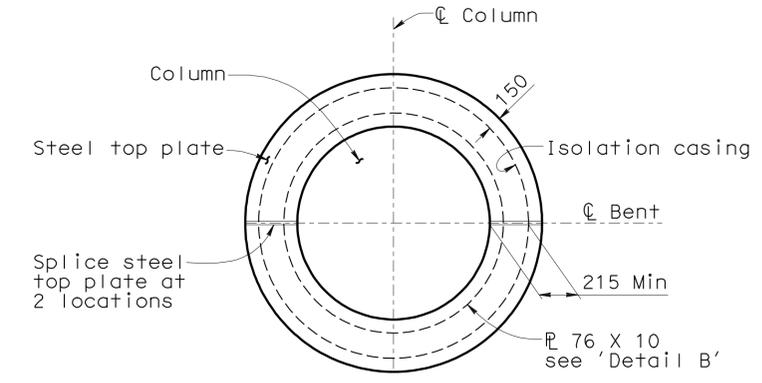
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	383	439
 REGISTERED CIVIL ENGINEER DATE 05-11-09					
PLANS APPROVAL DATE 6-7-10 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



COLUMN ISOLATION CASING
1:40

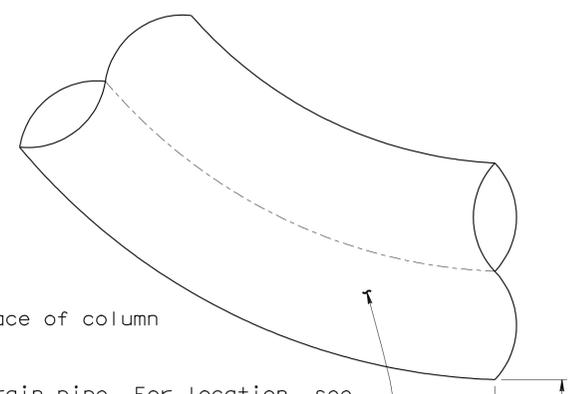


COLUMN ISOLATION CASING ALTERNATIVE
1:40

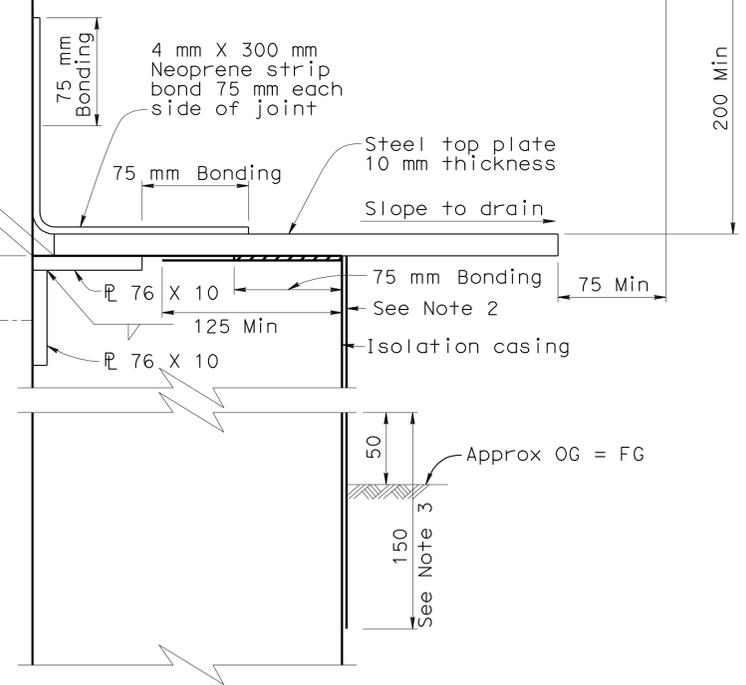


VIEW 0-0
1:20

- Legend:**
-  Indicates limits of structure excavation (Bridge)
 -  Indicates limits of lean concrete backfill
 -  Indicates limits of structure excavation type (Y-2) Aerially deposited lead. Any excess Type (Y-2) material that cannot be reused on site or along the corridor shall be classified as Type (Z-2)

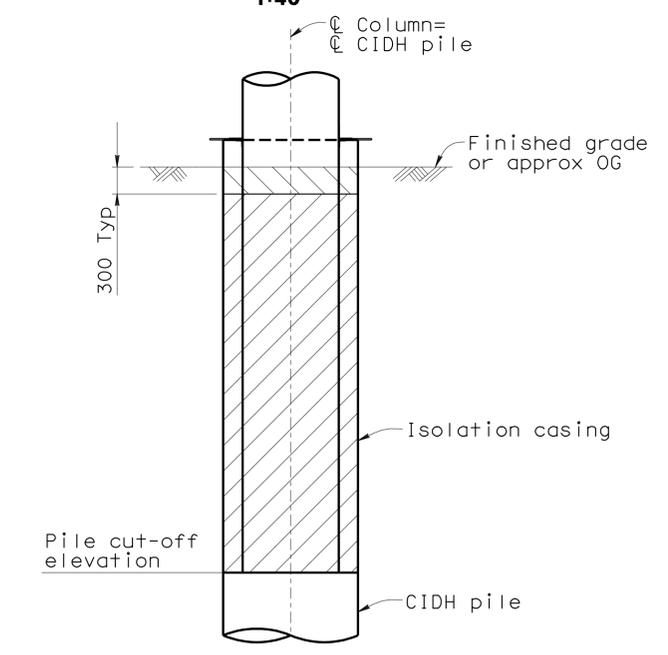


13 mm Clr max
13 mm Ø Concrete anchorage device spaced @ 200 mm O.C. and one at each end of each plate. Column reinforcement to remain undamaged

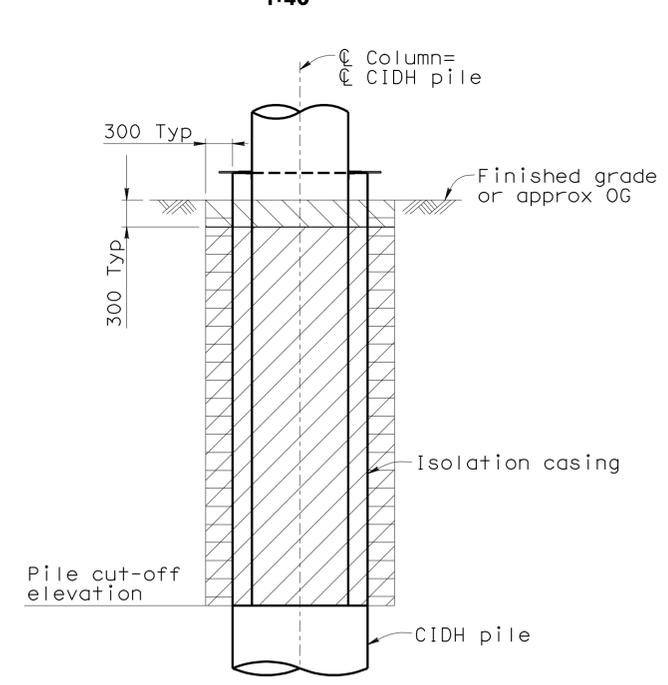


DETAIL D
1:2.5

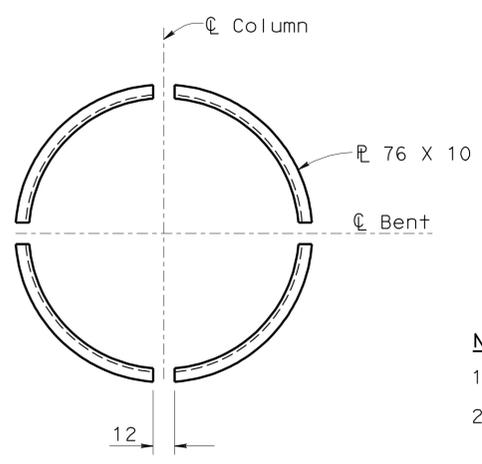
- Notes:**
- Limits of clean and paint column isolation casing.
 - 26 gage galvanized colored trim to be used on 12 gage galvanized corrugated pipe isolation casing alternative only. Bond top of trim with 75 mm of epoxy resin. Color of trim to match paint on 10 mm thickness isolation casing.
 - Asphalt membrane waterproofing limits unless trim is embedded in concrete sidewalk or other roadway material.



PAY LIMITS FOR STRUCTURE EXCAVATION FOR COLUMN ISOLATION CASING
1:40



PAY LIMITS FOR STRUCTURE EXCAVATION AND BACKFILL FOR COLUMN ISOLATION CASING ALTERNATIVE
1:40



DETAIL "B"
1:20

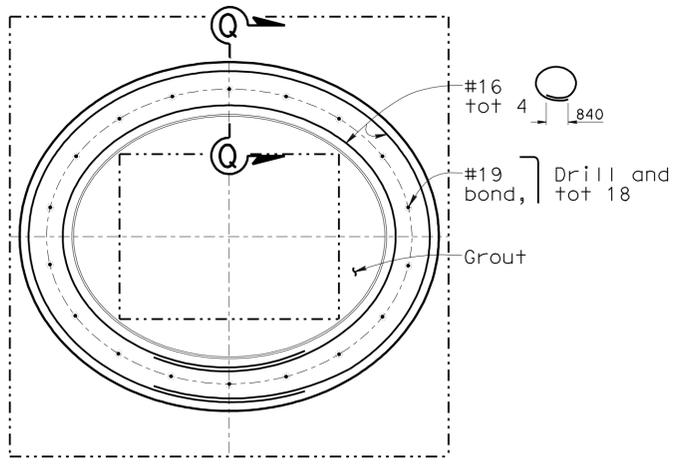
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) COLUMN ISOLATION CASING DETAILS
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97	
	QUANTITIES	BY Leon Valla	CHECKED Richard Schendel	CU 07 EA 241301	FILE => 53-1254-j-ciso.dgn	DISREGARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES: 11-26-07, 11-27-07, 12-26-07, 01-29-08, 02-04-08, 06-13-08, 05-26-09, 8-12-09		SHEET 12 OF 28

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

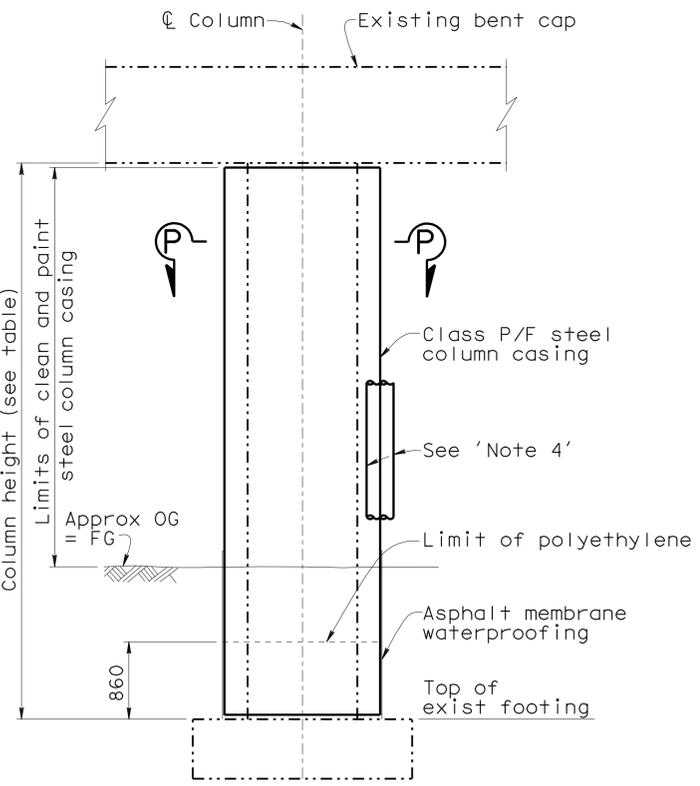
ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS: 0 10 20 30 40 50 60 70 80 90 100

STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)



For column 11R and 15R only

DETAIL E
1:20

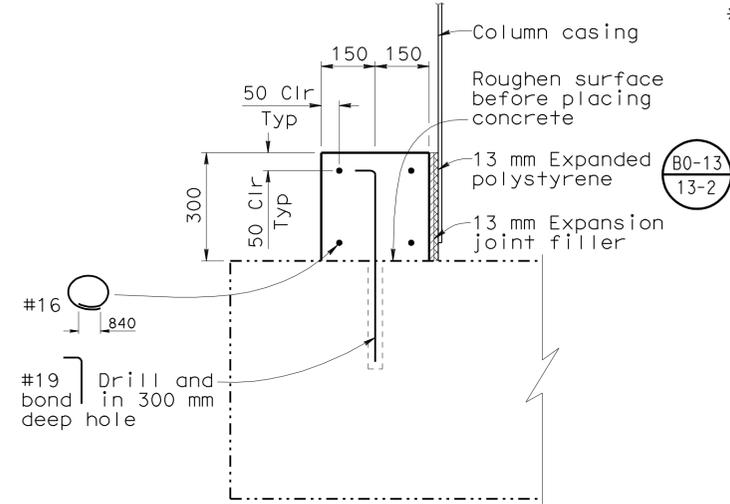


TYPICAL SECTION
1:40

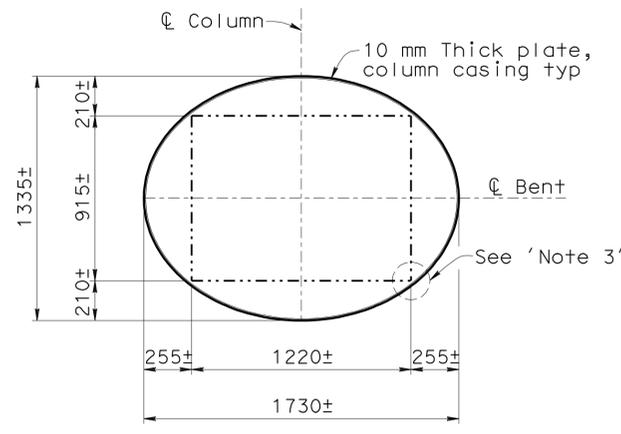
LEFT BRIDGE				
BENT NO.	COLUMN NO.	TOP OF EXIST FOOTING ELEVATION (m±)*	APPROX O.G. ELEVATION (m±)*	COLUMN HEIGHT (m±)*
2	1L	6.760	8.520	9.130
	2L	6.760	8.525	9.130
	3L	7.670	8.555	8.140
	4L	7.670	8.620	7.980
3	5L	7.670	8.515	7.890
	6L	7.670	8.640	7.890
	7L	7.670	8.760	7.820
	8L	7.670	8.890	7.660
4	9L	7.670	9.045	7.560
	10L	7.670	8.985	7.570
	11L	7.980	8.970	7.190
	12L	7.980	9.130	7.020

RIGHT BRIDGE				
BENT NO.	COLUMN NO.	TOP OF EXIST FOOTING ELEVATION (m±)*	APPROX O.G. ELEVATION (m±)*	COLUMN HEIGHT (m±)*
2	1R	7.670	8.715	7.910
	2R	7.670	8.820	7.920
	3R	7.670	9.000	7.840
	4R	7.670	9.205	7.670
	5R	7.670	9.445	7.500
3	6R	7.670	8.985	7.590
	7R	7.670	9.140	7.590
	8R	7.670	9.300	7.500
	9R	7.670	9.445	7.320
4	10R	7.670	9.630	7.150
	11R	8.280	9.235	6.650
	12R	8.280	9.405	6.660
	13R	8.280	9.525	6.540
	14R	8.280	9.720	6.350
	15R	8.280	9.925	6.170

* All elevations are based on 1929 vertical datum



SECTION Q-Q
1:10

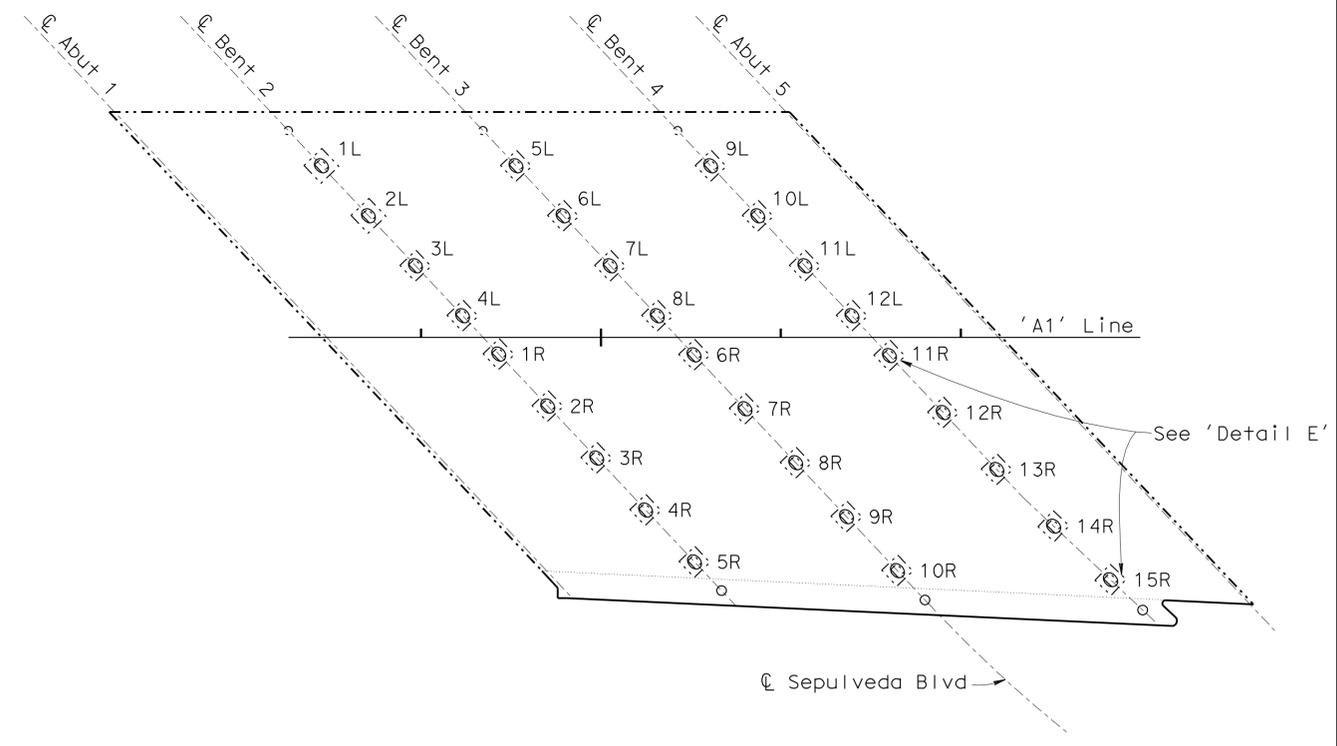


SECTION P-P
1:20

Note: Dimensions shown to inside of casing

* All elevations are based on 1929 vertical datum

* All elevations are based on 1929 vertical datum



COLUMN RETROFIT KEY PLAN
1:400



DESIGN	BY Leon Valla	CHECKED Richard Schendel
DETAILS	BY Ton Doan	CHECKED Leon Valla
QUANTITIES	BY Leon Valla	CHECKED Richard Schendel

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO. 53-1254
KILOMETER POST 40.97
SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)
STEEL COLUMN CASING LAYOUT

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

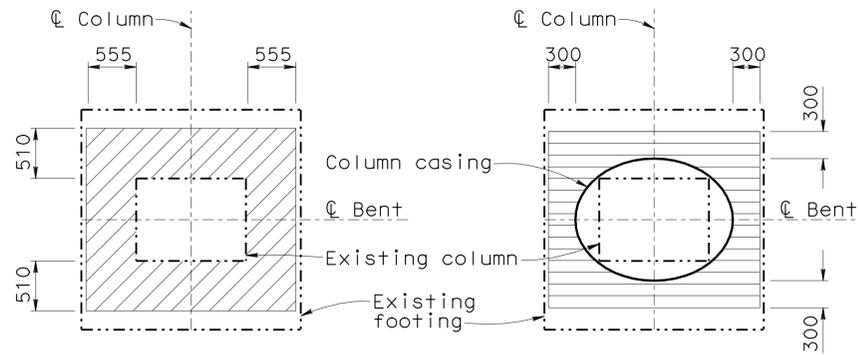
REVISION DATES	SHEET	OF
06-14-07 08-30-07 10-21-07 11-29-07 01-29-08	13	28

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	385	439

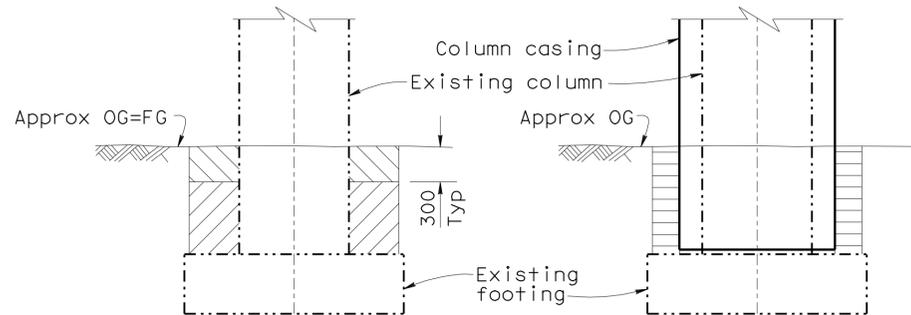
REGISTERED CIVIL ENGINEER DATE 05-11-09
 REGISTERED CIVIL ENGINEER Leon Valla
 PLANS APPROVAL DATE 6-7-10
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

Legend:

-  Indicates limits of structure excavation (Bridge)
-  Indicates limits of structure backfill (Bridge)
-  Indicates limits of structure excavation Type (Y-2) Aerially Deposited Lead. Any excess Type (Y-2) material that cannot be reused on site or along the corridor shall be classified as Type (Z-2)



PLAN



ELEVATION

LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL FOR COLUMN RETROFIT

1:40



DESIGN	BY Leon Valla	CHECKED Richard Schendel
DETAILS	BY Ton Doan	CHECKED Leon Valla
QUANTITIES	BY Leon Valla	CHECKED Richard Schendel

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1254
KILOMETER POST	40.97

SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)
STEEL COLUMN CASING DETAILS

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES
06-28-07 10-01-07 11-28-07 12-20-07

SHEET	14	OF	28
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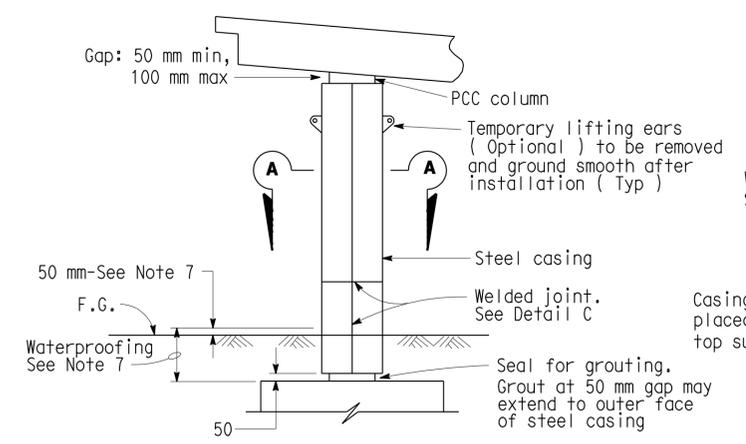
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STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)

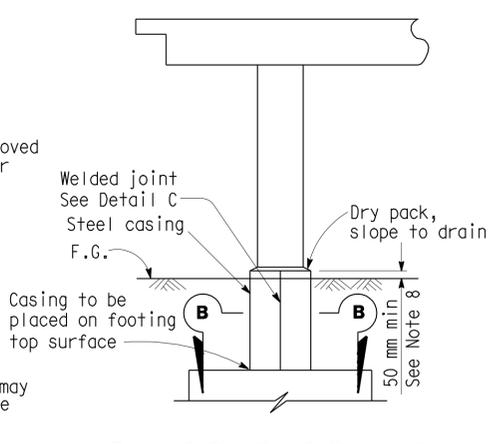
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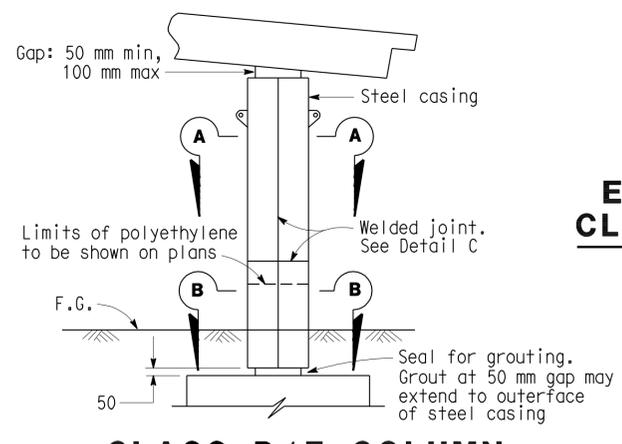
DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	405	39.7/41.5	386	439
			05-11-09	REGISTERED ENGINEER - CIVIL	
6-7-10			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



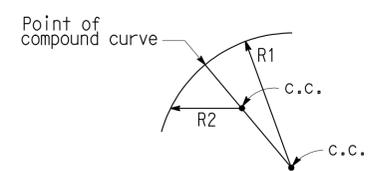
CLASS F COLUMN



CLASS P COLUMN

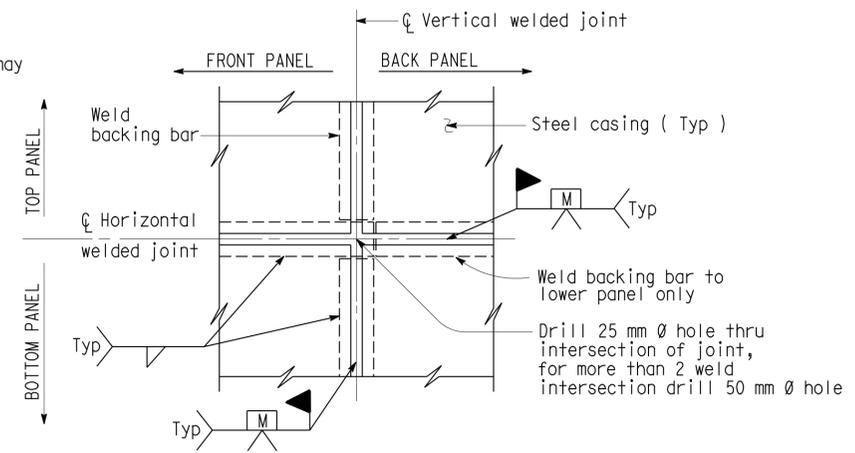


CLASS P/F COLUMN



ELLIPTICAL CASING DETAIL CLASS P, F AND P/F COLUMN

Radii R1 and R2 to be determined by the Contractor subject to the approval of the Engineer

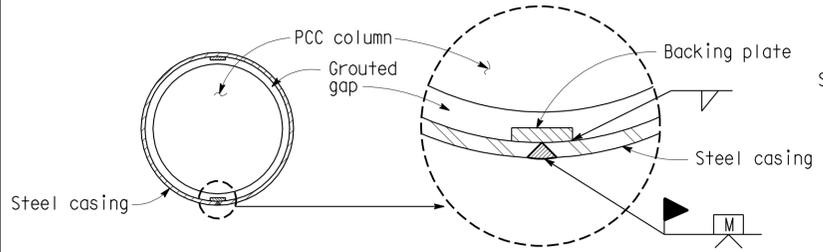


(TWO WELDED INTERSECTION JOINT)

DETAIL C

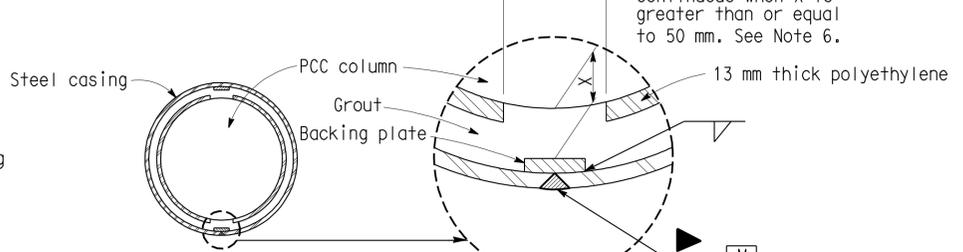
NOTES:

- For varying thickness steel casing inside surface to remain flush. Minimum clearance between PCC column to casing shall be maintained.
- Appropriate injection nozzles to be provided on casing, but removed and ground flush following completion of grouting operation.
- All voids between steel casing and polyethylene (Class P and Class P/F), and steel casing and PCC column (Class F) to be filled with grout.
- Location and number of vertical and horizontal welds to be determined by the Contractor, and subject to the approval of the Engineer. The location of casing welds are for illustration. No skip welds allowed.
- Circular steel casing to be 6 mm thick minimum for casings with a 1321 mm diameter or less; all other steel casings to be 10 mm thick unless noted differently on contract plans. Backing plates to be the same thickness as casing up to maximum 13 mm thick.
- Contractor shall remove 305 mm polyethylene strip behind backing plate if backing plate is closer than 38 mm from polyethylene.
- Waterproof limits for steel casings. Typical for Classes "P", "F" and "P/F".
- Minimum length of Classes "P" and "F" casing shall be 1.50 times the largest dimension of prismatic section of column, or 50 mm above finished grade whichever is greater. Lengths other than the specified minimum shall be shown on Detail sheets.
- For pipe extensions, opening shall be no more than 6 mm greater than the pipe extension diameter. For other openings, the opening diameter to be determined by the Engineer.



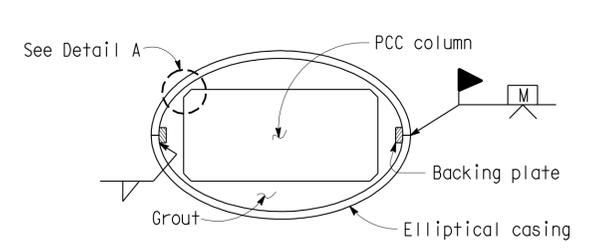
SECTION A-A ROUND COLUMN

Minimum inside diameter of steel casing = 38 mm greater than nominal column diameter for Class F and 64 mm for Class P/F

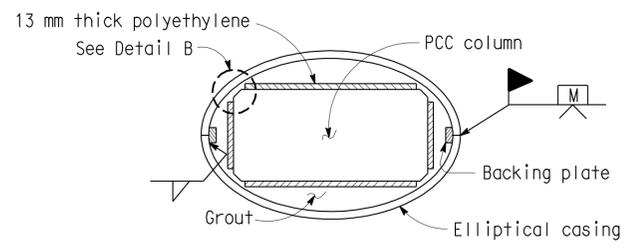


SECTION B-B ROUND COLUMN

Minimum inside diameter of steel casing = 64 mm greater than nominal column diameter for Class P and Class P/F.



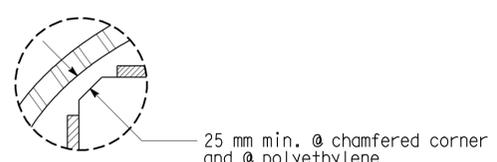
SECTION A-A RECTANGULAR COLUMN



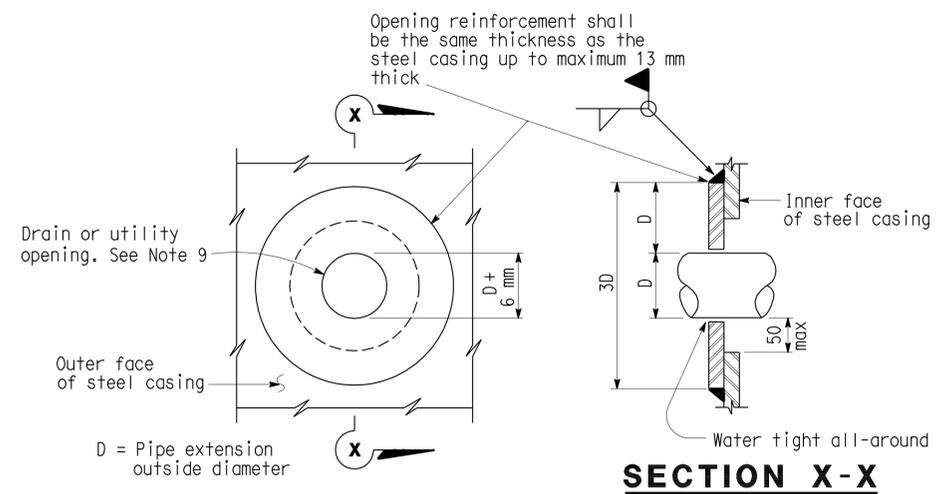
SECTION B-B RECTANGULAR COLUMN



DETAIL A



DETAIL B



SECTION X-X

CASING OPENING

Note: Opening reinforcement required for drain or utility openings larger than 100 mm.

NO SCALE
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

STANDARD DRAWING			
RELEASE DATE	DESIGN BY	CHECKED	RELEASED BY
8/12/93	BRIAN MARONEY	R.J. ZELINSKI	
FILE NO.	DETAILS BY	CHECKED	OFFICE CHIEF
xs7-010	R.YEE	PAT HIPLEY	
	SUBMITTED BY	DRAWING DATE	
	R.J. ZELINSKI	8/93	

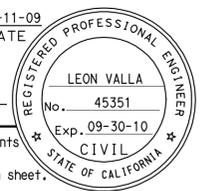
STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES
DEPARTMENT OF TRANSPORTATION	

BRIDGE NO.	53-1254
KILOMETER POST	40.97

SEPVLEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)	
STEEL COLUMN CASING DETAILS	
SEISMIC RETROFIT	

DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:40

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	388	439
			05-11-09	DATE	
REGISTERED CIVIL ENGINEER			DATE		
6-7-10			PLANS APPROVAL DATE		
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.					



FALSEWORK RELEASE

Falsework shall be released as soon as permitted by the specifications. Closure pour shall not be placed sooner than 60 days after the falsework has been released

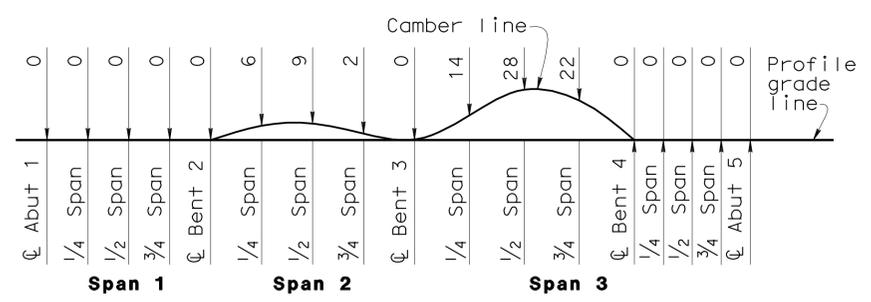
PRESTRESSING NOTES

1860 MPa Low Relaxation Strand:
 P Jack = 6300 kN
 Anchor Set = 10 mm
 Total Number of Girders = 2
 Friction curvature coefficient $\mu = 15 \times 10^{-2} (1/\text{rad})$
 Friction wobble coefficient $K = 6.6 \times 10^{-4} (1/\text{m})$
 Distribution of prestress force (Pjack) between girders shall not exceed the ratio of 3:2.
 Maximum final force variation between girders shall not exceed 300 kN.
 Concrete: $f'_c = 35$ MPa @ 28 days
 $f'_{ci} = 25$ MPa @ time of stressing
 Contractor shall submit elongation calculations based on initial stress at
 $\lambda = 0.863$ times jacking stress.
 One end stressing shall be performed from the long-span end only

Notes:

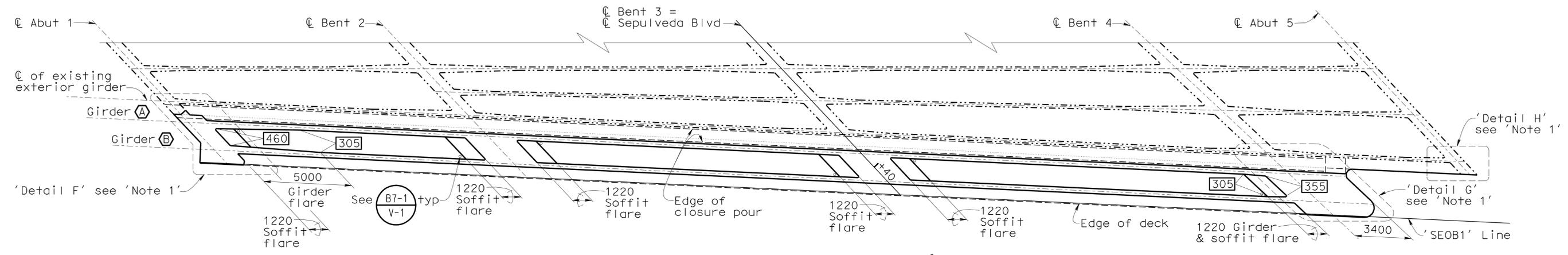
1. For 'Detail F', 'Detail G' and 'Detail H' see 'Girder Details No. 1' sheet

Indicates stem width in millimeters

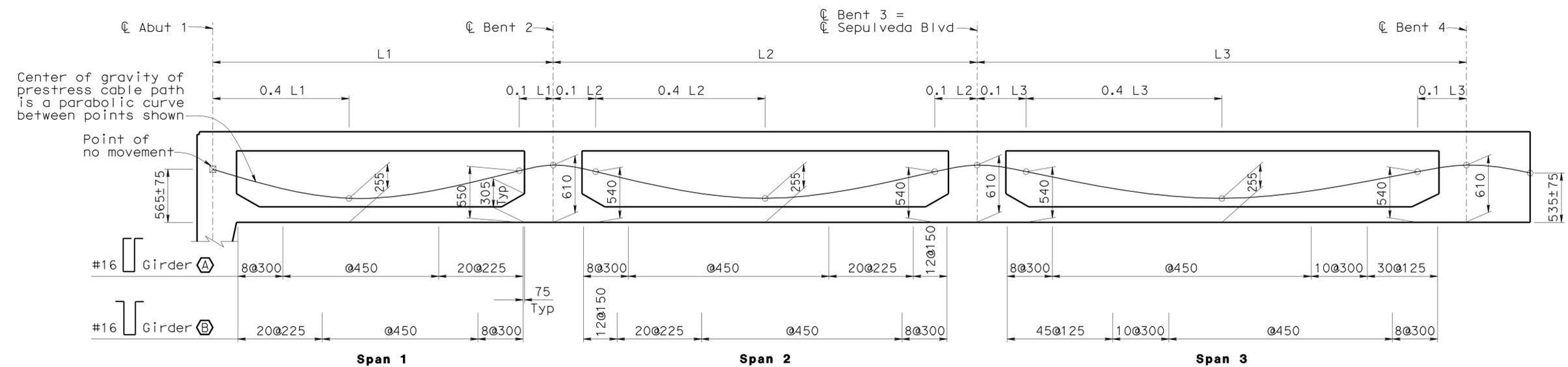


CAMBER DIAGRAM NO SCALE

Does not include allowance for falsework settlement



PLAN 1:125



LONGITUDINAL SECTION

1:125 Horiz
1:25 Vert

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY Fayek Tannous	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) GIRDER LAYOUT				
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97					
	QUANTITIES	BY Leon Valla	CHECKED Richard Schendel			CU 07 EA 241301	REVISION DATES		03-12-07 05-12-09 07-22-07 08-21-07 09-11-07 09-28-07 10-23-07 11-22-07 12-22-07			
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN								ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS	0 10 20 30 40 50 60 70 80 90 100	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 17 OF 28

USERNAME => HSTFK DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:40

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	389	439

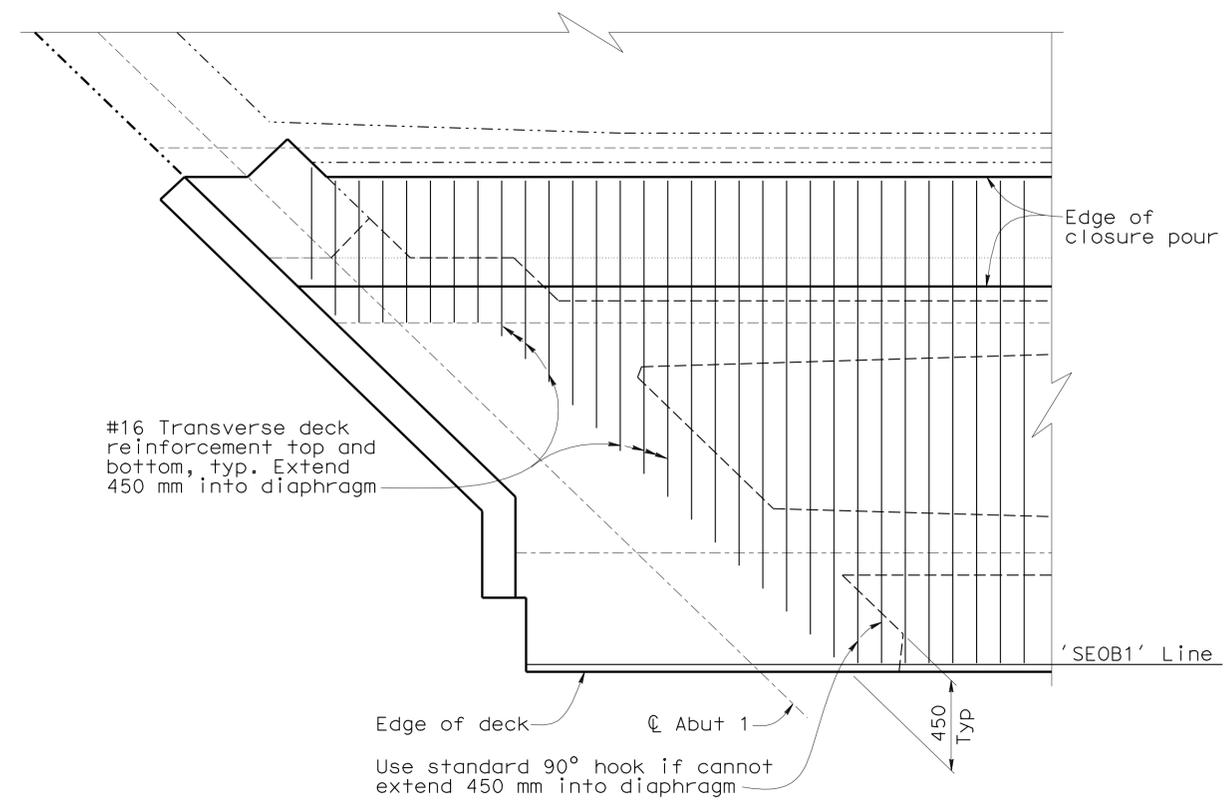
 REGISTERED CIVIL ENGINEER DATE 05-11-09		
PLANS APPROVAL DATE 6-7-10		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.		

Legend:

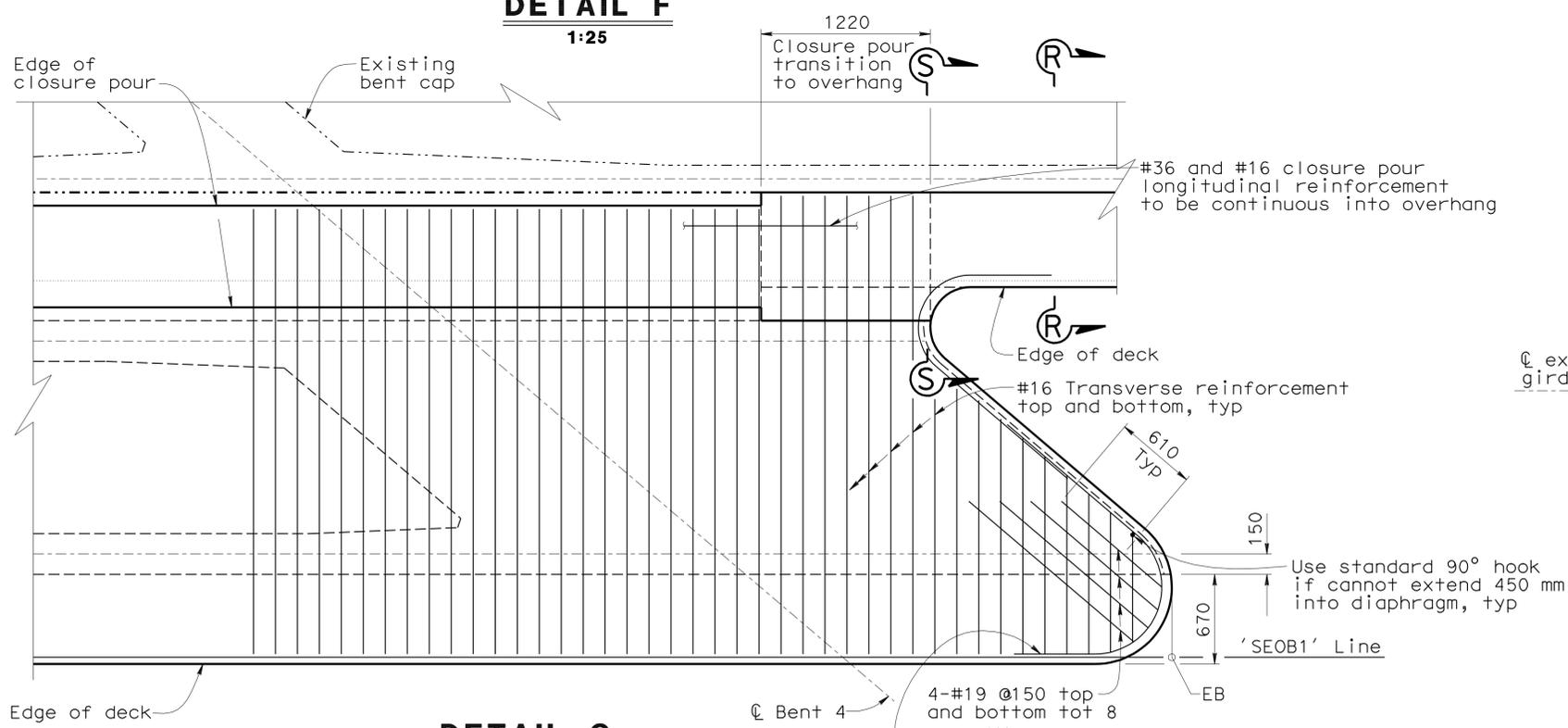
-  Indicates limits of existing type 1 barrier, existing bridge overhang and existing bridge removal portion
-  Indicates limits of expansion joint filler

Notes:

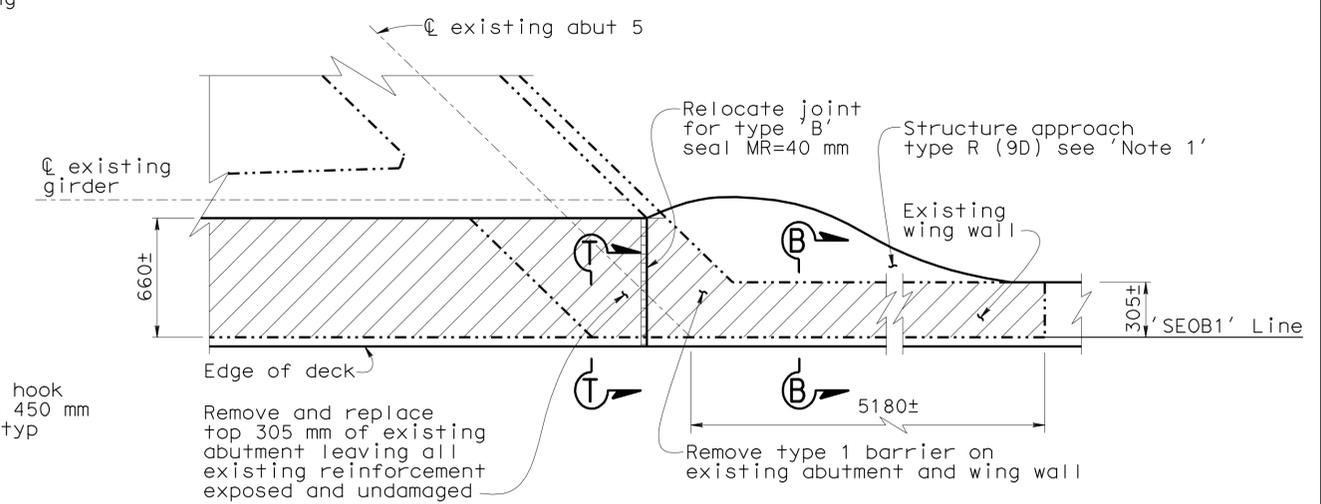
1. See structure approach details on "Structure Approach Type R (9D)" sheet
2. For 'Section B-B', see "Structure Approach Type R (9D)" sheet
3. For 'Section R-R', 'Section S-S' and 'Section T-T' see "Girder Details No. 2" sheet
4. See "Concrete Barrier Type 736 Mod Details" sheet for details not shown



DETAIL F
1:25



DETAIL G
1:25



DETAIL H
1:20

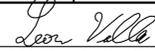
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

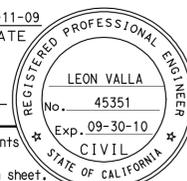
	DESIGN	BY Leon Valla	CHECKED Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) GIRDER DETAILS NO. 1									
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97										
	QUANTITIES	BY Leon Valla	CHECKED Richard Schendel			CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">REVISION DATES</th> </tr> <tr> <td style="font-size: x-small;">03-28-07</td> <td style="font-size: x-small;">2-25-08</td> </tr> <tr> <td style="font-size: x-small;">08-31-07</td> <td style="font-size: x-small;">09-28-07</td> </tr> <tr> <td style="font-size: x-small;">10-28-07</td> <td style="font-size: x-small;">11-27-07</td> </tr> <tr> <td style="font-size: x-small;">12-28-07</td> <td style="font-size: x-small;">01-29-08</td> </tr> <tr> <td style="font-size: x-small;">02-04-08</td> <td></td> </tr> </table>	REVISION DATES		03-28-07	2-25-08	08-31-07	09-28-07	10-28-07	11-27-07
REVISION DATES																	
03-28-07	2-25-08																
08-31-07	09-28-07																
10-28-07	11-27-07																
12-28-07	01-29-08																
02-04-08																	
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN								ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 	SHEET 18 OF 28 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)								

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	390	439

Legend:

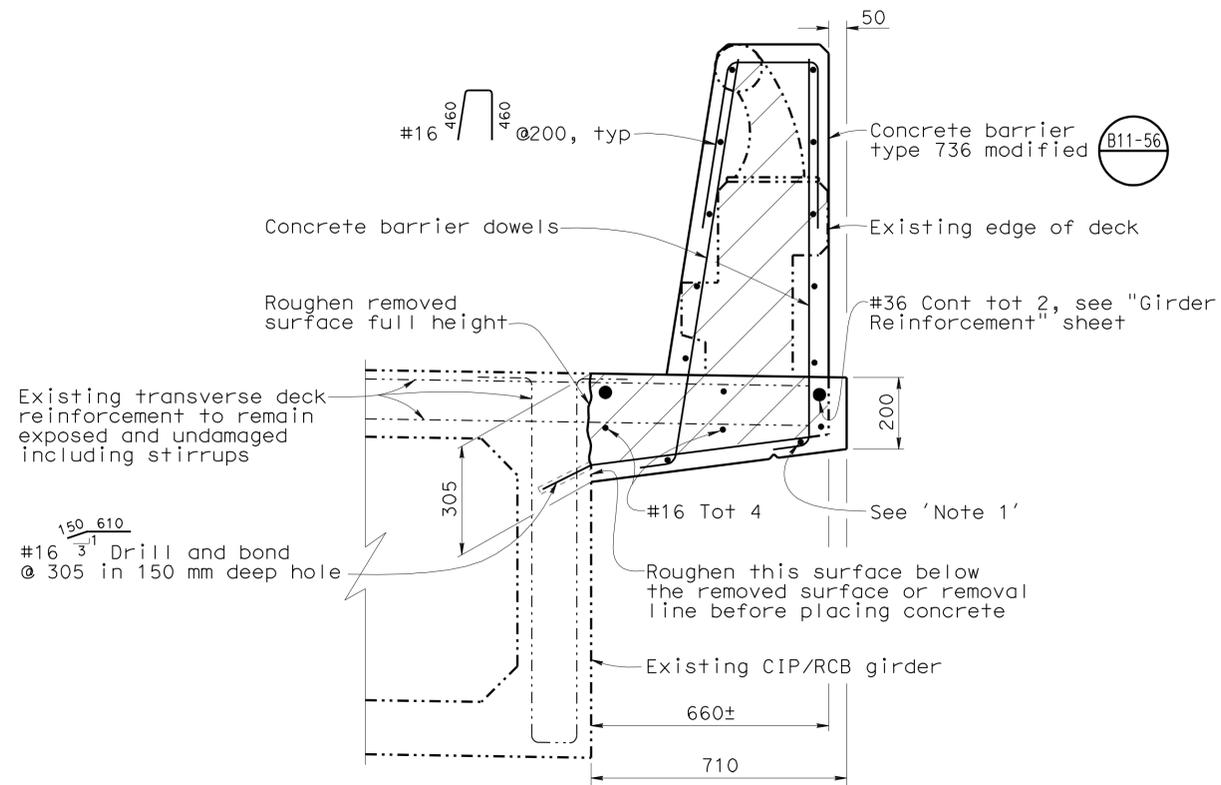
 Indicates limits of existing type 1 barrier, existing bridge overhang and existing bridge removal portion

 05-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
 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.

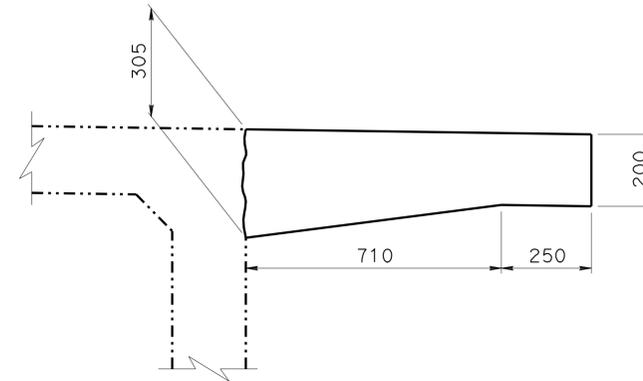


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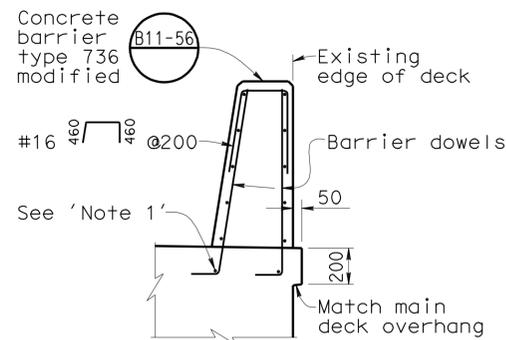
- For reinforcement and/or details not shown, see 



SECTION R-R
1:10



SECTION S-S
1:10



SECTION T-T
1:20

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



DESIGN	BY Leon Valla	CHECKED Richard Schendel
DETAILS	BY Ton Doan	CHECKED Leon Valla
QUANTITIES	BY Leon Valla	CHECKED Richard Schendel

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1254
KILOMETER POST	40.97

SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)
GIRDER DETAILS NO. 2

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



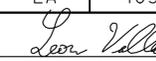
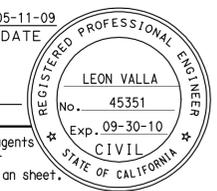
CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	
03-28-07	08-28-07
08-28-07	08-31-07
09-28-07	11-28-07
12-28-07	01-28-08
2-25-08	

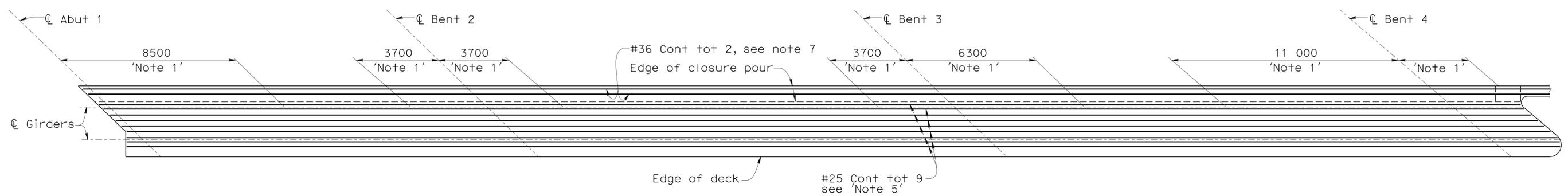
SHEET 19 OF 28

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:58

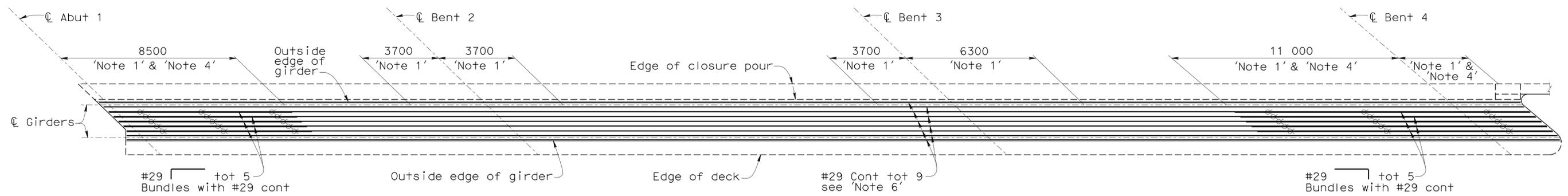
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	391	439
 REGISTERED CIVIL ENGINEER DATE 05-11-09					
6-7-10 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					

Notes:

1. No splices allowed in reinforcement in this zone
 2. All reinforcement is 'Service' butt spliced
 3. All bars shall be evenly spaced between girders as shown
 4. Denotes limits of #29 bundled bars
 5. Terminate all #25 bars at ends with standard 90° hooks
 6. Terminate all #29 bars at ends with standard 90° hooks
 7. Extend #36 reinforcement continuous into overhang and terminate at left end with standard 180° hook
- α Indicates bundled bars



TOP REINFORCEMENT
1:100



BOTTOM REINFORCEMENT
1:100

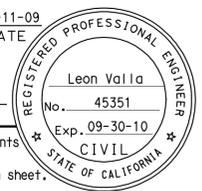


NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY Leon Valla	CHECKED Richard Shendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) GIRDER REINFORCEMENT													
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97														
	QUANTITIES	BY Leon Valla	CHECKED Richard Shendel			CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES		<table border="1"> <tr> <th colspan="8">REVISION DATES</th> </tr> <tr> <td>07-22-07</td> <td>07-31-07</td> <td>09-14-07</td> <td>09-21-07</td> <td>10-23-07</td> <td>11-22-07</td> <td>12-28-07</td> <td></td> </tr> </table>	REVISION DATES								07-22-07	07-31-07	09-14-07	09-21-07
REVISION DATES																					
07-22-07	07-31-07	09-14-07	09-21-07	10-23-07	11-22-07	12-28-07															
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 		FILE => 53-1254-o-gir_rf.dgn STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)		SHEET 20 OF 28													

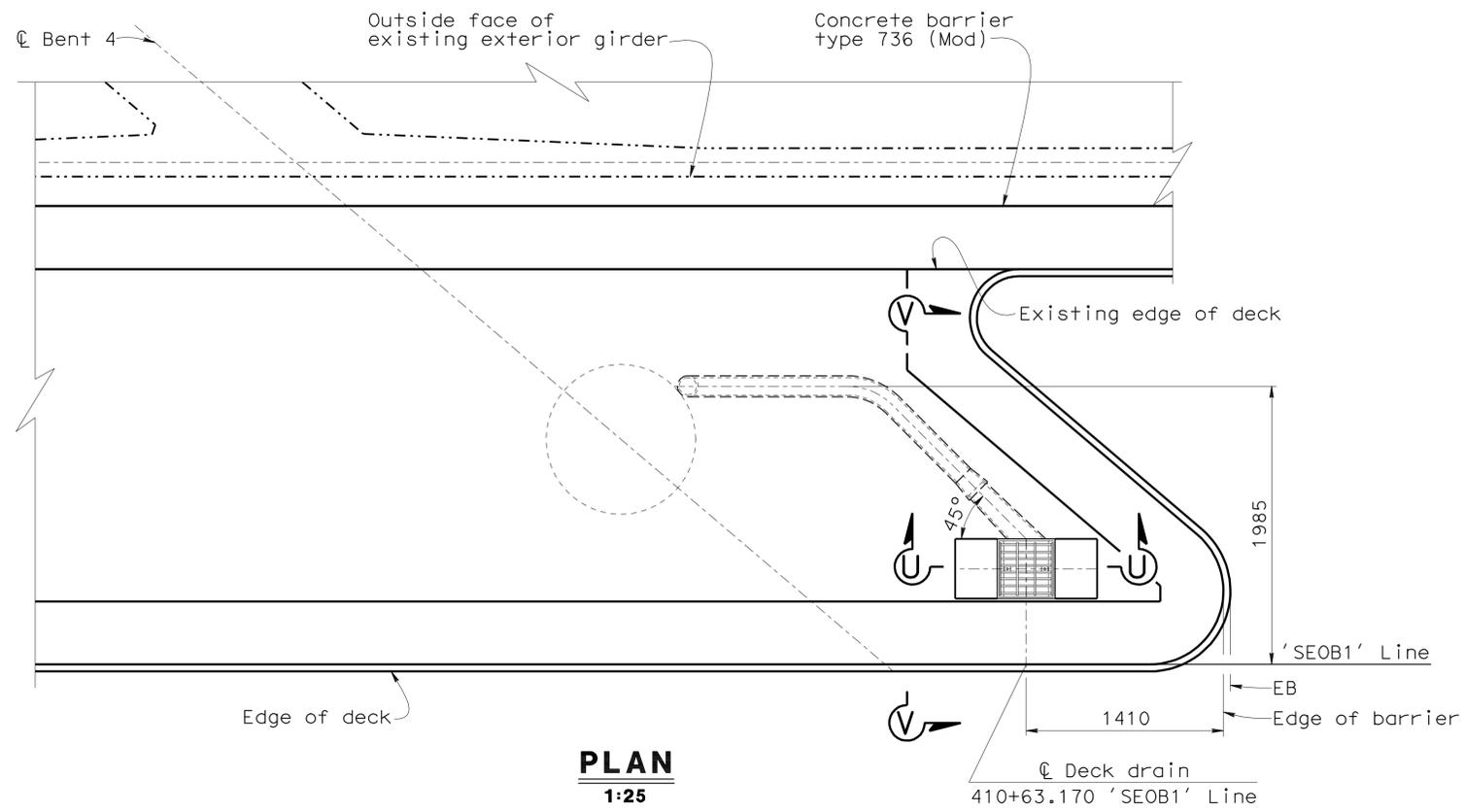
USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:58

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	392	439
			05-11-09		
			DATE		
			6-7-10		
			PLANS APPROVAL DATE		
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.					

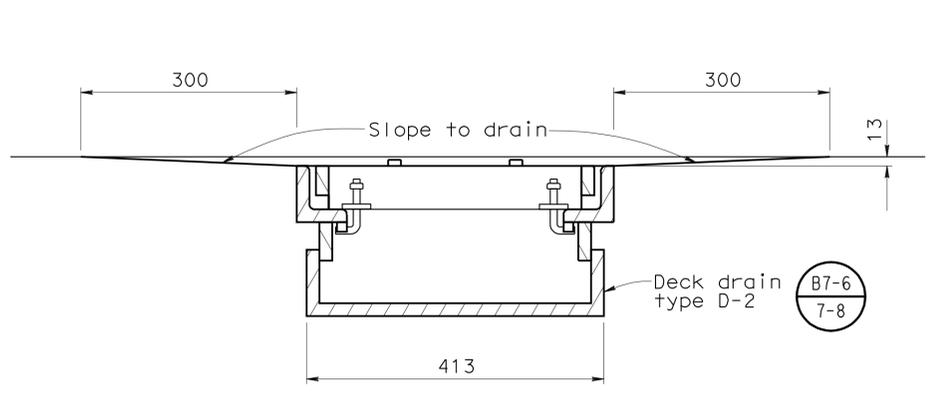


Notes:

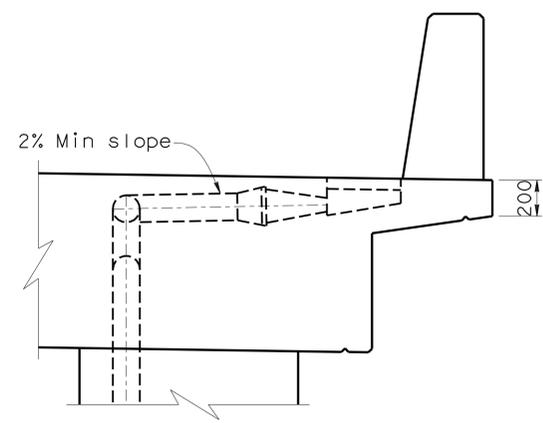
- For details not shown, see B7-6
- The Contractor may Fabricate or Purchase Pipe Support Hangers and Brackets as Approved by the Engineer. Pipe Supports and Brackets shall be Capable of Supporting Drain Pipe Loads



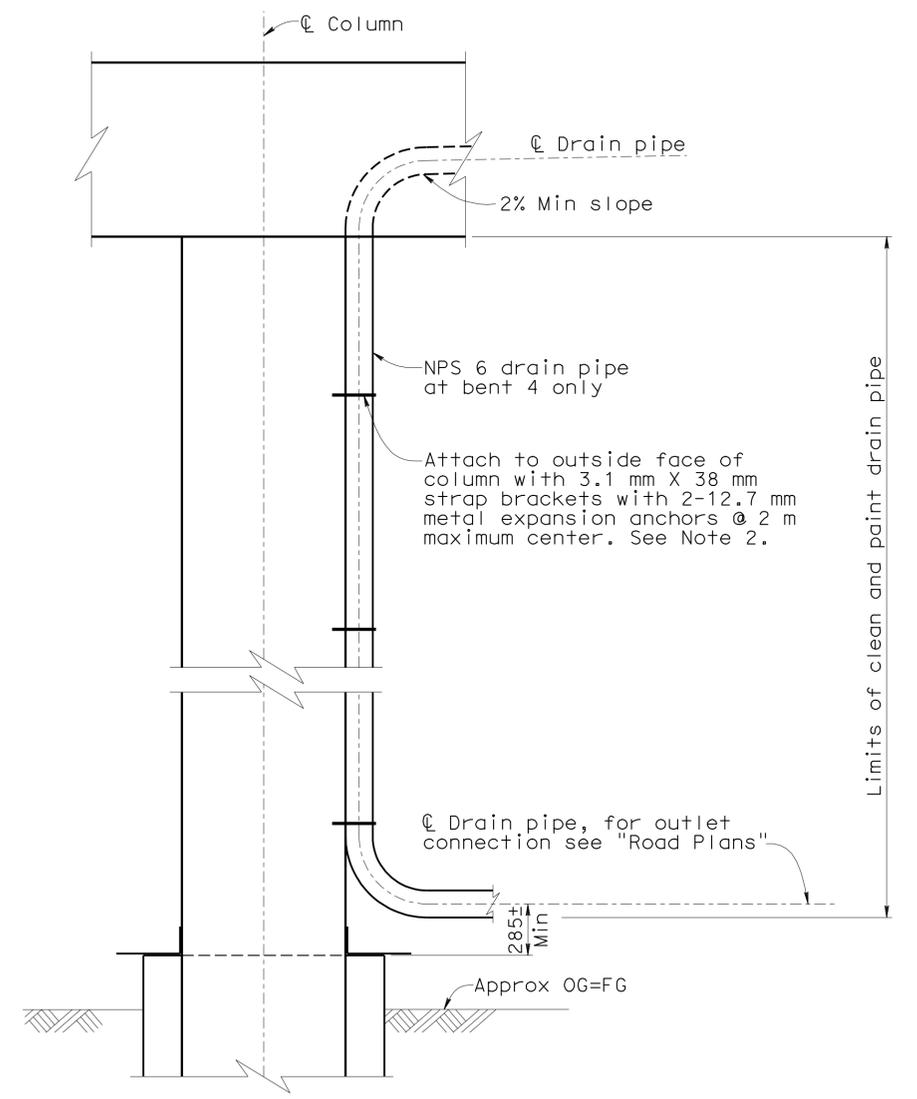
PLAN
1:25



SECTION U-U
1:5



SECTION V-V
1:20



DRAIN PIPE ELEVATION
1:20



DESIGN	BY Leon Valla	CHECKED Richard Shendel
DETAILS	BY Ton Doan	CHECKED Leon Valla
QUANTITIES	BY Leon Valla	CHECKED Richard Shendel

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO.	53-1254
KILOMETER POST	40.97

SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)
DECK DRAINAGE DETAILS

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	08-07-07	10-01-07	11-27-07	12-28-07	01-29-08	06-13-08
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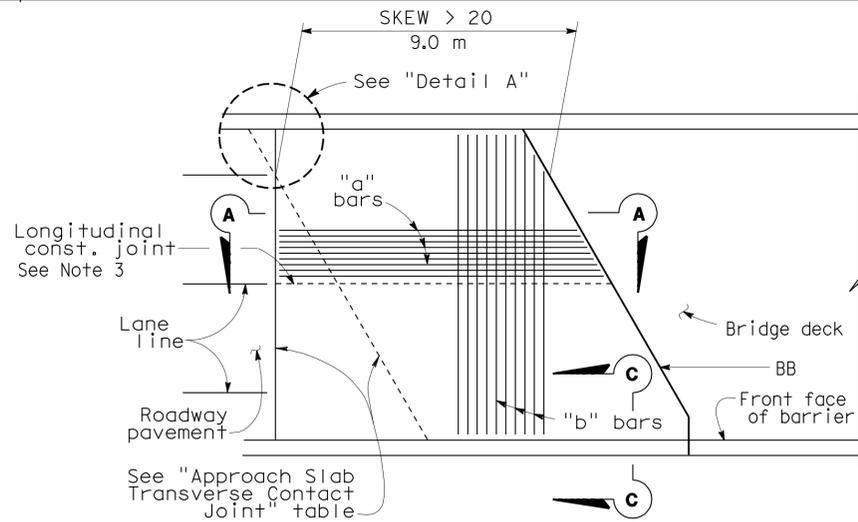
SHEET 21 OF 28

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:58



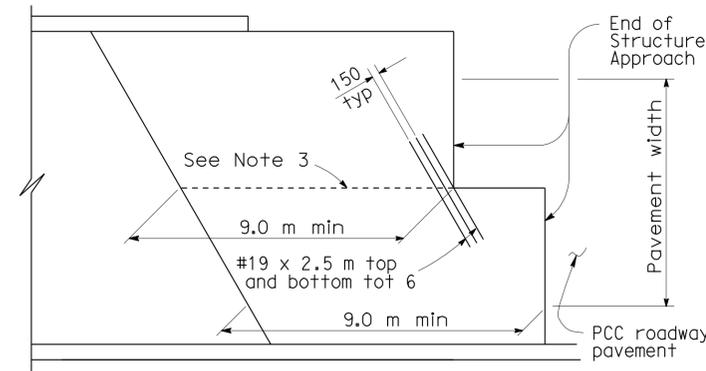
DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	405	39.7/41.5	393	439

Leon Valla 05-11-09
 REGISTERED ENGINEER - CIVIL
 6-7-10
 PLANS APPROVAL DATE
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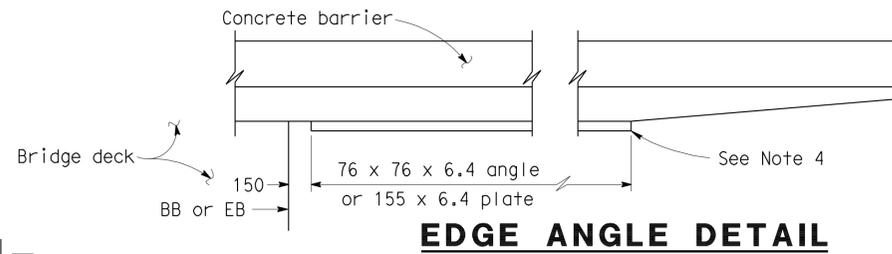
PLAN

STRUCTURE APPROACH - END STAGGER DETAIL

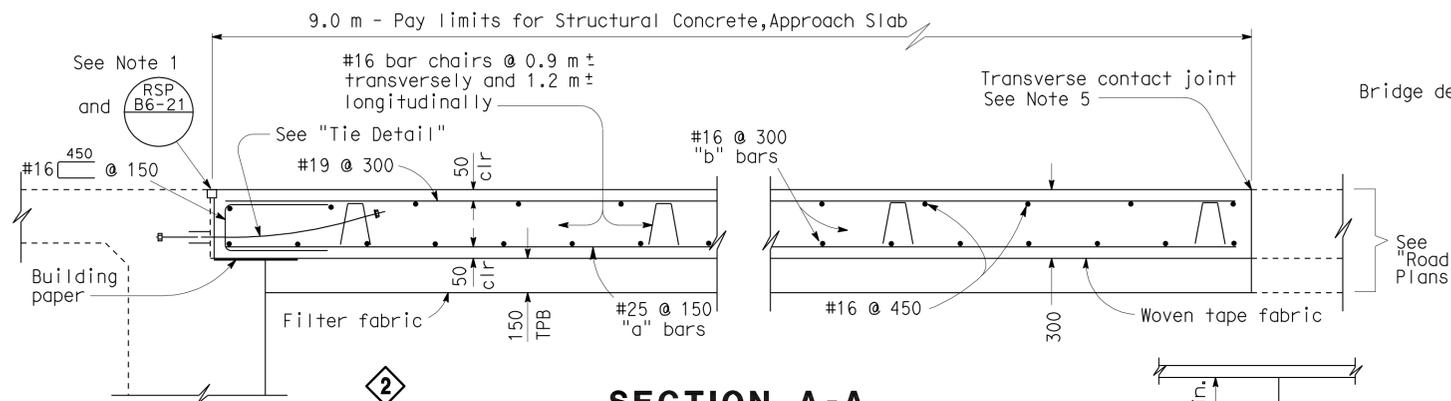


STRUCTURE APPROACH - END STAGGER DETAIL

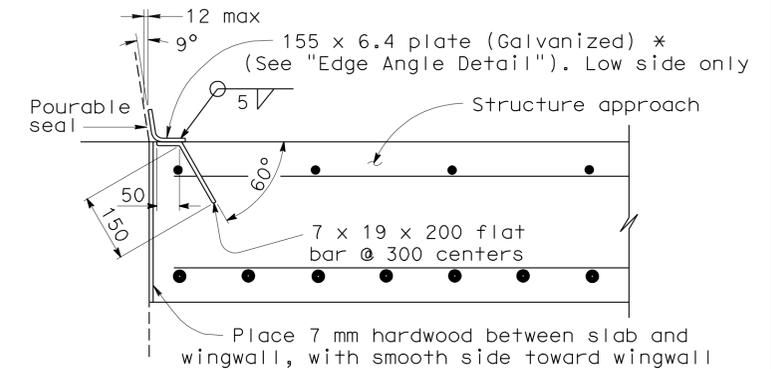
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 20°	Parallel to face of paving notch	Parallel to face of paving notch
20° - 45°	Parallel to face of P N use (Detail A)	Stagger lines 7.2 m to 10.8 m apart
> 45°	Parallel to face of P N use (Detail A)	Stagger at each lane line



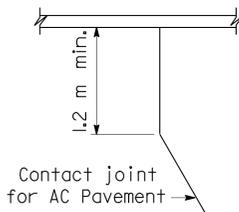
EDGE ANGLE DETAIL



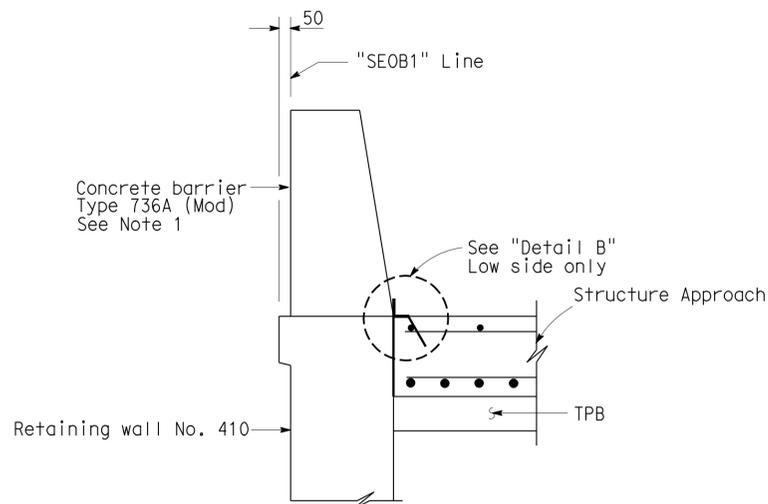
SECTION A-A



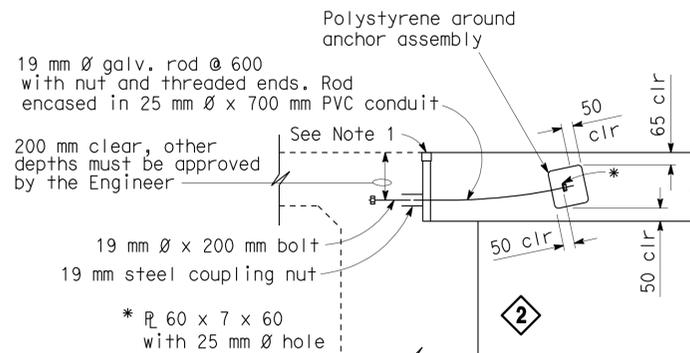
***(TO BE USED WITH TYPE 732 OR TYPE 736 CONCRETE BARRIER)**



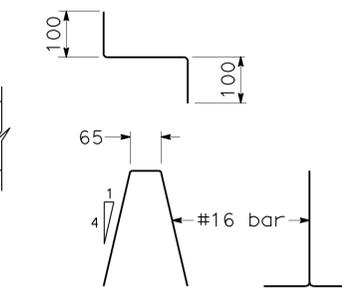
DETAIL A



SECTION C-C



TIE DETAIL



BAR CHAIR DETAIL

NOTES:

- For details not noted or shown, see Structure Plans.
- For drainage details, see "Abutment 1 Details No. 1" sheet.
- Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines.
- End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach, as applicable.
- For transverse contact joint with new PCC paving, refer to Standard Plan P10.
- At the contractor's option, approach slab transverse reinforcement may be placed parallel to paving notch. Spacing of transverse reinforcement is measured along roadway.

NO SCALE SPECIAL DETAILS

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

NOTE: THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

STANDARD DRAWING			
RELEASE DATE	DESIGN BY	CHECKED	RELEASED BY
Revised	M. TRAFFALIS	E. THORKILDSEN	
FILE NO.	DETAILS BY	CHECKED	
xs3-180	R. YEE	E. THORKILDSEN	
	SUBMITTED BY	DRAWING DATE	OFFICE CHIEF
	M. HA	4/98	

- 1 Deleted detail
- 2 Modified detail
- 3 Modified note

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

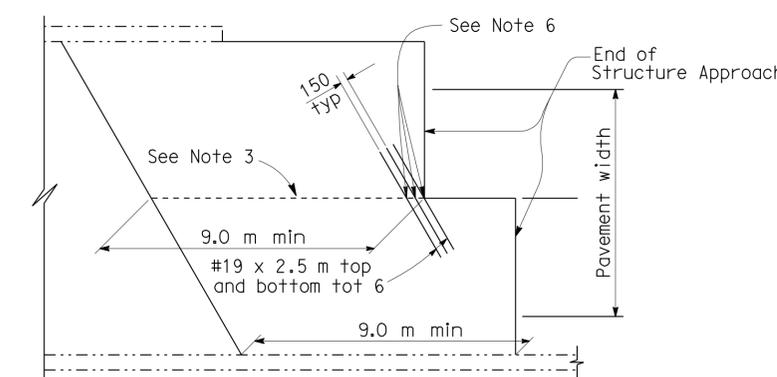
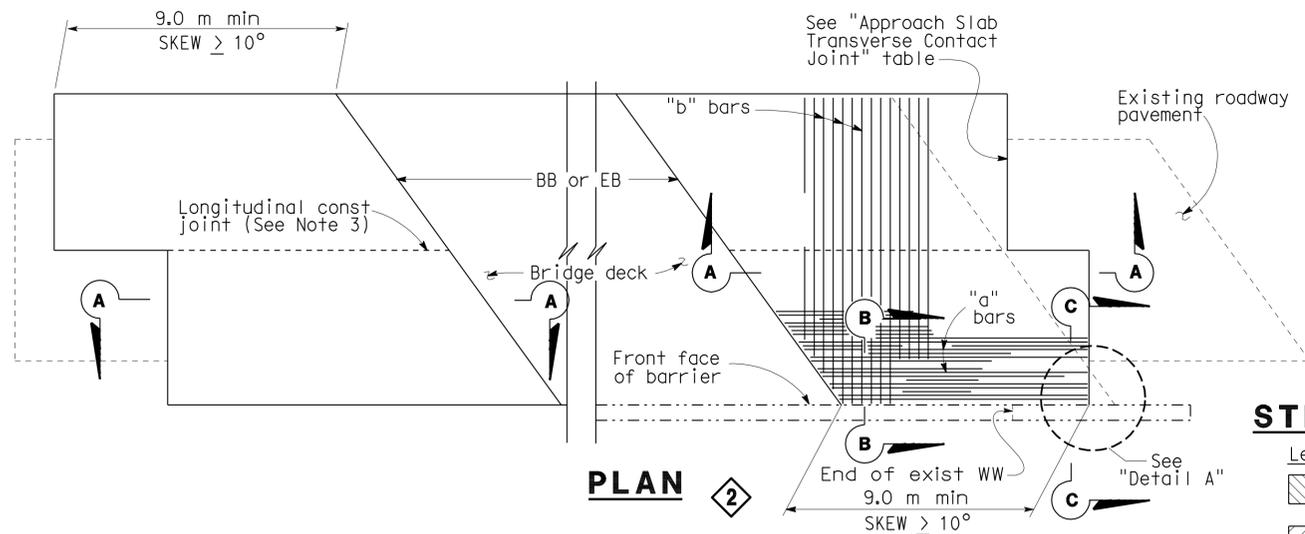
BRIDGE NO. 53-1254
KILOMETER POST 40.97

SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)
STRUCTURE APPROACH TYPE N(9D)



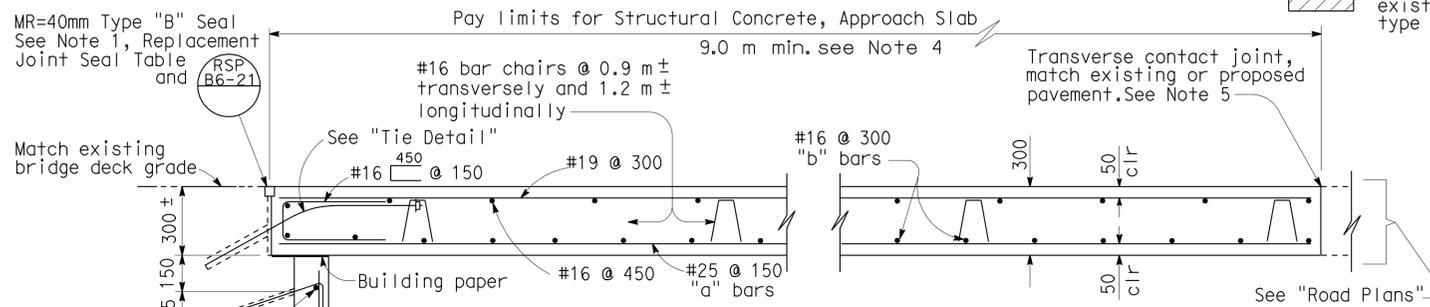
DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	405	39.7/41.5	394	439

REGISTERED ENGINEER - CIVIL
 Leon Valla 05-11-09
 No. 45351
 Exp. 09-30-10
 CIVIL
 STATE OF CALIFORNIA

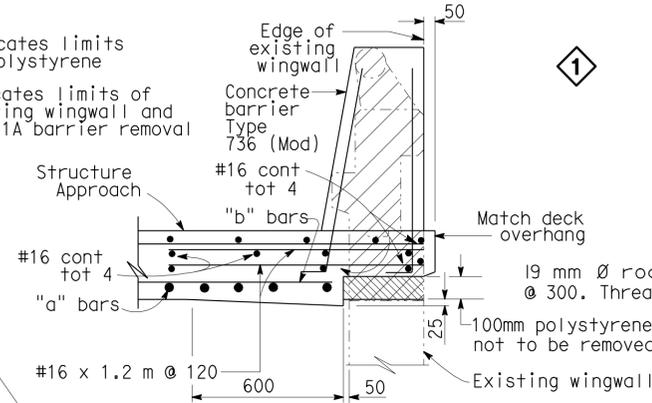


STRUCTURE APPROACH - END STAGGER DETAIL

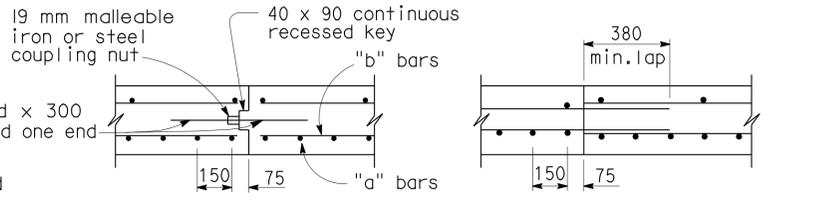
APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	Parallel to face of paving notch	Parallel to face of paving notch
10° - 45°	Parallel to face of P N use (Detail A)	Stagger lines 7.2 m to 10.8 m apart
> 45°	Parallel to face of P N use (Detail A)	Stagger at each lane line



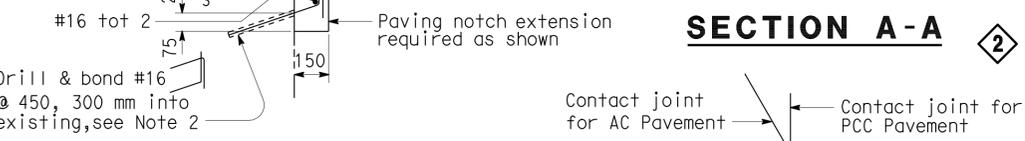
SECTION A-A



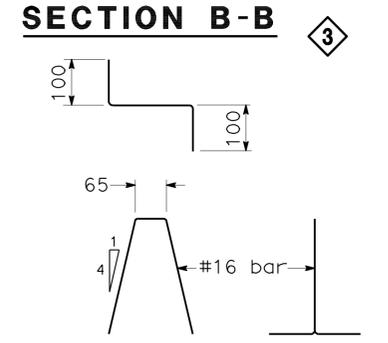
SECTION B-B



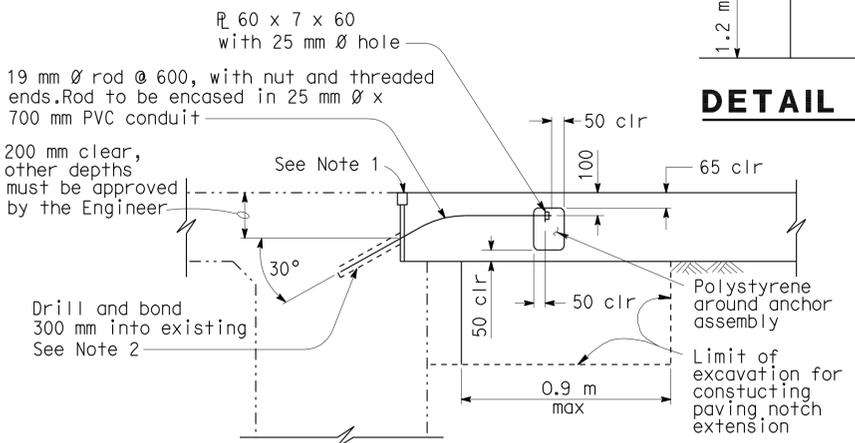
LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES



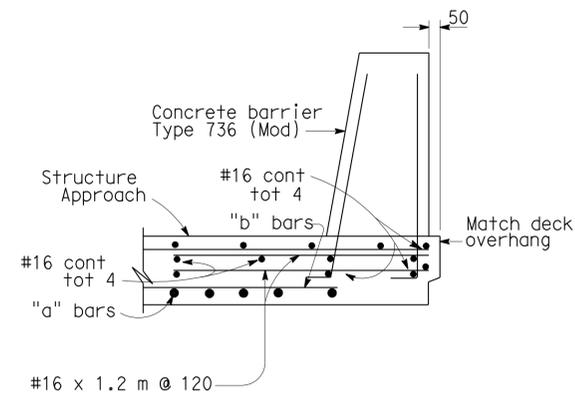
DETAIL A



BAR CHAIR DETAIL



TIE DETAIL



SECTION C-C

LOCATION	MINIMUM MR (mm)	MINIMUM W1 (mm)	APPROX LENGTH (m)	EXIST WATER STOP
ABUT 1	40	-	10.1	NO
ABUT 5	40	-	10.6	NO

- NOTES:**
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required.
 - Space to avoid existing prestress anchorages and main reinforcement.
 - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines.
 - Transverse contact joint shall be a minimum of 1.5 m from an existing or constructed weakened plane joint.
 - For transverse contact joint with new PCC paving, refer to Standard Plan P10.
 - Couplers are required for stage construction.
 - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable.

NO SCALE SPECIAL DETAILS
 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

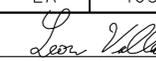
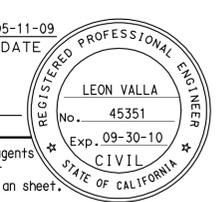
NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

- 1 Deleted detail
- 2 Modified detail
- 3 Added detail
- 4 Added table

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES

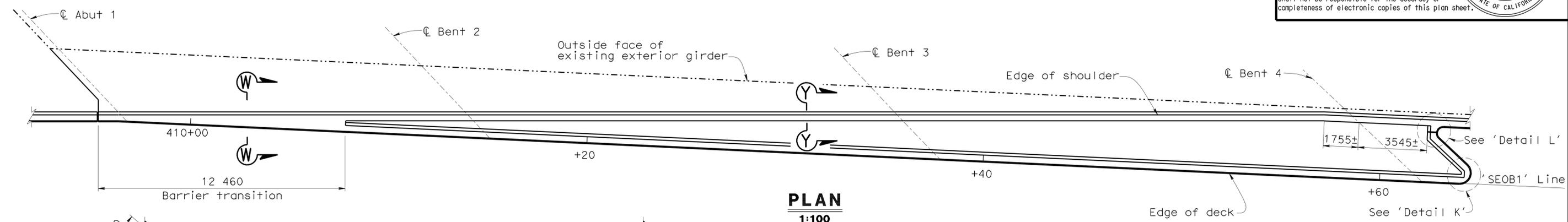
BRIDGE NO. 53-1254
 KILOMETER POST 40.97
SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)
STRUCTURE APPROACH TYPE R(9D)

STANDARD DRAWING			
RELEASE DATE	DESIGN BY	CHECKED	RELEASED BY
Revised	M. TRAFFALIS	E. THORKILDSEN	
FILE NO.	DETAILS BY	CHECKED	
xs3-140	R. YEE	E. THORKILDSEN	
	SUBMITTED BY	DRAWING DATE	OFFICE CHIEF
	M. HA	8/92	

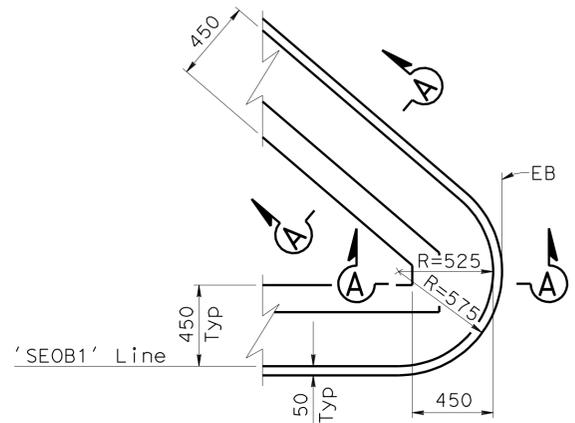
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	395	439
 REGISTERED CIVIL ENGINEER DATE 05-11-09					
PLANS APPROVAL DATE 6-7-10					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

Notes:

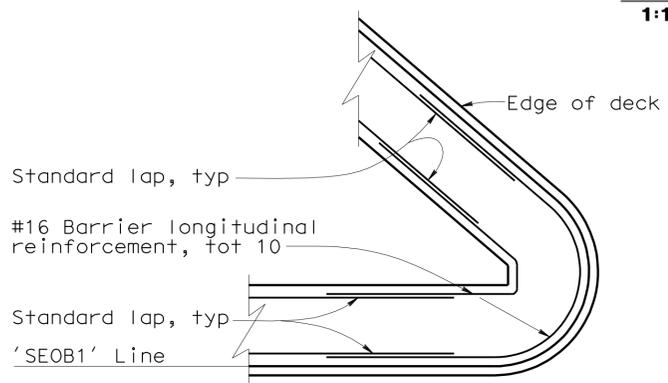
1. Drill and bond #19 @300 or wet set barrier dowels per **B11-56**. All new or existing longitudinal girder and bent cap reinforcement bars to remain undamaged from drill and bond dowels.
2. For all reinforcement and or details not shown, see **B11-56**.



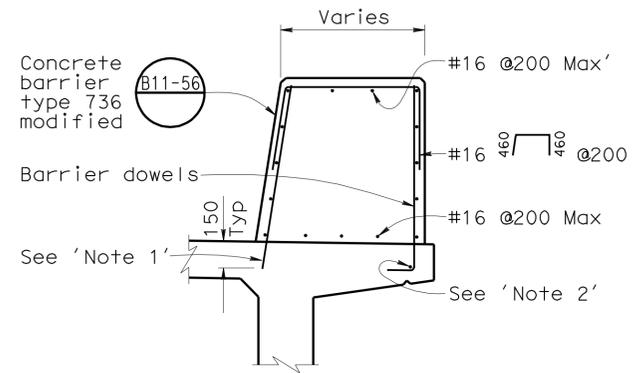
PLAN
1:100



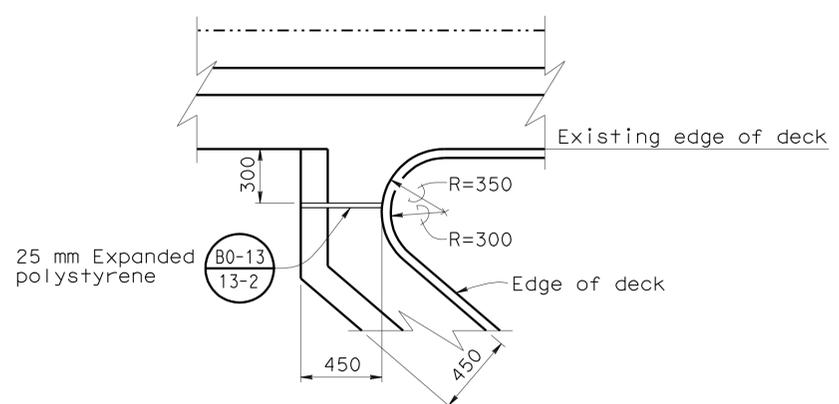
DETAIL K - PLAN
1:20



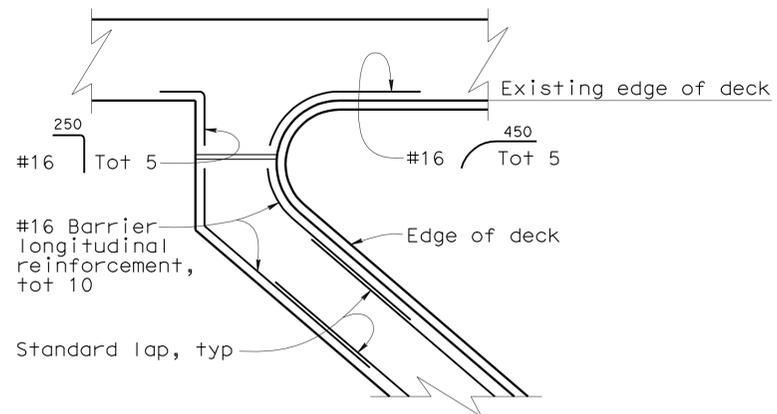
DETAIL K - SECTION
1:20



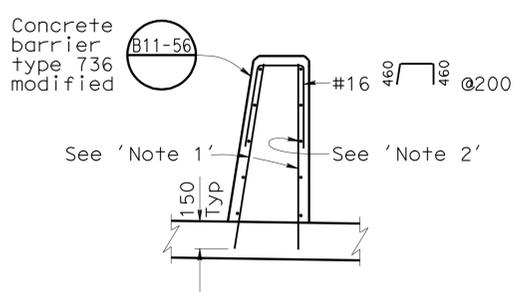
SECTION W-W
1:20



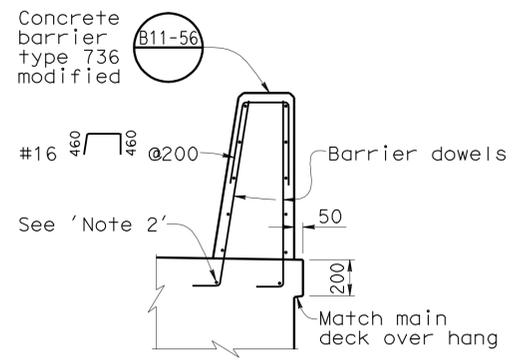
DETAIL L - PLAN
1:20



DETAIL L - SECTION
1:20



SECTION Y-Y
1:20

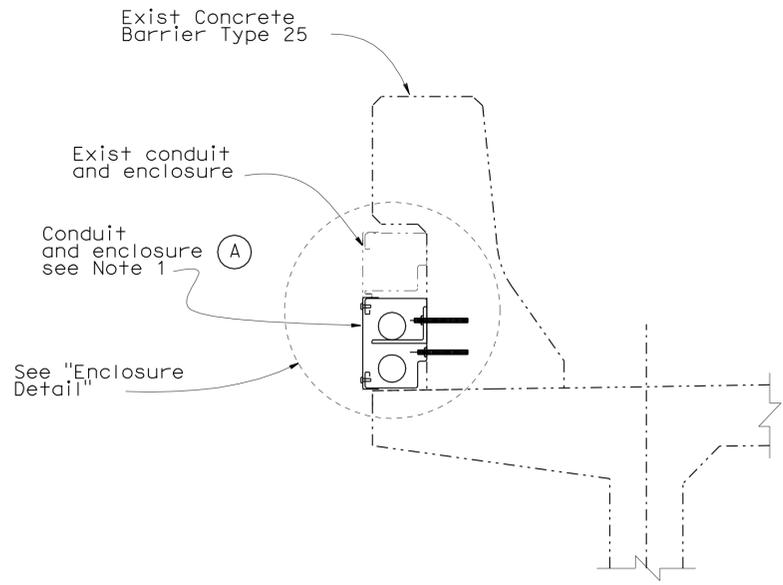


SECTION A-A
1:20

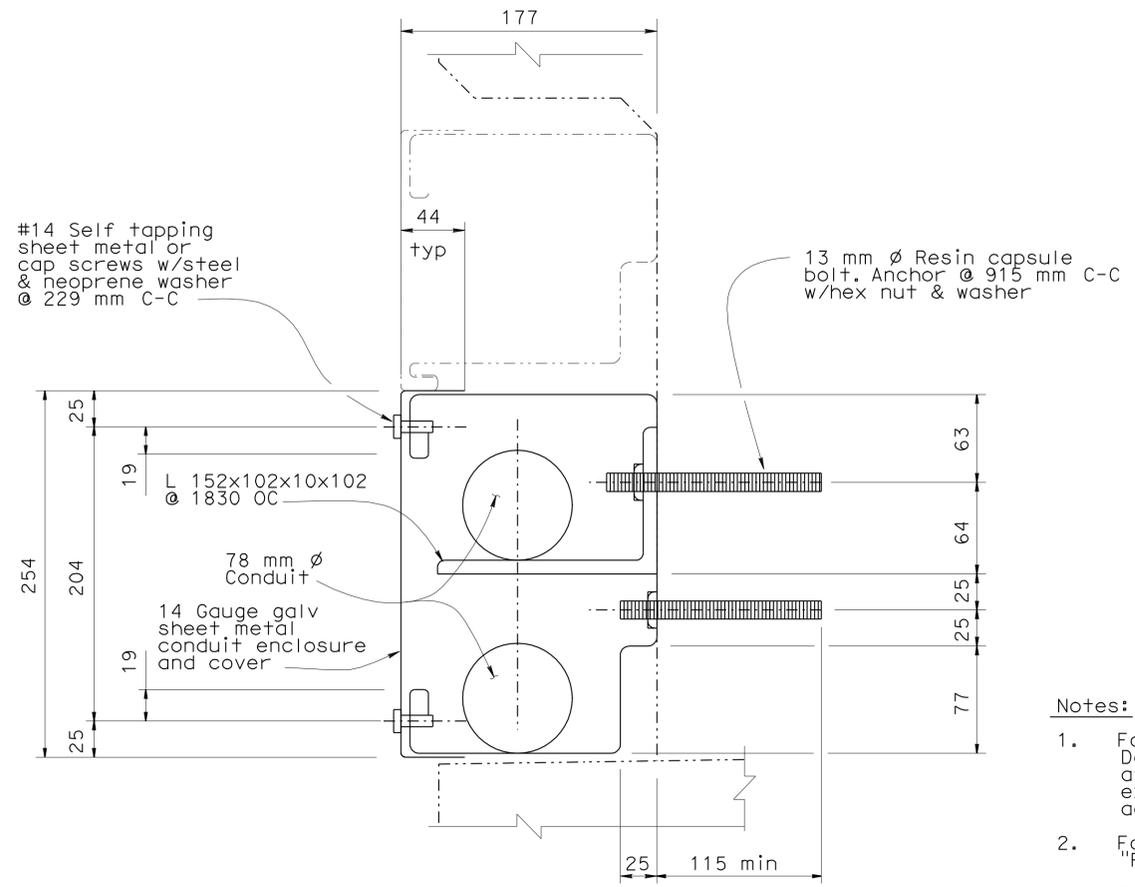
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN	BY Leon Valla	CHECKED Richard Shendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) CONCRETE BARRIER TYPE 736 MOD DETAILS	
	DETAILS	BY Ton Doan	CHECKED Leon Valla			KILOMETER POST	40.97		
	QUANTITIES	BY Leon Valla	CHECKED Richard Shendel			CU 07	EA 241301		
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN				ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES: 03-24-07, 10-11-07, 11-24-07, 01-02-08, 01-23-08	SHEET 24 OF 28

USERNAME => HRTIGHT DATE PLOTTED => 07-JUN-2010 TIME PLOTTED => 18:59



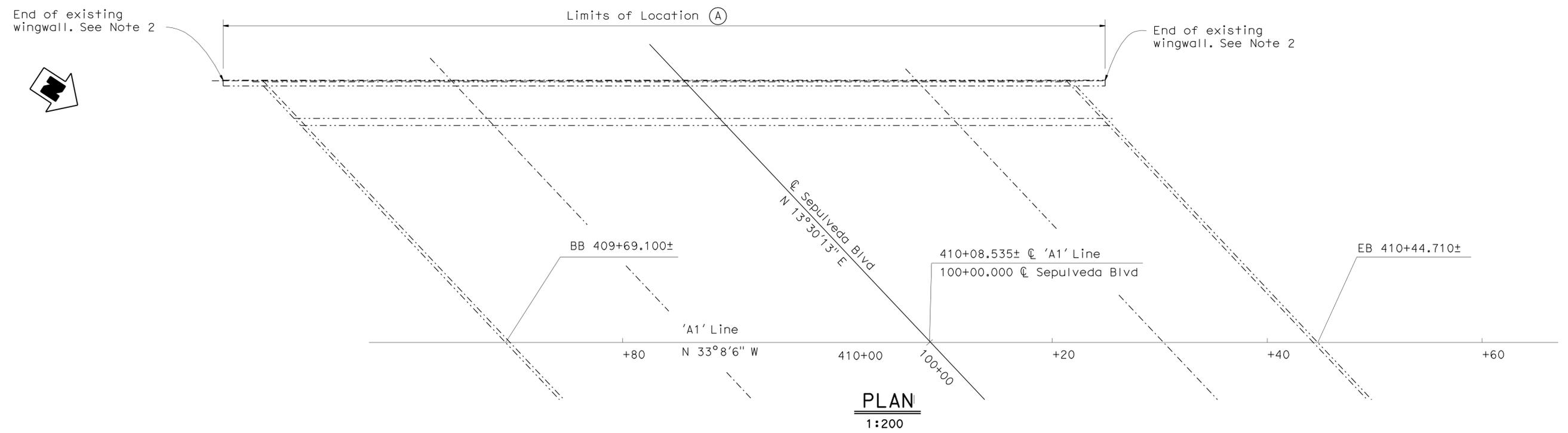
TYPICAL DETAIL FOR CONDUIT AT EXISTING BARRIER
1:10



ENCLOSURE DETAIL
1:2.5

UTILITY OPENINGS			
LOCATION	UTILITY	OWNER	CONDUIT SIZE
(A)	(2) Fiber Optic Cable	Caltrans	78 mm ϕ

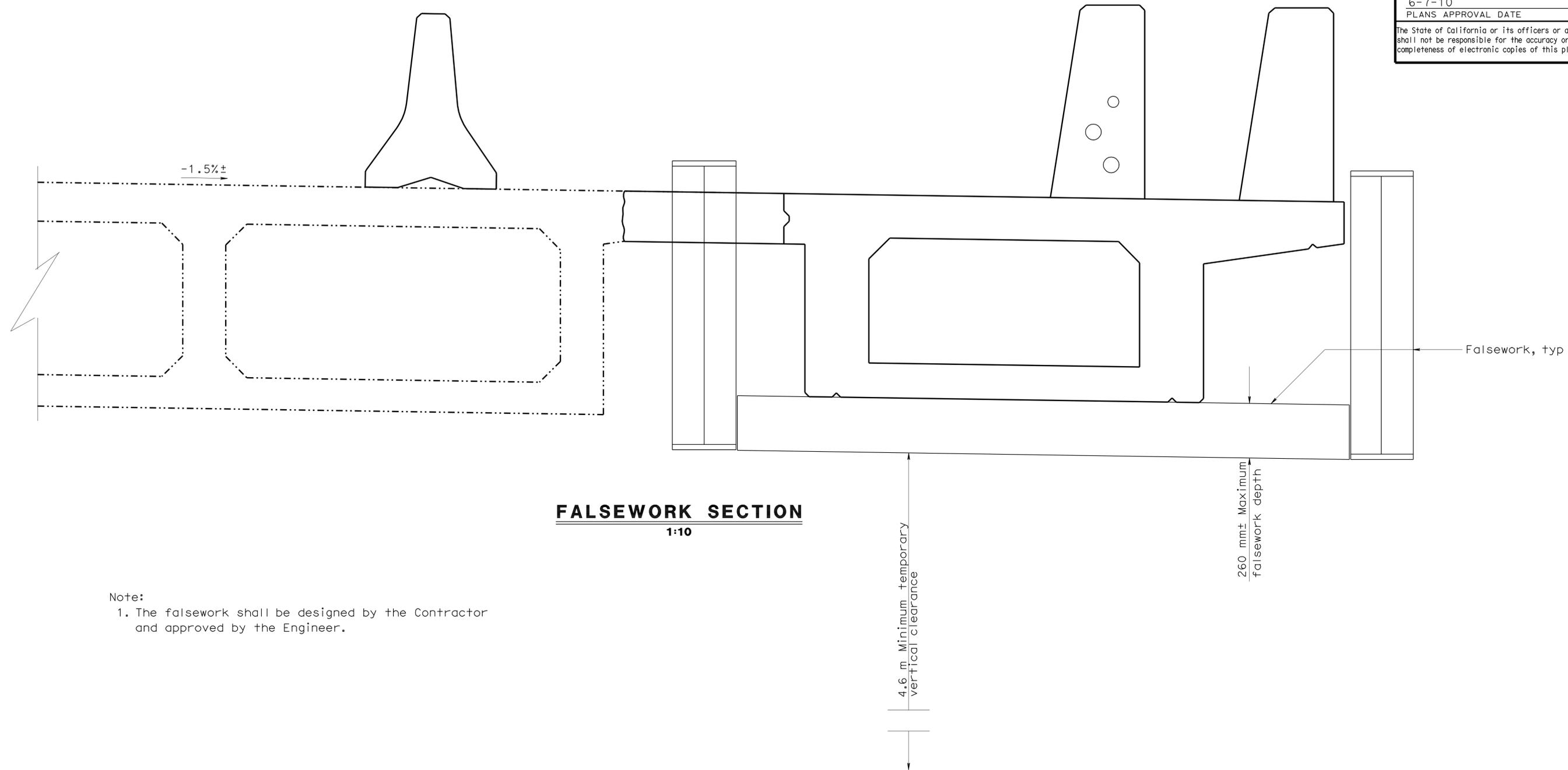
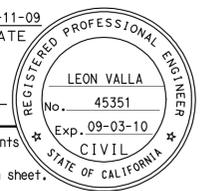
- Notes:
- For conduit expansion fitting, see Standard Plan RSP ES-9B Detail X. Provide for a minimum movement or 38 mm (T+13 mm) at each abutment where no expansion joints are located. Other expansion assemblies shall provide movements according to adjacent expansion joint size.
 - For details of conduits outside limits of location (A) see "Roadway Communication System Plan E" sheets.
 - For location (A) quantity and specifications see "Roadway Communication System Plan E" sheets.



PLAN
1:200

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	397	439

Leon Valla 05-11-09
 REGISTERED CIVIL ENGINEER DATE
 6-7-10
 PLANS APPROVAL DATE
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FALSEWORK SECTION
1:10

Note:
1. The falsework shall be designed by the Contractor and approved by the Engineer.

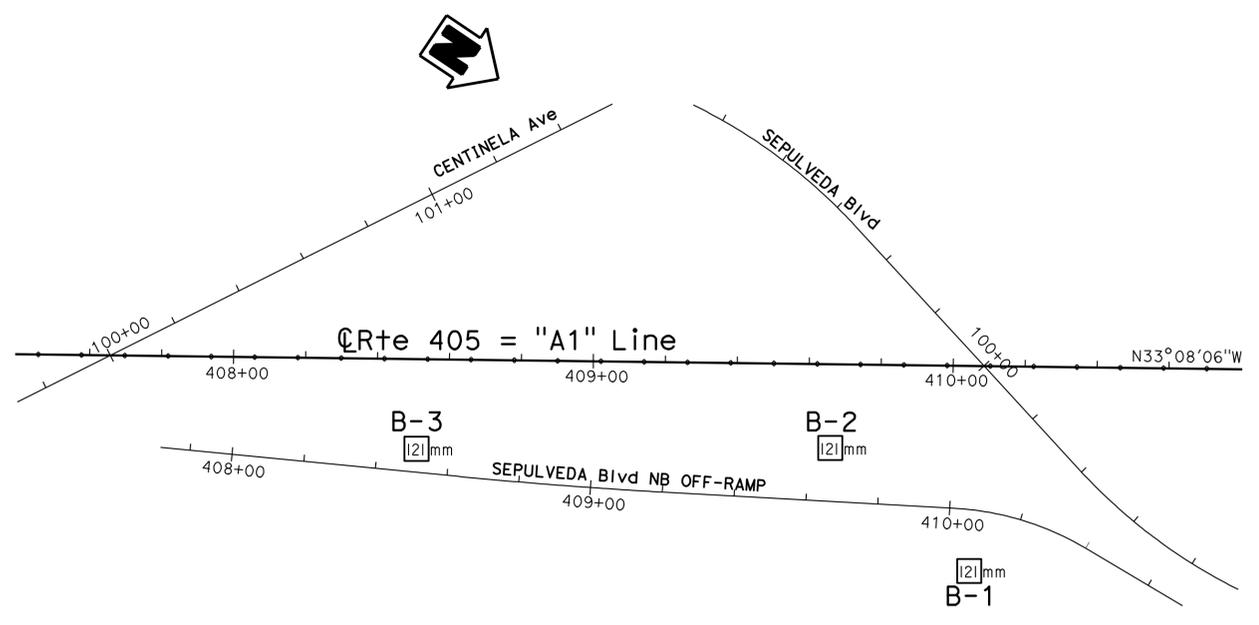
NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	DESIGN BY Leon Valla	CHECKED BY Richard Schendel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) ALLOWABLE FALSEWORK PLACEMENT LIMITS
	DETAILS BY Leon Valla	CHECKED BY Richard Schendel			KILOMETER POST 40.97	
	QUANTITIES BY Leon Valla	CHECKED BY Richard Schendel				
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN			ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS		REVISION DATES: 03-02-07, 01-28-08, 02-04-08, 11-05-08, 09-11-07, 09-28-07, 10-23-07, 11-21-07, 12-26-07	
			CU 07 EA 241301		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
			FILE => 53-1254-u-miscd+03.dgn		SHEET 26 OF 28 STRUCTURES DESIGN DETAIL SHEET (METRIC) (REV.03-17-04)	

USERNAME => H11enard DATE PLOTTED => 08-JUN-2010 TIME PLOTTED => 05:21

DIST	COUNTY	ROUTE	KILOMETER TOTAL PROJECT	POST TOTAL	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5		398	439

Registered Civil Engineer
 05-19-09
 6-7-10
 PLANS APPROVAL DATE
 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.



BENCH MARK
 Fd brass disk in median island
 @ SEPULVEDA BLVD N/O 405 FWY.
 N = 553,633.100
 E = 1,963,544.617
 EI = 11.143

Notes:

Borehole Number	Drill Rig	Exploration Method	Hammer Type	Avg. Hammer Efficiency, ETR (%)
B-1	CME85	Mud Rotary	Auto	0.87
B-2	CME85	Mud Rotary	Auto	0.87
B-3	CME85	Mud Rotary	Auto	0.87

LEGEND OF BORING OPERATIONS

75 mm CONE PENETRATION TEST
 Penetration measured along a 75 mm diameter cone (100 mm length) on tip of cone. Pressure measured on tip of cone. Friction ratio (s) = Tip Bearing (MPa) / Penetration (MPa).

57 mm CONE PENETRATION BORING
 No count recorded. Pushed. Driving rate in seconds per 300 mm. MB 1.18 penetration (number of blows).

ROTARY SAMPLE BORING (WET)
 Top Hole EL., Location, Boring Date, Casing driven, Size of sampler, Reporting of logs, Shear strength, Vane shear.

SAMPLE BORING (DRY)
 Top Hole EL., Location, Boring Date, Refused, Sample taken.

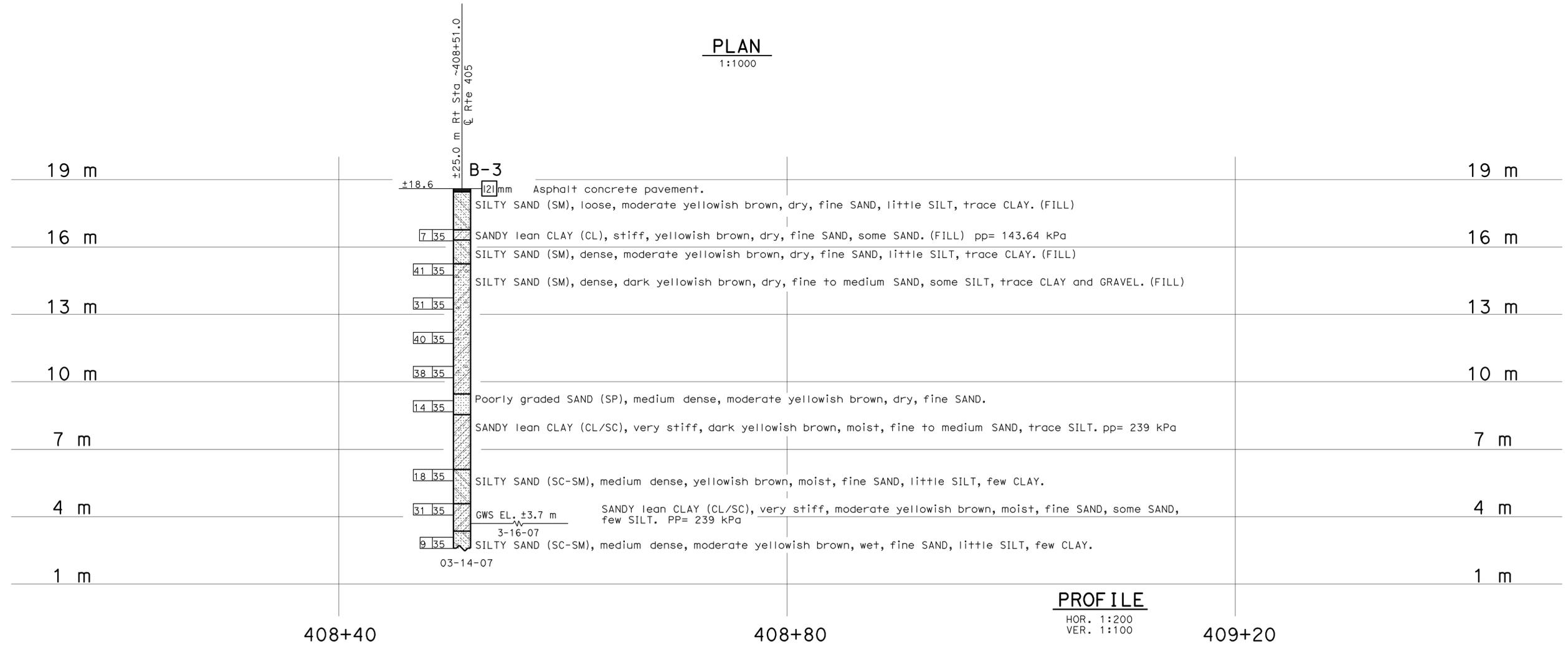
ELECTRONIC CONE PENETROMETER

LEGEND OF EARTH MATERIALS

CONSISTENCY CLASSIFICATION FOR SOILS

SPT N-value (0-30)	Consistency
0-4	Very Loose
5-10	Loose
11-30	Medium Dense
31-50	Dense
>50	Very Dense

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.



PROFILE

HOR. 1:200
 VER. 1:100



ENGINEERING SERVICES	GEOTECHNICAL SERVICES	FIELD INVESTIGATION BY: H. Liu	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO. 53-1254 KILOMETER POST 40.97	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT) LOG OF TEST BORINGS 1 OF 2
DRAWN BY F. Nguyen 11/07	CHECKED BY H. Liu					REVISION DATES (PRELIMINARY STAGE ONLY) 12-05-07

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS

CU 07
EA 241301

DISREGARD PRINTS BEARING EARLIER REVISION DATES

SHEET 27 OF 28

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS" 1 OF 2

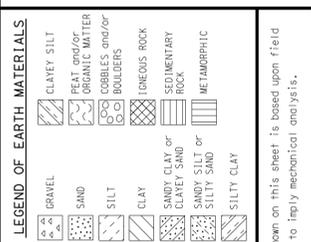
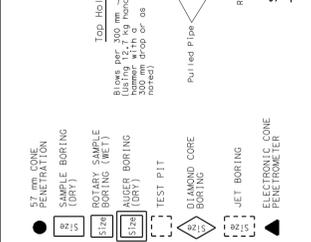
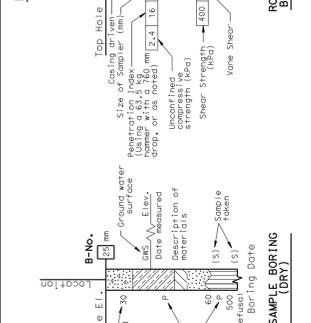
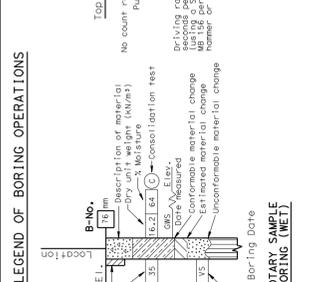
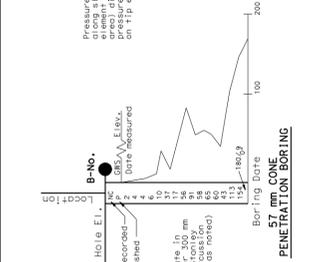
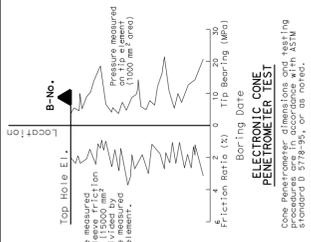
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	399	439

L. Haitao 05-19-09
REGISTERED CIVIL ENGINEER

6-7-10
PLANS APPROVAL DATE

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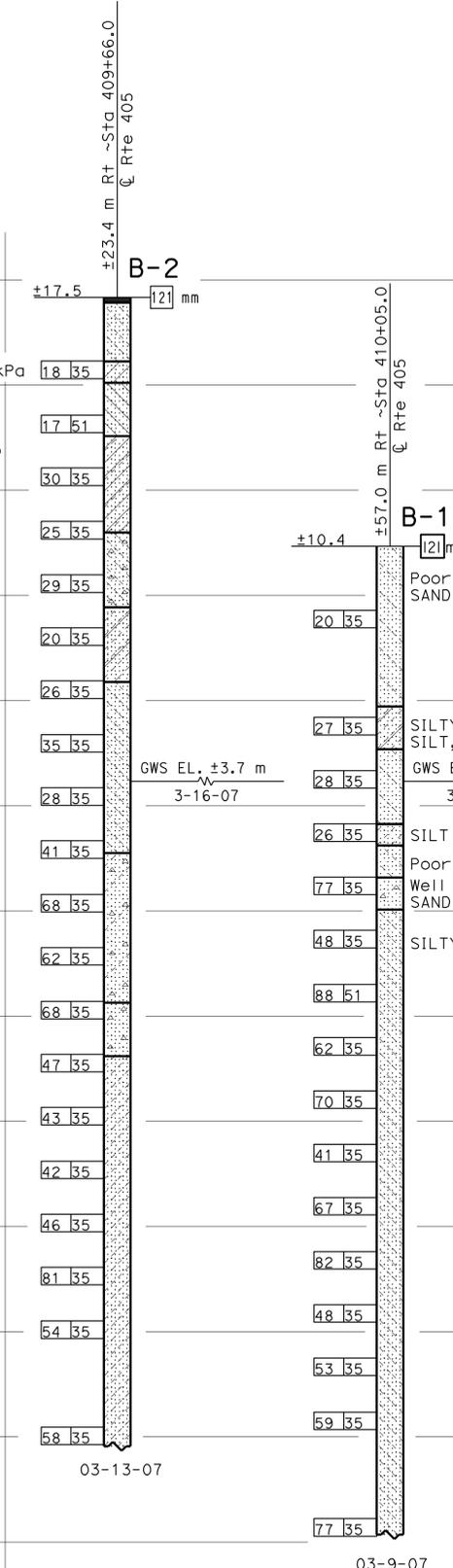
REGISTERED PROFESSIONAL ENGINEER
Haitao Liu
No. C66398
Exp. 06-30-10
CIVIL
STATE OF CALIFORNIA



CONSISTENCY CLASSIFICATION FOR SOILS	
According to the Standard Penetration Test	
SPT N-value (0-30)	Conservative
2-4	Very Soft
5-8	Soft
9-15	Firm
16-30	Stiff
>30	Very Stiff
>30	Hard

NOTE: Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

18 m	Asphalt concrete pavement. SILTY SAND (SM), medium dense, dark yellowish brown, dry, fine SAND, little SILT. (FILL)	±17.5	121 mm	18 m
15 m	SANDY lean CLAY (CL), hard, dark yellowish brown, dry, some fine SAND. (FILL) pp= 383 kPa CLAYEY SAND (SC), medium dense, dark yellowish brown, dry, fine to coarse SAND, some CLAY. (FILL)	18 35		15 m
12 m	Poorly graded SAND with CLAY (SP-SC), medium dense, dark yellowish brown, dry, fine to medium SAND, few CLAY and few SILT. (FILL)	17 51		12 m
9 m	SILTY SAND (SM), dense, dusky yellowish brown, dry, fine to medium SAND, some SILT, trace GRAVEL. SILTY SAND (SM), medium dense, moderate yellowish brown, dry, fine to medium SAND, little SILT, trace CLAY.	30 35		9 m
6 m	SANDY SILT (ML), dense, olive gray, moist, fine SAND, some SAND.	25 35		6 m
3 m	Poorly graded SAND (SP), very dense, olive gray, wet, fine to medium SAND, trace SILT and GRAVEL (fine).	29 35		3 m
0 m	Well graded SAND (SW), very dense, olive gray, wet, fine to coarse SAND, few GRAVEL.	20 35		0 m
-3 m	SILTY SAND (SM), very dense, olive gray, wet, fine SAND, some SILT.	26 35		-3 m
-6 m	SILT (ML), very stiff, medium dark gray, moist, few fine SAND. pp= 239.4 kPa Poorly graded SAND (SP), dense, medium dark gray, moist, fine SAND, few SILT. Well graded SAND (SW), very dense, medium bluish gray, moist, fine to coarse SAND, few GRAVEL (fine, subangular and subrounded).	35 35		-6 m
-9 m	SILTY SAND (SM), very dense, medium dark gray, wet, fine SAND, little SILT.	28 35		-9 m
-12 m		41 35		-12 m
-15 m		68 35		-15 m
-18 m		77 35		-18 m



PROFILE
HOR. 1:500
VER. 1:100



ENGINEERING SERVICES	GEOTECHNICAL SERVICES
DRAWN BY: F. Nguyen 11/07	CHECKED BY: H. Liu

FIELD INVESTIGATION BY:
H. Liu

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 12

BRIDGE NO. 53-1254	SEPULVEDA BLVD UC (WIDEN AND SEISMIC RETROFIT)
KILOMETER POST 40.97	
LOG OF TEST BORINGS 2 OF 2	

USERNAME => hlietao DATE PLOTTED => 08-JUN-2010 TIME PLOTTED => 05:21

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	405	39.7/41.5	400	439

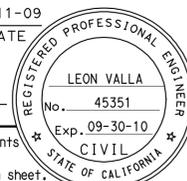
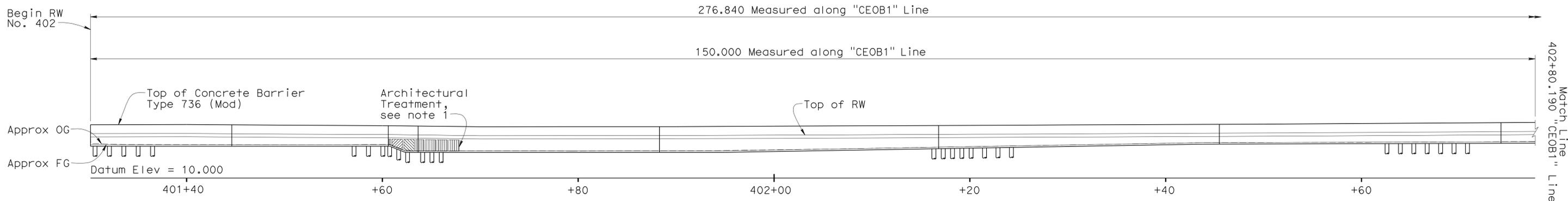
Notes:

1. For Architectural Treatment see "Architectural Treatment Details" sheet.
2. For Quantities see "Index To Plans" sheet.

 5-11-09
 REGISTERED CIVIL ENGINEER DATE

6-7-10
 PLANS APPROVAL DATE

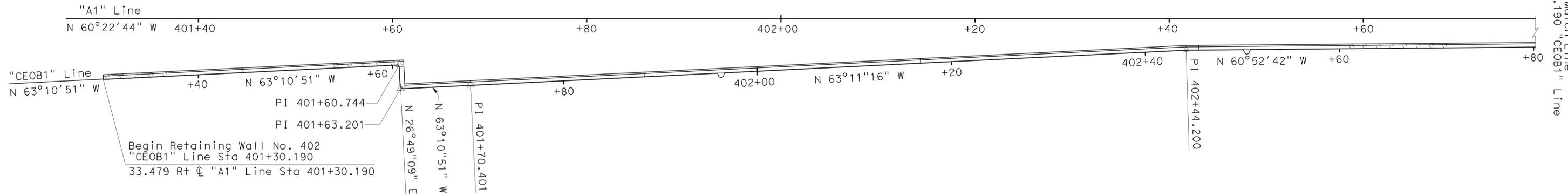
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Not all piles shown for clarity

DEVELOPED ELEVATION

1:200



Not all piles shown for clarity

PLAN

1:200



	DESIGN	BY Fitsum Habtu	CHECKED Sebastian Mofor	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 12	BRIDGE NO.	RETAINING WALL NO. 402 GENERAL PLAN NO. 1					
	DETAILS	BY Various	CHECKED Leon Valla	LAYOUT	BY Fitsum Habtu			CHECKED Leon Valla		53E0113				
	QUANTITIES	BY Leon Valla	CHECKED Fayek Tannous	SPECIFICATIONS	BY Theresa Nedwick			CHECKED Theresa Nedwick		PLANS AND SPECS COMPARED	40.27			
ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN						ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 	CU 07 EA 241301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES <table border="1"> <tr> <td>08-07-08</td> <td>08-12-08</td> <td>09-22-08</td> <td>10-15-09</td> </tr> </table>	08-07-08	08-12-08	09-22-08	10-15-09	SHEET 1 OF 19
08-07-08	08-12-08	09-22-08	10-15-09											

FILE => 53-e0113-a-gp01.dgn

STRUCTURES DESIGN GENERAL PLAN SHEET (METRIC) (REV.07-24-06)