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THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN ALAMEDA COUNTY NEAR HAYWARD
AT VARIOUS LOCATIONS FROM CASTRO VALLEY
UNDERCROSSING TO HESPERIAN BOULEVARD
UNDERCROSSING

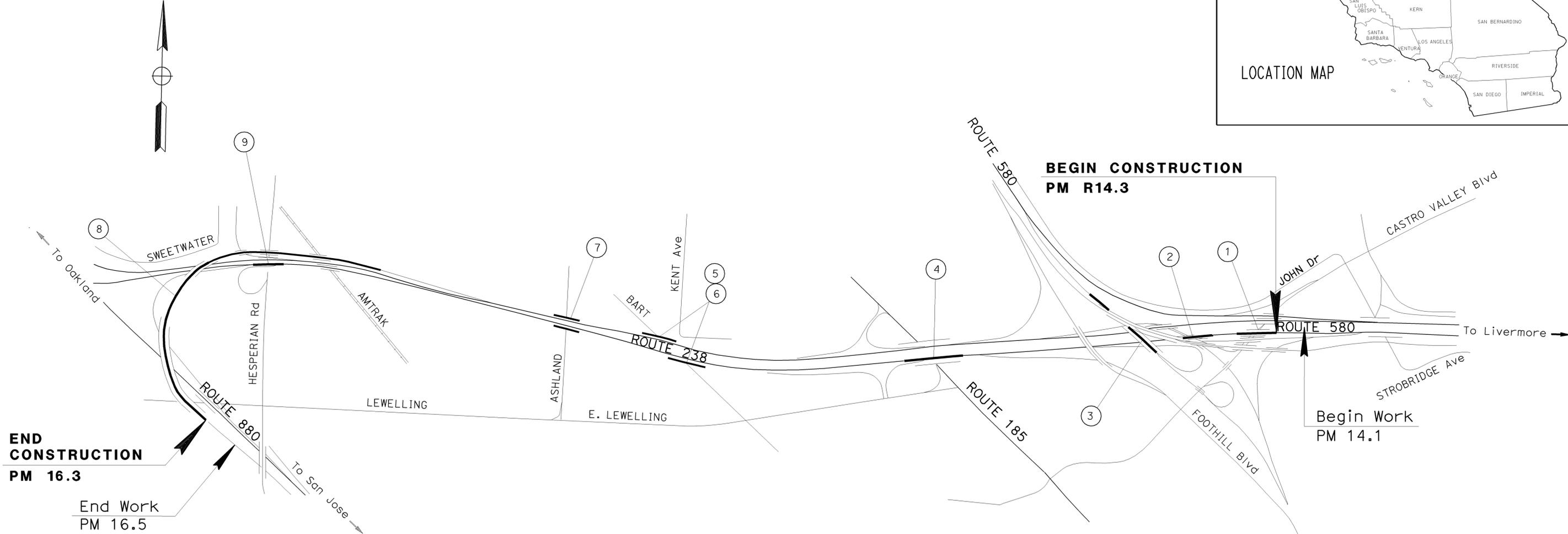
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	238	R14.3/16.3	1	17



Caltrans

LOCATION MAP



LOCATIONS OF CONSTRUCTION

LOCATION	COUNTY AND ROUTE	PM	BRIDGE No.	BRIDGE NAME
1	Ala-238	R14.31	33-0202F	CASTRO VALLEY Blvd UC
2	Ala-238	14.41	33-0524F	EAST CONNECTOR SEPARATION
3	Ala-238	R14.49	33-0526G	NORTH CONNECTOR SEPARATION
4	Ala-238	14.93	33-0212R	ROUTES 238/185 SEPARATION
5	Ala-238	15.41	33-0217L	KENT Ave OH
6	Ala-238	15.41	33-0217R	KENT Ave OH
7	Ala-238	15.67	33-0221	ASHLAND Ave UC
8	Ala-238	16.03	33-0540G	N238-S880 CONNECTOR OC
9	Ala-238	16.28	33-0216	HESPERIAN Blvd UC

HAYWARD

Jan Yuan 1-29-10
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER

February 1, 2010
 PLANS APPROVAL DATE



THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

NO SCALE

CONTRACT No. 04-0E9904



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	238	R14.3/16.3	2	17

<i>Florante P. Perez</i>	2-1-10
REGISTERED CIVIL ENGINEER	DATE
	2-1-10
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
Florante P. Perez
No. 41030
Exp. 3-31-11
CIVIL
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

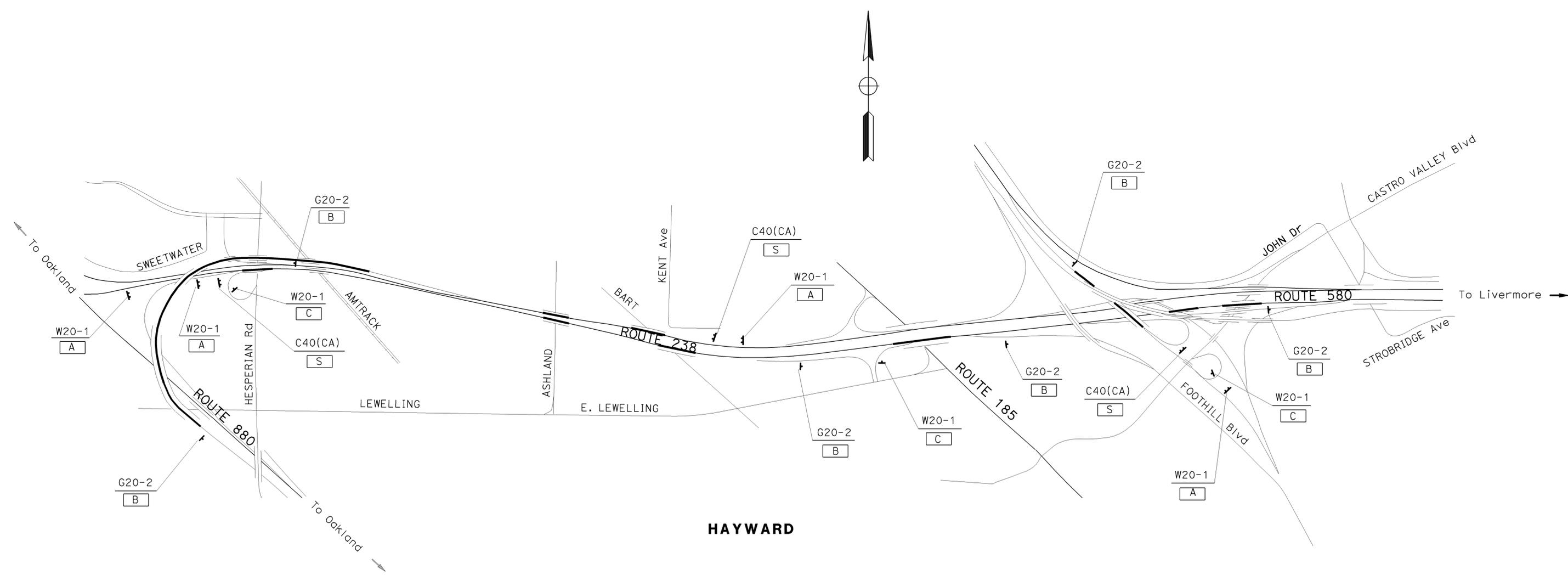
LEGEND:

[No.] CONSTRUCTION AREA SIGN DESIGNATION

NOTE:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATIONS AND POSITIONS TO BE DETERMINED BY THE ENGINEER.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	LEOPOLDO G. BONGATO	REVISOR	
Caltrans	LOURDES DAVID	FLORANTE P. PEREZ	DATE	
TRAFFIC	CHECKED BY		DATE	
	DESIGNED BY			



CONSTRUCTION AREA SIGNS

NO SCALE

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY

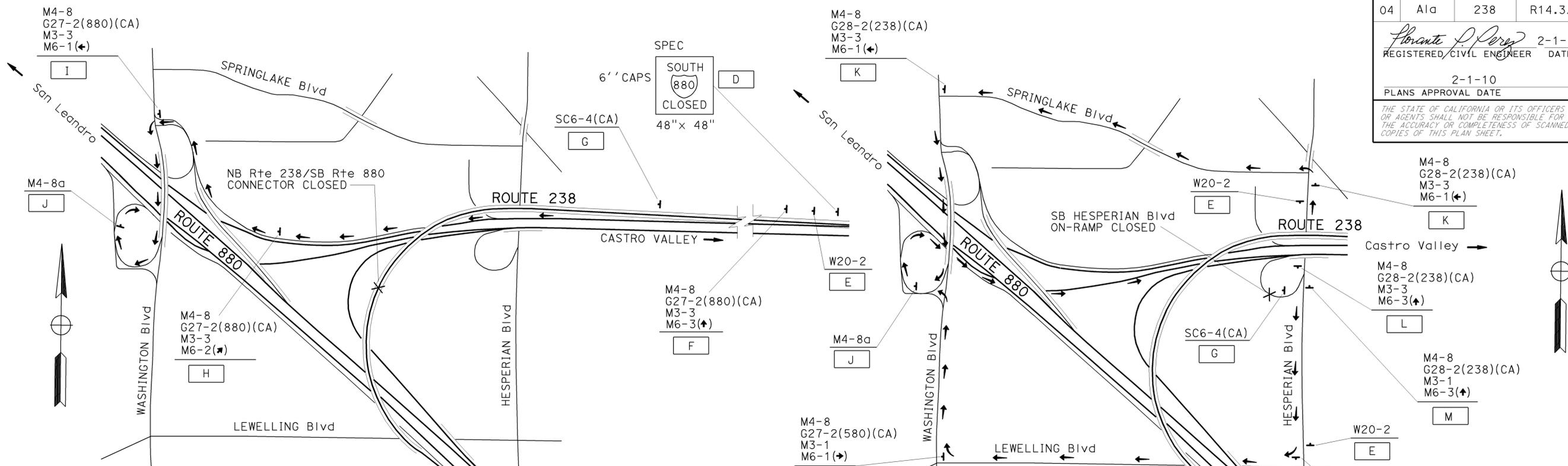
CS-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	238	R14.3/16.3	3	17

<i>Florante P. Perez</i>		2-1-10
REGISTERED CIVIL ENGINEER	DATE	
2-1-10		
PLANS APPROVAL DATE		

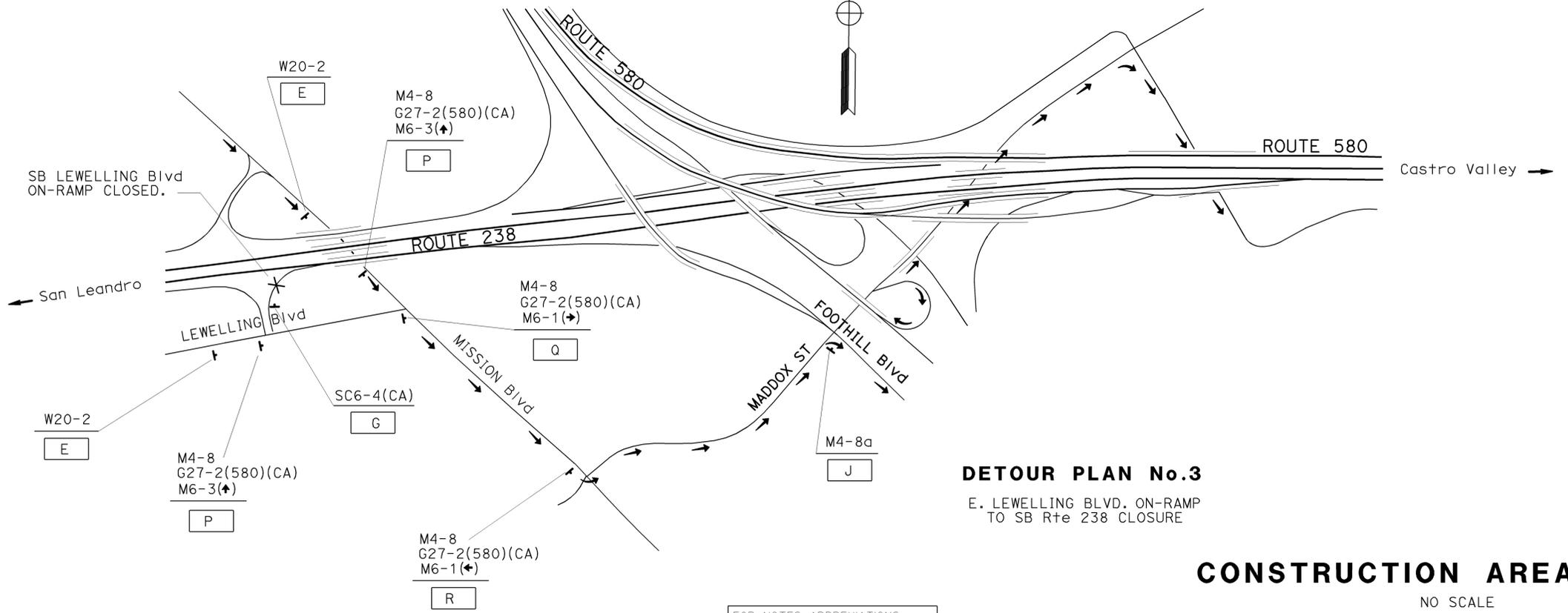
REGISTERED PROFESSIONAL ENGINEER	Florante P. Perez
No.	41030
Exp.	3-31-11
CIVIL	

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



DETOUR PLAN No.1
NB RTE 238/SB RTE 880
CONNECTOR CLOSURE

DETOUR PLAN No.2
HESPERIAN BLVD ON-RAMP TO
SB RTE 238 CLOSURE



DETOUR PLAN No.3
E. LEWELLING BLVD. ON-RAMP
TO SB RTE 238 CLOSURE

CONSTRUCTION AREA SIGNS

NO SCALE

CS-2

FOR NOTES, ABBREVIATIONS
&/OR LEGEND, SEE SHEET CS-1

THIS PLAN ACCURATE FOR
CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LEOPOLDO G. BONGATO	REVISOR
Caltrans	FLORANTE P. PEREZ	DATE
FUNCTIONAL SUPERVISOR	LOURDES DAVID	DESIGNED BY
TRAFFIC		CHECKED BY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	238	R14.3/16.3	5	17

Jan Yuan 1-29-10
 REGISTERED CIVIL ENGINEER DATE

2-1-10
 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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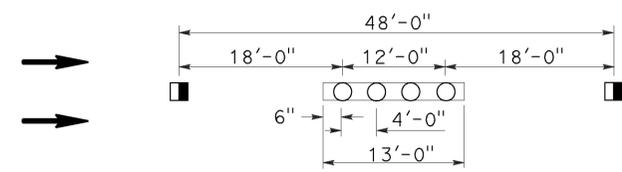
- TYPE A WHITE NON-REFLECTIVE MARKER
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
- ▭ 4" WHITE STRIPE
- ➔ DIRECTION OF TRAVEL

NOTE:

- INSTALL 4" WHITE THERMOPLASTIC TRAFFIC STRIPE. AFTER INSTALLING PAVEMENT MARKERS.
- ALL EXISTING PAVEMENT DELINEATION REMOVED SHALL BE PLACED AT THE SAME LOCATION AT THE EXISTING.

TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

LOCATION	BRIDGE NAME	BRIDGE No.	DETAIL No.	REMOVE				THERMOPLASTIC TRAFFIC STRIPE						PAVEMENT MARKER			THERMO-PLASTIC PAVEMENT MARKING		
				THERMOPLASTIC TRAFFIC STRIPE (WHITE)	THERMOPLASTIC TRAFFIC STRIPE (YELLOW)	PAVEMENT MARKER	THERMOPLASTIC PAVEMENT MARKING	4 INCH WHITE	4 INCH YELLOW	4 INCH WHITE (BROKEN 17-7)	4 INCH WHITE (BROKEN 35-13)	8 INCH WHITE	8 INCH WHITE (BROKEN 12-3)	NON-REFLECTIVE	RETROREFLECTIVE				
				LF	EA	SQFT	LF	EA	SQFT	TYPE A	TYPE G	TYPE H	LIMIT LINE						
1	CASTRO VALLEY Blvd UC Ala-238-R14.31	33-0202F	13M	65		25					233				20	5			
			25			233												5	
			27B	233				233											
2	E CONNECTOR SEPARATION Ala-238-14.41	33-0524F	13M	117		45					423			36	9				
			25			423												9	
			27B	423				423											
3	N CONNECTOR SEPARATION Ala-238-R14.49	33-0526G	LIMIT LINE				870											870	
			13M	182		71					671		56	15					
			25			671		15			671							15	
4	ROUTES 238/185 SEPARATION Ala-238-14.93	33-0212R	36A	600							110				7				
			13M	78		30					242		24	6					
			25			242		6			242							6	
			27B	242				242											
5	KENT Ave OH Ala-238-15.41	33-0217L	13M	117		45					414		36	9					
			25			414		9			414							9	
			27B	414				414											
6	KENT Ave OH Ala-238-15.41	33-0217R	13M	104		40					353		32	8					
			25			353		8			353							8	
			27B	353				353											
			37	144		24									24				
7	ASHLAND Ave UC Ala-238-15.67	33-0221	13M	52		20					130		16	4				4	
			25	130		4				130									
			27B		130														
			37	30		6									6				
8	W238-S880 CONNECTOR OC Ala-238-16.03	33-0540G	13M	1040		400					3830		320	80					
			25			3830		80			3830								80
			27B	4550				4550											
SUBTOTAL				9545	6296	842	870	7052	6426	110	6296	162	418	540	173	136	870		
TOTAL				9545	6296	842	870	13478		110	6296	162	418	540	309	136	870		



DETAIL 13M

PAVEMENT DELINEATION QUANTITIES

PDQ-1

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	238	R14.3/16.3	6	17

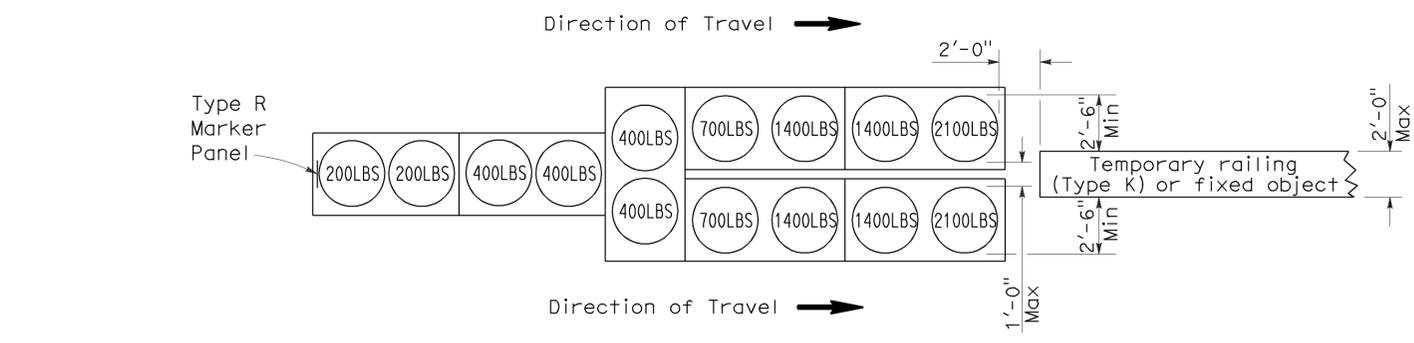
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

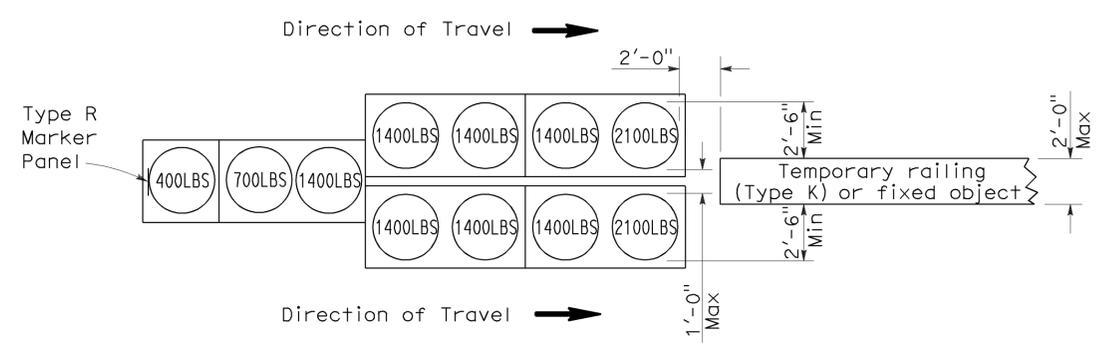
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 2-1-10



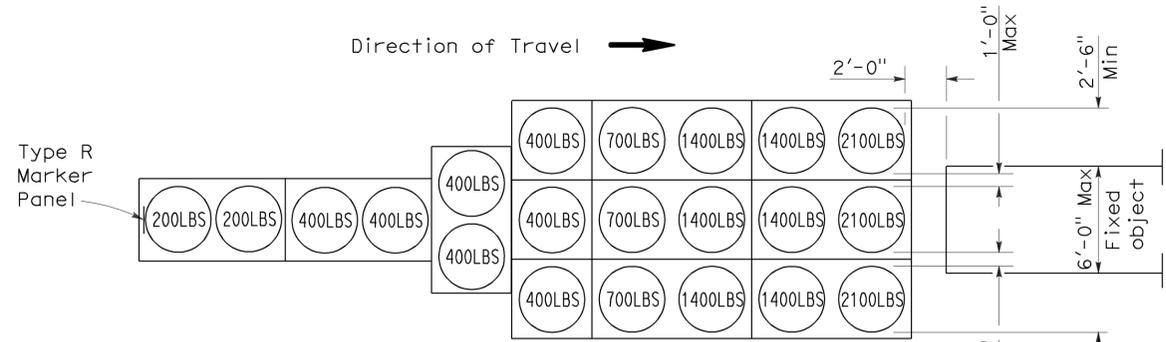
ARRAY 'TU14'

Approach speed 45 mph or more



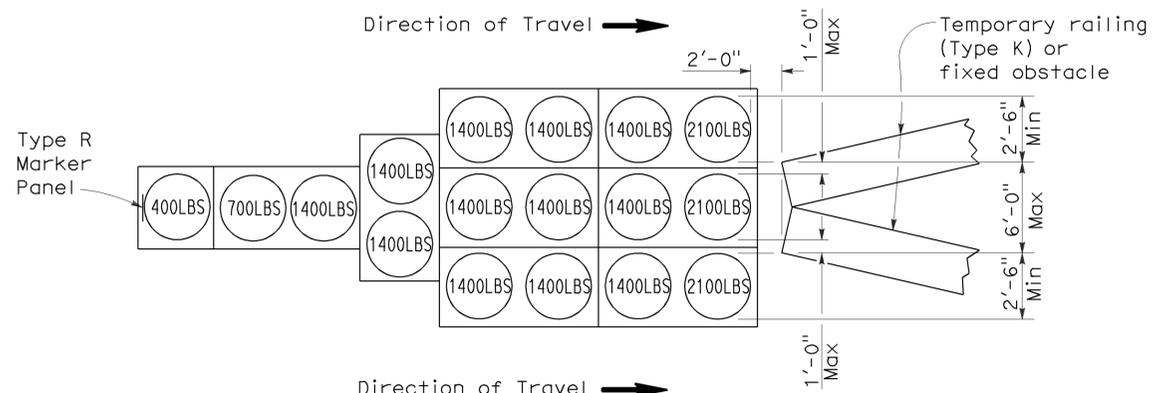
ARRAY 'TU11'

Approach speed less than 45 mph



ARRAY 'TU21'

Approach speed 45 mph or more

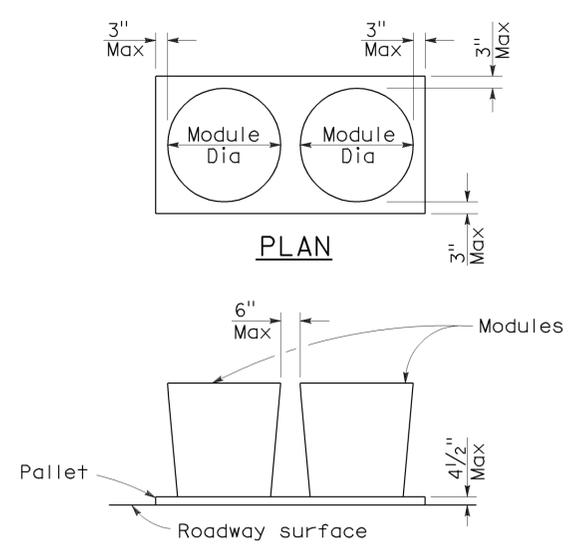


ARRAY 'TU17'

Approach speed less than 45 mph

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.



CRASH CUSHION PALLET DETAIL
See Note 7

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	238	R14.3/16.3	7	17

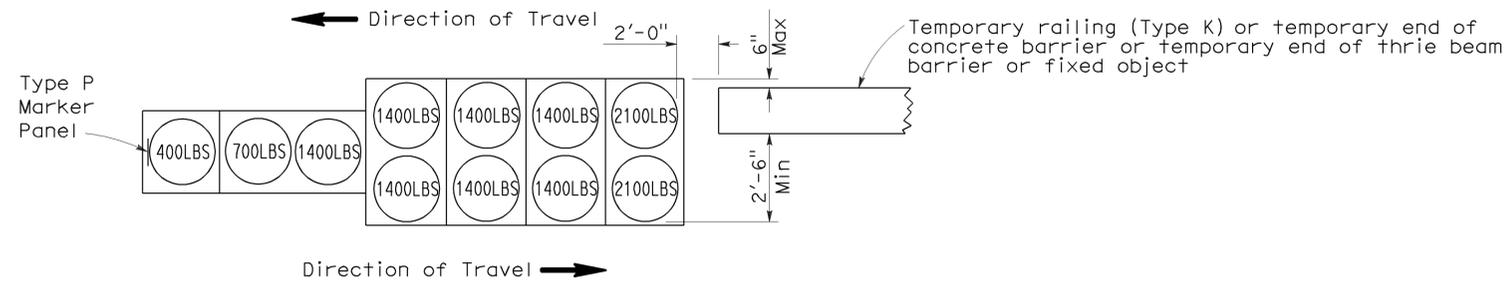
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

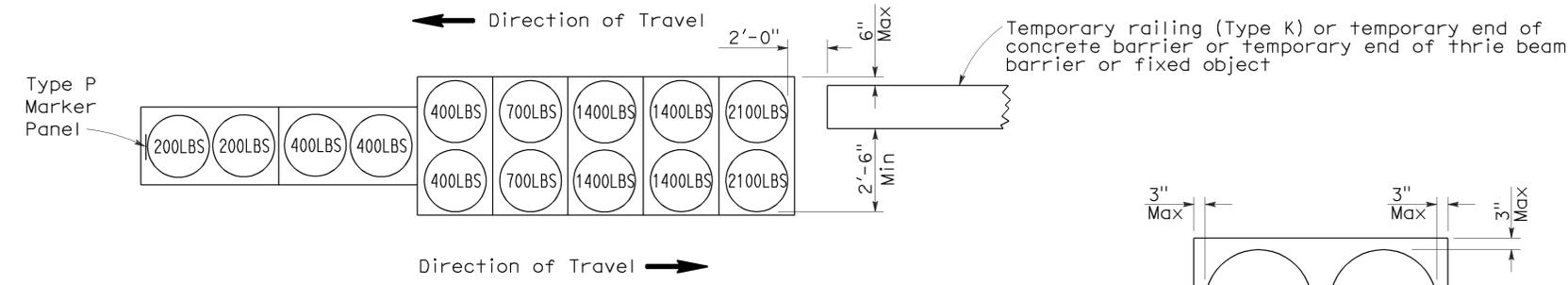
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 2-1-10



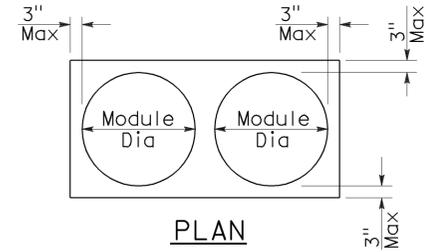
ARRAY 'TB11'

Approach speed less than 45 mph

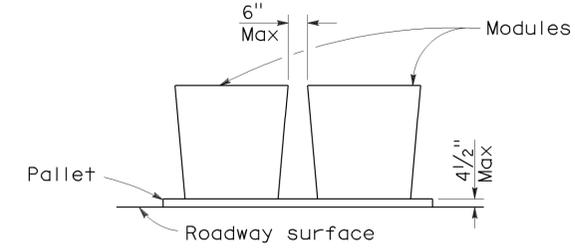


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(BIDIRECTIONAL)**

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	238	R14.3/16.3	8	17

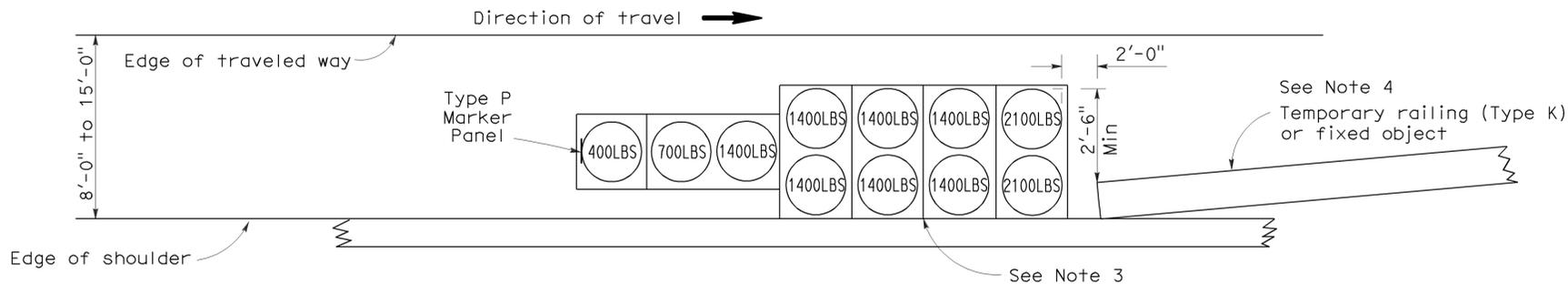
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

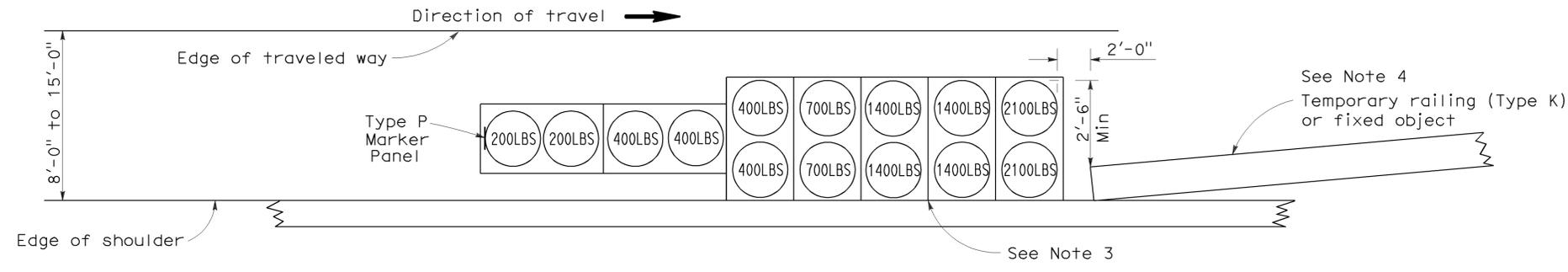
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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To accompany plans dated 2-1-10



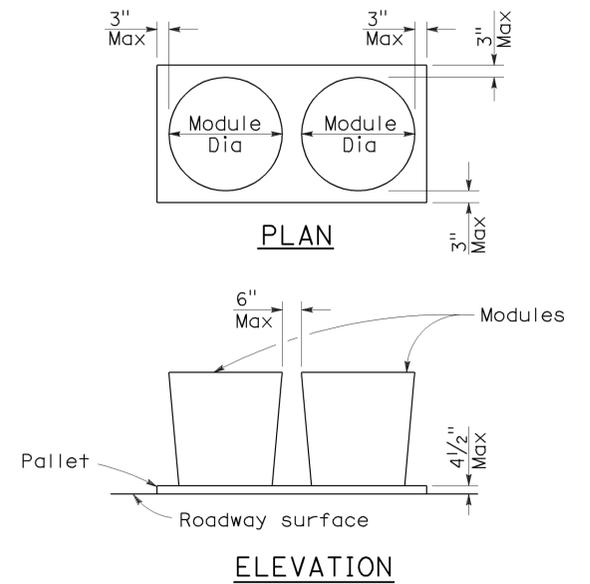
ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



ARRAY 'TS14'
Approach speed 45 mph or more
See Note 9

NOTES:

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.



CRASH CUSHION PALLET DETAIL
See Note 11

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

NO SCALE

RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Alameda	238	R14.3/16.3	9	17

Syed M Kazmi 8/28/09
REGISTERED CIVIL ENGINEER DATE

2-1-10
PLANS APPROVAL DATE

Syed Kazmi
No. 48356
Exp. 6/30/10
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.

URS CORPORATION
1380 LEAD HILL BLVD, SUITE 100
ROSEVILLE, CA 95661-2997

INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN No. 1
2	GENERAL PLAN No. 2
3	GENERAL PLAN No. 3
4	GENERAL PLAN No. 4
5	GENERAL PLAN No. 5
6	DECK REPAIR DETAILS
7	JOINT SEAL DETAILS
8	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
9	JOINT SEALS (MAXIMUM MOVEMENT RATING = 4")

STANDARD PLANS DATED MAY 2006

A10A	ACRONYMS AND ABBREVIATIONS (A-L)
A10B	ACRONYMS AND ABBREVIATIONS (M-Z)

LEGEND:

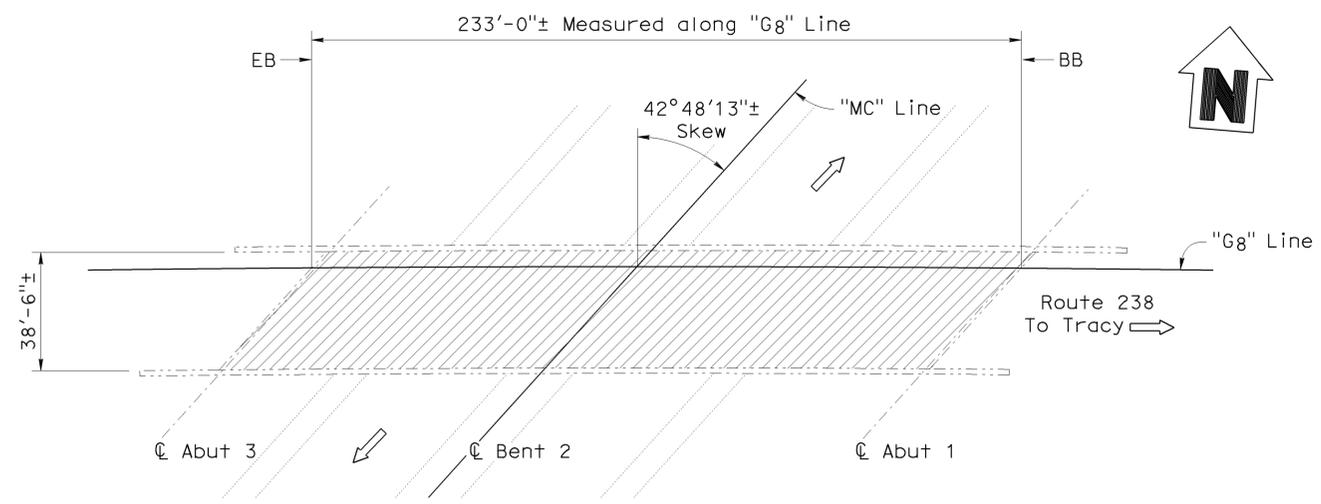
- Indicates existing structure
- ➔ Indicates direction of traffic
- Indicates limits of Remove Unsound Concrete and replace with Rapid Setting Concrete, Clean and Treat Deck with high molecular weight methacrylate. See "Deck Repair Detail" on "Deck Repair Details" sheet.
- Indicates location of existing joint seal assembly removal and placement of new joint seal assembly. For details see "Joint Seal Details" and "Joint Seal Assembly (Maximum Movement rating = 4") sheets.
- ⊖ Indicates bridge location. see "Title" sheet.

GENERAL NOTES

REINFORCED CONCRETE: $f_y = 60$ ksi
 $f'_c = 4$ ksi
 $n = 8$

EAST CONNECTOR SEPARATION (33-0524F) QUANTITIES

REMOVE UNSOUND CONCRETE	41	CF
CLEAN BRIDGE DECK	16,300	SQFT
BRIDGE REMOVAL (PORTION)	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE	8	CY
CLEAN EXPANSION JOINT	78	LF
RAPID SETTING CONCRETE (PATCH)	41	CF
JOINT SEAL ASSEMBLY (MR 2")	78	LF
TREAT BRIDGE DECK	16,300	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	218	GAL

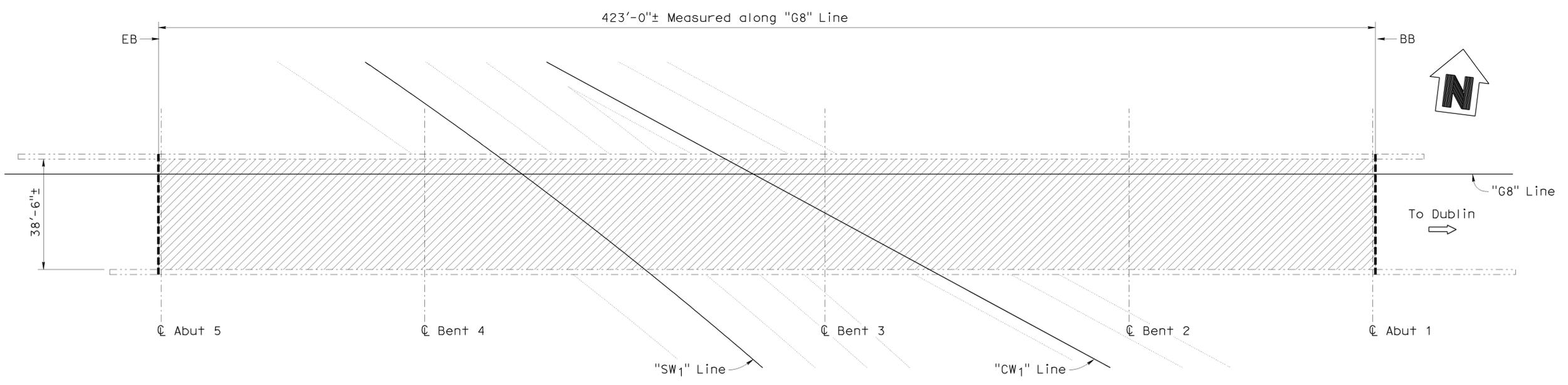


1 CASTRO VALLEY BLVD UC

Br No. 33-0202F, Route 238, PM R14.31
No Scale

CASTRO VALLEY BLVD UC (33-0202F) QUANTITIES

REMOVE UNSOUND CONCRETE	23	CF
CLEAN BRIDGE DECK	9,000	SQFT
RAPID SETTING CONCRETE (PATCH)	23	CF
TREAT BRIDGE DECK	9,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	120	GAL
PUBLIC SAFETY PLAN	LUMP	SUM



2 EAST CONNECTOR SEPARATION

Br No. 33-0524F, Route 238, PM 14.41
No Scale

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

REPLACE JOINT SEAL & TREAT BRIDGE DECKS

Br No. 33-0202F & Br No. 33-0524F
ON ROUTE 238

GENERAL PLAN No. 1

Kenneth R Brown
DESIGN OVERSIGHT
12-14-09
SIGN OFF DATE

DESIGN BY H. Choi	CHECKED D. Anderson	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS BY L. Davis	CHECKED D. Anderson	LAYOUT BY H. Choi	CHECKED D. Anderson
QUANTITIES BY H. Choi	CHECKED D. Anderson	SPECIFICATIONS BY D. Harnagel	PLANS AND SPECS COMPARED S. Kazmi

PREPARED FOR THE
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

Syed Kazmi
PROJECT ENGINEER

BRIDGE No.	Various
POST MILES	Varies

DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 2/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0	1	2	3
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CU 04
EA 0E9901

DISREGARD PRINTS BEARING EARLIER REVISION DATES

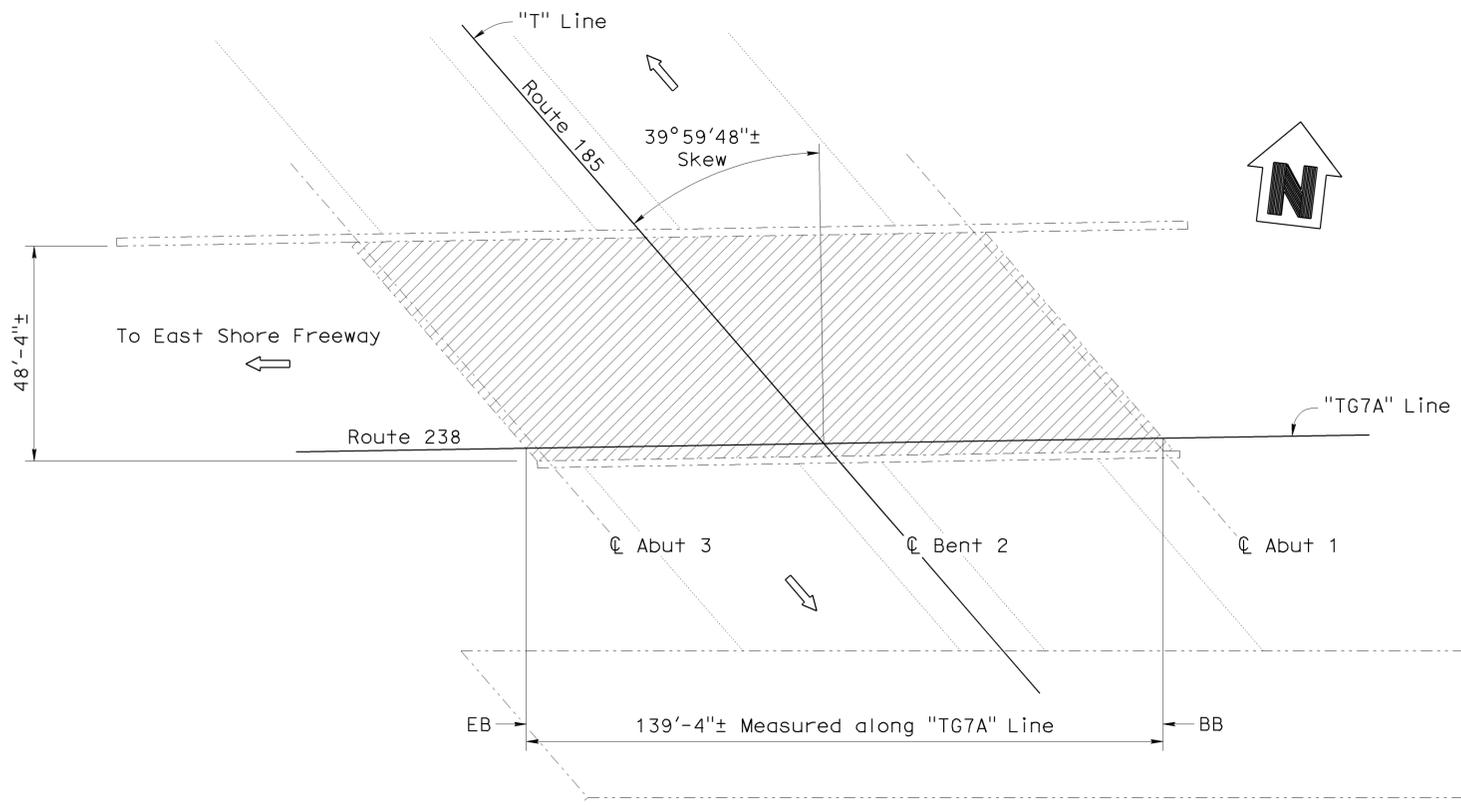
REVISION DATES (PRELIMINARY STAGE ONLY)	3-27-09	5-8-09	6-18-09	8-28-09
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SHEET	OF
1	9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Alameda	238	R14.3/16.3	10	17

Syed M Kazmi
REGISTERED CIVIL ENGINEER DATE 8/28/09
2-1-10
PLANS APPROVAL DATE
Syed Kazmi
No. 48356
Exp. 6/30/10
CIVIL
STATE OF CALIFORNIA

URS CORPORATION
1380 LEAD HILL BLVD, SUITE 100
ROSEVILLE, CA 95661-2997



- LEGEND:**
- Indicates existing structure
 - Indicates direction of traffic
 - ▨ Indicates limits of Remove Unsound Concrete and replace with Rapid Setting Concrete, Clean and Treat Deck with high molecular weight methacrylate. See "Deck Repair Detail" on "Deck Repair Details" sheet.
 - /— Indicates location of existing joint seal removal and placement of new joint seal. For details see "Joint Seal Details" sheet.
 - ① Paint the bridge identification "N238/W580 CONN BR NO 33 0526G PM R14.49 1988" on the first column of bent (approaching bridge) facing traffic
 - ② Paint the bridge identification "N238/W580 CONN BR NO 33 0526G PM R14.49 1988"
 - Indicates bridge location. see "Title" sheet.

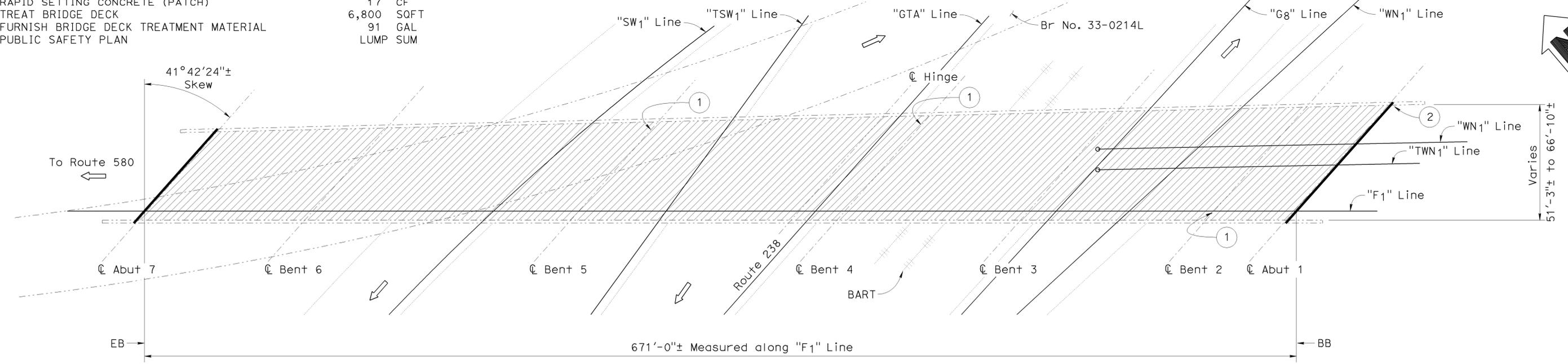
ROUTE 238/185 SEPARATION (33-0212R) QUANTITIES

REMOVE UNSOUND CONCRETE	17	CF
CLEAN BRIDGE DECK	6,800	SQFT
RAPID SETTING CONCRETE (PATCH)	17	CF
TREAT BRIDGE DECK	6,800	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	91	GAL
PUBLIC SAFETY PLAN		LUMP SUM

④ ROUTE 238/185 SEPARATION
Br No. 33-0212R, Route 238, PM 14.93
No Scale

NORTH CONNECTOR SEPARATION (33-0526G) QUANTITIES

REMOVE UNSOUND CONCRETE	100	CF
CLEAN BRIDGE DECK	39,700	SQFT
CLEAN EXPANSION JOINT	161	LF
RAPID SETTING CONCRETE (PATCH)	100	CF
JOINT SEAL (MR 1")	161	LF
TREAT BRIDGE DECK	39,700	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	530	GAL



③ NORTH CONNECTOR SEPARATION
Br No. 33-0526G, Route 238, PM R14.49
No Scale

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

 DESIGN OVERSIGHT 12-14-09 SIGN OFF DATE	DESIGN	BY H. Choi	CHECKED D. Anderson	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION Syed Kazmi PROJECT ENGINEER	BRIDGE NO.	Various	
	DETAILS	BY L. Davis	CHECKED D. Anderson	LAYOUT	BY H. Choi		CHECKED D. Anderson	POST MILES	Varies
	QUANTITIES	BY H. Choi	CHECKED D. Anderson	SPECIFICATIONS	BY D. Harnagel		PLANS AND SPECS COMPARED	S. Kazmi	
	DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 2/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS							CU 04 EA 0E9901	DISREGARD PRINTS BEARING EARLIER REVISION DATES

REPLACE JOINT SEAL & TREAT BRIDGE DECKS
Br No. 33-0526G & Br No. 33-0212R ON ROUTE 238
GENERAL PLAN No. 2

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
3-27-09 5-8-09 6-18-09 8-28-09	2	9

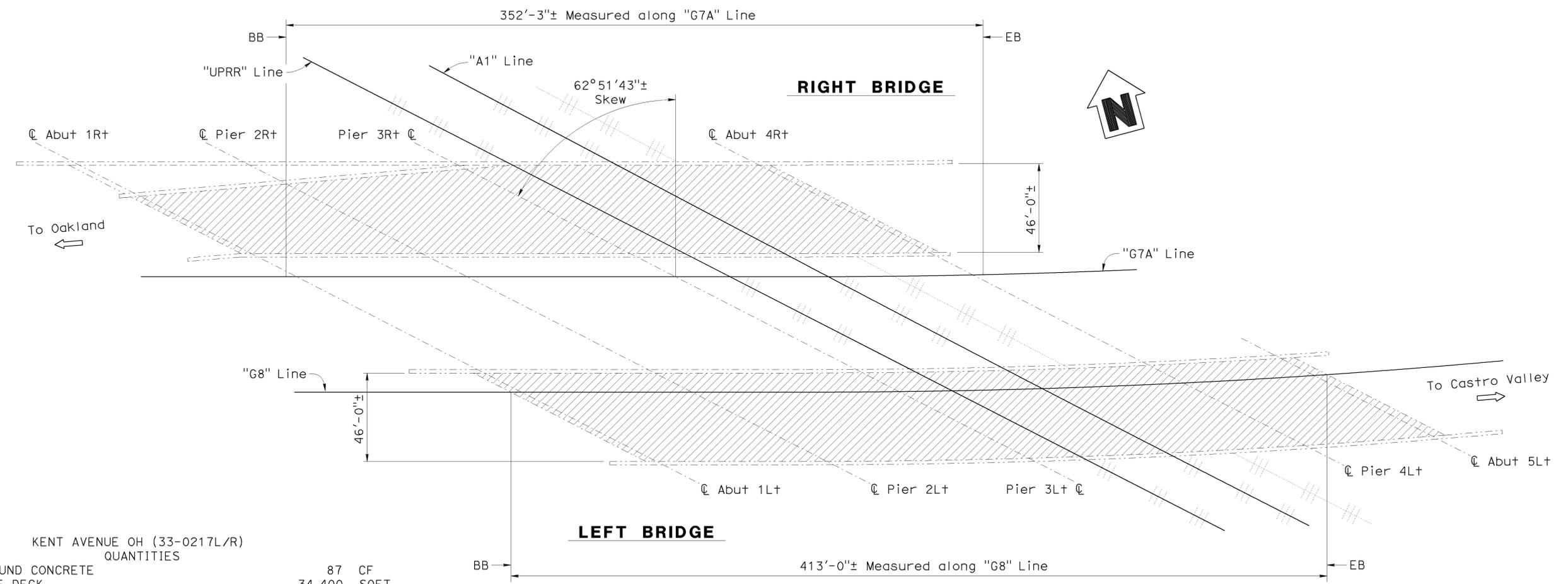
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DATE PLOTTED => 29-JAN-2010
TIME PLOTTED => 14:05

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Alc	238	R14.3/16.3	11	17

Syed M Kazmi
REGISTERED CIVIL ENGINEER DATE 8/28/09
2-1-10
PLANS APPROVAL DATE
No. 48356
Exp. 6/30/10
CIVIL
STATE OF CALIFORNIA

URS CORPORATION
1380 LEAD HILL BLVD, SUITE 100
ROSEVILLE, CA 95661-2997

- LEGEND:**
- Indicates existing structure
 - Indicates direction of traffic
 - ▨ Indicates limits of Remove Unsound Concrete and replace with Rapid Setting Concrete, Clean and Treat Deck with high molecular weight methacrylate. See "Deck Repair Detail" on "Deck Repair Details" sheet.
 - Indicates bridge location. see "Title" sheet.



**KENT AVENUE OH (33-0217L/R)
QUANTITIES**

REMOVE UNSOUND CONCRETE	87	CF
CLEAN BRIDGE DECK	34,400	SQFT
RAPID SETTING CONCRETE (PATCH)	87	CF
TREAT BRIDGE DECK	34,400	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	460	GAL
PUBLIC SAFETY PLAN	LUMP	SUM

5 6 KENT AVENUE OVERHEAD
Br No. 33-0217L/R, Route 238, PM 15.41
No Scale

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

REPLACE JOINT SEAL & TREAT BRIDGE DECKS

Kenneth R Brown
DESIGN OVERSIGHT
12-14-09
SIGN OFF DATE

DESIGN	BY H. Choi	CHECKED D. Anderson	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD
DETAILS	BY L. Davis	CHECKED D. Anderson	LAYOUT	BY H. Choi
QUANTITIES	BY H. Choi	CHECKED D. Anderson	SPECIFICATIONS	BY D. Harnagel

**PREPARED FOR THE
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION**
Syed Kazmi
PROJECT ENGINEER

BRIDGE NO.	Various
POST MILES	Varies
Br No. 33-0217L/R ON ROUTE 238	
GENERAL PLAN No. 3	

DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 2/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

CU 04
EA 0E9901

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET 3 OF 9
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USERNAME => s114592 DATE PLOTTED => 29-JAN-2010 TIME PLOTTED => 14:05

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Ala	238	R14.3/16.3	12	17

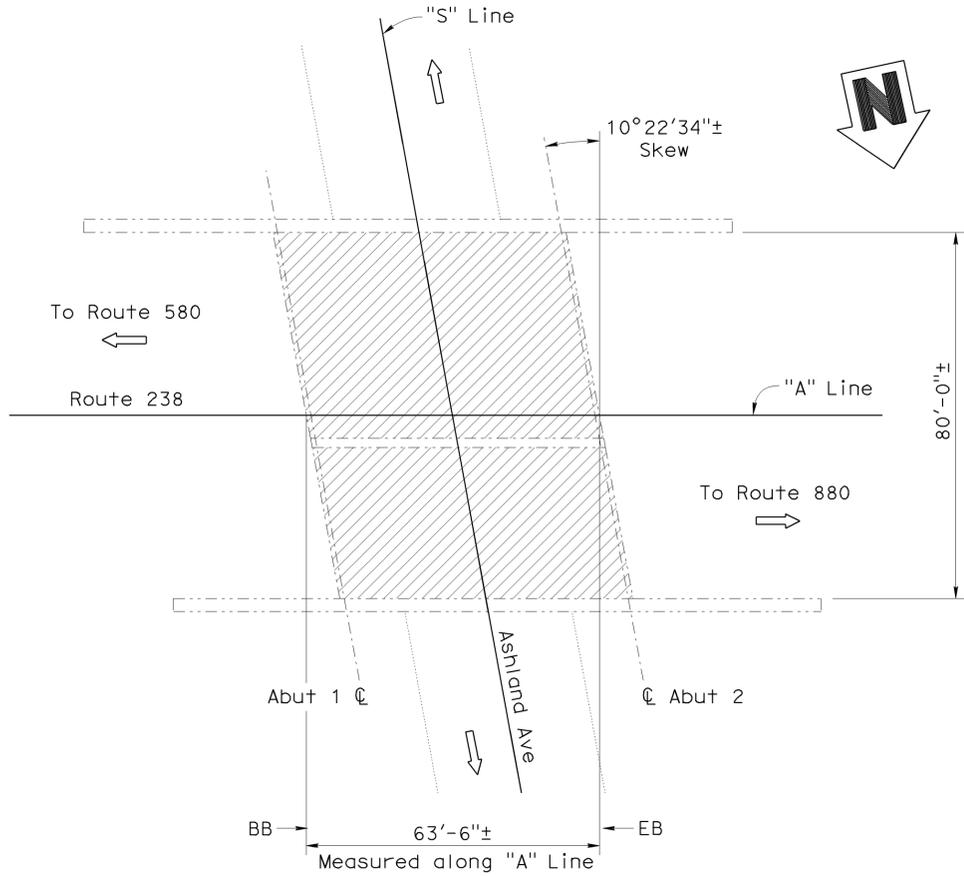
Syed M Kazmi
REGISTERED CIVIL ENGINEER DATE 8/28/09

2-1-10
PLANS APPROVAL DATE

Syed Kazmi
No. 48356
Exp. 6/30/10
CIVIL
STATE OF CALIFORNIA

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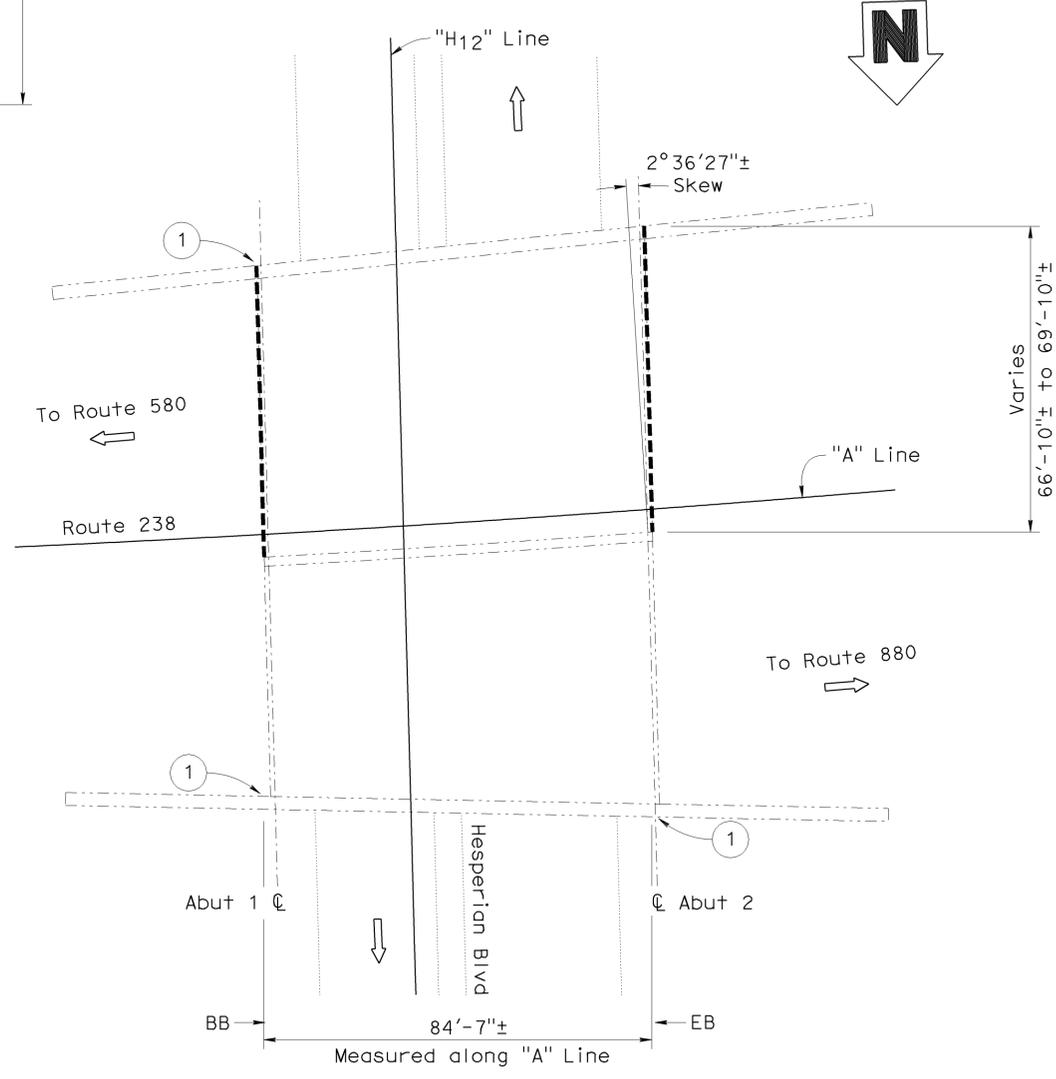
URS CORPORATION
1380 LEAD HILL BLVD, SUITE 100
ROSEVILLE, CA 95661-2997



7 ASHLAND AVENUE UC
Br No. 33-0221, Route 238, PM 15.67
No Scale

ASHLAND AVENUE UC (33-0221)
QUANTITIES

REMOVE UNSOUND CONCRETE	13	CF
CLEAN BRIDGE DECK	5,000	SQFT
RAPID SETTING CONCRETE (PATCH)	13	CF
TREAT BRIDGE DECK	5,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	67	GAL
PUBLIC SAFETY PLAN		LUMP SUM



9 HESPERIAN BLVD UC
Br No. 33-0216, Route 238, PM 16.28
No Scale

HESPERIAN BLVD UC (33-0216)
QUANTITIES

CLEAN EXPANSION JOINT	133	LF
JOINT SEAL (ASPHALTIC PLUG)	133	LF

LEGEND:

- Indicates existing structure
- ➔ Indicates direction of traffic
- ▨ Indicates limits of Remove Unsound Concrete and replace with Rapid Setting Concrete, Clean and Treat Deck with high molecular weight methacrylate. See "Deck Repair Detail" on "Deck Repair Details" sheet.
- - - - - Indicates location of existing joint removal and placement of asphaltic plug joint seals. For details see "Joint Seal Details" sheet.
- ① Paint the bridge identification "HESPERIAN BLVD. UC BR NO 33 0216 PM 16.28"
- Indicates bridge location. see "Title" sheet.

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

 DESIGN OVERSIGHT 12-14-09 SIGN OFF DATE	DESIGN	BY H. Choi	CHECKED D. Anderson	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION Syed Kazmi PROJECT ENGINEER	BRIDGE NO.	REPLACE JOINT SEAL & TREAT BRIDGE DECKS Br No. 33-0221 & Br No. 33-0216 ON ROUTE 238 GENERAL PLAN No. 4	
	DETAILS	BY L. Davis	CHECKED D. Anderson	LAYOUT	BY H. Choi		CHECKED D. Anderson		Various
	QUANTITIES	BY H. Choi	CHECKED D. Anderson	SPECIFICATIONS	BY D. Harnagel		PLANS AND SPECS COMPARED S. Kazmi		Varies

CU 04	EA 0E9901	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET 4	OF 9
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DATE PLOTTED => 29-JAN-2010 14:06
USERNAME => s114592

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Ala	238	R14.3/16.3	13	17

Syed M Kazmi
REGISTERED CIVIL ENGINEER DATE 8/28/09

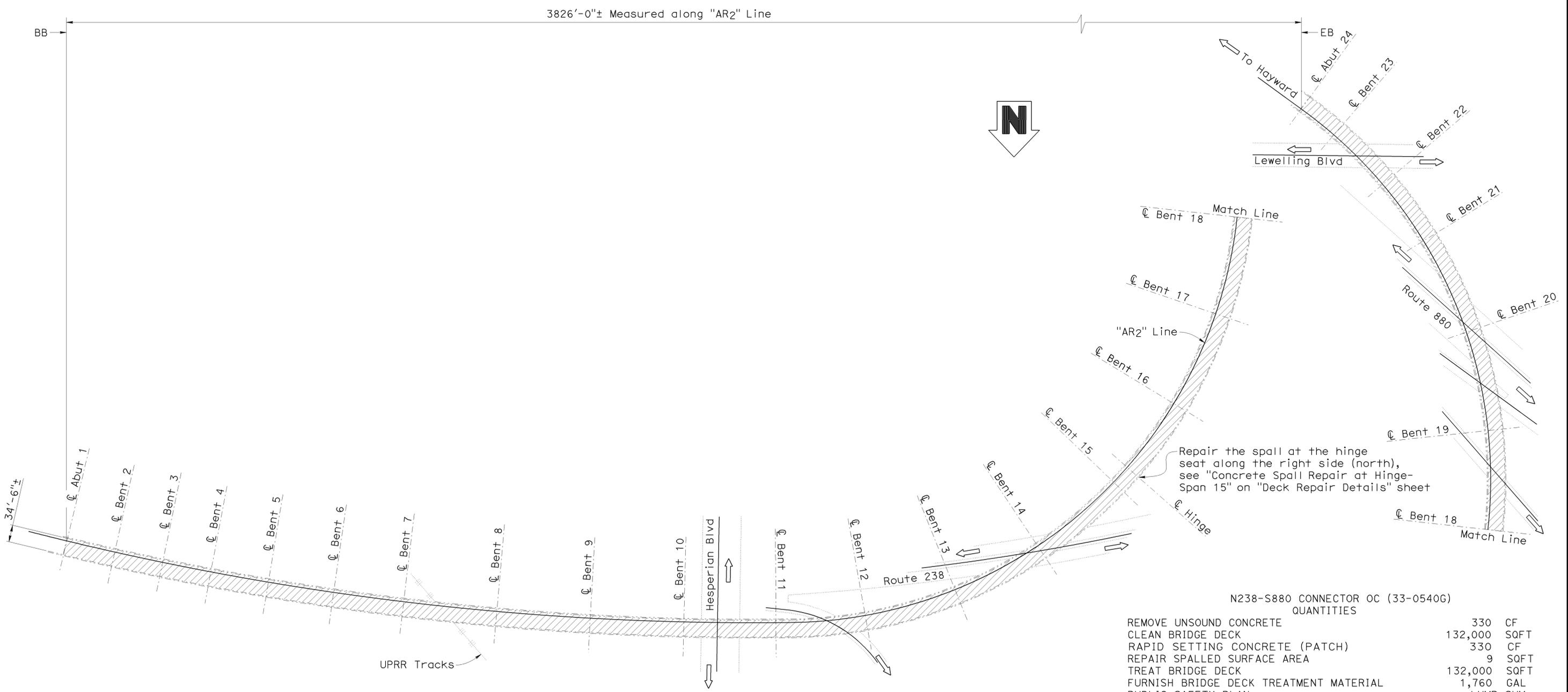
2-1-10
PLANS APPROVAL DATE

Syed Kazmi
No. 48356
Exp. 5/30/10
CIVIL
STATE OF CALIFORNIA

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URS CORPORATION
1380 LEAD HILL BLVD, SUITE 100
ROSEVILLE, CA 95661-2997

- LEGEND:**
- Indicates existing structure
 - ➔ Indicates direction of traffic
 - ▨ Indicates limits of Remove Unsound Concrete and replace with Rapid Setting Concrete, Clean and Treat Deck with high molecular weight methacrylate. See "Deck Repair Detail" on "Deck Repair Details" sheet.
 - Indicates bridge location. see "Title" sheet.



N238-S880 CONNECTOR OC (33-0540G)
QUANTITIES

REMOVE UNSOUND CONCRETE	330	CF
CLEAN BRIDGE DECK	132,000	SQFT
RAPID SETTING CONCRETE (PATCH)	330	CF
REPAIR SPALLED SURFACE AREA	9	SQFT
TREAT BRIDGE DECK	132,000	SQFT
FURNISH BRIDGE DECK TREATMENT MATERIAL	1,760	GAL
PUBLIC SAFETY PLAN		LUMP SUM

8 N238-S880 CONNECTOR OC
Br No. 33-0540G, Route 238, PM 16.03
No Scale

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

DESIGN OVERSIGHT Kenneth R Brown 12-14-09 SIGN OFF DATE	DESIGN BY H. Choi	CHECKED D. Anderson	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. Various	
	DETAILS BY L. Davis	CHECKED D. Anderson	LAYOUT BY H. Choi	CHECKED D. Anderson		PROJECT ENGINEER Syed Kazmi	POST MILES Varies
	QUANTITIES BY H. Choi	CHECKED D. Anderson	SPECIFICATIONS BY D. Harnagel	PLANS AND SPECS COMPARED S. Kazmi		PROJECT ENGINEER Syed Kazmi	

REPLACE JOINT SEAL & TREAT BRIDGE DECKS

Br No. 33-0540G ON ROUTE 238

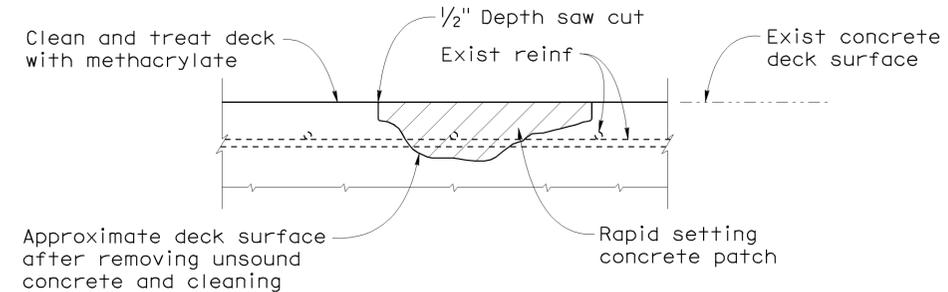
GENERAL PLAN No. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Ala	238	R14.3/16.3	14	17

Syed M Kazmi
REGISTERED CIVIL ENGINEER DATE 8/28/09
2-1-10
PLANS APPROVAL DATE
No. 48356
Exp. 6/30/10
CIVIL
STATE OF CALIFORNIA

URS CORPORATION
1380 LEAD HILL BLVD, SUITE 100
ROSEVILLE, CA 95661-2997

DECK REPAIR TABLE						
INDEX	BRIDGE NUMBER	TOTAL DECK AREA (SQ FT)	APPROX AREA DAMAGED (percent)	APPROX DEPTH DAMAGED (inches)	REMOVE UNSOUND CONCRETE (CF)	RAPID SETTING CONCRETE PATCH (CF)
①	33-0202F	9,000	1	3	23	23
②	33-0524F	16,300	1	3	41	41
③	33-0526G	39,700	1	3	100	100
④	33-0212R	6,800	1	3	17	17
⑤	33-0217L	19,000	1	3	48	48
⑥	33-0217R	15,400	1	3	39	39
⑦	33-0221	5,000	1	3	13	13
⑧	33-0540G	132,000	1	3	330	330



DECK REPAIR DETAIL

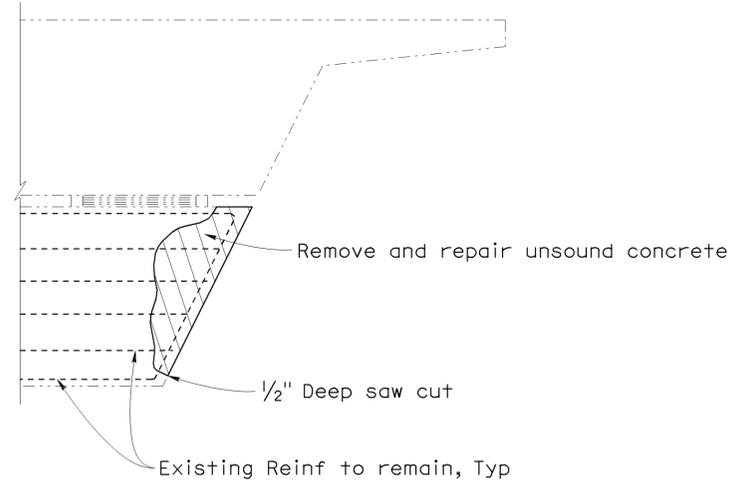
No Scale
Locations to be determined by the Engineer. Reinforcement may be encountered during deck concrete removal. Also see "DECK REPAIR TABLE".

DECK REPAIR NOTES:

1. When existing transverse reinforcement is exposed in the deck surface, saw cutting shall be waived with the approval of the Engineer.

LEGEND:

- - - - - Indicates existing structure
- ⊖ Indicates bridge location, see "Title" sheet.



CONCRETE SPALL REPAIR AT HINGE-SPAN 15

No Scale

CONCRETE SPALL NOTES:

1. Limits of removal dimensions to be determined by the Engineer.
2. Depth of removal shall extend 1 inch Min beyond existing Reinf.
3. Existing Reinf encountered during construction removal to remain in place.

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

Kenneth R Brown
DESIGN OVERSIGHT
12-14-09
SIGN OFF DATE

DESIGN	BY H. Choi	CHECKED D. Anderson
DETAILS	BY L. Davis	CHECKED D. Anderson
QUANTITIES	BY H. Choi	CHECKED D. Anderson

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		Syed Kazmi PROJECT ENGINEER
--	--	--------------------------------

BRIDGE NO.	Various
POST MILES	Varies

REPLACE JOINT SEAL & TREAT BRIDGE DECKS

ROUTE 238 BRIDGES	
DECK REPAIR DETAILS	

DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 2/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

CU 04
EA 0E9901

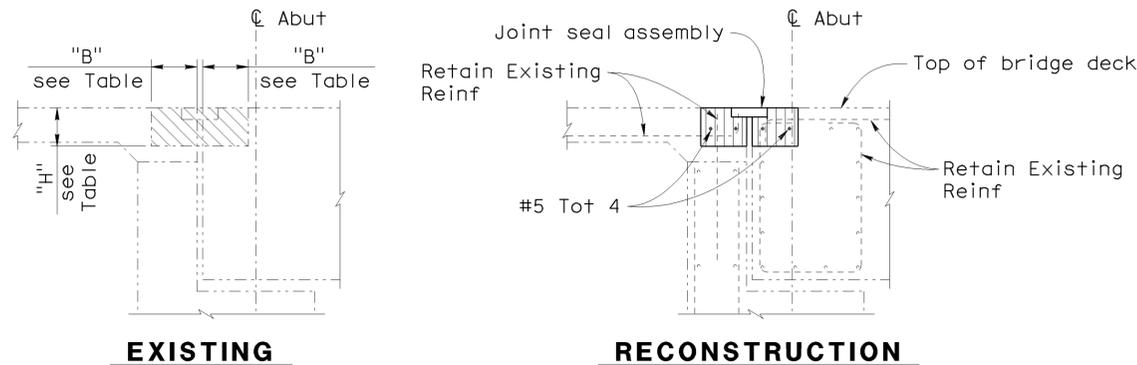
DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)				SHEET	OF
3-27-09	5-8-09	6-18-09	8-28-09	6	9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Ala	238	R14.3/16.3	15	17
Syed M Kazmi REGISTERED CIVIL ENGINEER		11/15/09 DATE			
2-1-10 PLANS APPROVAL DATE					
URS CORPORATION 1380 LEAD HILL BLVD, SUITE 100 ROSEVILLE, CA 95661-2997					

INDEX	BRIDGE NUMBER	LOCATION	"MR" * (inches)	APPROX LENGTH (feet)	EXISTING WATERSTOP OR NEOPRENE STRIP	APPROX DEPTH TO CLEAN EXPANSION JOINT (inches)
②	33-0524F	Abutment 1	2	39	No	Reconstruct
		Abutment 5	2	39	No	Reconstruct
③	33-0526G	Abutment 1	1	91	Yes	15
		Abutment 7	1	70	Yes	15
⑨	33-0216	Abutment 1	1/2	68	No	12
		Abutment 2	1/2	65	No	12

* Movement Rating (MR) calculations only consider temperature movement.



JOINT SEAL ASSEMBLY REPLACEMENT

No Scale

INDEX	BRIDGE NUMBER	LOCATION	"B"	"H"
②	33-0524F	Abutment 1	1'-5"	1'-0"
		Abutment 5	1'-5"	1'-0"

The following notes apply to JOINT SEAL TYPE A:

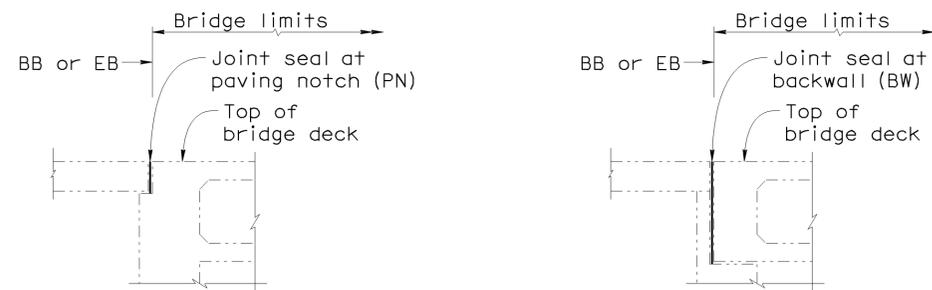
- 1) Install Type A joint seal 3" up into curb or rail on the low side of the deck where joint matches curb or rail joint. For details not shown see "Joint Seals (Maximum Movement Rating = 2")" sheet.
- 2) The replacement joint seal shall be the same type as the existing joint seal.

The following notes apply to JOINT SEAL TYPE B:

- 1) Joint seal must satisfy both minimum Movement Rating (MR) and minimum W1 requirements.
- 2) Minimum W1 is the calculated maximum width of the joint based on field measurements. After the joints have been cleaned, minimum W1 is to be calculated by the Engineer.
- 3) W1 shall be the smaller of the values determined as follows:
 - A) 0.85 times the manufacturer's designed minimum uncompressed width of the seal.
 - B) The width of the seal on the third successive test cycle of the pressure deflection test, when compressed to an average pressure of 3 psi.
- 4) Bend Type B joint seal 6" up into curb or rail on the low side of the deck where deck joint matches curb or rail joint.
- 5) For details not shown see "Joint Seals (Maximum Movement Rating = 2")" sheet.
- 6) The replacement joint seal shall be the same type as the existing joint seal.

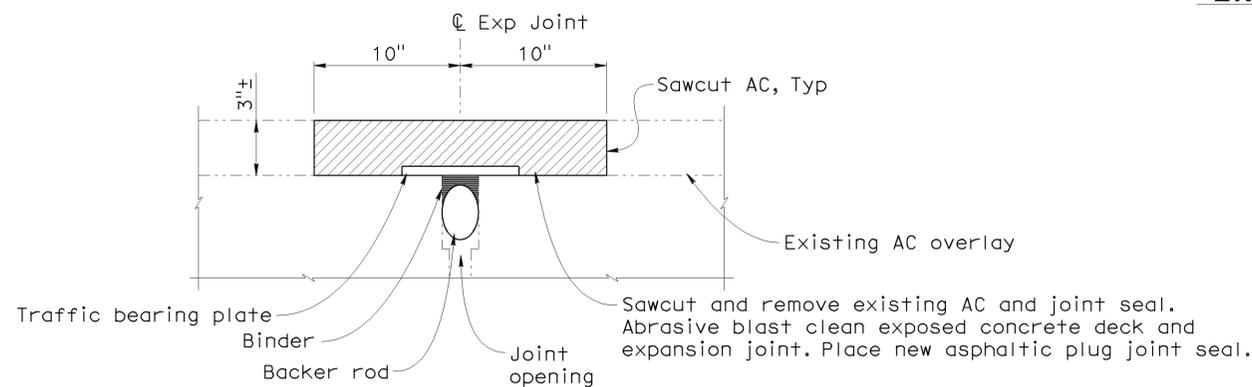
LEGEND:

- Indicates existing structure
- ⊖ Indicates bridge location. see "Title" sheet.
- BW Backwall
- PN Paving Notch
- Indicates Existing Joint Seal Assembly Removal
- Indicates Reconstruction of Joint Seal Assembly
- Indicates Asphaltic Plug



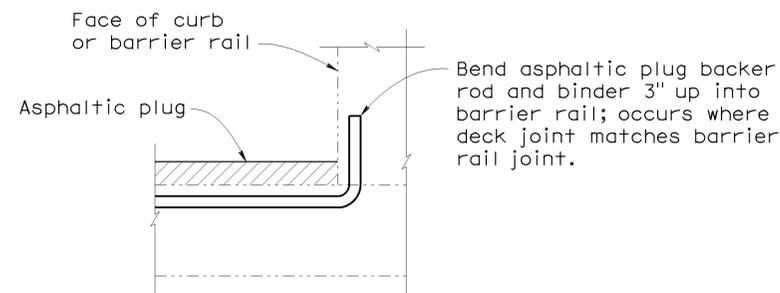
JOINT SEAL LOCATION

No Scale



ASPHALTIC PLUG JOINT SEAL DETAIL - ABUTMENT

No Scale



ASPHALTIC PLUG DETAIL - BARRIER RAIL

No Scale

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

DESIGN OVERSIGHT

 12-14-09
 SIGN OFF DATE

DESIGN	BY H. Choi	CHECKED D. Anderson
DETAILS	BY L. Davis	CHECKED D. Anderson
QUANTITIES	BY H. Choi	CHECKED D. Anderson

PREPARED FOR THE
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

Syed Kazmi
 PROJECT ENGINEER

BRIDGE NO.	Various
POST MILES	Varies

REPLACE JOINT SEAL & TREAT BRIDGE DECKS

ROUTE 238 BRIDGES
JOINT SEAL DETAILS

DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 2/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



CU 04
 EA 0E9901

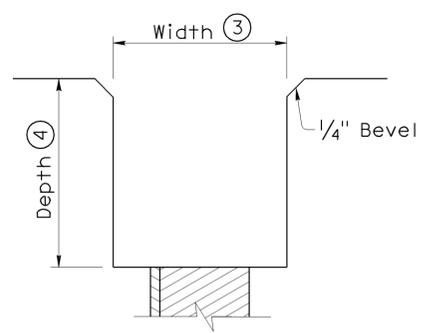
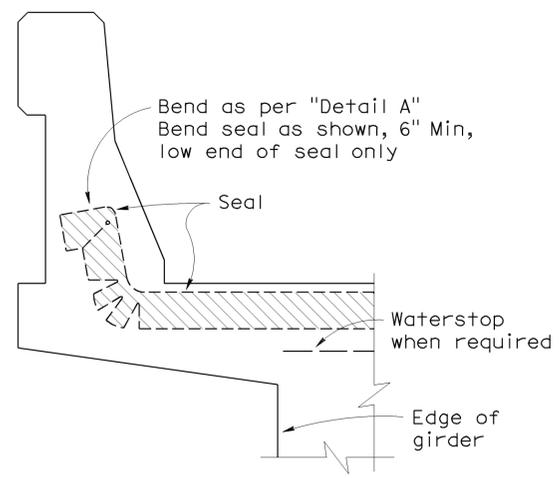
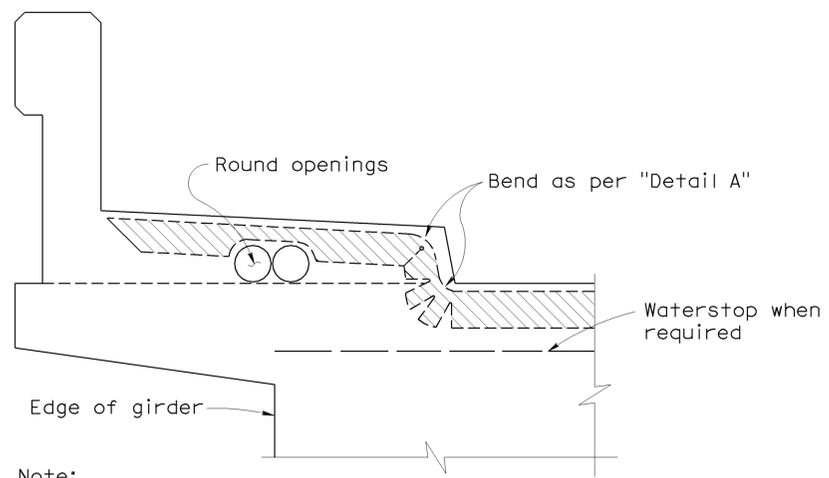
DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)

3-27-09	5-4-09	6-18-09	8-28-09	11-15-09					

SHEET 7 OF 9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Ala	238	R14.3/16.3	16	17
Syed M Kazmi REGISTERED CIVIL ENGINEER DATE 8/28/09					
2-1-10 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.					
URS CORPORATION 1380 LEAD HILL BLVD, SUITE 100 ROSEVILLE, CA 95661-2997					



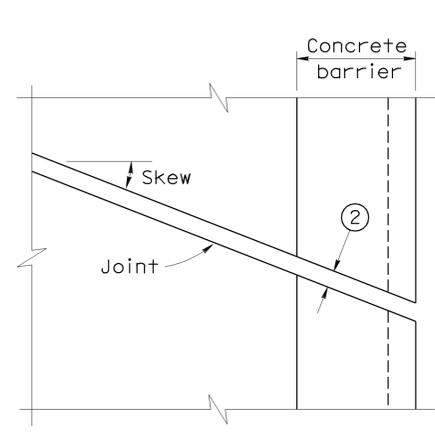
SAWCUT DETAIL

Note:
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

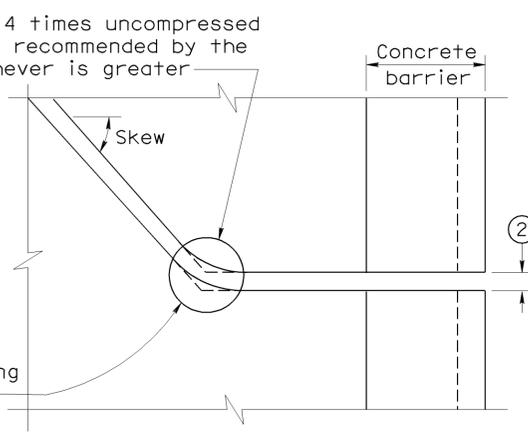
CONCRETE BARRIER AND SIDEWALK

CONCRETE BARRIER

JOINT SEALS DETAILS



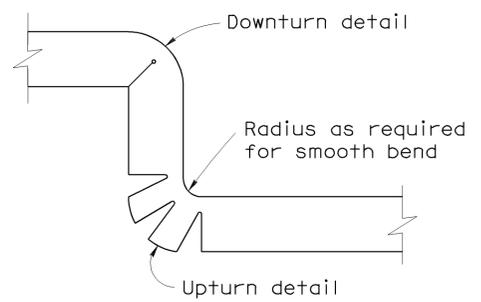
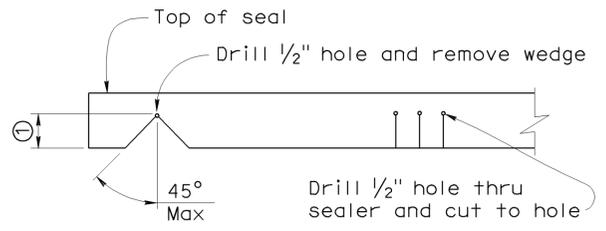
Min ϕ radius to be 4 times uncompressed width of seal or as recommended by the manufacturer, whichever is greater



In lieu of saw cutting, this area may be blocked out and reconstructed to match saw cutting on both sides.

PLAN OF JOINT (SKEW \leq 20°)

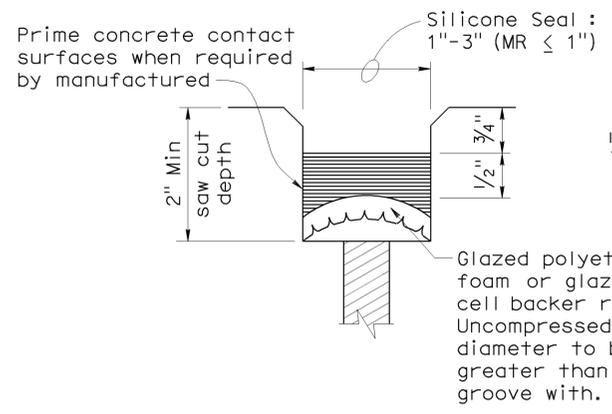
PLAN OF JOINT (SKEW $>$ 20°)



DETAIL A

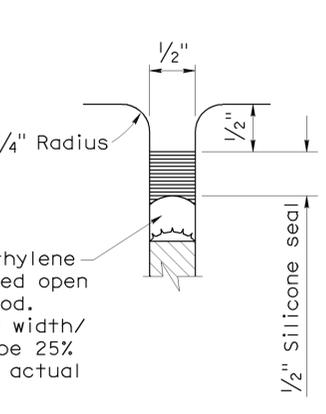
NOTES:

- ① Make smooth cuts from the bottom of seal to 1 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
- ② Opening in barrier to match width of sawn deck joint.
- ③ Sawcut groove widths shall be as ordered by the Engineer.
- ④ Depth of sawcut: Type A - Depth to be 2" minimum. Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W2) plus dimensions shown.
- ⑤ Other depths must be approved by the Engineer.



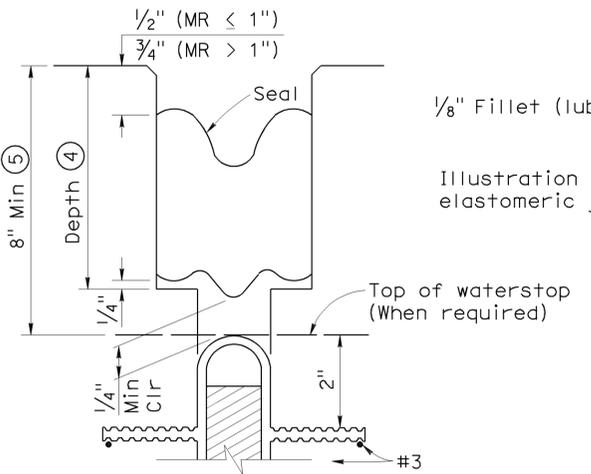
TYPE A SEAL

Movement rating : Silicone = 1" Max

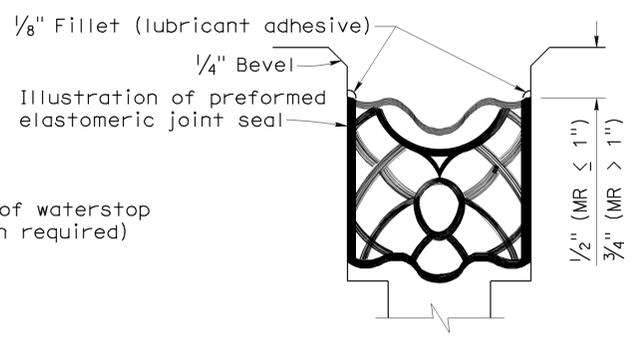


TYPE AL SEAL

Longitudinal joints only



TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W2)



TYPE B SEAL

Movement Rating \leq 2"

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

DESIGN OVERSIGHT	<i>Kenneth R Brown</i>
SIGN OFF DATE	12-14-09

DESIGN	BY H. Choi	CHECKED D. Anderson
DETAILS	BY L. Davis	CHECKED D. Anderson
QUANTITIES	BY H. Choi	CHECKED D. Anderson

PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	Syed Kazmi PROJECT ENGINEER
---	--------------------------------

BRIDGE NO.	Various
POST MILES	Varies
CU 04 EA 0E9901	

REPLACE JOINT SEAL & TREAT BRIDGE DECKS	
ROUTE 238 BRIDGES	
JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")	
REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET 8 OF 9

USERNAME => s114592 DATE PLOTTED => 29-JAN-2010 TIME PLOTTED => 14:08

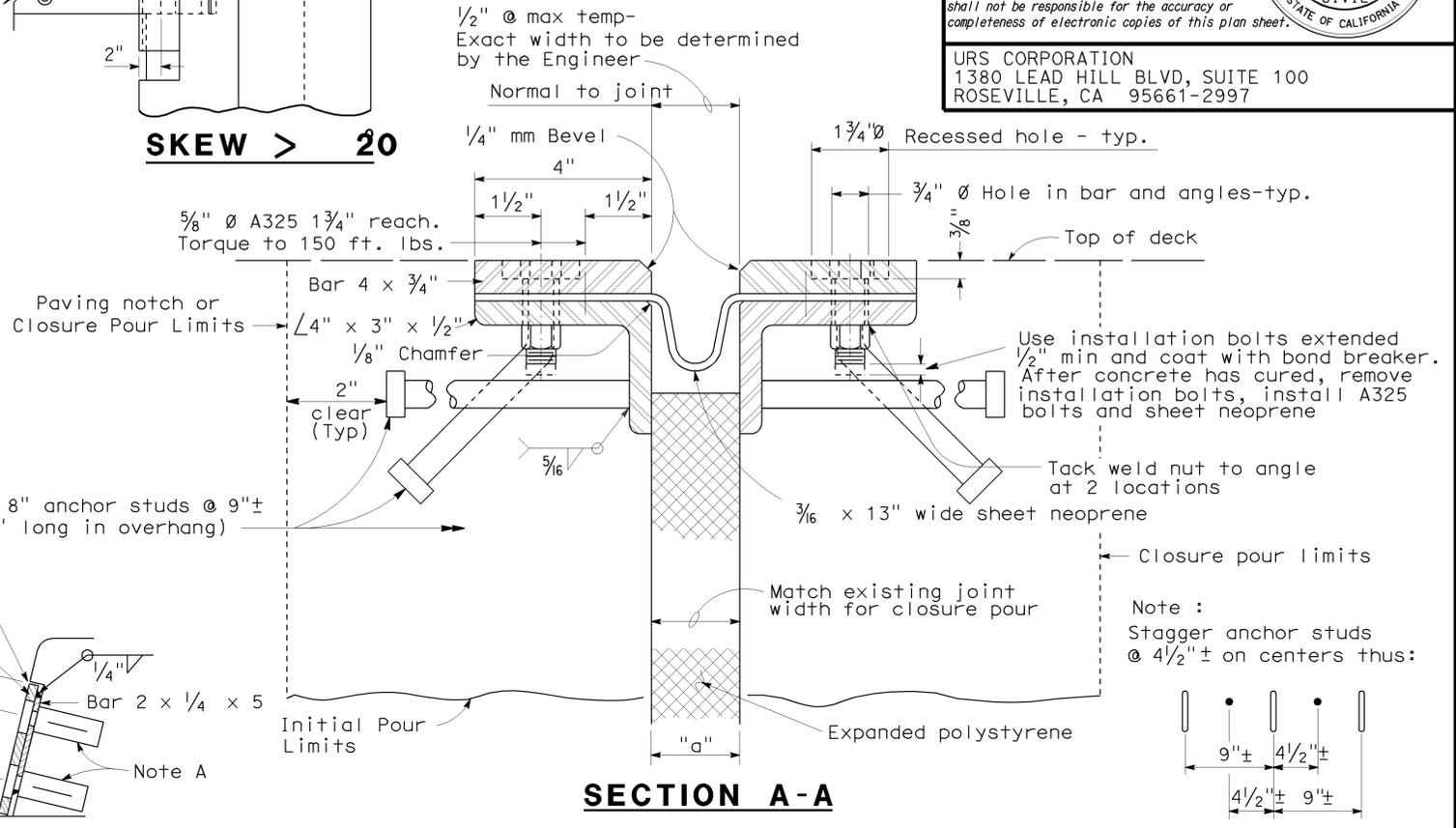
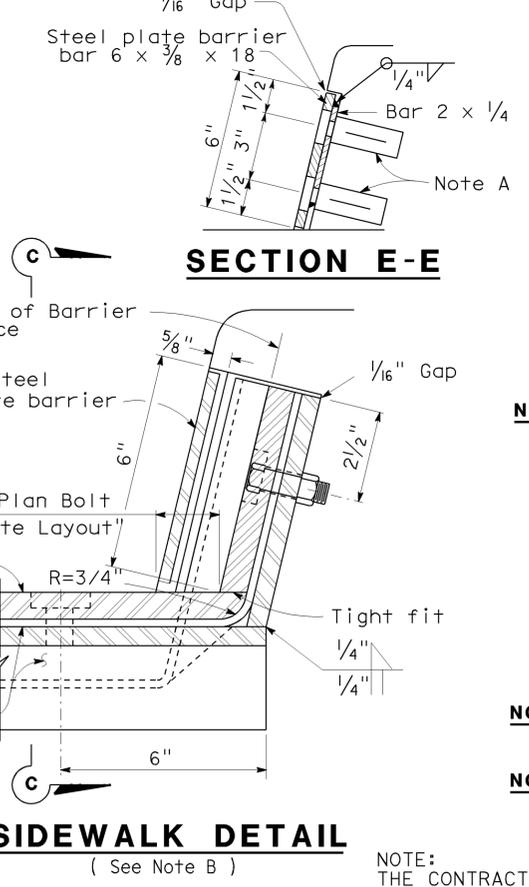
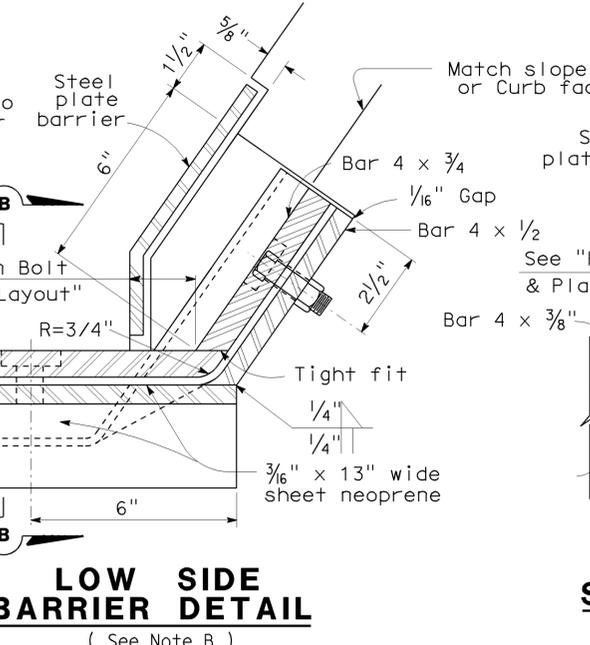
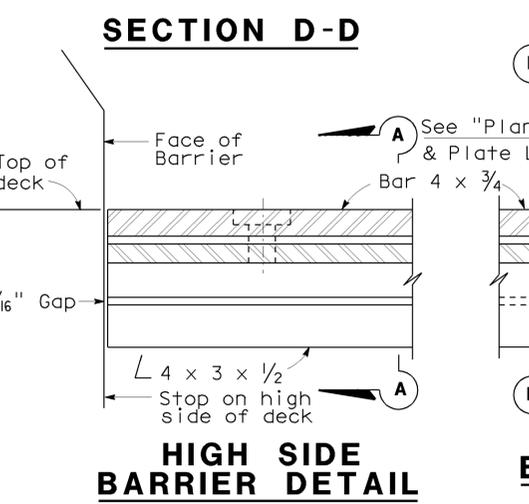
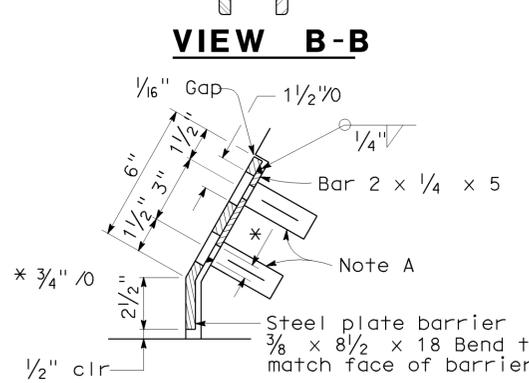
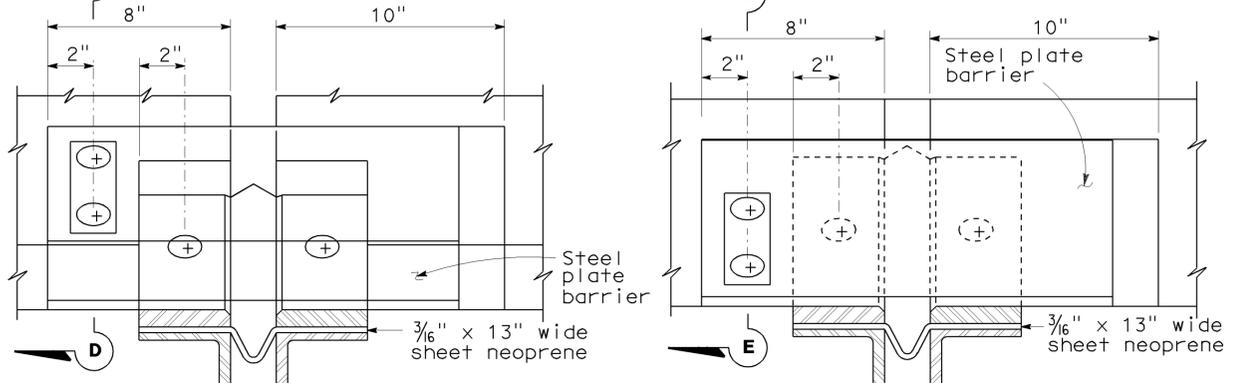
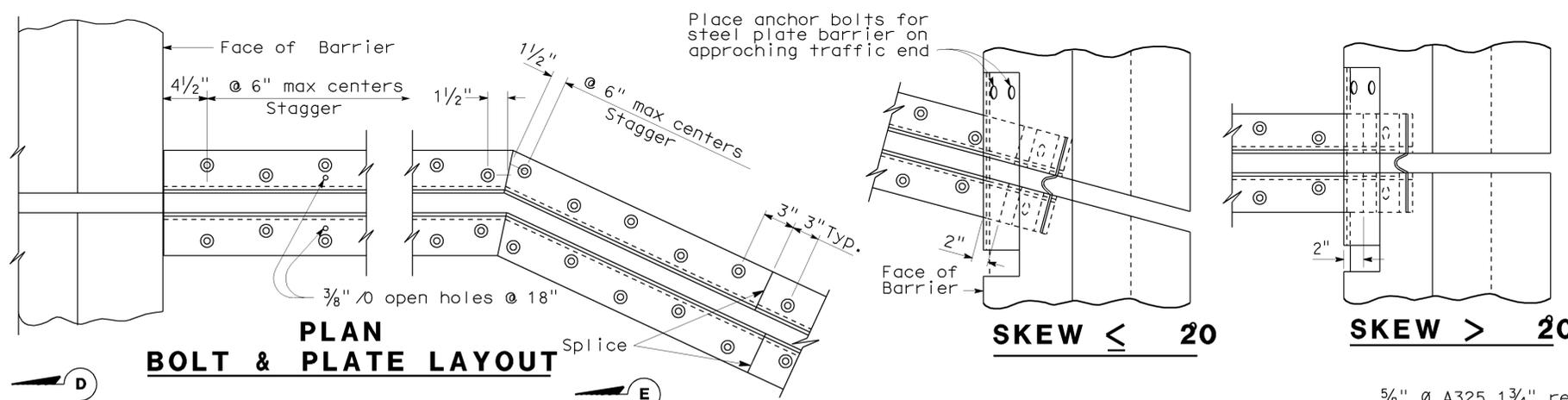
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
04	Ala	238	R14.3/16.3	17	17

Syed M Kazmi
REGISTERED CIVIL ENGINEER DATE 8/28/09

2-1-10
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.

URS CORPORATION
1380 LEAD HILL BLVD, SUITE 100
ROSEVILLE, CA 95661-2997



JOINT INFORMATION

INDEX	BRIDGE NUMBER	LOCATION	MOVEMENT RATING "MR"	SKEW
①				
②	33-0524F	Abutment 1	2	0°
		Abutment 5	2	0°

Note: Movement Rating (MR) calculations only consider temperature movement.

LEGEND:

① - Indicates bridge location, see "Title" sheet.

NOTES:

Full penetration butt welds may be substituted for fillet welds on all anchor studs. Alternate types of anchor studs may be permitted subject to the approval by the Engineer. Joint seal assembly to be used in conjunction with closure pour. (See other sheets for limits). Closure pour shall not be placed until final deck surface is within the tolerances specified.

Use joint at crown of roadway, at any change in traverse slope in deck and at changes in horizontal direction. Place other joints at or near lanes. All metal parts to be painted or galvanized after fabrication.

Sheet neoprene shall be fabricated in one continuous piece or joints shall be vulcanized. Neoprene shall be fabricated to bend around corners. 1" holes in neoprene sheets shall be drilled or punched so that the neoprene is not distorted at the time of installation.

NOTE A
Insert assembly or expansion anchorage for 5/8" x 1 3/4" A325 bolt.

NOTE B
Use the sidewalk Detail at all sidewalk joints. Use the Barrier Detail at both sides if the roadway is crowned or if the difference in elevation between the ends of the seal is 0.5' or less.

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

REPLACE JOINT SEAL & TREAT BRIDGE DECKS

STANDARD DRAWING

FILE NO. xs8-010e	APPROVED BY T. DELIS RESPONSIBLE TECHNICAL SPECIALIST	RELEASED BY ROBERTO LACALLE RESPONSIBLE OFFICE CHIEF
APPROVAL DATE 5-8-08	RELEASE DATE 5-8-08	

① Revised table and added legend

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. Various	ROUTE 238 BRIDGES
POST MILES Varies	JOINT SEALS (MAXIMUM MOVEMENT RATING = 4")