Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	1	20

ACSTP-P187(003)E

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

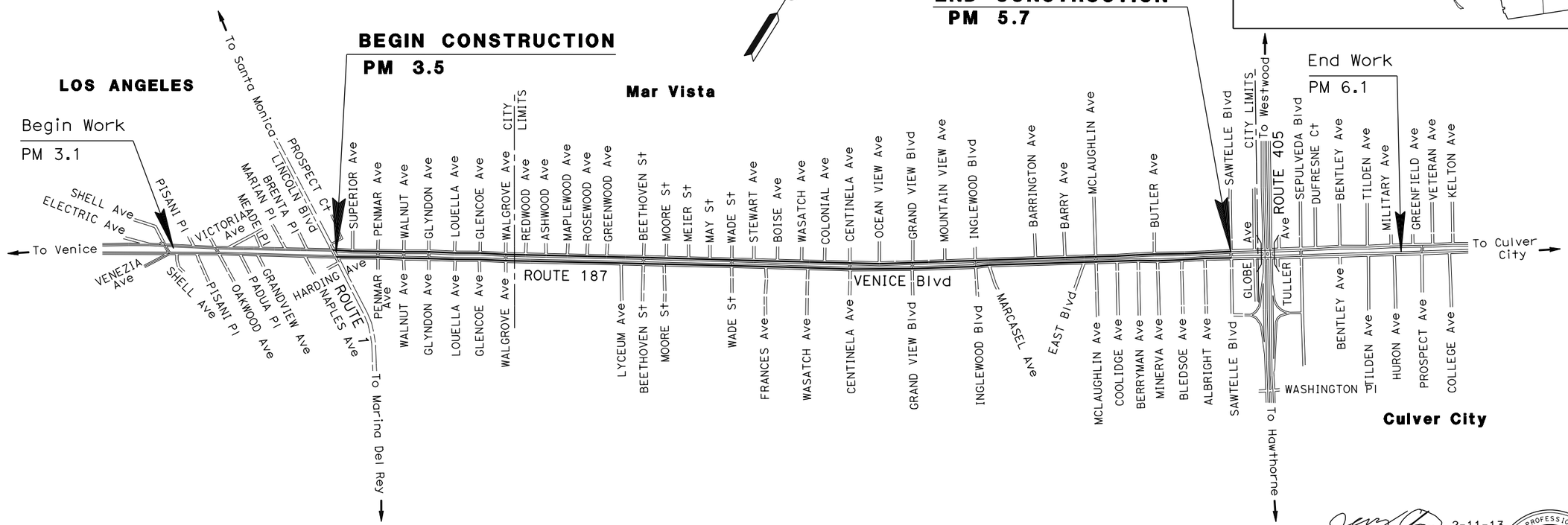
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN LOS ANGELES COUNTY
IN MAR VISTA AND LOS ANGELES
FROM LINCOLN BOULEVARD TO SAWTELLE BOULEVARD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTION
3-11	CONSTRUCTION DETAILS
12	CONSTRUCTION AREA SIGNS
13-14	PAVEMENT DELINEATION QUANTITIES
15	SUMMARY OF QUANTITIES
16	ELECTRICAL PLANS
17	TRAFFIC CONTROL SYSTEM
18-20	REVISED STANDARD PLANS

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



NO SCALE

PROJECT MANAGER	GARY KEVORKIAN
DESIGN ENGINEER	JERRY CHEN

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

PROJECT ENGINEER REGISTERED CIVIL ENGINEER — DATE 2-11-13

REGISTERED PROFESSIONAL ENGINEER — JERRY CHEN — No. C65548 — Exp. 9-30-13 — CIVIL — STATE OF CALIFORNIA

February 25, 2013
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.

CONTRACT No.	07-1W4904
PROJECT ID	0712000298

LAST REVISION 02-14-13 — DATE PLOTTED => 28-FEB-2013 — TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	2	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

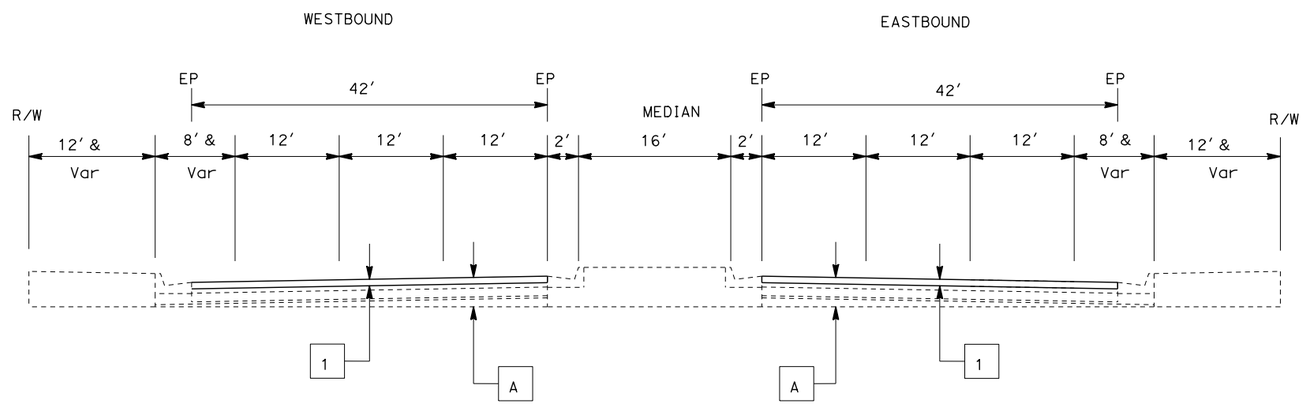
NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION SHOWN OR AS DIRECTED BY THE ENGINEER.
3. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
4. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
5. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
6. OMIT RUBBERIZED HOT MIX ASPHALT (GAP GRADED-WMA) ON BRIDGE DECKS, PCC PAVEMENT, MANHOLES AND GUTTERS.

1 — 0.1′ COLD PLANE ASPHALT CONCRETE PAVEMENT
0.1′ RUBBERIZED HOT MIX ASPHALT (GAP GRADED-WMA)

EXISTING STRUCTURAL PAVEMENT SECTION

A — 0.33′ TYPE A AC
0.67′ CLASS A CTB
0.17′ CLASS 2 AB
0.83′ CLASS 4 AS



ROUTE 187

PM 3.50/5.74

TYPICAL CROSS SECTION

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI
CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI
REVISED BY
DATE REVISED

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	3	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

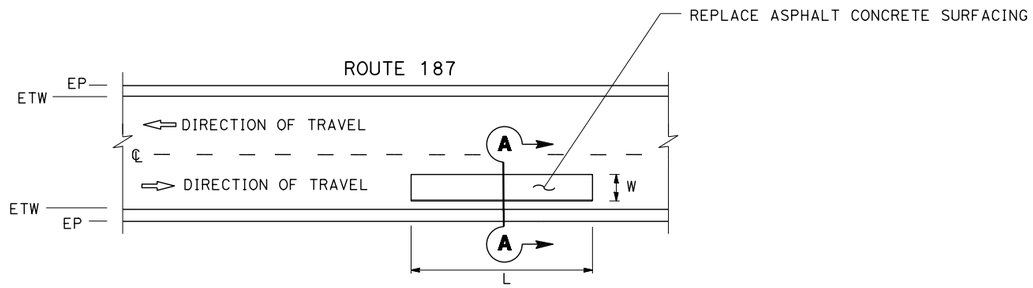
2-25-13
PLANS APPROVAL DATE

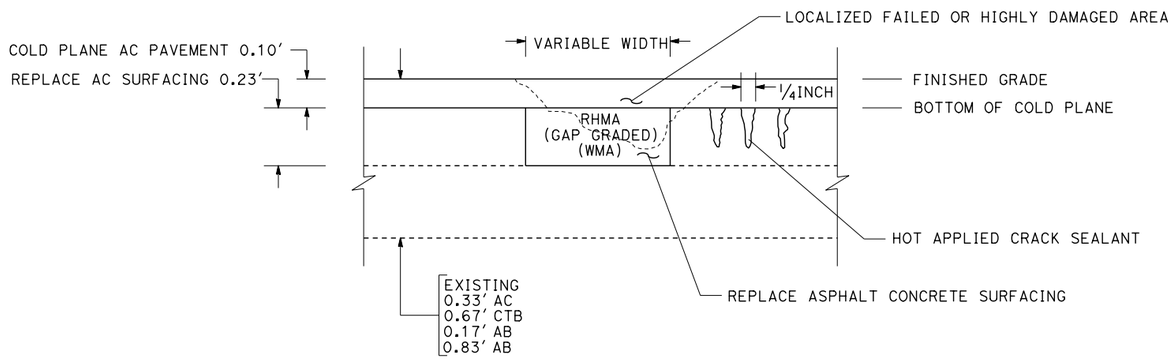
REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 CIVIL STATE OF CALIFORNIA

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.

NOTES:

1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED-WMA) ON BRIDGE DECKS AND PCC PAVEMENT.
4. SEAL ALL CRACKS GREATER THAN 1/4 INCH WITH HOT APPLIED CRACK SEALANT.





SECTION A-A

REPLACE ASPHALT CONCRETE SURFACING

DIRECTION	LOCATION	LANE	DIMENSIONS W x L	DEPTH	VOLUME (CY)
EASTBOUND	BETWEEN LINCOLN AND PENMAR	2	12' x 100'	0.23'	10.2
EASTBOUND	BETWEEN PENMAR AND WALNUT	2	12' x 30'	0.23'	3.1
EASTBOUND	NEAR GLENCOE	1, 2	24' x 30'	0.23'	6.1
EASTBOUND	BETWEEN WALGROVE AND LYCEUM	1, 2	24' x 60'	0.23'	12.3
EASTBOUND	BETWEEN LYCEUM AND BEETHOVEN	1, 2	24' x 30'	0.23'	6.1
EASTBOUND	BETWEEN BEETHOVEN AND MOORE	2	12' x 30'	0.23'	3.1
EASTBOUND	BETWEEN MOORE AND WADE	1, 2	24' x 60'	0.23'	10.3
EASTBOUND	BETWEEN FRANCES AND WASATCH	1, 2	24' x 50'	0.23'	10.3
EASTBOUND	NEAR GRANDVIEW	2	12' x 60'	0.23'	6.1
EASTBOUND	NEAR INGLEWOOD	2	12' x 60'	0.23'	6.1
WESTBOUND	BETWEEN SAWTELLE AND BUTLER	3	12' x 80'	0.23'	8.2
WESTBOUND	BETWEEN BUTLER AND MCLAUGHLIN	3	12' x 20'	0.23'	2.1
WESTBOUND	NEAR MCLAUGHLIN	2, 3	24' x 30'	0.23'	6.1
WESTBOUND	NEAR BARRINGTON	3	12' x 20'	0.23'	2.1
WESTBOUND	BETWEEN BARRINGTON AND INGLEWOOD	3	12' x 20'	0.23'	2.1
WESTBOUND	NEAR GRANDVIEW	2, 3	24' x 40'	0.23'	8.2
WESTBOUND	NEAR BEETHOVEN	3	12' x 20'	0.23'	2.1
WESTBOUND	BETWEEN WALNUT AND PENMAR	1	12' x 40'	0.23'	4.1
WESTBOUND	BETWEEN PENMAR AND SUPERIOR	1, 2, 3	36' x 60'	0.23'	18.4
				TOTAL	127.1

CONSTRUCTION DETAILS

NO SCALE

C-1

REVISED BY | DATE REVISED

JERRY CHEN | PAUL J CRISPI

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: PAUL J CRISPI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 02-14-13 | DATE PLOTTED => 28-FEB-2013 | TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	4	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 CIVIL STATE OF CALIFORNIA

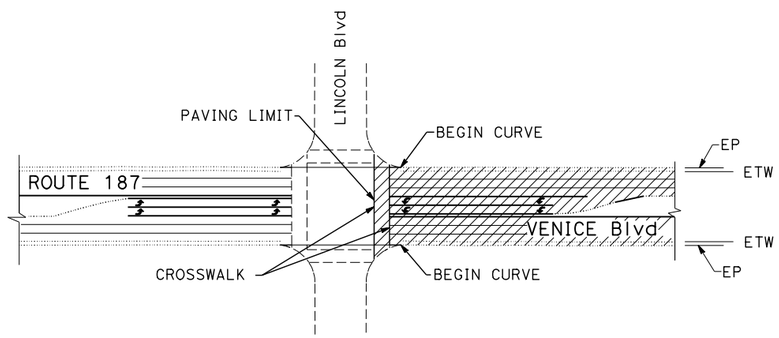
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

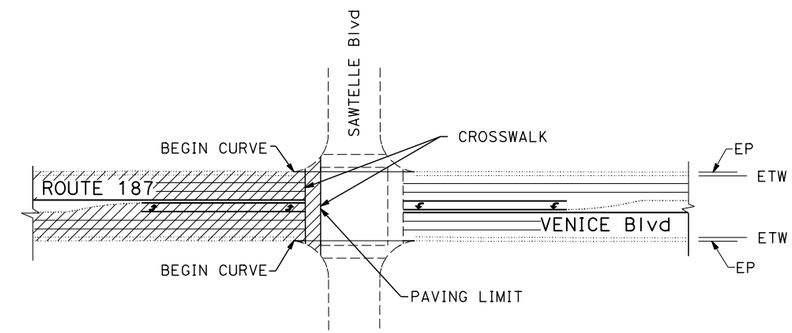
1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED - WMA) ON BRIDGE DECKS AND PCC PAVEMENT.

LEGEND:

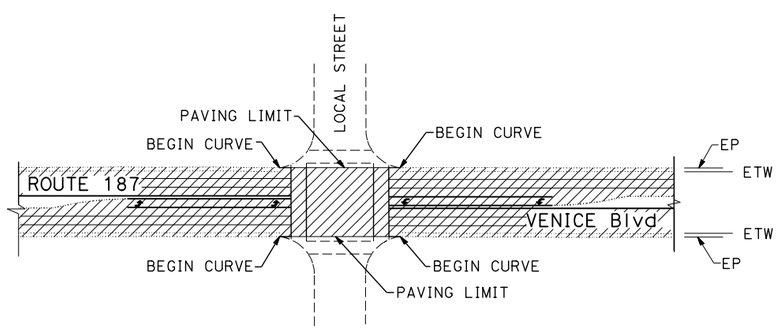
COLD PLANE ASPHALT CONCRETE PAVEMENT
RUBERRIZED HOT MIX ASPHALT (GAP GRADED-WMA)



PAVING LIMITS AT BEGIN CONSTRUCTION



PAVING LIMITS AT END CONSTRUCTION



TYPICAL PAVING LIMIT AT INTERSECTION

CONSTRUCTION DETAILS

NO SCALE

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI

CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI

REVISED BY
DATE REVISED

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	5	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 CIVIL STATE OF CALIFORNIA

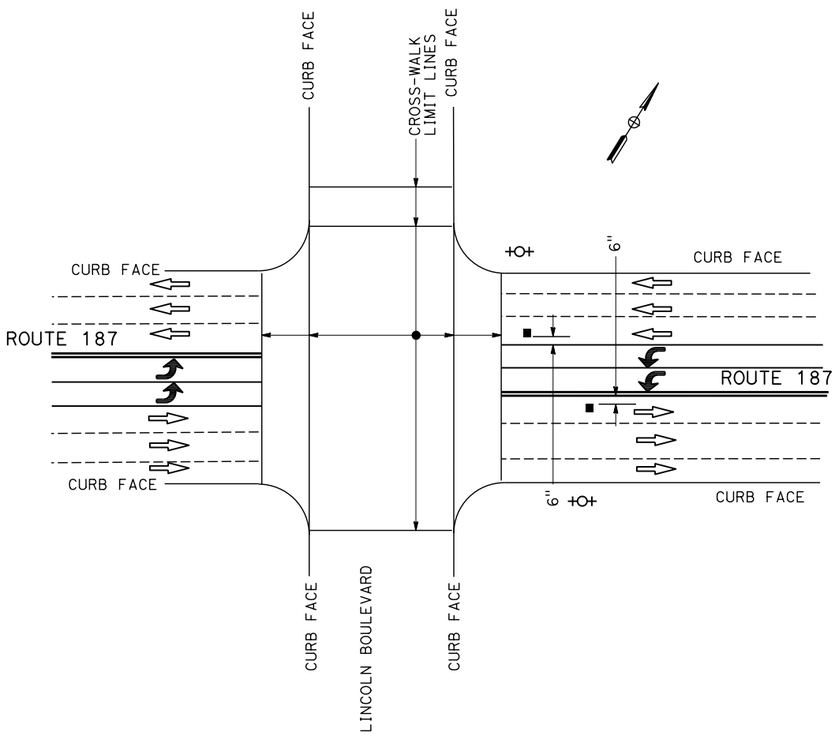
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED - WMA) ON BRIDGE DECKS AND PCC PAVEMENT.
4. EXACT LOCATIONS OF BLUE PAVEMENT MARKERS WILL BE DETERMINED BY ENGINEER.

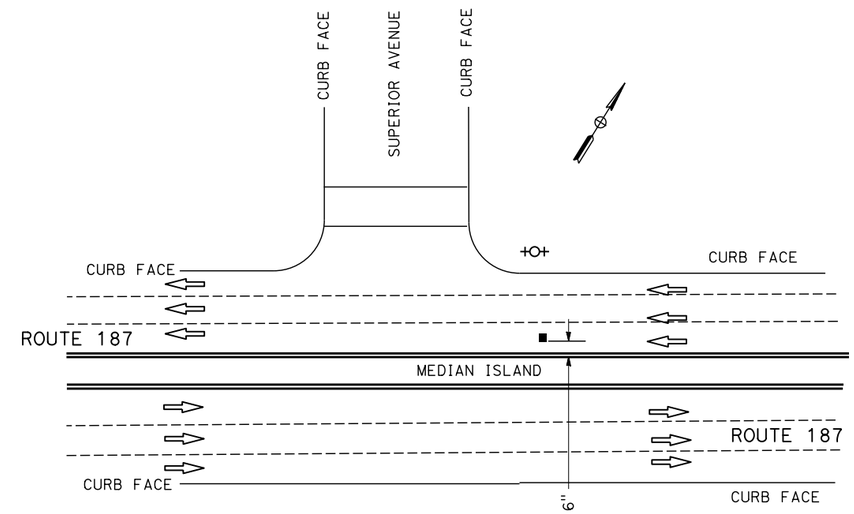
LEGEND:

- FIRE HYDRANT
- BLUE RETROREFLECTIVE PAVEMENT MARKER
- DIRECTION OF TRAVEL
- LEFT TURN LANE MARKING



LOCATION OF BLUE PAVEMENT MARKER

AT LINCOLN BOULEVARD INTERSECTION



LOCATION OF BLUE PAVEMENT MARKER

AT SUPERIOR AVENUE INTERSECTION

CONSTRUCTION DETAILS

NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI
CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI
REVISED BY
DATE REVISED

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	6	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

NOTES:

1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED - WMA) ON BRIDGE DECKS AND PCC PAVEMENT.
4. EXACT LOCATIONS OF BLUE PAVEMENT MARKERS WILL BE DETERMINED BY ENGINEER.

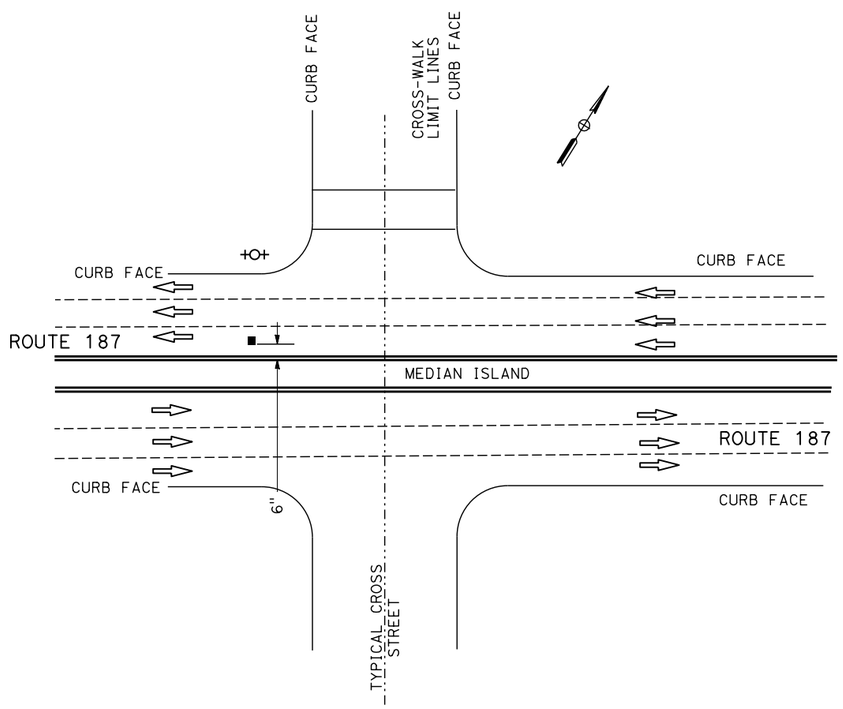
LEGEND:

FIRE HYDRANT

BLUE RETROREFLECTIVE PAVEMENT MARKER

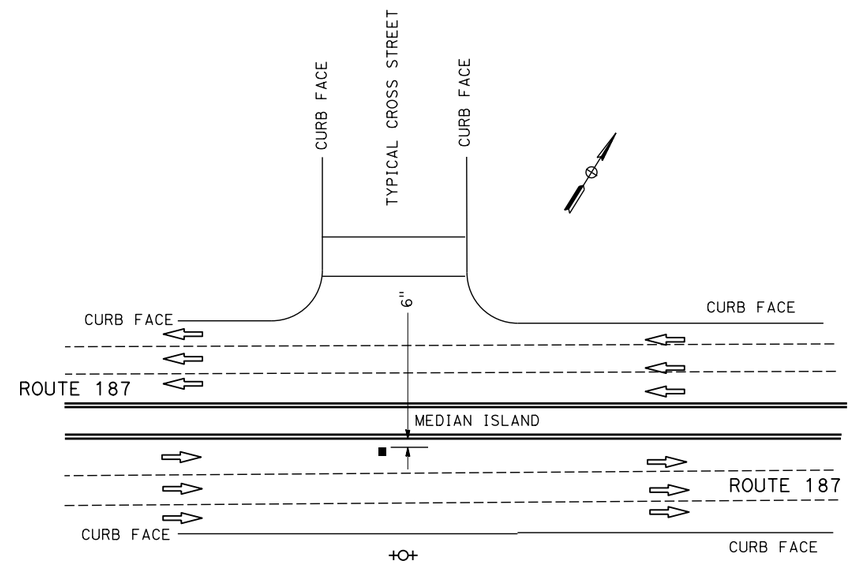
DIRECTION OF TRAVEL

LEFT TURN LANE MARKING



LOCATIONS OF BLUE PAVEMENT MARKER

AT PENMAR AVENUE INTERSECTION
AT WALNUT AVENUE INTERSECTION
AT GLYNDON AVENUE INTERSECTION
AT LOUELLA AVENUE INTERSECTION
AT GLENCOE AVENUE INTERSECTION



LOCATIONS OF BLUE PAVEMENT MARKER

AT ASHWOOD AVENUE INTERSECTION
AT MOUNTAIN VIEW AVENUE INTERSECTION

CONSTRUCTION DETAILS

NO SCALE

C-4

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI
FUNCTIONAL SUPERVISOR: PAUL J CRISPI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	7	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

NOTES:

1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED - WMA) ON BRIDGE DECKS AND PCC PAVEMENT.
4. EXACT LOCATIONS OF BLUE PAVEMENT MARKERS WILL BE DETERMINED BY ENGINEER.

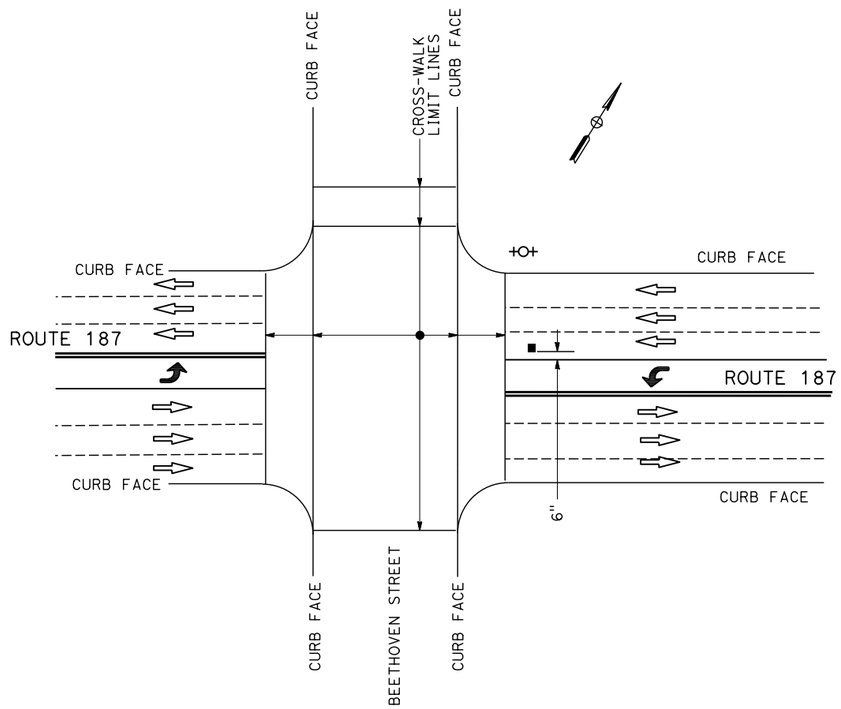
LEGEND:

FIRE HYDRANT

BLUE RETROREFLECTIVE PAVEMENT MARKER

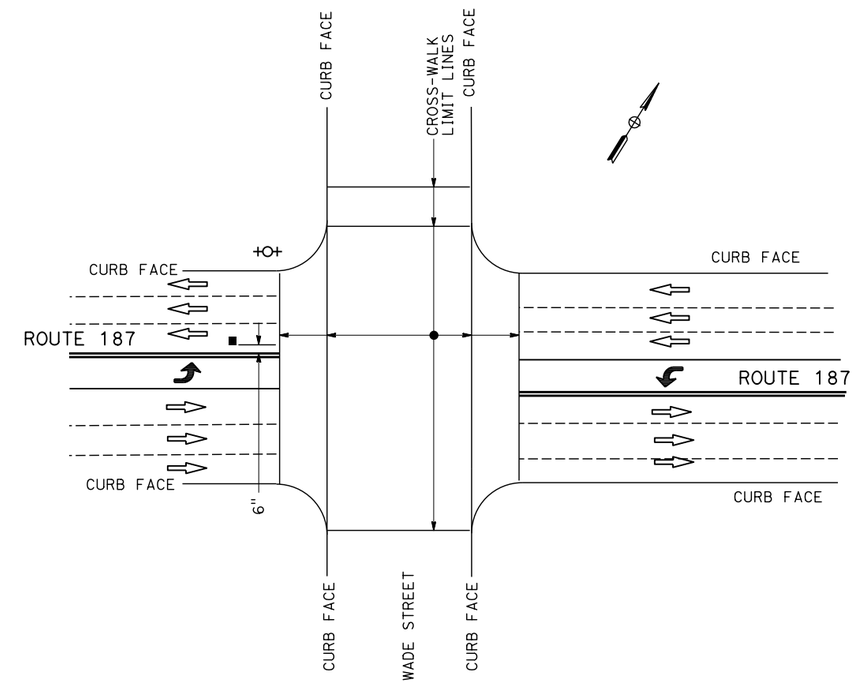
DIRECTION OF TRAVEL

LEFT TURN LANE MARKING



LOCATIONS OF BLUE PAVEMENT MARKER

AT BEETHOVEN STREET INTERSECTION



LOCATIONS OF BLUE PAVEMENT MARKER

AT WADE STREET INTERSECTION

CONSTRUCTION DETAILS

NO SCALE

C-5

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	JERRY CHEN
CHECKED BY	PAUL J CRISPI
FUNCTIONAL SUPERVISOR	PAUL J CRISPI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 02-14-13 | DATE PLOTTED => 28-FEB-2013 | TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	8	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

NOTES:

1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED - WMA) ON BRIDGE DECKS AND PCC PAVEMENT.
4. EXACT LOCATIONS OF BLUE PAVEMENT MARKERS WILL BE DETERMINED BY ENGINEER.

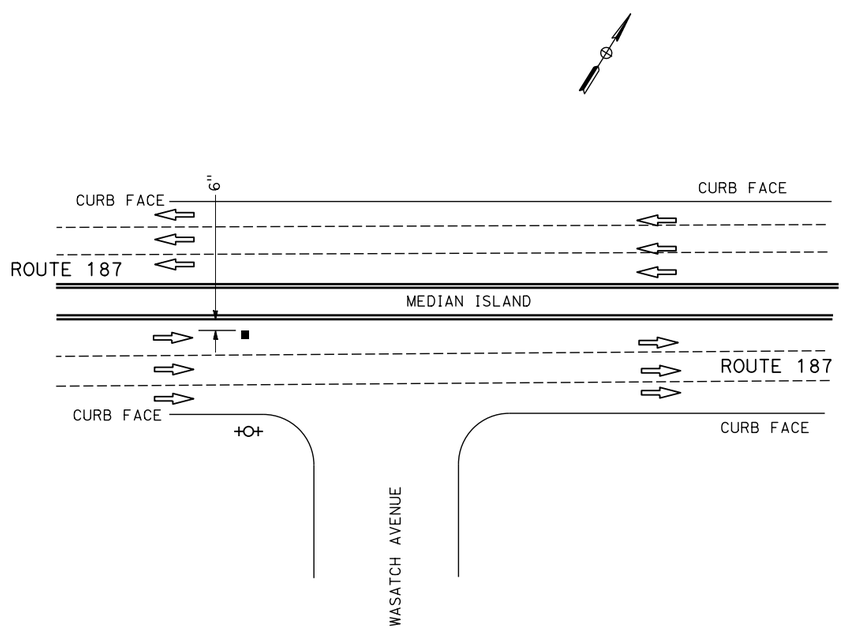
LEGEND:

FIRE HYDRANT

BLUE RETROREFLECTIVE PAVEMENT MARKER

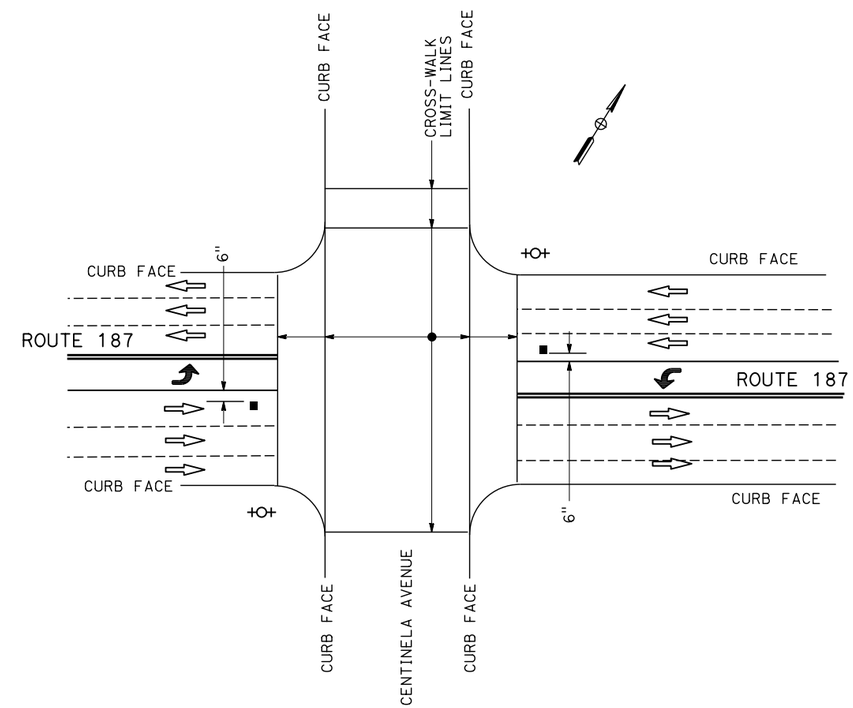
DIRECTION OF TRAVEL

LEFT TURN LANE MARKING



LOCATIONS OF BLUE PAVEMENT MARKER

AT WASATCH AVENUE INTERSECTION



LOCATIONS OF BLUE PAVEMENT MARKER

AT CENTINELA AVENUE INTERSECTION

CONSTRUCTION DETAILS

NO SCALE

C-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI
CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI
REVISED BY
DATE REVISED

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	9	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

NOTES:

1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED - WMA) ON BRIDGE DECKS AND PCC PAVEMENT.
4. EXACT LOCATIONS OF BLUE PAVEMENT MARKERS WILL BE DETERMINED BY ENGINEER.

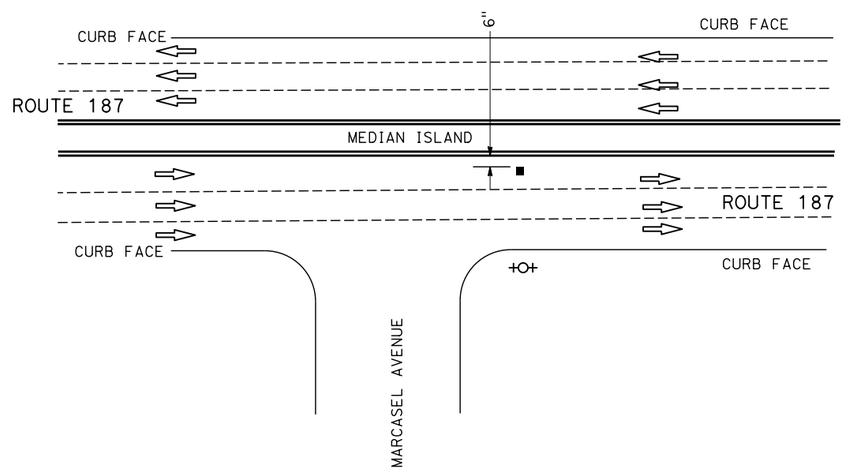
LEGEND:

FIRE HYDRANT

BLUE RETROREFLECTIVE PAVEMENT MARKER

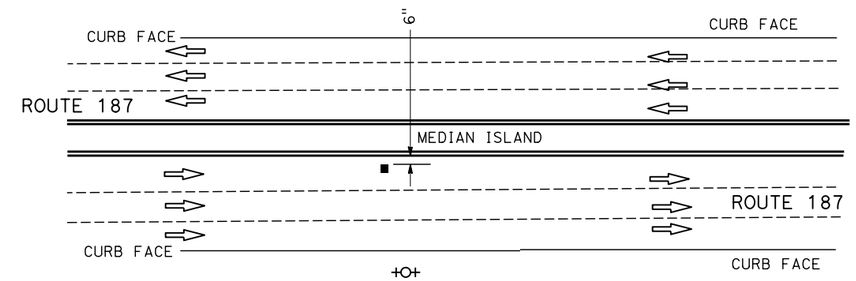
DIRECTION OF TRAVEL

LEFT TURN LANE MARKING



LOCATIONS OF BLUE PAVEMENT MARKER

AT MARCASEL AVENUE INTERSECTION



LOCATIONS OF BLUE PAVEMENT MARKER

BETWEEN MARCASEL AVENUE AND BARRINGTON AVENUE
BETWEEN BARRINGTON AVENUE AND BARRY AVENUE

CONSTRUCTION DETAILS

NO SCALE

C-7

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY
JERRY CHEN	PAUL J CRISPI

FUNCTIONAL SUPERVISOR: PAUL J CRISPI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 02-14-13 | DATE PLOTTED => 28-FEB-2013 | TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	10	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

NOTES:

1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED - WMA) ON BRIDGE DECKS AND PCC PAVEMENT.
4. EXACT LOCATIONS OF BLUE PAVEMENT MARKERS WILL BE DETERMINED BY ENGINEER.

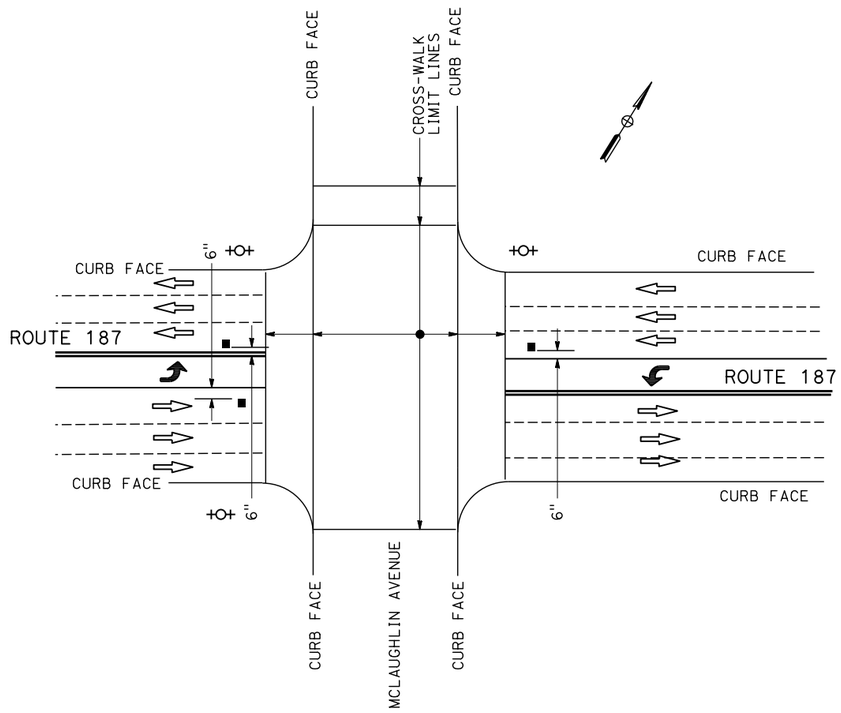
LEGEND:

FIRE HYDRANT

BLUE RETROREFLECTIVE PAVEMENT MARKER

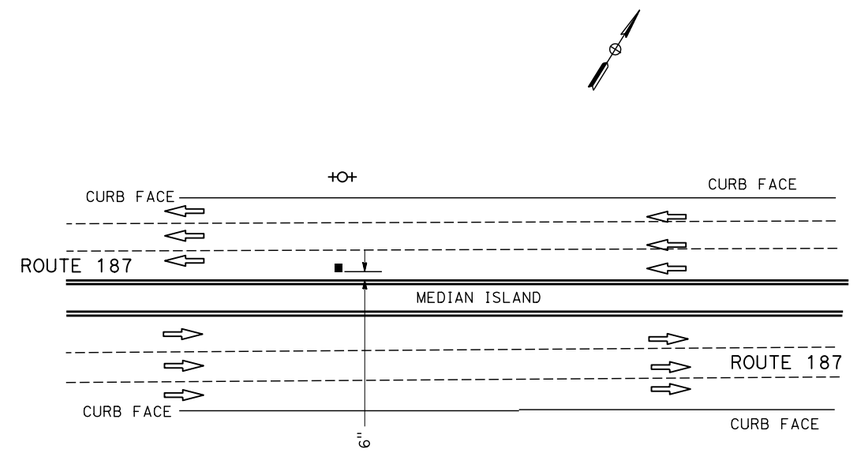
DIRECTION OF TRAVEL

LEFT TURN LANE MARKING



LOCATIONS OF BLUE PAVEMENT MARKER

AT MCLAUGHLIN AVENUE INTERSECTION



LOCATIONS OF BLUE PAVEMENT MARKER

BETWEEN COOLIDGE AVENUE AND BERRYMAN AVENUE

CONSTRUCTION DETAILS

NO SCALE

C-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI
CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI
REVISED BY
DATE REVISED

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	11	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

NOTES:

1. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OMIT COLD PLANE AND OVERLAY RHMA (GAP GRADED - WMA) ON BRIDGE DECKS AND PCC PAVEMENT.
4. EXACT LOCATIONS OF BLUE PAVEMENT MARKERS WILL BE DETERMINED BY ENGINEER.

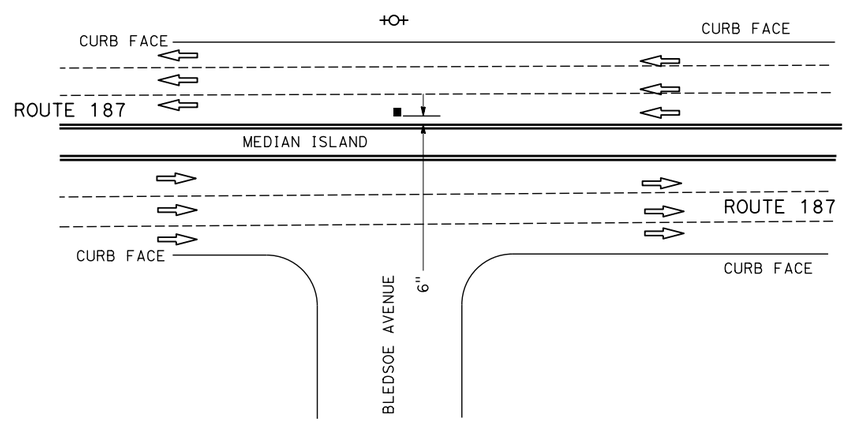
LEGEND:

FIRE HYDRANT

BLUE RETROREFLECTIVE PAVEMENT MARKER

DIRECTION OF TRAVEL

LEFT TURN LANE MARKING



LOCATIONS OF BLUE PAVEMENT MARKER

AT BLEDSOE AVENUE INTERSECTION

CONSTRUCTION DETAILS

NO SCALE

C-9

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	JERRY CHEN
CHECKED BY	PAUL J CRISPI

FUNCTIONAL SUPERVISOR PAUL J CRISPI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 02-14-13 | DATE PLOTTED => 28-FEB-2013 | TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	12	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. "TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES" SIGNS SHALL BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF "ROAD WORK AHEAD" SIGNS OR AS DETERMINED BY THE ENGINEER.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN NUMBER	CODE	SIGN MESSAGE	PANEL SIZE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
1	W20-1	ROAD WORK AHEAD	36" x 36"	1 - 4" x 4"	78
2	G20-2	END ROAD WORK	36" x 18"	1 - 4" x 4"	2
3	C40(CA)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	48" x 48"	1 - 4" x 6"	2
4	W20-1	ROAD WORK AHEAD	48" x 48"	2 - 4" x 6"	2
				TOTAL	84

CONSTRUCTION AREA SIGNS

NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CS-1

REVISED BY	DATE REVISED
JERRY CHEN	PAUL J CRISPI

CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI

FUNCTIONAL SUPERVISOR: PAUL J CRISPI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	13	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

LOCATION	THERMOPLASTIC TRAFFIC STRIPE							
	Det 21 YELLOW	Det 9 WHITE	Det 37B WHITE	Det 38 WHITE	Det 39 WHITE	Det 39A WHITE	Det 40 WHITE	Det 41 YELLOW
	LF	LF	LF	LF	LF	LF	LF	LF
	4" YELLOW THERMOPLASTIC TRAFFIC STRIPE	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)	8" THERMOPLASTIC TRAFFIC STRIPE	6" THERMOPLASTIC TRAFFIC STRIPE	6" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 8-4)	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 6-1)	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 6-1)
LINCOLN TO GLYNDON	1204	4050	768	1546	2297	629		
GLYNDON TO WALGROVE		3720		1030	1376	998		
WALGROVE TO BEETHOVEN		7000		1164	3006	1593		
BEETHOVEN TO WADE		4320		832	1845	962		
WADE TO CENTINELA		6000		836	2250	1529		
CENTINELA TO GRAND VIEW		3000		896	1389	711		
GRAND VIEW TO INGLEWOOD		3000		816	1544	564	230	115
INGLEWOOD TO MCLAUGHLIN		6000		1070	3116	876	480	120
MCLAUGHLIN TO SAWTELLE		6800		1058	2891	1661		
SUBTOTAL	1204	43890	768	9248	19714	9523	710	235
TOTAL	1204	43890	768	9248	19714	9523	945	

PAVEMENT DELINEATION QUANTITIES

PDQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI

CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI

REVISED BY
DATE REVISED

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	14	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER JERRY CHEN No. C65548 Exp. 9-30-13 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.

LOCATION	PAVEMENT MARKERS				THERMOPLASTIC PAVEMENT MARKINGS							
	Det 9	Det 37B	Det 38		ARROWS			WORDS			CROSSWALK	
	EA	EA	EA		SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT	SQFT
	TYPE G RETROREFLECTIVE	TYPE G RETROREFLECTIVE	TYPE G RETROREFLECTIVE	BLUE RETROREFLECTIVE	TYPE IV (L) AREA=15 SQFT	TYPE IV (R) AREA=15 SQFT	TYPE VII (R) AREA=27 SQFT	BIKE LANE AREA=7 SQFT	"BIKE"	"LANE"	1' WHITE	1' YELLOW
LINCOLN TO GLYNDON	85	53	65	6	90	15	27	49	35	42	265	
GLYNDON TO WALGROVE	79		44	2	75			42	30	36		180
WALGROVE TO BEETHOVEN	147		50	1	75			63	45	54	411	397
BEETHOVEN TO WADE	91		36	2	60			56	40	48	545	
WADE TO CENTINELA	126		36	2	60			56	40	48	500	
CENTINELA TO GRAND VIEW	64		38	1	60			28	20	24	432	
GRAND VIEW TO INGLEWOOD	64		35	1	60			35	25	30	400	
INGLEWOOD TO MCLAUGHLIN	126		46	5	60			56	40	48	458	
MCLAUGHLIN TO SAWTELLE	143		45	3	90			77	55	66	458	
SUBTOTAL	925	53	395	23	630	15	27	462	330	396	3469	577
TOTAL	1396				5906							

PAVEMENT DELINEATION QUANTITIES

PDQ-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI
CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI
REVISED BY
DATE REVISED

LAST REVISION 02-14-13
DATE PLOTTED => 28-FEB-2013
TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	15	20

REGISTERED CIVIL ENGINEER 2-11-13 DATE

2-25-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JERRY CHEN
No. C65548
Exp. 9-30-13
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.

ROADWAY QUANTITIES

POST MILE	COLD PLANE ASPHALT CONCRETE PAVEMENT	RUBBERIZED HOT MIX ASPHALT (GAP GRADED - WMA)	CRACK TREATMENT	TACK COAT
	SQYD	TON	LNMI	TON
3.50/5.74	129,695	8756	14	60

SUMMARY OF QUANTITIES

NO SCALE

Q-1

REVISED BY	JERRY CHEN
DATE REVISED	PAUL J CRISPI
CALCULATED-DESIGNED BY	JERRY CHEN
CHECKED BY	PAUL J CRISPI
FUNCTIONAL SUPERVISOR	PAUL J CRISPI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 02-14-13 | DATE PLOTTED => 28-FEB-2013 | TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.74	16	20

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER STANLEY L. JOHNSON No. E16761 Exp. 09/30/14 ELECTRICAL STATE OF CALIFORNIA

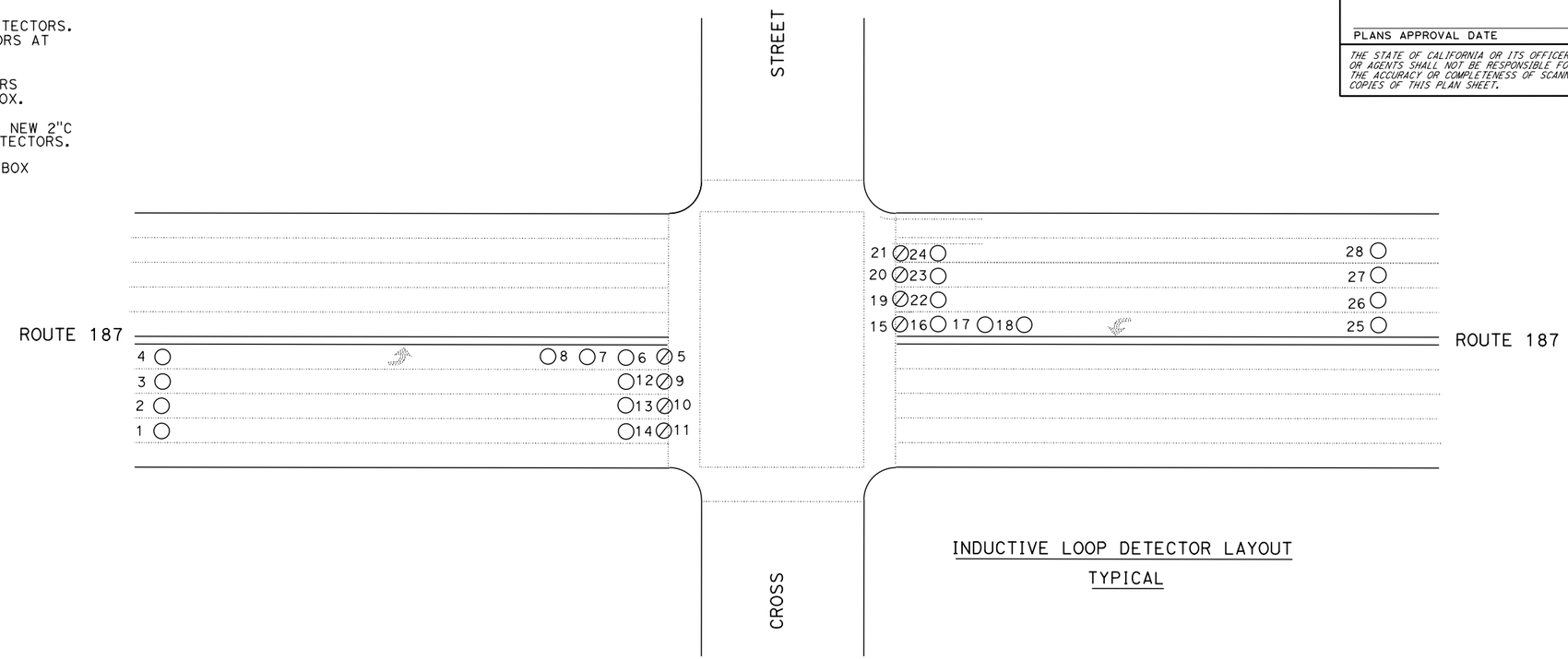
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES: (THIS SHEET)

1. PRIOR TO CONSTRUCTION, LOCATE EXISTING INDUCTIVE LOOP DETECTORS.
2. ABANDON EXISTING INDUCTIVE LOOP DETECTORS. INSTALL NEW INDUCTIVE LOOP DETECTORS AT THE SAME LOCATION.
3. SPLICE NEW LOOP DETECTOR CONDUCTORS TO EXISTING dlc IN ADJACENT PULL BOX.
4. ABANDON EXISTING STUBOUTS. INSTALL NEW 2"C STUBOUT FOR NEW INDUCTIVE LOOP DETECTORS.
5. TAG EXISTING dlc IN ADJACENT PULL BOX AND AT CONTROLLER CABINET.

LEGEND: (THIS SHEET ONLY)

⊘ CITY OF LOS ANGELES BICYCLE DETECTOR



INDUCTIVE LOOP DETECTOR LAYOUT
TYPICAL

INDUCTIVE LOOP DETECTOR SCHEDULE

SIGNAL LOCATION ON ROUTE 187	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
WALGROVE Ave	X	X	X	X	X	X	X	X							X	X	X	X							X	X	X	X
BEETHOVEN St	X	X	X	X	X	X	X								X	X	X								X	X	X	X
CENTINELA Ave	X	X	X	X	X	X									X	X									X	X	X	X
INGLEWOOD Blvd	X	X	X	X	X	X	X	X							X	X	X	X							X	X	X	X
MCLAUGHLIN Ave	X	X	X	X	X	X									X	X									X	X	X	X
SAWTELLE Blvd	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

APPROVED FOR ELECTRICAL WORK ONLY

INDUCTIVE LOOP DETECTOR

NO SCALE

E-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY
MARTY MORTAZEVI	STANLEY L. JOHNSON

FUNCTIONAL SUPERVISOR: HASSAN MANNAA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® TRAFFIC DESIGN

LAST REVISION 02-14-13 | DATE PLOTTED => 28-FEB-2013 | TIME PLOTTED => 10:16

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	17	20

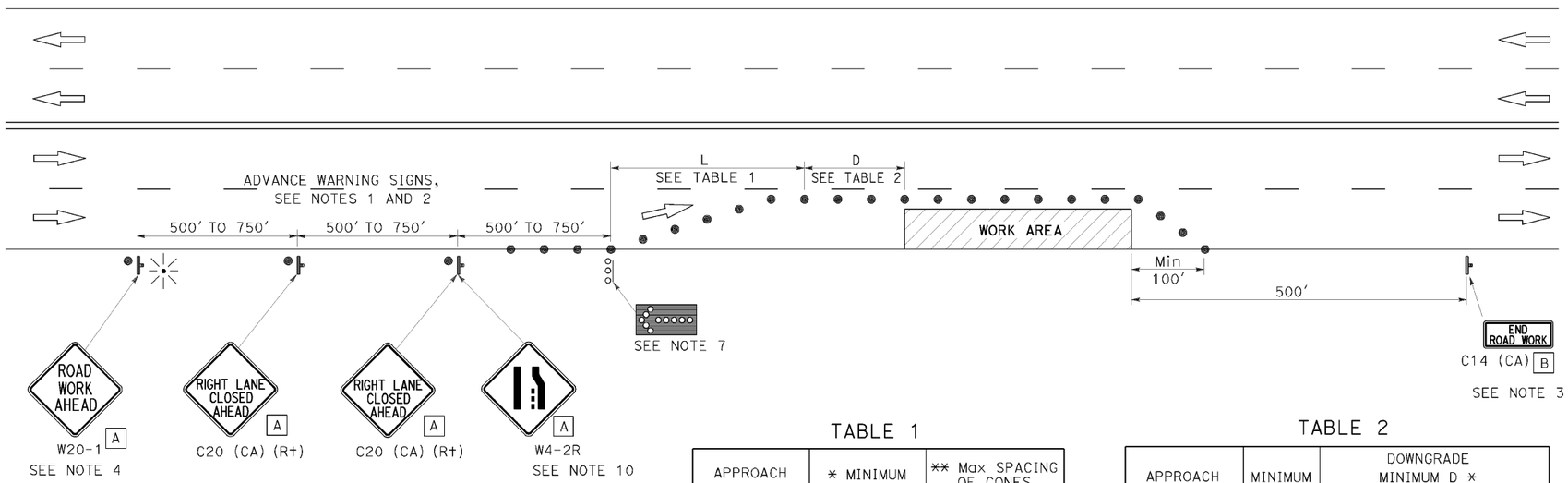
REGISTERED CIVIL ENGINEER 12-7-12 DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Gurinderpal Bhullar No. C48815 Exp. 9-30-14 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.

TYPICAL LANE CLOSURE



NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

TABLE 1

APPROACH SPEED	* MINIMUM L	** Max SPACING OF CONES ALONG TAPER
mph	ft	ft
20 AND BELOW	80	20
25	125	25
30	180	30
35	245	35
40	320	40
45	540	45
50	600	50
Over 50	SEE NOTE 9	

* USE L FOR LANE WIDTHS LESS THAN OR EQUAL TO 12'.
** SEE NOTE 8.

TABLE 2

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 AND BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
OVER 50	SEE NOTE 9			

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

LEGEND

- TRAFFIC CONE
- TEMPORARY SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

A 36" x 36"

B 36" x 18"

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300' spacing and placed closer in urban areas.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a C20 (CA) sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Flashing arrow sign shall be either Type I or Type II.
8. The maximum spacing between cones along a tangent shall be 50' and along a taper shall be approximately as shown in Table 1.
9. For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
10. When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

NO SCALE

TCS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI

CALCULATED-DESIGNED BY | CHECKED BY | REVISED BY | DATE REVISED

LAST REVISION 02-19-13 | DATE PLOTTED => 10-DEC-2012 | TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	18	20

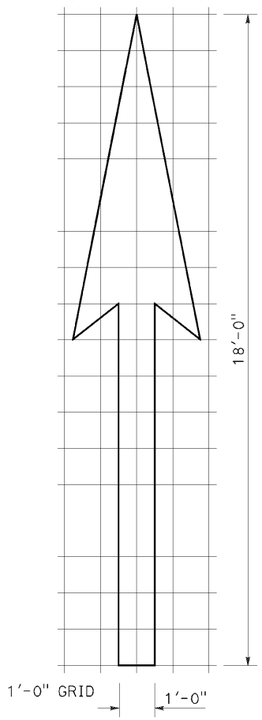
REGISTERED CIVIL ENGINEER

April 20, 2012
PLANS APPROVAL DATE

Roberta L. McLaughlin
No. C40375
Exp. 3-31-13
CIVIL
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER

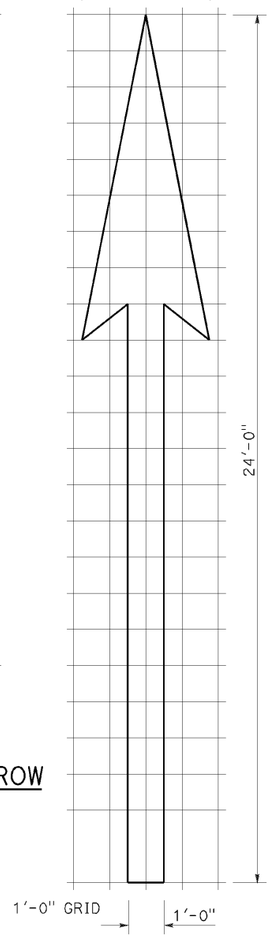
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED _____



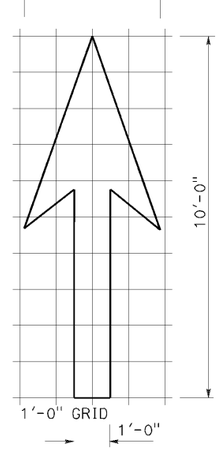
A=25 ft^2

TYPE I 18'-0" ARROW



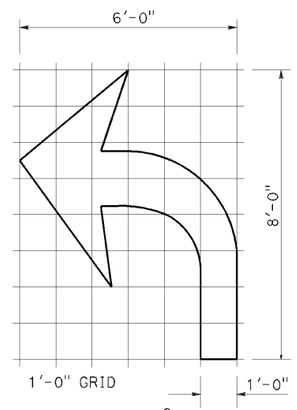
A=31 ft^2

TYPE I 24'-0" ARROW



A=14 ft^2

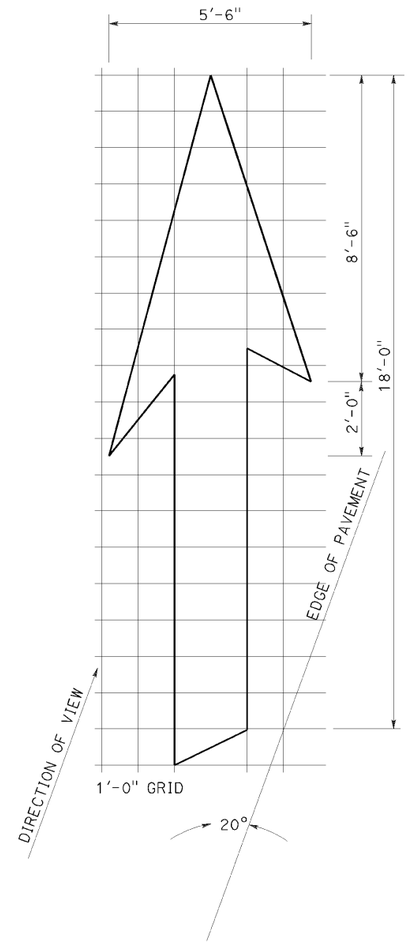
TYPE I 10'-0" ARROW



A=15 ft^2

TYPE IV (L) ARROW

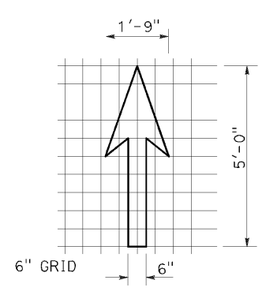
(For Type IV (R) arrow, use mirror image)



A=42 ft^2

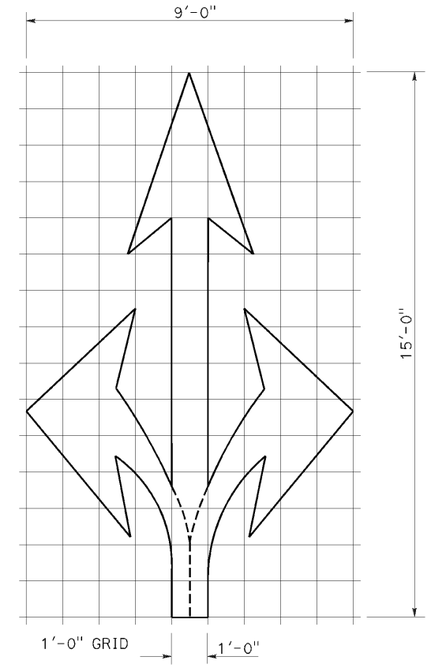
TYPE VI ARROW

Right lane drop arrow (For left lane, use mirror image)



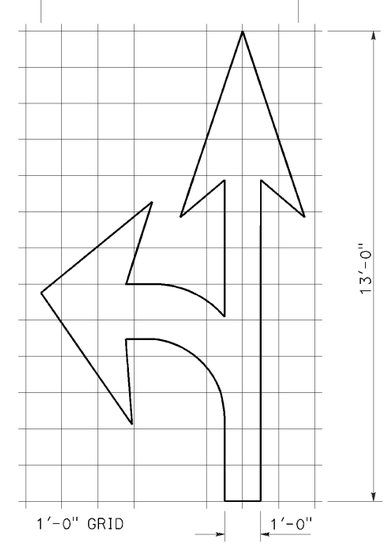
A=3.5 ft^2

BIKE LANE ARROW



A=36 ft^2

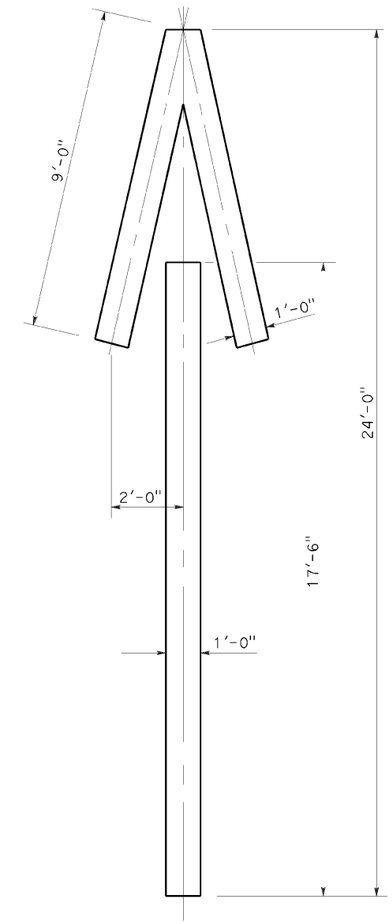
TYPE VIII ARROW



A=27 ft^2

TYPE VII (L) ARROW

(For Type VII (R) arrow, use mirror image)



A=33 ft^2

TYPE V ARROW

NOTE:
Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS ARROWS

NO SCALE

RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24A

2010 REVISED STANDARD PLAN RSP A24A

3-14-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	19	20

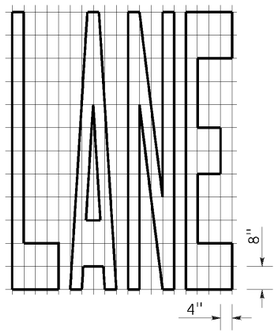
REGISTERED CIVIL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

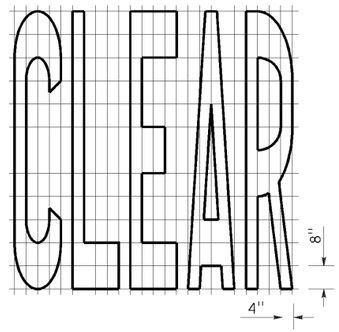
REGISTERED PROFESSIONAL ENGINEER
Roberta L. McLaughlin
No. C40375
Exp. 3-31-13
CIVIL
STATE OF CALIFORNIA

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.

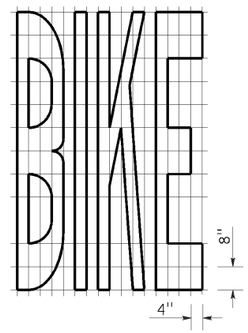
TO ACCOMPANY PLANS DATED _____



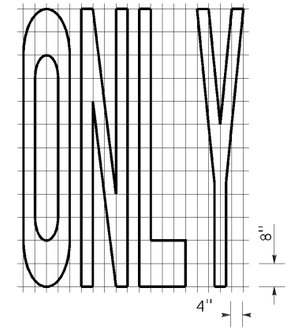
A=24 ft^2



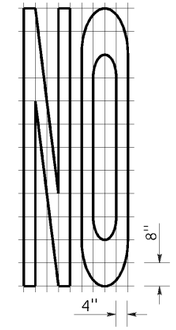
A=27 ft^2



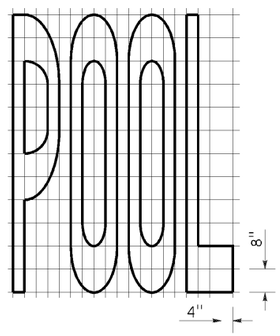
A=21 ft^2



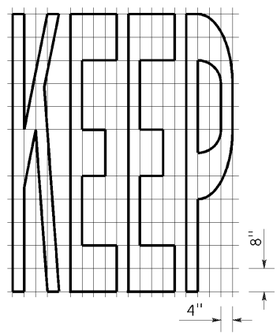
A=22 ft^2



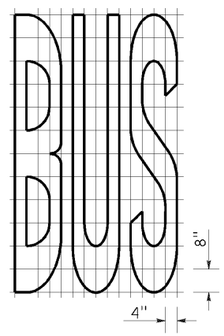
A=14 ft^2



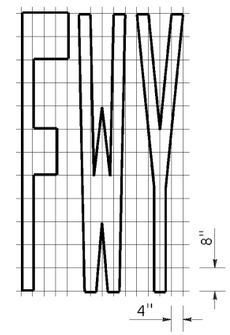
A=23 ft^2



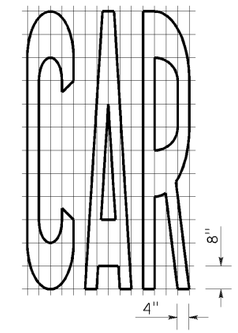
A=24 ft^2



A=20 ft^2

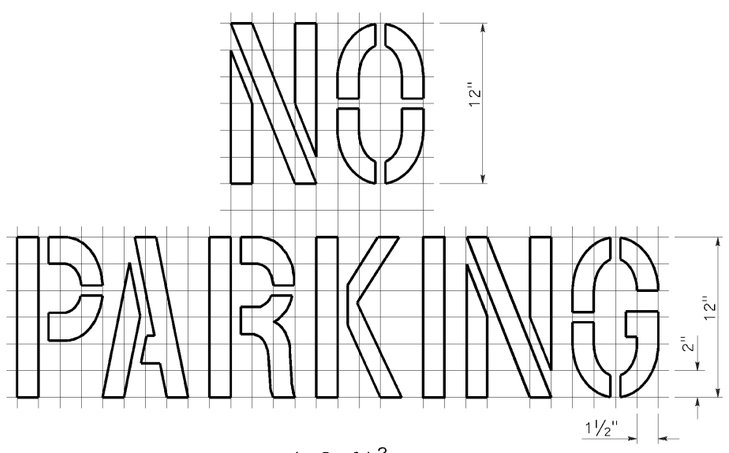


A=16 ft^2



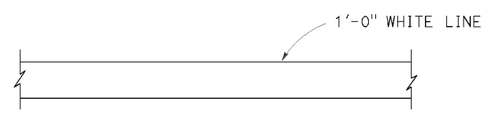
A=17 ft^2

WORD MARKINGS			
ITEM	ft^2	ITEM	ft^2
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16

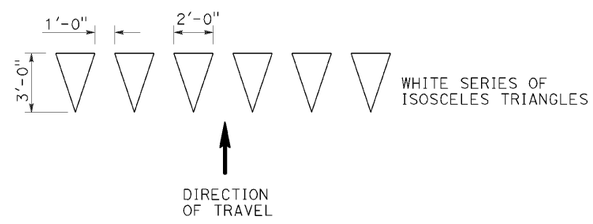


A=2 ft^2

See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS WORDS, LIMIT AND YIELD LINES

NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24E

2010 REVISED STANDARD PLAN RSP A24E

6-12-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	187	3.5/5.7	20	20

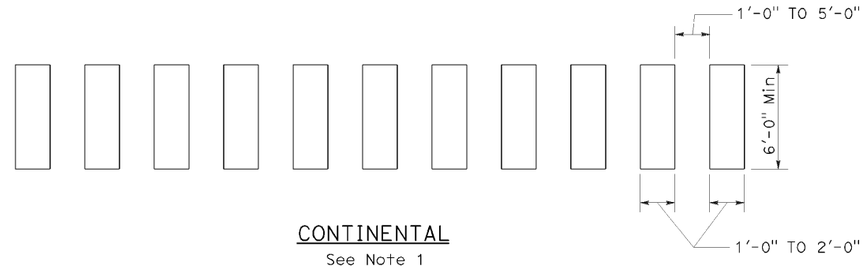
REGISTERED CIVIL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

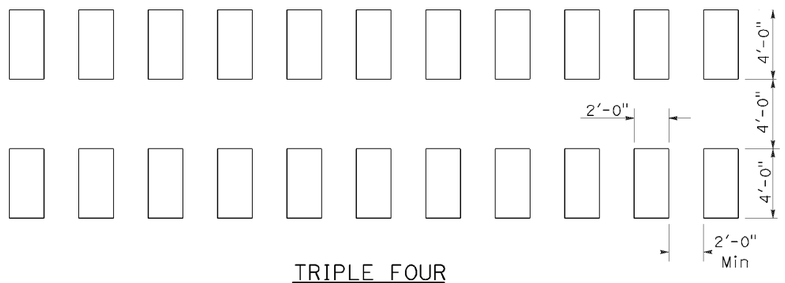
REGISTERED PROFESSIONAL ENGINEER
Roberta L. McLaughlin
No. C40375
Exp. 3-31-13
CIVIL
STATE OF CALIFORNIA

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.

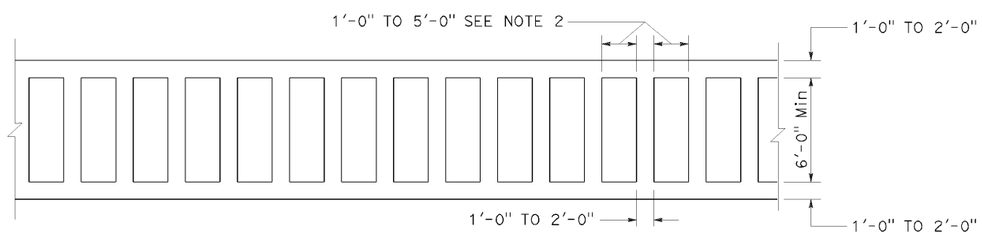
TO ACCOMPANY PLANS DATED _____



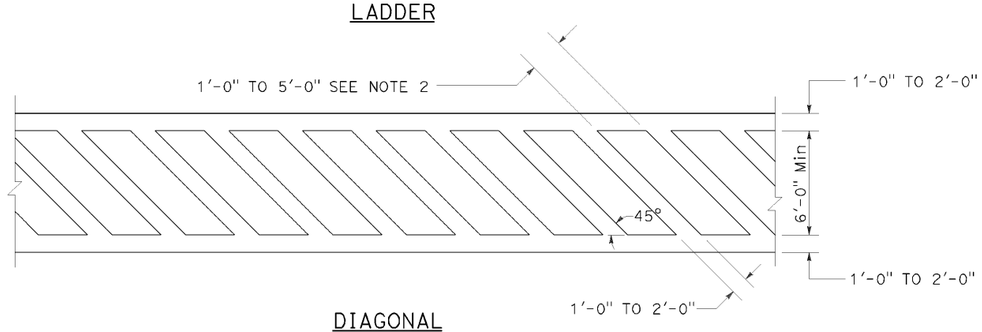
CONTINENTAL
See Note 1



TRIPLE FOUR
See Note 1



LADDER

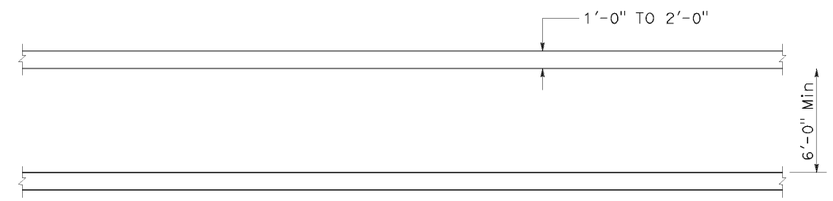


DIAGONAL

HIGHER VISIBILITY CROSSWALKS

NOTES:

1. Spaces between markings should be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except for those near schools must be yellow.



BASIC

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS CROSSWALKS

NO SCALE

RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24F

2010 REVISED STANDARD PLAN RSP A24F

6-28-12