PROJECT PLANS FOR CONSTRUCTION OF NEW TRAFFIC SIGNAL LIGHT & INTERSECTION IMPROVEMENTS AT STATE HIGHWAY 86 AND NECKEL ROAD

IN CITY OF IMPERIAL, IMPERIAL COUNTY

ON ROUTE 86 FROM 11.65 MILES SOUTH TO 11.95 NORTH OF NECKEL ROAD

Federal-aid Project: HSIP 5134 (013)

PERMIT NUMBER 11 - 14 - N5N - 0279

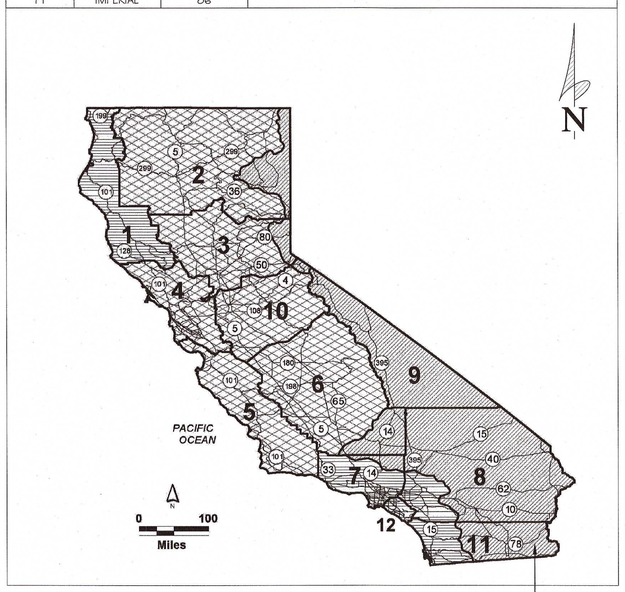
CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

DRAWINGS LIST

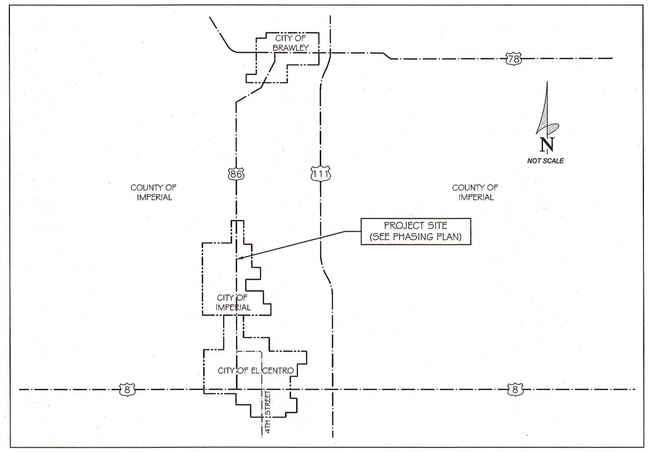
SHEET	DESCRIPTION	SHEET	DESCRIPTION
C1	TITLE SHEET & GENERAL NOTES	C8	PROPOSED CROSS SECTIONS
C2	EXISTING TOPOGRAPHIC & UTILITY PLAN (SR-86)	C9	PROPOSED TRAFFIC SIGNAL
C3	EXISTING TOPOGRAPHIC & UTILITY PLAN (NECKEL RD)	C10	STREET STRIPING AND SIGNING PLAN (SR-86)
C4	EXISTING CROSS SECTIONS	C11	STREET STRIPING AND SIGNING PLAN (NECKEL RD)
C5	PROPOSED LAYOUT PLAN (SR-86)	C12	TRAFFIC CONTROL PLAN (SR-86)
C6	PROPOSED LAYOUT PLAN (NECKEL RD)	C13	TRAFFIC CONTROL PLAN (NECKEL RD)
C7	PROPOSED CROSS SECTIONS	C14	WATER POLLUTION AND EROSION CONTROL DRAWING

DISTRICT	COUNTY	ROUTE
11	IMPERIAL	86

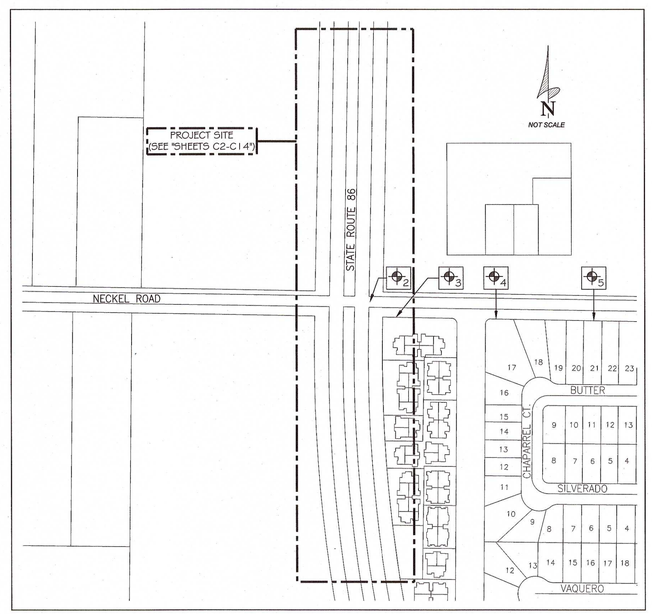


LOCATION PLAN
NOT TO SCALE

PROJECT SITE
(COUNTY OF IMPERIAL)



VICINITY MAP
NOT TO SCALE



PHASING MAP
NOT TO SCALE

VERTICAL BENCHMARK

(BENCHMARK NGS PID DB0660: NGS DATA SHEET ATTACHED TO PERMIT)

1.5 MI N FROM IMPERIAL.

1.5 MILES NORTH ALONG THE SOUTHERN PACIFIC COMPANY RAILROAD FROM THE CROSSING OF MAIN STREET AT IMPERIAL, AT THE CROSSING OF RALPH ROAD, IN THE TOP OF THE SOUTH CORNER OF THE CONCRETE FOUNDATION OF THE SOUTHWEST STEEL LEG OF CALCOT COTTON COMPRESS ELEVATED WATER TANK, 446 FEET WEST OF THE WEST RAIL, 48 FEET NORTH OF THE CENTER LINE OF THE ROAD, 4.8 FEET NORTH OF A CYCLONE FENCE, AND ABOUT LEVEL WITH THE TRACK. SECTION 6, T 15 N, R 14 E.

"DB0660" = -65.66 FEETS (NAVD 88)

+ 999.92 FEETS = 934.26 FEETS

HORIZONTAL BENCHMARK

(NGS DATA SHEET ATTACHED TO PERMIT)

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NAVD 83 GRID BEARING BETWEEN THE NGS IMPERIAL COUNTY CONTROL STATIONS "PID DB1524" AND "PID DB1755".

I.E. N 63° 26' 43.24" E

IMPORTANT NOTICE

SECTION 4216 / 4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT IDENTIFICATION NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 TWO (2) WORKING DAYS BEFORE YOU DIG.

HORIZONTAL AND VERTICAL BENCHMARKS CONTROL POINTS

LEGEND	EASTING	NORTHING	ELEVATION	DESCRIPTION
BENCHMARK No.1 (BM #1)	6,771,711.90	1,896,768.53	934.26	BM MONUMENT
BENCHMARK No.2 (BM #2)	6,770,488.78	1,894,070.59	937.24	TARGET 1 / TRACT MON.
BENCHMARK No.3 (BM #3)	6,770,561.18	1,894,040.67	937.76	"X-CHIPPED" ON TC (SOUTH)
BENCHMARK No.4 (BM #4)	6,770,847.07	1,894,042.75	936.83	"X-CHIPPED" ON TC (SOUTH)
BENCHMARK No.5 (BM #5)	6,771,151.99	1,894,045.07	936.53	"X-CHIPPED" ON TC (SOUTH)

NOTE: SEE "VERTICAL BENCHMARK" AND "HORIZONTAL BENCHMARK" ON SHEET "C1" FOR MORE INFORMATION

PROJECT SCOPE OF WORK

THIS PROJECT WILL CONSIST OF THE CONSTRUCTION OF A NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION STREET IMPROVEMENTS AT THE INTERSECTION OF NECKEL ROAD AND STATE ROUTE 86 IN THE CITY OF IMPERIAL, COUNTY OF IMPERIAL. THE STREET IMPROVEMENTS WILL CONSIST OF: TRAFFIC CONTROL SIGNS DURING CONSTRUCTION, THE INSTALLATION NEW TRAFFIC SIGNAL LIGHTS, MINOR CONCRETE STRUCTURES FOR ADA COMPLIANCE, AND THE PREPARATION OF SUBGRADE / CLASS II BASE / AND NEW PAVEMENT SECTION, FOR THE EAST LEG OF NECKEL ROAD. ALL WORK TO TAKE PLACE WITHIN CALTRANS AND CITY RIGHT OF WAY.

GENERAL NOTES

PROJECT SPECIFICATIONS:
THE SPECIFICATIONS FOR THIS PROJECT SHALL BE THE 2010 EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) "STANDARD SPECIFICATIONS" AT THE TIME OF APPROVAL OF THIS PROJECT. COPIES OF SUCH ARE AVAILABLE FROM: CALTRANS, CENTRAL PUBLICATION DISTRIBUTION UNIT, 6002 FOLSOM BLVD., SACRAMENTO, CA 95819. ALL THE WORK SHOWN OR CALLED FOR ON THESE PLANS SHALL CONFORM TO: THE SPECIFICATIONS CONTAINED HEREIN; TO THOSE SECTIONS OF THE STANDARD SPECIFICATIONS, AND, TO OTHER SECTIONS AND STANDARDS OF ORGANIZATIONS SUCH AS-BUT NOT LIMITED TO AWWA, ACI, ASTM. WHERE CONFLICTS OCCUR, THE MOST STRINGENT SPECIFICATIONS SHALL APPLY.

PERMITS AND FEES:
CONTRACTORS AND/OR SUBCONTRACTORS DOING WORK OR OPERATING EQUIPMENT WITHIN CALTRANS / STATE ROUTE 86 RIGHT OF WAY (R/W), OR WITHIN AN IMPERIAL IRRIGATION DISTRICT FACILITY OR EASEMENT, SHALL OBTAIN AN ENCROACHMENT PERMIT FROM SAID AGENCIES, AND SHALL COMPLY WITH ALL THE PROVISIONS AND REQUIREMENTS OF SAID PERMIT. PERMITS FEES SHALL BE PAID BY CONTRACTOR OR SUBCONTRACTOR, AND BE REIMBURSED BY THE OWNER. A COPY OF SAID PERMITS SHALL BE PROVIDED TO THE OWNER AND TO THE CORRESPONDING AGENCIES PRIOR TO BEGINNING OF WORK WITHIN SAID AREAS. CALTRANS R/W CERTIFICATION (S) AND RELATED R/W DOCUMENTS SHALL BE OBTAINED BY THE CITY OF IMPERIAL PRIOR TO BID ADVERTISEMENT FOR CONSTRUCTION.

PRE-CONSTRUCTION MEETING:
A PRE-CONSTRUCTION MEETING SHALL BE HELD INCLUDING: THE OWNER, REPRESENTATIVES OF THE GOVERNMENT AGENCIES AND THE UTILITY COMPANIES HAVING JURISDICTION OVER THE PROJECT, AND, ALL CONTRACTORS / SUBCONTRACTORS DOING WORK PURSUANT TO THESE PLANS. AT SAID MEETING, THE NAMES, ADDRESSES AND PHONE NUMBERS OF ALL PARTIES ATTENDING SHALL BE PROVIDED ALONG WITH THE ESTIMATED DATES WHEN EACH TYPE OF WORK WILL TAKE PLACE. OTHER DATA RELATIVE TO LICENSE NUMBERS, CONTRACTS AND INSURANCE MAY ALSO BE REQUIRED FROM EACH SUBCONTRACTOR DOING WORK ON THIS PROJECT. NO LESS THAN 3 DAYS NOTICE SHALL BE GIVEN BY THE OWNER FOR SAID PRE-CONSTRUCTION MEETING.

RECORD DRAWINGS:
ALL WORK AND MATERIALS PROVIDED FOR THIS PROJECT SHALL CONFORM WITH THESE PLANS AND WITH OTHER PLANS, DRAWINGS AND DOCUMENTS REFERENCED HEREIN. IN THE EVENT DEVIATIONS ARE REQUIRED AND SUCH HAVE BEEN APPROVED BY THE COUNTY OF IMPERIAL OR THE ASSOCIATED UTILITY COMPANY, SAID DEVIATIONS SHALL BE PROVIDED TO THE ENGINEER OF WORK FOR THE PREPARATION OF A 'RECORD DRAWING'. RECORD DRAWINGS SHALL BE SUBMITTED TO THE CORRESPONDING AGENCIES AT THE COMPLETION OF THE WORK.

GENERAL SAFETY NOTES

PROJECT AREA SAFETY:
EACH CONTRACTOR AND/OR SUBCONTRACTORS DOING WORK WITHIN THE PROJECT AREA(S), SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL PERSONS AND PROPERTY WITHIN THEIR WORK AREAS, DURING 24 HOURS A DAY AND DURING WORKING AND NONE WORKING HOURS. AND SHALL PROVIDE THE NECESSARY PERSONNEL AND DEVICES SUCH AS -BUT NOT LIMITED TO: TRAFFIC SAFETY SIGNS, BARRICADES, LIGHTS, TRENCH SHORING, FENCE, ETC.

CONSTRUCTION FENCE SHALL BE INSTALLED BEFORE CONSTRUCTION BEGINS.

TRAFFIC CONTROL:
EACH CONTRACTOR AND/OR SUBCONTRACTOR DOING WORK ON THIS PROJECT SHALL BE RESPONSIBLE TO PROVIDE TRAFFIC CONTROL PERSONNEL AND DEVICES SUCH AS-BUT NOT LIMITED TO: BARRICADES, TRAFFIC CONTROL SIGNS, LIGHTS, AND OTHER DEVICES NECESSARY TO PROTECT HIS WORK EMPLOYEES, VEHICULAR AND PEDESTRIAN TRAFFIC PASSING THROUGH OR NEAR HIS WORK AREAS IN ACCORDANCE WITH THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES". SAID MANUAL MAY BE OBTAINED FROM: CALTRANS CENTRAL PUBLICATIONS DISTRIBUTION UNIT, 6002 FOLSOM BLVD., SACRAMENTO CA 95819.

EACH CONTRACTOR AND/OR SUBCONTRACTOR DOING WORK OR OPERATING EQUIPMENT WITHIN TEN (10) FEET OF AN EXISTING PUBLIC STREET, SIDEWALK OR DRIVEWAY, SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL SAFETY PLAN TO THE GOVERNMENT AGENCIES HAVING JURISDICTION OVER THE PROJECT. WORK MAY NOT BEGIN UNTIL THE TRAFFIC CONTROL SAFETY PLAN IS APPROVED BY SAID AGENCIES AND AFTER ALL TRAFFIC DEVICES "CALLED FOR" ARE IN PLACE.

TRENCH SAFETY:
EACH CONTRACTOR AND/OR SUBCONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE NECESSARY DEVICES SUCH AS-BUT NOT LIMITED TO: SHORING, SHEETING, SHIELDS AND EXCAVATED SLOPES IN TRENCH EXCAVATIONS CONFORMING TO THE CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT (CALOSHA) AS ADMINISTERED BY THE STATE OF CALIFORNIA, DEPARTMENT OF INDUSTRIAL RELATIONS AND AS SHOWN AND INDICATED IN THE "TRENCH AND EXCAVATION SAFETY GUIDE" AVAILABLE FROM CALOSHA COMMUNICATIONS, 525 GOLDEN GATE AVENUE, SAN FRANCISCO, CALIFORNIA 94102.

UNDERGROUND UTILITIES

EXISTING UNDERGROUND UTILITIES:
ONLY THOSE EXISTING UNDERGROUND UTILITIES KNOWN TO THE ENGINEER ARE SHOWN ON THESE PLANS. THE LOCATIONS OF SUCH UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK. NOTICE OF THE PROPOSED WORK SHALL BE GIVEN TO THE UNDERGROUND SERVICE ALERT (1-800-422-4133) AT LEAST THREE (2) WORKING DAYS PRIOR TO ANY EXCAVATION. ALSO, THE CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY TO REVIEW AND DISCUSS IN THE FIELD, THE LOCATION AND OTHER FEATURES RELATED TO THE UNDERGROUND UTILITIES MARKED IN THE FIELD THROUGH THE UNDERGROUND SERVICE ALERT. THE CONTRACTOR SHALL NOTIFY OWNER AND PROJECT ENGINEER OF ANY UTILITY CONFLICTS FOUND IN THE FIELD AND NOT INDICATED OR SHOWN ON THESE PLANS.

COORDINATION OF UTILITIES:
NO LESS THAN 3 WORKING DAYS PRIOR TO ANY EXCAVATION OR TRENCHING, EACH CONTRACTOR DOING SUCH WORK SHALL CONTACT OR TELEPHONE THE FOLLOWING AGENCIES SO THAT EXISTING UNDERGROUND UTILITIES MAY BE LOCATED AND, IF REQUIRED BY THE AGENCY, AN INSPECTOR MAY BE PRESENT AS EXCAVATIONS ARE PERFORMED.

IMPERIAL IRRIGATION DISTRICT POWER DIVISION.....(760) 339-9280
IMPERIAL IRRIGATION DISTRICT WATER DIVISION.....(760) 339-9263
SOUTHERN CALIFORNIA GAS COMPANY.....(800) 422-4133
PACIFIC BELL TELEPHONE COMPANY.....(800) 422-4133
ADELPHIA COMMUNICATIONS CABLE TELEVISION.....(760) 352-8770

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF THE WORK OF THIS PROJECT DRAWINGS AND SPECIFICATIONS, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT CHECK OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF IMPERIAL IS CONFINED TO REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITY FOR PROJECT DESIGN.

RESPONSIBLE PROJECT ENGINEER
NAME: JOSE CARLOS ROMERO
ADDRESS: 444 SOUTH EIGHT STREET, SUITE D, EL CENTRO, CA 92243
TELEPHONE #: 760-352-6968 FAX #: 760-352-6069

BY:_____ _____ DATE:_____

REGISTERED CIVIL ENGINEER RCE NO. C 50,429

NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF
2	2nd CALTRANS	12/05/14	AF
3	2nd CALTRANS	02/17/15	JG

NO.	DESCRIPTION	DATE	BY
1	3rd CALTRANS	03/27/15	AF
2	4th CALTRANS	08/04/15	AF

PREPARED BY:
JOSE CARLOS ROMERO PE 50,429 / LS 7,671
09/30/14
DATE

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

ProTerra
LAND SURVEYING / CIVIL ENGINEERING / PROJECT MANAGEMENT
444 South Eight Street, Suite D, El Centro CA 92243
(760) 352 6968 Off - 760 352 6069 Fax - 760 235 5185 Cell

9/30/16

CITY OF IMPERIAL
APPROVED FOR CONSTRUCTION BY:
JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL, CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION:
NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5134-013)

DRAWING DESCRIPTION:
TITLE SHEET & GENERAL NOTES

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET:
C1
1-14

DRAWN BY: M.D. 12/10/12
LAST REVISED
DATE: MD 09/30/16

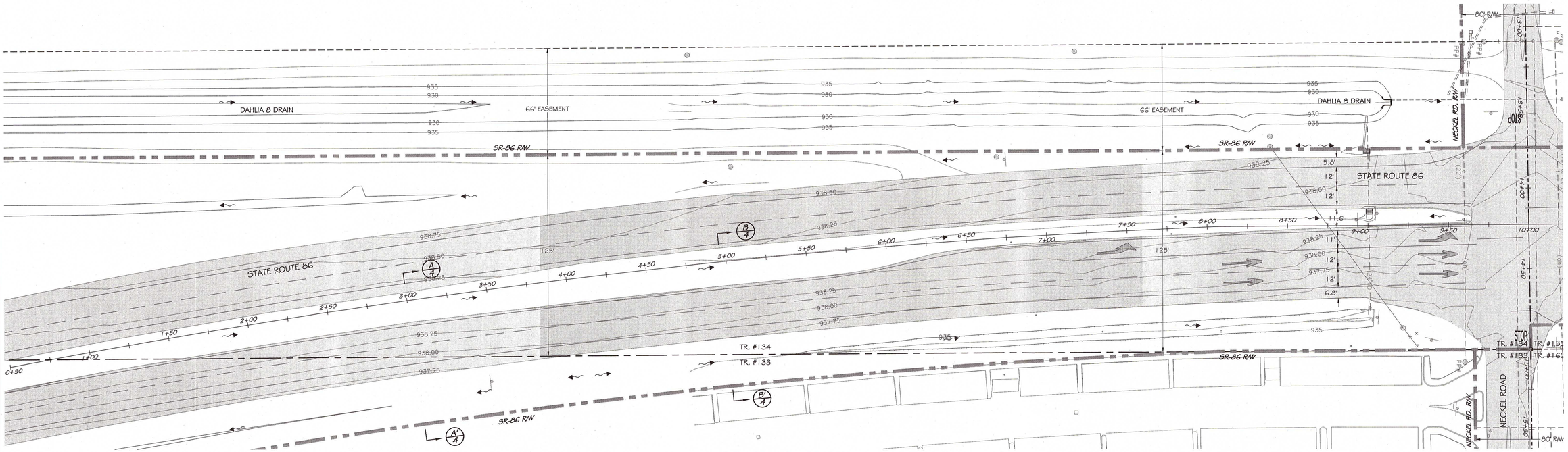
EXISTING LEGEND

- EXISTING RIGHT OF WAY PER ROS 14-73 & CALTRANS R/W PLAN
- EXISTING EASEMENT PER ROS 14-73
- EXISTING TRACT LINE PER ROS 14-73
- PROPOSED CITY RIGHT OF WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING AC PAVEMENT
- EXISTING SURFACE FLOW LINE

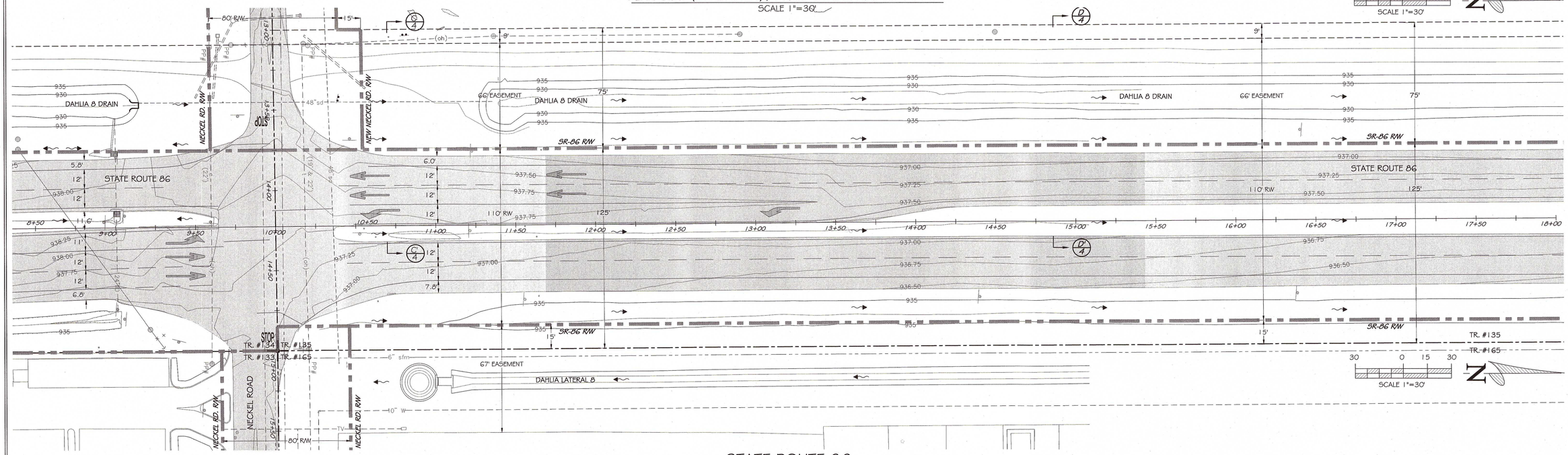
PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE



STATE ROUTE 86
PLAN VIEW (± PM 5.24) / FROM STA. 2+00 TO 11+00
SCALE 1"=30'



STATE ROUTE 86
PLAN VIEW (± PM 5.24) / FROM STA. 8+50 TO 17+50
SCALE 1"=30'

NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF
2	2nd CALTRANS	12/05/14	AF
2	2nd CALTRANS	02/17/15	JG
3	3rd CALTRANS	03/27/15	AF
4	4th CALTRANS	08/04/15	AF

PREPARED BY: JOSE CARLOS ROMERO PE 50,429 / LS 7,871 — 09/30/16 DATE

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

ProTerra
LAND SURVEYING / CIVIL ENGINEERING / PROJECT MANAGEMENT
444 South Eighth Street, Suite D, El Centro CA 92243
(760) 352-6968 Off - 760 352-6069 Fax - 760 235 5185 Cell

9/30/16

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY: JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (11SP-5134-013)

DRAWING DESCRIPTION: EXISTING TOPOGRAPHIC & UTILITY PLAN (SR-86)

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET: C2

2-14

DRAWN BY: M.D. 12/10/12
LAST REVISED DATE: MD 09/30/16

EXISTING LEGEND

- EXISTING RIGHT OF WAY PER ROS 14-73 & CALTRANS R/W PLAN
- EXISTING EASEMENT PER ROS 14-73
- EXISTING TRACT LINE PER ROS 14-73
- PROPOSED CITY RIGHT OF WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING AC PAVEMENT
- EXISTING SURFACE FLOW LINE

PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	08/23/14	AF	3	3rd CALTRANS	03/27/15	AF
2	2nd CALTRANS	12/05/14	AF	4	4th CALTRANS	08/04/15	AF
3	2nd CALTRANS	02/17/15	JG				

PREPARED BY: JOSE CARLOS ROMERO PE 50,429 / LS 7,871 — 09/30/16 DATE

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

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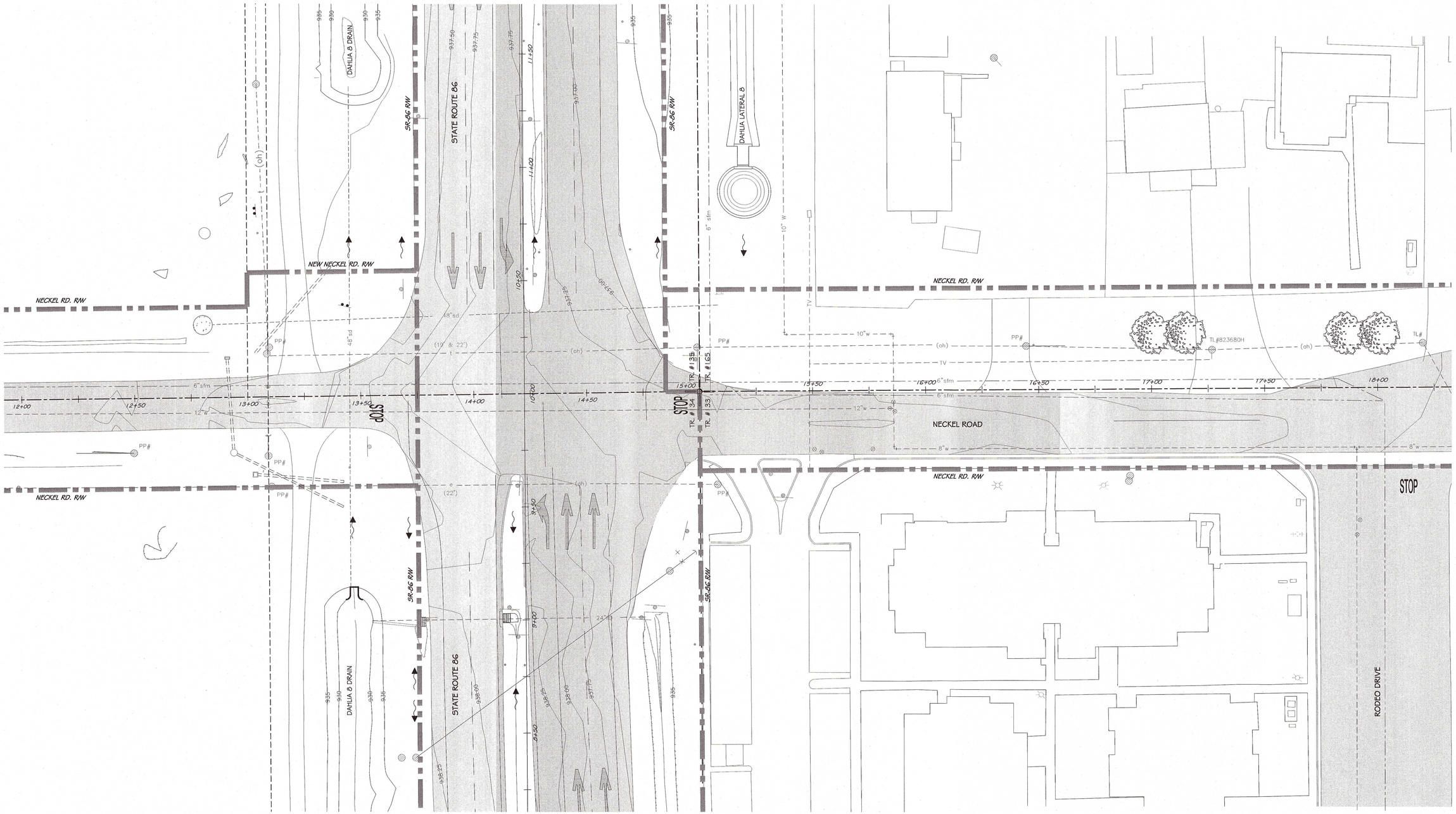


NECKEL ROAD
PLAN VIEW (± PM 5.24) / FROM STA. 12+50 TO 18+50
SCALE 1"=20'

20 0 10 20
SCALE 1"=20'

N

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY: 9/30/16
JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL, CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5134-013)

DRAWING DESCRIPTION: EXISTING TOPOGRAPHIC & UTILITY PLAN (NECKEL RD)

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

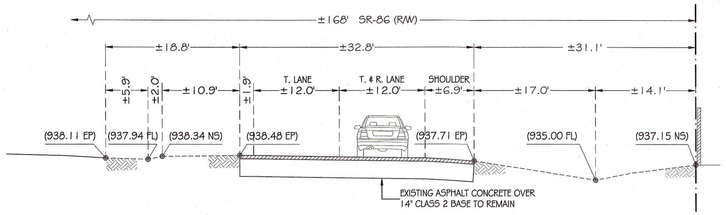
SHEET: C3
3-14

DRAWN BY: M.D. 12/10/12
LAST REVISED DATE: MD 09/30/16

PERMIT NUMBER 11 - 14 - NSN - 0279

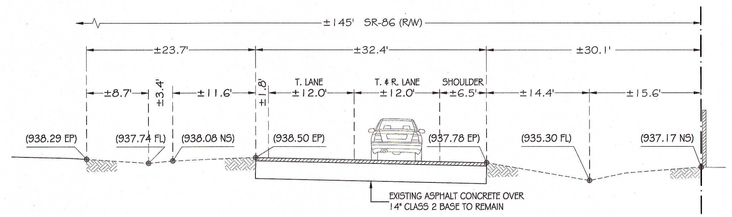
CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE



EXISTING CROSS SECTION A-A' (STA. 3+00)

SCALE 1" = 10'



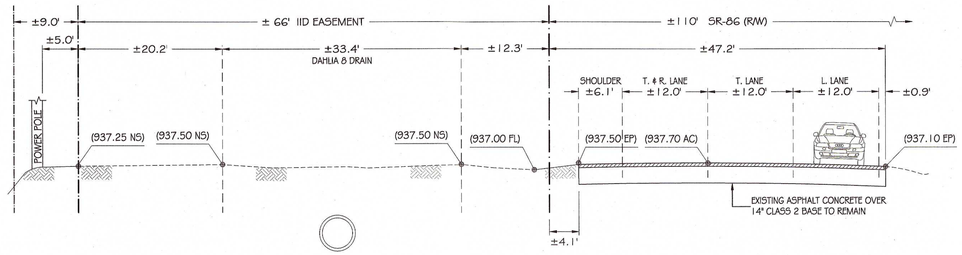
EXISTING CROSS SECTION B-B' (STA. 4+58)

SCALE 1" = 10'

HORIZONTAL AND VERTICAL COORDINATES

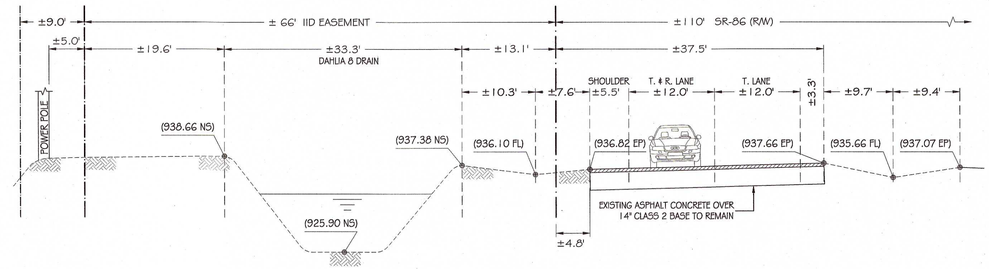
LEGEND	EASTING	NORTHING	ELEVATION	DESCRIPTION
1	6,770,468.36	1,894,010.92	937.75	BEGINNING OF CURB (FACE)
2	6,770,498.49	1,894,040.78	937.10	END OF CURB (FACE)
3	6,770,476.59	1,894,019.65	937.85	CL TRAFFIC SIGNAL POLE "B"
4	6,770,487.29	1,894,031.75	937.85	CL TRAFFIC SIGNAL POLE "A"
5	6,770,493.69	1,894,084.16	937.33	BEGINNING OF CURB (FACE)
6	6,770,463.55	1,894,114.04	937.20	END OF CURB (FACE)
7	6,770,476.71	1,894,097.06	937.55	CL TRAFFIC SIGNAL POLE "G"
8	6,770,359.12	1,894,122.63	937.80	BEGINNING OF CURB (FACE)
9	6,770,324.51	1,894,088.24	937.70	END OF CURB (FACE)
10	6,770,349.17	1,894,115.15	937.95	CL TRAFFIC SIGNAL POLE "E"
11	6,770,320.73	1,894,114.72	937.95	CL TRAFFIC SIGNAL POLE "D"

NOTE: SEE "VERTICAL BENCHMARK" AND "HORIZONTAL BENCHMARK" ON SHEET "C1" FOR MORE INFORMATION



EXISTING CROSS SECTION C-C' (STA. 10+70)

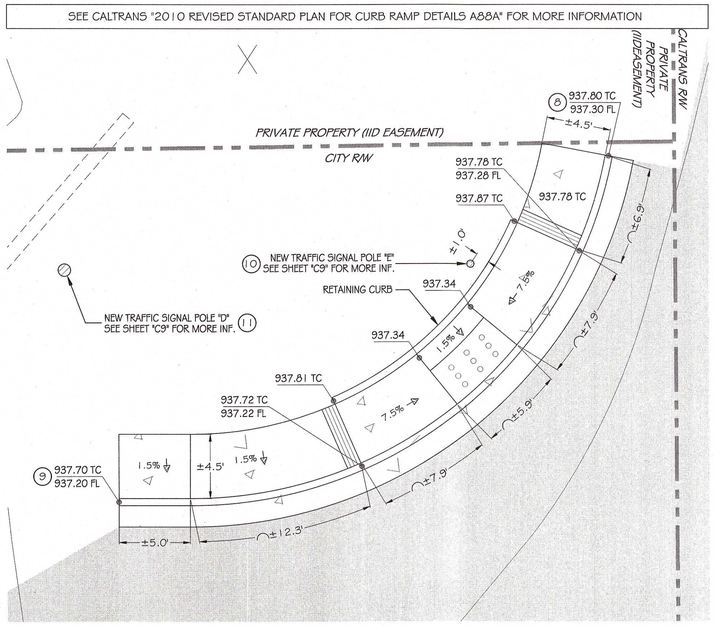
SCALE 1" = 10'



EXISTING CROSS SECTION D-D' (STA. 14+85)

SCALE 1" = 10'

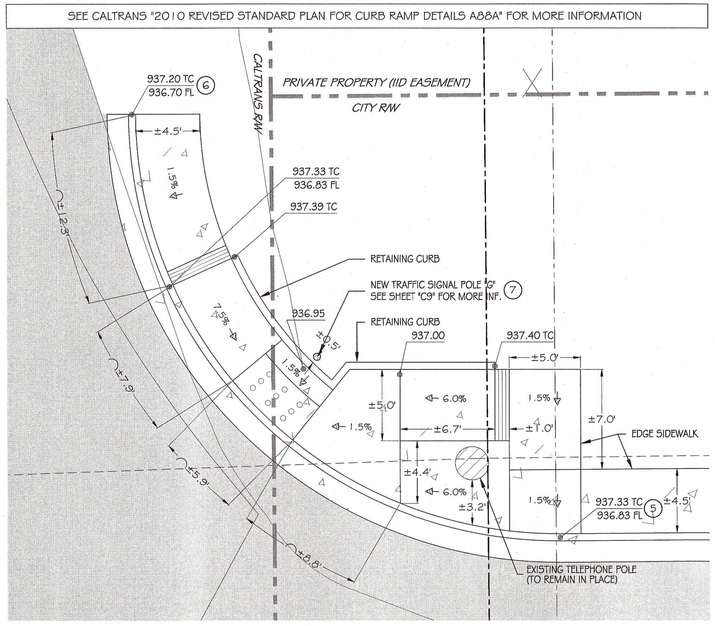
SEE CALTRANS "2010 REVISED STANDARD PLAN FOR CURB RAMP DETAILS A88A" FOR MORE INFORMATION



NEW ADA CURB DETAIL - NORTH WEST CORNER

SCALE 1" = 5'

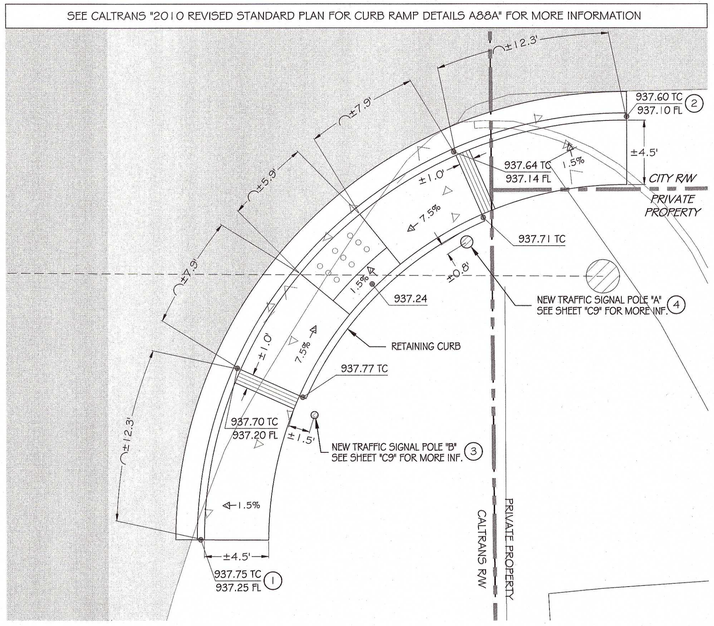
SEE CALTRANS "2010 REVISED STANDARD PLAN FOR CURB RAMP DETAILS A88A" FOR MORE INFORMATION



NEW ADA CURB DETAIL - NORTH EAST CORNER

SCALE 1" = 5'

SEE CALTRANS "2010 REVISED STANDARD PLAN FOR CURB RAMP DETAILS A88A" FOR MORE INFORMATION



NEW ADA CURB DETAIL - SOUTH EAST CORNER

SCALE 1" = 5'

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF	3	3rd CALTRANS	03/27/15	AF
2	2nd CALTRANS	12/05/14	AF	4	4th CALTRANS	08/04/15	AF
3	2nd CALTRANS	02/17/15	JG				

PREPARED BY: JOSE CARLOS ROMERO PE 50,429 / LS 7,871 — 09/30/16 DATE

REGISTERED PROFESSIONAL ENGINEER — JOSE CARLOS ROMERO — C 50429 — EXP 6-30-17 — CIVIL — STATE OF CALIFORNIA

ProTerra
LAND SURVEYING / CIVIL ENGINEERING / PROJECT MANAGEMENT
444 South Eighth Street, Suite D, El Centro CA 92243
(760) 352 6968 Off - 760 352 6069 Fax - 760 233 5185 Cell

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY: 9/30/16
JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5134-013)

DRAWING DESCRIPTION: EXISTING & PROPOSED CROSS SECTIONS

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET: C4 — 4-14

DRAWN BY: M.D. 12/10/12
LAST REVISED DATE: MD 09/30/16

EXISTING LEGEND

- EXISTING RIGHT OF WAY PER ROS 14-73 & CALTRANS R/W PLAN
- EXISTING EASEMENT PER ROS 14-73
- EXISTING TRACT LINE PER ROS 14-73
- PROPOSED CITY RIGHT OF WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING AC PAVEMENT

HORIZONTAL AND VERTICAL COORDINATES

LEGEND	EASTING	NORTHING	ELEVATION	DESCRIPTION
1	6,770,509.84	1,893,144.83	938.48	BEGINNING OF SAW CUT
2	6,770,477.46	1,893,260.73	938.75	B.C. EDGE OF PAVEMENT
3	6,770,423.30	1,893,741.95	938.81	END OF SAW CUT
4	6,770,409.52	1,894,405.47	937.63	BEGINNING OF SAW CUT
5	6,770,407.63	1,894,710.22	---------	B.C. EDGE OF PAVEMENT
6	6,770,396.27	1,894,839.28	---------	END OF SAW CUT
7	6,770,469.55	1,894,132.48	---------	CL TRAFFIC SIGNAL POLE "F"
8				

NOTE: SEE "VERTICAL BENCHMARK" AND "HORIZONTAL BENCHMARK" ON SHEET "C1" FOR MORE INFORMATION

CENTER LINE DATA

No.	Delta/Beanng	Radius	Length	Remarks
1	4° 46' 32"	5027.53'	419.05'	CENTERLINE
2	3° 48' 41"	5027.12'	334.42'	CENTERLINE
3	N 00° 22' 27" W		196.31'	CENTERLINE
4	N 00° 22' 02" W		749.25'	CENTERLINE

EDGE OF PAVEMENT LINE DATA

No.	Delta/Beanng	Radius	Length	Remarks
1	9° 11' 57"	404.82'	65.00'	EDGE OF PAVEMENT
2	12° 10' 36"	262.69'	55.83'	EDGE OF PAVEMENT
3	3° 38' 29"	4468.58'	284.00'	EDGE OF PAVEMENT
4	2° 22' 51"	4823.52'	200.43'	EDGE OF PAVEMENT
5	0° 02' 37"	399.486'	304.76'	EDGE OF PAVEMENT
6	8° 30' 54"	474.29'	70.49'	EDGE OF PAVEMENT
7	5° 58' 38"	567.09'	59.16'	EDGE OF PAVEMENT

NEW CONSTRUCTION LEGEND (SR-86)

- 1 NEW TRAFFIC SIGNAL LIGHTS POLES WITH CAMERAS (SEE "SHEET C9")
- 2 NEW ADA RAMP (SEE "SHEET C4")
- 3 NEW CURB & GUTTER, SIDEWALK AND CONCRETE PAD
- 4 NEW DRIVEWAY
- 5 NEW PAVEMENT AREA (7" AC OVER 23" AB)
- 6 SAWCUT AND REMOVE EXISTING AC PAVEMENT AND BASE (30" DEPTH)
- 7 1" AC GRINDING + 2" AC OVERLAY (SEE "SHEET C6")
- CENTER LINE DATA
- EDGE OF PAVEMENT LINE DATA
- EDGE OF PAVEMENT LINE DATA

PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82

AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	08/23/14	AF	3	3rd CALTRANS	03/27/15	AF
2	2nd CALTRANS	12/09/14	AF	4	4th CALTRANS	08/04/15	AF
3	2nd CALTRANS	02/17/15	JG				

PREPARED BY: JOSE CARLOS ROMERO PE 50,429 / LS 7,871 — 09/30/16 DATE

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

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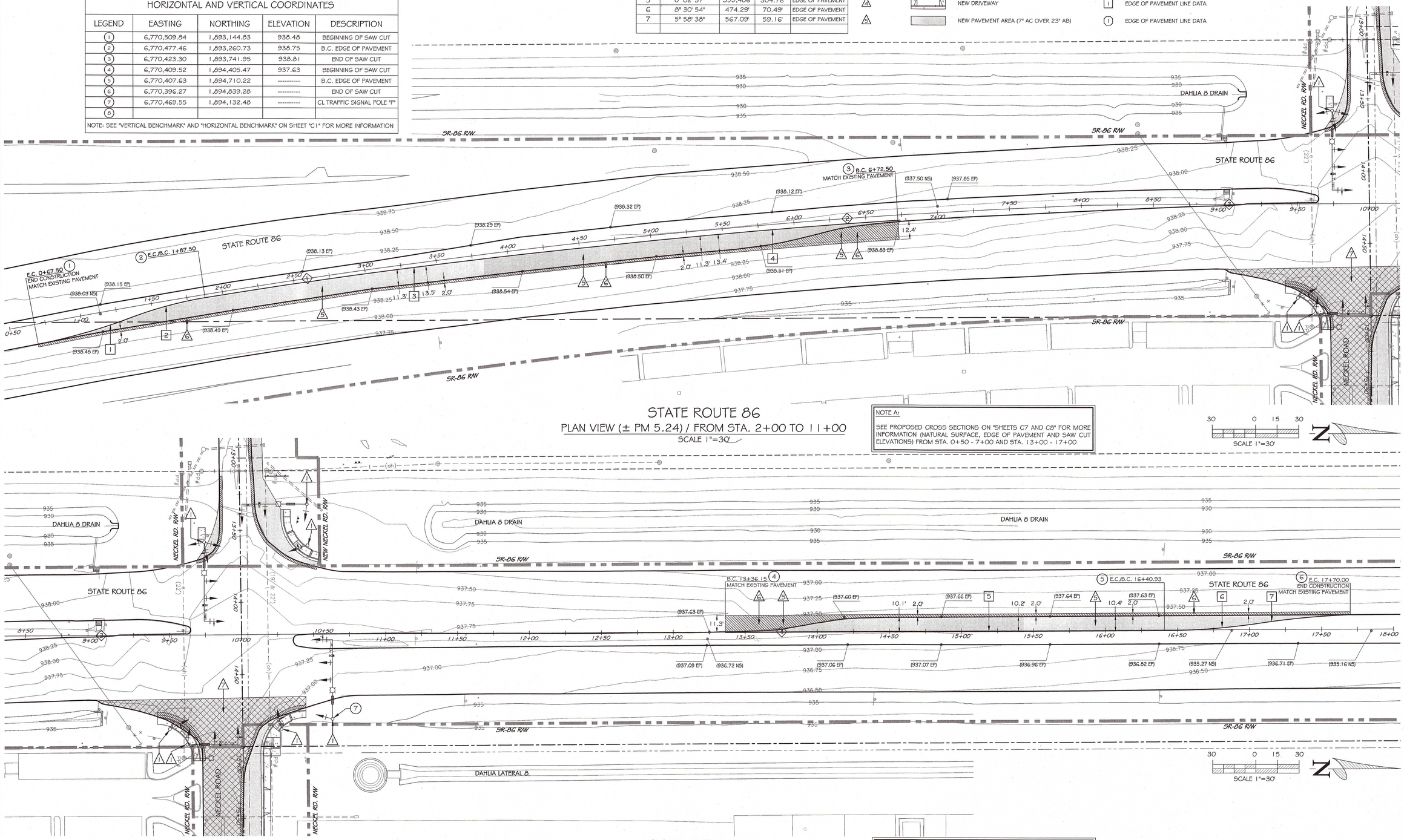
444 South Eight Street, Suite D, El Centro CA 92243
(760) 352-9988 Off / 760 352-0069 Fax / 760 235 5185 Cell

9/30/16

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY: JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371



STATE ROUTE 86

PLAN VIEW (± PM 5.24) / FROM STA. 2+00 TO 11+00

SCALE 1"=30'

NOTE A:

SEE PROPOSED CROSS SECTIONS ON "SHEETS C7 AND C8" FOR MORE INFORMATION (NATURAL SURFACE, EDGE OF PAVEMENT AND SAW CUT ELEVATIONS) FROM STA. 0+50 - 7+00 AND STA. 13+00 - 17+00

STATE ROUTE 86

PLAN VIEW (± PM 5.24) / FROM STA. 8+50 TO 17+50

SCALE 1"=30'

NOTE A:

SEE PROPOSED CROSS SECTIONS ON "SHEETS C7 AND C8" FOR MORE INFORMATION (NATURAL SURFACE, EDGE OF PAVEMENT AND SAW CUT ELEVATIONS) FROM STA. 0+50 - 7+00 AND STA. 13+00 - 17+00

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5134-013)

DRAWING DESCRIPTION: PROPOSED LAYOUT PLAN (SR-86)

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET: C5 5-14

DRAWN BY: M.D. 12/10/12

LAST REVISED DATE: MD 09/30/16

HORIZONTAL AND VERTICAL COORDINATES

LEGEND	EASTING	NORTHING	ELEVATION	DESCRIPTION
1	6,770,804.91	1,894,085.49	936.45	EDGE OF PAVEMENT
2	6,770,588.67	1,894,084.91	937.10	END OF CURB (FACE)
3	6,770,302.86	1,894,084.24	937.13	EDGE OF PAVEMENT
4	6,770,204.12	1,894,081.51	936.76	EDGE OF PAVEMENT
5	6,770,191.10	1,894,073.99	936.86	EDGE OF PAVEMENT
6	6,770,469.55	1,894,132.48	---------	CL TRAFFIC SIGNAL POLE "P"
7	6,770,454.03	1,894,114.04	937.05	OVERLAY LIMITS
8	6,770,457.05	1,893,969.11	937.23	OVERLAY LIMITS
9	6,770,763.76	1,894,043.92	936.95	OVERLAY LIMITS

NOTE: SEE "VERTICAL BENCHMARK" AND "HORIZONTAL BENCHMARK" ON SHEET "C1" FOR MORE INFORMATION

◇ CENTER LINE DATA

No.	Delta/Beaning	Radius	Length	Remarks
5	N 89° 13' 25" E		250.00'	CENTERLINE
6	N 89° 32' 56" E		350.00'	CENTERLINE

◯ CURB LINE DATA

No.	Delta/Beaning	Radius	Length	Remarks
1	90° 00' 00"	30.00'	47.12'	FACE OF CURB
2	90° 00' 00"	30.00'	47.12'	FACE OF CURB
3	90° 00' 00"	30.00'	47.12'	FACE OF CURB
4	N 89° 32' 56" E		94.99'	FACE OF CURB

☐ EDGE OF PAVEMENT LINE DATA

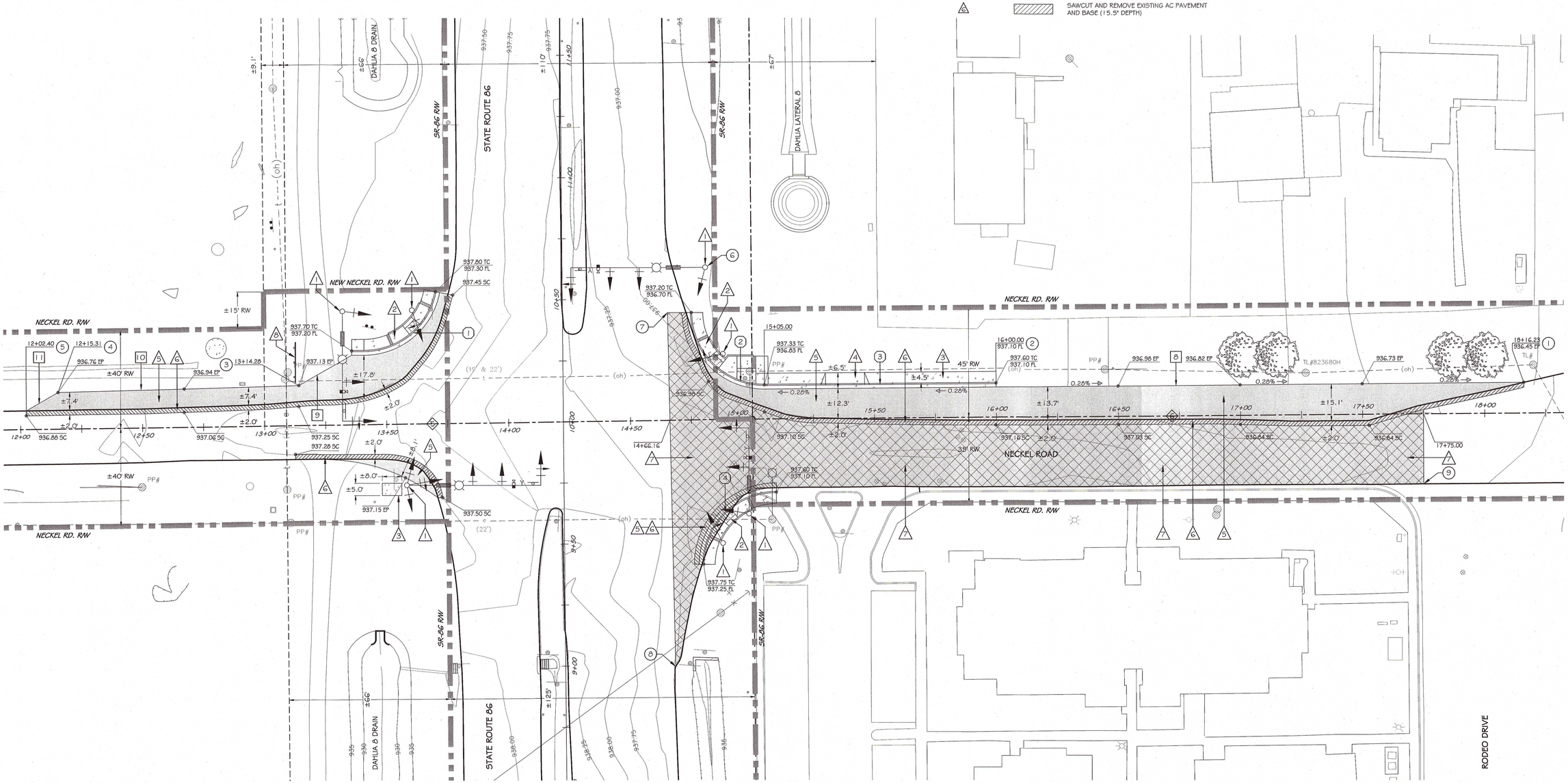
No.	Delta/Beaning	Radius	Length	Remarks
8	N 89° 28' 46" E		216.23'	EDGE OF PAVEMENT
9	N 60° 00' 00" E		25.00'	EDGE OF PAVEMENT
10	N 88° 24' 50" E		98.77'	EDGE OF PAVEMENT
11	N 60° 00' 00" E		15.03'	EDGE OF PAVEMENT

EXISTING LEGEND

- EXISTING RIGHT OF WAY PER ROS 14-73 & CALTRANS R/W PLAN
- EXISTING EASEMENT PER ROS 14-73
- EXISTING TRACT LINE PER ROS 14-73
- PROPOSED CITY RIGHT OF WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING AC PAVEMENT

NEW CONSTRUCTION LEGEND (NECKEL RD.)

1. NEW TRAFFIC SIGNAL LIGHTS POLES WITH CAMERAS (SEE "SHEET C9")
2. NEW ADA RAMP (SEE "SHEET C4")
3. NEW CURB & GUTTER, SIDEWALK AND CONCRETE PAD
4. NEW DRIVEWAY
5. NEW PAVEMENT AREA (3.5" AC OVER 12" AB)
6. SAWCUT AND REMOVE EXISTING AC PAVEMENT AND BASE (15.5" DEPTH)
7. 1" AC GRINDING + 2" AC OVERLAY
8. BARRICADE
- CENTER LINE DATA
- EDGE OF PAVEMENT LINE DATA
- EDGE OF PAVEMENT LINE DATA



NECKEL ROAD

PLAN VIEW (± PM 5.24) / FROM STA. 12+50 TO 18+50

SCALE 1"=20'

PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82

AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF	3	3rd CALTRANS	03/27/15	AF
2	2nd CALTRANS	12/05/14	AF	4	4th CALTRANS	08/04/15	AF
2	2nd CALTRANS	02/17/15	JG				

PREPARED BY: JOSE CARLOS ROMERO PE 50,429 / LS 7,671 DATE 09/30/16

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

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444 South Eighth Street, Suite D, El Centro CA 92243
(760) 352 6908 Off - 760 352 6069 Fax - 760 235 5185 Cell

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY: 9/30/16

JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5134-013)

DRAWING DESCRIPTION: PROPOSED LAYOUT PLAN (NECKEL RD)

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET: C6 6-14

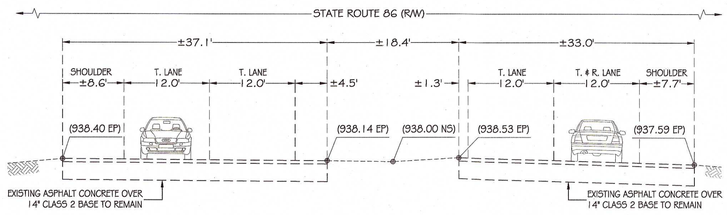
DRAWN BY: M.D. 12/10/12

LAST REVISED DATE: MD 09/30/16

PERMIT NUMBER 11 - 14 - N5N - 0279

CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE



CROSS SECTION - STA. 0+50

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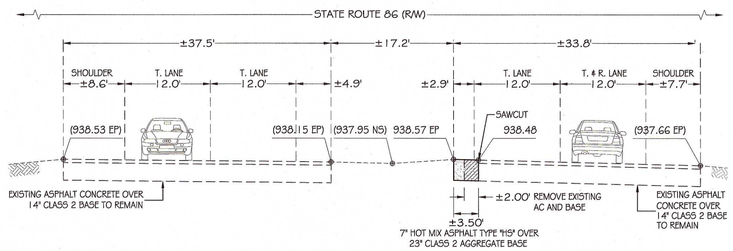

CROSS SECTION - STA. 1+00

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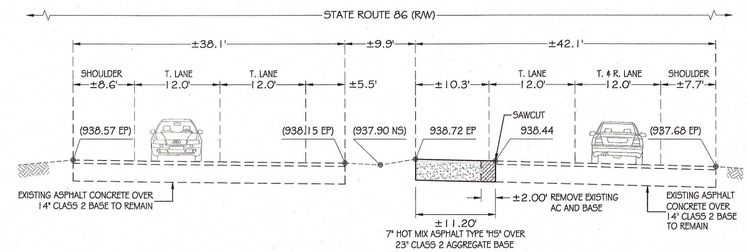

CROSS SECTION - STA. 1+50

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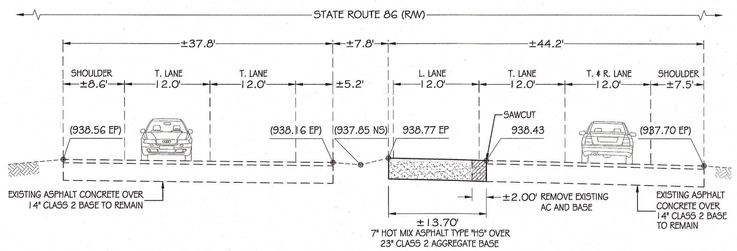

CROSS SECTION - STA. 2+00

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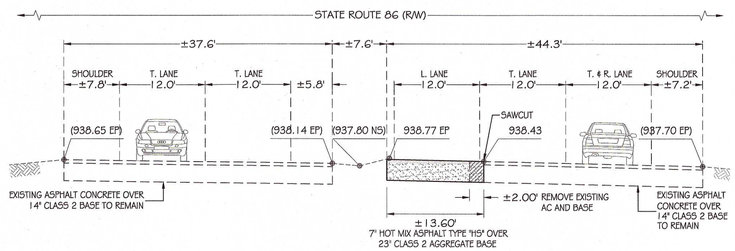
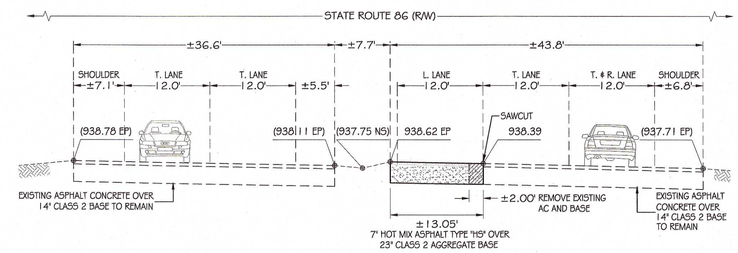


CROSS SECTION - STA. 2+50

SCALE 1" = 10'



CROSS SECTION - STA. 3+00

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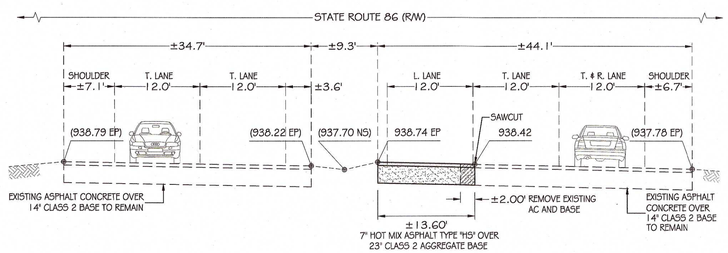

CROSS SECTION - STA. 3+50

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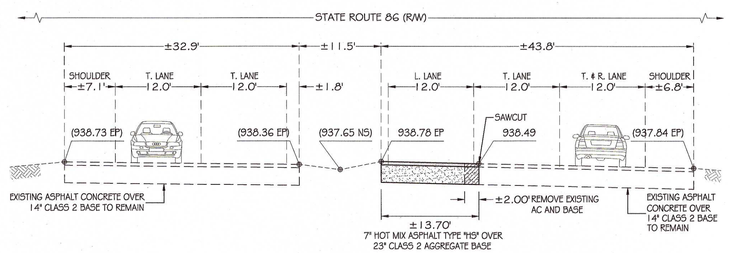

CROSS SECTION - STA. 4+00

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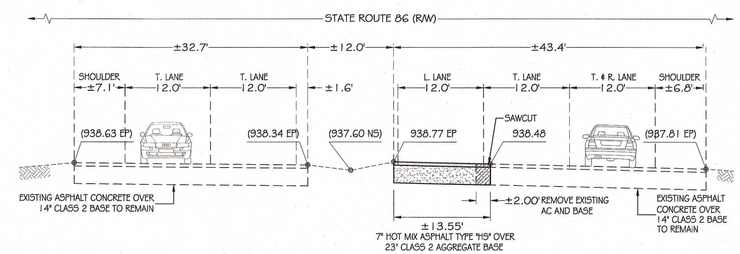

CROSS SECTION - STA. 4+50

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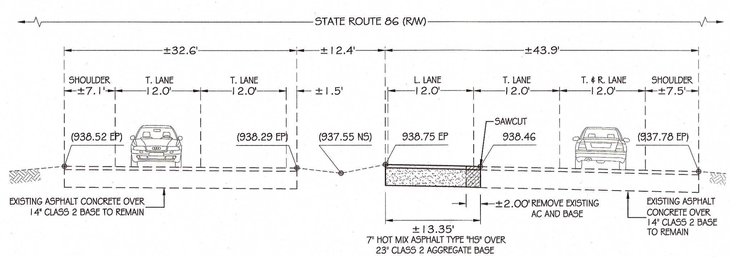
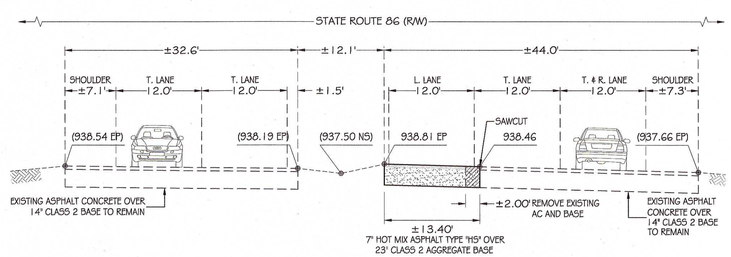


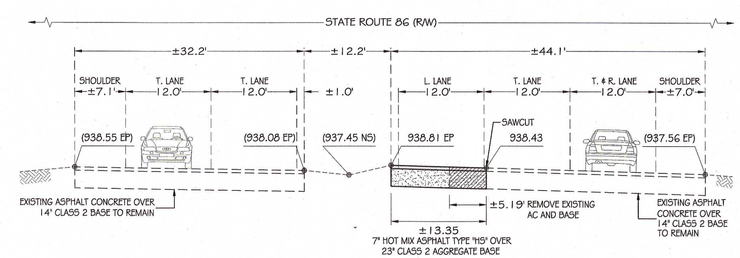
CROSS SECTION - STA. 5+00

SCALE 1" = 10'



CROSS SECTION - STA. 5+50

SCALE 1" = 10'



CROSS SECTION - STA. 6+00

SCALE 1" = 10'

NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF
2	2nd CALTRANS	12/05/14	AF
3	2nd CALTRANS	02/17/15	JG

NO.	DESCRIPTION	DATE	BY
1	3rd CALTRANS	03/27/15	AF
2	4th CALTRANS	08/04/15	AF

PREPARED BY:
JOSE CARLOS ROMERO
PE 50,429 / LS 7,671
07/30/16
DATE

REGISTERED PROFESSIONAL ENGINEER
JOSE CARLOS ROMERO
C 50429
EXP 6-30-17
CIVIL
STATE OF CALIFORNIA

ProTerra
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444 South Eight Street, Suite D, El Centro CA 92243
(760) 352 6958 Off. 760 352 6969 Fax. 760 355 5185 Cell

9/30/16
DATE

CITY OF IMPERIAL
APPROVED FOR CONSTRUCTION BY:
JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION:
NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD
(HSIP 5134-013)

DRAWING DESCRIPTION:
PROPOSED CROSS SECTIONS

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET:
C7
7-14

DRAWN BY: M.D. 12/10/12
LAST REVISED
DATE: MD 09/30/16

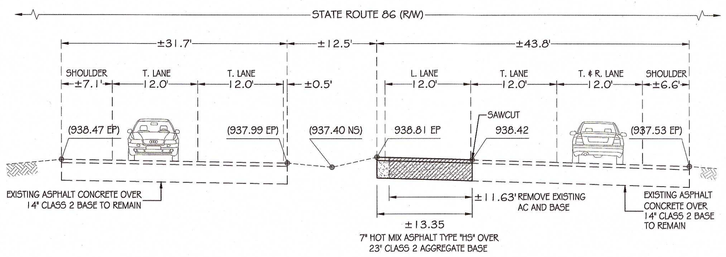
PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

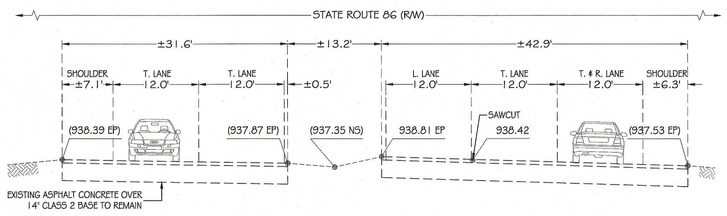
NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF	3	3rd CALTRANS	03/27/15	AF
2	2nd CALTRANS	12/05/14	AF	4	4th CALTRANS	08/04/15	AF
3	2nd CALTRANS	02/17/15	JG				

PREPARED BY: JOSE CARLOS ROMERO PE 50,429 / LS 7,871 — 09/30/16 DATE



CROSS SECTION - STA. 6+50

SCALE 1" = 10'



CROSS SECTION - STA. 7+00

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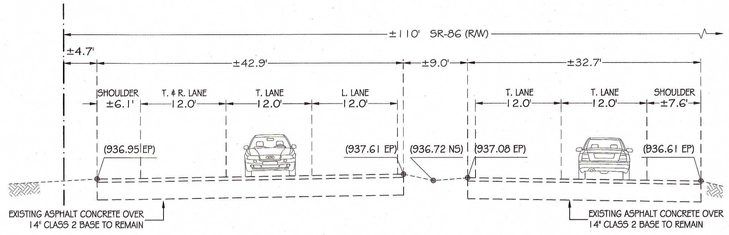

CROSS SECTION - STA. 13+00

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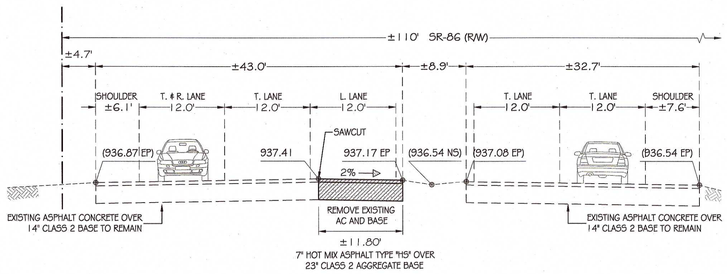

CROSS SECTION - STA. 13+50

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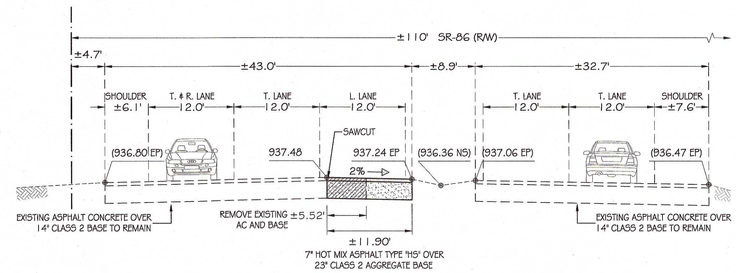
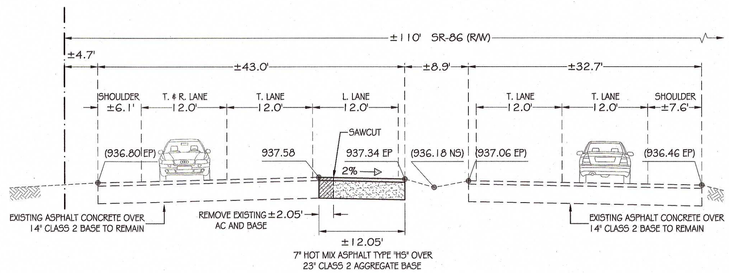


CROSS SECTION - STA. 14+00

SCALE 1" = 10'



CROSS SECTION - STA. 14+50

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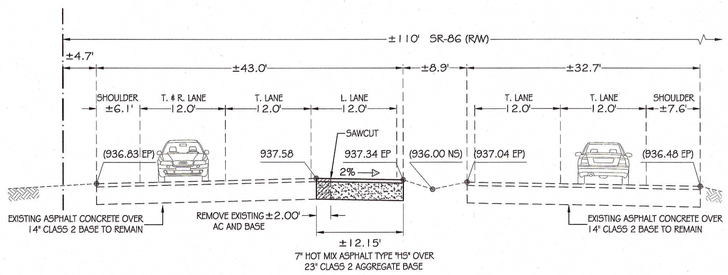
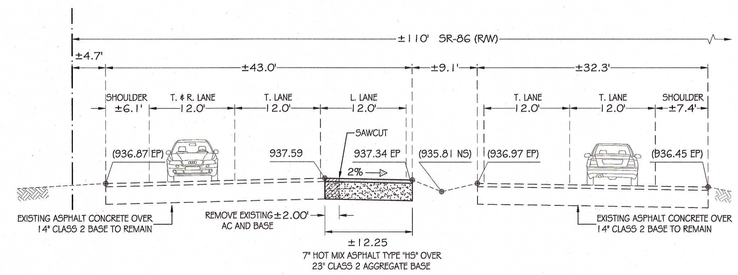


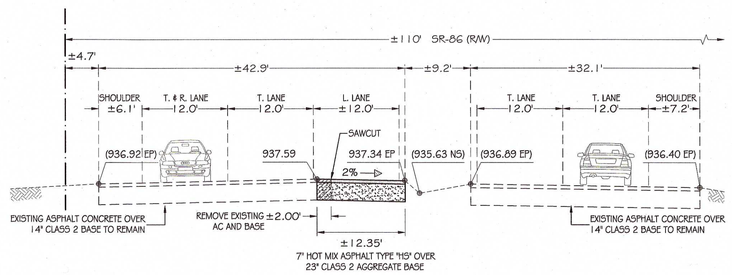
CROSS SECTION - STA. 15+00

SCALE 1" = 10'



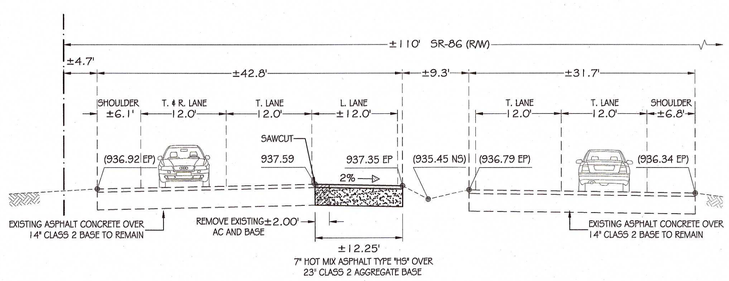
CROSS SECTION - STA. 15+50

SCALE 1" = 10'



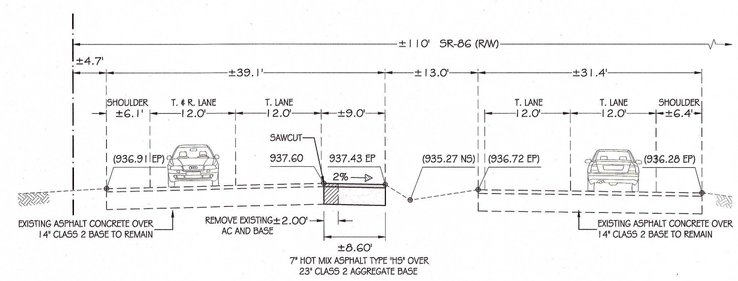
CROSS SECTION - STA. 16+00

SCALE 1" = 10'



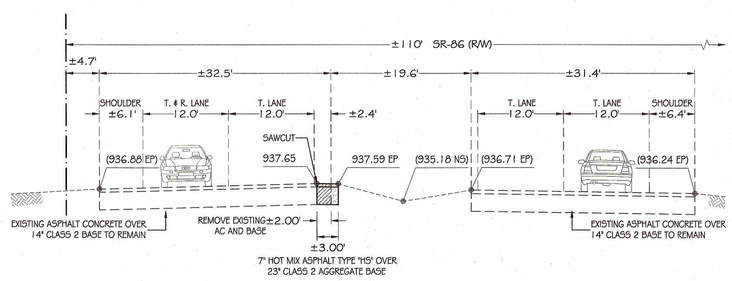
CROSS SECTION - STA. 16+50

SCALE 1" = 10'



CROSS SECTION - STA. 17+00

SCALE 1" = 10'



CROSS SECTION - STA. 17+50

SCALE 1" = 10'

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

ProTerra
LAND SURVEYING / CIVIL ENGINEERING / PROJECT MANAGEMENT
444 South Eighth Street, Suite D, El Centro CA 92243
(760) 352-6868 Off - 760.352.6069 Fax - 760.235.5185 Cell

9/30/16

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY:

JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 S. IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (11SP 5134-013)

DRAWING DESCRIPTION: PROPOSED CROSS SECTIONS

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET: C8

8-14

DRAWN BY: M.D. 12/10/12

LAST REVISED DATE: MD 09/30/16

PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

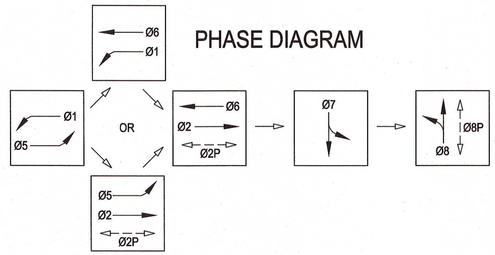
CONSTRUCTION NOTES:

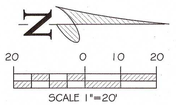
1. STATE FURNISHED MODEL 332 CONTROLLER ASSEMBLY, FOUNDATION PER ES-3C. FURNISH AND INSTALL VIDEO DETECTION UNIT, COMMUNICATION CARD AND VIDEO DISPLAY IN THE CABINET. FURNISH AND INSTALL BATTIES AND EXTERNAL BBU SYSTEM CABINET, SEE ELECTRICAL DETAILS.
2. INSTALL TYPE III-8F SIGNAL AND LIGHTING SERVICE ENCLOSURE PER IMPERIAL IRRIGATION DISTRICT (IID) REQUIREMENTS. PROVIDE 50A-1P, 120V SIGNAL METERED CIRCUIT BREAKER, 15A-1P, 120V I.I.S.N.S. METERED CIRCUIT BREAKER, 15A-1P, 120V FLASHING BEACON AND 30A-2P, 240V LIGHTING METERED CIRCUIT BREAKER. THE SERVICE CABINET SHALL BE FABRICATED FROM ANODIZED ALUMINUM SHEET PER CALTRANS SPECIFICATIONS. CALTRAN STD. PLAN ES-2E. AN ADDITIONAL FLASHING BEACON METERED CIRCUIT BREAKER SHALL ALSO BE INCLUDED.
3. INSTALL VIDEO DETECTION SYSTEM (ITERIS VANTAGE EDGE 2, OR APPROVED EQUAL) TO PROVIDE VEHICULAR, MOTOR CYCLE AND BICYCLE DETECTION FOR ALL APPROACHES AS SHOWN ON PLAN. PROVIDE VIDEO DETECTION PROCESSORS AND A VIDEO MONITOR IN THE CONTROLLER CABINET, VIDEO DETECTION CAMERAS MOUNTED ON THE SIGNAL MAST ARMS AND PROVIDE ALL WIRING AND ANCILLARY EQUIPMENT AS NEEDED. VIDEO DETECTION CAMERAS SHALL BE MOUNTED ON THE SIGNAL MAST ARMS PER CALTRANS STD. PLAN ES-7R.
4. INSTALL DUAL CHANNEL EMERGENCY VEHICLE PRE-EMPTION (E.V.P.E.) DETECTOR UNITS (3M OPTICOM MODEL 711 OR APPROVED EQUAL). CONTRACTOR SHALL FURNISH AND INSTALL E.V.P.E. EQUIPMENT, MOUNTING HARDWARE, CABLES AND ALL OTHER NECESSARY HARDWARE.
5. FURNISH AND INSTALL TYPE "A" INTERNALLY ILLUMINATED STREET NAME SIGN, DUAL FACE, MAST ARM MOUNTED. SEE POLE AND EQUIPMENT SCHEDULE FOR STREET NAMES. USE UPPER AND LOWER CASE WHITE LETTERS ON A GREEN BACKGROUND, PER CATRANS STANDARD PLAN ES-7P.
6. INSTALL MAST-ARM MOUNTED SIGN, AS NOTED ON PLAN, PER CALTRANS STANDARD PLAN ES-7N, DETAIL "U".
7. INSTALL NO. 5(T), TRAFFIC SIGNAL PULL BOX, PER CALTRANS STANDARD PLAN ES-8.
8. INSTALL NEW TYPE "E" LOOP DETECTORS, PER CALTRANS STANDARD PLAN ES-5B.
9. INSTALL NO. 6(T), TRAFFIC SIGNAL PULL BOX, PER CALTRANS STANDARD PLAN ES-8.
10. RELOCATED EXISTING FLASHING BEACON UNIT, SIGN AND PAVEMENT LEGEND CURRENTLY LOCATED ON STATE ROUTE 86, APPROXIMATELY 700' NORTH OF 15TH STREET.
11. ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM AND L.E.D. COUNTDOWN PEDESTRIAN SIGNAL HEAD.
12. INSTALL A METAL BEAM GUARD RAILING PER CALTRANS STANDARD PLAN A77G3, TYPE 16B LAYOUT.
13. REMOVE EXISTING METAL BEAM GUARD RAILING CURRENTLY LOCATED ON THE WEST SIDE OF STATE ROUTE 86, APPROXIMATELY 700' NORTH OF 15TH STREET.

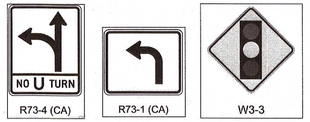
GENERAL NOTES:

1. THE CALTRANS ENCROACHMENT PERMIT CONDITIONS AND PROVISIONS SHALL TAKE PRECEDENCE OVER THE APPROVED PLANS AND SPECIFICATIONS FOR ANY CONFLICTS.
2. APPROVAL OF THESE SIGNAL PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT LIMITS.
3. THE EXISTANCE AND LOCATION OF EXISTING UNDERGROUND AND OVERHEAD FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THERE ARE NO EXISTING FACILITIES OTHER THAN THOSE SHOWN ON THESE PLANS. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ALL EXISTING FACILITIES SHOWN HEREON AND ALL OTHERS THAT ARE NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
4. UTILITY COORDINATION:
   NO LESS THAN THREE (3) WORKING DAYS PRIOR TO ANY EXCAVATION OR TRENCHING, EACH CONTRCTOR SHALL CONTACT THE FOLLOWING AGENCIES TO LOCATE EXISTING UNDERGROUND UTILITIES.
   a. IRRIGATION DISTRICT (POWER) (760) 339-9280
   b. IRRIGATION DISTRICT (WATER) (760) 339-9263
   c. PACIFIC BELL (800) 422-4133
   d. THE GAS COMPANY (800) 227-2600
5. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLACEMENT OF ALL STRIPING, PAVEMENT MARKERS, OR LEGENDS OBLITERATED BY THE CONSTRUCTION OF THIS PROJECT.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL NEW STRIPING AND THE SANDBLASTING OF CONFLICTING STRIPING.
7. THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE THE CALTRANS DISTRICT 11 OFFICE, AND THE CITY OF IMPERIAL, PRIOR TO WORKING IN THE PUBLIC RIGHT OF WAY.
8. UNDERGROUND SERVICE ALERT (USA) MUST BE CONTACTED, AT 811, 48 HOURS PRIOR TO CONSTRUCTION.
9. ALL MATERIALS ARE SUBJECT TO THE INSPECTION AND APPROVAL FROM THE CALTRANS OR CITY OF IMPERIAL INSPECTOR OR THEIR REPRESENTATIVE.
10. SPECIAL REVISIONS MUST BE APPROVED BY THE DISTRICT ENGINEER AND THE ENGINEER OF RECORD. A REPRODUCIBLE AS-BUILT PLAN WILL BE REQUIRED BY CALTRANS AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO ACCEPTANCE.
11. TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT WORK AREA TRAFFIC CONTROL HANDBOOK, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR AS DIRECTED BY CALTRANS INSPECTOR.

PHASE DIAGRAM







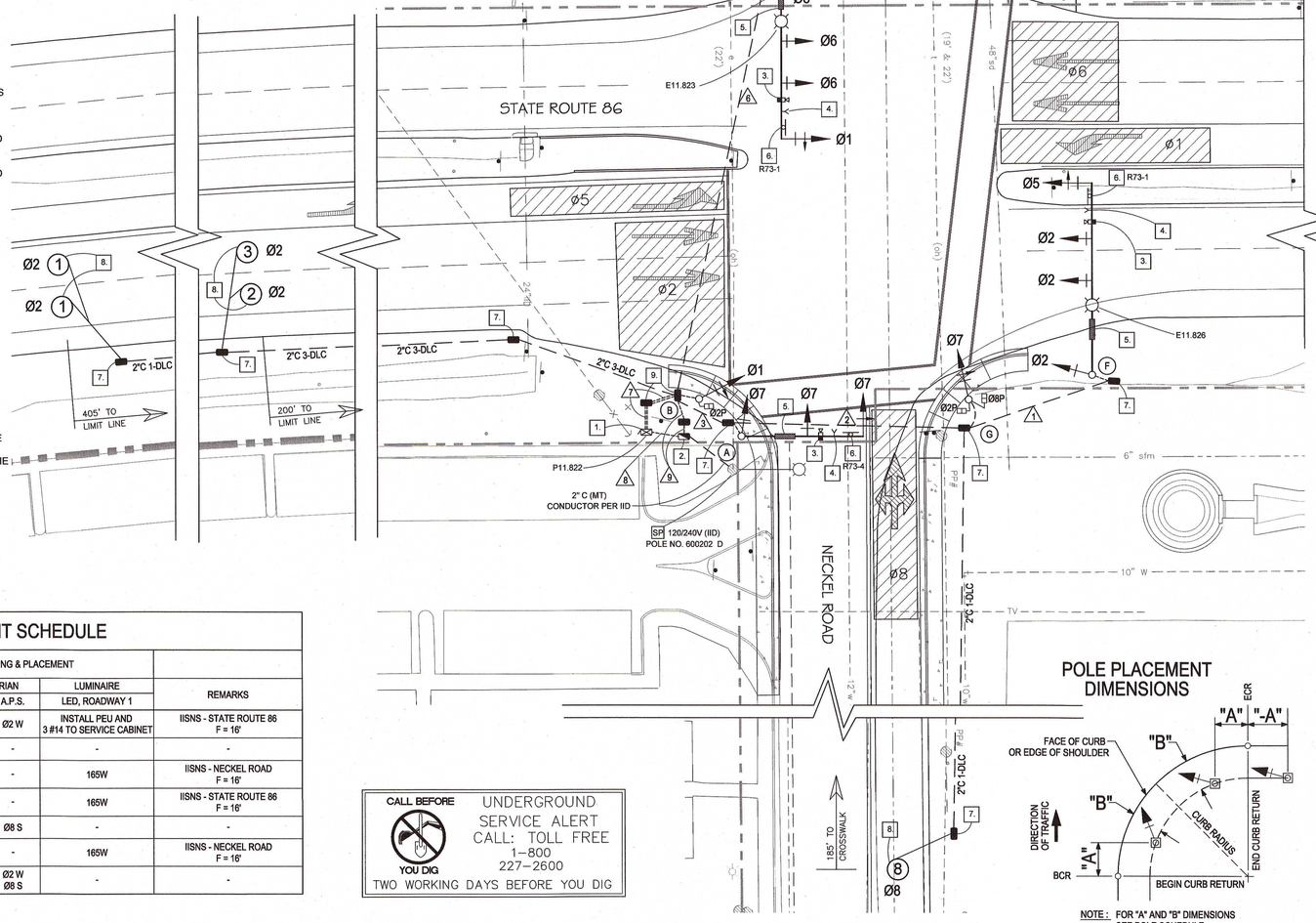
WORK TO BE DONE:

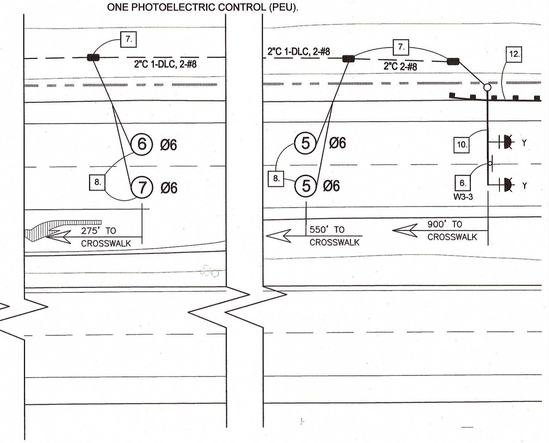
THE PROPOSED IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THIS PLAN AND:

1. CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION (2010).
2. CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, CURRENT EDITION (2010).
3. THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION (2012).
4. STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK) CURRENT EDITION (2012).

TRAFFIC SIGNAL NOTES:

1. ALL CONDUITS SHALL BE 2" UNLESS OTHERWISE SPECIFIED ON PLAN SHEET.
2. ALL TRAFFIC SIGNAL POLE FOUNDATIONS SHALL HAVE A 3" CONDUIT INSTALLED TO THE ADJACENT NO.5 PULL BOX. PULL BOXES PLACED AT 200 FEET MAXIMUM SPACING.
3. ALL SIGNAL HEADS SHALL BE 12" IN DIAMETER WITH BLACK BACK PLATES. ALL VEHICULAR AND PEDESTRIAN SIGNAL INDICATIONS SHALL BE L.E.D.
4. PEDESTRIAN HEADS AND PEDESTRIAN PUSH BUTTONS SHALL UTILIZE INTERNATIONAL SYMBOL INDICATIONS. PEDESTRIAN HEADS WILL BE ILLUMINATED BY L.E.D. PEDESTRIAN PUSH BUTTONS SHALL BE TYPE B, CALTRANS STANDARD PLANS ES-5C.
5. ALL SIGNAL STANDARDS ANCHORE BOLT NUTS SHALL HAVE COVERS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF LOOP DETECTORS, PAVEMENT MARKING AND PLACEMENT OF TRAFFIC SIGNAGE AS SHOWN ON THIS PLAN.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STOP CONTROL SIGNS AND MARKINGS (BY SAND BLASTING) AND APPLICATION OF SIGNAL CONTROL MARKINGS AND SIGNAGE UPON TRAFFIC SIGNAL ENERGIZING.
8. THE CONTRACTOR SHALL NOT ERECT ANY SIGNAL STANDARDS MORE THAN TWO WEEKS PRIOR TO THE SCHEDULED TRAFFIC SIGNAL TURN-ON UNLESS APPROVED BY CALTRANS AND THE CITY OF IMPERIAL. ALL SIGNAL FACES WILL BE TURNED AWAY FROM TRAFFIC AND COVERED UNTIL ACTIVATION.
9. FLASHING OPERATION SHALL BE RED FOR ALL APPROACHES. PEDESTRIAN INDICATIONS SHALL BE DARK.
10. SIGNAL CONTROL EQUIPEMENT SHALL BE BENCH TESTED AT A FACILITY DESIGNATED BY CALTRANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR TRANSPORTING THE EQUIPMENT.
11. THE CONDUCTOR SCHEDULE IS PROVIDED AS AN INSTALLATION GUIDE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS AND/OR CABLES REQUIRED TO PROVIDE FOR THE INTENDED SIGNAL OPERATION.
12. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL SERVICE CONNECTION WITH THE IMPERIAL IRRIGATION DISTRICT.
13. ALL SALVAGE EQUIPMENT SHALL BECOME THE PROPERTY OF THE CITY OF IMPERIAL OR CALTRANS, DEPENDING ON TRAFFIC CONTROL DEVICE LOCATION.
14. THE LUMINAIRES AND INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL HAVE ONE PHOTOELECTRIC CONTROL (PEU).





POLE PLACEMENT DIMENSIONS

NOTE: FOR "A" AND "B" DIMENSIONS SEE POLE SCHEDULE.

POLE AND EQUIPMENT SCHEDULE

LOC.	STANDARD TYPE	MASTARM SIG.	MASTARM LUM.	PLACEMENT DIMENSIONS A FT.	PLACEMENT DIMENSIONS B FT.	SIGNAL MOUNTING & PLACEMENT: VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN A.P.S.	LUMINAIRE LED, ROADWAY 1	REMARKS
A	23-4-100	35'	-	11'	6'	SV-1-T	MAT Ø7 MAS Ø7	-	Ø2 W	INSTALL PEU AND 3 #14 TO SERVICE CABINET	IISNS - STATE ROUTE 86 F = 16'
B	1-A	-	-	8.5'	6.5'	TV-1-T	-	SP-1-T	-	-	-
C	29A-5-100	55'	15'	10'	8.5'	SV-3-TC	MAT Ø1 2-MAS Ø6	-	-	165W	IISNS - NECKEL ROAD F = 16'
D	26A-4-100	45'	15'	(-9')	16.5'	SV-1-T	MAT Ø8 MAS Ø8	-	-	165W	IISNS - STATE ROUTE 86 F = 16'
E	1-A	-	-	13'	6'	TV-1-T	-	SP-1-T	Ø8 S	-	-
F	29A-5-100	55'	15'	(-18.5')	6'	SV-1-T	MAT Ø5 2-MAS Ø2	-	-	165W	IISNS - NECKEL ROAD F = 16'
G	1-A	-	-	17'	6'	TV-1-T	-	SP-2-T	Ø2 W Ø8 S	-	-

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT CALL: TOLL FREE 1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

CONDUIT AND CONDUCTOR SCHEDULE

AWG OR CABLE	CONDUCTOR RUN / POLE OR CIRCUIT	1	2	3	4	5	6	7	8	9
3CSC	POLE "A"			1 1				1 1		
	POLE "B"							0 1		
	POLE "C"					0 2	0 2			
	POLE "D"					0 1	0 1	0 1		
	POLE "E"				1 1	1 1	1 1	1 1		
12CSC	POLE "F"	0 1	0 1	0 1				0 1		
	POLE "G"		2 1	2 1				2 1		
	TOTAL CABLES	0 1	2 2	3 3	1 1	1 2	1 4	4 8		
#14	PEU			3						3
#10	I.I.S.N.S.	2	2	2		2	2			2
	LUMINAIRES	2	2	2		2	2			2
	TOTAL # 10	4	4	4	1	4	4			4
# 8	FLASHING BEACON				2	2	2			2
# 6	SIGNAL SERVICE								2	
EVP CABLE	VEHICLE PRE-EMPTION	1	1	2		1	2	4		
DETECTOR LEAD-IN CABLE	Ø2 DETECTORS							3		
	Ø6 DETECTORS				3	3	3	3		
	Ø7 DETECTORS						1	1		
	Ø8 DETECTORS		1	1				1		
	TOTAL DLC		1	1	3	3	4	8		
COAX CABLE	Ø1 & Ø6 VIDEO CABLES						1 1	1 1		
	Ø2 & Ø5 VIDEO CABLES	1 1	1 1	1 1				1 1		
	Ø7 VIDEO CABLES			1 1				1 1		
POWER	Ø8 VIDEO CABLES					1 1	1 1	1 1		
	TOTAL VIDEO CABLES	1 1	1 1	2 2		1 1	2 2	4 4		
	MINIMUM CONDUIT SIZE	3"	3"	4"	2"	3"	4"	2 - 4"	2"	2"

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF	3	3rd CALTRANS	03/27/15	AF
2	2nd CALTRANS	12/05/14	AF	4	4th CALTRANS	08/04/15	AF
3	2nd CALTRANS	02/17/15	JG				

PREPARED BY: JOSE CARLOS ROMERO PE 80,429 / LS 7,671 — DATE 09/30/16

REGISTERED PROFESSIONAL ENGINEER — JOSE CARLOS ROMERO — No. 80429 — TRAFFIC — STATE OF CALIFORNIA

THE PERFECT SOLUTION
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING
1100 ANZA AVENUE, VISTA, CA 92084
(760) 908-9233

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY: JESUS VILLEGAS - PROJECT MANAGER — DATE 9/30/16

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5 (34-013))

DRAWING DESCRIPTION: PROPOSED TRAFFIC SIGNAL

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET: C9 — 9-14

DRAWN BY: M.C.L. 5/6/15
LAST REVISED
DATE: MD 09/30/16

STREET STRIPING LEGEND

- TYPE III (L) ARROW PER CALTRANS STANDARD PLANS (A24B). (THERMOPLASTIC)
- TYPE VIII ARROW PER CALTRANS STANDARD PLANS (A24A). (THERMOPLASTIC)
- TYPE I ARROW PER CALTRANS STANDARD PLANS (A24A). (THERMOPLASTIC)
- B (XX) BEGIN DETAIL PER CALTRANS STANDARD PLANS. (A20A THROUGH A20D)
- E (XX) END DETAIL PER CALTRANS STANDARD PLANS. (A20A THROUGH A20D)
- (XX) DETAIL PER CALTRANS STANDARD PLANS. (A20A THROUGH A20D)
- I 12" SOLID WHITE LINE (CROSSWALK OR LIMIT LINE) PER CALTRANS STANDARD PLANS. (A24E) (THERMOPLASTIC)
- SIGNAL AHEAD LEGEND PER CALTRANS STANDARD PLANS (A24D)
- ES EXISTING STRIPING TO BE REFRESH
- G REMOVE EXISTING STRIPING AND PAVEMENT MARKING
- RP EXISTING ROAD SIDE SIGN TO REMAIN IN PLACE
- RS REMOVE AND SALVAGE EXISTING ROAD SIDE SIGN
- RL REMOVE AND RELOCATE EXISTING ROAD SIDE SIGN BY SANDBLASTING

STREET SIGNING LEGEND

1. W3-3 SIGNAL AHEAD SIGN - 48" X 48" FOR SR-86 / 36" X 36" FOR NECKEL (PROPOSED)
2. TYPE I BARRICADE
3. CANTILEVER FLASHING BEACON WITH A SIGN UNLESS OTHERWISE SPECIFIED OR INDICATED (SEE SHEET C8 FOR MORE INFORMATION)
4. W9-3a NO PEDESTRIAN CROSSING SIGN (MOUNTED ON THE TRAFFIC SIGNAL POST)

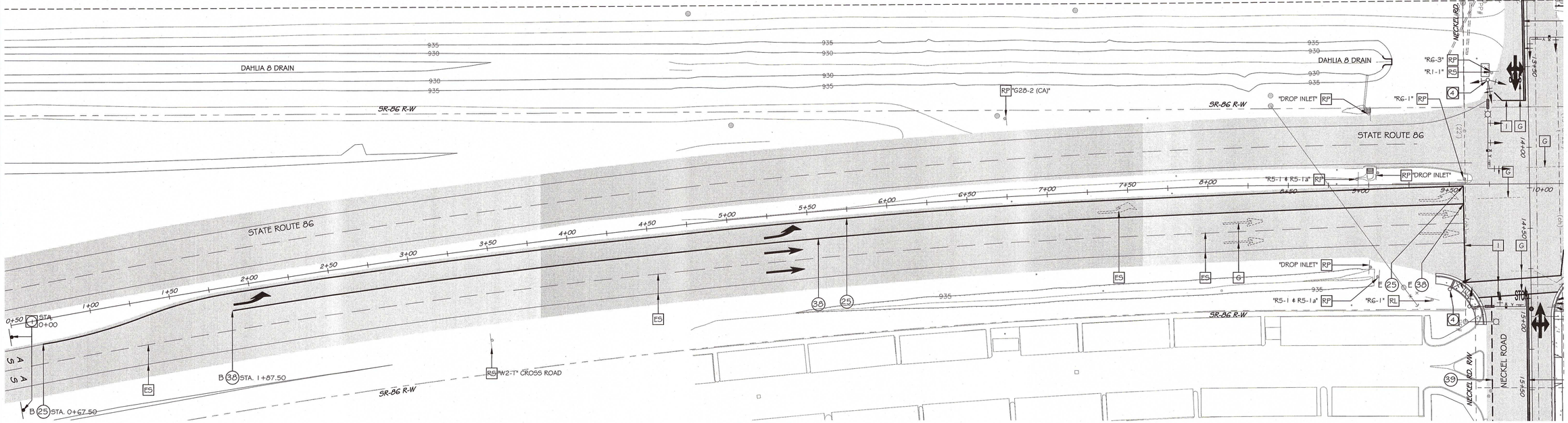
GENERAL NOTES

1) CONTRACTOR SHALL REMOVE AND SALVAGE ALL EXISTING CONFLICTING SIGNS, PAVEMENT MARKERS AND REMOVE / SANDBLAST ALL CONFLICTING EXISTING STRIPING AND PAVEMENT MARKINGS.
2) ALL STRIPING DETAIL 38, 40 AND LIMIT LINES SHALL BE THERMOPLASTIC.
3) REFRESH ALL EXISTING TRAFFIC STRIPS AND PAVEMENT MARKING WITH IN THE WORK AREA.
4) INSTALL STREET NAME SIGNS ON ALL DIRECTIONS ON SIGNALS MAST ARM.
5) UPGRADE ALL EXISTING ROADSIDE SIGNS WITHIN WORK LIMITS TO TYPE XI REFLECTIVITY.

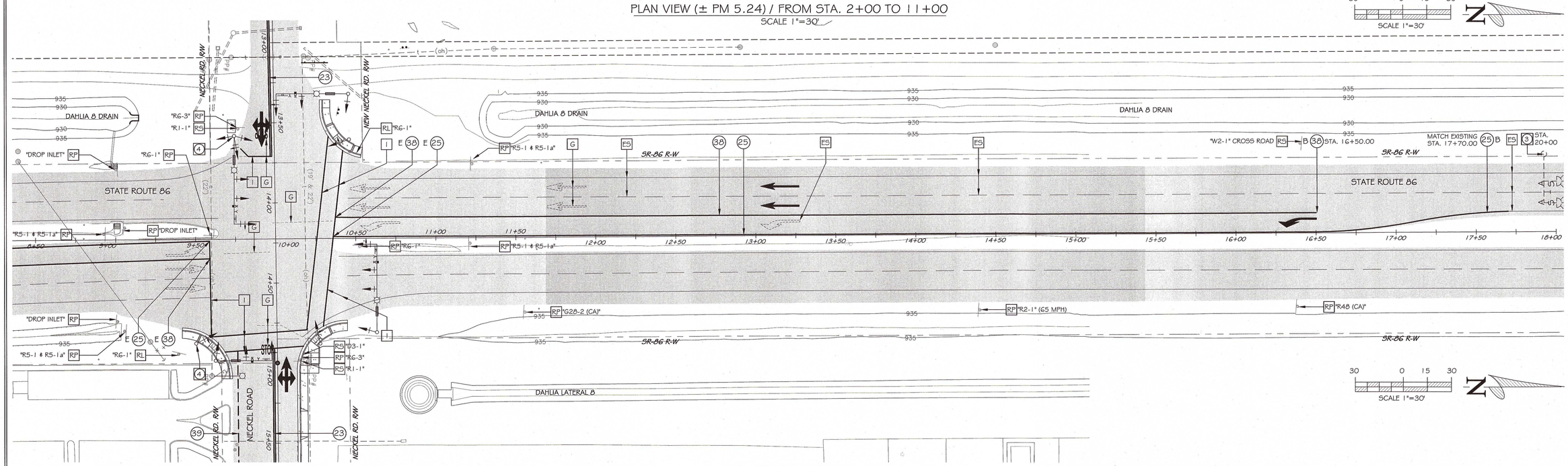
PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE



STATE ROUTE 86
PLAN VIEW (± PM 5.24) / FROM STA. 2+00 TO 11+00
SCALE 1"=30'



STATE ROUTE 86
PLAN VIEW (± PM 5.24) / FROM STA. 8+50 TO 17+50
SCALE 1"=30'

NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF
2	2nd CALTRANS	12/05/14	AF
3	2nd CALTRANS	02/17/15	JG
4	3rd CALTRANS	03/27/15	AF
5	4th CALTRANS	08/04/15	AF

PREPARED BY:
JOSE CARLOS ROMERO
PE 50,429 / LS 7,671
09/30/16
DATE

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

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444 South Eighth Street, Suite D, El Centro, CA 92243
(760) 352-0968 Off - 760 352-0969 Fax - 760 235-5185 Cell

9/30/16

CITY OF IMPERIAL
APPROVED FOR CONSTRUCTION BY
JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5134-013)

DRAWING DESCRIPTION: STREET STRIPING AND SIGNING PLAN (SR-86)

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET:
C10
10-14

DRAWN BY: M.D. 12/10/12
LAST REVISED DATE: MD 09/30/16

STREET STRIPING LEGEND

- TYPE III (L) ARROW PER CALTRANS STANDARD PLANS (A24B). (THERMOPLASTIC)
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- (XX) DETAIL PER CALTRANS STANDARD PLANS. (A20A THROUGH A20D)
- 1 12" SOLID WHITE LINE (CROSSWALK OR LIMIT LINE) PER CALTRANS STANDARD PLANS. (A24E) (THERMOPLASTIC)
- SIGNAL AHEAD LEGEND PER CALTRANS STANDARD PLANS (A24D)
- E5 EXISTING STRIPING TO BE REFRESH
- G REMOVE EXISTING STRIPING AND PAVEMENT MARKING
- RP EXISTING ROAD SIDE SIGN TO REMAIN IN PLACE
- RS REMOVE AND SALVAGE EXISTING ROAD SIDE SIGN
- RL REMOVE AND RELOCATE EXISTING ROAD SIDE SIGN BY SANDBLASTING

STREET SIGNING LEGEND

1. W3-3 SIGNAL AHEAD SIGN - 48" X 48" FOR SR-86 / 36" X 36" FOR NECKEL (PROPOSED)
2. TYPE I BARRICADE
3. CANTILEVER FLASHING BEACON WITH A SIGN UNLESS OTHERWISE SPECIFIED OR INDICATED (SEE SHEET C9 FOR MORE INFORMATION)
4. W9-3a NO PEDESTRIAN CROSSING SIGN (MOUNTED ON THE TRAFFIC SIGNAL POST)

GENERAL NOTES

1) CONTRACTOR SHALL REMOVE AND SALVAGE ALL EXISTING CONFLICTING SIGNS, PAVEMENT MARKERS AND REMOVE / SANDBLAST ALL CONFLICTING EXISTING STRIPING AND PAVEMENT MARKINGS.
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PERMIT NUMBER 11 - 14 - NSN - 0279

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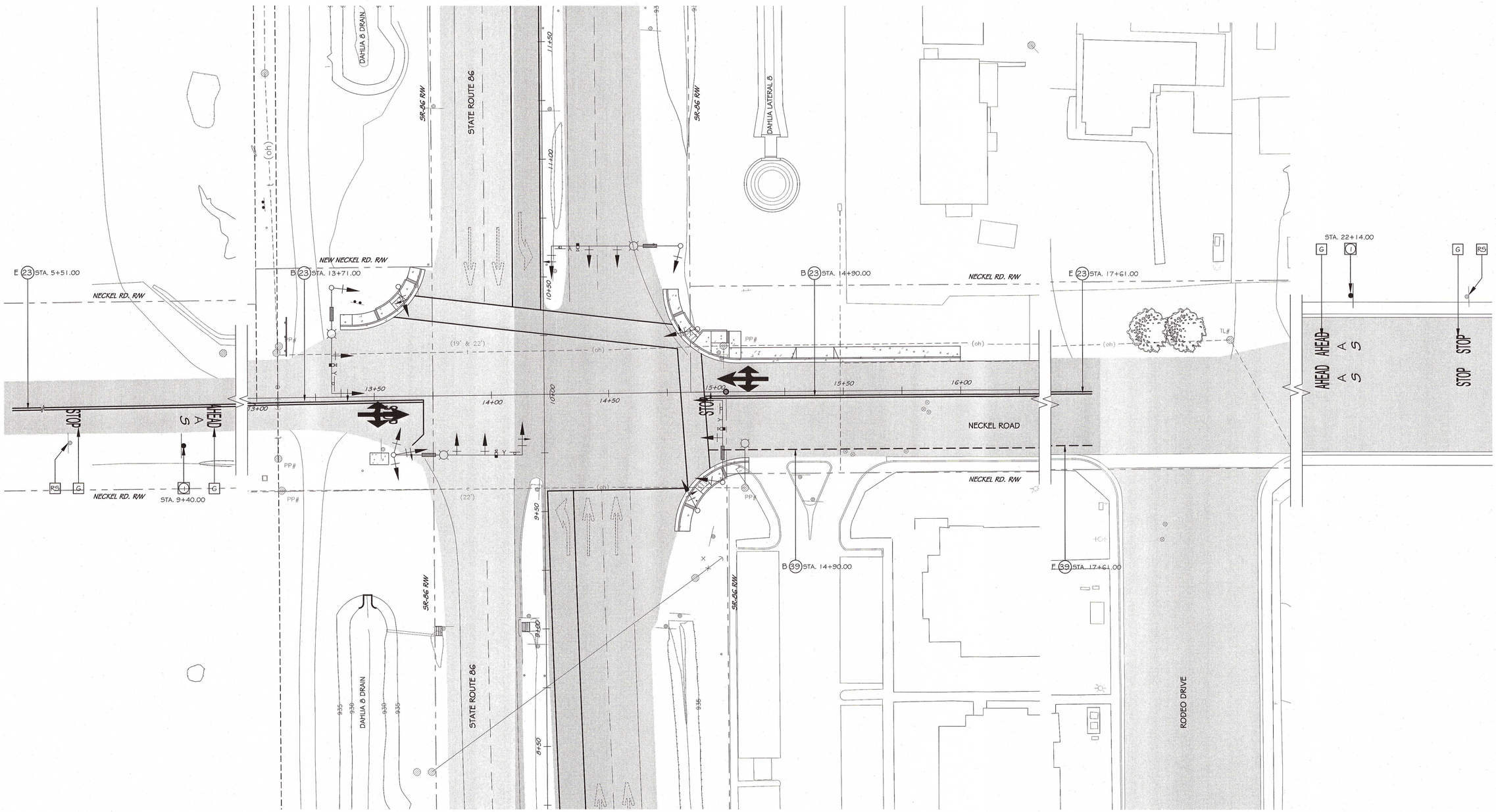

NECKEL ROAD

PLAN VIEW (± PM 5.24) / FROM STA. 12+50 TO 18+50

SCALE 1"=20'

20 0 10 20
SCALE 1"=20'

N

NO.	DESCRIPTION	DATE	BY
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NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD
(115H 5134-013)

DRAWING DESCRIPTION:
STREET STRIPING AND SIGNING PLAN (NECKEL RD)

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET:
C11
11-14

DRAWN BY: M.D. 12/10/12
LAST REVISED
DATE: MD 09/30/16

LEGEND

- EXISTING RIGHT OF WAY PER ROS 14-73 & CALTRANS R/W PLAN
- EXISTING EASEMENT PER ROS 14-73
- EXISTING TRACT LINE PER ROS 14-73
- PROPOSED CITY RIGHT OF WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING AC PAVEMENT

TRAFFIC LEGEND

- DIRECTION OF TRAVEL
- PORTABLE SIGN
- TRAFFIC CONE/DELINEATOR @ 50'
- TYPE II BARRICADE
- TEMPORARY RAILING (TYPE K)
- FLAGGER
- FLAG TREE
- FLASHING ARROW SIGN
- WORK ZONE
- TEMPORARY CRASH CUSHION (SAND FILLED)

TRAFFIC SIGNS

1. ROAD WORK 1050 FT (W20-1) 48" X 48"
2. LEFT LINE CLOSED 1000 FT (C20 (CA)) 48" X 48"
3. LANE ENDS (W4-2) 48" X 48"
4. LANE CLOSED (C30 (CA)) 30" X 30"
5. END ROAD WORK (G20-2) 36" X 18"

PHASE 1

PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82

AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

TRAFFIC CONTROL NOTES

WORK HOURS TO BE RESTRICTED TO 9:00 AM TO 4:00 PM UNLESS APPROVED OTHERWISE.

PEDESTRIAN CONTROLS WILL BE PROVIDED AS SHOWN.

PEDESTRIANS SHALL BE PROTECTED FROM ENTERING THE EXCAVATION BY PHYSICAL BARRIER DESIGNED, INSTALLED, AND MAINTAINED TO THE SATISFACTION OF THE CITY INSPECTOR.

ACCESS WILL BE MAINTAINED FOR ALL UTILITY MAINTENANCE VEHICLES AS IS POSSIBLE DURING CONSTRUCTION ACTIVITIES.

TRENCHES MUST BE BACKFILLED OR PLATED DURING NON-WORKING HOURS UNLESS K-RAIL IS PROVIDED. K-RAIL IS ONLY APPROVED WHEN SPECIFICALLY SHOWN ON THE APPROVED TRAFFIC CONTROL PLAN. PLATES SHALL HAVE CLEATS AND COLD MIX AT THE EDGES AS APPROVED BY THE CITY INSPECTOR.

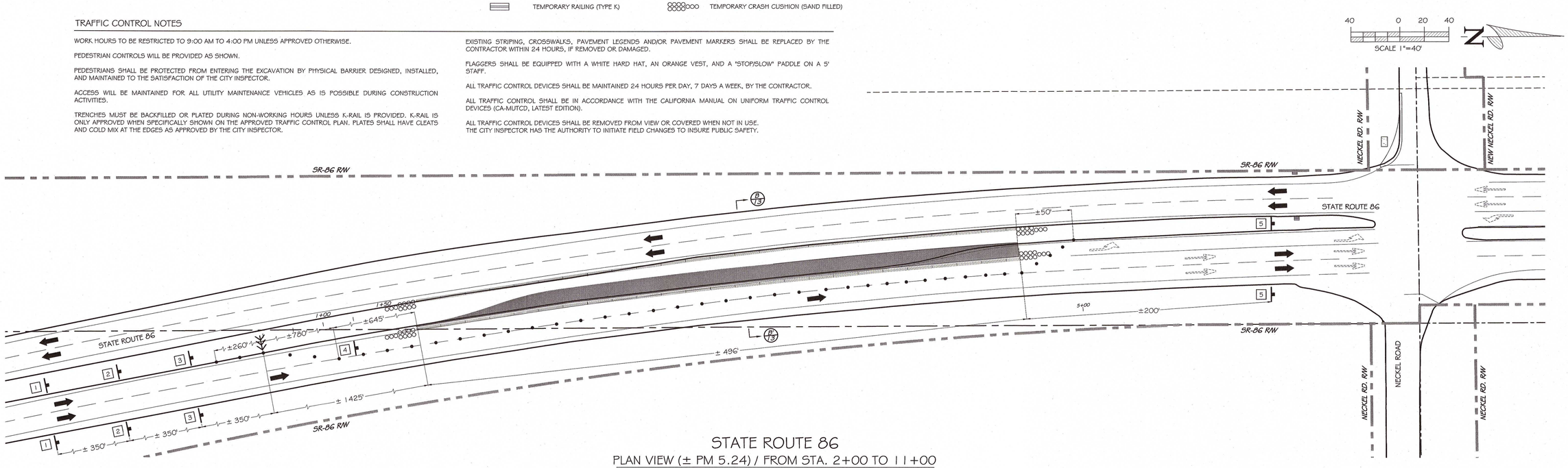
EXISTING STRIPING, CROSSWALKS, PAVEMENT LEGENDS AND/OR PAVEMENT MARKERS SHALL BE REPLACED BY THE CONTRACTOR WITHIN 24 HOURS, IF REMOVED OR DAMAGED.

FLAGGERS SHALL BE EQUIPPED WITH A WHITE HARD HAT, AN ORANGE VEST, AND A "STOP/SLOW" PADDLE ON A 5' STAFF.

ALL TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED 24 HOURS PER DAY, 7 DAYS A WEEK, BY THE CONTRACTOR.

ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA-MUTCD, LATEST EDITION).

ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM VIEW OR COVERED WHEN NOT IN USE. THE CITY INSPECTOR HAS THE AUTHORITY TO INITIATE FIELD CHANGES TO INSURE PUBLIC SAFETY.

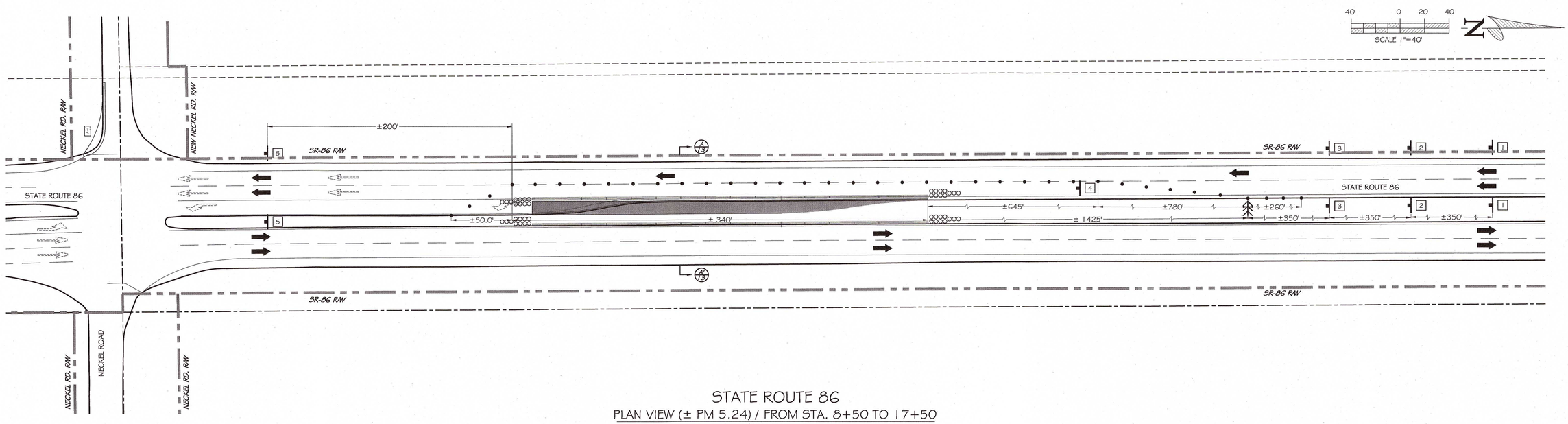


STATE ROUTE 86

PLAN VIEW (± PM 5.24) / FROM STA. 2+00 TO 11+00

SCALE 1"=40'

*NOTE A = SEE CALTRANS REVISED STANDARD PLANS (RSP) T9 AND T11 FOR MORE INFORMATION



STATE ROUTE 86

PLAN VIEW (± PM 5.24) / FROM STA. 8+50 TO 17+50

SCALE 1"=40'

*NOTE A = SEE CALTRANS REVISED STANDARD PLANS (RSP) T9 AND T11 FOR MORE INFORMATION

NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	08/23/14	AF
2	2nd CALTRANS	12/05/14	AF
3	2nd CALTRANS	02/17/15	JG
4	3rd CALTRANS	03/27/15	AF
5	4th CALTRANS	08/04/15	AF

PREPARED BY: JOSE CARLOS ROMERO PE 50,429 / LS 7,671 — 09/30/16 DATE

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 DP 6-30-17 CIVIL STATE OF CALIFORNIA

ProTerra LAND SURVEYING / CIVIL ENGINEERING / PROJECT MANAGEMENT
444 South Eighth Street, Suite D, El Centro CA 92243
(760) 352 6958 Off - 760 352 6969 Fax - 760 235 5185 Cell

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY — 9/30/16
JESUS VILLEGAS - PROJECT MANAGER
CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL, CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5134-013)

DRAWING DESCRIPTION: TRAFFIC CONTROL PLAN - PHASE 1 (SR-86)

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET: C12 12-14

DRAWN BY: M.D. 12/10/12

LAST REVISED DATE: MD 09/30/16

LEGEND

- EXISTING RIGHT OF WAY PER ROS 14-73 & CALTRANS R/W PLAN
- EXISTING EASEMENT PER ROS 14-73
- EXISTING TRACT LINE PER ROS 14-73
- PROPOSED CITY RIGHT OF WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING AC PAVEMENT

TRAFFIC LEGEND

- DIRECTION OF TRAVEL
- PORTABLE SIGN
- TRAFFIC CONE/DELINEATOR @ 50'
- TYPE II BARRICADE
- TEMPORARY RAILING (TYPE K)
- FLAGGER
- FLAG TREE
- FLASHING ARROW SIGN
- WORK ZONE
- TEMPORARY CRASH CUSHION (SAND FILLED)

TRAFFIC SIGNS

1	SHOULDER WORK (W21-5)	3	SHOULDER CLOSED (C30A)
2	RIGHT SHOULDER CLOSED AHEAD (W21-5b)	4	END ROAD WORK (G20-2)

PHASE 2

PERMIT NUMBER 11 - 14 - N5N - 0279

CO IMP RTE 86 PM 11.82

AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE

TRAFFIC CONTROL NOTES

WORK HOURS TO BE RESTRICTED TO 9:00 AM TO 4:00 PM UNLESS APPROVED OTHERWISE.

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TRENCHES MUST BE BACKFILLED OR PLATED DURING NON-WORKING HOURS UNLESS K-RAIL IS PROVIDED. K-RAIL IS ONLY APPROVED WHEN SPECIFICALLY SHOWN ON THE APPROVED TRAFFIC CONTROL PLAN. PLATES SHALL HAVE CLEATS AND COLD MIX AT THE EDGES AS APPROVED BY THE CITY INSPECTOR.

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ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA-MUTCD, LATEST EDITION).

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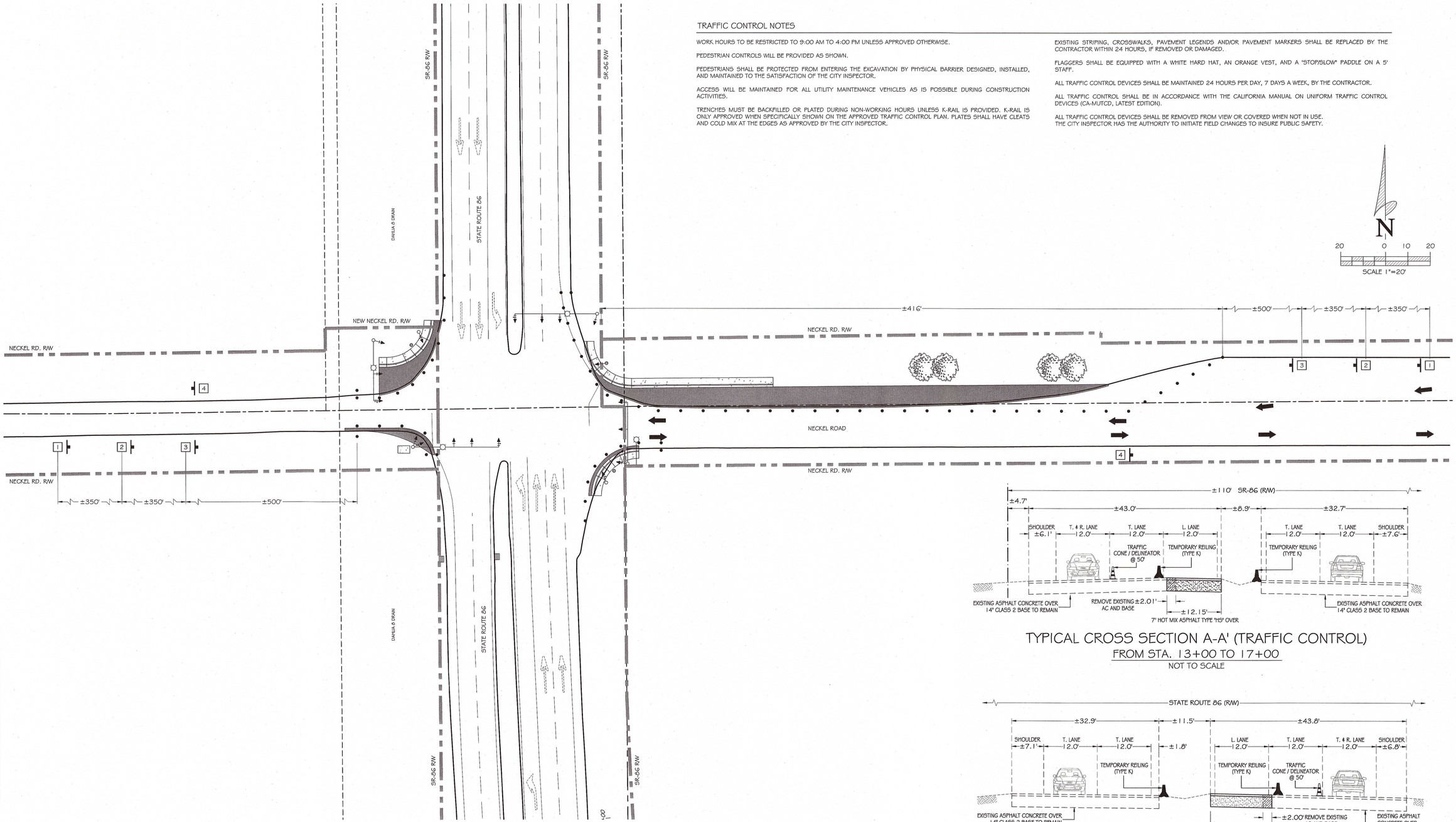


NECKEL ROAD

PLAN VIEW (± PM 5.24) / FROM STA. 12+50 TO 18+50

SCALE 1"=20'

TYPICAL CROSS SECTION A-A' (TRAFFIC CONTROL)

FROM STA. 13+00 TO 17+00

NOT TO SCALE

TYPICAL CROSS SECTION B-B' (TRAFFIC CONTROL)

FROM STA. 0+50 TO 7+00

NOT TO SCALE

NO.	DESCRIPTION	DATE	BY	NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF	3	3rd CALTRANS	03/27/15	AF
2	2nd CALTRANS	12/05/14	AF	4	4th CALTRANS	08/04/15	AF
2	2nd CALTRANS	02/17/15	JG				

PREPARED BY: JOSE CARLOS ROMERO PE 50,429 / LS 7,671 — 09/30/16 DATE

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

ProTerra
LAND SURVEYING / CIVIL ENGINEERING / PROJECT MANAGEMENT
444 South Eight Street, Suite D, El Centro CA 92243
(760) 352 6968 Off - 760 352 6069 Fax - 760 235 5185 Cell

CITY OF IMPERIAL APPROVED FOR CONSTRUCTION BY: 9/30/16

JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION: NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD (HSIP 5134-013)

DRAWING DESCRIPTION: TRAFFIC CONTROL PLAN - PHASE 2 (NECKEL RD)

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET: C13

13-14

DRAWN BY: M.D. 12 / 10 / 12

LAST REVISED

DATE: MD 09 / 30 / 16

LEGEND

XX-# DESIGNATIONS FOR WATER POLLUTION CONTROL DEVICES ARE PER CALIFORNIA STORM WATER QUALITY ASSOCIATION (CASQA) STORM WATER BEST MANAGEMENT PRACTICE (BMP) CONSTRUCTION HANDBOOK.

1 — CONSTRUCTION SITE PERIMETER

2 — DSA .- DISTURBED SOIL AREAS (±42,600 S.F. / 0.98 AC)

3 — SE-10.- STORM DRAIN INLET PROTECTION - TYPE 3

4 — CONTRACTOR'S YARD AREA (USE BMP'S)

BMP'S TO BE USED ON THE CONTRACTOR'S YARD

NS-1	WATER CONSERVATION PRACTICES	WM-3	STOCKPILE MANAGEMENT
NS-3	PAVING AND GRINDING OPERATIONS	WM-4	SPILL PREVENTION AND CONTROL
NS-6	ILLICIT CONNECTION/ILLIGAL DISCHARGE	WM-5	SOLID WASTE MANAGEMENT
NS-7	POTABLE WATER IRRIGATION	WM-6	HAZARDOUS WASTE MANAGEMENT
NS-8	VEHICLE AND EQUIPMENT CLEANING	WM-7	CONTAMINATED SOIL MANAGEMENT
NS-9	VEHICLE AND EQUIPMENT FUELING	WM-8	CONCRETE WASTE MANAGEMENT
NS-10	VEHICLE AND EQUIPMENT MAINTENANCE	WM-9	SANITARY/SEPTIC WASTE MANAGEMENT
NS-12	CONCRETE CURING		
WM-1	MATERIAL DELIVERY AND STORAGE		
WM-2	MATERIAL USE		

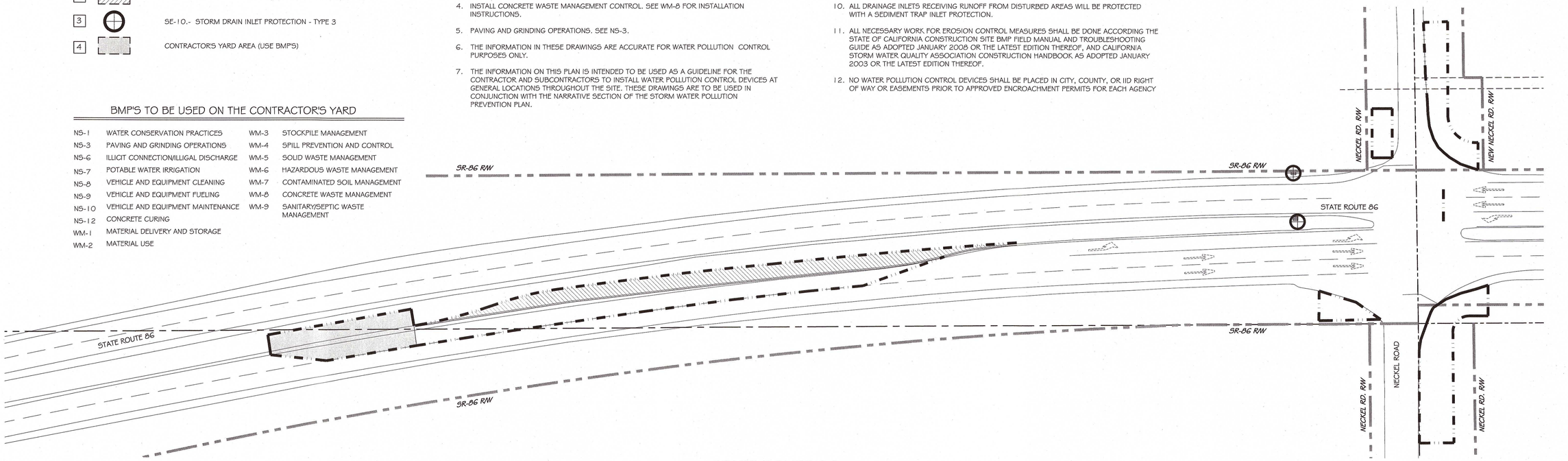
GENERAL WATER POLLUTION CONTROL NOTES:

1. STABILIZED CONSTRUCTION ENTRANCE/EXIT. SEE TC-1 FOR INSTALLATION INSTRUCTIONS.
2. APPLY WIND EROSION CONTROL THROUGHOUT THE CONSTRUCTION SITE. SEE WE-1 FOR IMPLEMENTATION INSTRUCTIONS.
3. COMBINED VEHICLE CLEANING, FUELING AND MAINTENANCE STORAGE AREA. SEE NS-8, NS-9, AND NS-10 FOR INSTALLATION INSTRUCTIONS.
4. INSTALL CONCRETE WASTE MANAGEMENT CONTROL. SEE WM-8 FOR INSTALLATION INSTRUCTIONS.
5. PAVING AND GRINDING OPERATIONS. SEE NS-3.
6. THE INFORMATION IN THESE DRAWINGS ARE ACCURATE FOR WATER POLLUTION CONTROL PURPOSES ONLY.
7. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE STORM WATER POLLUTION PREVENTION PLAN.
8. FIELD CONDITION MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.
9. EROSION CONTROL MEASURES WILL BE IMPLEMENTED 10 DAYS PRIOR TO THE START OF THE DEFINED RAINY SEASON (BETWEEN AUGUST 1 AND OCTOBER 1, AND BETWEEN NOVEMBER 1 AND MAY 1) AND AT REGULAR INTERVALS THROUGHOUT THE RAINY SEASON TO ACHIEVE AND MAINTAIN THE CONTRACTS DISTURBED SOIL AREA (DSA) PROTECTION REQUIREMENTS (SEE CONTRACT SPECIFICATIONS).
10. ALL DRAINAGE INLETS RECEIVING RUNOFF FROM DISTURBED AREAS WILL BE PROTECTED WITH A SEDIMENT TRAP INLET PROTECTION.
11. ALL NECESSARY WORK FOR EROSION CONTROL MEASURES SHALL BE DONE ACCORDING THE STATE OF CALIFORNIA CONSTRUCTION SITE BMP FIELD MANUAL AND TROUBLESHOOTING GUIDE AS ADOPTED JANUARY 2008 OR THE LATEST EDITION THEREOF, AND CALIFORNIA STORM WATER QUALITY ASSOCIATION CONSTRUCTION HANDBOOK AS ADOPTED JANUARY 2003 OR THE LATEST EDITION THEREOF.
12. NO WATER POLLUTION CONTROL DEVICES SHALL BE PLACED IN CITY, COUNTY, OR IID RIGHT OF WAY OR EASEMENTS PRIOR TO APPROVED ENCROACHMENT PERMITS FOR EACH AGENCY

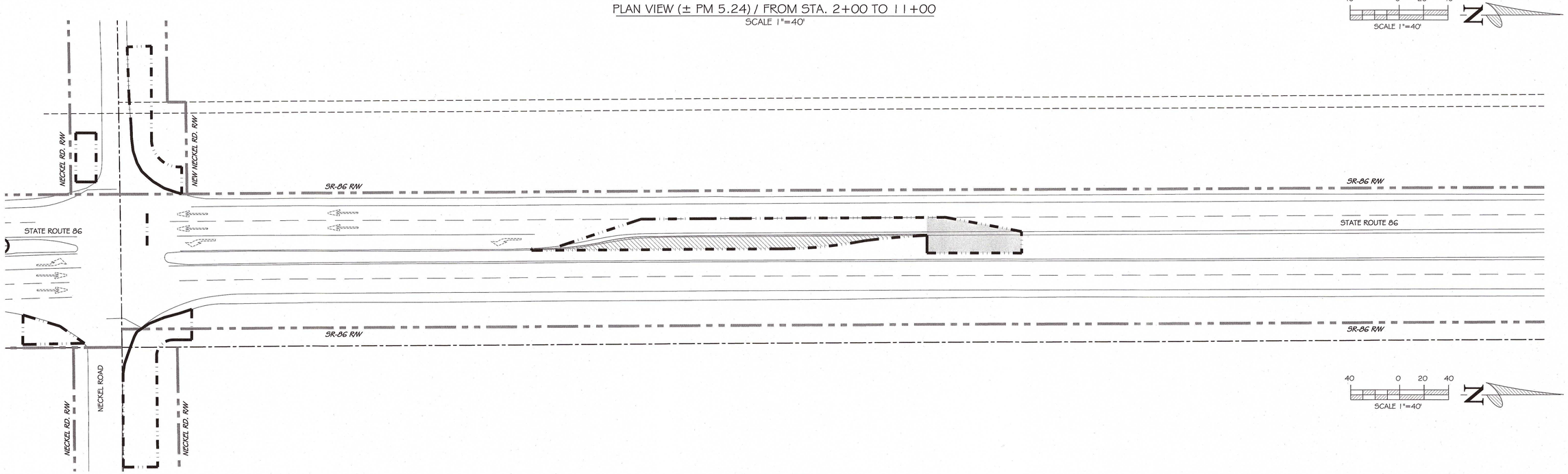
PERMIT NUMBER 11 - 14 - NSN - 0279

CO IMP RTE 86 PM 11.82
AS-BUILT PLANS FOR ROADWAY GEOMETRIC AND ABOVE GROUND FEATURES

STATE REPRESENTATIVE DATE



STATE ROUTE 86
PLAN VIEW (± PM 5.24) / FROM STA. 2+00 TO 11+00
SCALE 1"=40'



STATE ROUTE 86
PLAN VIEW (± PM 5.24) / FROM STA. 8+50 TO 17+50
SCALE 1"=40'

NO.	DESCRIPTION	DATE	BY
1	1st CALTRANS	06/23/14	AF
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PREPARED BY:
JOSE CARLOS ROMERO PE 50,429 / LS 7,871
09/30/16
DATE

REGISTERED PROFESSIONAL ENGINEER JOSE CARLOS ROMERO C 50429 EXP 6-30-17 CIVIL STATE OF CALIFORNIA

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9/30/16

CITY OF IMPERIAL
APPROVED FOR CONSTRUCTION BY:

JESUS VILLEGAS - PROJECT MANAGER

CLIENT: CITY OF IMPERIAL
ADDRESS: 420 SOUTH IMPERIAL AVENUE, IMPERIAL CA 92251
TELEPHONE: (760) 355-4371

PROJECT DESCRIPTION:
NEW TRAFFIC SIGNAL LIGHT AND INTERSECTION IMPROVEMENTS AT SR-86 & NECKEL ROAD
(HSIP 5134-013)

DRAWING DESCRIPTION:
WATER POLLUTION CONTROL DRAWING

LOCATION: HIGHWAY 86 & NECKEL ROAD INTERSECTION

PROJECT NO. 12015

SHEET:
C14
14-14

DRAWN BY: M.D. 12/10/12
LAST REVISED
DATE: MD 09/30/16