

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	Riv	15	R1.0	1	28

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TEMPORARY WATER POLLUTION CONTROL QUANTITIES
3	CONSTRUCTION AREA SIGNS
4-11	REVISED AND NEW STANDARD PLANS

BUILDING PLANS

12	GENERAL PLAN
13-17	MECHANICAL PLANS
18-28	ELECTRICAL PLANS

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**PROJECT PLANS FOR BUILDING CONSTRUCTION ON  
STATE HIGHWAY  
IN RIVERSIDE COUNTY NEAR TEMECULA  
ABOUT 1.2 MILES NORTH  
OF THE SAN DIEGO COUNTY LINE  
AT THE RAINBOW TRUCK INSPECTION FACILITY**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

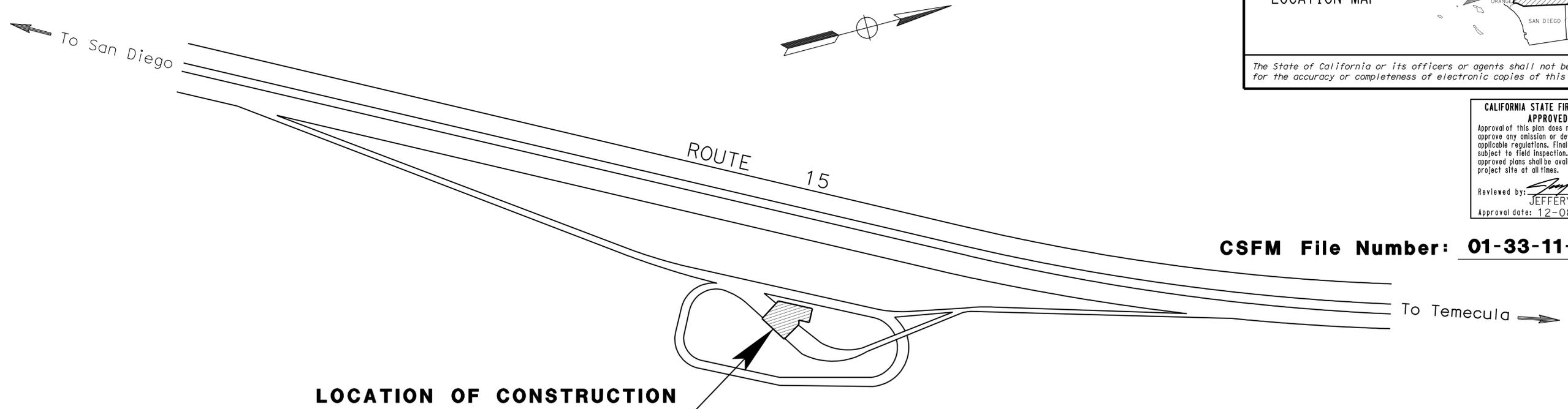


The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

**CALIFORNIA STATE FIRE MARSHAL APPROVED**  
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

Reviewed by: *[Signature]*  
JEFFERY SCHWARTZ  
Approval date: 12-08-10

**CSFM File Number: 01-33-11-006**



**LOCATION OF CONSTRUCTION  
PM R1.0**

*[Signature]* 10-27-10  
PROJECT ENGINEER DATE  
REGISTERED MECHANICAL ENGINEER



July 5, 2011

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.	<b>08-OF 2404</b>
PROJECT ID	<b>0800001211</b>

PROJECT MANAGER	RAFAEL YOUSSEF
DESIGN ENGINEER	TOM H. HATAM

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

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** DESIGN

BORDER LAST REVISED 7/2/2010

USERNAME => frmikes1  
 DGN FILE => 80f240gd001.dgn

RELATIVE BORDER SCALE  
 IS IN INCHES



UNIT 2233

PROJECT NUMBER & PHASE

08000001211

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	R1.0	2	28

*Paul A. Lambert* 3-28-11  
 REGISTERED CIVIL ENGINEER DATE  
 7-5-11  
 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.

**TEMPORARY  
 WATER POLLUTION CONTROL**

DESCRIPTION	UNIT	QUANTITIES
TEMPORARY CONCRETE WASHOUT (PORTABLE)	LS	LUMP SUM
TEMPORARY DRAINAGE INLET PROTECTION	EA	2

**TEMPORARY  
 WATER POLLUTION CONTROL  
 QUANTITIES**

**WPCQ-1**

LAST REVISION | DATE PLOTTED => 07-JUL-2011  
 03-17-11 TIME PLOTTED => 10:47

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	15	R1.0	3	28

REGISTERED CIVIL ENGINEER DATE 3-28-11  
 7-5-11  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**CHRIS HARDIMON**  
 No. C 66092  
 Exp. 6-30-12  
 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:**

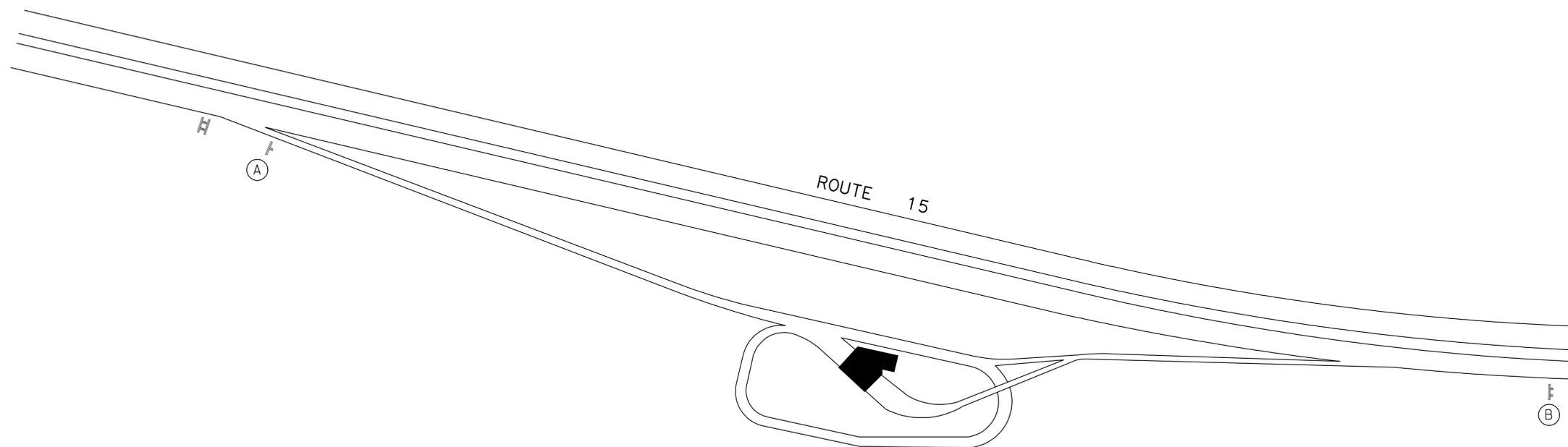
1. CONSTRUCTION AREA SIGN LOCATIONS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. REFER TO STANDARD PLAN T14 FOR TRAFFIC CONTROL REQUIREMENTS.

**LEGEND**

- CONSTRUCTION AREA
- ▬ PORTABLE CHANGEABLE MESSAGE SIGN

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN LETTER	SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. OF POST(S) AND SIZE
Ⓐ	W20-1	36" X 36"	ROAD WORK AHEAD	1 - 4" X 6"
Ⓑ	G20-2	48" X 24"	END ROAD WORK	2 - 4" X 4"



**CONSTRUCTION AREA SIGNS**

NO SCALE

**CS-1**

THIS PLAN IS ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN B  
 FUNCTIONAL SUPERVISOR LARRY SARTORI  
 CHECKED BY LARRY SARTORI  
 DESIGNED BY LARRY SARTORI  
 REVISIONS: [Blank]

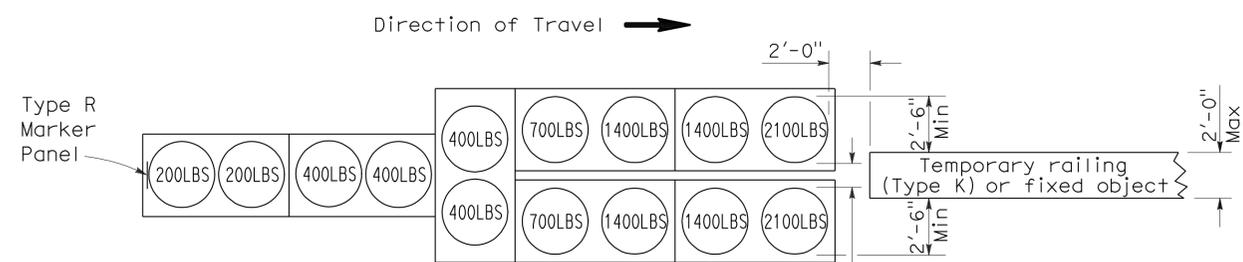
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	4	28

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

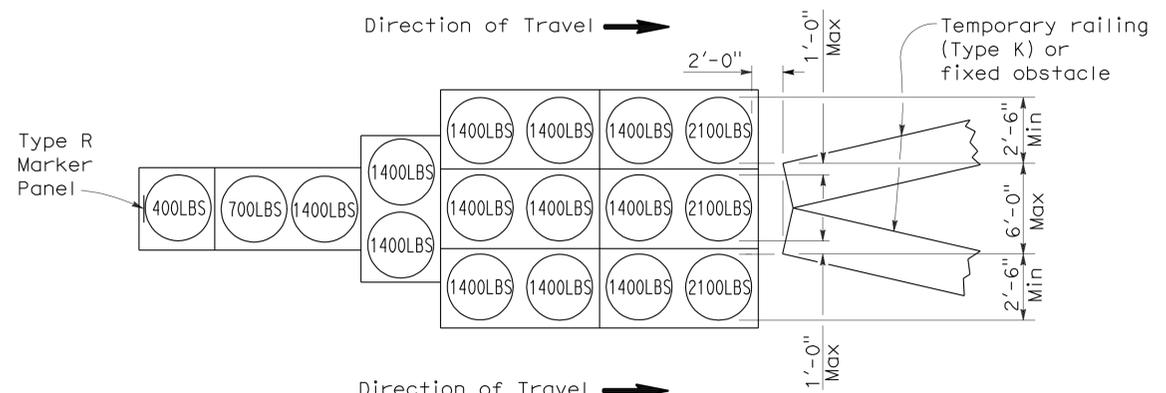
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

To accompany plans dated 7-5-11



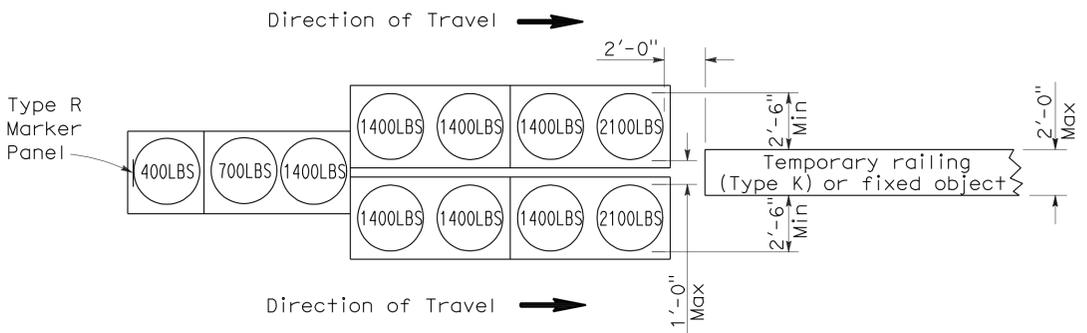
**ARRAY 'TU14'**

Approach speed 45 mph or more



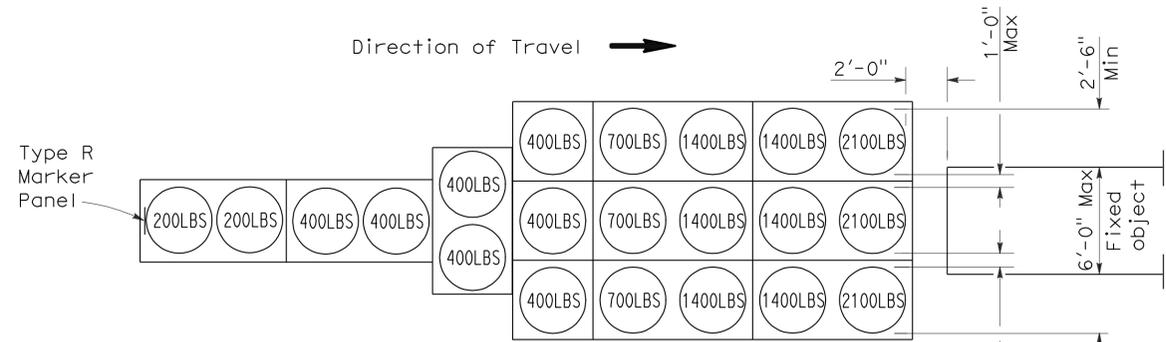
**ARRAY 'TU17'**

Approach speed less than 45 mph



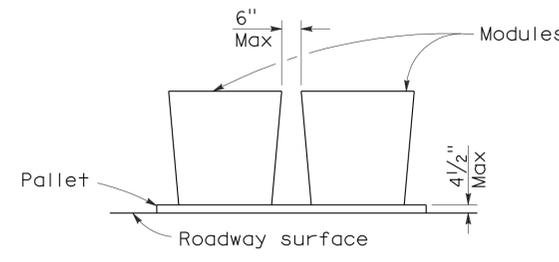
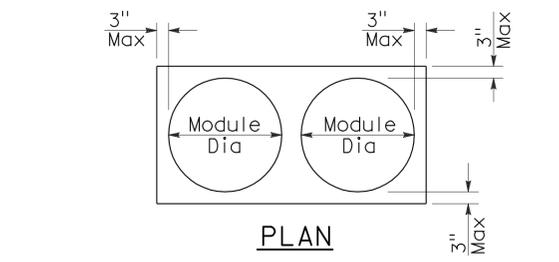
**ARRAY 'TU11'**

Approach speed less than 45 mph



**ARRAY 'TU21'**

Approach speed 45 mph or more



**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

**REVISED STANDARD PLAN RSP T1A**

2006 REVISED STANDARD PLAN RSP T1A

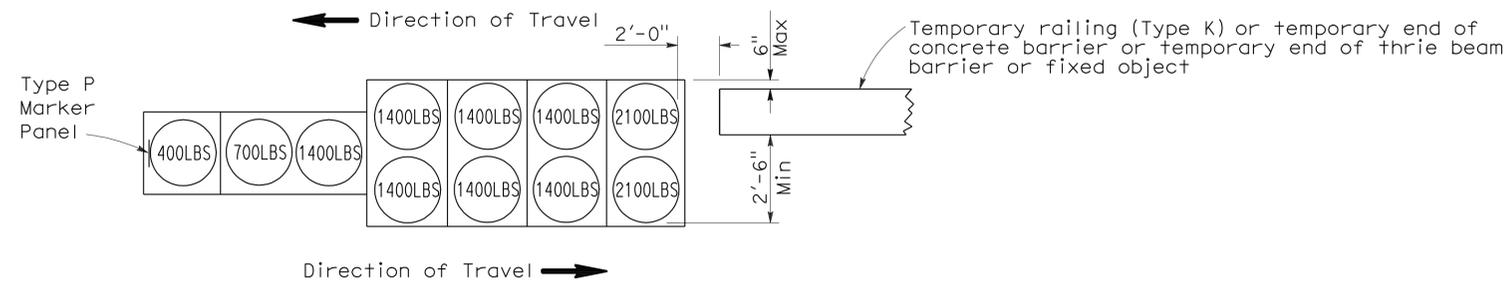
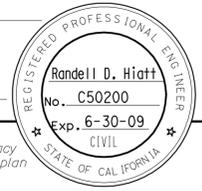
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	5	28

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

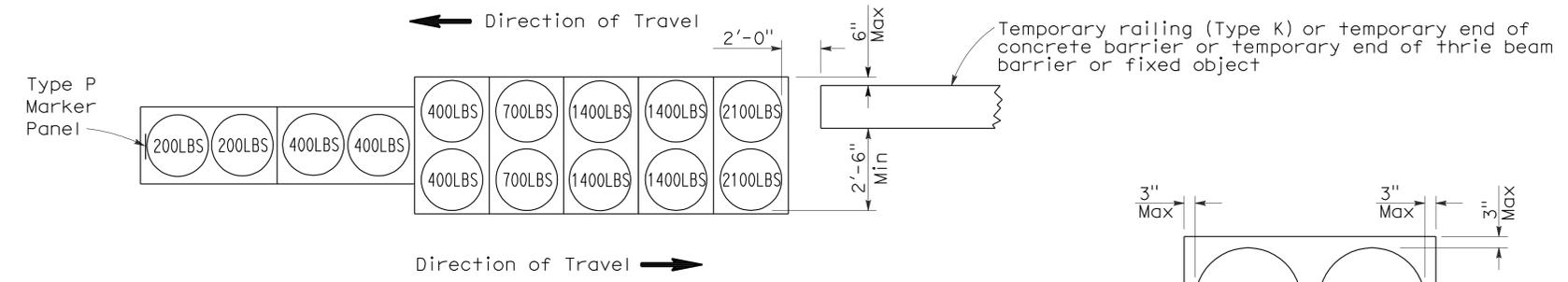
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

To accompany plans dated 7-5-11



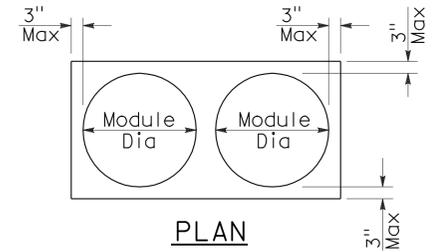
**ARRAY 'TB11'**

Approach speed less than 45 mph

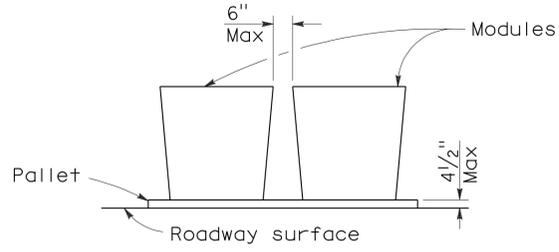


**ARRAY 'TB14'**

Approach speed 45 mph or more



PLAN



ELEVATION

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

**REVISED STANDARD PLAN RSP T1B**

2006 REVISED STANDARD PLAN RSP T1B

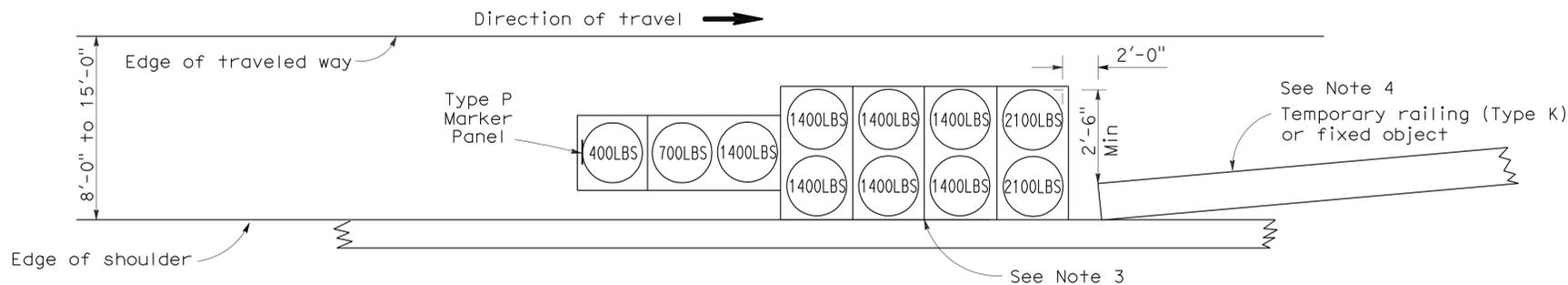
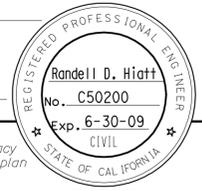
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	6	28

*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

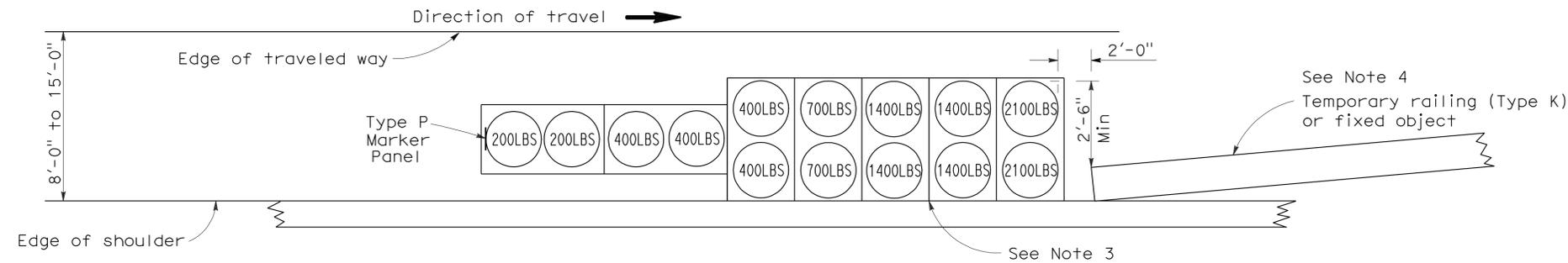
June 6, 2008  
PLANS APPROVAL DATE

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

To accompany plans dated 7-5-11



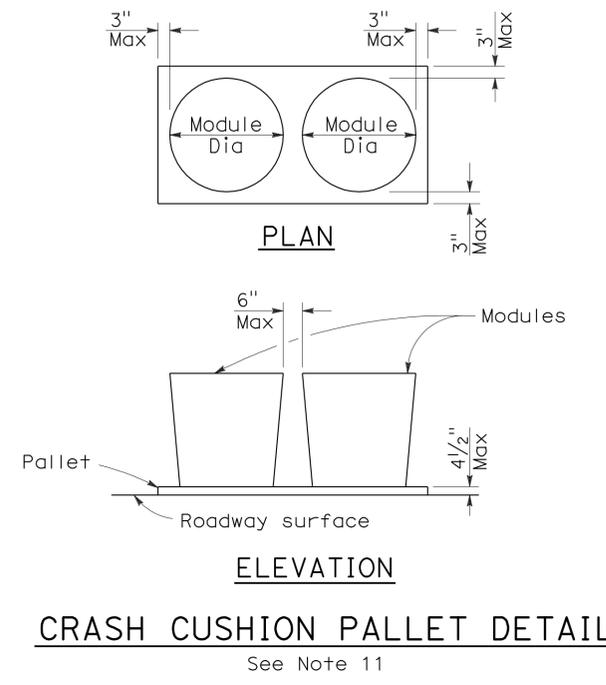
**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



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

**NOTES:**

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



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**  
NO SCALE

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

**REVISED STANDARD PLAN RSP T2**

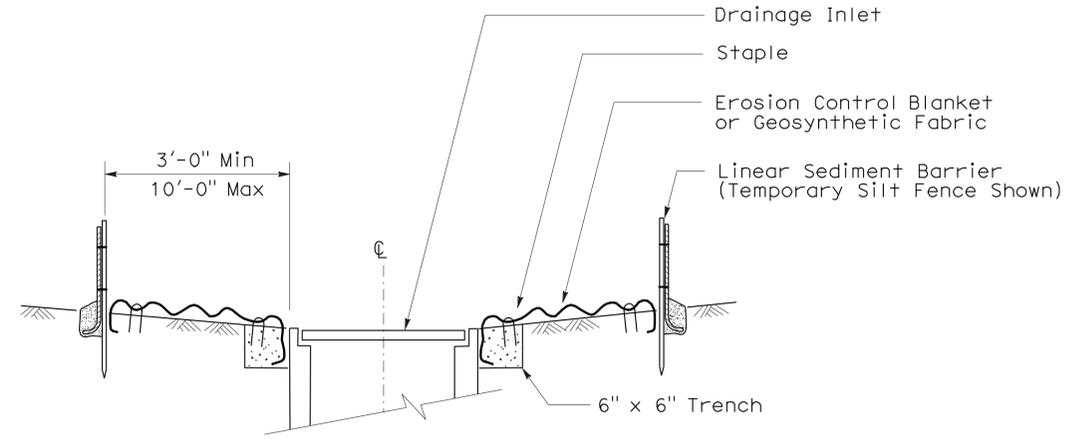
2006 REVISED STANDARD PLAN RSP T2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	7	28

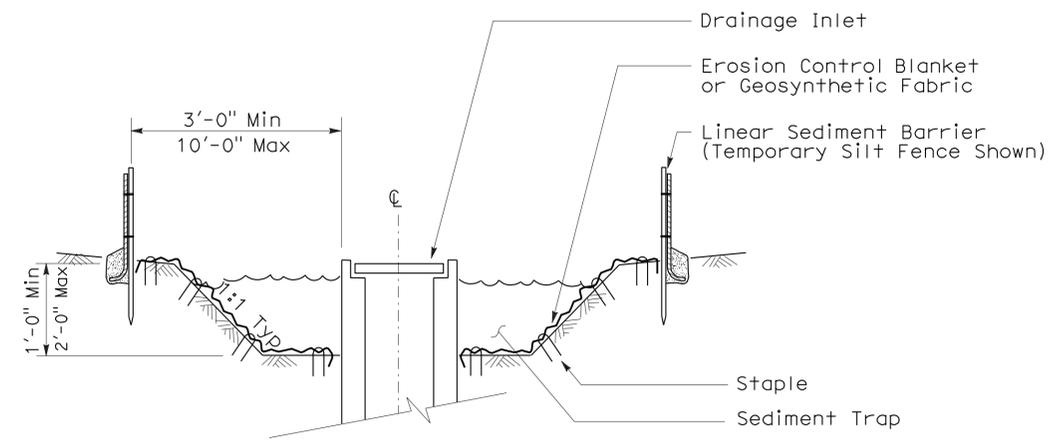
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS Approval DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 7-5-11

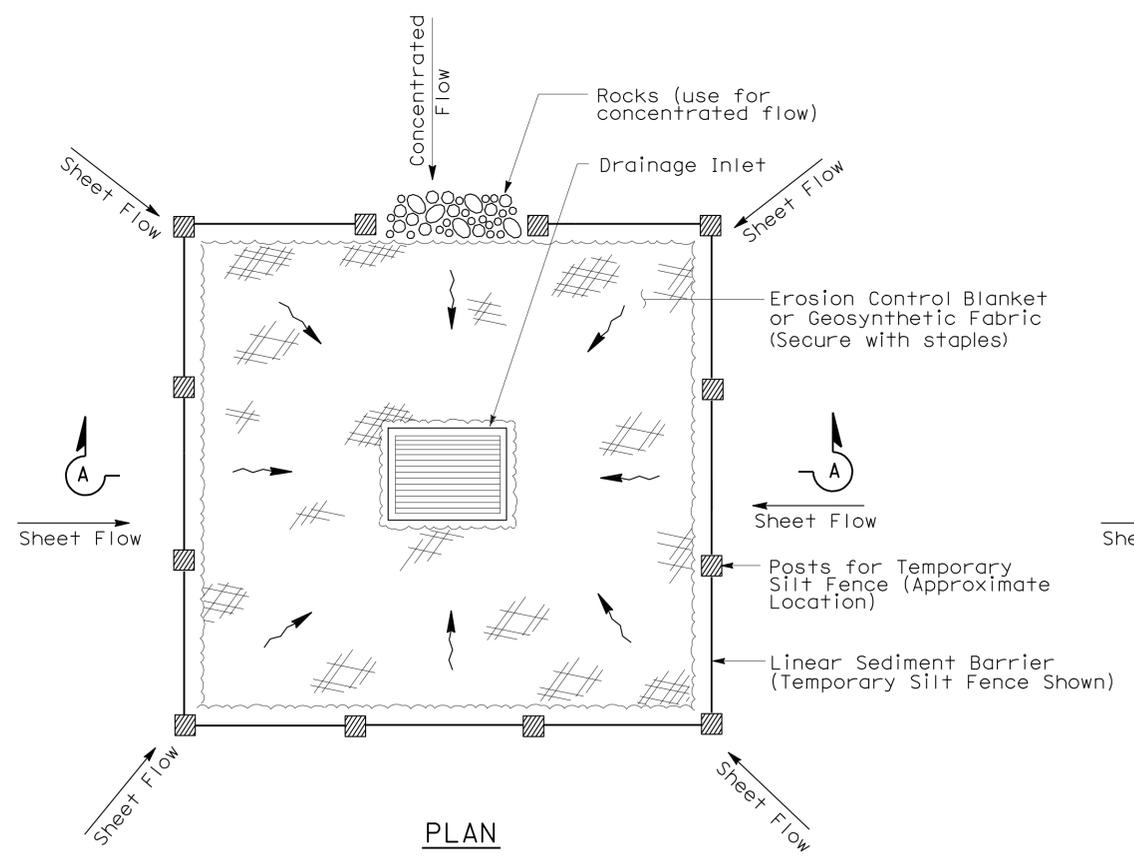
- NOTES:**
- See Standard Plan T51 for Temporary Silt Fence.
  - Dimensions may vary to fit field conditions.



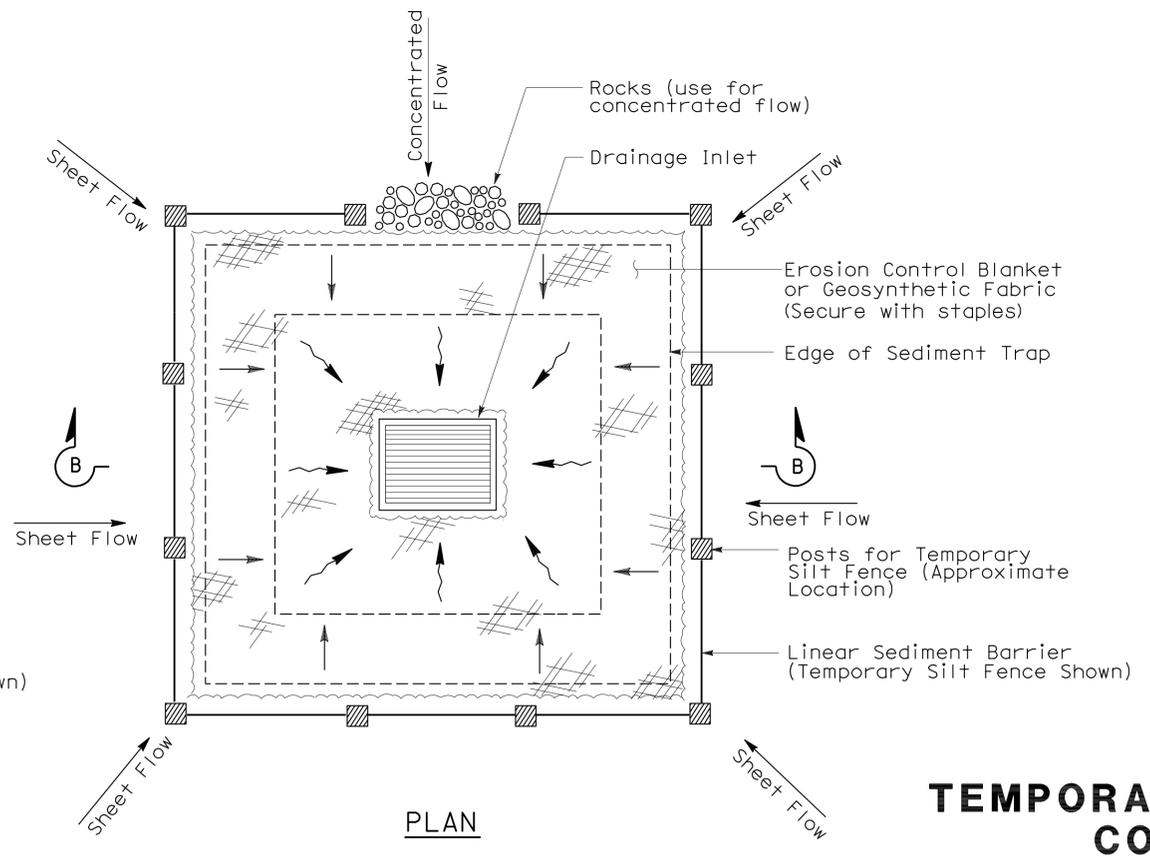
SECTION A-A



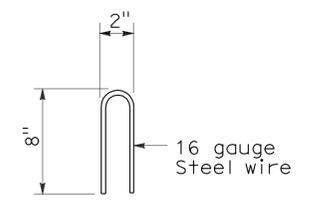
SECTION B-B



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 2) (EXCAVATED SEDIMENT TRAP)



STAPLE DETAIL

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS**  
**(TEMPORARY DRAINAGE INLET PROTECTION)**  
 NO SCALE

NSP T61 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T61

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	8	28

Robert B. Schott  
LICENSED LANDSCAPE ARCHITECT

August 15, 2008  
PLANS APPROVAL DATE

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

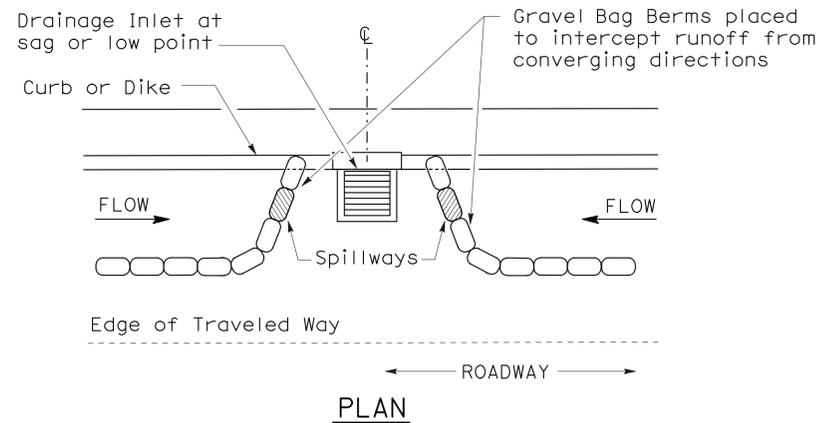
To accompany plans dated 7-5-11

2006 NEW STANDARD PLAN NSP T62

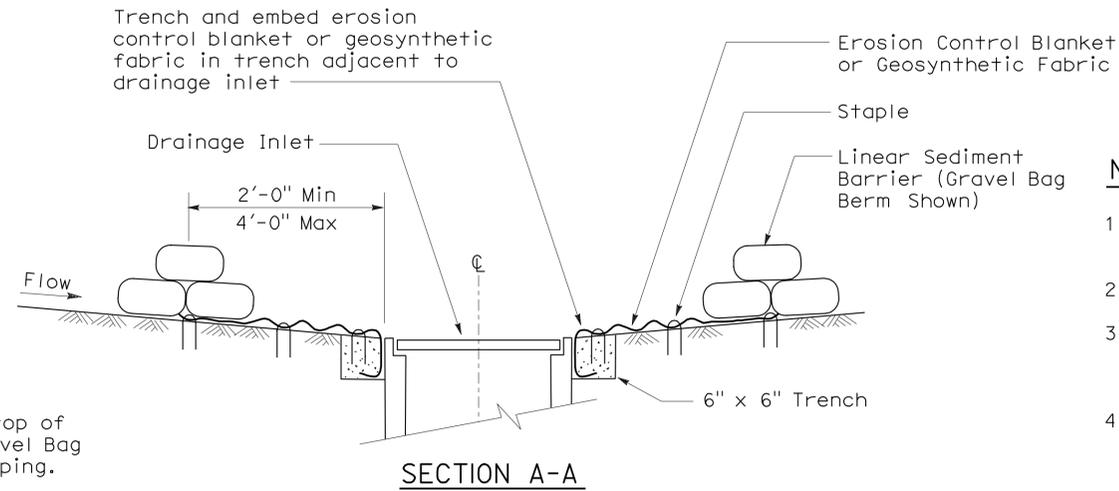
**GRAVEL BAG BERM (TYPE 3A) SPACING TABLE**

SLOPE OF ROADWAY (PERCENT)	1 to 3.9	4 to 5.9	6 to 7.9	8 to 10	10+
INTERVAL BETWEEN BERM	100'	75'	50'	25'	12'

For slope of less than 1%, install barriers only if erosion/sediment is prevalent



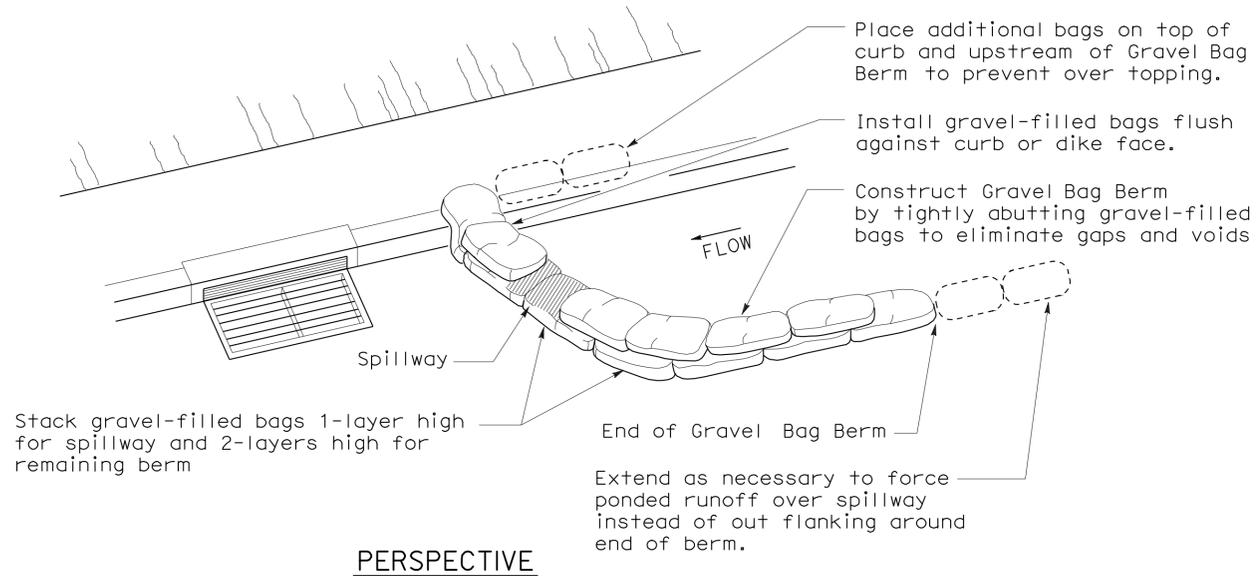
**PLAN**  
**CONFIGURATION FOR SAG POINT INLET**  
**(GRAVEL BAG BERM)**



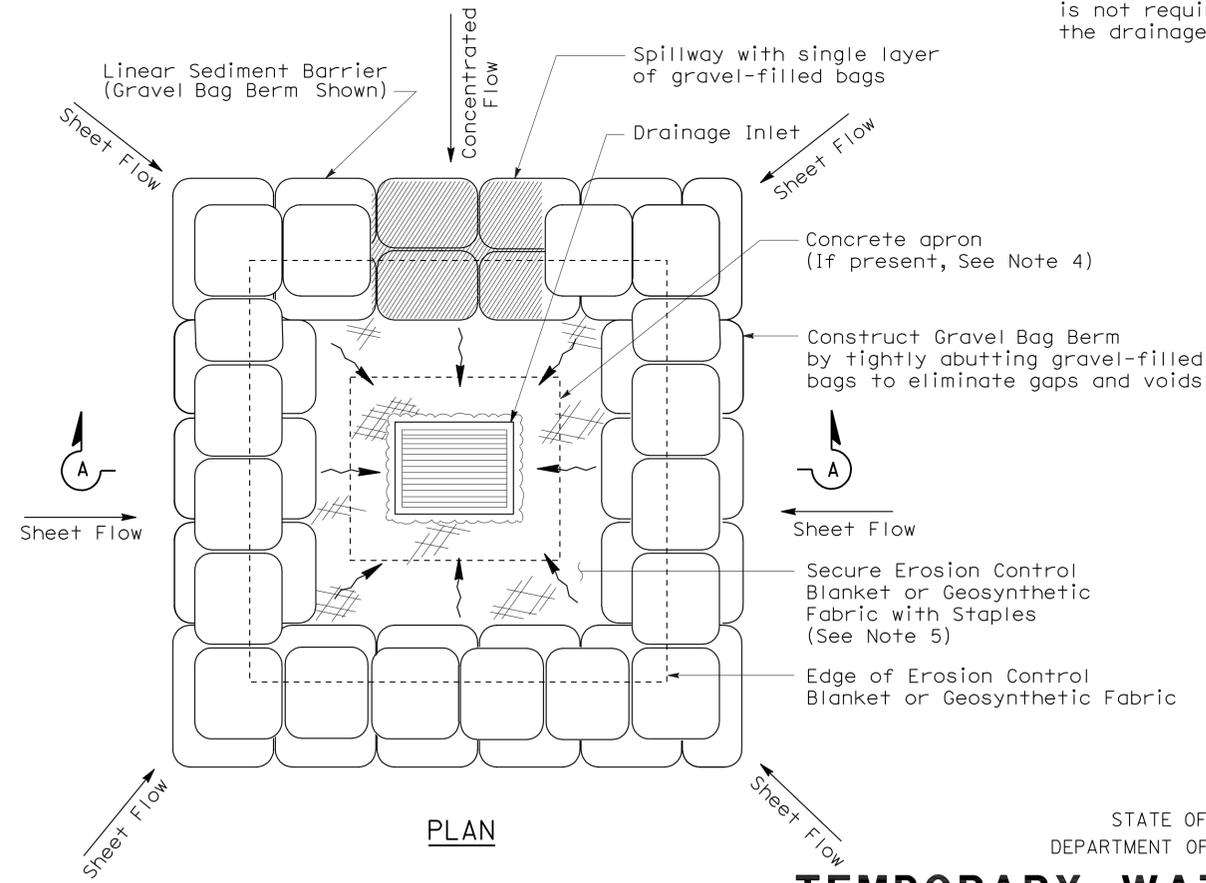
**SECTION A-A**

**NOTES:**

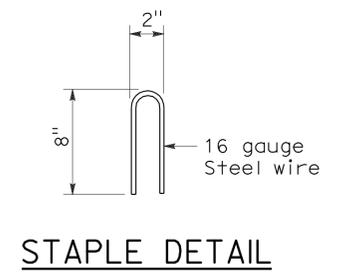
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated or paved.



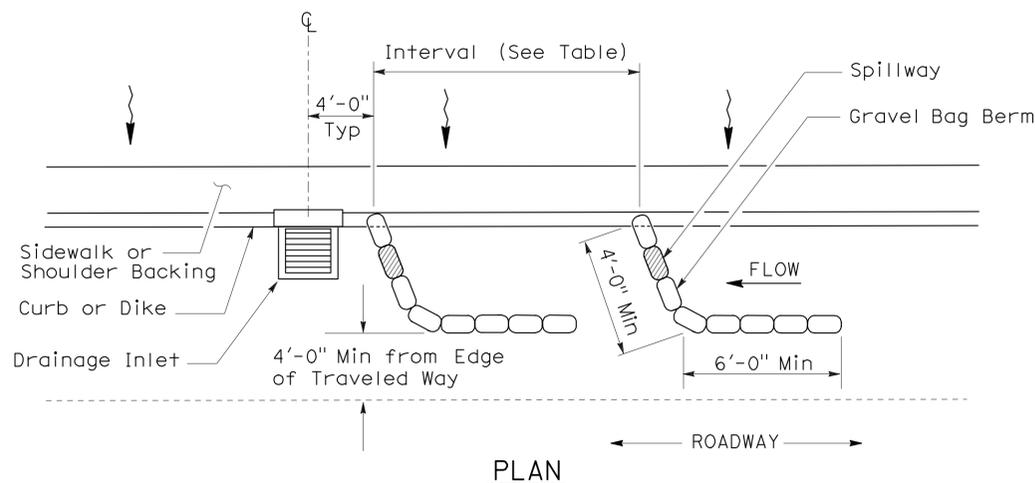
**PERSPECTIVE**



**PLAN**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 3B)**



**STAPLE DETAIL**



**PLAN**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 3A)**  
**(GRAVEL BAG BERM)**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION**  
**CONTROL DETAILS**  
**(TEMPORARY DRAINAGE**  
**INLET PROTECTION)**

NO SCALE  
NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

FLEXIBLE SEDIMENT BARRIER SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	0 to 0.9	1 to 1.9	2 to 2.9	3 to 4	5+
INTERVAL BETWEEN BARRIERS	50'	35'	30'	25'	20'
ANGLE FROM FACE OF CURB	70°	70°	70°	45°	45°
SUGGESTED BARRIER LENGTH	6'	6'	6'	6'	6'

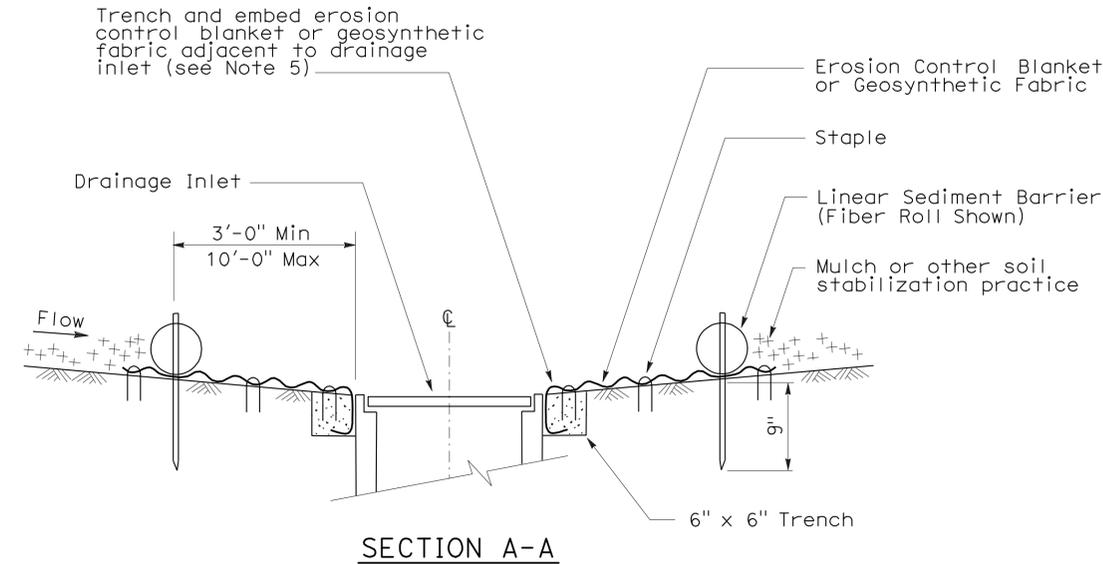
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	9	28

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS APPROVAL DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

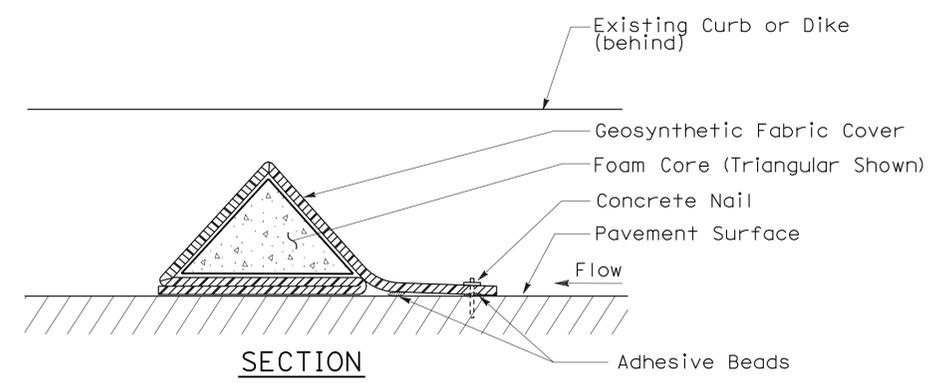
To accompany plans dated 7-5-11

NOTES:

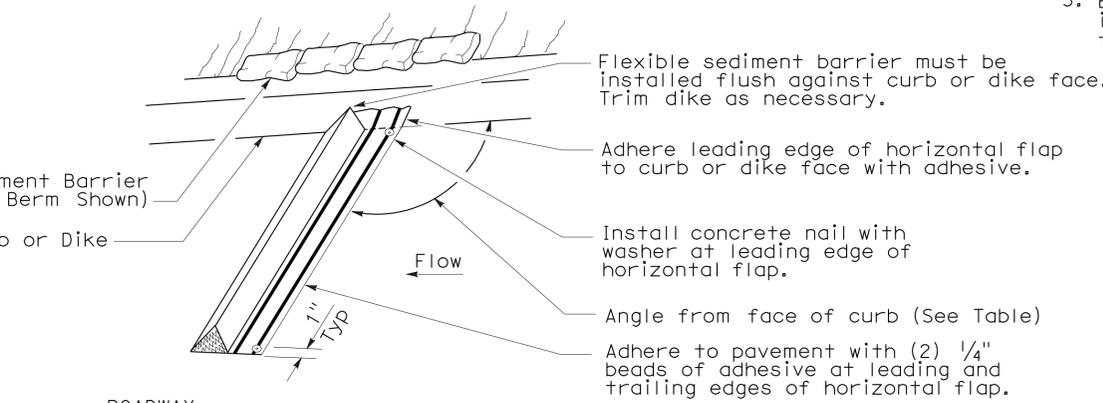
- See Standard Plan T51 for Temporary Silt Fence.
- Dimensions may vary to fit field conditions.
- Install a minimum of 3 flexible sediment barriers upstream of each drainage inlet to be protected.
- Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
- Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated.



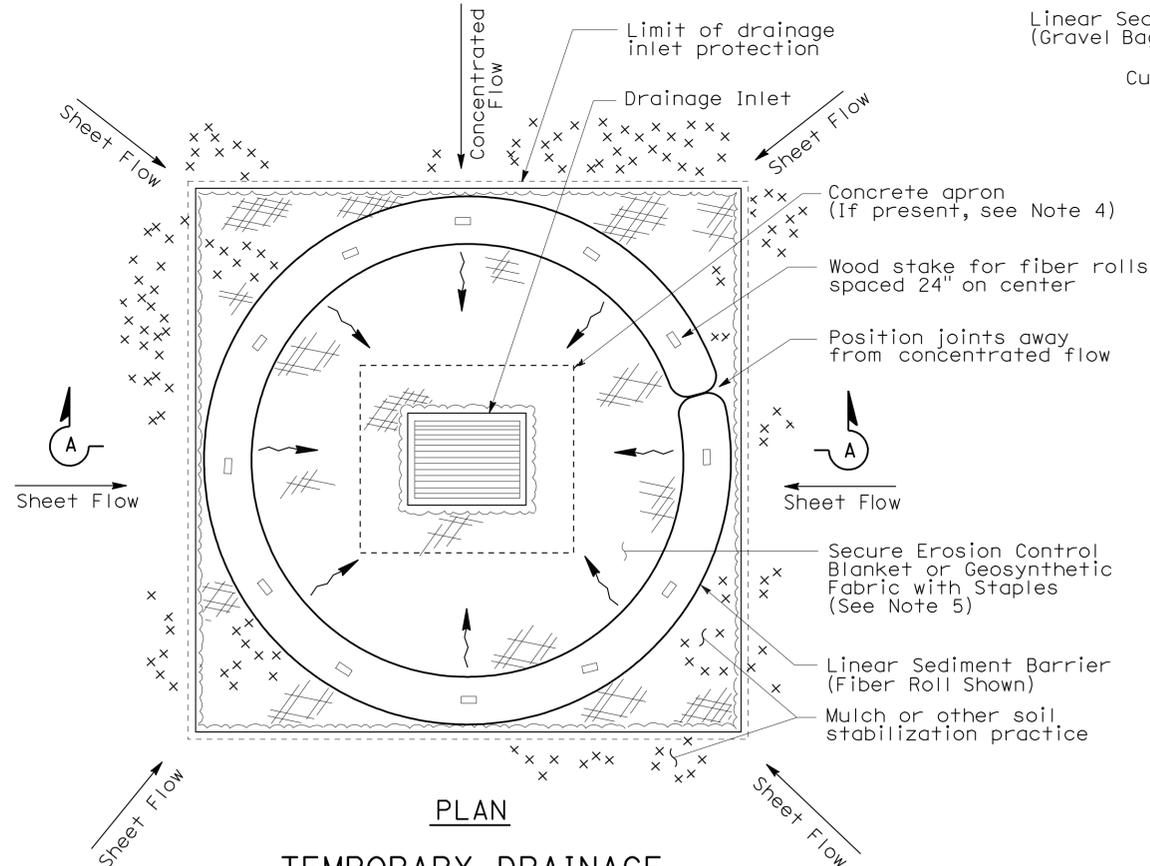
SECTION A-A



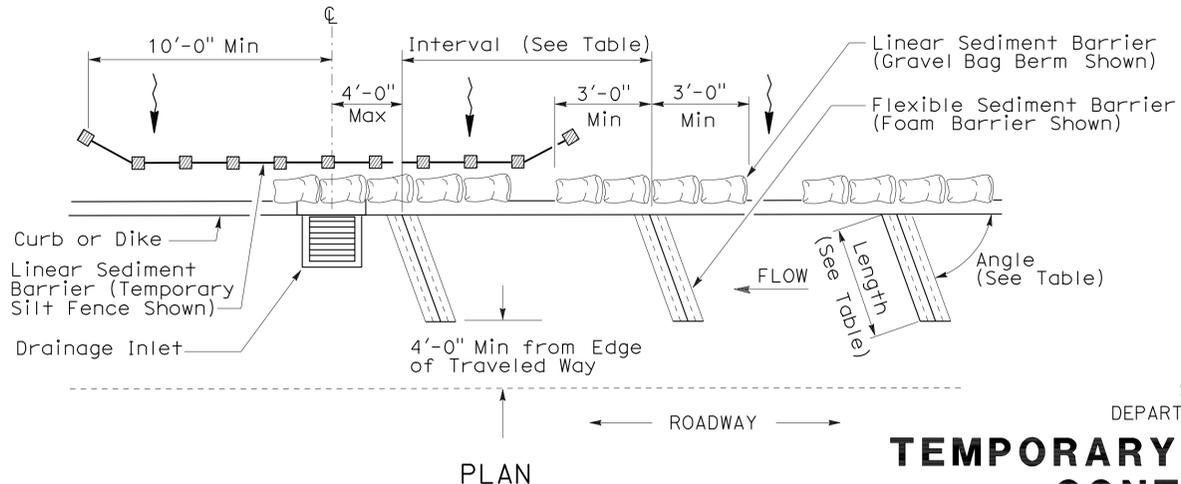
SECTION FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)



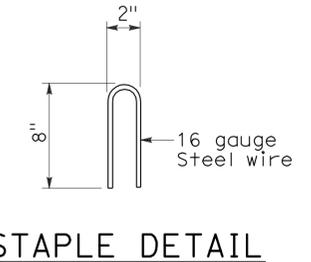
PERSPECTIVE



PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4A)



PLAN TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4B) FLEXIBLE SEDIMENT BARRIER



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE  
NSP T63 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T63

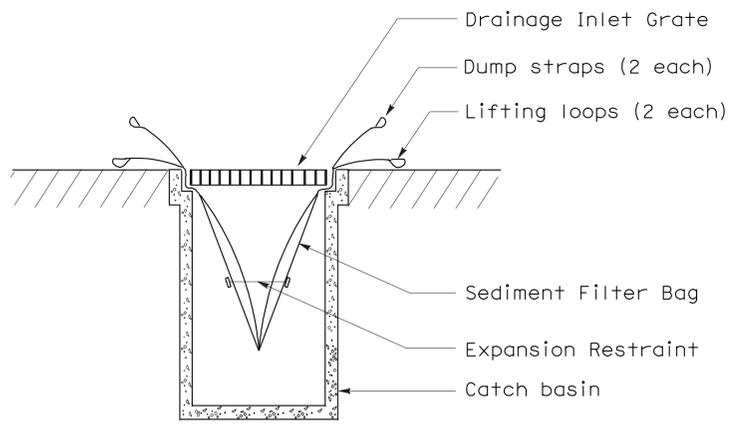
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	10	28

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT

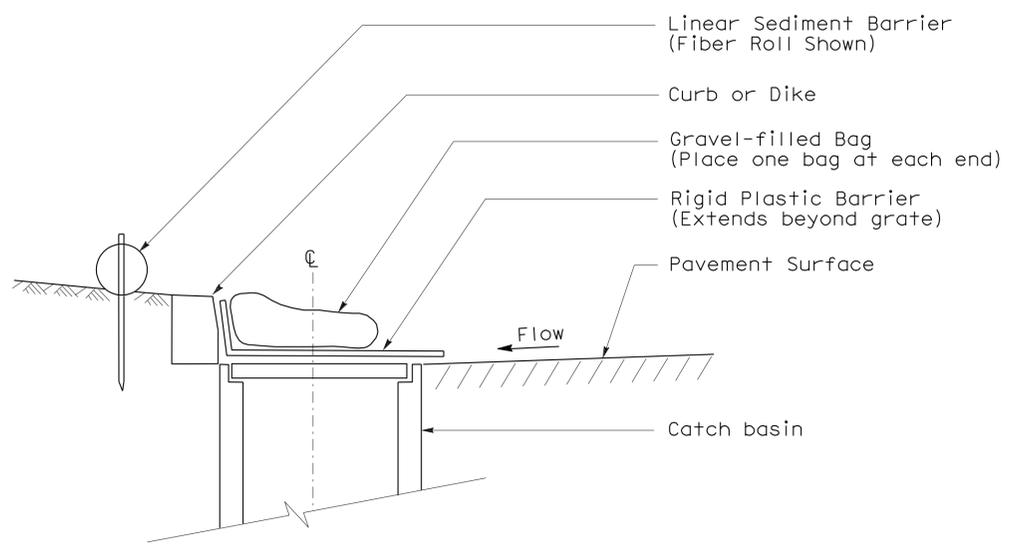
August 15, 2008  
 PLANS APPROVAL DATE

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 Signature  
 11-04-08  
 Renewal Date  
 08-11-08  
 Date

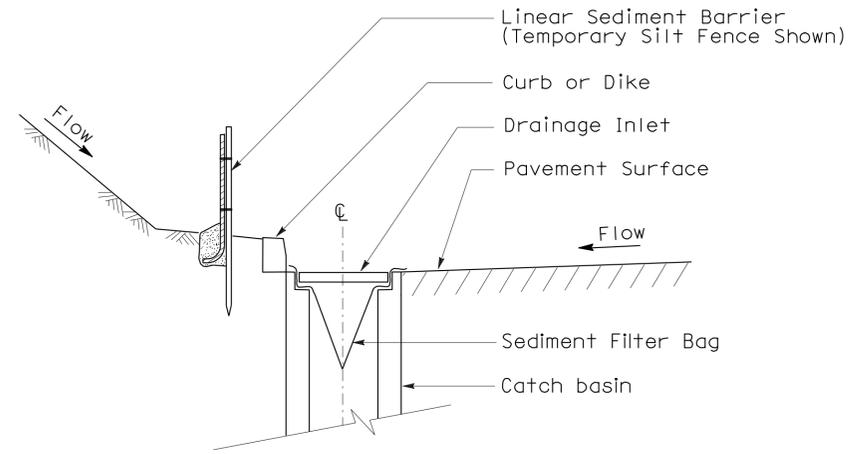
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



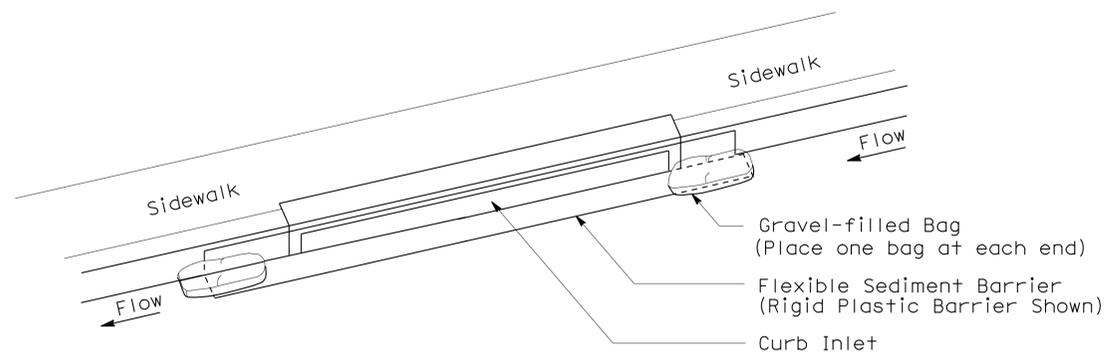
SECTION B-B  
SEDIMENT FILTER BAG DETAIL



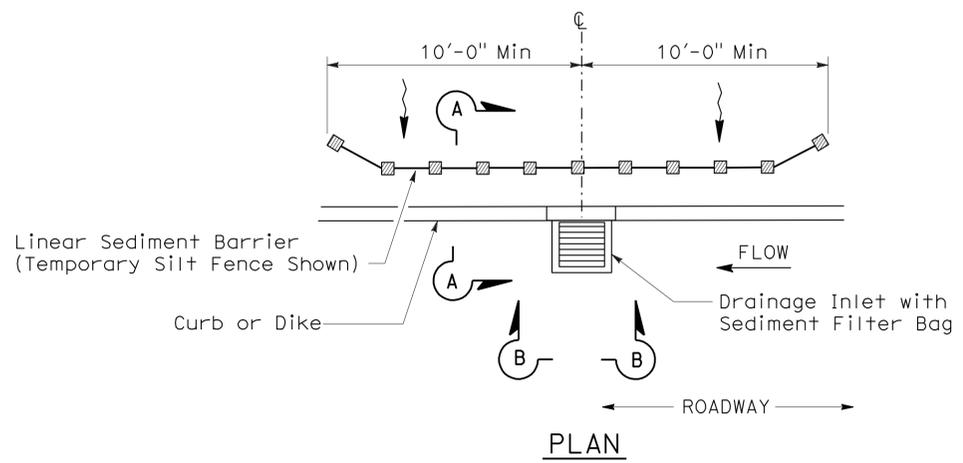
SECTION  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6A)  
(CATCH BASIN WITH GRATE)



SECTION A-A



PERSPECTIVE  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6B)  
(CURB INLET WITHOUT GRATE)



PLAN  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 5)  
(SEDIMENT FILTER BAG)

- NOTES:**
1. See Standard Plan T51 for Temporary Silt Fence.
  2. Dimensions may vary to fit field conditions.

To accompany plans dated 7-5-11

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY WATER POLLUTION  
CONTROL DETAILS  
(TEMPORARY DRAINAGE  
INLET PROTECTION)**

NO SCALE  
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

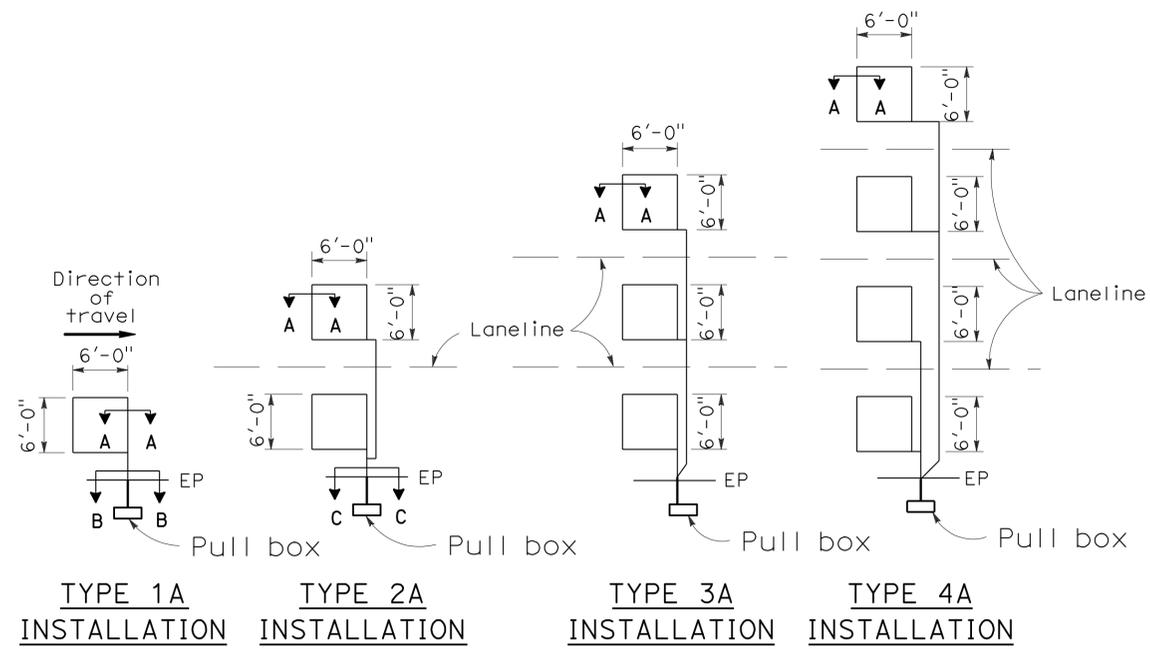
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	11	28

*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 October 5, 2007  
 PLANS APPROVAL DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 7-5-11

## LOOP INSTALLATION PROCEDURE

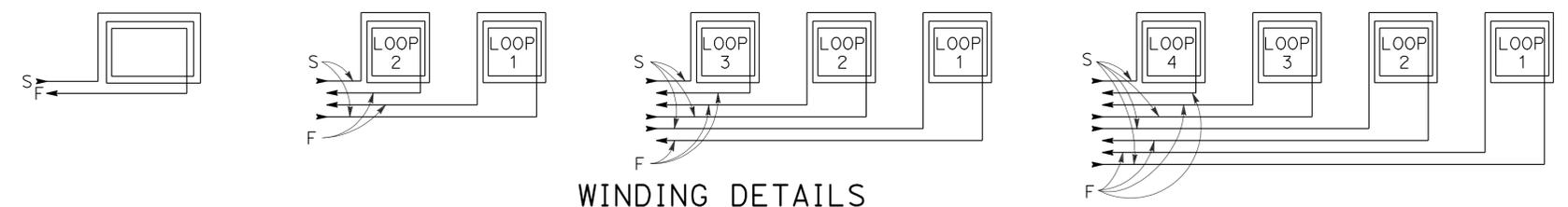
- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
- Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.



TYPE 1A INSTALLATION    TYPE 2A INSTALLATION    TYPE 3A INSTALLATION    TYPE 4A INSTALLATION

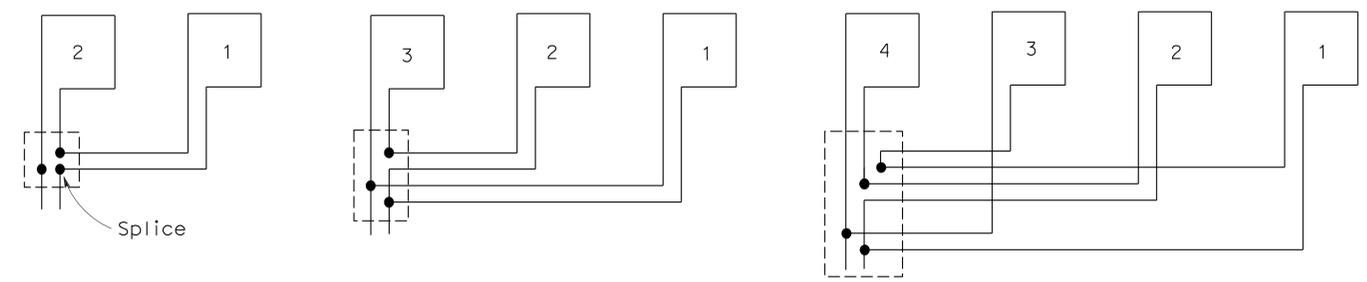
### SAWCUT DETAILS

- (Type A loop detector configurations illustrated)
- 1A thru 4A = 1 Type A loop configuration in each lane.
  - 1B thru 4B = 1 Type B loop configuration in each lane.
  - 1C = 1 Type C loop configuration entering lanes as required.
  - 1D thru 4D = 1 Type D loop configuration in each lane.
  - 1E thru 4E = 1 Type E loop configuration in each lane.
  - 1Q thru 4Q = 1 Type Q loop configuration in each lane.
- (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



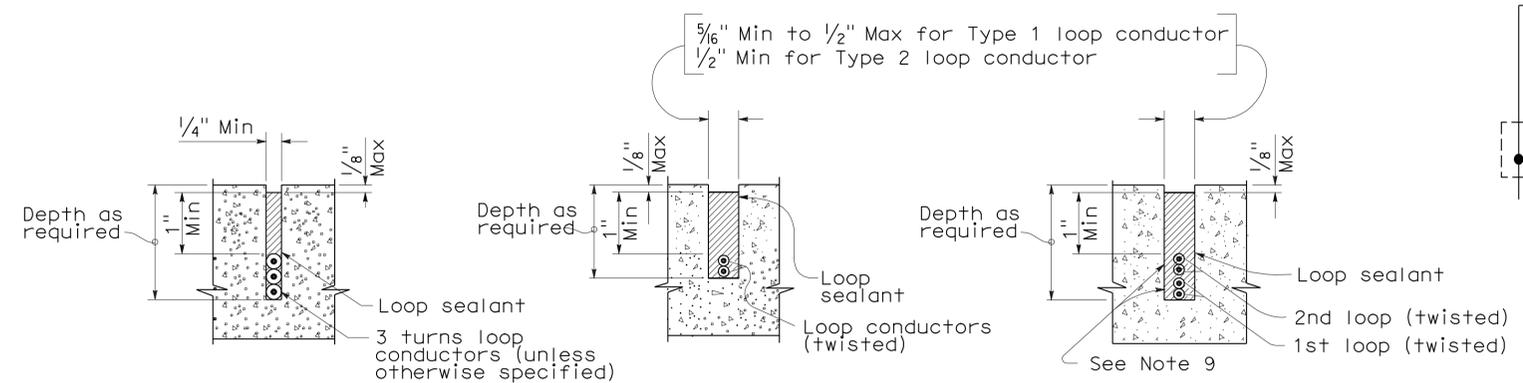
### WINDING DETAILS

See Notes 6 and 7



### TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)



SECTION A-A    SECTION B-B    SECTION C-C  
 SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR

## ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

NO SCALE

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A  
 DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

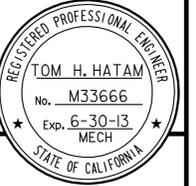
2006 REVISED STANDARD PLAN RSP ES-5A

APPLICABLE CODES	
2007 California Building Code (CBC)	Title 24, Part 2 CCR
2007 California Electrical Code (CEC)	Title 24, Part 3 CCR
2007 California Fire Code (CEC)	Title 24, Part 9 CCR
2007 California Mechanical Code (CMC)	Title 24, Part 4 CCR
NFPA 30A 2003 Edition	NFPA 52 2010 Edition

**CALIFORNIA STATE FIRE MARSHAL**  
**APPROVED**  
 Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.  
 Reviewed by: *Jeffery Schwartz*  
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10

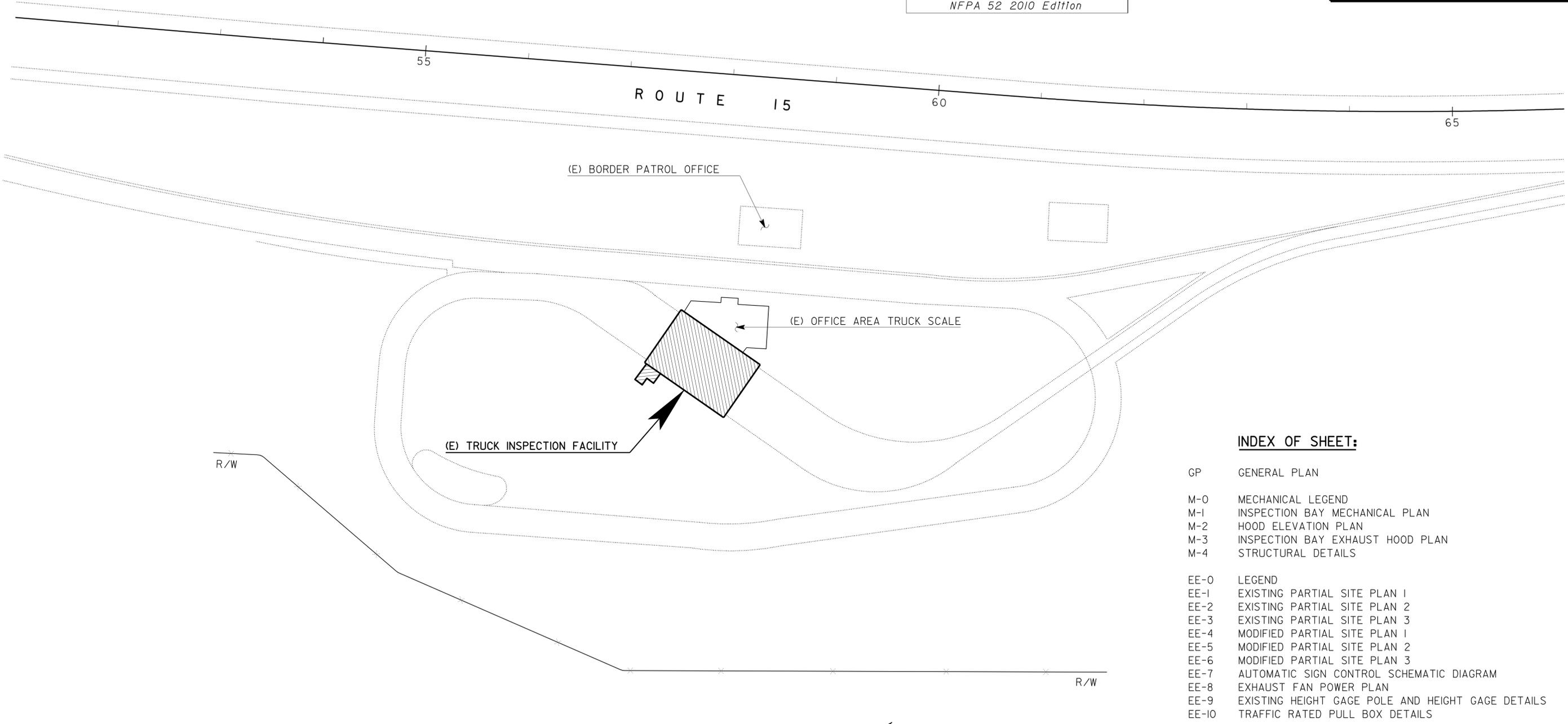
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	12	28

*Tom H. Hatam* 10-27-10  
 REGISTERED ENGINEER-MECHANICAL



7-5-11  
 PLANS APPROVAL DATE

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**SITE PLAN**

SCALE: 1" = 50'-0"

**INDEX OF SHEET:**

- GP GENERAL PLAN
- M-0 MECHANICAL LEGEND
- M-1 INSPECTION BAY MECHANICAL PLAN
- M-2 HOOD ELEVATION PLAN
- M-3 INSPECTION BAY EXHAUST HOOD PLAN
- M-4 STRUCTURAL DETAILS
- EE-0 LEGEND
- EE-1 EXISTING PARTIAL SITE PLAN 1
- EE-2 EXISTING PARTIAL SITE PLAN 2
- EE-3 EXISTING PARTIAL SITE PLAN 3
- EE-4 MODIFIED PARTIAL SITE PLAN 1
- EE-5 MODIFIED PARTIAL SITE PLAN 2
- EE-6 MODIFIED PARTIAL SITE PLAN 3
- EE-7 AUTOMATIC SIGN CONTROL SCHEMATIC DIAGRAM
- EE-8 EXHAUST FAN POWER PLAN
- EE-9 EXISTING HEIGHT GAGE POLE AND HEIGHT GAGE DETAILS
- EE-10 TRAFFIC RATED PULL BOX DETAILS

THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

<i>Paul Schreff</i> DESIGN SUPERVISOR	DESIGN	BY Tom Hatam	CHECKED Severiano Gutierrez
	DETAILS	BY Rudy Sarte	CHECKED Severiano Gutierrez
	QUANTITIES	BY Tom Hatam	CHECKED Severiano Gutierrez

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF ENGINEERING SERVICES  
 ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

BRIDGE NO. 58W0003	<b>RAINBOW TRUCK INSPECTION FACILITY</b>	SHEET <b>GP</b>
POST MILE R1.0		
<b>GENERAL PLAN</b>		

DS OSD 2139A (4/89) FILE => gp.dgn DATE PLOTTED => 07-JUL-2011 TIME PLOTTED => 10:39

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

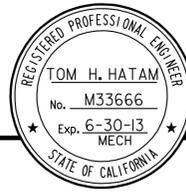
UNIT PROJECT NUMBER & PHASE 3580 08000001211

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF
	07-20-10   08-05-10   08-10-10   09-27-10   10-27-10	

USERNAME => hmtkres DATE PLOTTED => 07-JUL-2011 TIME PLOTTED => 10:39

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08	Riv	15	R1.0	13	28

 REGISTERED ENGINEER-MECHANICAL 10-27-10		
7-5-11 PLANS APPROVAL DATE		

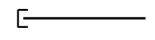
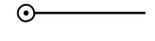
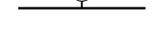
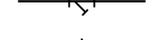
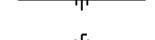
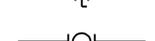
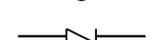
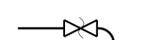
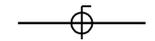
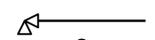
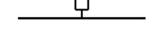
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**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10

**PLUMBING**

- — — — Cold Water
- A — Compressed Air
- F — Fire Service Water Line
- G — Gas
- D — Equipment Drain
- RD — Roof Drain
- OD — Overflow Drain
- RWL — Rain Water Leader
- — — — Hot Water
- R — Relief Valve Discharge Pipe
- S — Sewer Line
- — — — Sanitary Sewer (above grade)
- — — — Sewer Line
- — — — Sanitary Sewer Vent

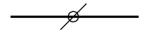
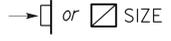
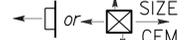
**PIPE FITTINGS AND VALVES**

-  Cap, Threaded
-  Elbow, Turned Down
-  Elbow, Turned Up
-  Reducer, Concentric
-  Pressure Gauge (with gage cock and Snubber)
-  Strainer
-  Union
-  Union, Insulating
-  Valve, Ball
-  Valve, Check
-  Valve, Gas
-  Valve, Gate
-  Valve, Safety Relief
-  Valve, Pressure Reducing
-  Valve, Pressure/Temperature Relief
-  Water Hammer Arrestor

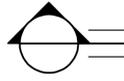
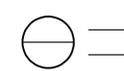
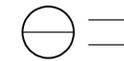
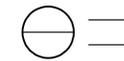
**MECHANICAL ABBREVIATIONS:**

A/C	Air Conditioning	GA	Gauge	R	Radius
ABS	Acrylonitrile Butadiene Styrene	GALV	Galvanized	RH	Radiant Heater
AC	Asphalt Concrete	GH	Ground Hydrant	REG	Register
AD	Air Drop	GLV	Globe Valve	RCP	Reinforced Concrete Pipe
AP	Alternative Pipe	GPM	Gallons Per Minute	RV	Relief Valve
ATF	Automatic Transmision Fluid	GSP	Galvanized Steel Pipe	REQ	Required
		GV	Gate Valve	RA	Return Air
		GWH	Gas Water Heater	RD	Roof Drain
		GYP	Gypsum		
BFP	Backflow Preventer	H	Height	SDS	Sanitary Dump Station
BLDG	Building	HB	Hydrant Box	SS	Sanitary Sewer
BTU	British Thermal Unit	H/C	Hot Water, High Pressure Cleaner	SCH	Schedule
BTUH	British Thermal Unit Per Hour	HF	Hose Faucet	S/S	Service Slnk
BV	Balancing Valve	HVAC	Heating, Ventilating And Air Conditioning	SHR	Shower
		HW	Hot Water	STD	Standard
		HZ	Hertz	S.P.	Static Pressure
C	Conduit	ID	Inside Diameter	STA	Station
Cap.	Capacity	IE	Invert Elevation	SA	Supply Air
CHLF	Combination Heat Lamp, Light and Fan Unit	IN	Inch	SF	Supply Fan
CI	Cast-Iron	IPS	International Pipe Standard		
CO	Cleanout	KS	Kitchen Sink	TCV	Temperature Control Valve
COTF	Cleanout Through Floor	KW	Kilowatt	TP	Trap Primer
COTG	Cleanout Through Grade	LAV	Lavatory	TOT	Total
COTW	Cleanout To Wall	LPG	Liquid Petroleum Gas	TS	Time Switch
CV	Check Valve	L/s	Liters per Second	TYP	Typical
CW	Cold Water	MAX	Maximum		
CFM	Cubic Feet Per Minute	MAN	Manhole	UH	Unit Heater
		MIN	Minimum	UR	Urinal
D	Depth	MS	Mop Sink	V	Vent
Dia	Diameter	(N)	New	VAC	Voltage, Alternating Current
DWV	Drain / Waste / Vent	NIC	Not In Contract	VR	Vent Riser
DB	Dry Bulb	NO	Number	VTR	Vent Thru Roof
DF	Drinking Fountain	NPT	National Pipe Thread		
DH	Duct Heater	NST	National Standard Thread	W	Width
(E)	Existing	NPS	Nominal Pipe Size	W/	With
EA	Exhaust Air	OA	Outside Air	W/O	Without
EEW	Emergency Eyewash and Shower	OC	On Center	WB	Wet Bulb
EF	Exhaust Fan	OD	Outside Diameter	WC	Water Closet
EL	Elevation	OG	Original Ground	W.C.	Water Column
Elect.	Electrical	PH	Phase	WH	Water Hammer Arrestor
ESP	External Static Pressure	POC	Point of Connection	W.H.	Wall Hydrant
EWC	Electric Water Cooler	PVC	Polyvinyl Chloride	WLS	Water Level Switch
EWH	Electric Water Heater	PCC	Portland Cement Concrete	WP	Weatherproof
		PSI	Pounds Per Square Inch	WS	Wash Sink
°F	Fahrenheit	PRV	Pressure Reducing Valve	WSP	Welded Steel Pipe
FC	Flexible Connection				
FD	Floor Drain				
FDC	Fire Department Connection				
FE	Fire Extinguisher				
FG	Finish Grade				
FL	Flow Line				
FH	Fire Hydrant				
FS	Flow Switch				
FTR	Flue Through Roof				

**HEATING, VENTILATING AND AIR CONDITIONING**

-  Balance Damper
-  Flexible Duct
- EA — Exhaust Air
- RA — Return Air
- SA — Supply Air
-  SIZE Exhaust Register
-  or  SIZE Return Register, See Note
-  or  SIZE Supply Diffuser, See Note
-  T Thermostat
-  TS Time Switch
-  F Exhaust Fan
-  FE Fire Extinguisher
-  CHLF Combination Heat Lamp, Light and Fan Unit

**MISCELLANEOUS**

- L Angle
- ⊕ Centerline
- ∅ Diameter
- Ⓟ Plate
-  Section / Elevation Letter
-  Sheet Number
-  Detail Number
-  Sheet Number

NOTE Ceiling Registers and Diffusers are Identified by Duct Connection Neck Size

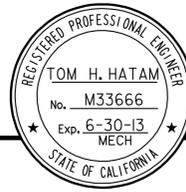
THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

DESIGN BY <i>Tom Hatam</i> CHECKED <i>Severiano Gutierrez</i> DETAILS BY <i>Rudy Sarte</i> CHECKED <i>Severiano Gutierrez</i> QUANTITIES BY <i>Tom Hatam</i> CHECKED <i>Severiano Gutierrez</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 58W0003	<b>RAINBOW TRUCK INSPECTION FACILITY</b>	SHEET <b>M-0</b>
			POST MILE R1.0		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3			UNIT PROJECT NUMBER & PHASE 3580 08000001211	REVISION DATES (PRELIMINARY STAGE ONLY) 07-20-10 08-05-10 08-10-10 09-27-10 10-27-10	SHEET OF 13 OF 28

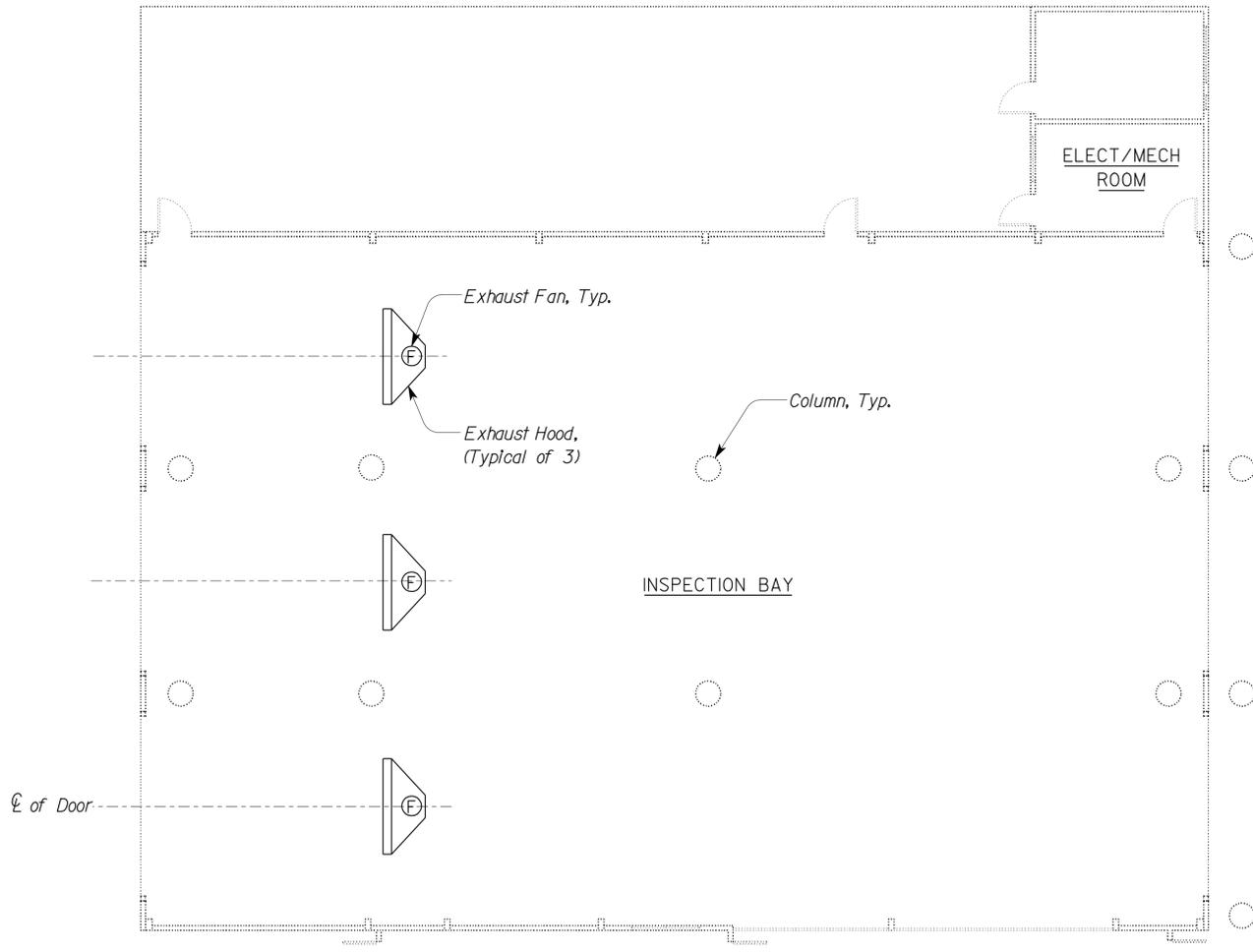
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DISREGARD PRINTS BEARING EARLIER REVISION DATES

OF 2401 VI-1

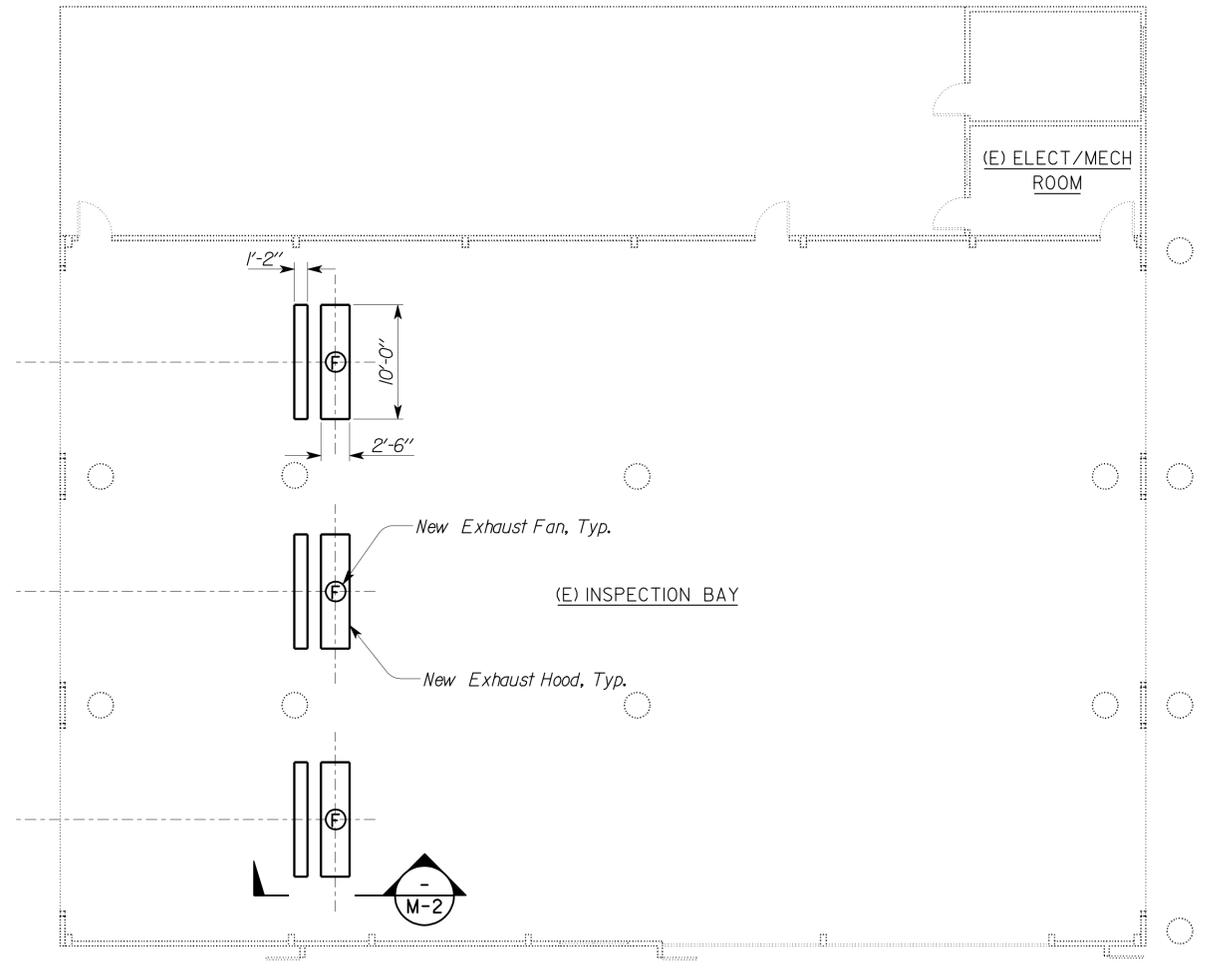
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	14	28
 REGISTERED ENGINEER-MECHANICAL			10-27-10		
7-5-11 PLANS APPROVAL DATE					
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 Reviewed by:   
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10



**EXISTING**

Note: Remove Exhaust Fans, Exhaust Hoods and associated ductworks



**MODIFIED**



**PARTIAL PLAN**

SCALE: 1/8" = 1'-0"

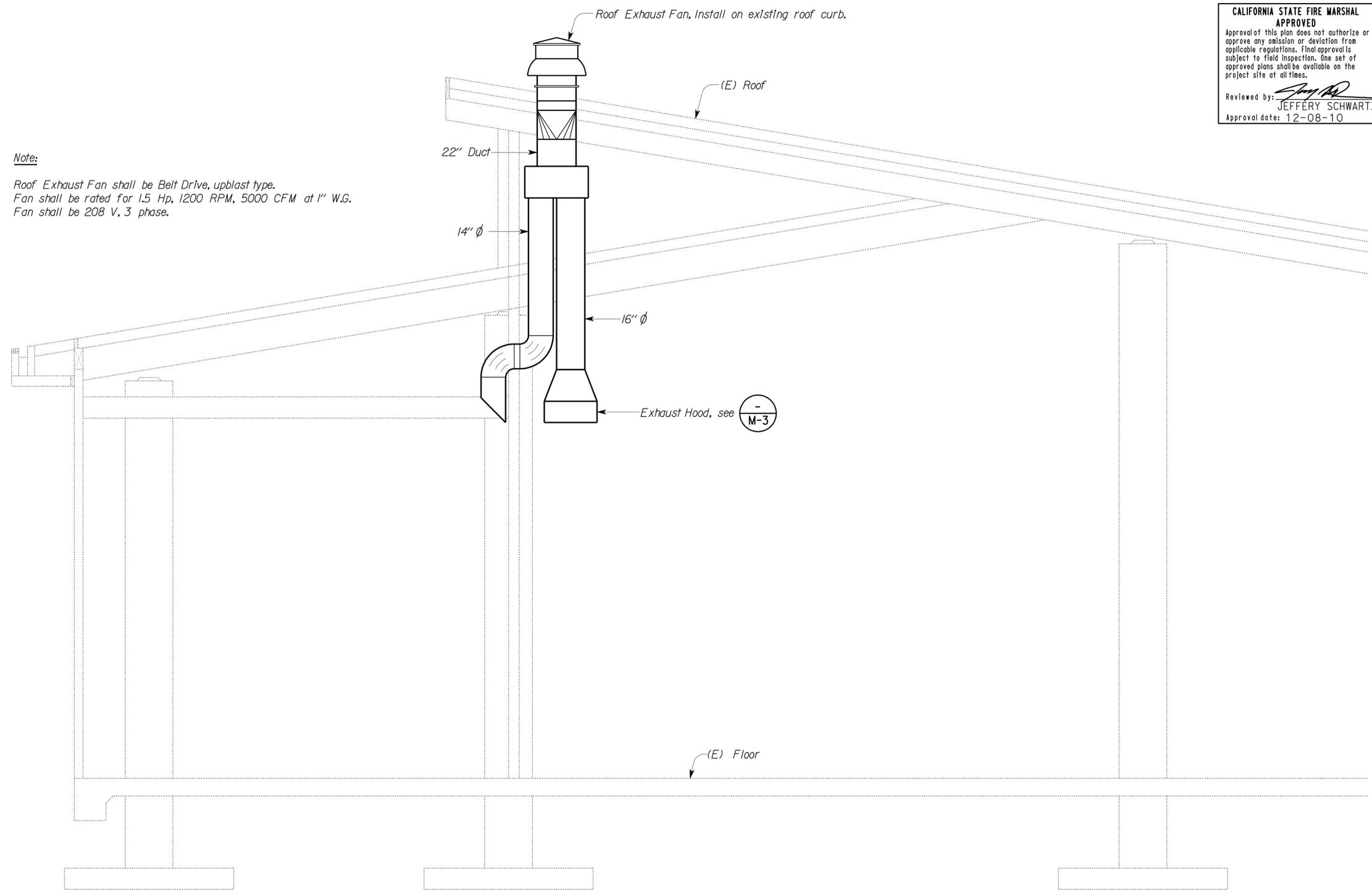
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	DETAILS	BY Rudy Sarte	CHECKED Severiano Gutierrez			POST MILE	R1.0		
QUANTITIES	BY Tom Hatam	CHECKED Severiano Gutierrez		UNIT PROJECT NUMBER & PHASE	3580 08000001211	REVISION DATES (PRELIMINARY STAGE ONLY) 07-20-10   08-05-10   08-10-10   09-27-10   10-27-10			

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	15	28
<p><i>Tom H. Hatam</i> 10-27-10 REGISTERED ENGINEER-MECHANICAL</p> <p>7-5-11 PLANS APPROVAL DATE</p> <p>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</p>					

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**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10



Note:  
 Roof Exhaust Fan shall be Belt Drive, upblast type.  
 Fan shall be rated for 1.5 Hp, 1200 RPM, 5000 CFM at 1" W.G.  
 Fan shall be 208 V, 3 phase.

**A SECTION**  
 SCALE: 3/8" = 1'-0"

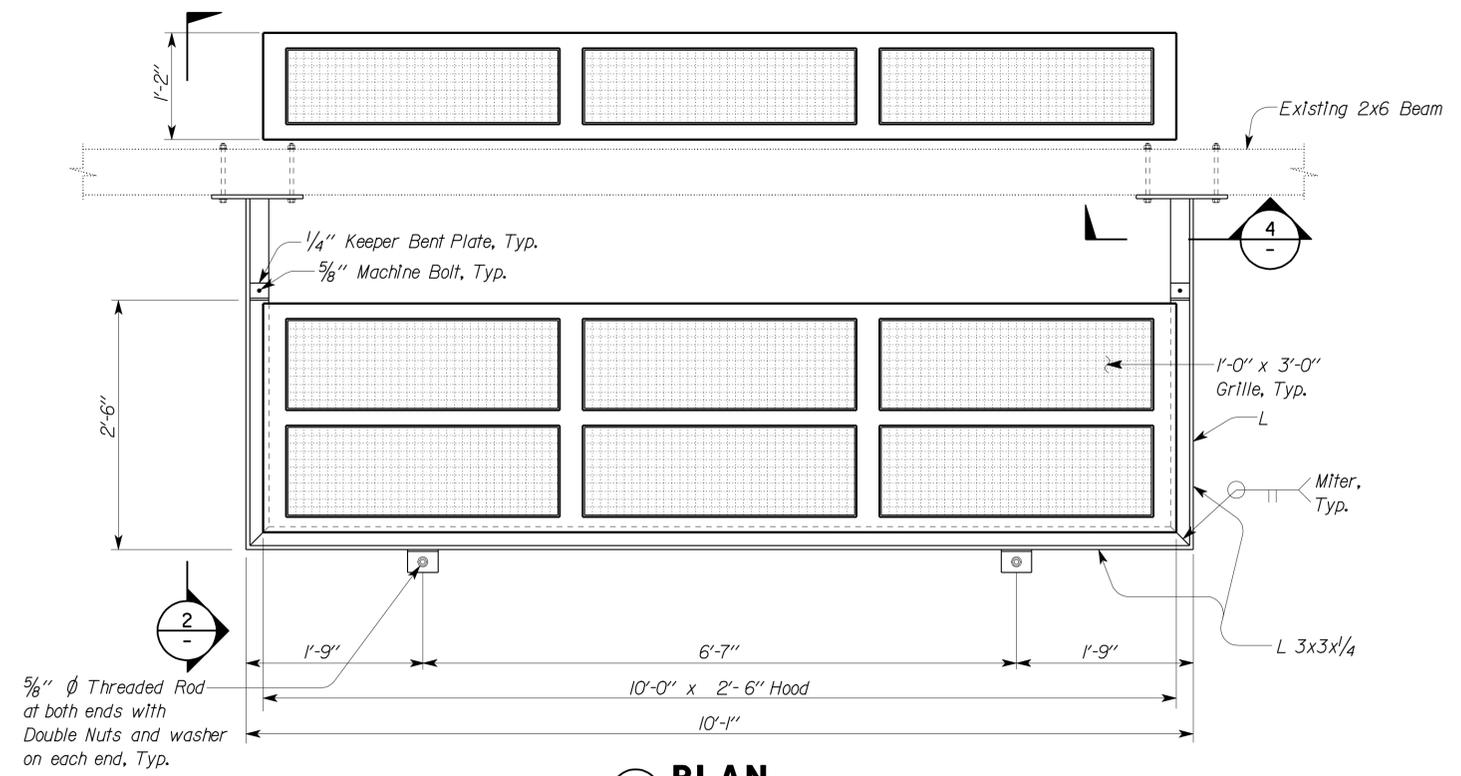
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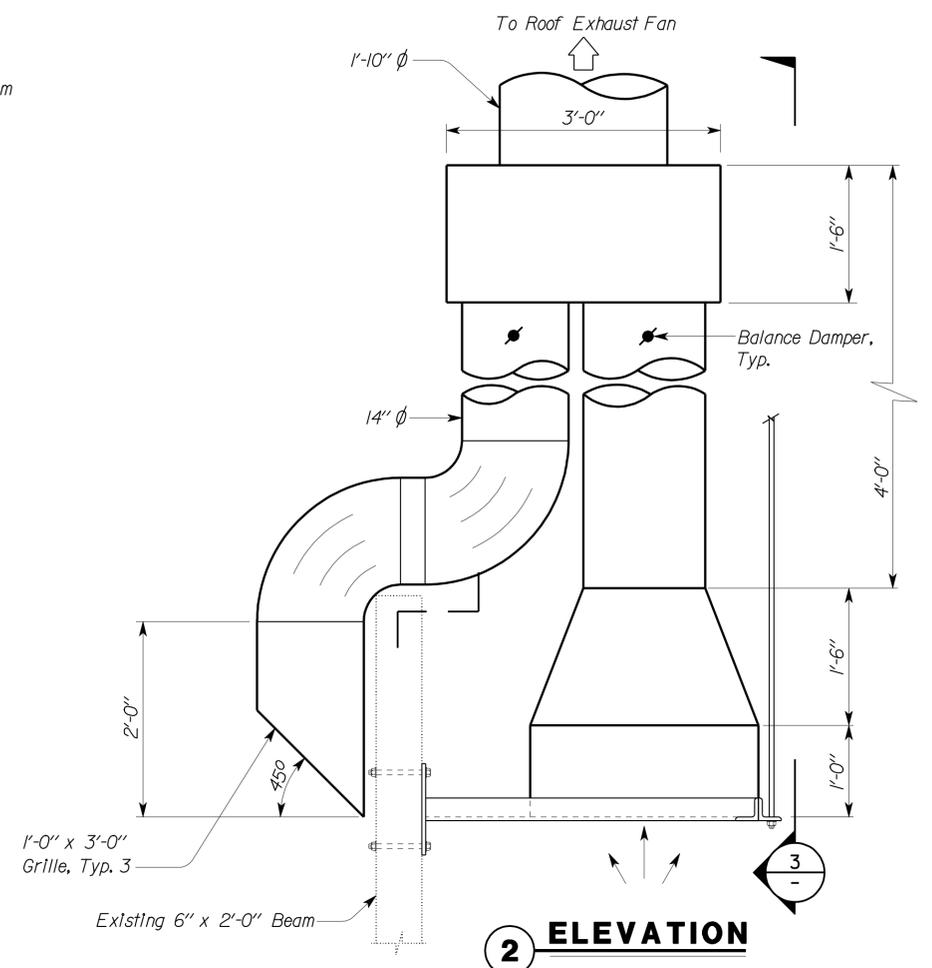
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08	Riv	15	R1.0	16	28
 REGISTERED ENGINEER-MECHANICAL No. M33666 Exp. 6-30-13 MECH STATE OF CALIFORNIA			10-27-10 PLANS APPROVAL DATE 7-5-11 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.		

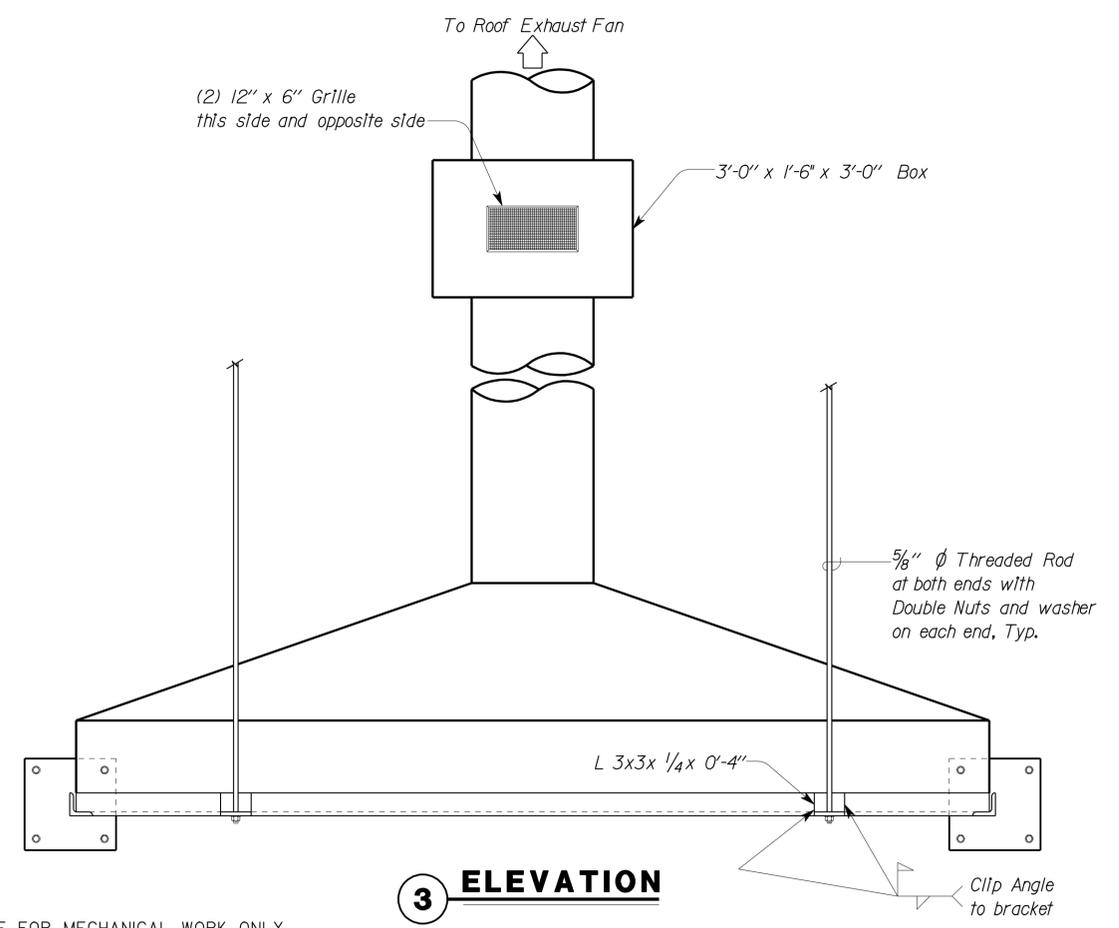
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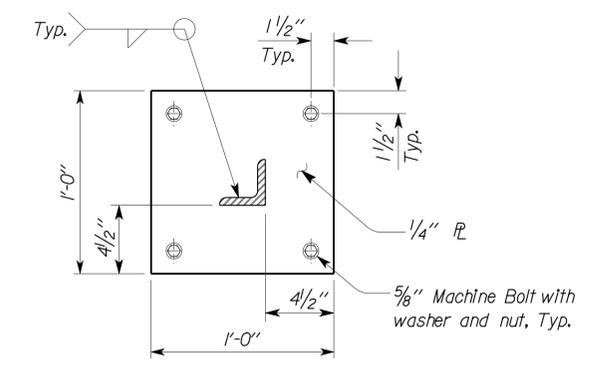
**1 PLAN**



**2 ELEVATION**



**3 ELEVATION**



**4 SECTION**

SCALE: 2" = 1'-0"

THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

All Scale: 1" = 1'-0" unless otherwise noted:

DS OSD 2139A (4/89) FILE NO.:	FILE => m_3.dgn DATE PLOTTED => 07-JUL-2011 TIME PLOTTED => 10:39	DESIGN BY <i>Tom Hatam</i> CHECKED <i>Severiano Gutierrez</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 58W0003 POST MILE R1.0	<b>RAINBOW TRUCK INSPECTION FACILITY</b> INSPECTION BAY EXHAUST HOOD	SHEET <b>M-3</b> OF
		DETAILS BY <i>Rudy Sarte</i> CHECKED <i>Severiano Gutierrez</i>		PROJECT NUMBER & PHASE 3580 08000001211	REVISION DATES (PRELIMINARY STAGE ONLY) 07-20-10 08-05-10 08-10-10 09-27-10 10-27-10		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		QUANTITIES BY <i>Tom Hatam</i> CHECKED <i>Severiano Gutierrez</i>	0 1 2 3	UNIT PROJECT NUMBER & PHASE	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET OF	USERNAME => fhmikes DATE PLOTTED => 07-JUL-2011 TIME PLOTTED => 10:39

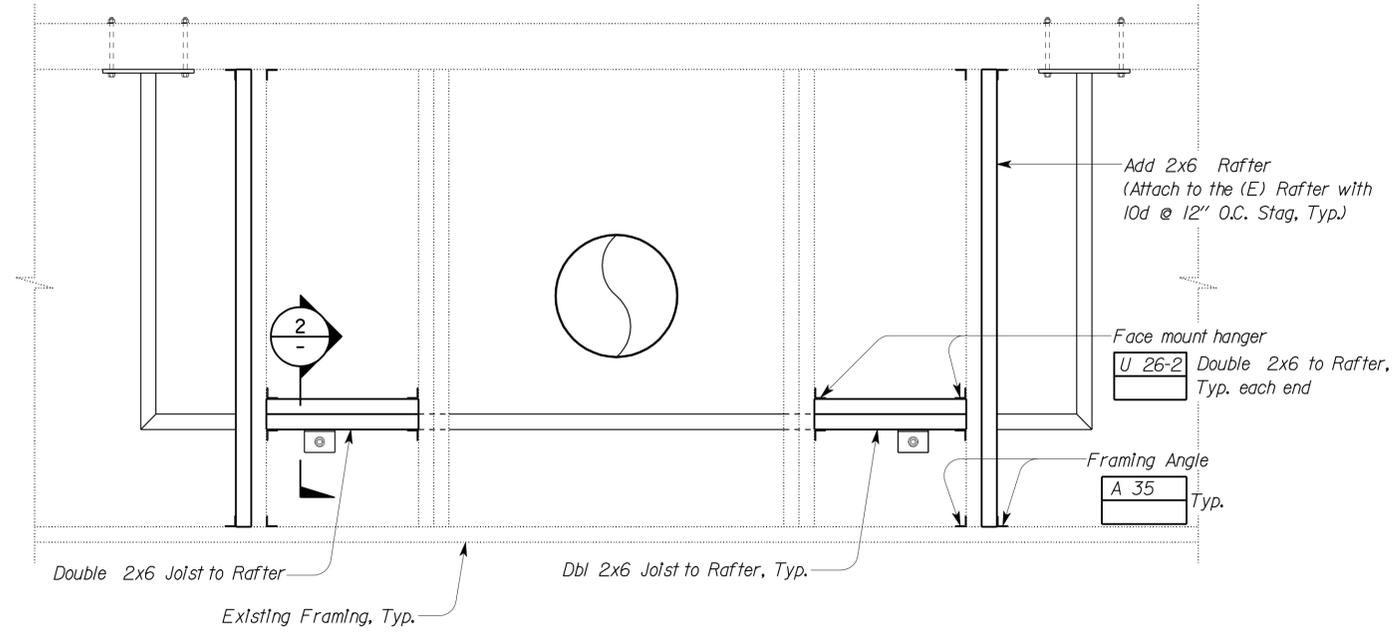
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	17	28

**CALIFORNIA STATE FIRE MARSHAL APPROVED**  
 Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.  
 Reviewed by: *Jeffery Schwartz*  
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10

*Tom H. Hatam* 10-27-10  
 REGISTERED ENGINEER-MECHANICAL

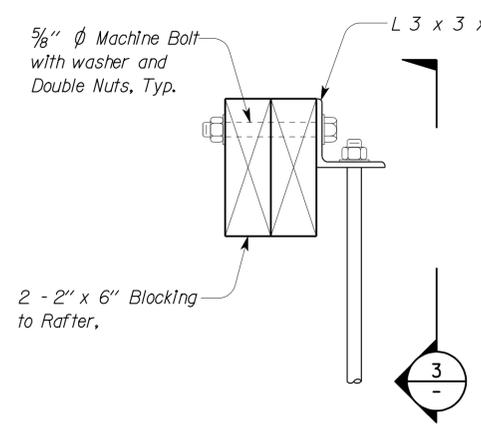
7-5-11  
 PLANS APPROVAL DATE

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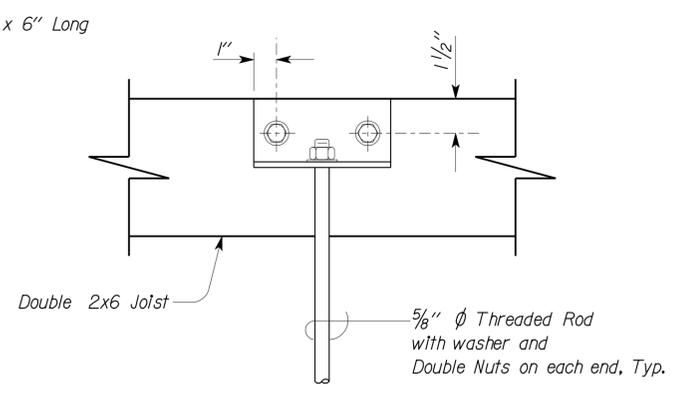
**1 PLAN**

SCALE: 1" = 1'-0"



**2 SECTION**

SCALE: 3" = 1'-0"



**3 ELEVATION**

SCALE: 3" = 1'-0"

THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

 STRUCTURAL REVIEW BY:	DESIGN BY <i>Tom Hatam</i> CHECKED <i>Severiano Gutierrez</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. 58W0003	<b>RAINBOW TRUCK INSPECTION FACILITY</b>	SHEET <b>M-4</b>
	DETAILS BY <i>Rudy Sarte</i> CHECKED <i>Severiano Gutierrez</i>		ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	POST MILE R1.0		
	QUANTITIES BY <i>Tom Hatam</i> CHECKED <i>Severiano Gutierrez</i>		UNIT PROJECT NUMBER & PHASE 3580 08000001211	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF

USERNAME => frmikes1 DATE PLOTTED => 07-JUL-2011 TIME PLOTTED => 10:39

**GRAPHIC SYMBOLS FOR ELECTRICAL WIRING AND LAYOUT DIAGRAMS**

SYMBOL	DESCRIPTION
	POLE-TOP ELECTROLIER
	POLE-ARM ELECTROLIER
<b>CEILING WALL</b>	
	SURFACE FLUORESCENT, METAL HALIDE OR SODIUM VAPOR FIXTURE
	RECESSED FLUORESCENT, METAL HALIDE, OR SODIUM VAPOR FIXTURE
	EXIT LIGHT
	SURFACE OR PENDANT INDIVIDUAL FLUORESCENT FIXTURE
	RECESSED INDIVIDUAL FLUORESCENT FIXTURE
	SURFACE OR PENDANT CONTINUOUS ROW FLUORESCENT FIXTURES
NOTE: A LOWER CASE LETTER NEAR GRAPHIC LIGHTING FIXTURE SYMBOL DENOTES THAT FIXTURE IS CONTROLLED BY A SIMILARLY MARKED SWITCH, AN ALPHANUMERIC SYMBOL NEAR GRAPHIC LIGHTING FIXTURE SYMBOL DENOTES FIXTURE TYPE, (I=INCANDESCENT, F=FLUORESCENT, MH=METAL HALIDE, H=HIGH PRESSURE SODIUM VAPOR), DESIGN TYPE, NUMBER OF LAMPS AND WATTAGE. EXAMPLE: (4) F 2 - 2 x 32	
	32 WATT LAMPS 2 LAMPS DESIGN TYPE FLUORESCENT NUMBER OF FIXTURES
	BLANK OUTLET
	JUNCTION BOX
	DROP CORD
	SINGLE RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET (WITH GFCI)
	DUPLEX RECEPTACLE OUTLET, WEATHERPROOF (WITH GFCI)
	SINGLE, SPECIAL PURPOSE RECEPTACLE OUTLET
	DUPLEX, SPECIAL PURPOSE RECEPTACLE OUTLET
	RANGE OUTLET
	CLOCK HANGER RECEPTACLE
	FAN HANGER RECEPTACLE
	FLOOR SINGLE RECEPTACLE OUTLET
	FLOOR DUPLEX RECEPTACLE OUTLET
	FLOOR SPECIAL PURPOSE OUTLET
	FLOOR RADIO OUTLET
	FLOOR TELEPHONE OUTLET
	MULTI-FLOOR OUTLET, 2 OR MORE GANG
	MULTI-OUTLET ASSEMBLY
	S SINGLE POLE SWITCH
	S <sub>2</sub> DOUBLE POLE SWITCH
	S <sub>3</sub> THREE WAY SWITCH
	S <sub>4</sub> FOUR WAY SWITCH
	S <sub>D</sub> AUTOMATIC DOOR
	S <sub>K</sub> KEY OPERATED SWITCH
	S <sub>P</sub> SWITCH AND PILOT LIGHT
	S <sub>MC</sub> MOMENTARY CONTACT SWITCH
	S <sub>RC</sub> REMOTE CONTROL SWITCH
	S <sub>WP</sub> WEATHERPROOF SWITCH
	S <sub>F</sub> FAN SWITCH
	S <sub>L</sub> LIGHT SWITCH
	S <sub>H</sub> HEATER SWITCH
	S <sub>Vs</sub> VARIABLE SPEED MOTOR CONTROL SWITCH
	S <sub>CHLF</sub> TWO SWITCHES, ONE SWITCH FOR LIGHT AND FAN AND TIMER SWITCH FOR HEAT LAMP

SYMBOL	DESCRIPTION
	S <sub>1</sub> OCCUPANCY SENSOR WALL SWITCH, SINGLE LEVEL
	S <sub>2</sub> OCCUPANCY SENSOR WALL SWITCH, BILEVEL
	S <sub>M</sub> MOTION SENSOR SWITCH
	S <sub>T</sub> MANUAL MOTOR STARTING SWITCH, THERMAL OVERLOAD TYPE
	S <sub>HFP</sub> MANUAL MOTOR STARTING SWITCH, WITHOUT OVERLOAD ELEMENT
	T <sub>s</sub> TIMER SWITCH
	S <sub>S</sub> SWITCH AND SINGLE RECEPTACLE
	S <sub>S</sub> SWITCH AND DUPLEX RECEPTACLE
	H <sub>C</sub> HAND DRYER NOZZLE
	H <sub>D</sub> HAND DRYER
	R <sub>O</sub> RADIO OUTLET
	T <sub>O</sub> TELEPHONE OUTLET
	S <sub>O</sub> SOUND SYSTEM LOUD SPEAKER OUTLET
	P <sub>B</sub> PUSHBUTTON
	P <sub>L</sub> PUSHBUTTON STATION, NC, WITH LOCKING DEVICE FOR OPEN
	P <sub>M</sub> PUSHBUTTON STATION MOTOR CONTROL
	B <sub>Z</sub> BUZZER
	B <sub>L</sub> BELL
	B <sub>B</sub> COMBINATION BELL-BUZZER
	T <sub>H</sub> THERMOSTAT
	P <sub>S</sub> PRESSURE SWITCH
	R <sub>C</sub> CONTROL RELAY
	F <sub>S</sub> FLOW SWITCH
	PEC PHOTOELECTRIC CELL
	R <sub>O</sub> RADIO OUTLET
	T <sub>V</sub> TELEVISION OUTLET
	M <sub>O</sub> MICROPHONE OUTLET
	F <sub>M</sub> FLUSH-MOUNTED PANELBOARD AND CABINET
	S <sub>M</sub> SURFACE-MOUNTED PANELBOARD AND CABINET
	L <sub>P</sub> LIGHTING PANEL
	P <sub>P</sub> POWER PANEL
	C <sub>LP</sub> COMBINATION LIGHTING AND POWER
	MC MOTOR CONTROLLER
	D <sub>S</sub> DISCONNECT SWITCH
	C <sub>C</sub> CONDUIT CONCEALED IN CEILING OR WALL
	F <sub>C</sub> CONDUIT CONCEALED IN FLOOR
	E <sub>C</sub> CONDUIT EXPOSED
	CROSS-LINES INDICATE NUMBER OF #12 AWG CONDUCTORS. LONGER CROSS-LINE INDICATES #12 AWG (G) FOR EQUIPMENT GROUNDING CONDUCTOR. NO CROSS-LINE INDICATES 2#12 WITH #12 (G) UNLESS OTHERWISE NOTED. ALL CONDUIT SHALL BE 1/2" UNLESS OTHERWISE NOTED.
	A <sub>1</sub> , A <sub>2</sub> HOMERUN TO PANELBOARD, ARROWS INDICATE NUMBER OF CIRCUITS, LETTER DENOTES PANELBOARD, NUMERAL DENOTES CIRCUIT.
	SM SURFACE METAL RACEWAY
	(2) 1/2" C, PVC, 2#12 CONDUCTOR INFO (PER CONDUIT) CONDUIT TYPE CONDUIT SIZE NUMBER OF CONDUITS (NO NUMBER INDICATES ONE CONDUIT)
	MC CONDUIT, RIGID STEEL, UNDERGROUND
	PVC CONDUIT, POLYVINYL CHLORIDE, UNDERGROUND
	F CONDUIT, FLEXIBLE
	U CONDUIT, TURN UP
	D CONDUIT, TURN DOWN
	S CONDUIT SEAL, EXPLOSION-PROOF
	X CONDUIT, EXPANSION JOINT
	A ADAPTER, ONE TYPE CONDUIT TO ANOTHER
	O POLE

SYMBOL	DESCRIPTION
	OC OCCUPANCY SENSOR
	H HEAT DETECTOR
	S SMOKE DETECTOR
	P MANUAL PULL STATION
	AV AUDIO/VISUAL ALARM DEVICE
	G GLASS BREAK DISCRIMINATOR
	C MAGNETIC CONTACT SWITCH-PEDESTRIAN DOOR
	C MAGNETIC CONTACT SWITCH-VEHICLE DOOR
	K KEYPAD FOR ALARM SYSTEM
	W COMBINATION DETECTOR (MICROWAVE/PASSIVE INFRARED)
	T <sub>R</sub> TRAFFIC RATED PULL BOX, UNLESS OTHERWISE NOTED
	CHLF COMBINATION HEAT, LIGHT AND FAN UNIT
	A — SECTION/ELEVATION LETTER
	EE-2 — SHEET NUMBER
	I — DETAIL NUMBER
	EE-2 — SHEET NUMBER

**REMODEL WORK**

SYMBOL	DESCRIPTION
	F-◯-F EXISTING FLUORESCENT FIXTURE-TO REMAIN
	F-✕-F EXISTING FLUORESCENT FIXTURE-REMOVE
	◯ EXISTING INCANDESCENT FIXTURE-TO REMAIN
	✕ EXISTING INCANDESCENT FIXTURE-REMOVE
	◯ EXISTING OUTLET-TO REMAIN
	◯ EXISTING RECEPTACLE OUTLET-TO REMAIN
	✕ EXISTING RECEPTACLE OUTLET-REMOVE
	-E-E- EXISTING CONDUIT AND CONDUCTORS-TO REMAIN UNLESS OTHERWISE NOTED
	-*-*- EXISTING CONDUIT AND CONDUCTORS-REMOVE
	S EXISTING SWITCH-TO REMAIN
	✕ EXISTING SWITCH-REMOVE
	◯ EXISTING JUNCTION BOX-TO REMAIN
	✕ EXISTING JUNCTION BOX-REMOVE

**STANDARD NOTES**

	AB ABANDON, IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.
	BC INSTALL PULL BOX IN EXISTING CONDUIT RUN.
	CB INSTALL CONDUIT INTO EXISTING PULL BOX.
	CC CONNECT NEW AND EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS AND INSTALL CONDUCTORS AS INDICATED.
	CF CONDUIT TO REMAIN FOR FUTURE USE. REMOVE CONDUCTORS, INSTALL PULL ROPE AND PLUG.
	FA REMOVE FOUNDATION ABOVE GRADE AND ABANDON FOUNDATION BELOW GRADE.
	RL RELOCATE EQUIPMENT.
	RLD RELOCATED EQUIPMENT.
	SC SPLICE NEW TO EXISTING CONDUCTORS.

**STANDARD PLANS**

DATED MAY, 2006

- T-14
- ES-8

**GRAPHIC SYMBOLS FOR ELECTRICAL DIAGRAMS**

SYMBOL	DESCRIPTION
	CIRCUIT BREAKER, SINGLE POLE
	CIRCUIT BREAKER, DOUBLE POLE
	CIRCUIT BREAKER, THREE POLE
	GFCI CIRCUIT BREAKER, WITH GROUND FAULT CIRCUIT INTERRUPTER
	CONTACT, NORMALLY OPEN
	CONTACT, NORMALLY CLOSED
	CONTACT, NORMALLY CLOSED, TIME DELAY CLOSING ON DE-ENERGIZING
	CONTACT, NORMALLY OPEN, TIME DELAY OPENING ON DE-ENERGIZING
	CONTACT, NORMALLY OPEN, TIME DELAY CLOSING ON ENERGIZING
	CONTACT, NORMALLY CLOSED, TIME DELAY OPENING ON ENERGIZING
	CONTACT, SINGLE POLE DOUBLE-THROW
	OPERATING COIL
	LIQUID LEVEL ACTUATED SWITCH, NORMALLY CLOSED
	LIQUID LEVEL ACTUATED SWITCH, NORMALLY OPEN
	PRESSURE ACTUATED SWITCH, NORMALLY CLOSED
	PRESSURE ACTUATED SWITCH, NORMALLY OPEN
	FLOW ACTUATED SWITCH, NORMALLY CLOSED
	FLOW ACTUATED SWITCH, NORMALLY OPEN
	TEMPERATURE ACTUATED SWITCH, NORMALLY CLOSED
	TEMPERATURE ACTUATED SWITCH, NORMALLY OPEN
	LIMIT SWITCH, NORMALLY CLOSED
	LIMIT SWITCH, NORMALLY OPEN
	PUSHBUTTON SWITCH, NORMALLY CLOSED
	PUSHBUTTON SWITCH, NORMALLY OPEN
	SWITCH, SINGLE-POLE
	SWITCH, SINGLE-POLE, DOUBLE-THROW
	SWITCH, DOUBLE-POLE
	SWITCH, DOUBLE-POLE, DOUBLE-THROW
	SWITCH, SINGLE-POLE, 3-POSITION
	THERMAL OVERLOAD
	FUSE
	RESISTOR
	VARIABLE RESISTOR
	TRANSFORMER WINDING
	GROUNDING ELECTRODE
	ENCLOSURE BOND
	PILOT LIGHT (A=AMBER, G=GREEN, R=RED)
	G GENERATOR
	M MOTOR
	F FAN MOTOR

**PROJECT NOTES**

- SEPARATE GROUNDED (NEUTRAL) CONDUCTOR SHALL BE USED FOR EACH 120-VOLT CIRCUIT.
- HOMERUNS TO PANELBOARDS SHALL BE INSTALLED AS SHOWN ON THE PLANS. HOMERUNS SHALL NOT BE COMBINED.
- A SINGLE INSULATED EQUIPMENT GROUNDING CONDUCTOR (SIZED AS REQUIRED) SHALL BE INSTALLED IN EACH CONDUIT RUN.

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	18	28

*Jarid Amirazodi* 1-13-11  
REGISTERED ELECTRICAL ENGINEER DATE

REG. PROFESSIONAL ENGINEER  
J. AMIRAZODI  
No. 17509  
Exp. 6-30-13  
ELEC  
STATE OF CALIFORNIA

7-5-11  
PLANS APPROVAL DATE

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**ABBREVIATIONS**

ABBREVIATION	DESCRIPTION
A/C	AMPERES
ACS	AIR CONDITIONING UNIT
AI	AIR COMPRESSOR STARTER
AL	ALARM INPUT
AO	ALARM LIGHT
AO	ANALOG OUTPUT
AVC	AIR VOLUME CONTROLLER
BD	BUILDING DISCONNECT
BRK	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CD	CONTROL DISCONNECT
CR	CONTROL RELAY
CKT	CIRCUIT
CMS	CHANGEABLE MESSAGE SIGN
DLC	DETECTOR LOOP CABLE
DO	DIGITAL OUTPUT
DP	DUPLEX PLUG RECEPTACLE
DS	DOOR SWITCH
(E)	EXISTING
EF	EXHAUST FAN
EMS	EXTINGUISHABLE MESSAGE SIGN
F	FUSE
FLA	FLASHER
FLEX	FLEXIBLE CONDUIT
FLS	FLOW SWITCH
FR	FAILURE RESET
FS	FLOAT SWITCH
G	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GRS	GALVANIZED RIGID STEEL
IR	INDUCTION RELAY
JB	JUNCTION BOX
L	LIGHT
LC	LIGHTING CONTACTOR
LCP	LIGHTING CONTROL PANEL
LD	LIGHT DISCONNECT
LL	LIQUID LEVEL RELAY
LLC	LIQUID LEVEL CONTROLLER
LP	LIGHT PANEL
LS	LIGHT SWITCH
LT	LIGHT TRANSFORMER
LTO	LIGHT TRANSFORMER OVERLOAD
MB	MAIN BREAKER
MC	METALLIC CONDUIT
MCP	MOTOR CIRCUIT PROTECTOR
MCC	MOTOR CONTROL CENTER
TDR	TIME DELAY RELAY
MSB	MAIN SWITCHBOARD
MT	EMPTY CONDUIT
(N)	NEW
NC	NORMALLY CLOSED
NO	NUMBER
NO	NORMALLY OPEN
NSW	NEUTRAL SWITCHING BREAKER
OL	OVERLOAD
P	POLE
PB	PULL BOX, PUSHBUTTON
PFROD	PHASE FAILURE RELAY DISCONNECT
PEC	PHOTOELECTRIC CELL
PL	PILOT LIGHT
PS	PRESSURE SWITCH
PTS	POWER TRANSFER SWITCH
PVC	POLYVINYL CHLORIDE
RES	RESISTOR
RTB	RADIO TERMINAL BOARD
S	STARTER COIL
SD	SERVICE DISCONNECT
SFR	SEAL FAILURE RELAY
SL	SUMP LIGHT
SPR	STANDBY POWER RECEPTACLE
SS	SELECTOR SWITCH
ST	STARTER
SV	SOLENOID VALVE
T	TRANSFORMER
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TGLS	TOGGLE SWITCH
TM	TIME METER
TOT	TOTAL
TS	TIMER SWITCH
TSW	TEST SWITCH
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
V	VOLT
WIM	WEIGH IN MOTION
WLS	WATER LEVEL SWITCH
WP	WEATHERPROOF
WSMS	WEIGH STATION MESSAGE SIGN

**CALIFORNIA STATE FIRE MARSHAL APPROVED**

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Reviewed by: *Jeffery Schwartz*  
JEFFERY SCHWARTZ  
Approval date: 12-08-10

DESIGN	BY <i>Jarid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 58W003	RAINBOW TRUCK INSPECTION FACILITY	SHEET
	DETAILS	BY <i>Ed D. Tapalla 7-08</i>		CHECKED <i>Jarid Amirazodi</i>	POST MILE R1.0		LEGEND
QUANTITIES	BY <i>Jarid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT PROJECT NUMBER & PHASE 3596 0800001211	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF

DOES SD Imperial Rev. 9/02

07-JUL-2011 10:39

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	19	28

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 Reviewed by: *Jeffery Schwartz*  
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10

*Jarid Amirazodi*  
**J. AMIRAZODI**  
 No. 17509  
 Exp. 6-30-13  
 ELEC  
 STATE OF CALIFORNIA  
 REGISTERED ELECTRICAL ENGINEER  
 DATE 1-13-11  
 7-5-11  
 PLANS APPROVAL DATE

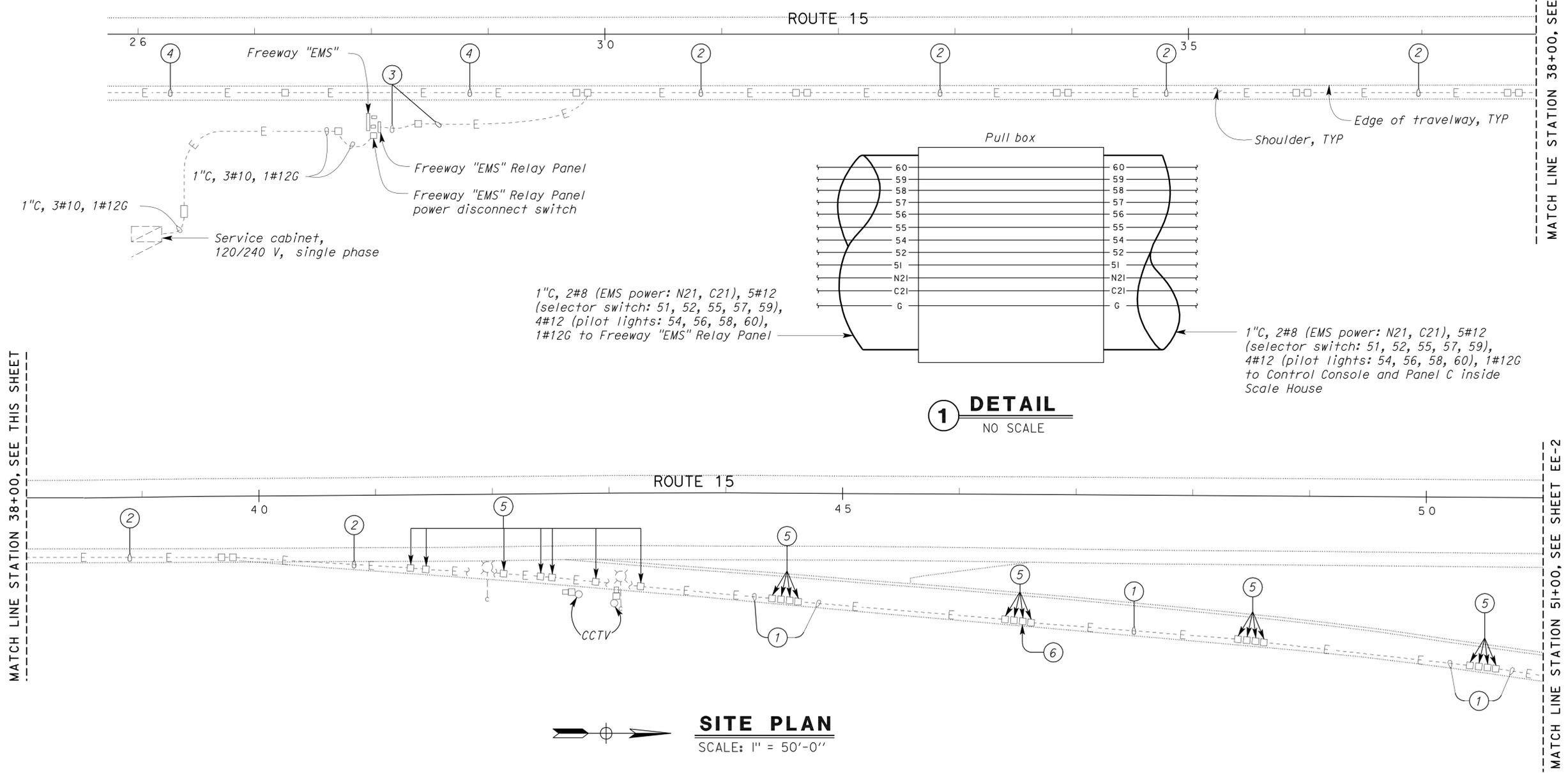
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General Notes:

- A. Not all electrical/mechanical equipment and conduit systems are shown.
- B. Existing electrical equipment, underground conduit and conductor system as shown are diagrammatic and their location as shown are approximate only. Therefore, field verify exact location of existing underground facilities prior to the beginning of trenching and or removal work. The cost for pot holing and or locating existing underground utilities shall be considered to be paid for in the building lump sump price and no additional cost will be paid.
- C. Sawcut existing paved surfaces at places where required for installation of underground conduit system and repair disturbed surfaces to match existing.
- D. Determine, record and submit size of each pull box to be removed.

Notes:

- ① 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G;  
 1" C, 2#8 (ramp lights, A15-17), 2#10 (CCTV camera system power, B18), 1#10G;  
 1" C, Entrance and lane CCTV camera coaxial signal cable;  
 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ② 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G;  
 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ③ 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G.
- ④ 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ⑤ Replace existing pull box with same size traffic rated pull box. For details, see sheet EE-10.
- ⑥ For contents of this pull box, see "Detail 1" this sheet.



MATCH LINE STATION 38+00, SEE THIS SHEET

MATCH LINE STATION 51+00, SEE SHEET EE-2

DESIGN SUPERVISOR <i>J. Schreff</i> DESIGN ENGINEER <i>Jaswinder K. Sandhu</i>		DESIGN BY <b>Javid Amirazodi</b>	CHECKED <b>Jesse Sandhu</b>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 58W0003 POST MILE R1.0	<b>RAINBOW TRUCK INSPECTION FACILITY</b> EXISTING PARTIAL SITE PLAN I	SHEET <b>EE-1</b>
		DETAILS BY <b>Ed D. Tapalla 7-08</b>	CHECKED <b>Javid Amirazodi</b>		UNIT PROJECT NUMBER & PHASE 3596 08000001211	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY) 7/2/08 1/13/11	SHEET OF
		QUANTITIES BY <b>Javid Amirazodi</b>	CHECKED <b>Jesse Sandhu</b>		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3			

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	20	28

*Javid Amirazodi* 1-13-11  
REGISTERED ELECTRICAL ENGINEER DATE

7-5-11  
PLANS APPROVAL DATE

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- C. Saw cut existing paved surfaces at places where required for installation of underground conduit system and repair disturbed surfaces to match existing.
- D. Determine, record and submit size of each pull box to be removed.

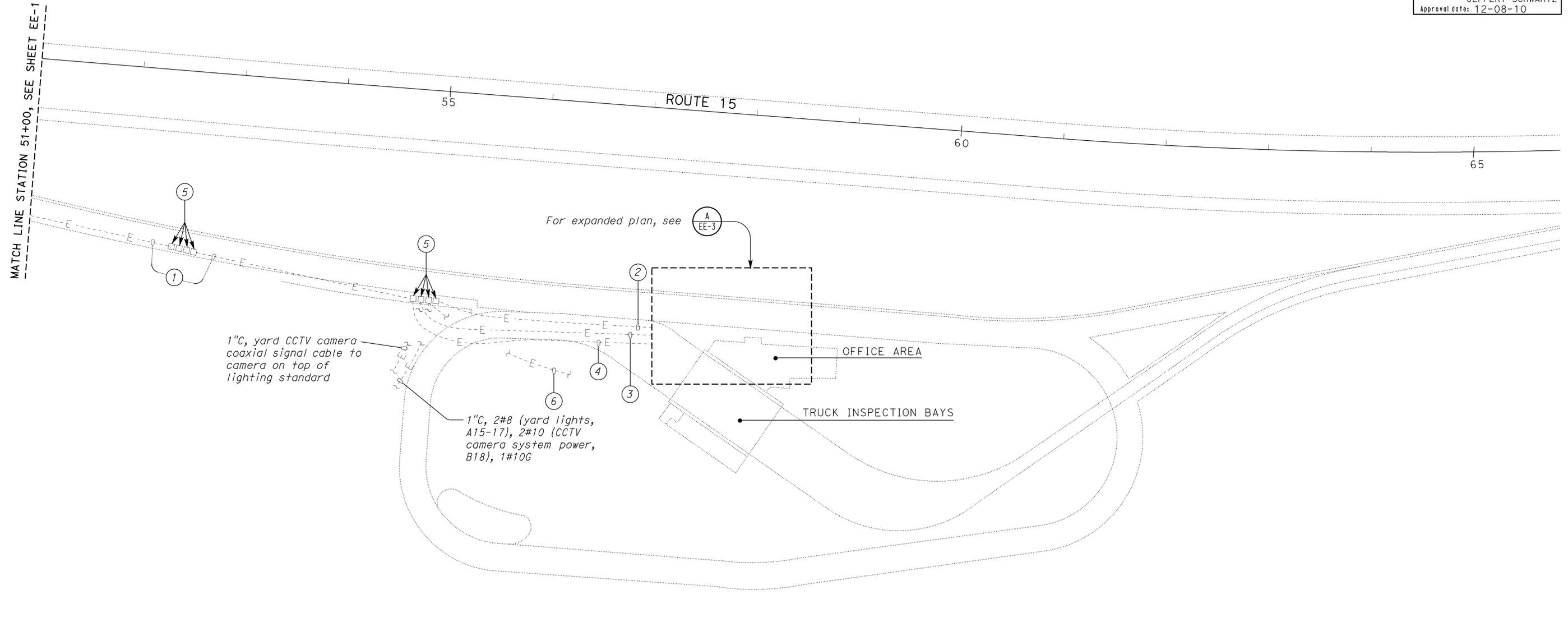
Notes:

- ① 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G;  
1" C, 2#8 (ramp lights, A15-17), 2#10 (CCTV camera system power, B18), 1#10G;  
1" C, entrance and lane CCTV camera coaxial signal cable;  
1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ② 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G.
- ③ 1 1/2" C, Entrance, yard and lane CCTV camera coaxial signal cable.
- ④ 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ⑤ Replace existing pull box with same size traffic rated pull box. For details, see sheet EE-10.
- ⑥ 1" C, 2#8 (yard and ramp lights, A15-17), 2#10 (CCTV camera system power, B18), 1#10G.

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Reviewed by: *Jeffery Schwartz*  
**JEFFERY SCHWARTZ**  
Approval date: 12-08-10



**SITE PLAN**  
SCALE: 1" = 50'-0"

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

DESIGN	BY <i>Javid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>
DETAILS	BY <i>Ed D. Tapalla 7-08</i>	CHECKED <i>Javid Amirazodi</i>
QUANTITIES	BY <i>Javid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

BRIDGE NO. 58W0003  
POST MILE R1.0

**RAINBOW TRUCK INSPECTION FACILITY**

EXISTING PARTIAL SITE PLAN 2

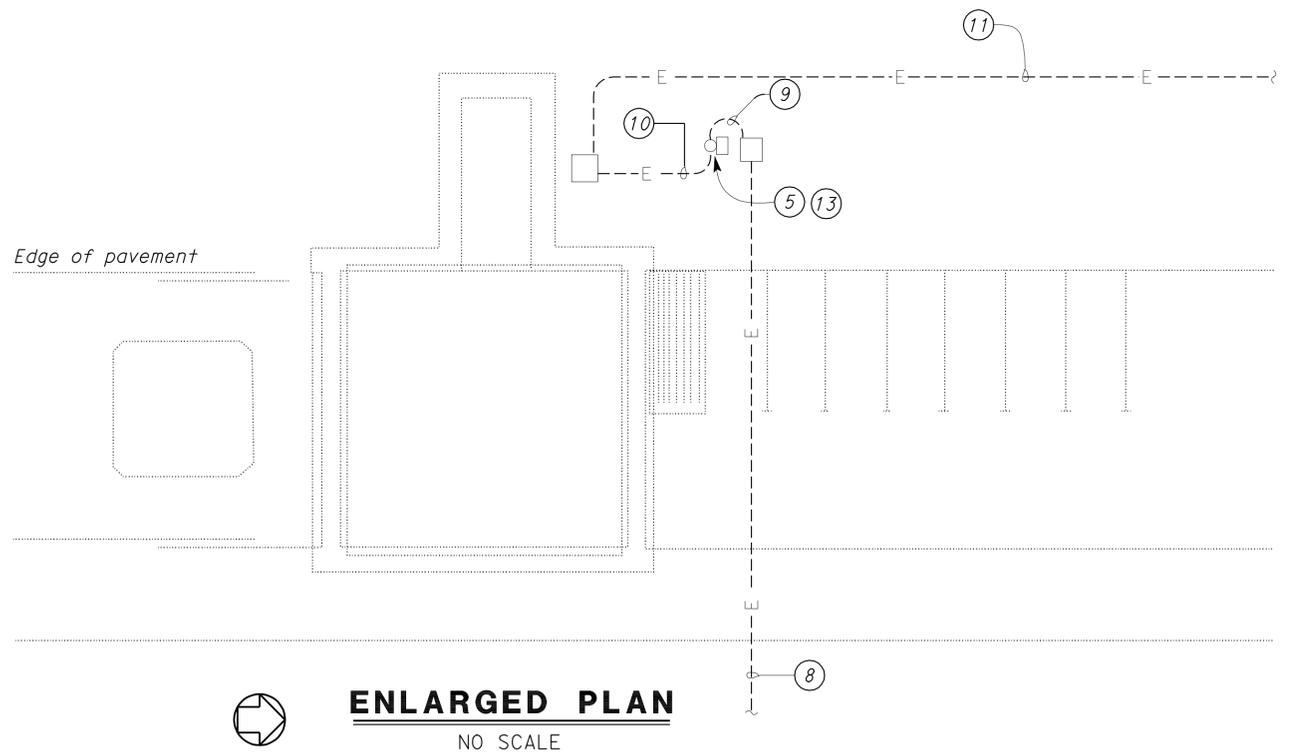
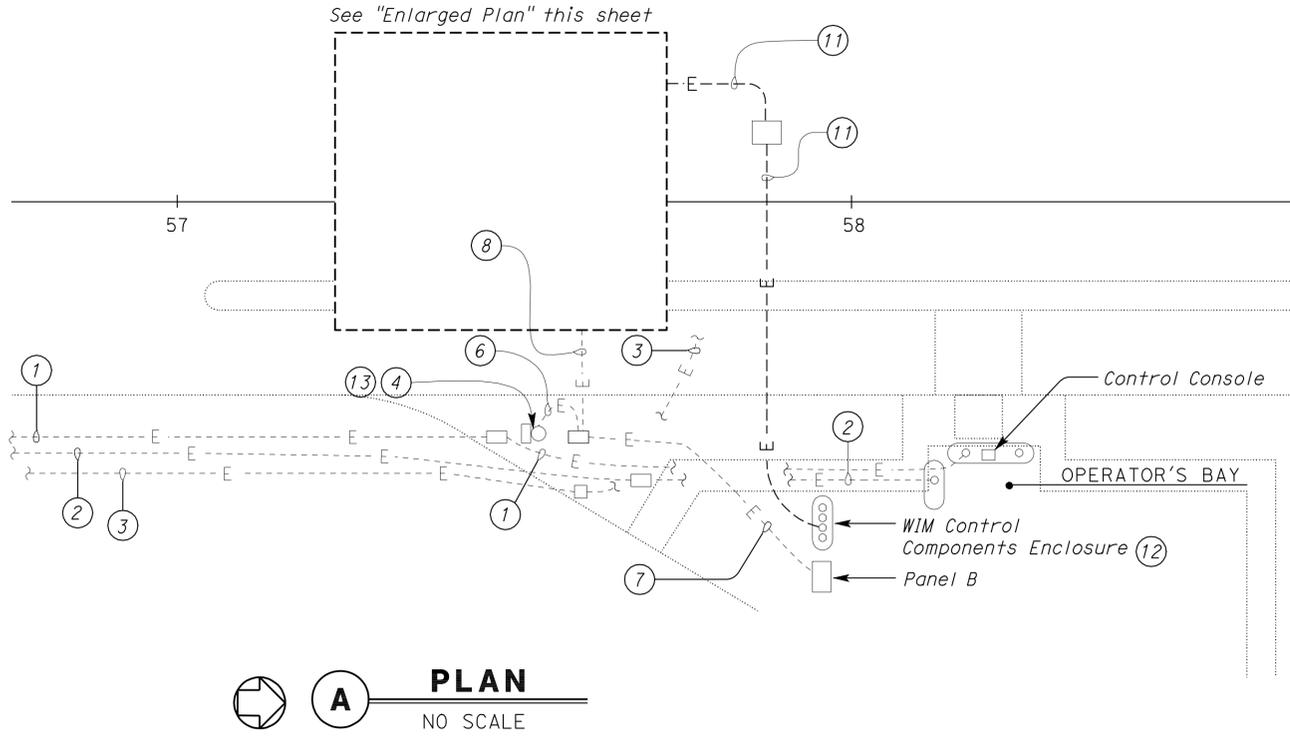
SHEET **EE-2** OF

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	21	28

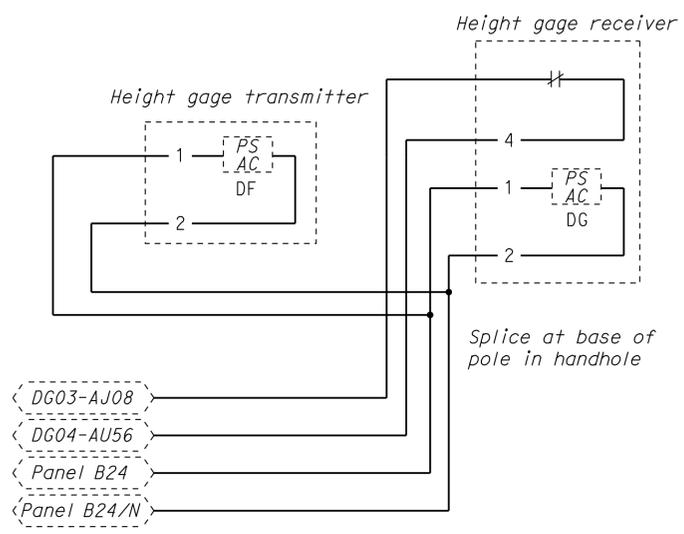
  

<b>Javid Amirazodi</b> REGISTERED ELECTRICAL ENGINEER DATE 1-13-11		
PLANS APPROVAL DATE 7-5-11		

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- General Notes:**
- Not all electrical/mechanical equipment and conduit systems are shown.
  - Existing electrical equipment, underground conduit and conductor system as shown are diagrammatic and their location as shown are approximate only. Therefore, field verify exact location of existing underground facilities prior to the beginning of trenching and or removal work. The cost for pot holing and or locating existing underground utilities shall be considered to be paid for in the building lump sump price and no additional cost will be paid.
  - Sawcut existing paved surfaces at places where required for installation of underground conduit system and repair disturbed surfaces to match existing.
  - Panel A is located inside the Electrical/Mechanical room at inspection area. Panel B and WIM Control Components Enclosure are located inside the Electrical room. Panel C is located in Hallway.



- Notes:**
- 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G.
  - 1 1/2" C, entrance, yard and lane CCTV camera coaxial signal cable.
  - 1 1/2" C, 1 fiber optic cable, 1-12 pair video cable.
  - Height gage receiver pole. Remove height gage receiver, brackets, and associated conductors. Pole to remain.
  - Height gage transmitter pole. Remove height gage transmitter, brackets, and associated conductors. Pole to remain.
  - 1" C, 2#10 (height gage power, B24), 2#10 (height gage control), 1#12G. Remove conductors and reuse conduit.
  - 1" C, 2#10 (height gage power, B24) and other conductors and cables. Remove 2#10 height gage power conductors.
  - 1" C, 2#10 (height gage power) and other conductors and cables. Remove 2#10 height gage power conductors.
  - 3/4" C, 2#10 (height gage power). Remove conductors and reuse conduit.
  - 1" C, 2#10 (height gage power). Remove height gage conductors and reuse conduit.
  - 2" C 2#10 (height gage power) and other conductors and cables. Remove height gage power conductors.
  - Record conductors and cables termination prior to removal.
  - For height gage wiring diagram, see details this sheet.

**CALIFORNIA STATE FIRE MARSHAL APPROVED**

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Reviewed by:   
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

DESIGN	BY <i>Javid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>
DETAILS	BY <i>Ed D. Tapalla 7-08</i>	CHECKED <i>Javid Amirazodi</i>
QUANTITIES	BY <i>Javid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

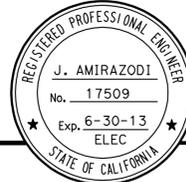
DIVISION OF ENGINEERING SERVICES  
 ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

BRIDGE NO.	58W0003	<b>RAINBOW TRUCK INSPECTION FACILITY</b> EXISTING PARTIAL SITE PLAN 3
POST MILE	R1.0	

SHEET **EE-3** OF

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	22	28

<b>Jarid Amirazodi</b> REGISTERED ELECTRICAL ENGINEER DATE 1-13-11		
7-5-11 PLANS APPROVAL DATE		

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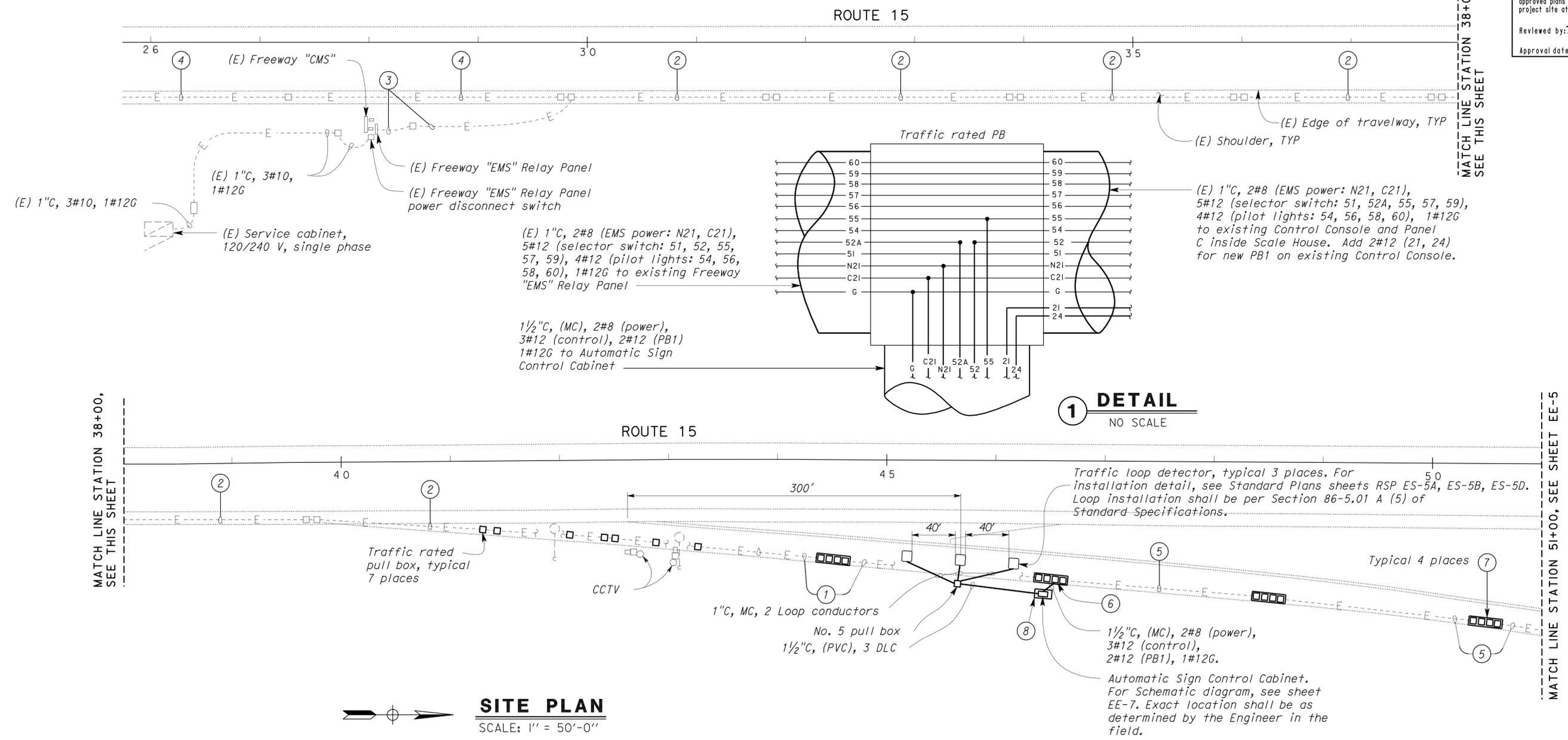
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- C. Sawcut existing paved surfaces at places where required for installation of underground conduit system and repair disturbed surfaces to match existing.

**Notes:**

- ① • (E) 1" C, 2#8 (EMS power, C21), 9#12 (EMS control, 1#12G);  
 • (E) 1" C, 2#8 (ramp lights, A15-17), 2#10 (CCTV camera system power, B18), 1#10G;  
 • (E) 1" C, Entrance and lane CCTV camera coaxial signal cable;  
 • (E) 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ② (E) 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G;  
 (E) 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ③ (E) 1" C, 2#8 (power, C21), 9#12 (EMS control), 1#12G.
- ④ (E) 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ⑤ • (E) 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G. Add 2#12 for new PB1 on existing Control Console located inside existing Operator's Bay;  
 • (E) 1" C, 2#8 (ramp lights, A15-17), 2#10 (CCTV camera system power, B18), 1#10G;  
 • (E) 1" C, entrance and lane CCTV camera coaxial signal cable;  
 • (E) 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ⑥ For contents of this pull box, see "Detail 1" this sheet.
- ⑦ For pull box arrangement and details, see sheet EE-10.
- ⑧ Automatic Sign Control Cabinet concrete pad. Concrete pad shall be minimum 6" thick, and sized to fit the Automatic Sign Control Cabinet. Concrete pad shall be extended additional 3 feet in front of the Cabinet door for accessibility.

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 Reviewed by: *Jeffery Schwartz*  
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10



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DESIGN BY <i>Jarid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 58W0003	<b>RAINBOW TRUCK INSPECTION FACILITY</b>	SHEET <b>EE-4</b>
				POST MILE R1.0		
DETAILS BY <i>Ed D. Tapalla 7-08</i>	CHECKED <i>Jarid Amirazodi</i>	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT PROJECT NUMBER & PHASE 3596 08000001211	REVISION DATES (PRELIMINARY STAGE ONLY)		SHEET OF
QUANTITIES BY <i>Jarid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>			7/21/08 1/13/11		

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	23	28

<i>Javid Amirazodi</i> REGISTERED ELECTRICAL ENGINEER DATE 1-13-11		
PLANS APPROVAL DATE 7-5-11		

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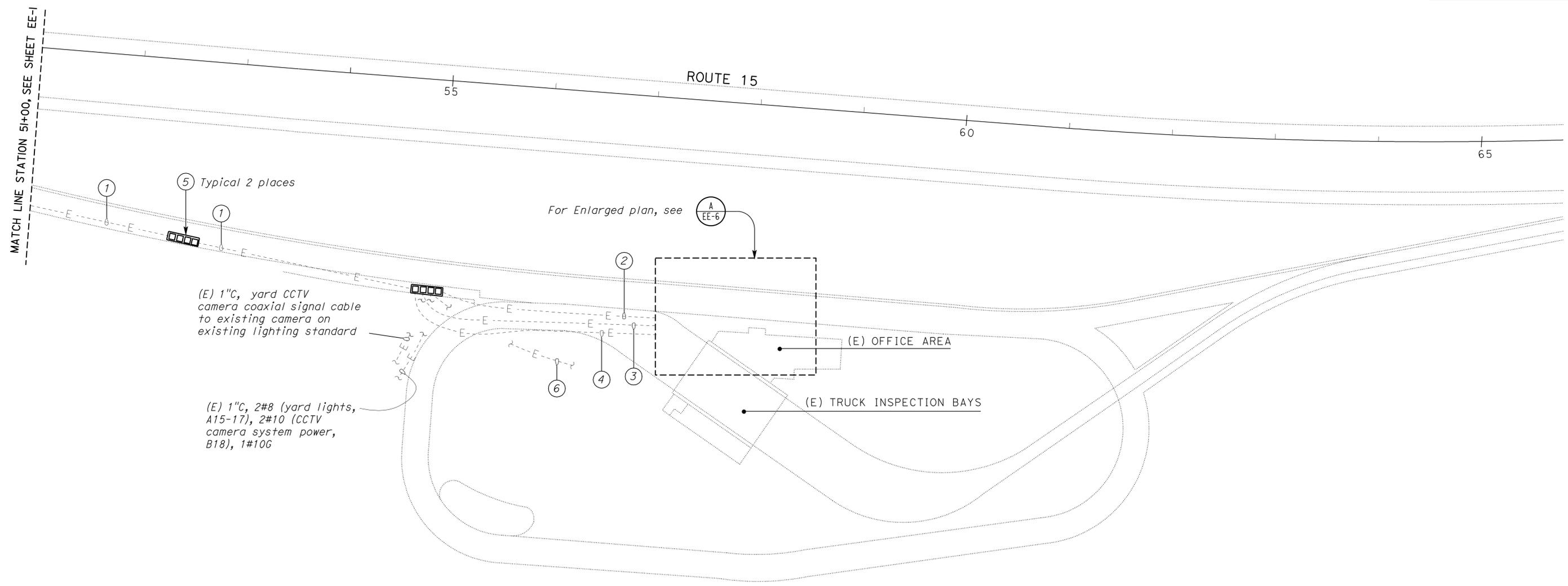
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- B. Existing electrical equipment, underground conduit and conductor system as shown are diagrammatic and their location as shown are approximate only. Therefore, field verify exact location of exiting underground facilities prior to the beginning of trenching and or removal work. The cost for pot holing and or locating existing underground utilities shall be considered to be paid for in the building lump sump price and no additional cost will be paid.
- C. Saw cut existing paved surfaces at places where required for installation of underground conduit system and repair disturbed surfaces to match existing.

Notes:

- ① (E) 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G. Add 2#12 for new PB1 on existing Control Console located inside the existing Scale House;
- (E) 1" C, 2#8 (ramp lights, A15-17), 2#10 (CCTV camera system power, B18), 1#10G;
- (E) 1" C, Entrance and lane CCTV camera coaxial signal cable;
- (E) 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ② (E) 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G. Add 2#12 for new PB1 on existing Control Console located inside the existing Scale House.
- ③ (E) 1/2" C, Entrance, yard and lane CCTV camera coaxial signal cable.
- ④ (E) 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ⑤ For pull box arrangement and details, see sheet EE-10.
- ⑥ (E) 1" C, 2#8 (yard and ramp lights, A15-17), 2#10 (CCTV camera system power, B18), 1#10G.

**CALIFORNIA STATE FIRE MARSHAL APPROVED**  
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 Reviewed by: *Jeffery Schwartz*  
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10



**SITE PLAN**  
 SCALE: 1" = 50'-0"

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DESIGN BY <i>Javid Amirazodi</i> CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 58W0003	<b>RAINBOW TRUCK INSPECTION FACILITY</b>	SHEET
			POST MILE R1.0		<b>EE-5</b>
			MODIFIED PARTIAL SITE PLAN 2		
DETAILS BY <i>Ed D. Tapalla 7-08</i> CHECKED <i>Javid Amirazodi</i>	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	UNIT PROJECT NUMBER & PHASE 3596 08000001211	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET OF
QUANTITIES BY <i>Javid Amirazodi</i> CHECKED <i>Jesse Sandhu</i>				7/21/08 1/13/11	
DOES SD Imperial Rev. 9/02					

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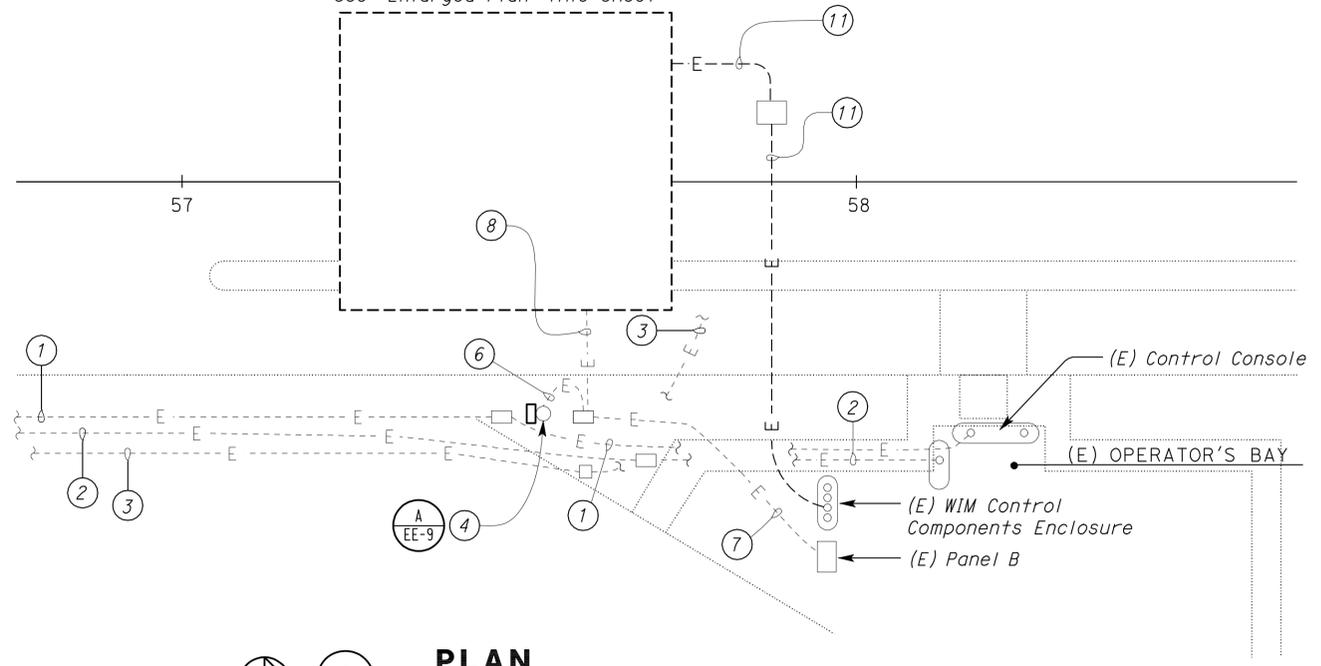
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	24	28

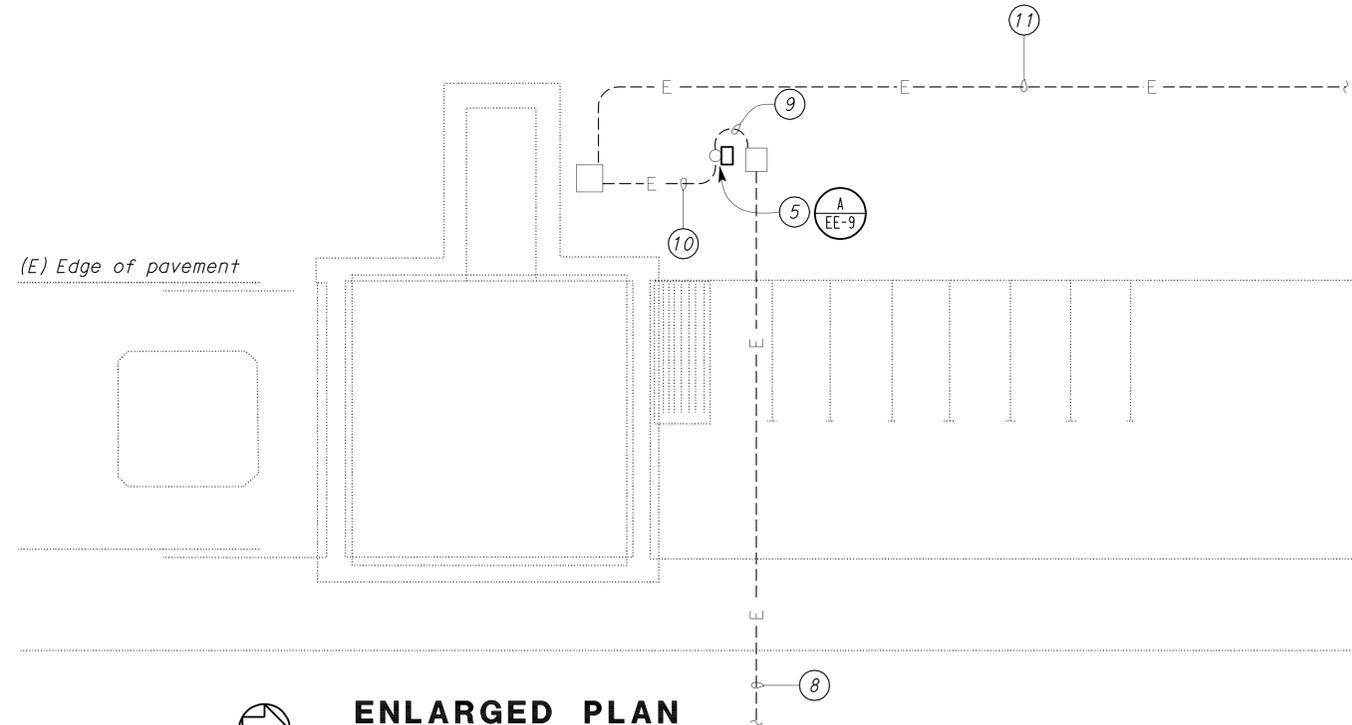
<b>CALIFORNIA STATE FIRE MARSHAL APPROVED</b> Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times. Reviewed by: <i>Jeffery Schwartz</i> <b>JEFFERY SCHWARTZ</b> Approval date: 12-08-10		1-13-11 DATE REGISTERED ELECTRICAL ENGINEER
7-5-11 PLANS APPROVAL DATE		
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See "Enlarged Plan" this sheet



**A PLAN**  
NO SCALE



**ENLARGED PLAN**  
NO SCALE

**General Notes:**

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- C. Saw cut existing paved surfaces at places where required for installation of underground conduit system and repair disturbed surfaces to match existing.
- D. Panel A is located inside the Electrical/Mechanical room at inspection area. Panel B and WIM Control Components Enclosure are located inside the Electrical room. Panel C is located in Hallway.

**Notes:**

- ① (E) 1" C, 2#8 (EMS power, C21), 9#12 (EMS control), 1#12G. Add 2#12 for new PB1 on existing Control Console located inside the existing Scale House.
- ② (E) 1 1/2" C, entrance, yard and lane CCTV camera coaxial signal cable.
- ③ (E) 1 1/2" C, 1-fiber optic cable, 1-12 pair video cable.
- ④ (E) Pole with new height gage receiver.
- ⑤ (E) Pole with new height gage transmitter.
- ⑥ (E) 1" C. Install 2#10 (height gage power, B24), 2#10 (height gage control), 1#12G.
- ⑦ (E) 1" C. Install 2#10 (height gage power, B24) along with existing conductors and cables.
- ⑧ (E) 1" C. Install 2#10 (height gage power) along with existing conductors and cables.
- ⑨ (E) 3/4" C. Install 2#10 (height gage power).
- ⑩ (E) 1" C. Install 2#10 (height gage power).
- ⑪ (E) 2" C. Install 2#10 (height gage power) along with existing conductors and cables.

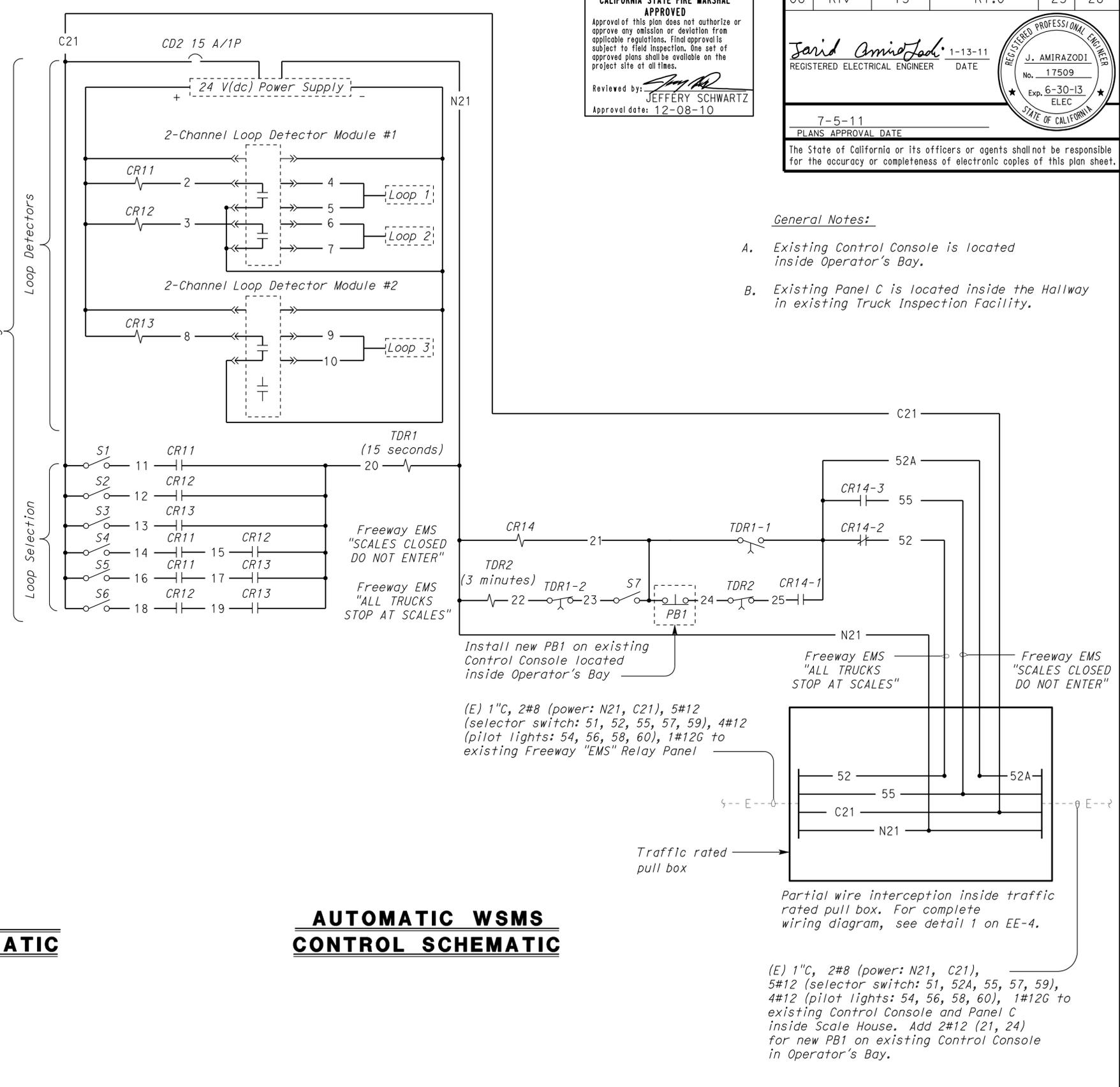
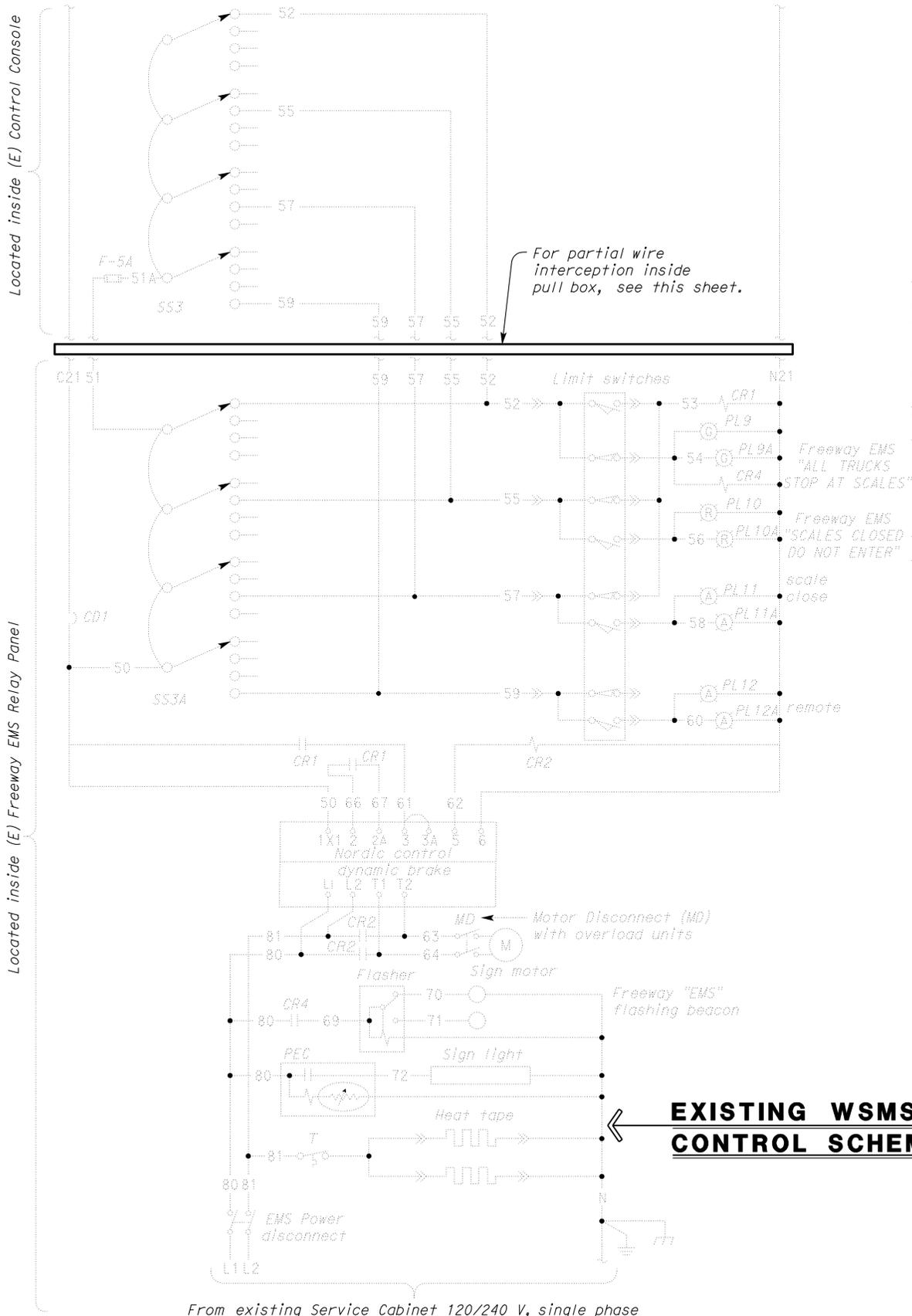
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DESIGN BY <i>Javid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 58W0003	<b>RAINBOW TRUCK INSPECTION FACILITY</b>	SHEET <b>EE-6</b>			
				POST MILE R1.0			MODIFIED PARTIAL SITE PLAN 3		
DETAILS BY <i>Ed D. Tapalla 7-08</i>	CHECKED <i>Javid Amirazodi</i>	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT PROJECT NUMBER & PHASE 3596 08000001211	REVISION DATES (PRELIMINARY STAGE ONLY)			SHEET OF		
QUANTITIES BY <i>Javid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>			0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	7/23/08		9/16/08	1/13/11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	25	28

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7-5-11 PLANS APPROVAL DATE		
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 Reviewed by: *Jeffery Schwartz*  
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10

- General Notes:**
- A. Existing Control Console is located inside Operator's Bay.
  - B. Existing Panel C is located inside the Hallway in existing Truck Inspection Facility.

**EXISTING WSMS CONTROL SCHEMATIC**

**AUTOMATIC WSMS CONTROL SCHEMATIC**

DOES SD Imperial Rev. 9/02	DESIGN	BY <i>Javid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO.	58W0003	RAINBOW TRUCK INSPECTION FACILITY	AUTOMATIC SIGN CONTROL SYSTEM SCHEMATIC DIAGRAM	SHEET OF <b>EE-7</b>
	DETAILS	BY <i>Ed D. Tapalla 7-08</i>	CHECKED <i>Javid Amirazodi</i>			POST MILE	R 1.0			
	QUANTITIES	BY <i>Javid Amirazodi</i>	CHECKED <i>Jesse Sandhu</i>			UNIT	3596			
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					0 1 2 3	PROJECT NUMBER & PHASE		08000001211	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
REVISION DATES (PRELIMINARY STAGE ONLY)										
7/2/08 1/13/11										

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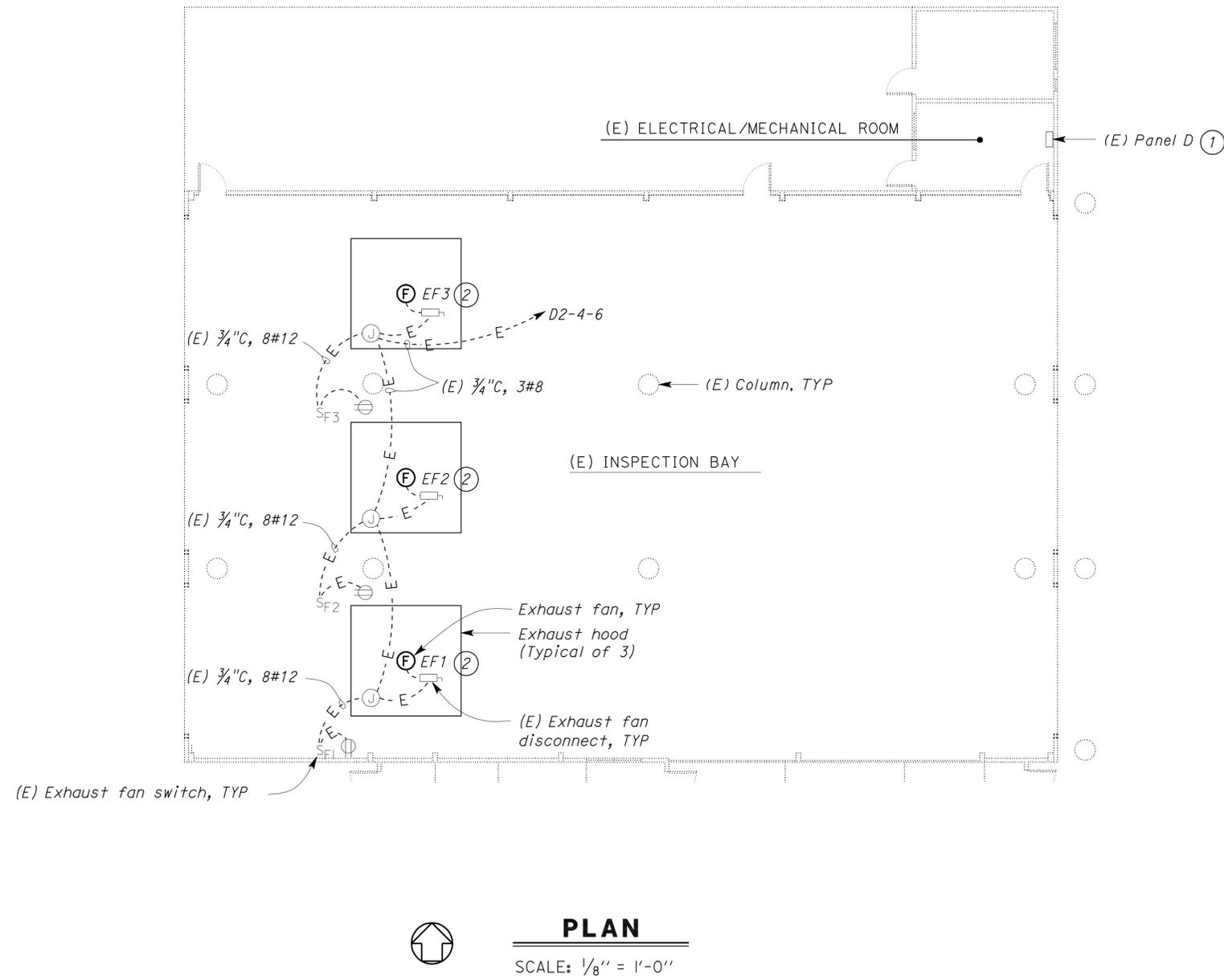
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	26	28

Approved by: <u>Jarid Amirazodi</u> REGISTERED ELECTRICAL ENGINEER DATE 1-13-11	
Reviewed by: <u>Jeffery Schwartz</u> Approval date: 12-08-10	
PLANS APPROVAL DATE 7-5-11	
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Reviewed by: Jeffery Schwartz  
 Approval date: 12-08-10



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- Notes:**
- Existing Panel D is N00D type Square D, 208/120 Volts, 3-phase, 4-wire with 100-Ampere main lugs. Replace existing 25 A/3P circuit breaker in spaces D2-4-6 with 30 A/3P circuit breaker to feed exhaust fans. Update panel directory.
  - Extend existing conduit and conductors as required for supplying new exhaust fan. For exact location of new exhaust fan see mechanical sheets.

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DESIGN BY <u>Javid Amirazodi</u>	CHECKED <u>Jesse Sandhu</u>	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. <u>58W0003</u>	<b>RAINBOW TRUCK INSPECTION FACILITY</b>		SHEET		
DETAILS BY <u>Ed D. Tapalla 4/10</u>	CHECKED <u>Javid Amirazodi</u>		ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	POST MILE <u>R1.0</u>	<b>EXHAUST FAN POWER PLAN</b>		<b>EE-8</b>		
QUANTITIES BY <u>Javid Amirazodi</u>	CHECKED <u>Jesse Sandhu</u>		UNIT PROJECT NUMBER & PHASE <u>3596 08000001211</u>	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY) <u>4/15/10</u> 1/13/11		OF		
DOES SD Imperial Rev. 9/02	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3					ee_08.dgn		



DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	15	R1.0	28	28

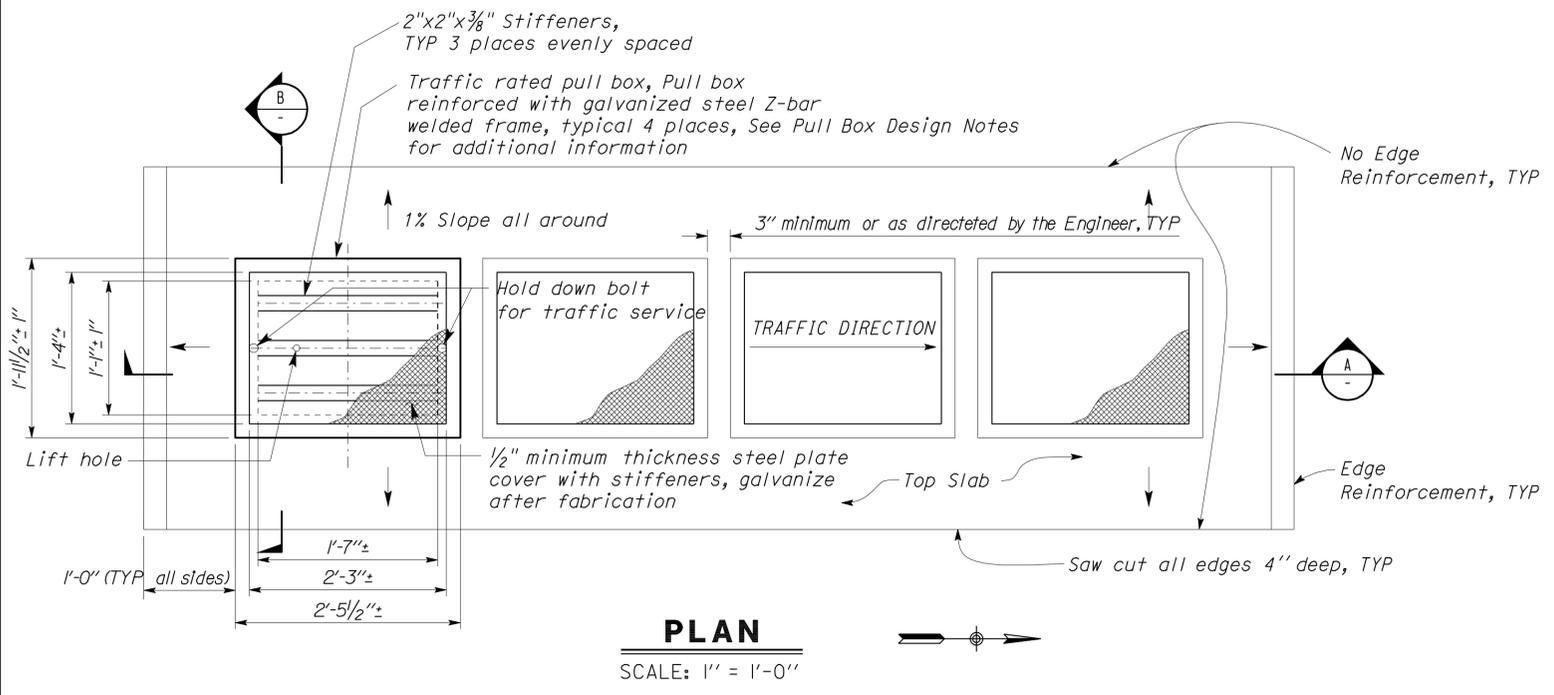
  

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7-5-11 PLANS APPROVAL DATE		
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**A REINFORCED CONCRETE DESIGN NOTES**

- 1. Design : Bridge Design Specifications 2004 AASHTO with Interims and revisions by Caltrans.
- a. Live Loads : AASHTO HS 20-44 (continuous)
- b. Reinforced Concrete ( Ultimate Strength Design ) :  
 $f_c = 3,250 \text{ psi}$   
 $f_y = 60,000 \text{ psi}$

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 Reviewed by: *[Signature]*  
**JEFFERY SCHWARTZ**  
 Approval date: 12-08-10

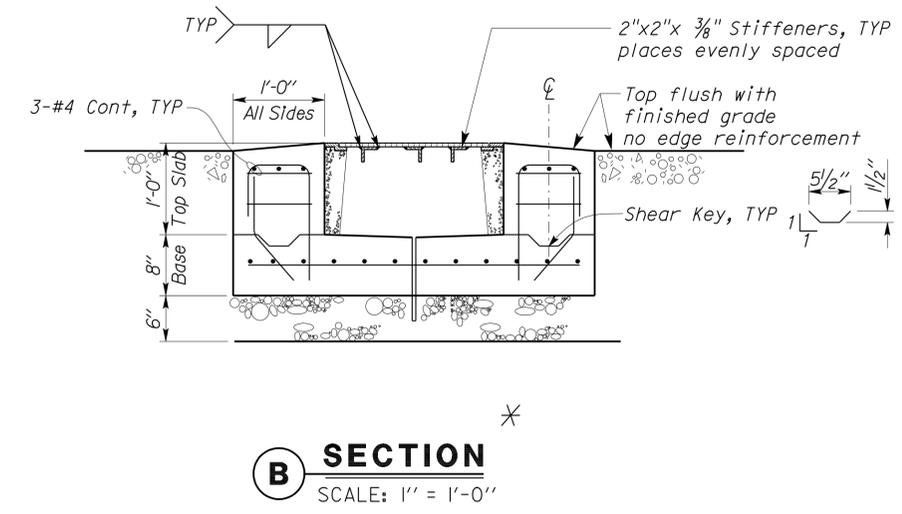
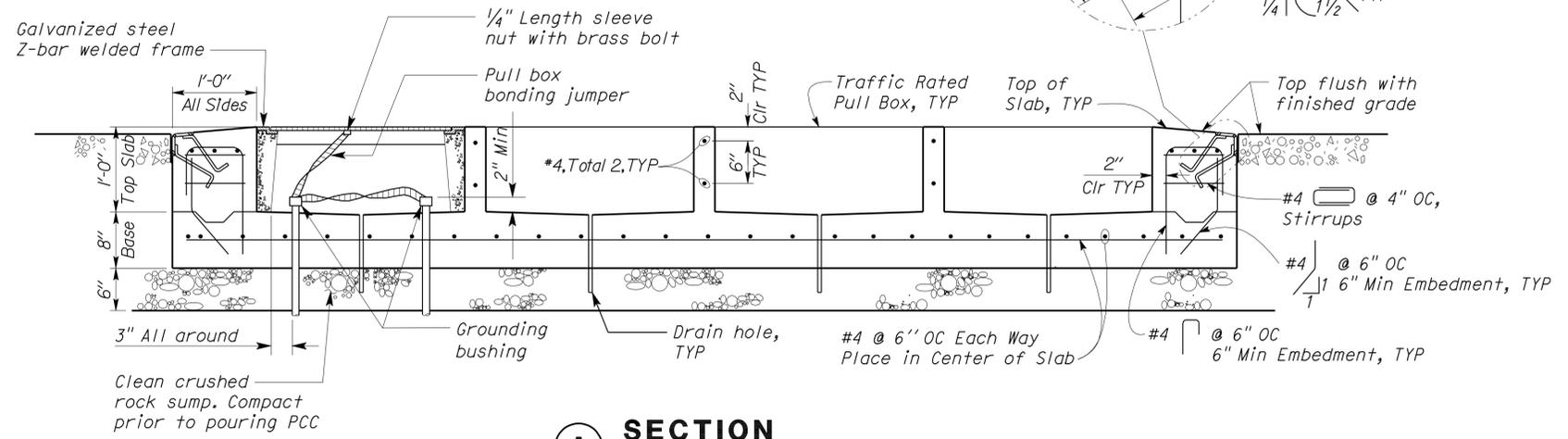
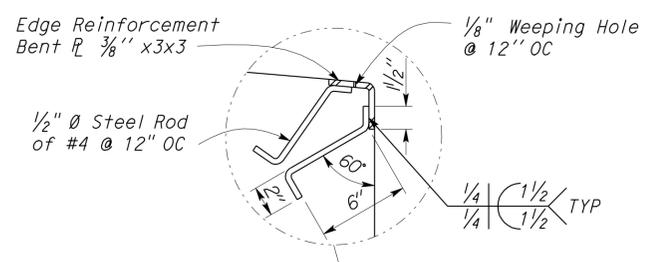


**B PULL BOX DESIGN NOTES**

- A. Traffic rated pull boxes shall be for continuous AASHTO HS 20-44 truck loading. Provide 1/2" minimum thickness steel cover with embossed non-skid pattern with stiffeners as shown and reinforced concrete top slab and base. Pull Boxes shall conform to Caltrans 2006 Standard Plan ES-8 (traffic-rated), unless otherwise noted.
- B. Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.
- C. Pull box covers shall be marked as follows: ELECTRICAL, LIGHTING, CCTV SYSTEM and FIBER OPTIC for respective pull boxes.
- D. Bonding jumper for metal covers shall be 3' long, minimum.
- E. The nominal dimensions of the opening in which the cover sets shall be the same as the cover dimensions except the length and width dimensions shall be 1/8" greater.
- F. Covers and boxes shall be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces shall be flush within 1/8". Top outside edge of concrete covers and pull boxes shall have a 1/4" minimum radius.
- G. The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

**General Notes:**

- A. Plan and sections for set of four traffic rated pull boxes are shown. Plans and sections for single traffic rated pull boxes are similar.
- B. However in actuality, the pull boxes combination may contain combination of No. 3 1/2 and No. 5 pull boxes. Therefore, the Contractor must field verify exact count of size and number at each location and submit to the Engineer for record.
- C. The replacement pull box or pull boxes shall be of the same size as existing pull boxes.
- D. For internal dimensions of No. 3 1/2 traffic rated pull box, see sheet ES-8 of Standard Plans.



THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY

DESIGN BY <i>Javid Amirazodi</i> CHECKED <i>Jesse Sandhu</i> DETAILS BY <i>Ed D. Tapalla 5/10</i> CHECKED <i>Javid Amirazodi</i> QUANTITIES BY <i>Javid Amirazodi</i> CHECKED <i>Jesse Sandhu</i>	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 58W0003	<b>RAINBOW TRUCK INSPECTION FACILITY</b>	SHEET <b>EE-10</b>	
			POST MILE R1.0			TRAFFIC RATED PULL BOX DETAILS
			UNIT PROJECT NUMBER & PHASE 3596 08000001211			DISREGARD PRINTS BEARING EARLIER REVISION DATES 5/10/10