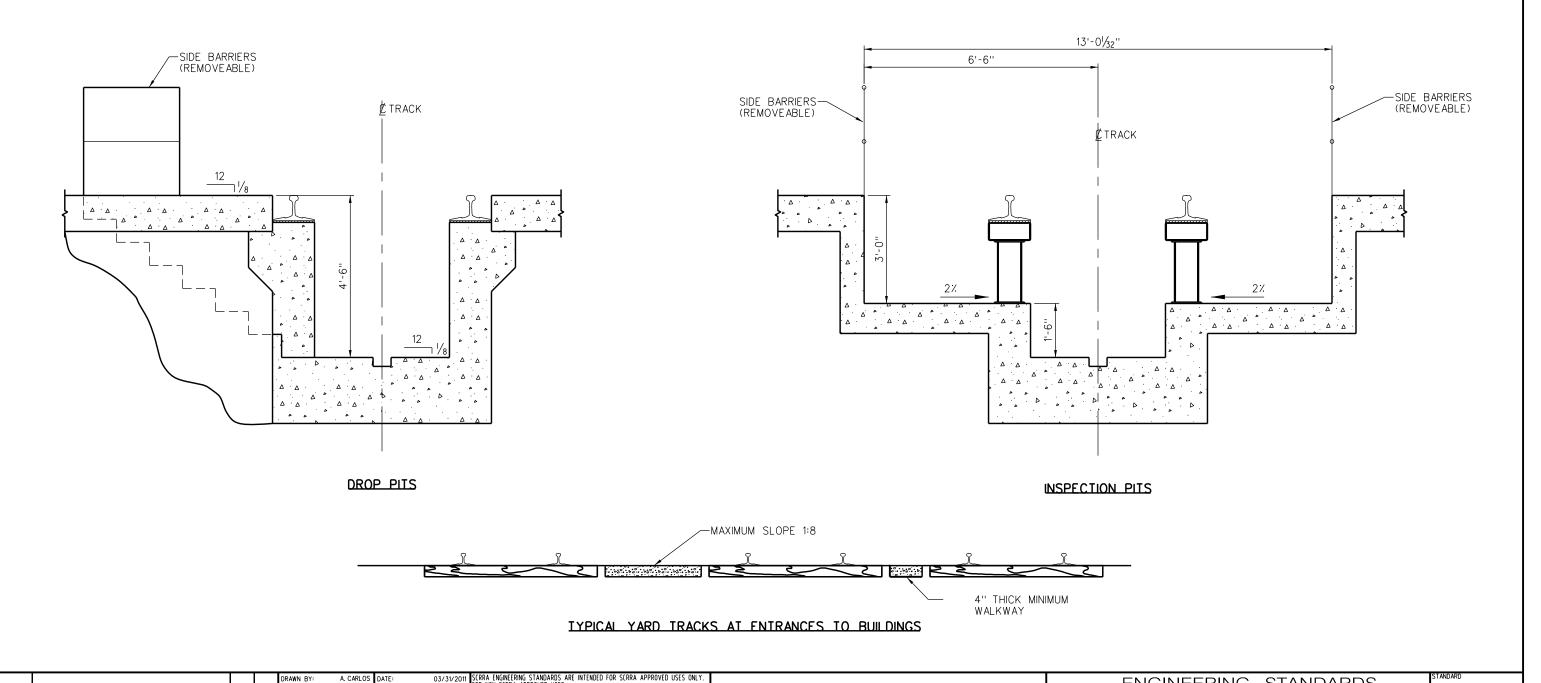
#### NOTES:

- 1. SIDE BARRIERS SHALL BE MAINTAINED IN PLACE EXCEPT MAY BE REMOVED WHEN ROLLING STOCK IS ON THE PIT TRACK. BARRIERS ARE TO BE REPLACED BEFORE ROLLING STOCK IS REMOVED FROM THE PIT TRACK.
- 2. WALKWAYS SHALL BE MAINTAINED AND KEPT FREE FROM VEGETATION.
  3. IF PHYSICAL CONDITIONS REQUIRE THE MINIMUM REQUIRED WALKWAY WIDTH FOR NO. 1
  TYPE WALKWAYS MAY BE REDUCED TO 2 MINIMUM UPON APPROVAL OF THE SCRRA DIRECTOR OF ENGINEERING & CONSTRUCTION.
- 4. FOR DETAILS OF STANDARD ROADBED SECTIONS REFER TO ES2001 & ES2002.
- 5. BALLAST SHOULDER SHALL BE 9" FOR TIES 9'-0" OR GREATER IN LENGTH AND SHALL BE 12" FOR TIES LESS THAN 9'-0" IN LENGTH.



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Illiam

Varet D. Pope ASSISIANT DIRECTOR: STANDARDS & DESIGN

03/31/2011

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SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

WALKWAY CLEARANCE FOR FACILITIES
WITH UNDER TRACK PITS

**ENGINEERING STANDARDS** 



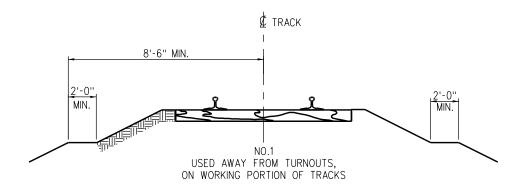
TYPICAL TRACK CONFIGURATION STORAGE TRACKS



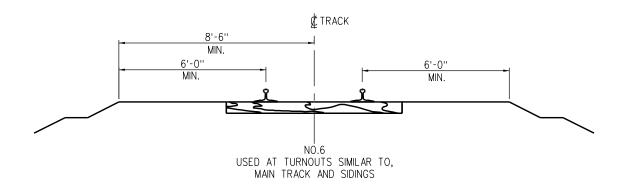
TYPICAL TRACK CONFIGURATION STORAGE TRACKS

# NOTES:

- 1. IN ALL CASES LATERAL CLEARANCE AND TRACK SPACING WILL MATCH CPUC G.O. 26-D EXCEPT ES7001 AND INSPECTION PITS.
- 2. WALKWAYS SHALL BE MAINTAINED AND KEPT FREE FROM VEGETATION. 3. IF PHYSICAL CONDITIONS REQUIRE, THE MINIMUM REQUIRED WALKWAY WIDTH FOR NO. 1 TYPE WALKWAYS MAY BE REDUCED TO 2' MINIMUM
- UPON APPROVAL OF THE SCRRA DIRECTOR OF ENGINEERING & CONSTRUCTION. 4. FOR DETAILS OF SCRRA STANDARD ROADBED SECTIONS REFER TO ES2001 & ES2002.
- 5. BALLAST SHOUDER SHALL BE 9" FOR TIES 9'-0" OR GREATER IN LENGTH AND SHALL BE 12" FOR TIES LESS THAN 9'0" IN LENGTH.
- 6. WHERE PAVING IS USED WITH IN THE WALKWAY AREAS IT SHALL CONFORM TO THE DIMENSIONS AND SLOPES SHOWN FOR CRUSHED ROCK WALKWAYS.
- 7. ROCKWAY ROCK SHALL BE CRUSHED ROCK IN COFORMANCE WITH AREMA STANDARDS.



#### GENERAL WALKWAY PER CALIFORNIA P.U.C. STANDARD 1



WALKWAY AT TURNOUTS AND CAR SPOTS PER C.P.U.C. STANDARD 6

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					/ Varen D. Vall
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REV.	DATE	DESCRIPTION	DES.	ENG.	DIRECTOR OF ENGINEERING AND CONSTRUCTION

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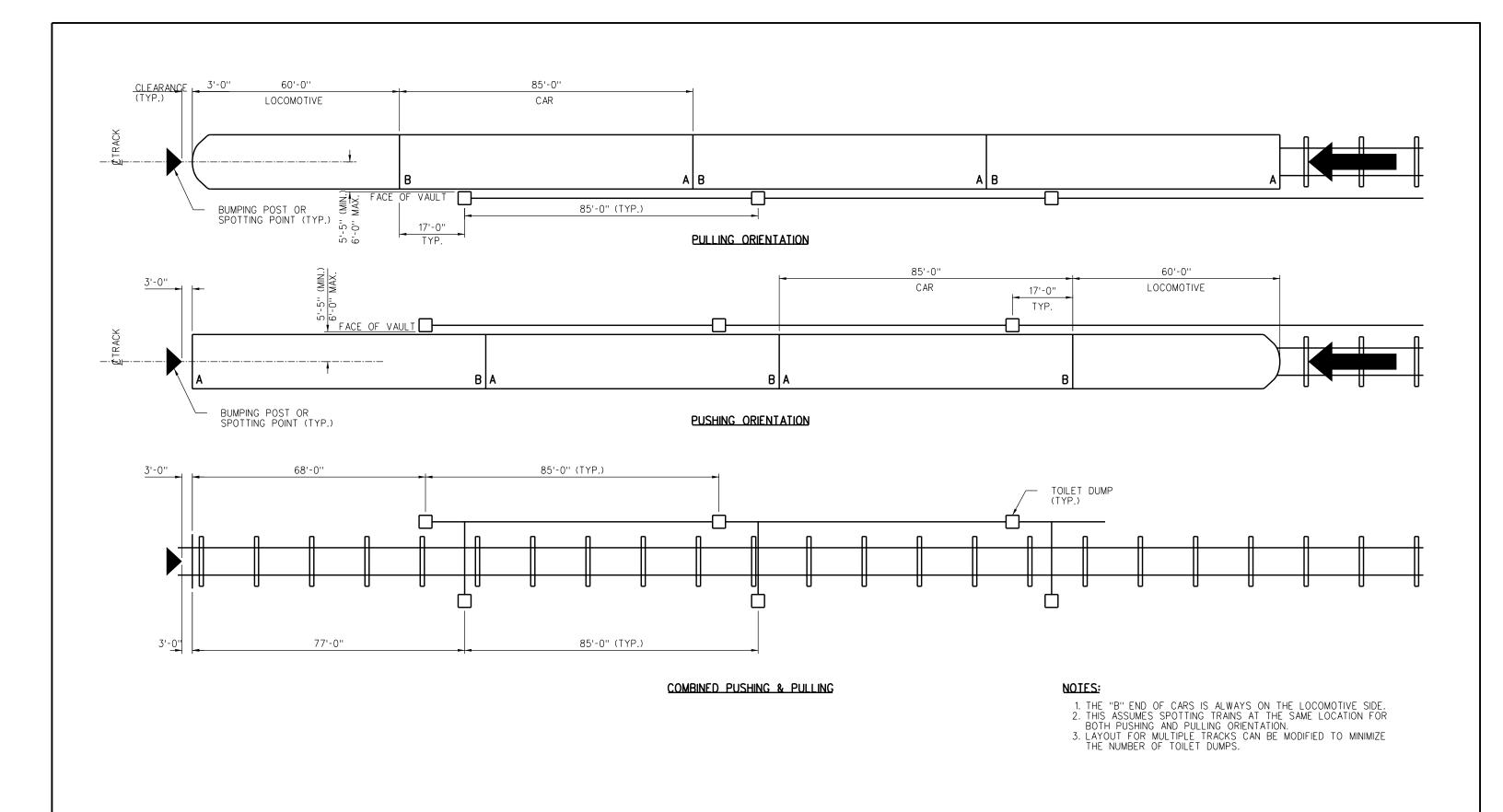
ONE GATEWAY PLAZA, 12TH FLOOR, L. A., CA. 90012



WALKWAY CLEARANCE FOR FACILITIES WITHOUT UNDER - TRACK PITS

**ENGINEERING STANDARDS** 

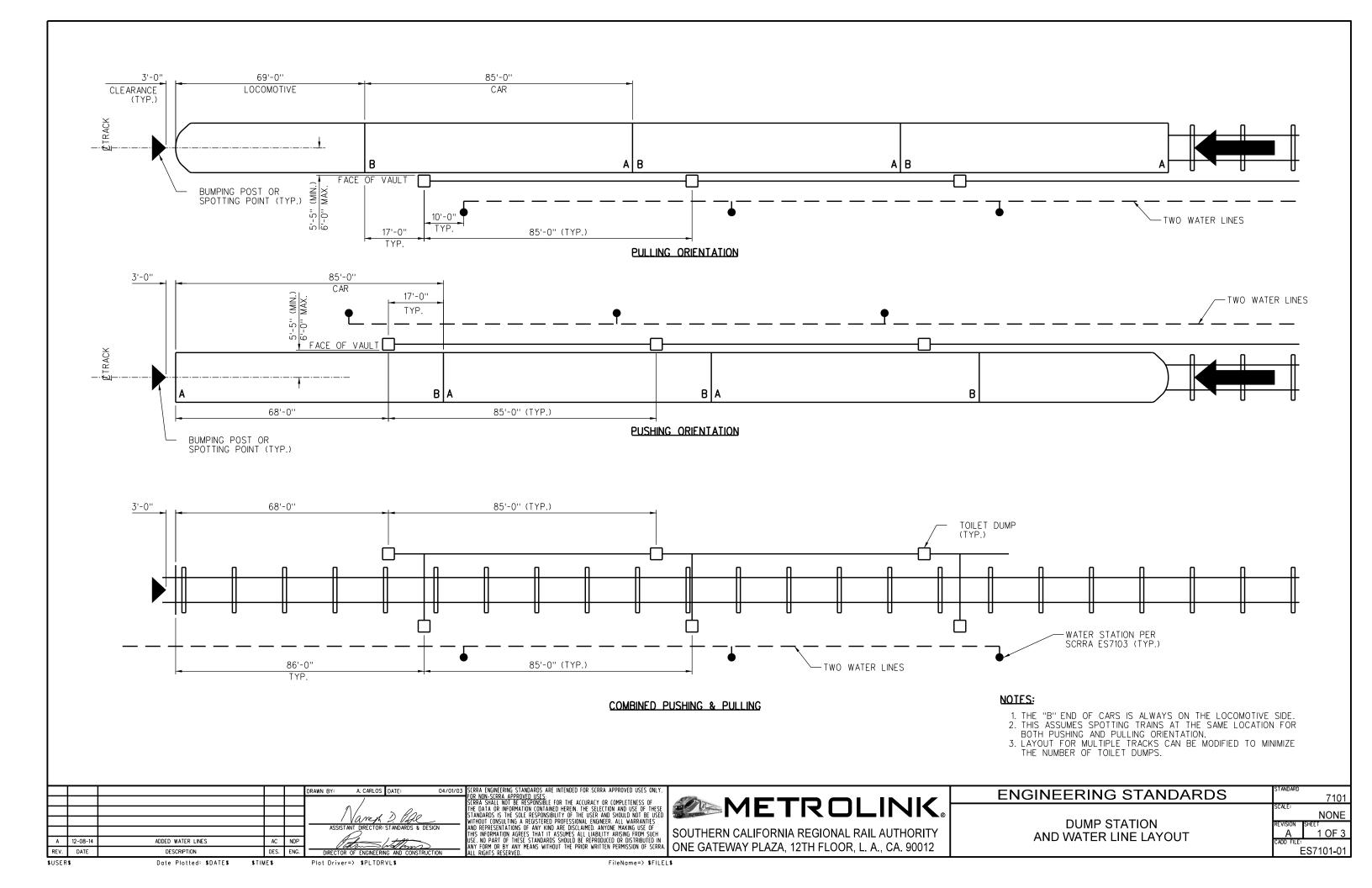
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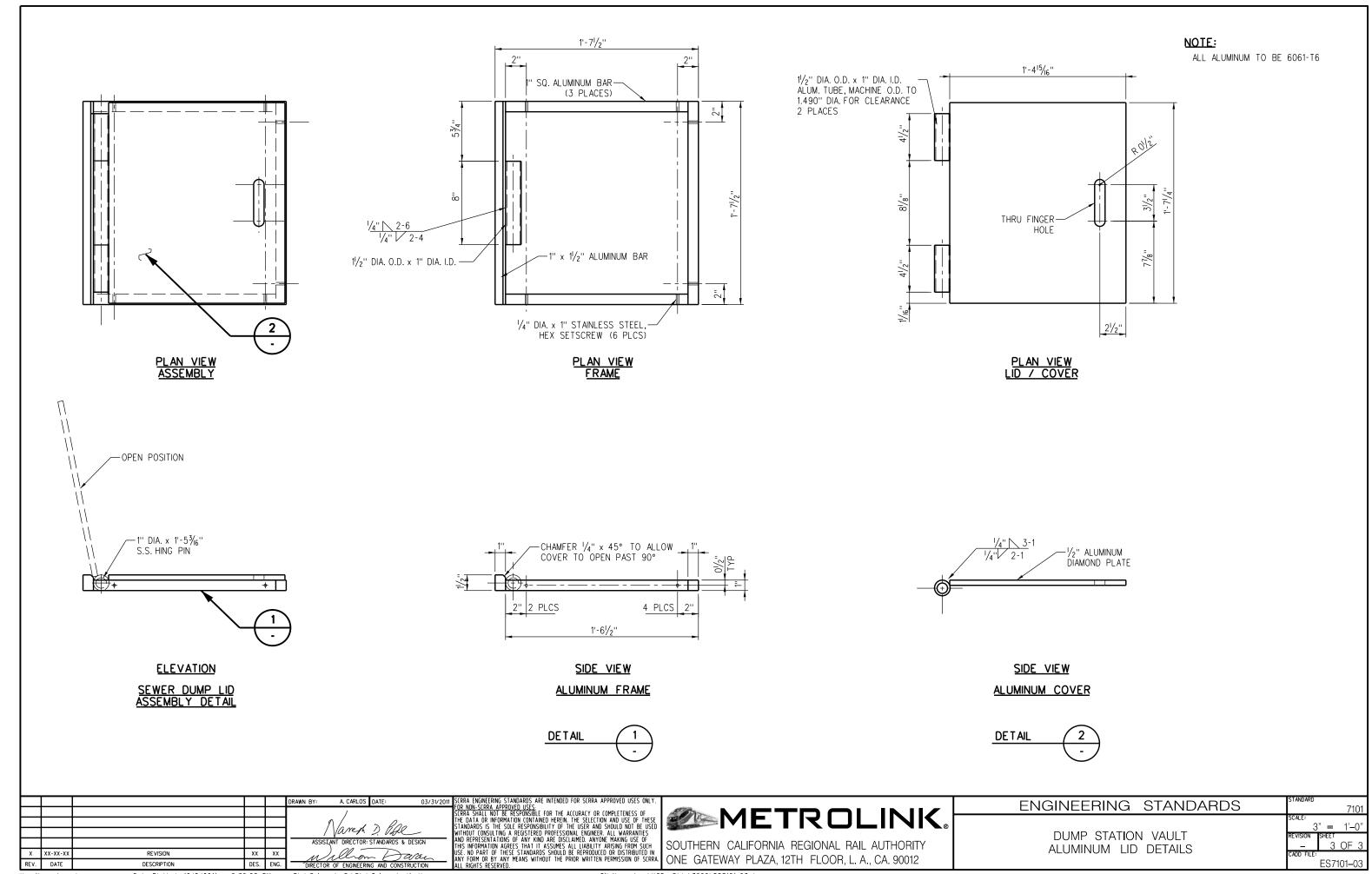


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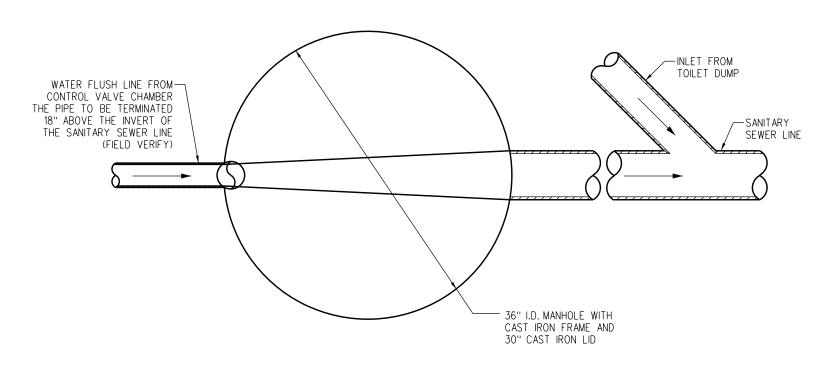
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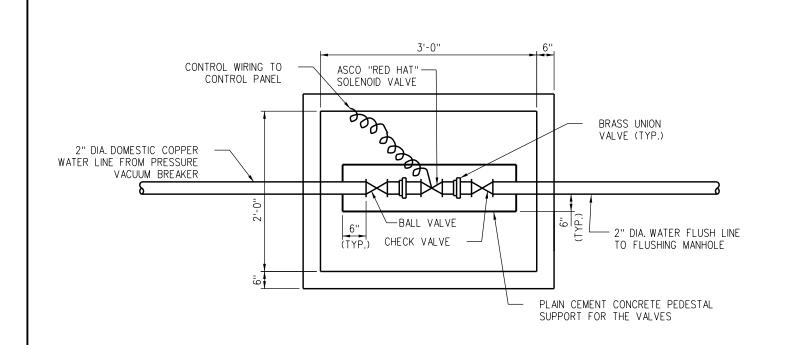


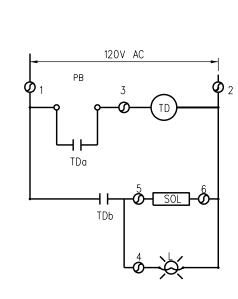
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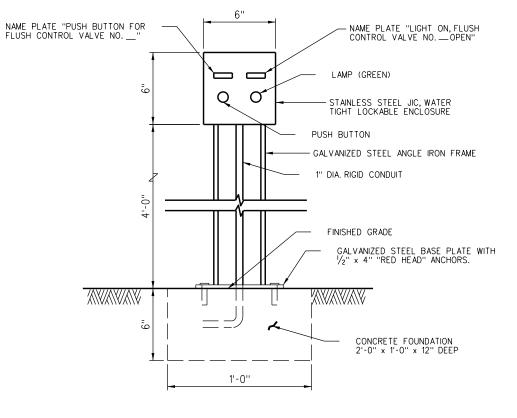
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PLAN FLUSHING MANHOLE







PLAN
FLUSHING CONTROL VALVE **BOX CHAMBER** 

SCHEMATIC DIAGRAM FOR SOLENOID VALVE CONTROL

FLUSHING MANHOLE CONTROL PANEL LAYOUT

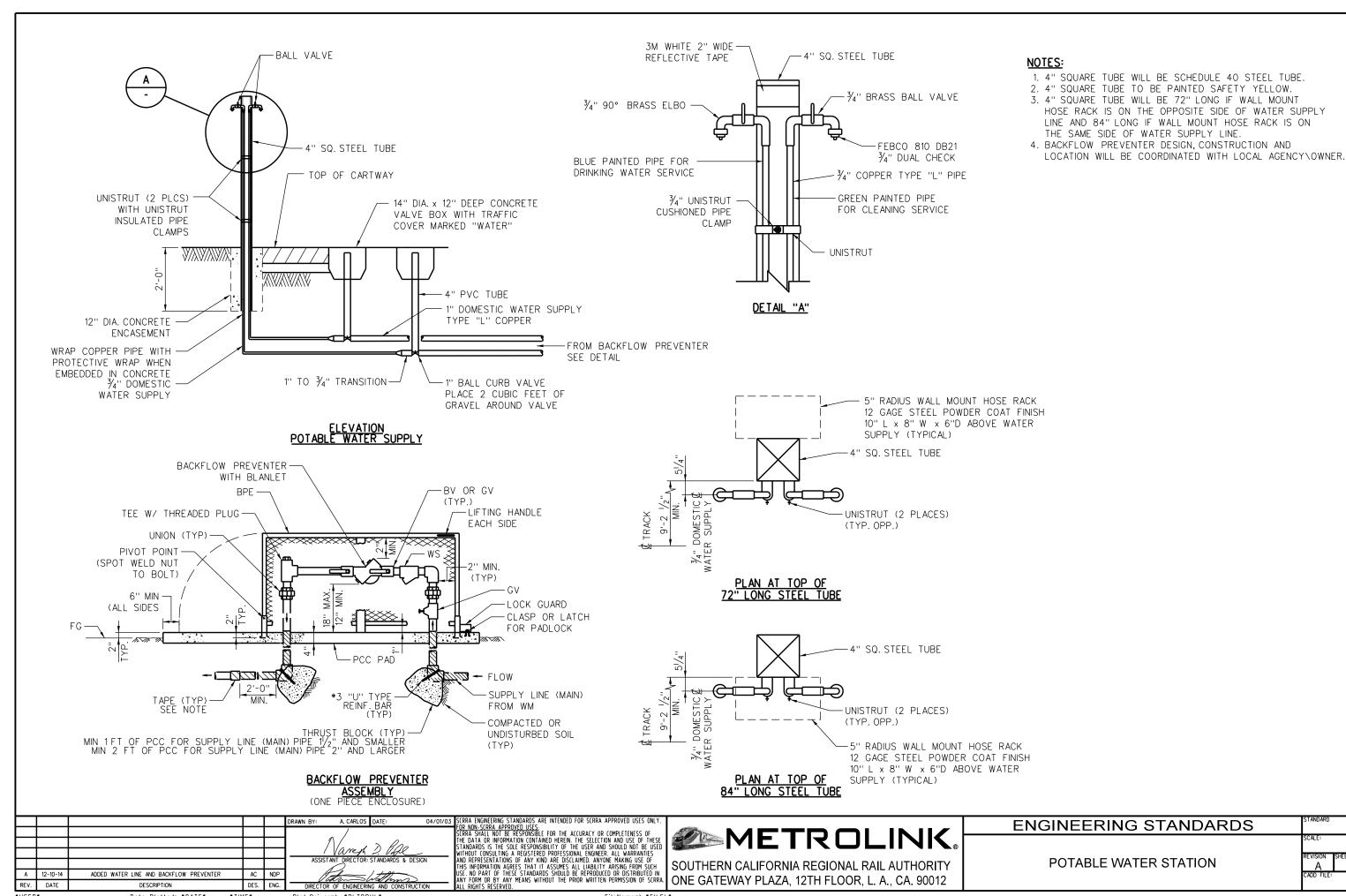
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REV.	DATE	DESCRIPTION	DES.	ENG.	DIRECTOR OF ENGINEERING AND CONSTRUCTION

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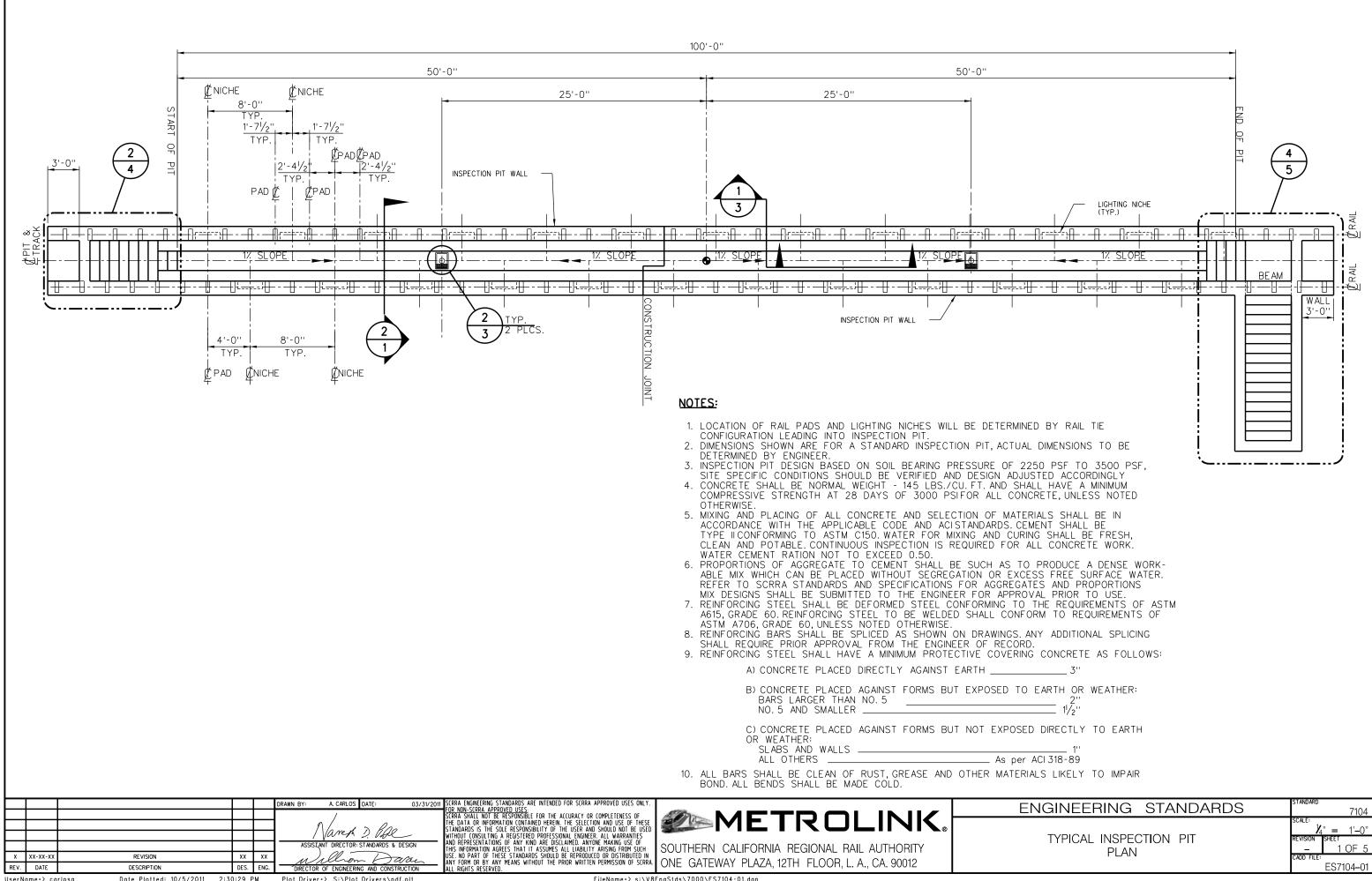
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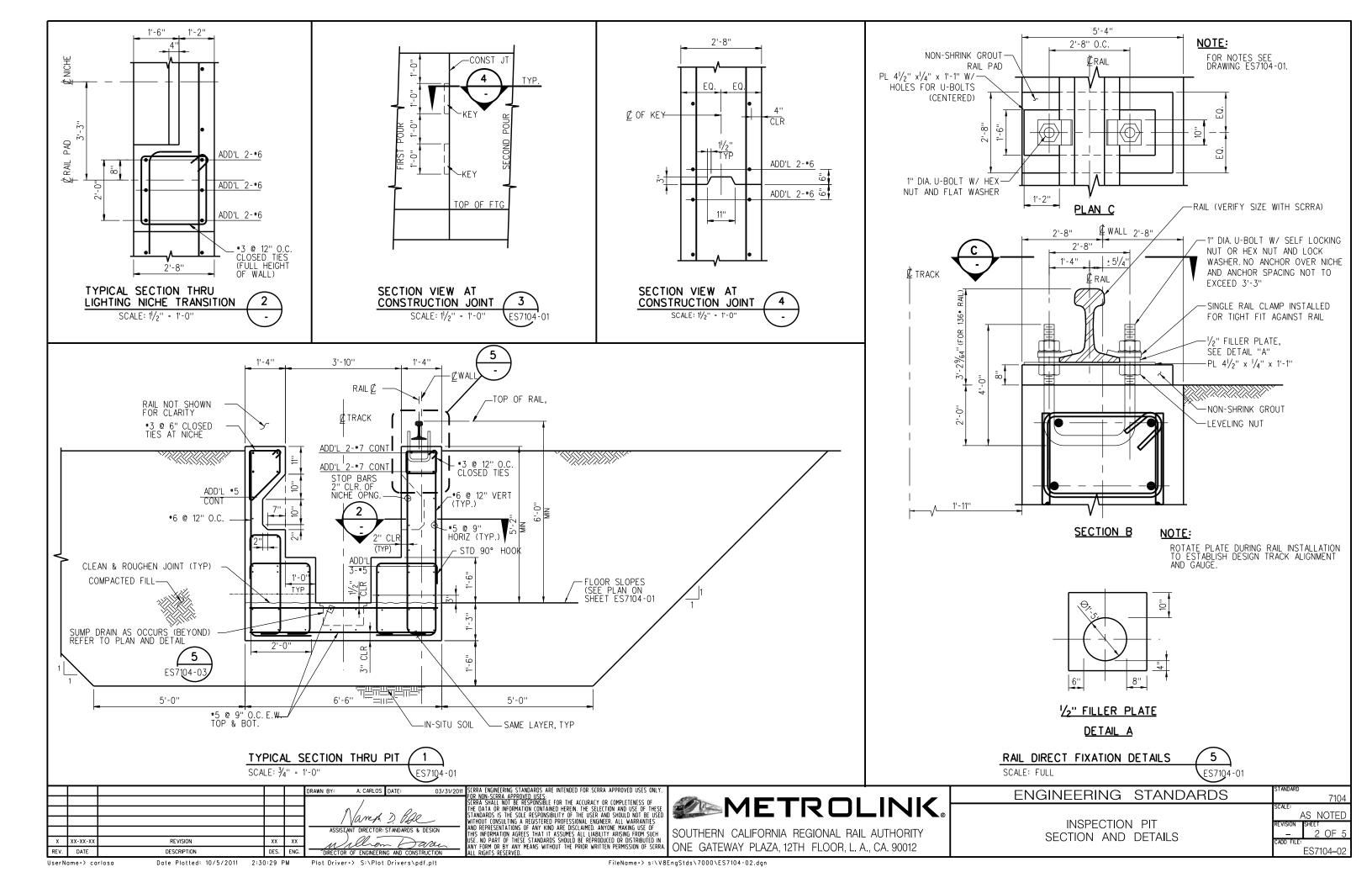
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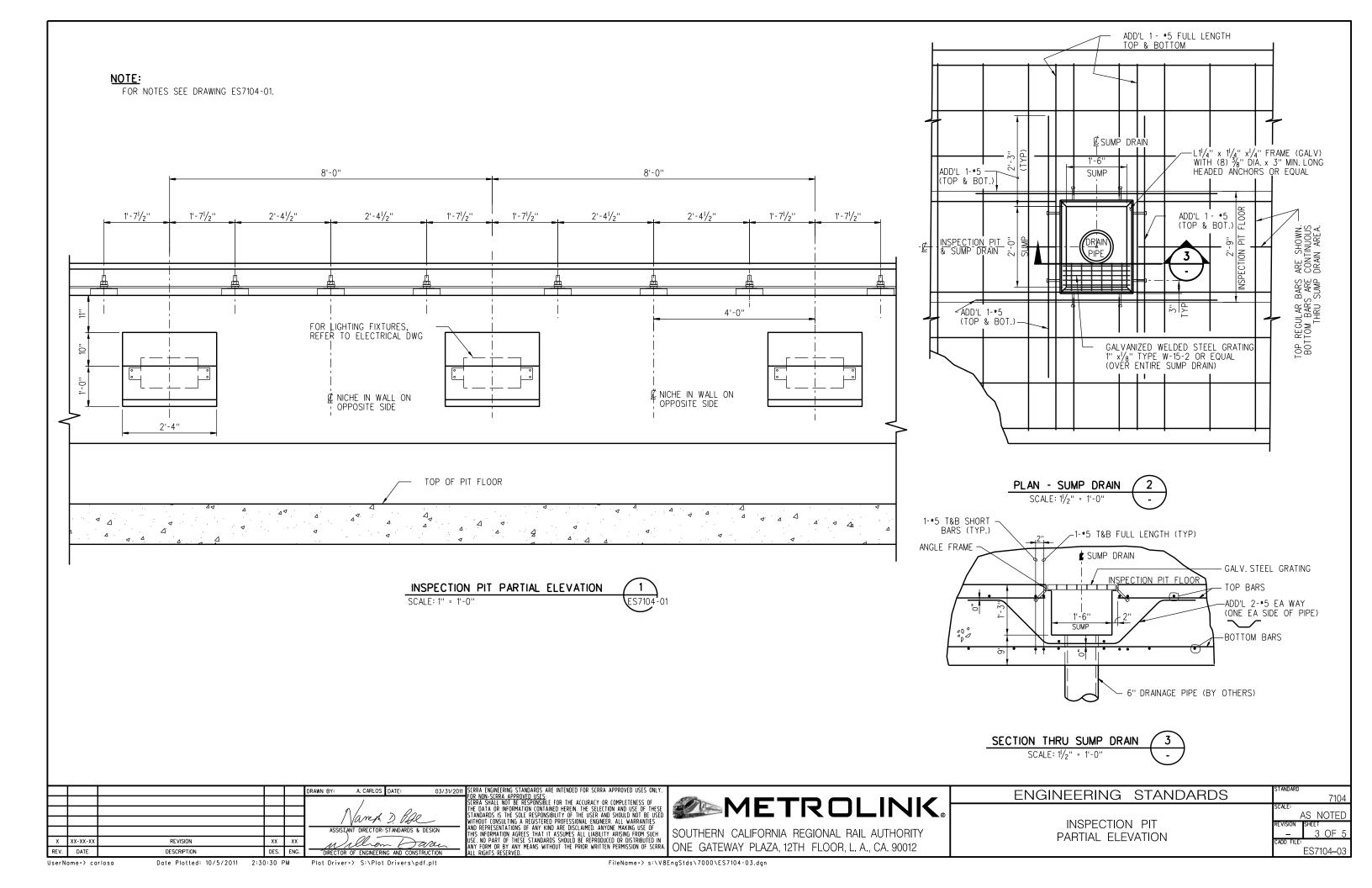
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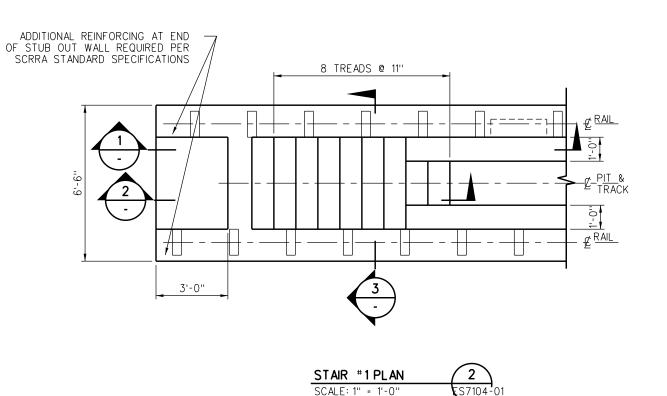
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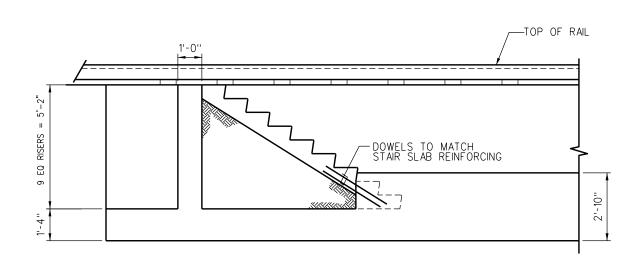
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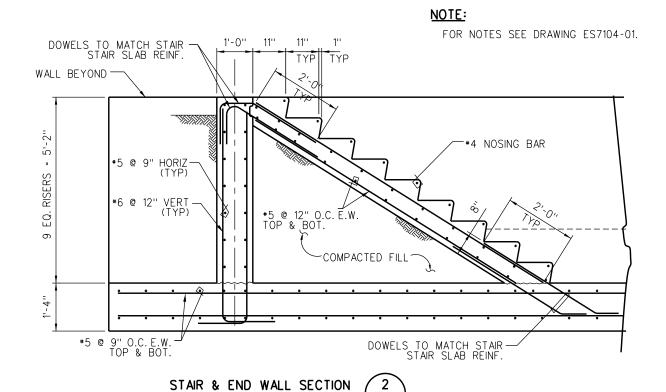
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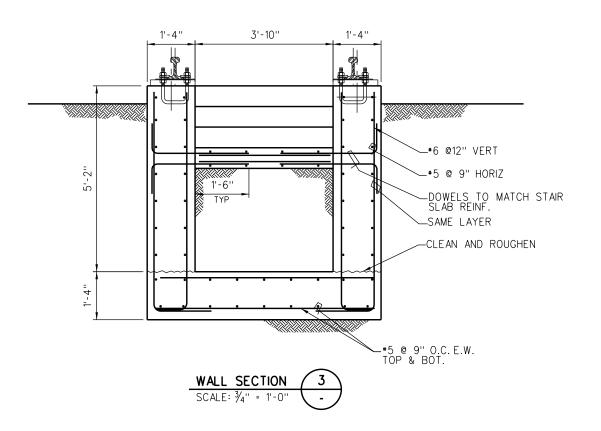
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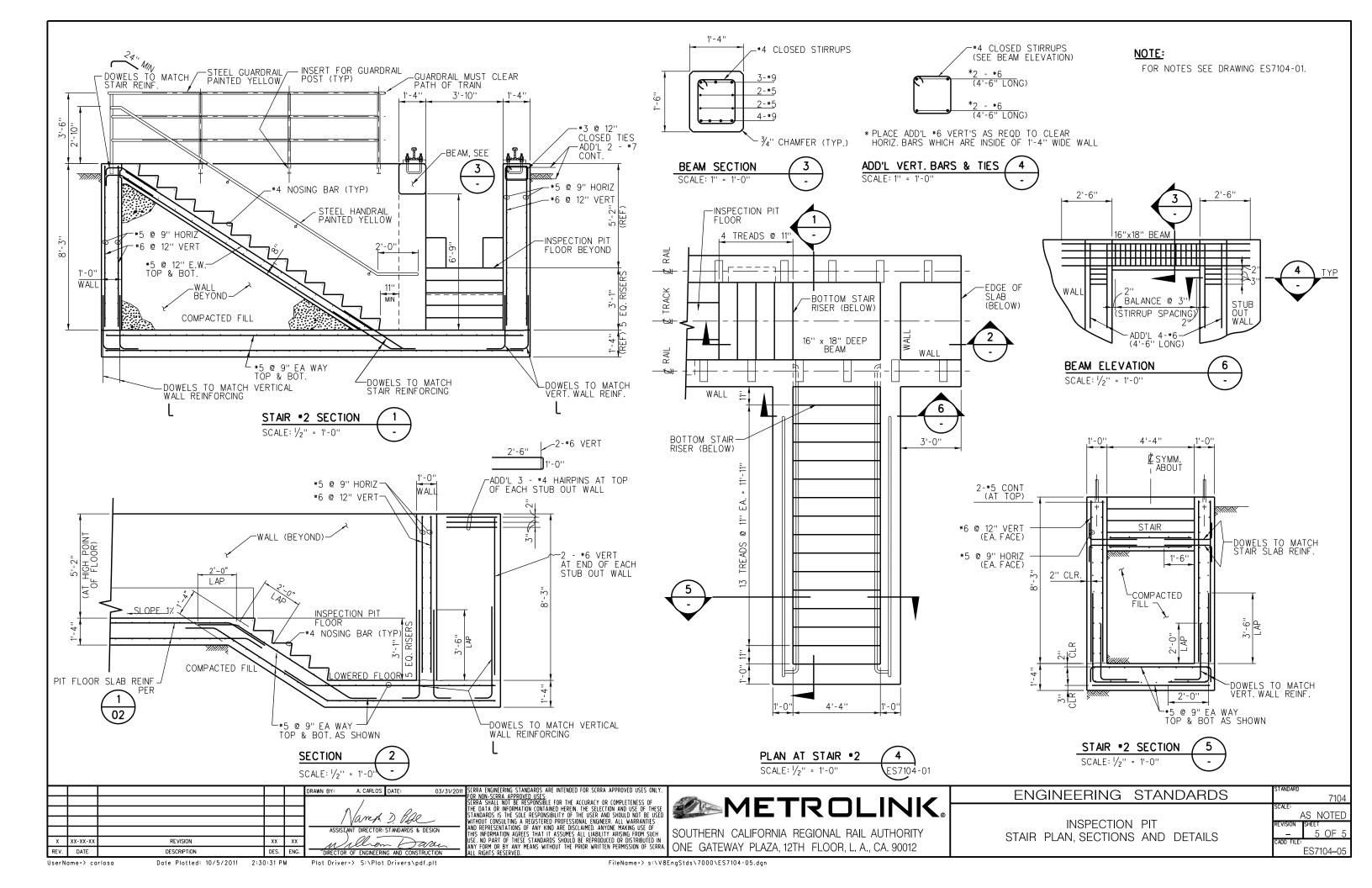
SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

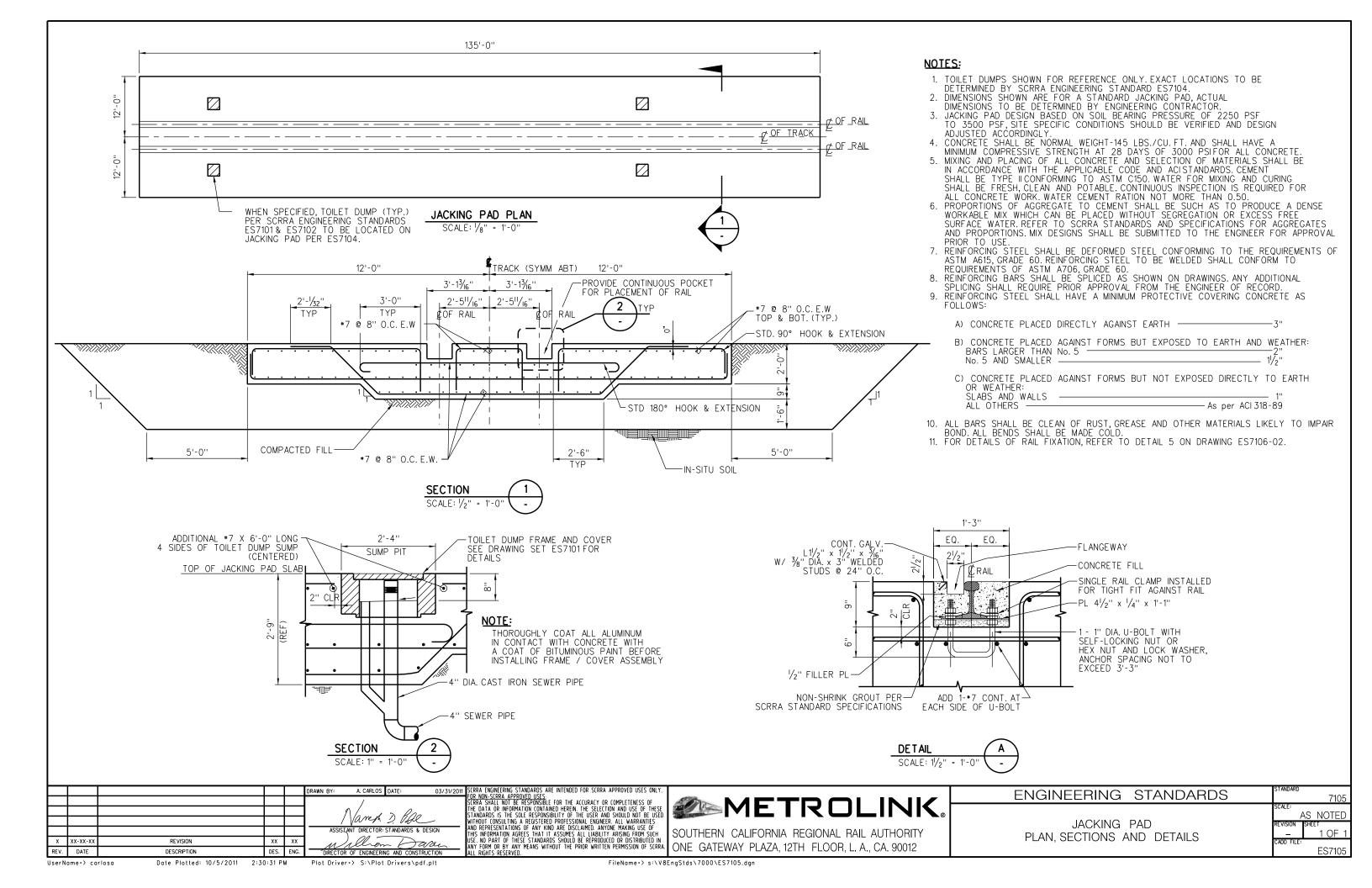
ENGINEERING STANDARDS AS NOTED INSPECTION PIT \_4 OF 5 STAIR PLAN AND SECTION ES7104-04

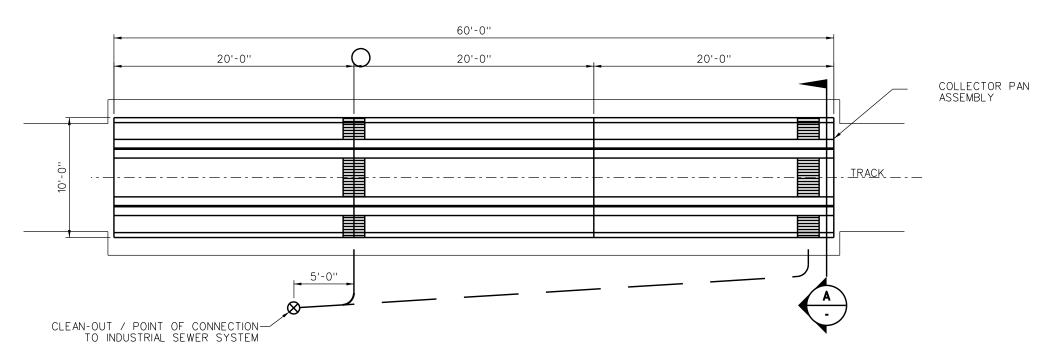


SCALE: 3/4" = 1'-0"

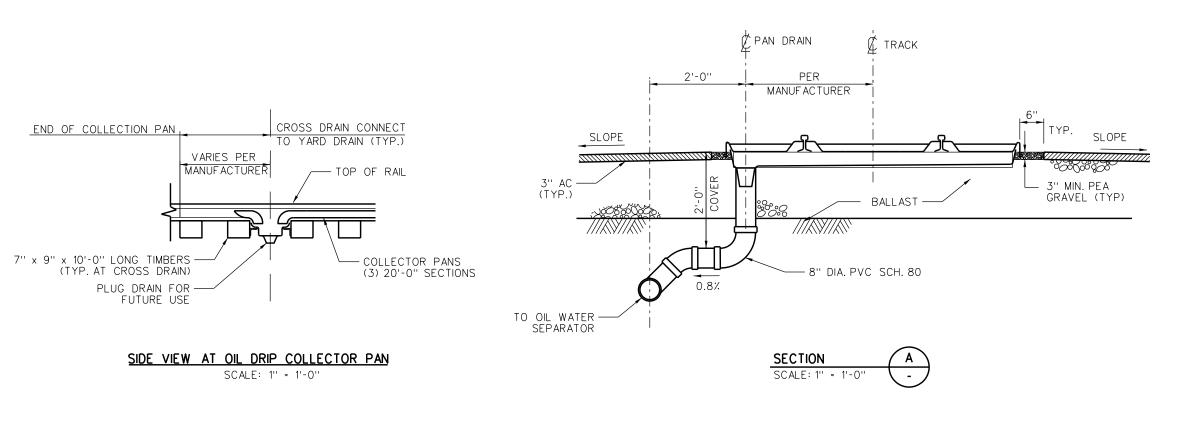








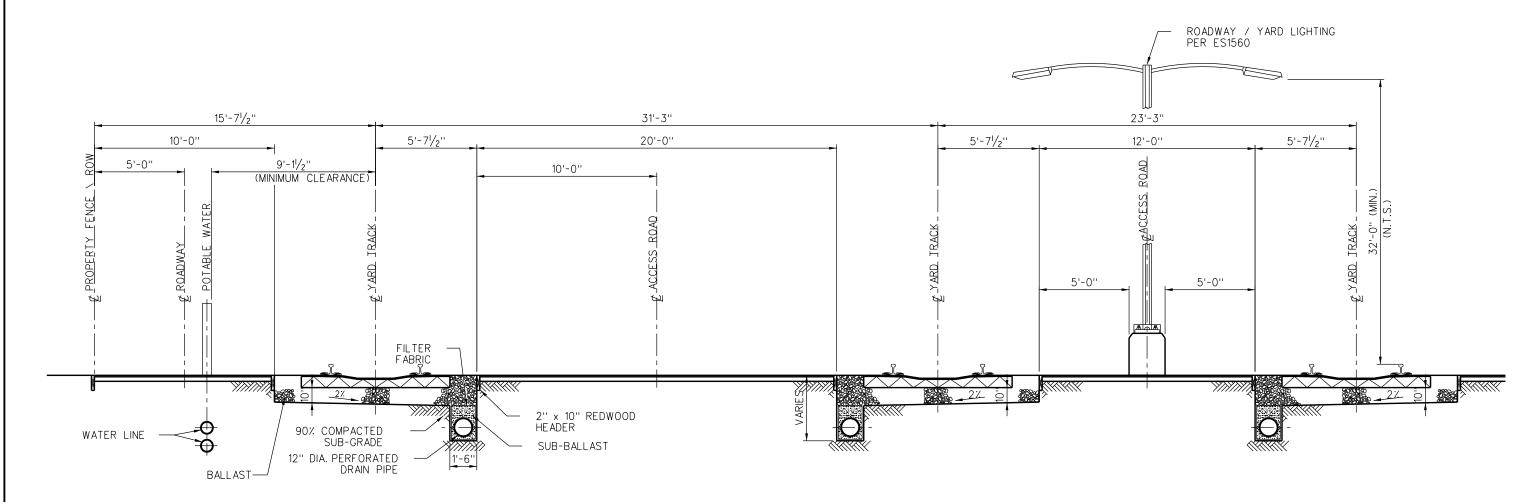
# PLAN AT OIL DRIP COLLECTOR PANS SCALE: 1/4" = 1'-0"



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# NOTES:

- 1. DEPTH OF ASPHALT CONCRETE TO BE DETERMINED BASED ON SITE SPECIFIC SOIL CONDITIONS.
  2. SIZE OF STORM DRAIN AND SANITARY SEWER SYSTEMS ARE TO BE DETERMINED BASED ON SITE SPECIFIC CONDITIONS.
  3. LOCATIONS OF STORM DRAINS AND SLOPE FOR ROADWAYS TO BE DETERMINED BASED ON SITE SPECIFIC CONDITIONS.



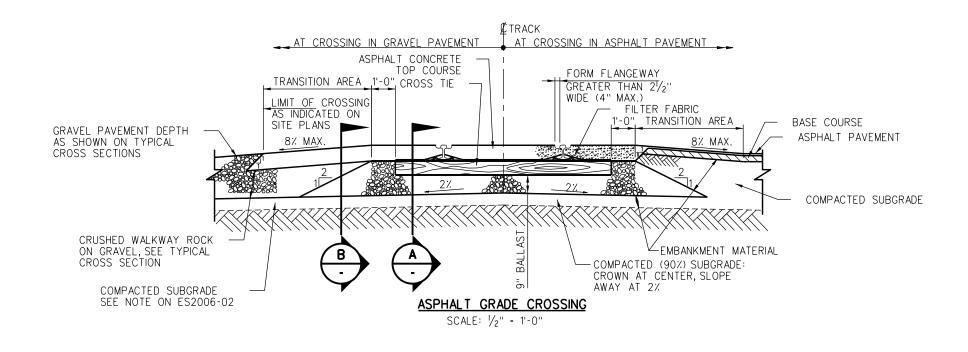
**ROADWAY SECTION** 

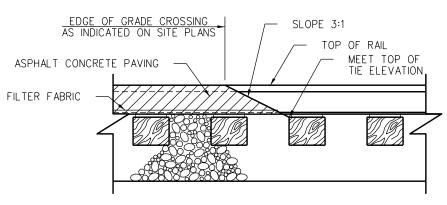
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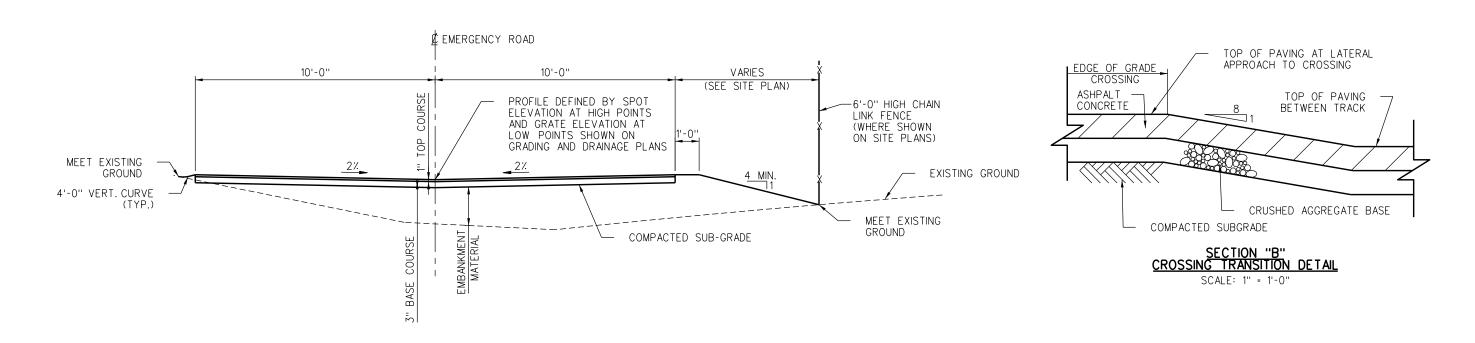
TRACK SPACING	
AT MAINTENANCE FACIL	ITIES

**ENGINEERING STANDARDS** 





SECTION "A"
CROSSING END DETAIL SCALE: 1" = 1'-0"



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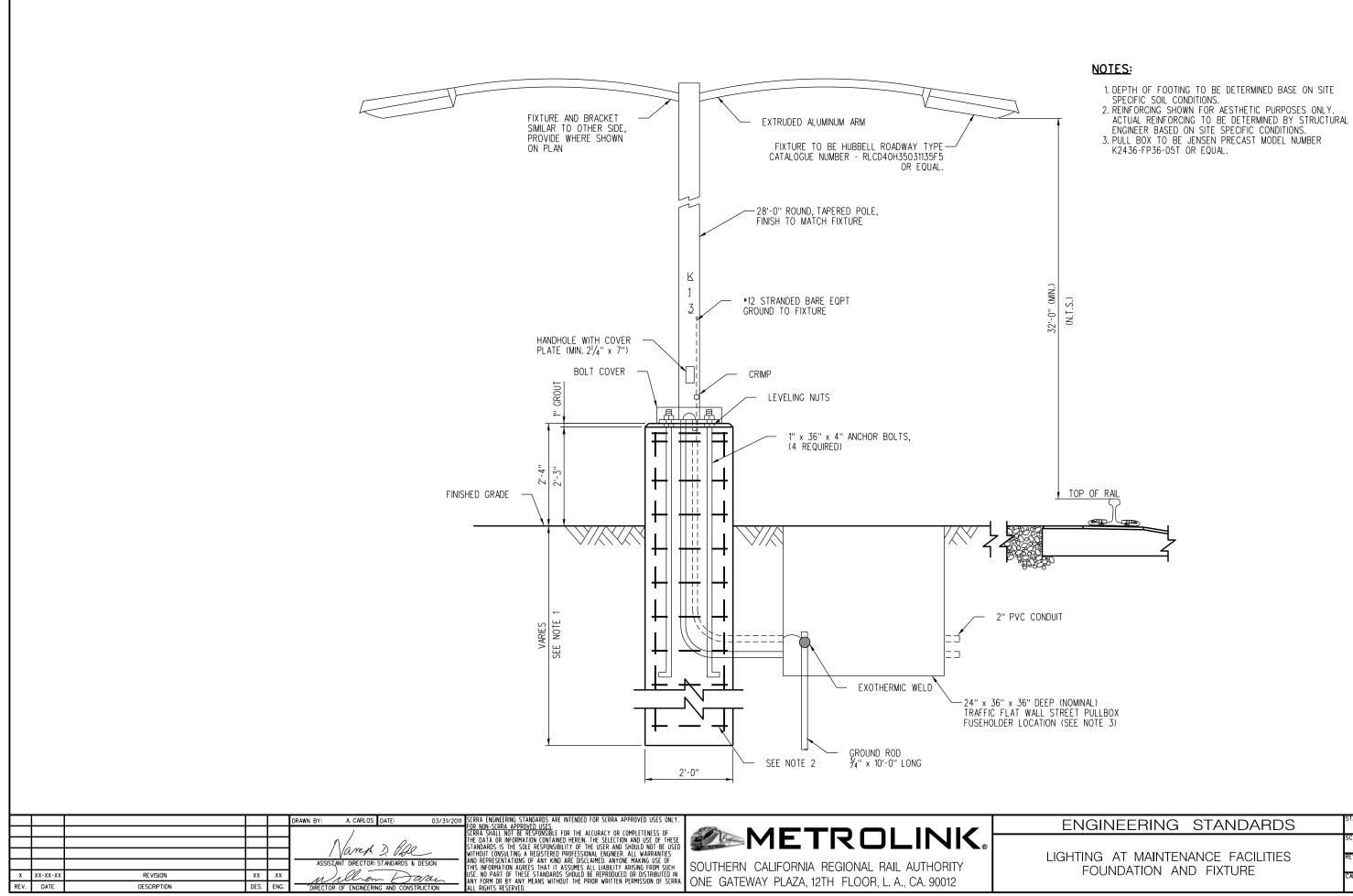
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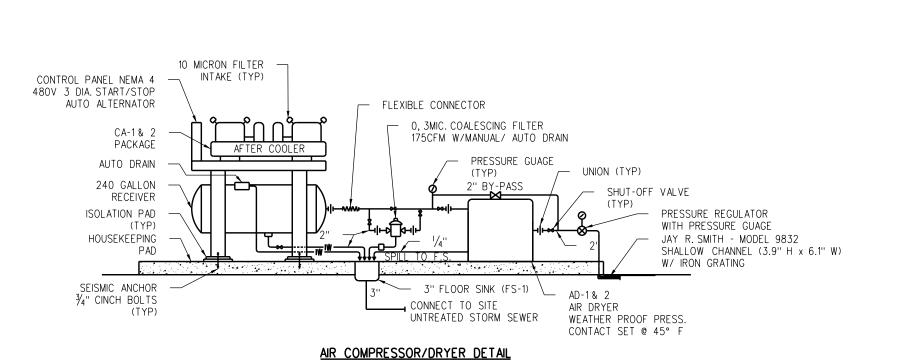
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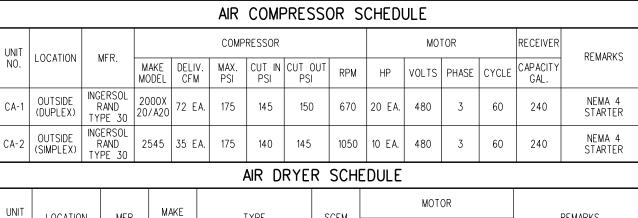
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ONE GATEWAY PLAZA, 12TH FLOOR, L. A., CA. 90012

1" = 1'-0"

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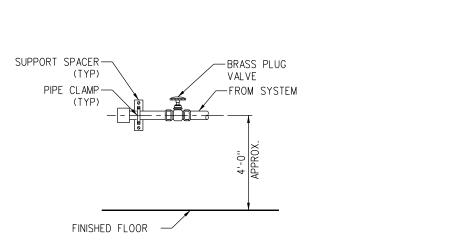


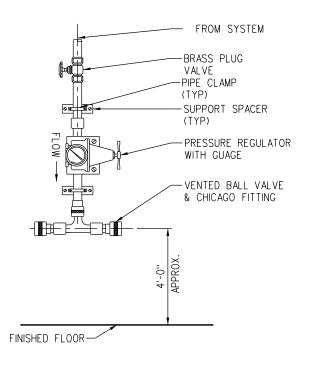


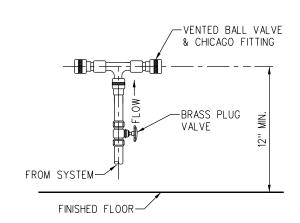
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AD-1	OUTSIDE	ZEKS HEATSINK	150HSE	REFRIGERATED DRYING	150	¾ HP, 1KW	115	1	60	FOR OUTSIDE USE			
AD-2	OUTSIDE	ZEKS HEATSINK	75HSB	REFRIGERATED DRYING	75	¾ HP, 0.8KW	115	1	60	FOR OUTSIDE USE			

# NOTE:

CONTRACTOR TO PROVIDE ADDITIONAL PIPING SUPPORTS AS NEEDED.







#### AIR COMPRESSOR OUTLET (AO-3)

#### AIR COMPRESSOR OUTLET (AO-2)

#### AIR COMPRESSOR OUTLET (AO-1)

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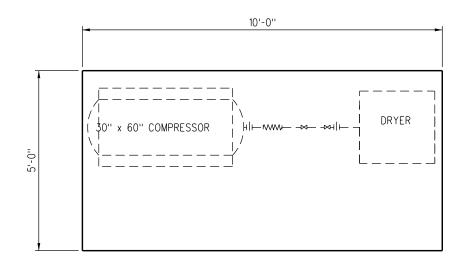
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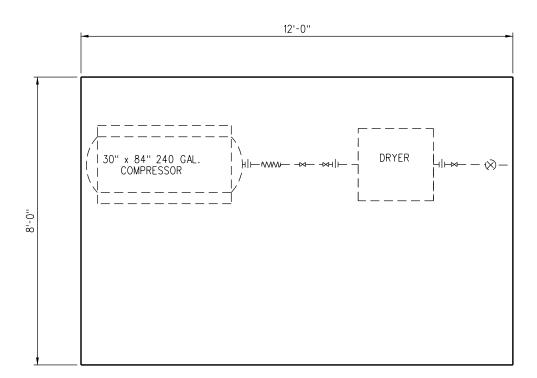
**METROLINK** 

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY ONE GATEWAY PLAZA, 12TH FLOOR, L. A., CA. 90012

ENGINEERING	STANDARDS	STANDARD	7201
COMPRESSEI PLUMBING SCHEDULE		SCALE:  REVISION SHEE  CADD FILE:	NONE 1 OF 2 7201-01



# PLAN AT SIMPLEX COMPRESSOR FOUNDATION



# PLAN AT COMPRESSOR FOUNDATION

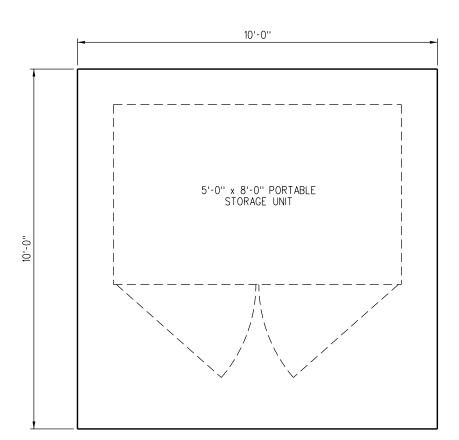
#### DRAWN BY: A. CARLOS DATE: Varen D. Page ASSISIANT DIRECTOR: STANDARDS & DESIGN x xx-xx-x REVISION REV. DATE DESCRIPTION DES. ENG.

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ENGINEERING	STANDARDS	STANDARD
MISCELLANEOUS EQUIPME	ENT FOUNDATIONS	SCALE:  34" =  REVISION SHEE  CADD FILE:

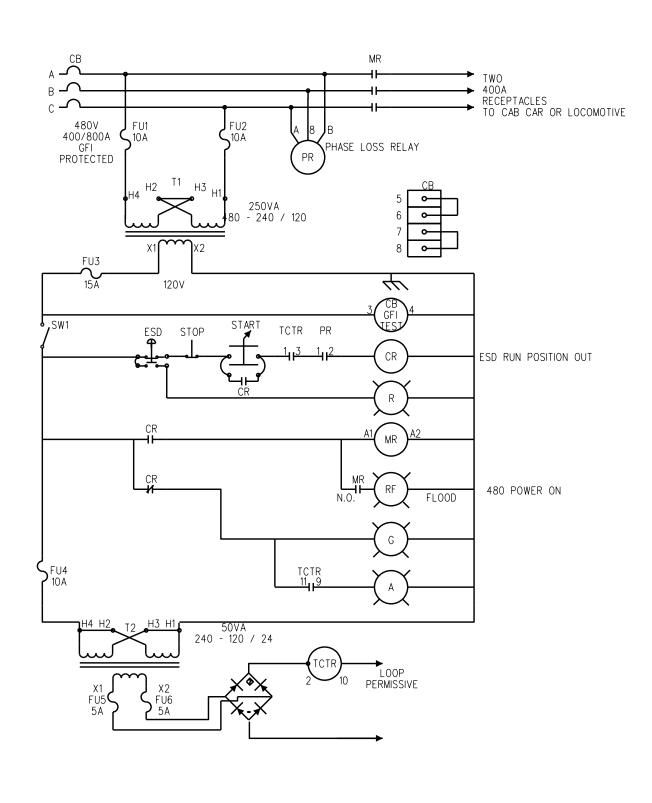
# NOTES:

- 1. CONTRACTOR TO SUBMIT PAD DETAILS PER SCRRA STANDARD SPECIFICATIONS. 2. FOUNDATION BOLTS SHOULD PROJECT THRU NUTS AT LEAST  $\frac{1}{2}$ " TO ALLOW FOR LEVELING.



# FOUNDATION PLAN

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ı						DRAWN BY: A. CARLOS DATE: 03/
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ı						] / Vareth D. Vall
ı						ASSISTANT DIRECTOR: STANDARDS & DESIGN
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ENGINEERING STANDARDS	STANDAR
GROUND POWER SYSTEM	SCALE: REVISION

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NONE

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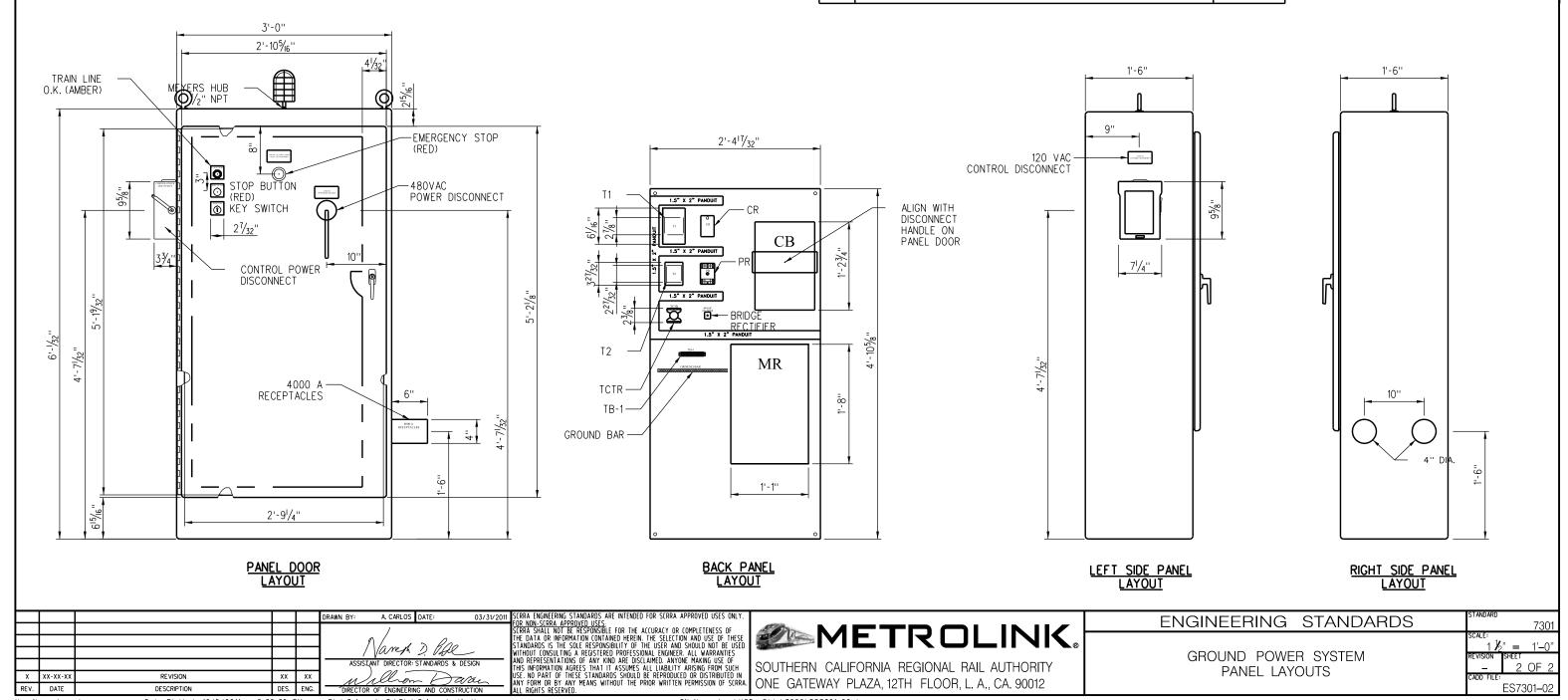
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#### WAYSIDE POWER CABINET OPERATION:

WITH TWO WAYSIDE POWER JUMPER CABLES CONNECTED TO THE CABCAR OR LOCOMOTIVE:

- 1. MOVE THE EMERGENCY STOP BUTTON ON THE FRONT OF THE PANEL TO THE RUN POSITION (OUT).
- 2. MOVE THE CONTROL CIRCUIT KNIFE SWITCH LOCATED ON THE SIDE OF THE WAYSIDE POWER PANEL TO THE CONNECTED POSITION.
- 3. THE AMBER LIGHT OF THE WAYSIDE POWER CABINET WILL ILLUMINATE WHEN THERE IS CONTINUITY IN THE TRAINLINE CIRCUIT.
- 4. WHEN TRAINLINE IS ESTABLISHED ENERGIZED THE 480 VOLT POWER TO THE EQUIPMENT BY KEYING ON THE KEY SWITCH LOCATED ON THE FRONT OF THE WAYSIDE POWER CABINET.
- 5. WHEN THE 480 VOLT POWER IS ENERGIZED, THE RED LIGHT ON TOP OF THE WAYSIDE POWER PANEL WILL ILLUMINATE, THE AMBER TRAINLINE LIGHT WILL GO OUT, THE RED PUSH BUTTON ABOVE THE KEY SWITCH WILL ILLUMINATE.
- 6. TO SHUT DOWN THE 480 VOLT POWER, PUSH THE RED STOP BUTTON LOCATED ABOVE THE KEY SWITCH.
- 7. PHASING FOR WAYSIDE POWER SHALL BE SET FOR COUNTER CLOCKWISE.

BILL OF MATERIAL				BILL OF MATERIAL (CONT.)	BILL OF MATERIAL (CONT.)			
QTY	TEM DESCRIPTION	LEGEND	QTY	ITEM DESCRIPTION	LEGEND	QTY	ITEM DESCRIPTION	LEGEND
1	CIRCUIT BREAKER, 3 POLE, 600A, 480 VAC, ELECTRONIC TRIP	СВ	1	CONTACT BLOCK, 1 N.O. & N.C.	POWER ON	1	MOUNTING HOOD	
1	CONTACTOR, IEC, 3 POLE, 630A, 480 VAC, COIL VOLTAGE 120 VAC	М	1	MUSHROOM HEAD, RED, JUMBO	ESD	1	MEYERS HUB, 1/2"	RF
2	LUG KIT, 2 x 2 600 MCM	М	1	RELAY, 3 POLE, 2 N.O. & 1 N.C., 120 VAC COIL	CR	1	CONDUIT NIPPLE, CLOSE x 1/2"	
1	SAFETY SWITCH, 2 POLE, 30A, 240 VAC, NEMA 3R	SW1	1	RELAY SOCKET	PR	2	LOCK NUT, 1/2"	
1	DOOR MOUNTED OPERATING MECHANISMS	СВ	1	RELAY SOCKET	TCTR	2	BUSHING INSULATING, 1/2"	
1	CONTROL TRANSFORMER, 120/24 V	Т2	1	RELAY, 24 VDC, 3 POLE, 11 PIN	TCTR	2	CONNECTOR	
1	CONTROL TRANSFORMER, 480/120-240 V	T1	1	RELAY, PHASE LOSS/ UNDER VOLTAGE, 480 VAC	PR	2	CONNECTOR	
1	KEY OPERATED SELECTOR SWITCH, 3 POSITION, SPRING RETURN TO CENTER	START	1	GROUND BAR		1	FUSES, TRM-10	F4
1	PUSH BUTTON OPERATOR	ESD	4	NAMEPLATE, LARGE NEMA DEVICE		1	FUSES, TRM-15	F3
1	PILOT LIGHT, AMBER, 120 VAC	А	3	NAMEPLATE, 3" x 4", RED WHITE LETTERS		2	FUSES, ATMR-5	F5 & F6
1	PUSH BUTTON, ILLUMINATED, RED, 120 VAC	G, STOP	1	ENCLOSURE, NEMA $4\frac{1}{2}$ ", 2 DOOR, LOCKABLE HANDLE		2	FUSES, ATMR-10	F1 & F2
1	CONTACT BLOCK, 1 N.C.	ESD	1	BACK PANEL		1	TERMINAL BLOCK, 10 POLE, 30 A	
1	CONTACT BLOCK 1 N.O.	ESD	1	PENANT FIXTURE		1	CABLE, WELDING, 4/0	
•			2	HOUSING & CABLE ASSEMBLY - PYLE NATIONAL PART No. RPC1736SE1794 OR EQUAL				



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REV. DATE

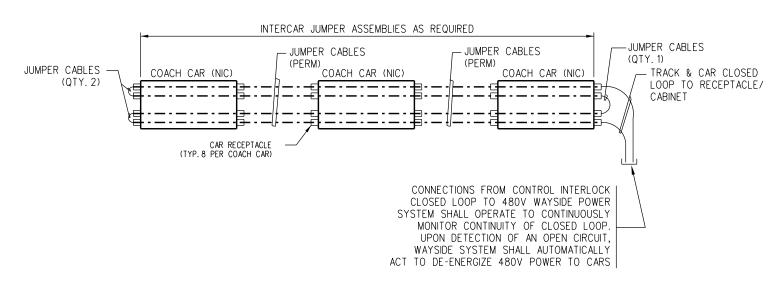
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DESCRIPTION

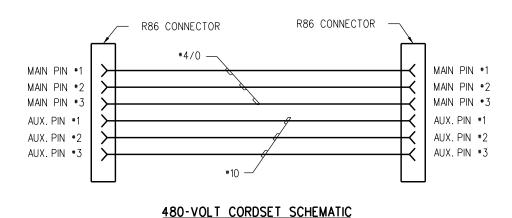
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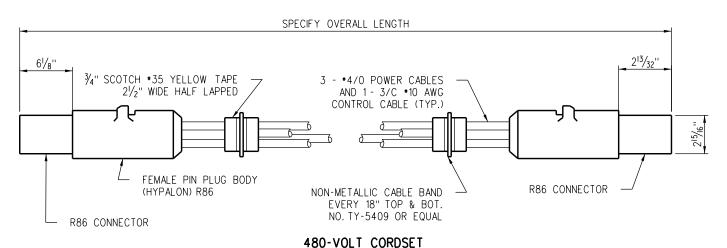
Varet D. Pope

ASSISIANT DIRECTOR: STANDARDS & DESIGN



# PLAN VIEW - CONTROL INTERLOCK SCHEME FOR 480V STANDBY POWER





QUANTITY REQ'D.-2 FOR EACH 480-VOLT WAYSIDE POWER RECEPTACLE BOX OUTLET

	480-VOLT OUTLET PIN UTILIZATIONS								
PIN	CONNECTION AT RECEPTACLE	CAR CONNECTION	FUNCTION						
MAIN #1	'A' PHASE OF 480V FEEDER	480-V `A' BUS	480-V POWER						
MAIN #2	'B' PHASE OF 480V FEEDER	480-V 'B' BUS	480-V POWER						
MAIN *3	'C' PHASE OF 480V FEEDER	480-V 'C' BUS	480-V POWER						
AUX. *1	CONTROL INTERLOCK SYSTEM RELAY (S)	AUX. *1 PIN OF RECEPTACLE AT OPPOSITE END OF CAR	CONTROL CLOSED LOOP INTERLOCK						
AUX. #2 AUX. #3	GROUND	CHASIS GROUND	GROUNDING						

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	XX-XX-XX	XX-XX-XX REVISION DATE DESCRIPTION			ASSISIANT DIRECTOR  XX-XX-XX  REVISION  XX  XX  WILLOW	ASSISTANT DIRECTOR: STANDARDS & DESIGN  XX-XX-XX  REVISION  XX  XX  WILLIAM DAGAL

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ENGINEERING STANDARDS	STANDARD 7302
	scale: NONE
CORDSET DETAILS	REVISION SHEET  - 1 OF 1
COMBOLT BETTIES	CADD FILE: ES7302