DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1301	1414

C. V. Udarbe — 11-04-11
REGISTERED CIVIL ENGINEER — DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHRIS UDARBE — No. C62985 — Exp. 06-30-12 — CIVIL — STATE OF CALIFORNIA

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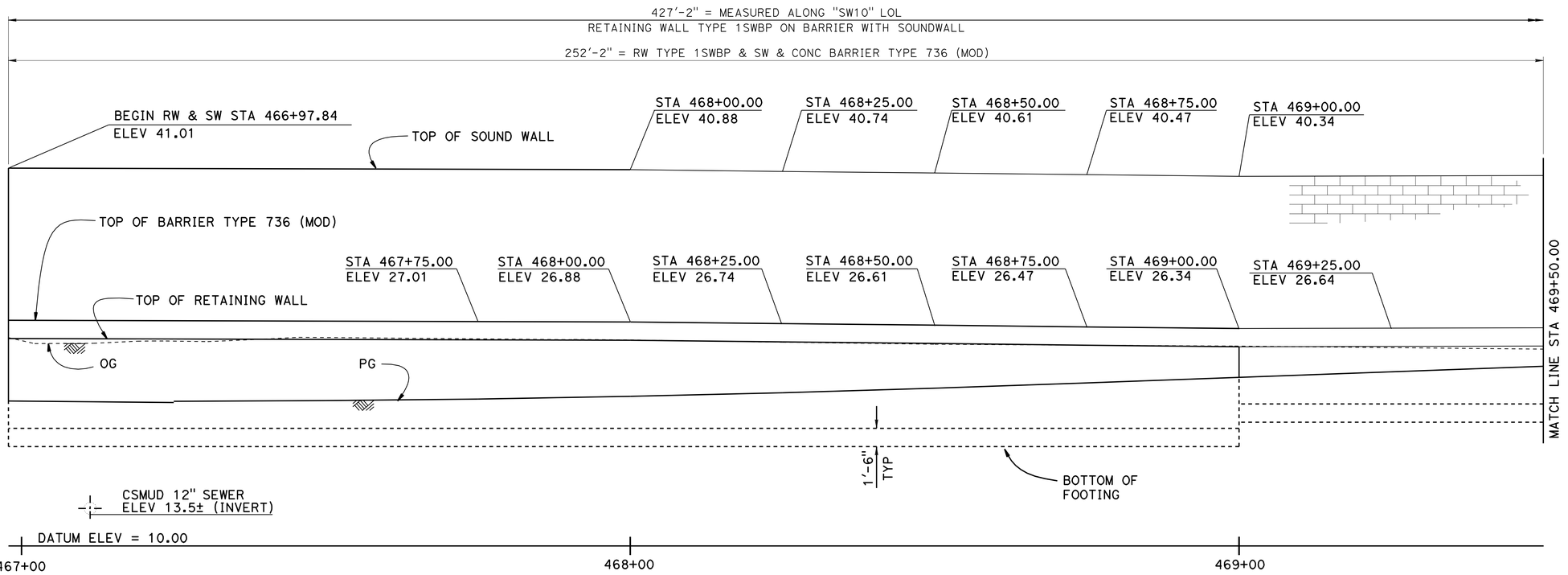


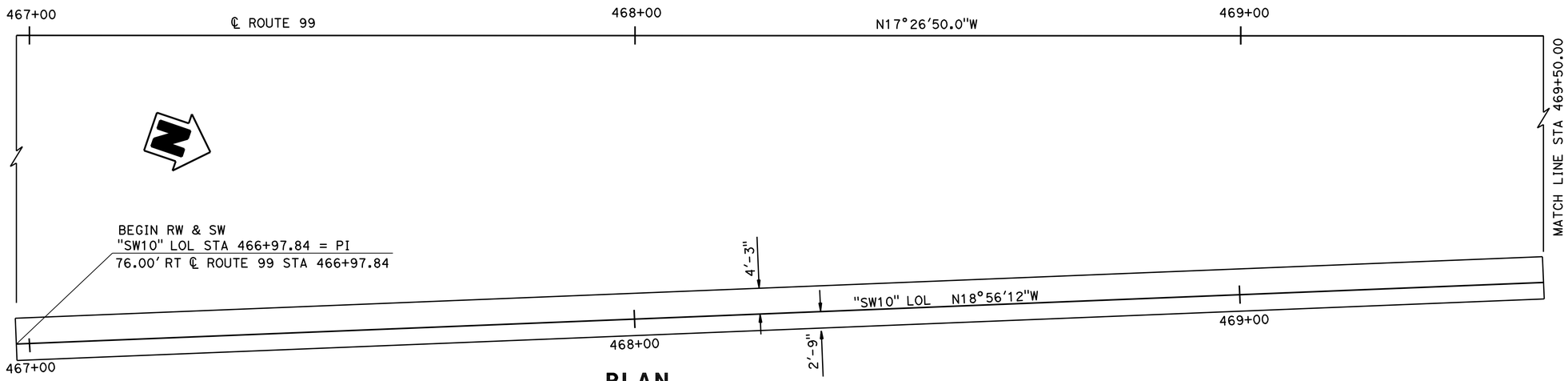
MIRRORED ELEVATION

VERT: 1" = 5'
HORIZ: 1" = 10'

B15-6 B15-7 B15-8

Note:

1. For additional details, see "STRUCTURE PLAN NO.2 & "XS" sheets
2. For architectual treatment, see" ARCHITECTURAL DETAILS NO. 1 & NO. 2" sheets



PLAN

1" = 10'

DESIGN	BY C. Udarbe	CHECKED R. Coria	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 17	BRIDGE NO. 29E0010	SOUTH STOCKTON WIDENING
DETAILS	BY G. Leung	CHECKED C. Udarbe			POST MILE 18.15	SOUNDWALL NO. 10
QUANTITIES	BY P. Vu	CHECKED R. Coria				STRUCTURE PLAN NO. 1

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091
CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES			SHEET	OF
12-27-10		09-22-11 9-29-11	2	18

FILE => 29e-0010-c-sp01.dgn

USERNAME => s113571 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:47

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1302	1414

C. V. Udarbe 11-04-11
REGISTERED CIVIL ENGINEER DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CHRIS UDARBE
No. C62985
Exp. 06-31-12
CIVIL
STATE OF CALIFORNIA

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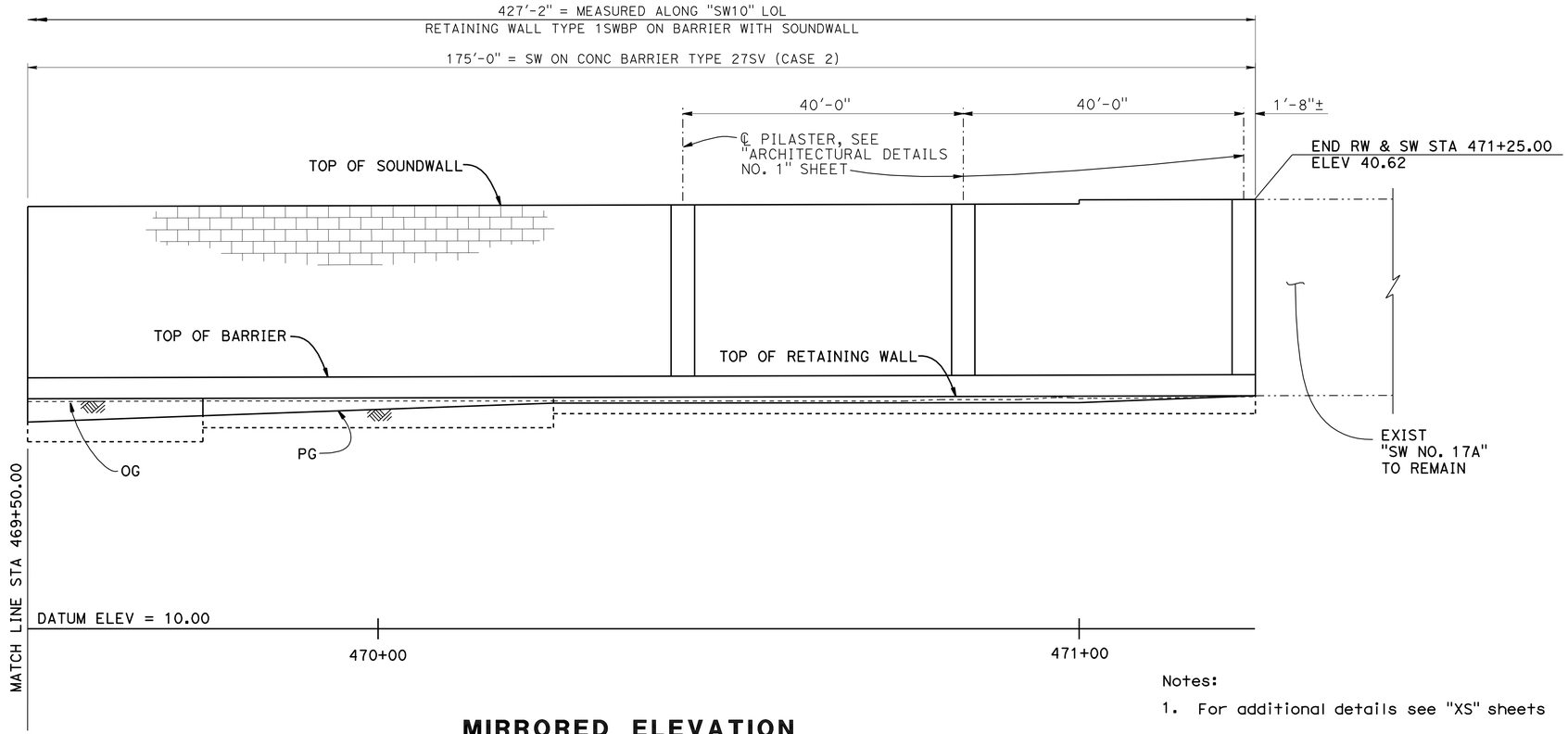
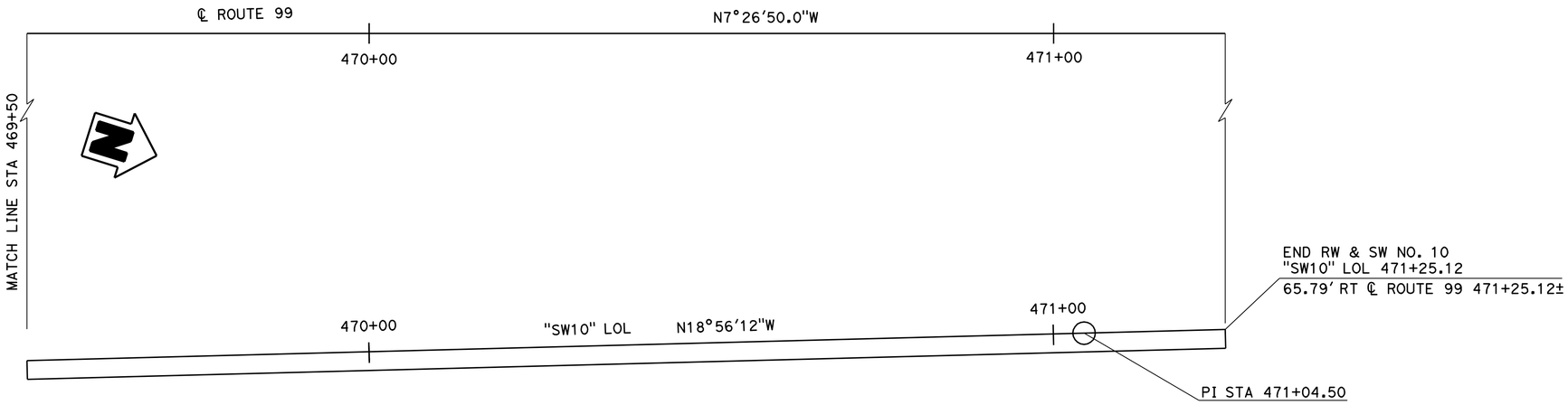


MIRRORED ELEVATION

VERT: 1" = 5'
HORIZ: 1" = 10'



PLAN

1" = 10'

Notes:

1. For additional details see "XS" sheets
2. For architectural treatment see "ARCHITECTURAL DETAILS NO.1 & NO.2" sheets

	BY	CHECKED
DESIGN	C. Udarbe	R. Coria
DETAILS	G. Leung	C. Udarbe
QUANTITIES	P. Vu	R. Coria

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 29E0010
POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
STRUCTURE PLAN NO. 2

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES			SHEET	OF
12-29-10		09-29-11 02-22-12	3	18

FILE => 29e-0010-c-sp02.dgn

USERNAME => s121614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1303	1414

CJ V. Udarbe 11-04-11
REGISTERED CIVIL ENGINEER DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CHRIS V. UDARBE
No. C62985
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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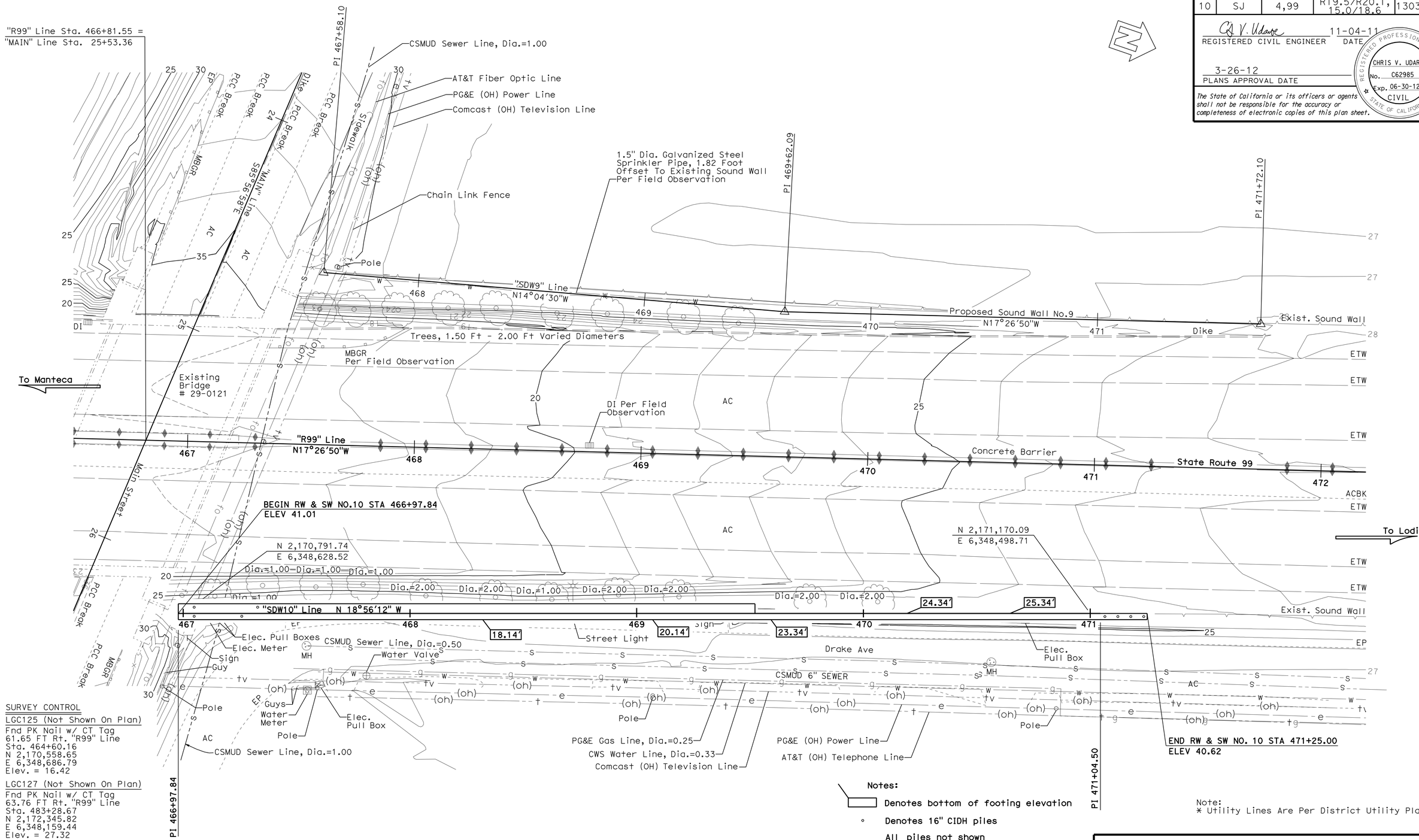

SURVEY CONTROL

LGC125 (Not Shown On Plan)
Fnd PK Nail w/ CT Tag
61.65 FT Rt. "R99" Line
Sta. 464+60.16
N 2,170,558.65
E 6,348,686.79
Elev. = 16.42

LGC127 (Not Shown On Plan)
Fnd PK Nail w/ CT Tag
63.76 FT Rt. "R99" Line
Sta. 483+28.67
N 2,172,345.82
E 6,348,159.44
Elev. = 27.32

Notes:
Denotes bottom of footing elevation
° Denotes 16" CIDH piles
All piles not shown

Note:
* Utility Lines Are Per District Utility Plan

PRELIMINARY INVESTIGATION SECTION									
SCALE 1"=20'	VERT.DATUM NGVD29	PHOTOGRAMMETRY AS OF: X				DESIGN	BY C. Udarbe	CHECKED R. Coria
	HORZ.DATUM NAD83 (1991.35)	SURVEYED	BY District	CHECKED	BY T.Gillett 9/2009	DETAILS	BY L. Wang	CHECKED C. Udarbe
	ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED	BY J.Martinez 9/2009	CHECKED	BY L.Lew 9/2009	QUANTITIES	BY P. Vu	CHECKED R. Coria

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 29E0010
POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
FOUNDATION PLAN

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3646
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
9/24/09	9/28/09	2/23/12		4	18

FILE => 29e-0010-e-fp.dgn

TIME PLOTTED => 13:08
29-MAR-2012

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1304	1414

C. V. Udarbe 11-04-11
REGISTERED CIVIL ENGINEER DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHRIS UDARBE — No. C62985 — Exp. 12-30-11 — CIVIL — STATE OF CALIFORNIA

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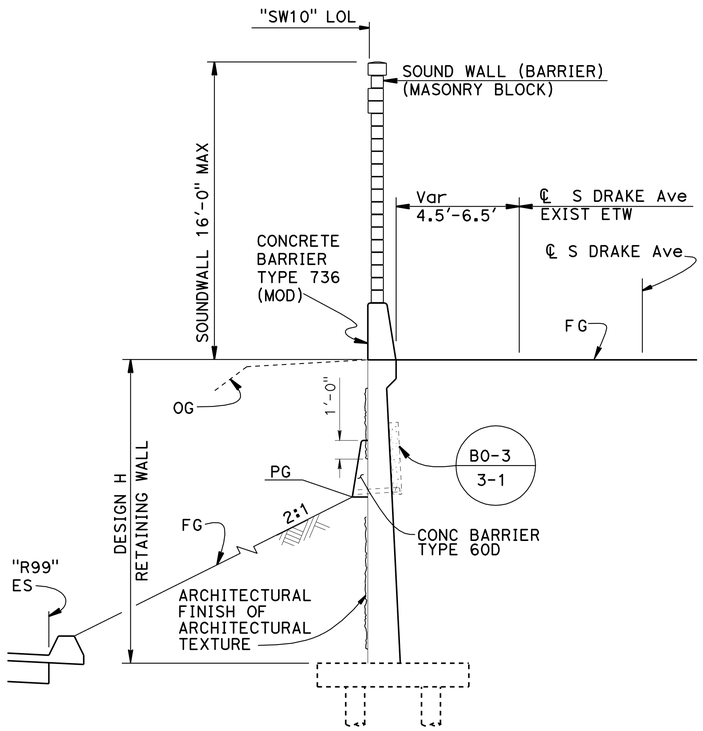
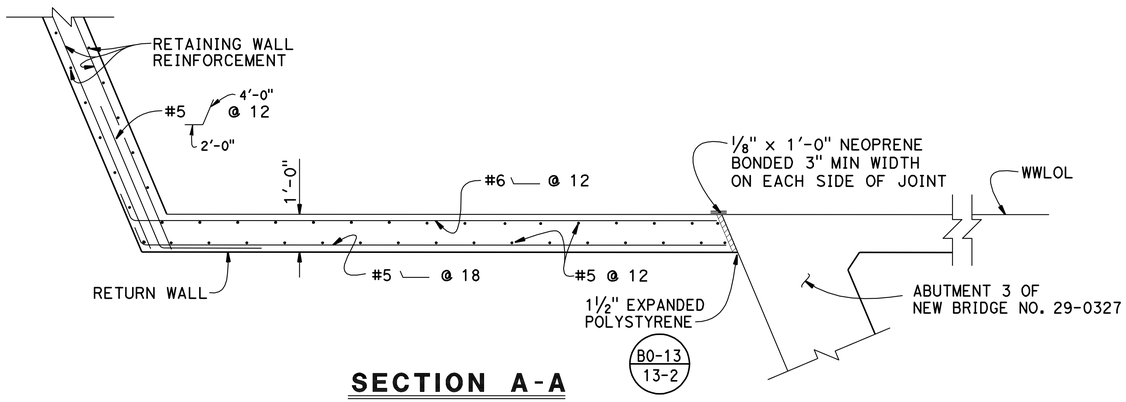


TYPICAL SECTION

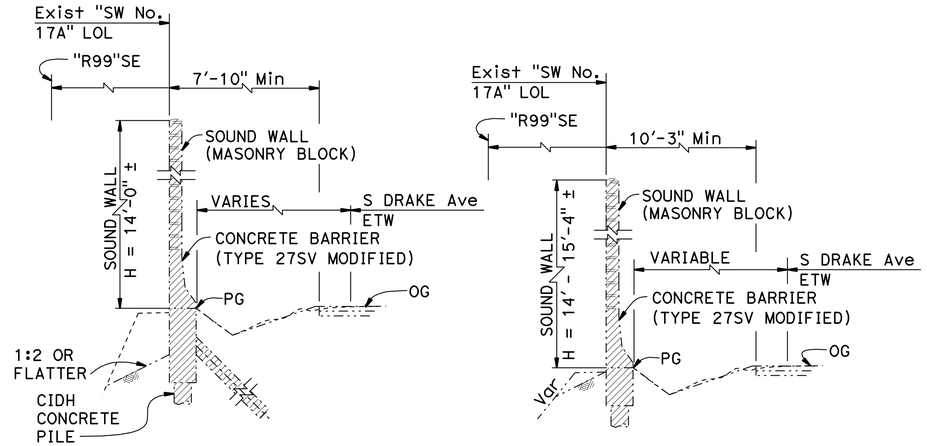
1/4" = 1'-0"

SOUND WALL NO. 10 ELEVATIONS				
SWLOL	PG	TOP OF RETAINING WALL	TOP OF BARRIER	TOP OF SOUND WALL
466+97.84	21.89	27.01	—	41.01
467+00.00	21.89	27.01	—	41.01
467+25.00	21.86	27.01	—	41.01
467+50.00	21.92	27.01	—	41.01
467+75.00	22.06	27.01	—	41.01
468+00.00	22.27	26.88	—	40.88
468+25.00	22.56	26.74	—	40.74
468+50.00	22.94	26.61	—	40.61
468+75.00	23.38	26.47	—	40.47
469+00.00	23.83	26.34	—	40.34
469+25.00	24.28	26.34	—	40.34
469+50.00	24.74	—	29.34	40.34
469+75.00	25.19	—	29.34	40.34
470+00.00	25.64	—	29.34	40.34
470+25.00	26.10	—	29.34	40.34
470+50.00	26.11	—	29.34	40.34
470+75.00	26.12	—	29.34	40.34
471+00.00	26.13	—	29.34	40.34
471+25.00	26.62	—	26.62	40.62
471+25.12	26.62	—	26.62	40.62



SECTION A-A

1/2" = 1'-0"



Indicates removal of existing wall and pile cap approximate length of existing soundwall removal is 351'-0" *. Bridge removal (Portion), LOCATION I.

EXISTING SOUNDWALL SECTION

1/4" = 1'-0"

DESIGN	BY C. Udarbe	CHECKED R. Coria	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY L. Wang	CHECKED C. Udarbe	
QUANTITIES	BY P. Vu	CHECKED R. Coria	

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 29E0010
POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
TYPICAL SECTION

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES			SHEET	OF
06-29-10	08-24-11	09-29-11	5	18

FILE => 29e-0010-k-ts01.dgn

USERNAME => s121614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1305	1414

C. V. Udarbe — 11-04-11
REGISTERED CIVIL ENGINEER — DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHRIS UDARBE — No. C62985 — Exp. 12-30-12 — CIVIL — STATE OF CALIFORNIA

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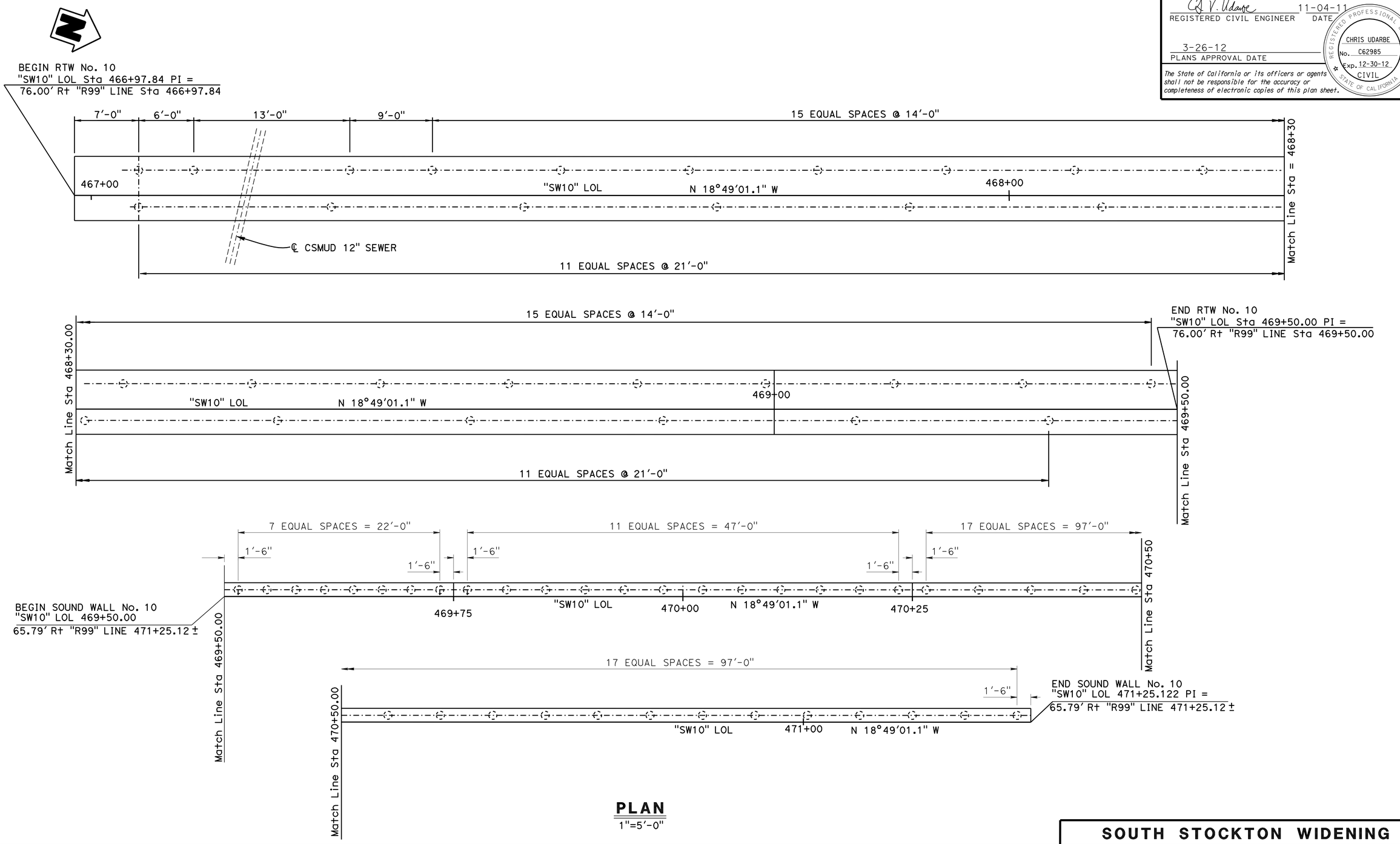

PLAN
1"=5'-0"

	BY	CHECKED
DESIGN	C. Udarbe	R. Coria
DETAILS	G. Leung	C. Udarbe
QUANTITIES	P. Vu	R. Coria

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 29E0010
POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
PILE DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091
CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
12-29-10		08-05-11	9-29-11	6	18

FILE => 29e-0010-q-pd01.dgn

USERNAME => s1216l4 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1306	1414

C. V. Udarbe 11-04-11
REGISTERED CIVIL ENGINEER DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CHRIS UDARBE
No. C62985
Exp. 06-30-12
CIVIL
STATE OF CALIFORNIA

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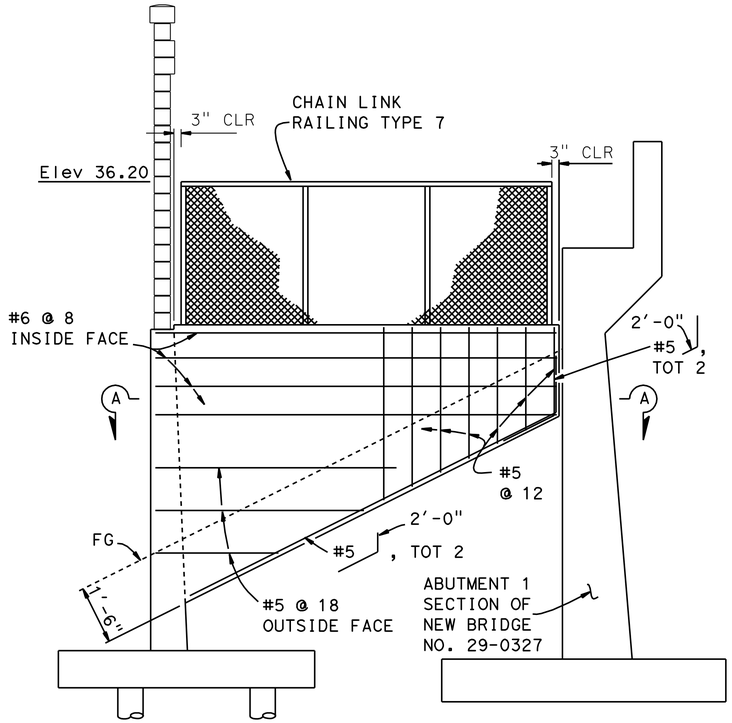

RETURN WALL ELEVATION

NO SCALE

Note:
For Section A-A, see "TYPICAL SECTION" sheet

PILE DATA TABLE

SUPPORT LOCATION	PILE TYPE	NOMINAL RESISTANCE (kips)		DESIGN TIP ELEVATION (ft)	SPECIFIED TIP ELEVATION (ft)
		COMPRESSION	TENSION		
466+97.84 to 469+00 (H=8 ft)	16" ø CIDH	180	0	-18.0 (a)	-18.0
469+00 to 469+50 (H=8 ft)	16" ø CIDH	180	0	-15.0 (a)	-15.0
469+50 to 469+75 (H=8 ft)	16" ø CIDH	180	0	-15.0 (a)	-15.0
469+75 to 470+25 (H=8 ft)	16" ø CIDH	180	0	-11.0 (a)	-11.0
470+25 to 471+25.12 (H=8 ft)	16" ø CIDH	180	0	-10.0 (a)	-10.0

Note:
1). Design tip elevations are controlled by (a) compression.
2). Since there are no soft compressible soil layers below the design tip elevation, there is no design tip elevation for settlement.
3). The specified tip elevation shall not be raised above the design tip elevations for Lateral Load.

DESIGN	BY C. Udarbe	CHECKED R. Coria	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY L. Wang	CHECKED C. Udarbe	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 17
QUANTITIES	BY P. Vu	CHECKED R. Coria	BRIDGE NO. 29E0010 POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
MISCELLANEOUS DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES			SHEET	OF
07-06-10		08-05-11 09-29-11	7	18

FILE => 29e-0010-u-miscdet01.dgn

USERNAME => s121614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1307	1414

C.J. V. Udarbe — 11-04-11
REGISTERED CIVIL ENGINEER — DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHRIS UDARBE No. C62985 Exp. 12-30-12 CIVIL — STATE OF CALIFORNIA

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TABLE OF PILE SPACING: CLASS 45 - CONCRETE PILES														
DESIGN H	6′	8′	10′	12′	14′	16′	18′	20′	22′	24′	26′	28′	30′	32′
W	6′-9"	7′-0"	7′-6"	8′-3"	9′-3"	10′-3"	11′-0"	12′-0"	13′-0"	14′-3"	16′-3"	16′-9"	18′-0"	20′-6"
C	2′-9"	2′-9"	3′-0"	3′-3"	3′-6"	4′-0"	4′-3"	4′-9"	5′-0"	5′-6"	6′-3"	6′-9"	7′-3"	7′-9"
B	4′-0"	4′-3"	4′-6"	5′-0"	5′-9"	6′-3"	6′-9"	7′-3"	8′-0"	8′-9"	10′-0"	10′-0"	10′-9"	12′-9"
F	1′-6"	1′-6"	1′-6"	1′-9"	1′-9"	2′-0"	2′-6"	2′-9"	3′-0"	3′-0"	3′-3"	3′-6"	3′-9"	4′-0"
M	1′-3"	1′-3"	1′-6"	1′-9"	2′-0"	2′-6"	2′-9"	3′-3"	3′-6"	4′-0"	4′-9"	5′-3"	5′-9"	6′-3"
N	2′-6"	2′-9"	3′-0"	3′-6"	4′-3"	4′-9"	5′-3"	5′-9"	6′-6"	7′-3"	8′-6"	8′-6"	9′-3"	11′-3"
ROW 1	16′-0"	14′-0"	12′-0"	10′-0"	8′-0"	6′-6"	5′-6"	4′-6"	4′-0"	4′-0"	4′-0"	4′-0"	4′-0"	4′-0"
ROW 2	24′-0"	21′-0"	18′-0"	15′-0"	14′-0"	13′-0"	11′-0"	9′-0"	8′-0"	12′-0"	10′-0"	6′-0"	4′-0"	4′-0"
ROW 3										8′-0"	5′-0"	4′-0"	4′-0"	6′-0"
ROW 4														6′-0"
CONFIGURATION	I	I	I	I	I	I	I	I	I	II	II	II	II	III

TABLE 1: TABLE OF REINFORCING STEEL DIMENSIONS AND DATA														
	STEM WITH HAUNCH													
DESIGN H	6′	8′	10′	12′	14′	16′	18′	20′	22′	24′	26′	28′	30′	32′
STEM BATTER	0	½:12	½:12	½:12	½:12	½:12	½:12	½:12	½:12	⅝:12	¾:12	⅞:12	1:12	1:12
STEM THICKNESS @ TOP	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"
STEM THICKNESS @ HAUNCH	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"
ⓐ BARS				#6@18 XX	#7@18 XX	#8@18 XX	#9@18 XX	#10@18 XX	#8 @ 9 X	#8 @ 9 X	#7 @ 6 X	#10@12 XX	#9 @ 9 X	#11@12 XX
X				CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT
Y				8′-0"	6′-6"	7′-6"	8′-6"	9-6"	9′-6"	11′-0"	11′-6"	13′-0"	14′-0"	15′-6"
ⓑ BARS	#5 @ 12	#5 @ 12	#5 @ 9	#6@18 XX	#7@18 XX	#8@18 XX	#9@18 XX	#10@18 XX	#8 @ 9 X	#8 @ 9 X	#7 @ 6 X	#10@12 XX	#9 @ 9 X	#11@12 XX
X	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT
Y	CONT	CONT	CONT	CONT	10′-6"	13′-0"	15′-0"	17′-6"	19′-6"	21′-0"	18′-6"	19′-0"	25′-6"	23′-6"
ⓒ BARS					#6 @ 18	#6 @ 18	#6 @ 18	#6 @ 18	#6 @ 18	#6 @ 18	#6 @ 12	#7 @ 12	#7 @ 18	#7 @ 12
ⓓ BARS	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 9	#5 @ 9	#6 @ 9	#5 @ 6	#7 @ 9	#7 @ 9	#6 @ 6	#7 @ 6
TOTAL ⓔ BARS	6 #5	6 #5	6 #5	6 #5	8 #5	8 #5	10 #5	10 #5	10 #5	10 #5	12 #5	12 #5	12 #5	14 #5
TOTAL ⓕ BARS	6 #5	6 #5	6 #5	6 #5	6 #5	8 #5	8 #5	8 #5	8 #5	10 #5	10 #5	10 #5	12 #5	12 #5

TABLE 2: TABLE OF REINFORCING STEEL DIMENSIONS AND DATA														
	STEM WITH HAUNCH							STEM WITHOUT HAUNCH						
DESIGN H	6′	8′	10′	12′	14′	16′	18′	20′	22′	24′	26′	28′	30′	32′
BATTER	0	0	0	0	0	0	0	0	0	0	¼:12	½:12	½:12	½:12
STEM THICKNESS @ TOP	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	1′-6"	2′-0"	2′-0"	2′-0"	2′-0"	2′-0"	2′-0"
STEM THICKNESS @ HAUNCH	1′-0"	1′-0"	1′-0"	1′-0"	1′-0"	1′-3"	1′-3"							
ⓐ BARS				#6@12 XX	#5 @ 6 X	#9@18 XX	#9@12 XX	#9@12 XX	#9@12 XX	#7 @ 6 X	#7 @ 6 X	#7 @ 6 X	#9 @ 9 X	#11@12 XX
X				CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT
Y				5′-6"	5′-6"	8′-6"	8′-6"	8′-6"	8′-6"	9′-6"	11′-0"	12′-6"	13′-6"	14′-6"
ⓑ BARS	#5 @ 12	#5 @ 9	#6 @ 9	#6@12 XX	#5 @ 6 X	#9@18 XX	#9@12 XX	#9@12 XX	#9@12 XX	#7 @ 6 X	#7 @ 6 X	#7 @ 6 X	#9 @ 9 X	#11@12 XX
X	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT	CONT
Y	CONT	CONT	CONT	CONT	CONT	11′-6"	11′-6"	12′-0"	12′-0"	17′-6"	20′-0"	21′-6"	24′-0"	24′-0"
ⓒ BARS						#7 @ 18	#7 @ 12	#7 @ 12	#7 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#7 @ 18	#7 @ 12
ⓓ BARS	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 9	#5 @ 9	#6 @ 9	#5 @ 6	#7 @ 9	#7 @ 9	#6 @ 6	#7 @ 6
TOTAL ⓔ BARS	6 #5	6 #5	6 #5	6 #5	8 #5	8 #5	10 #5	10 #5	10 #5	10 #5	12 #5	12 #5	12 #5	14 #5
TOTAL ⓕ BARS	6 #5	6 #5	6 #5	6 #5	6 #5	8 #5	8 #5	8 #5	8 #5	10 #5	10 #5	10 #5	12 #5	12 #5

CONT = CONTINUOUS

* = ⓐ AND ⓑ BARS ARE BUNDLED TOGETHER.

** = ALTERNATE ⓐ AND ⓑ BARS AS SHOWN IN DETAIL A.

DESIGN DATA

DESIGN: LOAD FACTOR DESIGN (LFD)

CONCRETE: REINFORCED CONCRETE, f′c = 3600 psi
fy = 60000 psi

LOADING CASE:

LEVEL GROUND WITH 240 psf LIVE LOAD SURCHARGE AND 16′ SOUNDWALL.
SEISMIC LOAD = 0.3 DEAD LOAD
WIND LOAD = 30 psf
DEAD LOAD OF SOUNDWALL = 1414 lb/lf
DEAD LOAD OF BARRIER = 372 lb/lf

SEISMIC LOAD: SOIL

Kh = 0.3g
Kv = 0.0
Kae : MONONOBE-OKABE METHOD
<1> V_{s30} = 920 ft/sec

SOIL: Ø = 34°γ = 120 pcf

EQUIVALENT FLUID PRESSURE:
= 36 pcf FOR DETERMINATION OF TOE PRESSURE
= 27 pcf FOR DETERMINATION OF HEEL PRESSURE

LOAD COMBINATIONS:

GROUP A : βD+1.7E+1.7SC
GROUP B : βD+1.7E+1.3W
GROUP C :
STEM : 1.0D+1.0E+1.0EQD+1.0EQE
FOOTING : D+PYM
WHERE : β = 1.0 OR 1.3 WHICHEVER CONTROLS DESIGN
D = DEAD LOAD
E = LATERAL EARTH PRESSURE
SC = SURCHARGE
W = WIND LOAD
EQD = SEISMIC DEAD LOAD
EQE = SEISMIC LATERAL EARTH PRESSURE
PYM = PROBABLE YIELD MOMENT (1.3* NOMINAL YIELD MOMENT OF STEM)

GENERAL NOTES

1. CLASS 45-CONCRETE PILES WERE USED FOR THE DESIGN.
2. PILE BATTER SHOWN ARE 1:3.
3. MINIMUM DISTANCE BETWEEN CENTER PILE AND EDGE OF FOOTING IS 1′-6".
4. REDUCTION FACTORS:
GROUPS A & B : Ø = 0.75
GROUP C : Ø = 1.0
5. LATERAL RESISTANCE OF EACH PILE:
GROUPS A & B : = 30 kip
GROUP C : = 40 kip
6. MAXIMUM SPACING BETWEEN PILES IS SHOWN IN THE TABLE. REDUCE TO SUIT THE LENGHTH OF FOOTING.
7. MINIMUM DISTANCE BETWEEN ANY TWO PILES IS 3′-0".
8. LIMIT OF NO SPLICING FOR REBARS = 3 TIMES THE BOTTOM THICKNESS OF STEM.

SPECIAL DETAILS

REVISED STANDARD DRAWING

FILE NO. xs14-320-1x

APPROVAL DATE July 2011

<1> Added note

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 29E0010
POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
RETAINING WALL TYPE 1SWBP - DETAILS NO. 1

DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
01-13-12				8	18

FILE => 29e-0010-xs14-320-1e.dgn

USERNAME => s121614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1308	1414

C. V. Udarbe 11-04-11
REGISTERED CIVIL ENGINEER DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHRIS UDARBE No. C62985 Exp. 12-30-12 CIVIL — STATE OF CALIFORNIA

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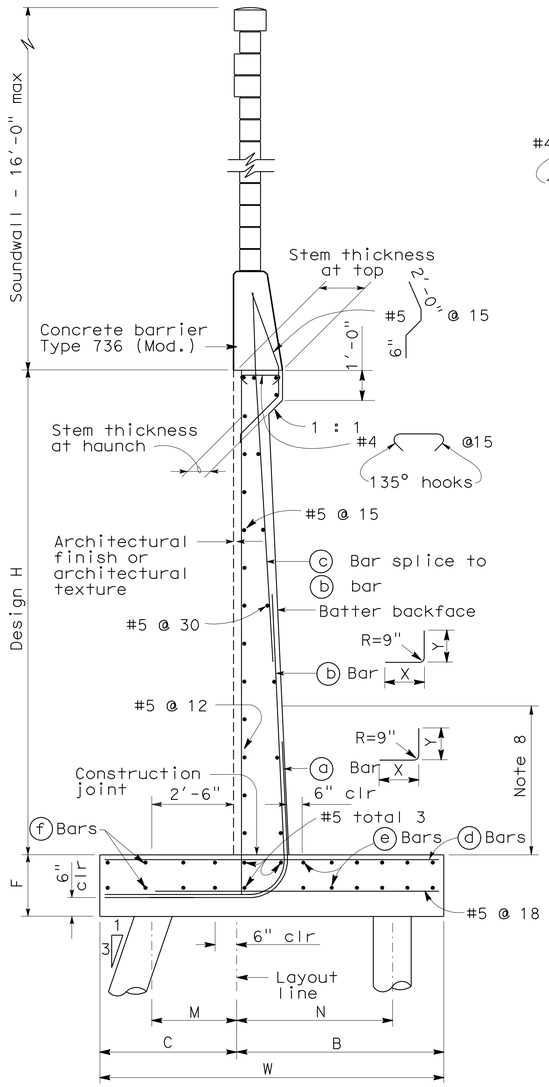
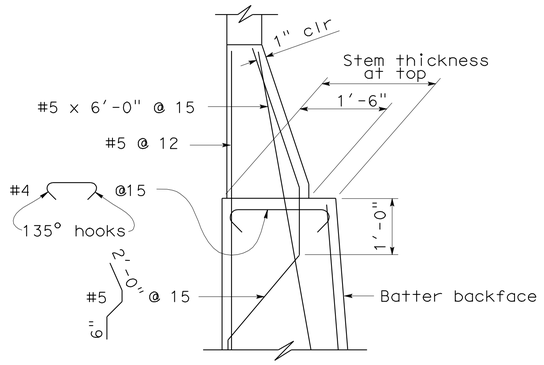


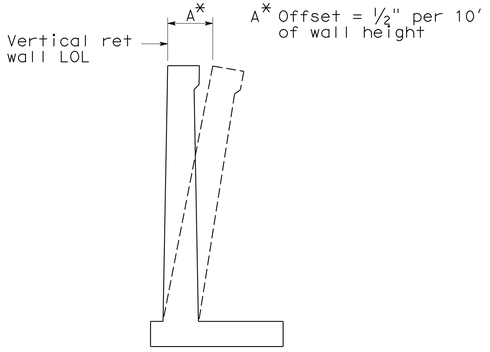
45T PILE FOOTING SECTION

NO SCALE



SPREAD FOOTING SECTION WITHOUT HAUNCH

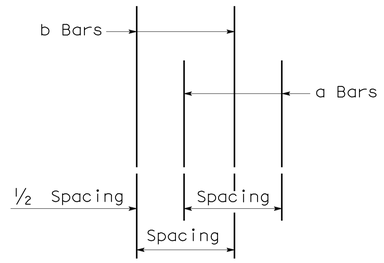
NO SCALE



WALL OFFSET

NO SCALE

Values for offsetting forms to be determined by the engineer

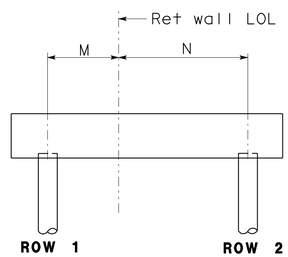


DETAIL A

NO SCALE

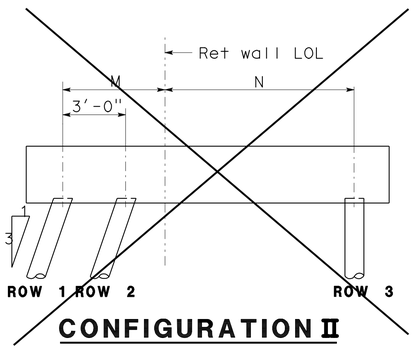
NOTES

1. For soundwall and retaining wall architectural finish or texture, see details elsewhere in project plans.
2. For details not shown and drainage notes, see B3-8
3. Footing cover, 1'-6" minimum.
4. For soundwall and barrier reinforcrments, see "Soundwall Masonry Block on Barriers" Sheets in Standard Plans.



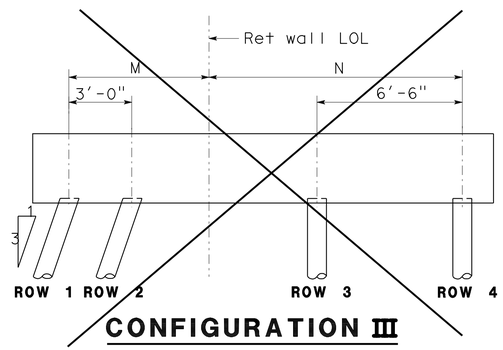
CONFIGURATION I

2



CONFIGURATION II

1



CONFIGURATION III

1

SPECIAL DETAILS

SOUTH STOCKTON WIDENING

SOUNDWALL NO. 10

RETAINING WALL TYPE 1SWBP - DETAILS NO. 2

REVISED STANDARD DRAWING

FILE NO. xs14-320-2x

APPROVAL DATE July 2011

1 Detail does not apply

2 Detail modified

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO. 29E0010

POST MILE 18.15

DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091
CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
01-13-12				9	18

FILE => 29e-0010-xs14-320-2e.dgn

USERNAME => s121614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1309	1414

C. V. Udarbe 11-04-11
REGISTERED CIVIL ENGINEER DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHRIS UDARBE No. C62985 Exp 12-30-12 CIVIL — STATE OF CALIFORNIA

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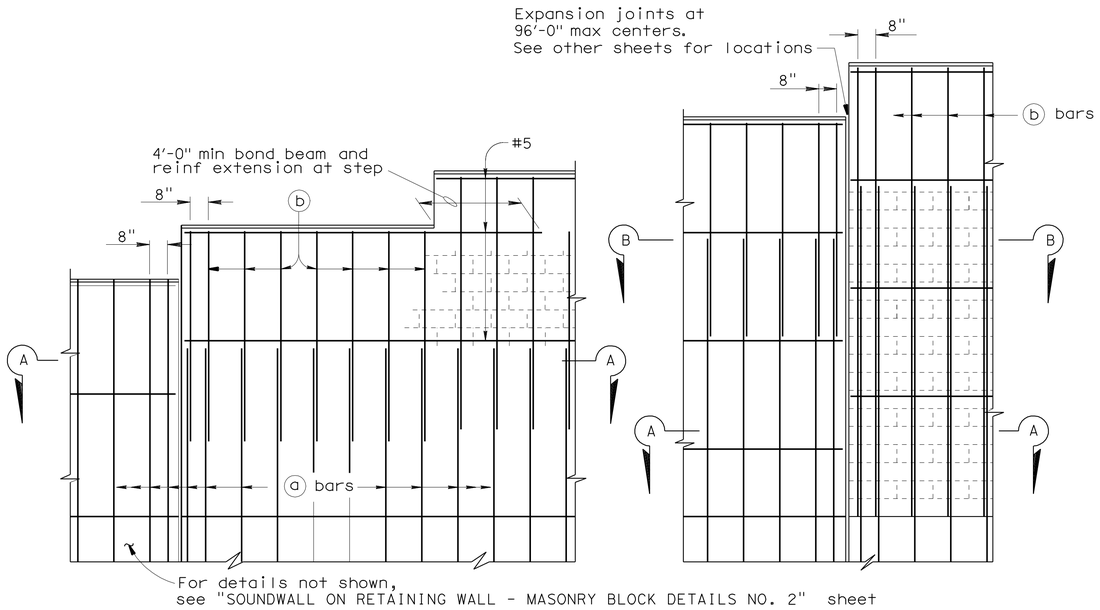
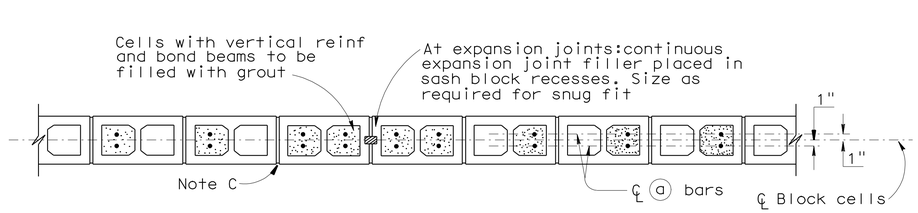
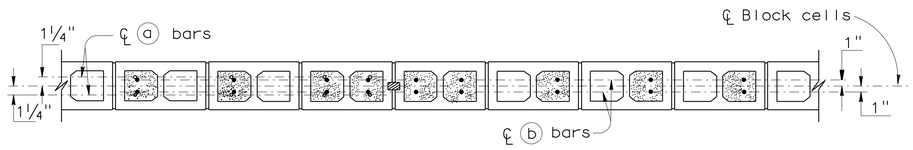


PART ELEVATIONS



SECTION A- A

H=6'-0" THRU H= 12'-0"



SECTION A- A

SECTION B- B

H=12'-0" THRU H= 16'-0"

DESIGN NOTES

DESIGN

Uniform Building Code,1997 Edition and the Bridge Design Specifications.

DESIGN WIND LOAD

33 psf

DESIGN SEISMIC LOAD

0.57 Dead load

REINFORCED CONCRETE

f'c = 3.250 ksi
fy = 60 ksi

CONCRETE MASONRY

	REGULAR STRENGTH	HIGH STRENGTH	
f'm	= 1500 psi	= 2000 psi	= 2500 psi
f_b	= 495 psi	= 660 psi	= 830 psi
fs	= 24000 psi	= 24000 psi	= 24000 psi
n	= 25.8	= 19.3	= 15.5

LOAD FACTORS AND LOAD COMBINATIONS

Working Stress Design (WSD) Percentage of unit stress

Group 1: D + E + SC 100%
Group 2: D + W + SC + E 100%
Group 3: D + 0.71 EQD + E 100%

Where:

D = Dead load
E = Lateral earth pressure
SC = Live load surcharge
W = Wind load
EQD = Seismic dead load

Load Factor Design (LFD)

Group A: βD +1.7 E + 1.7 SC
Group B: βD +1.7 E + 1.3 W
Group C: βD +1.3 E + 1.0 EQE
Group D: βD +1.3 E + 1.0 EQD
Group E: βD +1.1 E + 0.85 (EQE + EQD)

Where : β = 0.9 or 1.2, whichever controls in design
D = Dead load
E = Lateral earth pressure
SC = Live load surcharge
W = Wind load
EQD = Seismic dead load
EQE = Seismic earth load

STRENGTH REDUCTION FACTORS, Ø

Reinforced concrete:
For flexure ——— Ø=0.90
For shear ——— Ø=0.85

Concrete masonry:
For flexure ——— Ø=0.80
For shear ——— Ø=0.60

Foundations:
See "RETAINING WALL TYPE 1SW" sheet

SOUNDWALL REINFORCEMENT TABLE

Maximum H	a bars @ 406 max	b bars @ 406 max	"y"	f'm (psi)	Compressive Strength of CMU (psi)	Maximum H
6'-0"	#4	———	———	1500	1.9	6'-0"
8'-0"	#4	———	———	1500	1900	8'-0"
10'-0"	#4	———	———	1500	1900	10'-0"
12'-0"	#5	#4	6'-0"	2000	2800	12'-0"
14'-0"	#6	#4	8'-0"	2500	3750	14'-0"
16'-0"	#6	#4	10'-0"	2500	3750	16'-0"

GENERAL NOTES

Note A: For type of block and joint finish, See other sheets.

Note B: When blocks are laid in stacked bond, ladder type, galvanized joint reinforcement shall be provided. A minimum of 2 - 9 gauge wires continuous at 4'-0" maximum to be used. Locate reinforcement in joints that are at the approximate midpoint between bond beams.

Note C: Horizontal joints shall be tooled concave or may be weathered.
Vertical joints shall be tooled concave or may be raked.

Note D: For intermediate wall heights that are between the "H's" given. Use the tabular information for the next higher "H".

Note E: Masonry strengths are listed in the "SOUNDWALL REINFORCEMENT TABLE".

	BY	CHECKED
DESIGN	C. Udarbe	R. Coria
DETAILS	G. Leung	C. Udarbe
QUANTITIES	P. Vu	R. Coria

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 29E0010
POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
SOUNDWALL ON RETAINING WALL-MASONRY BLOCK DETAILS NO. 1

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
01-13-12				10	18

FILE => 29e-0010-xs15-120-1e.dgn

USERNAME => s121614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1310	1414

C. V. Udarbe — REGISTERED CIVIL ENGINEER — 11-04-11 DATE

3-26-12 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHRIS UDARBE — No. C62985 — Exp 12-30-12 — CIVIL — STATE OF CALIFORNIA

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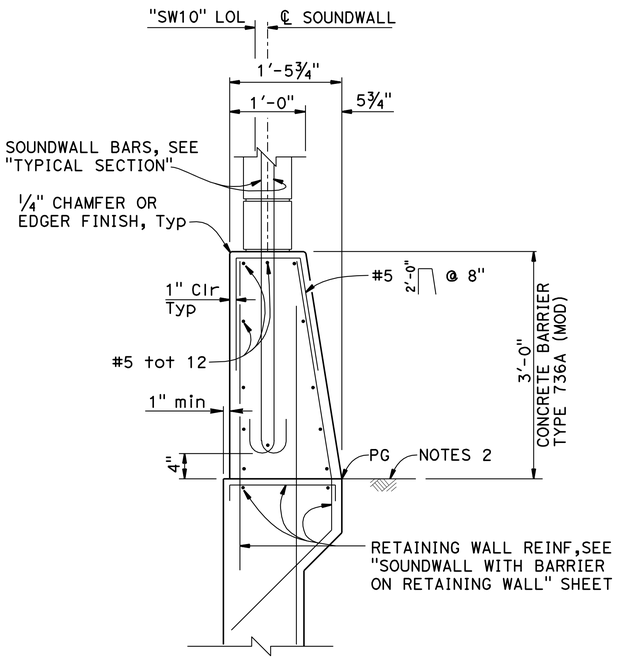
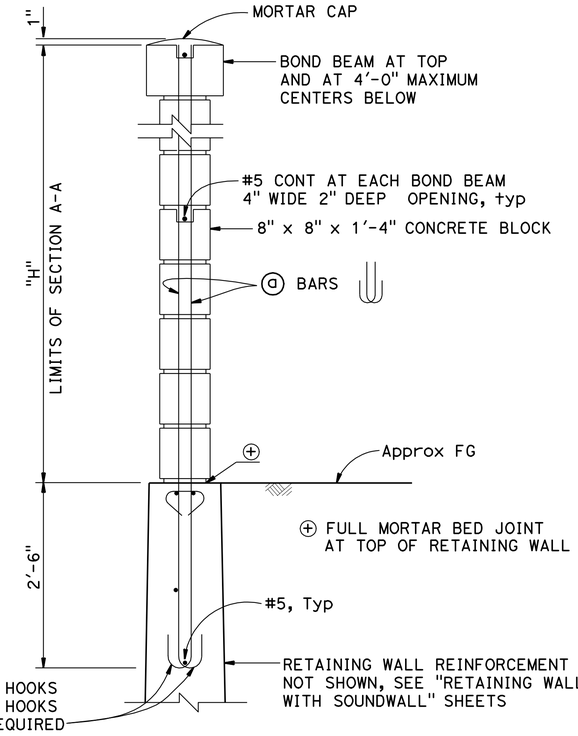


CONCRETE BARRIER TYPE 736A (MOD) SECTION

1" = 1'

NOTES:

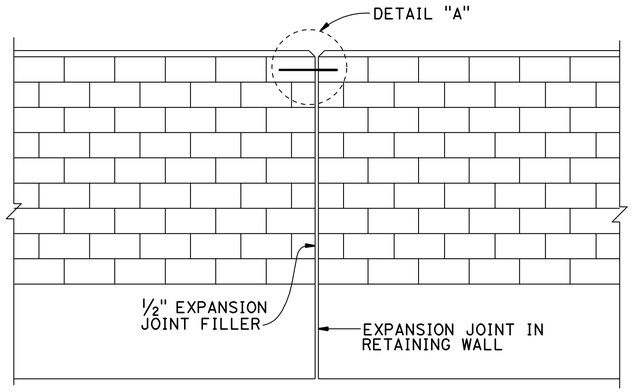
1. For details not shown, see "RETAINING WALL WITH WOUNDWALLI" sheets.
2. Slope ground at traffic side of barrier to drain maximum slope *10%, see "STANDARD PLAN B11-56, NOTE D"



FOR DETAILS NOT SHOWN,SEE H=12'-0" THRU H=16'-0"

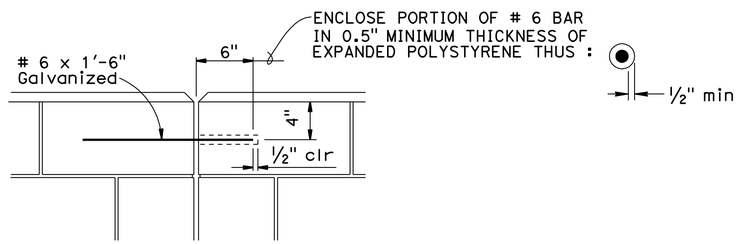
TYPICAL SECTIONS H = 6'-0" Thru H = 10'-0"

1" = 1'



ALIGNMENT KEY DETAIL

1" = 1'



DETAIL A

1½" = 1'

DESIGN	BY C. Udarbe	CHECKED R. Coria	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 17	BRIDGE NO. 29E0010
DETAILS	BY G. Leung	CHECKED C. Udarbe			POST MILE 18.15
QUANTITIES	BY P. Vu	CHECKED R. Coria			

SOUTH STOCKTON WIDENING

SOUNDWALL NO. 10

SOUNDWALL ON RETAINING WALL-MASONRY BLOCK DETAILS NO. 2

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
01-13-12				11	18

FILE => 29e-0010-xs15-120-2e.dgn

USERNAME => s121674 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1311	1414

CJ V. Udarbe — REGISTERED CIVIL ENGINEER — 11-04-11 DATE

3-26-12 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CHRIS UDARBE — No. C62985 — Exp. 12-30-12 — CIVIL — STATE OF CALIFORNIA

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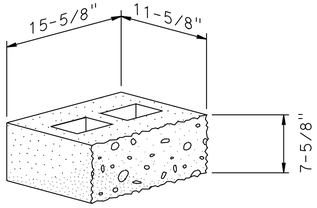
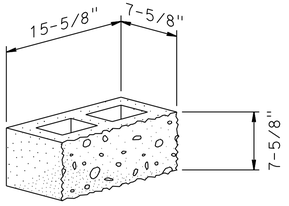


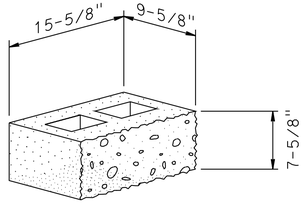
'A' BLOCK

SPLIT FACE ON SIDE
12 X 8 X 16 NOMINAL



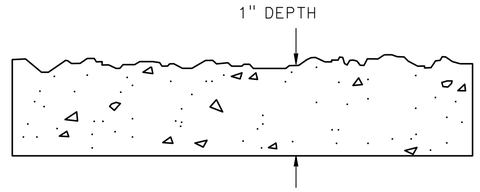
'B' BLOCK

SPLIT FACE ON SIDE
8 X 8 X 16 NOMINAL



'C' BLOCK

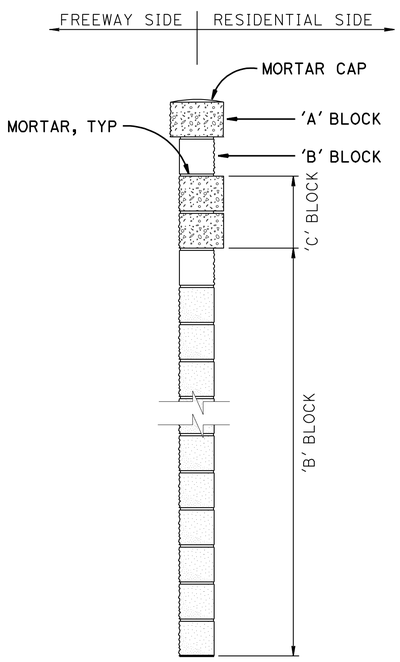
SPLIT FACE ON SIDE
10 X 8 X 16 NOMINAL



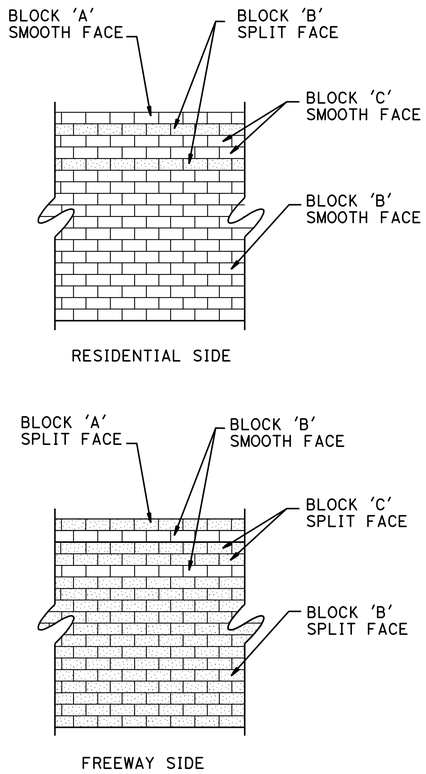
NOTES: - TEXTURE #T323 LIMESTONE1
- MEASUREMENTS ARE APPROXIMATE

TYPICAL SPLIT FACE DETAIL

NO SCALE



TYPICAL SECTION

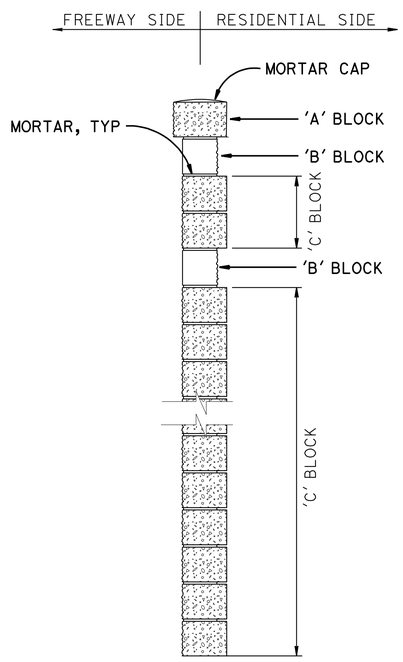


ELEVATION
TYPICAL TREATMENT

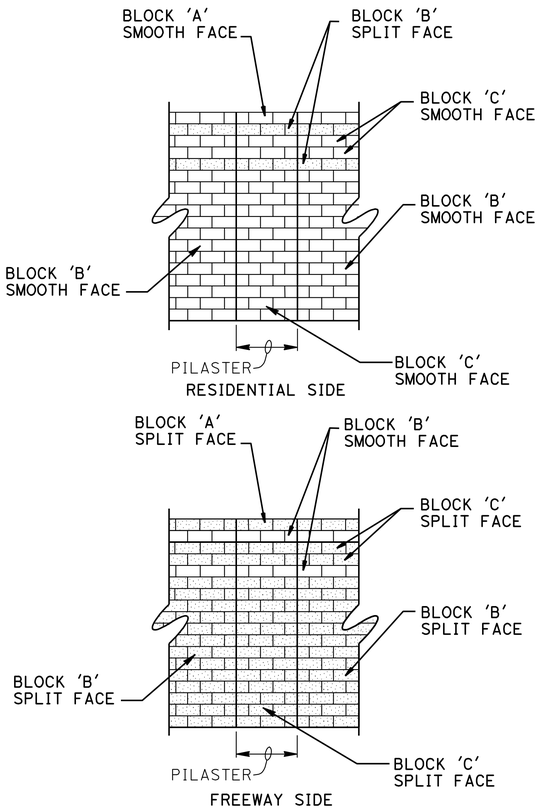
SOUND WALL DETAILS

NO SCALE

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



TYPICAL SECTION



ELEVATION
TYPICAL TREATMENT

SOUND WALL AT PILASTER DETAILS

NO SCALE

DESIGN	BY C. Udarbe	CHECKED R. Coria	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 17	BRIDGE NO. 29E0010
DETAILS	BY G. Leung	CHECKED C. Udarbe			POST MILE 18.15
QUANTITIES	BY P. Vu	CHECKED R. Coria			

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
ARCHITECTURAL DETAILS NO. 1

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
~~12-09-10~~		09-29-11	02-29-12	12	18

FILE => 29e-0010-y-archdet01.dgn

USERNAME => 612614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1312	1414

C. V. Udarbe 11-04-11
REGISTERED CIVIL ENGINEER DATE

3-26-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CHRIS UDARBE
No. C62985
Exp 12-30-12
CIVIL
STATE OF CALIFORNIA

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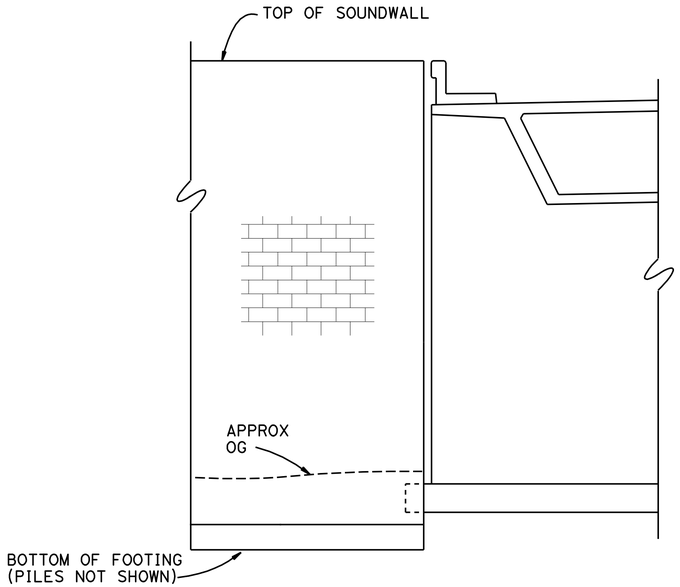
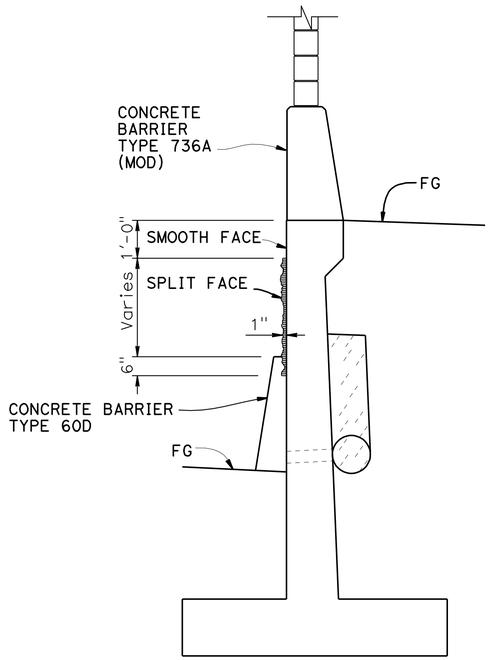
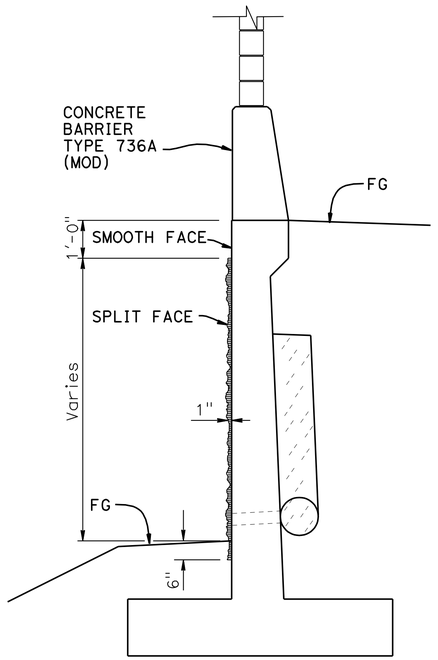


END OF SOUNDWALL & BRIDGE GAP DETAIL

NO SCALE





RETAINING WALL DETAILS TYPICAL SECTION

½" = 1'-0"

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

	BY	CHECKED
DESIGN	C. Udarbe	R. Coria
DETAILS	G. Leung	C. Udarbe
QUANTITIES	P. Vu	R. Coria

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 29E0010
POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUNDWALL NO. 10
ARCHITECTURAL DETAILS NO. 2

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
~~12-09-10~~		03-01-12	~~02-29-12~~	13	18

FILE => 29e-0010-y-archdet02.dgn

USERNAME => s1216l4 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1313	1414

Joseph M Kaump 8-24-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST
Joseph Kaump
No. 7837
Exp. 01-31-13
STATE OF CALIFORNIA

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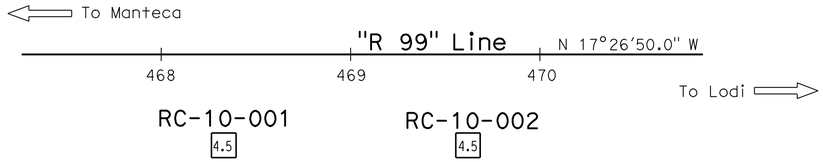
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

BENCH MARK

Southeast corner of Main Street OC.
60.8 ft Right ℄ Rte 99, Sta 466+21.7
Vertical Datum NGVD 29.
Elev 35.94 ft.

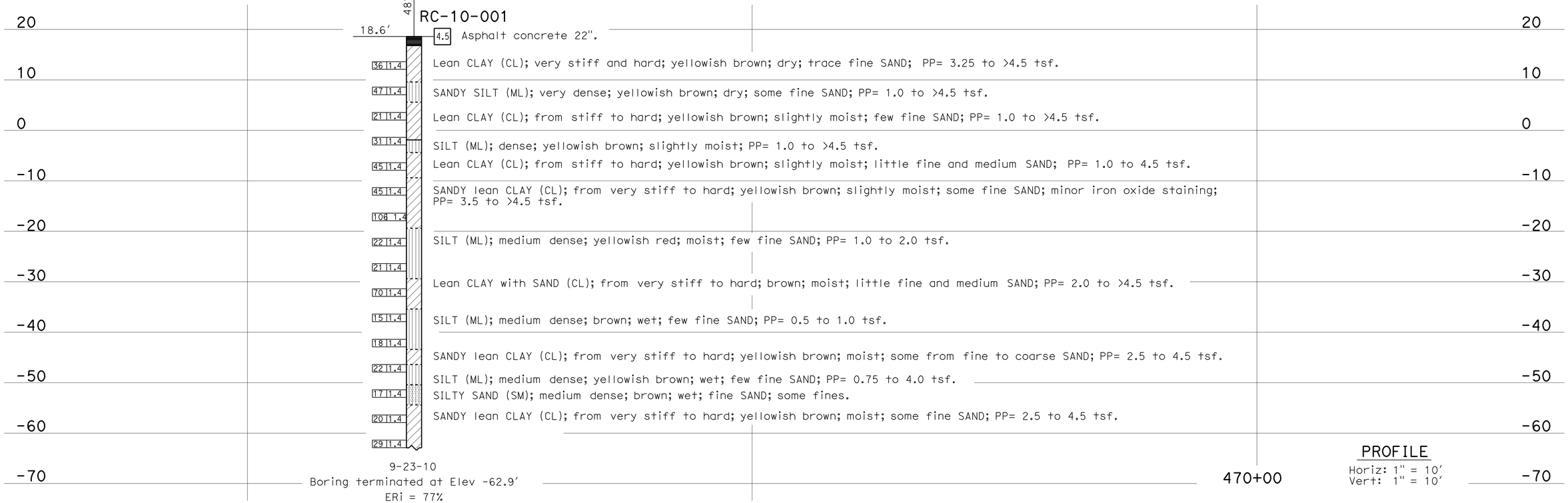


PLAN

1" = 40'

Notes:

1. Groundwater present but not measured.
2. Refer to the Boring RC-10-002 for Main street OC (Br. 29-0327) dated 9-28-10. Groundwater was measured at elevation -29.0 on 9-29-10.



PROFILE

Horiz: 1" = 10'
Vert: 1" = 10'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 17	BRIDGE NO. 29E0010	SOUTH STOCKTON WIDENING
FUNCTIONAL SUPERVISOR NAME: R. Buell	DRAWN BY: F. Nguyen 7/11 CHECKED BY: A. Barrie	FIELD INVESTIGATION BY: T. Alderman		POST MILE 18.15	SOUND WALL NO. 10 LOG OF TEST BORINGS 1 OF 5

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
08-24-11				14	18

FILE => 29e-0010z-ltb1of5.dgn

USERNAME => s121614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1314	1414

Joseph M Kaump 8-24-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST
Joseph Kaump
No. 7837
Exp. 01-31-13
STATE OF CALIFORNIA

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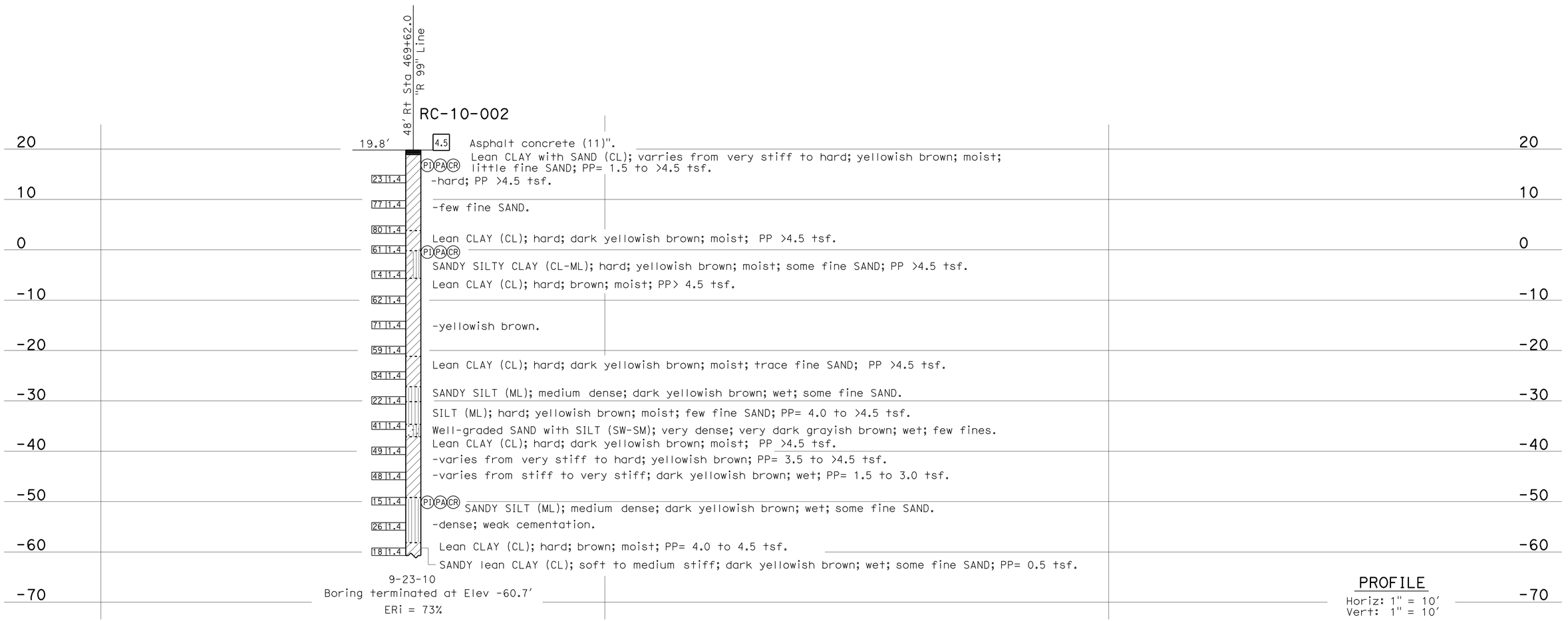
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 5"



PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 17	BRIDGE NO. 29E0010	SOUTH STOCKTON WIDENING
FUNCTIONAL SUPERVISOR NAME: R. Buell	DRAWN BY: F. Nguyen 7/11 CHECKED BY: A. Barrie	FIELD INVESTIGATION BY: J. Kaump		POST MILE 18.15	SOUND WALL NO. 10 LOG OF TEST BORINGS 2 OF 5

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES	SHEET	OF
08-24-11	15	18

FILE => 29e-0010z-ltb2of5.dgn

USERNAME => s1216l4 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:10

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1315	1414

Joseph M Kaump 8-24-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST
Joseph Kaump
No. 7837
Exp. 01-31-13
STATE OF CALIFORNIA

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CEMENTATION

Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

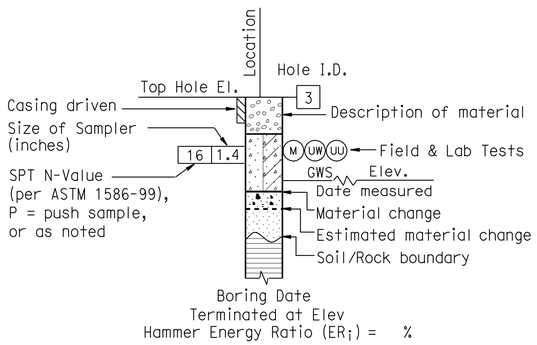
BOREHOLE IDENTIFICATION

Symbol	Hole Type	Description
Size	A	Auger Boring (hollow or solid stem bucket)
Size	R RW RC P	Rotary drilled boring (conventional) Rotary drilled with self-casing wire-line Rotary core with continuously-sampled, self-casing wire-line Rotary percussion boring (air)
Size	R	Rotary drilled diamond core
Size	HD HA	Hand driven (1-inch soil tube) Hand Auger
●	D	Dynamic Cone Penetration Boring
▲	CPT	Cone Penetration Test (ASTM D 5778)
⬚	O	Other (note on LOTB)

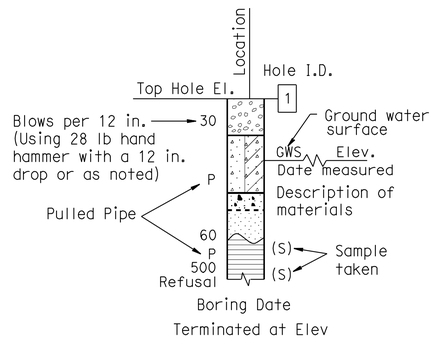
Note: Size in inches.

CONSISTENCY OF COHESIVE SOILS

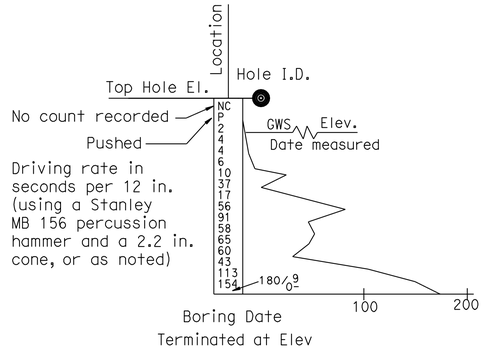
Description	Shear Strength (tsf)	Pocket Penetrometer Measurement, PP, (tsf)	Torvane Measurement, TV, (tsf)	Vane Shear Measurement, VS, (tsf)
Very Soft	Less than 0.12	Less than 0.25	Less than 0.12	Less than 0.12
Soft	0.12 - 0.25	0.25 - 0.5	0.12 - 0.25	0.12 - 0.25
Medium Stiff	0.25 - 0.5	0.5 - 1	0.25 - 0.5	0.25 - 0.5
Stiff	0.5 - 1	1 - 2	0.5 - 1	0.5 - 1
Very Stiff	1 - 2	2 - 4	1 - 2	1 - 2
Hard	Greater than 2	Greater than 4	Greater than 2	Greater than 2



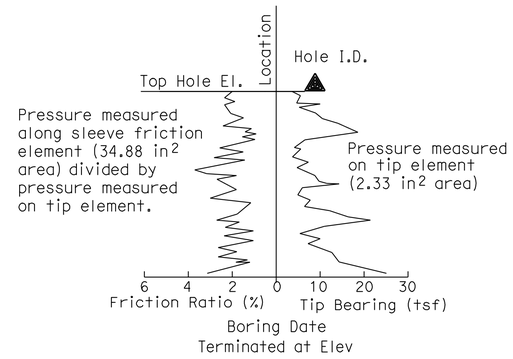
ROTARY BORING



HAND BORING



DYNAMIC CONE PENETRATION BORING



CONE PENETRATION TEST (CPT) BORING

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 17	BRIDGE NO. 29E0010 POST MILE 18.15	SOUTH STOCKTON WIDENING SOUND WALL NO. 10 LOG OF TEST BORINGS 3 OF 5
	PREPARED BY: F. Nguyen 7/11				

GS LOTB SOIL LEGEND

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
08-24-11				16	18

FILE => 29e-0010z-ltb3of5.dgn

USERNAME => s1216l4 DATE PLOTTED => 23-MAR-2012 TIME PLOTTED => 13:10

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010)

GROUP SYMBOLS AND NAMES

Graphic/Symbol	Group Names
GW	Well-graded GRAVEL Well-graded GRAVEL with SAND
GP	Poorly-graded GRAVEL Poorly-graded GRAVEL with SAND
GW-GM	Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND
GW-GC	Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)
GP-GM	Poorly-graded GRAVEL with SILT Poorly-graded GRAVEL with SILT and SAND
GP-GC	Poorly-graded GRAVEL with CLAY (or SILTY CLAY) Poorly-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)
GM	SILTY GRAVEL SILTY GRAVEL with SAND
GC	CLAYEY GRAVEL CLAYEY GRAVEL with SAND
GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND
SW	Well-graded SAND Well-graded SAND with GRAVEL
SP	Poorly-graded SAND Poorly-graded SAND with GRAVEL
SW-SM	Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL
SW-SC	Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)
SP-SM	Poorly-graded SAND with SILT Poorly-graded SAND with SILT and GRAVEL
SP-SC	Poorly-graded SAND with CLAY (or SILTY CLAY) Poorly-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)
SM	SILTY SAND SILTY SAND with GRAVEL
SC	CLAYEY SAND CLAYEY SAND with GRAVEL
SC-SM	SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL
PT	PEAT
	COBBLES COBBLES and BOULDERS BOULDERS

Graphic/Symbol	Group Names
CL	Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
CL-ML	SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
ML	SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
OL	ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
OL	ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
CH	Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
MH	Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
OH	ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
OH	ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
OL/OH	ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND

FIELD AND LABORATORY TESTING

- (C) Consolidation (ASTM D 2435)
- (CL) Collapse Potential (ASTM D 5333)
- (CP) Compaction Curve (CTM 216)
- (CR) Corrosivity Testing (CTM 643, CTM 422, CTM 417)
- (CU) Consolidated Undrained Triaxial (ASTM D 4767)
- (DS) Direct Shear (ASTM D 3080)
- (EI) Expansion Index (ASTM D 4829)
- (M) Moisture Content (ASTM D 2216)
- (OC) Organic Content-% (ASTM D 2974)
- (P) Permeability (CTM 220)
- (PA) Particle Size Analysis (ASTM D 422)
- (PI) Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
- (PL) Point Load Index (ASTM D 5731)
- (PM) Pressure Meter
- (R) R-Value (CTM 301)
- (SE) Sand Equivalent (CTM 217)
- (SG) Specific Gravity (AASHTO T 100)
- (SL) Shrinkage Limit (ASTM D 427)
- (SW) Swell Potential (ASTM D 4546)
- (UC) Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938)
- (UU) Unconsolidated Undrained Triaxial (ASTM D 2850)
- (UW) Unit Weight (ASTM D 4767)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1316	1414

Joseph M Kaump 8-24-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — Joseph Kaump — No. 7837 — Exp. 01-31-13 — STATE OF CALIFORNIA

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APPARENT DENSITY OF COHESIONLESS SOILS

Description	SPT N_{60} (Blows / 12 in.)
Very Loose	0 - 5
Loose	5 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Greater than 50

MOISTURE

Description	Criteria
Dry	No discernable moisture
Moist	Moisture present, but no free water
Wet	Visible free water

PERCENT OR PROPORTION OF SOILS

Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5% - 10%
Little	15% - 25%
Some	30% - 45%
Mostly	50% - 100%

PARTICLE SIZE

Description		Size (in.)
Boulder		Greater than 12
Cobble		3 - 12
Gravel	Coarse	3/4 - 3
	Fine	1/5 - 3/4
Sand	Coarse	1/16 - 1/5
	Medium	1/64 - 1/16
	Fine	1/300 - 1/64
Silt and Clay		Less than 1/300

ENGINEERING SERVICES

MATERIALS AND GEOTECHNICAL SERVICES

PREPARED BY: F. Nguyen 7/11

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 29E0010
POST MILE 18.15

SOUTH STOCKTON WIDENING
SOUND WALL NO. 10
LOG OF TEST BORINGS 4 OF 5

GS LOTB SOIL LEGEND

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3586
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
08-24-11				17	18

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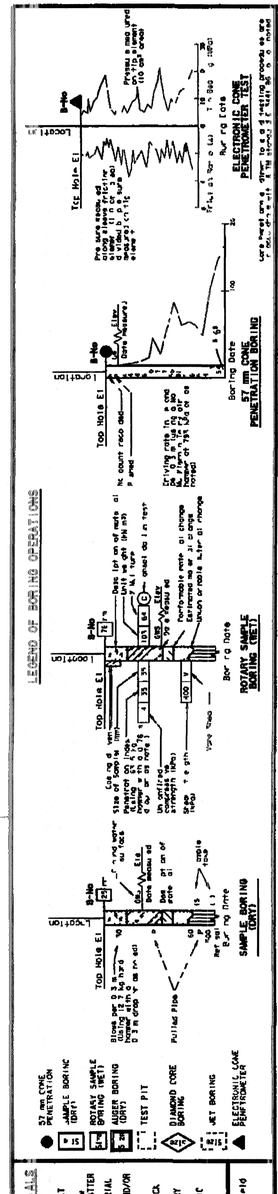
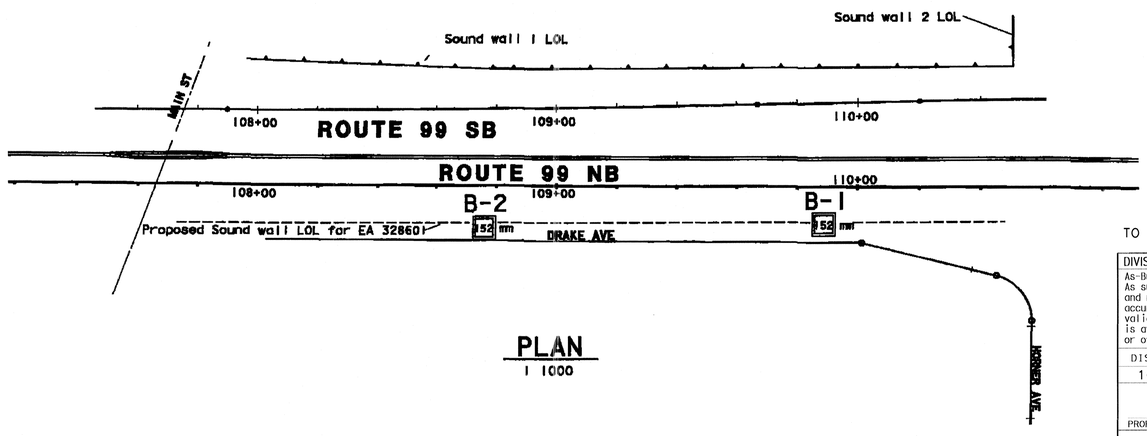
USERNAME => s121614 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 13:10



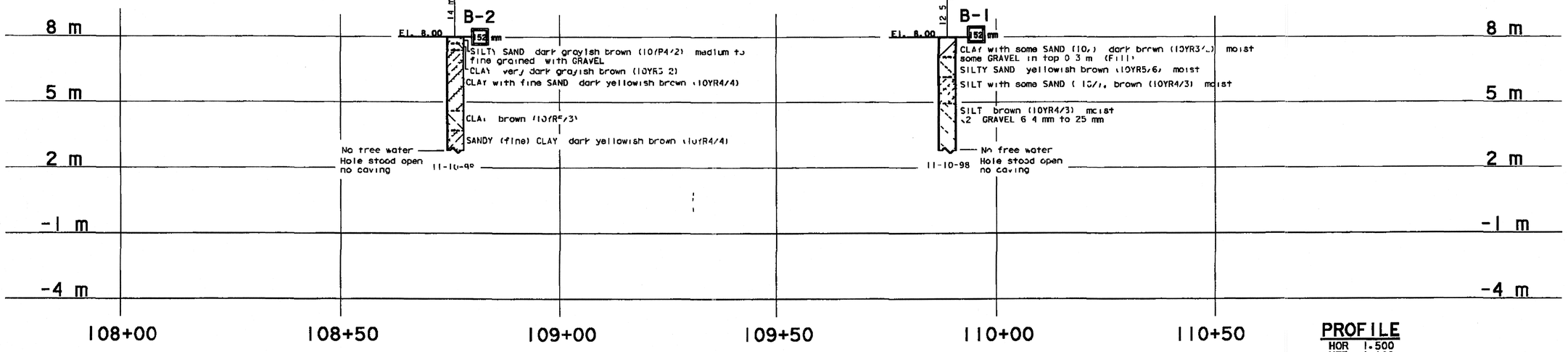


PLAN
1 1000

BENCH MARK

Fd toe of Sound wall 17, 11 806 m
Rt Sta 110+48 219 C/L Rte 99
Elev 8 38 m

NOTE Boring Data B-1 and B-2 were originally drilled for EA 32860I



PROFILE
HOR 1-500
VER 1 100

TO ACCOMPANY PLANS DATED 3-26-12

DIVISION OF ENGINEERING SERVICES - MATERIALS AND GEOTECHNICAL SERVICES

As-Built Log of Test Borings sheet is considered an informational document only. As such, the State of California registration seal with signature, license number and registration certificate expiration date confirm that this is a true and accurate copy of the original document. It does not attest to the accuracy or validity of the information contained in the original document. This drawing is available and presented only for the convenience of any bidder, contractor or other interested party.

DIST.	COUNTY	ROUTE	POST MILE-TOTAL PROJECT	Sheet No.	Total Sheets
10	SJ	4,99	R19.5/R20.1,15.0/18.6	1317	1414

PROFESSIONAL GEOLOGIST — DATE 8-24-11

Joseph Kaump, No. 7837, Exp. 1-31-13, PROFESSIONAL GEOLOGIST, STATE OF CALIFORNIA

SOUTH STOCKTON WIDENING
SOUND WALL NO. 10
LOG OF TEST BORINGS 5 OF 5

UNIT: 3643	CONTRACT No.	BRIDGE No.
PROJECT NUMBER & PHASE: 10000004091	10-3A1001	29E-0010

NOTE: A COPY OF THIS LOG OF TEST BORINGS IS AVAILABLE AT OFFICE OF STRUCTURE MAINTENANCE AND INVESTIGATIONS, SACRAMENTO, CALIFORNIA — Sheet 18 of 18

Revisions made to this Log of Test Borings from the original 1998 As-Built Log of Test Borings are the addition of the following table and note:

Boring	Station	Offset from ℄ Rte 99
B-1	474+00	72.0 ft Right
B-2	470+32	79.0 ft Right

Note:
The data are the As-Built Test Borings referenced to the proposed new structure location. This table is presented on the As-Built Log of Test Boring sheet for the convenience of any bidder, contractor or other interested party.

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
10	SJ	99	29 2/29 5	19	23

REGISTERED GEOLOGIST
1-8-01
PLANS APPROVAL DATE

REGISTERED GEOLOGIST, CARL W SAMUEL, No 6094, Exp 11-30-00, STATE OF CALIFORNIA

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Caltrans now has a web site linked to the web site up to http://www.dot.ca.gov

Caltrans Metric

ENGINEERING SERVICE CENTER	STRUCTURE FOUNDATIONS
DRAWN BY IRMA G-REMMEN 1/99	FIELD INVESTIGATION BY: C W SAMUEL
CHECKED BY	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF STRUCTURES
STRUCTURE DESIGN

BRIDGE NO
KILOMETER POST 29 2/29 5

SOUND WALL
LOG OF TEST BORINGS SW-11

CU 06241
EA 3A0801

REVISION DATES PRELIMINARY TAKE OUT | SHEET | OF

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 2 5 99

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100

DATE PLOTTED => 12-JAN 2001
TIME PLOTTED => 07 02

FILENAME => 29e-0010z-ltb5of5.tif

OSP GEOLOGIST LOG OF TEST BORINGS SHEET (METRIC) (REV 11/18/97)

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1318	1414

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: FRANCIS SOLICH

Approval date: 08-04-11

Jack Wheeler 02-29-12

REGISTERED ENGINEER-MECHANICAL DATE

REGISTERED PROFESSIONAL ENGINEER — Jack Wheeler — No. 21648 — Exp. 06-30-13 — MECH — STATE OF CALIFORNIA

3-26-12

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.

INDEX OF SHEETS

STRUCTURAL

East Stockton UP Pumping Plant

Rte 26/99 Sep Pumping Plant

INDEX OF SHEETS, CONTINUED

MECHANICAL

East Stockton UP Pumping Plant

Rte 26/99 SEP Pumping Plant

ELECTRICAL

East Stockton UP Pumping Plant

Rte 26/99 SEP Pumping Plant

ABBREVIATIONS

Ø	Diameter
EL	Elevation
LOEP	Low Edge of Pavement
O.D.	Outside Diameter
PP	Pumping Plant
Sch	Schedule
S.S.	Stainless Steel

DESIGN SUPERVISOR

DESIGN ENGINEER

	BY	CHECKED
DESIGN	Thomas Dietsch	Jesus Ramirez
DETAILS	Thomas Dietsch	Jesus Ramirez
QUANTITIES	Thomas Dietsch	Jesus Ramirez

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

BRIDGE NO. 29-0115W, 29-0120W

POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

INDEX OF SHEETS AND ABBREVIATIONS

SHEET GP-0

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3615

PROJECT NUMBER & PHASE 1000000409

EA 3A1001

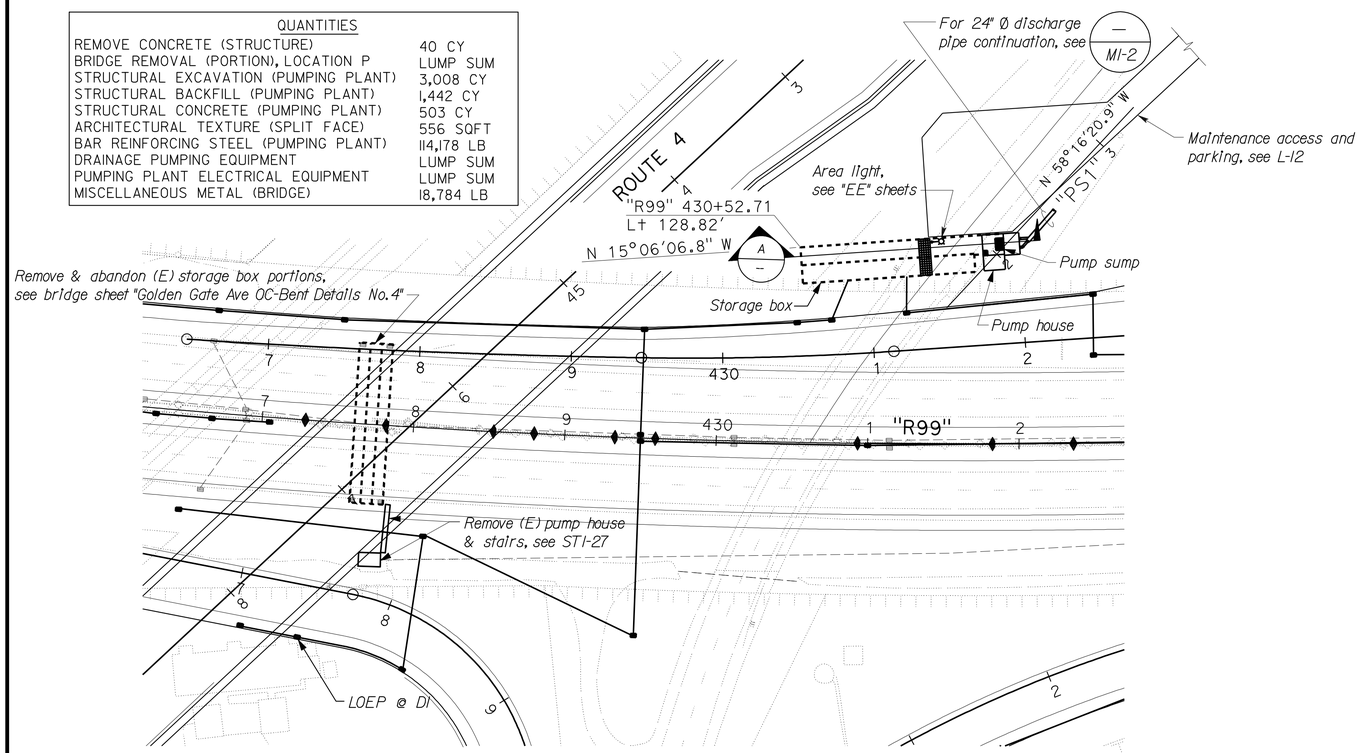
DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) 02-29-12

SHEET OF

VI=1

QUANTITIES	
REMOVE CONCRETE (STRUCTURE)	40 CY
BRIDGE REMOVAL (PORTION), LOCATION P	LUMP SUM
STRUCTURAL EXCAVATION (PUMPING PLANT)	3,008 CY
STRUCTURAL BACKFILL (PUMPING PLANT)	1,442 CY
STRUCTURAL CONCRETE (PUMPING PLANT)	503 CY
ARCHITECTURAL TEXTURE (SPLIT FACE)	556 SQFT
BAR REINFORCING STEEL (PUMPING PLANT)	114,178 LB
DRAINAGE PUMPING EQUIPMENT	LUMP SUM
PUMPING PLANT ELECTRICAL EQUIPMENT	LUMP SUM
MISCELLANEOUS METAL (BRIDGE)	18,784 LB



SITE PLAN
1"=50'

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: FRANCIS SOLICH
Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1319	1414

REGISTERED ENGINEER-MECHANICAL — DATE: 08-24-11

REGISTERED PROFESSIONAL ENGINEER — Jack Wheeler — No. 21648 — Exp. 06-30-13 — MECH — STATE OF CALIFORNIA

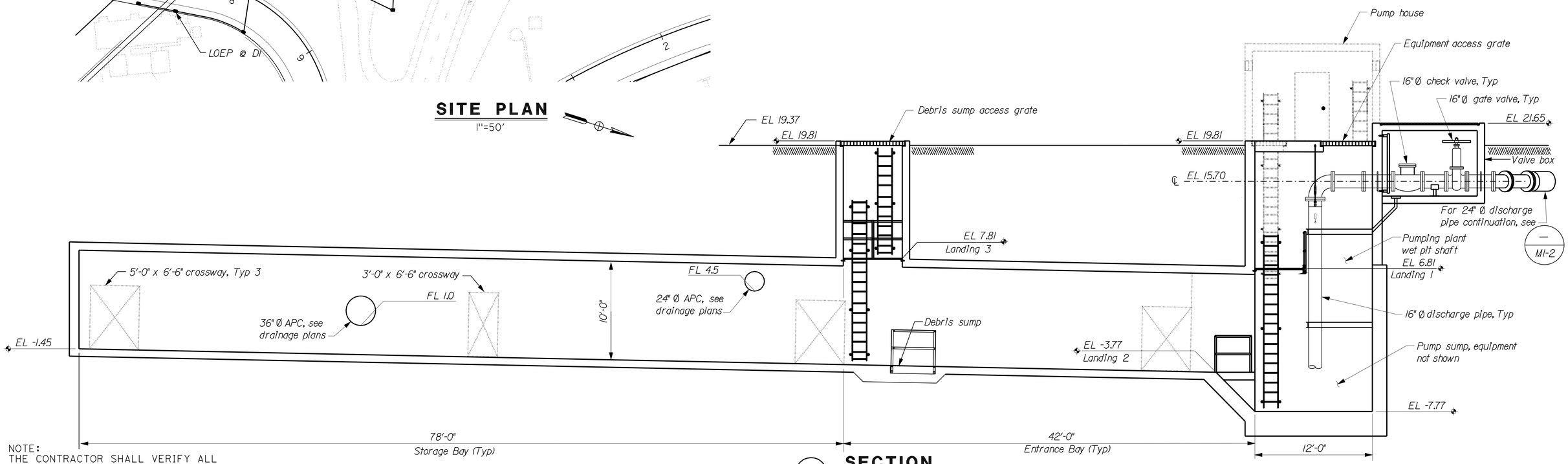
3-26-12
PLANS APPROVAL DATE

EQUIPMENT SCHEDULE

EQUIPMENT	PUMP PERFORMANCE		ELECTRICAL CHARACTERISTICS
	PUMPING RATE (Gallons per Minute)	TOTAL DYNAMIC HEAD (Feet)	
Drainage Pumps No.1 and 2	5050 5400 5800	44.5 42.0 37.5	480 V, 3 phase, 60 Hz 1200 RPM (sync.), 75 hp

RAINFALL DATA	
Storm Time (Min)	R_{50} (in)
5	0.366
10	0.473
15	0.550
30	0.711
60	0.920

Storage: 22,000 cubic feet in Storage Box
Storage: 7,000 cubic feet in Collection System
For details of Collection System, See "Drainage Plans"
For underground electrical conduits, see "Electrical Plans"
Drainage area: 1,061,000 square ft
LOEP @ DI: EL 8.68 ft, 34.0' Rt 427+50.00 ℄ "GG2"



A SECTION
1"=5'

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

THIS DRAWING ACCURATE FOR PUMPING PLANT WORK ONLY

DESIGN SUPERVISOR

DESIGN ENGINEER

	BY		CHECKED
DESIGN	Thomas Dietsch		Jesus Ramirez
DETAILS	Thomas Dietsch		Jesus Ramirez
QUANTITIES	Thomas Dietsch		Jesus Ramirez

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

UNIT 3615
PROJECT NUMBER & PHASE 1000000409

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

EAST STOCKTON UP PUMPING PLANT

GENERAL PLAN

SHEET GP-1

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)								SHEET	OF
06-17-10	08-18-10	02-09-11	03-28-11	04-13-11	05-18-11	07-06-11	08-24-11		

EA 3A1001 FILE => gp_1.dgn

USERNAME => s1216114 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 17:44

VI=1

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1320	1414

REGISTERED ENGINEER-MECHANICAL — DATE 08-24-11

REGISTERED PROFESSIONAL ENGINEER — Jack Wheeler — No. 21648 — Exp. 06-30-13 — MECH — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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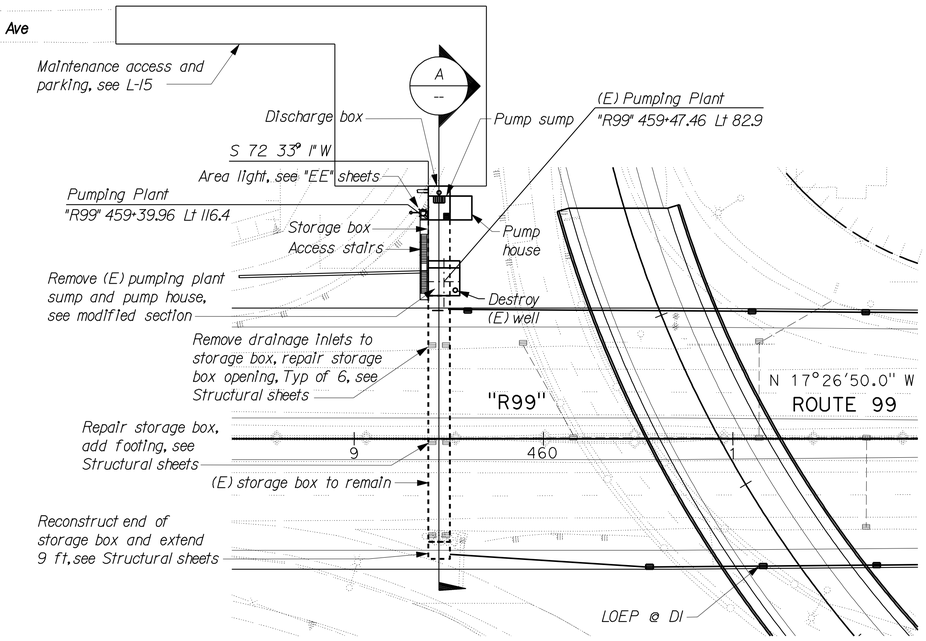
CALIFORNIA STATE FIRE MARSHAL APPROVED

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: FRANCIS SOLICH

Approval date: 08-04-11



SITE PLAN

1"=40'

EQUIPMENT SCHEDULE

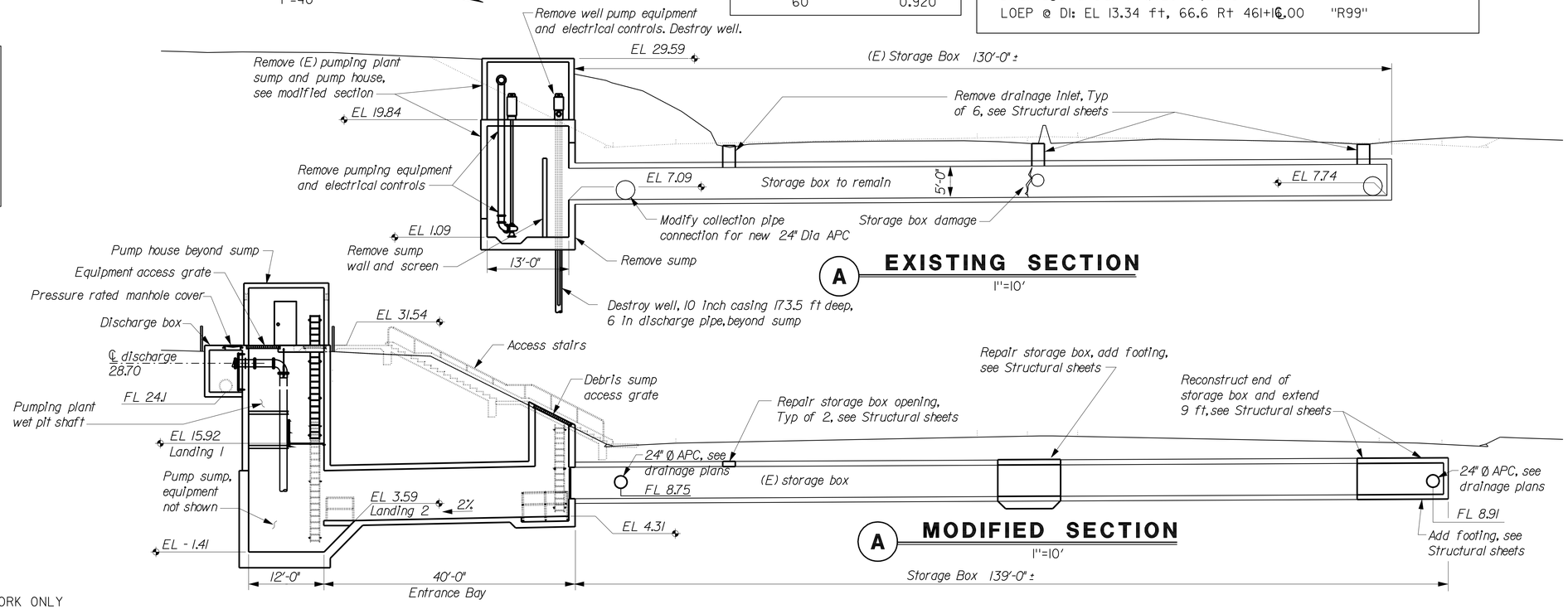
EQUIPMENT	PUMP PERFORMANCE		ELECTRICAL CHARACTERISTICS
	PUMPING RATE (Gallons per Minute)	TOTAL DYNAMIC HEAD (Feet)	480 V, 3 phase, 60 Hz 880 RPM (sync.), 40 hp
Drainage Pumps No. 1 and 2	3100	31.0	
	3900	27.0	
	4300	25.0	

RAINFALL DATA

Storm Time (Min)	R_{50} (in)
5	0.366
10	0.473
15	0.550
30	0.711
60	0.920

Storage: 6,500 cubic feet in (E) Storage Box
Storage: 2,450 cubic feet in new Storage Box
Storage: 6,325 cubic feet in Collection System
For details of Collection System, See "Drainage Plans"
For underground electrical conduits, see "Electrical Plans"
Drainage area: 644,720 square ft
LOEP @ DI: EL 13.34 ft, 66.6 Rt 461+16.00 "R99"

QUANTITIES	
DESTROY WELL	LUMP SUM
REMOVE CONCRETE (STRUCTURE)	70 CY
BRIDGE REMOVAL (PORTION), LOCATION 0	LUMP SUM
STRUCTURAL EXCAVATION (PUMPING PLANT)	2,377 CY
STRUCTURAL BACKFILL (PUMPING PLANT)	1,400 CY
STRUCTURAL CONCRETE (PUMPING PLANT)	306 CY
ARCHITECTURAL TEXTURE (SPLIT FACE)	446 SQFT
BAR REINFORCING STEEL (PUMPING PLANT)	60,000 LB
DRAINAGE PUMPING EQUIPMENT	LUMP SUM
PUMPING PLANT ELECTRICAL EQUIPMENT	LUMP SUM
MISCELLANEOUS METAL (BRIDGE)	12,600 LB



A EXISTING SECTION

1"=10'

A MODIFIED SECTION

1"=10'

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

THIS DRAWING ACCURATE FOR PUMPING PLANT WORK ONLY

	BY	CHECKED
DESIGN	Thomas Dietsch	Jesus Ramirez
DETAILS	Thomas Dietsch	Jesus Ramirez
QUANTITIES	Thomas Dietsch	Jesus Ramirez

DESIGN SUPERVISOR

DESIGN ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

UNIT 3615
PROJECT NUMBER & PHASE 1000000409

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

GENERAL PLAN

SHEET GP-2

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)								SHEET	OF
06-17-10	10-19-10	02-09-11	03-28-11	04-13-11	04-20-11	05-18-11	07-06-11	08-24-11		

EA 3A1001 FILE => gp_2.dgn

USERNAME => S12161 4 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 17:44

V=1

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1321	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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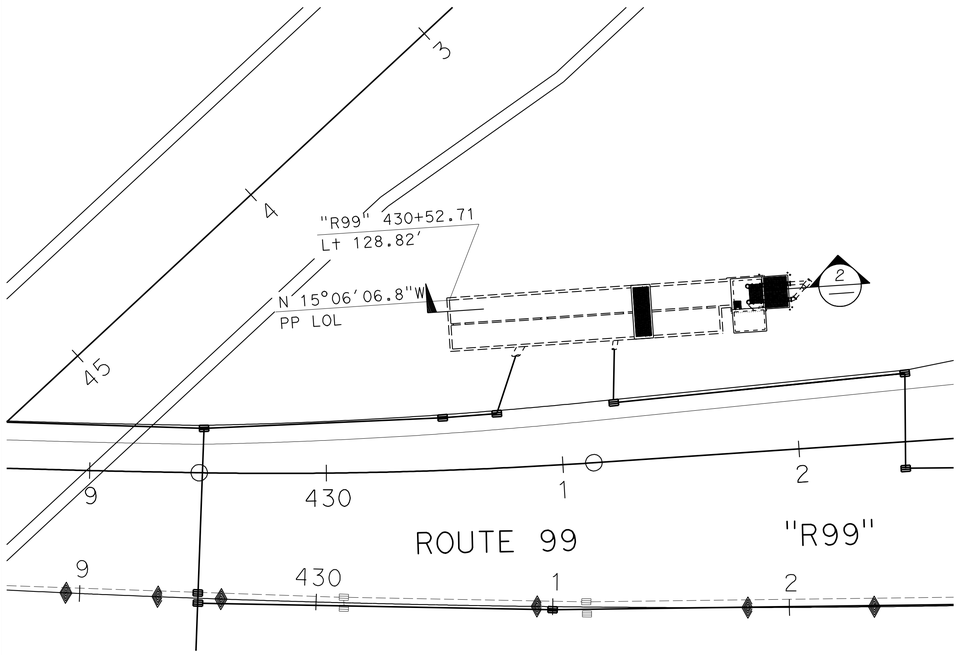
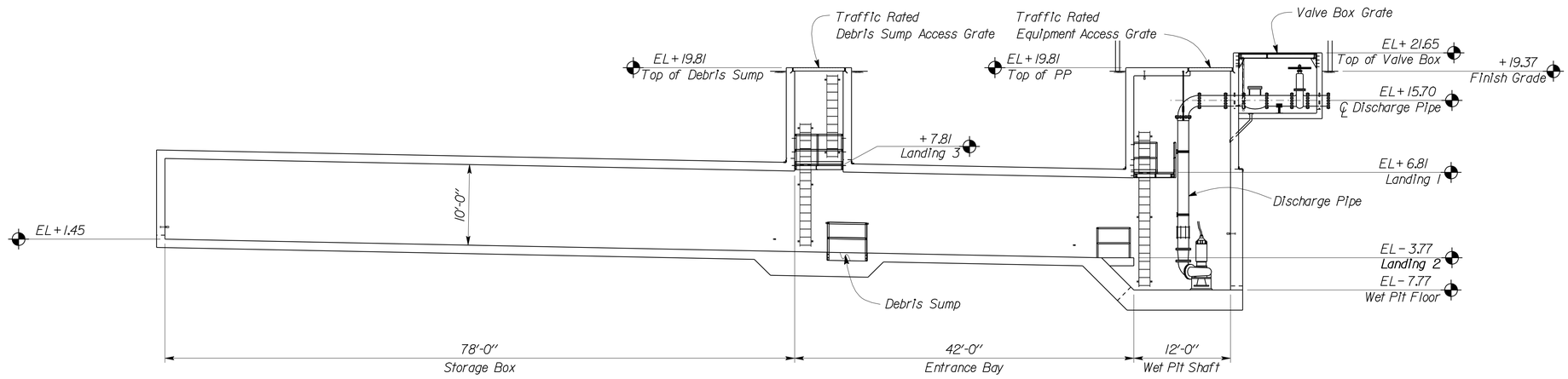


1 STRUCTURAL PLAN
Scale 1/32" = 1'-0"



2 PUMPING PLANT SECTION
Scale 1/8" = 1'-0"

R E Transit DESIGN SUPERVISOR / DESIGN ENGINEER	DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN
	DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat		
	QUANTITIES	BY	CHECKED		

BRIDGE NO. 29-0115W
POST MILE
EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
EAST STOCKTON UP PUMPING PLANT
STRUCTURAL SITE PLAN
SHEET ST1-0

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES (PRELIMINARY STAGE ONLY): 02-07-11 | 04-07-11 | SHEET | OF

28-MAR-2012 14:49

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A PUMPING PLANT DESIGN NOTES

1. Design : AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments, Preface Dated December 2008
   a. Loads :
      Vertical Box :
      Earth Loads (Equivalent Fluid Pressure):
      60 PCF above GWT
      90 PCF below GWT
      Horizontal Box :
      Live Load : HS 20-44 Truck
      Roof : 30% Impact up to 3' of cover, no Impact above 3' of cover.
      Walls : No surcharge
      Invert : No Impact
      Earth Loads (Equivalent Fluid Pressure for two conditions):
      140 PCF vertical and 42 PCF horizontal
      140 PCF vertical and horizontal
      Landings : Live Load 100 PSF
   b. Reinforced Concrete (Ultimate Strength Design):
      $f'c$ = 3,250 PSI
      f_y = 60,000 PSI
   c. Miscellaneous Metal (Working Stress Design):
      f_y = 36,000 PSI unless otherwise noted
2. Foundation Report : Dated April 11, 2011

B DETAIL NOTES

1. Metal Work Notes :
   a. All metal work shall be hot dip galvanized after fabrication
   b. Secure metal to metal connections shown as + with a 1/2" Ø x 1 1/2" hex head machine bolt, lock washer and hex nut unless otherwise noted.
   c. Mechanical Expansion Anchors shall be 5/8" Ø and have a 4" minimum embedment, 3'-0" maximum spacing and placed 6" from ends, two minimum, unless otherwise shown.
   d. Mechanical Expansion Anchors used for securing ladders inside of Pumping Plant shall be of stainless steel.
   e. All lock washers shall be helical spring lock washers.
   f. All Railing and Ladders shall have smooth edges.
   g. Welded Steel Grate : Unless otherwise noted
      Bearing Bars 1 3/4" x 3/16" @ 1 3/16" C-C
      Cross Bars 1/2" Ø @ 4" C-C
      Trim Bars 1 3/4" x 3/16" fillet welded to ends of Bearing Bars
      Grate shall be anchored to supports with 1/4" Ø threaded stud and "Saddle Clip" type fastener as recommended by the manufacturer. Fasteners shall be installed at 3'-0" C-C maximum 6" from ends with 3 minimum per fixed grate.
   h. Welded Steel Grate :
      Traffic Rated Grate :
      Bearing Bars 5" x 3/8" @ 1 3/16" C-C
      Cross Bars 1/2" Ø @ 4" C-C
      Trim Bars 5" x 3/8" fillet welded to ends of Bearing Bars
      Direction of Bearing Bars is indicated by
2. For Discharge Pipe locations and elevations, see Mechanical Plans.
3. For Ground Rod details not shown, see Electrical Plans.
4. For Ladder Details, see (1 / ST1-16) & (--- / ST1-25) for Ladder Safety Post

SYMBOLS

- Elevation or Working Point
- Earth
- Existing Features
- Reinforced Concrete
- (3 / ST-1) 5b — Detail Number or Note Number; Additional Reference (If required); Sheet Number

ABBREVIATIONS

Alt	Alternative
EL	Elevation or Working Point
GWT	Ground Water Table
MEA	Mechanical Expansion Anchor
OH	Opposite Hand
Opt	Optional
PP	Pumping Plant
PP LOL	Pumping Plant Layout Line

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1322	1414

N Bapat 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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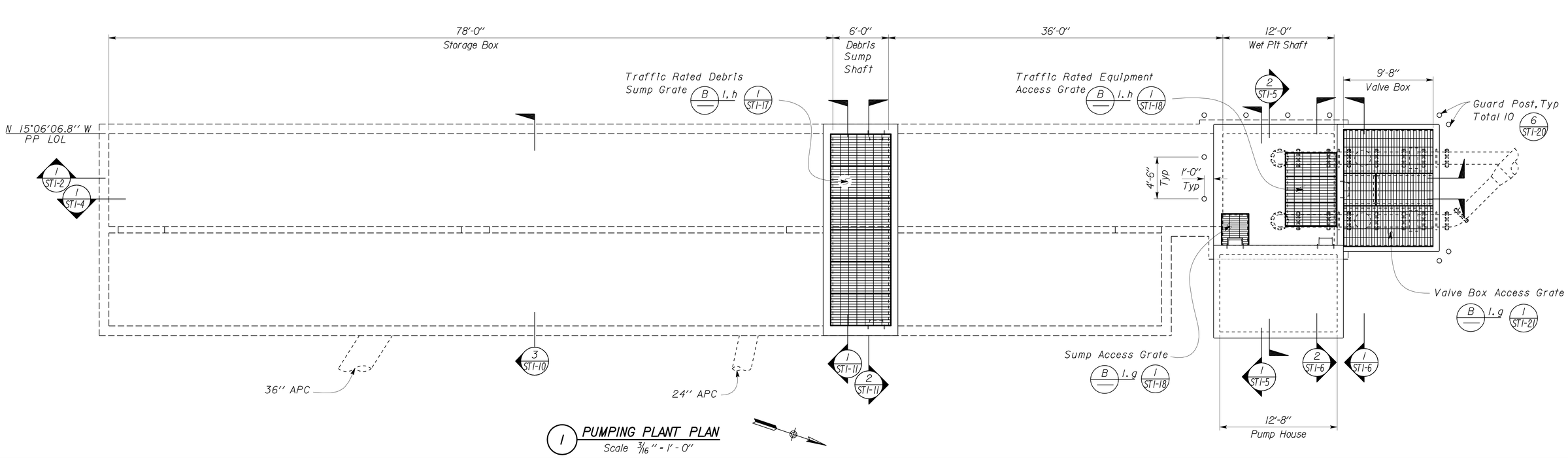

1 PUMPING PLANT PLAN
Scale 3/16" = 1'-0"

	BY	CHECKED
DESIGN	Chandra Bapat	Thomas Tong
DETAILS	Aleksey Serin	Chandra Bapat
QUANTITIES		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
EAST STOCKTON UP PUMPING PLANT
PUMPING PLANT PLAN

SHEET ST1-1

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)							SHEET	OF
10-07-10	01-27-11							

29-MAR-2012 17:44

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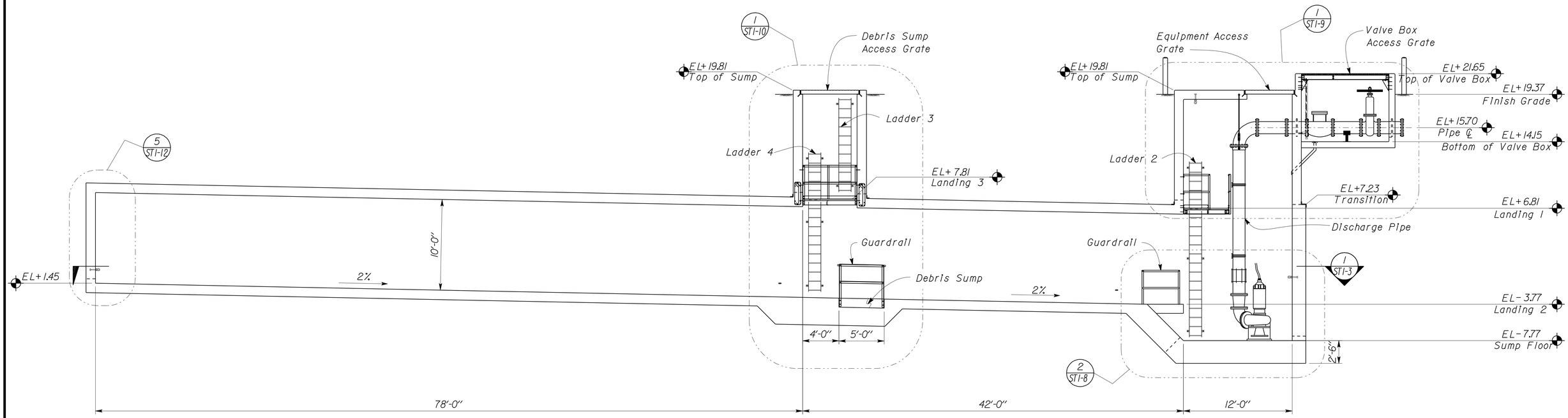
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1323	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE



2 PUMPING PLANT SECTION
Scale 3/16" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99
Sep PUMPING PLANTS

EAST STOCKTON UP PUMPING PLANT

PUMPING PLANT SECTION I

SHEET ST1-2

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
10-12-10

28-MAR-2012 14:49

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1324	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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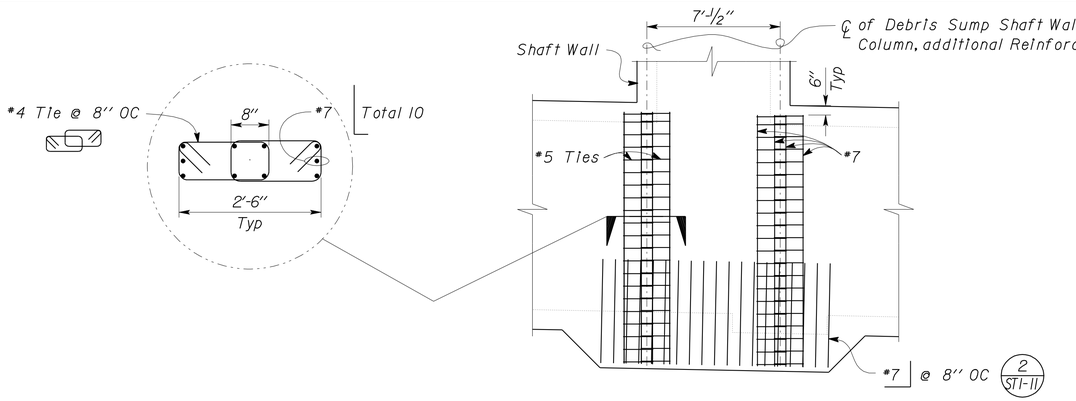
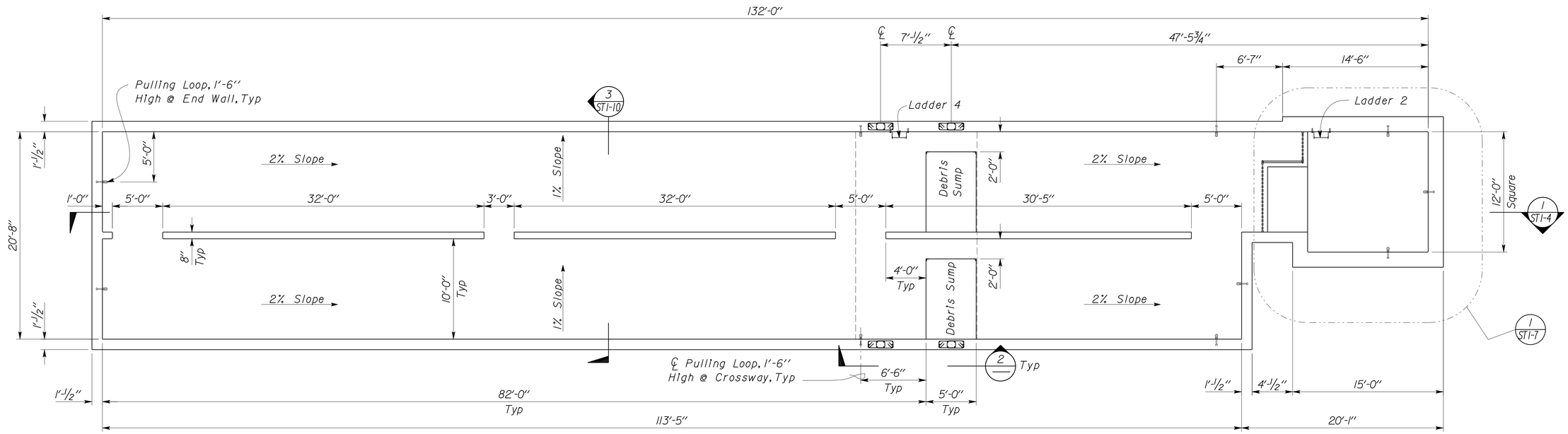


2 **ADDITIONAL WALL REINFORCEMENT**
Scale 1/4" = 1' - 0"



1 **FOUNDATION PLAN**
Scale 3/16" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-3
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — FOUNDATION PLAN	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 10-13-10 | 01-27-11 | 02-18-11 | SHEET | OF

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1325	1414

NBapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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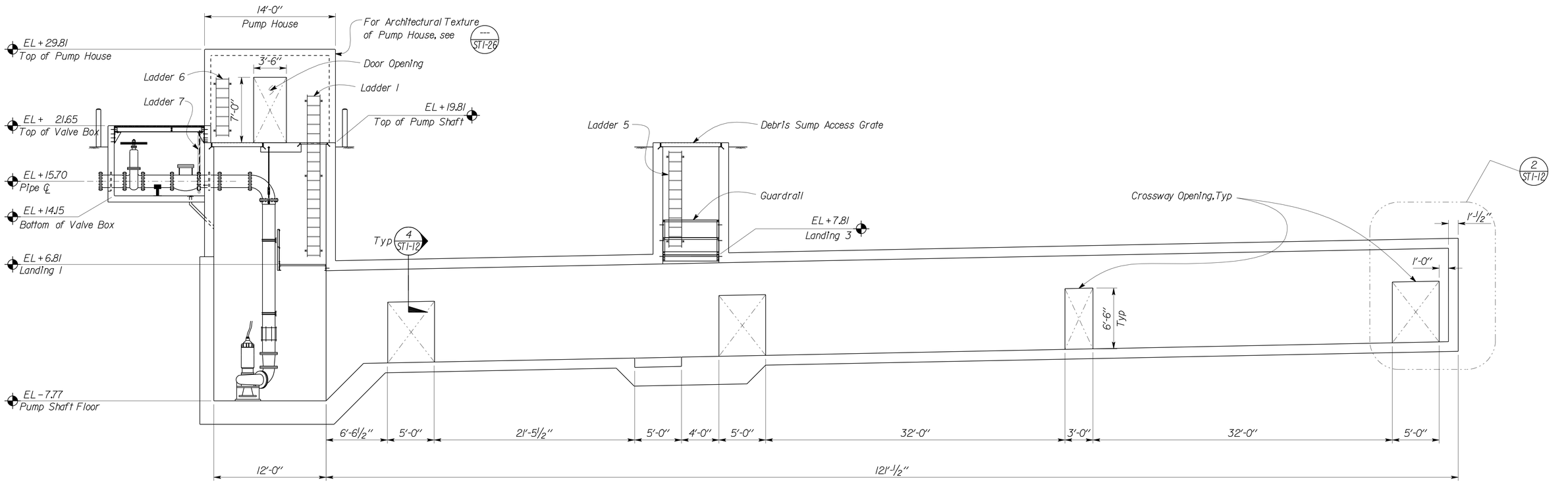

1 LONGITUDINAL SECTION
Scale 3/16" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-4
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — PUMPING PLANT SECTION 2	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY) 03-07-11 | SHEET | OF

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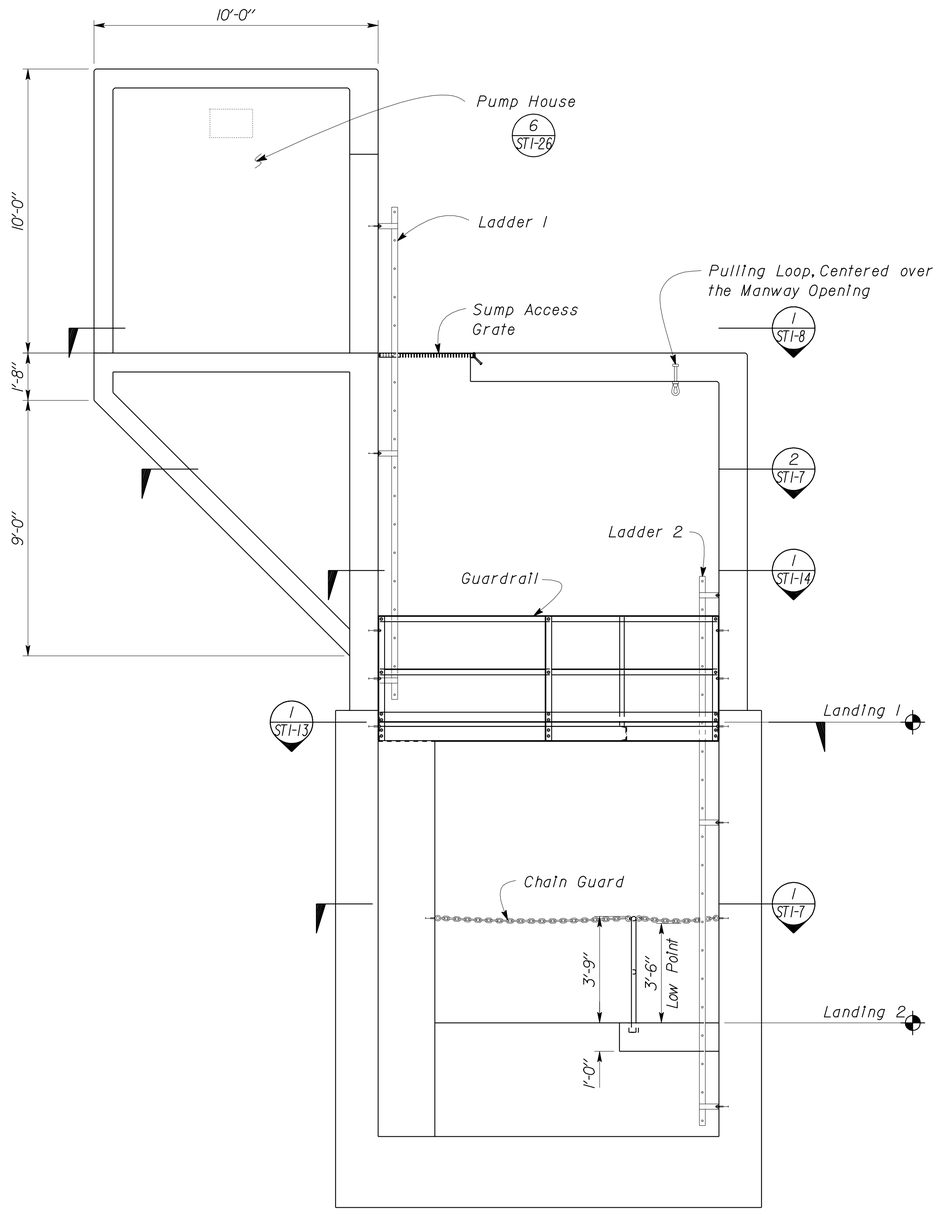
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1326	1414

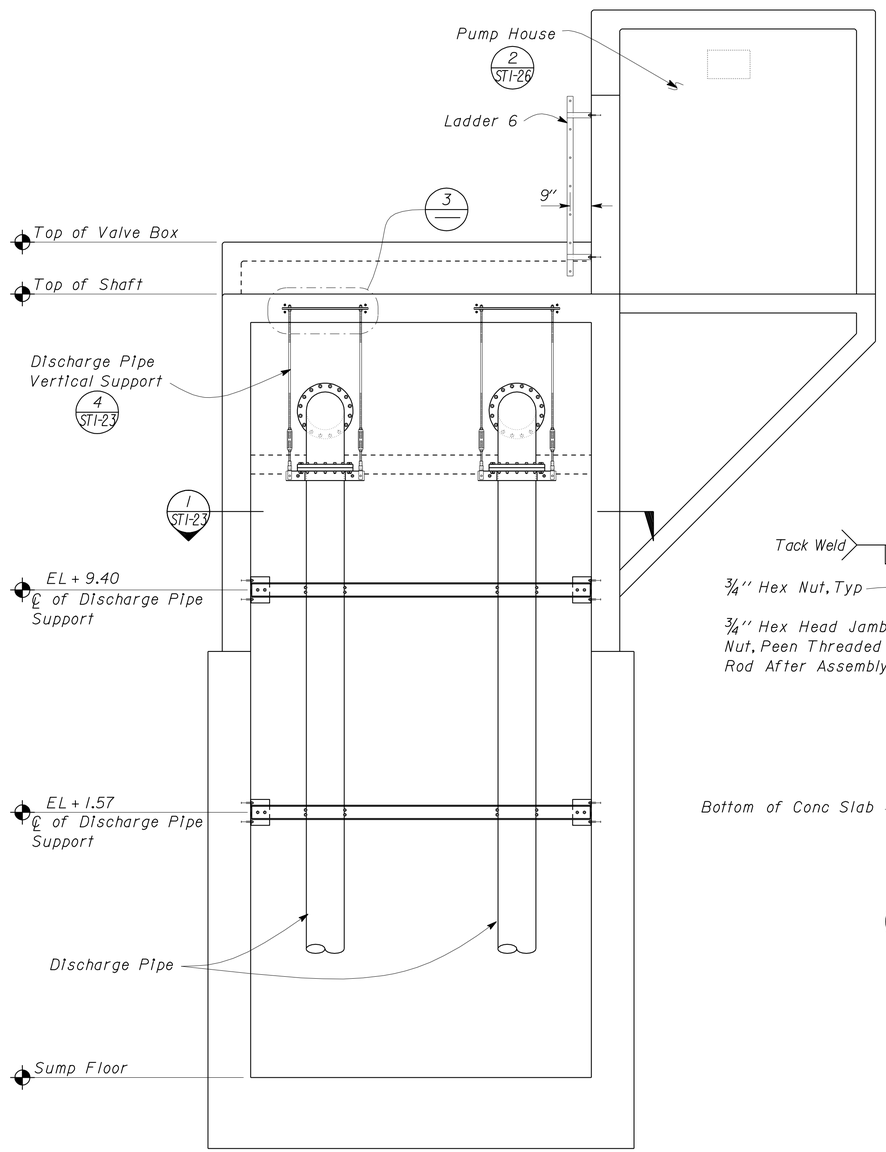
C.Bapat 03-02-12
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat, No. 46493, Exp. 6-30-13, CIVIL, STATE OF CALIFORNIA

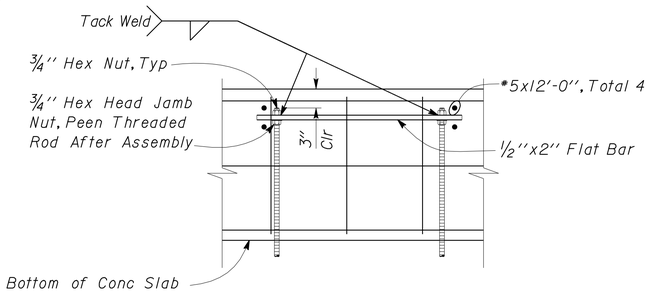
3-26-12
PLANS APPROVAL DATE



1 WET PIT SHAFT VERTICAL SECTION
Scale 3/8"= 1' - 0"



2 DISGHARGE PIPE SUPPORT ELEVATION
Scale 3/8"= 1' - 0"



Note:
For Items Not Noted
See Detail 4 ST1-23

3 THREADED ROD CONNECTION
Scale 1" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
EAST STOCKTON UP PUMPING PLANT
WET PIT SHAFT VERTICAL SECTIONS

SHEET ST1-5

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES (PRELIMINARY STAGE ONLY): 01-27-11 | 02-29-12
SHEET | OF

D:\User\Projects\Dist_10\1000000409_Stockton_pp\st1_East_stockton_UP_MLK\Expedite_Resubmittal_03-02-2012\st1_05.dgn

28-MAR-2012 14:50

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1327	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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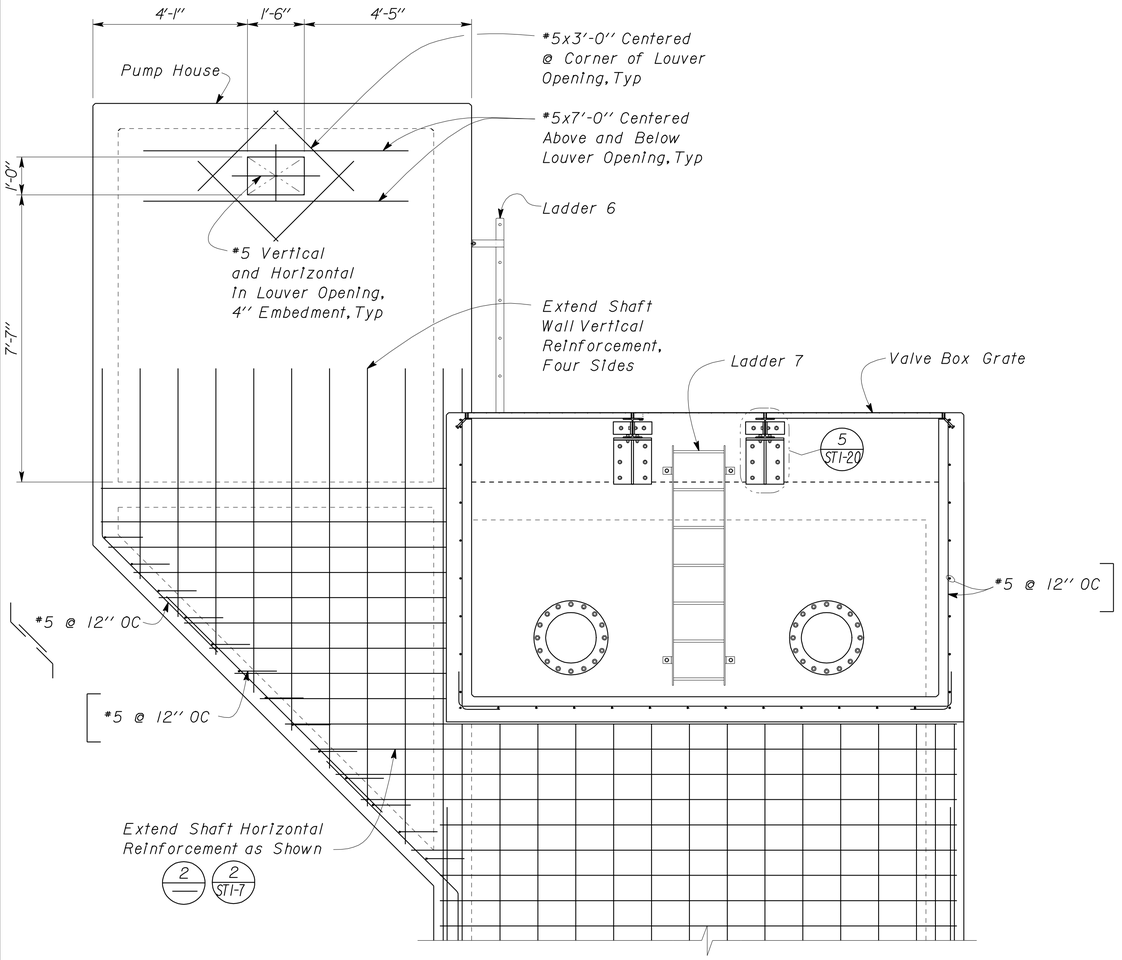
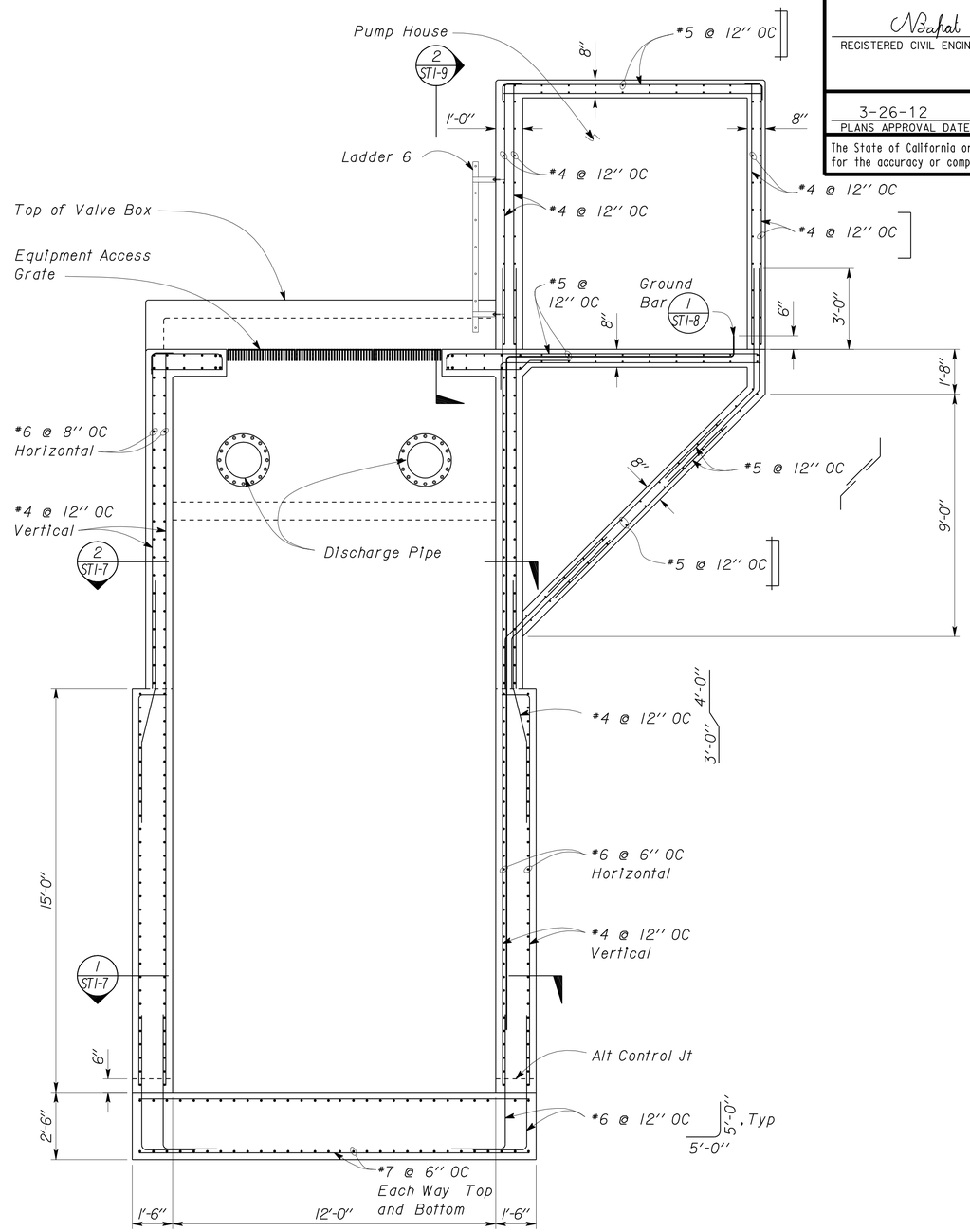


1 REINFORCEMENT DETAIL
Scale 1/2" = 1'-0"



2 WET PIT SHAFT REINFORCEMENT
Scale 3/8" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-6
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT: WET PIT SHAFT VERTICAL SECTIONS 2	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
12-08-10 02-15-11		

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28-MAR-2012 14:50

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1328	1414

C Bapat 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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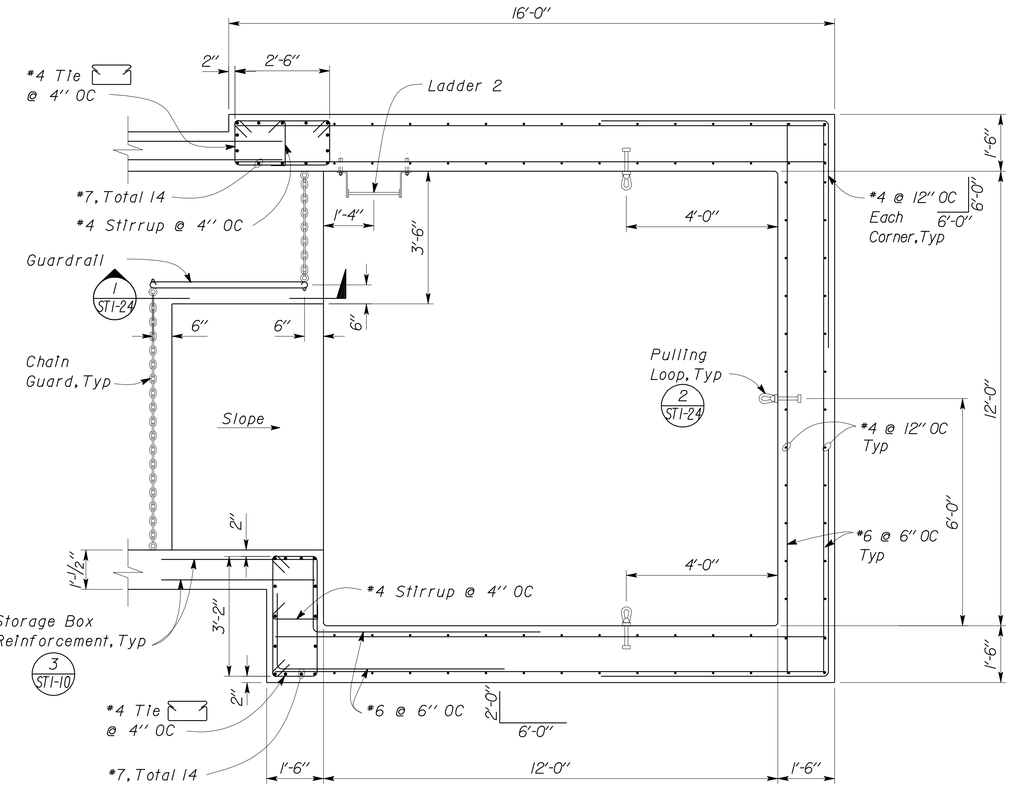
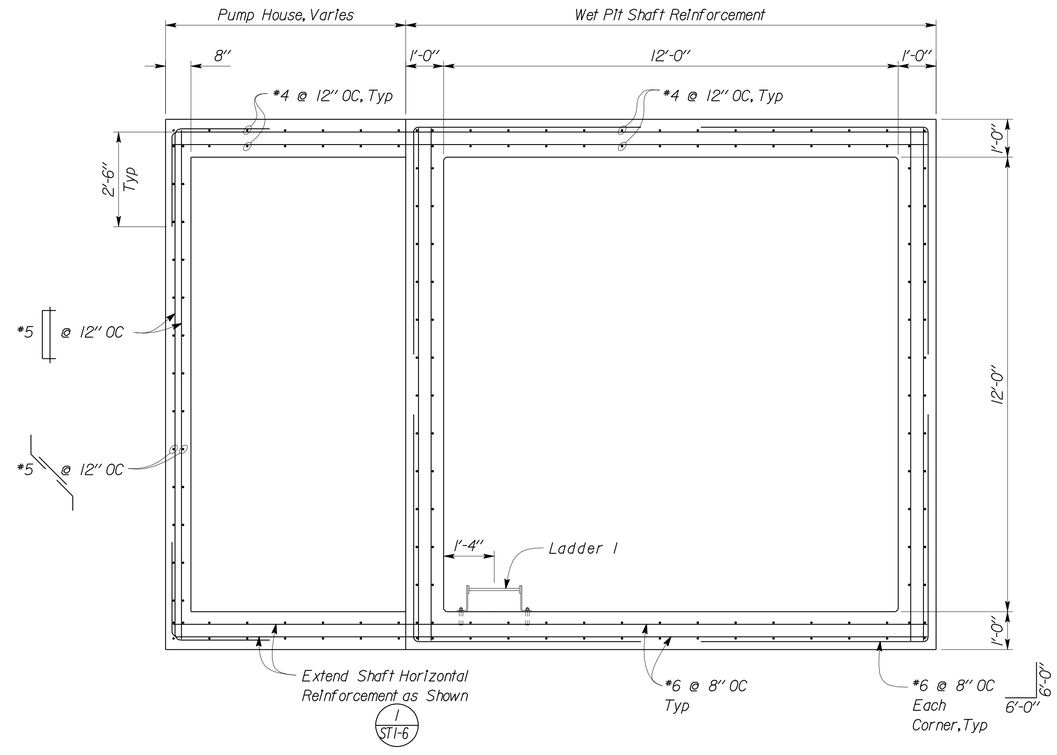


1 WET PIT SHAFT SECTION
Scale 1" = 1'-0"



2 WET PIT SHAFT SECTION
Scale 1" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-7
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — WET PIT SHAFT HORIZONTAL SECTIONS	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 12-14-10, 02-15-11 — SHEET — OF

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1329	1414

REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat, No. 46493, Exp. 6-30-13, CIVIL, STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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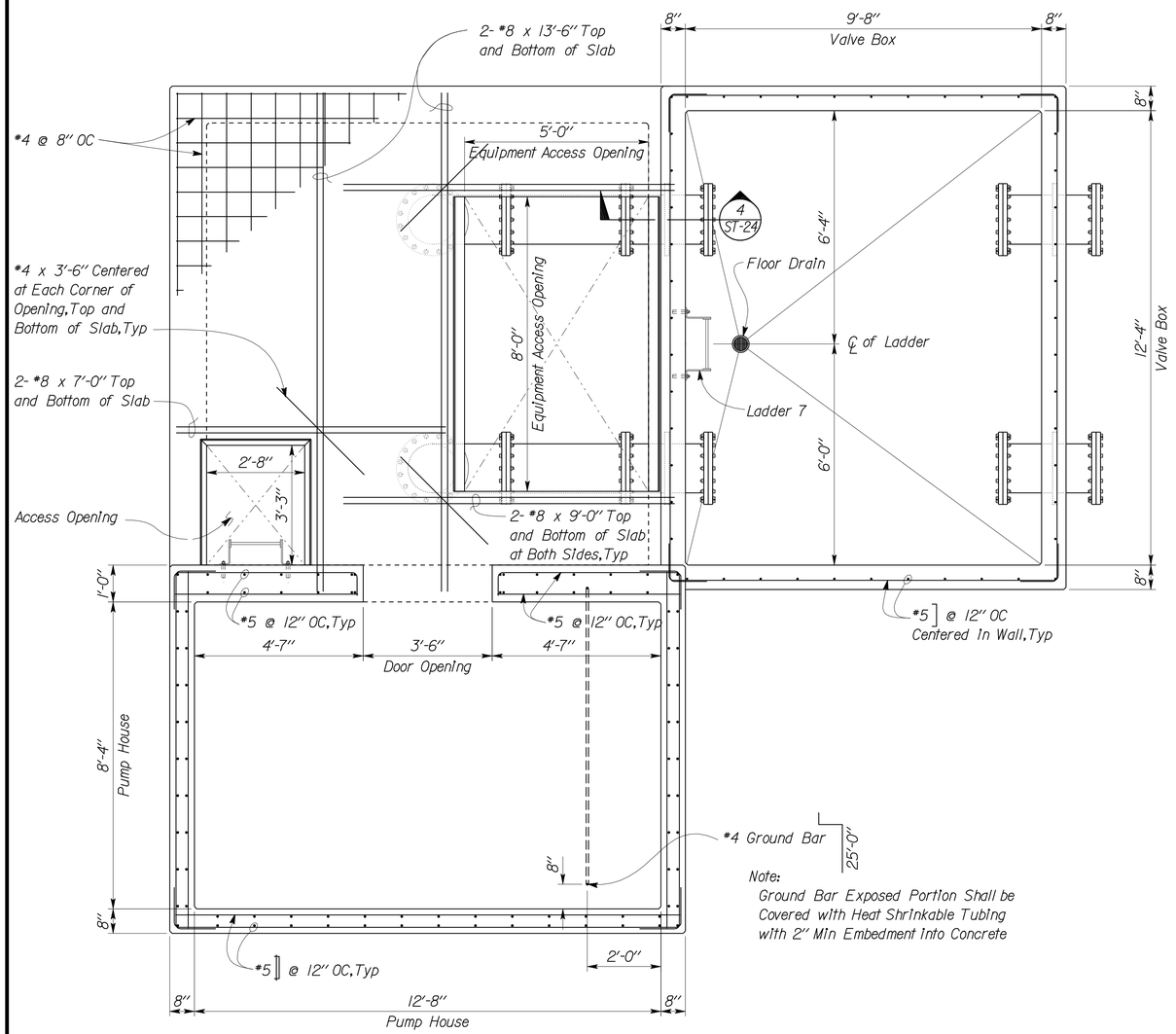
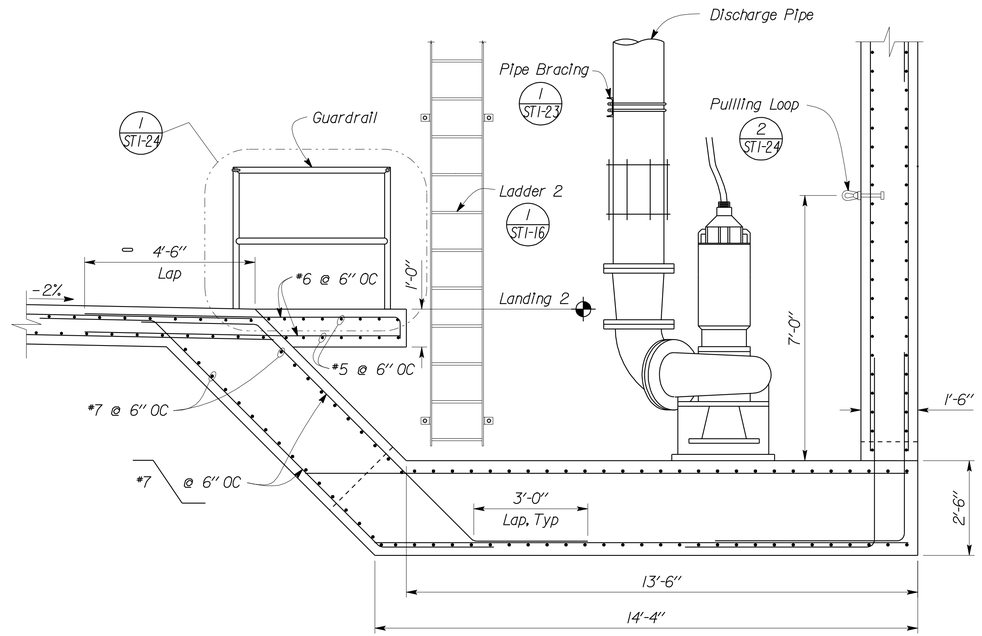


Note:
Ground Bar Exposed Portion Shall be Covered with Heat Shrinkable Tubing with 2" Min Embedment into Concrete

Note:
For Exterior Elevation of Pumping Plant, see (1 / ST1-26)

1 ROOF SLAB, PUMP HOUSE FLOOR PLAN, AND VALVE BOX SECTION

Scale 1/2" = 1'-0"



Note:
For more Reinforcement Information, see (2 / ST1-6) (1 / ST1-7) (3 / ST1-10)

2 LANDING 2 SECTION

Scale 1/2" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

EAST STOCKTON UP PUMPING PLANT

WET PIT SHAFT TOP SLAB

SHEET ST1-8

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
12-17-10		

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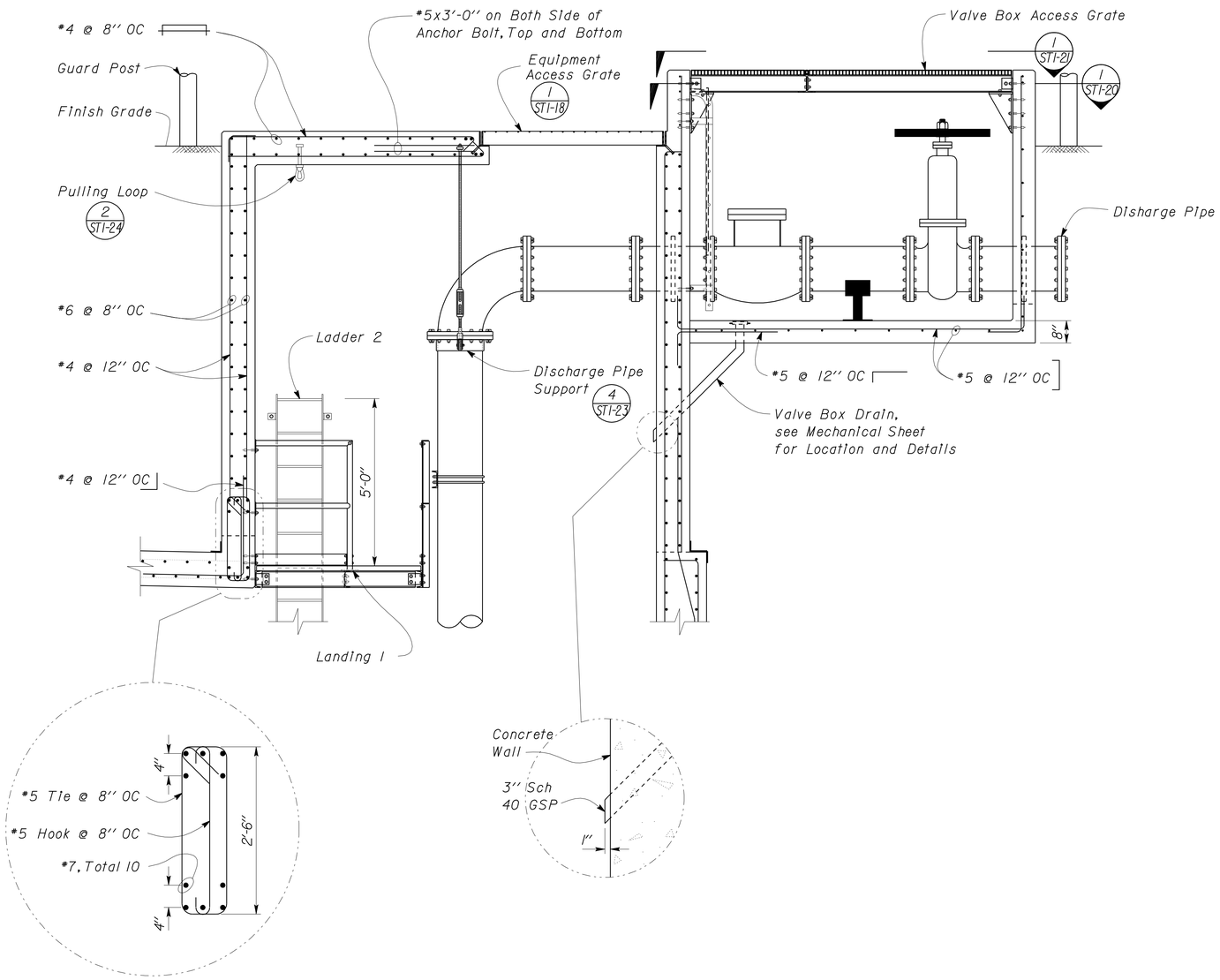
29-MAR-2012 17:45

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1330	1414

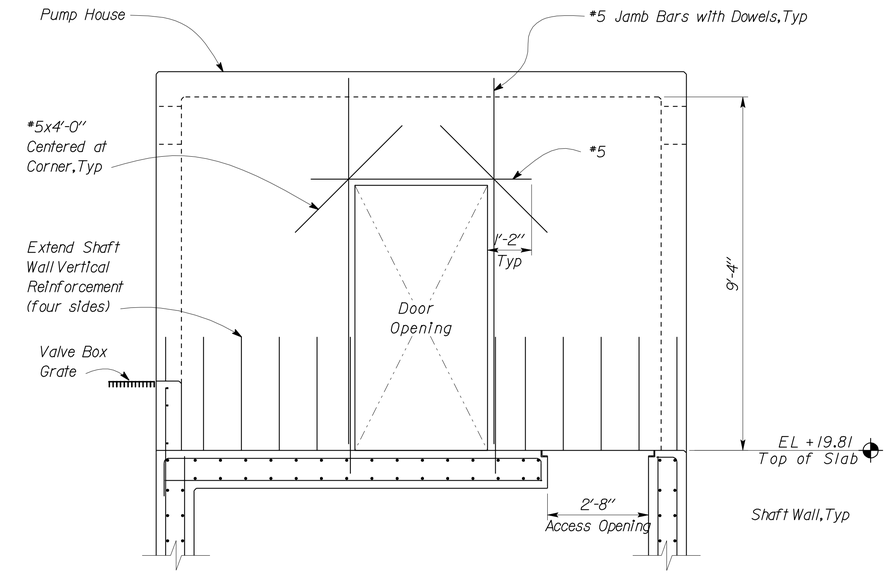
C Bapat 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE



1 TOP SHAFT/VALVE BOX SECTION
Scale 1" = 1'-0"



2 PUMP HOUSE ELEVATION
Scale 1" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-9
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — TOP SHAFT, VALVE BOX SECTIONS / PUMP HOUSE ELEVATION	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 12-21-10

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

28-MAR-2012 14:50

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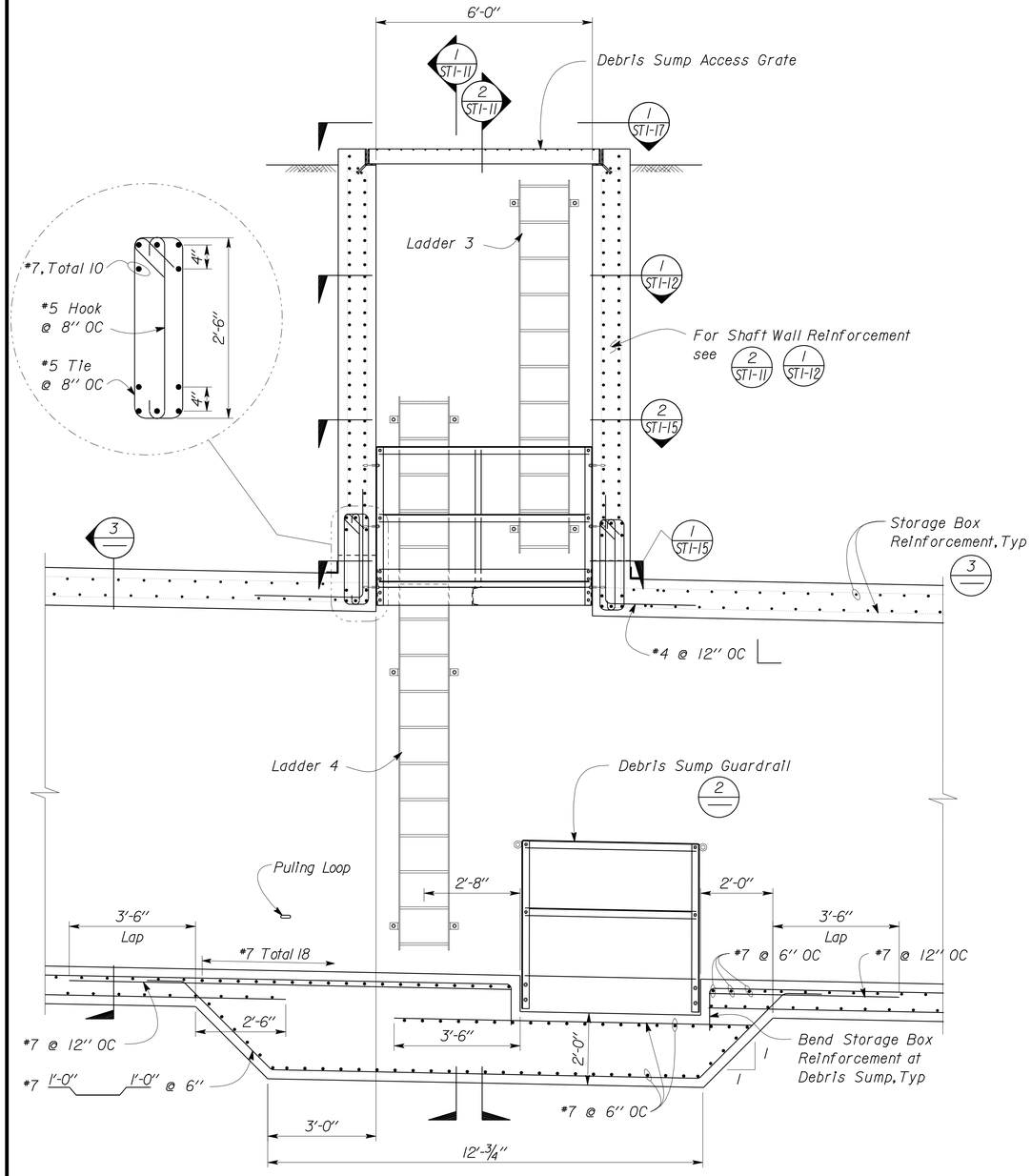
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1331	1414

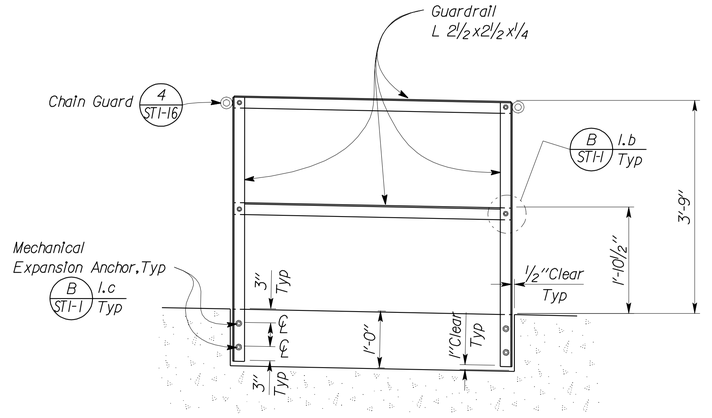
N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

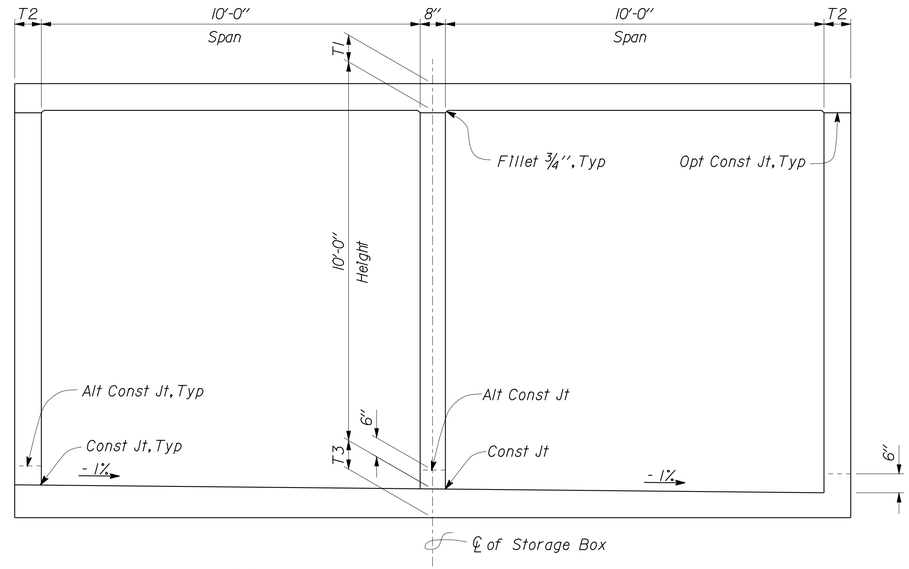
3-26-12
PLANS APPROVAL DATE



1 DEBRIS SUMP SECTION
Scale 1/2" = 1' - 0"



2 GUARDRAIL DETAIL
Scale 3/4" = 1' - 0"



Note:
For Storage Box Reinforcement see Standard Plans D81.
Use : Span 10'-0" Height 10'-0"
Maximum earth cover (design) 20'-0"

3 STORAGE BOX SECTION
Scale 1/2" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-10
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — DEBRIS SUMP AND STORAGE BOX SECTION	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 12-27-10 02-18-11 — SHEET — OF

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1332	1414

C Bapat 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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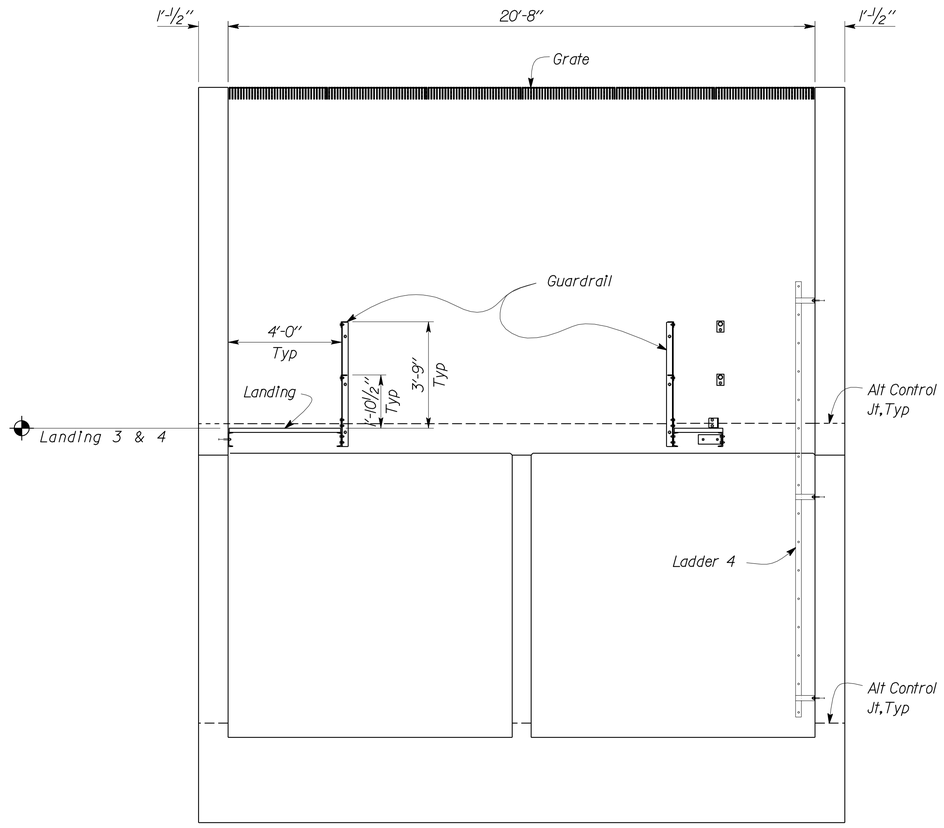
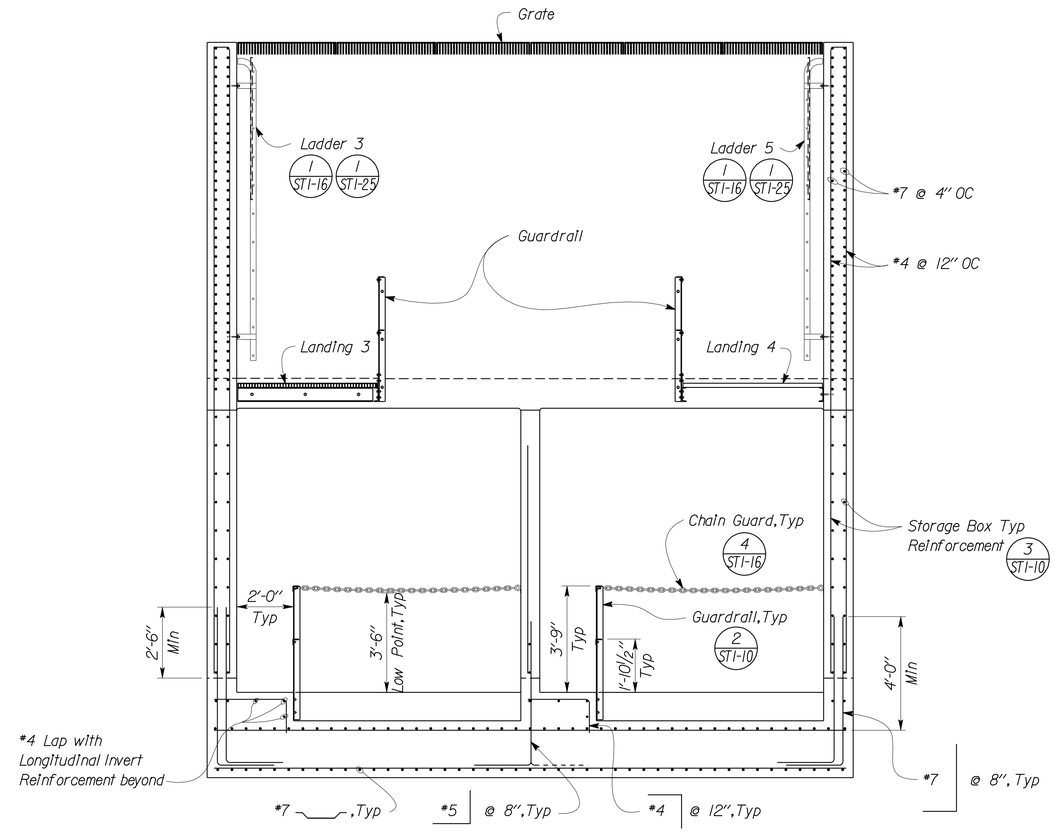


1 DEBRIS SUMP SECTION ONE
Scale 3/8" = 1' - 0"



2 DEBRIS SUMP SECTION TWO
Scale 3/8" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-11
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — DEBRIS SUMP VERTICAL SECTIONS	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)										SHEET	OF
12-28-10	02-17-11										

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28-MAR-2012 14:51

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1333	1414

C.Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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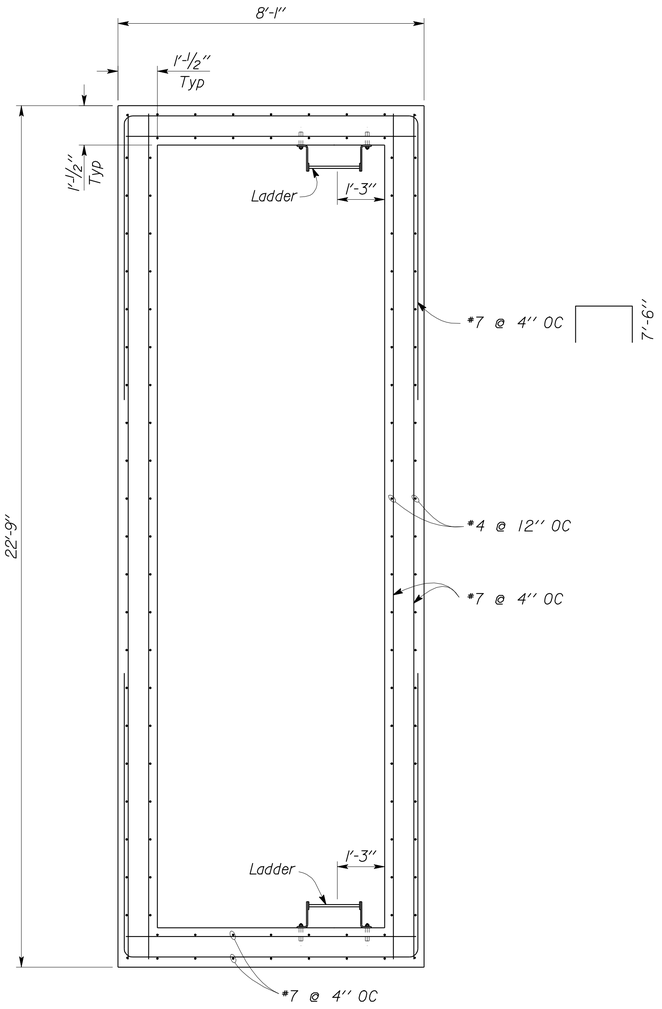
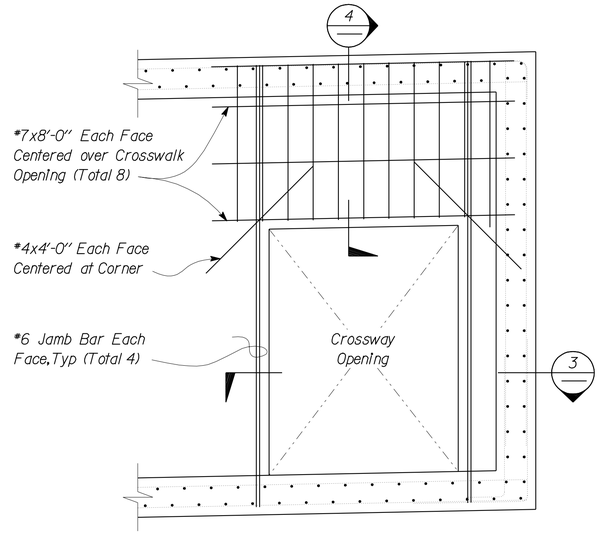
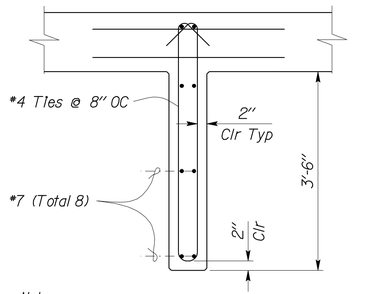


1 DEBRIS SUMP SHAFT SECTION
Scale 1/2" = 1' - 0"



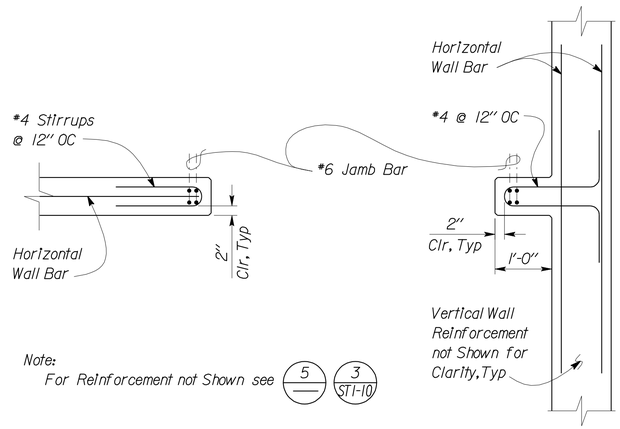
Note:
For Reinforcement not Shown see 5

2 CROSSWAY SECTION
Scale 1/2" = 1' - 0"



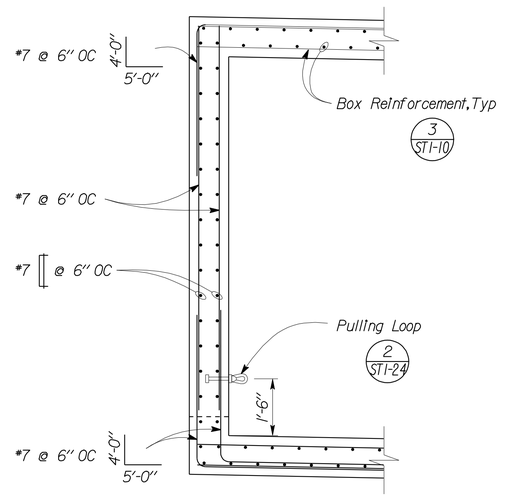
Note:
For Reinforcement not Shown see 5 and 3 ST1-10

4 CROSSWAY BEAM
Scale 3/4" = 1' - 0"



Note:
For Reinforcement not Shown see 5 and 3 ST1-10

3 CROSSWAY SECTION
Scale 3/4" = 1' - 0"



5 ENDWALL SECTION
Scale 1/2" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT: DEBRIS SUMP AND CROSSWAY SECTIONS
QUANTITIES	BY	CHECKED				SHEET ST1-12

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 01-28-11 02-16-11

SHEET OF

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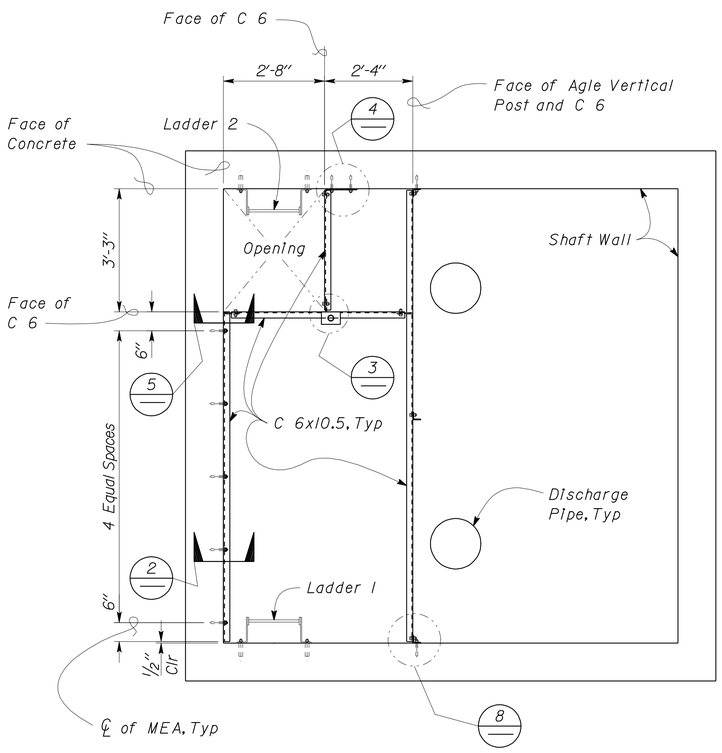
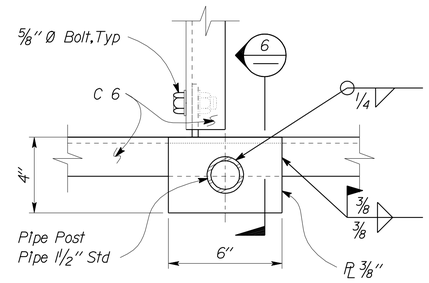
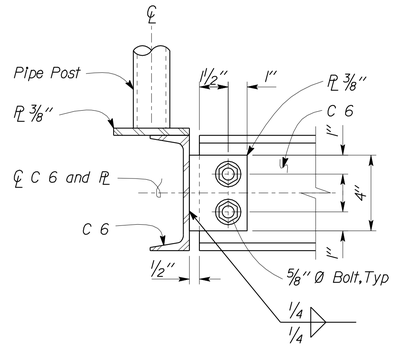


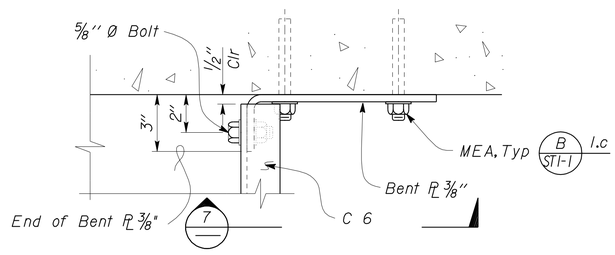
1 LANDING I FRAME PLAN
Scale 1/2" = 1' - 0"



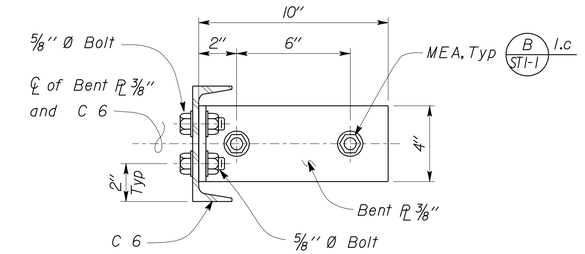
3 C6 TO C6 AT OPENING
Scale 3" = 1' - 0"



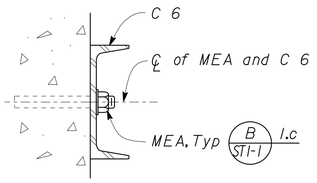
6 C6 TO C6 SECTION
Scale 3" = 1' - 0"



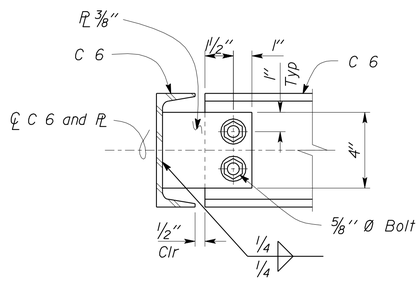
4 C6 TO WALL CONNECTION
Scale 3" = 1' - 0"



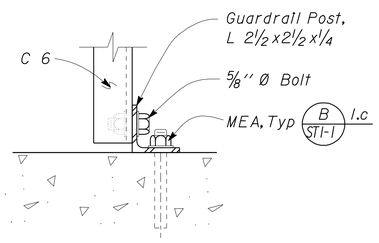
7 C6 TO C6 ELEVATION
Scale 3" = 1' - 0"



2 C6 TO WALL CONNECTION
Scale 3" = 1' - 0"



5 C6 TO C6 CONNECTION
Scale 3" = 1' - 0"



8 GUARDRAIL POST TO WALL AND C6
Scale 3" = 1' - 0"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1334	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat, No. 46493, Exp. 6-30-13, CIVIL, STATE OF CALIFORNIA

3-26-12 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.

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

EAST STOCKTON UP PUMPING PLANT — LANDING I FRAMING PLAN AND DETAILS

SHEET ST1-13

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY) 02-01-11

SHEET OF

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28-MAR-2012 14:51

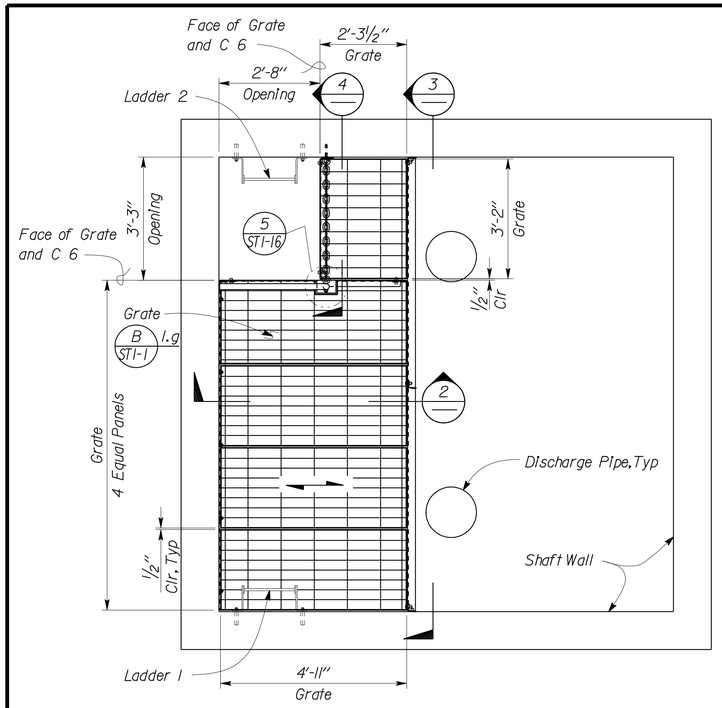
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1335	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

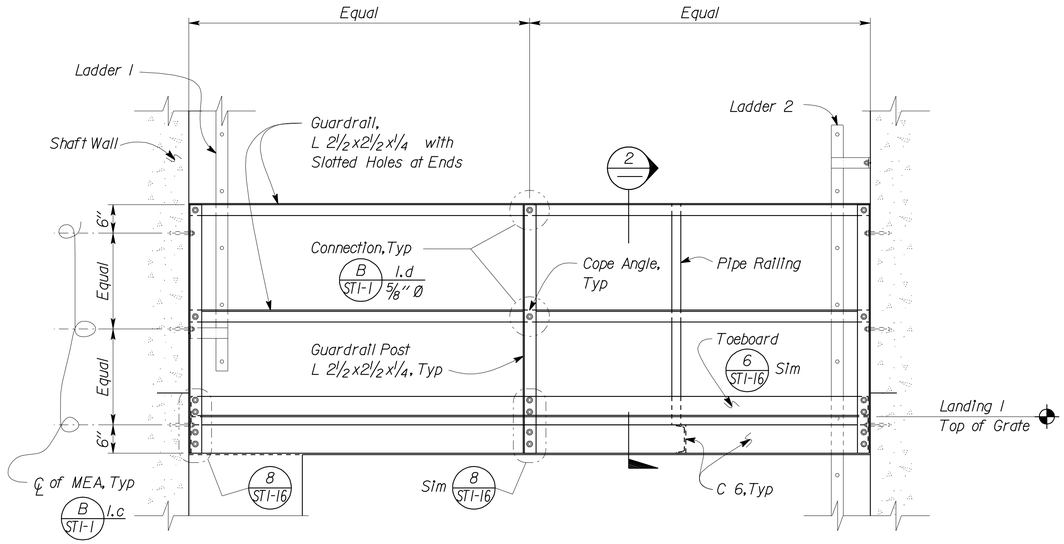
REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

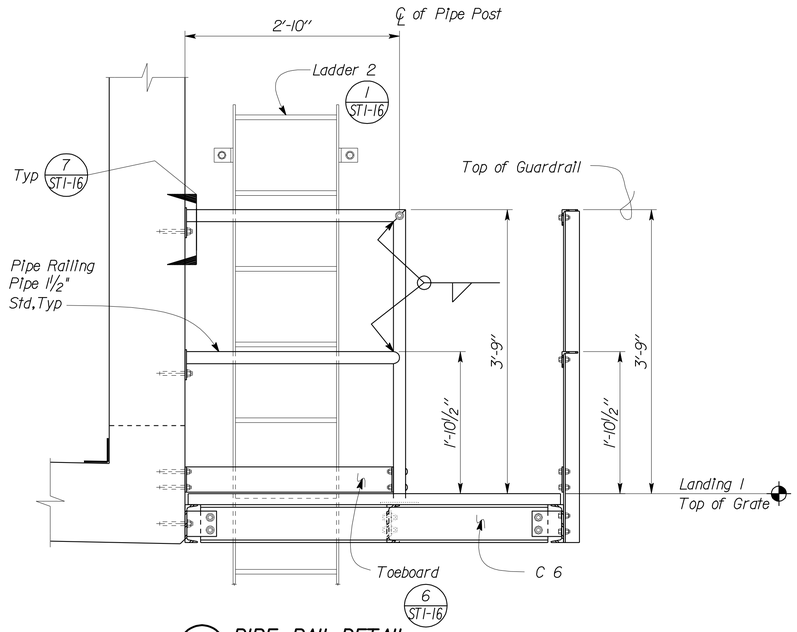
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



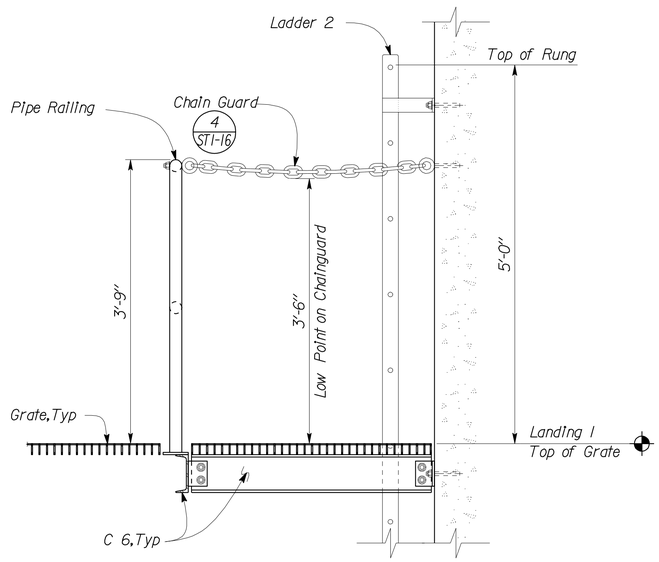
1 LANDING 1 GRATE
Scale ½" = 1' - 0"



3 LANDING 1 GUARDRAIL ELEVATION
Scale ¾" = 1' - 0"



2 PIPE RAIL DETAIL
Scale 1" = 1' - 0"



4 CHAIN GUARD DETAIL
Scale 1" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE
QUANTITIES	BY	CHECKED			

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

EAST STOCKTON UP PUMPING PLANT — LANDING GRATE AND GUARDRAIL DETAILS

SHEET ST1-14

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)										SHEET	OF
02-02-11											

28-MAR-2012 14:51

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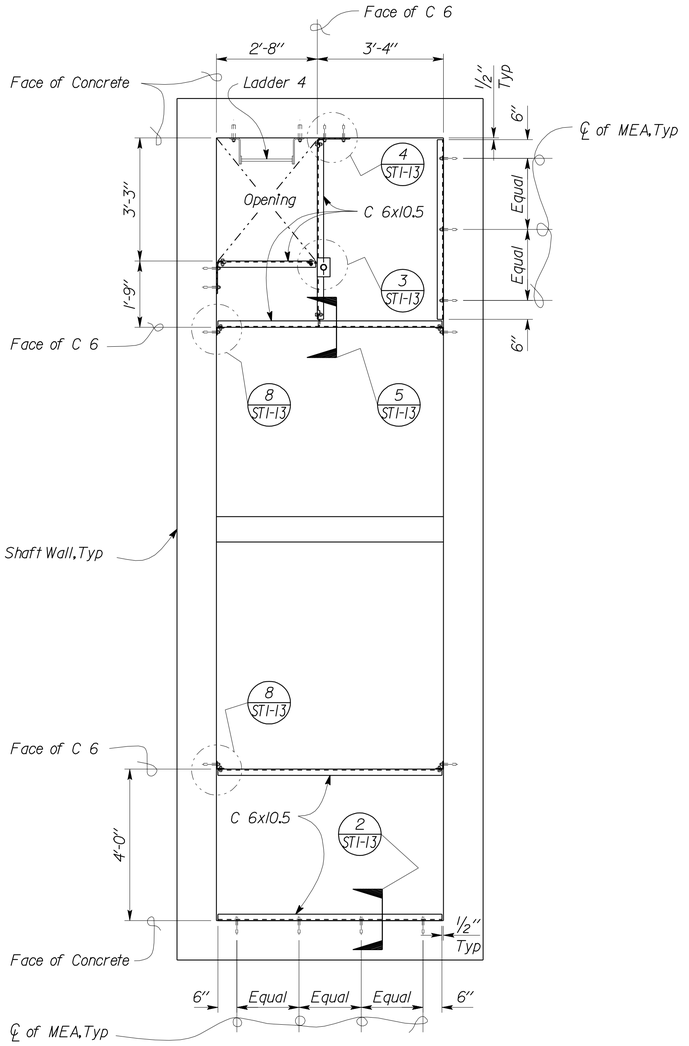
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1336	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

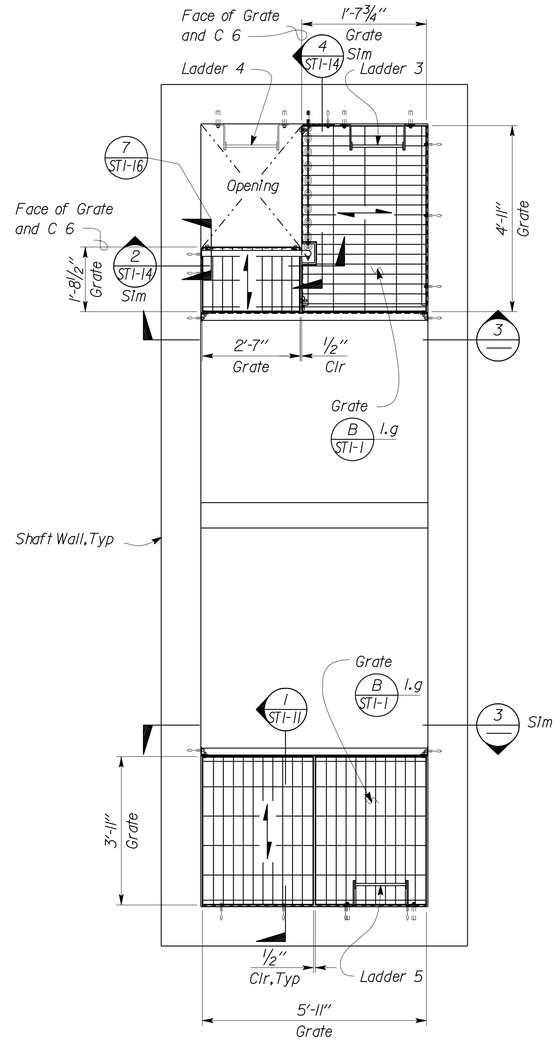
REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

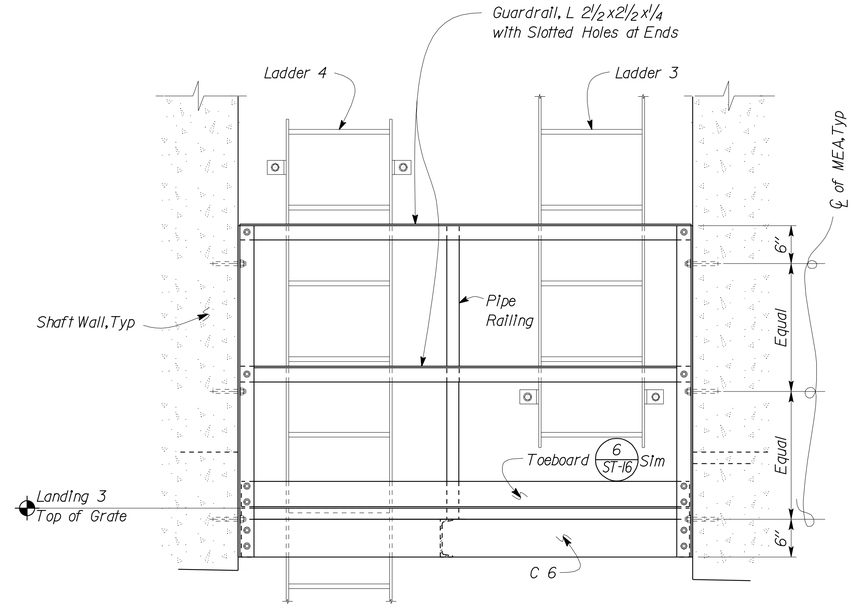
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



1 LANDING 3 FRAME PLANE
Scale 1/2" = 1' - 0"



2 LANDING 3 GRATE
Scale 1/2" = 1' - 0"



3 LANDING 3 GUARDRAIL ELEVATION
Scale 3/4" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-15
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — LANDING 3 DETAILS	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
02-09-11		

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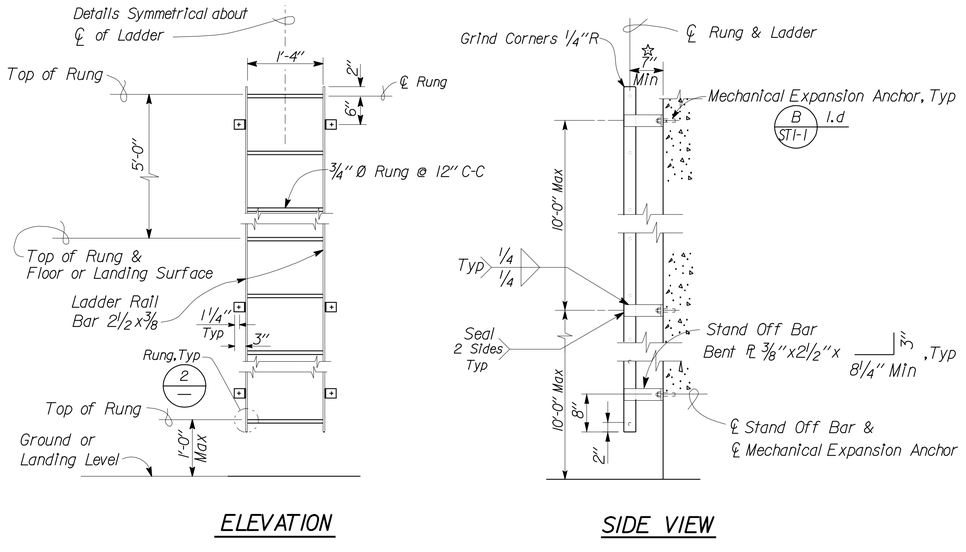
28-MAR-2012 14:51

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1337	1414

N Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

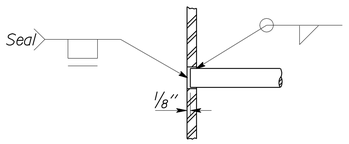


ELEVATION

SIDE VIEW

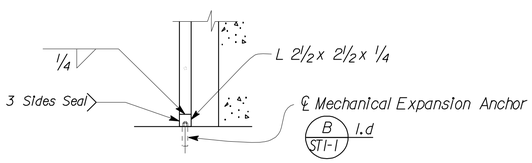
NOTE
For Bottom of Ladder option see 3

1 LADDER DETAILS
Scale 3/4" = 1'-0"

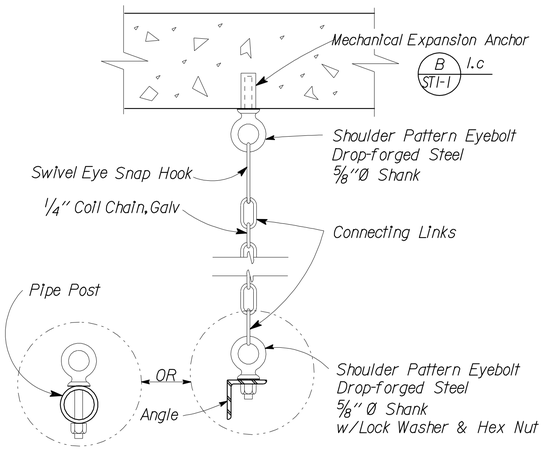


NOTE:
Rung to be Placed 1/8" Inside of Ladder Rail

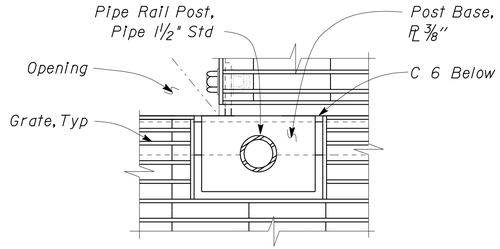
2 RUNG DETAIL
Scale 4" = 1'-0"



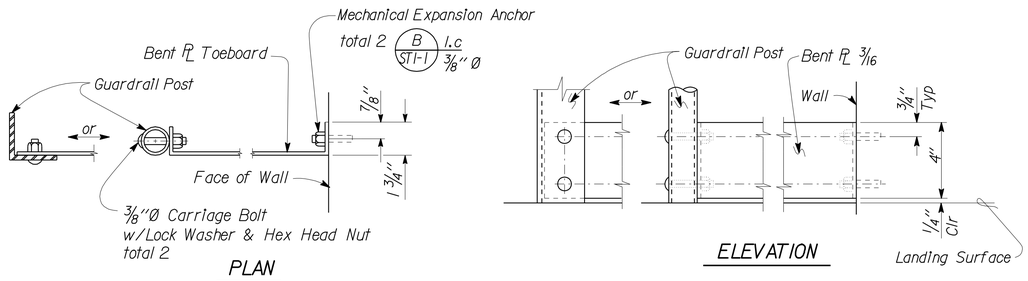
3 BOTTOM OF LADDER OPTION
Scale 3/4" = 1'-0"



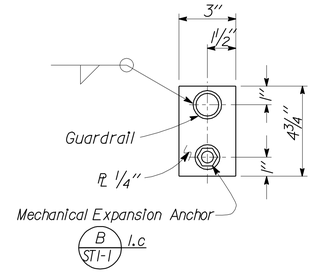
4 CHAIN GUARD DETAIL
No Scale



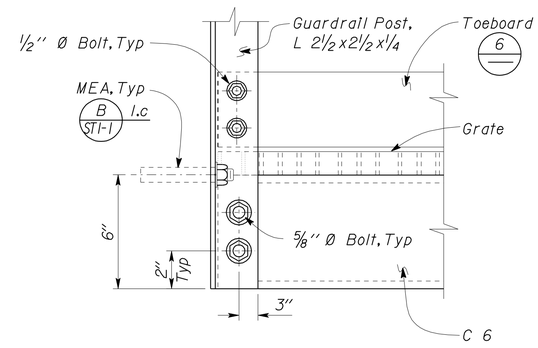
5 POST BASE ANCHORAGE
Scale 3" = 1'-0"



6 TOEBOARD DETAIL
Scale 1/4" = 1"



7 RAIL TO WALL ANCHORAGE
Scale 3" = 1'-0"



8 GUARDRAIL POST CONNECTION
Scale 3" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — LADDER AND LANDING DETAILS
QUANTITIES	BY	CHECKED				SHEET ST1-16

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)											SHEET	OF
02-07-11												

28-MAR-2012 14:51

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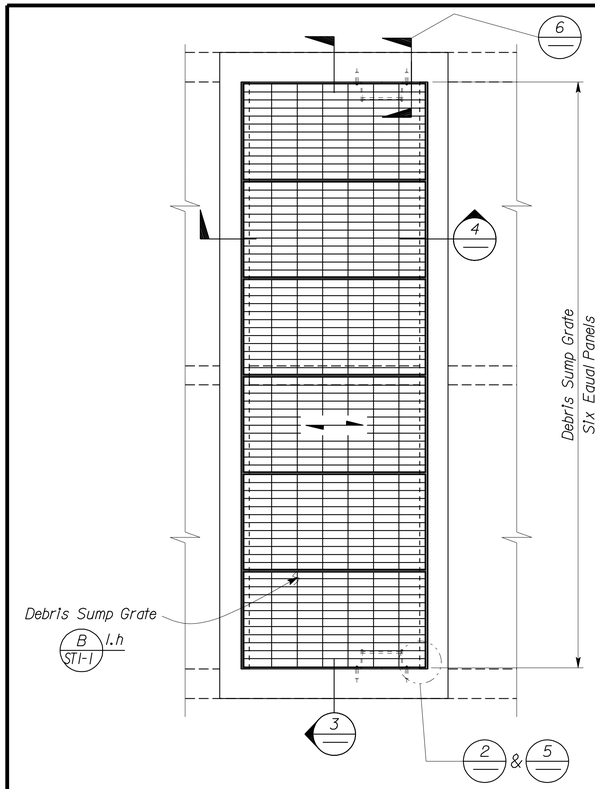
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1338	1414

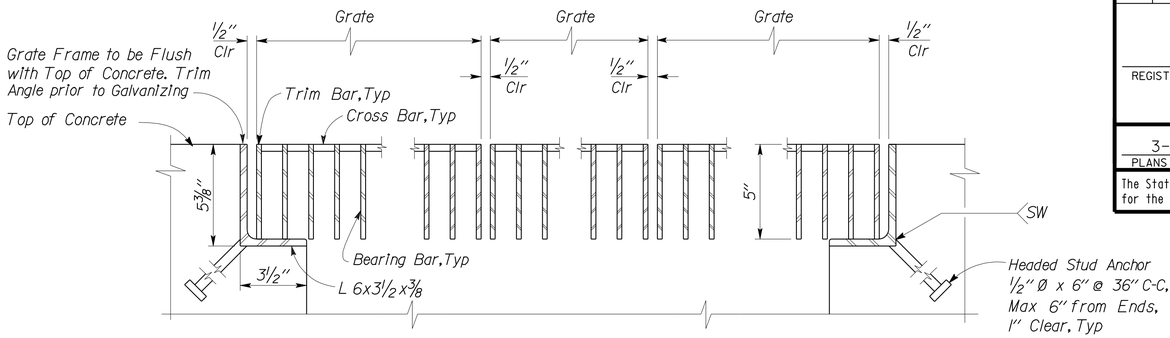
N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

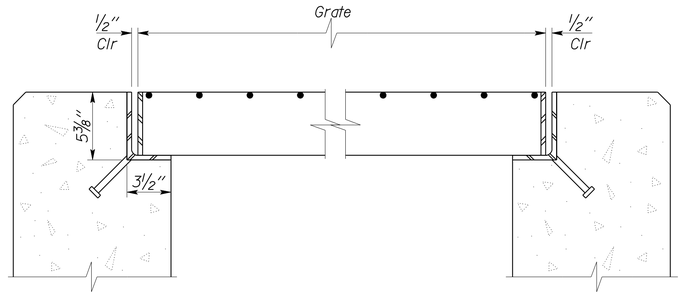
3-26-12
PLANS APPROVAL DATE



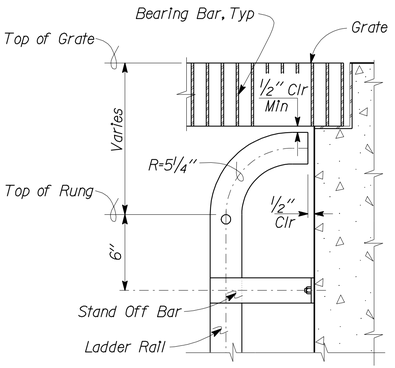
1 DEBRIS SUMP GRATE PLAN
Scale 3/8" = 1' - 0"



3 GRATE AND FRAME SECTION
Scale 3" = 1'-0"

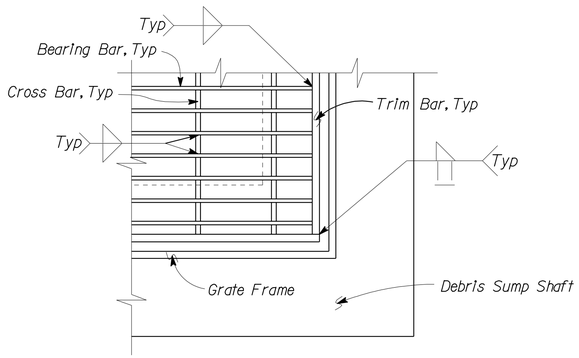


4 GRATE AND FRAME SECTION
Scale 2" = 1' - 0"

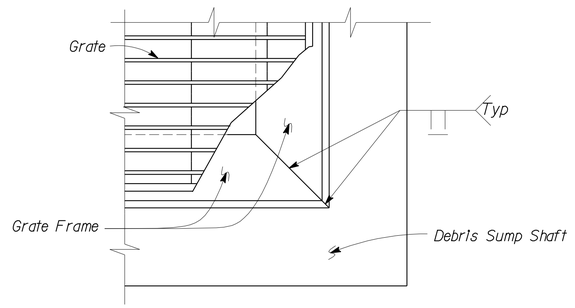


Notes:
1. For Details not Shown, see 1 / ST1-16
2. For Ladder Safety Post, see 1 / ST1-25

6 LADDER AT ACCESS GRATE
Scale 2" = 1'-0"



2 GRATE DETAIL
Scale 3" = 1' - 0"



5 GRATE FRAME DETAIL
Scale 3" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-17
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — DEBRIS SUMP GRATE DETAILS	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
03-07-11		

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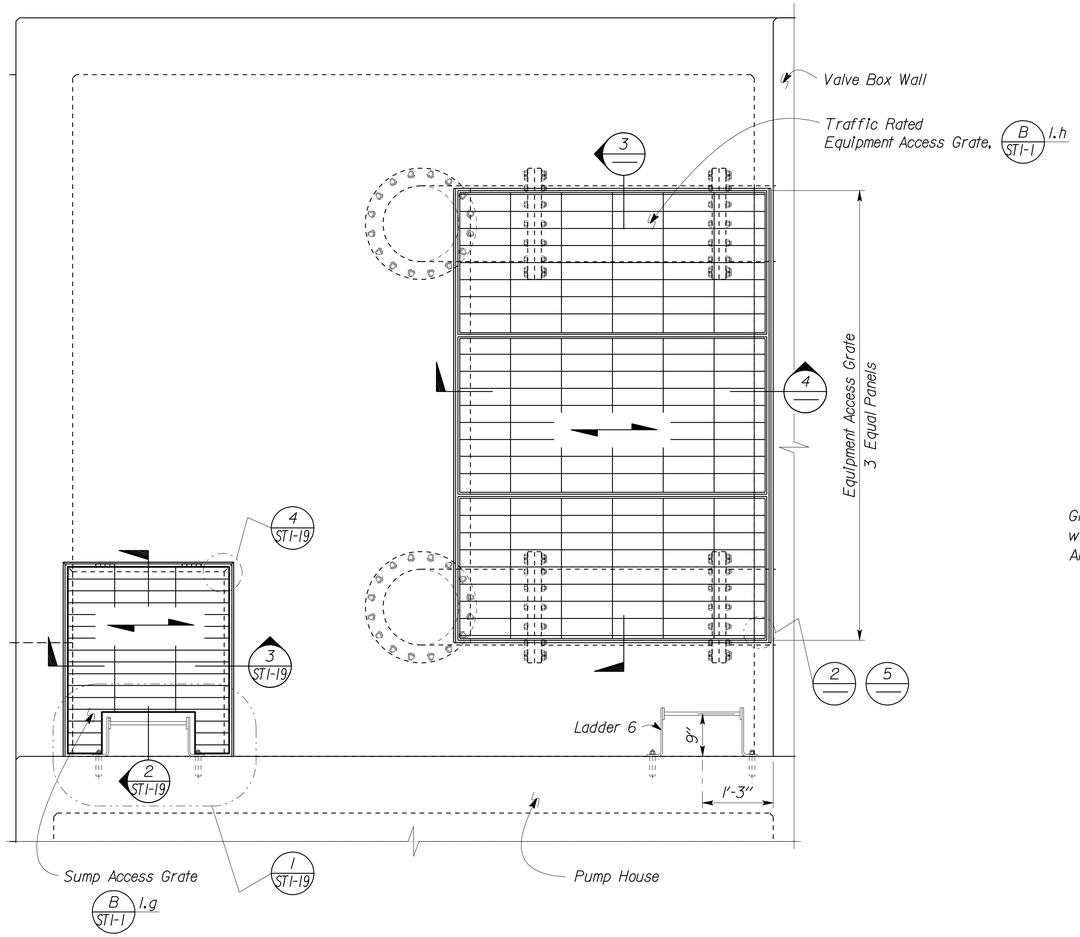
23-MAR-2012 17:45

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1339	1414

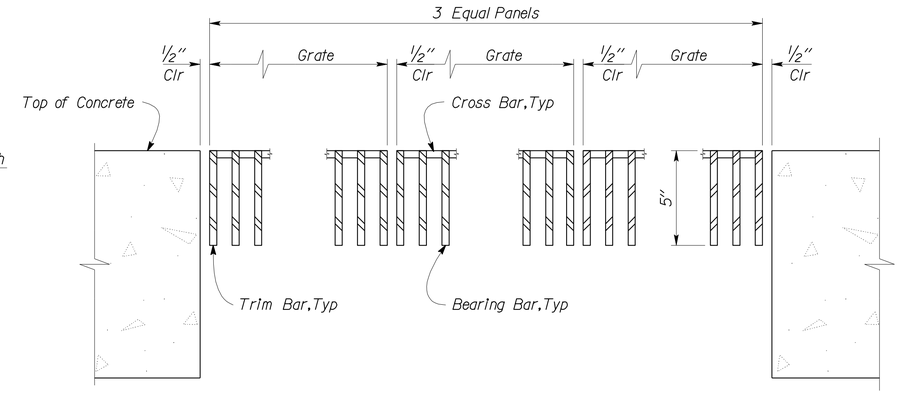
N Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

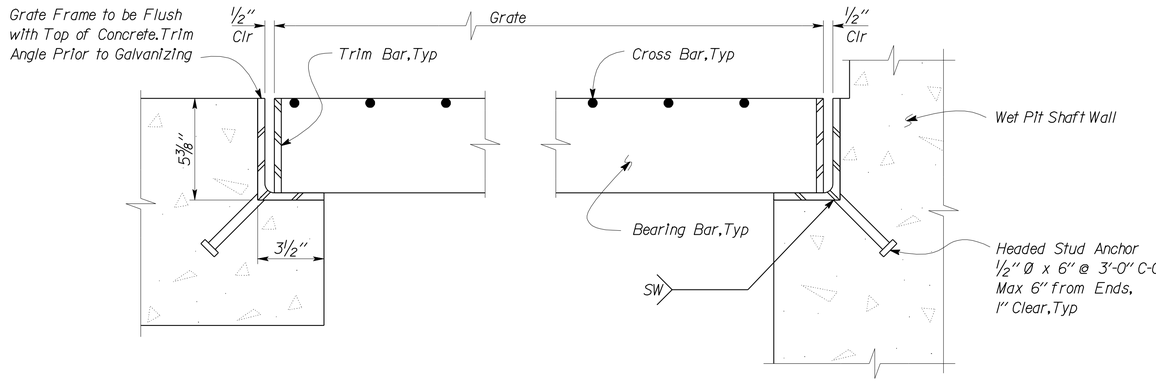
3-26-12
PLANS APPROVAL DATE



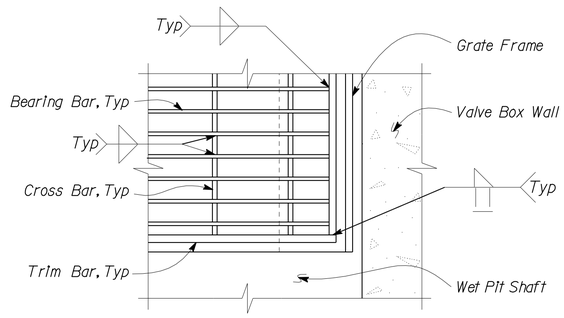
1 EQUIPMENT ACCESS GRATE PLAN
Scale 3/4" = 1' - 0"



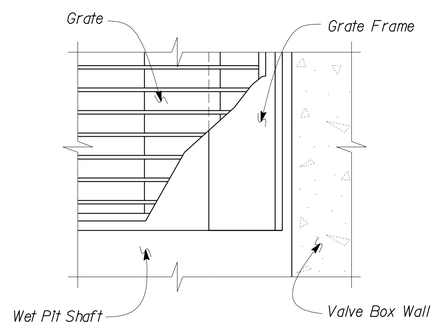
3 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"



4 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"



2 GRATE DETAIL
Scale 3" = 1' - 0"



5 GRATE FRAME DETAIL
Scale 3" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-18
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — EQUIPMENT ACCESS GRATE DETAILS	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
12-29-10		

28-MAR-2012 14:52

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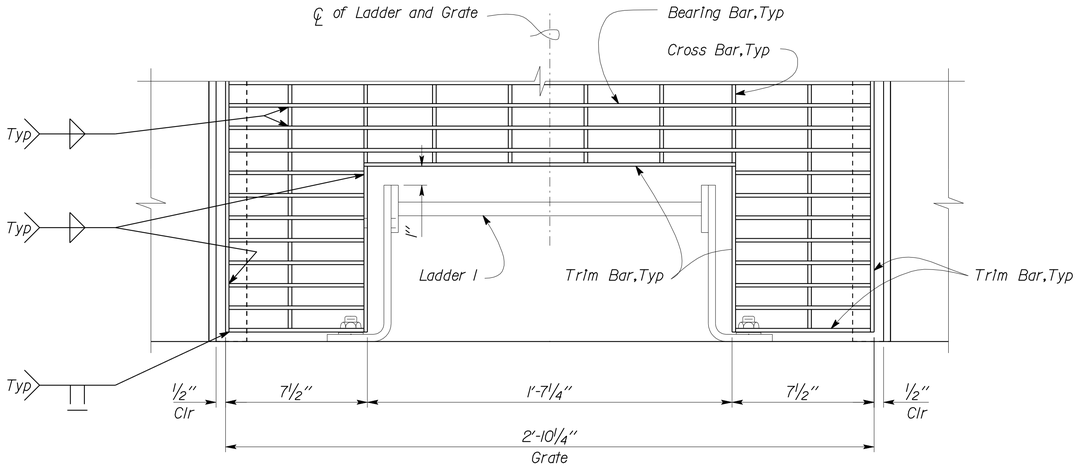
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1340	1414

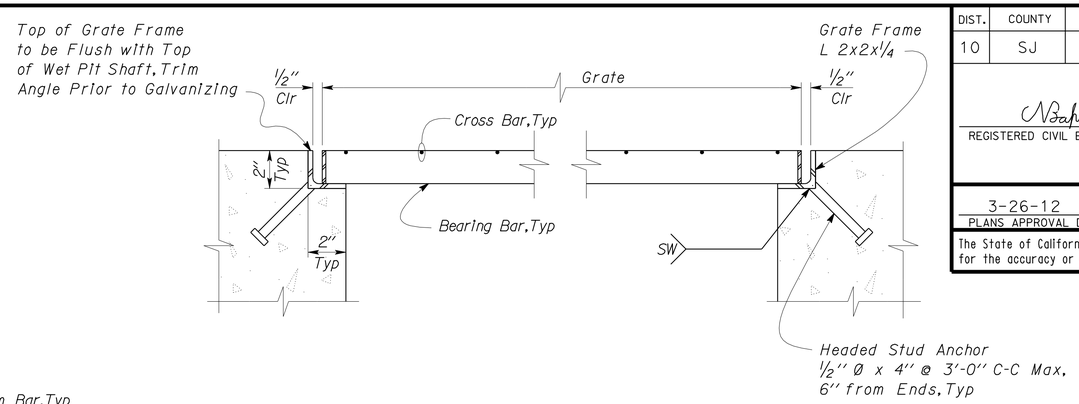
N Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

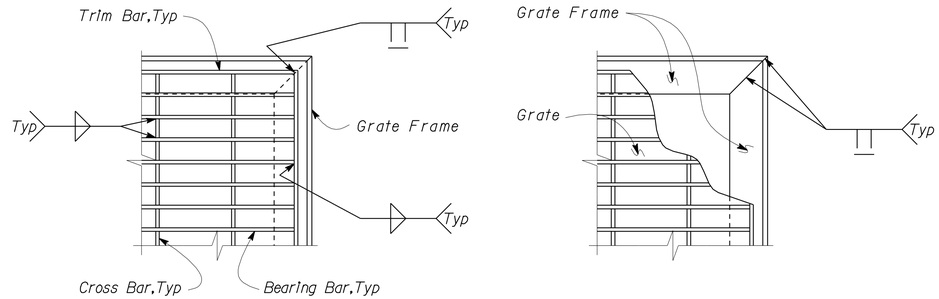
3-26-12
PLANS APPROVAL DATE



1 ACCESS GRATE DETAIL
Scale 3" = 1' - 0"



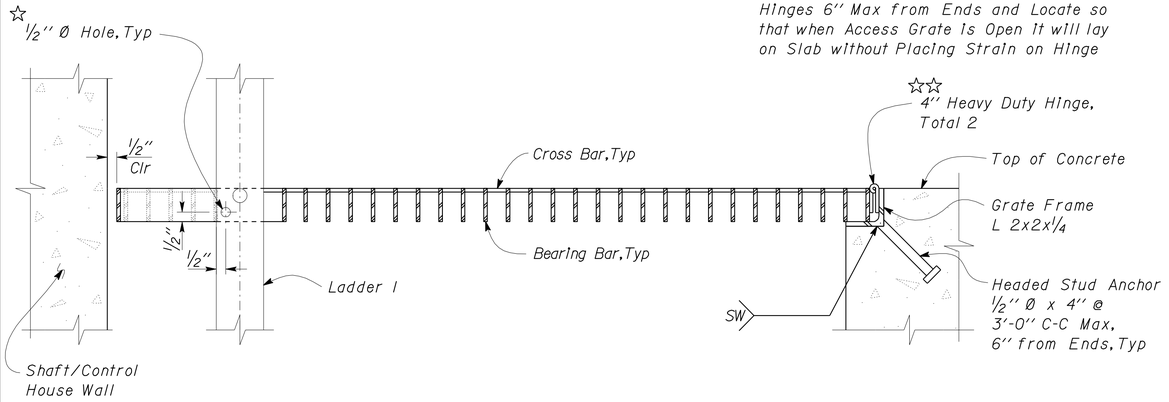
3 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"



4 GRATE AND FRAME DETAILS
Scale 3" = 1' - 0"

☆ Note:
Provide 1/2" Ø Aligned Hole In Access Grate Trim Bar and Ladder Rail for Padlock

☆☆ Note:
Fillet Weld Hinge to Grate Frame and Trim Bar on Three Sides of Hinge Leaf, Place Hinges 6" Max from Ends and Locate so that when Access Grate Is Open It will lay on Slab without Placing Strain on Hinge



2 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-19
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — ACCESS GRATE DETAILS	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY) 03-07-11 — SHEET — OF

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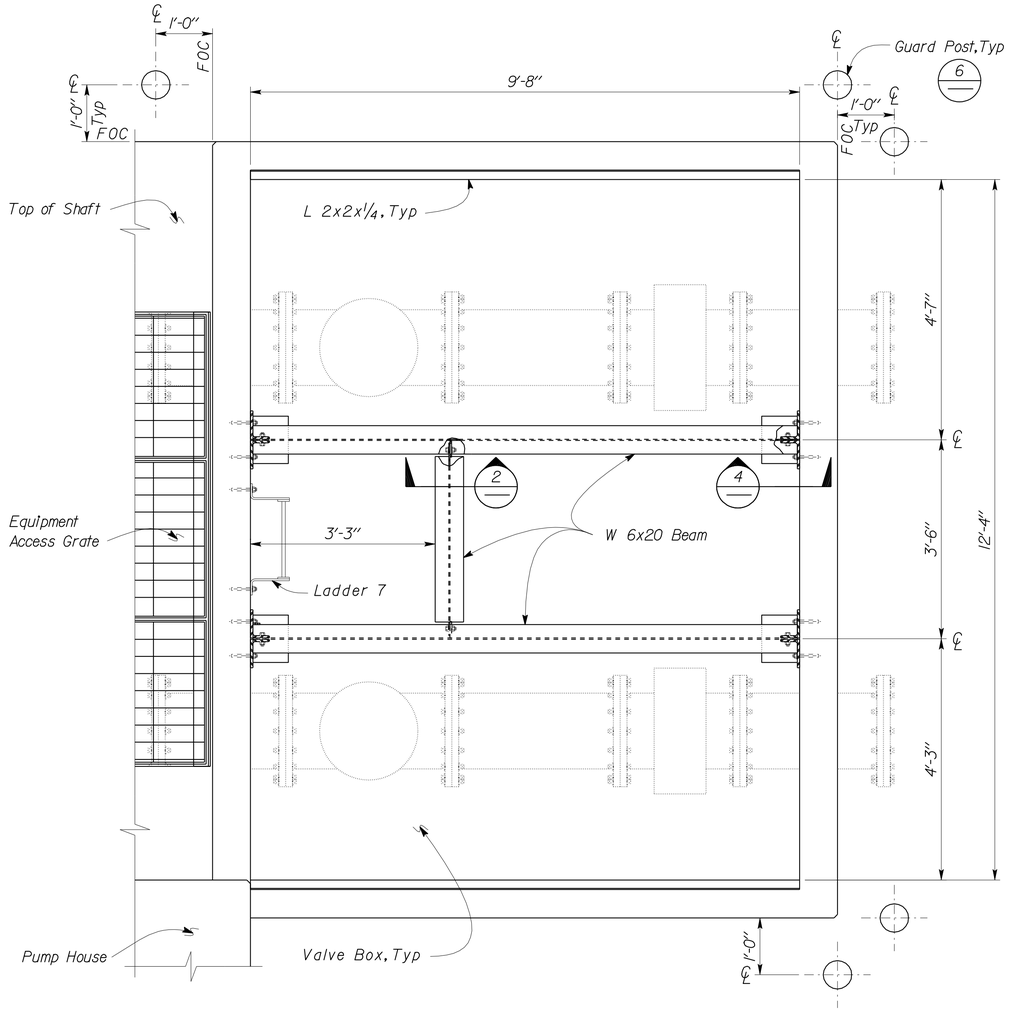
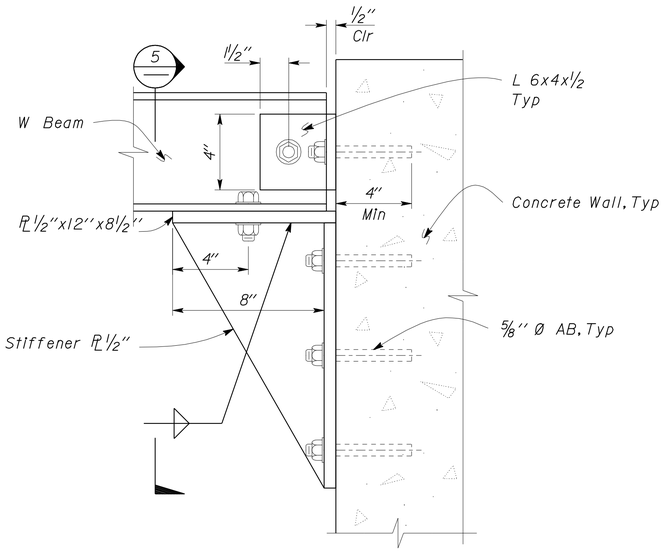
29-MAR-2012 17:45

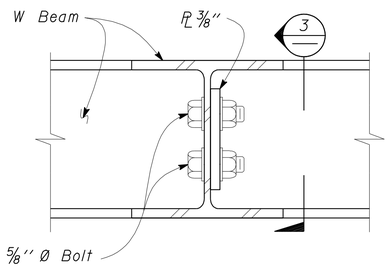


1 GRATE SUPPORT PLAN
Scale 3/4" = 1' - 0"

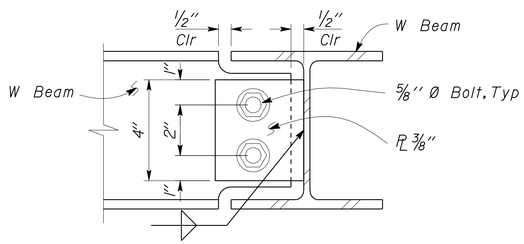


4 BEAM TO WALL CONNECTION
Scale 3" = 1' - 0"

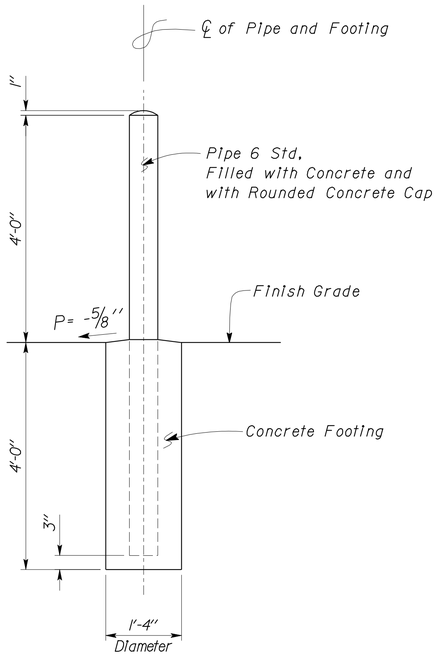
5 SECTION
Scale 3" = 1' - 0"



2 BEAM TO BEAM CONNECTION
Scale 4" = 1' - 0"



3 SECTION
Scale 4" = 1' - 0"



6 PIPE GUARD POST DETAIL
Scale 3/4" = 1' - 0"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1341	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat, No. 46493, Exp. 6-30-13, CIVIL — STATE OF CALIFORNIA

3-26-12
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.

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat
QUANTITIES	BY	CHECKED

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
EAST STOCKTON UP PUMPING PLANT
VALVE BOX GRATE SUPPORT DETAILS

SHEET ST1-20

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)									SHEET	OF
01-04-11										

TAEMWW Imperial Rev. 7/10

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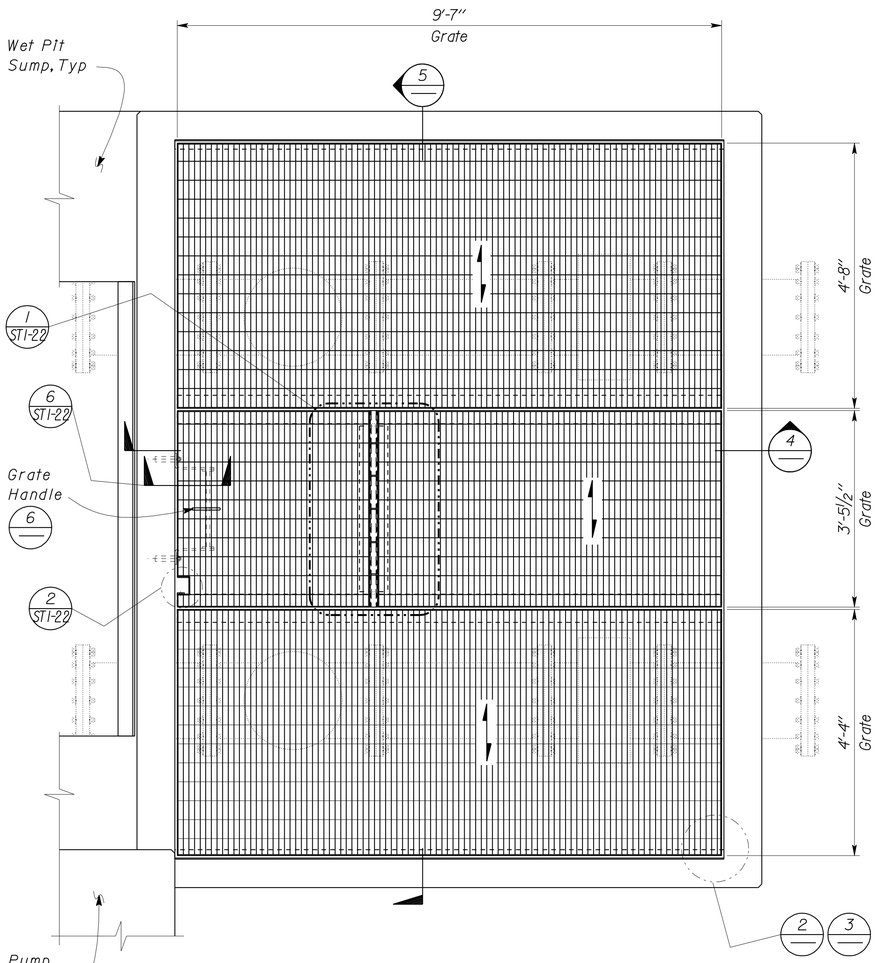
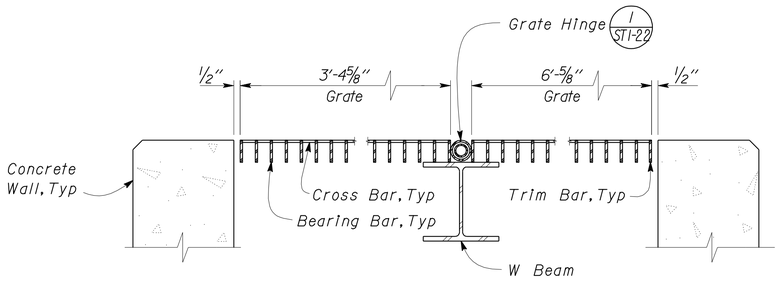
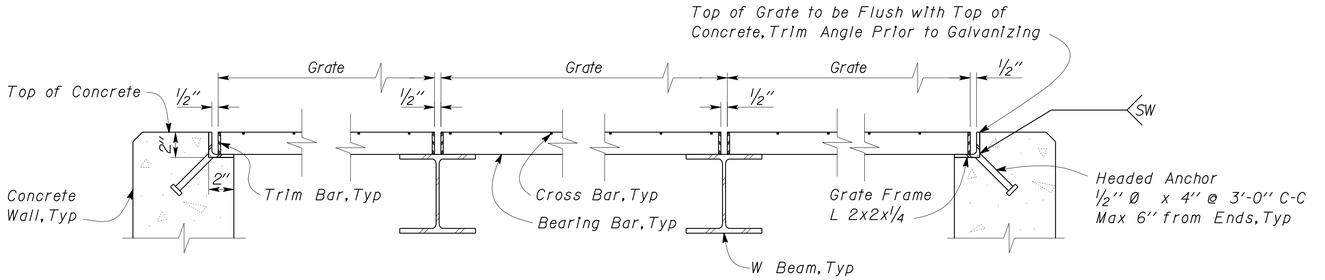
29-MAR-2012 17:45



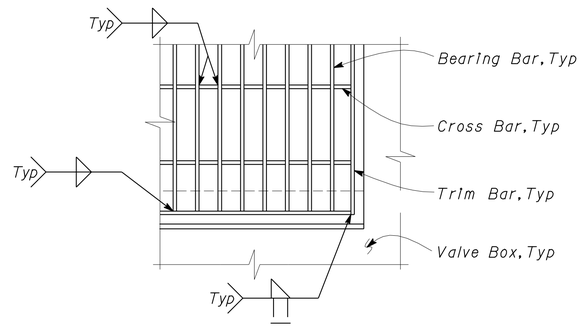
1 VALVE BOX ACCESS GRATE PLAN
Scale 3/4" = 1'-0"



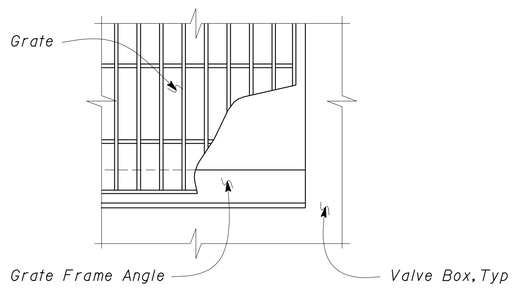
4 GRATE AND FRAME SECTION
Scale 2" = 1'-0"



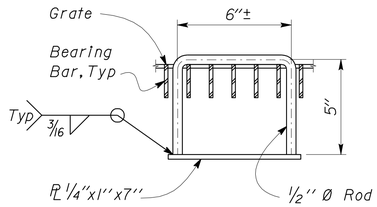
5 GRATE AND FRAME SECTION
Scale 2" = 1'-0"



2 GRATE DETAIL
Scale 3" = 1'-0"



3 GRATE FRAME DETAIL
Scale 3" = 1'-0"



6 HANDLE DETAIL
Scale 3" = 1'-0"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1342	1414

C. Bapat
REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
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.

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

EAST STOCKTON UP PUMPING PLANT

VALVE BOX GRATE PLAN AND DETAILS

SHEET ST1-21

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES (PRELIMINARY STAGE ONLY): 01-12-11
SHEET OF

29-MAR-2012 17:45
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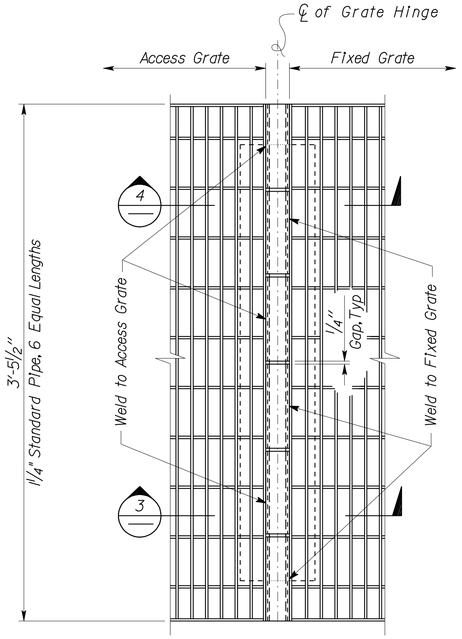
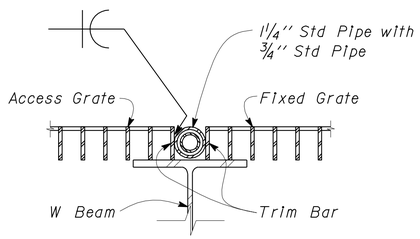
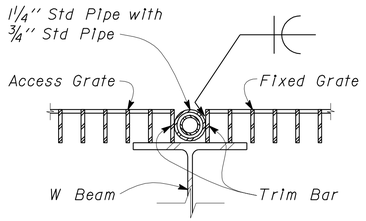


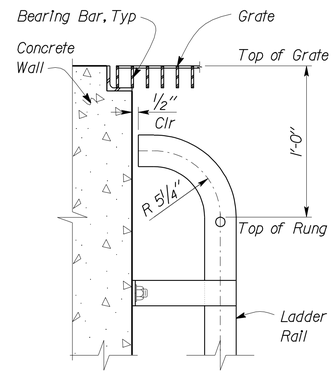
1 PIPE HINGE DETAIL
Scale 2" = 1'-0"



3 PIPE HINGE SECTION
Scale 3" = 1'-0"

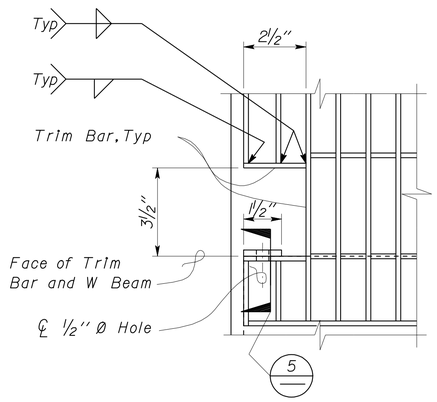


4 PIPE HINGE SECTION
Scale 3" = 1'-0"

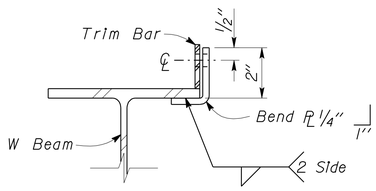


Notes:
1. For Details not Shown, see 1/ST1-16
2. For Ladder Safety Post, see 1/ST1-25

6 LADDER 6 SECTION
Scale 2" = 1'-0"



2 PADLOCK HASP DETAIL
Scale 4" = 1'-0"



5 PADLOCK HASP SECTION
Scale 4" = 1'-0"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1343	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

	BY	CHECKED
DESIGN	Chandra Bapat	Thomas Tong
DETAILS	Aleksey Serin	Chandra Bapat
QUANTITIES		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
EAST STOCKTON UP PUMPING PLANT
VALVE BOX GRATE DETAILS

SHEET ST1-22

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
02-09-11		

29-MAR-2012 17:45

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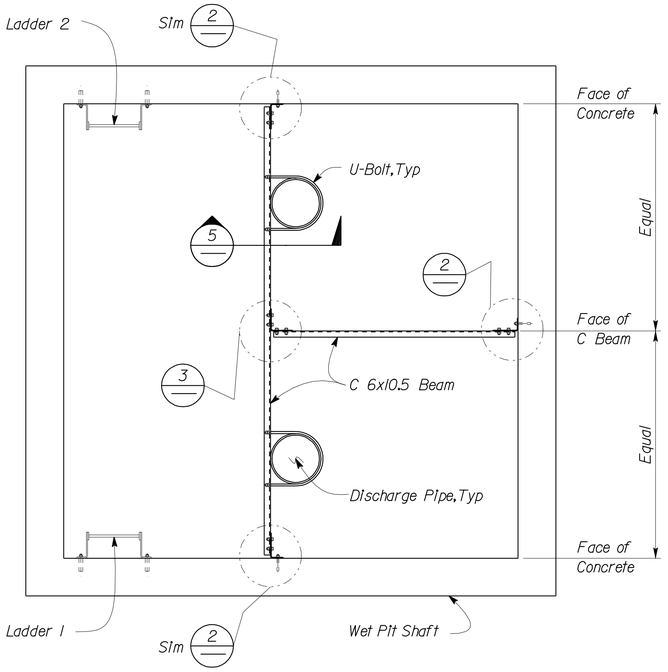
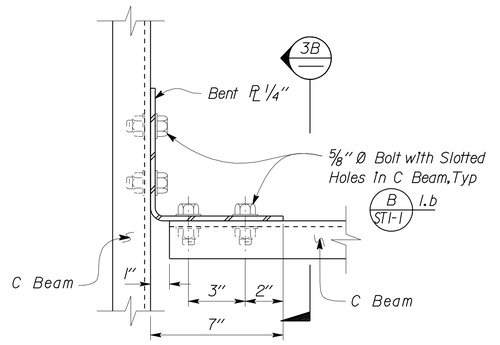
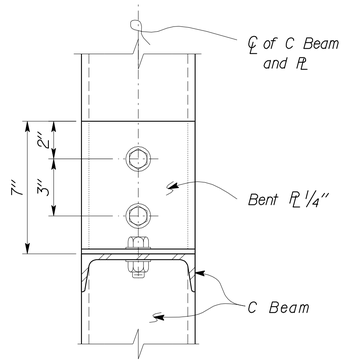


1 DISCHARGE PIPE SUPPORT PLAN
Scale 1/2" = 1' - 0"

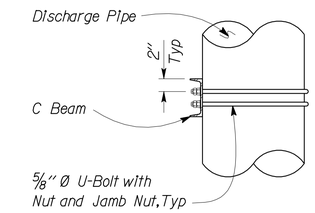


3A PLAN

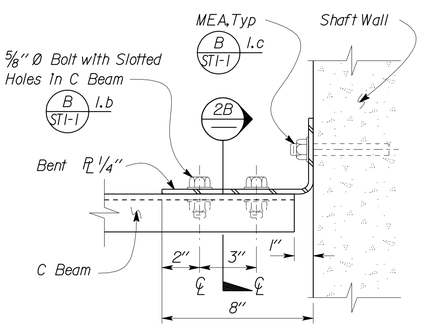


3B ELEVATION

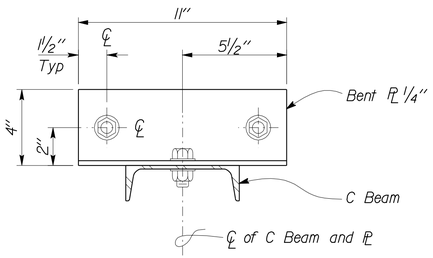
3 C BEAM TO C BEAM CONNECTION
Scale 3" = 1' - 0"



5 PIPE TO C BEAM CONNECTION
Scale 1" = 1' - 0"

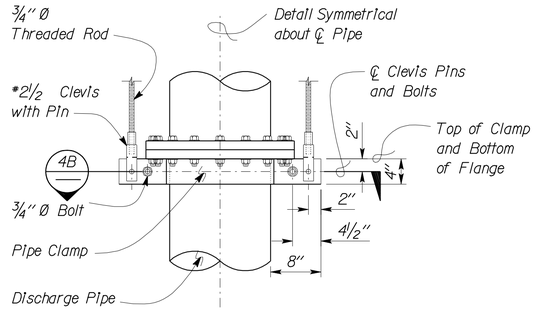


2A PLAN

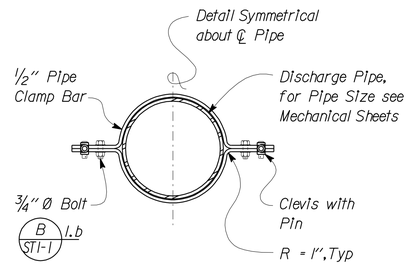


2B ELEVATION

2 C BEAM TO WALL CONNECTION
Scale 3" = 1' - 0"



4A ELEVATION



4B SECTION

4 PIPE CLAMP DETAIL
Scale 1" = 1' - 0"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1344	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
EAST STOCKTON UP PUMPING PLANT
DISCHARGE PIPE SUPPORT DETAILS

SHEET ST1-23

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)												SHEET	OF
02-11-11													

28-MAR-2012 14:52

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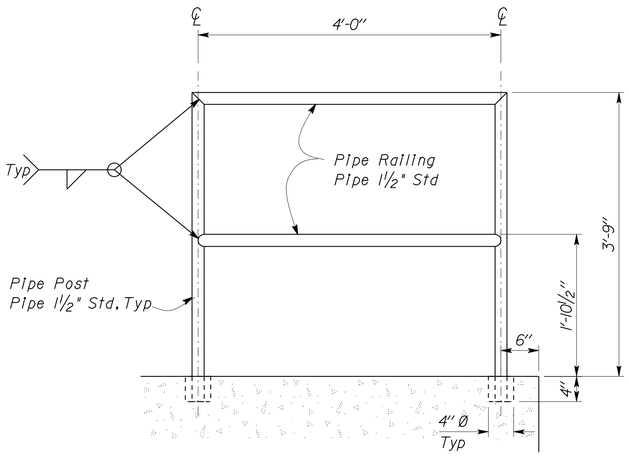
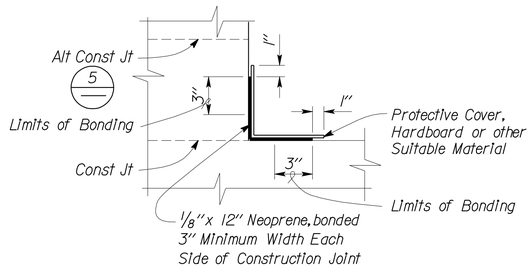
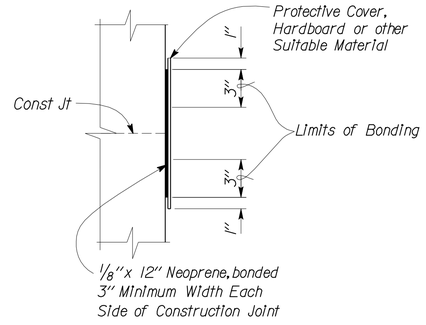


1 **LANDING 2 GUARDRAIL**
Scale 1" = 1' - 0"



3 **WATERSTOP DETAIL**
No Scale



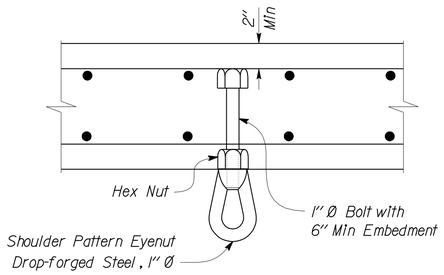
5 **WATERSTOP DETAIL**
No Scale

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1345	1414

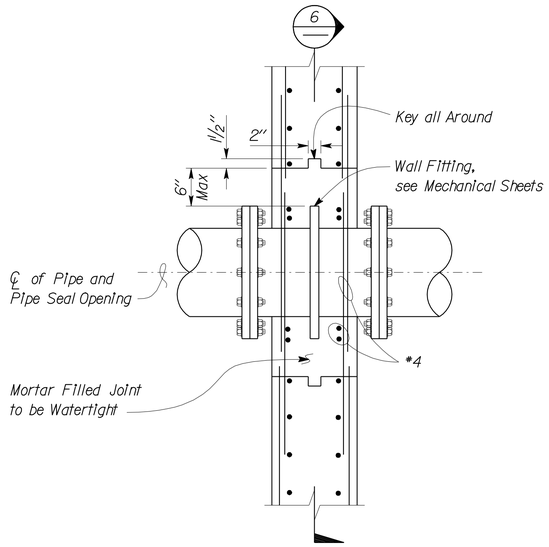
N Bapat 10-21-11
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

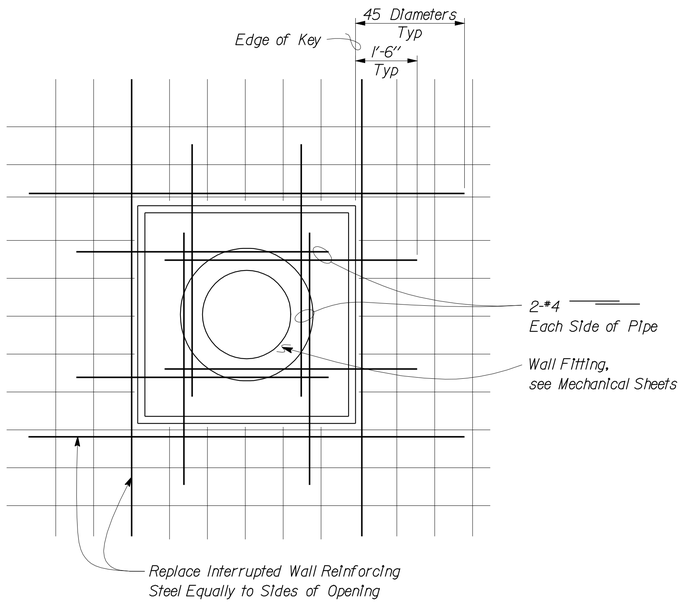
3-26-12
PLANS APPROVAL DATE



2 **PULLING LOOP DETAIL**
No Scale



4 **WALL FITTING SEAL DETAIL**
No Scale



Note:
For Pipe Location see Mechanical Sheets.

6 **PIPE SEAL DETAIL**
No Scale

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT / MISCELLANEOUS DETAILS
QUANTITIES	BY	CHECKED				

SHEET ST1-24

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY) 02-15-11 | SHEET | OF

28-MAR-2012 14:52
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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1346	1414

N Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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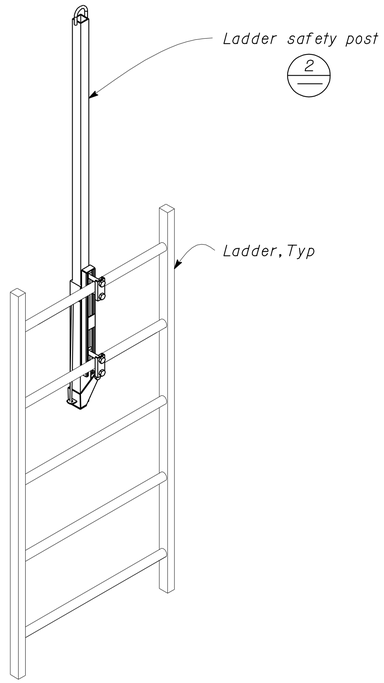
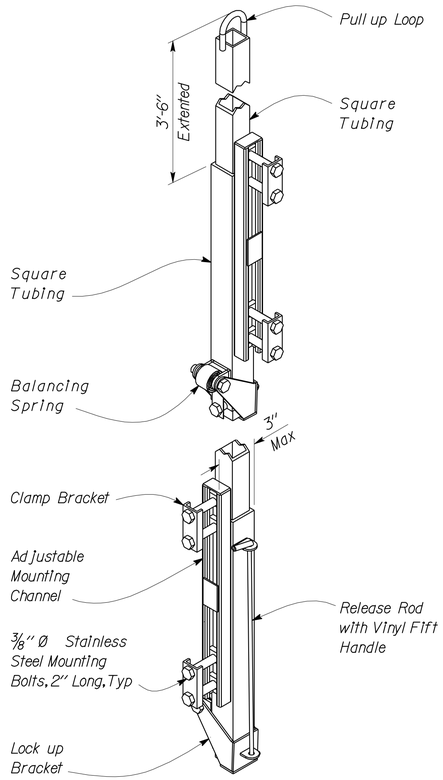
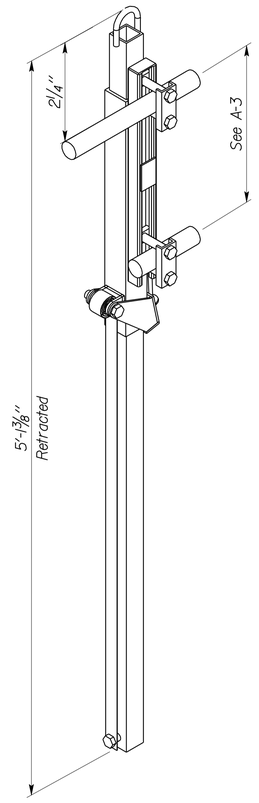


1 CONNECTION VIEW
No Scale





2 DETAILS
No Scale

A Notes

1. The ladder safety post shall be furnished completely assembled ready to mount on rear of ladder with clamp brackets on climbing side. Ladder must be structurally sound and securely anchored.
2. On hollow round rung ladders insert solid round bar (same length as rung) into the top two rungs to provide additional strength and prevent crushing of the rung when the ladder safety post is fastened.
3. Adjustable mounting fits ladders with rung spacing up to about 14" center to center.
4. Clamp bracket may be reversed to accommodate rung sizes of 3/4" to 1 1/4" with standard 2" bolt furnished. Larger rungs will require longer bolts.
5. The ladder safety post shall be steel and hot dipped galvanized.
6. Submit working drawings of ladder safety post for Engineer's approval.

	BY	CHECKED
DESIGN	Chandra Bapat	Thomas Tong
DETAILS	Aleksey Serin	Chandra Bapat
QUANTITIES		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
EAST STOCKTON UP PUMPING PLANT
LADDER SAFETY POST

SHEET ST1-25

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
04-04-11		

28-MAR-2012 14:52
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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1347	1414

C Bapat 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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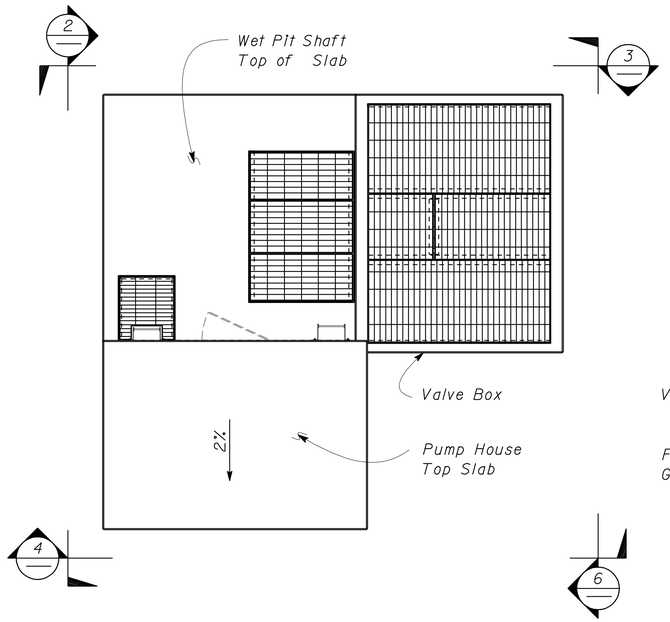
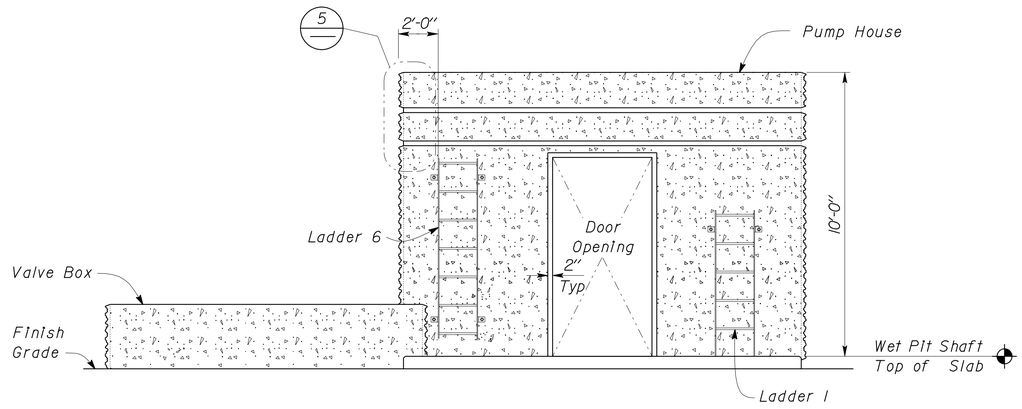
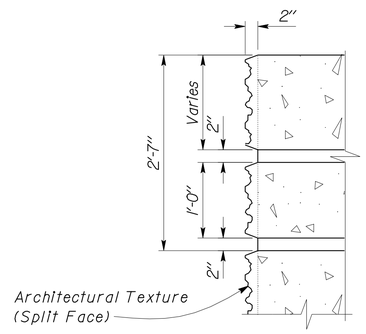


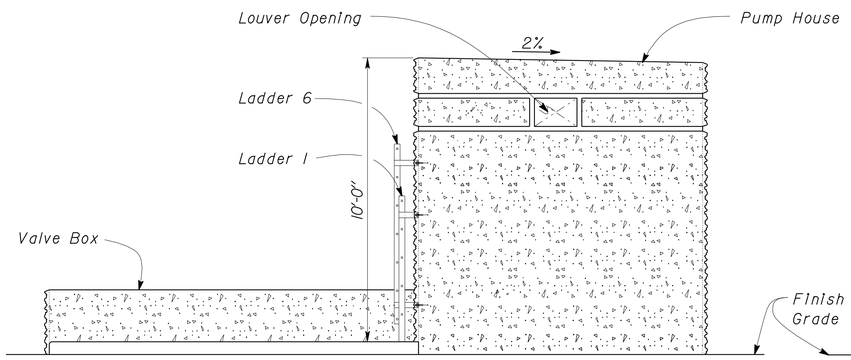
1 PUMPING PLANT PLAN
Scale 1/4" = 1' - 0"



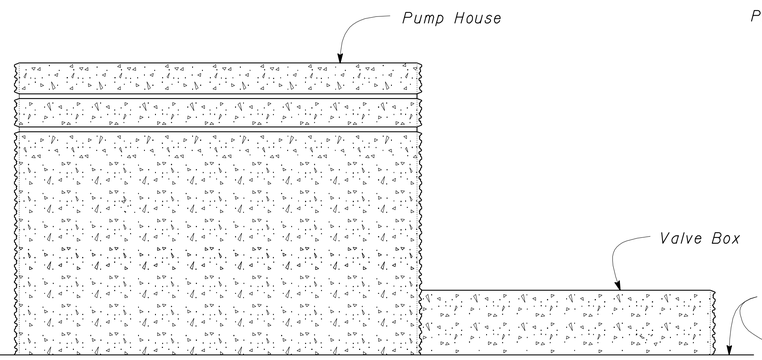
3 FRONT ELEVATION
Scale 3/8" = 1' - 0"



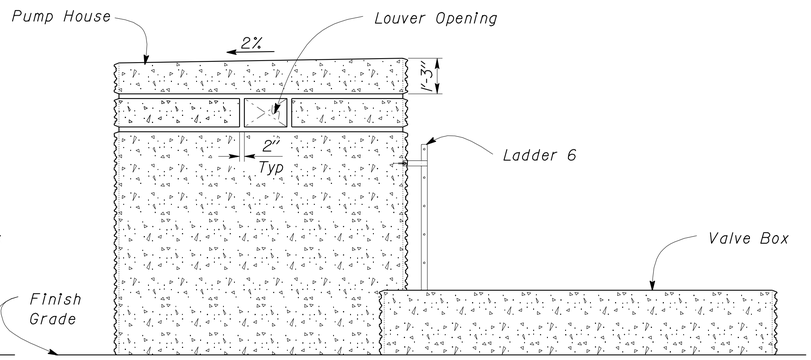
5 TEXTURE DETAIL
Scale 1" = 1' - 0"



2 LEFT SIDE ELEVATION
Scale 3/8" = 1' - 0"



4 BACK SIDE ELEVATION
Scale 3/8" = 1' - 0"



6 RIGHT SIDE ELEVATION
Scale 3/8" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
EAST STOCKTON UP PUMPING PLANT
PUMPING PLANT ELEVATIONS

SHEET ST1-26

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
04-08-11

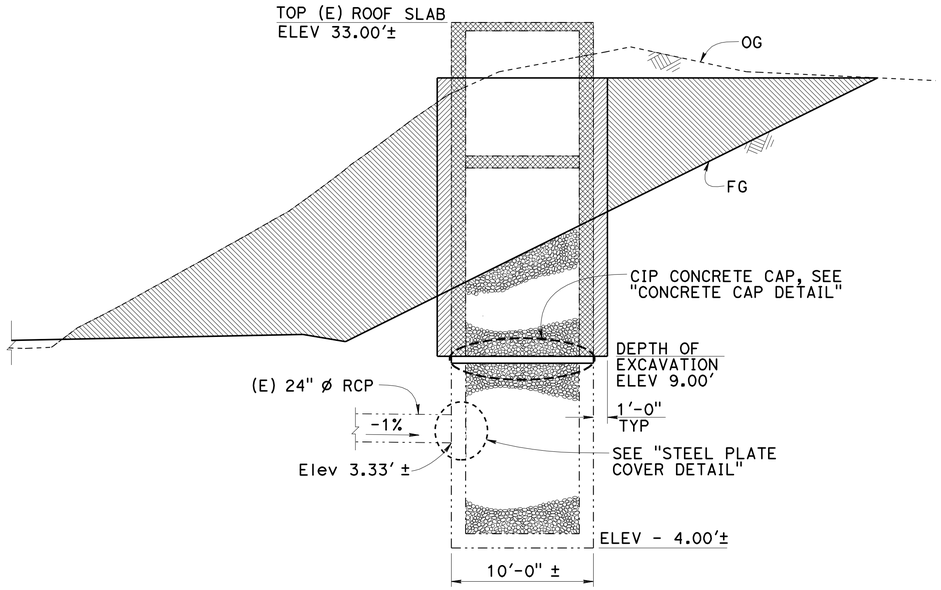
28-MAR-2012 14:53
D:\User\projects\dist_10\3A1001\st1_East_stockton_UP_MLK\Expedite\st1_26.dgn

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1348	1414

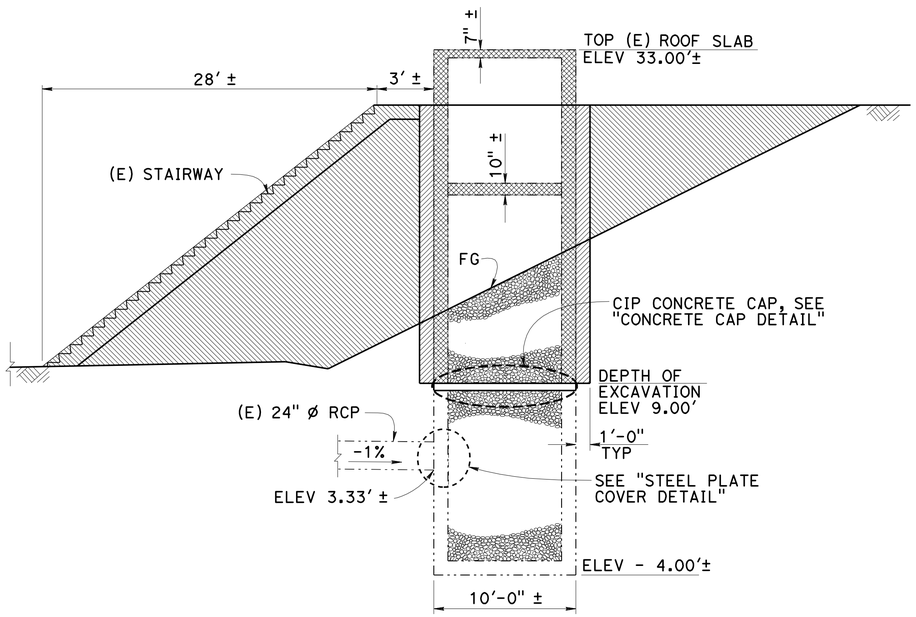
C. N. Bapat — 03-02-12
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE



SECTION B-B
3/16" = 1'-0"

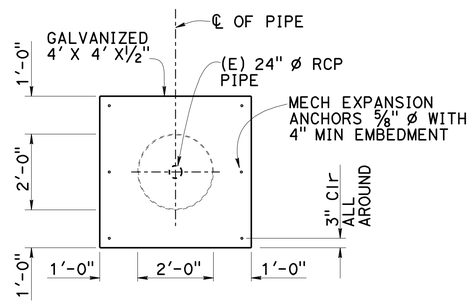


SECTION A-A
3/16" = 1'-0"

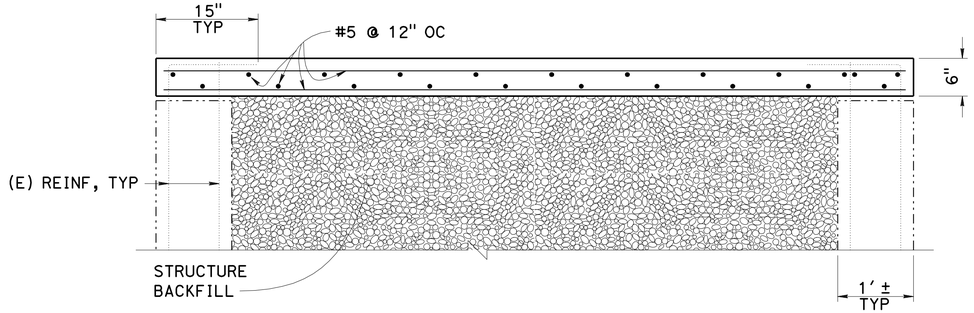
NOTE:

Remove all existing Mechanical and Electrical equipment from Pump Shaft.

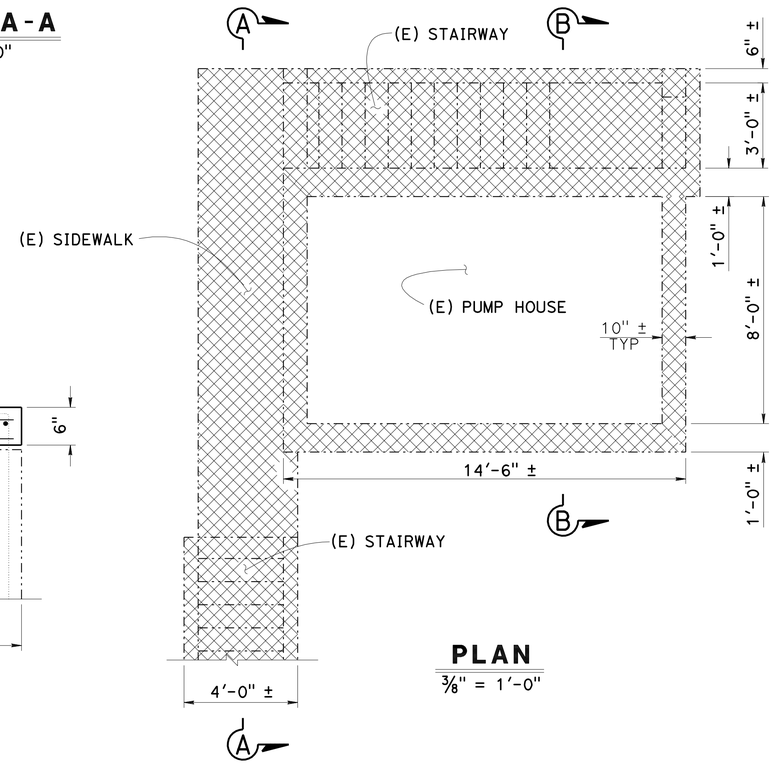
- Indicates concrete removal
- Indicates Structure Excavation
- Indicates Structure Backfill
- Indicates Roadway Excavation
- Indicates existing structure
- Indicates new structure



STEEL PLATE COVER
½" = 1'-0"



CONCRETE CAP DETAIL
1" = 1'-0"



PLAN
⅜" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST1-27
DETAILS	BY Aleksey Serin	CHECKED Chandra Bapat			POST MILE	EAST STOCKTON UP PUMPING PLANT — PUMP HOUSE REMOVAL	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
02-29-12		

D:\User\Projects\Dist_10\1000000409_Stockton_pp\st1_East_stockton_UP_MLK\Expedite_Resubmittal_03-02-2012\st1_27.dgn

30-MAR-2012 05:39

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1349	1414

Joseph M Kaump 7-7-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST
Joseph Kaump
No. 7837
Exp. 01-31-13
PROFESSIONAL GEOLOGIST
STATE OF CALIFORNIA

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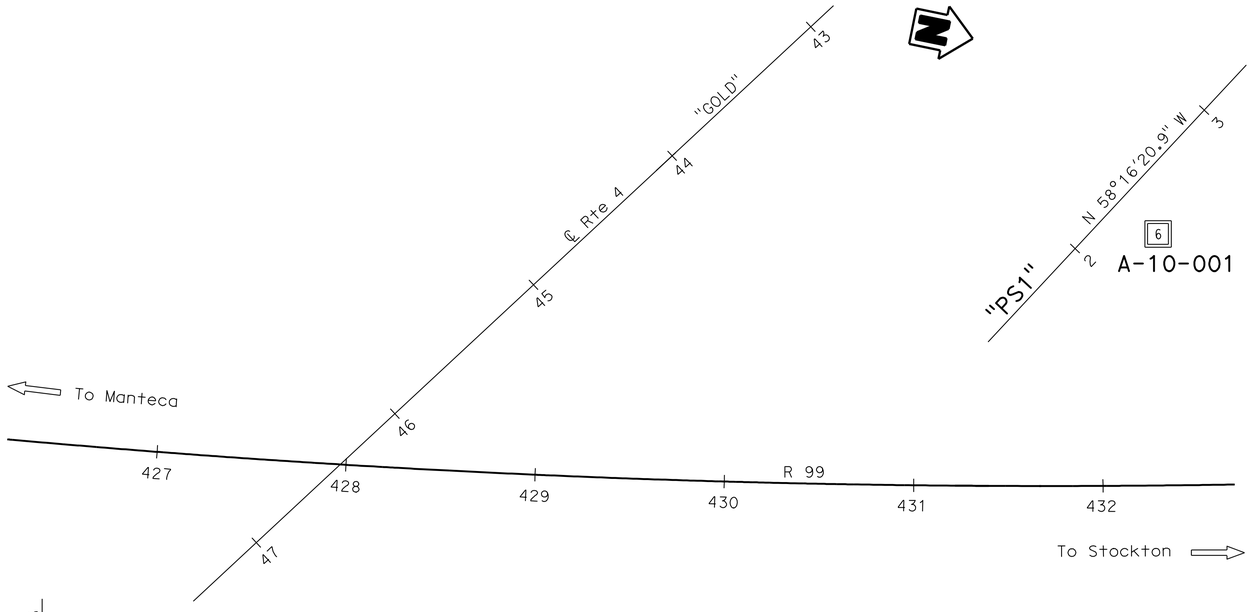
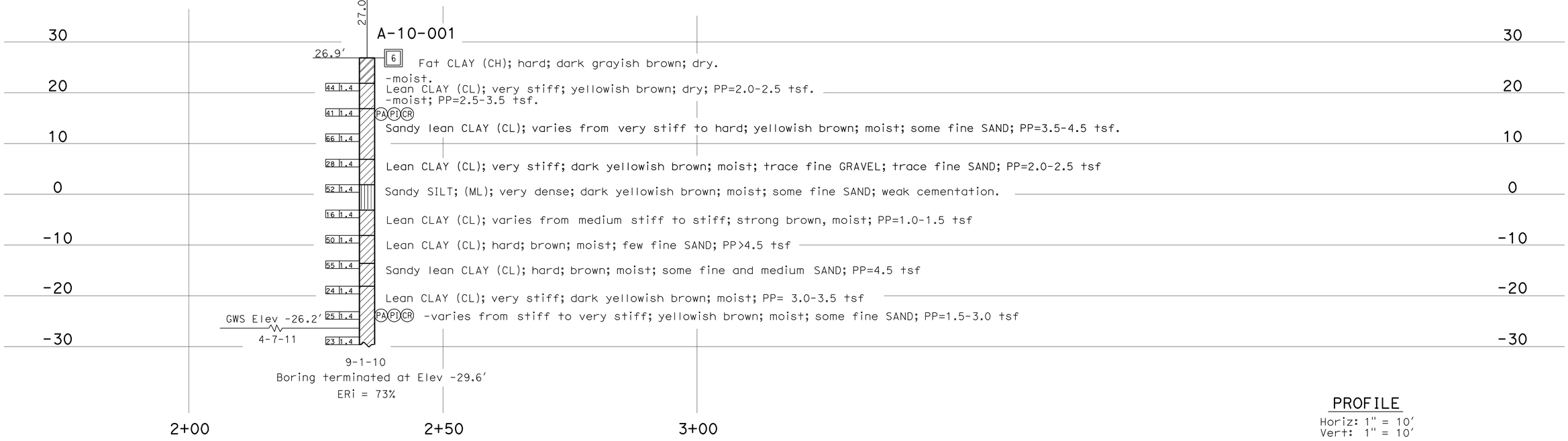
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

BENCH MARK

IGP 102
Fnd Spike
Elev 37.14
103.21′ Rt Sta 429+96.21 "R99" Line
N 2,167,238.21
E 6,349,713.11
Vert Datum = NGVD 29



PLAN
1" = 40′



PROFILE
Horiz: 1" = 10′
Vert: 1" = 10′

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	EAST STOCKTON UP PUMPING PLANT
FUNCTIONAL SUPERVISOR	DRAWN BY: W. Tang 6/11		DESIGN BRANCH X	29-0115W	LOG OF TEST BORINGS 1 OF 3
NAME: R. Buell	CHECKED BY: L. Paredes-Mejia	FIELD INVESTIGATION BY: J. Kaump		POST MILE	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
07-06-11				X	X

FILE => st_Log01_of_03.dgn

USERNAME => s109658 DATE PLOTTED => 28-MAR-2012 TIME PLOTTED => 14:53

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1350	1414

Joseph M Kaump 7-7-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — Joseph Kaump — No. 7837 — Exp. 01-31-13 — PROFESSIONAL GEOLOGIST — STATE OF CALIFORNIA

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CEMENTATION

Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

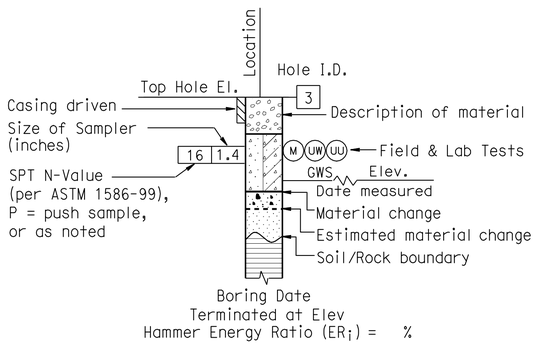
BOREHOLE IDENTIFICATION

Symbol	Hole Type	Description
Size	A	Auger Boring (hollow or solid stem bucket)
Size	R RW RC P	Rotary drilled boring (conventional) Rotary drilled with self-casing wire-line Rotary core with continuously-sampled, self-casing wire-line Rotary percussion boring (air)
Size	R	Rotary drilled diamond core
Size	HD HA	Hand driven (1-inch soil tube) Hand Auger
●	D	Dynamic Cone Penetration Boring
▲	CPT	Cone Penetration Test (ASTM D 5778)
⬚	O	Other (note on LOTB)

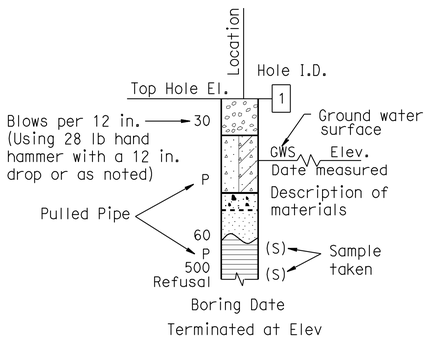
Note: Size in inches.

CONSISTENCY OF COHESIVE SOILS

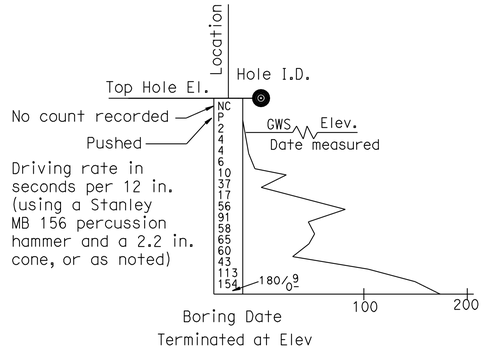
Description	Shear Strength (tsf)	Pocket Penetrometer Measurement, PP, (tsf)	Torvane Measurement, TV, (tsf)	Vane Shear Measurement, VS, (tsf)
Very Soft	Less than 0.12	Less than 0.25	Less than 0.12	Less than 0.12
Soft	0.12 - 0.25	0.25 - 0.5	0.12 - 0.25	0.12 - 0.25
Medium Stiff	0.25 - 0.5	0.5 - 1	0.25 - 0.5	0.25 - 0.5
Stiff	0.5 - 1	1 - 2	0.5 - 1	0.5 - 1
Very Stiff	1 - 2	2 - 4	1 - 2	1 - 2
Hard	Greater than 2	Greater than 4	Greater than 2	Greater than 2



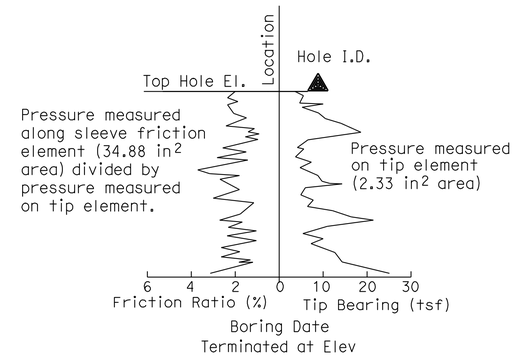
ROTARY BORING



HAND BORING



DYNAMIC CONE PENETRATION BORING



CONE PENETRATION TEST (CPT) BORING

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	EAST STOCKTON UP PUMPING PLANT
	PREPARED BY: W. Tang 6/11		DESIGN BRANCH X	29-0115W POST MILE	LOG OF TEST BORINGS 2 OF 3

GS LOTB SOIL LEGEND

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
				X	X

FILE => st_Log02_of_03.dgn

USERNAME => s109858 DATE PLOTTED => 28-MAR-2012 TIME PLOTTED => 14:53

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010)

GROUP SYMBOLS AND NAMES

Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
GW	Well-graded GRAVEL Well-graded GRAVEL with SAND	CL	Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
GP	Poorly-graded GRAVEL Poorly-graded GRAVEL with SAND		
GW-GM	Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND	CL-ML	SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
GW-GC	Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
GP-GM	Poorly-graded GRAVEL with SILT Poorly-graded GRAVEL with SILT and SAND	ML	SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
GP-GC	Poorly-graded GRAVEL with CLAY (or SILTY CLAY) Poorly-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
GM	SILTY GRAVEL SILTY GRAVEL with SAND	OL	ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
GC	CLAYEY GRAVEL CLAYEY GRAVEL with SAND		
GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND	OL	ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
SW	Well-graded SAND Well-graded SAND with GRAVEL		
SP	Poorly-graded SAND Poorly-graded SAND with GRAVEL	CH	Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
SW-SM	Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL		
SW-SC	Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)	MH	Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
SP-SM	Poorly-graded SAND with SILT Poorly-graded SAND with SILT and GRAVEL		
SP-SC	Poorly-graded SAND with CLAY (or SILTY CLAY) Poorly-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)	OH	ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
SM	SILTY SAND SILTY SAND with GRAVEL		
SC	CLAYEY SAND CLAYEY SAND with GRAVEL	OH	ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
SC-SM	SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL		
PT	PEAT	OL/OH	ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND
	COBBLES COBBLES and BOULDERS BOULDERS		

FIELD AND LABORATORY TESTING

- (C) Consolidation (ASTM D 2435)
- (CL) Collapse Potential (ASTM D 5333)
- (CP) Compaction Curve (CTM 216)
- (CR) Corrosivity Testing (CTM 643, CTM 422, CTM 417)
- (CU) Consolidated Undrained Triaxial (ASTM D 4767)
- (DS) Direct Shear (ASTM D 3080)
- (EI) Expansion Index (ASTM D 4829)
- (M) Moisture Content (ASTM D 2216)
- (OC) Organic Content-% (ASTM D 2974)
- (P) Permeability (CTM 220)
- (PA) Particle Size Analysis (ASTM D 422)
- (PI) Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
- (PL) Point Load Index (ASTM D 5731)
- (PM) Pressure Meter
- (R) R-Value (CTM 301)
- (SE) Sand Equivalent (CTM 217)
- (SG) Specific Gravity (AASHTO T 100)
- (SL) Shrinkage Limit (ASTM D 427)
- (SW) Swell Potential (ASTM D 4546)
- (UC) Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938)
- (UU) Unconsolidated Undrained Triaxial (ASTM D 2850)
- (UW) Unit Weight (ASTM D 4767)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1351	1414

Joseph M Kaump 7-7-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

Joseph Kaump No. 7837 Exp. 01-31-13 PROFESSIONAL GEOLOGIST STATE OF CALIFORNIA

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APPARENT DENSITY OF COHESIONLESS SOILS

Description	SPT N_{60} (Blows / 12 in.)
Very Loose	0 - 5
Loose	5 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Greater than 50

MOISTURE

Description	Criteria
Dry	No discernable moisture
Moist	Moisture present, but no free water
Wet	Visible free water

PERCENT OR PROPORTION OF SOILS

Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5% - 10%
Little	15% - 25%
Some	30% - 45%
Mostly	50% - 100%

PARTICLE SIZE

Description		Size (in.)
Boulder		Greater than 12
Cobble		3 - 12
Gravel	Coarse	3/4 - 3
	Fine	1/5 - 3/4
Sand	Coarse	1/16 - 1/5
	Medium	1/64 - 1/16
	Fine	1/300 - 1/64
Silt and Clay		Less than 1/300

ENGINEERING SERVICES

MATERIALS AND GEOTECHNICAL SERVICES
PREPARED BY: W. Tang 6/11

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN
DESIGN BRANCH X

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP PUMPING PLANT
LOG OF TEST BORINGS 3 OF 3

GS LOTB SOIL LEGEND

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
				X	X

FILE => st_Log03_of_03.dgn

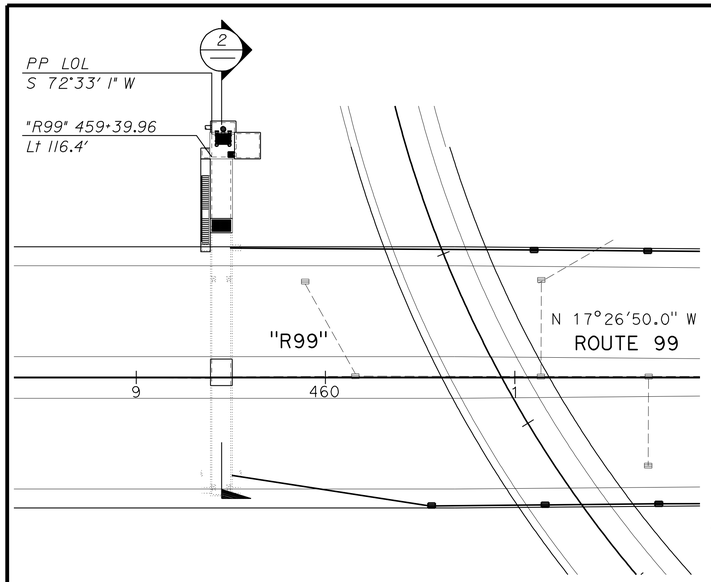
USERNAME => s109858 DATE PLOTTED => 28-MAR-2012 TIME PLOTTED => 14:53

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1352	1414

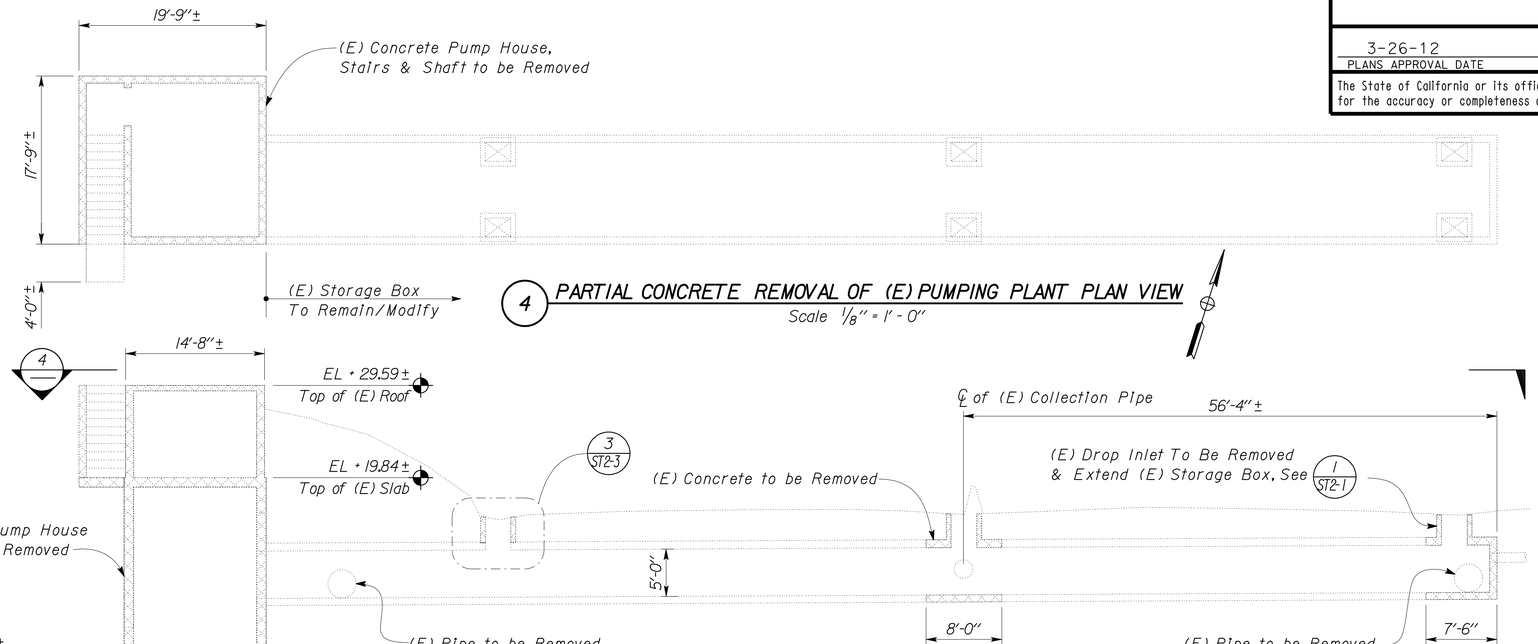
N Bapat 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

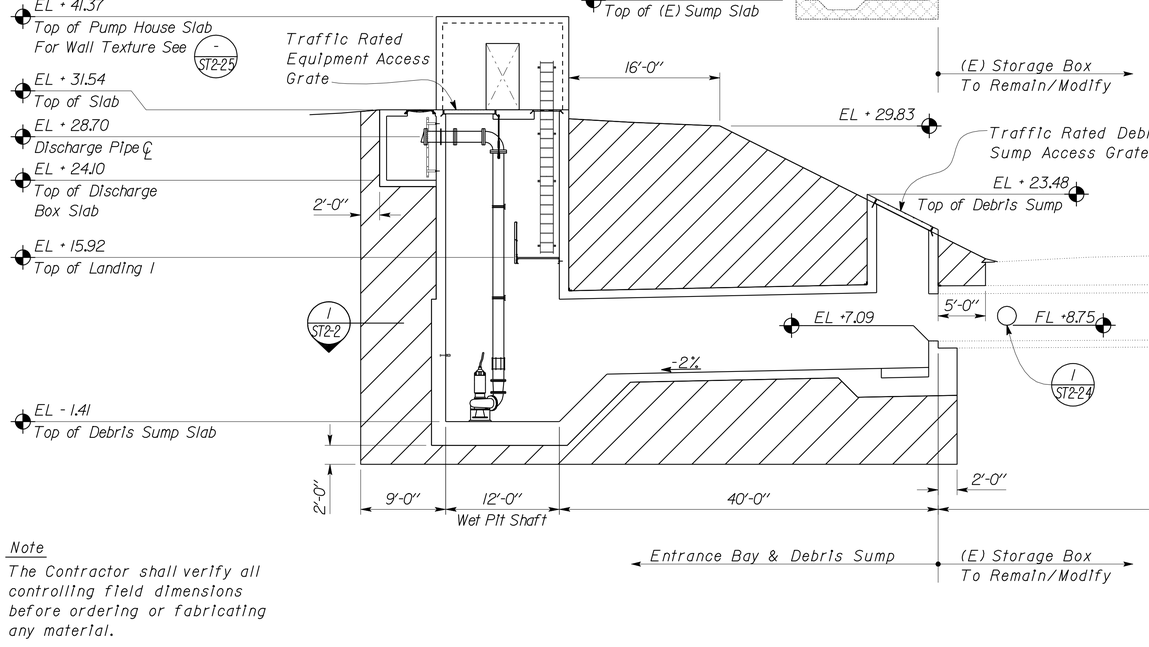
3-26-12
PLANS APPROVAL DATE



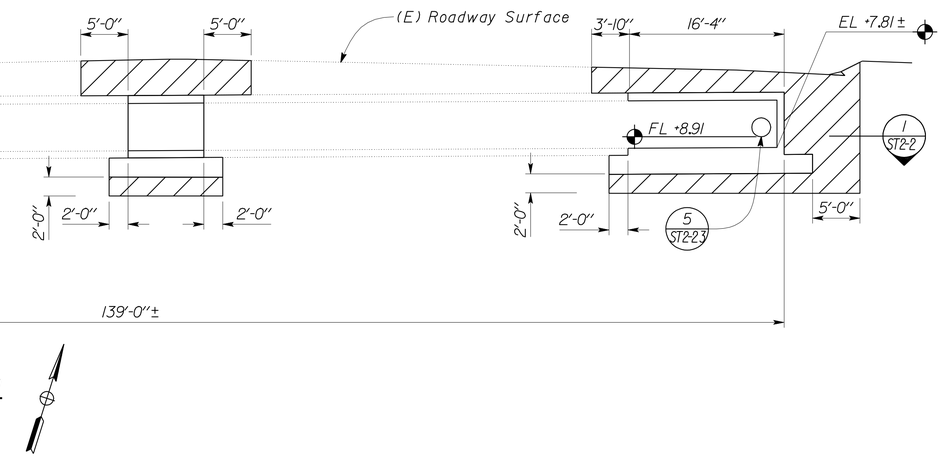
1 SITE PLAN
Scale 1" = 40' - 0"



4 PARTIAL CONCRETE REMOVAL OF (E) PUMPING PLANT PLAN VIEW
Scale 1/8" = 1' - 0"



3 PARTIAL CONCRETE REMOVAL OF (E) PUMPING PLANT SECTION
Scale 1/8" = 1' - 0"



2 PUMPING PLANT SECTION
Scale 1/8" = 1' - 0"

Note
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

RE Travis DESIGN SUPERVISOR	DESIGN	BY Chandra Bapat	CHECKED Thomas Tong
Joe Gallardo DESIGN ENGINEER	DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat
	QUANTITIES	BY	CHECKED

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE
RTE 26/99 Sep PUMPING PLANT

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

STRUCTURAL SITE PLAN

SHEET ST2-0

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)										SHEET	OF
07-22-10	02-04-11	03-02-11	03-29-11	04-07-11	04-13-11	05-12-11	05-26-11	10-20-11			

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30-MAR-2012 14:13

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1353	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

A PUMPING PLANT DESIGN NOTES

1. Design : AASHTO LRFD Bridge Design Specification, 4th Edition with California Amendments, Preface dated December 2008
   a. Loads :
      Vertical Box :
      Earth Loads (Equivalent Fluid Pressure):
      60 PCF above GWT
      90 PCF below GWT
      Horizontal Box :
      Live Load : HS 20-44 Truck
      Roof : 30% Impact up to 3' of cover, no Impact above 3' of cover.
      Walls : No surcharge
      Invert : No Impact
      Earth Loads (Equivalent Fluid Pressure for two conditions):
      140 PCF vertical and 42 PCF horizontal
      140 PCF vertical and horizontal
      Landings : Live Load 100 PSF
   b. Reinforced Concrete (Ultimate Strength Design):
      $f'c$ = 3,250 PSI
      f_y = 60,000 PSI
   c. Miscellaneous Metal (Working Stress Design):
      f_y = 36,000 PSI unless otherwise noted
2. Foundation Report : Dated April 11, 2011

B DETAIL NOTES

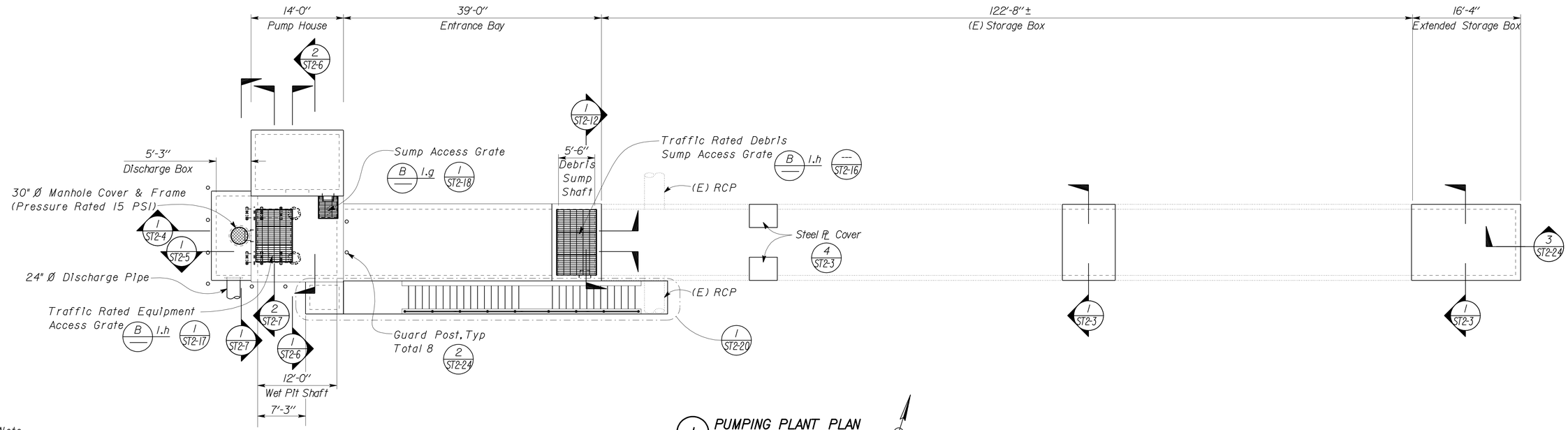
1. Metal Work Notes :
   a. All metal work shall be hot dip galvanized after fabrication
   b. Secure metal to metal connections shown as + with a 1/2" Ø x 1 1/2" hex head machine bolt, lock washer and hex nut unless otherwise noted.
   c. Mechanical Expansion Anchors shall be 5/8" Ø and have a 4" minimum embedment, 3'-0" maximum spacing and placed 6" from ends, two minimum, unless otherwise shown.
   d. Mechanical Expansion Anchors used for securing ladders inside of Pumping Plant shall be of stainless steel.
   e. All lock washers shall be helical spring lock washers.
   f. All Railing and Ladders shall have smooth edges.
   g. Welded Steel Grate : Unless otherwise noted
      Bearing Bars 1 3/4" x 3/16" @ 1 3/16" C-C
      Cross Bars 1/2" Ø @ 4" C-C
      Trim Bars 1 3/4" x 3/16" fillet welded to ends of Bearing Bars
      Grate shall be anchored to supports with 1/4" Ø threaded stud and "Saddle Clip" type fastener as recommended by the manufacturer. Fasteners shall be installed at 3'-0" C-C maximum 6" from ends with 3 minimum per fixed grate.
   h. Welded Steel Grate :
      Traffic Rated Grate :
      Bearing Bars 5" x 3/8" @ 1 3/16" C-C
      Cross Bars 1/2" Ø @ 4" C-C
      Trim Bars 5" x 3/8" fillet welded to ends of Bearing Bars
      Direction of Bearing Bars is indicated by ⟵
2. For Discharge Pipe locations and elevations, see Mechanical Plans.
3. For Ground Rod details not shown, see Electrical Plans.
4. For Ladder Details see (1 / ST2-19) & (--- / ST2-26) for Ladder Safety Post.

ABBREVIATIONS

Alt	Alternative
Btm	Bottom
EL	Elevation
GWT	Ground Water Table
MEA	Mechanical Expansion Anchor
OH	Opposite Hand
PP LOL	Pumping Plant Layout Line
Stagg	Staggered

SYMBOLS

- Elevation or Working Point
- Existing Features
- Earth
- Free Draining Granular Material
- Reinforced Concrete
- (3 / ST-1) 5b — Detail Number or Note Number; Additional Reference (If required); Sheet Number
- Limits of Structure Excavation & Structure Backfill (shown on plan view)
- Structure Excavation & Structure Backfill
- Concrete Removal



1 PUMPING PLANT PLAN
Scale 1/8" = 1'-0"

Note
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

BRIDGE NO. 29-0120W
POST MILE

RTE 26/99 Sep PUMPING PLANT

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

PUMPING PLANT PLAN

SHEET ST2-1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
01-04-11 | 01-25-11 | 02-03-11 | 03-10-11 | 03-29-11 | 04-07-11 | 05-05-11 | 10-20-11

TAEMWW Imperial Rev. 7/10

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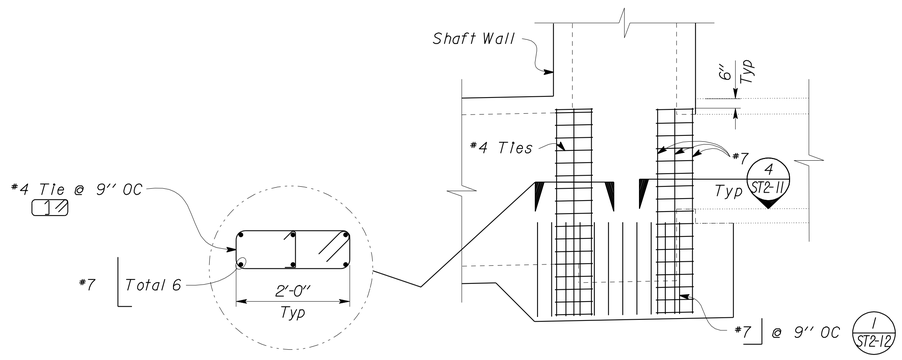
29-MAR-2012 17:46

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1354	1414

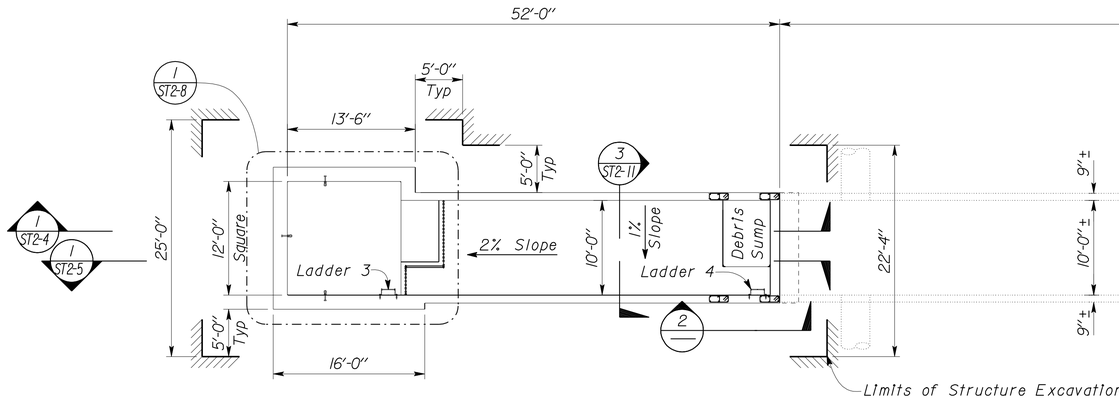
N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

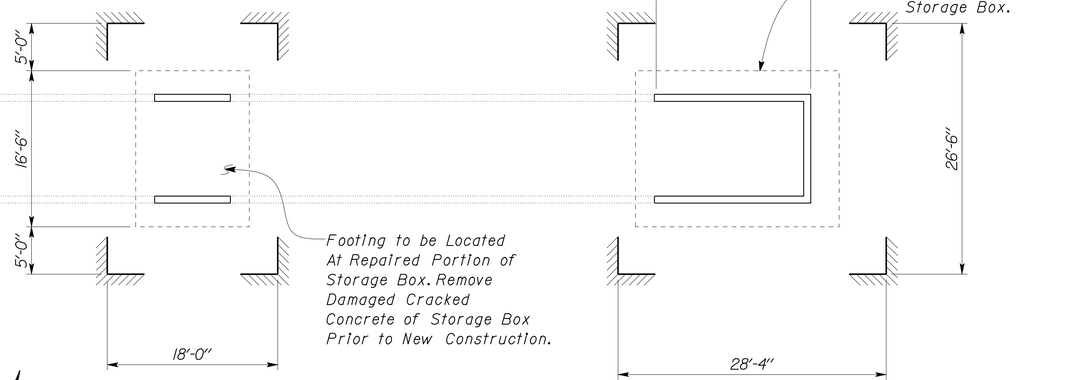
REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE



2 ADDITIONAL WALL REINFORCEMENT TYPICAL
Scale 1/4" = 1'-0"





1 FOUNDATION PLAN
Scale 1/8" = 1'-0"

Note

The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST2-2
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT — FOUNDATION PLAN	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)							SHEET	OF
10-20-11			05-05-11	05-26-11	06-01-11	06-09-11	06-23-11	06-27-11		

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28-MAR-2012 15:55

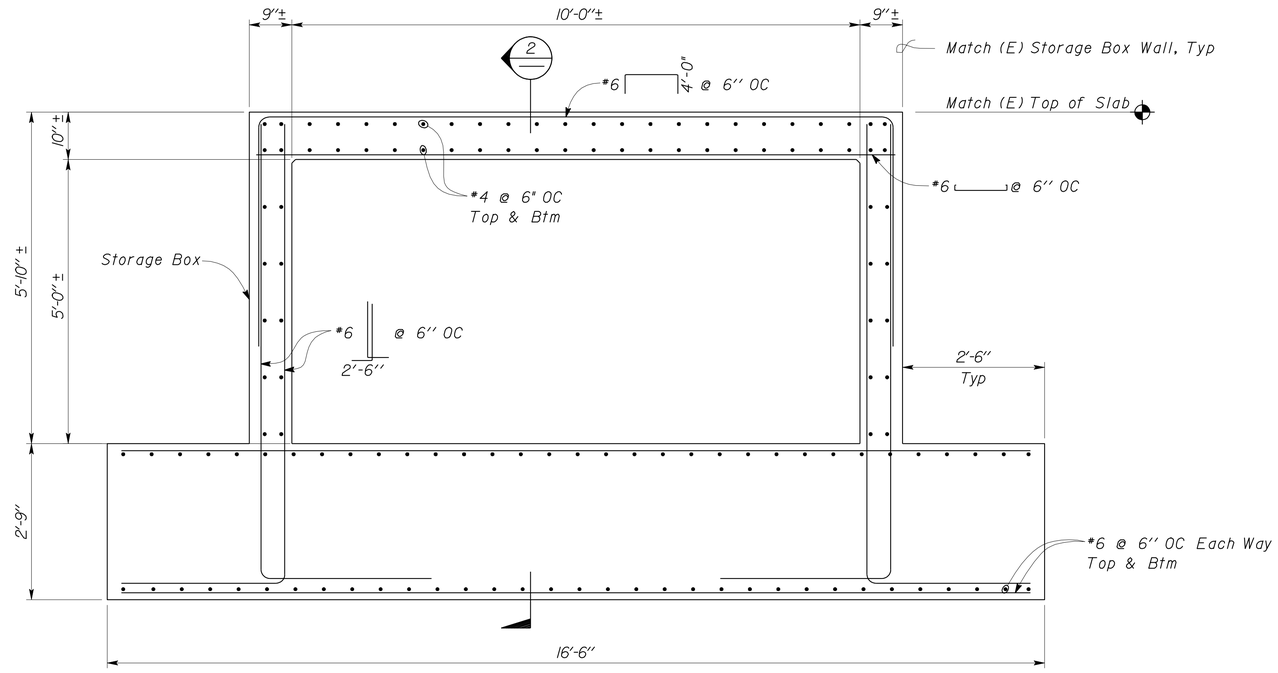
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1355	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

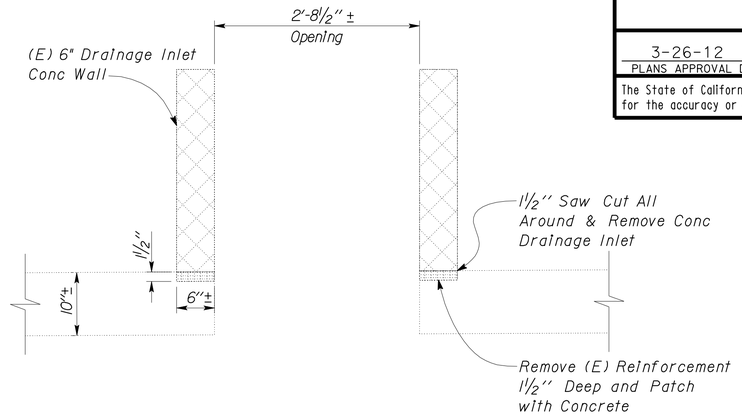
REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

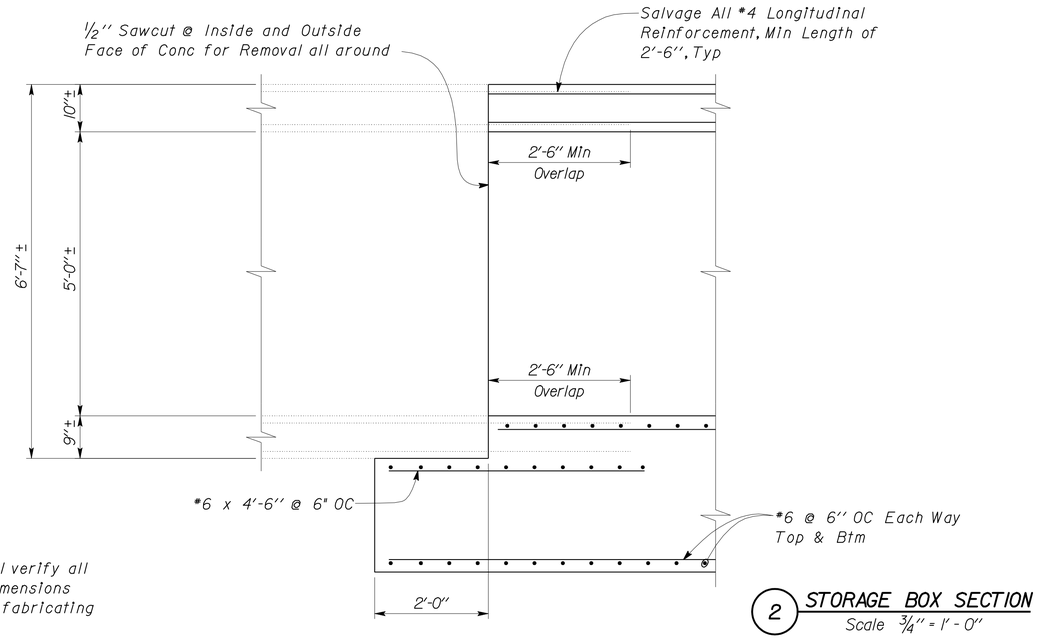
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.



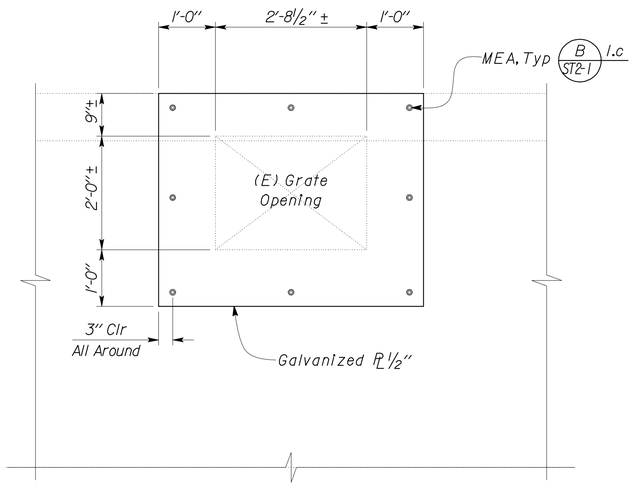
1 STORAGE BOX SECTION
Scale 3/4" = 1'-0"



3 (E) DRAINAGE INLET REMOVAL TYPICAL
Scale 1" = 1'-0"



2 STORAGE BOX SECTION
Scale 3/4" = 1'-0"



4 STEEL PLATE COVER
Scale 3/4" = 1'-0"

Note
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

	BY	CHECKED
DESIGN	Chandra Bapat	Thomas Tong
DETAILS	Daniel Harakh	Chandra Bapat
QUANTITIES		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
RTE 26/99 Sep PUMPING PLANT
STORAGE BOX SECTION & DETAILS

SHEET ST2-3

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES (PRELIMINARY STAGE ONLY): 03-02-11 | 04-07-11 | 05-12-11 | 05-17-11 | 06-22-11 | 10-20-11
SHEET OF

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1356	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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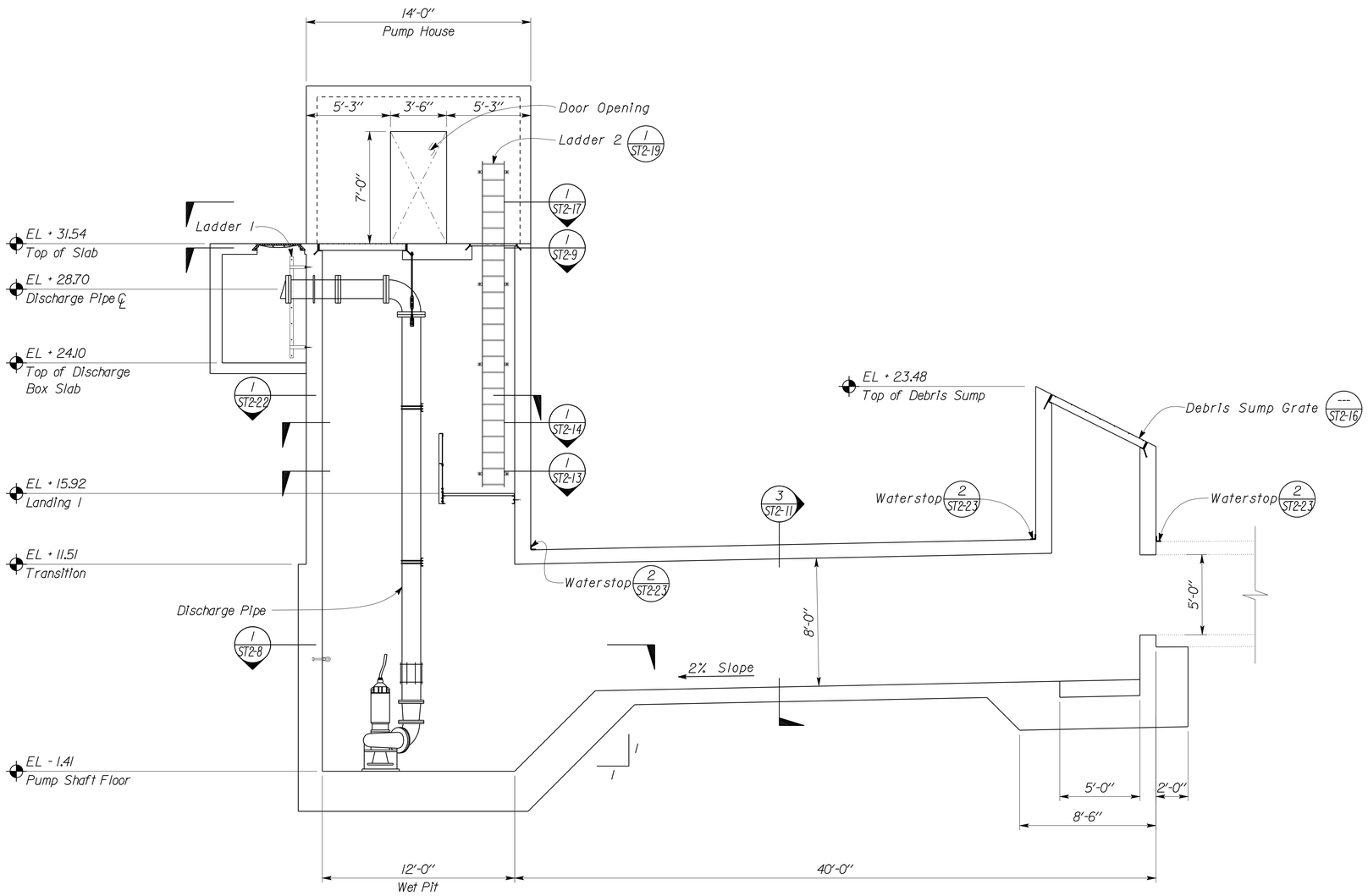

1 PUMPING PLANT SECTION
Scale 1/4" = 1'-0"

Note

The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

PUMPING PLANT SECTION 1

SHEET ST2-4

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 02-03-11 | 03-03-11 | 03-18-11 | 03-29-11 | 04-12-11 | 05-12-11 | 05-26-11 | 10-20-11

SHEET OF

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28-MAR-2012 15:35

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1357	1414

N Bapat 10-21-11
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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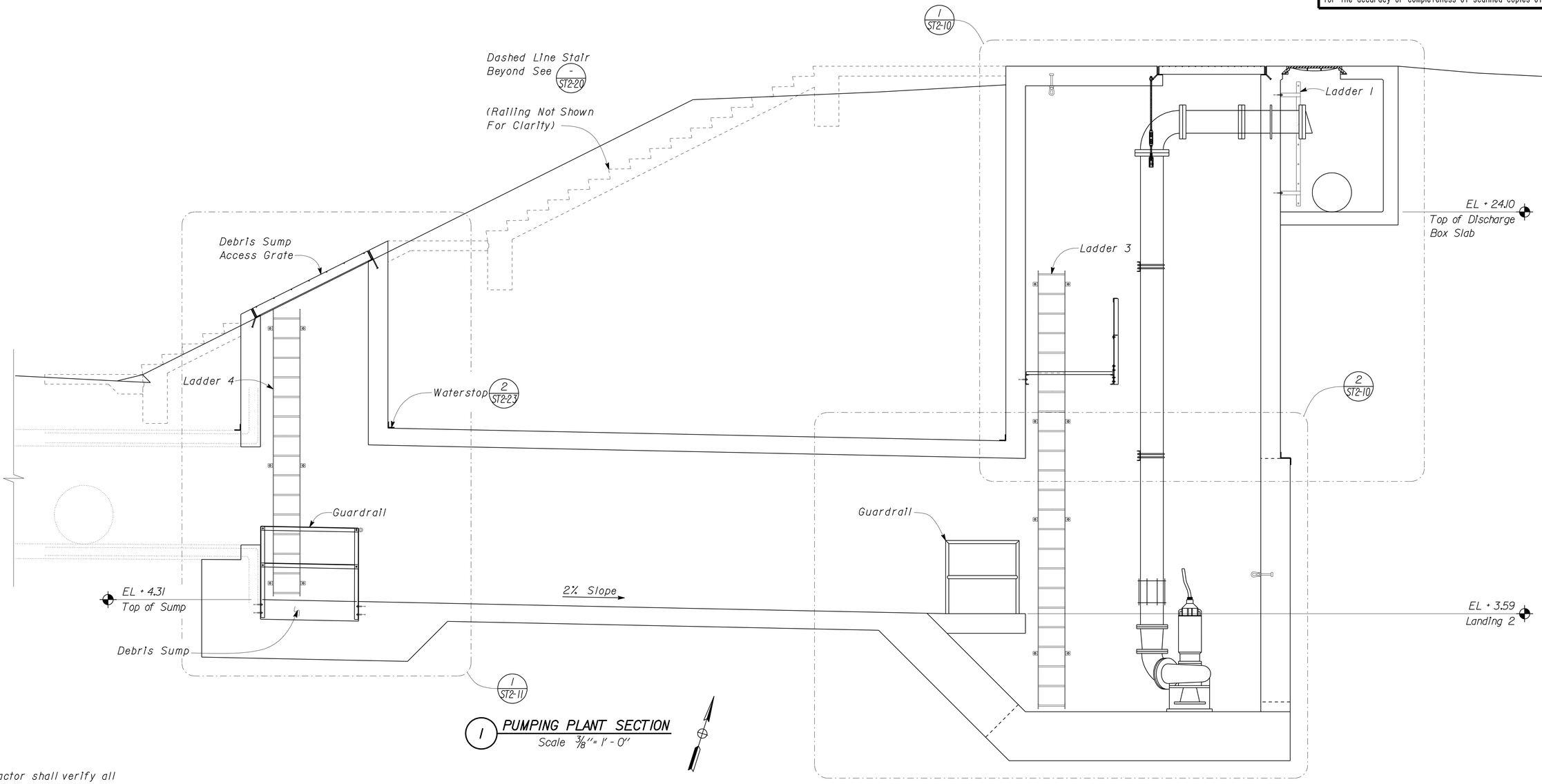

1 PUMPING PLANT SECTION
Scale 3/8"= 1'-0"

Note
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

PUMPING PLANT SECTION 2

SHEET ST2-5

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 1000000409
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)							SHEET	OF
02-03-11	03-03-11	03-29-11	04-13-11	10-20-11				

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28-MAR-2012 15:55

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1358	1414

REGISTERED CIVIL ENGINEER 03-02-12 DATE

REGISTERED PROFESSIONAL ENGINEER C. N. Bapat No. 46493 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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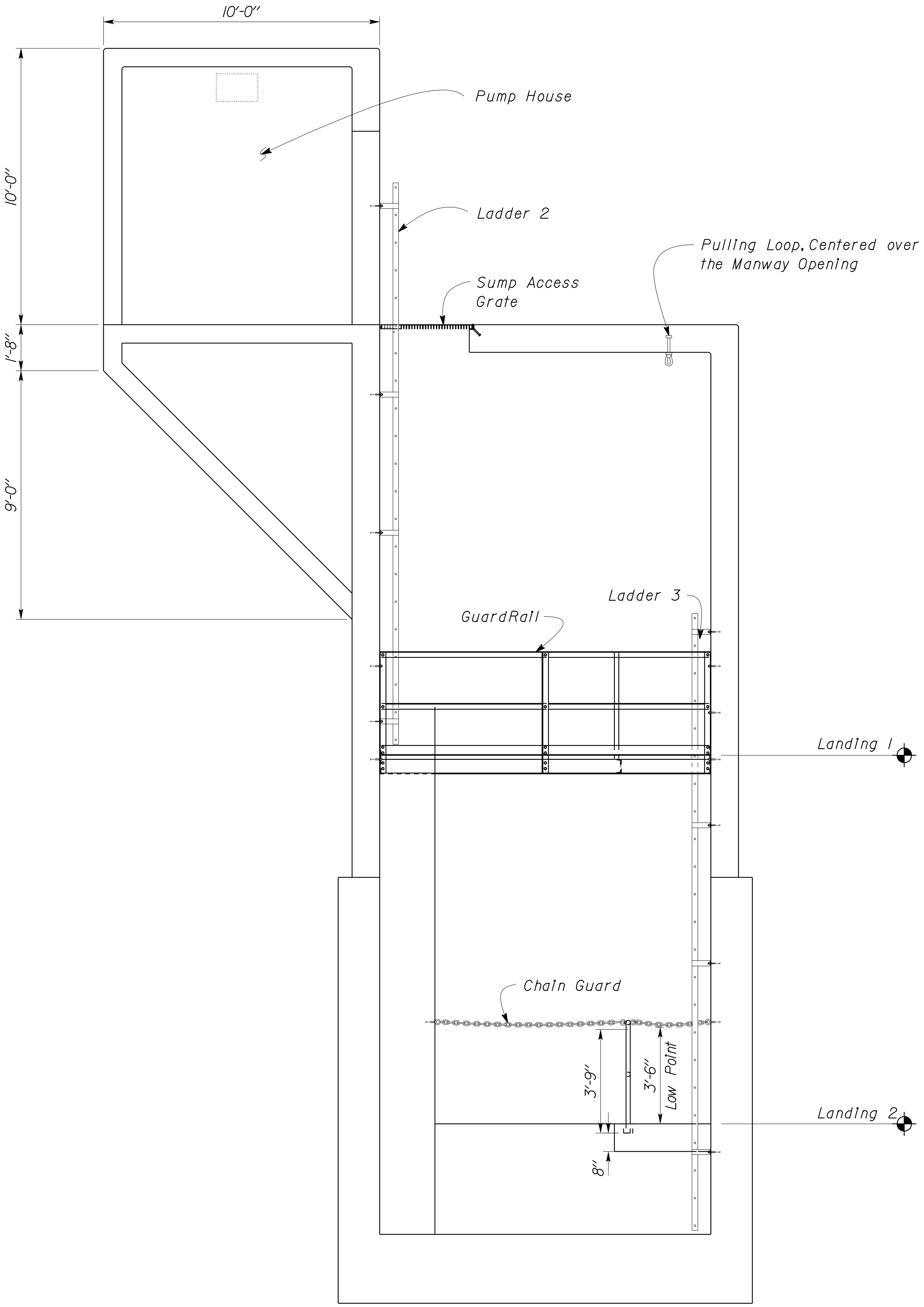
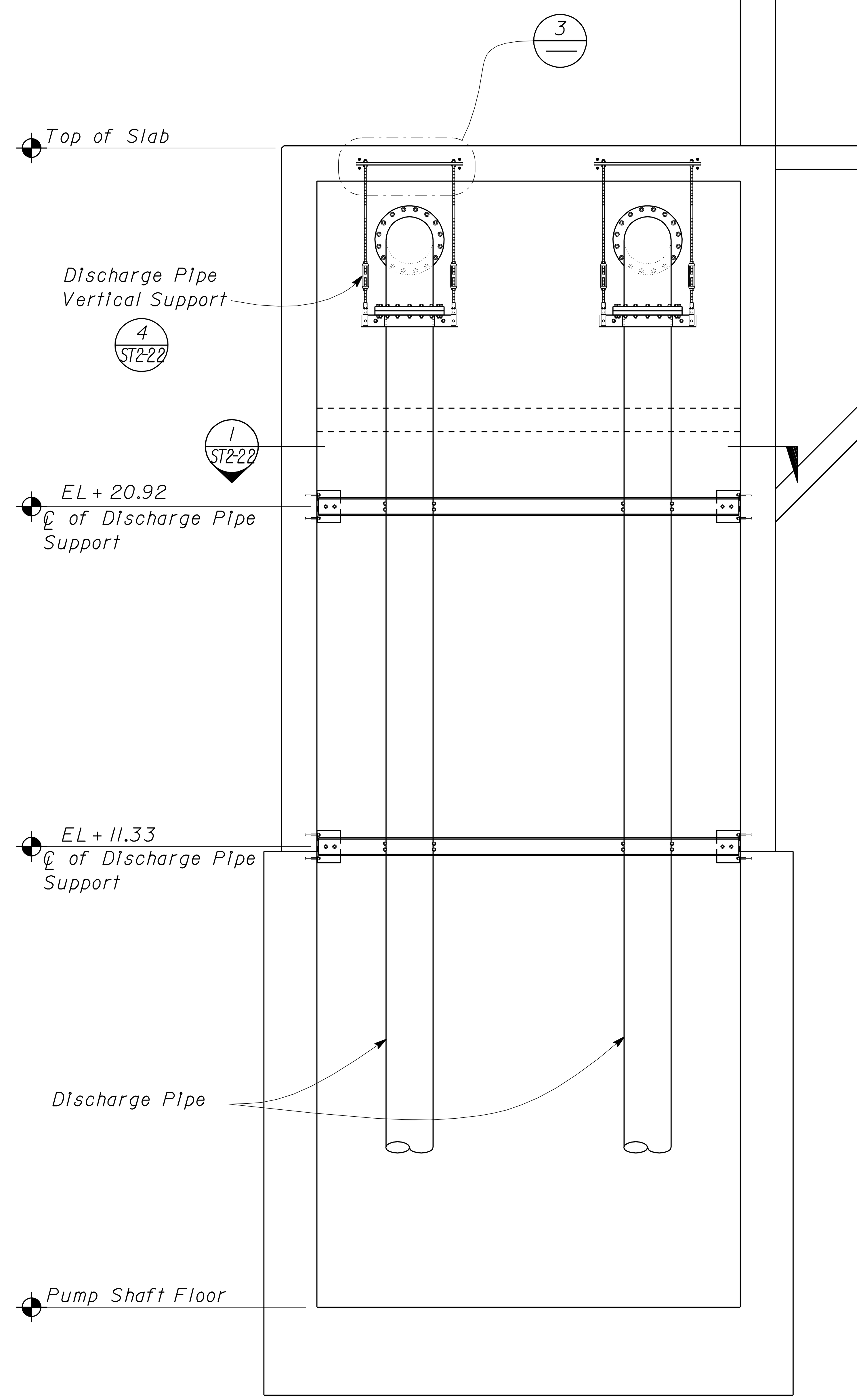
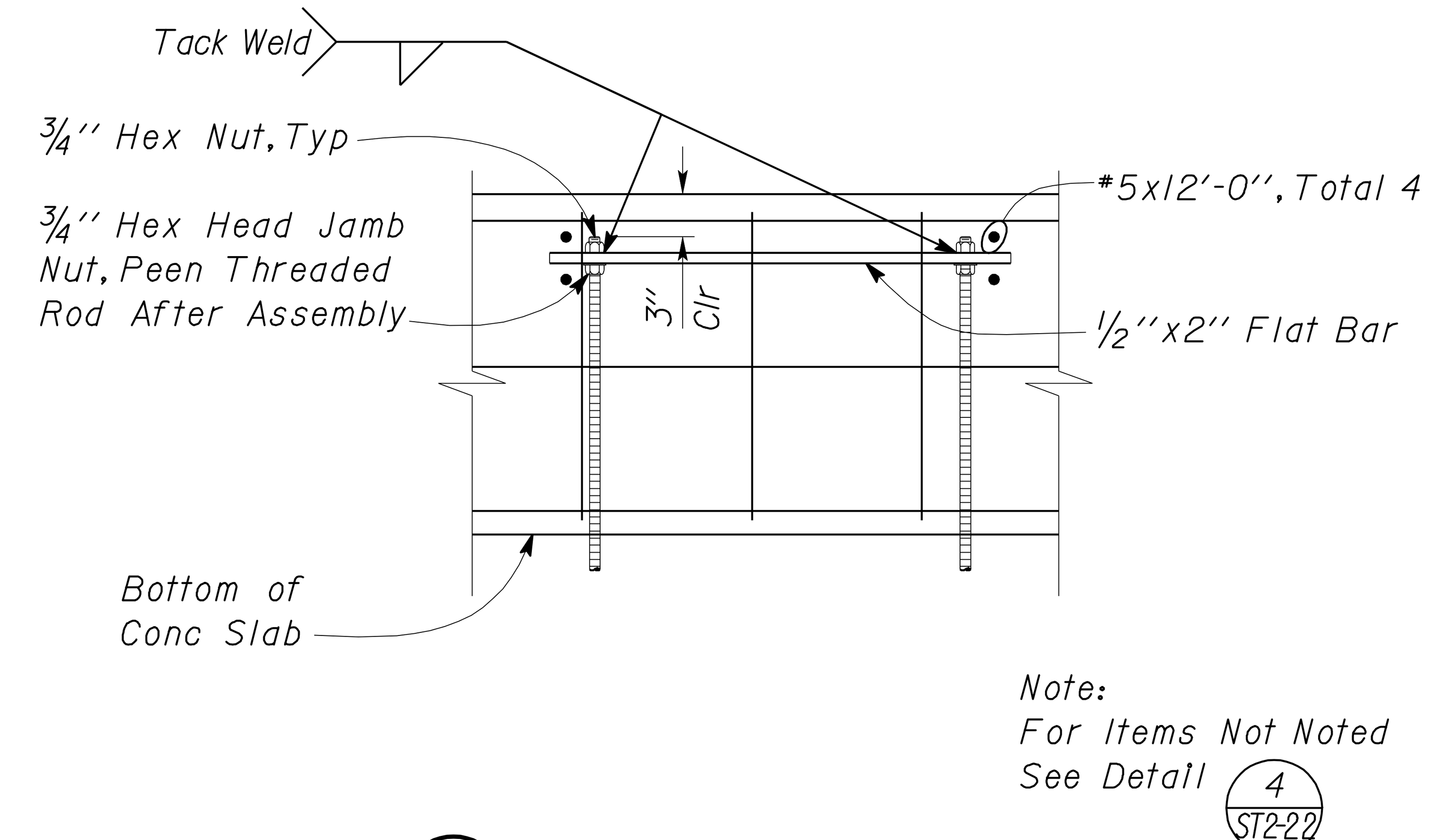


1 WET PIT SHAFT VERTICAL SECTION
Scale 3/8" = 1' - 0"



2 DISCHARGE PIPE SUPPORT ELEVATION
Scale 3/8" = 1' - 0"



Note:
For Items Not Noted See Detail 4 ST2-22

3 THREADED ROD CONNECTION
Scale 1" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat
QUANTITIES	BY	CHECKED

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT — WET PIT SHAFT VERTICAL SECTIONS I

SHEET ST2-6

DOES SD Imperial Rev. 9/03 / TAEW/Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 03-10-11 04-12-11 10-28-11 02-29-12

SHEET OF

EA 3A1001 D:\User\Projects\Dist_10\1000000409_Stockton_pp\st2_Rte_26_99_SEP_charter_way\Expedite_Resubmittal_03-02-2012\st2_06.dgn

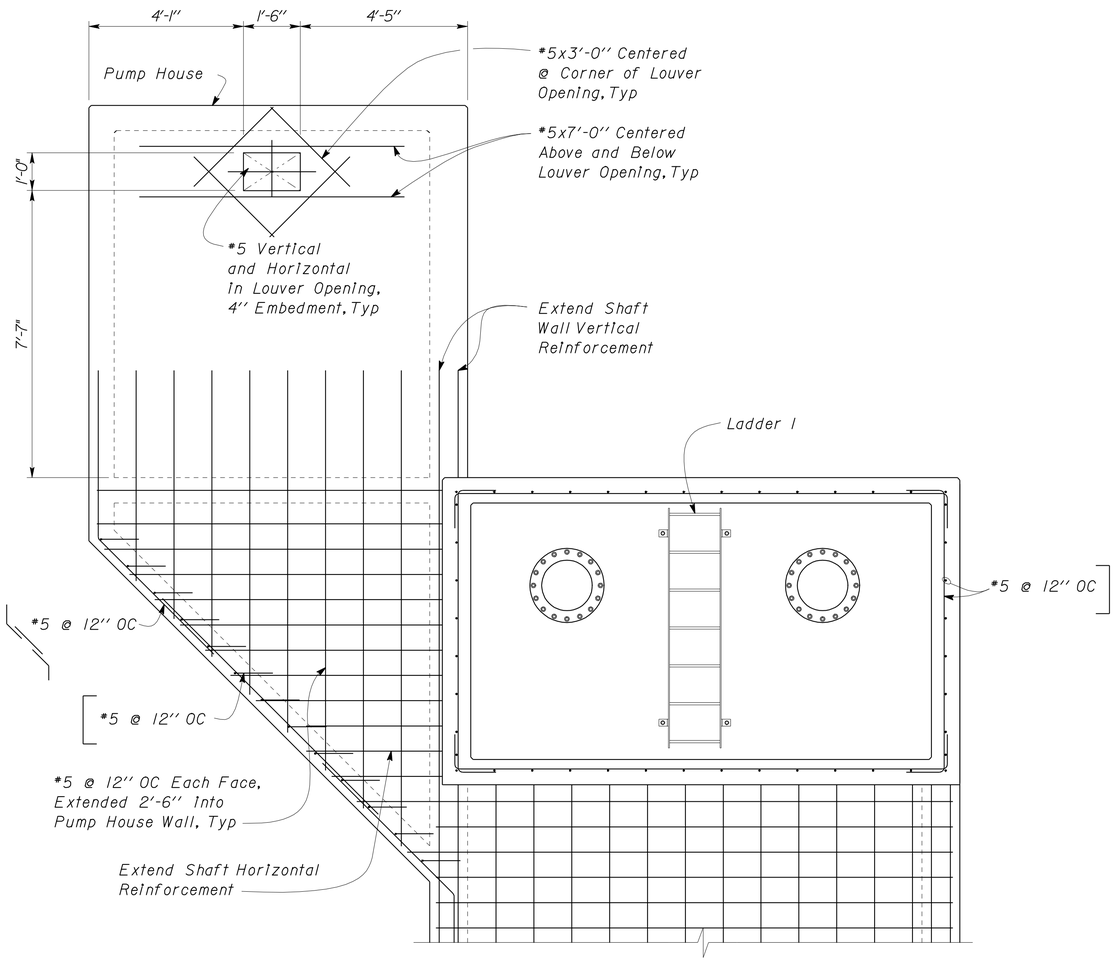
30-MAR-2012 14:13

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1359	1414

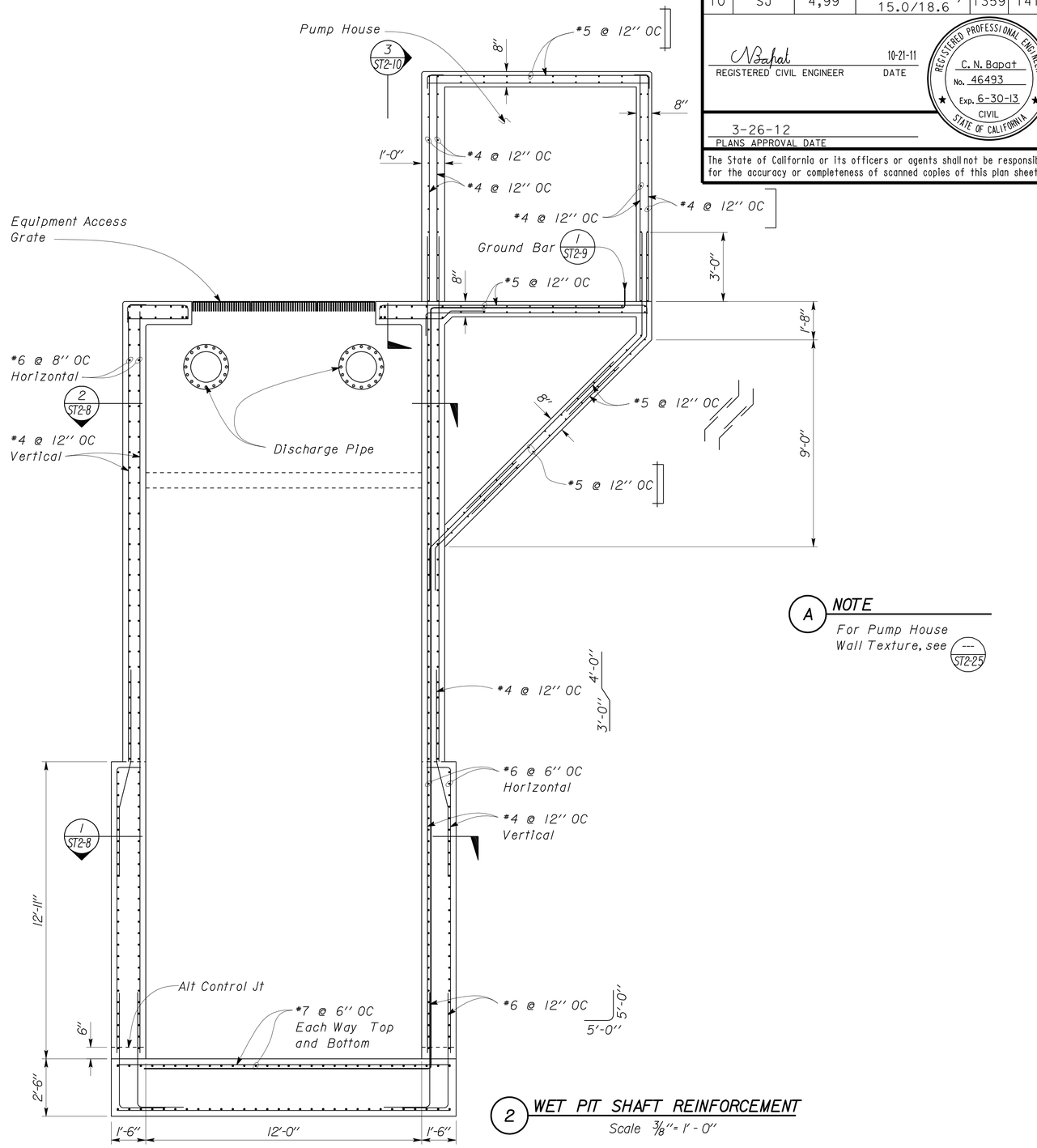
N Bapat 10-21-11
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE



1 REINFORCEMENT DETAIL
Scale 1/2" = 1'-0"



2 WET PIT SHAFT REINFORCEMENT
Scale 3/8" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST2-7
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT WET PIT SHAFT VERTICAL SECTIONS 2	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 12-08-10 | 03-11-11 | 04-07-11 | 04-12-11 | 05-12-11 | 10-20-11

SHEET OF

D:\User\Projects\Dist_10\1000000409_Stockton_pp\st2_Rte_26_99_SEP_charter_way\Expedite_10-21-2011\st2_07.dgn

28-MAR-2012 15:55

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1360	1414

N Bapat 10-21-11
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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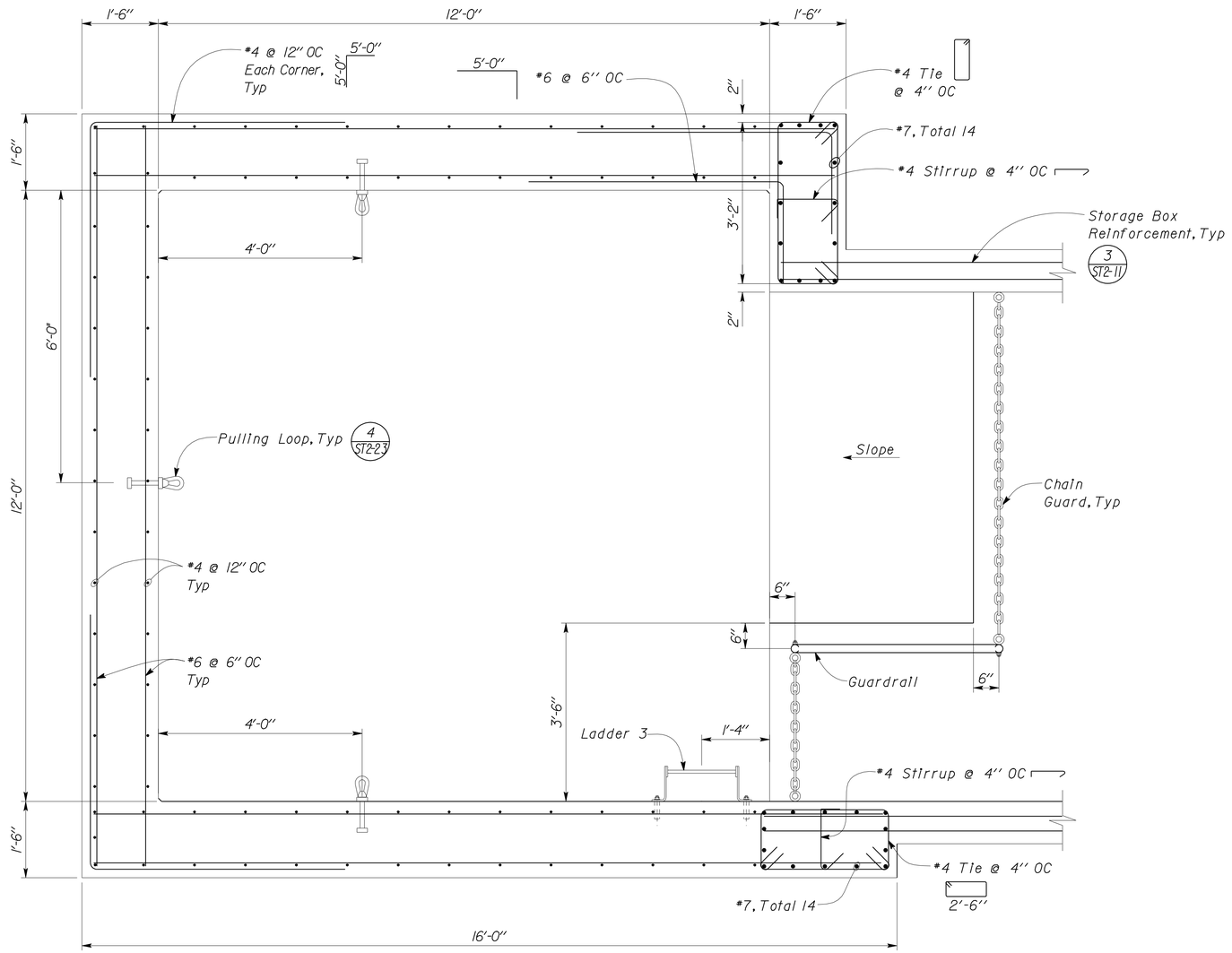
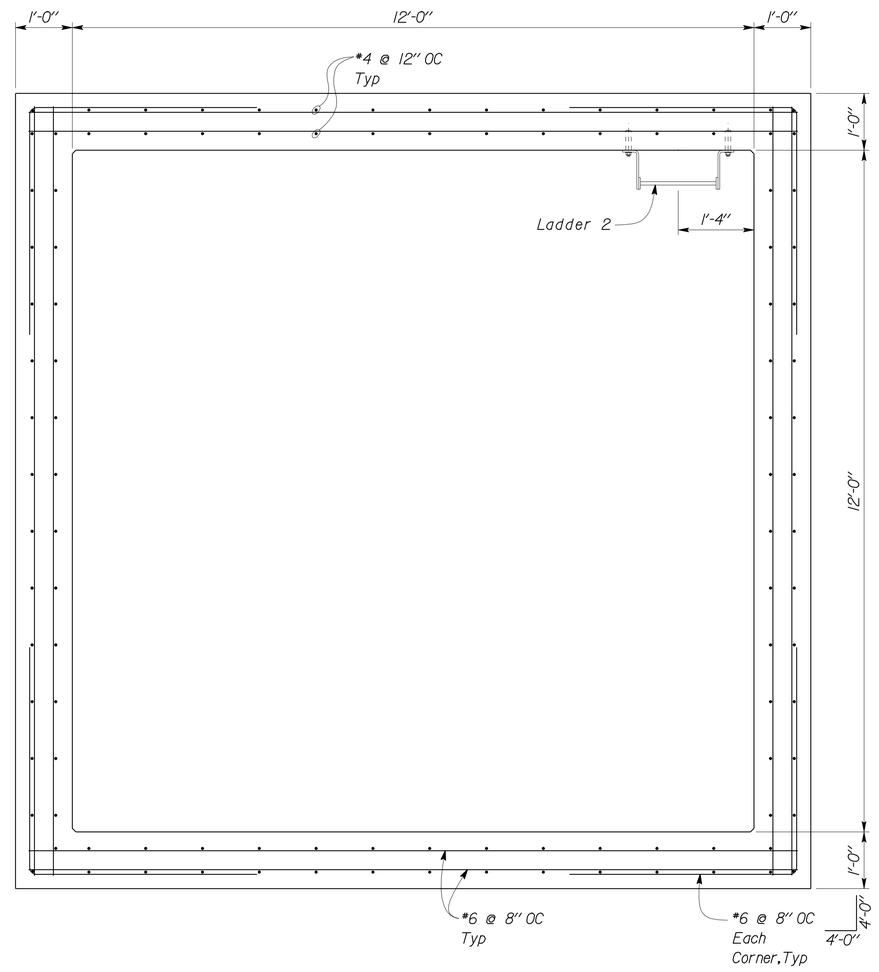


1 WET PIT SHAFT SECTION
Scale 3/4" = 1'-0"



2 WET PIT SHAFT SECTION
Scale 3/4" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE
QUANTITIES	BY	CHECKED			

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT | WET PIT SHAFT HORIZONTAL SECTIONS

SHEET ST2-8

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)								SHEET	OF
02-03-11	03-29-11	04-12-11	05-12-11						

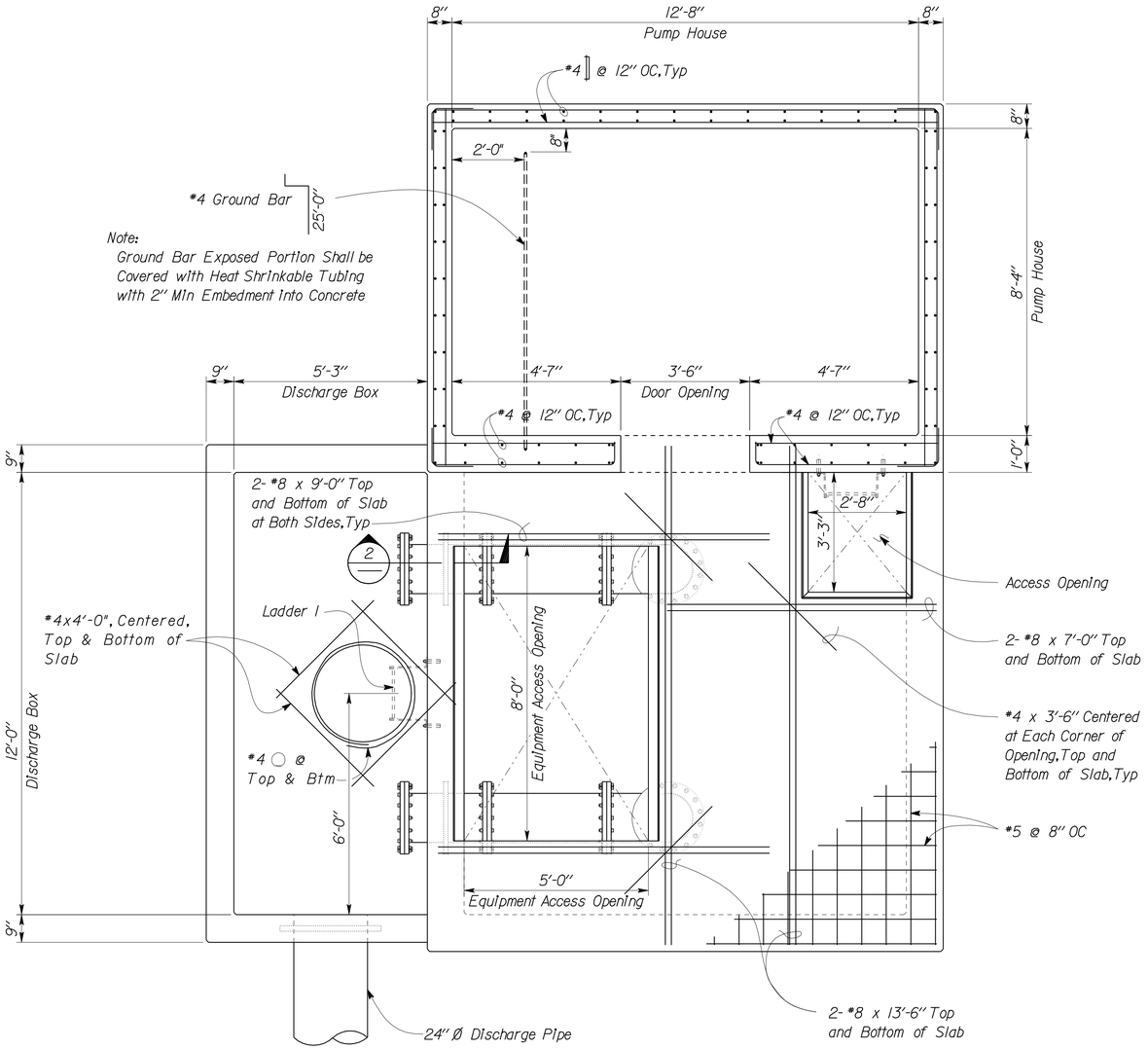
D:\User\Projects\Dist_10\1000000409_Stockton_pp\st2_Rte_26_99_SEP_charter_way\Expedite_10-21-2011\st2_08.dgn 28-MAR-2012 15:55

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1361	1414

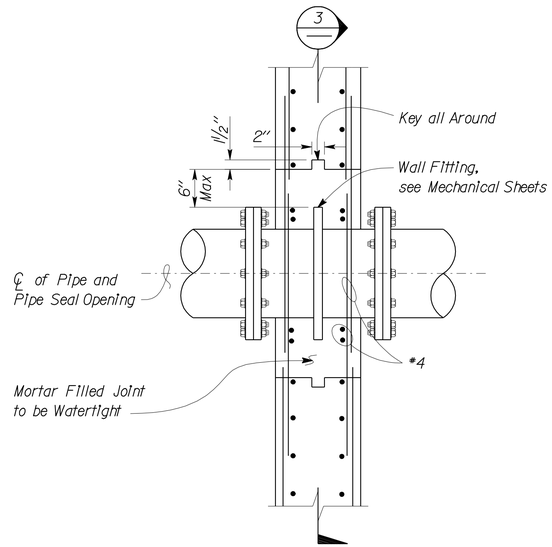
N Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

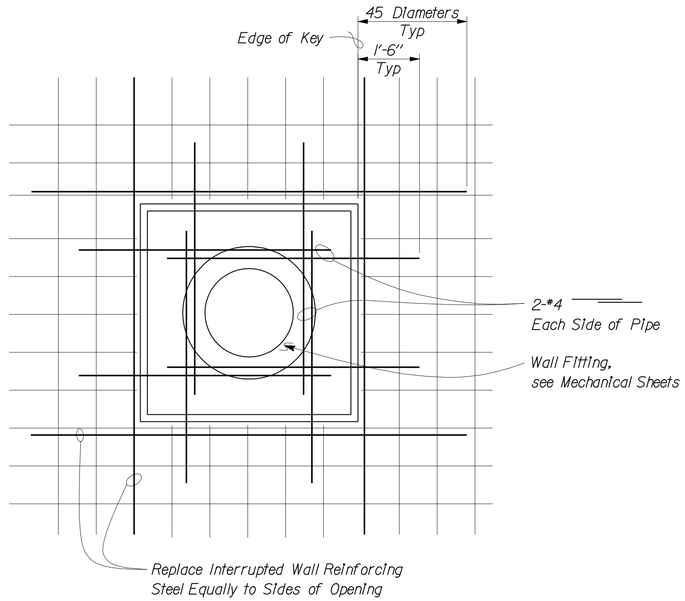
3-26-12
PLANS APPROVAL DATE



1 ROOF SLAB, PUMP HOUSE FLOOR PLAN, AND DISCHARGE BOX SECTION
Scale 1" = 1'-0"



2 WALL FITTING SEAL DETAIL
No Scale



Note:
For Pipe Location see Mechanical Sheets.

3 PIPE SEAL DETAIL
No Scale

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST2-9
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT — WET PIT SHAFT TOP SLAB	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 01-26-11 | 04-12-11 | 05-16-11 — SHEET — OF

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30-MAR-2012 05:42

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1362	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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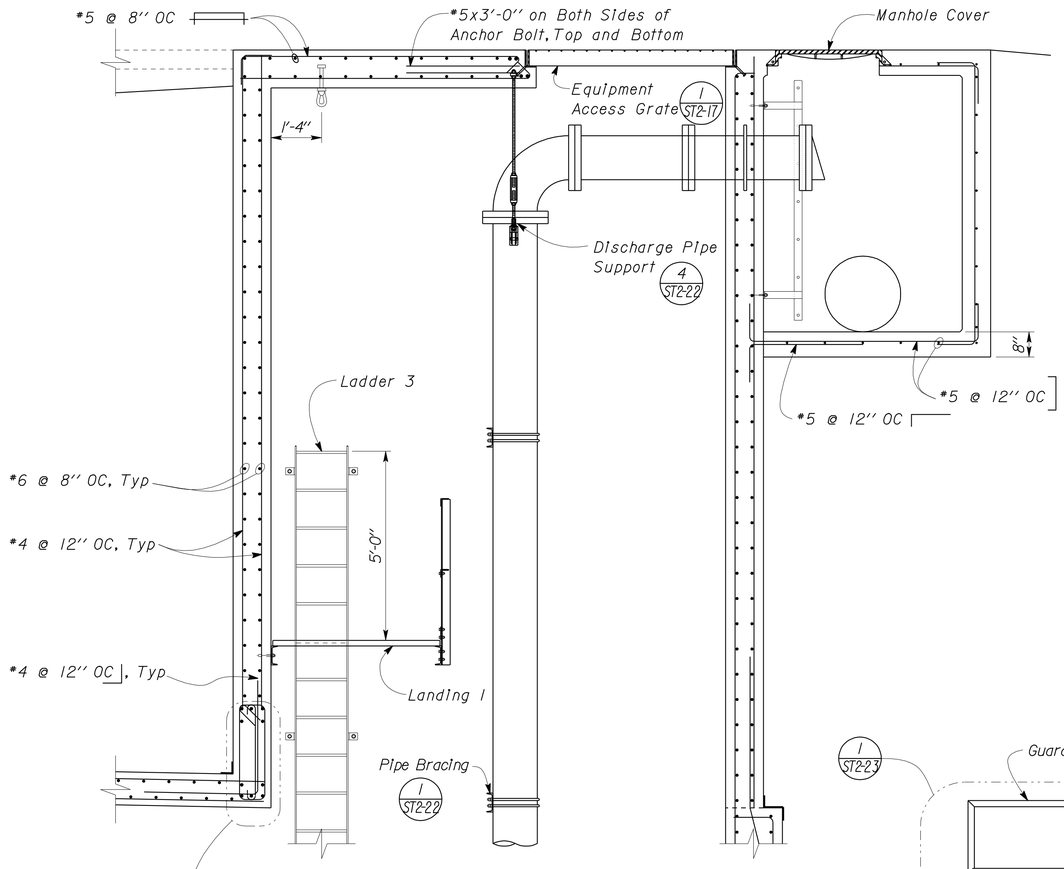
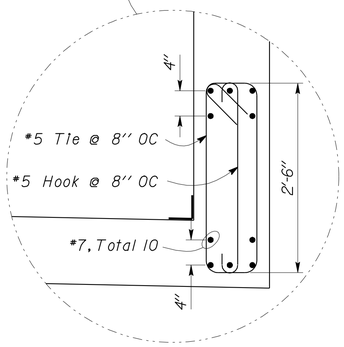
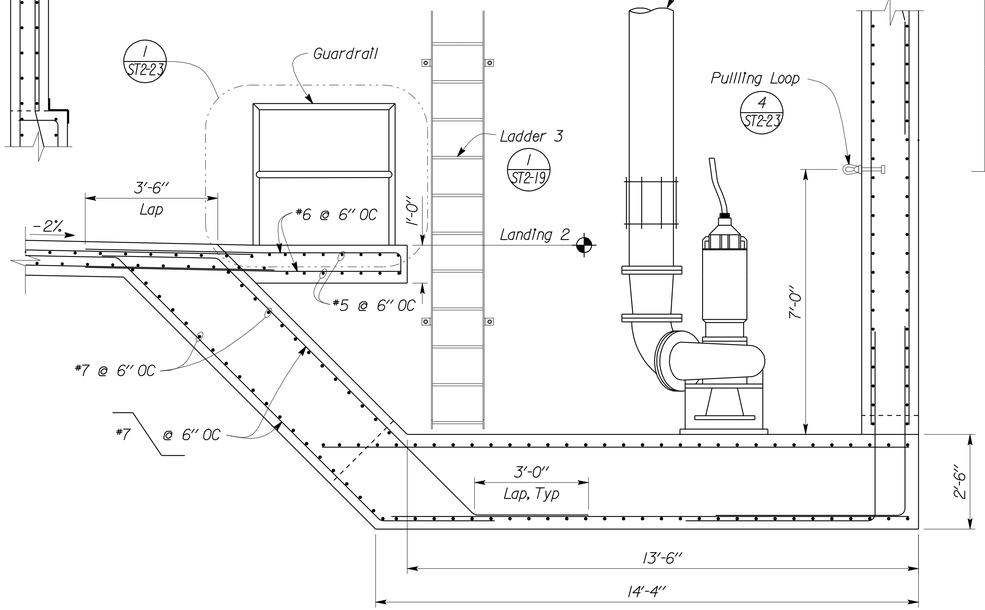


1 TOP SHAFT/DISCHARGE BOX SECTION
Scale 1/2" = 1'-0"





Note:
For more Reinforcement Information, see 2 ST2-7, 1 ST2-8, 3 ST2-11

2 LANDING 2 SECTION
Scale 1/2" = 1'-0"

Note:
For Shaft Reinforcement, See 1

3 PUMP HOUSE ELEVATION
Scale 1" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT — TOP SHAFT, DISCHARGE BOX SECTIONS/PUMP HOUSE ELEVATION
QUANTITIES	BY	CHECKED				SHEET ST2-10

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)							SHEET	OF
01-27-11	02-04-11	04-07-11	04-12-11	05-12-11	10-20-11			

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28-MAR-2012 15:55

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1363	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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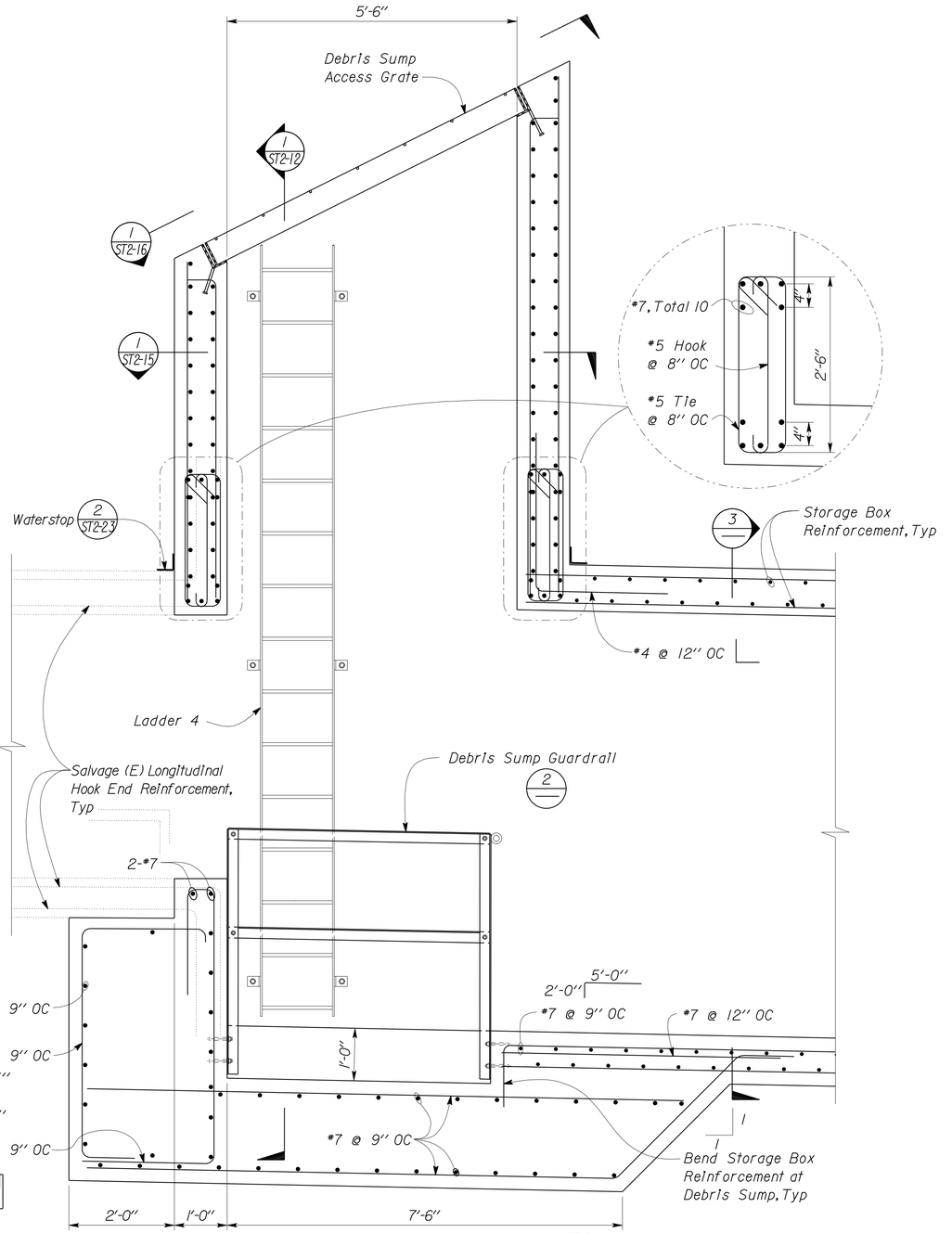
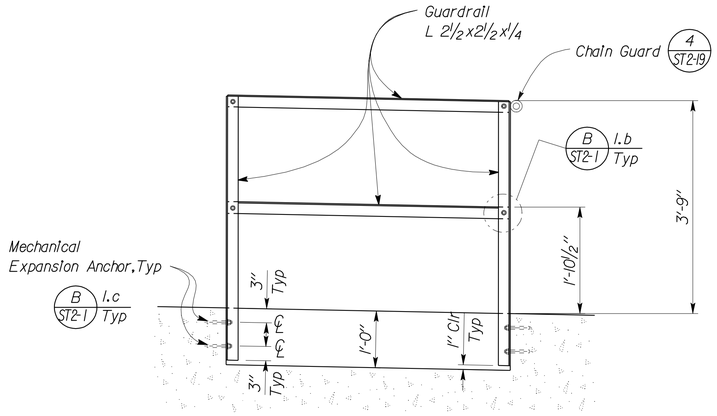
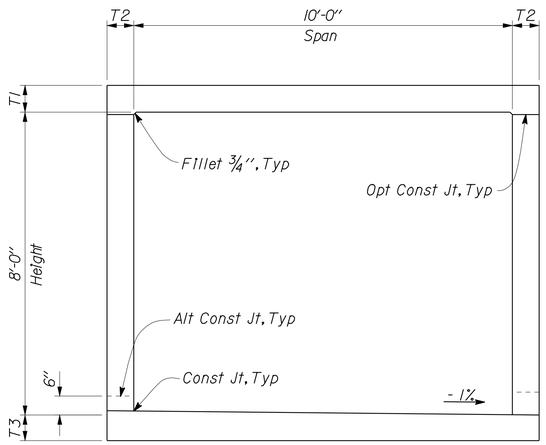


1 **DEBRIS SUMP SECTION**
Scale 1/2"= 1' - 0"

Note:
For Additional Entrance Bay Reinf under Debris Sump See 2 ST2-2



2 **GUARDRAIL DETAIL**
Scale 3/4" = 1' - 0"



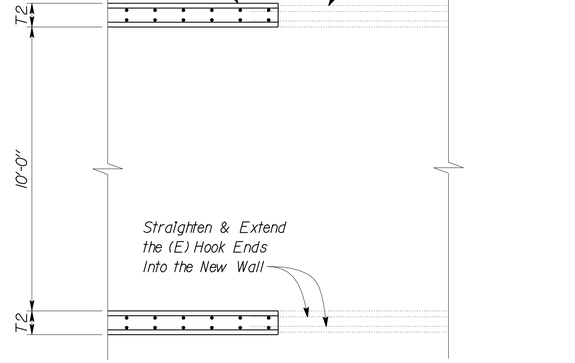
Note

For Storage Box Reinforcement see Standard Plans D80 .

Use : Span 10'-0" Height 8'-0"

Maximum earth cover (design) 20'-0"

3 **STORAGE BOX SECTION**
Scale 1/2"= 1' - 0"



Note:
For Additional Wall Reinf Not Shown See 2 ST2-2

4 **PLAN VIEW (E) STORAGE BOX Reinf EXTENSIONS TO ENTRANCE BAY**
Scale 3/8"= 1' - 0"

	BY	CHECKED
DESIGN	Chandra Bapat	Thomas Tong
DETAILS	Daniel Harakh	Chandra Bapat
QUANTITIES		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
RTE 26/99 Sep PUMPING PLANT
DEBRIS SUMP AND STORAGE BOX SECTION

SHEET **ST2-11**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
12-27-10 04-07-11 04-12-11 05-12-11 06-03-11 06-08-11 06-23-11 10-21-11		

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1364	1414

N Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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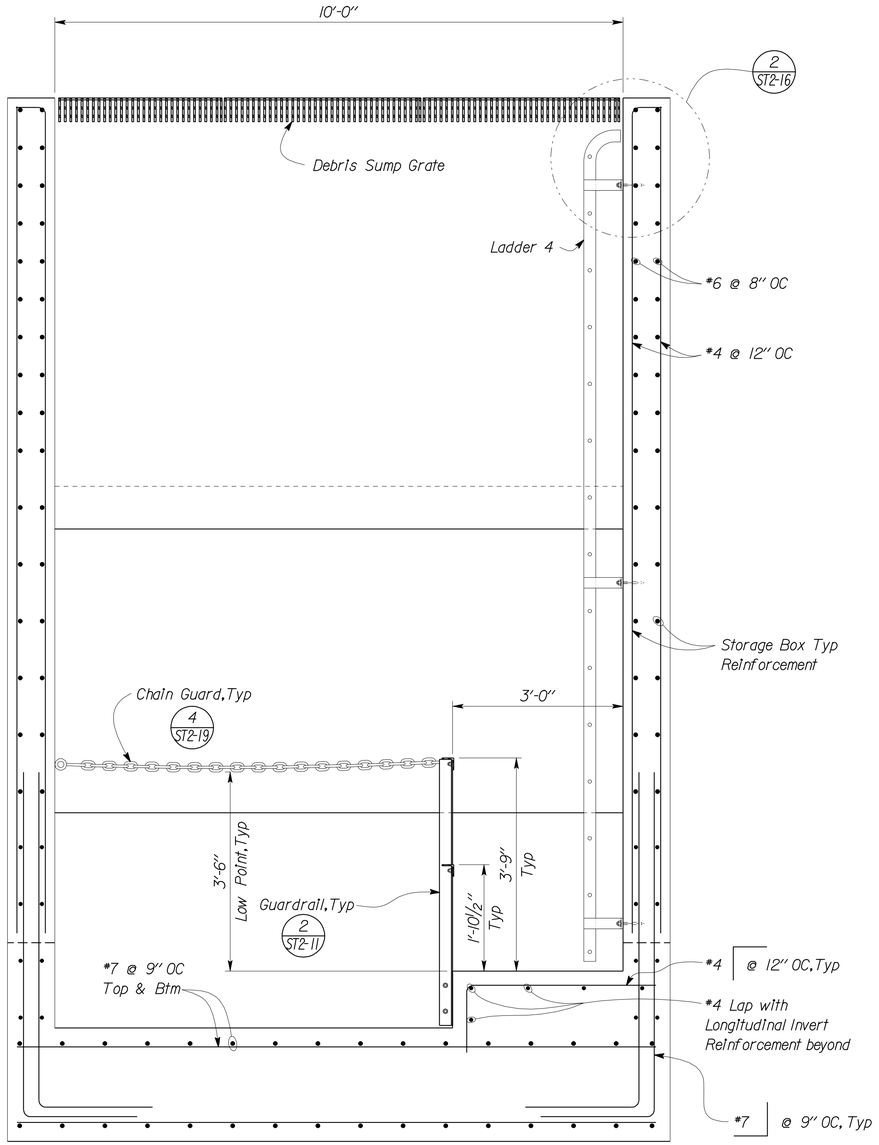

Note:
Stairs not shown

1 DEBRIS SUMP SECTION
Scale 3/4" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

DEBRIS SUMP VERTICAL SECTION

SHEET ST2-12

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)									SHEET	OF
04-07-11	04-12-11	05-26-11	10-20-11							

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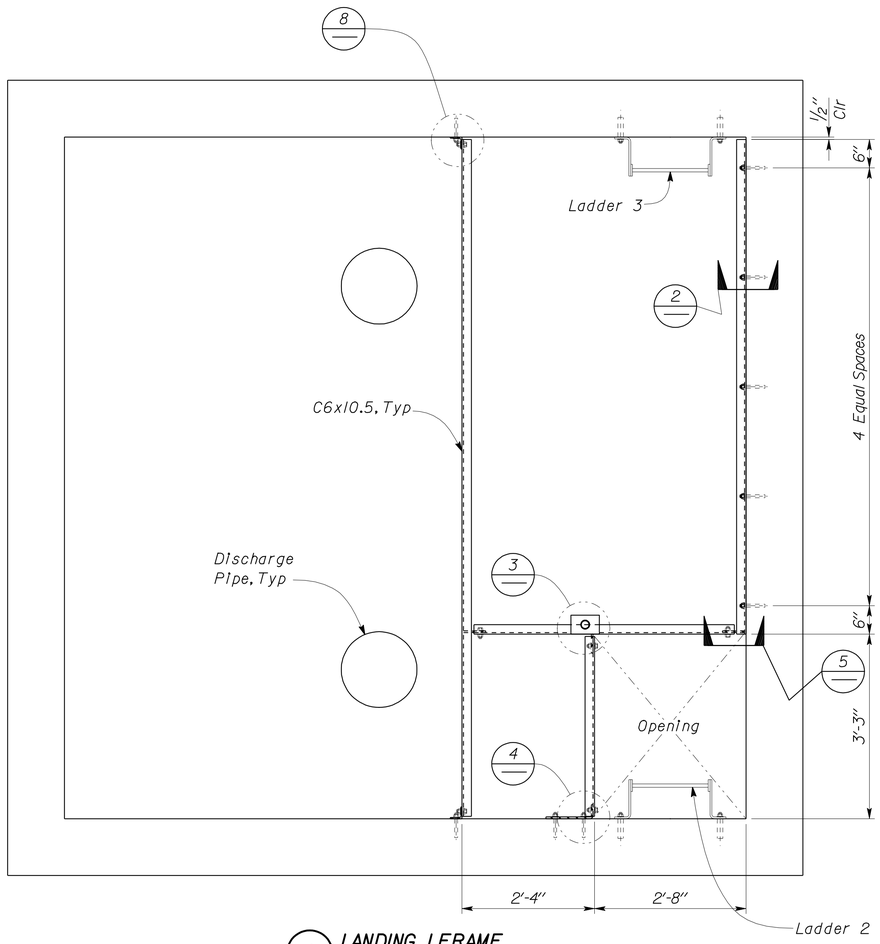
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1365	1414

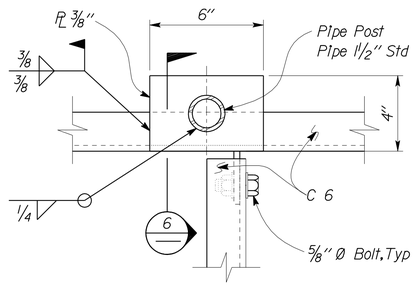
N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

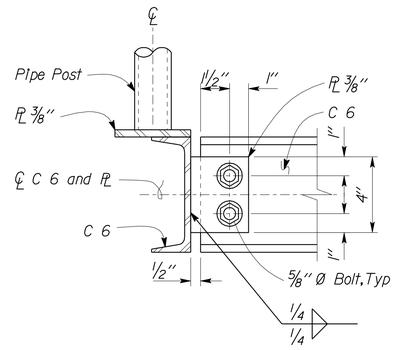
3-26-12
PLANS APPROVAL DATE



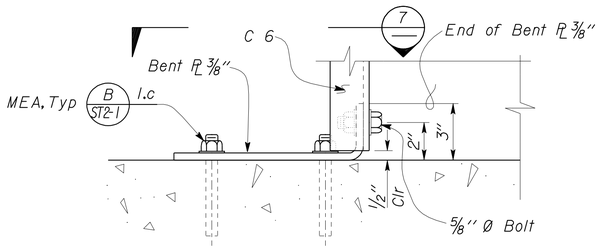
1 LANDING I FRAME
Scale 3/4" = 1' - 0"



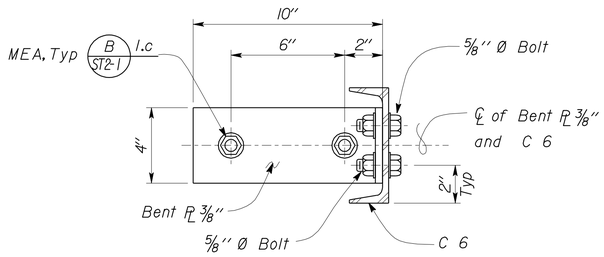
3 C6 TO C6 AT OPENING
Scale 3" = 1' - 0"



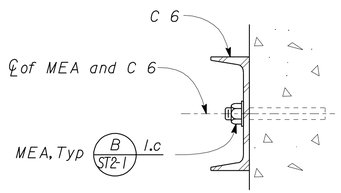
6 C6 TO C6 SECTION
Scale 3" = 1' - 0"



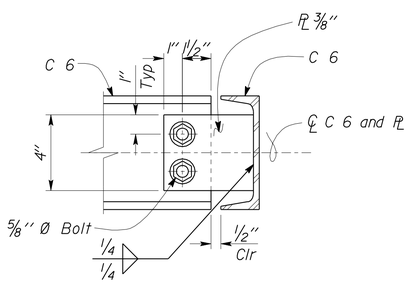
4 C6 TO WALL CONNECTION
Scale 3" = 1' - 0"



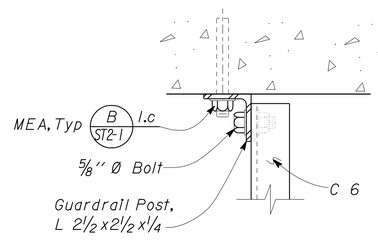
7 C6 TO C6 ELEVATION
Scale 3" = 1' - 0"



2 C6 TO WALL CONNECTION
Scale 3" = 1' - 0"



5 C6 TO C6 CONNECTION
Scale 3" = 1' - 0"



8 GUARDRAIL POST TO WALL AND C6
Scale 3" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT
QUANTITIES	BY	CHECKED				LANDING FRAME DETAILS

SHEET ST2-13

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)										SHEET	OF
01-27-11	04-13-11										

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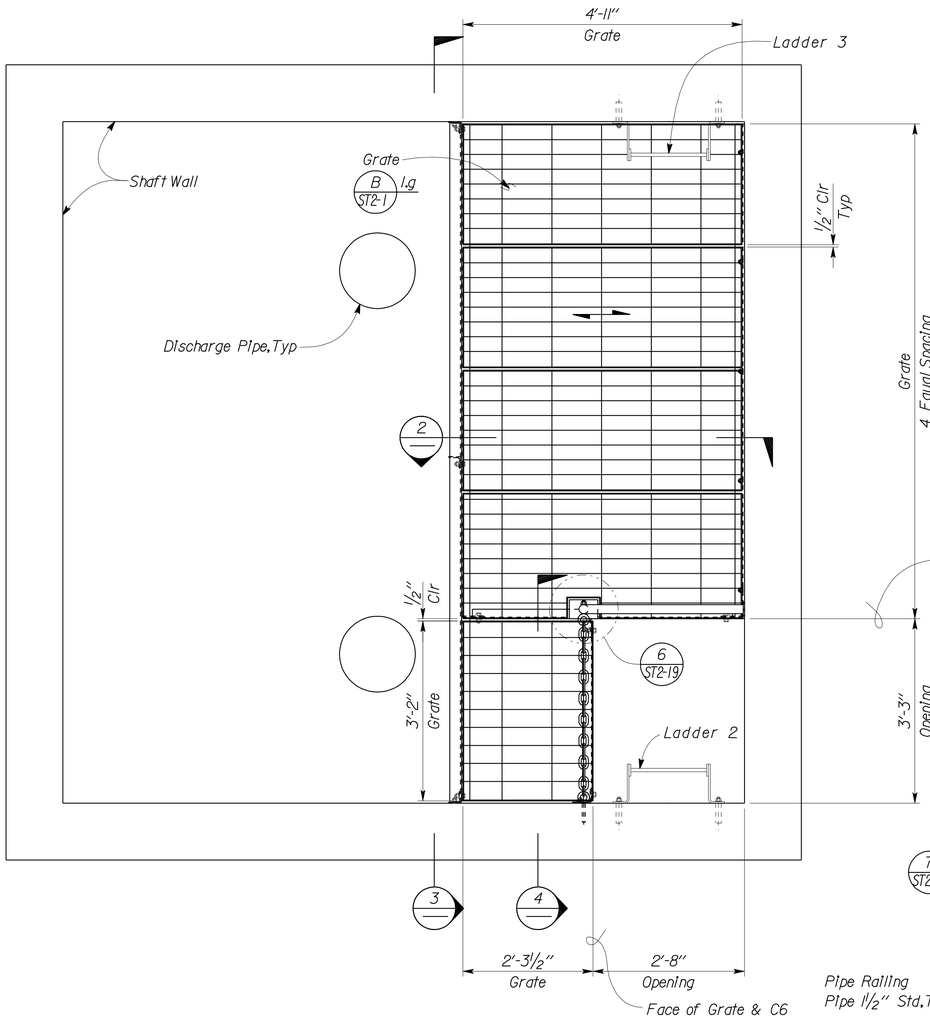
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1366	1414

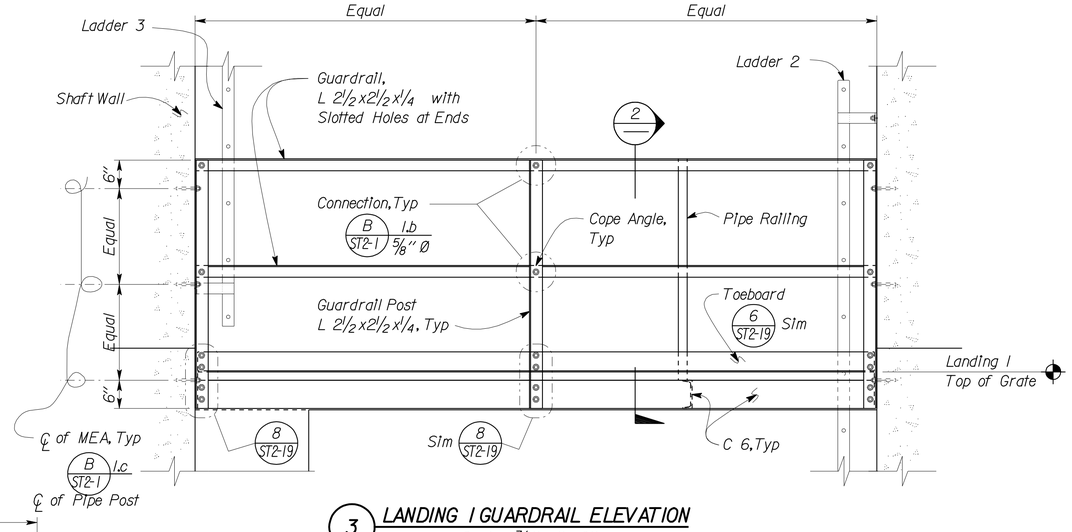
N Bapat 10-21-11
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

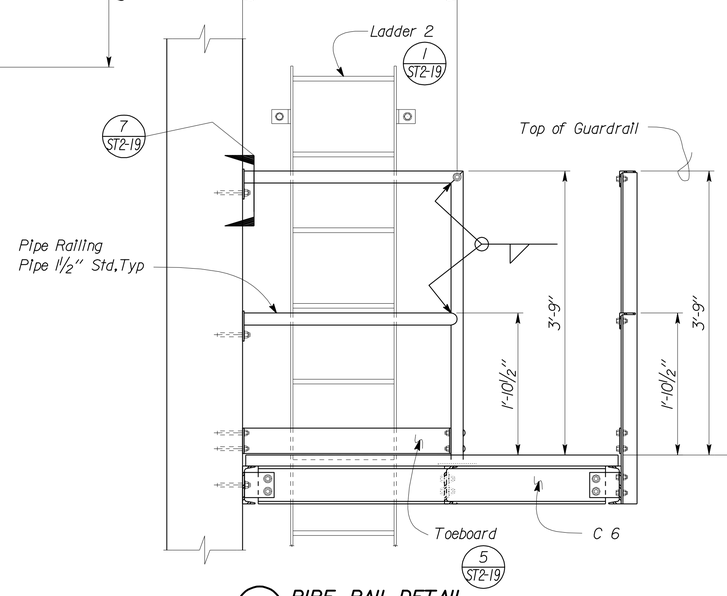
3-26-12
PLANS APPROVAL DATE



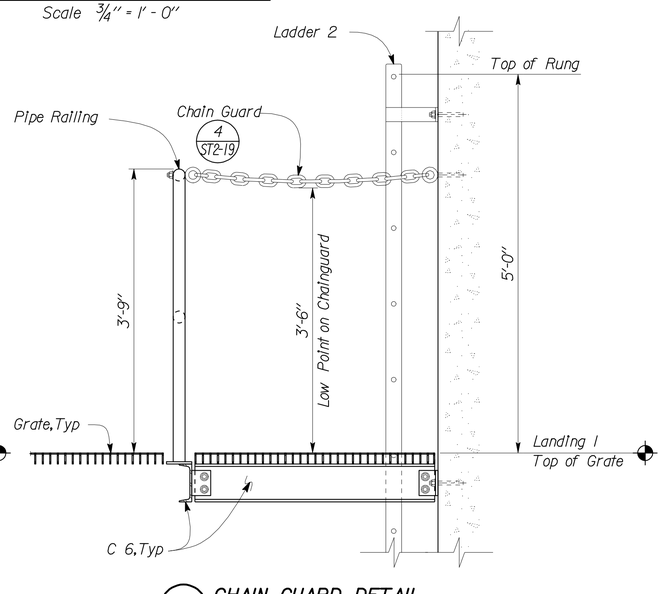
1 LANDING 1 GRATE
Scale 3/4" = 1'-0"



3 LANDING 1 GUARDRAIL ELEVATION
Scale 3/4" = 1'-0"



2 PIPE RAIL DETAIL
Scale 1" = 1'-0"



4 CHAIN GUARD DETAIL
Scale 1" = 1'-0"

	BY	CHECKED
DESIGN	Chandra Bapat	Thomas Tong
DETAILS	Daniel Harakh	Chandra Bapat
QUANTITIES		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

LANDING GRATE SECTION

SHEET ST2-14

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)						SHEET	OF
01-27-11	02-04-11	03-22-11	05-12-11	10-21-11			

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1367	1414

N Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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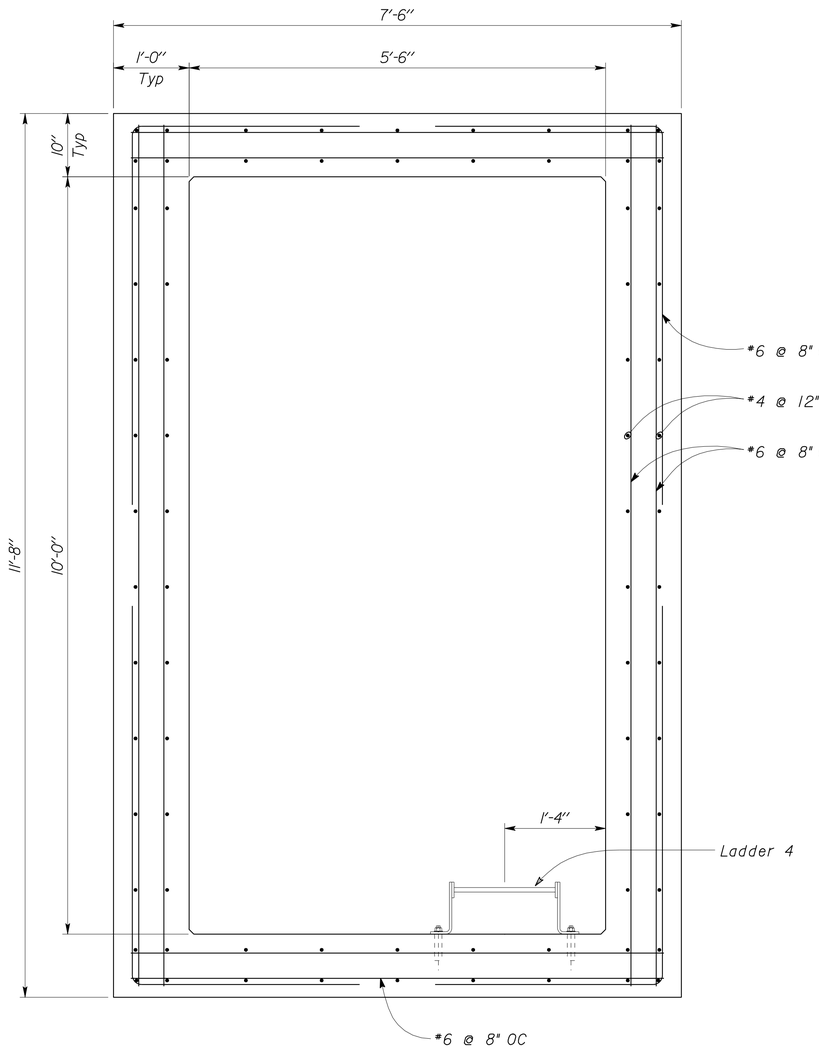

1 DEBRIS SUMP SECTION
Scale 1" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST2-15
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT — DEBRIS SUMP SECTION	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): ~~03-24-11~~ ~~04-12-11~~ 05-17-11 — SHEET — OF

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1368	1414

N Bapat 10-21-11
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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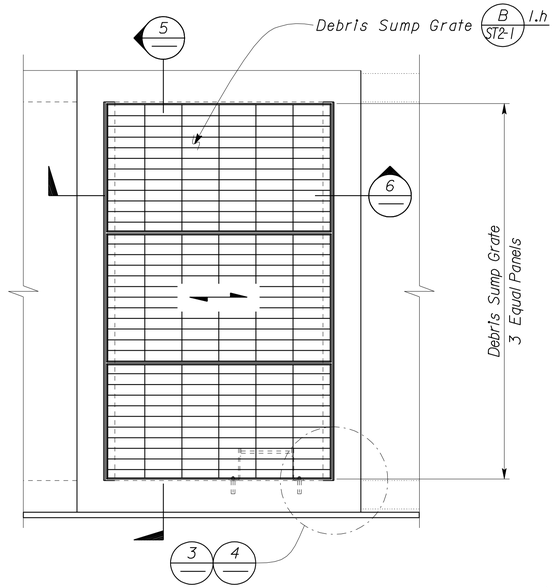
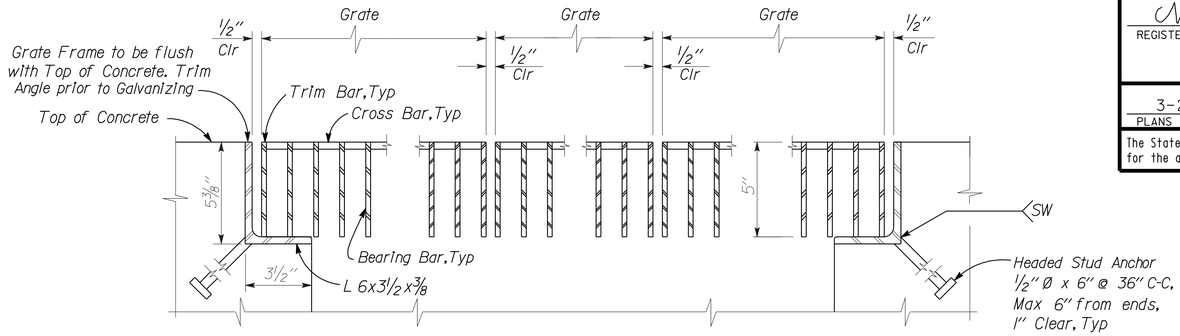
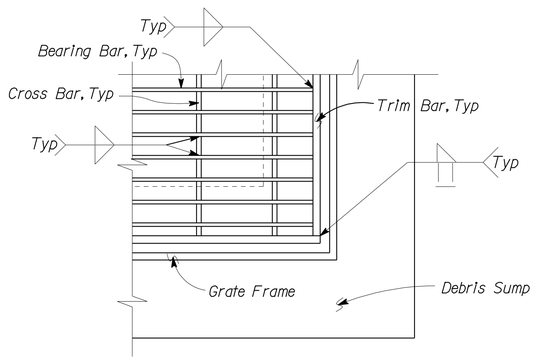


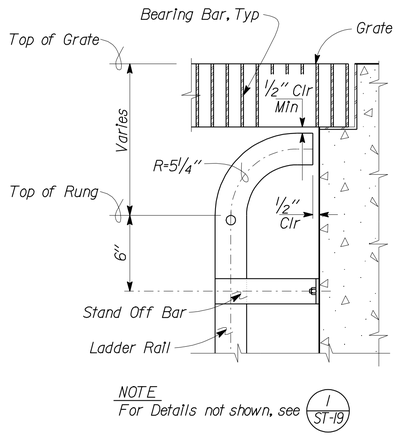
1 DEBRIS SUMP GRATE PLAN
Scale 1/2"= 1' - 0"



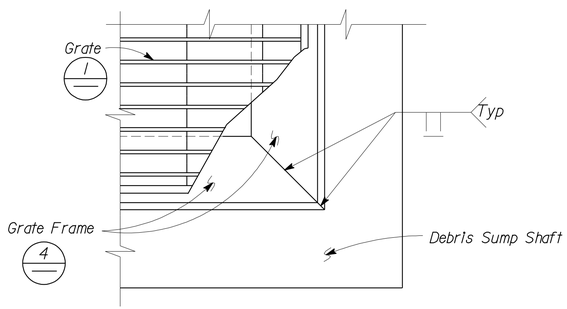
5 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"



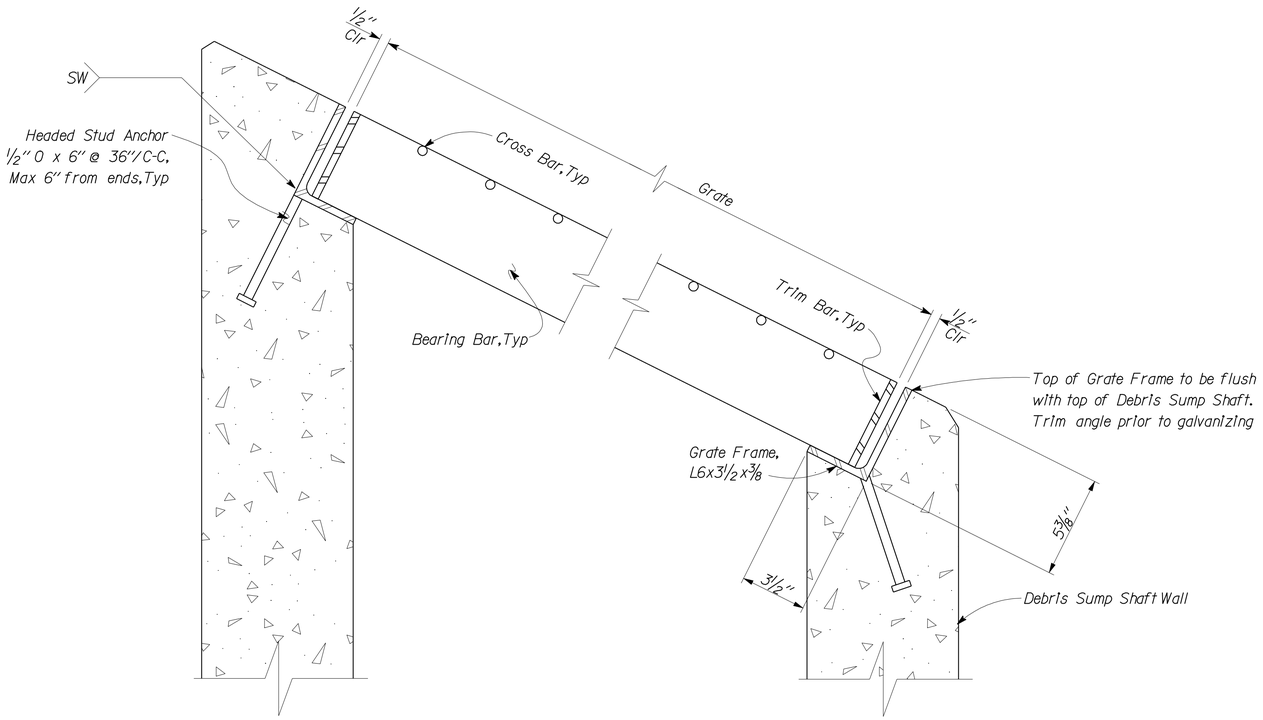
4 GRATE DETAIL



2 LADDER AT ACCESS GRATE
Scale 2" = 1' - 0"



3 GRATE FRAME DETAIL
Scale 3" = 1' - 0"



6 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

DEBRIS SUMP GRATE DETAILS

SHEET ST2-16

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)										SHEET	OF
03-03-11	03-23-11	05-13-11									

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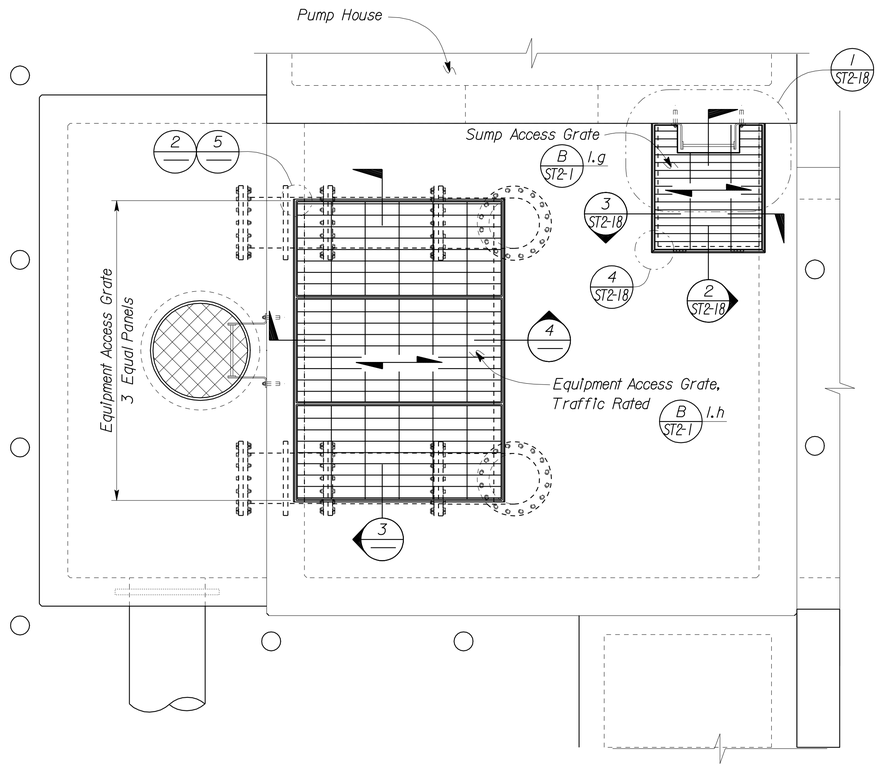
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1369	1414

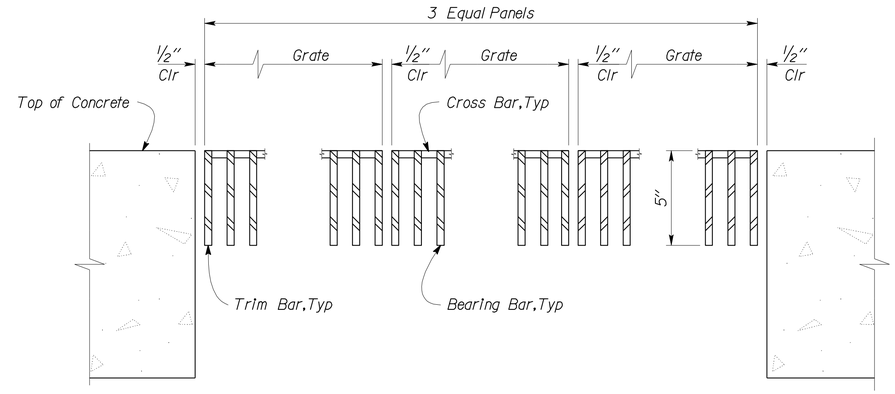
N Bapat — REGISTERED CIVIL ENGINEER — DATE 10-21-11

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

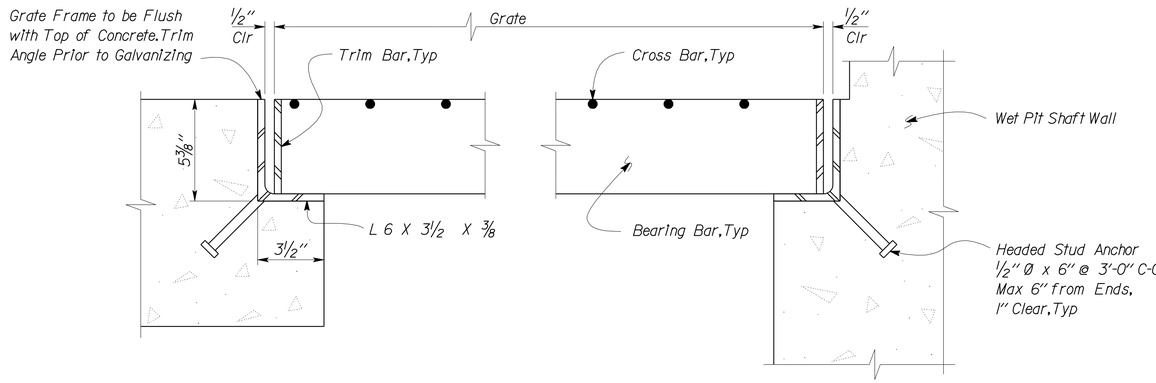
3-26-12
PLANS APPROVAL DATE



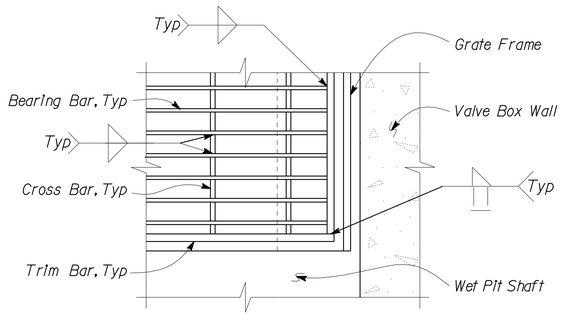
1 EQUIPMENT ACCESS GRATE PLAN
Scale 1/2" = 1' - 0"



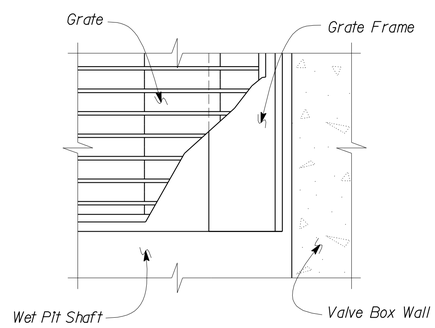
3 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"



4 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"



2 GRATE DETAIL
Scale 3" = 1' - 0"



5 GRATE FRAME DETAIL
Scale 3" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W POST MILE	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST2-17
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat				RTE 26/99 Sep PUMPING PLANT — EQUIPMENT ACCESS GRATE DETAILS	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 12-28-10 02-04-11 — SHEET — OF

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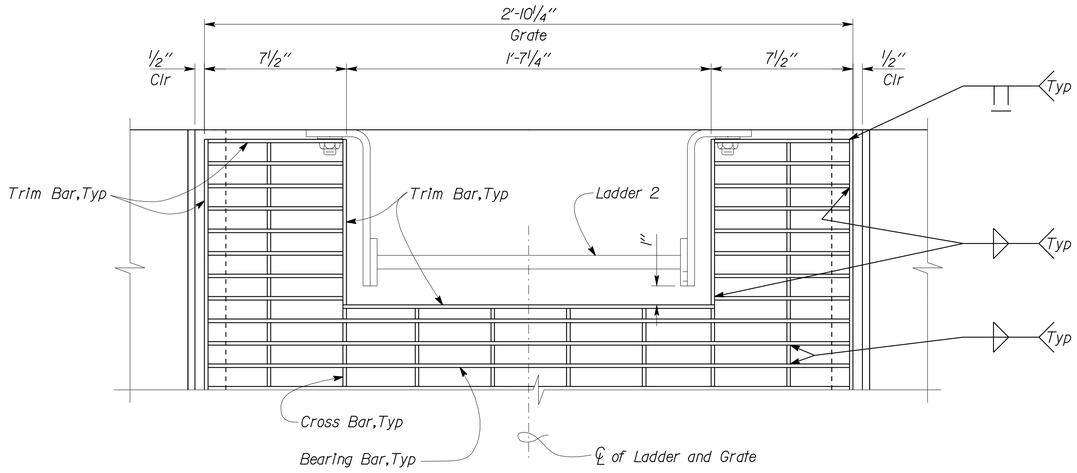
29-MAR-2012 17:46

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1370	1414

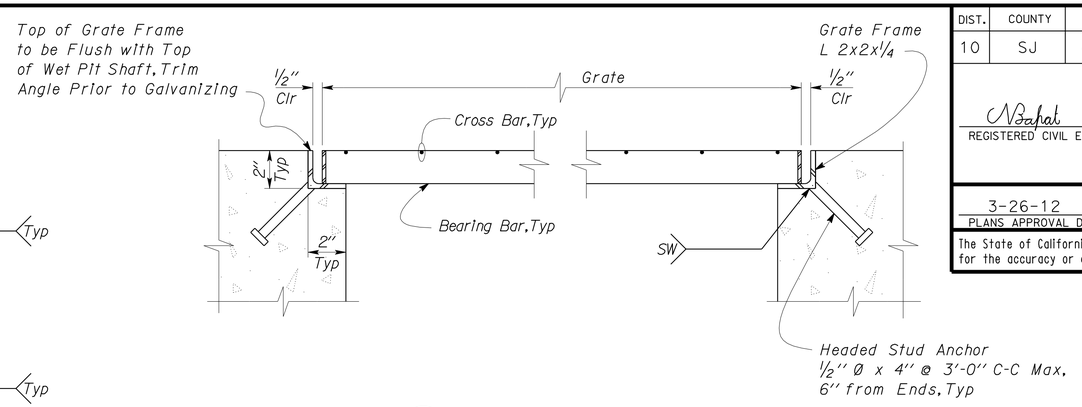
N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

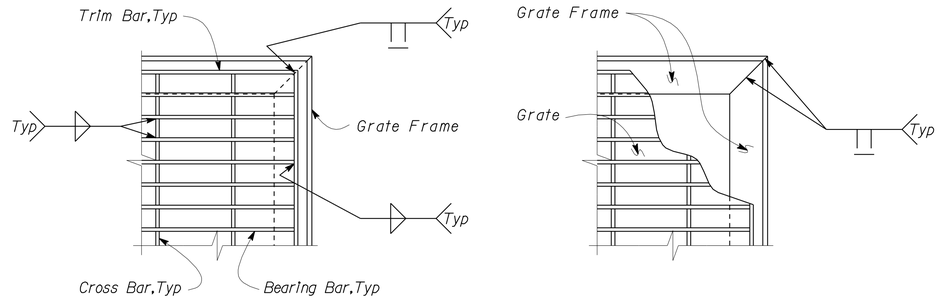
3-26-12
PLANS APPROVAL DATE



1 SUMP ACCESS GRATE DETAIL
Scale 3" = 1' - 0"



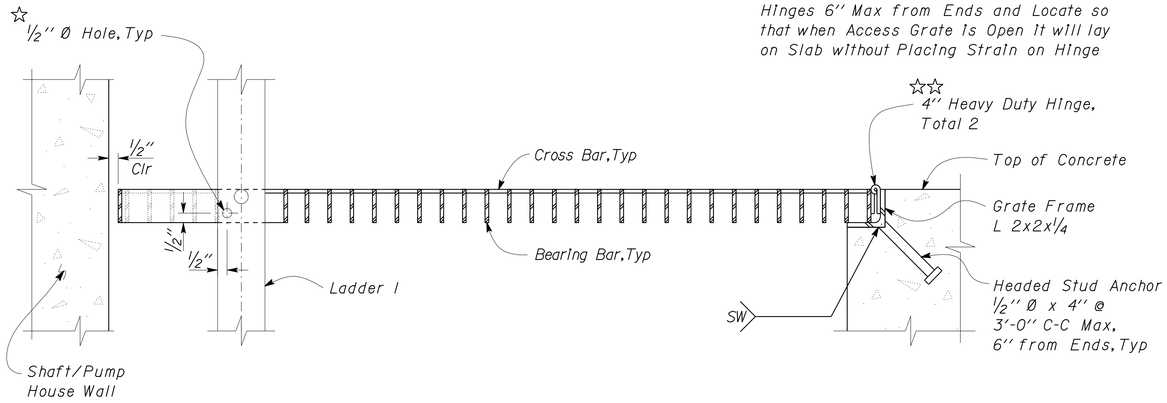
3 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"



4 GRATE AND FRAME DETAILS
Scale 3" = 1' - 0"

☆ Note:
Provide ½" Ø Aligned Hole In Access Grate Trim Bar and Ladder Rail for Padlock

☆☆ Note:
Fillet Weld Hinge to Grate Frame and Trim Bar on Three Sides of Hinge Leaf, Place Hinges 6" Max from Ends and Locate so that when Access Grate Is Open It will lay on Slab without Placing Strain on Hinge



2 GRATE AND FRAME SECTION
Scale 3" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

SUMP ACCESS GRATE DETAILS

SHEET ST2-18

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
04-13-11		

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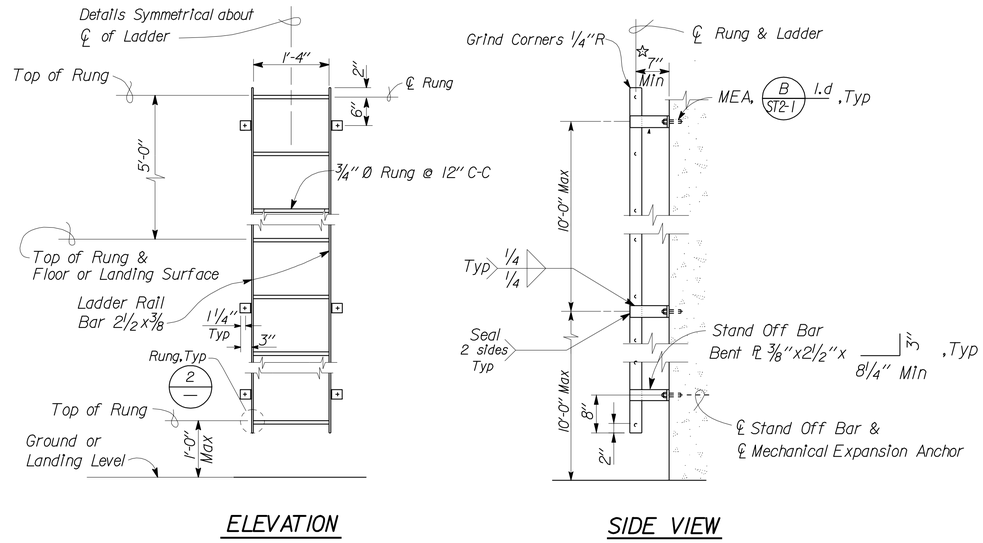


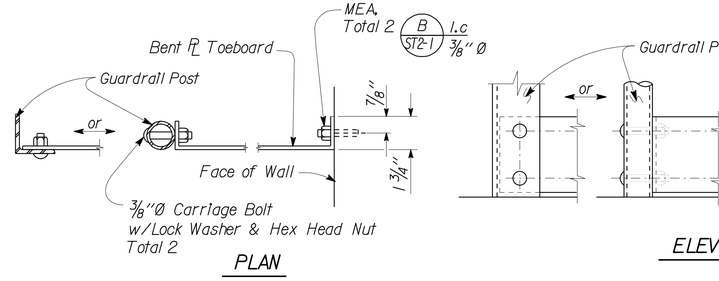
ELEVATION

NOTE
☆ Unless otherwise noted.

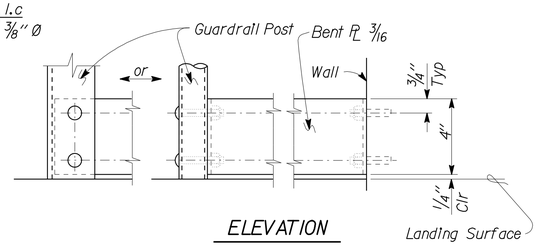
SIDE VIEW

NOTE
For Bottom of Ladder option see 3

1 LADDER DETAILS
Scale ¾" = 1'-0"

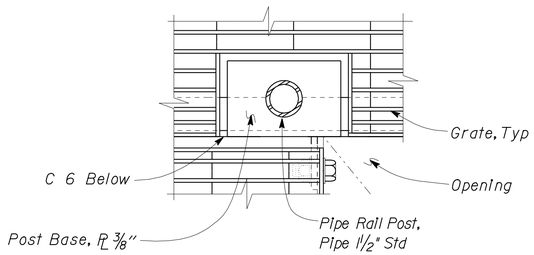


PLAN

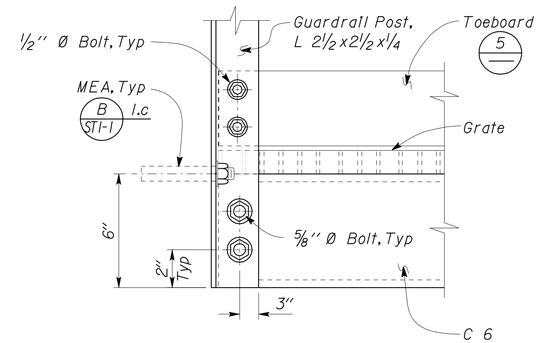


ELEVATION

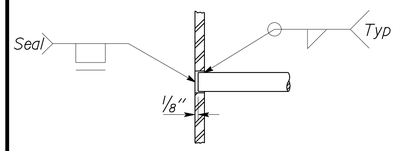
5 TOEBOARD DETAIL
Scale ¼" = 1' - 0"



6 POST BASE ANCHORAGE
Scale 3" = 1' - 0"

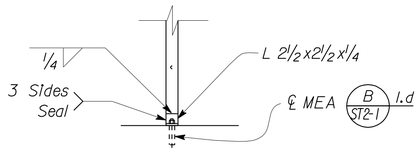


8 GUARDRAIL POST CONNECTION
Scale 3" = 1' - 0"

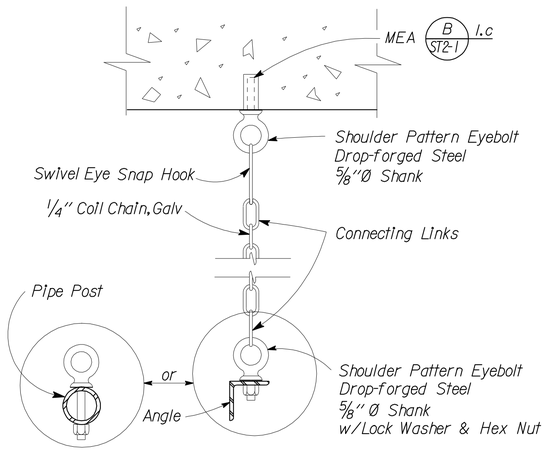


NOTE:
Rung to be Placed ⅛"
Inside of Ladder Rail

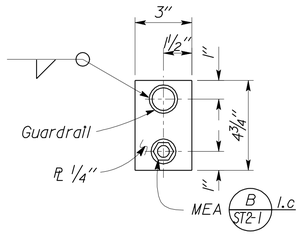
2 RUNG DETAIL
Scale 4" = 1' - 0"



3 BOTTOM OF LADDER OPTION
Scale ¾" = 1'-0"



4 CHAIN GUARD DETAIL
No Scale



7 RAIL TO WALL CONNECTION
Scale 3" = 1' - 0"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1371	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

LADDER AND LANDING DETAILS

SHEET ST2-19

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
01-27-11 | 03-02-11 | 05-12-11

TAEMWW Imperial Rev. 7/10

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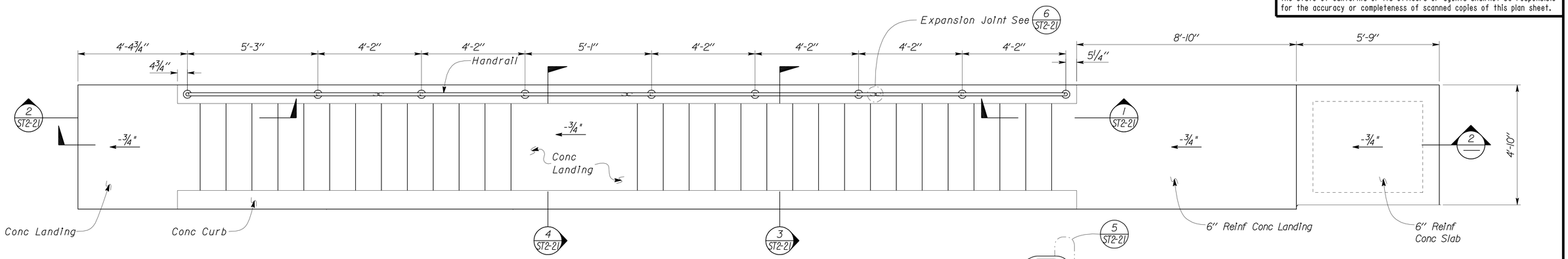
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1372	1414

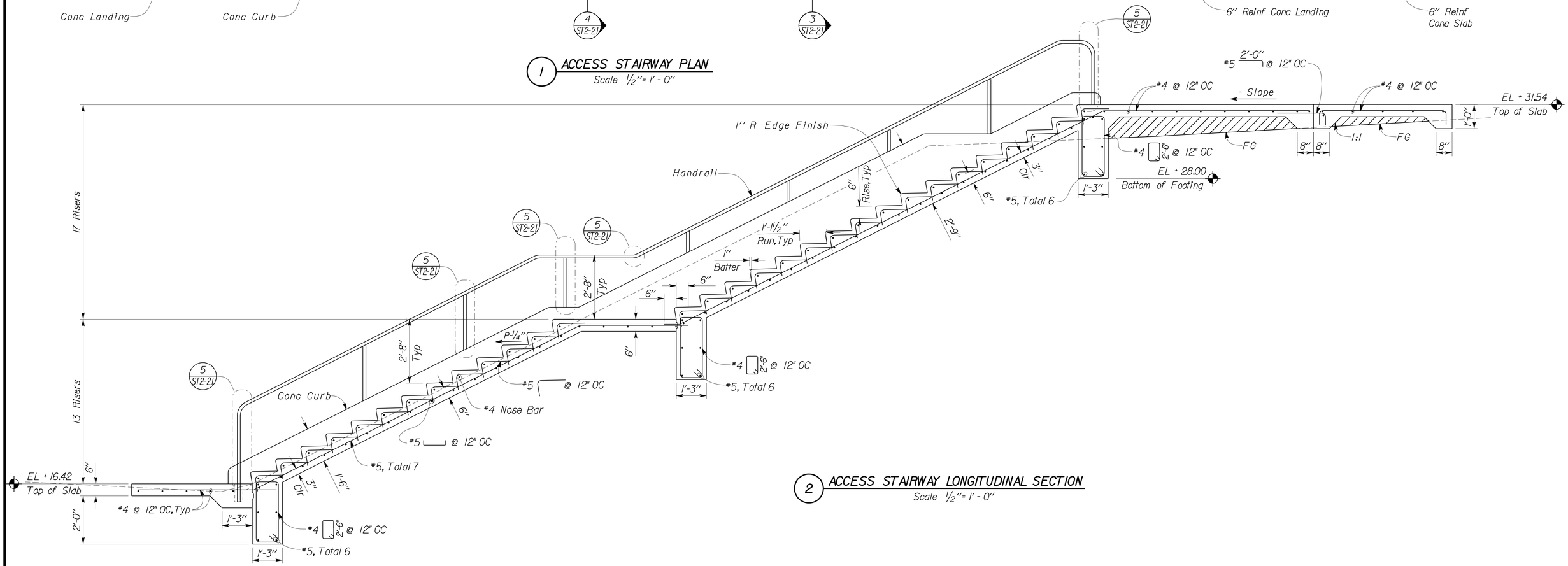
N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE



1 ACCESS STAIRWAY PLAN
Scale 1/2"= 1'-0"



2 ACCESS STAIRWAY LONGITUDINAL SECTION
Scale 1/2"= 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST2-20
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT — ACCESS STAIRWAY PLAN	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 04-08-11 | 05-12-11 | 06-27-11 | 10-21-11 — SHEET — OF

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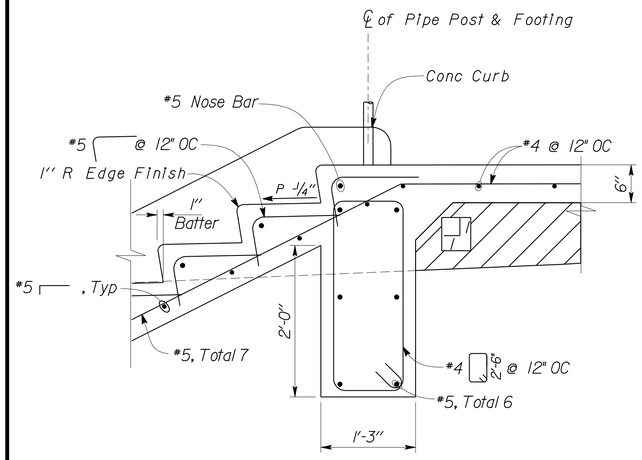
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1373	1414

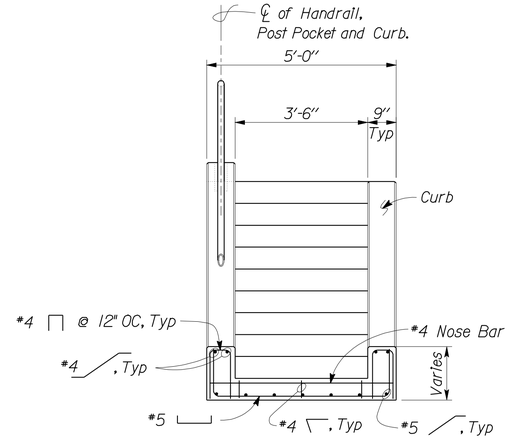
N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

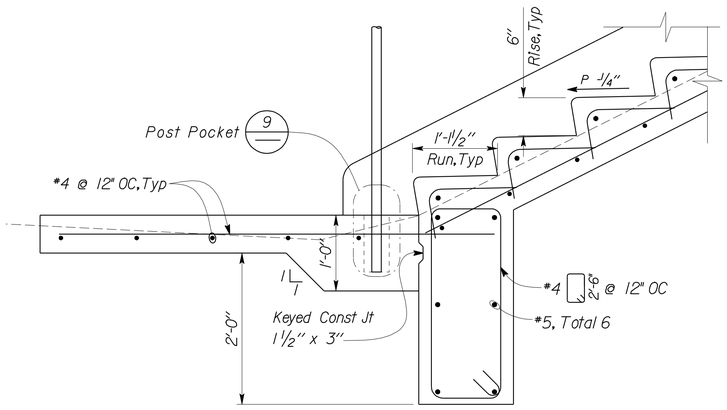


1 TOP OF STAIRS SECTION
Scale 1" = 1' - 0"



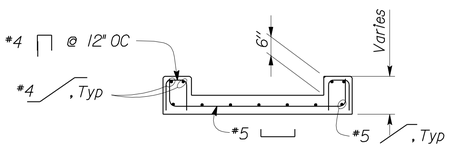
NOTE
Bend reinforcement to clear Post Pockets.

4 STAIRWAY SECTION
Scale 1/2" = 1' - 0"

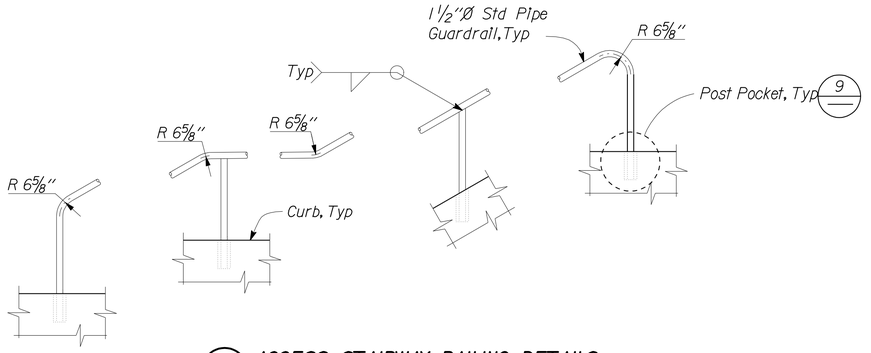


Note:
For Reinf Not Noted
See 1

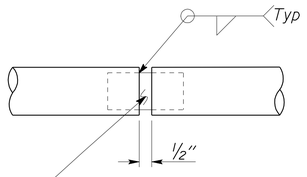
2 BOTTOM OF STAIRS SECTION
Scale 1" = 1' - 0"



3 STAIRWAY SECTION
Scale 1/2" = 1' - 0"

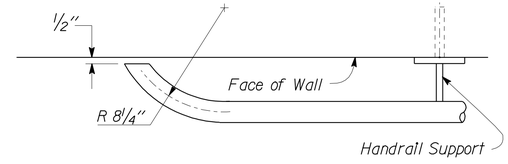


5 ACCESS STAIRWAY RAILING DETAILS
Scale 1/2" = 1' - 0"

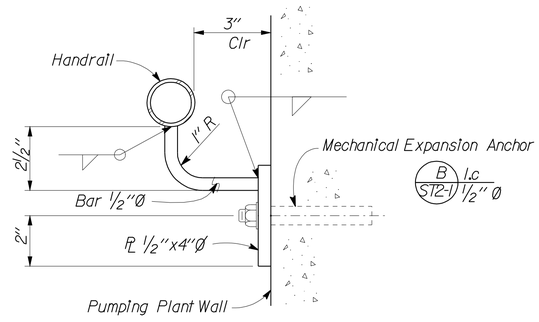


1 1/4" Ø x 0'-5" Std Pipe slotted longitudinally to slip fit inside 1 1/2" Ø Std Pipe Guardrail

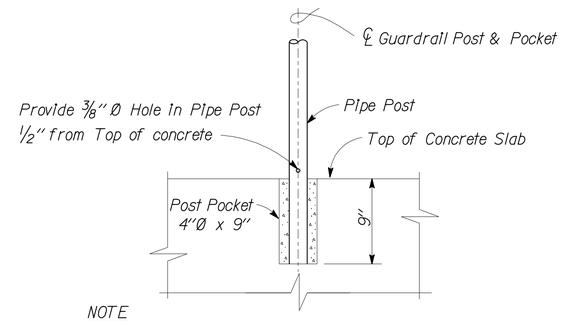
6 EXPANSION JOINT DETAIL @ 10'-0" MAX
Scale 4" = 1' - 0"



7 HANDRAIL RETURN AT WALL
Scale 2" = 1'-0"



8 HANDRAIL SUPPORT DETAIL
Scale 4" = 1' - 0"



NOTE
Pack Post Pocket with Epoxy Grout, Typ

9 POST POCKET DETAIL
Scale 1 1/2" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS — SHEET ST2-21
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT — STAIRWAY DETAILS
QUANTITIES	BY	CHECKED				

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 03-11-11 | 04-07-11 | 06-22-11 | 10-21-11 — SHEET — OF

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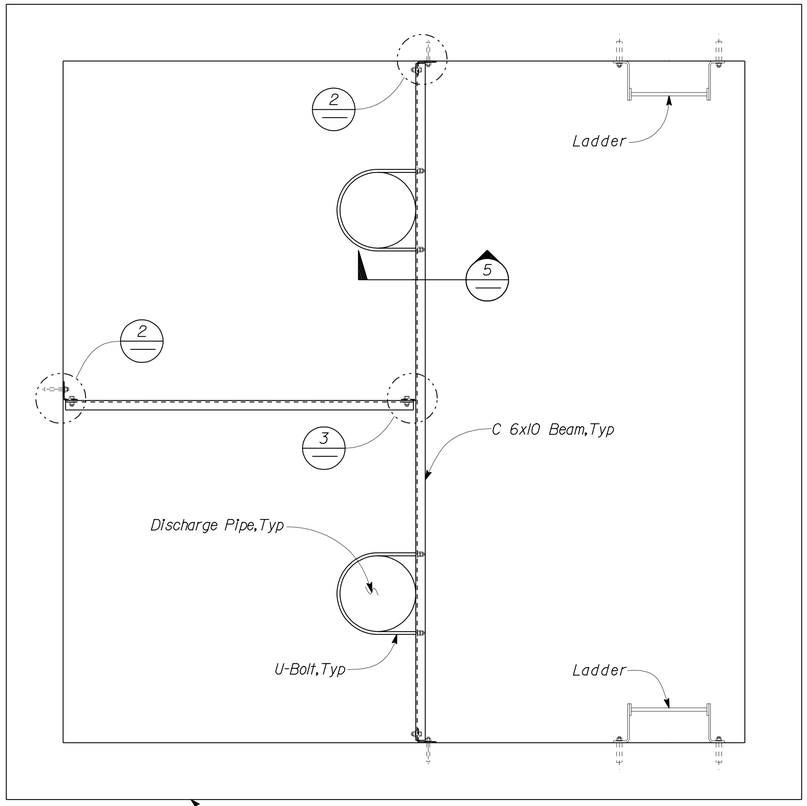
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1374	1414

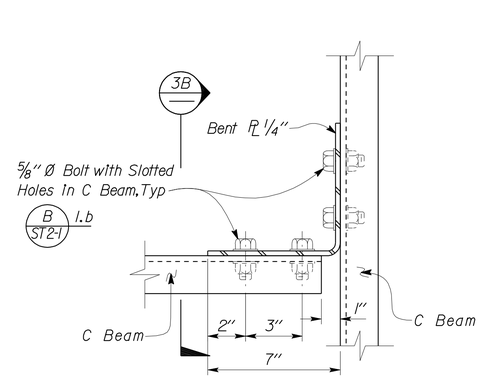
N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

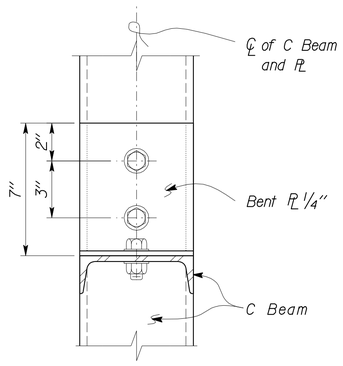
3-26-12
PLANS APPROVAL DATE



1 DISCHARGE PIPE SUPPORT PLAN
Scale 3/4" = 1' - 0"

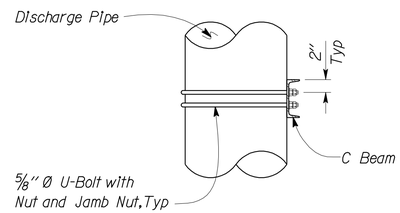


3A PLAN

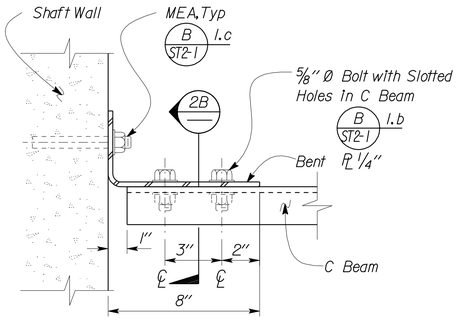


3B ELEVATION

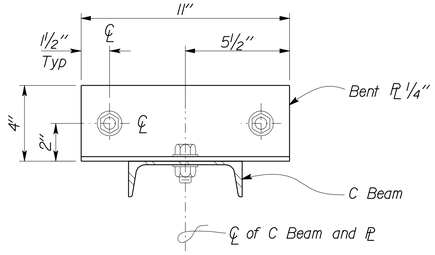
3 C BEAM TO C BEAM CONNECTION
Scale 3" = 1' - 0"



5 PIPE TO C BEAM CONNECTION
Scale 1" = 1' - 0"

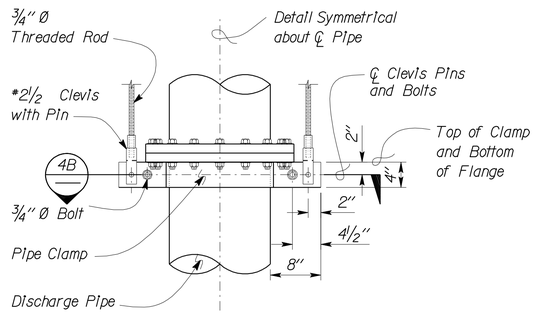


2A PLAN

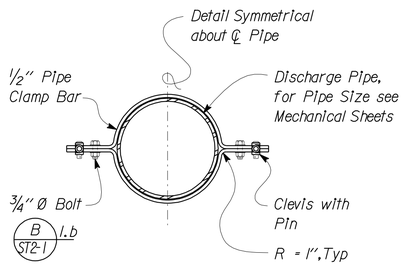


2B ELEVATION

2 C BEAM TO WALL CONNECTION
Scale 3" = 1' - 0"



4A ELEVATION



4B SECTION

4 PIPE CLAMP DETAIL
Scale 1" = 1' - 0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST2-22
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT — DISCHARGE PIPE SUPPORT DETAILS	
QUANTITIES	BY	CHECKED					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 01-27-11 | 03-03-11 | 04-01-11 — SHEET — OF

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29-MAR-2012 17:47

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1375	1414

N Bapat — REGISTERED CIVIL ENGINEER — 10-21-11 DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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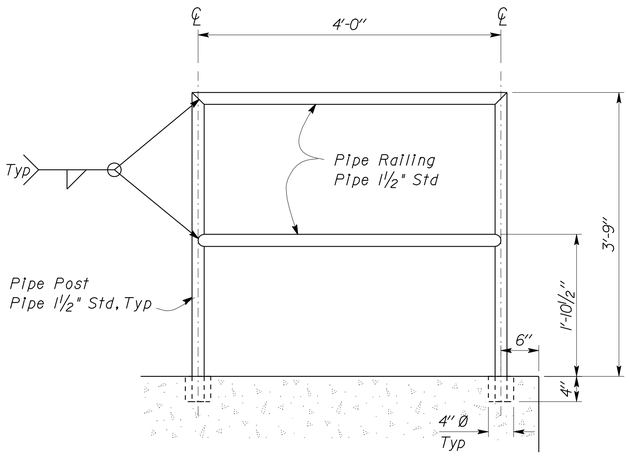
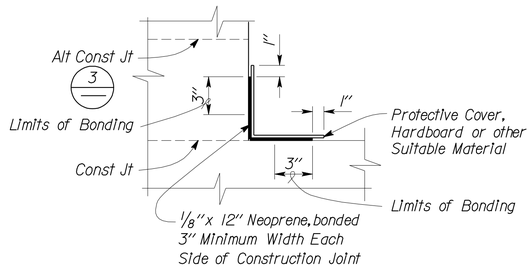
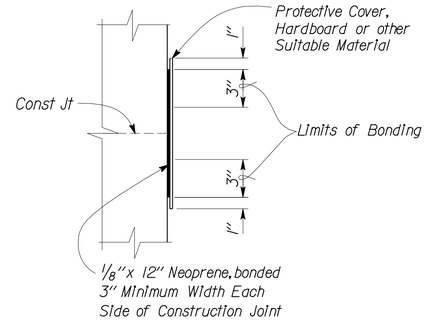


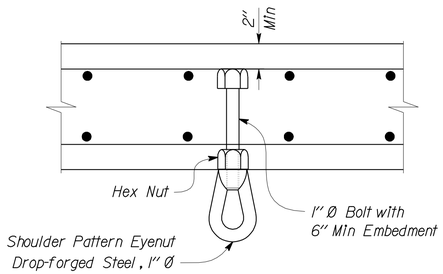
1 LANDING 2 GUARDRAIL
Scale 1" = 1'-0"



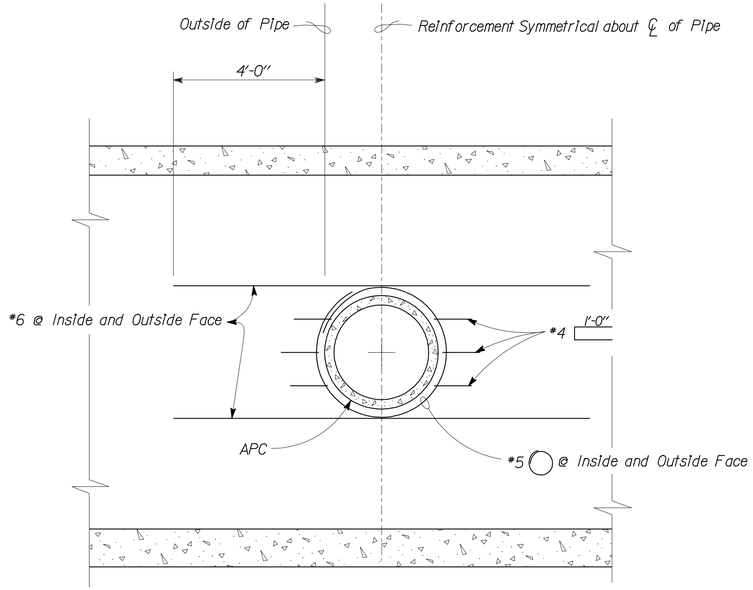
2 WATERSTOP DETAIL
No Scale



3 WATERSTOP DETAIL
No Scale



4 PULLING LOOP DETAIL
No Scale



5 PIPE WALL PENETRATION
No Scale

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS		SHEET ST2-23
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT	MISCELLANEOUS DETAILS	
QUANTITIES	BY	CHECKED						

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY) 03-03-11 | SHEET | OF

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28-MAR-2012 15:55

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1376	1414

N Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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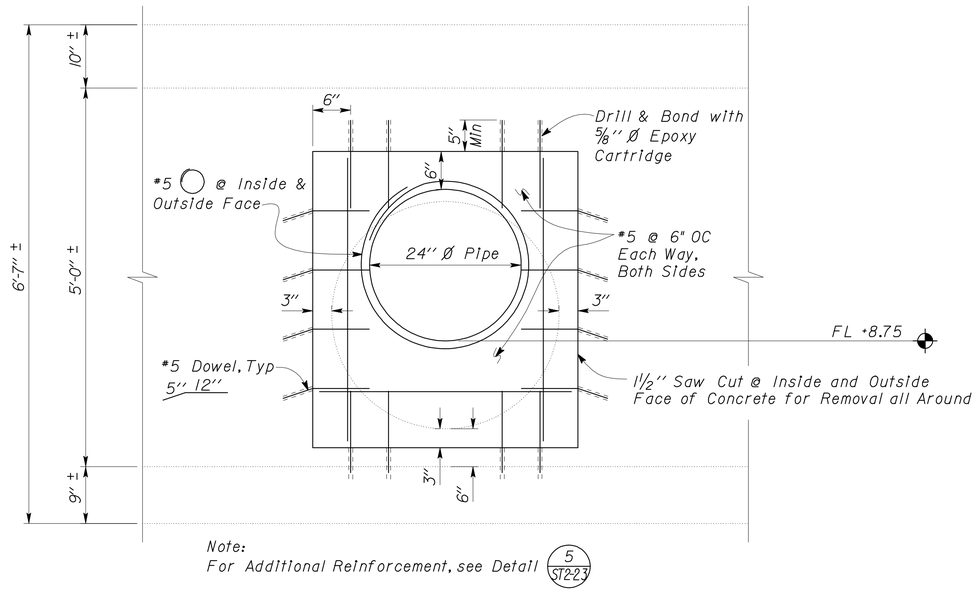
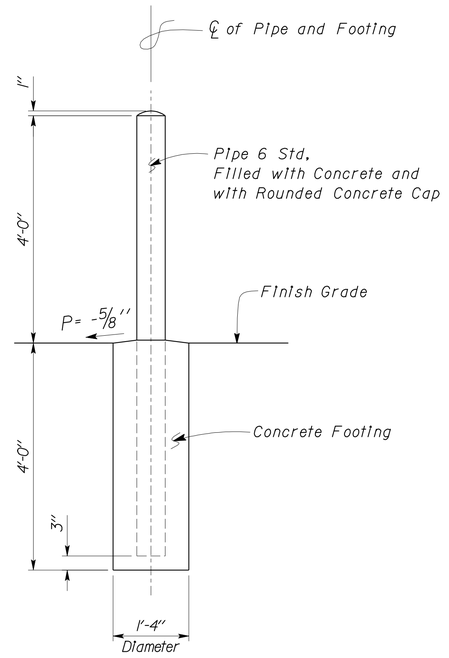
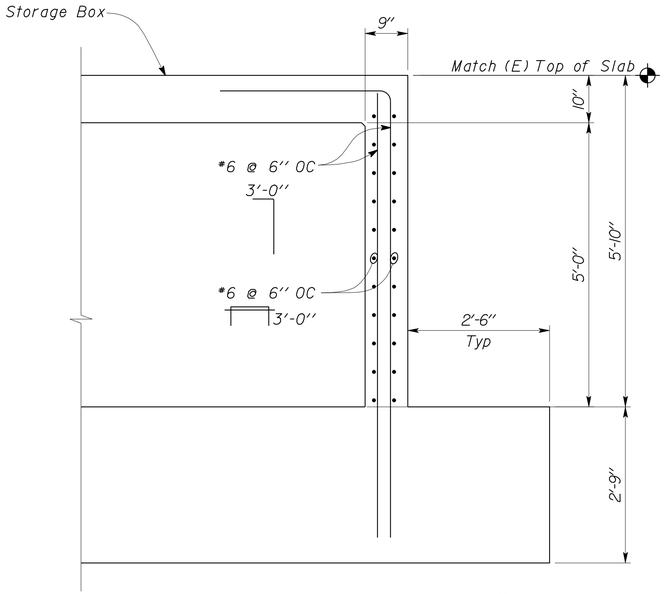


Note:
For Additional Reinforcement, see Detail 5 / ST2.23

1 CONCRETE REMOVAL FOR PIPE REPLACEMENT
Scale 1" = 1'-0"



2 PIPE GUARD POST DETAIL
Scale 3/4" = 1'-0"



3 END WALL SECTION
Scale 3/4" = 1'-0"

Note:
All Reinforcement Not Shown
For Clarity, See Detail 1 / ST2-3

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ARCHITECTURAL AND STRUCTURAL DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS	SHEET ST2-24
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat			POST MILE	RTE 26/99 Sep PUMPING PLANT — STORAGE BOX DETAILS	
QUANTITIES	BY	CHECKED					

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY): 04-20-11 | 05-16-11 | 06-08-11 | 10-20-11

SHEET OF

TAEMWW Imperial Rev. 7/10

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29-MAR-2012 17:47

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1377	1414

C. N. Bapat — 10-21-11
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — C. N. Bapat — No. 46493 — Exp. 6-30-13 — CIVIL — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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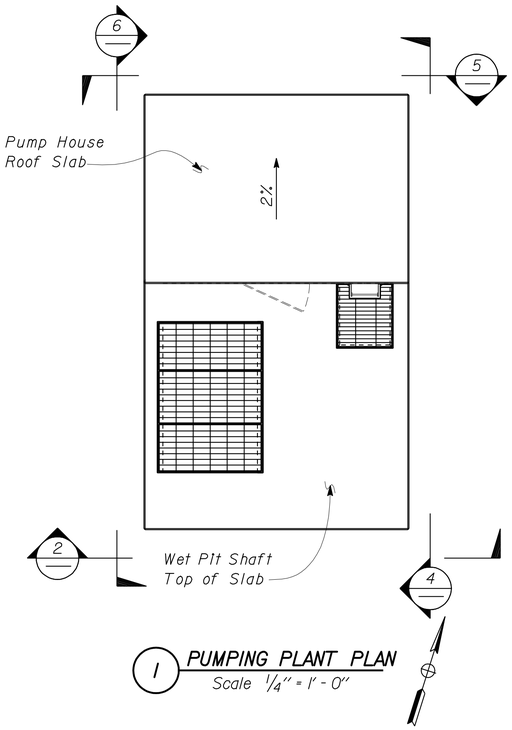
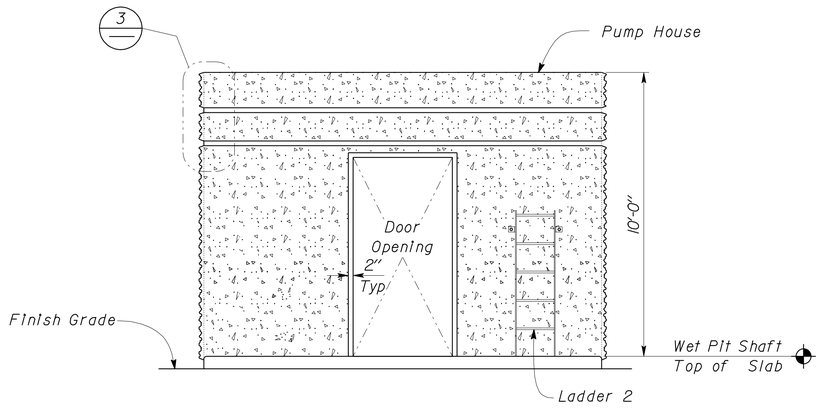
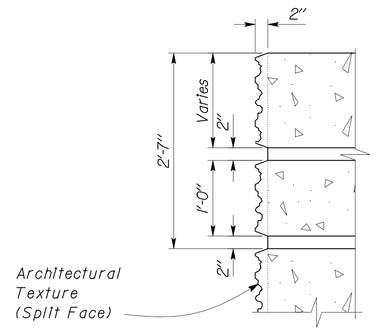


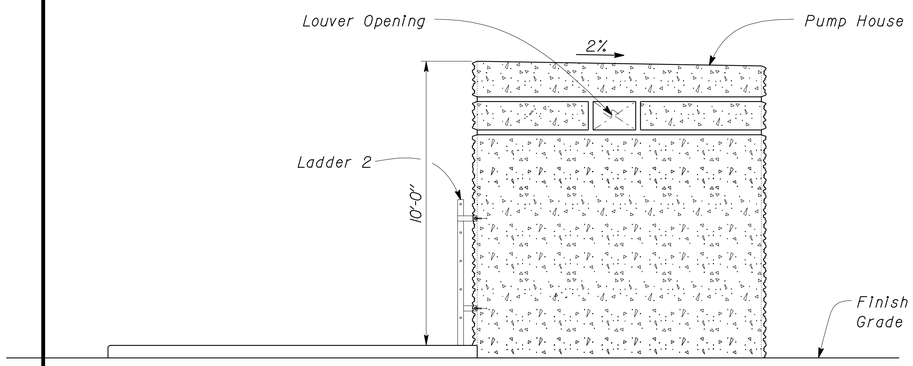
1 PUMPING PLANT PLAN
Scale 1/4" = 1'-0"



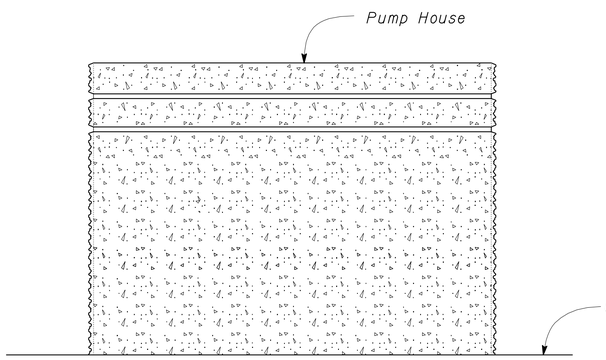
2 FRONT ELEVATION
Scale 3/8" = 1'-0"



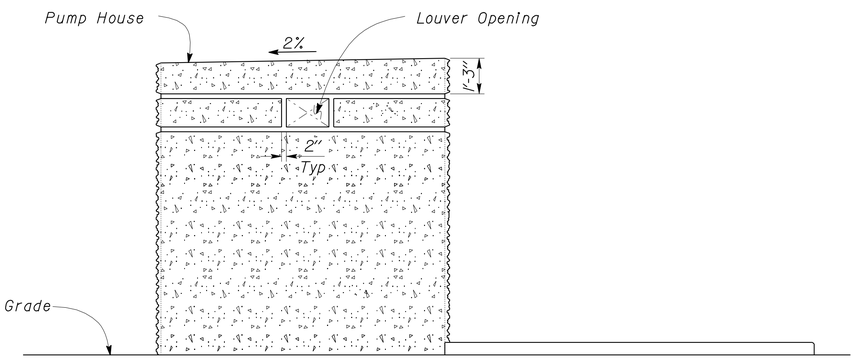
3 TEXTURE DETAIL
Scale 1" = 1'-0"



4 RIGHT SIDE ELEVATION
Scale 3/8" = 1'-0"



5 BACK SIDE ELEVATION
Scale 3/8" = 1'-0"



6 LEFT SIDE ELEVATION
Scale 3/8" = 1'-0"

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

PUMPING PLANT ELEVATIONS

SHEET ST2-25

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)		SHEET	OF
05-11-11	10-21-11		

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29-MAR-2012 17:47

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1378	1414

N Bapat 10-21-11
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
C. N. Bapat
No. 46493
Exp. 6-30-13
CIVIL
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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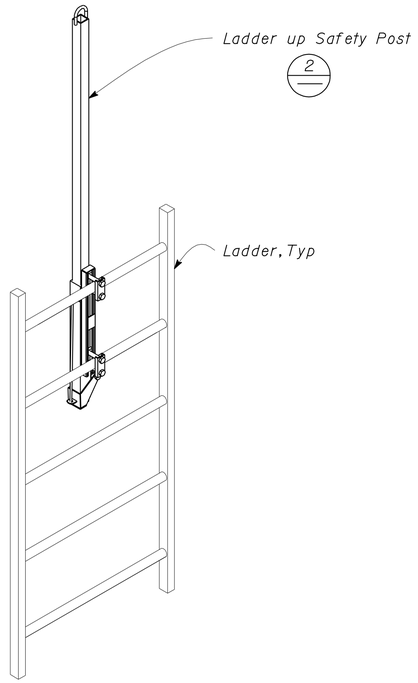
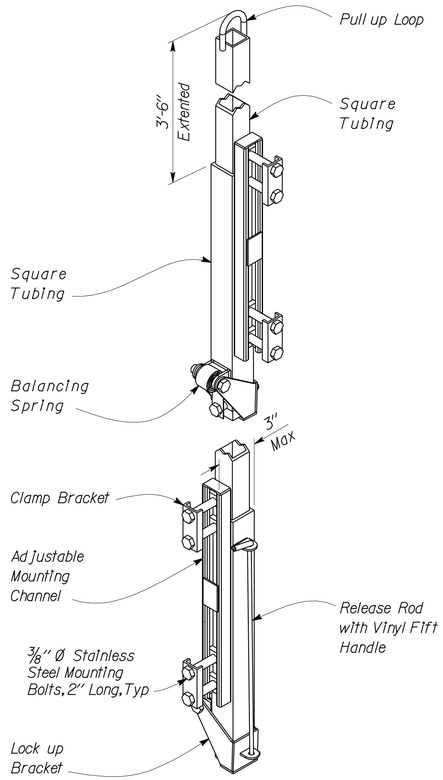
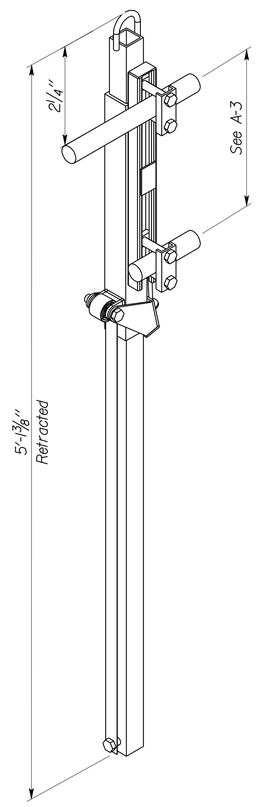


1 CONNECTION VIEW
No Scale





2 DETAILS
No Scale

A Notes

1. The ladder safety post shall be furnished completely assembled ready to mount on rear of ladder with clamp brackets on climbing side. Ladder must be structurally sound and securely anchored.
2. On hollow round rung ladders insert solid round bar (same length as rung) into the top two rungs to provide additional strength and prevent crushing of the rung when the ladder safety post is fastened.
3. Adjustable mounting fits ladders with rung spacing up to about 14" center to center.
4. Clamp bracket may be reversed to accommodate rung sizes of 3/4" to 1 1/4" with standard 2" bolt furnished. Larger rungs will require longer bolts.
5. The ladder safety post shall be steel and hot dipped galvanized.
6. Submit working drawings of ladder safety post for Engineer's approval.

DESIGN	BY Chandra Bapat	CHECKED Thomas Tong	
DETAILS	BY Daniel Harakh	CHECKED Chandra Bapat	
QUANTITIES	BY	CHECKED	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
ARCHITECTURAL AND STRUCTURAL DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

LADDER SAFETY POST

SHEET ST2-26

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3581
PROJECT NUMBER & PHASE 10000004091
EA 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
06-27-11		

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30-MAR-2012 14:13

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1379	1414

Joseph M Kaump 7-08-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — Joseph Kaump — No. 7837 — Exp. 01-31-13 — STATE OF CALIFORNIA

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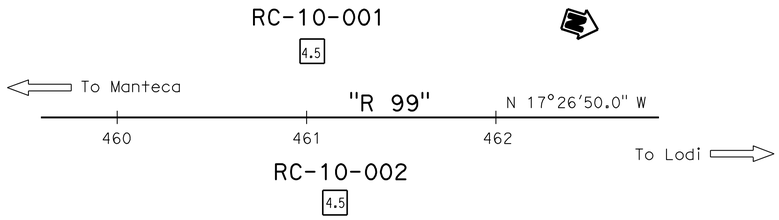
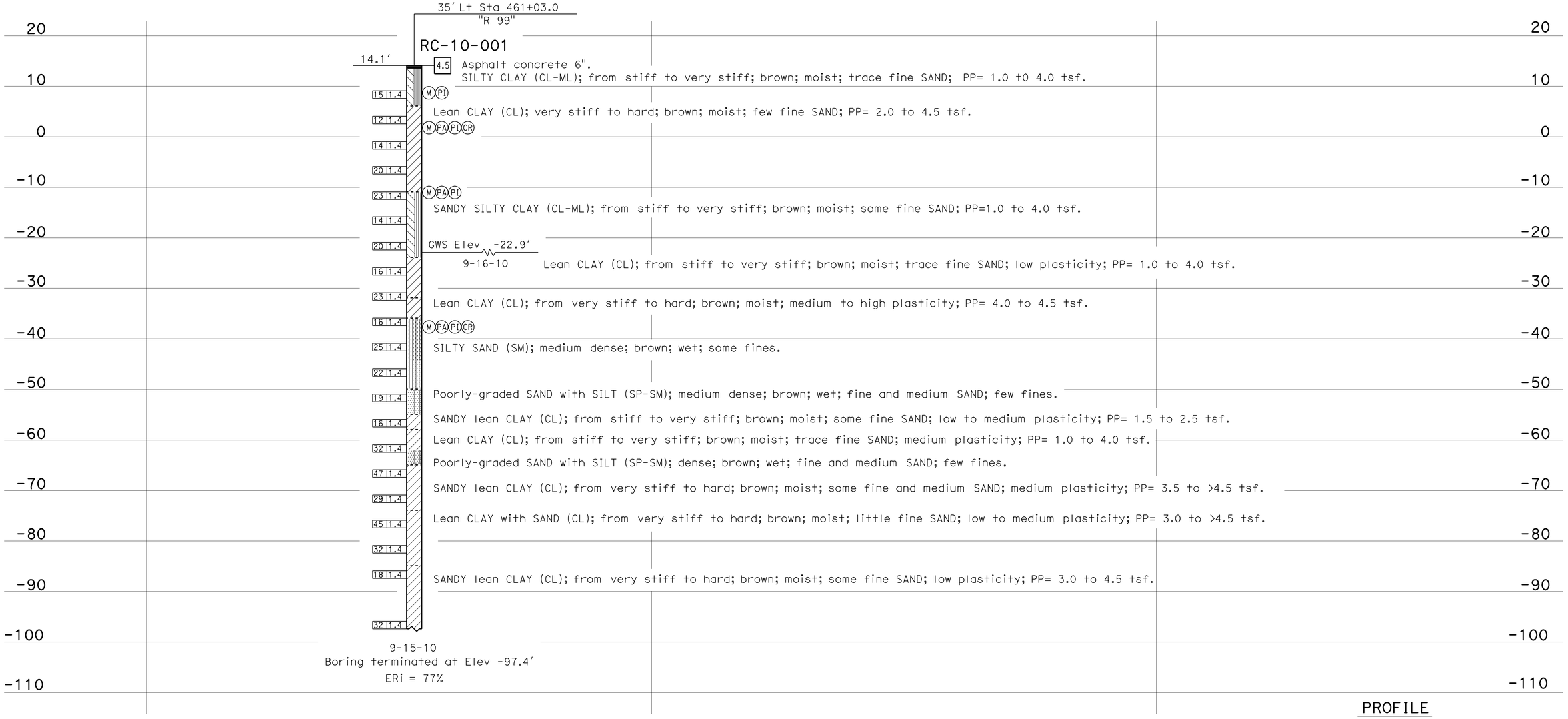
BENCH MARK

NW corner of existing Br. No. 29-0120G
56.70' Lt ℄ "R99" Line Sta 460+22.65
Elev= 35.09'.
As shown on Foundation Plan for Dr. Martin Luther King BLVD OC dated 5-12-11
Vertical Datum NGVD 29.



PLAN
1" = 40'



PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RTE 26/99 Sep PP MODIFICATION
FUNCTIONAL SUPERVISOR NAME: R. Buell	DRAWN BY: F. Nguyen 6/11 CHECKED BY:	FIELD INVESTIGATION BY: T. Alderman	DESIGN BRANCH X	29-0120W POST MILE	LOG OF TEST BORINGS 1 OF 4

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
07-27-11	07-08-11			X	X

FILE => st_Log01_of_04.dgn

USERNAME => s135518 DATE PLOTTED => 28-MAR-2012 TIME PLOTTED => 15:29

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1380	1414

Joseph M Kaump 7-08-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — Joseph Kaump — No. 7837 — Exp. 01-31-13 — STATE OF CALIFORNIA

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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

FOR PLAN VIEW, SEE
"LOG OF TEST BORINGS 1 OF 4"

PROFILE
Horiz: 1" = 10'
Vert: 1" = 10'

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RTE 26/99 Sep PP MODIFICATION
FUNCTIONAL SUPERVISOR	DRAWN BY: F. Nguyen 6/11		DESIGN BRANCH X	29-0120W	LOG OF TEST BORINGS 2 OF 4
NAME: R. Buell	CHECKED BY:	FIELD INVESTIGATION BY: T. Alderman		POST MILE	

OGS CIVIL LOG OF TEST BORINGS SHEET

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
07-22-11	07-08-11			X	X

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USERNAME => s135318 DATE PLOTTED => 28-MAR-2012 TIME PLOTTED => 15:29

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1381	1414

Joseph M Kaump 7-7-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

Joseph Kaump No. 7837 Exp. 01-31-13 PROFESSIONAL GEOLOGIST STATE OF CALIFORNIA

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CEMENTATION

Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

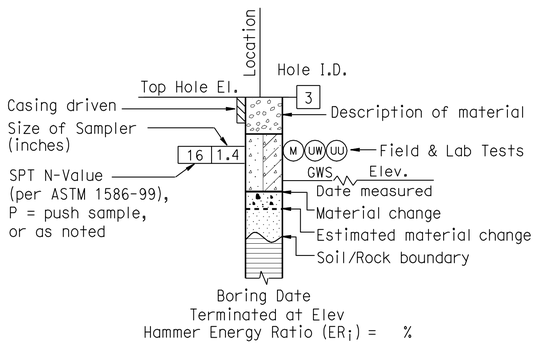
BOREHOLE IDENTIFICATION

Symbol	Hole Type	Description
Size	A	Auger Boring (hollow or solid stem bucket)
Size	R RW RC P	Rotary drilled boring (conventional) Rotary drilled with self-casing wire-line Rotary core with continuously-sampled, self-casing wire-line Rotary percussion boring (air)
Size	R	Rotary drilled diamond core
Size	HD HA	Hand driven (1-inch soil tube) Hand Auger
●	D	Dynamic Cone Penetration Boring
▲	CPT	Cone Penetration Test (ASTM D 5778)
⬚	O	Other (note on LOTB)

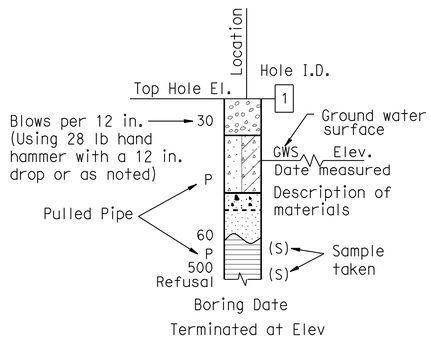
Note: Size in inches.

CONSISTENCY OF COHESIVE SOILS

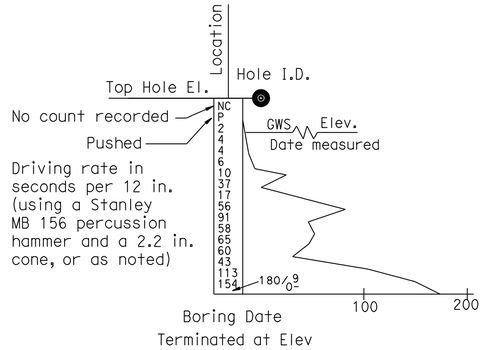
Description	Shear Strength (tsf)	Pocket Penetrometer Measurement, PP, (tsf)	Torvane Measurement, TV, (tsf)	Vane Shear Measurement, VS, (tsf)
Very Soft	Less than 0.12	Less than 0.25	Less than 0.12	Less than 0.12
Soft	0.12 - 0.25	0.25 - 0.5	0.12 - 0.25	0.12 - 0.25
Medium Stiff	0.25 - 0.5	0.5 - 1	0.25 - 0.5	0.25 - 0.5
Stiff	0.5 - 1	1 - 2	0.5 - 1	0.5 - 1
Very Stiff	1 - 2	2 - 4	1 - 2	1 - 2
Hard	Greater than 2	Greater than 4	Greater than 2	Greater than 2



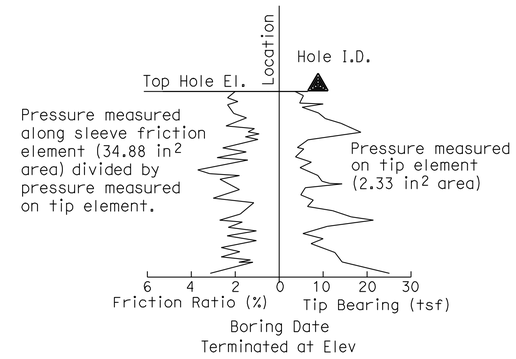
ROTARY BORING



HAND BORING



DYNAMIC CONE PENETRATION BORING



CONE PENETRATION TEST (CPT) BORING

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RTE 26/99 Sep PP MODIFICATION
	PREPARED BY: F. Nguyen 6/11		DESIGN BRANCH X	29-0120W POST MILE	LOG OF TEST BORINGS 3 OF 4

GS LOTB SOIL LEGEND

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
				X	X

FILE => st_Log03_of_04.dgn

USERNAME => s135318 DATE PLOTTED => 28-MAR-2012 TIME PLOTTED => 15:29

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010)

GROUP SYMBOLS AND NAMES

Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
GW	Well-graded GRAVEL Well-graded GRAVEL with SAND	CL	Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
GP	Poorly-graded GRAVEL Poorly-graded GRAVEL with SAND		
GW-GM	Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND	CL-ML	SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
GW-GC	Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
GP-GM	Poorly-graded GRAVEL with SILT Poorly-graded GRAVEL with SILT and SAND	ML	SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
GP-GC	Poorly-graded GRAVEL with CLAY (or SILTY CLAY) Poorly-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
GM	SILTY GRAVEL SILTY GRAVEL with SAND	OL	ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
GC	CLAYEY GRAVEL CLAYEY GRAVEL with SAND		
GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND	OL	ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
SW	Well-graded SAND Well-graded SAND with GRAVEL		
SP	Poorly-graded SAND Poorly-graded SAND with GRAVEL	CH	Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
SW-SM	Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL		
SW-SC	Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)	MH	Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
SP-SM	Poorly-graded SAND with SILT Poorly-graded SAND with SILT and GRAVEL		
SP-SC	Poorly-graded SAND with CLAY (or SILTY CLAY) Poorly-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)	OH	ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
SM	SILTY SAND SILTY SAND with GRAVEL		
SC	CLAYEY SAND CLAYEY SAND with GRAVEL	OH	ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
SC-SM	SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL		
PT	PEAT	OL/OH	ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND
	COBBLES COBBLES and BOULDERS BOULDERS		

FIELD AND LABORATORY TESTING

- (C) Consolidation (ASTM D 2435)
- (CL) Collapse Potential (ASTM D 5333)
- (CP) Compaction Curve (CTM 216)
- (CR) Corrosivity Testing (CTM 643, CTM 422, CTM 417)
- (CU) Consolidated Undrained Triaxial (ASTM D 4767)
- (DS) Direct Shear (ASTM D 3080)
- (EI) Expansion Index (ASTM D 4829)
- (M) Moisture Content (ASTM D 2216)
- (OC) Organic Content-% (ASTM D 2974)
- (P) Permeability (CTM 220)
- (PA) Particle Size Analysis (ASTM D 422)
- (PI) Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
- (PL) Point Load Index (ASTM D 5731)
- (PM) Pressure Meter
- (R) R-Value (CTM 301)
- (SE) Sand Equivalent (CTM 217)
- (SG) Specific Gravity (AASHTO T 100)
- (SL) Shrinkage Limit (ASTM D 427)
- (SW) Swell Potential (ASTM D 4546)
- (UC) Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938)
- (UU) Unconsolidated Undrained Triaxial (ASTM D 2850)
- (UW) Unit Weight (ASTM D 4767)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1382	1414

Joseph M Kaump 7-7-11
PROFESSIONAL GEOLOGIST

3-26-12
PLANS APPROVAL DATE

PROFESSIONAL GEOLOGIST — Joseph Kaump — No. 7837 — Exp. 01-31-13 — PROFESSIONAL GEOLOGIST — 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.

APPARENT DENSITY OF COHESIONLESS SOILS

Description	SPT N_{60} (Blows / 12 in.)
Very Loose	0 - 5
Loose	5 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Greater than 50

MOISTURE

Description	Criteria
Dry	No discernable moisture
Moist	Moisture present, but no free water
Wet	Visible free water

PERCENT OR PROPORTION OF SOILS

Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5% - 10%
Little	15% - 25%
Some	30% - 45%
Mostly	50% - 100%

PARTICLE SIZE

Description		Size (in.)
Boulder		Greater than 12
Cobble		3 - 12
Gravel	Coarse	3/4 - 3
	Fine	1/5 - 3/4
Sand	Coarse	1/16 - 1/5
	Medium	1/64 - 1/16
	Fine	1/300 - 1/64
Silt and Clay		Less than 1/300

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO.	RTE 26/99 Sep PP MODIFICATION
	PREPARED BY: F. Nguyen 6/11		DESIGN BRANCH X	29-0120W POST MILE	LOG OF TEST BORINGS 4 OF 4

GS LOTB SOIL LEGEND

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 10000004091 CONTRACT NO.: 10-3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES | SHEET X | OF X

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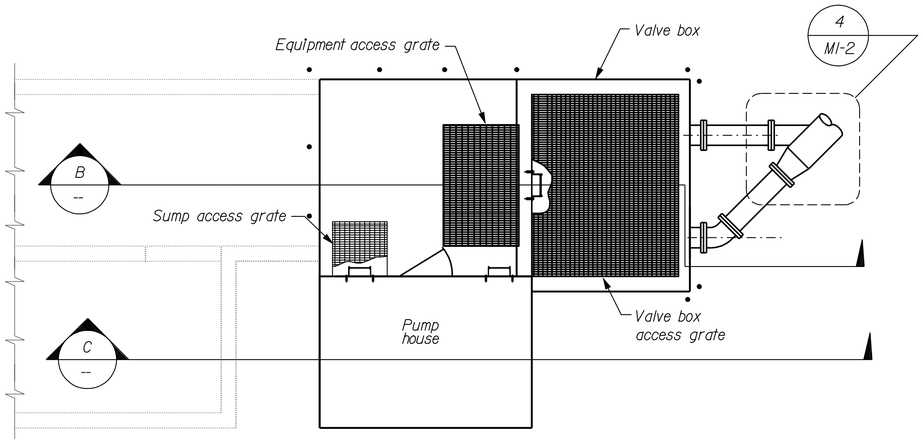
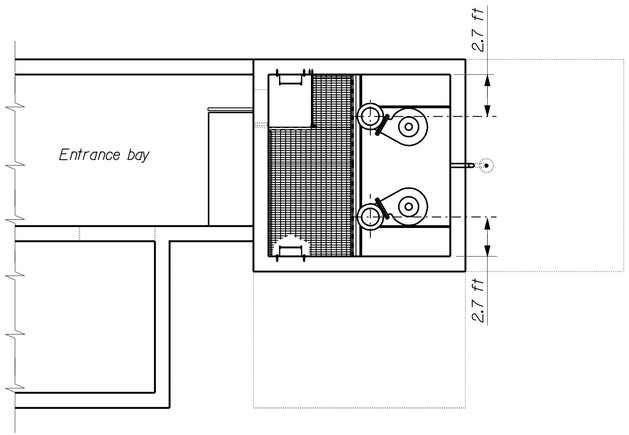
USERNAME => s135318 DATE PLOTTED => 28-MAR-2012 TIME PLOTTED => 15:30



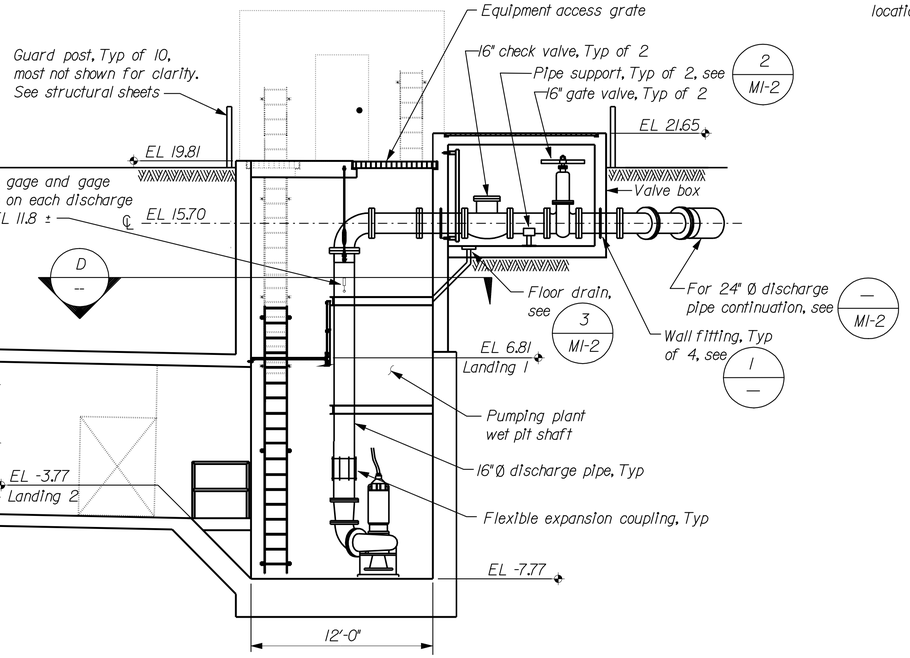
PARTIAL PLAN

1"=5'



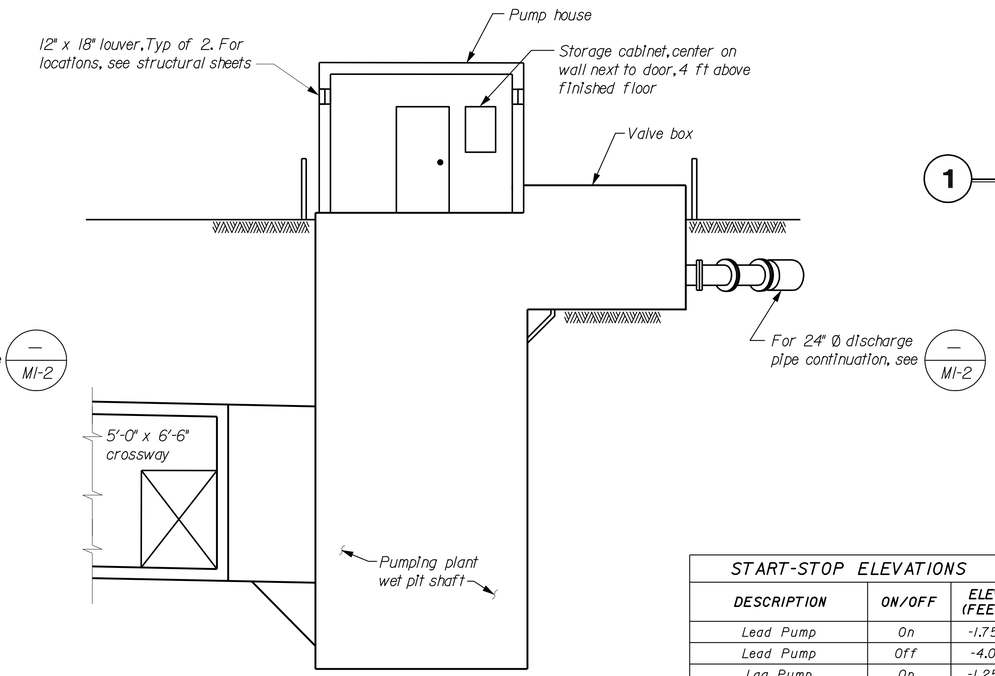
D SECTION

1"=5'



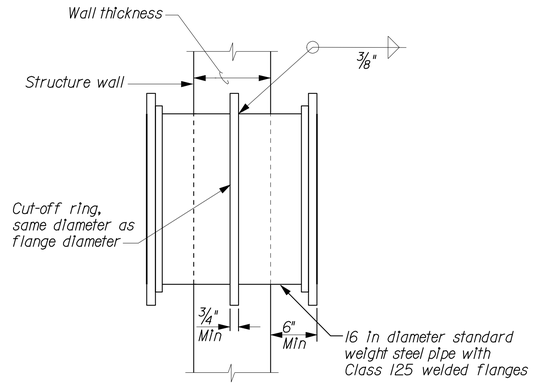
B SECTION

1"=5'



C SECTION

1"=5'



1 WALL FITTING DETAIL

No Scale

START-STOP ELEVATIONS		
DESCRIPTION	ON/OFF	ELEV (FEET)
Lead Pump	On	-1.75
Lead Pump	Off	-4.0
Lag Pump	On	-1.25
Lag Pump	Off	-4.0
High Level	On	-0.5
High Level	Off	-4.0

NOTES:

1. Support pump motor cables with stainless steel grips. See Electrical sheets for details.
2. Pumps shall be installed with cast-in-place studs, epoxy concrete expansion anchor bolts, or per manufacturer's recommendation. The size and number of fasteners shall match manufacturer's recommendation. All fasteners and appurtenances shall be stainless steel. Pump setting details shall be in accordance with pump manufacturer installation requirements.

THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

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: FRANCIS SOLICH

Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1383	1414

08-24-11
REGISTERED ENGINEER-MECHANICAL DATE

REGISTERED PROFESSIONAL ENGINEER
Jack Wheeler
No. 21648
Exp. 06-30-13
MECH
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

DESIGN	BY Thomas Dietsch	CHECKED Jesus Ramirez	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0115W
DETAILS	BY Thomas Dietsch	CHECKED Jesus Ramirez			POST MILE
QUANTITIES	BY Thomas Dietsch	CHECKED Jesus Ramirez			

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

EAST STOCKTON UP PUMPING PLANT — PUMPING PLANT DETAILS

SHEET M1-1

UNIT 3615
PROJECT NUMBER & PHASE 1000000409

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY): 06-17-10 | 08-18-10 | 02-09-11 | 04-13-11 | 05-18-11 | 07-05-11 | 08-24-11

SHEET OF

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

EA 3A1001 FILE => m1_1.dgn

USERNAME => s1216l4 DATE PLOTTED => 04-MAY-2012 TIME PLOTTED => 11:01

VI=I

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1384	1414

08-24-11
REGISTERED ENGINEER-MECHANICAL DATE

REGISTERED PROFESSIONAL ENGINEER
Jack Wheeler
No. 21648
Exp. 06-30-13
MECH
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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CALIFORNIA STATE FIRE MARSHAL APPROVED
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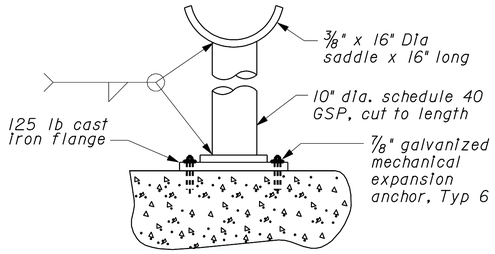
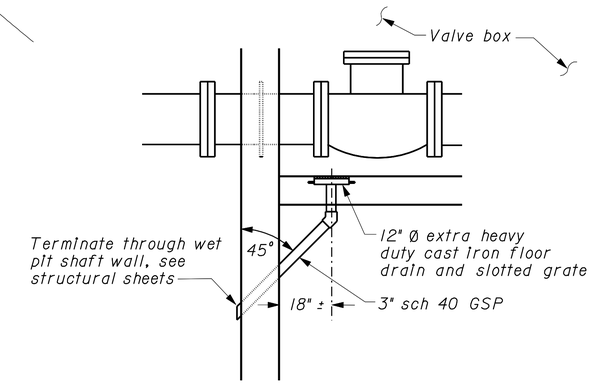
Reviewed by: FRANCIS SOLICH
Approval date: 08-04-11

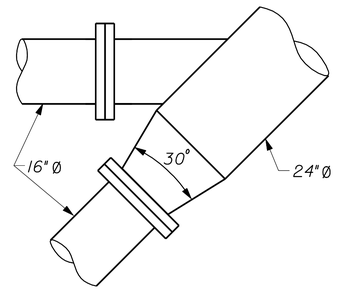


2 PIPE SUPPORT DETAIL
No Scale
Two Required

PARTIAL SITE PLAN
1"=100'



3 FLOOR DRAIN DETAIL
No Scale



4 MANIFOLD DETAIL
No Scale

THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

DESIGN	BY Thomas Dietsch	CHECKED Jesus Ramirez	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS
DETAILS	BY Thomas Dietsch	CHECKED Jesus Ramirez			POST MILE	EAST STOCKTON UP PUMPING PLANT: PUMPING PLANT OUTFALL
QUANTITIES	BY Thomas Dietsch	CHECKED Jesus Ramirez				

SHEET M1-2

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3615
PROJECT NUMBER & PHASE 1000000409

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)							SHEET	OF
06-11-10	08-18-10	02-09-11	04-13-11	05-16-11	07-06-11	08-24-11		

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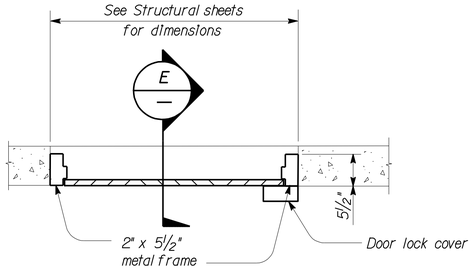
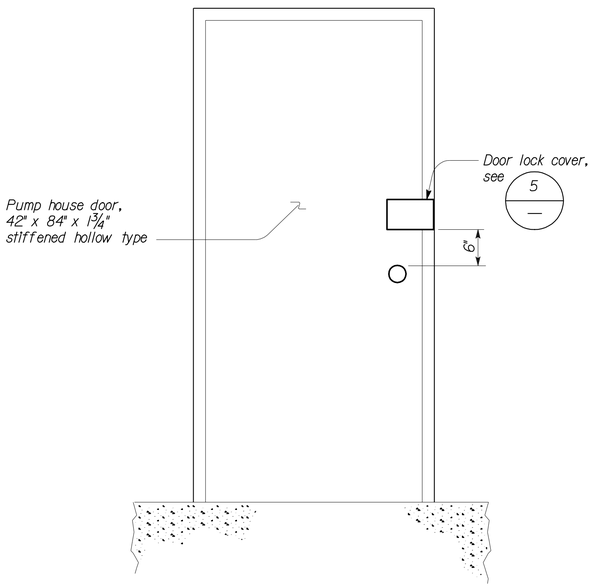
USERNAME => s1216l4 DATE PLOTTED => 30-MAR-2012 TIME PLOTTED => 14:13

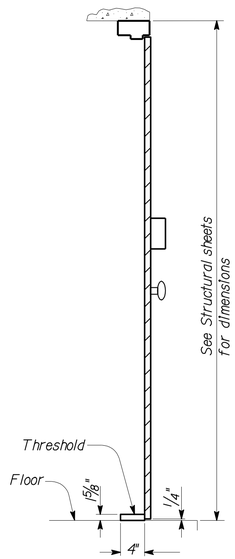
VI=I



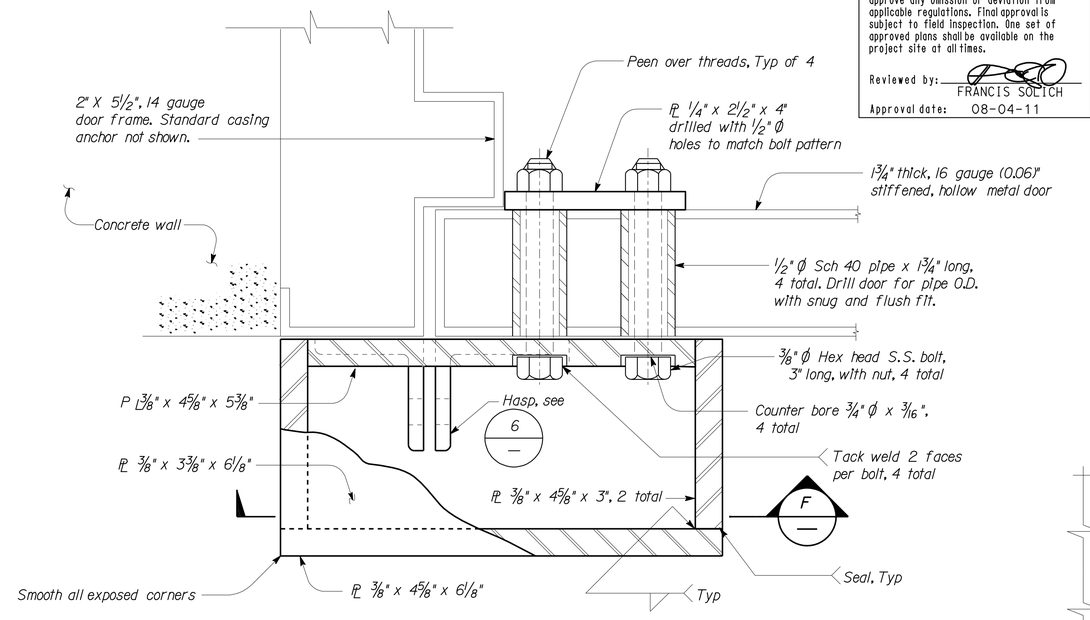
DOOR PLAN
No Scale



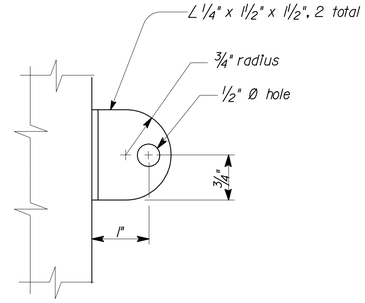
DOOR ELEVATION
No Scale



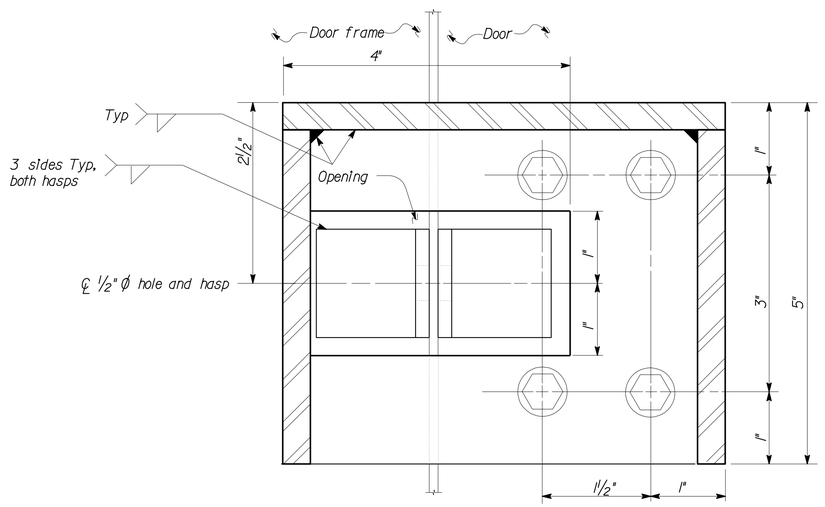
E SECTION
No Scale



5 DOOR LOCK COVER DETAIL
No Scale



6 HASP DETAIL
No Scale
Two Required



F SECTION
No Scale

NOTE:
Completed door lock cover shall be primed and painted to match door finish.

THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

CALIFORNIA STATE FIRE MARSHAL APPROVED
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Reviewed by: FRANCIS SOLICH
Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1385	1414

08-24-11
REGISTERED ENGINEER-MECHANICAL DATE

REGISTERED PROFESSIONAL ENGINEER
Jack Wheeler
No. 21648
Exp. 06-30-13
MECH
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

DESIGN	BY Thomas Dietsch	CHECKED Jesus Ramirez	
DETAILS	BY Thomas Dietsch	CHECKED Jesus Ramirez	
QUANTITIES	BY Thomas Dietsch	CHECKED Jesus Ramirez	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

UNIT 3615
PROJECT NUMBER & PHASE 1000000409

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

EAST STOCKTON UP PUMPING PLANT

PUMP HOUSE DOOR DETAILS

SHEET **M1-3**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
06-17-10 | 08-18-10 | 02-09-11 | 04-13-11 | 05-16-11 | 07-06-11 | 08-24-11

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USERNAME => s12161:4 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 17:47

VI=I

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1386	1414

CALIFORNIA STATE FIRE MARSHAL APPROVED

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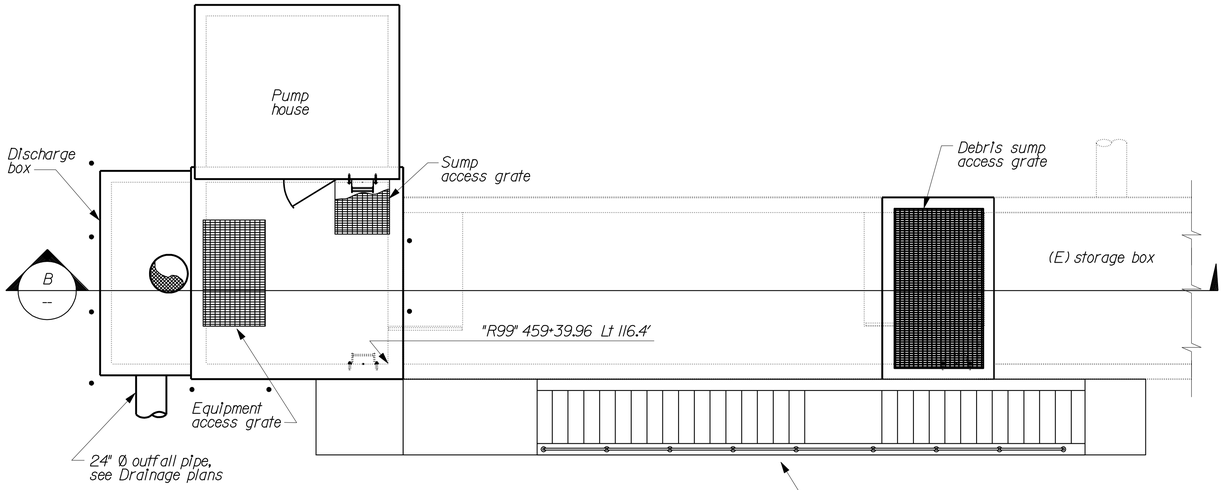
Reviewed by: FRANCIS SOLICH

Approval date: 08-04-11

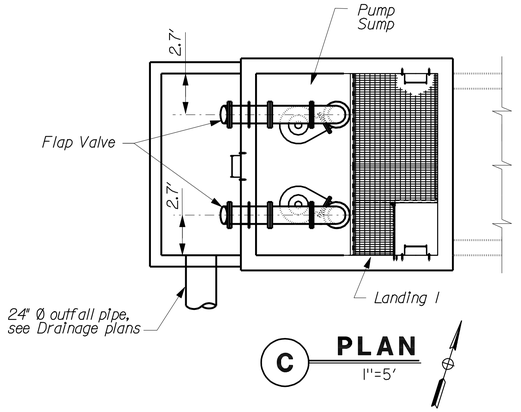
REGISTERED ENGINEER-MECHANICAL — 08-24-11 DATE

REGISTERED PROFESSIONAL ENGINEER — Jack Wheeler — No. 21648 — Exp. 06-30-13 — MECH — STATE OF CALIFORNIA

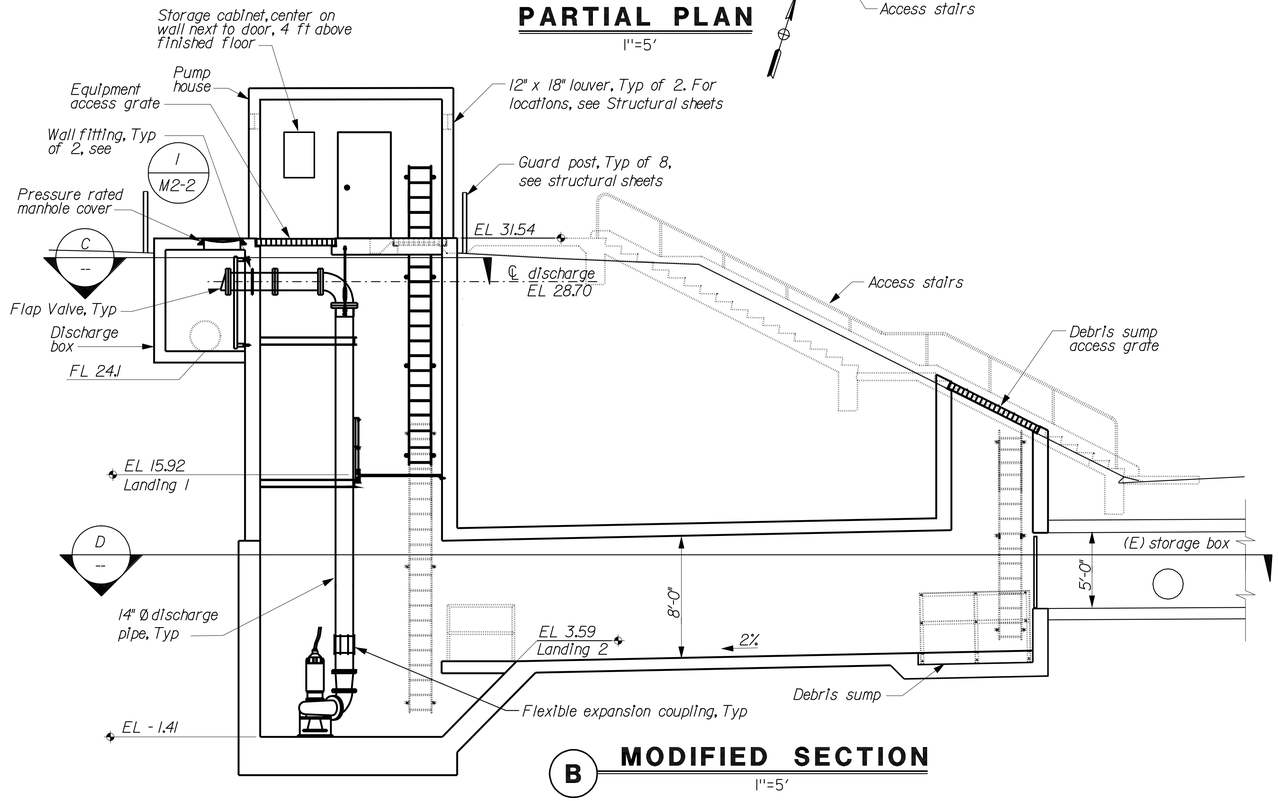
3-26-12
PLANS APPROVAL DATE



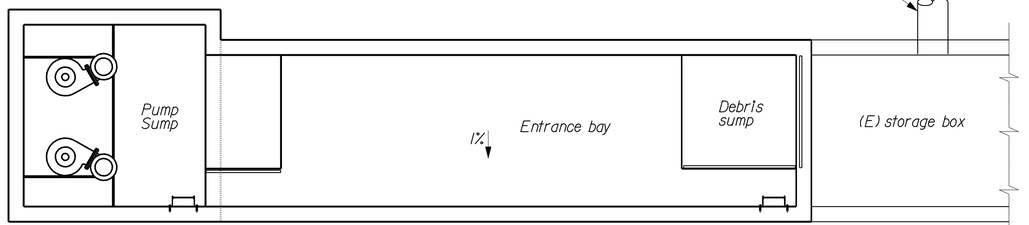
PARTIAL PLAN
1"=5'



C PLAN
1"=5'



B MODIFIED SECTION
1"=5'



D PLAN
1"=5'

THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

NOTES:

1. *Support pump motor cables with stainless steel grips. See Electrical sheets for details.*
2. *Pumps shall be installed with cast-in-place studs, epoxy concrete expansion anchor bolts, or per manufacturer's recommendation. The size and number of fasteners shall match manufacturer's recommendation. All fasteners and appurtenances shall be stainless steel. Pump setting details shall be in accordance with pump manufacturer installation requirements.*

START-STOP ELEVATIONS		
DESCRIPTION	ON/OFF	ELEV (FEET)
Lead Pump	On	7.0
Lead Pump	Off	2.3
Lag Pump	On	7.5
Lag Pump	Off	2.3
High Level	On	8.25
High Level	Off	2.3

	BY		CHECKED
DESIGN	Thomas Dietsch		Jesus Ramirez
DETAILS	Thomas Dietsch		Jesus Ramirez
QUANTITIES	Thomas Dietsch		Jesus Ramirez

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT

PUMPING PLANT DETAILS

SHEET **M2-1**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3615
PROJECT NUMBER & PHASE 1000000409

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
06-17-10 | 10-19-10 | 02-28-11 | 04-13-11 | 05-18-11 | 07-06-11 | 08-24-11

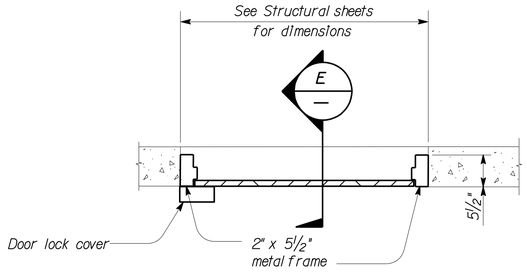
EA 3A1001 FILE => m2_1.dgn

USERNAME => s1216l4 DATE PLOTTED => 04-MAY-2012 TIME PLOTTED => 11:04

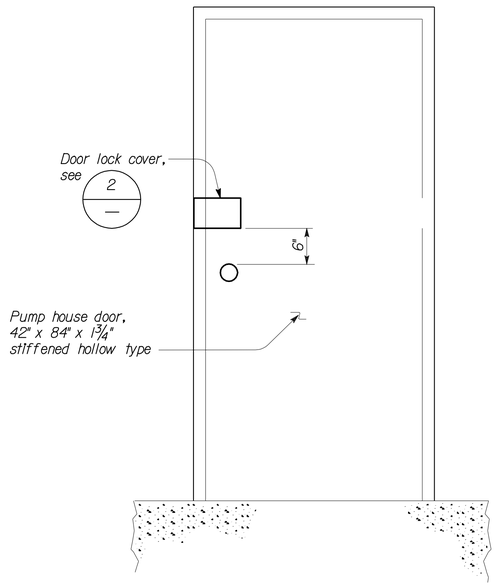
VI=I

NOTE:

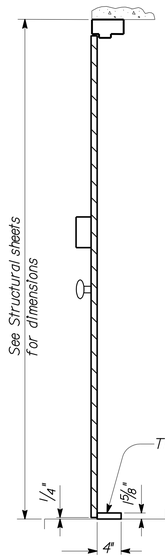
Completed door lock cover shall be primed and painted to match door finish.



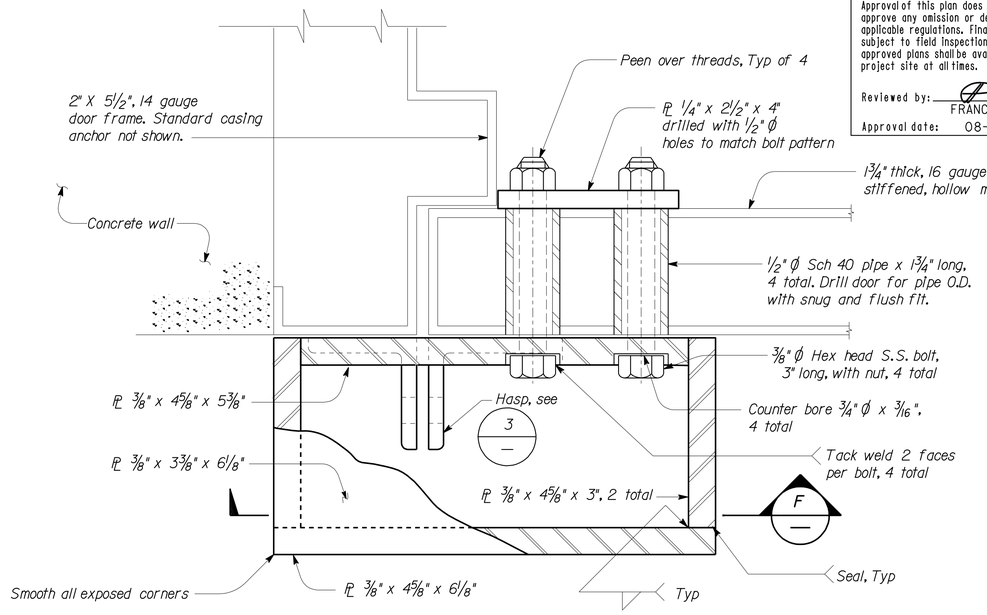
DOOR PLAN
No Scale



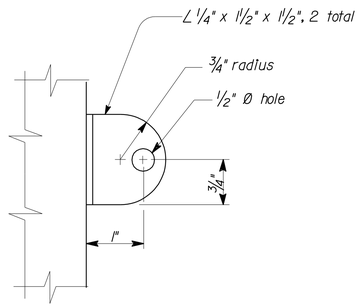
DOOR ELEVATION
No Scale



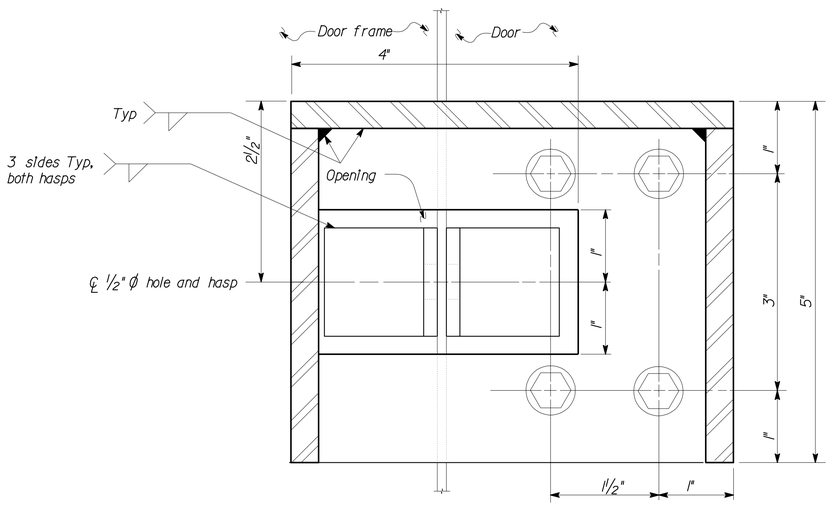
E SECTION
No Scale



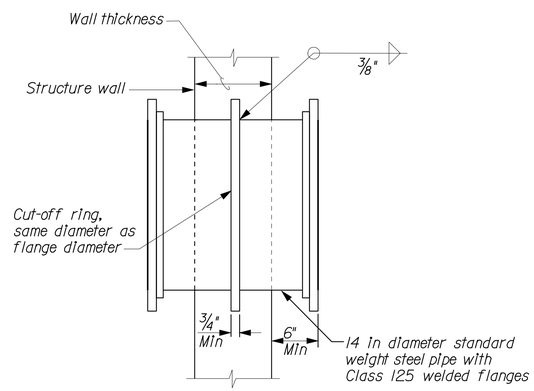
2 DOOR LOCK COVER DETAIL
No Scale



3 HASP DETAIL
No Scale
Two Required



F SECTION
No Scale



1 WALL FITTING DETAIL
No Scale

THIS DRAWING ACCURATE FOR MECHANICAL WORK ONLY

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1387	1414

REGISTERED ENGINEER-MECHANICAL — DATE 08-24-11

REGISTERED PROFESSIONAL ENGINEER — Jack Wheeler — No. 21648 — Exp. 06-30-13 — MECH — STATE OF CALIFORNIA

3-26-12
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.

CALIFORNIA STATE FIRE MARSHAL APPROVED

Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approvals subject to field inspection. One set of approved plans shall be available on the project site at all times.

Reviewed by: FRANCIS SOLICH

Approval date: 08-04-11

DESIGN	BY Thomas Dietsch	CHECKED Jesus Ramirez	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0120W; POST MILE
DETAILS	BY Thomas Dietsch	CHECKED Jesus Ramirez			
QUANTITIES	BY Thomas Dietsch	CHECKED Jesus Ramirez			

EAST STOCKTON UP AND RTE 26/99 Sep PUMPING PLANTS

RTE 26/99 Sep PUMPING PLANT — **PUMP HOUSE DOOR DETAILS**

SHEET **M2-2**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3615
PROJECT NUMBER & PHASE 1000000409

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

06-17-10 | 10-19-10 | 02-08-11 | 04-13-11 | 05-16-11 | 07-06-11 | 08-24-11

EA 3A1001 FILE => m2_2.dgn

USERNAME => s12161:4 DATE PLOTTED => 29-MAR-2012 TIME PLOTTED => 17:47

V|=|

GRAPHIC SYMBOLS FOR ELECTRICAL WIRING AND LAYOUT DIAGRAMS

SYMBOL	DESCRIPTION
	POLE-TOP ELECTROLIER
	POLE-ARM ELECTROLIER
CEILING WALL	
(S) (S)	SURFACE FLUORESCENT, METAL HALIDE OR SODIUM VAPOR FIXTURE
(R) (R)	RECESSED FLUORESCENT, METAL HALIDE, OR SODIUM VAPOR FIXTURE
(X) (X)	EXIT LIGHT
	SURFACE OR PENDANT INDIVIDUAL FLUORESCENT FIXTURE
(R)	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 ALPHA-NUMERIC 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
(B) (B)	BLANK OUTLET
(J) (J)	JUNCTION BOX
(D)	DROP CORD
	SINGLE RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET
(GFCI)	DUPLEX RECEPTACLE OUTLET (WITH GFCI)
(GFCI) WP	DUPLEX RECEPTACLE OUTLET,WEATHERPROOF (WITH GFCI)
	SINGLE, SPECIAL PURPOSE RECEPTACLE OUTLET
	DUPLEX, SPECIAL PURPOSE RECEPTACLE OUTLET
R	RANGE OUTLET
(C)	CLOCK HANGER RECEPTACLE
(F)	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_2	DOUBLE POLE SWITCH
S_3	THREE WAY SWITCH
S_4	FOUR WAY SWITCH
S_D	AUTOMATIC DOOR
S_K	KEY OPERATED SWITCH
S_P	SWITCH AND PILOT LIGHT
S_{MC}	MOMENTARY CONTACT SWITCH
S_{RC}	REMOTE CONTROL SWITCH
S_{WP}	WEATHERPROOF SWITCH
S_F	FAN SWITCH
S_L	LIGHT SWITCH
S_H	HEATER SWITCH
S_{VS}	VARIABLE SPEED MOTOR CONTROL SWITCH
S_{CHLF}	TWO TIMER SWITCHES, ONE SWITCH FOR LIGHT AND FAN AND ONE SWITCH FOR HEAT LAMP

SYMBOL	DESCRIPTION
S^{O}_{1}	OCCUPANCY SENSOR WALL SWITCH, SINGLE LEVEL
S^{O}_{2}	OCCUPANCY SENSOR WALL SWITCH, BILEVEL
S_M	MOTION SENSOR SWITCH
S_T	MANUAL MOTOR STARTING SWITCH, THERMAL OVERLOAD TYPE
S_{HP}	MANUAL MOTOR STARTING SWITCH, WITHOUT OVERLOAD ELEMENT
TS	TIMER SWITCH
S	SWITCH AND SINGLE RECEPTACLE
S	SWITCH AND DUPLEX RECEPTACLE
	HAND DRYER NOZZLE
H	HAND DRYER
	RADIO OUTLET
	COMMUNICATION OUTLET
	SOUND SYSTEM LOUD SPEAKER OUTLET
	PUSHBUTTON
L	PUSHBUTTON STATION, NC, WITH LOCKING DEVICE FOR OPEN
	PUSHBUTTON STATION MOTOR CONTROL
	BUZZER
	BELL
	COMBINATION BELL-BUZZER
T	THERMOSTAT
PS	PRESSURE SWITCH
R	CONTROL RELAY
FS	FLOW SWITCH
PEC	PHOTOELECTRIC CELL
R	RADIO OUTLET
TV	TELEVISION OUTLET
M	MICROPHONE OUTLET
	FLUSH-MOUNTED PANELBOARD AND CABINET
	SURFACE-MOUNTED PANELBOARD AND CABINET
	LIGHTING PANEL
	POWER PANEL
	COMBINATION LIGHTING AND POWER
MC	MOTOR CONTROLLER
	DISCONNECT SWITCH
	CONDUIT CONCEALED IN CEILING OR WALL
	CONDUIT CONCEALED IN FLOOR
	CONDUIT EXPOSED
	CROSS-LINES INDICATE NUMBER OF #12 AWG CONDUCTORS. LONGER CROSS-LINE INDICATES 1#12 AWG (G) FOR EQUIPMENT GROUNDING CONDUCTOR. NO CROSS-LINE INDICATES 2#12 WITH 1#12 (G) UNLESS OTHERWISE NOTED. ALL CONDUIT SHALL BE ½" UNLESS OTHERWISE NOTED.
A1, 2	HOMERUN TO PANELBOARD, ARROWS INDICATE NUMBER OF CIRCUITS, LETTER DENOTES PANEL-BOARD, NUMERAL DENOTES CIRCUIT.
SM	SURFACE METAL RACEWAY
(2) ½"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
	CONDUIT, FLEXIBLE
	CONDUIT, TURN UP
	CONDUIT, TURN DOWN
	CONDUIT SEAL, EXPLOSION-PROOF
	CONDUIT, EXPANSION JOINT
	ADAPTER, ONE TYPE CONDUIT TO ANOTHER
	POLE

SYMBOL	DESCRIPTION
OC	OCCUPANCY SENSOR
P	OCCUPANCY SENSOR POWER PACK
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)
	PULL BOX-LETTER INDICATES TYPE OF PULL BOX (E-ELECTRICAL, T-TELEPHONE, R-RADIO)
(T)	PULL BOX (TRAFFIC RATED)-LETTER INDICATES TYPE OF PULL BOX (E-ELECTRICAL, T-TELEPHONE, R-RADIO)
CHLF	COMBINATION HEAT, LIGHT AND FAN UNIT
A / EE-2	SECTION/ELEVATION LETTER; SHEET NUMBER
1 / EE-2	DETAIL NUMBER; SHEET NUMBER

REMODEL WORK

SYMBOL	DESCRIPTION
	EXISTING FLUORESCENT FIXTURE-TO REMAIN
	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	EXISTING CONDUIT AND CONDUCTORS-TO REMAIN UNLESS OTHERWISE NOTED
	EXISTING CONDUIT AND CONDUCTORS-REMOVE
S	EXISTING SWITCH-TO REMAIN
	EXISTING SWITCH-REMOVE
J	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

- RSP-ES-6A
- NSP-ES-8A
- NSP-ES-8B

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
	CIRCUIT BREAKER, SINGLE POLE, SWITCHED NEUTRAL
	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
A	PILOT LIGHT (A=AMBER, G=GREEN, R=RED)
G	GENERATOR
M	MOTOR
F	FAN MOTOR

PROJECT NOTES

A. SEPARATE GROUNDED (NEUTRAL) CONDUCTOR SHALL BE USED FOR EACH 120-VOLT CIRCUIT.

B. HOMERUNS TO PANELBOARDS SHALL BE INSTALLED AS SHOWN ON THE PLANS. HOMERUNS SHALL NOT BE COMBINED.

C. 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
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1388	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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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: FRANCIS SOLICH

Approval date: 08-04-11

ABBREVIATIONS

A	AMPERES
A/C	AIR CONDITIONING UNIT
ACS	AIR COMPRESSOR STARTER
AI	ANALOG INPUT
AL	ALARM LIGHT
AO	ANALOG OUTPUT
AVC	AIR VOLUME CONTROLLER
BD	BUILDING DISCONNECT
BRK	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CR	CONTROL RELAY
CSW	CURRENT SWITCH
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
DP	DUPLEX PLUG RECEPTACLE
DS	DOOR SWITCH
(E)	EXISTING
EF	EXHAUST FAN
F	FUSE
FL	FAILURE LIGHT
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
IL	INDICATING LIGHT
ISR	INTRINSICALLY SAFE 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
MSB	MAIN SWITCHBOARD
MT	EMPTY CONDUIT
(N)	NEW
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NSW	NEUTRAL SWITCHING BREAKER
OL	OVERLOAD
P	POLE
PB	PULL BOX
PB	PUSHBUTTON
PFR	PHASE FAILURE RELAY
PFRD	PHASE FAILURE RELAY DISCONNECT
PEC	PHOTOELECTRIC CELL
PL	PILOT LIGHT
PS	POWER 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
SST	STAINLESS STEEL
ST	STARTER
SV	SOLENOID VALVE
T	TRANSFORMER
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TM	TIME METER
TOT	TOTAL
TS	TIMER SWITCH
TSW	TEST SWITCH
TYP	TYPICAL
UPS	UNINTERRUPTIBLE POWER SUPPLY
WLS	WATER LEVEL SWITCH
WP	WEATHERPROOF

	BY	CHECKED
DESIGN	Beatrice Bindu	Tech Ngov
DETAILS	Kathi Andreasen	Beatrice Bindu
QUANTITIES	Beatrice Bindu	Tech Ngov

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0115W 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

LEGEND

SHEET EE1-0

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

28-MAR-2012 15:50

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1389	1414

REGISTERED ELECTRICAL ENGINEER 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER BEATRICE BINDU No. E 17240 Exp. 6-30-12 ELEC STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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: FRANCIS SOLICH
Approval date: 08-04-11

CERTIFICATE OF COMPLIANCE (Page 1 of 4) LTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS
Date: 4/29/2011

Project Address: HWY 99 and HWY 4 INTERCHAGE STOCKTON, CA 95206
Climate Zone: 12
Building CFA: N/A
Unconditioned Floor Area: 420

General Information

Building Type:	☑ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel
☐ Schools ✓	☐ Relocatable Public Schools	☐ Conditioned Spaces	☑ Unconditioned Spaces
Phase of Construction:	☑ New Construction	☐ Addition	☐ Alteration
Method of Compliance:	☐ Complete Building	☑ Area Category	☐ Tailored

Documentation Author's Declaration Statement

- I Certify that this Certificate of Compliance documentation is accurate and complete.

Name: BEATRICE BINDU
Signature: [signature]
Company: CALTRANS
Date: 4/29/2011
Address: 1801 30TH STREET
If applicable: CEA # CEPE #
City/State/Zip: SACRAMENTO, CA 95816
Phone: (916) 227-8764

Principal Lighting Designer's Declaration Statement

- I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the lighting design.
- This Certificate of Compliance identifies the lighting features and performance specifications required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.
- The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Name: BEATRICE BINDU
Signature: [signature]
Company: CALTRANS
Phone: (916) 227-8764
Address: 1801 30TH STREET
License # E 17240
City/State/Zip: SACRAMENTO, CA 95816
Date: 4/29/2011

Lighting Mandatory Measures

Indicate location on building plans of Mandatory Measures Note Block: N/A

LIGHTING COMPLIANCE FORMS & WORKSHEETS (Check box if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.

☑	LTG-1C Pages 1 through 4	Certificate of Compliance. All pages required on plans for all submittals.
☐	LTG-2C	Lighting Controls Credit Worksheet
☐	LTG-3C	Indoor Lighting Power Allowance
☐	LTG-4C Pages 1 through 4	Tailored Method Worksheet
☐	LTG-5C Pages 1 and 2	Line Voltage Track Lighting Worksheet

CERTIFICATE OF COMPLIANCE (Page 2 of 4) LTG-1C

INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS
Date: 4/29/2011

Installation Certificate, LTG-1-INST (Retain a copy and verify form is completed and signed.) — **Field Inspector** ☐

Certificate of Acceptance, LTG-2A and LTG-3A (Retain a copy and verify form is completed and signed.) — **Field Inspector** ☐

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces Installed Lighting Power listed on this Lighting Schedule is only for: ☐ CONDITIONED SPACE ☑ UNCONDITIONED SPACE

☐ The actual indoor lighting power listed below includes all installed permanent and portable lighting system in accordance with S 146 (a)

☐ Only for offices: Up to the first 0.2 watts per square foot of portable lighting shall not be required to be included in the calculation of actual indoor lighting power density in accordance with Exception to S 146 (a). All portable lighting in excess of 0.2 watts per square foot is totaled below.

A	B	C	D	E		F	G	H	
	Luminaire Schedule (Type, Lamps, Ballasts)		Installed Watts	How wattage was determined				Field Inspector 2	
Name or Item Tag	Complete Luminaire Description (i.e, 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)		Watts per Luminaire 1	CEC Default from NA8	According to S 130 (d or e)	Number of Luminaires	Installed Watts (D x F)	Pass	Fail
F1	F1-2x32, CEILING MOUNTED, WRAP AROUND		80	☑	☐	2	160	☐	☐
SL1	WALL MOUNTED, 26 WATT COMPACT FLUORESCENT		37	☑	☐	2	74	☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
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				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
INSTALLED WATTS PAGE TOTAL:							234		

Building total number of pages: 1
Installed Watts Building Total (Sum of all pages): 234
Enter into LTG-1C Page 4 of 4

1. Wattage shall be determined according to Section 130 (d and e). Wattage shall be rating of light fixture, not rating of bulb.
2. If Fail then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

DESIGN	BY *Beatrice Bindu*	CHECKED *Tech Ngov*	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY *Kathi Andreasen*	CHECKED *Beatrice Bindu*	
QUANTITIES	BY *Beatrice Bindu*	CHECKED *Tech Ngov*	

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

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS
EAST STOCKTON UNDERPASS PUMPING PLANT
TITLE 24 COMPLIANCE NO. 1

SHEET **EE1-1**

TAEMWW Imperial Rev. 7/10
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3
UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001
DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES (PRELIMINARY STAGE ONLY) 4/29/11 7/8/11 8/16/11 10/20/11
SHEET OF
28-MAR-2012 14:58
ee1_01.dgn

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1390	1414

Beatrice Bindu — REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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: FRANCIS SOLICH

Approval date: 08-04-11

CERTIFICATE OF COMPLIANCE (Page 3 of 4) LTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

Date: 4/29/2011

INDOOR LIGHTING SCHEDULE and FIELD ENERGY CHECKLIST

Fill in controls for all spaces: a) area controls, b) multi-level controls, c) manual daylighting controls for daylit areas> 250 sq ft, automatic daylighting controls for daylit areas> 2,500 sq ft, d) shut-off controls, e) display lighting controls, f) tailored lighting controls-general lighting controlled separately from display, ornamental and display case lighting and g) demand responsive automatic controls for retail stores> 50,000 sq ft, in accordance with Section 131.

MANDATORY LIGHTING CONTROLS - FIELD INSPECTION ENERGY CHECKLIST				Field Inspector	
Type/Description	Number of Units	Location in Building		Pass	Fail
NOT APPLICABLE				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐

Field Inspectors's Notes or Discrepancies:

2008 Nonresidential Compliance Forms *July 2010*

CERTIFICATE OF COMPLIANCE (Page 4 of 4) LTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

Date: 4/29/2011

Conditioned and Unconditioned space Lighting must not be combined for compliance

Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
Installed Lighting (from Conditioned LTG-1C Page 2			Installed Lighting (from Unconditioned LTG-1C Page 2		234
Lighting Control Credit Conditioned Spaces (from LTG-2C)	-		Lighting Control Credit Unconditioned Spaces (from LTG-2C)	-	
Adjusted Installed Lighting Power	=		Adjusted Installed Lighting Power	=	234
Complies if Installed ≤ Allowed	↕		Complies if Installed ≤ Allowed	↕	
Allowed Lighting Power Conditioned Spaces (from LTG-3C)			Allowed Lighting Power Unconditioned Spaces (from LTG-3C)		252

Required Acceptance Tests

Designer:

This form is to be used by the designer and attached to the plans. Listed below is the acceptance test for the Lighting system, LTG-2A and LTG-3A. The designer is required to check the acceptance tests and list all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance. If all the lighting system or control of a certain type requires a test, list the different lighting and the number of systems. The NA7 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately. Forms can be grouped by type of Luminaire controlled.

Enforcement Agency:

System Acceptance. Before Occupancy Permit is granted for a newly constructed building or space or when ever new lighting system with controls is installed in the building or space shall be certified as meeting the Acceptance Requirements. The LTG-2A and LTG-3A forms are not considered a complete form and is not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. In addition, a Certificate of Acceptance forms shall be submitted to the enforcement agency that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of S 10-103 (b) of Title 24 Part 6. The field inspector must receive the properly filled out and signed forms before the building can receive final occupancy. A copy of the LTG-2A and LTG-3A for each different lighting luminaire control(s) must be provided to the owner of the building for their records.

Luminaires Controlled				LTG-2A and LTG-3A
Equipment Requiring Testing	Description	Number of like Controls	Location	Controls and Sensors and Automatic Daylighting Controls Acceptance
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐

2008 Nonresidential Compliance Forms *July 2010*

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS	SHEET EE1-2
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu			POST MILE	EAST STOCKTON UNDERPASS PUMPING PLANT — TITLE 24 COMPLIANCE NO. 2	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov		UNIT 3597 PROJECT NUMBER & PHASE 10000004091 3A1001	DISREGARD PRINTS BEARING EARLIER REVISION DATES →	REVISION DATES (PRELIMINARY STAGE ONLY) 4/29/11 7/8/11 8/16/11 10/20/11	SHEET OF

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

28-MAR-2012 14:58

ee1_02.dgn

CERTIFICATE OF COMPLIANCE (Page 1 of 4) OLTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS	Date: 4/29/2011
Project Address: HWY 99 and HWY 4 INTERCHANGE STOCKTON, CA 95206	Total Hardscape Illuminated Area: 650

General Information

Phase of Construction: ☑ New Construction ☐ Addition ☐ Alteration

Documentation Author's Declaration Statement

- I Certify that this Certificate of Compliance documentation is accurate and complete.

Name: BEATRICE BINDU	Signature: beatrice bindu		
Company: CALTRANS		Date: 4/29/2011	
Address: 1801 30TH STREET		If applicable: CEA # CEPE #	
City/State/Zip: SACRAMENTO, CA 95816		Phone: (916) 227-8764	

Principal Lighting Designer's Declaration Statement

- I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the lighting design.
- This Certificate of Compliance identifies the lighting features and performance specification required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.
- The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Name: BEATRICE BINDU	Signature: beatrice bindu		
Company: CALTRANS		Phone: (916) 227-8764	
Address: 1801 30TH STREET		License # E 17240	
City/State/Zip: SACRAMENTO, CA 95816		Date: 4/29/2011	

Principal Lighting Designer's Declaration

☐ I Certify that this Certificate of Compliance documentation is accurate and complete, and accounts for all outdoor lighting power, including building mounted, pole mounted, as well as all other outdoor lighting designed for the site, and that Additional Lighting Power Allowances for Specific Applications or Additional Lighting Power Allowances for Ordinance Requirements have not been counted more than one time for the same area, in Accordance with Section 147 of the Standards.

Outdoor Lighting Mandatory Measures

Indicate location on building plans of Mandatory Measures Note Block: N/A

LIGHTING COMPLIANCE FORMS & WORKSHEETS (check box if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.

☐	OLTG-1C	Certificate of Compliance. All 4 pages required on plans for all submittal.
☐	OLTG-2C	(Page 1 of 3) Lighting Wattage Allowances for General Hardscape, Sales Frontage, or Ornamental Lighting. Optional on plans.
☐	OLTG-2C	(Page 2 of 3) Lighting Wattage Allowances for Per Application or Per Area. Optional on plans.
☐	OLTG-2C	(Page 3 of 3) Additional Lighting Power Allowance for Ordinance Requirements. Optional on plans.

CERTIFICATE OF COMPLIANCE (Page 2 of 4) OLTG-1C

COMPLIANCE FIXTURE/LIGHTING CONTROL SCHEDULE and FIELD INSPECTION CHECKLIST

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS — Date: 4/29/2011

INSTALLATION CERTIFICATE, OLTG-1-INST (Retain a copy and verify form is completed and signed.) — Field Inspection ☐

CERTIFICATE OF ACCEPTANCE, OLTG-2A (Retain a copy and verify form is completed and signed.) — Field Inspection ☐

Luminaire Schedule			Installed Watts							
A	B	C	D	E	F		G	H	I	
Name Or Item Tag	Luminaire Description See footnote below (i.e, lamp pole-top shoe-box 400 watt metal halide)	Cutoff Designation	Watts per Luminaire 1	Special Features	How wattage was determined: Default from NA-8	How wattage was determined: According to S 130 (d or e)	Number of Luminaires	Installed Watts (D x G)	Field Inspector 2: Pass	Field Inspector 2: Fail
HP1	POLE-TOP 310 WATT HIGH PRESSURE SODIUM	✓	310	☐	☐	☑	1	310	☐	☐
H1	ENTRY LIGHT - H1-1X150		150	☐	☐	☐	1	150	☐	☐
				☐	☐	☐			☐	☐
				☐	☐	☐			☐	☐
				☐	☐	☐			☐	☐
				☐	☐	☐			☐	☐
	Enter total into OLTG-1C; Page 4 of 4; Row H; Total Installed Watts:							460		

1. Type of luminaire (i.e.: post top, wall pack, surface, shoe box); for non-incandescent luminaires, indicate nominal lamp wattage and lamp type (i.e.: fluorescent incandescent, HID); ballast type (i.e.: electronic or magnetic); number of lamps and number of ballast per luminaire. For incandescent luminaires the luminaire wattage listed in column D shall be the maximum relamping rated wattage on a permanent factory-installed label on the luminaire. NOT the wattage of the lamp (bulb) used, in accordance with Section 130 (d or e).
2. If Fail then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

EXEMPT LUMINAIRES — Field Inspection ☐

Name or Symbol	Description of exempt luminaires in accordance with S 147

MANDATORY CONTROLS — Field Inspection ☐

#	Description	Location	#	Description	Location

SPECIAL FEATURES INSPECTION CHECKLIST (See Page 2 of 4 of OLTG-1C)

The local enforcement agency should pay special attention to the items specified in this checklist. These Items require special written justification and documentation, and special verification. The local enforcement agency determines the adequacy of the justification, and may reject a building or design that otherwise complies base on the adequacy of the special justification and documentation submitted.

Field Inspector Notes or Discrepancies:

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1391	1414

beatrice bindu
REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
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.

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: FRANCIS SOLICH
Approval date: 08-04-11

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS
EAST STOCKTON UNDERPASS PUMPING PLANT
TITLE 24 COMPLIANCE NO. 3

SHEET EE1-3

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
4/29/11 | 7/8/11 | 8/16/11 | 10/20/11

28-MAR-2012 14:58
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CERTIFICATE OF COMPLIANCE (Page 3 of 4) OLTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

Date: 4/29/2011

A. OUTDOOR LIGHTING ZONE

OUTDOOR LIGHTING ZONE: ☐ OLZ 1 ☐ OLZ 2 ☑ OLZ 3 ☐ OLZ 4

Is the Outdoor Lighting Zone: ☐ Default in accordance with S 10-114, or ☐ Amended by JHA

Complete the information below if the default Outdoor Lighting Zone has been amended by the local jurisdiction having authority (JHA):

☐ The site is a government designated park, recreation area, wildlife preserve, or portion thereof, and has been designated as LZ2 or LZ3, in accordance with Table 10-114-A, because the site is contained within such a zone.

☐ The local jurisdiction having authority has officially adopted a change to the State Default Lighting Zone and has notified the Energy Commission by providing the materials required in S 10-114(d) to the Executive Director.

☐ The adopted change is posted on the Energy Commission website.

B. ADDITIONAL LIGHTING POWER ALLOWANCE FOR ORDINANCE REQUIREMENTS

Are additional lighting power allowances for ordinance in Table 147-C used? Yes ☐ No ☐

Complete the information below if the additional lighting power allowances for ordinance requirements are used:

☐ The local jurisdiction having authority has officially adopted specific outdoor light levels, which are expressed as average or minimum footcandle levels, by following a public process that allowed for formal public notification, review, and comment about the proposed changed.

☐ The local jurisdiction having authority which adopted specific outdoor light levels and has notified the Commission by providing the following materials required S 10-114(f) to the Executive Director.

C. ACCEPTANCE FORMS

Required Acceptance Tests

Designer:

This form is to be used by the designer and attached to the plans. Listed below is the acceptance tests for the Lighting system,

OLTG-2A. The designer is required to check the acceptance tests and list all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance. If all the lighting system or control of a certain type requires a tests, list the different lighting and the number of systems. The NA7 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be a part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately. Forms can be grouped by type of Luminaire controlled.

Enforcement Agency:

Systems Acceptance. Before Occupancy Permit is granted for a newly constructed building or space or when ever new lighting system with controls is installed in the building or space shall be certified as meeting the Acceptance Requirements. The OLTG-2A form is not considered a complete form and is not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. In addition, a Certificate of Acceptance forms shall be submitted to the enforcement agency that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of S 10-103(b) of Title 24 Part 6. The field inspector must receive the properly filled out and signed forms before the building can receive final occupancy. A copy of the OLTG-2A for each different lighting luminaire control(s) must be provided to the owner of the building for their records.

Certificate of Acceptance

	Luminaires Controlled			OLTG-2A [1]
Equipment Requiring Testing	Description	Number of like Controls	Location	Outdoor Lighting Acceptance Tests
POLE-TOP LUMINAIRE	PHOTOCELL		OUTSIDE THE BUILDING	

1. Insert: **OMS** for Outdoor Motion Sensor; **OLSC** for Outdoor Lighting Shutoff Controls; **OP** for Outdoor Photocontrol; **ATS** for Astronomical Time Switch; and, **STS** for Standard (non-astronomical) Time Switch acceptance.

CERTIFICATE OF COMPLIANCE (Page 4 of 4) OLTG-1C

COMPLIANCE FIXTURE/LIGHTING CONTROL SCHEDULE and FIELD INSPECTION CHECKLIST

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

Date: 4/29/2011

ALLOWED AND INSTALLED OUTDOOR LIGHTING POWER

		Lighting Wattage Power Allowance
A	Lighting power allowance for general hardscape (from OLTG-2C Page 1 of 3)	1108
B	Specific application lighting wattage allowance per unit length (from OLTG-2C Page 1 of 3)	
C	Specific application wattage allowance for ornamental lighting (from OLTG-2C Page 1 of 3)	
D	Specific application wattage allowance per application (from OLTG-2C Page 2 of 3)	
E	Specific application lighting wattage allowance per area (from OLTG-2C Page 2 of 3)	
F	Additional lighting power allowance for ordinance requirements (from OLTG-2C Page 3 of 3)	
G	Total Allowed Wattage = Sum of rows A through F:	1108
H	Total installed Watts (from Luminaire Schedule, (from OLTG-1C (Page 2 of 4)	460

Provided that the lighting wattage power allowance listed in rows A through F are identical to the lighting wattage power allowance taken from OLTG-2C pages 1 through 3, complies if installed Wattage in row H is less than or equal to the Total Installed Wattage in row G — ☑ Yes ☐ No

NOTES:

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1392	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU No. E 17240 Exp. 6-30-12 ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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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: FRANCIS SOLICH

Approval date: 08-04-11

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

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

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

EAST STOCKTON UNDERPASS PUMPING PLANT

TITLE 24 COMPLIANCE NO. 4

SHEET **EE1-4**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) 4/29/11 8/16/11 10/20/11

SHEET OF

28-MAR-2012 14:58

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CALIFORNIA STATE FIRE MARSHAL APPROVED

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Reviewed by: FRANCIS SOLICH

Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1393	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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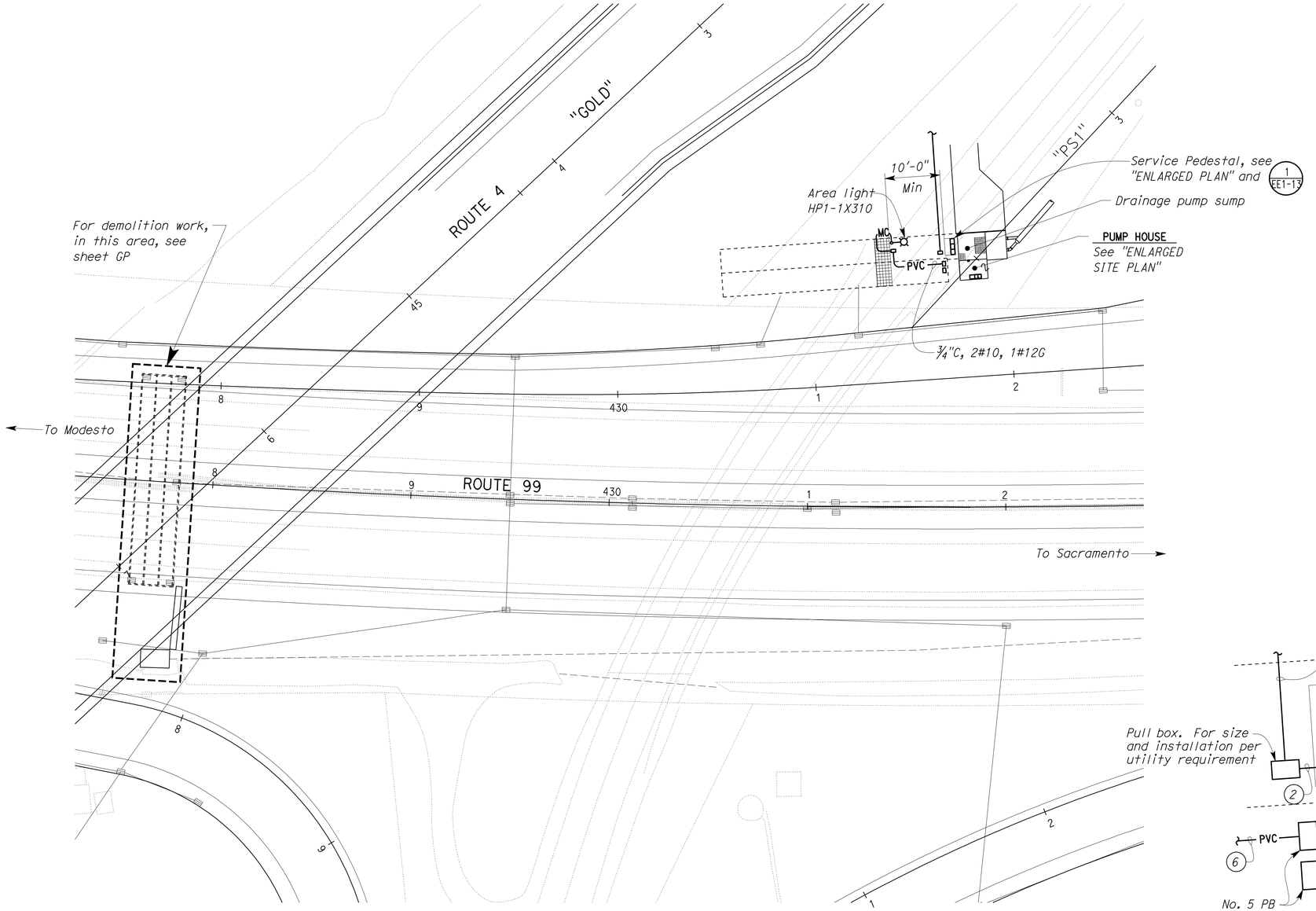
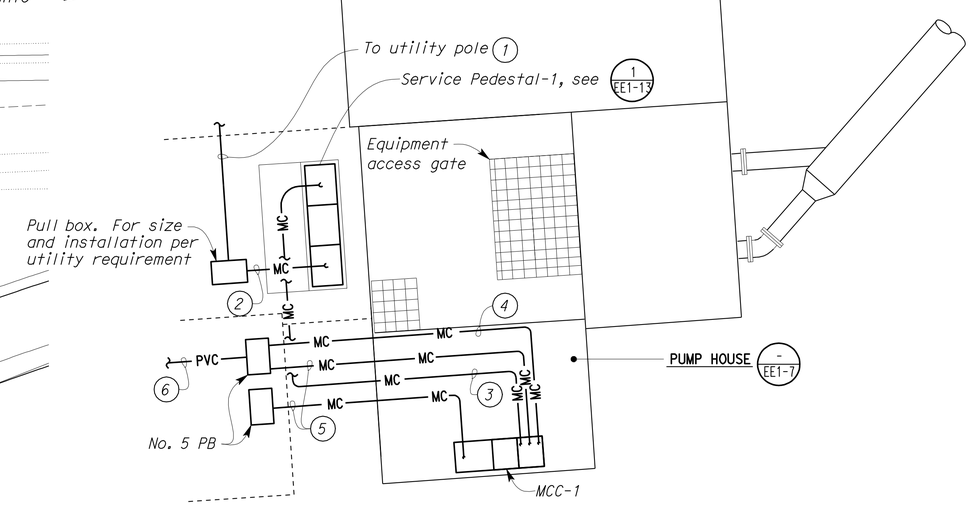


SITE PLAN

SCALE 1" = 30'-0"



ENLARGED SITE PLAN

SCALE 1" = 5'-0"

Notes:

1. For the location of the utility transformer installation of conduits and conductors, see Electrical plans ("E" sheets).
2. 4"C, PVC, MT, conductors per Utility Company requirements.
3. 4"C, MC, 3#300 MCM, 1#2G, to MCC
4. ¾"C, 2#10, 1#12G (Area light)..
5. 1½"C, MT (Spare).
6. ¾"C, 2#10, 1#12G, to area light pull box.

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY.

DESIGN SUPERVISOR

DESIGN ENGINEER

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

EAST STOCKTON UNDERPASS PUMPING PLANT

ELECTRICAL SITE PLAN

SHEET EE1-5

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)					SHEET	OF
3/14/11	6/21/11	7/8/11	8/16/11	10/20/11		

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1394	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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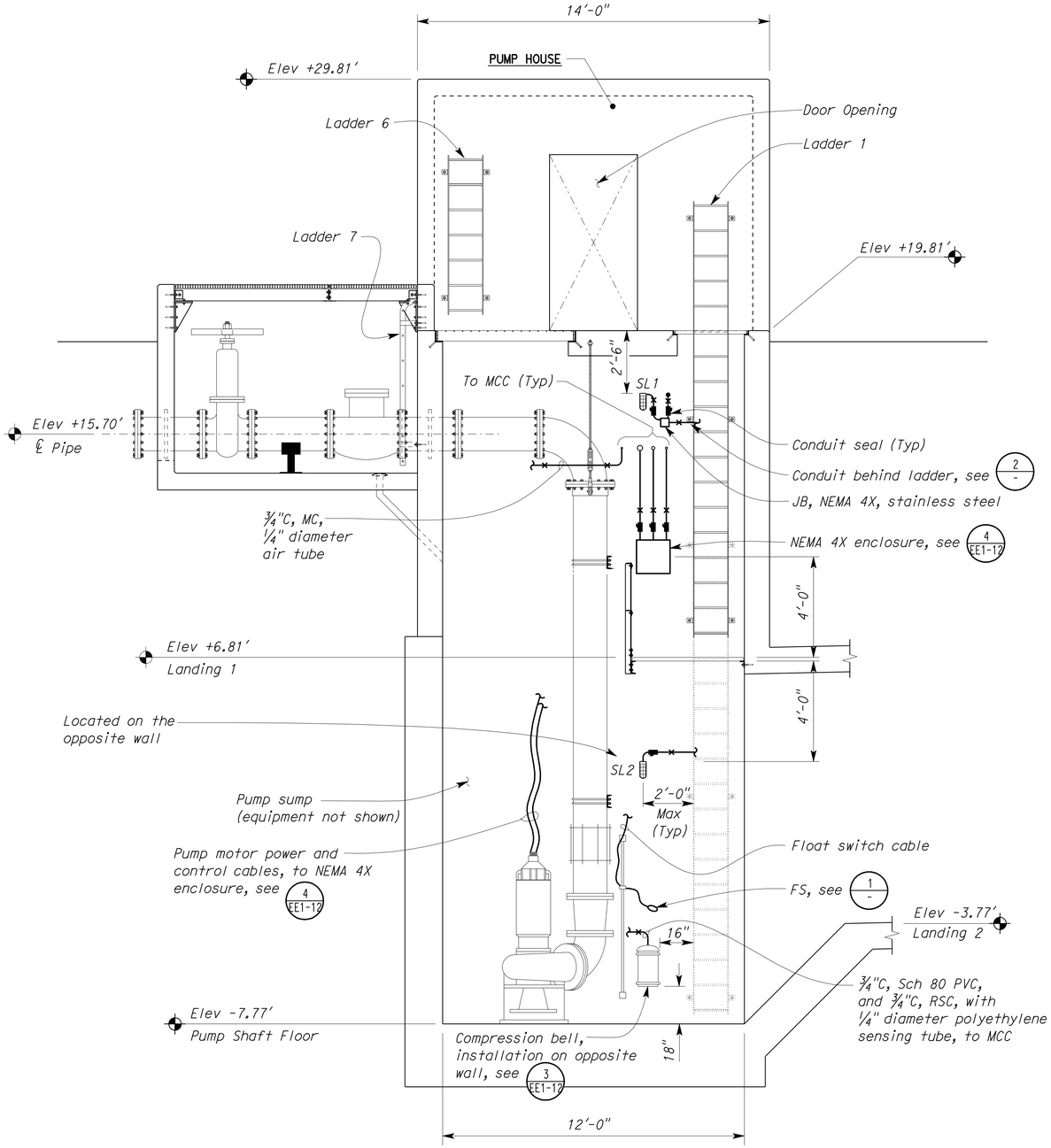
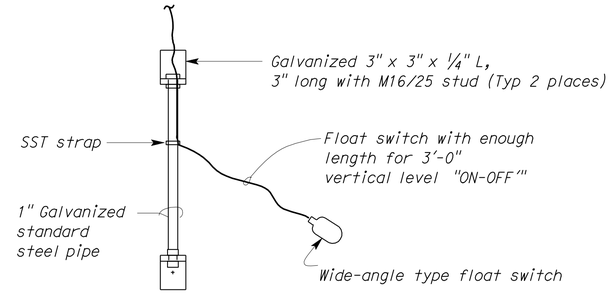


A SECTION
SCALE 3/8"= 1'-0"

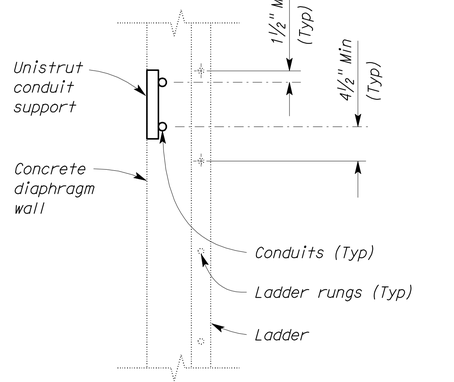


1 FLOAT SWITCH MOUNTING DETAIL
NO SCALE

General Note:

A. For pump control levels, see Mechanical plans.

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: FRANCIS SOLICH
Approval date: 08-04-11



2 TYPICAL CONDUIT INSTALLATION UNDER LADDER
NO SCALE

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY.

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS
EAST STOCKTON UNDERPASS PUMPING PLANT
PUMPING PLANT SECTION

SHEET EE1-6

DISREGARD PRINTS BEARING EARLIER REVISION DATES →
REVISION DATES (PRELIMINARY STAGE ONLY): 7/18/11 | 7/18/11 | 7/21/11 | 8/1/11 | 8/25/11 | 9/1/11 | 9/16/11 | 10/20/11

SHEET OF

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

TAEMWW Imperial Rev. 7/10

28-MAR-2012 14:59
ee1_06.dgn

General Note:

All conduits to pump sump shall be PVC coated rigid steel conduits.

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1395	1414

Beatrice Bindu — REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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Note:

(1) Panel LP is inside MCC.

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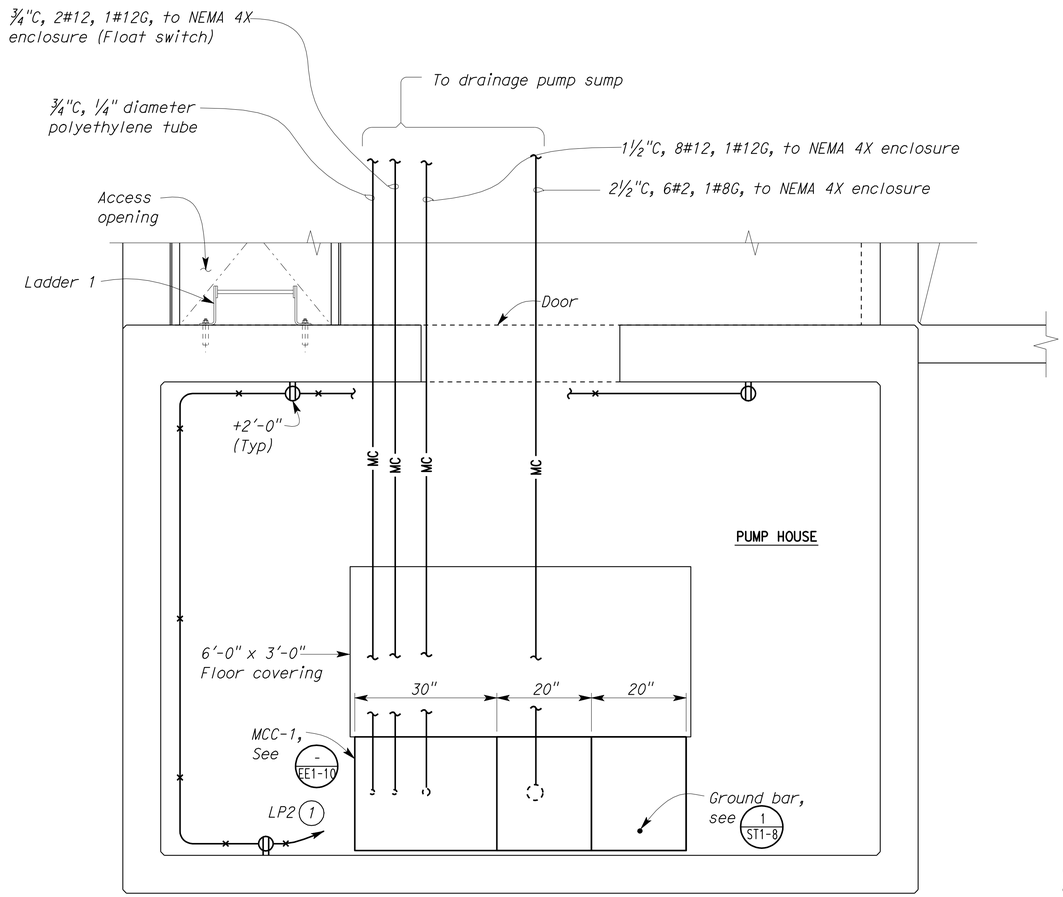
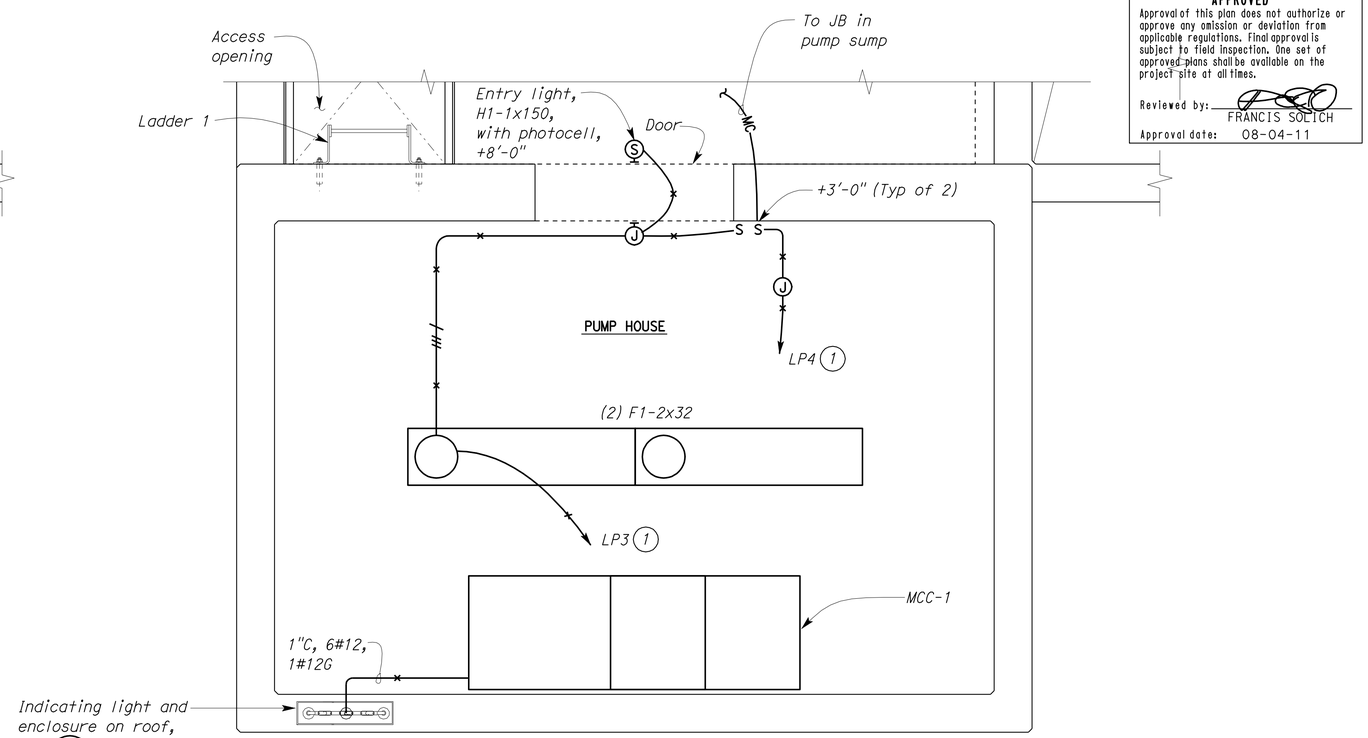
Reviewed by: FRANCIS SOLICH

Approval date: 08-04-11



A **POWER PLAN**

SCALE ¾" = 1'-0"



B **LIGHTING PLAN**

SCALE ¾" = 1'-0"

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY.

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

EAST STOCKTON UNDERPASS PUMPING PLANT

CONTROL ROOM POWER AND LIGHTING PLAN

SHEET **EE1-7**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF

1/18/11 | 1/18/11 | 4/29/11 | 7/8/11 | 8/16/11 | 10/20/11

28-MAR-2012 14:57

ee1_07.dgn

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1396	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

CALIFORNIA STATE FIRE MARSHAL APPROVED

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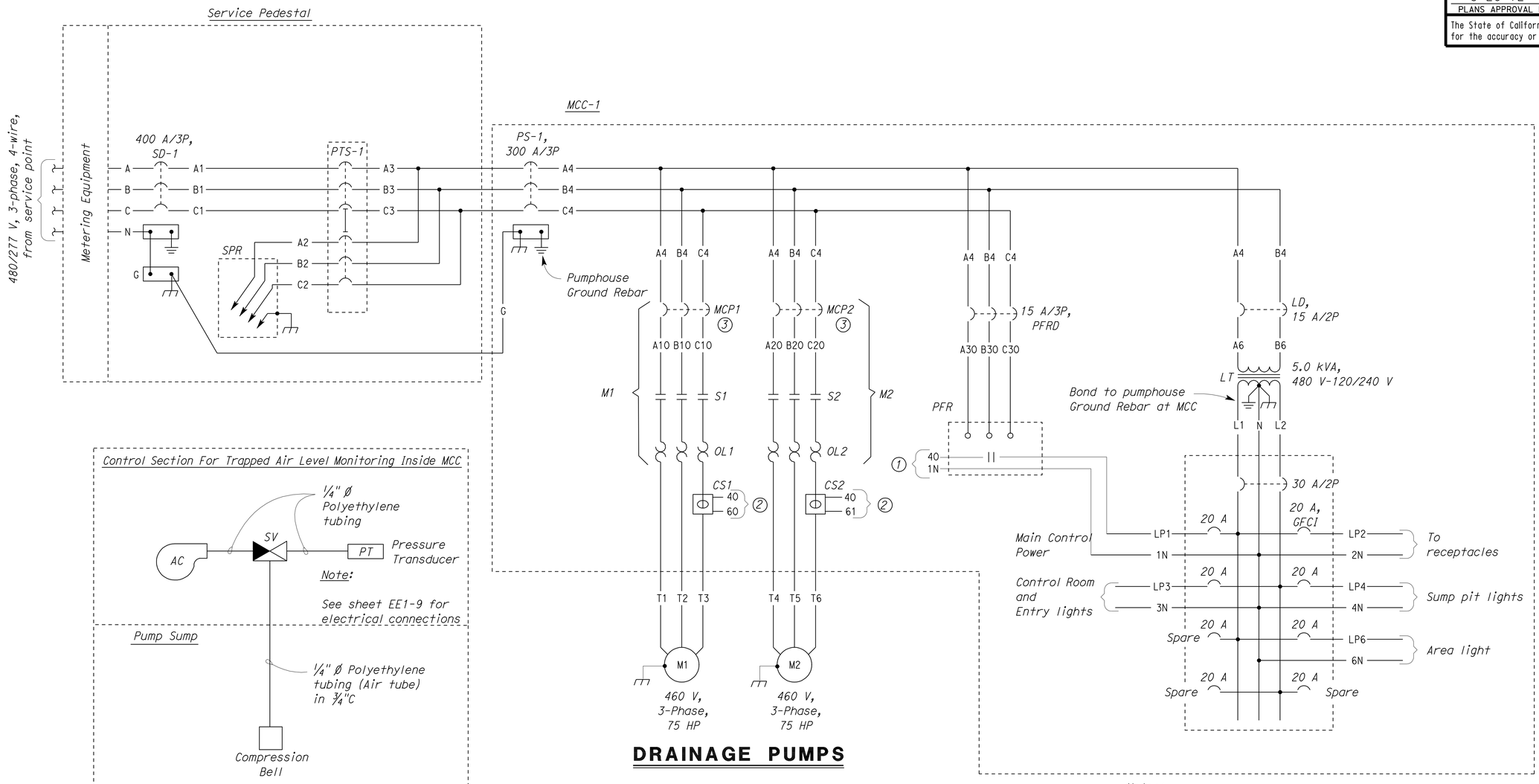
Reviewed by: FRANCIS SOLICH

Approval date: 08-04-11



DRAINAGE PUMPS

TRAPPED AIR LEVEL MONITORING SYSTEM SCHEMATIC

Notes:

1. Pump Controls. For continuation see sheet EE1-9.
2. For continuation see sheet EE1-9.
3. Trip rating is recommended by the pump motor manufacturer

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS	SHEET EE1-8
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu			POST MILE	EAST STOCKTON UNDERPASS PUMPING PLANT — POWER SCHEMATIC DIAGRAM	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 12/28/10 | 4/5/11 | 7/8/11 | 8/16/11 | 10/20/11

REVISION DATES (PRELIMINARY STAGE ONLY) — SHEET OF

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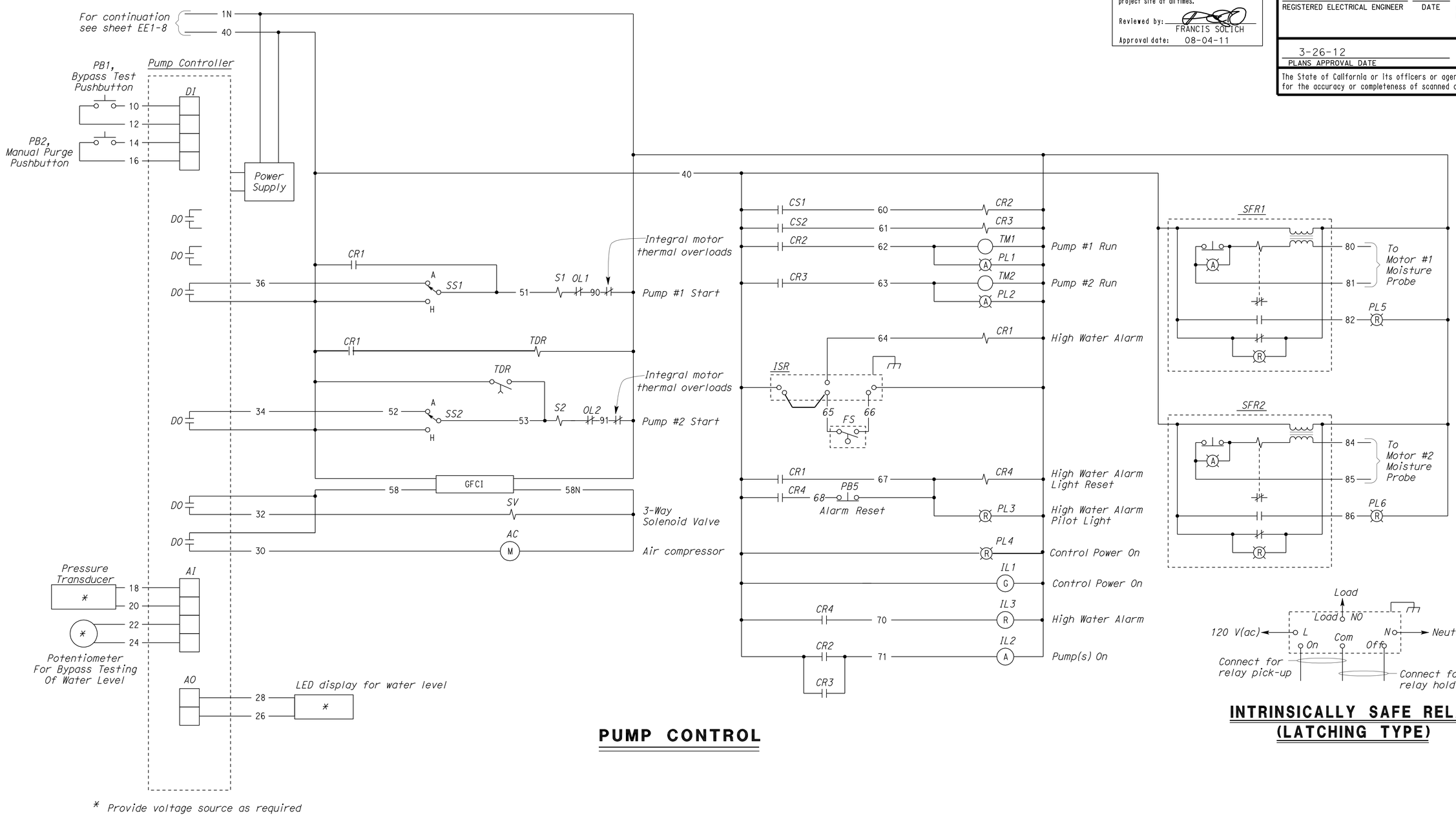

PUMP CONTROL

INTRINSICALLY SAFE RELAY (LATCHING TYPE)

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10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1397	1414

Beatrice Bindu — REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
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DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS
EAST STOCKTON UNDERPASS PUMPING PLANT
STORM WATER PUMPS CONTROL SCHEMATIC DIAGRAM

SHEET EE1-9

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

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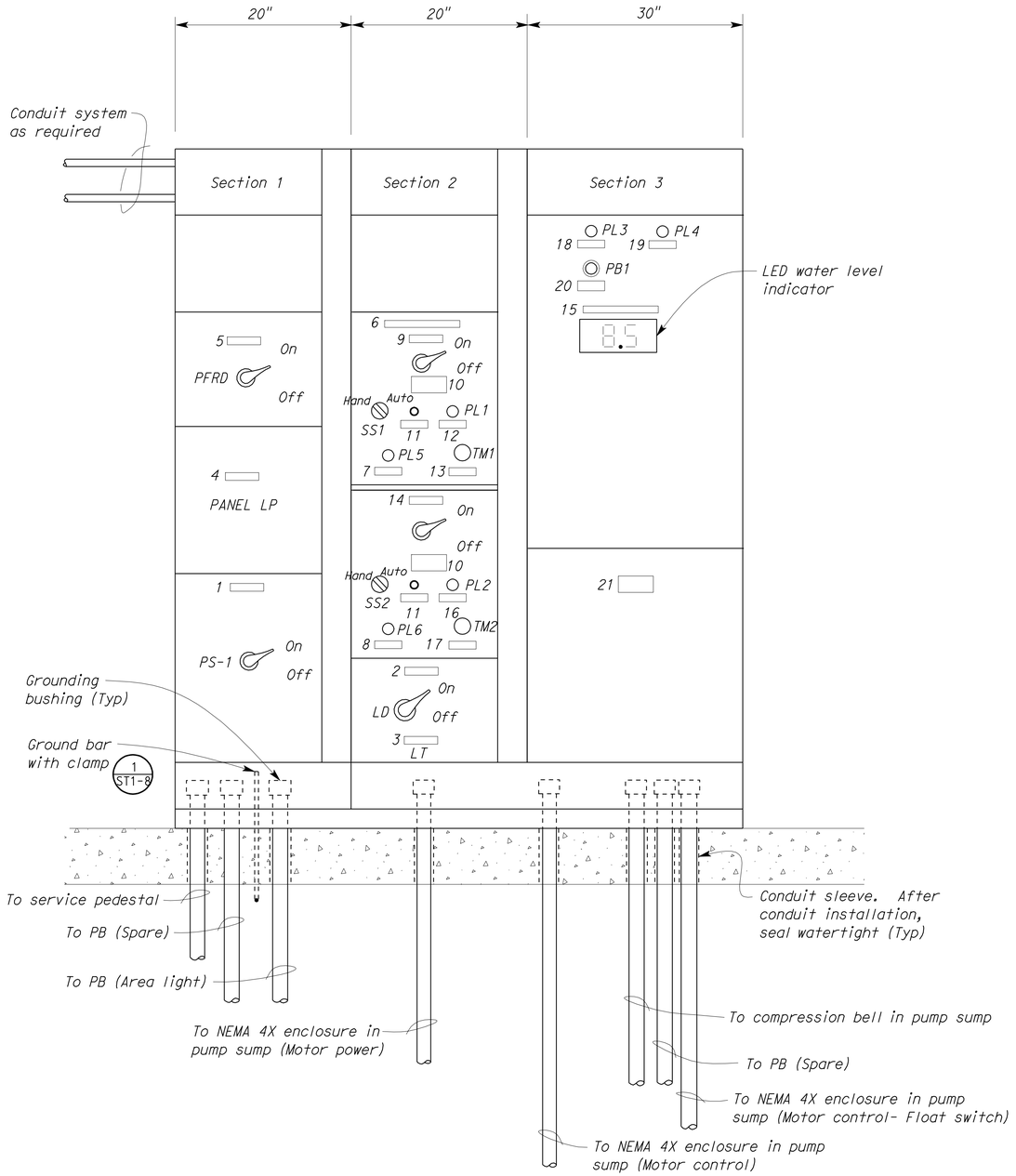

MOTOR CONTROL CENTER-1

NO SCALE

(For details see sheet EE1-11)

NAMEPLATE SCHEDULE

ITEM No.	INSCRIPTION	LETTER HEIGHT
1	MAIN DISCONNECT	1/4"
2	TRANSFORMER DISCONNECT	1/4"
3	LIGHTING TRANSFORMER. 480-120/240 V, 5 kVA	1/4"
4	PANEL LP 120/240 V - SINGLE PHASE	1/4"
5	PHASE FAILURE RELAY DISCONNECT	1/4"
6	DRAINAGE PUMPS	1/4"
7	SEAL FAILURE PUMP No. 1	1/8"
8	SEAL FAILURE PUMP No. 2	1/8"
9	PUMP No. 1 DISCONNECT	1/4"
11	OVERLOAD RESET	1/8"
12	PUMP No. 1 ON	1/8"
13	PUMP No. 1 RUN TIME	1/8"
14	PUMP No. 2 DISCONNECT	1/4"
15	PUMPS CONTROLLER	
16	PUMP No. 2 ON	1/8"
17	PUMP No. 2 RUN TIME	1/8"
18	HIGH WATER ALARM	1/8"
19	CONTROL POWER ON	1/8"
20	HIGH WATER ALARM RESET	1/8"

WARNING PLATE SCHEDULE

ITEM No.	INSCRIPTION	LETTER HEIGHT
10	WARNING: MOTOR DISCONNECT DOES NOT OPEN CONTROL CIRCUIT	1/4"
21	TO DISCONNECT POWER IN THIS SECTION TURN OFF CIRCUIT BREAKER LP1	1/4"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1398	1414

Beatrice Bindu
REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER
BEATRICE BINDU
No. E 17240
Exp. 6-30-12
ELEC
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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Approval date: 08-04-11

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DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0111S5W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

EAST STOCKTON UNDERPASS PUMPING PLANT

MOTOR CONTROL CENTER

SHEET **EE1-10**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

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REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
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Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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Beatrice Bindu — REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
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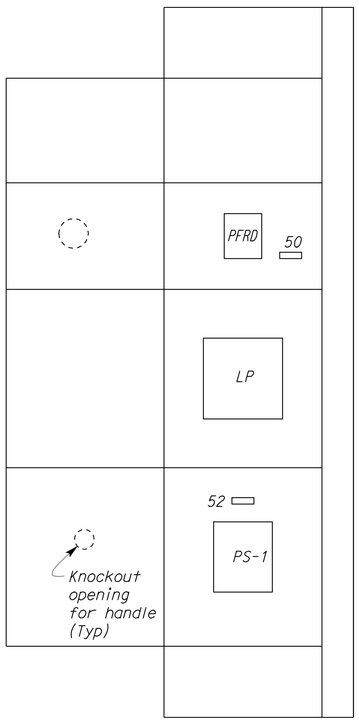
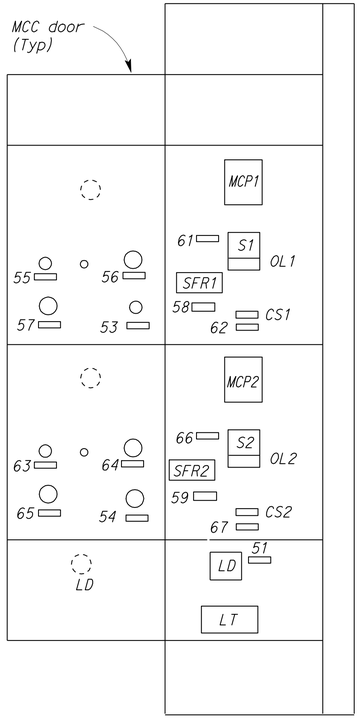
Note:

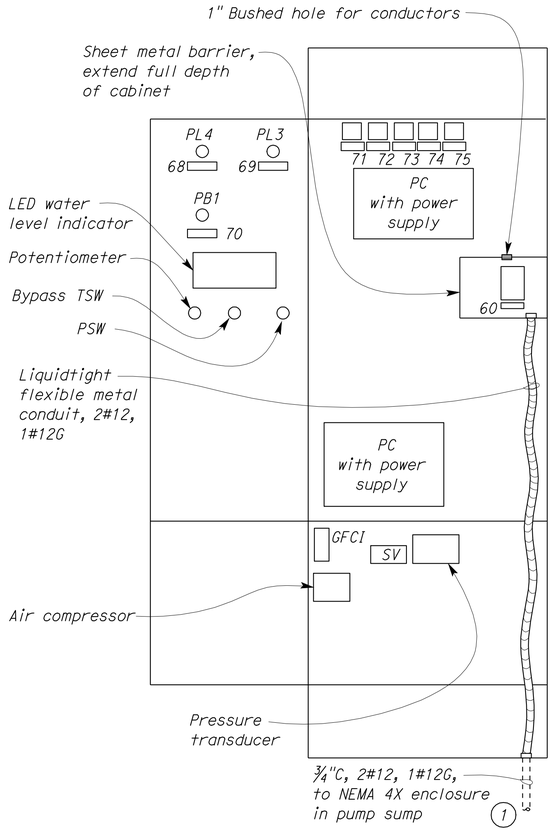
(1) *All conduits are not shown for clarity.*



SECTION 1



SECTION 2



SECTION 3

NAMEPLATE SCHEDULE		
ITEM NO.	INSCRIPTION	LETTER HEIGHT
50	PFRD	1/8"
51	LD	1/8"
52	PS	1/8"
53	PL5	1/8"
54	PL6	1/8"
55	PL1	1/8"
56	SS1	1/8"
57	TM1	1/8"
58	SFR1	1/8"
59	SFR2	1/8"
60	ISR	1/8"
61	ST1	1/8"
62	CS1	1/8"
63	PL2	1/8"
64	SS2	1/8"
65	TM2	1/8"
66	ST2	1/8"
67	CS2	1/8"
68	PL4	1/8"
69	PL3	1/8"
70	PB1	1/8"
71	TDR	1/8"
72	CR1	1/8"
73	CR2	1/8"
74	CR3	1/8"
75	CR4	1/8"

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

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

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

EAST STOCKTON UNDERPASS PUMPING PLANT

MOTOR CONTROL CENTER DETAILS

SHEET EE1-11

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) 12/30/10 7/8/11 8/16/11 10/20/11

SHEET OF

28-MAR-2012 14:58

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1400	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

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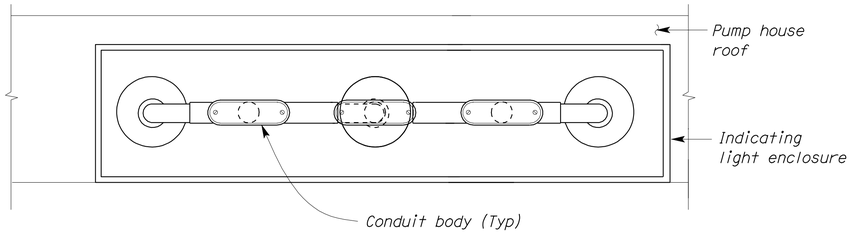
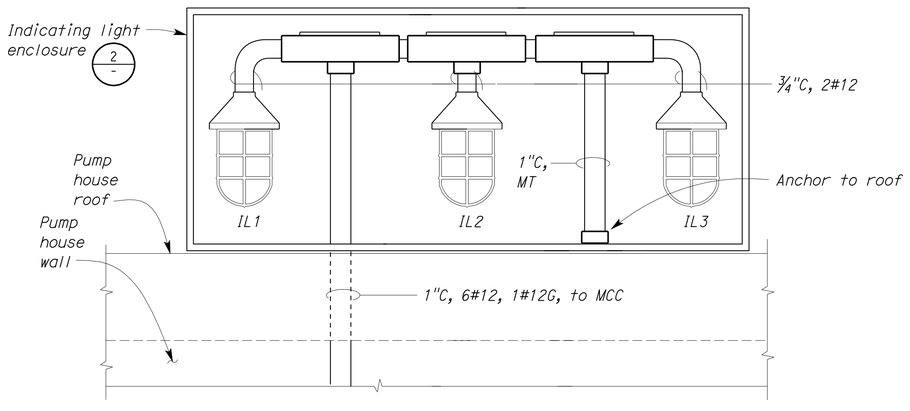


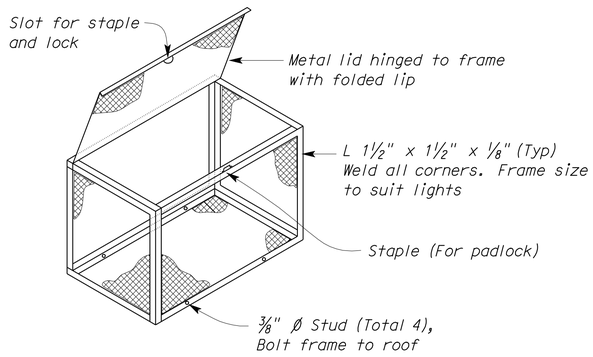
PLAN



ELEVATION

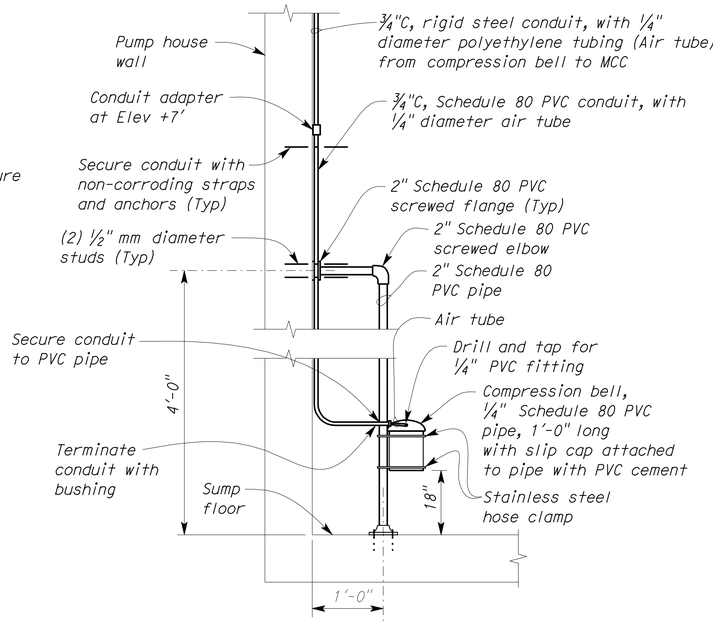
1 INDICATING LIGHTS MOUNTING DETAIL

NO SCALE



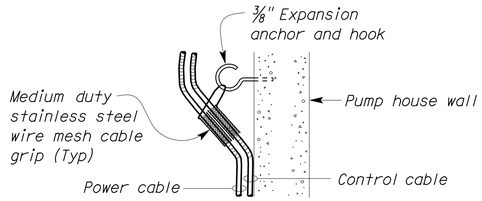
2 INDICATING LIGHT ENCLOSURE

NO SCALE



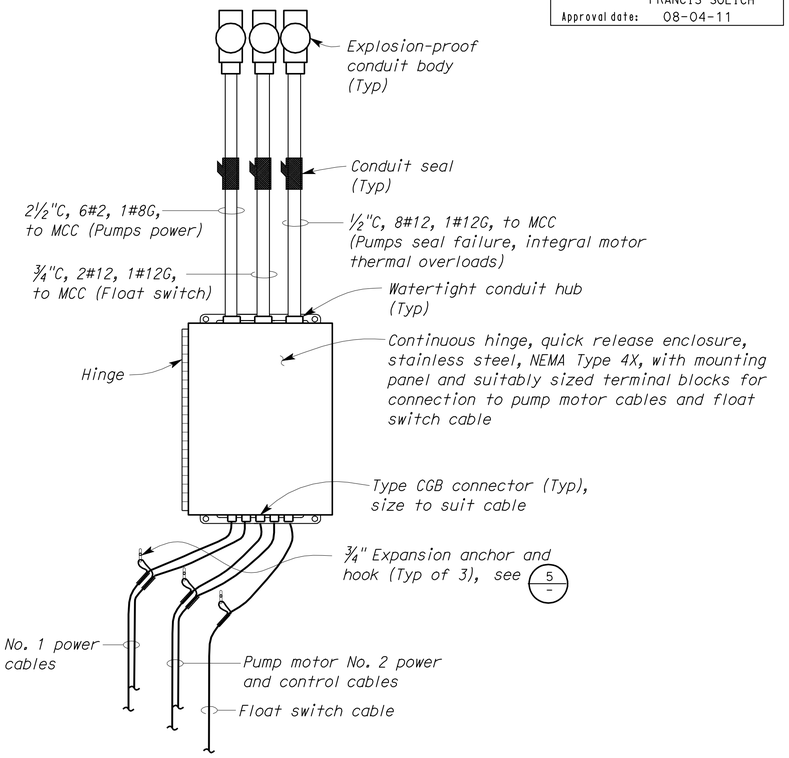
AIR TUBE AND COMPRESSION BELL MOUNTING DETAIL 3

NO SCALE



5 DETAIL

NO SCALE



4 DETAIL

NO SCALE

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0115W	EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS	SHEET EE1-12
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu			POST MILE	EAST STOCKTON UNDERPASS PUMPING PLANT — DETAILS	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)				SHEET	OF
12/30/10	7/8/11	8/16/11	10/20/11		

28-MAR-2012 14:58

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1401	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER
BEATRICE BINDU
No. E 17240
Exp. 6-30-12
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STATE OF CALIFORNIA

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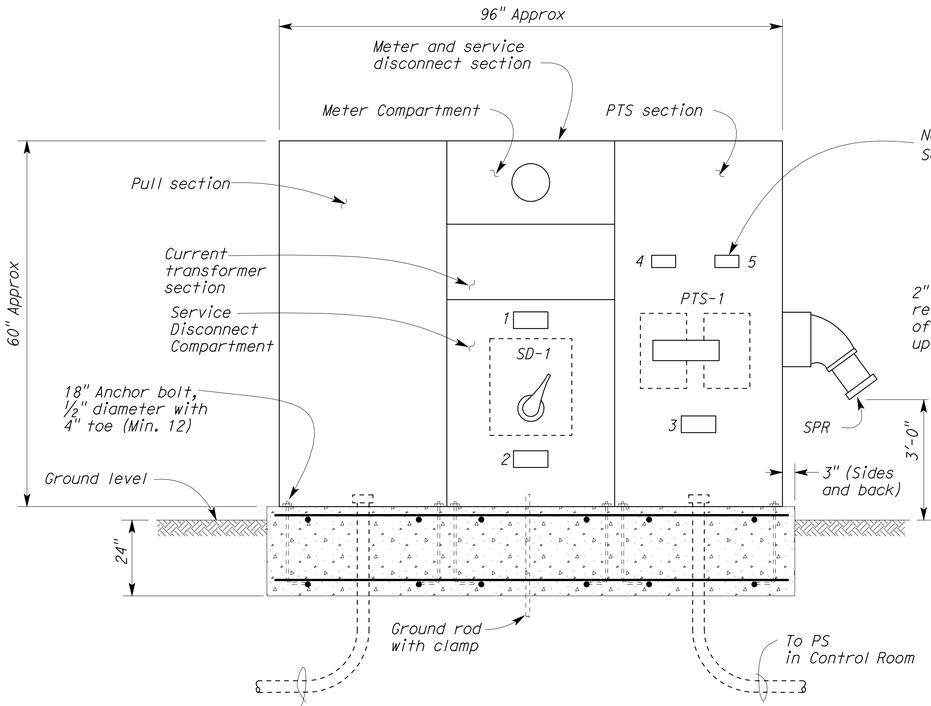
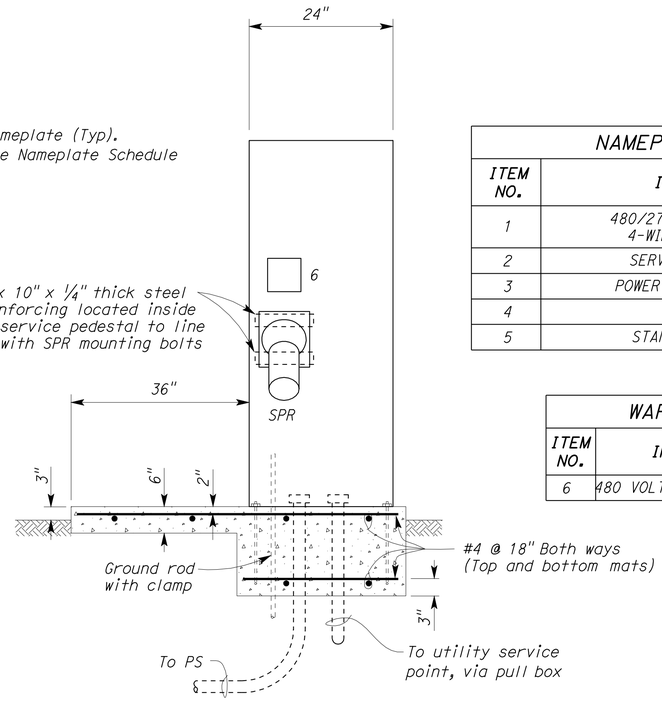


FRONT VIEW



SIDE VIEW

1 SERVICE PEDESTAL-1

NO SCALE

(Exterior door not shown for clarity)

NAMEPLATE SCHEDULE		
ITEM NO.	INSCRIPTION	LETTER HEIGHT
1	480/277-VOLT, 3-PHASE, 4-WIRE, 400-AMPERE	¼"
2	SERVICE DISCONNECT	¼"
3	POWER TRANSFER SWITCH	¼"
4	UTILITY	¼"
5	STANDBY GENERATOR	¼"

WARNING PLATE		
ITEM NO.	INSCRIPTION	LETTER HEIGHT
6	480 VOLTS, 3- PHASE ONLY	¼"

General Note:

Seismic bracing for the Service Pedestal shall be installed per the Manufacturer's recommendations to meet or exceed seismic zone 4 requirements.

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

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

UNIT 3597
PROJECT NUMBER & PHASE 10000004091

BRIDGE NO. 29-0115W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

EAST STOCKTON UNDERPASS PUMPING PLANT

SERVICE PEDESTAL DETAIL

SHEET EE1-13

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

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SHEET OF

3A1001

28-MAR-2012 14:58

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1402	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
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Reviewed by: FRANCIS SOLICH
Approval date: 08-04-11

CERTIFICATE OF COMPLIANCE (Page 1 of 4) LTG-1C

Project Name:	EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS		Date: 4/29/2011
Project Address:	HWY 99 and CHARTER WAY INTERSECTION STOCKTON, CA 95206	Climate Zone: 12	Building CFA: N/A Unconditioned Floor Area: 420

General Information

Building Type:	☑ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel
☐ Schools ✓	☐ Relocatable Public Schools	☐ Conditioned Spaces	☑ Unconditioned Spaces
Phase of Construction:	☑ New Construction	☐ Addition	☐ Alteration
Method of Compliance:	☐ Complete Building	☑ Area Category	☐ Tailored

Documentation Author's Declaration Statement

- I Certify that this Certificate of Compliance documentation is accurate and complete.

Name:	BEATRICE BINDU	Signature: beatrice b	
Company:	CALTRANS		Date: 4/29/2011
Address:	1801 30TH STREET		If applicable: CEA # CEPE #
City/State/Zip:	SACRAMENTO, CA 95816		Phone: (916) 227-8764

Principal Lighting Designer's Declaration Statement

- I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the lighting design.
- This Certificate of Compliance identifies the lighting features and performance specifications required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.
- The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Name:	BEATRICE BINDU	Signature: beatrice b	
Company:	CALTRANS		Phone: (916) 227-8764
Address:	1801 30TH STREET		License # E 17240
City/State/Zip:	SACRAMENTO, CA 95816		Date: 4/29/2011

Lighting Mandatory Measures
Indicate location on building plans of Mandatory Measures Note Block: N/A

LIGHTING COMPLIANCE FORMS & WORKSHEETS (Check box if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.

☑	LTG-1C Pages 1 through 4	Certificate of Compliance. All pages required on plans for all submittals.
☐	LTG-2C	Lighting Controls Credit Worksheet
☐	LTG-3C	Indoor Lighting Power Allowance
☐	LTG-4C Pages 1 through 4	Tailored Method Worksheet
☐	LTG-5C Pages 1 and 2	Line Voltage Track Lighting Worksheet

2008 Nonresidential Compliance Forms *July 2010*

CERTIFICATE OF COMPLIANCE (Page 2 of 4) LTG-1C

INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Project Name:	EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS	Date: 4/29/2011
Installation Certificate, LTG-1-INST (Retain a copy and verify form is completed and signed.)		Field Inspector ☐
Certificate of Acceptance, LTG-2A and LTG-3A (Retain a copy and verify form is completed and signed.)		Field Inspector ☐

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces Installed Lighting Power listed on this Lighting Schedule is only for: ☐ CONDITIONED SPACE ☑ UNCONDITIONED SPACE

☐ The actual indoor lighting power listed below includes all installed permanent and portable lighting system in accordance with S 146 (a)

☐ Only for offices: Up to the first 0.2 watts per square foot of portable lighting shall not be required to be included in the calculation of actual indoor lighting power density in accordance with Exception to S 146 (a). All portable lighting in excess of 0.2 watts per square foot is totaled below.

	Luminaire Schedule (Type, Lamps, Ballasts)		Installed Watts						
A	B	C	D	E		F	G	H	
Name or Item Tag	Complete Luminaire Description (i.e, 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)		Watts per Luminaire 1	How wattage was determined: CEC Default from NA8	How wattage was determined: According to S 130 (d or e)	Number of Luminaires	Installed Watts (D x F)	Field 2 Inspector: Pass	Field 2 Inspector: Fail
F1	F1-2x32, CEILING MOUNTED, WRAP AROUND		80	☑	☐	2	160	☐	☐
SL1	WALL MOUNTED, 26 WATT COMPACT FLUORESCENT		37	☑	☐	2	74	☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
				☐	☐			☐	☐
	INSTALLED WATTS PAGE TOTAL:						234		

Building total number of pages	1	Installed Watts Building Total (Sum of all pages)	234

Enter into LTG-1C Page 4 of 4

1. Wattage shall be determined according to Section 130 (d and e). Wattage shall be rating of light fixture, not rating of bulb.
2. If Fail then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

2008 Nonresidential Compliance Forms *July 2010*

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

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

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS
ROUTE 26/99 SEPARATION PUMPING PLANT
TITLE 24 COMPLIANCE NO. 1

SHEET EE2-1

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)			SHEET	OF
4/29/11	10/20/11			

28-MAR-2012 14:58
ee2_01.dgn

CERTIFICATE OF COMPLIANCE (Page 3 of 4) LTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

Date: 4/29/2011

INDOOR LIGHTING SCHEDULE and FIELD ENERGY CHECKLIST

Fill in controls for all spaces: a) area controls, b) multi-level controls, c) manual daylighting controls for daylit areas> 250 sq ft, automatic daylighting controls for daylit areas> 2,500 sq ft, d) shut-off controls, e) display lighting controls, f) tailored lighting controls-general lighting controlled separately from display, ornamental and display case lighting and g) demand responsive automatic controls for retail stores> 50,000 sq ft, in accordance with Section 131.

MANDATORY LIGHTING CONTROLS - FIELD INSPECTION ENERGY CHECKLIST				Field Inspector	
Type/Description	Number of Units	Location in Building		Pass	Fail
NOT APPLICABLE				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐

Field Inspectors's Notes or Discrepancies:

2008 Nonresidential Compliance Forms *July 2010*

CERTIFICATE OF COMPLIANCE (Page 4 of 4) LTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

Date: 4/29/2011

Conditioned and Unconditioned space Lighting must not be combined for compliance

Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
Installed Lighting (from Conditioned LTG-1C Page 2			Installed Lighting (from Unconditioned LTG-1C Page 2		234
Lighting Control Credit Conditioned Spaces (from LTG-2C)	-		Lighting Control Credit Unconditioned Spaces (from LTG-2C)	-	
Adjusted Installed Lighting Power	=		Adjusted Installed Lighting Power	=	234
Complies if Installed ≤ Allowed	↕		Complies if Installed ≤ Allowed	↕	
Allowed Lighting Power Conditioned Spaces (from LTG-3C)			Allowed Lighting Power Unconditioned Spaces (from LTG-3C)		252

Required Acceptance Tests

Designer:

This form is to be used by the designer and attached to the plans. Listed below is the acceptance test for the Lighting system, LTG-2A and LTG-3A. The designer is required to check the acceptance tests and list all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance. If all the lighting system or control of a certain type requires a test, list the different lighting and the number of systems. The NA7 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately. Forms can be grouped by type of Luminaire controlled.

Enforcement Agency:

System Acceptance. Before Occupancy Permit is granted for a newly constructed building or space or when ever new lighting system with controls is installed in the building or space shall be certified as meeting the Acceptance Requirements. The LTG-2A and LTG-3A forms are not considered a complete form and is not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. In addition, a Certificate of Acceptance forms shall be submitted to the enforcement agency that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of S 10-103 (b) of Title 24 Part 6. The field inspector must receive the properly filled out and signed forms before the building can receive final occupancy. A copy of the LTG-2A and LTG-3A for each different lighting luminaire control(s) must be provided to the owner of the building for their records.

Luminaires Controlled				LTG-2A and LTG-3A
Equipment Requiring Testing	Description	Number of like Controls	Location	Controls and Sensors and Automatic Daylighting Controls Acceptance
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐

2008 Nonresidential Compliance Forms *July 2010*

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1403	1414

Beatrice Bindu
REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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: FRANCIS SOLICH

Approval date: 08-04-11

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0120W	EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS	SHEET EE2-2
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu			POST MILE	ROUTE 26/99 SEPARATION PUMPING PLANT — TITLE 24 COMPLIANCE NO. 2	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov					

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597 PROJECT NUMBER & PHASE 10000004091 3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 4/29/11 | 7/8/11 | 8/16/11 | 10/20/11

SHEET OF

28-MAR-2012 14:58

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CERTIFICATE OF COMPLIANCE (Page 1 of 4) OLTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS	Date: 4/29/2011
Project Address: HWY 99 and CHARTER WAY INTERSECTION STOCKTON, CA 95206	Total Hardscape Illuminated Area: 650

General Information

Phase of Construction: ☑ New Construction ☐ Addition ☐ Alteration

Documentation Author's Declaration Statement

- I Certify that this Certificate of Compliance documentation is accurate and complete.

Name: BEATRICE BINDU	Signature:
Company: CALTRANS	Date: 4/29/2011
Address: 1801 30TH STREET	If applicable: CEA # CEPE #
City/State/Zip: SACRAMENTO, CA 95816	Phone: (916) 227-8764

Principal Lighting Designer's Declaration Statement

- I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the lighting design.
- This Certificate of Compliance identifies the lighting features and performance specification required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.
- The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Name: BEATRICE BINDU	Signature:
Company: CALTRANS	Phone: (916) 227-8764
Address: 1801 30TH STREET	License # E 17240
City/State/Zip: SACRAMENTO, CA 95816	Date: 4/29/2011

Principal Lighting Designer's Declaration

☐ I Certify that this Certificate of Compliance documentation is accurate and complete, and accounts for all outdoor lighting power, including building mounted, pole mounted, as well as all other outdoor lighting designed for the site, and that Additional Lighting Power Allowances for Specific Applications or Additional Lighting Power Allowances for Ordinance Requirements have not been counted more than one time for the same area, in Accordance with Section 147 of the Standards.

Outdoor Lighting Mandatory Measures

Indicate location on building plans of Mandatory Measures Note Block: N/A

LIGHTING COMPLIANCE FORMS & WORKSHEETS (check box if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.

☐ OLTG-1C	Certificate of Compliance. All 4 pages required on plans for all submittal.
☐ OLTG-2C	(Page 1 of 3) Lighting Wattage Allowances for General Hardscape, Sales Frontage, or Ornamental Lighting. Optional on plans.
☐ OLTG-2C	(Page 2 of 3) Lighting Wattage Allowances for Per Application or Per Area. Optional on plans.
☐ OLTG-2C	(Page 3 of 3) Additional Lighting Power Allowance for Ordinance Requirements. Optional on plans.

2008 Nonresidential Compliance Forms *July 2010*

CERTIFICATE OF COMPLIANCE (Page 2 of 4) OLTG-1C

COMPLIANCE FIXTURE/LIGHTING CONTROL SCHEDULE and FIELD INSPECTION CHECKLIST

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS	Date: 4/29/2011
INSTALLATION CERTIFICATE, OLTG-1-INST (Retain a copy and verify form is completed and signed.)	Field Inspection ☐
CERTIFICATE OF ACCEPTANCE, OLTG-2A (Retain a copy and verify form is completed and signed.)	Field Inspection ☐

Luminaire Schedule			Installed Watts							
A	B	C	D	E	F		G	H	I	
					How wattage was determined				Field Inspector [2]	
Name Or Item Tag	Luminaire Description See footnote below (i.e, lamp pole-top shoe-box 400 watt metal halide)	Cutoff Designation	Watts per Luminaire [1]	Special Features	Default from NA-8	According to S 130 (d or e)	Number of Luminaires	Installed Watts (D x G)	Pass	Fail
HP1	POLE-TOP 310 WATT HIGH PRESSURE SODIUM	✓	310	☐	☐	☑	1	310	☐	☐
HP1	ENTRY LIGHT H1-1 X 150		150	☐	☐	☐		150	☐	☐
				☐	☐	☐			☐	☐
				☐	☐	☐			☐	☐
				☐	☐	☐			☐	☐
				☐	☐	☐			☐	☐
				☐	☐	☐			☐	☐
	Enter total into OLTG-1C; Page 4 of 4; Row H; Total Installed Watts:							460		

1. Type of luminaire (i.e.: post top, wall pack, surface, shoe box); for non-incandescent luminaires, indicate nominal lamp wattage and lamp type (i.e.: fluorescent incandescent, HID); ballast type (i.e.: electronic or magnetic); number of lamps and number of ballast per luminaire. For incandescent luminaires the luminaire wattage listed in column D shall be the maximum relamping rated wattage on a permanent factory-installed label on the luminaire. NOT the wattage of the lamp (bulb) used, in accordance with Section 130 (d or e).
2. If Fail then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

EXEMPT LUMINAIRES — Field Inspection ☐

Name or Symbol	Description of exempt luminaires in accordance with S 147

MANDATORY CONTROLS — Field Inspection ☐

#	Description	Location	#	Description	Location

SPECIAL FEATURES INSPECTION CHECKLIST (See Page 2 of 4 of OLTG-1C)

The local enforcement agency should pay special attention to the items specified in this checklist. These Items require special written justification and documentation, and special verification. The local enforcement agency determines the adequacy of the justification, and may reject a building or design that otherwise complies base on the adequacy of the special justification and documentation submitted.

Field Inspector Notes or Discrepancies:

2008 Nonresidential Compliance Forms *July 2010*

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1404	1414

REGISTERED ELECTRICAL ENGINEER 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER BEATRICE BINDU No. E 17240 Exp. 6-30-12 ELEC STATE OF CALIFORNIA

3-26-12 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.

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: FRANCIS SOLICH

Approval date: 08-04-11

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0120W POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT — TITLE 24 COMPLIANCE NO. 3

SHEET EE2-3

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597 PROJECT NUMBER & PHASE 10000004091

3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES — REVISION DATES (PRELIMINARY STAGE ONLY) 4/29/11 7/8/11 8/16/11 10/20/11 SHEET OF

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CERTIFICATE OF COMPLIANCE (Page 3 of 4) OLTG-1C

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

Date: 4/29/2011

A. OUTDOOR LIGHTING ZONE

OUTDOOR LIGHTING ZONE: ☐ OLZ 1 ☐ OLZ 2 ☑ OLZ 3 ☐ OLZ 4

Is the Outdoor Lighting Zone: ☐ Default in accordance with S 10-114, or ☐ Amended by JHA

Complete the information below if the default Outdoor Lighting Zone has been amended by the local jurisdiction having authority (JHA):

☐ The site is a government designated park, recreation area, wildlife preserve, or portion thereof, and has been designated as LZ2 or LZ3, in accordance with Table 10-114-A, because the site is contained within such a zone.

☐ The local jurisdiction having authority has officially adopted a change to the State Default Lighting Zone and has notified the Energy Commission by providing the materials required in S 10-114(d) to the Executive Director.

☐ The adopted change is posted on the Energy Commission website.

B. ADDITIONAL LIGHTING POWER ALLOWANCE FOR ORDINANCE REQUIREMENTS

Are additional lighting power allowances for ordinance in Table 147-C used? Yes ☐ No ☐

Complete the information below if the additional lighting power allowances for ordinance requirements are used:

☐ The local jurisdiction having authority has officially adopted specific outdoor light levels, which are expressed as average or minimum footcandle levels, by following a public process that allowed for formal public notification, review, and comment about the proposed changed.

☐ The local jurisdiction having authority which adopted specific outdoor light levels and has notified the Commission by providing the following materials required S 10-114(f) to the Executive Director.

C. ACCEPTANCE FORMS

Required Acceptance Tests

Designer:

This form is to be used by the designer and attached to the plans. Listed below is the acceptance tests for the Lighting system,

OLTG-2A. The designer is required to check the acceptance tests and list all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance. If all the lighting system or control of a certain type requires a tests, list the different lighting and the number of systems. The NA7 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be a part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately. Forms can be grouped by type of Luminaire controlled.

Enforcement Agency:

Systems Acceptance. Before Occupancy Permit is granted for a newly constructed building or space or when ever new lighting system with controls is installed in the building or space shall be certified as meeting the Acceptance Requirements. The OLTG-2A form is not considered a complete form and is not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. In addition, a Certificate of Acceptance forms shall be submitted to the enforcement agency that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of S 10-103(b) of Title 24 Part 6. The field inspector must receive the properly filled out and signed forms before the building can receive final occupancy. A copy of the OLTG-2A for each different lighting luminaire control(s) must be provided to the owner of the building for their records.

Certificate of Acceptance

	Luminaires Controlled			OLTG-2A [1]
Equipment Requiring Testing	Description	Number of like Controls	Location	Outdoor Lighting Acceptance Tests
POLE-TOP LUMINAIRE	PHOTOCELL		OUTSIDE THE BUILDING	

1. Insert: **OMS** for Outdoor Motion Sensor; **OLSC** for Outdoor Lighting Shutoff Controls; **OP** for Outdoor Photocontrol; **ATS** for Astronomical Time Switch; and, **STS** for Standard (non-astronomical) Time Switch acceptance.

CERTIFICATE OF COMPLIANCE (Page 4 of 4) OLTG-1C

COMPLIANCE FIXTURE/LIGHTING CONTROL SCHEDULE and FIELD INSPECTION CHECKLIST

Project Name: EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

Date: 4/29/2011

ALLOWED AND INSTALLED OUTDOOR LIGHTING POWER

		Lighting Wattage Power Allowance
A	Lighting power allowance for general hardscape (from OLTG-2C Page 1 of 3)	1108
B	Specific application lighting wattage allowance per unit length (from OLTG-2C Page 1 of 3)	
C	Specific application wattage allowance for ornamental lighting (from OLTG-2C Page 1 of 3)	
D	Specific application wattage allowance per application (from OLTG-2C Page 2 of 3)	
E	Specific application lighting wattage allowance per area (from OLTG-2C Page 2 of 3)	
F	Additional lighting power allowance for ordinance requirements (from OLTG-2C Page 3 of 3)	
G	Total Allowed Wattage = Sum of rows A through F:	1108
H	Total installed Watts (from Luminaire Schedule, (from OLTG-1C (Page 2 of 4)	460

Provided that the lighting wattage power allowance listed in rows A through F are identical to the lighting wattage power allowance taken from OLTG-2C pages 1 through 3, complies if installed Wattage in row H is less than or equal to the Total Installed Wattage in row G — ☑ Yes ☐ No

NOTES:

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1405	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
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.

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: FRANCIS SOLICH

Approval date: 08-04-11

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

TITLE 24 COMPLIANCE NO. 4

SHEET **EE2-4**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) 4/29/11 7/8/11 8/16/11 10/20/11

SHEET OF

28-MAR-2012 14:59

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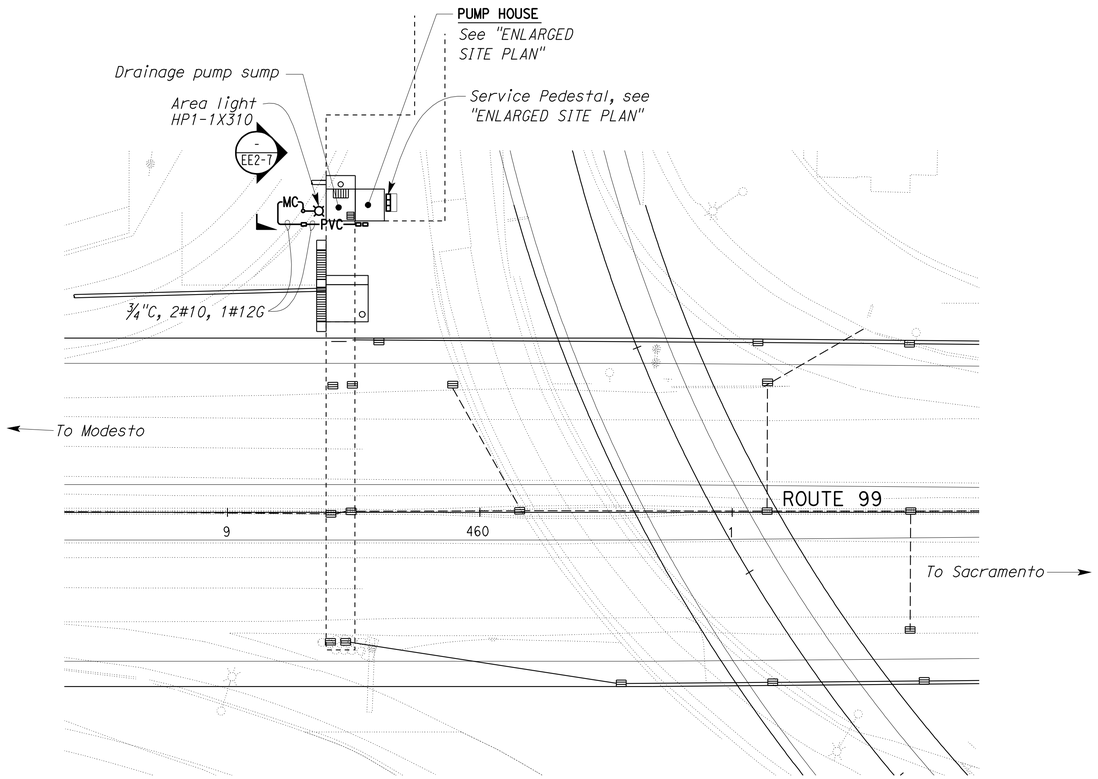

SITE PLAN

SCALE 1" = 30'-0"

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: FRANCIS SOLICH

Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1406	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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Notes:

(1) For the exact location of the utility pole, installation of conduits and conductors, see District Electrical plans ("E" sheets).

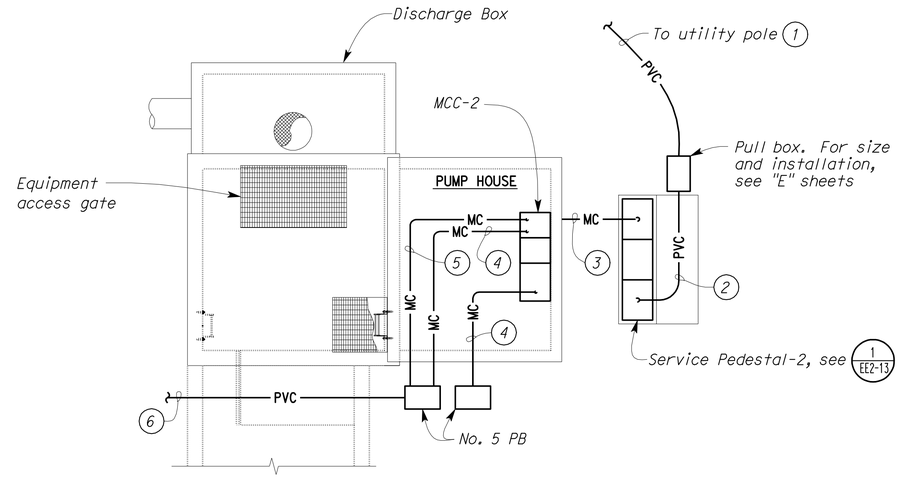
(2) 4"C, PVC, MT, conductors per Utility Company requirements.

(3) 4"C, MC, 3#250 MCM, 1#2G, to MCC. For continuation, see sheet EE2-7.

(4) 1½"C, MT (Spare).

(5) ¾"C, 2#10, 1#12G (Area light).

(6) ¾"C, 2#10, 1#12G, to area light pull box.



ENLARGED SITE PLAN

SCALE 1" = 5'-0"

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY.

DESIGN SUPERVISOR

DESIGN ENGINEER

	BY	CHECKED
DESIGN	Beatrice Bindu	Tech Ngov
DETAILS	Kathi Andreasen	Beatrice Bindu
QUANTITIES	Beatrice Bindu	Tech Ngov

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

ELECTRICAL SITE PLAN

SHEET **EE2-5**

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 3/14/11 | 4/8/11 | 4/19/11 | 7/8/11 | 8/16/11 | 10/20/11

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28-MAR-2012 14:59

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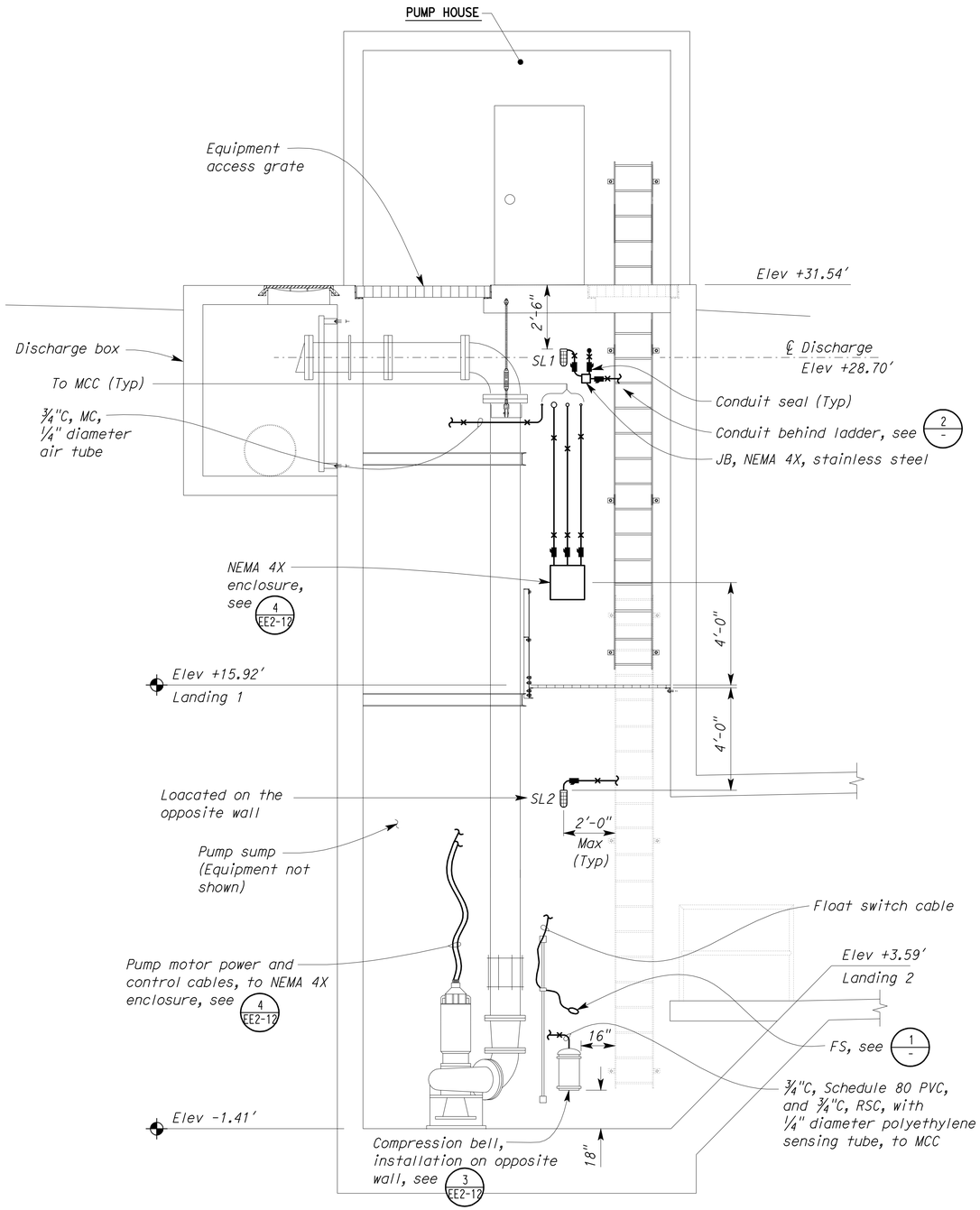
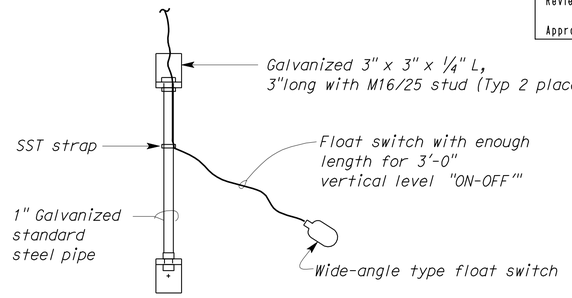


A SECTION

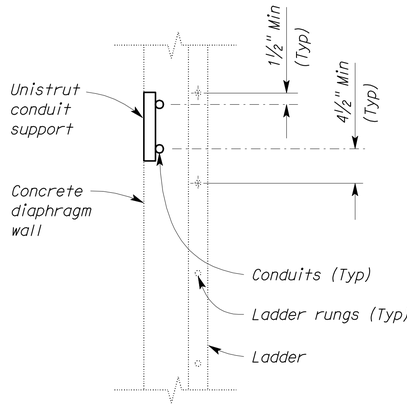
SCALE 3/8"= 1'-0"



FLOAT SWITCH MOUNTING DETAIL

1

NO SCALE



TYPICAL CONDUIT INSTALLATION UNDER LADDER

2

NO SCALE

CALIFORNIA STATE FIRE MARSHAL APPROVED

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Reviewed by: FRANCIS SOLICH

Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1407	1414

Beatrice Bindu — REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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General Note:

A. For pump control levels, see Mechanical plans.

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY.

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

PUMPING PLANT SECTION

SHEET EE2-6

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

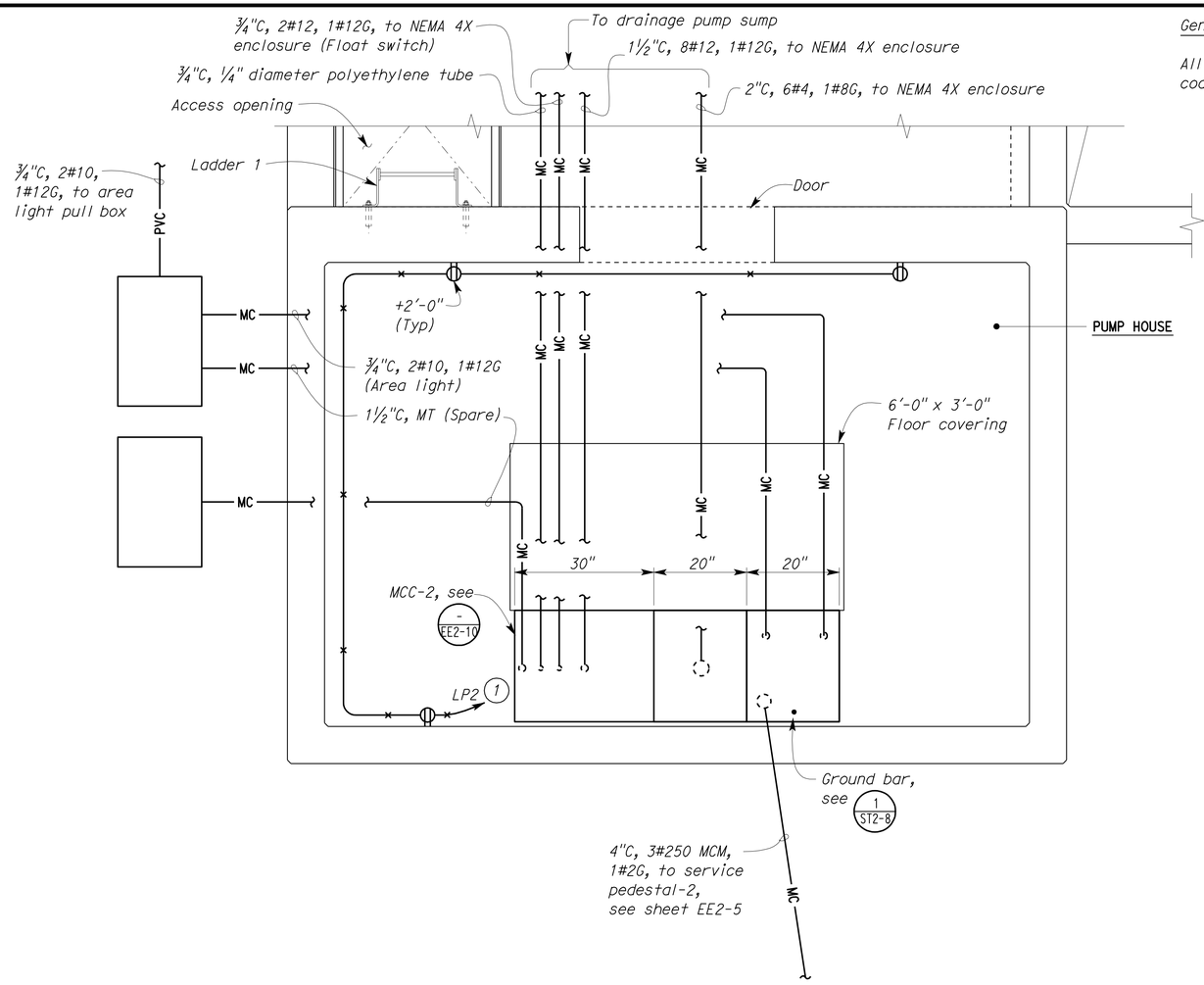
DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 7/18/11 | 7/18/11 | 7/21/11 | 8/11/11 | 8/25/11 | 7/8/11 | 8/16/11 | 10/20/11

SHEET OF

28-MAR-2012 14:59

ee2_06.dgn



General Note:

All conduits to pump sump shall be PVC coated rigid steel conduits.

CALIFORNIA STATE FIRE MARSHAL APPROVED

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Reviewed by: FRANCIS SOLICH

Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1408	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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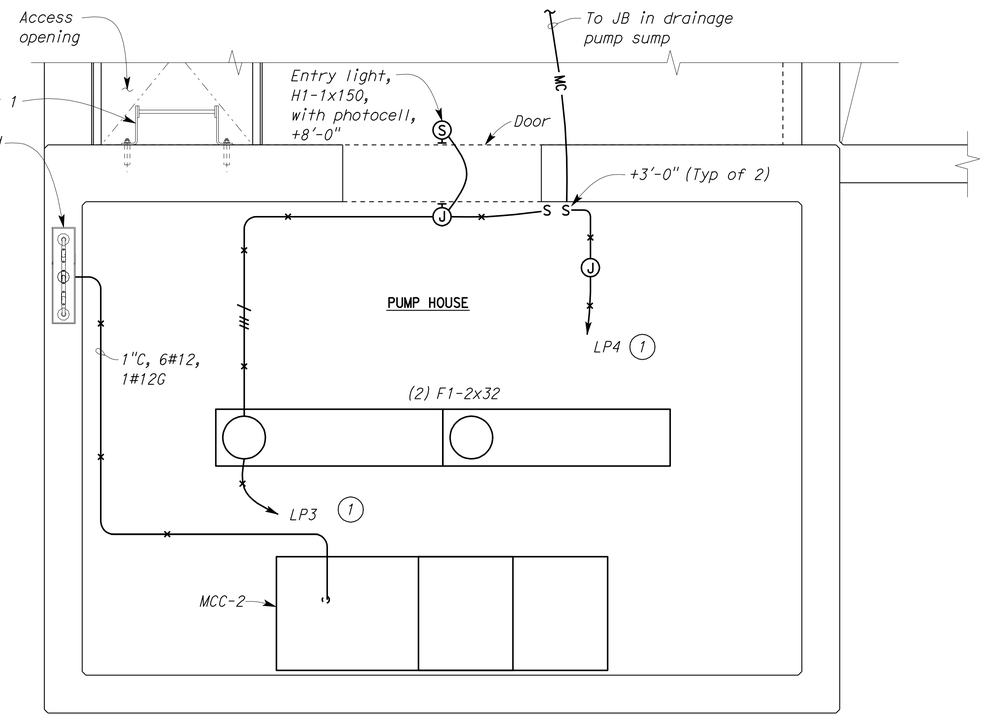
Note:

(1) Panel LP is inside MCC, section 1.



A **POWER PLAN**
SCALE ¾" = 1'-0"

B **LIGHTING PLAN**
SCALE ¾" = 1'-0"

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY.

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

CONTROL ROOM PLAN

SHEET **EE2-7**

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 1/18/11 | 1/21/11 | 4/8/11 | 7/8/11 | 8/16/11 | 10/20/11

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CALIFORNIA STATE FIRE MARSHAL
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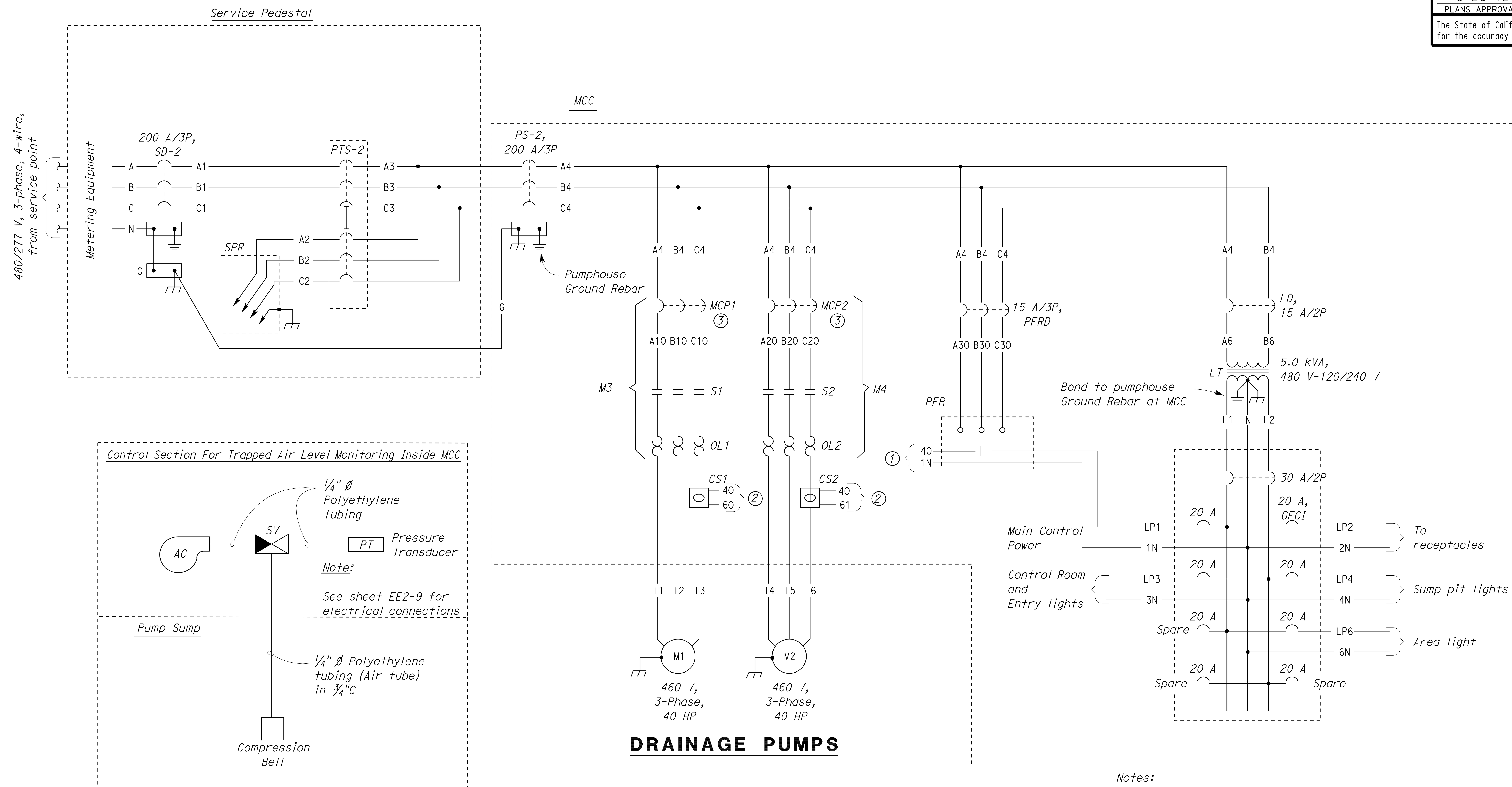
Reviewed by: FRANCIS SOLICH
Approval date: 08-04-11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1409	1414

REGISTERED ELECTRICAL ENGINEER 10-20-11 DATE
REGISTERED PROFESSIONAL ENGINEER BEATRICE BINDU No. E 17240 Exp. 6-30-12 ELEC STATE OF CALIFORNIA
3-26-12
PLANS APPROVAL DATE



DRAINAGE PUMPS

TRAPPED AIR LEVEL MONITORING SYSTEM SCHEMATIC

Notes:

① Pump Controls. For continuation see sheet EE2-9.

② For continuation see sheet EE2-9.

③ Trip rating is recommended by the pump motor manufacturer

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

POWER SCHEMATIC DIAGRAM

SHEET EE2-8

CALIFORNIA STATE FIRE MARSHAL APPROVED

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Approval date: 08-04-11

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10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1410	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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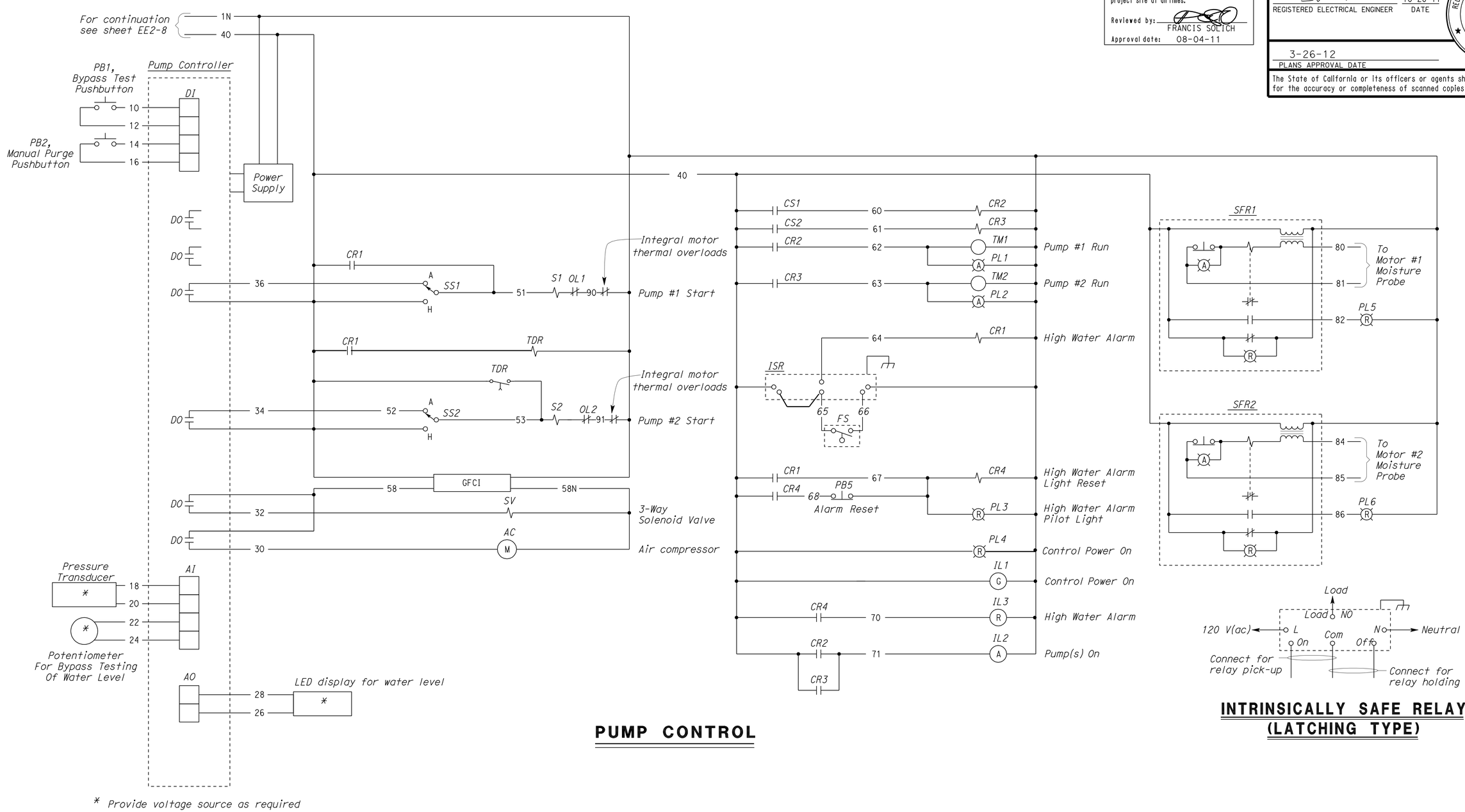

PUMP CONTROL

INTRINSICALLY SAFE RELAY (LATCHING TYPE)

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

STORM WATER PUMPS
CONTROL SCHEMATIC DIAGRAM

SHEET EE2-9

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
12/30/10 | 4/5/11 | 7/8/11 | 8/16/11 | 10/20/11

28-MAR-2012 15:00

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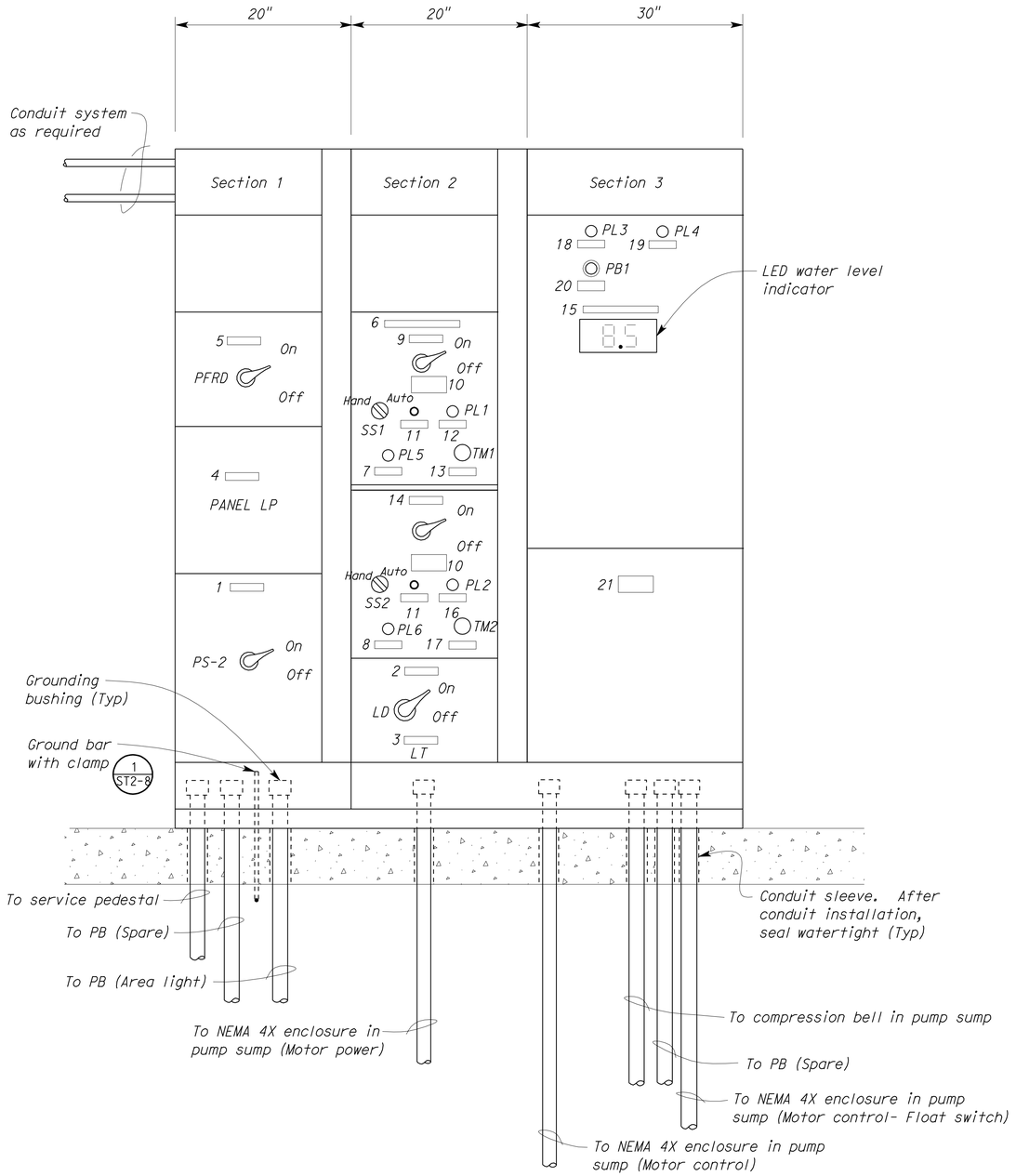

MOTOR CONTROL CENTER-2

NO SCALE

(For details see sheet EE2-11)

NAMEPLATE SCHEDULE

ITEM No.	INSCRIPTION	LETTER HEIGHT
1	MAIN DISCONNECT	1/4"
2	TRANSFORMER DISCONNECT	1/4"
3	LIGHTING TRANSFORMER. 480-120/240 V, 5 KVA	1/4"
4	PANEL LP 120/240 V - SINGLE PHASE	1/4"
5	PHASE FAILURE RELAY DISCONNECT	1/4"
6	DRAINAGE PUMPS	1/4"
7	SEAL FAILURE PUMP No. 1	1/8"
8	SEAL FAILURE PUMP No. 2	1/8"
9	PUMP No. 1 DISCONNECT	1/4"
11	OVERLOAD RESET	1/8"
12	PUMP No. 1 ON	1/8"
13	PUMP No. 1 RUN TIME	1/8"
14	PUMP No. 2 DISCONNECT	1/4"
15	PUMPS CONTROLLER	
16	PUMP No. 2 ON	1/8"
17	PUMP No. 2 RUN TIME	1/8"
18	HIGH WATER ALARM	1/8"
19	CONTROL POWER ON	1/8"
20	HIGH WATER ALARM RESET	1/8"

WARNING PLATE SCHEDULE

ITEM No.	INSCRIPTION	LETTER HEIGHT
10	WARNING: MOTOR DISCONNECT DOES NOT OPEN CONTROL CIRCUIT	1/4"
21	TO DISCONNECT POWER IN THIS SECTION TURN OFF CIRCUIT BREAKER LP1	1/4"

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1411	1414

Beatrice Bindu
REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER
BEATRICE BINDU
No. E 17240
Exp. 6-30-12
ELEC
STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

CALIFORNIA STATE FIRE MARSHAL APPROVED

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Reviewed by: FRANCIS SOLTCH

Approval date: 08-04-11

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0120W
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu			POST MILE
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov			

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

MOTOR CONTROL CENTER

SHEET EE2-10

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)											SHEET	OF
12/09/10	7/8/11	8/15/11	10/20/11									

28-MAR-2012 15:00

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Reviewed by: FRANCIS SOLICH

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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Beatrice Bindu — REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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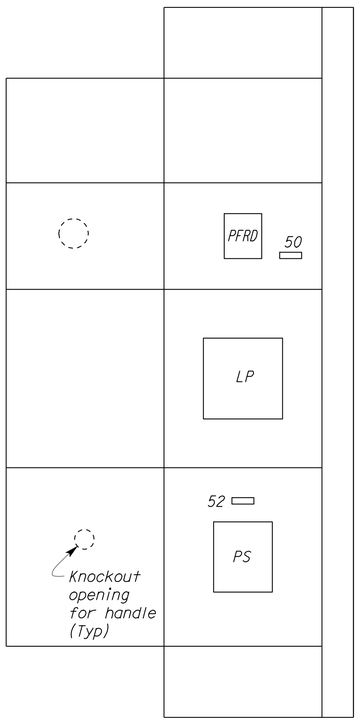
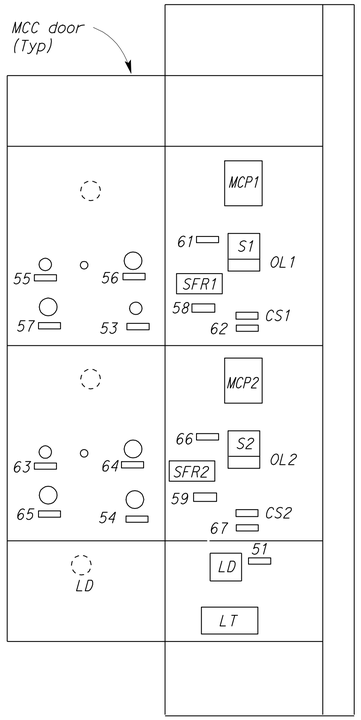
Note:

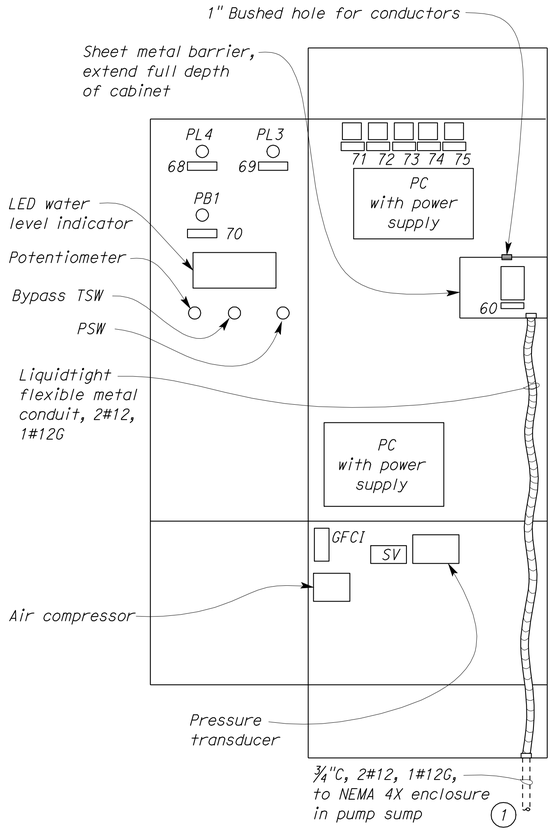
(1) *All conduits are not shown for clarity.*



SECTION 1



SECTION 2



SECTION 3

NAMEPLATE SCHEDULE		
ITEM NO.	INSCRIPTION	LETTER HEIGHT
50	PFRD	1/8"
51	LD	1/8"
52	PS	1/8"
53	PL5	1/8"
54	PL6	1/8"
55	PL1	1/8"
56	SS1	1/8"
57	TM1	1/8"
58	SFR1	1/8"
59	SFR2	1/8"
60	ISR	1/8"
61	ST1	1/8"
62	CS1	1/8"
63	PL2	1/8"
64	SS2	1/8"
65	TM2	1/8"
66	ST2	1/8"
67	CS2	1/8"
68	PL4	1/8"
69	PL3	1/8"
70	PB1	1/8"
71	TDR	1/8"
72	CR1	1/8"
73	CR2	1/8"
74	CR3	1/8"
75	CR4	1/8"

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu	
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov	

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

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

BRIDGE NO. 29-0120W
POST MILE

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

MOTOR CONTROL CENTER DETAILS

SHEET **EE2-11**

TAEMWW Imperial Rev. 7/10

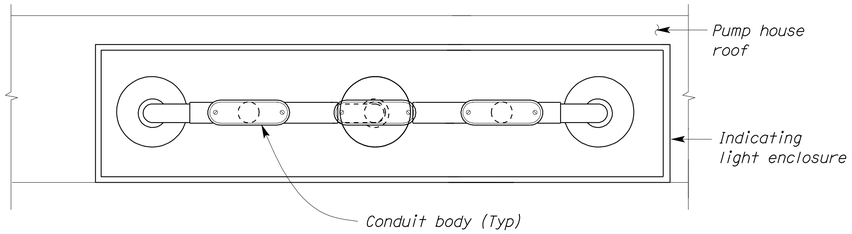
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

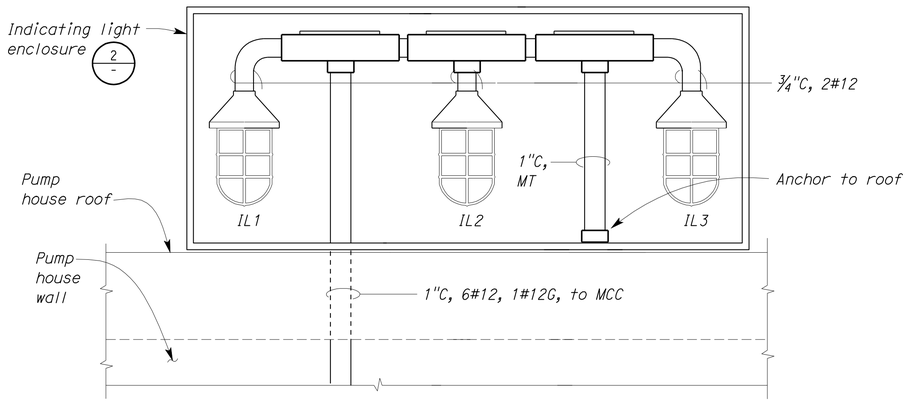
REVISION DATES (PRELIMINARY STAGE ONLY) | SHEET | OF
12/30/10 | 7/8/11 | 8/16/11 | 10/20/11

28-MAR-2012 15:00

ee2_11.dgn



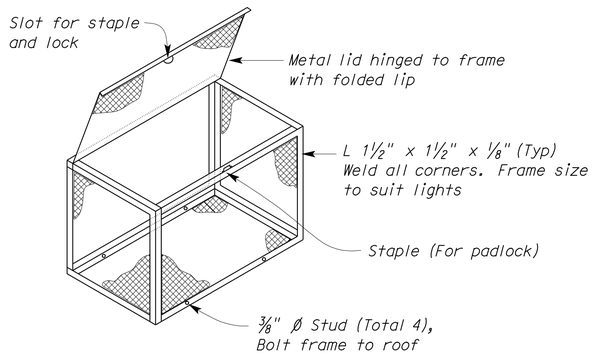
PLAN



ELEVATION

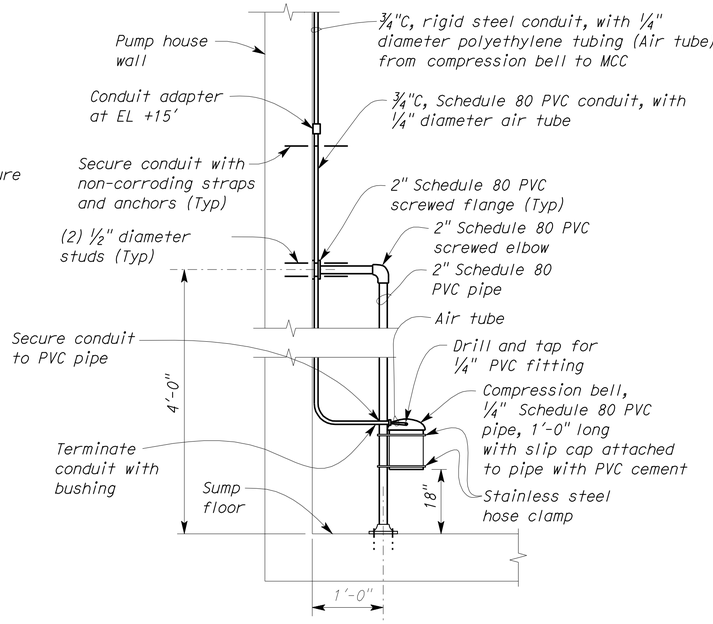
1 INDICATING LIGHTS MOUNTING DETAIL

NO SCALE



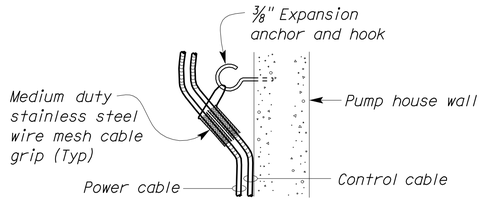
2 INDICATING LIGHT ENCLOSURE

NO SCALE



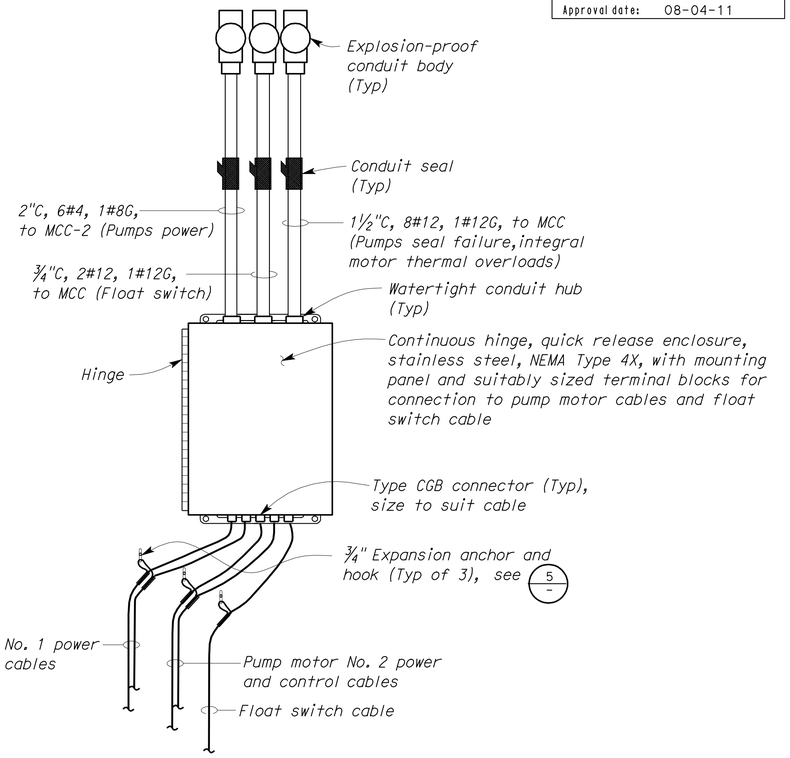
AIR TUBE AND COMPRESSION BELL MOUNTING DETAIL 3

NO SCALE



5 DETAIL

NO SCALE



4 DETAIL

NO SCALE

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1413	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER — BEATRICE BINDU — No. E 17240 — Exp. 6-30-12 — ELEC — STATE OF CALIFORNIA

3-26-12
PLANS APPROVAL DATE

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Reviewed by: FRANCIS SOLICH

Approval date: 08-04-11

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0120W
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu			POST MILE
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov			

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT — DETAILS

SHEET EE2-12

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 12/30/10 | 7/8/11 | 8/16/11 | 10/20/11

SHEET | OF

TAEMWW Imperial Rev. 7/10

28-MAR-2012 15:00

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	4,99	R19.5/R20.1, 15.0/18.6	1414	1414

REGISTERED ELECTRICAL ENGINEER — 10-20-11 DATE

REGISTERED PROFESSIONAL ENGINEER
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No. E 17240
Exp. 6-30-12
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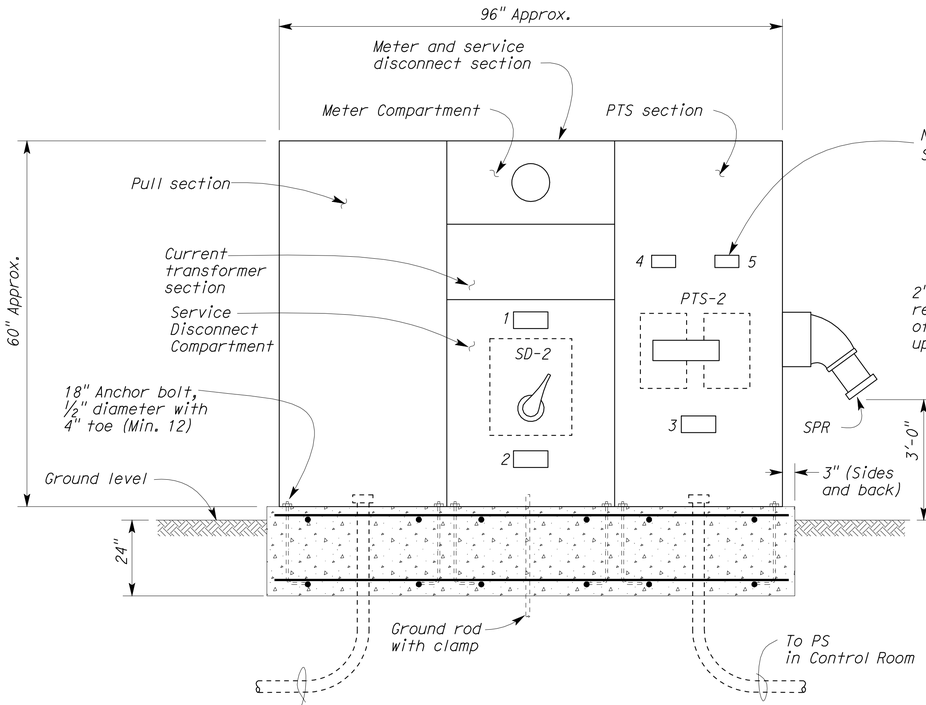
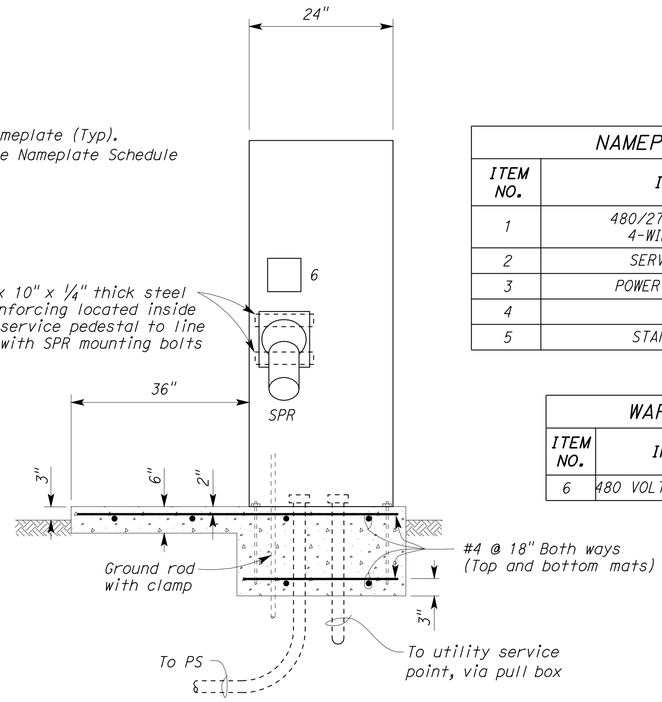


FRONT VIEW



SIDE VIEW

1 SERVICE PEDESTAL-2

NO SCALE

(Exterior door not shown for clarity)

NAMEPLATE SCHEDULE		
ITEM NO.	INSCRIPTION	LETTER HEIGHT
1	480/277-VOLT, 3-PHASE, 4-WIRE, 200-AMPERE	¼"
2	SERVICE DISCONNECT	¼"
3	POWER TRANSFER SWITCH	¼"
4	UTILITY	¼"
5	STANDBY GENERATOR	¼"

WARNING PLATE		
ITEM NO.	INSCRIPTION	LETTER HEIGHT
6	480 VOLTS, 3- PHASE ONLY	¼"

General Note:

Seismic bracing for the Service Pedestal shall be installed per the Manufacturer's recommendations to meet or exceed seismic zone 4 requirements.

DESIGN	BY Beatrice Bindu	CHECKED Tech Ngov	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN	BRIDGE NO. 29-0120W
DETAILS	BY Kathi Andreasen	CHECKED Beatrice Bindu			POST MILE
QUANTITIES	BY Beatrice Bindu	CHECKED Tech Ngov			

EAST STOCKTON UNDERPASS AND ROUTE 26/99 SEPARATION PUMPING PLANTS

ROUTE 26/99 SEPARATION PUMPING PLANT

SERVICE PEDESTAL DETAIL

SHEET EE2-13

TAEMWW Imperial Rev. 7/10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT 3597
PROJECT NUMBER & PHASE 10000004091
3A1001

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY): 12/28/10 | 4/5/11 | 7/28/11 | 8/16/11 | 10/20/11

SHEET OF

28-MAR-2012 15:00

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