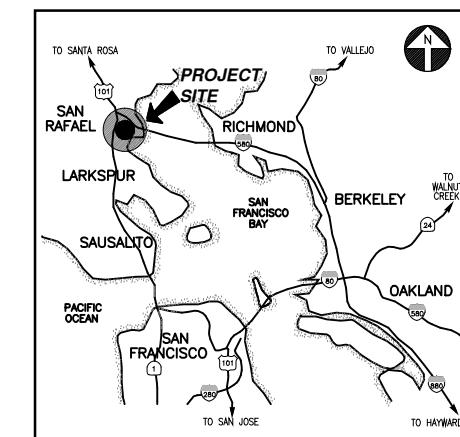
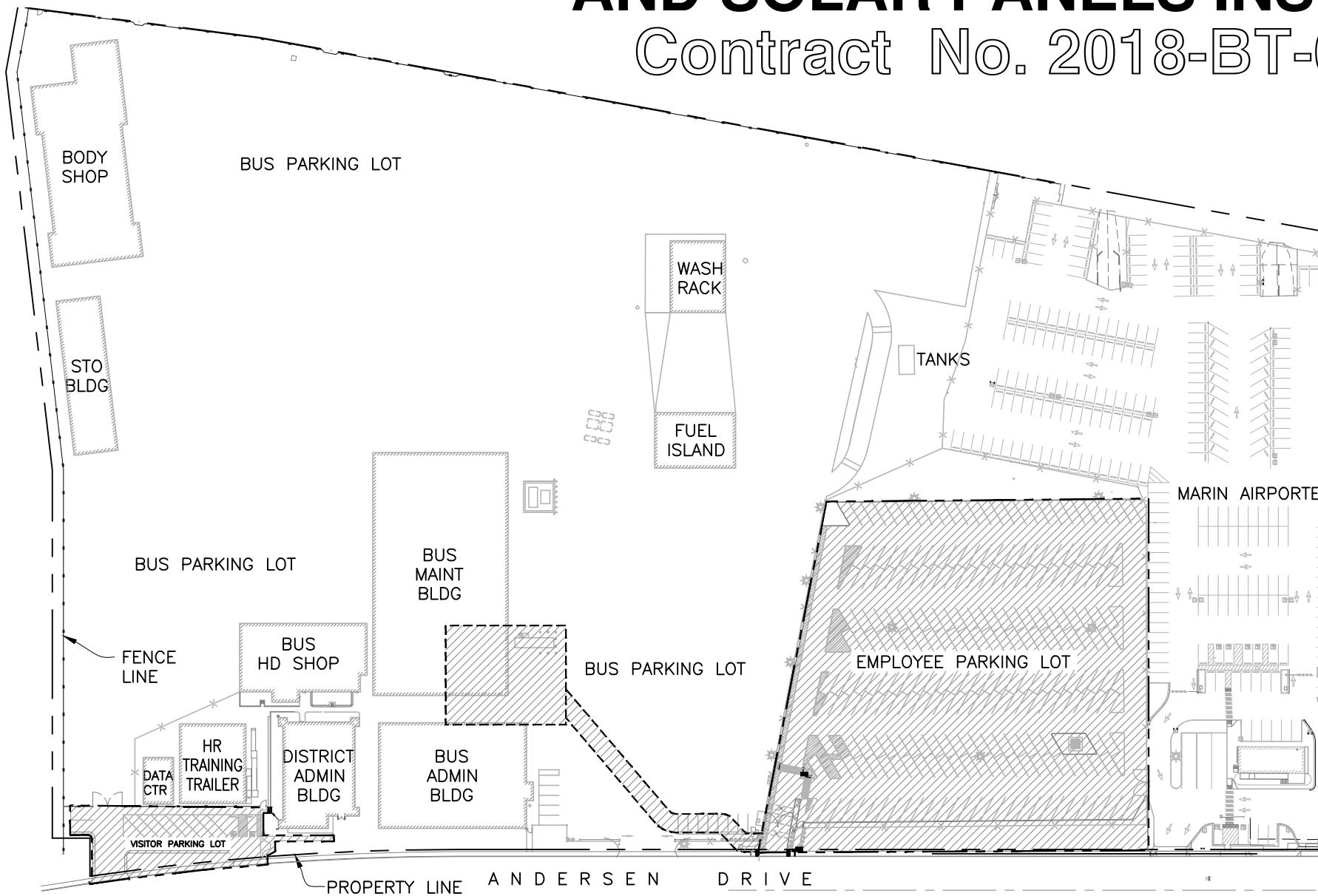




# Golden Gate Bridge, Highway and Transportation District

## SAN RAFAEL PARKING LOT IMPROVEMENTS AND SOLAR PANELS INSTALLATION

### Contract No. 2018-BT-098



**VICINITY MAP**  
NO SCALE

**PROJECT ADDRESS:**  
1011 ANDERSEN DRIVE  
SAN RAFAEL, CALIFORNIA 94901-5318

**LEGEND:**  
 INDICATES WORK AREA LOCATIONS

**95% DESIGN REVIEW**

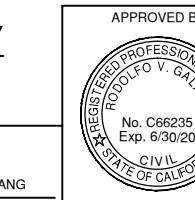
#### SAN RAFAEL BUS FACILITY LOCATION MAP

NOT TO SCALE

GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

IN	1	2	3	4	5	6	7
CM	1	2	3	4	5	6	7

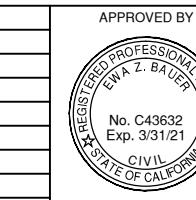
DESIGN	BY	RVG	CHECKED	CHV	PROJECT MANAGER
DETAILS	BY	RVG	CHECKED	First MI Last	
QUANTITIES	BY	RVG	CHECKED	First MI Last	



PROJECT ENGINEER  
MM/DD/YY  
DATE

REVISIONS  
CONTRACT NO. 2018-BT-098  
CADD FILE: 18T098C001.DWG

BY DATE  
DWG NO.  
**C01**



DISTRICT ENGINEER  
MM/DD/YY  
DATE

PROJECT TITLE

**SAN RAFAEL BUS  
EMPLOYEE PARKING LOT PAVING  
AND SOLAR PANELS INSTALLATION**

SHEET TITLE

**TITLE SHEET**

SCALE: AS NOTED

DATE: 7 May 2019



**GOLDEN GATE BRIDGE**  
HIGHWAY & TRANSPORTATION DISTRICT

## DRAWING INDEX

SHT NO.	DWG SHEET TITLE
1 C01	TITLE SHEET
2 C02	GENERAL NOTES, ABBREVIATIONS AND DRAWING INDEX
3 C03	EXISTING UTILITIES PLAN - EMPLOYEE PARKING LOT
4 C04	EXISTING UTILITIES PLAN - VISITOR PARKING LOT
5 C05	DEMOLITION PLAN - EMPLOYEE PARKING LOT
6 C06	DEMOLITION PLAN - VISITOR PARKING LOT
7 C07	SITE PREPARATION PLAN - EMPLOYEE PARKING LOT
8 C08	SITE PREPARATION PLAN - VISITOR & TEMPORARY VISITOR PARKING LOT
9 C09	RESURFACING & IMPROVEMENT PLAN - EMPLOYEE PARKING LOT
10 C10	RESURFACING & IMPROVEMENT PLAN - VISITOR PARKING LOT
11 C11	CONSTRUCTION DETAILS 1
12 C12	EMPLOYEE PARKING LOT DRIVEWAY IMPROVEMENT PLAN
13 C13	VISITOR PARKING LOT DRIVEWAY IMPROVEMENT PLAN 1
14 C14	VISITOR PARKING LOT DRIVEWAY IMPROVEMENT PLAN 2
15 C15	PAVEMENT STRIPING & MARKING PLAN - EMPLOYEE PARKING LOT
16 C16	PAVEMENT STRIPING & MARKING PLAN - VISITOR PARKING LOT
17 A01	EMPLOYEE PARKING LOT SOLAR PANEL LAYOUT
18 E01	ELECTRICAL GENERAL NOTES, ABBREVIATIONS AND SYMBOLS LIST
19 E02	SOLAR PANEL POWER PLAN
20 E0E	BUS MAINTENANCE BLDG. - ELECTRICAL PLAN
21 E04	SOLAR PANEL SINGLE LINE DIAGRAM
22 E05	ELECTRICAL DETAILS AND PANEL SCHEDULE
23 E06	CONSTRUCTION DETAILS 2
24 E07	TYPICAL SECURITY FENCE AND GATE DETAILS

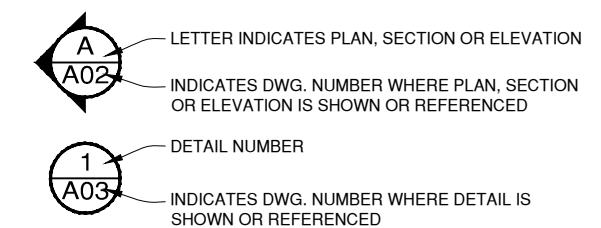
## SYMBOLS & ABBREVIATIONS:

AB	AGGREGATE BASE, ANCHOR BOLT	(N)	NEW
AC	ASPHALT CONCRETE	NIC	NOT IN CONTRACT
ADA	AMERICANS WITH DISABILITIES ACT	NOM	NOMINAL
APPROX	APPROXIMATE	OC	ON CENTER
@	AT	PB	PULL BOX
BET	BETWEEN	PCC	PORTLAND CEMENT CONCRETE
BLDG	BUILDING	PED	PEDESTRIAN
BOT	BOTTOM	PG&E	PACIFIC GAS & ELECTRIC
¢	CENTER LINE	PL	PLATE
C	CONDUIT	PCF	POUNDS PER CUBIC FOOT
C&G	CURB & GUTTER	PSF	POUNDS PER SQUARE FOOT
CLR	CLEARANCE	PSI	POUNDS PER SQUARE INCH
CONC	CONCRETE	PT	PRESSURE-TREATED
CONT	CONTINUOUS	PVC	POLY VINYL CHLORIDE
DET	DETAIL	PVMT	PAVEMENT
DI	DRAIN INLET	±	PLUS/MINUS
DIM	DIMENSIONS	R	RADIUS
Ø	DIAMETER	(R)	RIGHT
DP	DISCHARGE PIPE	RC	RELATIVE COMPACTION
DW	DETECTABLE WARNING	RCP	REINFORCED CONCRETE PIPE
DWG	DRAWING	REBAR	REINFORCING BAR
EA	EACH	REINF	REINFORCED
ELECT	ELECTRICAL	REQD	REQUIRED
EL, ELEV	ELEVATION	RGS	RIGID GALVANIZED STEEL
EJ	EXPANSION JOINT	RW	RETAINING WALL
EQ	EQUAL	R/W	RIGHT-OF-WAY
EW	EACH WAY	SCH	SCHEDULE
EXP	EXPANSION	SECT	SECTION
(E)	EXISTING	SF	SQUARE FEET
FDN	FOUNDATION	SHT	SHEET
FH	FIRE HYDRANT	SIM	SIMILAR
FL	FLOW LINE	SPECS	SPECIFICATIONS
FT	FEET	SQ	SQUARE
FTG	FOOTING	SS	STAINLESS STEEL
G	GROUND	STD	STANDARD
GAL	GALLON	STL	STEEL
GALV	GALVANIZED	SW	SIDEWALK
HMA	HOT MIX ASPHALT	SYM	SYMMETRICAL
HT	HEIGHT	TBM	TEMPORARY BENCH MARK
INV	INVERT	TEMP	TEMPORARY
IRR	IRRIGATION	TOG	TOP OF GRADE, TOP OF GRATE
JT	JOINT	THK	THICK
(L)	LEFT	TOC	TOP OF CURB
LF	LINEAL FEET	TOT	TOTAL
LP	LIGHTPOLE	TOP	TOP OF PIPE, TOP OF PAVEMENT
LOC	LOCATION	TYP	TYPICAL
MAX	MAXIMUM	UON	UNLESS OTHERWISE NOTED
MFR	MANUFACTURER	V	VOLT
MH	MANHOLE	VAR	VARIES
MIN	MINIMUM	VIF	VERIFY IN FIELD
		WD	WIDE
		WP	WEATHERPROOF

## GENERAL NOTES

- CONTRACTOR SHALL POSSESS A VALID STATE OF CALIFORNIA CLASS "A" GENERAL ENGINEERING CONTRACTOR'S LICENSE.
- NEW CONSTRUCTION SHALL EITHER BE UNPREFIXED OR PREFIXED BY (N) OR "NEW". EXISTING CONSTRUCTION SHALL BE PREFIXED BY (E) OR "EXIST".
- CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE MAKING SUBMITTALS, FABRICATING MATERIALS & FIELD CONSTRUCTION.
- CONTRACTOR SHALL SUBMIT WORK PLAN AND HEALTH & SAFETY PLAN & OBTAIN APPROVAL BY THE ENGINEER PRIOR TO STARTING FIELD WORK.
- CONTRACTOR SHALL SUBMIT WATER POLLUTION CONTROL PLAN & OBTAIN APPROVAL BY THE ENGINEER PRIOR TO STARTING COLD PLANING OR EXCAVATION.

## DETAIL / SECTION DESIGNATION



**95% DESIGN REVIEW**

GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS



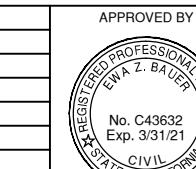
DESIGN	BY	RVG	CHECKED	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY	RVG	CHECKED	
			First MI Last	



PROJECT ENGINEER  
MM/DD/YY  
DATE

REVISIONS  
CONTRACT NO. 2018-BT-098  
CADD FILE: 18T098C002.DWG

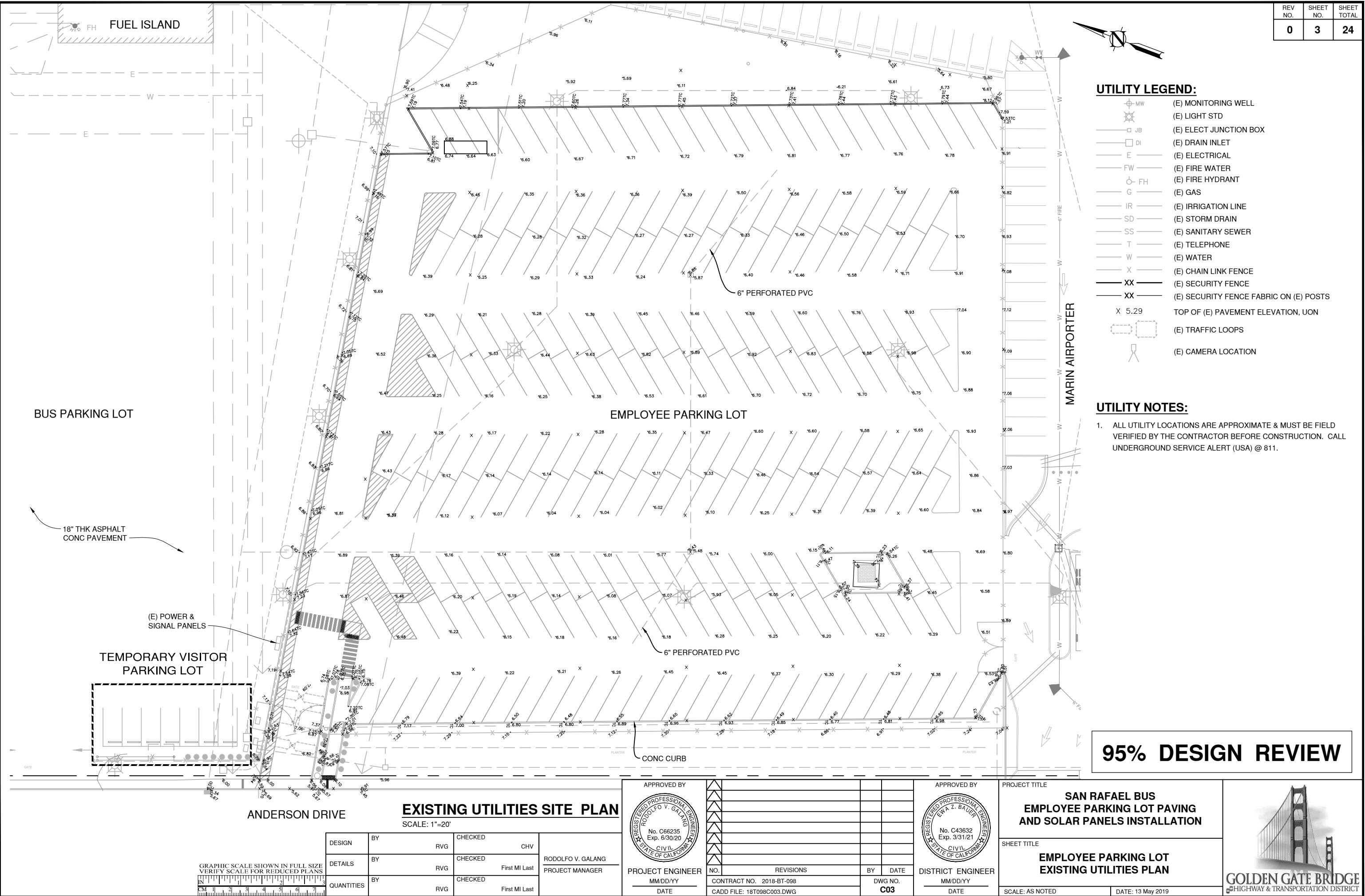
BY DATE  
DWG NO.  
C02

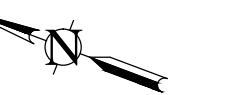


DISTRICT ENGINEER  
MM/DD/YY  
DATE

PROJECT TITLE  
**SAN RAFAEL BUS  
EMPLOYEE PARKING LOT PAVING  
AND SOLAR PANELS INSTALLATION**  
SHEET TITLE  
**GENERAL NOTES, ABBREVIATIONS  
AND DRAWING INDEX**  
SCALE: AS NOTED  
DATE: 13 May 2019





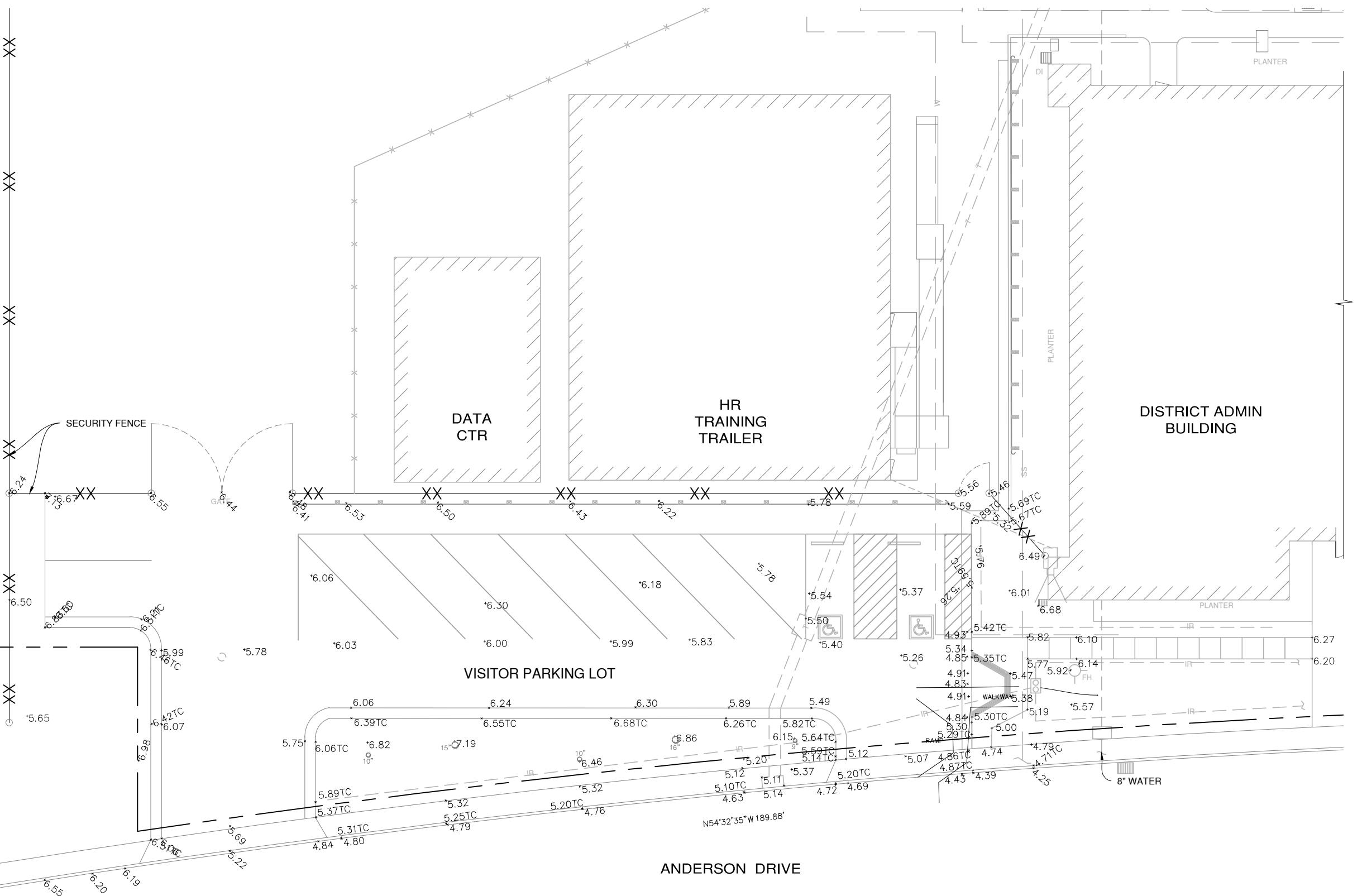


## **UTILITY LEGEND:**

 MW (E) MONITORING WELL  
 JB (E) LIGHT STD  
 DI (E) ELECT JUNCTION BOX  
 E (E) DRAIN INLET  
 FW (E) ELECTRICAL  
 FH (E) FIRE WATER  
 G (E) FIRE HYDRANT  
 IR (E) GAS  
 SD (E) IRRIGATION LINE  
 SS (E) STORM DRAIN  
 T (E) SANITARY SEWER  
 W (E) TELEPHONE  
 X (E) WATER  
 XX (E) CHAIN LINK FENCE  
 XX (E) SECURITY FENCE  
 XX (E) SECURITY FENCE FABRIC ON (E) POSTS  
 X 5.29 TOP OF (E) PAVEMENT ELEVATION, UON  
 (E) TRAFFIC LOOPS  
 (E) CAMERA LOCATION

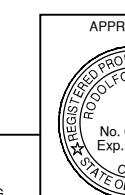
## **UTILITY NOTES:**

- ALL UTILITY LOCATIONS ARE APPROXIMATE & MUST BE FIELD  
VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION. CALL  
UNDERGROUND SERVICE ALERT (USA) @ 811.

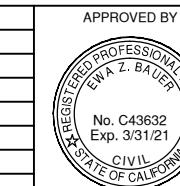


## **EXISTING UTILITIES SITE PLAN**

SCALE: 1"=10'



PROJECT  
MM



DISTRICT ENGINEER  
MM/DD/YY  
DATE

**SAN RAFAEL BUS  
EMPLOYEE PARKING LOT PAVING  
AND SOLAR PANELS INSTALLATION**

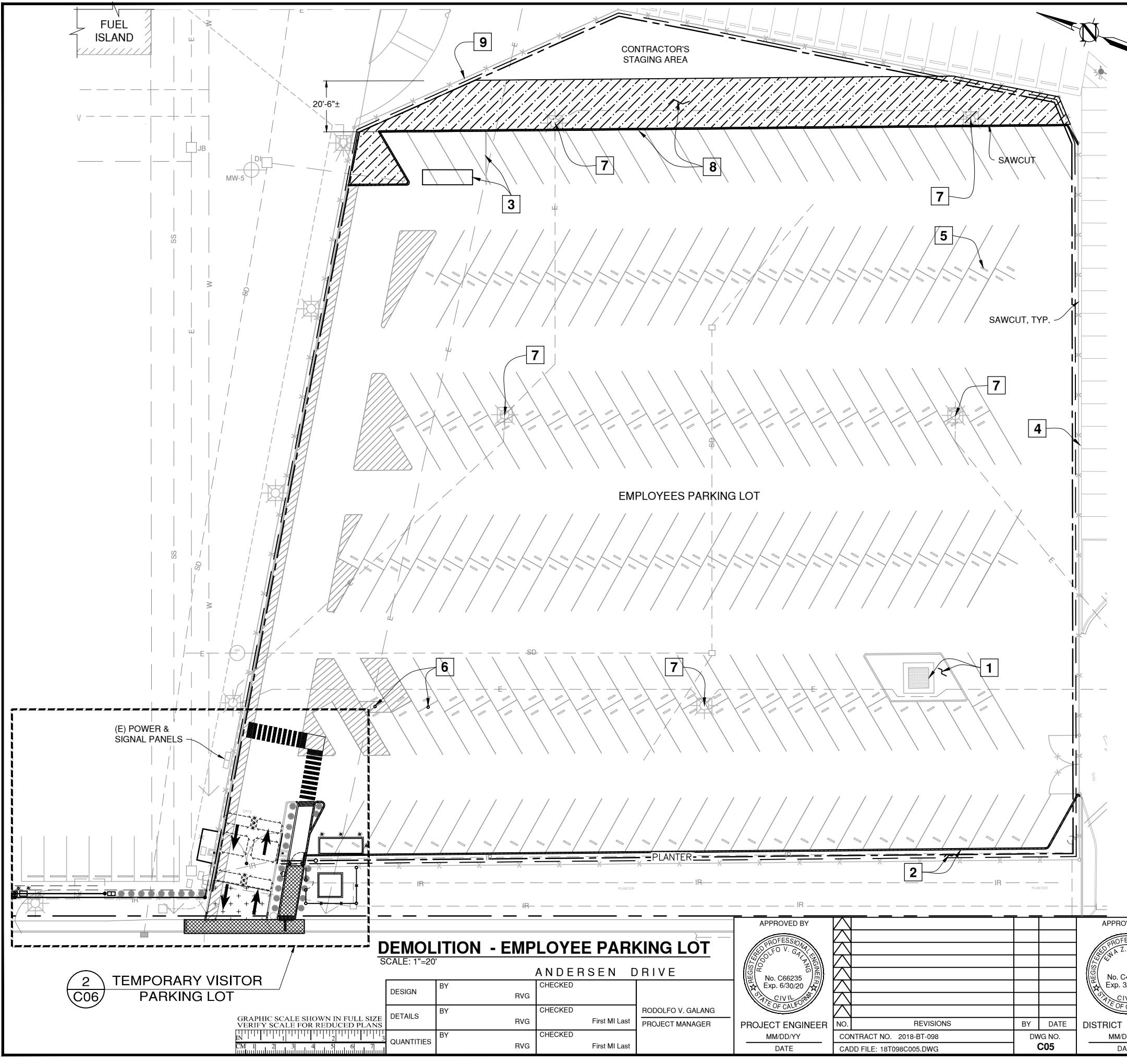
**HEET TITLE**

**VISITOR PARKING LOT  
EXISTING UTILITIES PLAN**

SCALE: AS NOTED DATE: 7 May 2019



**GOLDEN GATE BRIDGE**  
HIGHWAY & TRANSPORTATION DISTRICT

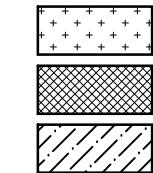


**DESCRIPTION OF WORK:**

- 1** (E) MICROWAVE TOWER STRUCTURE AND CONCRETE MAT FOUNDATION AND CONC CURB TO REMAIN. PRESERVE AND PROTECT FROM DAMAGE. REMOVE & DISPOSE TOP 6" OF SOIL AROUND TOWER FOUNDATION. REPLACE WITH 2" THK. HMA OVER 4" THK. CLASS 2 AB.
  - 2** REMOVE & DISPOSE APPROXIMATELY 325 LF OF CONCRETE CURB, AND APPROX. 12"-24" THICK OF PLANTER SOIL IN ENTIRE PLANTER AREA , CAP IRRIGATION AND/OR WATER LINE, RELOCATE IRRIGATION LINE & UTILITY BOX AS SHOWN ON PLANS.
  - 3** REMOVE & PRESERVE APPROX. 6' X 20' PREFABRICATED METAL SHED. REMOVE & DISPOSE ITS FOUNDATION. REINSTALL SHED AT THE LOCATION AS DIRECTED BY THE ENGINEER . REMOVE & DISPOSE APPROXIMATELY 22 LF OF STEEL PIPE RAILINGS AND ALL CONCRETE FOUNDATIONS.
  - 4** PROTECT & PRESERVE APPROX. 260 LF OF (E) CHAIN LINK FENCING & POSTS DURING CONSTRUCTION.
  - 5** REMOVE & DISPOSE CONCRETE WHEELSTOPs. TYPICAL AT EACH PARKING STALLS.
  - 6** REMOVE & DISPOSE SIGNS & POSTS INCLUDING CONCRETE FOUNDATIONS, TYP.
  - 7** REMOVE LIGHT POLE AND CONC FOUNDATION, SEE DRAWING NO. E05 FOR DETAILS. PROTECT AND PRESERVE ELECTRICAL WIRING AND CONDUIT BELOW GRADE AND INSTALL TRAFFIC RATED ELECTRICAL JUNCTION BOX AND RESTORE POWER TO REMAINING LIGHT POLES.
  - 8** REMOVE & DISPOSE APPROX. 295 LF OF CONCRETE CURB. CLEAR DIRT AREA.
  - 9** REMOVE & DISPOSE APPROX. 116 LF OF CL SECURITY FENCE PRIOR TO GRADING.

## **LEGEND:**

STRAW WATTERS AROUND PERIMETER, SEE CALTRANS STD PLAN DET # T56  
SILT FENCE AROUND PERIMETER, SEE CALTRANS STD PLAN DET # T21



4" ± AC GRIND & OVERLAY ENTIRE WIDTH OF DRIVEWAY X 15'-0" ±  
TO CONFORM TO (N) SIDEWALK AND RESURFACED PARKING LOT

CONCRETE DEMOLITION

GRADE AND BACKFILL, SEE DWG. C11.

## **NOTES:**

1. CONTRACTOR SHALL VERIFY LOCATION OF (E) UTILITIES & SHALL PROTECT ALL (E) UTILITIES DURING CONSTRUCTION. UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
  2. SEE DWG C02 FOR DRAWING INDEX & GENERAL NOTES.
  3. SEE DWG C03 FOR (E) UTILITIES, SITE PLAN, KEY MAP & UTILITY LEGEND & NOTES.
  4. CONTRACTOR'S ATTENTION IS DIRECTED TO THE TRAFFIC CONTROL PLAN & PHASING PLAN.
  5. CONTRACTOR TO IMPLEMENT WATER POLLUTION CONTROL MEASURES AS STATED IN THEIR WORK PLAN PRIOR TO START OF COLD PLANING OR EXCAVATION.
  6. CONTRACTOR SHALL RAISE UTILITY BOXES LOCATED AT VARIOUS LOCATIONS, AS NECESSARY TO MATCH (N) PAVEMENT ELEVATION.
  7. CONTRACTOR SHALL ESTABLISH (N) TOP OF PAVEMENT ELEVATIONS TO OBTAIN POSITIVE DRAINAGE. ELEVATIONS AS SHOWN ON RESURFACING PLANS ARE TOP OF (E) AC SURFACE COURSE, UON. SEE DWG C03.

# **35% DESIGN REVIEW**

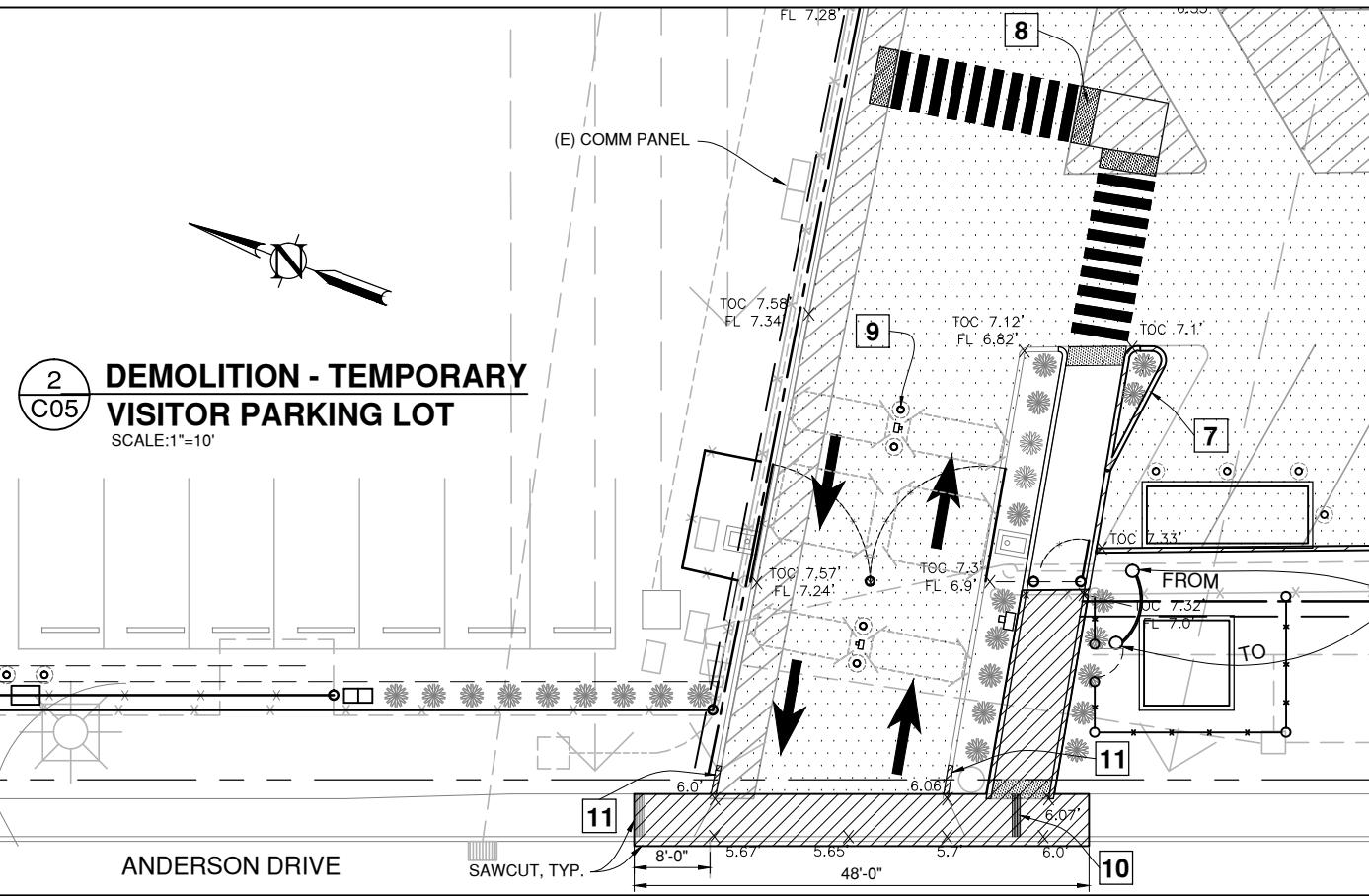
<b>DEMOLITION - EMPLOYEE PARKING LOT</b>				
SCALE: 1"=20'				
<b>ANDERSEN DRIVE</b>				
SIZE PLANS	DESIGN	BY	RVG	CHECKED
	DETAILS	BY	RVG	CHECKED First MI Last
	QUANTITIES	BY	RVG	CHECKED First MI Last
				RODOLFO V. GALANG PROJECT MANAGER

APPROVED BY   <p>RODOLFO V. GALANG REGISTERED PROFESSIONAL ENGINEER No. C66235 Exp. 6/30/20 CIVIL STATE OF CALIFORNIA</p>			
PROJECT ENGINEER MM/DD/YY DATE	NO.	REVISIONS CONTRACT NO. 2018-BT-098 CADD FILE: 18T098C005.DWG	BY DWG NO. <b>C05</b>

APPROVED BY  
EWA Z. BAUER  
REGISTERED PROFESSIONAL ENGINEER  
No. C43632  
Exp. 3/31/21  
STATE OF CALIFORNIA

PROJECT TITLE	<b>SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANELS INSTALLATION</b>
SHEET TITLE	<b>DEMOLITION PLAN EMPLOYEE &amp; TEMPORARY VISITOR PARKING LOT</b>
SCALE: AS NOTED	DATE: 13 May 2019





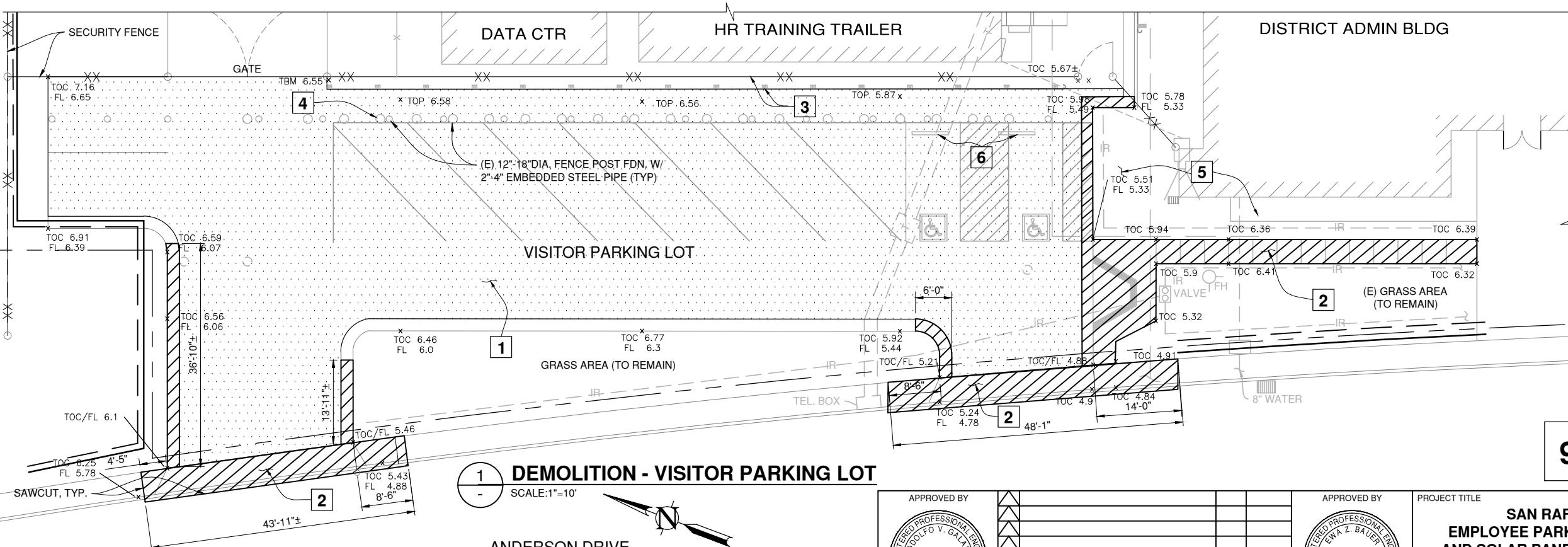
#### NOTES:

- CONTRACTOR SHALL VERIFY LOCATION OF (E) UTILITIES & SHALL PROTECT ALL (E) UTILITIES DURING CONSTRUCTION. UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- SEE DWG C02 FOR DRAWING INDEX & GENERAL NOTES.
- SEE DWG C03 FOR (E) UTILITIES, SITE PLAN, KEY MAP & UTILITY LEGEND & NOTES.
- CONTRACTOR'S ATTENTION IS DIRECTED TO THE TRAFFIC CONTROL PLAN & PHASING PLAN.
- CONTRACTOR TO IMPLEMENT WATER POLLUTION CONTROL MEASURES AS STATED IN THEIR WORK PLAN PRIOR TO START OF COLD PLANING OR EXCAVATION.
- CONTRACTOR SHALL RAISE UTILITY BOXES LOCATED AT VARIOUS LOCATIONS, AS NECESSARY TO MATCH (N) PAVEMENT ELEVATION.
- SAWCUT ALL EDGES OF (E) CONCRETE AND (E) AC PAVEMENT PRIOR TO REMOVAL AND COLD PLANING.
- CONTRACTOR SHALL ESTABLISH (N) TOP OF PAVEMENT ELEVATIONS TO OBTAIN POSITIVE DRAINAGE. ELEVATIONS AS SHOWN ON RESURFACING PLANS ARE TOP OF (E) AC SURFACE COURSE, UON. SEE DWG C03.

EXTEND & RELOCATE IRR. PIPE & UTILITY BOX AS SHOWN.

#### LEGEND:

- — — STRAW WATTLES, SEE CALTRANS STD PLAN DET # T56
- — — SILT FENCE, SEE CALTRANS STD PLAN DET # T21
- 4" ± AC & AB GRIND & OVERLAY PARKING LOT FOR POSITIVE DRAINAGE. SEE DWG. C10 & C11.
- CONCRETE DEMOLITION, TYP.



#### DESCRIPTION OF WORK:

- REMOVE (E) 2-1/2"± AC PVMT AND 1 1/2" AB AT VISITOR PARKING LOT.
- REMOVE & DISPOSE CONCRETE CURB, GUTTER, SIDEWALK AND WALKWAY. SEE DWG C10 & C11 FOR RECONSTRUCTION DETAILS.
- (E) METAL BEAM GUARDRAIL AND CHAIN LINK FENCE AND GATE SHALL REMAIN IN PLACE.
- REMOVE & DISPOSE STEEL PIPE AND CONCRETE FOUNDATION, TYP.
- REMOVE SHRUB TO RECONSTRUCT CURB AND RAMP. RELOCATE IRR. LINES AS NEEDED.
- REMOVE & DISPOSE (E) WHEELSTOP.
- REMOVE & DISPOSE APPROX. 40 LF OF CONCRETE CURB. REMOVE & DISPOSE APPROX. 12" THICK OF PLANTER SOIL. CAP ENCOUNTERED IRRIGATION LINE. REPLACE WITH (N) 4" HMA OVER 6" CLASS 2 AB TO MATCH SURROUNDING PAVEMENT.
- REMOVE & DISPOSE DETECTABLE TRUNCATED DOME AND CONCRETE SLAB. (3 LOCATIONS).
- REMOVE AND REPLACE (E) TRAFFIC SIGNAL LOOPS. CONTRACTOR SHALL SUBMIT WORK PLAN FOR REVIEW & APPROVAL PRIOR TO REMOVAL. COORDINATE WITH THE GGB BUS DIVISION. PROTECT (E) CARD READER AND UNDERGROUND UTILITIES.
- REMOVE AND DISPOSE CONCRETE CURB, GUTTER & SIDEWALK. SEE DETAIL 1, DWG. C13 & C14 FOR DRIVEWAY AND SIDEWALK RECONSTRUCTION SAWCUT & REMOVE 6" STRIP OF (E) AC PVMT. TO INSTALL (N) CONC. C&G, SIDEWALK & DRIVEWAY, INSTALL HMA FULL DEPTH TO MATCH (E) PAVEMENT ELEV. AFTER CONCRETE CURING.
- REMOVE & DISPOSE APPROX. 3 LF OF (E) CURB AT EACH SIDE OF THE DRIVEWAY. SEE SECTION D & E, DWG. C12 FOR RECONSTRUCTION.

**95% DESIGN REVIEW**



APPROVED BY  
PROJECT ENGINEER  
MM/DD/YY  
DATE

CHECKED  
First MI Last  
REVISIONS  
BY DATE

RODOLFO V. GALANG  
PROJECT MANAGER



APPROVED BY  
DISTRICT ENGINEER  
MM/DD/YY  
DATE

REVISIONS  
BY DATE

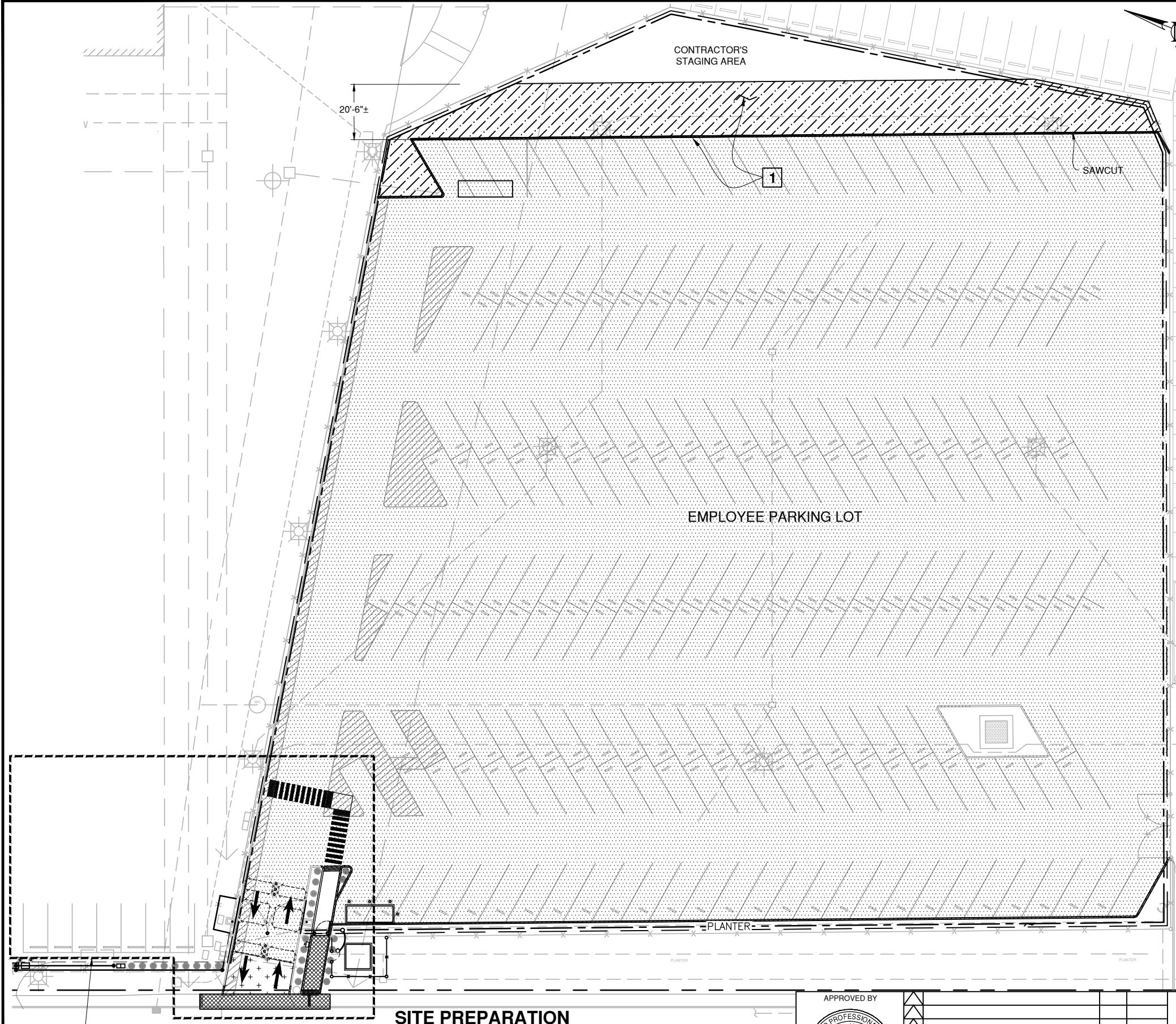
PROJECT TITLE  
SAN RAFAEL BUS  
EMPLOYEE PARKING LOT PAVING  
AND SOLAR PANELS INSTALLATION

SHEET TITLE  
DEMOLITION PLAN  
VISITOR & TEMPORARY VISITOR  
PARKING LOT

SCALE: AS NOTED

DATE: 13 May 2019



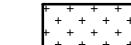


#### DESCRIPTION OF WORK:

- 1** BACKFILL & COMPACT WITH 3-INCH MINUS ROCK, CLASS 2 AB, AND 4" THK. HMA PAVEMENT. SEE SECTION F, DWG. C11 FOR CONSTRUCTION DETAILS.

#### LEGEND:

STRAW WATTLES AROUND PERIMETER, SEE CALTRANS STD PLAN DET # T56  
SILT FENCE AROUND PERIMETER, SEE CALTRANS STD PLAN DET # T21



4"± AC GRIND & OVERLAY ENTIRE WIDTH OF DRIVEWAY X 15'-0" ± TO CONFORM TO (N) SIDEWALK AND RESURFACED PARKING LOT

CONCRETE DEMOLITION

GRADE AND BACKFILL, SEE DWG. C11.

4" ± AC & AB GRIND & OVERLAY PARKING LOT FOR POSITIVE DRAINAGE. SEE DWG. C10 & C11.

#### NOTES:

1. CONTRACTOR SHALL VERIFY LOCATION OF (E) UTILITIES & SHALL PROTECT ALL (E) UTILITIES DURING CONSTRUCTION. UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
2. SEE DWG C02 FOR DRAWING INDEX & GENERAL NOTES.
3. SEE DWG C03 FOR (E) UTILITIES, SITE PLAN, KEY MAP & UTILITY LEGEND & NOTES.
4. CONTRACTOR'S ATTENTION IS DIRECTED TO THE TRAFFIC CONTROL PLAN & PHASING PLAN, TYP ALL SHEETS.
5. CONTRACTOR TO IMPLEMENT WATER POLLUTION CONTROL MEASURES AS STATED IN THEIR WORK PLAN PRIOR TO START OF COLD PLANING OR EXCAVATION.
6. CONTRACTOR SHALL RAISE UTILITY BOXES LOCATED AT VARIOUS LOCATIONS, AS NECESSARY TO MATCH (N) PAVEMENT ELEVATION.
7. CONTRACTOR SHALL ESTABLISH (N) TOP OF PAVEMENT ELEVATIONS TO OBTAIN POSITIVE DRAINAGE. ELEVATIONS AS SHOWN ON RESURFACING PLANS ARE TOP OF (E) AC SURFACE COURSE, UON. SEE DWG C03.

**35% DESIGN REVIEW**

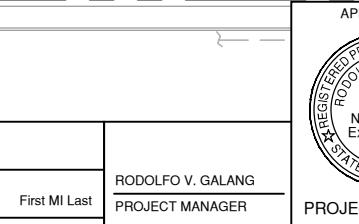
#### SITE PREPARATION EMPLOYEE PARKING LOT

SCALE: 1=20'

GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS



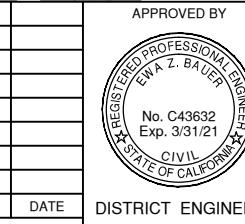
DESIGN	BY	RVG	CHECKED	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY	RVG	CHECKED	
QUANTITIES	BY	RVG	CHECKED	



PROJECT ENGINEER  
MM/DD/YY  
DATE

REVISIONS  
CONTRACT NO. 2018-BT-098  
CADD FILE: 18T098C007.DWG

BY DATE  
DWG NO.  
**C07**



DISTRICT ENGINEER  
MM/DD/YY  
DATE

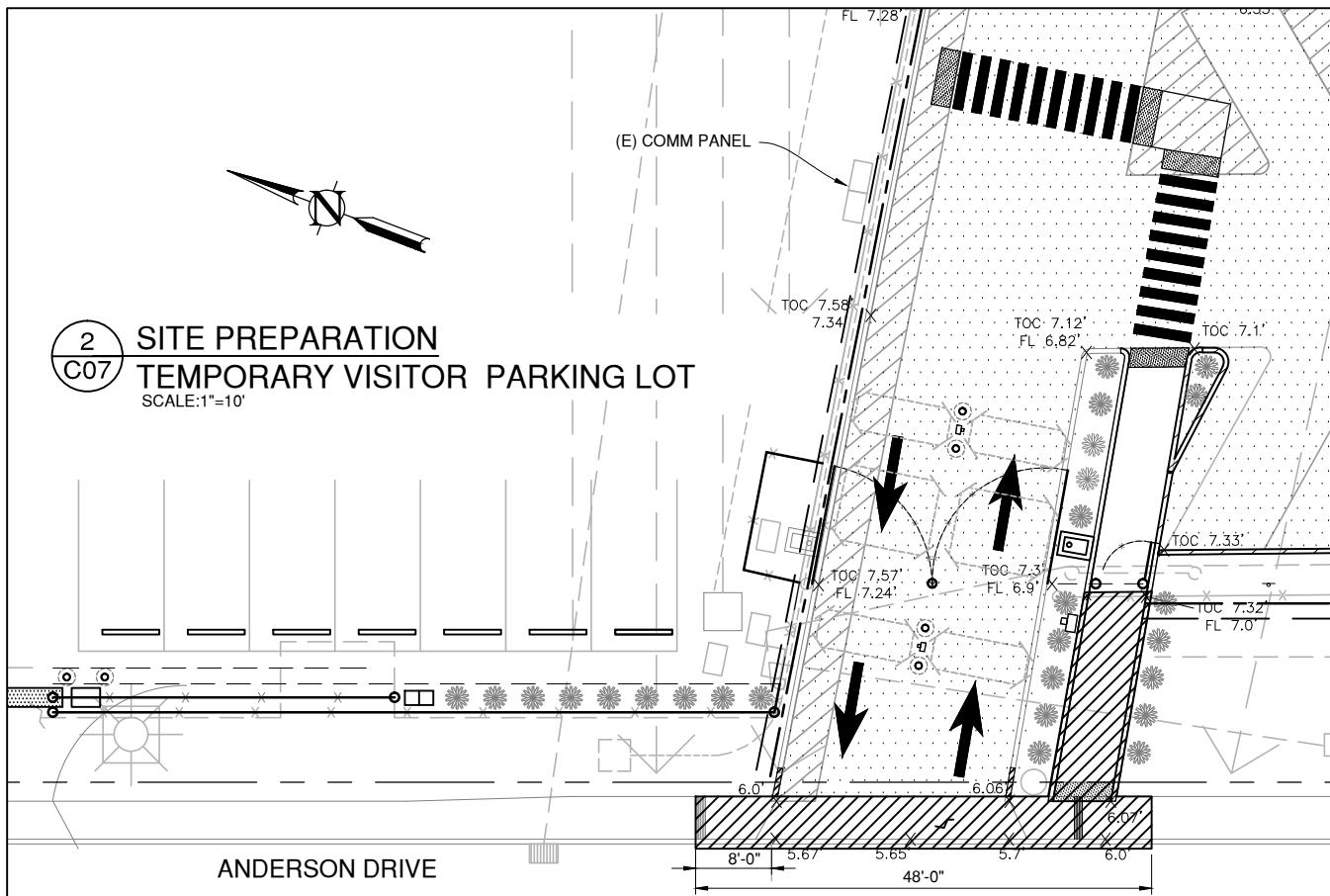
PROJECT TITLE  
**SAN RAFAEL BUS  
EMPLOYEE PARKING LOT PAVING  
AND SOLAR PANELS INSTALLATION**

SHEET TITLE  
**SITE PREPARATION PLAN  
EMPLOYEE PARKING LOT**

SCALE: AS NOTED

DATE: 13 May 2019





#### DESCRIPTION OF WORK:

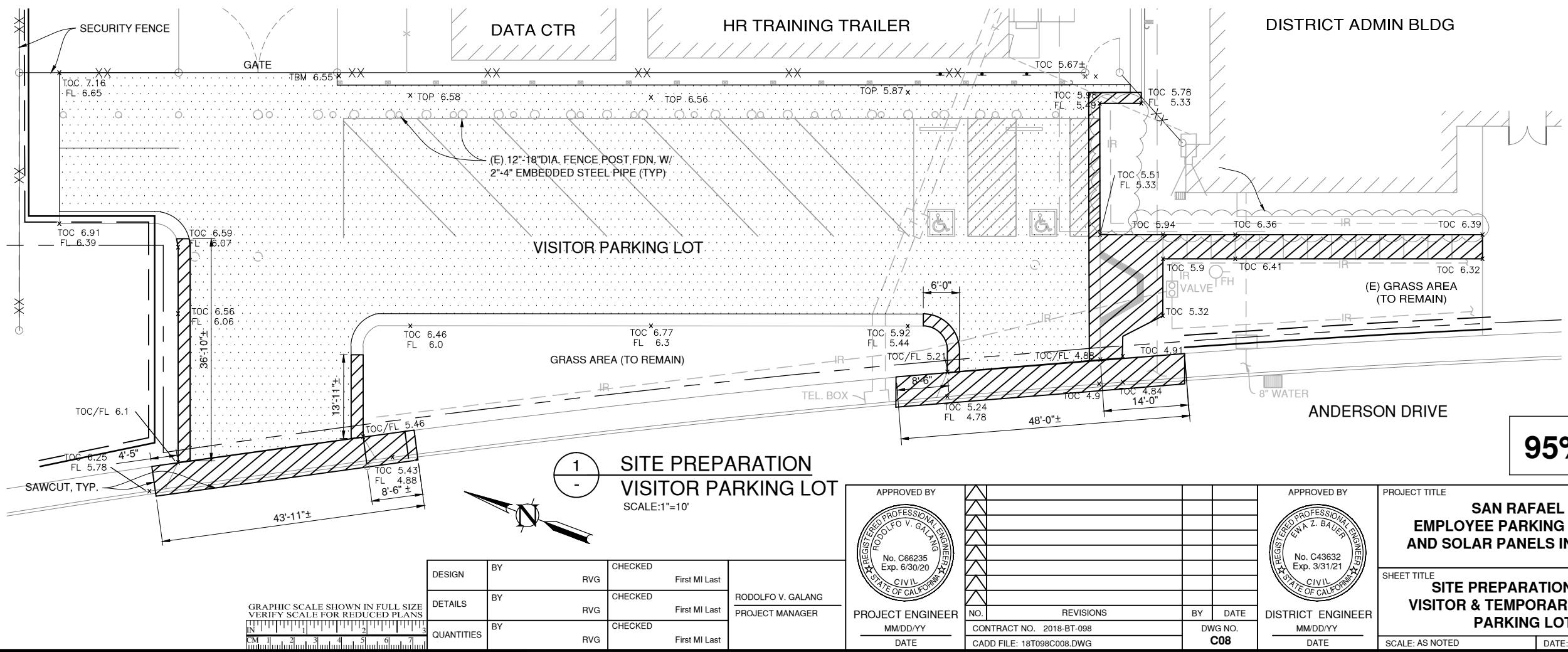
- 1 OVERLAY WITH (N) 4" MIN. HMA FOR POSITIVE DRAINAGE AND CONFORM TO (N) CONCRETE CURB, GUTTER AND SIDEWALK.

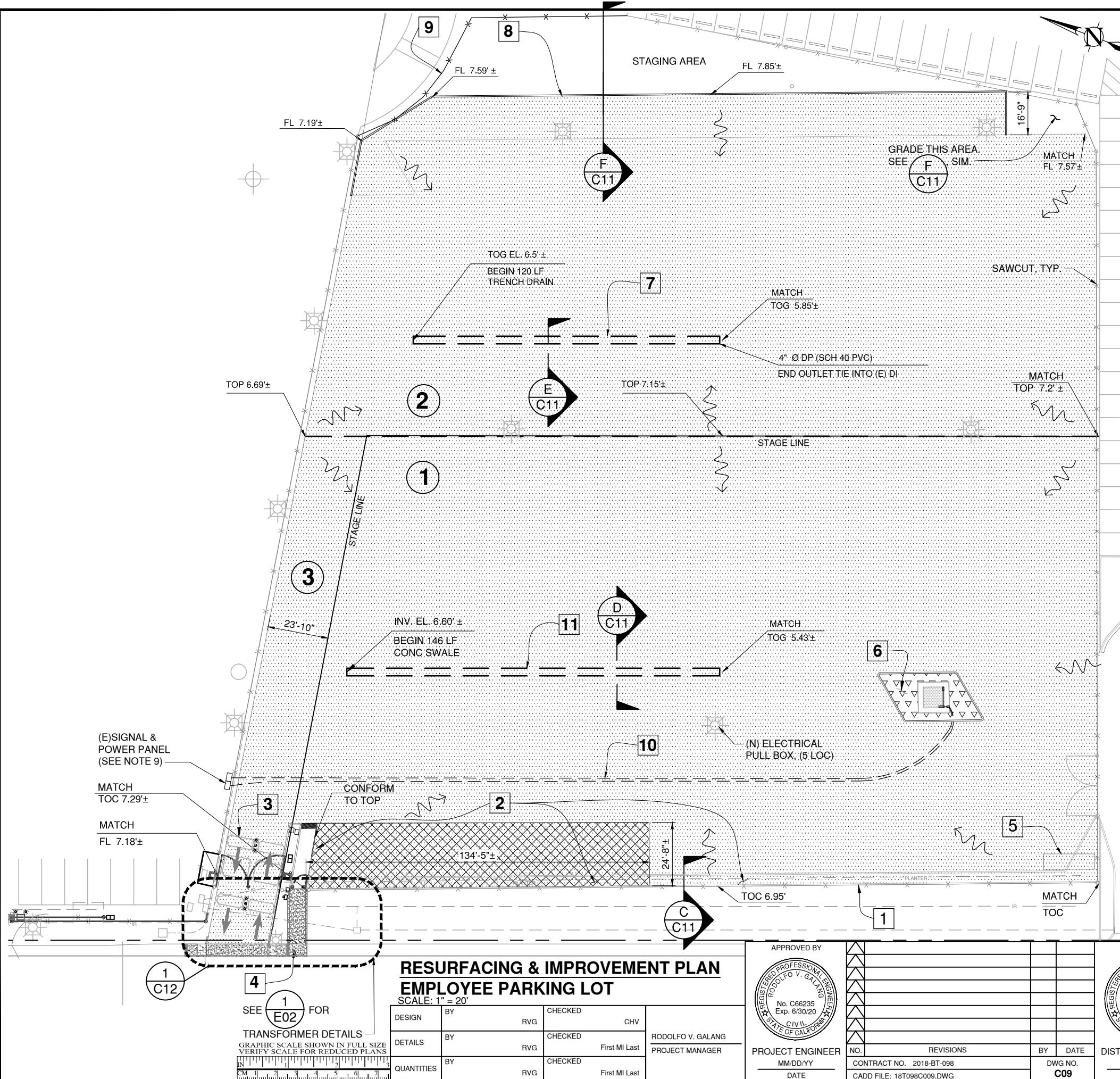
#### LEGEND:

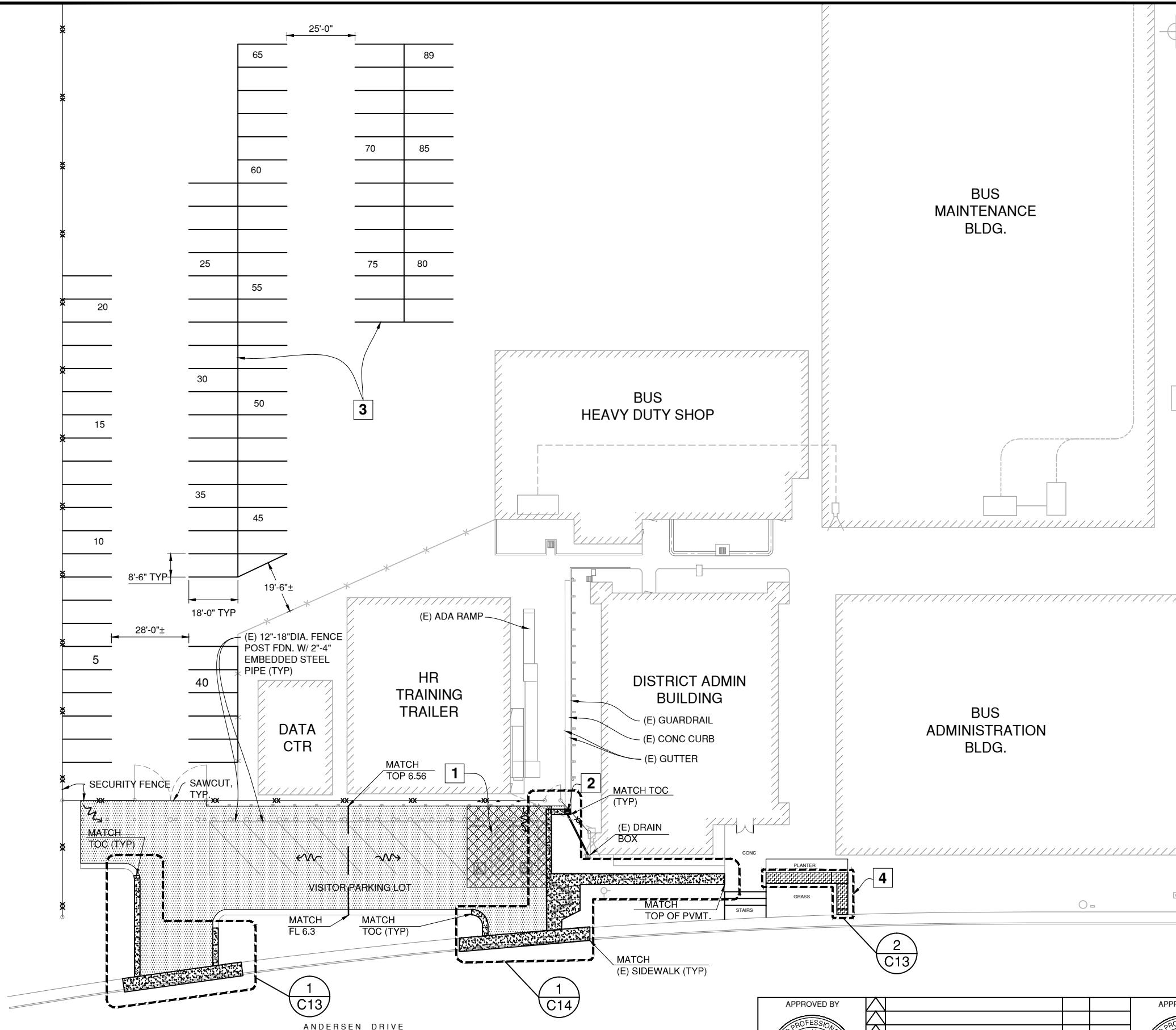
— — —	SILT FENCE, SEE CALTRANS STD PLAN DET # T21
— — —	STRAW WATTLES, SEE CALTRANS STD PLAN DET # T56
— — —	4" ± AC & AB GRIND & OVERLAY PARKING LOT FOR POSITIVE DRAINAGE. SEE DWG. C10 & C11.
— — —	CONCRETE DEMOLITION, TYP.

#### NOTES:

1. CONTRACTOR SHALL VERIFY LOCATION OF (E) UTILITIES & SHALL PROTECT ALL (E) UTILITIES DURING CONSTRUCTION. UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
2. SEE DWG C02 FOR DRAWING INDEX & GENERAL NOTES.
3. SEE DWG C03 FOR (E) UTILITIES, SITE PLAN, KEY MAP & UTILITY LEGEND & NOTES.
4. CONTRACTOR'S ATTENTION IS DIRECTED TO THE TRAFFIC CONTROL PLAN & PHASING PLAN, TYP ALL SHEETS.
5. CONTRACTOR TO IMPLEMENT WATER POLLUTION CONTROL MEASURES AS STATED IN THEIR WORK PLAN PRIOR TO START OF COLD PLANING OR EXCAVATION.
6. CONTRACTOR SHALL RAISE UTILITY BOXES LOCATED AT VARIOUS LOCATIONS, AS NECESSARY TO MATCH (N) PAVEMENT ELEVATION.
7. SAWCUT ALL EDGES OF (E) CONCRETE AND (E) AC PAVEMENT PRIOR TO REMOVAL AND COLD PLANING.
8. CONTRACTOR SHALL ESTABLISH (N) TOP OF PAVEMENT ELEVATIONS TO OBTAIN POSITIVE DRAINAGE. ELEVATIONS AS SHOWN ON RESURFACING PLANS ARE TOP OF (E) AC SURFACE COURSE, UON. SEE DWG C03.







### DESCRIPTION OF WORK:

- 1 (N) 4" MIN. HMA PARKING AREA WITH SLOPES NOT TO EXCEED 1.5% AT EACH DIRECTION.
- 2 (N) 24" X 24" DRAIN BOX WITH 4"Ø SCH. 40 PVC PIPE TIE-IN TO (E) DRAIN BOX AS SHOWN. PROVIDE MIN. 2% DROP.
- 3 APPLY PAINT STRIPING FOR TEMPORARY EMPLOYEE PARKING.
- 4 REMOVE LANDSCAPING, RE-GRADE AND CONSTRUCT TEMPORARY ADA RAMP AND RAILING WITH NON-SKID PLYWOOD AND WOOD RAILING. CROSS SLOPE SHALL NOT EXCEED 1.5%. SEE DETAIL 2 ON DWG. C10. REPLACE LANDSCAPING AFTER USE OF ADA RAMP.

### LEGEND:

X 3.85	(E) TOP OF PVMT ELEVATION, UON
—	RIDGE LINE (VIF)
4.35	APPROX (N) TOP PVMT ELEVATION, UON. CONTRACTOR TO ADJUST ELEV. AS REQD. FOR PROPER DRAINAGE.
← →	FLOW
██████	(N) 4" THK MIN 1/2" HMA TYPE A SEE SECT. B, DWG. C11
██████	ADA PARKING AREA
██████	(N) CONCRETE CURB & GUTTER AND SIDEWALK
██████	TEMPORARY ADA RAMP

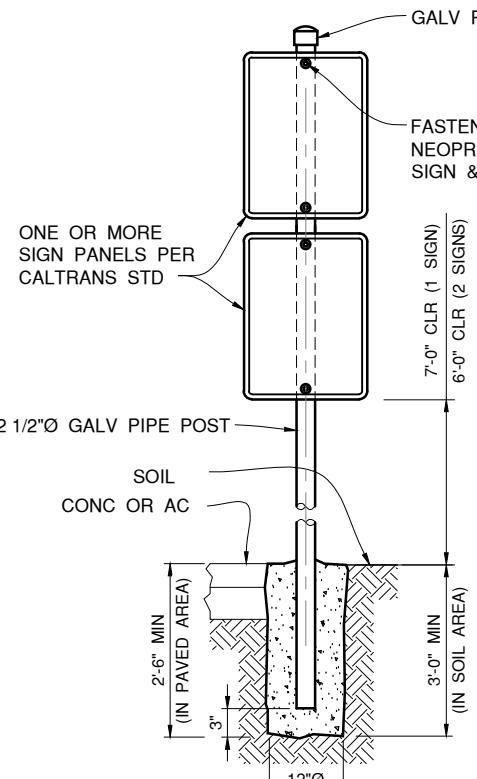
### NOTES:

1. PAVEMENT ELEVATION AROUND THE PERIMETER SHALL MATCH THE (E) PAVEMENT OR (E) CONC GUTTER ELEVATION, UON TO PROVIDE FOR PROPER DRAINAGE.
2. CURB REVEAL SHALL BE 6"±, UON.
3. CONTRACTOR SHALL ESTABLISH TOP OF PVMT ELEVATION TO PROVIDE MIN HMA THICKNESS & TO PROVIDE FOR POSITIVE DRAINAGE. ELEVATIONS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL.
4. CROSS HATCHED ADA PARKING AREA SHALL HAVE SLOPE NOT TO EXCEED 1.5% AT EACH DIRECTION.

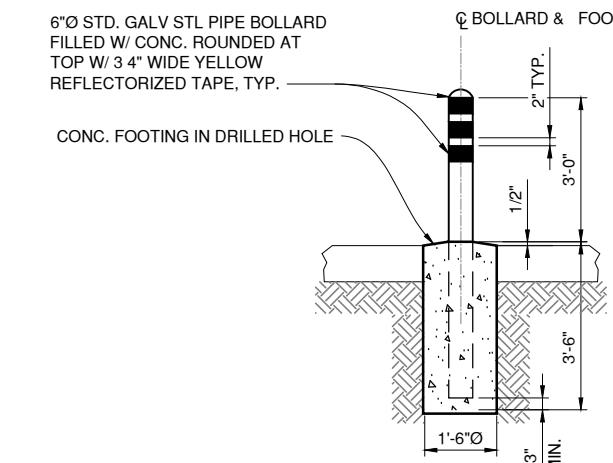
**95% DESIGN REVIEW**

APPROVED BY  No. C66235 Exp. 6/30/20 CIVIL STATE OF CALIFORNIA	PROJECT ENGINEER MM/DD/YY DATE	APPROVED BY  No. C43632 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA	PROJECT TITLE <b>SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANELS INSTALLATION</b>
DESIGN BY RVG CHECKED CHV DETAILS BY RVG CHECKED First MI Last QUANTITIES BY RVG CHECKED First MI Last	REVISIONS BY DATE	DWG NO. C10	SHEET TITLE <b>RESURFACING &amp; IMPROVEMENT PLAN VISITOR PARKING LOT</b>
RODOLFO V. GALANG PROJECT MANAGER	CONTRACT NO. 2018-BT-098 CADD FILE: 18T098C010.DWG	DISTRICT ENGINEER MM/DD/YY DATE	SCALE: AS NOTED DATE: 10 May 2019

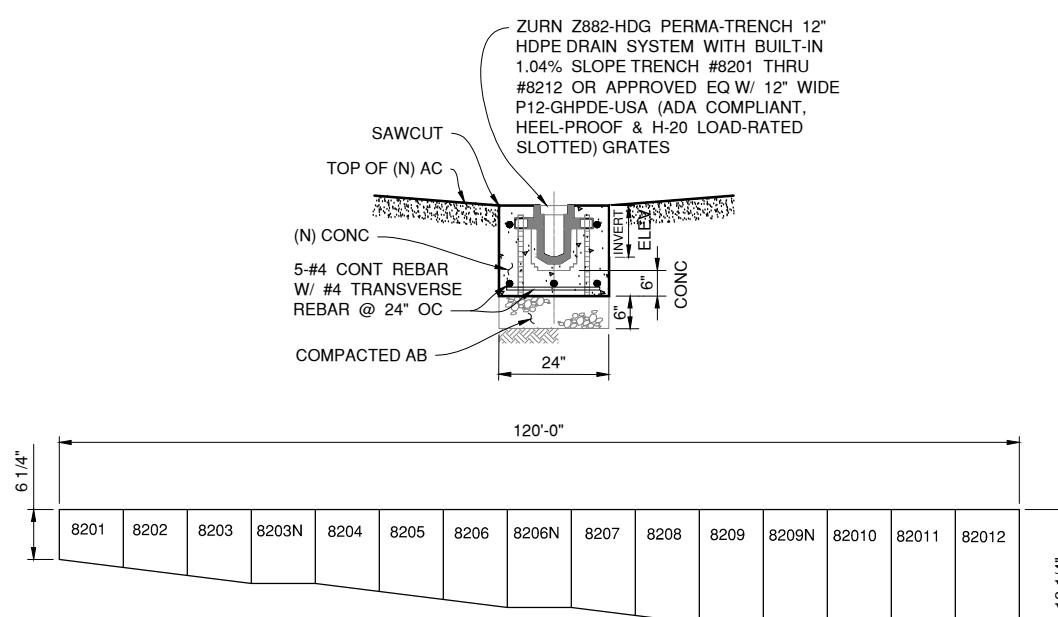




**TYPICAL SIGN POST DETAIL**  
C15  
SCALE: 3/4" = 1'-0"



**TYPICAL FIXED BOLLARD DETAIL**  
C15  
SCALE: 1/2" = 1'-0"

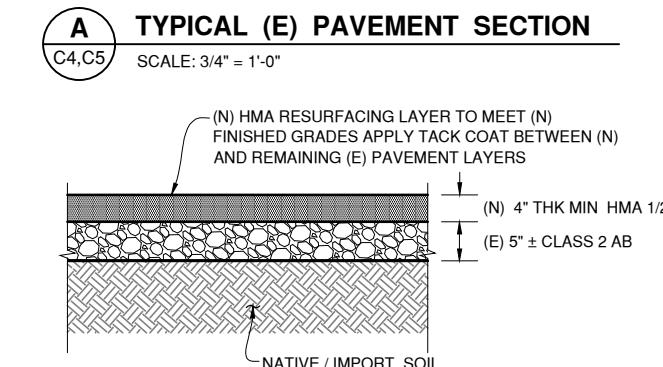
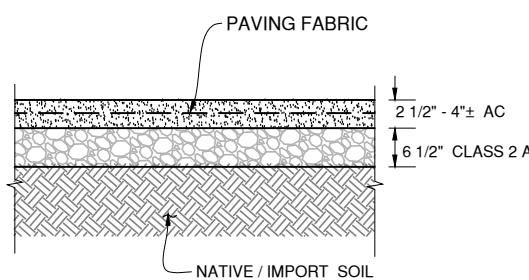


**TRENCH DRAIN Z882-HDG SYSTEM**  
E C09  
NOT TO SCALE

## 35% DESIGN REVIEW

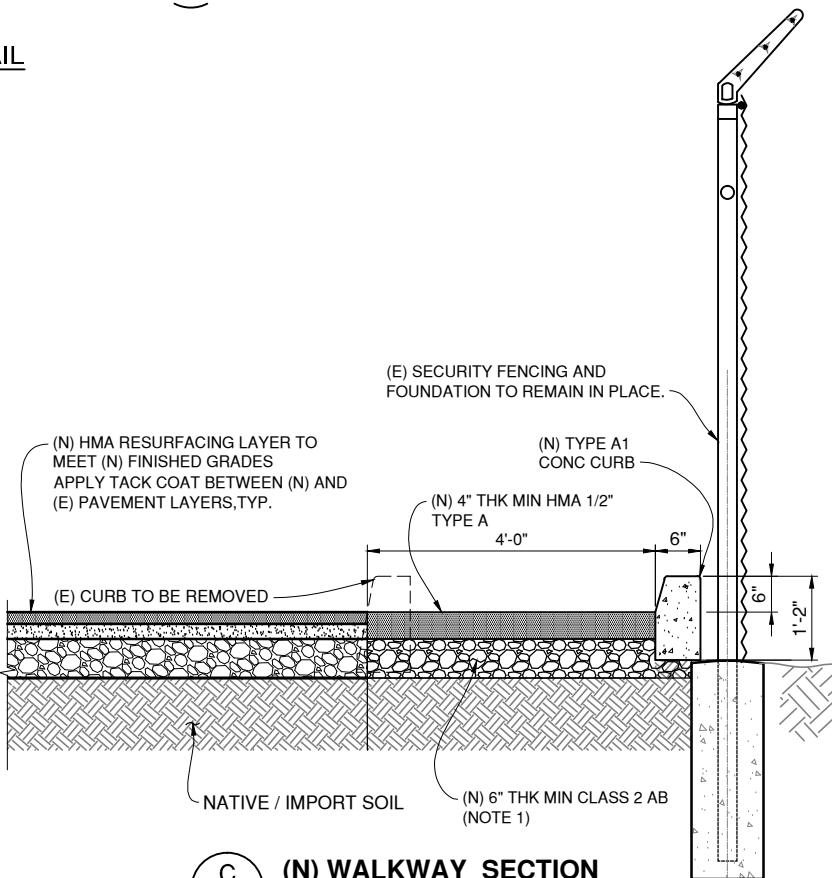
GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

DESIGN	BY	RVG	CHECKED	CHV	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY	RVG	CHECKED	First MI Last	
QUANTITIES	BY	RVG	CHECKED	First MI Last	

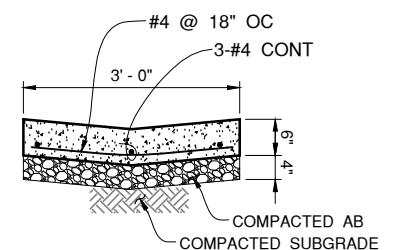


**TYPICAL (E) PAVEMENT SECTION**  
A C4,C5  
SCALE: 3/4" = 1'-0"

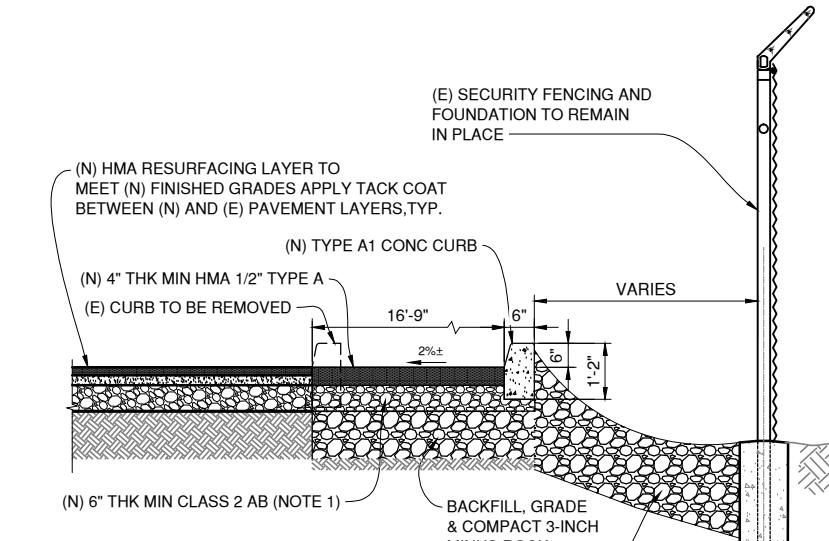
**TYPICAL (N) RESURFACING SECTION**  
B C09,C10  
SCALE: 3/4" = 1'-0"



**(N) WALKWAY SECTION**  
C C09  
SCALE: 3/4" = 1'-0"



**CONCRETE SWALE**  
D C09  
SCALE: 3/4" = 1'-0"



**PARKING LOT EXTENSION DETAILS**  
F C09  
NOT TO SCALE

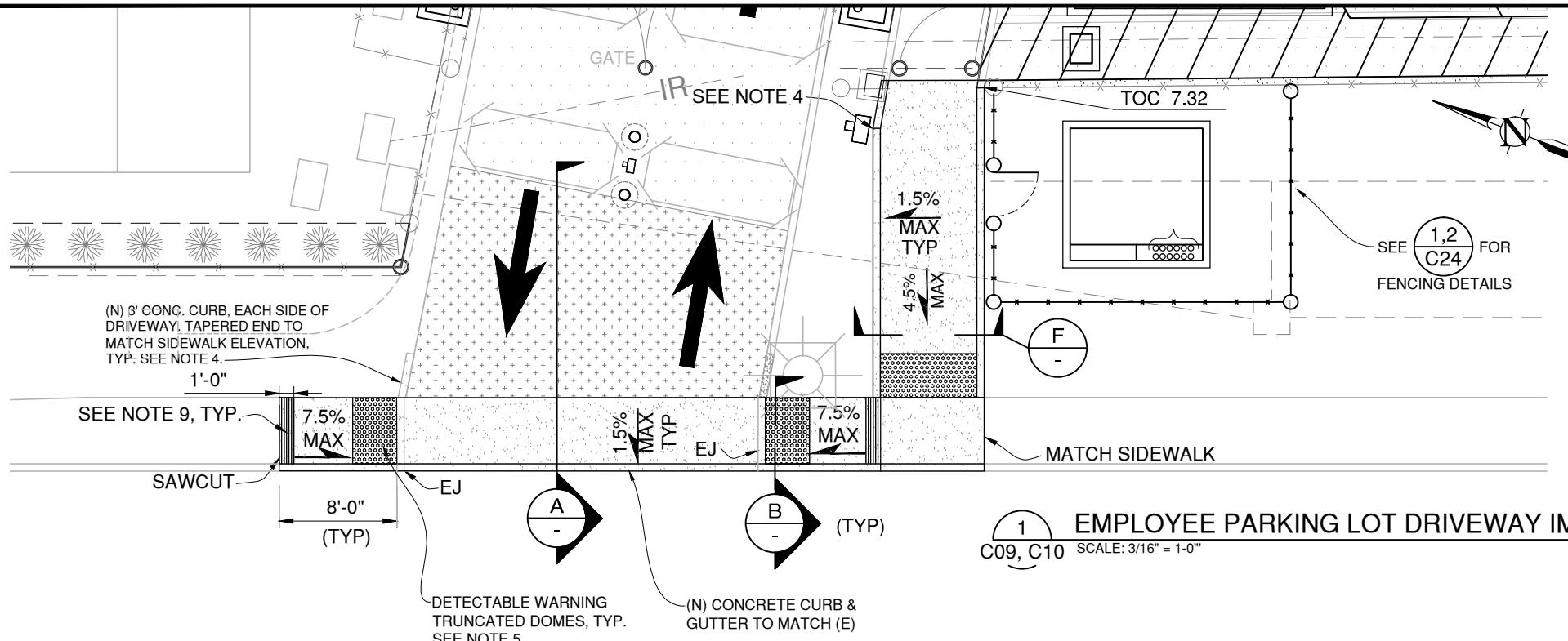
APPROVED BY RODOLFO V. GALANG REGISTERED PROFESSIONAL ENGINEER No. C66235 Exp. 6/30/20 CIVIL STATE OF CALIFORNIA	PROJECT ENGINEER MM/DD/YY DATE	REVISIONS	BY DATE	APPROVED BY EW A Z. BAUER REGISTERED PROFESSIONAL ENGINEER No. C43632 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA	PROJECT TITLE <b>SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANELS INSTALLATION</b>
	DISTRICT ENGINEER MM/DD/YY DATE	C11	DWG NO.		SHEET TITLE <b>CONSTRUCTION DETAILS 1</b>

SCALE: AS NOTED DATE: 9 May 2019

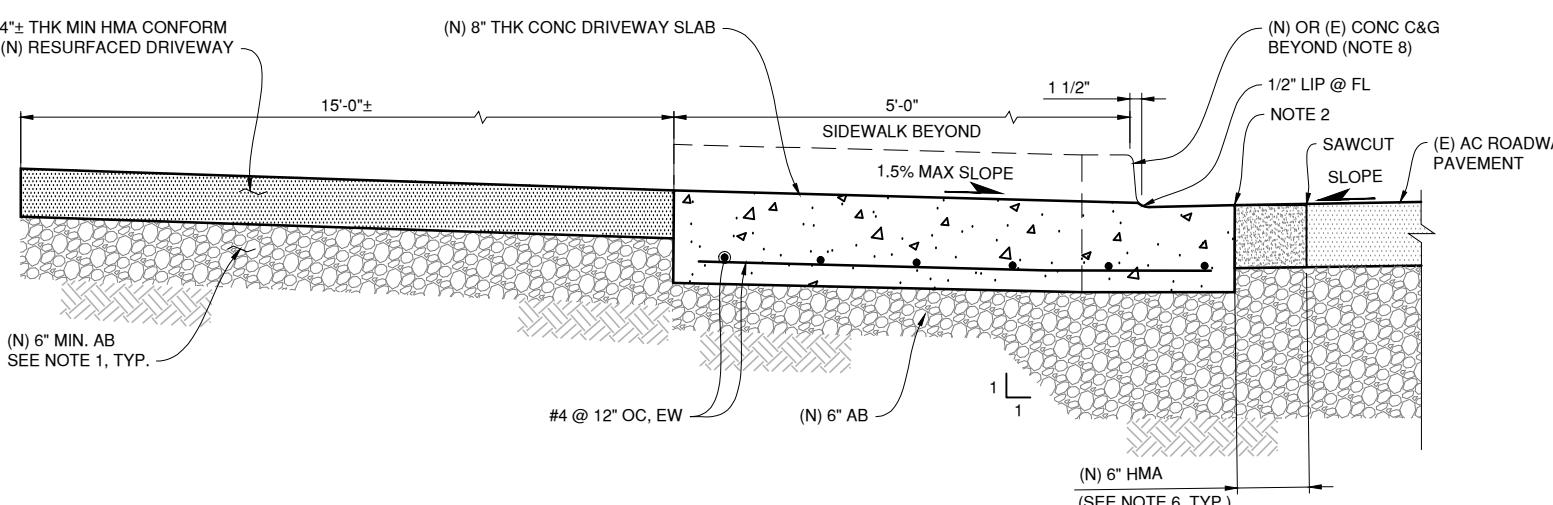


## NOTES:

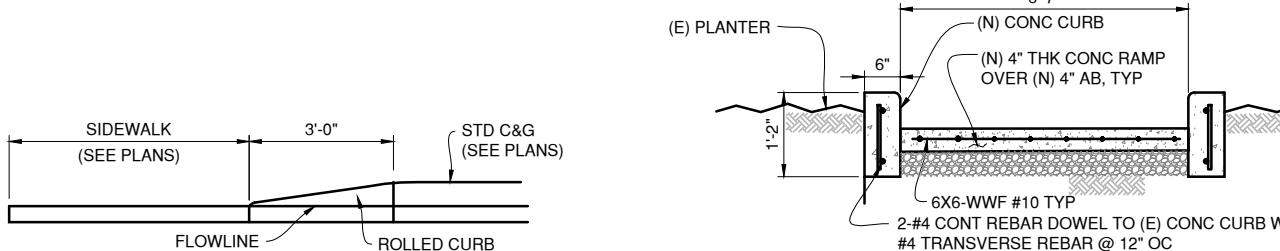
1. COMPACT SUBGRADE, AB, & HMA TO 95% MIN RELATIVE DENSITY, TYP. REPLACE UNSUITABLE SUBGRADE MATERIAL WITH AB OR AC GRINDINGS TO ACHIEVE COMPACTION AS NEEDED.
2. INSTALL 2-#4 EPOXY DOWELS AT INTERFACE OF (N) & (E) CONCRETE CURB.
3. APPLY TACK COAT AT ALL VERTICAL SURFACES OF (E) AND (N) PAVEMENT, CURBS, GUTTERS, AND CONSTRUCTION JOINTS.
4. PROTECT (E) FENCING DURING CONSTRUCTION. ANY DAMAGE TO (E) FENCING SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
5. GALV. STEEL PIPE POSTS WITH CONC. FOOTINGS SHALL BE FOR (N) SIGNS, UON.
6. LOCATIONS OF SIGNS ARE AS SHOWN ON DWG C15 OR AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL OBTAIN STREETS & HIGHWAY CODE SECTION & TEL. NUMBERS FROM THE ENGINEER PRIOR TO SIGN FABRICATION.
8. ALL SIGN MARKINGS SHALL CONFORM WITH THE STANDARDS OF FEDERAL HIGHWAY ADMINISTRATION (FHWA) LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES MUTCD 2014 & CALTRANS STANDARDS PLANS, 2015.
9. PROVIDE END OUTLET ADAPTER FOR 4" Ø SCH 40 PVC DISCHARGE PIPE TO TIE TO (E) DRAIN INLET.



EMPLOYEE PARKING LOT DRIVEWAY IMPROVEMENT PLAN  
C09, C10 SCALE: 3/16" = 1'-0"



EMPLOYEE PARKING LOT CONCRETE DRIVEWAY  
SCALE: 1 1/2" = 1'-0"



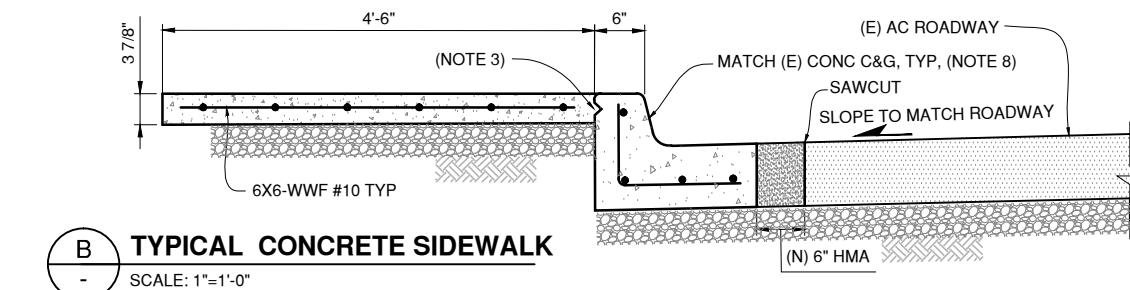
TYPICAL CONCRETE CURB TRANSITION  
C13 SCALE: 1/2" = 1'-0"

CONCRETE RAMP DETAIL  
F - SCALE: 3/4" = 1'-0"

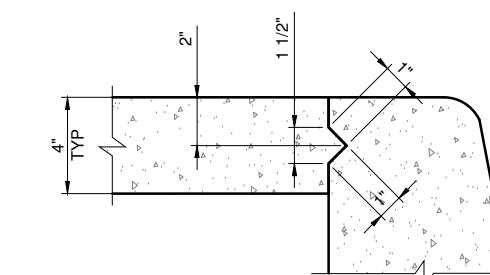
GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

IN	1	2	3	4	5	6	7
CM	1	2	3	4	5	6	7

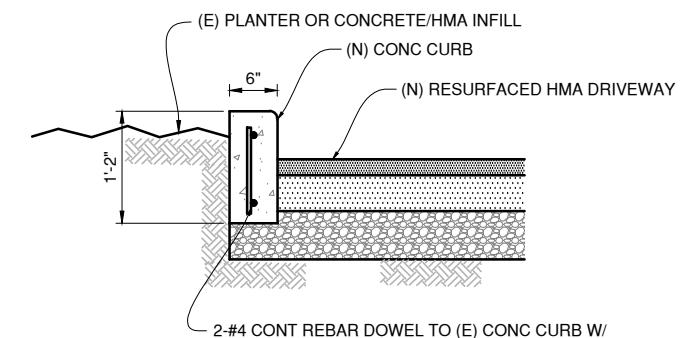
DESIGN	BY	RVG	CHECKED	CHV	PROJECT MANAGER RODOLFO V. GALANG		
DETAILS	BY	RVG	CHECKED	First MI Last			
QUANTITIES	BY	RVG	CHECKED	First MI Last			
GRAPHIC SCALE SHOWN IN FULL SIZE VERIFY SCALE FOR REDUCED PLANS	IN	1	2	3	4	5	6
	CM	1	2	3	4	5	6



TYPICAL CONCRETE SIDEWALK  
B - SCALE: 1"=1'-0"



TYPICAL LONGITUDINAL CONSTRUCTION  
JOINT FOR CONCRETE SIDEWALK  
C C13 SCALE: 1 1/2" = 1'-0"

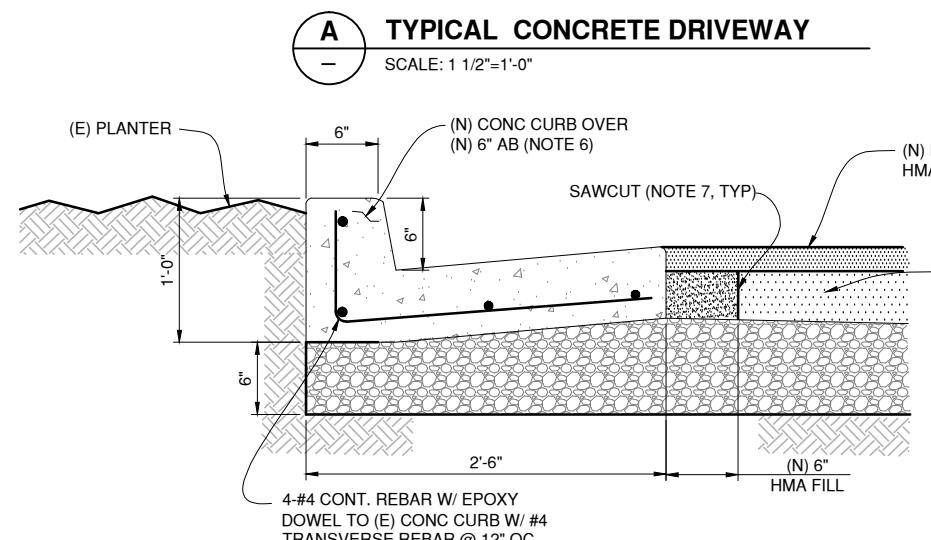
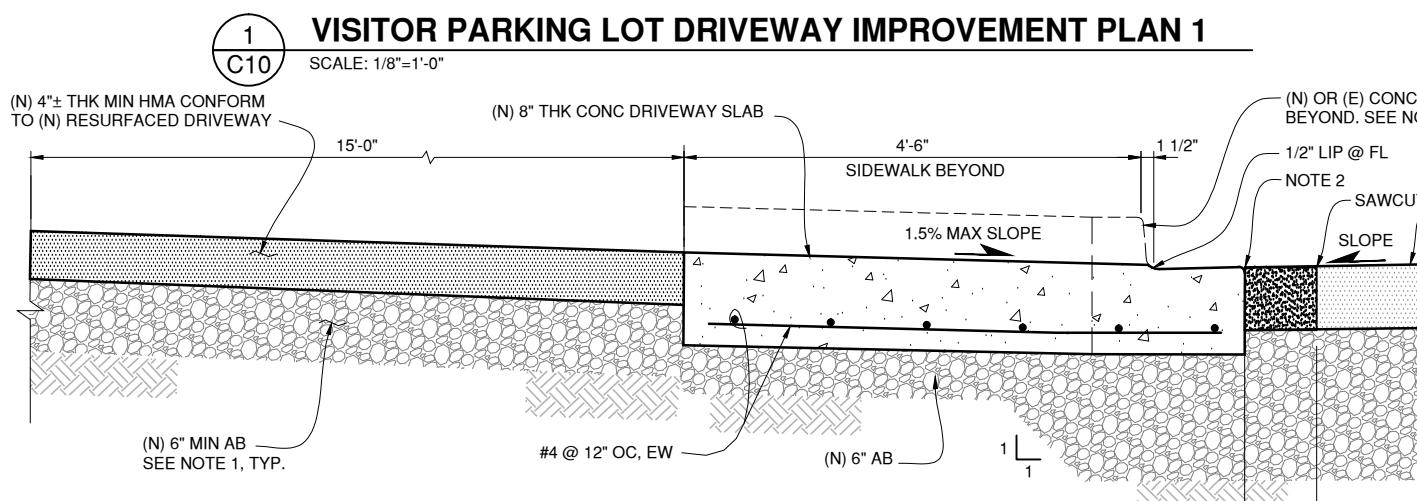
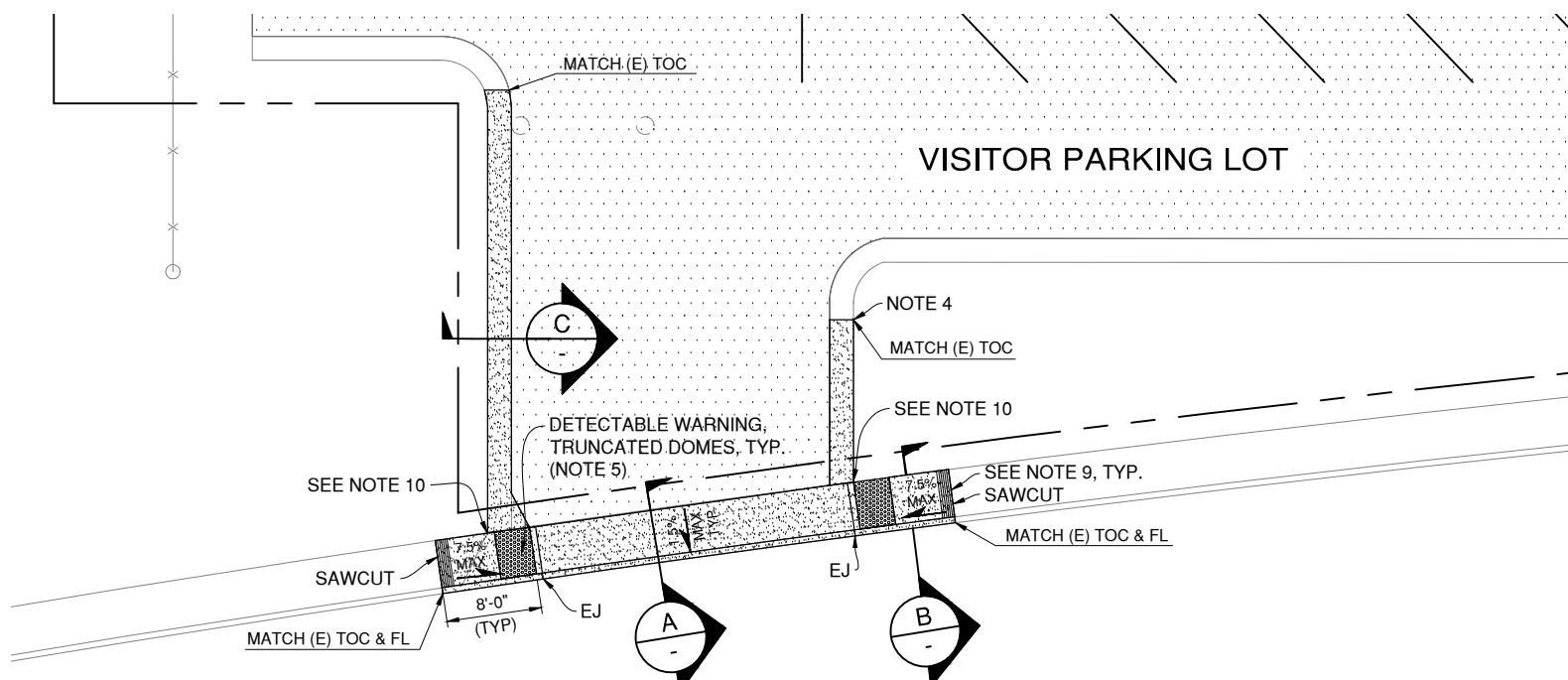


TYPICAL CONCRETE CURB  
D - SCALE: 1" = 1'-0"

## 95% DESIGN REVIEW

APPROVED BY RODOLFO V. GALANG REGISTERED PROFESSIONAL ENGINEER No. C66235 STATE OF CALIFORNIA CIVIL DATE: 6/30/20	APPROVED BY EW A Z. BAUER REGISTERED PROFESSIONAL ENGINEER No. C43632 STATE OF CALIFORNIA CIVIL DATE: 3/31/21
PROJECT ENGINEER MM/DD/YY DATE	PROJECT TITLE SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANELS INSTALLATION
NO. REVISIONS DATE	SHEET TITLE EMPLOYEE PARKING LOT DRIVEWAY IMPROVEMENT PLAN
DWG NO. C12	PROJECT DISTRICT ENGINEER MM/DD/YY DATE
CADD FILE: 18T098C012.DWG	

PROJECT TITLE SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANELS INSTALLATION	GOLDEN GATE BRIDGE HIGHWAY & TRANSPORTATION DISTRICT
SHEET TITLE EMPLOYEE PARKING LOT DRIVEWAY IMPROVEMENT PLAN	DATE: 10 May 2019
SCALE: AS NOTED	



**C TYPICAL (N) CONCRETE CURB & GUTTER**

SCALE: 1 1/2"=1'-0"

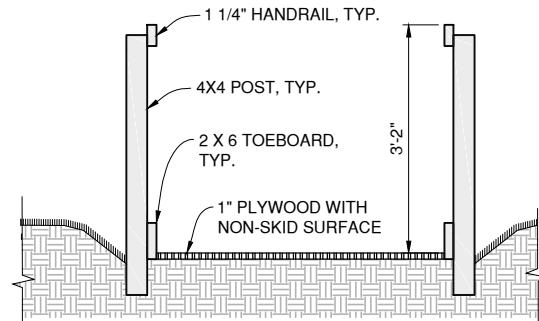
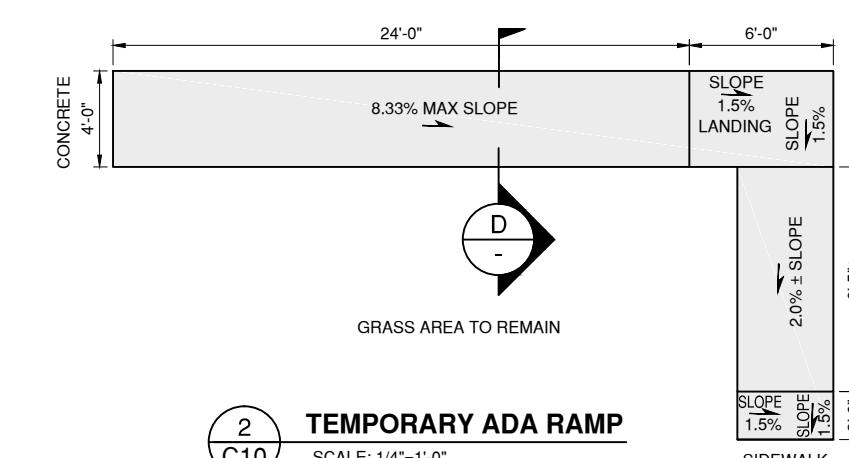
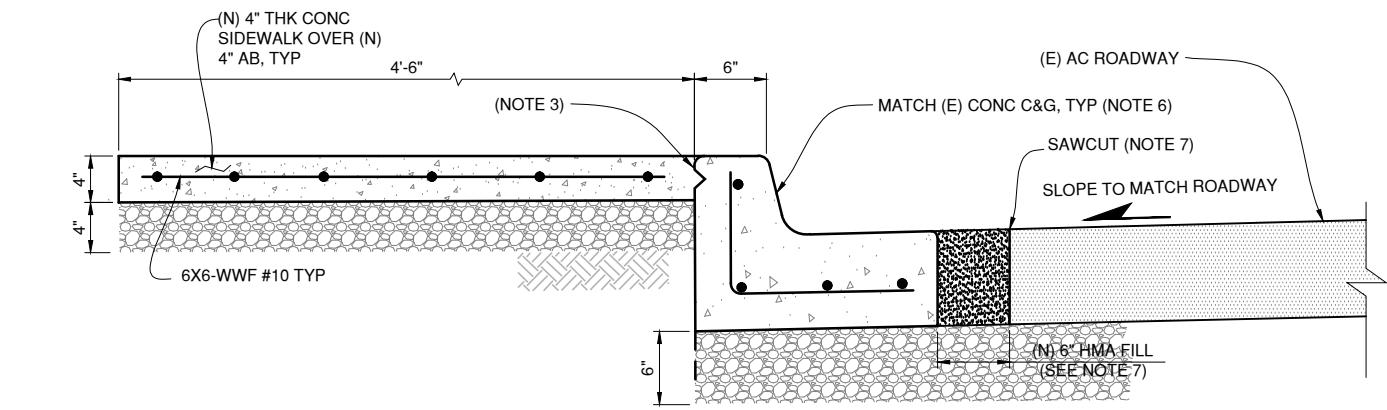
GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

IN	1	2	3	4	5	6	7
CM	25	50	75	100	125	150	175

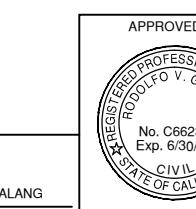
DESIGN	BY	RVG	CHECKED	CHV	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY	RVG	CHECKED	First MI Last	
QUANTITIES	BY	RVG	CHECKED	First MI Last	

**NOTES:**

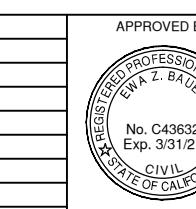
- (N) & (E) 3/4" CLASS 2 AB SHALL BE COMPACTED TO 95% MIN RELATIVE DENSITY.
- HMA SHALL BE LEVEL W/ THE LIP OF C&G, TYP.
- PROVIDE A LONGITUDINAL JOINT FOR CONCRETE SIDEWALK AS SHOWN ON PLANS. SEE DETAIL C, DWG. C12.
- INSTALL #4 REBAR EPOXY DOWEL BETWEEN (N) & (E) CONCRETE CURB & GUTTER, TYP.
- RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE THAT EXTENDS THE FULL WIDTH AND 3'-0" DEPTH OF THE RAMP. DETECTABLE WARNING SURFACES SHALL CONFORM TO THE DETAILS OF CALTRANS STD. PLAN A88A.
- (N) TYPE A2-6 CONC C&G TO MATCH (E) C&G. SEE DETAIL C THIS SHEET.
- SAWCUT & REMOVE 6" STRIP OF (E) AC ROADWAY PVMT TO INSTALL (N) CONCRETE CURB, GUTTER, SIDEWALK & DRIVEWAY, & INSTALL HMA FILL FULL DEPTH TO MATCH (E) PAVEMENT ELEVATION AFTER CONCRETE CURING, TYP.
- PROVIDE CONTROL JOINTS AT 5'-0"± O.C., TYP.
- THE CURB RAMPS SHALL HAVE OUTLINES AS SHOWN, WITH A 1'-0" WIDE BORDER WITH 1/4" GROOVES APPROXIMATELY 3/4" ON CENTER.
- SEE DETAIL E, DWG. C12 FOR CONCRETE CURB TRANSITIONS, TYP.



**95% DESIGN REVIEW**



PROJECT ENGINEER  
MM/DD/YY  
DATE



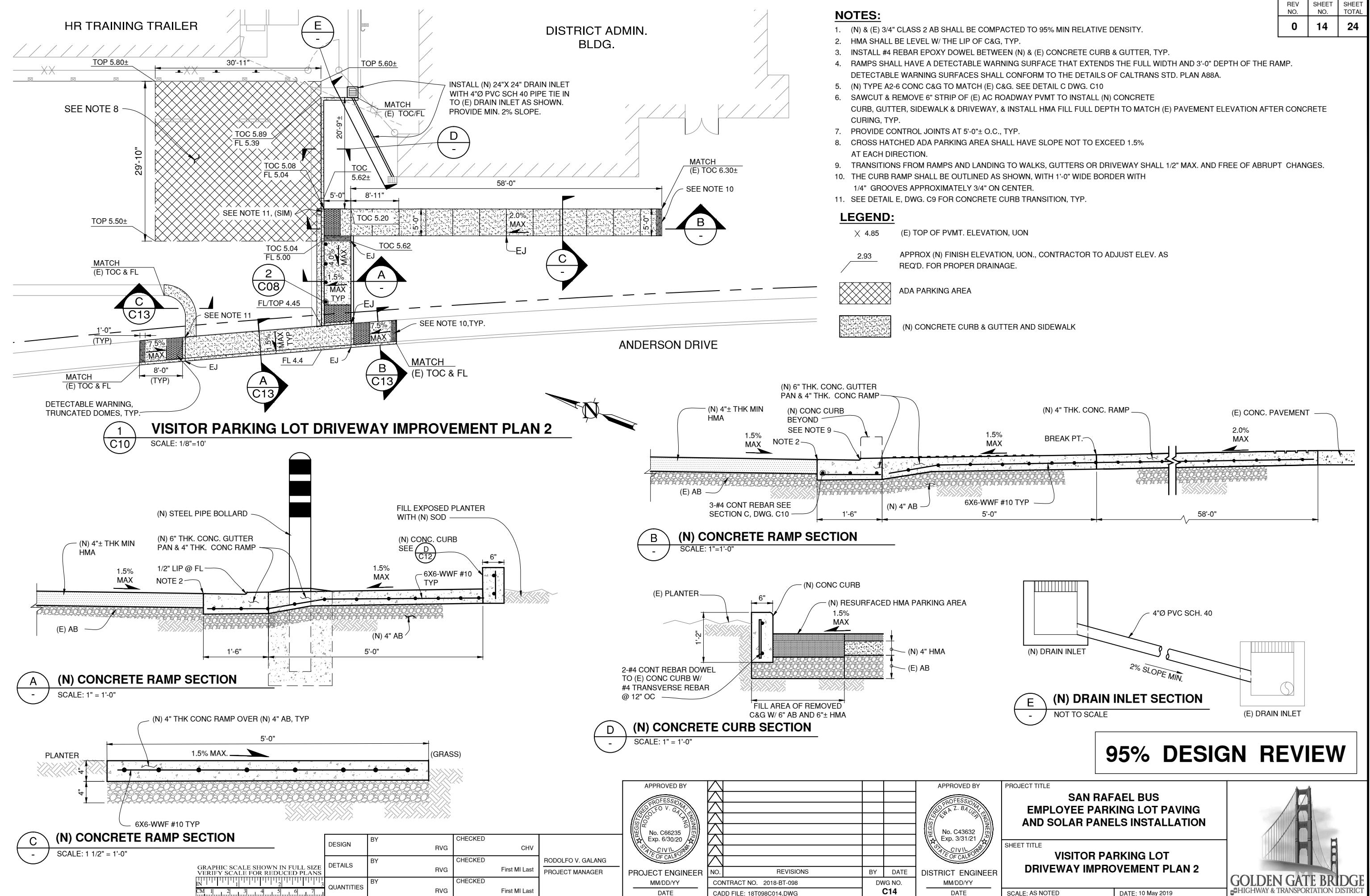
DISTRICT ENGINEER  
MM/DD/YY  
DATE

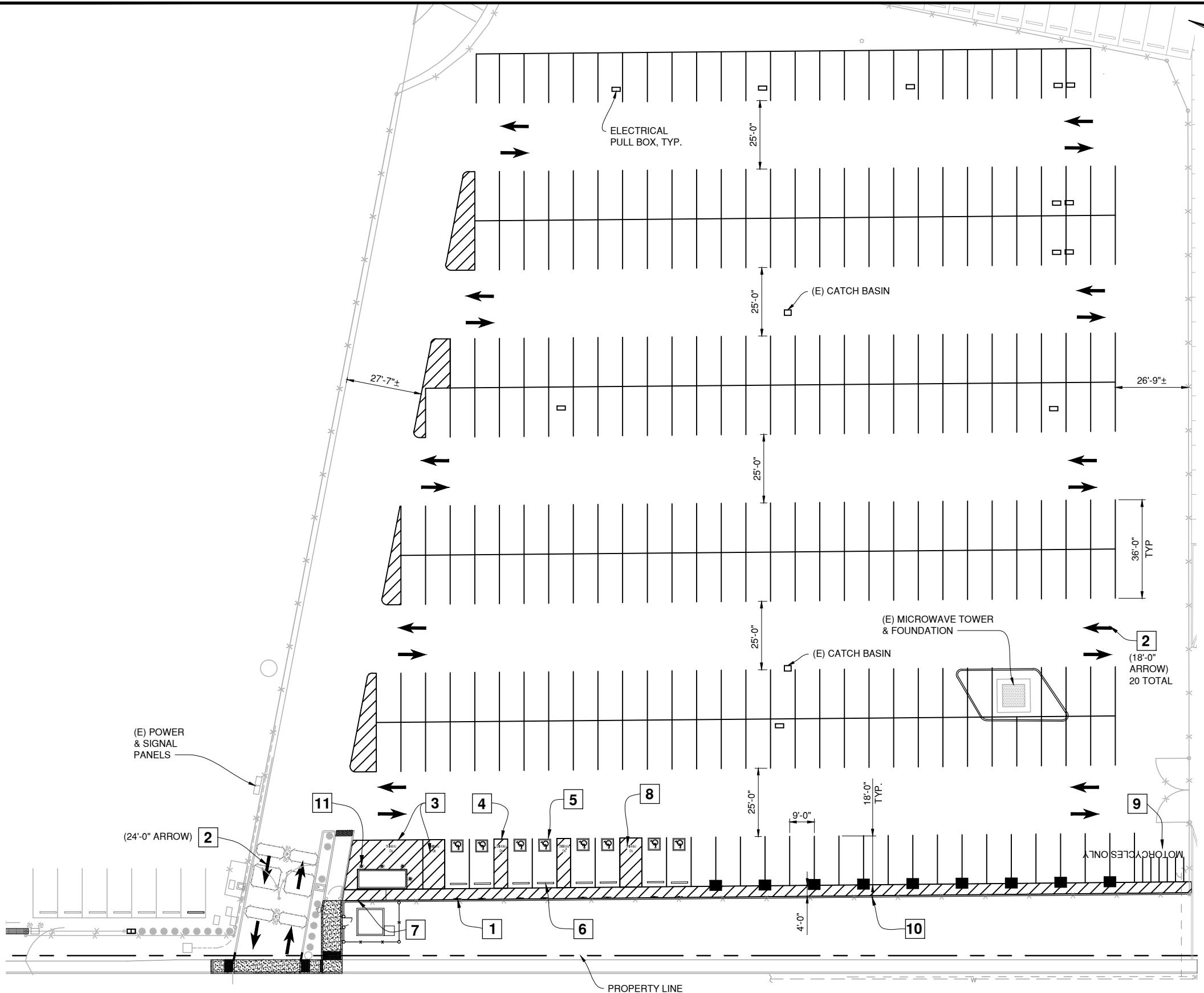
PROJECT TITLE  
**SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANELS INSTALLATION**

SHEET TITLE  
**VISITOR PARKING LOT DRIVEWAY IMPROVEMENT PLAN 1**

SCALE: AS NOTED DATE: 10 May 2019







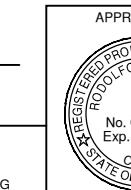
### EMPLOYEE PARKING LOT STRIPING PLAN

SCALE: 1"-20'

GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS



DESIGN	BY	RVG	CHECKED	CHV	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY	RVG	CHECKED	First MI Last	
QUANTITIES	BY	RVG	CHECKED	First MI Last	



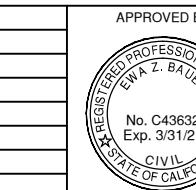
PROJECT ENGINEER  
MM/DD/YY  
DATE

REVISIONS

BY DATE

DWG NO.

C15



DISTRICT ENGINEER  
MM/DD/YY  
DATE

PROJECT TITLE  
**SAN RAFAEL BUS  
EMPLOYEE PARKING LOT PAVING  
AND SOLAR PANELS INSTALLATION**

SHEET TITLE  
**EMPLOYEE PARKING LOT  
PAVEMENT STRIPING & MARKING PLAN**

SCALE: AS NOTED

DATE: 9 May 2019

**95% DESIGN REVIEW**

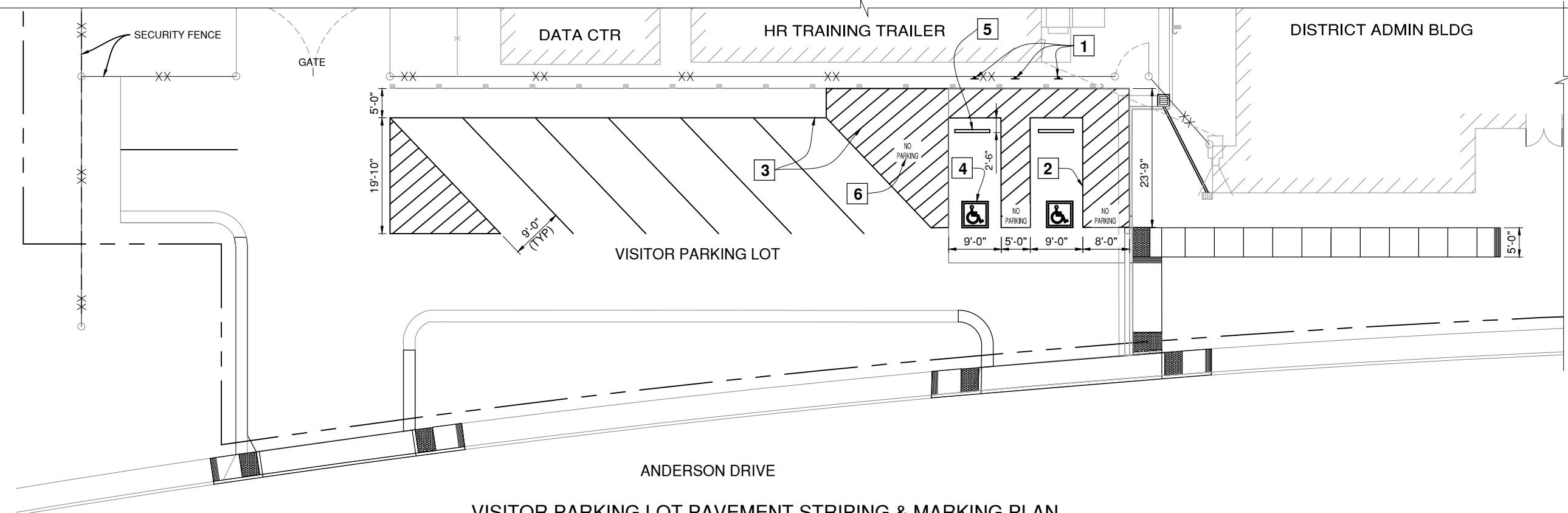
### DESCRIPTION OF WORK:

- 1 (N) ACCESSIBLE PARKING ONLY SIGNS AND 2 1/2" Ø GALV. STEEL POSTS (8 TOTAL), TYP. THE SIGNS SHALL BE R99C (CA) OR R99 (CA) WITH PLAQUE R99B (CA), AT THE TWO VAN ACCESSIBLE AREAS, ADDITIONAL SIGN R7-8b IS REQUIRED. SEE DETAIL 1, DWG C11.
- 2 ARROW TYPE I: CALTRANS STD PLAN A24A, TYP.
- 3 4" WHITE LINE AND DIAGONALS AT 3'-0" MAX CENTERS, TYP UON.
- 4 4" BLUE LINE BORDERS, TYP.
- 5 ISA (INTERNATIONAL SYMBOL OF ACCESSIBILITY) MARKING AT REAR LIMIT OF STALL SEE STD PLAN A24C.
- 6 INSTALL (N) 6'-0" LONG CONCRETE BUMPERS AT EACH ADA PARKING STALLS.
- 7 INSTALL ONE (1) R100B (CA) SIGN. SEE DETAIL DETAIL 1, DWG C11.
- 8 INSTALL 1'-0" HIGH "NO PARKING" PAVEMENT MARKING. SEE STD. PLAN A90A & A90B.
- 9 24" HIGH PAVEMENT MARKING
- 10 ELECTRIC VEHICLE CHARGING STATION ?
- 11 BOLLARDS (4), SEE DETAIL DETAIL 2, DWG C11.

### NOTES:

1. SEE CALTRANS STANDARD PLANS & TRAFFIC MANUAL FOR SIGN & PAVEMENT MARKING DETAILS.
2. ENTIRE PARKING LOT WITHIN PHASED CONSTRUCTION AREAS SHALL BE RESURFACED PRIOR TO PLACEMENT OF (N) STRIPING & (N) PAVEMENT MARKINGS.
3. ALL PAVEMENT STRIPING & MARKINGS SHALL BE THERMOPLASTIC PAINT.
4. (E) SIGNS & POSTS TO BE REMOVED BY CONTRACTOR AND REPLACED WITH (N) SIGNS & POSTS AS SHOWN ON THE PLANS.
5. ACCESSIBLE PARKING ONLY SIGN SHALL BE SIGN 99C (CA) OR SIGN 99 (CA) WITH PLAQUES R99B (CA). SIGN FOR VAN ACCESSIBLE SPACE SHALL INCLUDE SIGN R7-8b.
6. PROVIDE TEMPORARY STRIPING AFTER OPERATION AND BEFORE OPENING LOT FOR PARKING.





### VISITOR PARKING LOT PAVEMENT STRIPING & MARKING PLAN

SCALE: 1"-10"

#### DESCRIPTION OF WORK:

- 1 REMOVE (E) ADA SIGNS & REPLACE WITH (N) ACCESSIBLE PARKING ONLY SIGNS, TYP. THE SIGNS SHALL BE R99C (CA) OR R99 (CA) WITH PLAQUE R99B (CA), ONE (1) VAN ACCESSIBLE AREAS SHALL HAVE ADDITIONAL SIGN R7-8b. INSTALL ONE (1) R100B (CA) SIGN. MOUNT SIGNS TO THE (E) CHAIN LINK FENCING.
- 2 4" BLUE BORDERS, TYP.
- 3 4" WHITE LINE AND DIAGONALS AT 3'-0" MAX CENTERS.
- 4 ISA (INTERNATIONAL SYMBOL OF ACCESSIBILITY) MARKING AT REAR LIMIT OF STALL SEE STD PLAN A24C.
- 5 INSTALL (N) 6'-0" LONG CONCRETE BUMPERS AT EACH ADA PARKING STALLS.
- 6 INSTALL 1'-0" HIGH "NO PARKING" PAVEMENT MARKING. SEE STD. PLAN A90A & PLAN A90B.

#### NOTES:

1. SEE CALTRANS STANDARD PLANS & TRAFFIC MANUAL FOR SIGN & PAVEMENT MARKING DETAILS.
2. ALL PAVEMENT STRIPING & MARKINGS SHALL BE THERMOPLASTIC PAINT.

**95% DESIGN REVIEW**

GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

DESIGN	BY	RVG	CHECKED	CHV	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY	RVG	CHECKED	First MI Last	
QUANTITIES	BY	RVG	CHECKED	First MI Last	

APPROVED BY  
RODOLFO V. GALANG  
REGISTERED PROFESSIONAL ENGINEER  
No. C66235  
Exp. 6/30/20  
CIVIL  
STATE OF CALIFORNIA

PROJECT ENGINEER  
MM/DD/YY  
DATE

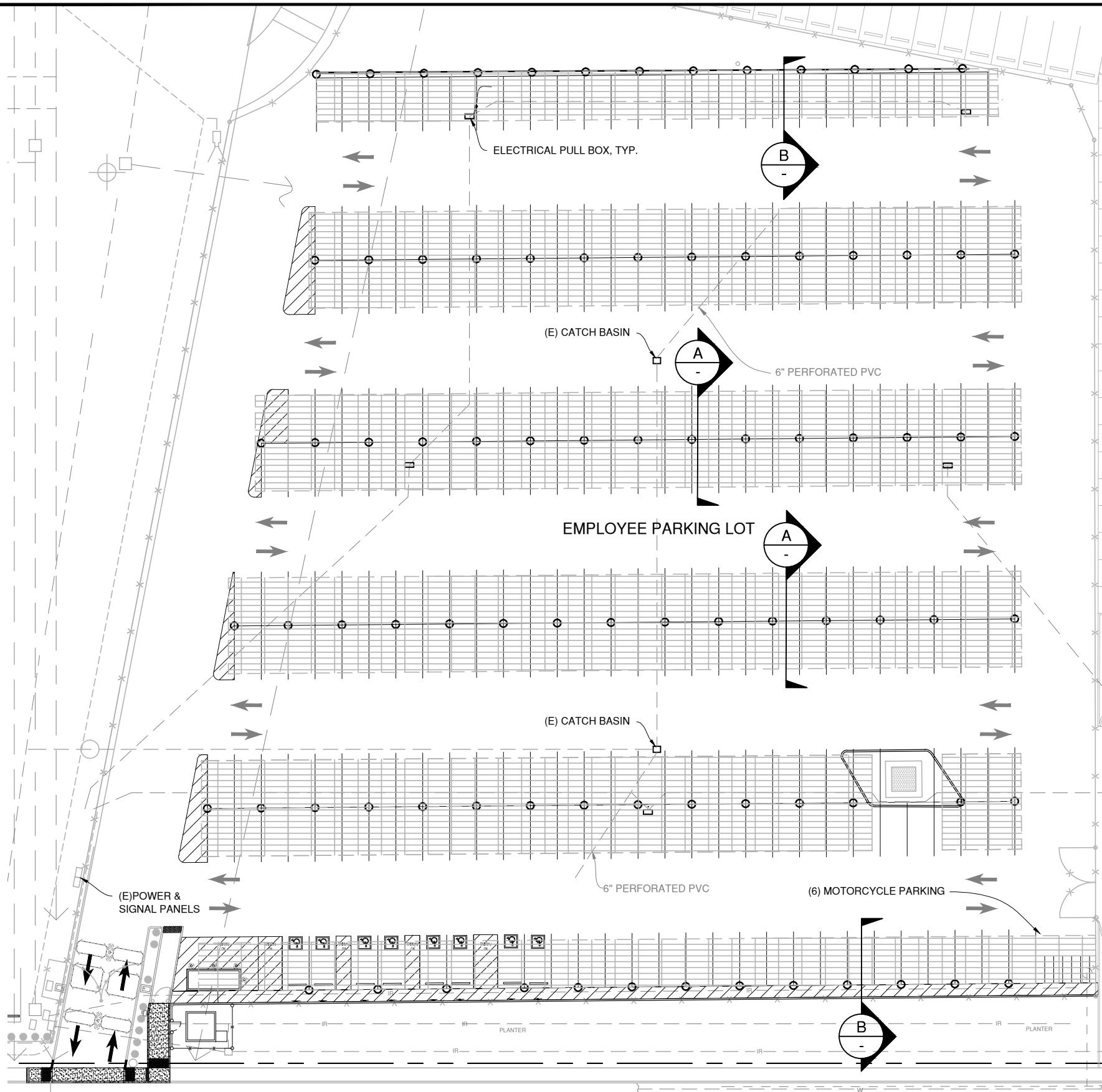
NO.	REVISIONS	BY	DATE
	CONTRACT NO. 2018-BT-098		DWG NO. C16
	CADD FILE: 18T098C016.DWG		MM/DD/YY

APPROVED BY  
EWA Z. BAUER  
REGISTERED PROFESSIONAL ENGINEER  
No. C43632  
Exp. 3/31/21  
CIVIL  
STATE OF CALIFORNIA

DISTRICT ENGINEER  
MM/DD/YY  
DATE

PROJECT TITLE			
SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANELS INSTALLATION			
SHEET TITLE			
VISITOR PARKING LOT PAVEMENT STRIPING & MARKING PLAN			
SCALE: AS NOTED			DATE: 13 May 2019





ANDERSON DRIVE  
EMPLOYEE PARKING LOT SOLAR PANEL LAYOUT PLAN  
SCALE: 1"=20'

GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

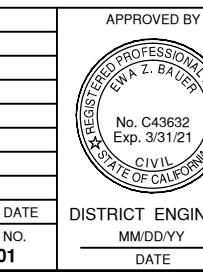
DESIGN	BY	MWY	CHECKED	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY	MWY	CHECKED	
QUANTITIES	BY	MWY	CHECKED	



PROJECT ENGINEER  
MM/DD/YY  
DATE

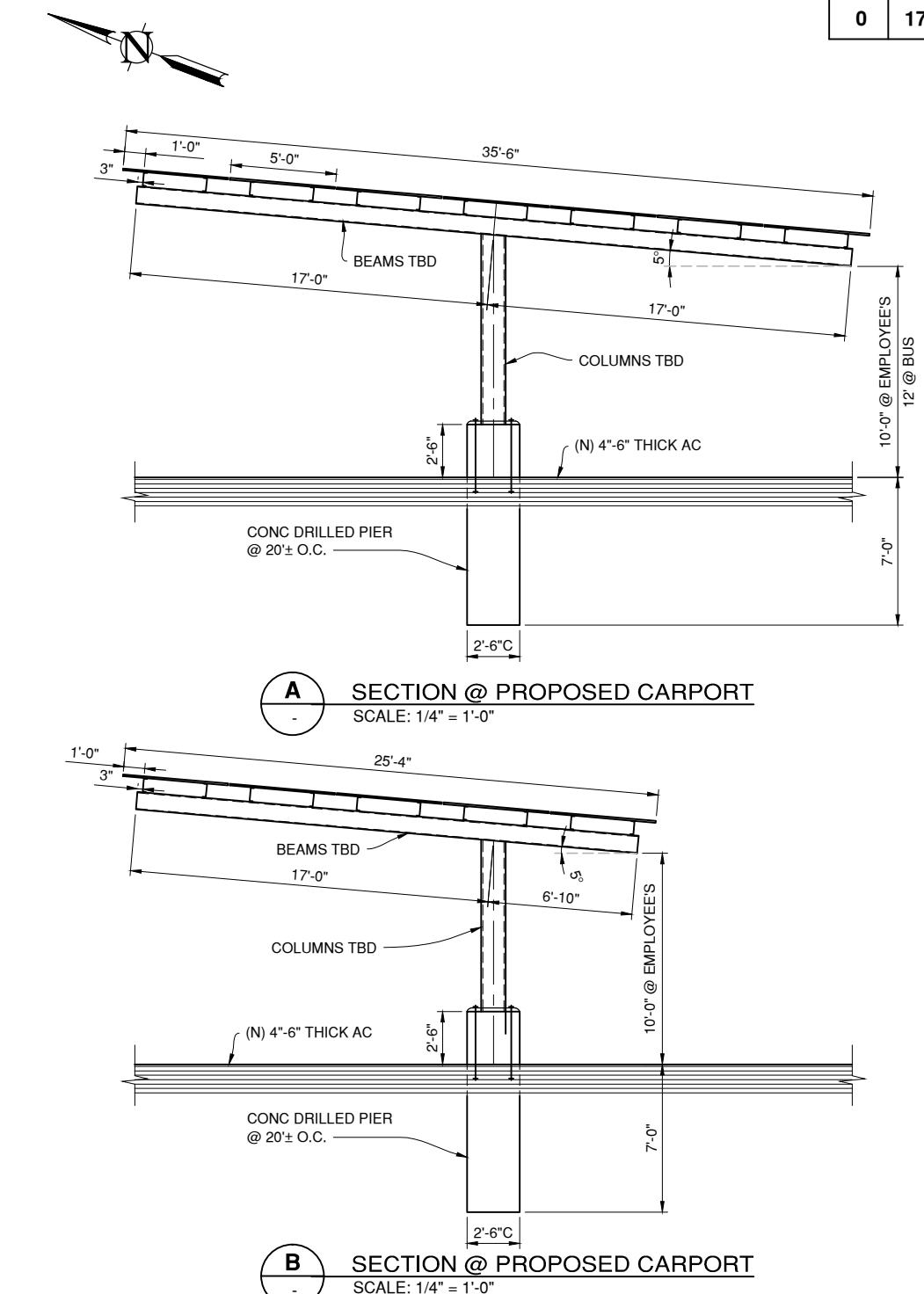
NO. REVISIONS  
CONTRACT NO. 2018-BT-098  
CADD FILE: 18T098C017.DWG

BY DATE  
DWG NO.  
**A01**



DISTRICT ENGINEER  
MM/DD/YY  
DATE

PROJECT TITLE  
**SAN RAFAEL BUS  
EMPLOYEE PARKING LOT PAVING  
AND SOLAR PANEL INSTALLATION**  
SHEET TITLE  
**EMPLOYEE PARKING LOT  
SOLAR PANEL LAYOUT PLAN**  
SCALE: AS NOTED  
DATE: 13 May 2019



**LEGEND:**



**95% DESIGN REVIEW**

## ELECTRICAL SYMBOL LIST:

	WIRE IN CONDUIT, UNDERGROUND
	CROSS HATCHES INDICATE NO. OF #12 AWG WIRES IN ADDITION TO #12 AWG GROUND, IF MORE THAN 2 #12
	CONDUIT STUB OUT
	CONDUIT UP
	CONDUIT DOWN
	GROUND WIRE IN CONDUIT
	EXISTING CONDUIT AND WIRING.
	PULL BOX, JUNCTION BOX
	DEMAND AND ENERGY METERING
	FUSED DISCONNECT SWITCH, SIZE OF FUSES AS SHOWN
	SINGLE POLE SWITCH
	DUPLEX RECEPTACLE
	GROUND
	OUTDOOR LIGHT
	FLUORESCENT LAMP

## ABBREVIATIONS

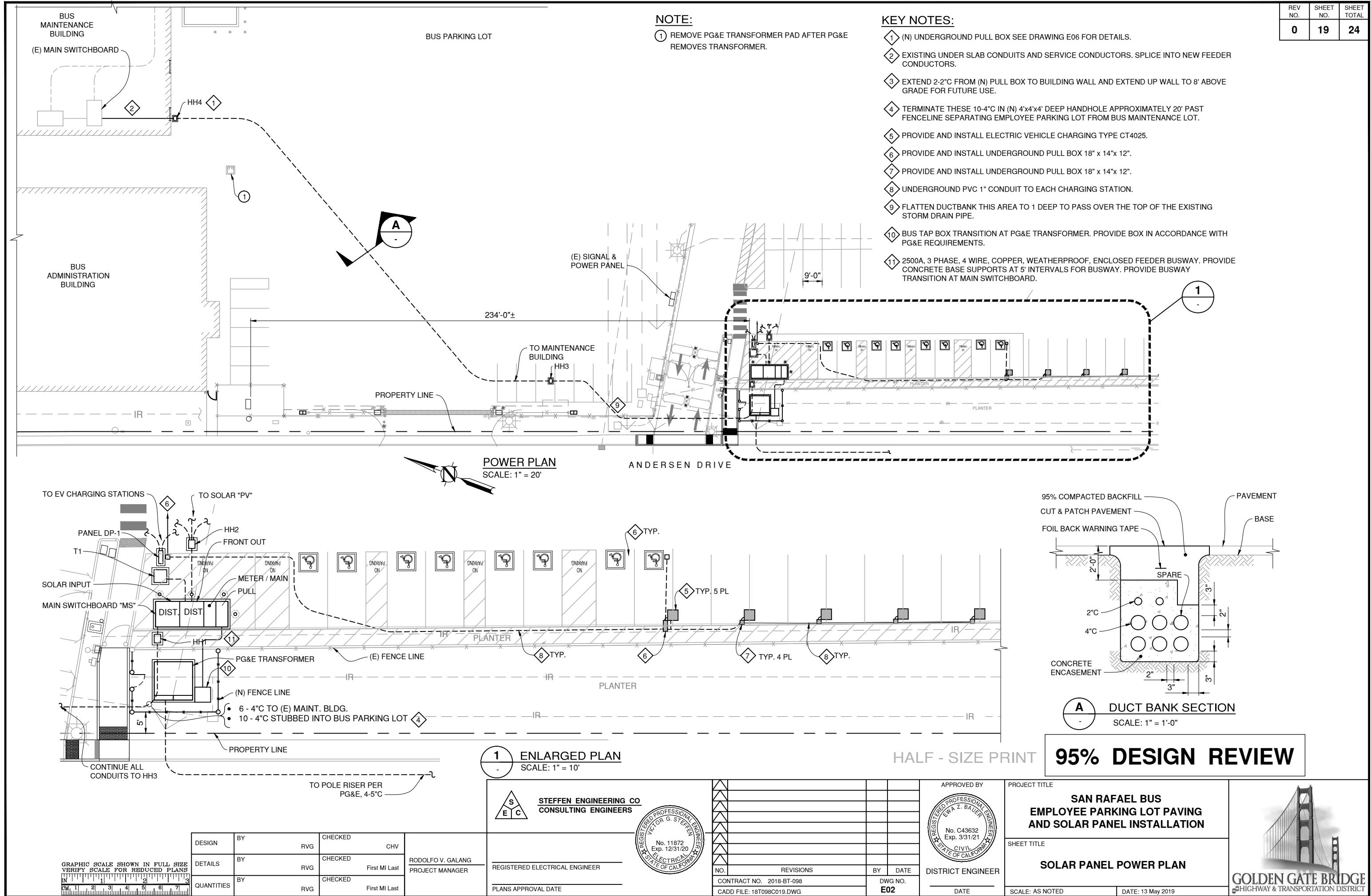
@	AT
Ø	DIAMETER
A	AMPERE
A.F.F.	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
BM	BEAM
C	CONDUIT
CB	CIRCUIT BREAKER
CIR, CKT	CIRCUIT
¢	CENTERLINE
DWG.	DRAWING
(E)	EXISTING
EOR	ENGINEER OF RECORD
ELEV	ELEVATION
EQ	EQUAL
FLEX.	FLEXIBLE (CONDUIT)
(G), GRD	GROUND
GFI	GROUND FAULT INTERRUPTER
HP	HORSE POWER
JB	JUNCTION BOX
KVA	KILOVOLTAMPERE
KW	KILOWATT
MAX	MAXIMUM
MIN	MINIMUM
(N)	NEW
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
¶	PLATE
PNL	PANEL
Ø, ph	PHASE
(R)	REMOVE
(E) (RE)	EXISTING TO REMAIN
(RL)	EXISTING TO BE RELOCATED
(R,R)	RELOCATED AND REINSTALL
SED	SEE ELECTRICAL DRAWINGS
SOG	SLAB ON GRADE
TYP.	TYPICAL
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLTAMPERE
VIF	VERIFY IN FIELD
W	WATT
WP	WEATHERPROOF
WT	WEIGHT
A-1,3,5	TYPICAL HOMERUN DESIGNATION TO CIRCUITS 1,3,5 IN PANEL "A"
A-1 (3,5)	TYPICAL HOMERUN DESIGNATION TO 3-POLE CIRCUIT BREAKER IN PANEL "A"

## **GENERAL NOTES:**

1. THE GENERAL CONTRACTOR SHALL POSSESS A VALID STATE OF CALIFORNIA CLASS "B" GENERAL BUILDING CONTRACTOR'S LICENSE OR A STATE OF CALIFORNIA CLASS "A" GENERAL ENGINEERING CONTRACTOR'S LICENSE WITH MINIMUM OF THREE SOLAR PV PROJECTS EXPERIENCE WITH PUBLIC AGENCIES IN THE PAST FIVE YEARS. BIDDER SHALL SUBMIT REFERENCES. FAILURE TO SUBMIT SATISFACTORY QUALIFICATIONS/EXPERIENCE WILL BE CONSIDERED AS NON-RESPONSIVE.
  2. ALL SUBCONTRACTOR(S) SHALL BE PROPERLY LICENSED BY THE STATE OF CALIFORNIA TO PERFORM SPECIALIZED TRADES. SUBCONTRACTOR(S) TO HAVE A MINIMUM OF THREE SIMILAR SOLAR PV PROJECTS EXPERIENCE WITH PUBLIC AGENCIES IN THE PAST FIVE YEARS. BIDDER SHALL SUBMIT REFERENCES. FAILURE TO SUBMIT SATISFACTORY QUALIFICATIONS/EXPERIENCE WILL BE CONSIDERED AS NON-RESPONSIVE.
  3. NEW CONSTRUCTION IS UN-PREFIXED OR PREFIXED BY (N) OR "NEW". EXISTING CONSTRUCTION IS PREFIXED BY (E) OR "EXIST".
  4. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND CONTROLLING FIELD DIMENSIONS PRIOR TO MAKING SUBMITTALS OR ORDERING OR FABRICATING MATERIALS.
  5. OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE EOR AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
  6. DO NOT USE SCALED DIMENSIONS. USE WRITTEN DIMENSIONS. WHERE NO DIMENSION IS PROVIDED, CONSULT THE EOR BEFORE PROCEEDING WITH THE WORK.
  7. IF CERTAIN FEATURES ARE NOT FULLY SHOWN OR CALLED FOR ON THE DRAWINGS OR SPECIFICATIONS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE CALLED FOR OR SHOWN.
  8. ALL CONSTRUCTION IS TO BE PERFORMED IN A MANNER TO MINIMIZE IMPACT ON THE CONTINUING OPERATION OF THE BUILDINGS, PARKING, AND BUS OPERATIONS.
  9. THE SOLAR PV SYSTEM SHALL BE DESIGNED, FABRICATED, SPECIFIED, INSTALLED, AND MADE FULLY FUNCTIONAL BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ALL COMPONENTS AS REQUIRED BY PG&E. THE CONTRACTOR SHALL APPLY TO PG&E FOR CUSTOMER GENERATION.

**95% DESIGN REVIEW**

				 <p><b>STEFFEN ENGINEERING CO</b> CONSULTING ENGINEERS</p>																									
DESIGN	BY	RVG	CHECKED CHV	RODOLFO V. GALANG PROJECT MANAGER																									
DETAILS	BY	RVG	CHECKED First MI Last																										
QUANTITIES	BY	RVG	CHECKED First MI Last																										
				<p>REGISTERED ELECTRICAL ENGINEER</p> <hr/> <p>PLANS APPROVAL DATE</p>						<table border="1"> <thead> <tr> <th>NO.</th> <th>REVISIONS</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td colspan="4">CONTRACT NO. 2018-BT-098</td> </tr> <tr> <td colspan="4">CADD FILE: 18T098C018.DWG</td> </tr> </tbody> </table>				NO.	REVISIONS	BY	DATE	CONTRACT NO. 2018-BT-098				CADD FILE: 18T098C018.DWG				<p>APPROVED BY</p>  <p>No. C43632 Exp. 3/31/21</p> <p>DISTRICT ENGINEER</p> <p>DATE</p>			
NO.	REVISIONS	BY	DATE																										
CONTRACT NO. 2018-BT-098																													
CADD FILE: 18T098C018.DWG																													
														<p>PROJECT TITLE</p> <p><b>SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANEL INSTALLATION</b></p> <p>SHEET TITLE</p> <p><b>ELECTRICAL GENERAL NOTES, ABBREVIATIONS AND SYMBOLS LIST</b></p> <p>SCALE: AS NOTED</p> <p>DATE: 13 May 2019</p>															
														 <p><b>GOLDEN GATE BRIDGE</b> HIGHWAY &amp; TRANSPORTATION DISTRICT</p>															





#### KEY NOTES:

- 1 (E) MAIN SWITCH BOARD
- 2 PROVIDE 4' x 4' x 4' DEEP PULL BOX. INTERCEPT EXISTING 3-5" CONDUITS TO MAIN SWITCHBOARD. ROUTE (N) 4-4" C AND CONDUCTORS INTO (N) PULLBOX AS SHOWN ON THE SINGLE LINE DIAGRAM. SPLICE (N) CONDUCTORS TO EXISTING CONDUCTORS FEEDING THE MAIN SWITCHBOARD. PROVIDE SUBMERSIBLE SPLICES. PULL BOX SHALL HAVE FULL OPENING HINGED DOUBLE COVERS WITH AASHTO-H20 LOAD RATING.
- 3 REMOVE (E) CONDUCTORS FROM NEW PULLBOX TO (E) PG&E SERVICE TRANSFORMER AFTER (E) MAIN SWITCHBOARD IS CONNECTED TO AND OPERATIONAL FROM NEW SERVICE SWITCHBOARD AT EMPLOYEE PARKING LOT.
- 4 REMOVE EXISTING SERVICE TRANSFORMER PAD AFTER PG&E REMOVES THEIR TRANSFORMER. COORDINATE WITH PG&E.

### BUS MAINTENANCE BUILDING PARTIAL ELECTRICAL PLAN

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

3 4 TO SERVICE TRANSFORMER

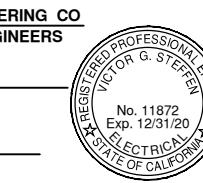
**95% DESIGN REVIEW**

GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

IN 1 2 3 4 5 6 7  
CM 1 2 3 4 5 6 7



STEFFEN ENGINEERING CO  
CONSULTING ENGINEERS



RODOLFO V. GALANG  
PROJECT MANAGER

REGISTERED ELECTRICAL ENGINEER

PLANS APPROVAL DATE

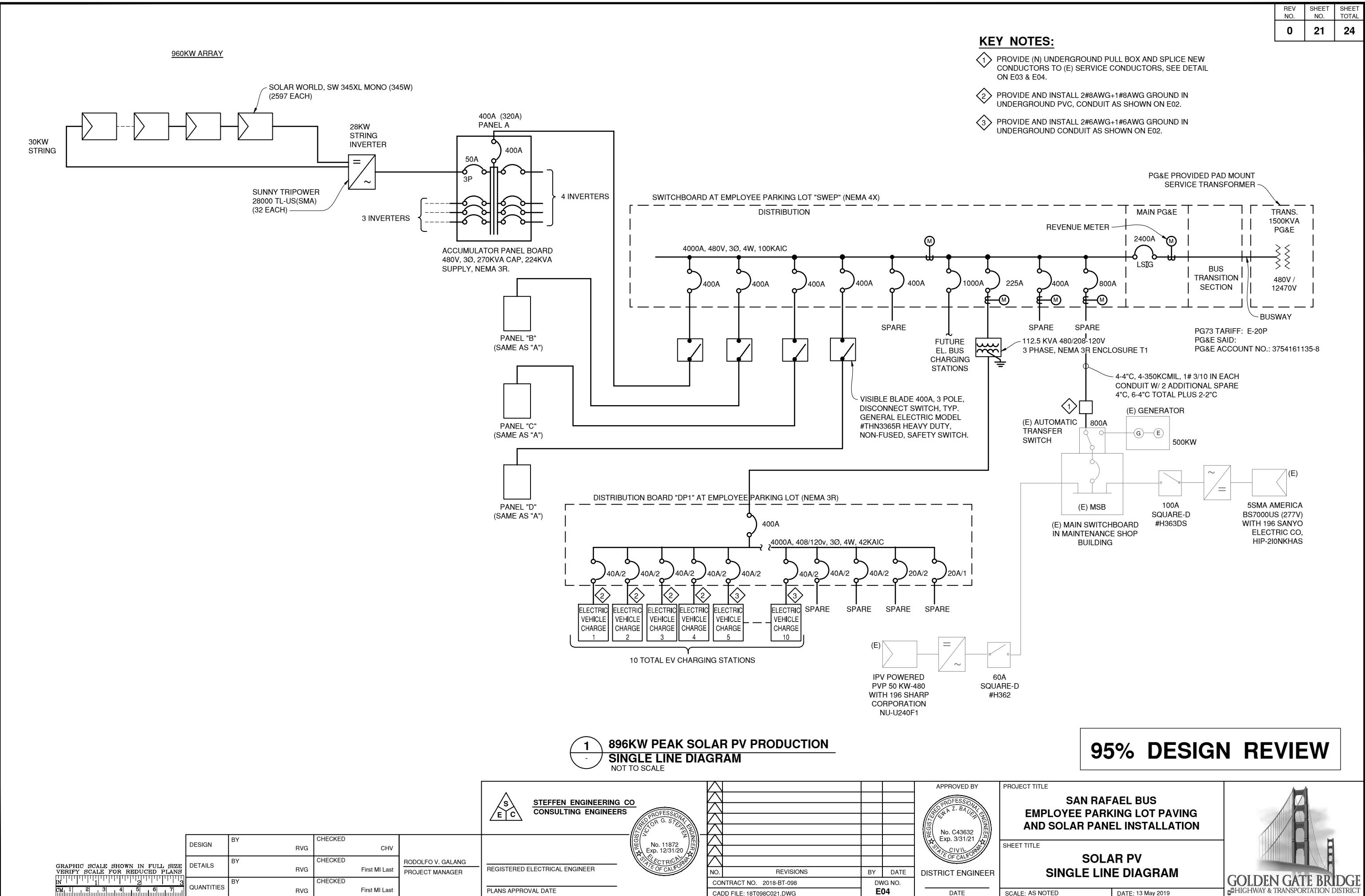
APPROVED BY			
EW A. Z. BAUER No. C43632 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA REGISTERED PROFESSIONAL ENGINEER			
DISTRICT ENGINEER			
CONTRACT NO.	REVISIONS	BY	DATE
2018-BT-098			
CADD FILE: 18T098C020.DWG		DWG NO.	E03
DATE			

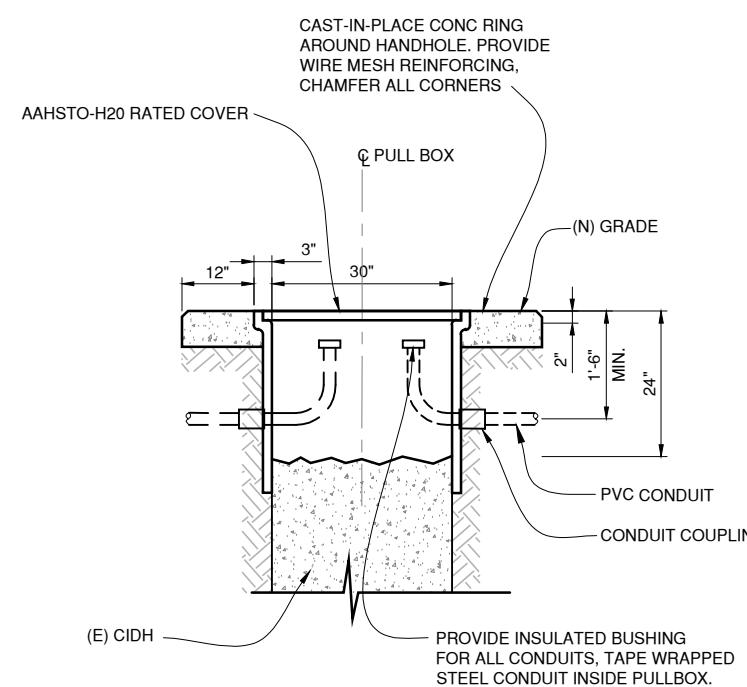
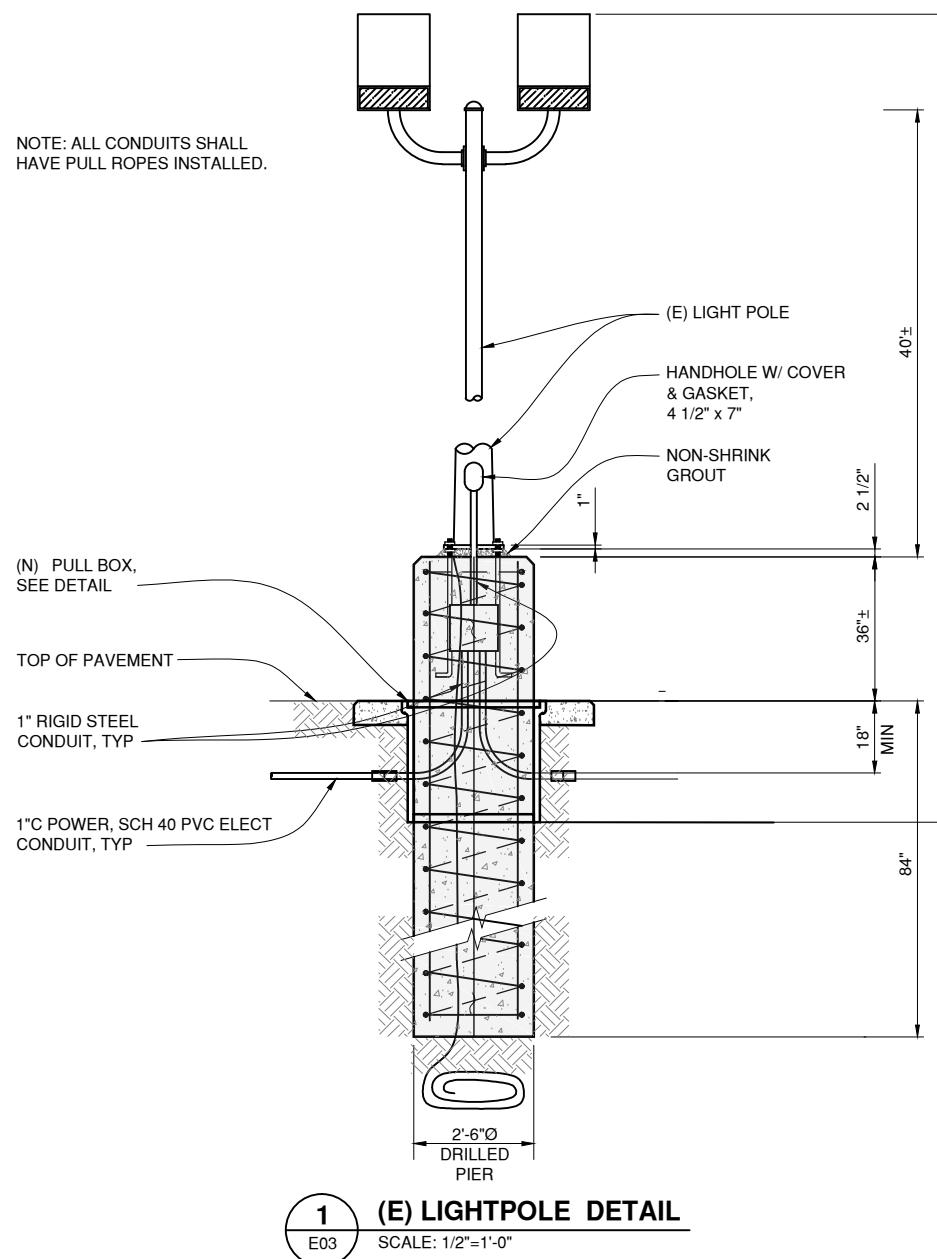
PROJECT TITLE  
**SAN RAFAEL BUS  
EMPLOYEE PARKING LOT PAVING  
AND SOLAR PANEL INSTALLATION**

SHEET TITLE  
**BUS MAINTENANCE BLDG.  
ELECTRICAL PLAN**

SCALE: AS NOTED







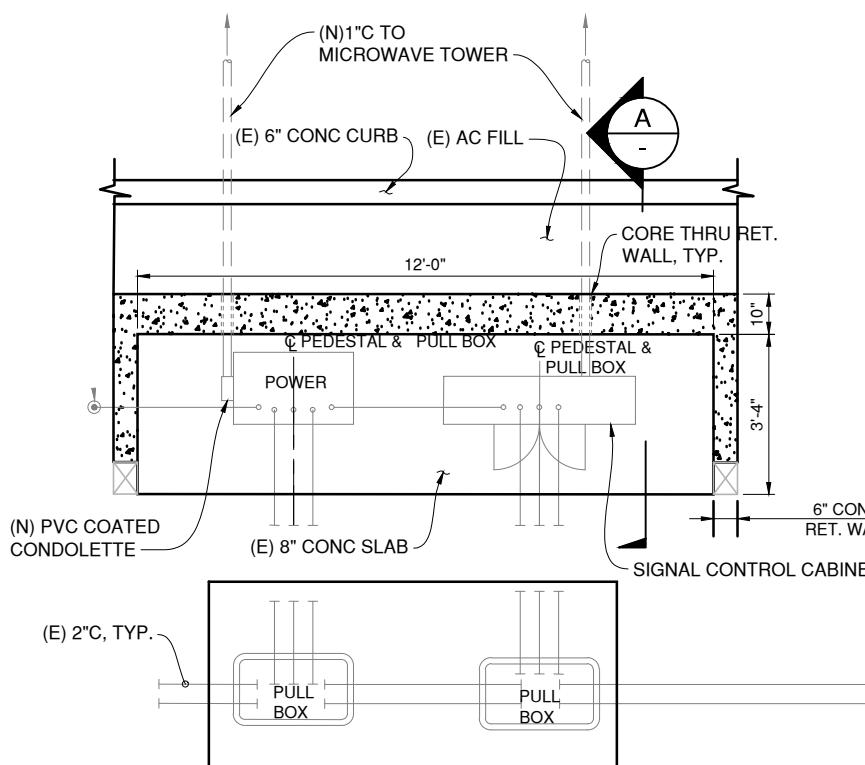
Panel DP1																																																																																																																																																																									
Volt: 208/120									Main Breaker:400A/3pole																																																																																																																																																																
Phase:3									Mount: NEMA 3R																																																																																																																																																																
Wire:4W									AIC:42KAIC																																																																																																																																																																
Bussing:400Amp									Poles:3p																																																																																																																																																																
<table border="1"> <thead> <tr> <th>Load Type</th> <th>Breaker</th> <th>Circuit</th> <th>A(KVA)</th> <th>B(KVA)</th> <th>C(KVA)</th> <th>A(KVA)</th> <th>B(KVA)</th> <th>C(KVA)</th> <th>Circuit</th> <th>Load Type</th> </tr> </thead> <tbody> <tr> <td>Electric vehicle Charge 1</td> <td></td> <td>1</td> <td>3.6</td> <td></td> <td>3.6</td> <td></td> <td>3.6</td> <td></td> <td></td> <td>2 Electric vehicle Charge 2</td> </tr> <tr> <td>Electric vehicle Charge 3</td> <td></td> <td>5</td> <td></td> <td>3.6</td> <td></td> <td></td> <td>3.6</td> <td></td> <td></td> <td>6 Electric vehicle Charge 4</td> </tr> <tr> <td>Electric vehicle Charge 5</td> <td></td> <td>9</td> <td></td> <td>3.6</td> <td></td> <td></td> <td>3.6</td> <td></td> <td>10</td> <td>Electric vehicle Charge 6</td> </tr> <tr> <td>Electric vehicle Charge 7</td> <td></td> <td>13</td> <td>3.6</td> <td></td> <td></td> <td>3.6</td> <td>3.6</td> <td></td> <td>14</td> <td>Electric vehicle Charge 8</td> </tr> <tr> <td>Electric vehicle Charge 9</td> <td></td> <td>17</td> <td>3.6</td> <td></td> <td>3.6</td> <td></td> <td></td> <td>3.6</td> <td>16</td> <td>Electric vehicle Charge 10</td> </tr> <tr> <td>Electric vehicle Charge 11</td> <td></td> <td>19</td> <td></td> <td>3.6</td> <td>3.6</td> <td></td> <td></td> <td></td> <td>18</td> <td>Spare</td> </tr> <tr> <td>Spare</td> <td></td> <td>21</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20</td> <td>Spare</td> </tr> <tr> <td>Spare</td> <td></td> <td>23</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>24</td> <td>Spare</td> </tr> <tr> <td></td> <td></td> <td></td> <td>14.4</td> <td>14.4</td> <td>14.4</td> <td>14.4</td> <td>10.8</td> <td>10.8</td> <td></td> <td>Spare</td> </tr> <tr> <td colspan="10">Phase A: 28.8KVA</td></tr> <tr> <td colspan="10">Phase B: 25.2KVA</td></tr> <tr> <td colspan="10">Phase C: 25.2KVA</td></tr> <tr> <td colspan="10">TOTAL 3 PHASE - 219A</td></tr> <tr> <td colspan="10">Total 3 phase connected load: 79.2KVA</td></tr> </tbody> </table>										Load Type	Breaker	Circuit	A(KVA)	B(KVA)	C(KVA)	A(KVA)	B(KVA)	C(KVA)	Circuit	Load Type	Electric vehicle Charge 1		1	3.6		3.6		3.6			2 Electric vehicle Charge 2	Electric vehicle Charge 3		5		3.6			3.6			6 Electric vehicle Charge 4	Electric vehicle Charge 5		9		3.6			3.6		10	Electric vehicle Charge 6	Electric vehicle Charge 7		13	3.6			3.6	3.6		14	Electric vehicle Charge 8	Electric vehicle Charge 9		17	3.6		3.6			3.6	16	Electric vehicle Charge 10	Electric vehicle Charge 11		19		3.6	3.6				18	Spare	Spare		21							20	Spare	Spare		23							24	Spare				14.4	14.4	14.4	14.4	10.8	10.8		Spare	Phase A: 28.8KVA										Phase B: 25.2KVA										Phase C: 25.2KVA										TOTAL 3 PHASE - 219A										Total 3 phase connected load: 79.2KVA									
Load Type	Breaker	Circuit	A(KVA)	B(KVA)	C(KVA)	A(KVA)	B(KVA)	C(KVA)	Circuit	Load Type																																																																																																																																																															
Electric vehicle Charge 1		1	3.6		3.6		3.6			2 Electric vehicle Charge 2																																																																																																																																																															
Electric vehicle Charge 3		5		3.6			3.6			6 Electric vehicle Charge 4																																																																																																																																																															
Electric vehicle Charge 5		9		3.6			3.6		10	Electric vehicle Charge 6																																																																																																																																																															
Electric vehicle Charge 7		13	3.6			3.6	3.6		14	Electric vehicle Charge 8																																																																																																																																																															
Electric vehicle Charge 9		17	3.6		3.6			3.6	16	Electric vehicle Charge 10																																																																																																																																																															
Electric vehicle Charge 11		19		3.6	3.6				18	Spare																																																																																																																																																															
Spare		21							20	Spare																																																																																																																																																															
Spare		23							24	Spare																																																																																																																																																															
			14.4	14.4	14.4	14.4	10.8	10.8		Spare																																																																																																																																																															
Phase A: 28.8KVA																																																																																																																																																																									
Phase B: 25.2KVA																																																																																																																																																																									
Phase C: 25.2KVA																																																																																																																																																																									
TOTAL 3 PHASE - 219A																																																																																																																																																																									
Total 3 phase connected load: 79.2KVA																																																																																																																																																																									

**PANEL SCHEDULE**  
NOT TO SCALE

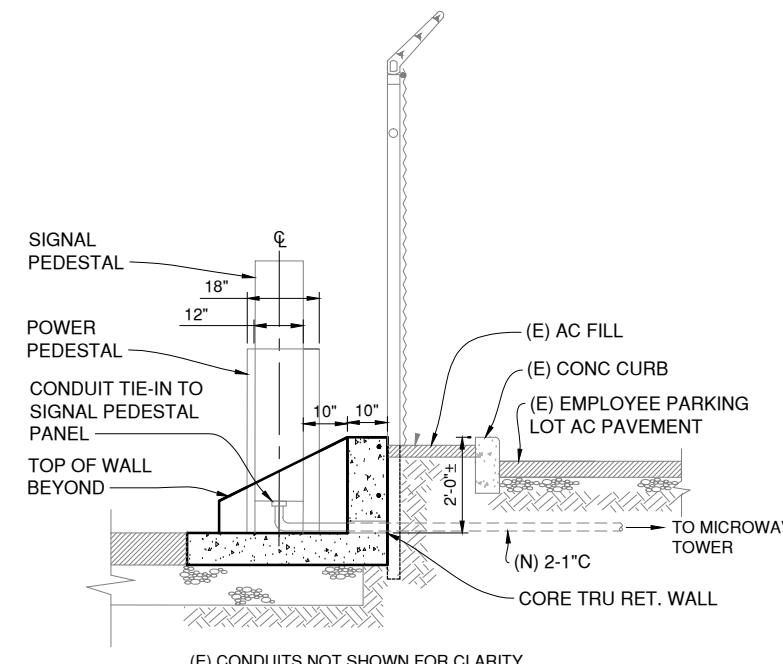
**95% DESIGN REVIEW**

GRAPHIC SCALE SHOWN IN FULL SIZE VERIFY SCALE FOR REDUCED PLANS	DESIGN BY RVG CHECKED CHV	RODOLFO V. GALANG PROJECT MANAGER	STEFFEN ENGINEERING CO CONSULTING ENGINEERS VICTOR G. STEFFEN REGISTERED PROFESSIONAL ENGINEER No. 11872 Exp. 12/31/20 ELECTRICAL STATE OF CALIFORNIA	REGISTERED ELECTRICAL ENGINEER PLANS APPROVAL DATE	APPROVED BY EW A. Z. BAUER REGISTERED PROFESSIONAL ENGINEER No. C43632 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA	PROJECT TITLE <b>SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANEL INSTALLATION</b>
DETAILS BY RVG CHECKED First MI Last	QUANTITIES BY RVG CHECKED First MI Last			NO. REVISIONS BY DATE	CONTRACT NO. 2018-BT-098 DWG NO. E05	SHEET TITLE <b>ELECTRICAL DETAILS AND PANEL SCHEDULE</b>
IN 1 2 3 4 6 7 8	CM 1 2 3 4 6 7			PLANS APPROVAL DATE	CADD FILE: 18T098C022.DWG	DATE SCALE: AS NOTED DATE: 13 May 2019

**GOLDEN GATE BRIDGE HIGHWAY & TRANSPORTATION DISTRICT**



**1 POWER & SIGNAL PANEL CONNECTIONS**  
SCALE: 1/2" = 1'-0"



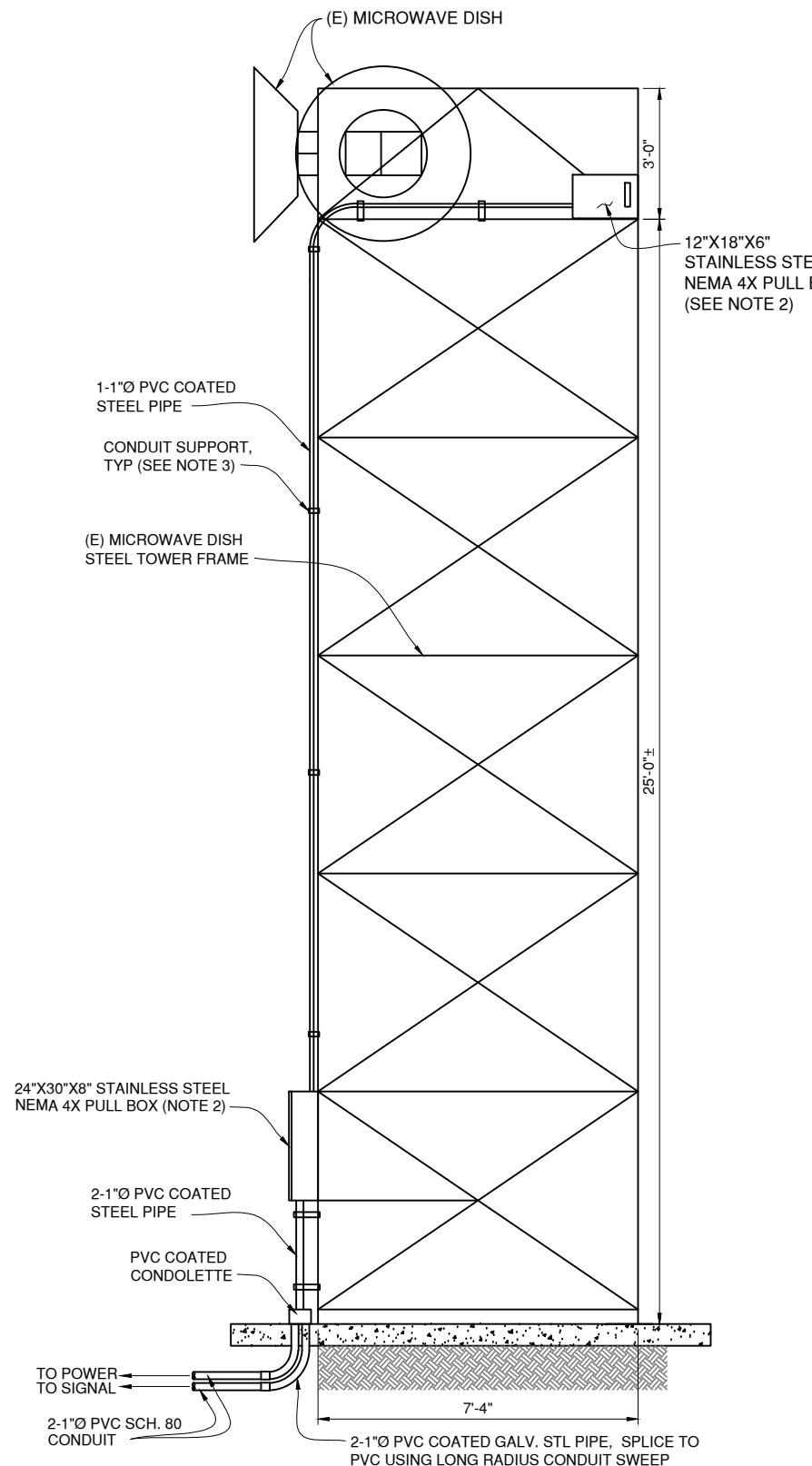
**A (N) WALKWAY SECTION**  
SCALE: 1/2" = 1'-0"

GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

IN	1	2	3	4	5	6	7
CM	1	2	3	4	5	6	7

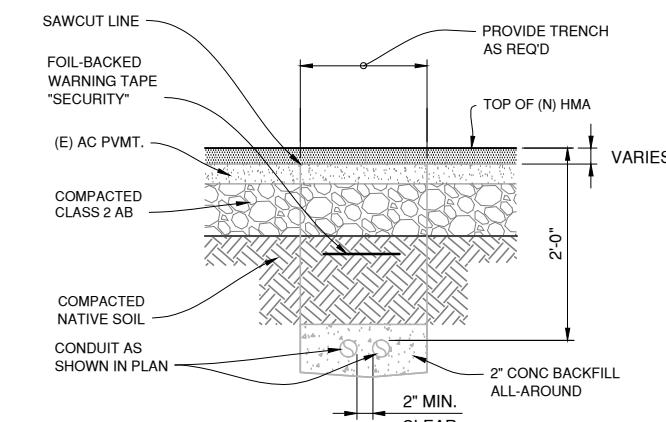
DESIGN	BY	RVG	CHECKED	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY	RVG	CHECKED	
QUANTITIES	BY	RVG	CHECKED	

**B ELECTRICAL CONDUIT LAYOUT (LOOKING NORTH)**  
SCALE: 1/2" = 1'-0"



**NOTES:**

1. PROTECT (E) FENCING DURING CONSTRUCTION. ANY DAMAGE TO (E) FENCING SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
2. PULL BOXES SHALL BE STAINLESS STEEL TYPE 316 WITH HINGED COVER. LOCKABLE LATCH, NEMA 4X, SIZE AND LOCATION AS SHOWN ON THE PLANS. MOUNT PULL BOXES TO (E) STEEL FRAMES USING UNISTRUT P1000 GALV. CHANNELS WITH UNISTRUT FITTINGS OR APPROVED EQUAL. SUBMIT CONNECTION DETAILS TO ENGINEER FOR APPROVAL.
3. MOUNT RIGID CONDUIT ON (E) STEEL FRAMES WITH "CADDY" CUSHIONED PIPE CLAMP @ 6 FT OC MAX, MFR. MODEL #454007 OR APPROVED EQUAL.

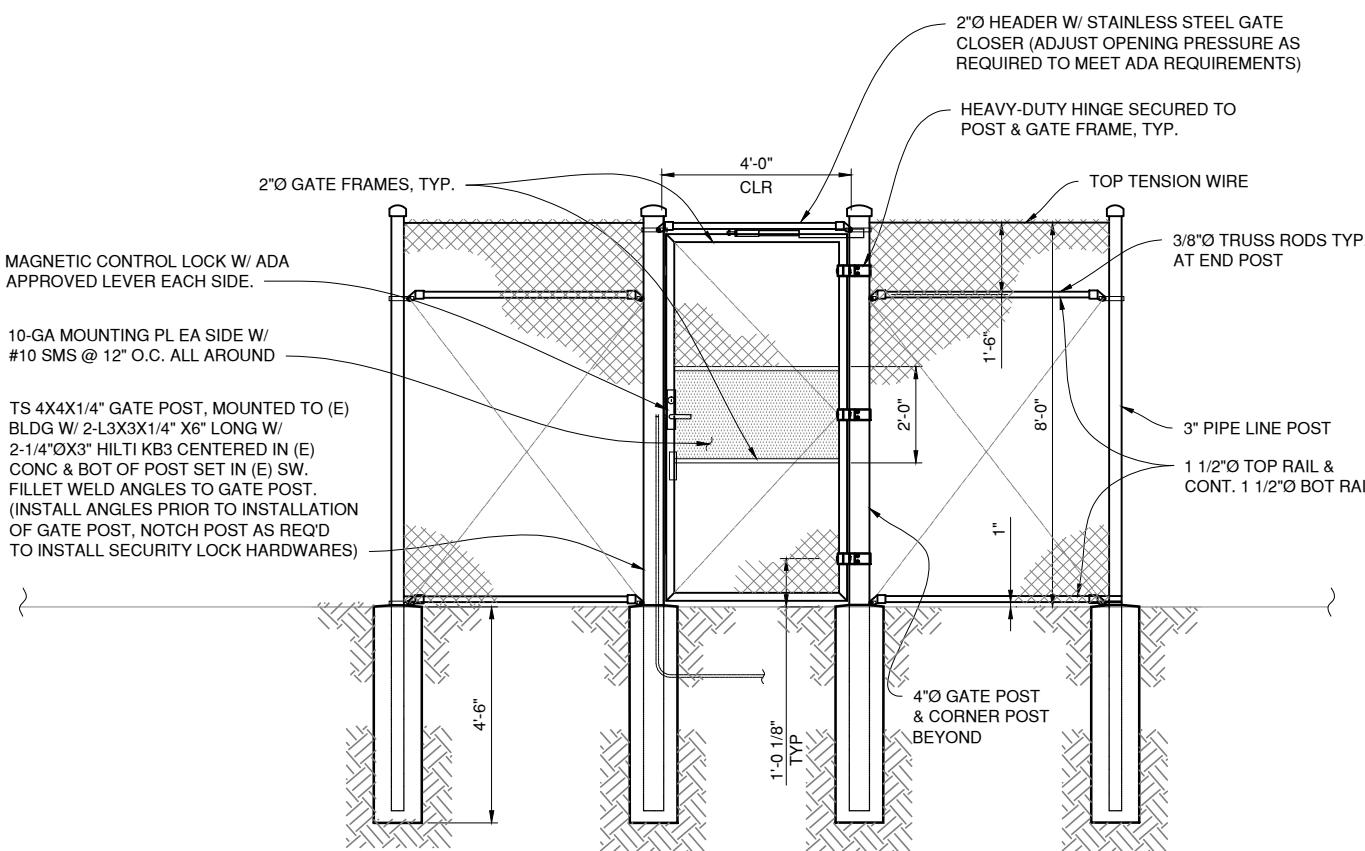


**C TYPICAL TRENCH SECTION**  
SCALE: 1" = 1'-0"

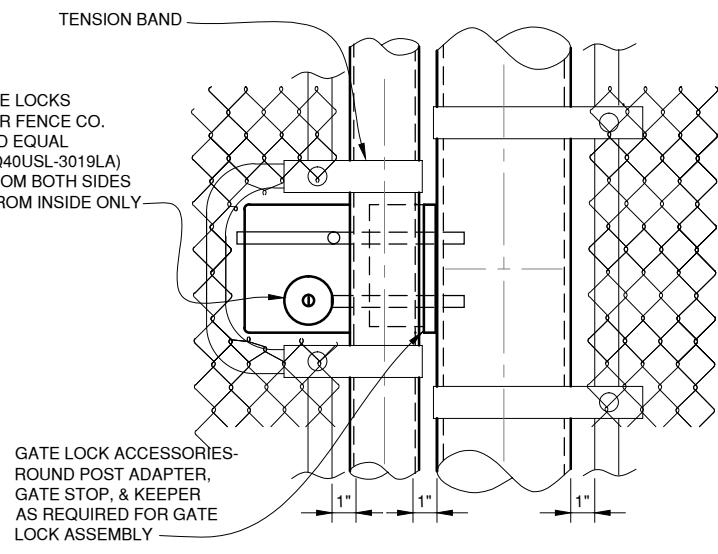
**95% DESIGN REVIEW**

APPROVED BY RODOLFO V. GALANG REGISTERED PROFESSIONAL ENGINEER No. C66235 Exp. 6/30/20 STATE OF CALIFORNIA CIVIL	APPROVED BY EW A Z. BAUER REGISTERED PROFESSIONAL ENGINEER No. C43632 Exp. 3/31/21 STATE OF CALIFORNIA CIVIL	PROJECT TITLE <b>SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANELS INSTALLATION</b>
PROJECT ENGINEER MM/DD/YY DATE	REVISIONS BY DATE DWG NO. <b>E06</b>	SHEET TITLE <b>CONSTRUCTION DETAILS 2</b>
CONTRACT NO. 2018-BT-098	CADD FILE: 18T098C023.DWG	SCALE: AS NOTED DATE: 13 May 2019



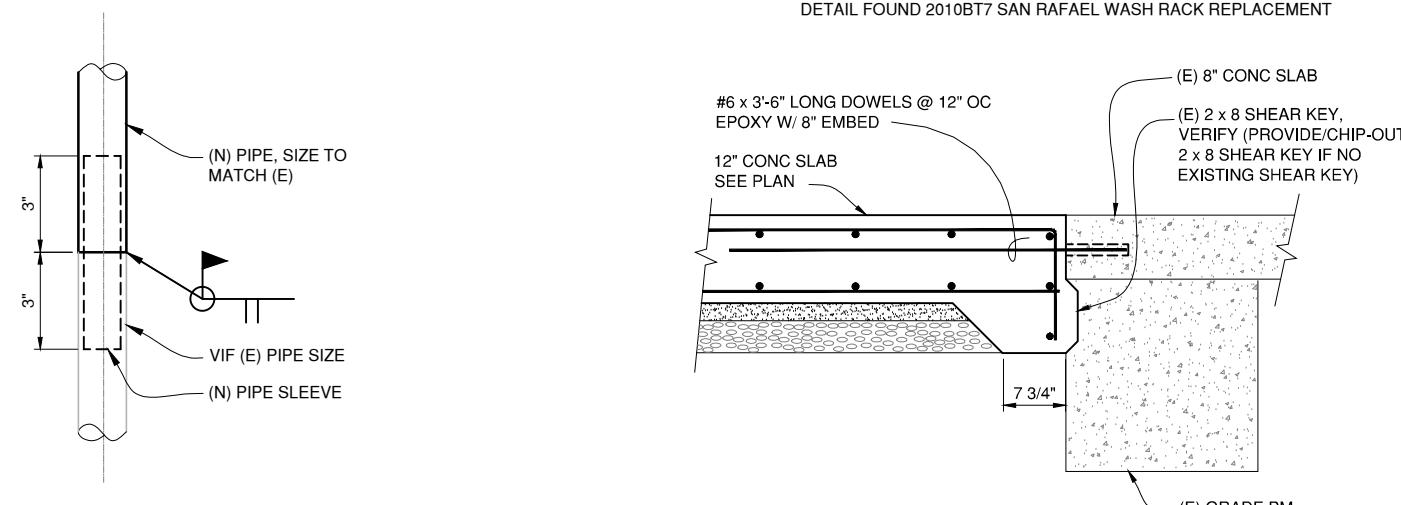


**1**  
C09  
TYP GATE DETAIL  
SCALE: 1/2"=1'-0"



**ELEVATION**

**2**  
C09  
TYP DEAD BOLT LOCK DETAIL  
3"=1'-0"



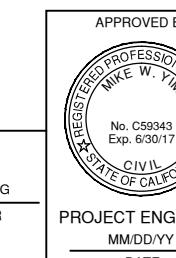
**3**  
TYP PIPE SPLICING DETAIL  
SCALE: 6"=1'-0"

**4**  
TRANSFORMER CONCRETE PAD DETAIL  
1"=1'-0"

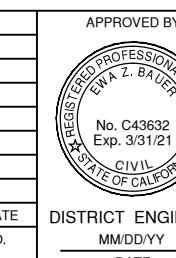
**NOTES:**

- SEE DWG E01 FOR GENERAL NOTES. SEE DWGS E03 & E04 FOR LOCATION & DESCRIPTION OF SEC FENCE & GATE IMPROVEMENTS.
- SEC FENCE SHALL BE 9 GA STL WIRE MESH W/ 1" SQ SPACING W/ 7-GA STL TENSION WIRES ON TOP & 1 1/2"Ø PIPE AT BOT. INSTALL 3/4"x3/16" EDGE STL TENSION BAR THREADED INTO EA MESH AT EA END OR GATE POST.
- ALL FENCE FABRIC, WIRES, PIPES & HARDWARE SHALL BE HOT-DIP GALV STL OR SS. EA PIPE POST SHALL HAVE A PIPE CAP OR BARBED WIRE ARM. EACH GATE OR CORNER POST SHALL HAVE T & B STRUTS W/ TRUSS ROD IN BOTH DIRECTIONS, TYP. ENTIRE FENCE SHALL HAVE BOTTOM PIPE STRUT
- FENCE GATES SHALL BE ALL WELD CONSTRUCTION INCLUDING FRAMES, BRACES, LOCKS, & MAGNETIC SWITCH. SECURE FENCE FABRIC TO ALL POSTS & TENSION WIRES W/ 9 GA STL TIE WIRES @ 3" OC & 6-GA POST CLIPS @ 6" OC. SECURE TENSION BARS W/ TENSION BANDS @ 6" OC, UON. EACH DEAD BOLT SHALL HAVE AN ENCLOSED HOUSING SECURE TO GATE FRAME & GATE POST W/ A TAMPER-PROOF COVER PLATE IN FRONT.
- CONTRACTOR SHALL COMPLY W/ REGULATIONS IN HANDLING DISPOSING EXCESS MATERIAL OR WATER, & SHALL NOT DISCHARGE INTO NEARBY CREEK OR DRAIN INLETS.
- GRADE (E) GROUND ALONG FENCE LINE TO A SMOOTH STRAIGHT FINISH BETWEEN POSTS & CONSTRUCT SEC FENCE TO FOLLOW FINISH GROUND SLOPE.
- BARBED WIRES REQD ALONG REAR & SIDE PERIMETER FENCES.
- REAR PERIMETER FENCE SHALL HAVE 8 FT HIGH PRIVACY FABRIC ATTACHED TO INSIDE OF FENCE FABRIC PER MFR INSTRUCTIONS.
- PROVIDE TWO DEAD BOLT LOCKS FOR EA MANUAL VEHICLE GATE & ONE FOR MANUAL PED GATE W/ KEY ACCESS FROM BOTH SIDES & INSIDE LEVER FOR EA LOCKS. PROVIDE ONE ELECTRIC LOCK FOR EA CARD ACCESS CONTROL PED GATE W/ CARD ACCESS FROM OUTSIDE W/ ADA APPROVED LEVER & ADA APPROVED LEVER OPENED FROM THE INSIDE. PROVIDE TWO MAG LOCKS FOR EA ELECTRIC OPERATOR CONTROLLED VEHICLE GATE.

**95% DESIGN REVIEW**



PROJECT ENGINEER  
MM/DD/YY  
DATE



DISTRICT ENGINEER  
MM/DD/YY  
DATE

PROJECT TITLE  
**SAN RAFAEL BUS EMPLOYEE PARKING LOT PAVING AND SOLAR PANEL INSTALLATION**

SHEET TITLE  
**TYPICAL SECURITY FENCE & GATE DETAILS**

SCALE: AS NOTED DATE: 13 May 2019



GRAPHIC SCALE SHOWN IN FULL SIZE  
VERIFY SCALE FOR REDUCED PLANS

IN 1 2 3 4 5 6 7  
CM 1 2 3 4 5 6 7

DESIGN	BY MWY	CHECKED	RODOLFO V. GALANG PROJECT MANAGER
DETAILS	BY MWY	CHECKED	
QUANTITIES	BY MWY	CHECKED	

REVISIONS  
CONTRACT NO. 2018-BT-098  
CADD FILE: 18T098C024.DWG

BY DATE  
DWG NO.  
E07