

INFORMATION HANDOUT

For Contract No. 04-0G7204

At 04-SCI-152-11.9

Identified by

Project ID 0400001989

PERMITS

Letter of Concurrence from U.S. Fish and Wildlife Service (08ESMF00-2014-I-0366-1)

MATERIALS INFORMATION

Battery Backup System



United States Department of the Interior



In Reply Refer to:
08ESMF00-2014-I-
0366-1

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846

DEC 05 2014

Ms. Melanie Brent, Deputy District Director
Caltrans District 4 Environmental Analysis
California Department of Transportation
P.O. Box 23660
Oakland, California 94623-0660

Subject: Informal Consultation on the Proposed State Route 152 and Frazier Lake Road
Project, Santa Clara County, California (Caltrans EA 04-0G720)

Dear Ms. Brent:

This letter responds to your March 9, 2014, letter requesting informal consultation and written concurrence for the proposed State Route 152 (SR-152) and Frazier Lake Road Project, Santa Clara County, California. Your letter was received by the U.S. Fish and Wildlife Service (Service) on March 14, 2014 (Caltrans EA 04-0G720). This consultation concerns the effects of the proposed action on the endangered least Bell's vireo (*Vireo bellii pusillus*), and threatened California tiger salamander (*Ambystoma californiense*) Central Valley Distinct Population Segment (Central California tiger salamander). This letter is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act).

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation (23 U.S.C. 327) allows the Secretary of the U.S. Department of Transportation acting through the Federal Highway Administration (FHWA) to establish a Surface Transportation Project Delivery Pilot Program, whereby a State may assume the FHWA responsibilities under the National Environmental Policy Act (NEPA) for environmental review, agency consultation and other action pertaining to the review or approval of a specific project. Caltrans assumed these responsibilities for the FHWA on July 1, 2007 through a Memorandum of Understanding (MOU) within the State of California (http://www.dot.ca.gov/ser/downloads/MOUs/nepa_delegation/sec6005mou.pdf).

The Service attended a site visit with Caltrans on February 6, 2014, to review the project and discuss components of the project that could result in take of listed species or affect critical habitat. The project is located within the Santa Clara Valley Habitat Plan (Plan) coverage area; however, the project qualifies as an exempt transportation project under section 6.4.4. of the Plan based on the length of the project, i.e. 600 feet, which extends less than 1,000 feet. The action area is defined in 50 CFR §402.02, as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." For the purposes of the proposed action, the Service considers the action area to comprise 15.5 acres extending from Post Mile (PM) 11.85 to PM 11.95 along SR-152 from the intersection at SR-101 to the intersection at SR-156 encompassing the

project footprint. The action area includes all construction access, staging areas, vehicle parking, and construction work zones as specified by Caltrans and submitted to the Service in the March 9, 2014, letter requesting informal consultation, the response to the 30-day letter dated June 17, 2014, the February 6, 2014 site visit, and associated email and phone correspondence. Habitat within the action area comprises ruderal, landscaped lands, disturbed herbaceous vegetation, paved and unimproved shoulders, and a maintained orchard.

The purpose of the proposed action is to mitigate traffic accidents in the City of Gilroy, Santa Clara County, at the SR-152/Frazier Lake Road intersection (PM 11.9), by installing a traffic signal to regulate the movement of vehicles within this intersection and reduce driver confusion, found to be a contributing factor in many of the accidents that occurred within the study period. Funding for this project is proposed from the State Highway Operation and Protection Program, Safety Improvement Program (Program Code 201.010). Caltrans proposes to widen the existing pavement from 5.5 feet to 7.5 feet on the south side of SR-152 extending approximately 600 feet from PM 11.85 to PM 11.95. Beyond the edge of the new pavement, there will be 2.5 feet of shoulder embankment to accommodate the installation of the Midwest Guardrail System. Approximately eight signal and lighting poles will be installed near the SR-152/Frazier Lake Road intersection. The foundation of the poles will be Cast-In-Drill-Hole piles, installed by an auger, having a maximum depth of 13 feet and a diameter of 3.5 feet. To shield motorists from the two traffic signal poles on the north side of the SR-152/Frazier Lake Road intersection, 200 feet of metal beam guardrail will be installed by a post driver a maximum of 4 feet away from the edge of pavement. A rock wheel machine will be used to dig into soil, beyond the edge of pavement of SR-152 and perform the electrical trenching needed to place the conduits, leading to the flashing beacons and traffic detectors to be installed, in the ground. The trenching will extend approximately 1,200 feet in each direction from the intersection, will have a minimum depth of approximately 30 inches, and will have a minimum width of approximately 4 inches. From the intersection, trenching will occur to the west, along the south side of SR-152, and to the east along the north side of SR-152. The trenches will be backfilled after the conduits have been placed in the ground. Detector loops will be installed below the surface of the traveled way by saw cutting the existing pavement a minimum of one inch. After all of the electrical equipment has been installed on the roadway, the existing pavement will be overlaid with hot mix asphalt and restriped.

Potential staging areas include the paved area and the gravel area at the southeast quadrant of the SR-152/Frazier Lake Road intersection. While work crews are building the new pavement structural section on the south side of the SR-152/Frazier Lake Road intersection, K-rail will be in place adjacent to the fog line to shield them from vehicles. One-way reversible traffic control will be in effect to accommodate construction operations associated with overlaying the existing pavement with hot mix asphalt and restriping. The total estimated project duration is 60 working days. Approximately 4 nights are needed to install and remove the temporary railing (Type K) and about 8 nights are needed for AC overlay and restriping work.

The Service has reviewed the submitted project as described in the March 9, 2014, letter to the Service, supporting documentation submitted to the Service and dated June 17, 2014, evaluation of project effects, and concurs with the determination that the project as described is not likely to adversely affect the least Bell's vireo and Central California tiger salamander as the effects will be discountable. Designated critical habitat has been designated for the Central California tiger salamander; however, the project does not occur within designated critical habitat for this species. The Service concurs that the proposed action is not likely to adversely affect these listed species based on the following: (1) construction activities, including staging, laydown and vehicle parking, will occur within areas that are paved or have compacted soils devoid of vegetation outside any

designated environmentally sensitive areas; (2) project has been modified to avoid affecting areas of vegetated habitat beyond the existing paved roadway; (3) Caltrans will implement construction and erosion control Best Management Practices and a Storm Water Pollution Prevention Plan; (4) preconstruction nesting bird surveys will be conducted for least Bell's vireo and other migratory birds between March 15 and September 15; (5) all environmentally sensitive areas will be clearly demarcated with temporary high-visibility fencing; (6) all on-site personnel will attend environmental awareness training prior to beginning project activities; and (7) Service-approved biological monitors will conduct preconstruction surveys for listed species prior to initial ground disturbing activities and will monitor construction activities for regulatory compliance.

This concludes informal consultation on the proposed SR-152 and Frazier Lake Road Project, Santa Clara County, California. Therefore, unless new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this informal consultation; the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this informal consultation; or a new species is listed or critical habitat designated that may be affected by the action, no further action pursuant to the Act is necessary. If you have questions please contact Jerry Roe, Endangered Species Biologist, or Ryan Olah Coast Bay Division Chief, at the letterhead address (916) 414-6600, or via email at Jerry_Roe@fws.gov or Ryan_Olah@fws.gov.

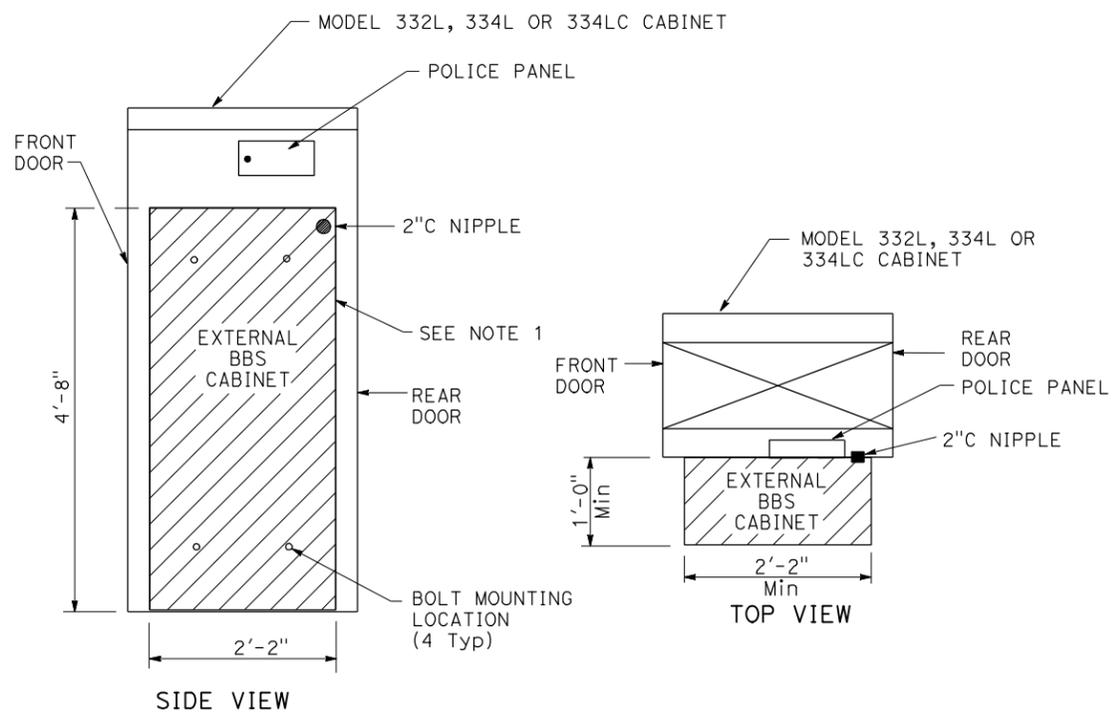
Sincerely,



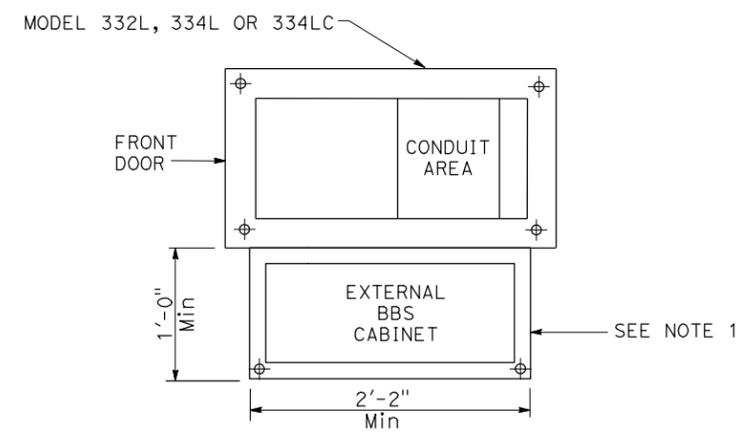
for Eric Tattersall
Deputy Assistant Field Supervisor

cc:
Melissa Escaron, California Department of Fish and Wildlife, Napa, California

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
<i>Theresa Gabriel</i> REGISTERED CIVIL ENGINEER No. E15129 Exp. 6-30-10 ELECT				12-20-07 DATE	
PLANS APPROVAL DATE					
<small>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.</small>					



EXTERNAL BBS CABINET MOUNTED TO THE MODEL 332L, 334L OR 334LC CABINET

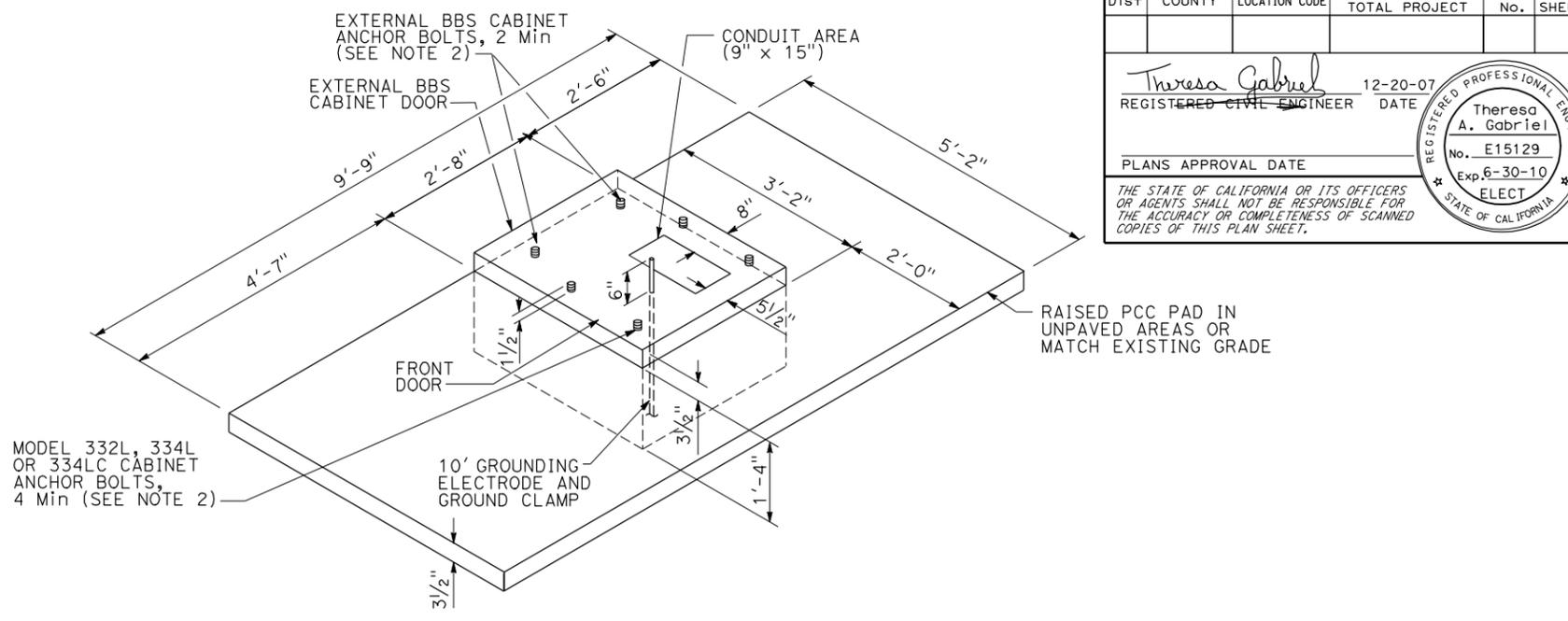


BASE PLAN FOR BBS MOUNTED TO THE MODEL 332L, 334L OR 334LC CABINET

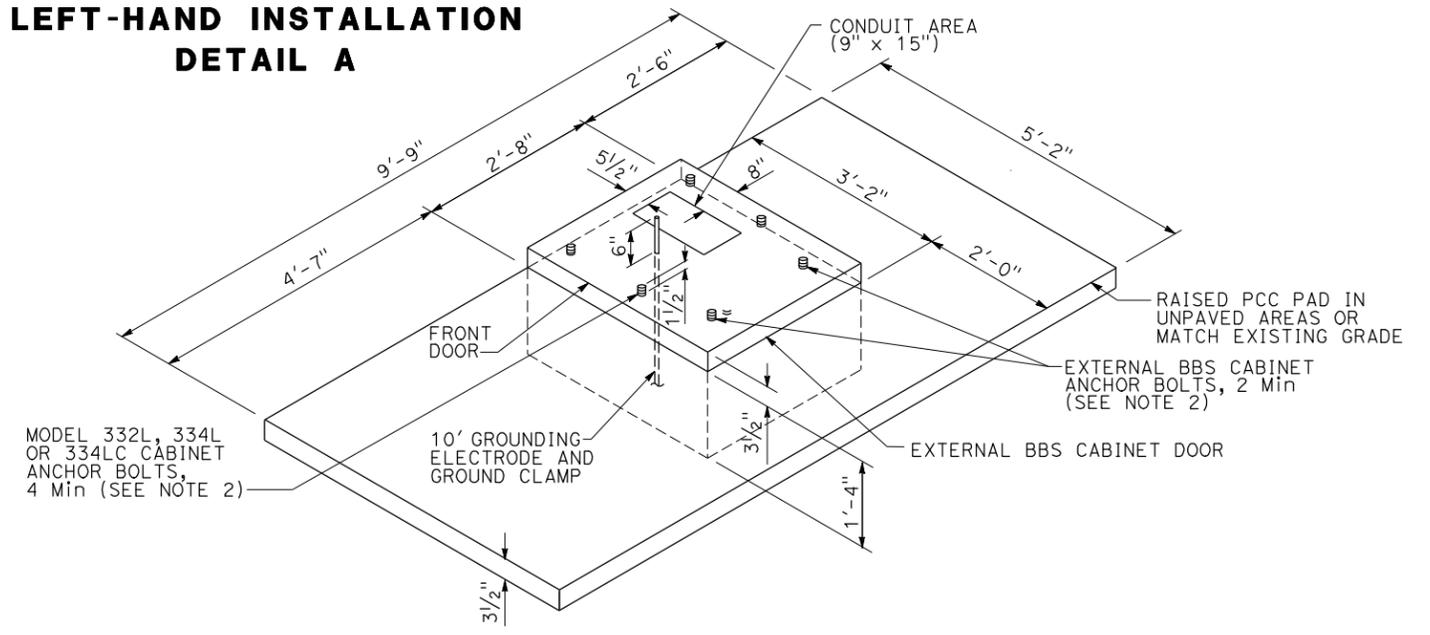
(FOR DIMENSIONS AND DETAILS NOT SHOWN, SEE SHEET A6-1 TO A6-4, CABINET HOUSING DETAILS OF THE TRANSPORTATION ELECTRICAL EQUIPMENT SPECIFICATION (TEES))

NOTES: (THIS SHEET ONLY)

1. THE EXTERNAL BBS CABINET SHALL BE MOUNTED TO THE MODEL 332L, 334L OR 334LC CABINET WITH FOUR 18-8 STAINLESS STEEL Hex HEAD, FULLY-THREADED, 3/8"-16 x 1" BOLTS; TWO WASHERS PER BOLT, DESIGNED FOR 3/8" BOLTS AND ARE 18-8 STAINLESS STEEL, 1" OUTSIDE DIAMETER, ROUND, AND FLAT; AND ONE K-LOCK NUT PER BOLT THAT IS 18-8 STAINLESS STEEL AND A Hex-NUT. THE ENGINEER WILL HAVE TO APPROVE THE BOLT MOUNTING LOCATION PRIOR TO INSTALLATION.
2. THE ANCHOR BOLTS SHALL BE 3/4" Dia x 15" WITH A 2"-90° BEND. THE CABINET MANUFACTURER'S SPECIFICATION SHALL DETERMINE THE LOCATION OF THE ANCHOR BOLTS IN THE FOUNDATION. THE ENGINEER WILL HAVE TO APPROVE THE ANCHOR BOLTS AND ITS LOCATION IN THE FOUNDATION PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS OF THE BBS CABINET PRIOR TO CONSTRUCTING THE FOUNDATION OF THE Std MODEL 332L, 334L OR 334LC CABINET FOUNDATION. THE ENGINEER WILL HAVE TO APPROVE ANY NECESSARY DEVIATIONS PRIOR TO CONSTRUCTION.
4. ALL DIMENSIONS ARE NOMINAL.



LEFT-HAND INSTALLATION DETAIL A



RIGHT-HAND INSTALLATION DETAIL B

MODIFIED MODEL 332L, 334L OR 334LC CABINET FOUNDATION DETAIL FOR BATTERY BACKUP SYSTEM (BBS)
 (FOR ADDITIONAL NOTES, SEE SHEET ES-3C OF THE STANDARD PLANS FOR MODEL 332L, 334L OR 334LC CABINETS)

ELECTRICAL SYSTEMS (BATTERY BACKUP SYSTEM FOUNDATION DETAILS)

NO SCALE

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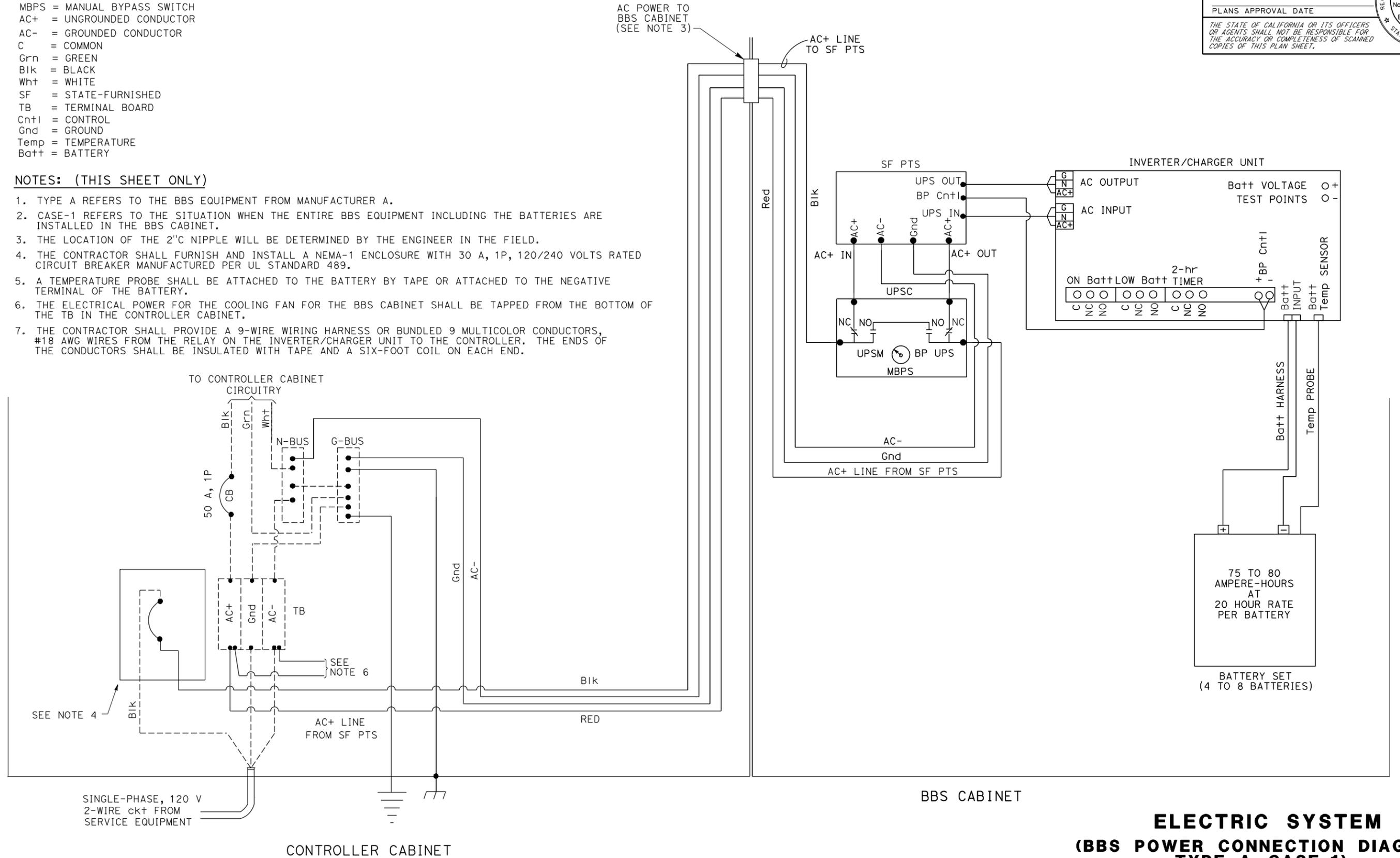
Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
<i>Theresa Gabriel</i> REGISTERED CIVIL ENGINEER			12-20-07 DATE	PROFESSIONAL ENGINEER Theresa A. Gabriel No. E15129 Exp 6-30-10 ELECT STATE OF CALIFORNIA	
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ABBREVIATIONS: (THIS SHEET ONLY)

- PTS = POWER TRANSFER SWITCH
- UPS = UNINTERRUPTIBLE POWER SUPPLY
- UPSC = UNINTERRUPTIBLE POWER SUPPLY CONTROLLER
- UPSM = UPS MODE
- BP = BYPASS
- MBPS = MANUAL BYPASS SWITCH
- AC+ = UNGROUNDED CONDUCTOR
- AC- = GROUNDED CONDUCTOR
- C = COMMON
- Grn = GREEN
- Blk = BLACK
- Wh+ = WHITE
- SF = STATE-FURNISHED
- TB = TERMINAL BOARD
- Cn+I = CONTROL
- Gnd = GROUND
- Temp = TEMPERATURE
- Batt+ = BATTERY

NOTES: (THIS SHEET ONLY)

1. TYPE A REFERS TO THE BBS EQUIPMENT FROM MANUFACTURER A.
2. CASE-1 REFERS TO THE SITUATION WHEN THE ENTIRE BBS EQUIPMENT INCLUDING THE BATTERIES ARE INSTALLED IN THE BBS CABINET.
3. THE LOCATION OF THE 2" C NIPPLE WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEMA-1 ENCLOSURE WITH 30 A, 1P, 120/240 VOLTS RATED CIRCUIT BREAKER MANUFACTURED PER UL STANDARD 489.
5. A TEMPERATURE PROBE SHALL BE ATTACHED TO THE BATTERY BY TAPE OR ATTACHED TO THE NEGATIVE TERMINAL OF THE BATTERY.
6. THE ELECTRICAL POWER FOR THE COOLING FAN FOR THE BBS CABINET SHALL BE TAPPED FROM THE BOTTOM OF THE TB IN THE CONTROLLER CABINET.
7. THE CONTRACTOR SHALL PROVIDE A 9-WIRE WIRING HARNESS OR BUNDLED 9 MULTICOLOR CONDUCTORS, #18 AWG WIRES FROM THE RELAY ON THE INVERTER/CHARGER UNIT TO THE CONTROLLER. THE ENDS OF THE CONDUCTORS SHALL BE INSULATED WITH TAPE AND A SIX-FOOT COIL ON EACH END.



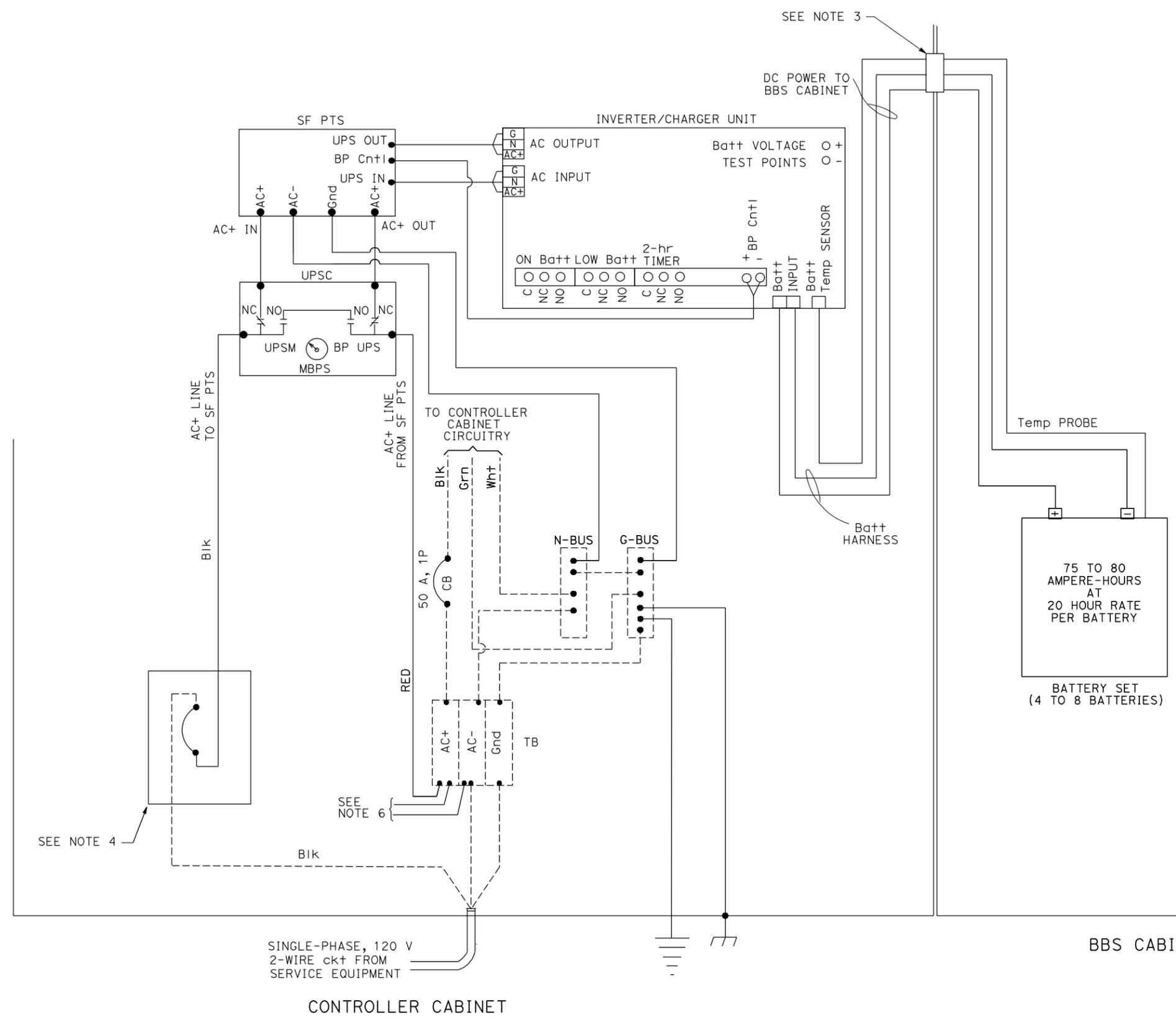
**ELECTRIC SYSTEM
(BBS POWER CONNECTION DIAGRAM,
TYPE A, CASE-1)**

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- Cntl = CONTROL
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NOTES: (THIS SHEET ONLY)

1. TYPE B REFERS TO THE BBS EQUIPMENT FROM MANUFACTURER B.
2. CASE-2 REFERS TO THE SITUATION WHEN ONLY THE BATTERIES ARE INSTALLED IN THE BBS CABINET. THE REMAINING EQUIPMENT IS PLACED IN THE CONTROLLER CABINET.
3. THE LOCATION OF THE 2" NIPPLE WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEMA-1 ENCLOSURE WITH 30 A, 1P, 120/240 VOLTS RATED CIRCUIT BREAKER MANUFACTURED PER UL STANDARD 489.
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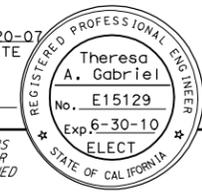


**ELECTRICAL SYSTEMS
(BBS POWER CONNECTION DIAGRAM,
TYPE A, CASE-2)**

NO SCALE

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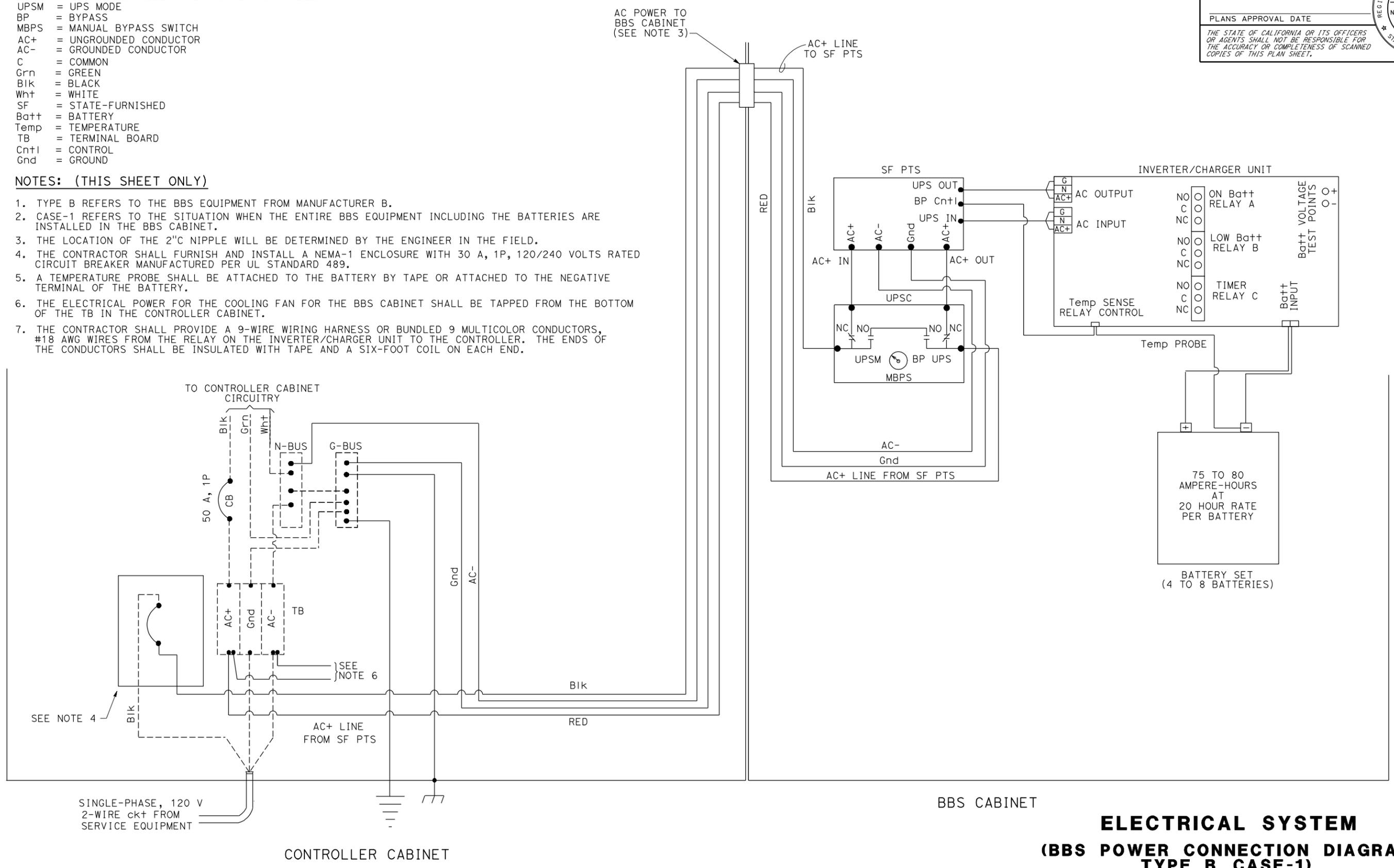
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2. CASE-1 REFERS TO THE SITUATION WHEN THE ENTIRE BBS EQUIPMENT INCLUDING THE BATTERIES ARE INSTALLED IN THE BBS CABINET.
3. THE LOCATION OF THE 2" C NIPPLE WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEMA-1 ENCLOSURE WITH 30 A, 1P, 120/240 VOLTS RATED CIRCUIT BREAKER MANUFACTURED PER UL STANDARD 489.
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AC POWER TO BBS CABINET (SEE NOTE 3)

AC+ LINE TO SF PTS



75 TO 80 AMPERE-HOURS AT 20 HOUR RATE PER BATTERY
 BATTERY SET (4 TO 8 BATTERIES)

BBS CABINET

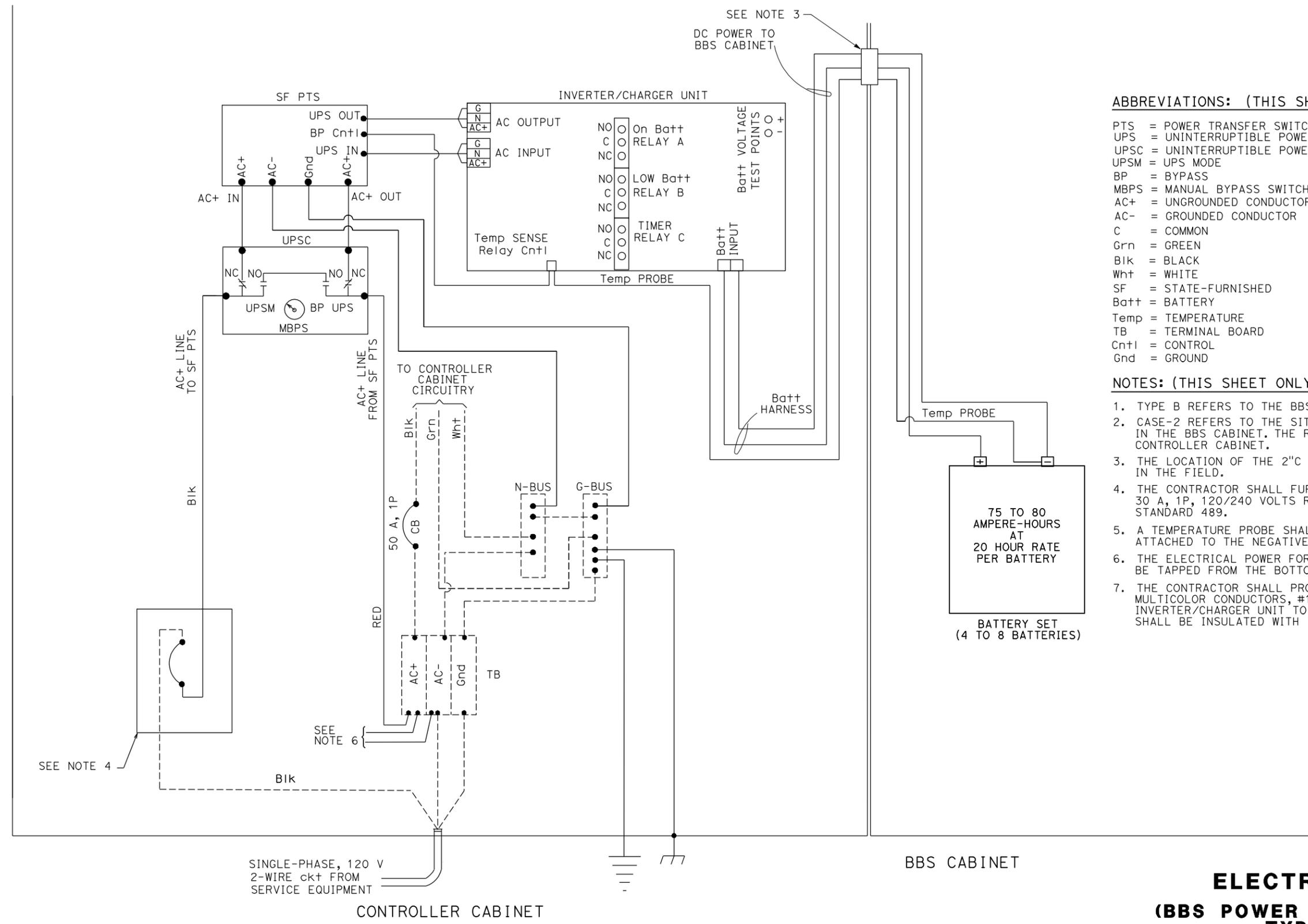
ELECTRICAL SYSTEM
(BBS POWER CONNECTION DIAGRAM, TYPE B, CASE-1)

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**ELECTRICAL SYSTEM
(BBS POWER CONNECTION DIAGRAM, TYPE B, CASE-2)**

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