VI. ARTISAN PRECAST SPECIFICATIONS AND DRAWINGS

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SPECIFICATION FOR CONSTRUCTION & INSTALLATION FOR CEDARCRETE® PRE-CAST CONCRETE SYSTEM

SECTION 1 - GENERAL

1.01 INTENT:

1. This specification states the conditions and requirements applicable to Artisan Precast, Inc.'s precast concrete fences CEDARCRETE®.

2. Specifications and drawings supplement each other and together constitute one complete set of specifications and drawings, so that any work exhibited in one and not in the other shall be executed just as if it had been set forth in both.

3. It is understood and agreed that the work shall be performed and completed according to the true spirit, meaning, and intent of the contract and specifications.

4. Shall anything be omitted from the specifications, which is necessary to a clear understanding of the work, or should it appear that various instructions are in conflict, then the contractor shall secure written instructions from the Owner before proceeding with the construction affected by such omissions and / or discrepancies.

1.02 STANDARDS:

1. Applicable ASTM Standards, latest revision, as published by the American Society for Testing and Materials and indicated hereinafter.

A. CONTRACTOR RESPONSIBILITIES

1. Fence contractor is responsible for laying out the fence lines, including fence corners and gate locations.

2. Fence contractor is responsible for clearing all trees & underbrush, which may be in the fence lines. All cleared trees and underbrush shall be removed from the job site by the fence contractor.

3. Fence contractor is responsible for contacting appropriate personnel for locating all underground utilities within the work area. Owner to provide assistance when requested by Contractor.

4. Fence contractor is responsible for providing a competent crew with a minimum of three workers on the job at all times.

B. SAFETY

1. The work shall be performed in accordance with all applicable federal, state, and local safety laws and regulations, including the Occupational Health and Safety Act of 1970 as amended (OSHA).

2. The contractor shall be responsible for the observance of proper safety practices and the avoidance of damage to property by all personnel engaged in the work. It is the Contractor's responsibility to be aware of and observe any recommended practice or regulations concerning the handling of construction materials called for on this project.

3. The Contractor shall take all steps necessary to prevent damage to or interference with the existing power lines, communication facilities, roadways, railroads, waterways, buried cables, pipelines, and other facilities on, adjacent to, or crossing the project property.

C. SUBMITTALS

1. Color to be selected by Owner from manufacturer's range of standard colors.

2. Shop Drawings: Owner or Contractor, if requested, to provide working drawings indicating all information necessary for precast fence elements. Drawings shall illustrate the shape and dimension of precast components; the size, quantity and details of the reinforcing steel; the quantity, type, size and details of connection and lifting hardware (if needed); the size and location of drain openings; and any additional details necessary. Drawings shall bear the seal of a registered professional engineer.

3. Design Calculations: Owner or Contractor, if requested, to furnish design calculations which include a summary of all design parameters used, including material types, strength values, allowable stresses, assumed loads and load combinations. Calculations shall be submitted covering the range of heights and loading conditions on the project. Calculations shall bear the seal of a registered professional engineer.

4. Soil Conditions: Owner to provide soil samples or a copy of a soils report to Contractor and/or engineer for design of piers/posts based on wind load calculations.

5. Samples: Manufacturer to furnish samples of each type, texture and color of concrete screening wall of interest where applicable.

D. QUALITY ASSURANCE

1. Qualifications: Engage an experienced Installer who has experience with architectural precast concrete fence projects with same material and of similar scope to the Project.

2. Obtain concrete fence materials trade marked as CEDARCRETE®manufactured in the United States.

3. Manufacturer Qualifications: A firm experienced in producing precast concrete fence units in accordance to those indicated for the Project, as well as sufficient production capacity to produce required units without delaying the Work.

E. PROJECT CONDITIONS

1. Field Measurements: Verify layout information for fences and gates shown on the Drawings in relation to the property survey and existing structures. Verify dimensions by field measurements.

2. All existing fence or fence line obstructions are to be removed by fence contractor prior to commencement of work.

SECTION 2 – PRODUCTS

A. MATERIALS

1. Suppliers: Subject to compliance with requirements, that may be incorporated in the work include the following:

   a. Artisan Precast, Inc.
      Contact: Christopher Miller
      1180 S. Beverly Drive
      Suite 608
      Los Angeles, CA 90035
      Phone: (800) 511-2747 / (310) 556-3200
      Fax: (310) 556-3201

   b. No substitutions allowed.

   c. Product to be manufactured by a NPCA (National Precast Concrete Association) certified factory in the USA.

2. Precast Concrete Fence Wall System (panels and posts) designated as CEDARCRETE®.

   a. 1’-0” - 10’-0” high
   b. Panels and posts to have same texture on both sides.
   c. Includes textured post caps (line, end and corner) and / or panel caps.
   d. Panel, Posts and caps shall be normal weight concrete having sand and gravel or crushed stone aggregates mixed with ASTM-C150, Type I or Type III Portland Cement and shall have a compression strength of 5,000 psi @ 28 days.
   e. Integral color and concrete to be thoroughly mixed and vibrated.
   f. Steel reinforced panels and rebar reinforced posts and rails. Rebar conforms to ASTM A615, grade 60. Fiber to be used in all components as a secondary reinforcement.
   g. Wall posts set 6’-4” feet apart, or per manufacturer’s recommendations.
   h. Post footings: 6’-4” on center (maximum).
   i. Loading: Wind loading and surcharge loads will be applied to the panels, columns, and foundation components per local building code requirements and per section G (Design Loading).

B. PRECAST FENCE COMPONENTS DIMENSIONS

1. Posts shall have a typical cross sectional dimension of 5.5" x 6.25" as measured from face-to-face.
2. All posts to 8' high shall be reinforced with 1 #4 rebar, each face. All post higher than 8' in length shall have 2 #5 rebar each face.
3. Method of post attachment to concrete footing / pier shall be by embedment in poured concrete. Depth of concrete pier, and embedment of post shall be as shown on Shop Drawing from manufacturer.
4. Panels shall have typical dimensions of 12 3/8" wide by 2" thick by a length to satisfy the fence height.
5. Panels shall have an interlock construction.
6. Panel caps shall have typical dimensions of 72.25" long by 5" high by 5.5" wide.
7. Panel caps shall be reinforced with 1 - #4 rebar positioned in mold with rebar clip #RCL 75 by Conac or equivalent.

C. COLOR

1. Integrally colored iron oxide pigments.
2. As selected from manufacturer's range of standard colors.

D. PIERS (POST FOOTINGS) DESIGN

1. 6'-4" on center (maximum)
2. Diameter: 12" minimum and per design calculations.
3. Depth: 30" minimum and per design calculations.
4. Reinforcement: None, unless required per design calculations.
5. Where a precast fence post shares the same pier with a steel gatepost, size of pier shall be increased to accommodate both posts. Concrete for this pier shall have a minimum compressive strength of 3,000 psi @ 28 days.
6. Concrete for line post piers shall be normal weight concrete having sand and gravel or crushed stone aggregates mixed with ASTM-C150, Type I or Type III Portland Cement and shall have a minimum compression strength of 2,500 psi @ 28 days.

E. HEIGHT

1. 1'-0" - 10'-0" height (min) above grade, i.e., above top of crushed rock.
2. Lower panel shall be supported by concrete panel cap.

F. DESIGN LOADING (example) – actual depends on soil conditions and other requirements.

1. Loads Criteria
   a. Wind velocity (V): 85 MPH
   b. Exposure: B
   c. Importance Factor (I): 1.0
   d. Velocity Pressure Exposure Coefficient (K_Z): 0.70
   e. Wind Directionality Factor (K_D): 0.85
   f. Topographical Factor (K_{ZT}): 1.0
   g. Wind Pressure $P = 0.00256 (K_Z) (K_{ZT}) (K_D) (V^2) (I)$
      $P = 0.00256 (0.70) (1.0) (0.85) (85^2) (1.0)$
      $P = 11.0$ psf
   h. Working Design Stress: 33% Increase (1.33)
   i. Seismic Design: Site Class D

G. CONCRETE

1. Concrete Material

a. Concrete shall be normal weight concrete having sand and gravel or crushed stone aggregates, mixed with ASTM-C150, Type I or Type III Portland Cement to meet the minimum compressive strengths as follows.

- Panels & posts: 5,000 psi @ 28 days
- Line post piers: 2,500 psi @ 28 days
- Gate post / line post shared pier: 2,500 psi @ 28 days

b. Water used for concrete shall be clean water and free from injurious amounts of oils, alkalis, organic or other deleterious substances.

c. All concrete permanently exposed to the weather shall contain an air entraining admixture resulting in 3 to 6% entrained air or as recommended by the manufacturer.

3. Reinforcing Materials:

a. All reinforcing steel shall be deformed type bars and conform to ASTM – A615, Grade 60, placed as shown on the drawings.

b. All ties and stirrups shall conform to the requirements of ASTM-A615, Grade 40.

c. All wire mesh shall be 9 gauge galvanized having 2 horizontal bars and at least 4 vertical bars.

4. Color: As selected from manufacturer's range of standard colors.

SECTION 3 – EXECUTION

A. INSTALLATION

1. Install precast concrete fence per manufacturer's recommendations.

2. Reinforcement steel, bars and wire fabric shall be thoroughly cleaned before placing and again before the concrete is placed, shall be accurately positioned and secured in place. Provide standard bar charts for all beam steel off the ground.

3. Install all reinforcement with the following clearances between reinforcing steel and face of concrete:
   - Footing, pier or beam bottom: 3"
   - Earth-formed pier of beam sides: 2"
   - Formed footing, pier or beam sides exposed: 1"
   - Precast exposed to weather: panels ¾"; post 1 ¼"

4. Splices within continuous unscheduled reinforcing steel shall have a minimum lap of 30 bar diameters.

5. Footing size shall be based on soil properties at the site.

6. Fresh poured concrete shall be tamped into place by steel rammer, slicing tools or mechanical vibrator until concrete is thoroughly compact and without void.

7. Make excavations for footing to undisturbed soil or to the depth noted on the drawings. Leave the bottom-bearing surface clean and smooth. If footing excavations are made deeper than intended, only concrete shall be used for fill. Remove all loose material from grade beam excavations prior to concrete pour.

8. Align and level posts and panels to be plumb.

B. TESTING OF CONCRETE

1. The contractor shall be responsible for the following concrete tests (varies according to customer requirements):

- 1 air entrainment test of fence and also each gate opening.
- 2 slump tests of fence and also at each gate opening.
- 4 test cylinders of fence and also at each gate opening including 1-7 day break, 2-28 day breaks, 1-spare

2. Slump test shall be done under the direct supervision of Owner. Slump of concrete shall be determined in conformity with ASTM, Standard Method C-143. The contractor shall be responsible for securing, transporting and testing of all concrete test specimens. Concrete test reports shall be forwarded to and shall become the property of the Owner.

3. Owner reserves the right to make any tests necessary to insure that the concrete conforms to the specifications.

4. All cost involving the testing of concrete by the contractor shall be the responsibility of the contractor, if included in price.

C. DAMAGED UNITS

1. Contractor shall replace panels and other components of work that have been damaged.

2. Cleaning: Prior to substantial completion of fence, Contractor shall clean surfaces of fence as recommended by fence manufacturer.

D. CLEANUP

1. Contractor shall clean up site and dispose of all debris, trash, excavated soil, etc. to the satisfaction of the construction inspector.

E. WARRANTIES

1. General

   a. The fence manufacturer shall furnish written warranties covering materials and workmanship and color finish of precast elements. Such warranties shall cover the full cost of materials to replace or repair defective materials per the conditions of the manufacturer

2. Durations of Warranties

   a. All materials and workmanship shall be warranted for a period of 5 years from the date of shipment.

F. LIMITATIONS

1. Product is intended for residential and commercial exterior fencing applications.

2. Product shall not be used alone as a retaining wall for the support of soils and other structural elements unless otherwise noted by the structural engineer.

END

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CONCRETE

1. All concrete shall:
   (a) have a minimum ultimate compressive strength (f'c) as follows:
   i) Panels & Posts : 4000 psi at 28 days
   ii) Pier Foundations : 2500 psi @ 28 days
   (b) have a maximum slump of 5" at point of placement.
   (c) have a W:C ratio of 0.55 or less for all walls and columns, and 0.60 or less for all foundations.
   (d) a normal dry-weight density (UNO).
   (e) be mixed with Portland Cement Type I or II and shall conform to ASTM C 150.
2. All aggregates shall conform to ASTM C33
3. Testing of materials if requested shall be performed in accordance with the governing building standards.
4. The Contractor shall remove and replace any concrete which fails to attain specified 28 day compressive strength if so directed by the Engineer. Any defects in the hardened concrete shall be repaired to the satisfaction of the Engineer and/or Architect or the hardened concrete shall be replaced at the Contractor's expense.
5. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
   i. Cast against earth: 3"
   ii. Precast against forms: Panels: 3/4"; Posts 1 1/2"
6. Minimum lap splice length for all reinforcing steel s hall be 40 bar diameter unless specifically noted otherwise on the structural plans and/or details. All lap splices to be staggered.
7. All reinforcing steel and any other hardware to be cast in concrete shall be well secured in position prior to foundation inspection. All hardware to be installed in accordance with respective manufacturer's specifications. Refer to architectural and structural plans for locations of embedded items.
8. All surfaces to receive fresh concrete shall be maintained continuously wet at least three (3) hours in advance of concrete placement.
9. The Contractor shall obtain approval from the Architect and the Engineer prior to placing sleeves, pipes, ducts, chases, coring and opening on or through structural concrete beams, walls, floors, and roof slabs unless specifically detailed or noted on the plans. All piles or conduits passing through concrete members shall be sleeved with standard steel pipe sections.
10. All concrete (except slabs-on-grade 6" or less) shall be placed by steel hammer, sliding tools or mechanically vibrator until concrete is thoroughly compact and without void.
11. Concrete shall be maintained in a moist condition for a minimum of five (5) days after placement.
12. Concrete shall not be permitted to free fall more than six (6) feet. For heights greater than six (6) feet, use tremie, pump or other method consistent with applicable standards.
13. When specified ultimate compressive strength is greater than 2500 psi, Contractor shall submit mix designs to Architect and Engineer for approval seven (7) days prior to placement. Mix designs shall be prepared by an approved testing laboratory. Sufficient data must be provided for all admixtures.

REINFORCEMENT

1. Reinforcing steel shall be to deformed, clean, free of rust, grease or any other material likely to impair concrete bond.
2. All bars shall conform to ASTM A615, Grade 60 minimum (UNO on structural plans), except that #3 & #4 bars may be Grade 40. All welded wire fabric (WWF) shall conform to ASTM A185.
3. Reinforcing steel that is to be welded shall conform to ASTM A706. All welding of reinforcement shall be subject to special inspection.
4. Contractor shall take necessary steps (standard ties, anchorage devices, etc.) to secure all reinforcing steel in their true position and prevent displacement during concrete placement.
5. Fabrication, placement and installation of reinforcing steel shall conform to:
   (a) Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice
   (b) CBC Section 1907.
7. Heating of reinforcing steel to aid in bending and shaping of bars is not permitted. All bends in reinforcing steel are to be made cold. All bend radii shall conform to CRSI Manual of Standard Practice.

FOUNDATIONS

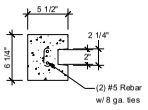
1. All Pier Foundations shall be located in Undisturbed Soil.
2. Unexpected Soil Conditions: Allowable values and subsequent foundation designs are based on soil conditions which are shown by test borings. Actual soil conditions which deviate appreciably from that shown in the test borings shall be reported to the Engineer immediately.
3. All compaction, fill, backfilling and site preparation shall be performed in accordance with CBC Appendix Chapter 33.
4. Excavate to required depths into natural soil (as indicated in the drawings) or as verified by building official or soils engineer. Care shall be taken not to over-excavate foundation at lower elevation and prevent disturbance of soils around high elevation. If footing excavations are made deeper than intended, only concrete shall be used for fill.
5. Foundations shall be poured in neat excavations.
6. All foundations shall be inspected and approved by the appropriate building official and/or a representative of the soils engineer prior to forming and placement of reinforcing or concrete.
7. Foundations shall not be poured until all required reinforcing steel, framing hardware, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the appropriate building official/inspector(s).
8. The sides and bottoms of dry excavations must be moistened just prior to placing concrete; Conversely, de-water footings as required to remove standing water and to maintain optimum working conditions.
9. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring, and the protection of adjacent property, structures, streets, and utilities in accordance with all federal, state and local safety ordinances. The Contractor shall provide for the design and installation of all cribbing, bracing and shoring required.

PRODUCT DATA

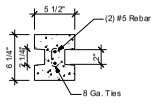
1. Manufacturer
   Manufactured In NPCA Certified Plant for: Artisan Precast, Inc

   Artisan Precast, Inc
   1180 South Beverly Dr. #608, Los Angeles, CA 90035
   Phone #: (310) 556 - 3200 FAX #: (310 556-3201
   Web Site: www.artisanprecast.com
2. Product Description:
   Productions are Intended for Residential, Commercial and Industrial Exterior Fencing, Screening Walls and Noise Barriers.
3. Composition and Materials:
   A mix of High Strength Portland Cement meeting for exceeding the requirements of ASTM-C150, natural aggregates, and Iron Oxide colors placed and cast within factory molds, cured and packaged for shipment.
4. Sizes:
   Screening fence columns are typically placed at 60 inches on center with he screen fence panels being 12 inches in height and approximately 2 inches in thickness. Overall heights are 6 or 8 feet dependant on local codes and site conditions. contact manufacturer for engineering not included in these specifications.
5. Limitations:
   Should not be used as a retaining wall for the support of soils or other structural elements, unless modifications in deign and construction are done and approved by the manufacturer.
6. Technical data for Loading:
   Each screen fence is designed to meet the local building codes as they apply. Wind loading and surcharge loads as they occur, will be applied to the panels, columns and foundation components.
7. Installation:
   The posts are positioned and erected by site-casting the column or post into a drilled pier. The pier size, depth and reinforcement is constructed as specified with site specific engineered drawings. After the posts are accurately spaced, plumbed and leveled, they are braced, until the pier concrete has obtained its initial strength. With the posts erected the panels are manually slid into place. Post caps and panel caps are bonded into place by applying a silicone-based adhesive between the cap and fence component.
   The posts spacing must be less than 152.4 cm. The panels are sawcut to a length as required to Fit.
8. Drainage:
   Panels can be arranged to allow for continuous or intermittent drainage beneath the fence where applicable.

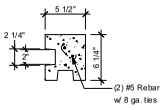
Footing Depth Schedule	B	
	Fence height = 6ft max.	
Soil Type	(12" Ø)	(18" Ø)
1. Massive Crystalline Bedrock	2'-3"	2'-0"
2. Sedimentary Rock	2'-9"	2'-6"
3. Sandy Gravel	3'-6"	3'-0"
4. Silty Sand	4'-0"	3'-3"
5. Sandy Clay**	4'-6"	4'-0"
** Assume Type 5 - Sandy Clay Soil OR Soil Types 1-4 may be used with the Approval of the Building Official or Soils Engineer		



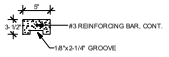
END POST



LINE POST

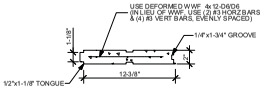


CORNER POST

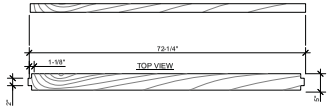


CEDARCRETE® TOP CAP - SECTION

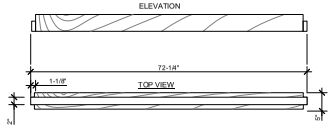
CEDARCRETE® BOTTOM CAP - SECTION



CEDARCRETE® PANEL - SECTION



CEDARCRETE® TOP CAP



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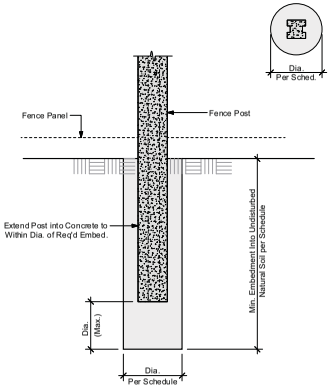
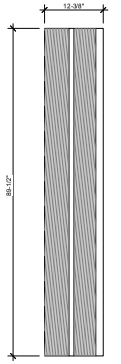
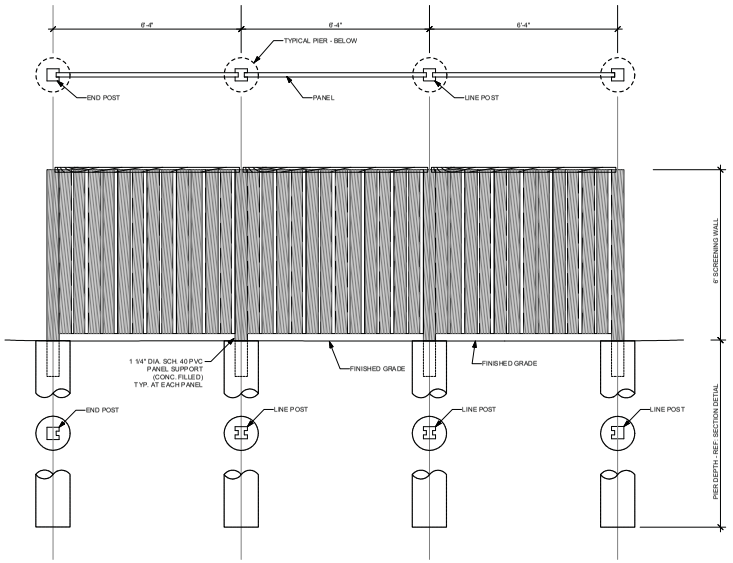


FENCE FOUNDATION SUPPORT



CEDARCRETE® STANDARD PANEL



ELEVATION - 6' SCREENING WALL AND PIERS

THE CONTRACTOR/OWNER IS RESPONSIBLE FOR HIRING A GEOTECHNICAL ENGINEER TO DETERMINE IF LOCAL SOIL CONDITIONS MEET OR EXCEED MINIMUM SOIL PROPERTIES SHOWN ON THIS PLAN.

THIS FOUNDATION HAS BEEN DESIGNED BASED ON MINIMUM SOIL PROPERTIES SET FORTH BY THE 2007 CALIFORNIA BUILDING CODE.

PIER INSTALLATION MAY ENCOUNTER AREAS OF GRANULAR, COLLAPSING SOILS THAT MAY CONTAIN PERCHED GROUNDWATER. PIERS MUST BE EXTENDED THROUGH SOFT AND ORGANIC DEPOSITS TO PROVIDE ADEQUATE LATERAL AND VERTICAL SUPPORT. TEMPORARY CASING MAY BE NECESSARY FOR THE DRILLED PIER INSTALLATION OPERATIONS TO MAINTAIN THE DRILLED SHAFT OPEN THROUGH THESE SOILS DURING CONSTRUCTION.

IF THE CONTRACTOR FINDS ANY DISCREPANCIES BETWEEN THE SITE AND THESE PLANS, HE SHALL NOTIFY THE ENGINEER IMMEDIATELY.

Project Name:	Highway 32
Project Address:	Chico, CA
Product:	CEDARCRETE
Fence Height:	6 ft , 7 ft, 8 ft, 9ft, 10ft
Governing Code:	2007 CBC
Wind Load:	90 MPH
Exposure:	B
Site Class	D

Ashley&Vance ENGINEERING, INC.
860 Walnut St, Suite C
San Luis Obispo, CA 93401
P: (805) 545-0010
F: (805) 545-0011
www.ashleyvance.com

Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER CHARLES R. ASHLEY JR. S 5238 STRUCTURAL STATE OF CALIFORNIA

CEDARCRETE WALL SYSTEM
ARTISAN PRECAST, INC
1180 South Beverly Dr. #608, Los Angeles, CA 90035
(310) 556- 3200 FAX (310) 556 - 3201
www.artisanprecast.com

Revisions:

Date: 22 Nov 2010 Scale: NTS

Job No.: 0217 - 0006

SHEET
1 OF 5

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

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CONCRETE

1. All concrete shall:
   (a) have a minimum ultimate compressive strength (f'c) as follows:
      i) Panels & Posts : 4000 psi at 28 days
      ii) Pier Foundations : 2500 psi @ 28 days
   (b) have a maximum slump of 5" at point of placement.
   (c) have a W:C ratio of 0.55 or less for all walls and columns, and 0.60 or less for all foundations.
   (d) a normal dry-weight density (UNO).
   (e) be mixed with Portland Cement Type I or II and shall conform to ASTM C 150.
2. All aggregates shall conform to ASTM C33
3. Testing of materials if requested shall be performed in accordance with the governing building standards.
4. The Contractor shall remove and replace any concrete which fails to attain specified 28 day compressive strength if so directed by the Engineer. Any defects in the hardened concrete shall be repaired to the satisfaction of the Engineer and/or Architect or the hardened concrete shall be replaced at the Contractor's expense.
5. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
   i. Cast against earth: 3"
   ii. Precast against forms: Panels: 3/4"; Posts 1 1/2"
6. Minimum lap splice length for all reinforcing steel s hall be 40 bar diameter unless specifically noted otherwise on the structural plans and/or details. All lap splices to be staggered.
7. All reinforcing steel and any other hardware to be cast in concrete shall be well secured in position prior to foundation inspection. All hardware to be installed in accordance with respective manufacturer's specifications. Refer to architectural and structural plans for locations of embedded items.
8. All surfaces to receive fresh concrete shall be maintained continuously wet at least three (3) hours in advance of concrete placement.
9. The Contractor shall obtain approval from the Architect and the Engineer prior to placing sleeves, pipes, ducts, chases, coring and opening on or through structural concrete beams, walls, floors, and roof slabs unless specifically detailed or noted on the plans. All piles or conduits passing through concrete members shall be sleeved with standard steel pipe sections.
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13. When specified ultimate compressive strength is greater than 2500 psi, Contractor shall submit mix designs to Architect and Engineer for approval seven (7) days prior to placement. Mix designs shall be prepared by an approved testing laboratory. Sufficient data must be provided for all admixtures.

REINFORCEMENT

1. Reinforcing steel shall be to deformed, clean, free of rust, grease or any other material likely to impair concrete bond.
2. All bars shall conform to ASTM A615, Grade 60 minimum (UNO on structural plans), except that #3 & #4 bars may be Grade 40. All welded wire fabric (WWF) shall conform to ASTM A185.
3. Reinforcing steel that is to be welded shall conform to ASTM A706. All welding of reinforcement shall be subject to special inspection.
4. Contractor shall take necessary steps (standard ties, anchorage devices, etc.) to secure all reinforcing steel in their true position and prevent displacement during concrete placement.
5. Fabrication, placement and installation of reinforcing steel shall conform to:
   (a) Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice
   (b) CBC Section 1907.
7. Heating of reinforcing steel to aid in bending and shaping of bars is not permitted. All bends in reinforcing steel are to be made cold. All bend radii shall conform to CRSI Manual of Standard Practice.

FOUNDATIONS

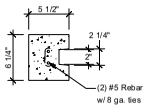
1. All Pier Foundations shall be located in Undisturbed Soil.
2. Unexpected Soil Conditions: Allowable values and subsequent foundation designs are based on soil conditions which are shown by test borings. Actual soil conditions which deviate appreciably from that shown in the test borings shall be reported to the Engineer immediately.
3. All compaction, fill, backfilling and site preparation shall be performed in accordance with CBC Appendix Chapter 33.
4. Excavate to required depths into natural soil (as indicated in the drawings) or as verified by building official or soils engineer. Care shall be taken not to over-excavate foundation at lower elevation and prevent disturbance of soils around high elevation. If footing excavations are made deeper than intended, only concrete shall be used for fill.
5. Foundations shall be poured in neat excavations.
6. All foundations shall be inspected and approved by the appropriate building official and/or a representative of the soils engineer prior to forming and placement of reinforcing or concrete.
7. Foundations shall not be poured until all required reinforcing steel, framing hardware, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the appropriate building official/inspector(s).
8. The sides and bottoms of dry excavations must be moistened just prior to placing concrete; Conversely, de-water footings as required to remove standing water and to maintain optimum working conditions.
9. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring, and the protection of adjacent property, structures, streets, and utilities in accordance with all federal, state and local safety ordinances. The Contractor shall provide for the design and installation of all cribbing, bracing and shoring required.

PRODUCT DATA

1. Manufacturer
   Manufactured In NPCA Certified Plant for: Artisan Precast, Inc

   Artisan Precast, Inc
   1180 South Beverly Dr. #608, Los Angeles, CA 90035
   Phone #: (310) 556 - 3200 FAX #: (310 556-3201
   Web Site: www.artisanprecast.com
2. Product Description:
   Productions are Intended for Residential, Commercial and Industrial Exterior Fencing, Screening Walls and Noise Barriers.
3. Composition and Materials:
   A mix of High Strength Portland Cement meeting for exceeding the requirements of ASTM-C150, natural aggregates, and Iron Oxide colors placed and cast within factory molds, cured and packaged for shipment.
4. Sizes:
   Screening fence columns are typically placed at 60 inches on center with he screen fence panels being 12 inches in height and approximately 2 inches in thickness. Overall heights are 6 or 8 feet dependant on local codes and site conditions. contact manufacturer for engineering not included in these specifications.
5. Limitations:
   Should not be used as a retaining wall for the support of soils or other structural elements, unless modifications in deign and construction are done and approved by the manufacturer.
6. Technical data for Loading:
   Each screen fence is designed to meet the local building codes as they apply. Wind loading and surcharge loads as they occur, will be applied to the panels, columns and foundation components.
7. Installation:
   The posts are positioned and erected by site-casting the column or post into a drilled pier. The pier size, depth and reinforcement is constructed as specified with site specific engineered drawings. After the posts are accurately spaced, plumbed and leveled, they are braced, until the pier concrete has obtained its initial strength. With the posts erected the panels are manually slid into place. Post caps and panel caps are bonded into place by applying a silicone-based adhesive between the cap and fence component.
   The posts spacing must be less than 152.4 cm. The panels are sawcut to a length as required to Fit.
8. Drainage:
   Panels can be arranged to allow for continuous or intermittent drainage beneath the fence where applicable.

Footing Depth Schedule	B	
	Fence height = 7ft max.	
Soil Type	(12" Ø)	(18" Ø)
1. Massive Crystalline Bedrock	2'-9"	2'-6"
2. Sedimentary Rock	3'-3"	2'-9"
3. Sandy Gravel	4'-3"	3'-6"
4. Silty Sand	4'-9"	4'-0"
5. Sandy Clay**	5'-6"	4'-9"
** Assume Type 5 - Sandy Clay Soil OR Soil Types 1-4 may be used with the Approval of the Building Official or Soils Engineer		



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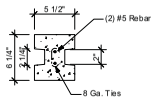

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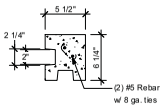
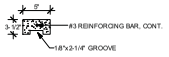
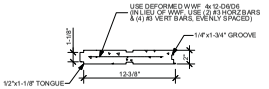


CORNER POST

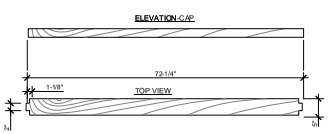


CEDARCRETE® TOP CAP - SECTION

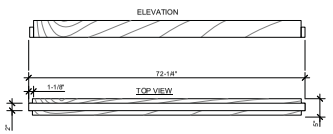
CEDARCRETE® BOTTOM CAP - SECTION



CEDARCRETE® PANEL - SECTION



CEDARCRETE® TOP CAP



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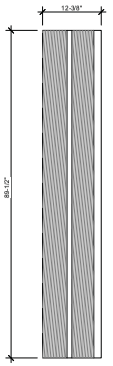
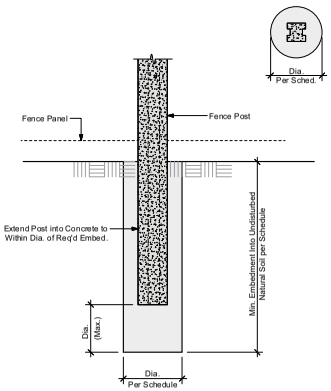
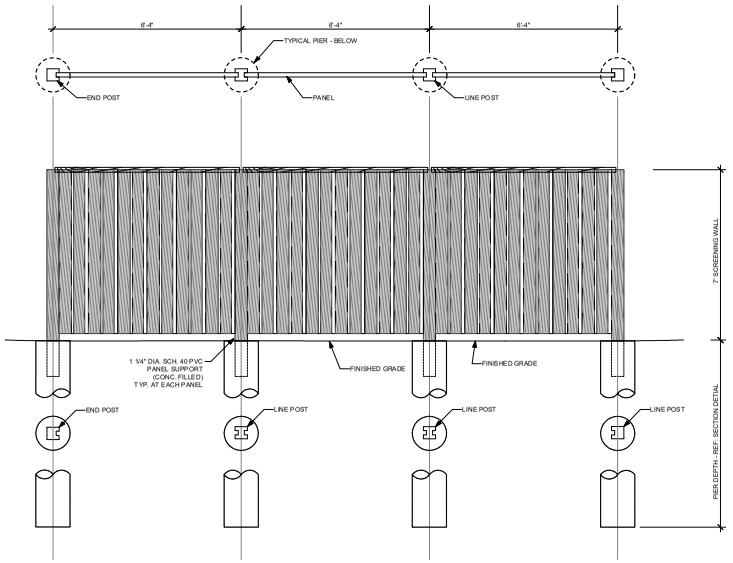


CEDARCRETE® STANDARD PANEL



FENCE FOUNDATION SUPPORT



ELEVATION - 7' SCREENING WALL AND PIERS

THE CONTRACTOR/OWNER IS RESPONSIBLE FOR HIRING A GEOTECHNICAL ENGINEER TO DETERMINE IF LOCAL SOIL CONDITIONS MEET OR EXCEED MINIMUM SOIL PROPERTIES SHOWN ON THIS PLAN.

THIS FOUNDATION HAS BEEN DESIGNED BASED ON MINIMUM SOIL PROPERTIES SET FORTH BY THE 2007 CALIFORNIA BUILDING CODE.

PIER INSTALLATION MAY ENCOUNTER AREAS OF GRANULAR, COLLAPSING SOILS THAT MAY CONTAIN PERCHED GROUNDWATER. PIERS MUST BE EXTENDED THROUGH SOFT AND ORGANIC DEPOSITS TO PROVIDE ADEQUATE LATERAL AND VERTICAL SUPPORT. TEMPORARY CASING MAY BE NECESSARY FOR THE DRILLED PIER INSTALLATION OPERATIONS TO MAINTAIN THE DRILLED SHAFT OPEN THROUGH THESE SOILS DURING CONSTRUCTION.

IF THE CONTRACTOR FINDS ANY DISCREPANCIES BETWEEN THE SITE AND THESE PLANS, HE SHALL NOTIFY THE ENGINEER IMMEDIATELY.

Project Name:	Highway 32
Project Address:	Chico, CA
Product:	CEDARCRETE
Fence Height:	6 ft , 7 ft, 8 ft, 9ft, 10ft
Governing Code:	2007 CBC
Wind Load:	90 MPH
Exposure:	B
Site Class	D

Ashley&Vance ENGINEERING, INC.
860 Walnut St, Suite C
San Luis Obispo, CA 93401
P: (805) 545-0010
F: (805) 545-0011
www.ashleyvance.com

Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER CHARLES R. ASHLEY JR. S 5238 STRUCTURAL STATE OF CALIFORNIA

CEDARCRETE WALL SYSTEM
ARTISAN PRECAST, INC
1180 South Beverly Dr. #608, Los Angeles, CA 90035
(310) 556- 3200 FAX (310) 556 - 3201
www.artisanprecast.com

Revisions:

Date: 22 Nov 2010 Scale: NTS

Job No.: 0217 - 0006

SHEET 2 OF 5

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

APSD-8

CONCRETE

1. All concrete shall:
   (a) have a minimum ultimate compressive strength (f'c) as follows:
   i) Panels & Posts : 4000 psi at 28 days
   ii) Pier Foundations : 2500 psi @ 28 days
   (b) have a maximum slump of 5" at point of placement.
   (c) have a W:C ratio of 0.55 or less for all walls and columns, and 0.60 or less for all foundations.
   (d) a normal dry-weight density (UNO).
   (e) be mixed with Portland Cement Type I or II and shall conform to ASTM C 150.
2. All aggregates shall conform to ASTM C33
3. Testing of materials if requested shall be performed in accordance with the governing building standards.
4. The Contractor shall remove and replace any concrete which fails to attain specified 28 day compressive strength if so directed by the Engineer. Any defects in the hardened concrete shall be repaired to the satisfaction of the Engineer and/or Architect or the hardened concrete shall be replaced at the Contractor's expense.
5. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
   i. Cast against earth: 3"
   ii. Precast against forms: Panels: 3/4"; Posts 1 1/2"
6. Minimum lap splice length for all reinforcing steel s hall be 40 bar diameter unless specifically noted otherwise on the structural plans and/or details. All lap splices to be staggered.
7. All reinforcing steel and any other hardware to be cast in concrete shall be well secured in position prior to foundation inspection. All hardware to be installed in accordance with respective manufacturer's specifications. Refer to architectural and structural plans for locations of embedded items.
8. All surfaces to receive fresh concrete shall be maintained continuously wet at least three (3) hours in advance of concrete placement.
9. The Contractor shall obtain approval from the Architect and the Engineer prior to placing sleeves, pipes, ducts, chases, coring and opening on or through structural concrete beams, walls, floors, and roof slabs unless specifically detailed or noted on the plans. All piles or conduits passing through concrete members shall be sleeved with standard steel pipe sections.
10. All concrete (except slabs-on-grade 6" or less) shall be placed by steel hammer, sliding tools or mechanically vibrator until concrete is thoroughly compact and without void.
11. Concrete shall be maintained in a moist condition for a minimum of five (5) days after placement.
12. Concrete shall not be permitted to free fall more than six (6) feet. For heights greater than six (6) feet, use tremie, pump or other method consistent with applicable standards.
13. When specified ultimate compressive strength is greater than 2500 psi, Contractor shall submit mix designs to Architect and Engineer for approval seven (7) days prior to placement. Mix designs shall be prepared by an approved testing laboratory. Sufficient data must be provided for all admixtures.

REINFORCEMENT

1. Reinforcing steel shall be to deformed, clean, free of rust, grease or any other material likely to impair concrete bond.
2. All bars shall conform to ASTM A615, Grade 60 minimum (UNO on structural plans), except that #3 & #4 bars may be Grade 40. All welded wire fabric (WWF) shall conform to ASTM A185.
3. Reinforcing steel that is to be welded shall conform to ASTM A706. All welding of reinforcement shall be subject to special inspection.
4. Contractor shall take necessary steps (standard ties, anchorage devices, etc.) to secure all reinforcing steel in their true position and prevent displacement during concrete placement.
5. Fabrication, placement and installation of reinforcing steel shall conform to:
   (a) Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice
   (b) CBC Section 1907.
7. Heating of reinforcing steel to aid in bending and shaping of bars is not permitted. All bends in reinforcing steel are to be made cold. All bend radii shall conform to CRSI Manual of Standard Practice.

FOUNDATIONS

1. All Pier Foundations shall be located in Undisturbed Soil.
2. Unexpected Soil Conditions: Allowable values and subsequent foundation designs are based on soil conditions which are shown by test borings. Actual soil conditions which deviate appreciably from that shown in the test borings shall be reported to the Engineer immediately.
3. All compaction, fill, backfilling and site preparation shall be performed in accordance with CBC Appendix Chapter 33.
4. Excavate to required depths into natural soil (as indicated in the drawings) or as verified by building official or soils engineer. Care shall be taken not to over-excavate foundation at lower elevation and prevent disturbance of soils around high elevation. If footing excavations are made deeper than intended, only concrete shall be used for fill.
5. Foundations shall be poured in neat excavations.
6. All foundations shall be inspected and approved by the appropriate building official and/or a representative of the soils engineer prior to forming and placement of reinforcing or concrete.
7. Foundations shall not be poured until all required reinforcing steel, framing hardware, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the appropriate building official/inspector(s).
8. The sides and bottoms of dry excavations must be moistened just prior to placing concrete; Conversely, de-water footings as required to remove standing water and to maintain optimum working conditions.
9. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring, and the protection of adjacent property, structures, streets, and utilities in accordance with all federal, state and local safety ordinances. The Contractor shall provide for the design and installation of all cribbing, bracing and shoring required.

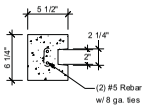
PRODUCT DATA

1. Manufacturer
   Manufactured In NPCA Certified Plant for: Artisan Precast, Inc

   Artisan Precast, Inc
   1180 South Beverly Dr. #608, Los Angeles, CA 90035
   Phone #: (310) 556 - 3200 FAX #: (310 556-3201
   Web Site: www.artisanprecast.com
2. Product Description:
   Productions are Intended for Residential, Commercial and Industrial Exterior Fencing, Screening Walls and Noise Barriers.
3. Composition and Materials:
   A mix of High Strength Portland Cement meeting for exceeding the requirements of ASTM-C150, natural aggregates, and Iron Oxide colors placed and cast within factory molds, cured and packaged for shipment.
4. Sizes:
   Screening fence columns are typically placed at 60 inches on center with he screen fence panels being 12 inches in height and approximately 2 inches in thickness. Overall heights are 6 or 8 feet dependant on local codes and site conditions. contact manufacturer for engineering not included in these specifications.
5. Limitations:
   Should not be used as a retaining wall for the support of soils or other structural elements, unless modifications in deign and construction are done and approved by the manufacturer.
6. Technical data for Loading:
   Each screen fence is designed to meet the local building codes as they apply. Wind loading and surcharge loads as they occur, will be applied to the panels, columns and foundation components.
7. Installation:
   The posts are positioned and erected by site-casting the column or post into a drilled pier. The pier size, depth and reinforcement is constructed as specified with site specific engineered drawings. After the posts are accurately spaced, plumbed and leveled, they are braced, until the pier concrete has obtained its initial strength. With the posts erected the panels are manually slid into place. Post caps and panel caps are bonded into place by applying a silicone-based adhesive between the cap and fence component.
   The posts spacing must be less than 152.4 cm. The panels are sawcut to a length as required to Fit.
8. Drainage:
   Panels can be arranged to allow for continuous or intermittent drainage beneath the fence where applicable.

Footing Depth Schedule	B	
	Fence height = 8ft max.	
Soil Type	(12" Ø)	(18" Ø)
1. Massive Crystalline Bedrock	2'-9"	2'-6"
2. Sedimentary Rock	3'-3"	2'-9"
3. Sandy Gravel	4'-3"	3'-6"
4. Silty Sand	4'-9"	4'-0"
5. Sandy Clay**	5'-6"	4'-9"

** Assume Type 5 - Sandy Clay Soil OR Soil Types 1-4 may be used with the Approval of the Building Official or Soils Engineer



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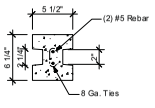
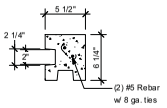
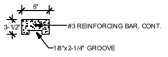


LINE POST

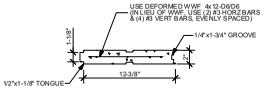


CORNER POST



CEDARCRETE® TOP CAP - SECTION

CEDARCRETE® BOTTOM CAP - SECTION



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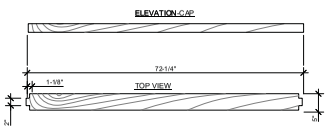

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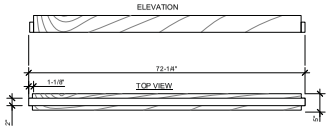

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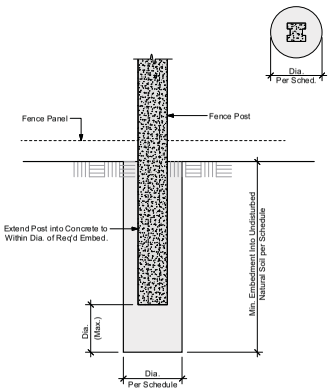
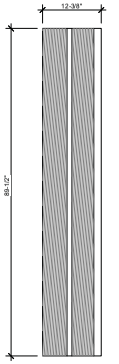
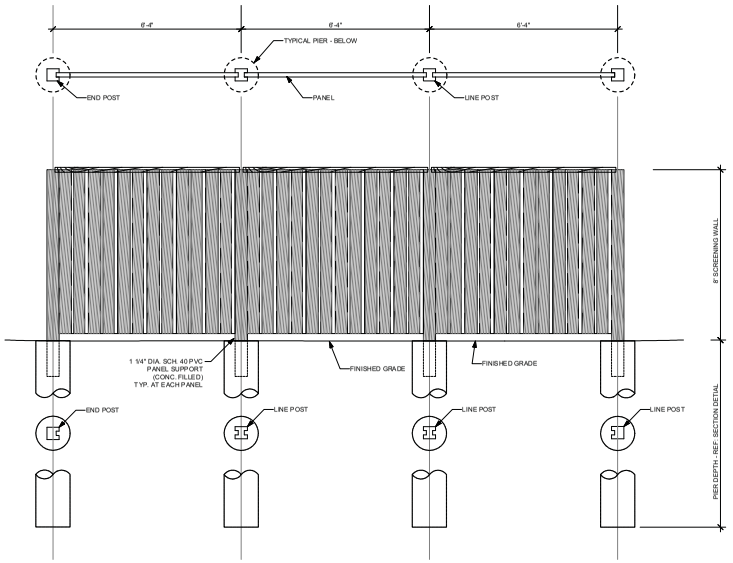


FENCE FOUNDATION SUPPORT



CEDARCRETE® STANDARD PANEL



ELEVATION - 8' SCREENING WALL AND PIERS

THE CONTRACTOR/OWNER IS RESPONSIBLE FOR HIRING A GEOTECHNICAL ENGINEER TO DETERMINE IF LOCAL SOIL CONDITIONS MEET OR EXCEED MINIMUM SOIL PROPERTIES SHOWN ON THIS PLAN.

THIS FOUNDATION HAS BEEN DESIGNED BASED ON MINIMUM SOIL PROPERTIES SET FORTH BY THE 2007 CALIFORNIA BUILDING CODE.

PIER INSTALLATION MAY ENCOUNTER AREAS OF GRANULAR, COLLAPSING SOILS THAT MAY CONTAIN PERCHED GROUNDWATER. PIERS MUST BE EXTENDED THROUGH SOFT AND ORGANIC DEPOSITS TO PROVIDE ADEQUATE LATERAL AND VERTICAL SUPPORT. TEMPORARY CASING MAY BE NECESSARY FOR THE DRILLED PIER INSTALLATION OPERATIONS TO MAINTAIN THE DRILLED SHAFT OPEN THROUGH THESE SOILS DURING CONSTRUCTION.

IF THE CONTRACTOR FINDS ANY DISCREPANCIES BETWEEN THE SITE AND THESE PLANS, HE SHALL NOTIFY THE ENGINEER IMMEDIATELY.

Project Name:	Highway 32
Project Address:	Chico, CA
Product:	CEDARCRETE
Fence Height:	6 ft , 7 ft, 8 ft, 9ft, 10ft
Governing Code:	2007 CBC
Wind Load:	90 MPH
Exposure:	B
Site Class	D

Ashley&Vance ENGINEERING, INC.
860 Walnut St, Suite C
San Luis Obispo, CA 93401
P: (805) 545-0010
F: (805) 545-0011
www.ashleyvance.com

Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER CHARLES R. ASHLEY JR. S 6298 STRUCTURAL STATE OF CALIFORNIA

CEDARCRETE WALL SYSTEM
ARTISAN PRECAST, INC
1180 South Beverly Dr. #608, Los Angeles, CA 90035
(310) 556- 3200 FAX (310) 556 - 3201
www.artisanprecast.com

Revisions:

Date: 22 Nov 2010 Scale: NTS

Job No.: 0217 - 0006

SHEET
3 OF 5

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

APSD-9

CONCRETE

1. All concrete shall:
   (a) have a minimum ultimate compressive strength (f'c) as follows:
   i) Panels & Posts : 4000 psi at 28 days
   ii) Per Foundations : 2500 psi @ 28 days
   (b) have a maximum slump of 5" at point of placement.
   (c) have a W:C ratio of 0.55 or less for all walls and columns, and 0.60 or less for all foundations.
   (d) a normal dry-weight density (UNO).
   (e) be mixed with Portland Cement Type I or II and shall conform to ASTM C 150.
2. All aggregates shall conform to ASTM C33
3. Testing of materials if requested shall be performed in accordance with the governing building standards.
4. The Contractor shall remove and replace any concrete which fails to attain specified 28 day compressive strength if so directed by the Engineer. Any defects in the hardened concrete shall be repaired to the satisfaction of the Engineer and/or Architect or the hardened concrete shall be replaced at the Contractor's expense.
5. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
   i. Cast against earth: 3"
   ii. Precast against forms: Panels: 3/4"; Posts 1 1/2"
6. Minimum lap splice length for all reinforcing steel s hall be 40 bar diameter unless specifically noted otherwise on the structural plans and/or details. All lap splices to be staggered.
7. All reinforcing steel and any other hardware to be cast in concrete shall be well secured in position prior to foundation inspection. All hardware to be installed in accordance with respective manufacturer's specifications. Refer to architectural and structural plans for locations of embedded items.
8. All surfaces to receive fresh concrete shall be maintained continuously wet at least three (3) hours in advance of concrete placement.
9. The Contractor shall obtain approval from the Architect and the Engineer prior to placing sleeves, pipes, ducts, chases, coring and opening on or through structural concrete beams, walls, floors, and roof slabs unless specifically detailed or noted on the plans. All piles or conduits passing through concrete members shall be sleeved with standard steel pipe sections.
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REINFORCEMENT

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   (b) CBC Section 1907.
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4. Excavate to required depths into natural soil (as indicated in the drawings) or as verified by building official or soils engineer. Care shall be taken not to over-excavate foundation at lower elevation and prevent disturbance of soils around high elevation. If footing excavations are made deeper than intended, only concrete shall be used for fill.
5. Foundations shall be poured in neat excavations.
6. All foundations shall be inspected and approved by the appropriate building official and/or a representative of the soils engineer prior to forming and placement of reinforcing or concrete.
7. Foundations shall not be poured until all required reinforcing steel, framing hardware, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the appropriate building official/inspector(s).
8. The sides and bottoms of dry excavations must be moistened just prior to placing concrete; Conversely, de-water footings as required to remove standing water and to maintain optimum working conditions.
9. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring, and the protection of adjacent property, structures, streets, and utilities in accordance with all federal, state and local safety ordinances. The Contractor shall provide for the design and installation of all cribbing, bracing and shoring required.

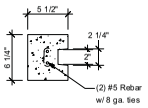
PRODUCT DATA

1. Manufacturer
   Manufactured In NPCA Certified Plant for: Artisan Precast, Inc

   Artisan Precast, Inc
   1180 South Beverly Dr. #608, Los Angeles, CA 90035
   Phone #: (310) 556 - 3200 FAX #: (310 556-3201
   Web Site: www.artisanprecast.com
2. Product Description:
   Productions are Intended for Residential, Commercial and Industrial Exterior Fencing, Screening Walls and Noise Barriers.
3. Composition and Materials:
   A mix of High Strength Portland Cement meeting for exceeding the requirements of ASTM-C150, natural aggregates, and Iron Oxide colors placed and cast within factory molds, cured and packaged for shipment.
4. Sizes:
   Screening fence columns are typically placed at 60 inches on center with he screen fence panels being 12 inches in height and approximately 2 inches in thickness. Overall heights are 6 or 8 feet dependant on local codes and site conditions. contact manufacturer for engineering not included in these specifications.
5. Limitations:
   Should not be used as a retaining wall for the support of soils or other structural elements, unless modifications in deign and construction are done and approved by the manufacturer.
6. Technical data for Loading:
   Each screen fence is designed to meet the local building codes as they apply. Wind loading and surcharge loads as they occur, will be applied to the panels, columns and foundation components.
7. Installation:
   The posts are positioned and erected by site-casting the column or post into a drilled pier. The pier size, depth and reinforcement is constructed as specified with site specific engineered drawings. After the posts are accurately spaced, plumbed and leveled, they are braced, until the pier concrete has obtained its initial strength. With the posts erected the panels are manually slid into place. Post caps and panel caps are bonded into place by applying a silicone-based adhesive between the cap and fence component.
   The posts spacing must be less than 152.4 cm. The panels are sawcut to a length as required to Fit.
8. Drainage:
   Panels can be arranged to allow for continuous or intermittent drainage beneath the fence where applicable.

Footing Depth Schedule	B	
	Fence height = 9ft max.	
Soil Type	(12" Ø)	(18" Ø)
1. Massive Crystalline Bedrock	3'-6"	3'-0"
2. Sedimentary Rock	4'-0"	3'-6"
3. Sandy Gravel	5'-3"	4'-6"
4. Silty Sand	5'-9"	4'-9"
5. Sandy Clay**	6'-9"	5'-9"

** Assume Type 5 - Sandy Clay Soil OR Soil Types 1-4 may be used with the Approval of the Building Official or Soils Engineer



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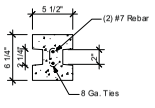

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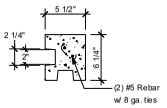

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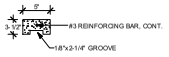
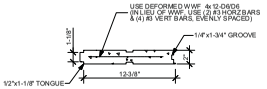
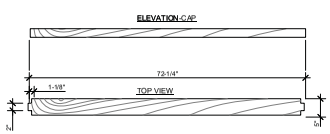


CEDARCRETE® TOP CAP - SECTION

CEDARCRETE® BOTTOM CAP - SECTION



CEDARCRETE® PANEL - SECTION



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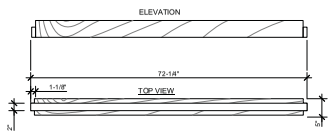
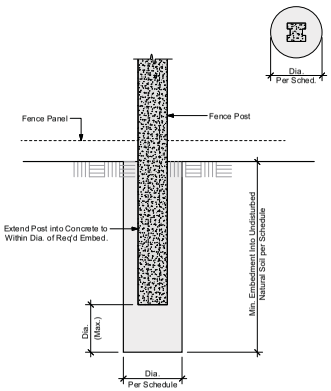
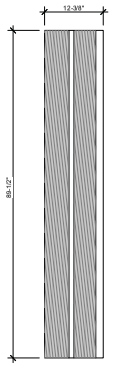


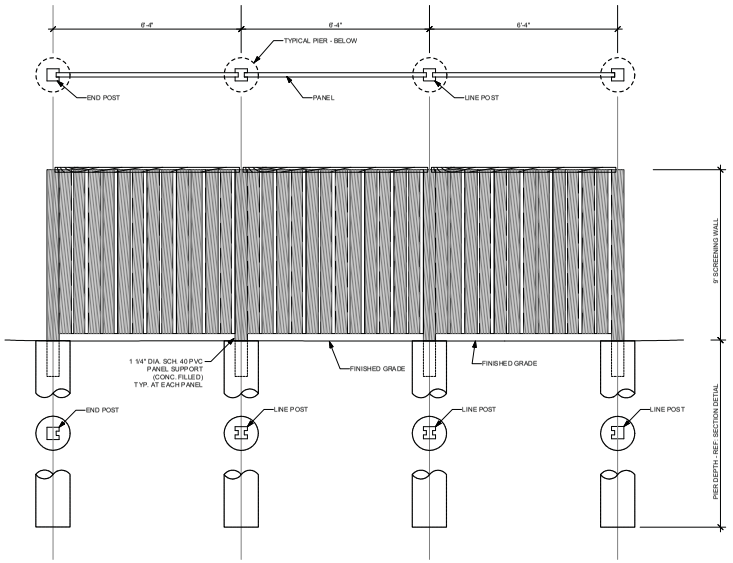
CEDARCRETE® BOTTOM CAP



FENCE FOUNDATION SUPPORT



CEDARCRETE® STANDARD PANEL



ELEVATION - 9' SCREENING WALL AND PIERS

THE CONTRACTOR/OWNER IS RESPONSIBLE FOR HIRING A GEOTECHNICAL ENGINEER TO DETERMINE IF LOCAL SOIL CONDITIONS MEET OR EXCEED MINIMUM SOIL PROPERTIES SHOWN ON THIS PLAN.

THIS FOUNDATION HAS BEEN DESIGNED BASED ON MINIMUM SOIL PROPERTIES SET FORTH BY THE 2007 CALIFORNIA BUILDING CODE.

PIER INSTALLATION MAY ENCOUNTER AREAS OF GRANULAR, COLLAPSING SOILS THAT MAY CONTAIN PERCHED GROUNDWATER. PIERS MUST BE EXTENDED THROUGH SOFT AND ORGANIC DEPOSITS TO PROVIDE ADEQUATE LATERAL AND VERTICAL SUPPORT. TEMPORARY CASING MAY BE NECESSARY FOR THE DRILLED PIER INSTALLATION OPERATIONS TO MAINTAIN THE DRILLED SHAFT OPEN THROUGH THESE SOILS DURING CONSTRUCTION.

IF THE CONTRACTOR FINDS ANY DISCREPANCIES BETWEEN THE SITE AND THESE PLANS, HE SHALL NOTIFY THE ENGINEER IMMEDIATELY.

Project Name:	Highway 32
Project Address:	Chico, CA
Product:	CEDARCRETE
Fence Height:	6 ft , 7 ft, 8 ft, 9ft, 10ft
Governing Code:	2007 CBC
Wind Load:	90 MPH
Exposure:	B
Site Class	D

Ashley&Vance ENGINEERING, INC.
860 Walnut St, Suite C
San Luis Obispo, CA 93401
P: (805) 545-0010
F: (805) 545-0011
www.ashleyvance.com

Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER CHARLES R. ASHLEY JR. S 6298 STRUCTURAL STATE OF CALIFORNIA

CEDARCRETE WALL SYSTEM
ARTISAN PRECAST, INC

1180 South Beverly Dr. #608, Los Angeles, CA 90035
(310) 556 -3200 FAX (310) 556 - 3201
www.artisanprecast.com

Revisions:

Date: 22 Nov 2010 Scale: NTS

Job No.: 0217 - 0006

SHEET
4 OF 5

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

APSD-10

CONCRETE

1. All concrete shall:
   (a) have a minimum ultimate compressive strength (f'c) as follows:
   i) Panels & Posts : 4000 psi at 28 days
   ii) Pier Foundations : 2500 psi @ 28 days
   (b) have a maximum slump of 5" at point of placement.
   (c) have a W:C ratio of 0.55 or less for all walls and columns, and 0.60 or less for all foundations.
   (d) a normal dry-weight density (UNO).
   (e) be mixed with Portland Cement Type I or II and shall conform to ASTM C 150.
2. All aggregates shall conform to ASTM C33
3. Testing of materials if requested shall be performed in accordance with the governing building standards.
4. The Contractor shall remove and replace any concrete which fails to attain specified 28 day compressive strength if so directed by the Engineer. Any defects in the hardened concrete shall be repaired to the satisfaction of the Engineer and/or Architect or the hardened concrete shall be replaced at the Contractor's expense.
5. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
   i. Cast against earth: 3"
   ii. Precast against forms: Panels: 3/4"; Posts 1 1/2"
6. Minimum lap splice length for all reinforcing steel s hall be 40 bar diameter unless specifically noted otherwise on the structural plans and/or details. All lap splices to be staggered.
7. All reinforcing steel and any other hardware to be cast in concrete shall be well secured in position prior to foundation inspection. All hardware to be installed in accordance with respective manufacturer's specifications. Refer to architectural and structural plans for locations of embedded items.
8. All surfaces to receive fresh concrete shall be maintained continuously wet at least three (3) hours in advance of concrete placement.
9. The Contractor shall obtain approval from the Architect and the Engineer prior to placing sleeves, pipes, ducts, chases, coring and opening on or through structural concrete beams, walls, floors, and roof slabs unless specifically detailed or noted on the plans. All piles or conduits passing through concrete members shall be sleeved with standard steel pipe sections.
10. All concrete (except slabs-on-grade 6" or less) shall be placed by steel hammer, sliding tools or mechanically vibrator until concrete is thoroughly compact and without void.
11. Concrete shall be maintained in a moist condition for a minimum of five (5) days after placement.
12. Concrete shall not be permitted to free fall more than six (6) feet. For heights greater than six (6) feet, use tremie, pump or other method consistent with applicable standards.
13. When specified ultimate compressive strength is greater than 2500 psi, Contractor shall submit mix designs to Architect and Engineer for approval seven (7) days prior to placement. Mix designs shall be prepared by an approved testing laboratory. Sufficient data must be provided for all admixtures.

REINFORCEMENT

1. Reinforcing steel shall be to deformed, clean, free of rust, grease or any other material likely to impair concrete bond.
2. All bars shall conform to ASTM A615, Grade 60 minimum (UNO on structural plans), except that #3 & #4 bars may be Grade 40. All welded wire fabric (WWF) shall conform to ASTM A185.
3. Reinforcing steel that is to be welded shall conform to ASTM A706. All welding of reinforcement shall be subject to special inspection.
4. Contractor shall take necessary steps (standard ties, anchorage devices, etc.) to secure all reinforcing steel in their true position and prevent displacement during concrete placement.
5. Fabrication, placement and installation of reinforcing steel shall conform to:
   (a) Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice
   (b) CBC Section 1907.
7. Heating of reinforcing steel to aid in bending and shaping of bars is not permitted. All bends in reinforcing steel are to be made cold. All bend radii shall conform to CRSI Manual of Standard Practice.

FOUNDATIONS

1. All Pier Foundations shall be located in Undisturbed Soil.
2. Unexpected Soil Conditions: Allowable values and subsequent foundation designs are based on soil conditions which are shown by test borings. Actual soil conditions which deviate appreciably from that shown in the test borings shall be reported to the Engineer immediately.
3. All compaction, fill, backfilling and site preparation shall be performed in accordance with CBC Appendix Chapter 33.
4. Excavate to required depths into natural soil (as indicated in the drawings) or as verified by building official or soils engineer. Care shall be taken not to over-excavate foundation at lower elevation and prevent disturbance of soils around high elevation. If footing excavations are made deeper than intended, only concrete shall be used for fill.
5. Foundations shall be poured in neat excavations.
6. All foundations shall be inspected and approved by the appropriate building official and/or a representative of the soils engineer prior to forming and placement of reinforcing or concrete.
7. Foundations shall not be poured until all required reinforcing steel, framing hardware, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the appropriate building official/inspector(s).
8. The sides and bottoms of dry excavations must be moistened just prior to placing concrete; Conversely, de-water footings as required to remove standing water and to maintain optimum working conditions.
9. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring, and the protection of adjacent property, structures, streets, and utilities in accordance with all federal, state and local safety ordinances. The Contractor shall provide for the design and installation of all cribbing, bracing and shoring required.

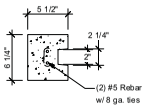
PRODUCT DATA

1. Manufacturer
   Manufactured In NPCA Certified Plant for: Artisan Precast, Inc

   Artisan Precast, Inc
   1180 South Beverly Dr. #608, Los Angeles, CA 90035
   Phone #: (310) 556 - 3200 FAX #: (310 556-3201
   Web Site: www.artisanprecast.com
2. Product Description:
   Productions are Intended for Residential, Commercial and Industrial Exterior Fencing, Screening Walls and Noise Barriers.
3. Composition and Materials:
   A mix of High Strength Portland Cement meeting for exceeding the requirements of ASTM-C150, natural aggregates, and Iron Oxide colors placed and cast within factory molds, cured and packaged for shipment.
4. Sizes:
   Screening fence columns are typically placed at 60 inches on center with he screen fence panels being 12 inches in height and approximately 2 inches in thickness. Overall heights are 6 or 8 feet dependant on local codes and site conditions. contact manufacturer for engineering not included in these specifications.
5. Limitations:
   Should not be used as a retaining wall for the support of soils or other structural elements, unless modifications in deign and construction are done and approved by the manufacturer.
6. Technical data for Loading:
   Each screen fence is designed to meet the local building codes as they apply. Wind loading and surcharge loads as they occur, will be applied to the panels, columns and foundation components.
7. Installation:
   The posts are positioned and erected by site-casting the column or post into a drilled pier. The pier size, depth and reinforcement is constructed as specified with site specific engineered drawings. After the posts are accurately spaced, plumbed and leveled, they are braced, until the pier concrete has obtained its initial strength. With the posts erected the panels are manually slid into place. Post caps and panel caps are bonded into place by applying a silicone-based adhesive between the cap and fence component.
   The posts spacing must be less than 152.4 cm. The panels are sawcut to a length as required to Fit.
8. Drainage:
   Panels can be arranged to allow for continuous or intermittent drainage beneath the fence where applicable.

Footing Depth Schedule	B	
	Fence height = 10ft max.	
Soil Type	(12" Ø)	(18" Ø)
1. Massive Crystalline Bedrock	3'-6"	3'-0"
2. Sedimentary Rock	4'-0"	3'-6"
3. Sandy Gravel	5'-3"	4'-6"
4. Silty Sand	5'-9"	4'-9"
5. Sandy Clay**	6'-9"	5'-9"

** Assume Type 5 - Sandy Clay Soil OR Soil Types 1-4 may be used with the Approval of the Building Official or Soils Engineer



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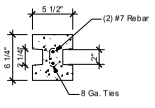

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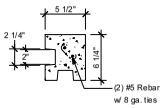
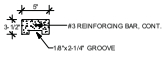
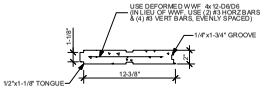


CORNER POST



CEDARCRETE® TOP CAP - SECTION

CEDARCRETE® BOTTOM CAP - SECTION



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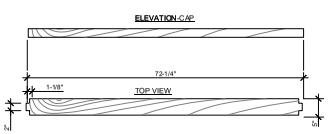
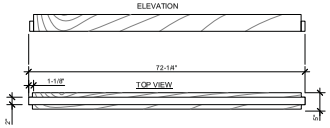
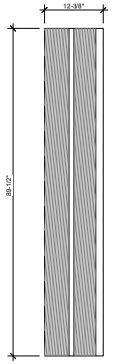


FENCE FOUNDATION SUPPORT

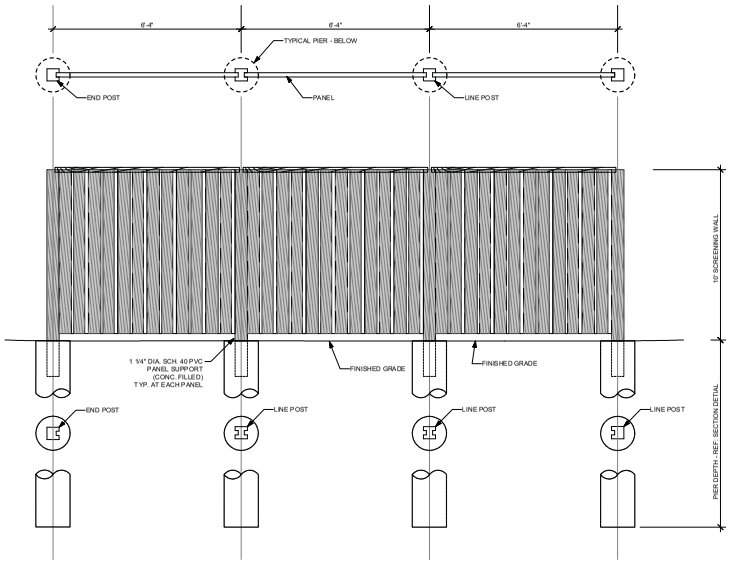
CEDARCRETE® TOP CAP



CEDARCRETE® BOTTOM CAP



CEDARCRETE® STANDARD PANEL



ELEVATION - 10' SCREENING WALL AND PIERS

THE CONTRACTOR/OWNER IS RESPONSIBLE FOR HIRING A GEOTECHNICAL ENGINEER TO DETERMINE IF LOCAL SOIL CONDITIONS MEET OR EXCEED MINIMUM SOIL PROPERTIES SHOWN ON THIS PLAN.

THIS FOUNDATION HAS BEEN DESIGNED BASED ON MINIMUM SOIL PROPERTIES SET FORTH BY THE 2007 CALIFORNIA BUILDING CODE.

PIER INSTALLATION MAY ENCOUNTER AREAS OF GRANULAR, COLLAPSING SOILS THAT MAY CONTAIN PERCHED GROUNDWATER. PIERS MUST BE EXTENDED THROUGH SOFT AND ORGANIC DEPOSITS TO PROVIDE ADEQUATE LATERAL AND VERTICAL SUPPORT. TEMPORARY CASING MAY BE NECESSARY FOR THE DRILLED PIER INSTALLATION OPERATIONS TO MAINTAIN THE DRILLED SHAFT OPEN THROUGH THESE SOILS DURING CONSTRUCTION.

IF THE CONTRACTOR FINDS ANY DISCREPANCIES BETWEEN THE SITE AND THESE PLANS, HE SHALL NOTIFY THE ENGINEER IMMEDIATELY.

Project Name:	Highway 32
Project Address:	Chico, CA
Product:	CEDARCRETE
Fence Height:	6 ft , 7 ft, 8 ft, 9ft, 10ft
Governing Code:	2007 CBC
Wind Load:	90 MPH
Exposure:	B
Site Class	D

Ashley&Vance ENGINEERING, INC.
860 Walnut St., Suite C
San Luis Obispo, CA 93401
P: (805) 545-0010
F: (805) 545-0011
www.ashleyvance.com

Engineer of Record:

REGISTERED PROFESSIONAL ENGINEER CHARLES R. ASHLEY JR. S 5238 STRUCTURAL STATE OF CALIFORNIA

CEDARCRETE WALL SYSTEM
ARTISAN PRECAST, INC
1180 South Beverly Dr. #608, Los Angeles, CA 90035
(310) 556-3200 FAX (310) 556-3201
www.artisanprecast.com

Revisions:

Date: 22 Nov 2010 Scale: NTS

Job No.: 0217 - 0006

SHEET
5 OF 5

DO NOT SCALE THESE DRAWINGS. Refer to Architectural plans for all dimensions.

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VII. BATTERY BACKUP SYSTEM DETAILS

(Blank)

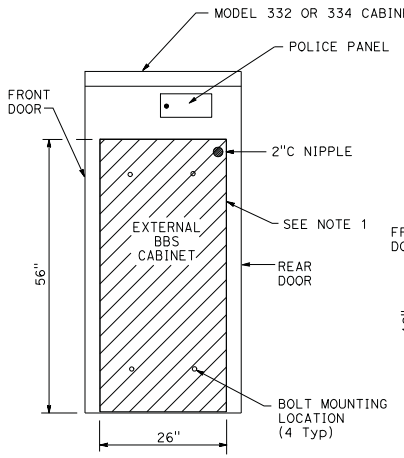
Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Theresa Gabriel — REGISTERED CIVIL ENGINEER — 12-20-07 DATE

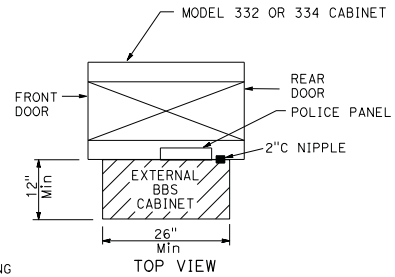
REGISTERED PROFESSIONAL ENGINEER — Theresa A. Gabriel — No. E15129 — Exp. 6-30-10 — ELECT — STATE OF CALIFORNIA

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.



SIDE VIEW

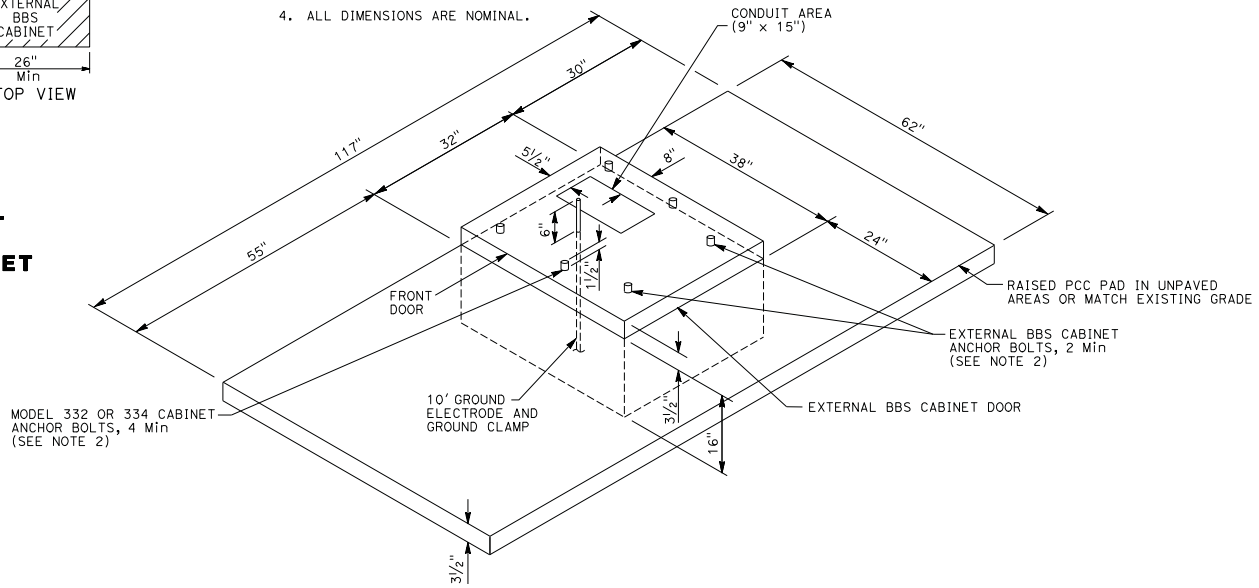


TOP VIEW

EXTERNAL BBS CABINET MOUNTED TO THE MODEL 332 OR 334 CABINET

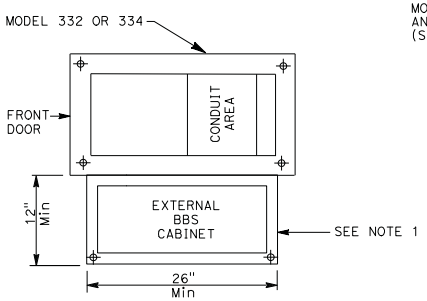
NOTE: (THIS SHEET ONLY)

1. THE EXTERNAL BBS CABINET SHALL BE MOUNTED TO THE MODEL 332 OR 334 CABINET WITH FOUR 18-8 STAINLESS STEEL HEX HEAD, FULLY-THREADED, ⅜"-16 X 1" BOLTS; TWO WASHERS PER BOLT, DESIGNED FOR ⅜" 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 ¾" 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 MODIFIED PORTION OF THE Std MODEL 332 AND 334 CABINET FOUNDATION. THE ENGINEER WILL HAVE TO APPROVE ANY NECESSARY DEVIATIONS PRIOR TO CONSTRUCTION.
4. ALL DIMENSIONS ARE NOMINAL.



MODIFIED MODEL 332 AND 334 CABINET FOUNDATION DETAIL FOR BATTERY BACKUP SYSTEM (BBS)

(FOR DIMENSIONS AND DETAILS NOT SHOWN AND ADDITIONAL NOTES, SEE SHEET ES-3C OF THE STANDARD PLANS FOR MODEL 332 AND 334 CABINETS)



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

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

ELECTRICAL SYSTEMS
(BBS FOUNDATION DETAILS)

NO SCALE

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans — FUNCTIONAL SUPERVISOR — CALCULATED-DESIGNED BY — CHECKED BY — REVISED BY — DATE REVISED

LAST REVISION 2-2-09 — DATE PLOTTED => 13-APR-2010 — TIME PLOTTED => 11:41

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trpierce | DGN FILE => BBS Foundation.dgn | CU 00000 | EA 000000

LEGEND: (THIS SHEET ONLY)

PTS = POWER TRANSFER SWITCH
UPS = UNINTERRUPTIBLE POWER SUPPLY
UPSC = UNINTERRUPTIBLE POWER SUPPLY CONTROLLER
UPSM = UPS MODE
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C = COMMON
Grn = GREEN
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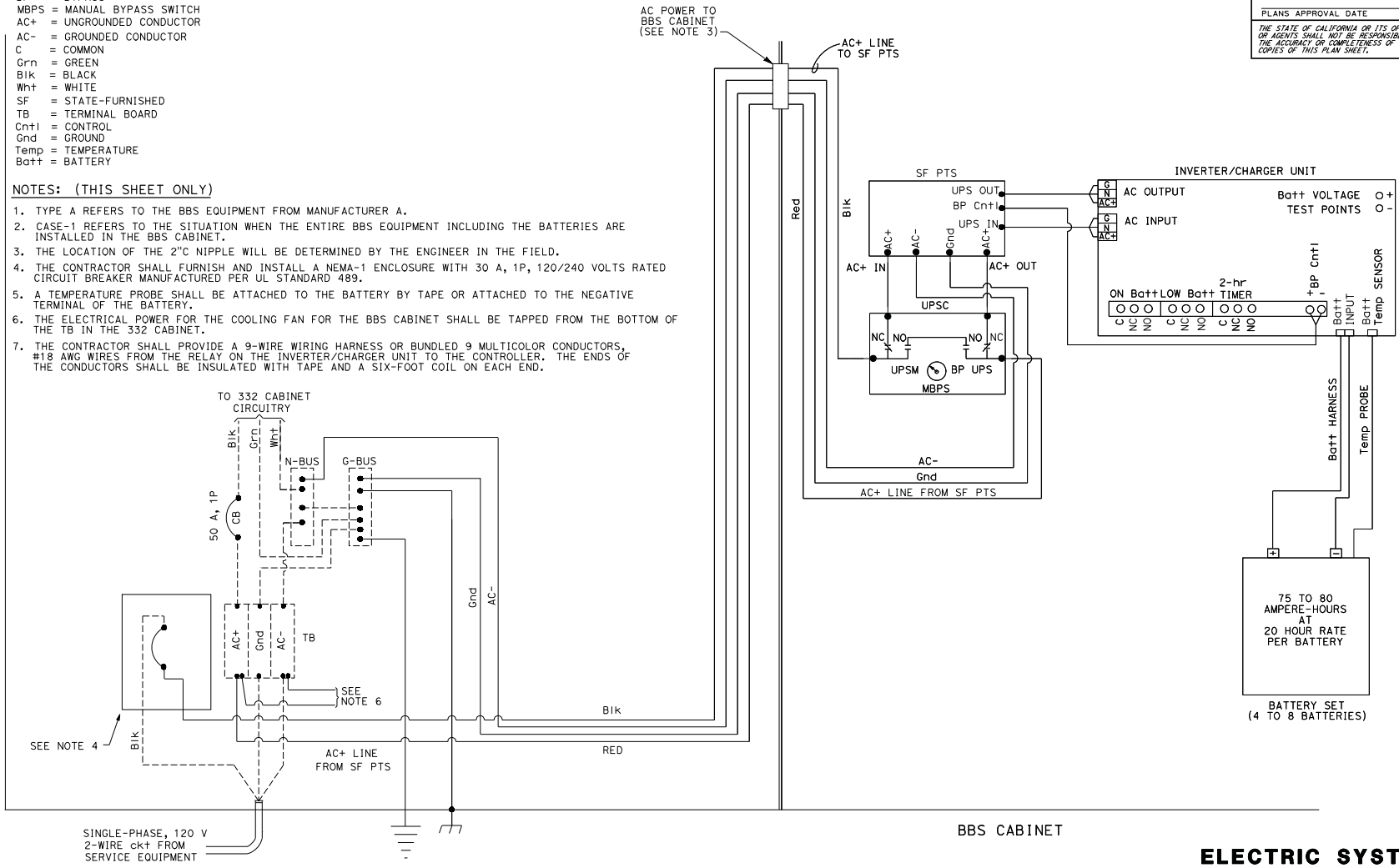
Wht = WHITE
SF = STATE-FURNISHED
TB = TERMINAL BOARD
Cntl = CONTROL
Gnd = GROUND
Temp = TEMPERATURE
Batt = BATTERY

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 332 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.



Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Theresa Gabriel 12-20-07
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

Theresa A. Gabriel No. E15129 Exp. 6-30-10 ELECT
REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

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

LAST REVISION 3-11-09 | DATE PLOTTED => 13-MAR-2009 | TIME PLOTTED => 09:06

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trcarol | DGN FILE => BBS 1250FSM.dgn | CU 00000 | EA 000000

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Theresa Gabriel — 12-20-07
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER — Theresa A. Gabriel — No. E15129 — Exp. 6-30-10 — ELECT — STATE OF CALIFORNIA

PLANS APPROVAL DATE

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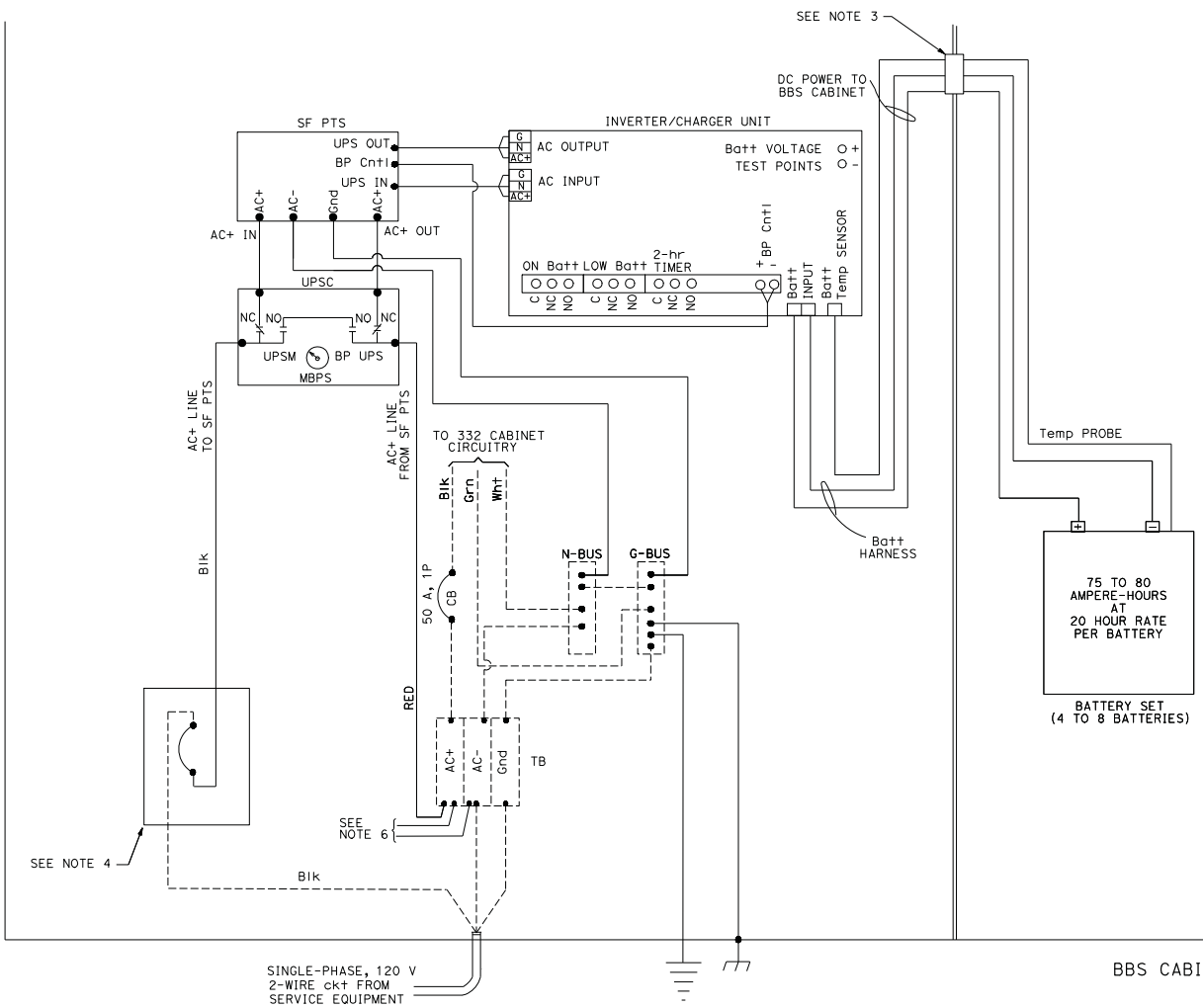

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Cntl = CONTROL
Gnd = GROUND

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

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY | CHECKED BY | REVISED BY | DATE REVISED

LAST REVISION 2-2-09 | DATE PLOTTED => 13-MAR-2009 | TIME PLOTTED => 09:07

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trcarol | DGN FILE => BBS 1250FSP.dgn | CU 00000 | EA 000000

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Theresa Gabriel 12-20-07
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

Theresa A. Gabriel No. E15129 Exp. 6-30-10 ELECT REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

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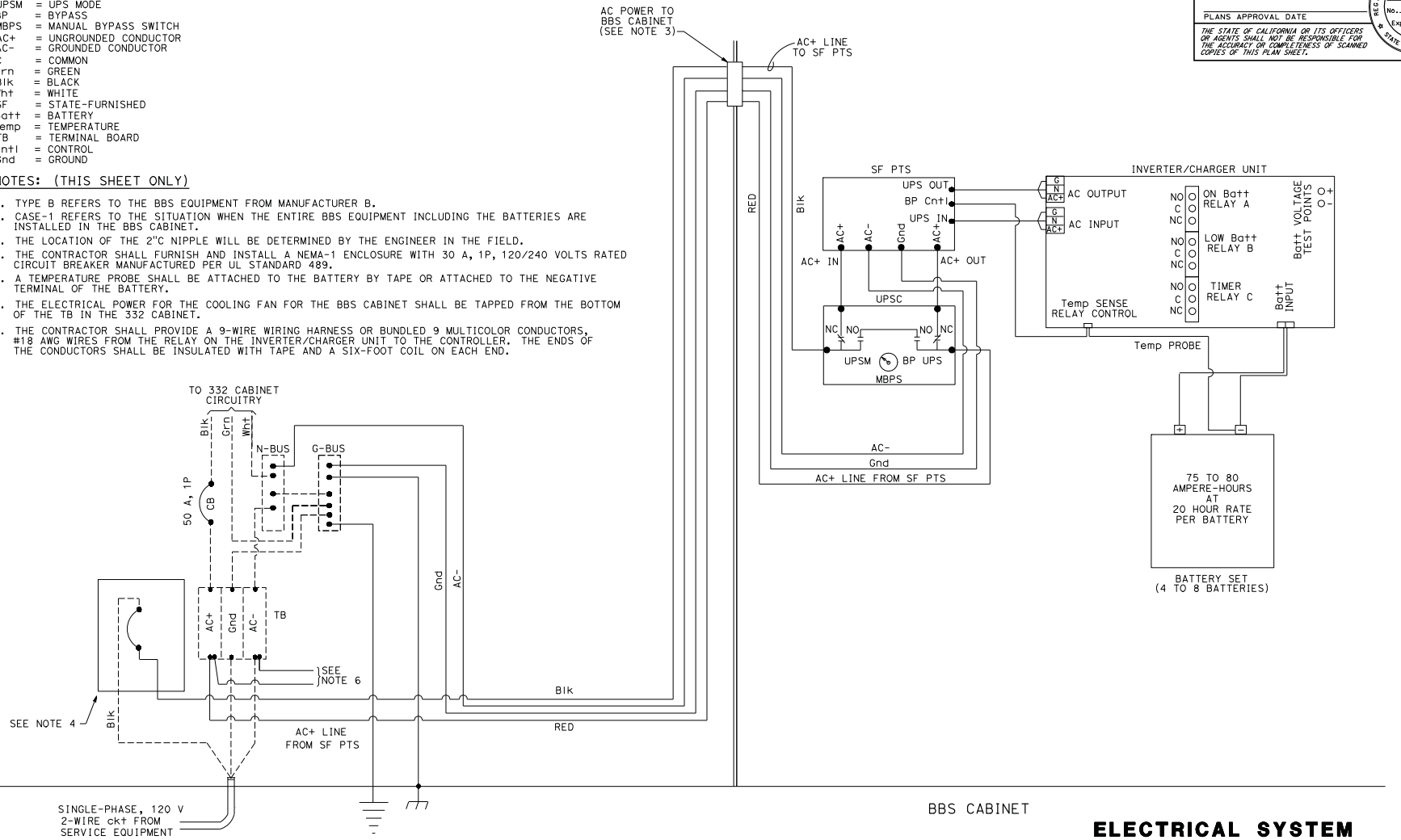

ELECTRICAL SYSTEM

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

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 3-11-09 | DATE PLOTTED => 21-SEP-2009 | TIME PLOTTED => 13:33

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trcarol | DGN FILE => BBS DUIFSM.dgn | CU 00000 | EA 000000

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Theresa Gabriel — REGISTERED CIVIL ENGINEER — 12-20-07 DATE

PLANS APPROVAL DATE

Registered Professional Engineer — Theresa A. Gabriel — No. E15129 — Exp. 6-30-10 — ELECT — State of California

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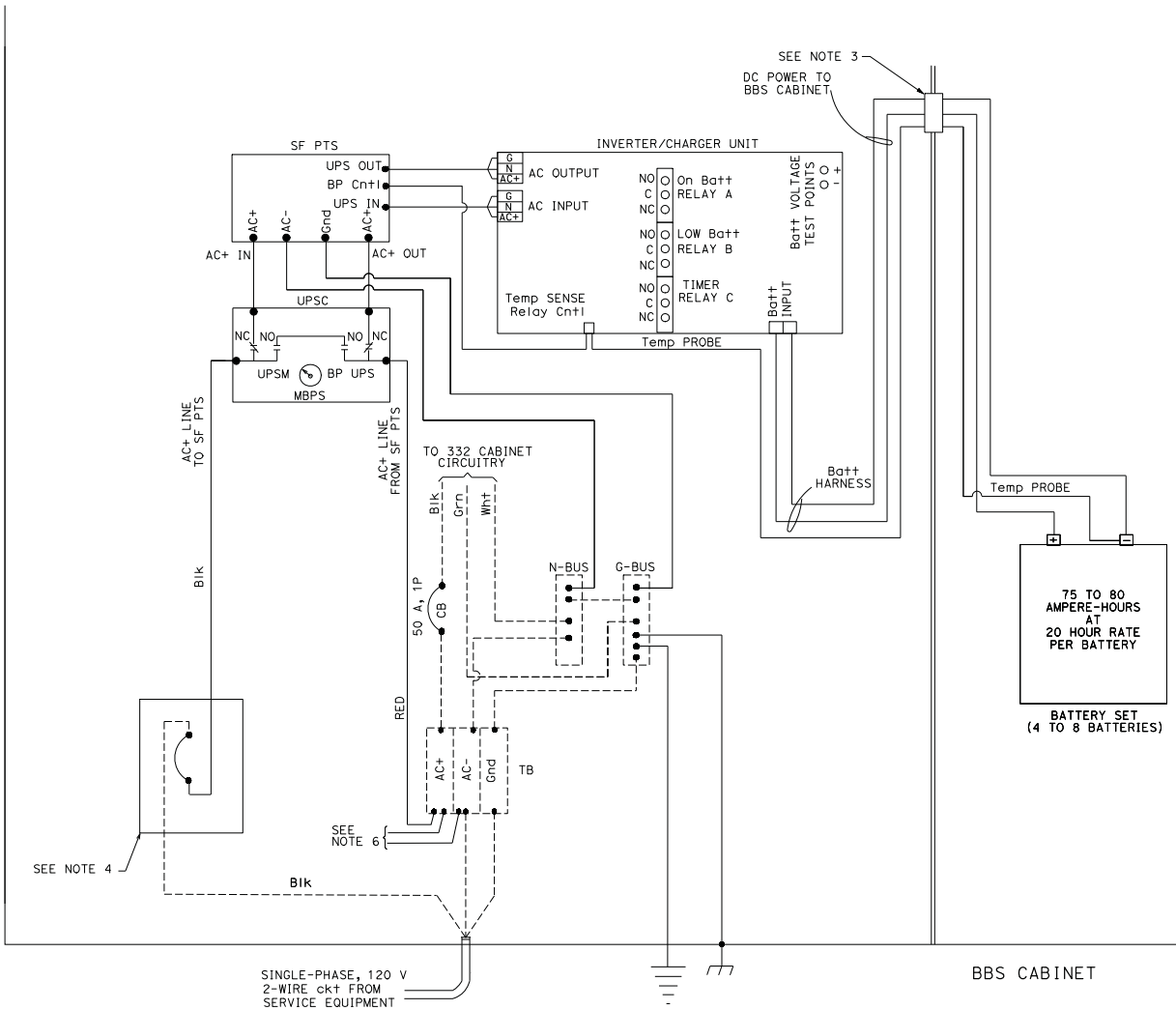

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ELECTRICAL SYSTEM

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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY | CHECKED BY | REVISED BY | DATE REVISED

LAST REVISION 3-11-09 | DATE PLOTTED => 13-MAR-2009 | TIME PLOTTED => 09:10

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => trcarol | DGN FILE => BBS DUIFSP.dgn | CU 00000 | EA 000000

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VIII. PROJECT FUNDING SIGN DETAILS

(Blank)

CALTRANS LOGO DETAILS

CHICO REDEVELOPMENT AGENCY LOGO DETAILS

CITY OF CHICO LOGO DETAILS

PROP 1-B BOND FUNDS-GENERAL SIGN SPECIFICATION

DESIGN NOTES:

1. Main text (example: Highway Widening) use 6” series D text minimum.
2. Completion date text (example: Completion 2013) use 8” series D text minimum for all text. Optionally, if “Completion” is uses on a separate line and to the left or right of a logo, it may be used as small text, 4” series D minimum.
3. All funding agency participant logos are to be displayed.
4. Individual logo height variable up to 23” maximum.
5. Caltrans logo shall be displayed as the uppermost and leftmost logo amongst a group or group of logos.
6. Overall sign size shall not exceed 11’x11’ (132”x132”).

FABRICATION NOTES:

1. Comply with 2006 Standard Plans S93 and S94 for sign panel.
2. Comply with ASTM type II retroreflective sheeting (or higher grade) for all colors except black.
3. Legend and artwork may be transparent film, ink, or applied decals.
4. Overlay entire sign face with premium grade graffiti film.
5. Comply with retroreflective sheeting manufacturer’s recommendations for transparent film, ink, applied decals, and graffiti film.

COLORS: BORDER - PURPLE (PANTONE #520)
LEGEND - BLACK, WHITE, AND ORANGE
BACKGROUND - PURPLE, (PANTONE #520) AND WHITE
CT LOGO - GREEN (PANTONE #326) AND BLUE (PANTONE #299)

(Blank)

IX. CONTRACT

(Blank)

CITY OF CHICO, CAPITAL PROJECTS SERVICES DEPARTMENT
CONTRACT - PUBLIC WORKS PROJECT
CITY OF CHICO / XXXXXXXXXXXXX
(Contractor)

STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT No. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
(Project Title)

MAJGC/15010-300-4150
(Budget Account Number)

THIS CONTRACT is executed this ____ day of _____, 2011, between the CITY OF CHICO, hereinafter called "City", and _____, a(n) (individual), (partnership), (corporation), (enter as appropriate) hereinafter called "Contractor."

ARTICLE I - WITNESSETH, that for and in consideration of the payments and agreements hereinafter mentioned to be made and performed by City, Contractor hereby agrees to, at its own proper cost and expense, do all the work and furnish all labor and materials necessary to complete in a good, workmanlike and substantial manner, the public work indicated above and described in the documents listed below and made a part of this Contract by reference thereto, and the same as though set forth herein. Said documents are more fully described as follows:

1. NOTICE TO CONTRACTORS dated _____
2. GENERAL PROVISIONS
3. SPECIAL PROVISIONS entitled STATE ROUTE 32 WIDENING PROJECT (PHASE 1) PROJECT No. 15010 – FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
4. PROPOSAL dated _____
5. CONTRACT DRAWINGS entitled STATE ROUTE 32 WIDENING PROJECT (PHASE 1) – PROJECT No. 15010 – FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE

Said public work is located in or near the City of Chico, County of Butte, State of California.

A requirement shown in any of said documents is as binding as though occurring in all. They are intended to be coordinated and to describe and provide for a complete work. Should it appear that the work to be done or any of the matters relative thereto are not sufficiently explained in said documents or should any of said documents appear to be conflicting, the Contractor shall apply to the City for such

further explanation as may be necessary, and shall conform to them as part of the Contract. The decisions of the City as to the true meaning of any of said documents shall be final.

The work shall be performed in accordance with the directions and specifications set forth in the above named documents and also in accordance with the following specifications entitled:

1. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, MAY 2006, as amended.
2. STANDARD SPECIFICATIONS OF THE CITY OF CHICO

Said specifications are hereby specifically referred to and by such reference made a part hereof.

ARTICLE II - Contractor agrees to receive and accept the prices set forth in Exhibit "A" attached hereto and by reference incorporated herein as full compensation for furnishing all labor and materials and doing all the work contemplated and embraced in this Contract; also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties or obstruction which may arise or be encountered in the prosecution of the work connected with the work; also for all expenses incurred by or in consequence of the suspension or discontinuance of work, and for well and faithfully completing the work, and the whole thereof, in the manner and according to the plans and specifications and the requirements of the Director of Engineering under them.

ARTICLE III - City hereby promises and agrees with Contractor to employ, and does hereby employ, Contractor to provide the labor and materials and to do the public work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner, and upon the conditions in said GENERAL PROVISIONS, SPECIAL PROVISIONS, PROPOSAL and SPECIFICATIONS as above set forth; and the said parties, for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.

ARTICLE IV - It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and the bid or proposal of said Contract, then this instrument shall control, and nothing herein shall be considered as acceptance of the said terms of said proposal conflicting herewith.

IN WITNESS WHEREOF, the parties hereto have executed these presents in the day and year first above written.

///

_____	CITY OF CHICO, A Municipal Corporation
CONTRACTOR	
_____	_____
ADDRESS	BY David Burkland, City Manager
_____	_____
CITY/STATE/ZIP	DATE:
BY _____	APPROVED AS TO FORM:
Signature	Lori Barker, City Attorney
_____	BY _____
	Alicia M. Rock, Assistant City Attorney
_____	
TITLE	
DATE: _____	
_____	
CONTRACTOR'S LICENSE NO.	

CONTRACTORS COMPENSATION SCHEDULE
STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT No. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
BUDGET ACCOUNT No. MAJGC/15010-300-4150

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
1		PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS			
2		CONSTRUCTION SITE MANAGEMENT	LS			
3		STORM WATER POLLUTION PREVENTION PLAN	LS			
4		WATER POLLUTION CONTROL	LS			
5		STORM WATER ANNUAL REPORTS	EA			
6		CONSTRUCTION AREA SIGNS	LS			
7	P	TRAFFIC CONTROL SYSTEM	LS			
8		TYPE III BARRICADE	EA			
9		TEMPORARY PAVEMENT MARKING (PAINT)	SF			
10		TEMPORARY TRAFFIC STRIPE (PAINT)	LF			
11		CHANNELIZERS (SURFACE MOUNTED)	EA			
12		TEMPORARY PAVEMENT MARKER	EA			
13		PORTABLE CHANGEABLE MESSAGE SIGN	LS			
14		TEMPORARY RAILING (TYPE K)	LF			
15		TEMPORARY CRASH CUSION (TYPE ABSORB 350)	EA			
16		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE	LF			
17		OBLITERATE SURFACING	SY			
18		REMOVE FENCE	LF			
19		REMOVE FLARED END SECTION	EA			
20		REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF			
21		REMOVE THERMOPLASTIC PAVEMENT MARKING	SF			
22		REMOVE PAVEMENT MARKER	EA			
23		REMOVE ROADSIDE SIGN	EA			
24		RELOCATE ROADSIDE SIGN	EA			
25		MODIFY INLET TO MANHOLE	EA			
26		COLD PLANE AC PAVEMENT (0.15 MAX)	SY			

CONTRACTORS COMPENSATION SCHEDULE
STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT No. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
BUDGET ACCOUNT No. MAJGC/15010-300-4150

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
27		REMOVE CONCRETE (CURB AND GUTTER)	LF			
28		REMOVE CONCRETE (SIDEWALK)	CY			
29		CLEAN BRIDGE DECK	SF			
30		REMOVE METAL BEAM GUARD RAILING	LF			
31		BRIDGE REMOVAL (PORTION)	LS			
32	P	CLEARING AND GRUBBING	LS			
33		REMOVE TREE	EA			
34	P	DEVELOP WATER SUPPLY	LS			
35		ROADWAY EXCAVATION	CY			
36		LEAD COMPLIANCE PLAN	LS			
37	F	STRUCTURE EXCAVATION (BRIDGE)	CY			
38	F	STRUCTURE BACKFILL (BRIDGE)	CY			
39		DITCH EXCAVATION	CY			
40		IMPORTED BORROW	CY			
41		IMPORTED MATERIAL (SHOULDER BACKING)	TON			
42		COMPOST (INCORPORATE)	SY			
43		EROSION CONTROL (HYDROSEED)	SF			
44		2" CONDUIT	LF			
45		3" CONDUIT	LF			
46		6" CONDUIT	LF			
47		CLASS 2 AGGREGATE BASE	CY			
48		AGGREGATE BASE (APPROACH SLAB)	CY			
49		HOT MIX ASPHALT	TON			
50		HOT MIX ASPHALT (OPEN GRADED FRICTION COURSE)	TON			
51		PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF			
52		PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF			

CONTRACTORS COMPENSATION SCHEDULE
STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT No. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
BUDGET ACCOUNT No. MAJGC/15010-300-4150

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
53		PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF			
54		PLACE HOT MIX ASPHALT (MISC AREA)	SY			
55		COLD FOAM IN PLACE RECYCLING	SY			
56	P-F	FURNISH PILING (CLASS 90) (ALTERNATIVE X)	LF			
57		DRIVE PILE (CLASS 90) (ALTERNATIVE X)	EA			
58	P-F	FURNISH PILING (15" PRECAST PILE EXTENSION)	LF			
59		DRIVE PILE (15" PRECAST PILE EXTENSION)	EA			
60	F	STRUCTURAL CONCRETE, BRIDGE	CY			
61	F	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ)	CY			
62	F	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	CY			
63		PAVING NOTCH EXTENSION	CF			
64	F	DRILL AND BOND DOWEL	LF			
65		DRILL AND BOND DOWEL (CHEMICAL ADHESIVE)	EA			
66		JOINT SEAL (MR 1/2")	LF			
67	P-F	BAR REINFORCING STEEL (BRIDGE)	LB			
68	F	TREAT BRIDGE DECK	SF			
69		FURNISH BRIDGE DECK TREATMENT MATERIAL	GAL			
70	P	PRECAST CONCRETE SOUNDWALL	SF			
71		FURNISH SINGLE SHEET ALUMINUM SIGN PANEL (0.063"- UNFRAMED)	SF			
72		FURNISH SINGLE SHEET ALUMINUM SIGN PANEL (0.080"- UNFRAMED)	SF			
73		FURNISH SINGLE SHEET ALUMINUM SIGN PANEL (0.063"-FRAMED)	SF			
74		ROADSIDE SIGN (ONE POST)	EA			
75		ROADSIDE SIGN (TWO POST)	EA			
76		INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA			
77		18" APC	LF			
78		24" APC	LF			

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
79		18" AFES	EA			
80		24" AFES	EA			
81		DRAINAGE INLET	EA			
82		ROCK SLOPE PROTECTION (LIGHT, METHOD B)	CY			
83		ROCK SLOPE PROTECTION (BACKING No. 2, METHOD B)	CY			
84		ROCK SLOPE PROTECTION FABRIC	SY			
85		MINOR CONCRETE (MEDIAN CURB)	CY			
86		MINOR CONCRETE (RETAINING CURB)	CY			
87		MINOR CONCRETE (CURB & GUTTER)	CY			
88		MINOR CONCRETE (SIDEWALK)	CY			
89		MINOR CONCRETE (CURB RAMP)	CY			
90		MINOR CONCRETE (TEXTURED PAVING)	CY			
91		MISCELLANEOUS IRON AND STEEL	LB			
92		DELINEATOR	EA			
93		HIGHWAY POST MARKER	EA			
94		OBJECT MARKER	EA			
95		METAL BEAM GUARD RAILING (WOOD POST)	LF			
96		MINOR CONCRETE (VEGETATION CONTROL)	CY			
97	**P-F**	TUBULAR BICYCLE RAILING	LF			
98		DOUBLE METAL BEAM GUARD RAILING (WOOD POST)	LF			
99	**P**	STEEL-BACKED TIMBER GUARD RAILING	LF			
100	**P**	STEEL-BACKED TIMBER GUARD RAILING (DOUBLE SIDED)	LF			
101		TRANSITION RAILING (TYPE WB)	EA			
102		TERMINAL SYSTEM (TYPE CAT)	EA			
103		TEMINAL SYSTEM (TYPE CAT) BACKUP	EA			
104		ALTERNATIVE FLARED TERMINAL SYSTEM	EA			

CONTRACTORS COMPENSATION SCHEDULE
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PROJECT No. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
BUDGET ACCOUNT No. MAJGC/15010-300-4150

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
105	**F**	CONCRETE BARRIER (TYPE 732R)	LF			
106	**F**	CONCRETE BARRIER (TYPE 732)	LF			
107		THERMOPLASTIC TRAFFIC STRIPE	LF			
108		THERMOPLASTIC PAVEMENT MARKING	SF			
109		PAVEMENT MARKER (RETRO-REFLECTIVE)	EA			
110		MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS			
111		SIGNAL AND LIGHTING (TEMPORARY)	LS			
112		INTERCONNECTION CONDUIT AND CABLE	LS			
113		MODIFY SIGNAL AND LIGHTING (LOCATION 1)	LS			
114		MODIFY SIGNAL AND LIGHTING (LOCATION 2)	LS			
115		RAISED PLANTER WALL CAP	LF			
116		RAISED PLANTER WALL FOOTING	LF			
117		FRONT RAISED PLANTER WALL	SF			
118		BACK RAISED PLANTER WALL	SF			
119		IMPORT TOPSOIL AND PLACEMENT	CY			
120		RAISED PLANTER BACKFILL	CY			
121		TREE PLANTING (15 GALLON SIZE, STAKED)	EA			
122		TREE PLANTING (15 GALLON SIZE,UN- STAKED)	EA			
123		SHRUB PLANTING (5 GALLON SIZE)	EA			
124		SHRUBS (1 GALLON SIZE)	EA			
125		VINES (1 GALLON)	EA			
126		WEED CONTROL	SF			
127		ROOT BARRIER	LF			
128		WOOD CHIP MULCH	CY			
129		WATER POINT OF CONNECTION	EA			
130		BACKFLOW PREVENTER ASSEMBLY	EA			

CONTRACTORS COMPENSATION SCHEDULE
STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT No. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
BUDGET ACCOUNT No. MAJGC/15010-300-4150

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
131		CONTROLLER	EA			
132		FLOW SENSING ASSEMBLY	EA			
133		ISOLATION VALVES	EA			
134		REMOTE CONTROL VALVES (SPRAY)	EA			
135		REMOTE CONTROL VALVES (DRIP)	EA			
136		2-WIRE DECODERS	EA			
137		QUICK COUPLER VALVES	EA			
138	**P**	PVC MAINLINE	LF			
139	**P**	PVC LATERAL LINES	LF			
140	**P**	CONDUIT	LF			
141		SLEEVING	LF			
142		LIGHTING ARRESTOR	EA			
143		PULL BOXES	EA			
144		SWING PIPE	LF			
145		EMITTERS	EA			
146		IRRIGATION HEAD	EA			
147		2 WIRE DECODER CABLE	LF			
148		WATER AUDIT	EA			
149		PLANT ESTABLISHMENT PERIOD	SF			
150		MOBILIZATION	LS			
					TOTAL BID	

Notes: (a) Contractors must use this form to provide bids (no exceptions or alterations are permitted).

(b) In order to be considered responsive, the bid schedule included in the proposal form must be filled out in its entirety. The City reserves the right to accept or reject any and all bids.

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X. PROPOSAL

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PROPOSAL

STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT NO. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
(Project Title)

MAJGC/15010-300-4150
(Budget Account Number)

TO THE CITY OF CHICO

The undersigned declares that he/she has carefully examined the location of the proposed work, that he/she has examined the contract plans and specifications, and read the accompanying General and Special Provisions, and hereby proposed to furnish all materials and do all the work required to complete the said work in accordance with said contract plans, if any, and specifications, and General and Special Provisions, for the unit prices or lump sum set forth in the following attached schedules.

The undersigned further agrees that in case of default in executing the required contract, with necessary bonds within ten (10) days, not including Sunday, after having received notice that the contract is ready for signature, the proceeds of the Bidder's guaranty accompanying his or her bid shall become the property of the CITY OF CHICO.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

(a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price:

(b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentagewise the unit price or item total in the Department’s Final Estimate of cost.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable

total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all such figures are assumed to be expressed in dollars and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the items total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the Department, and such discretion will be exercised in the manner deemed by the Department to best protect the public interest in the prompt and economical completion of the work. The decision of the Department respecting the amount of a bid, or the existence or treatment of an irregularity in a bid shall be final.

City of Chico Business License No._____

Taxpayer Identification No._____

Licensed in accordance with an act providing for the registration of contractors:

License No._____

Signature of Bidder:_____

(Check appropriate box below. State individual name or (if a firm or partnership), state the firm name and give names of all individual co-partners composing the firm. If a corporation, state legal name of corporation, also names of president, secretary, treasurer, and manager thereof.)

☐ Individual ☐ Corporation ☐ Partnership ☐ Other

Name

_____

_____

_____

Date:_____ 2011

Business Address

_____

_____

(Zip Code)

Phone No. _____

STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT NO. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
(Project Title)

MAJGC/15010-300-4150
(Budget Account Number)

LIST OF SUBCONTRACTORS
FOR CONTRACTOR_____

SUBCONTRACTORS NAME	ADDRESS & TELEPHONE #	RESPONSIBLE FOR CONTRACT ITEM NO.	DOLLAR AMOUNT OF SUBCONTRACT WORK

CONTRACTORS PROPOSAL FORM FOR
STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT No. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
BUDGET ACCOUNT No. MAJGC/15010-300-4150

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
1		PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	1		
2		CONSTRUCTION SITE MANAGEMENT	LS	1		
3		STORM WATER POLLUTION PREVENTION PLAN	LS	1		
4		WATER POLLUTION CONTROL	LS	1		
5		STORM WATER ANNUAL REPORTS	EA	2		
6		CONSTRUCTION AREA SIGNS	LS	1		
7	P	TRAFFIC CONTROL SYSTEM	LS	1		
8		TYPE III BARRICADE	EA	14		
9		TEMPORARY PAVEMENT MARKING (PAINT)	SF	850		
10		TEMPORARY TRAFFIC STRIPE (PAINT)	LF	29000		
11		CHANNELIZERS (SURFACE MOUNTED)	EA	310		
12		TEMPORARY PAVEMENT MARKER	EA	570		
13		PORTABLE CHANGEABLE MESSAGE SIGN	LS	1		
14		TEMPORARY RAILING (TYPE K)	LF	6740		
15		TEMPORARY CRASH CUSION (TYPE ABSORB 350)	EA	8		
16		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE	LF	7820		
17		OBLITERATE SURFACING	SY	1360		
18		REMOVE FENCE	LF	5530		
19		REMOVE FLARED END SECTION	EA	2		
20		REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	4710		
21		REMOVE THERMOPLASTIC PAVEMENT MARKING	SF	700		
22		REMOVE PAVEMENT MARKER	EA	410		
23		REMOVE ROADSIDE SIGN	EA	15		
24		RELOCATE ROADSIDE SIGN	EA	2		
25		MODIFY INLET TO MANHOLE	EA	1		
26		COLD PLANE AC PAVEMENT (0.15 MAX)	SY	2800		

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
27		REMOVE CONCRETE (CURB AND GUTTER)	LF	210		
28		REMOVE CONCRETE (SIDEWALK)	CY	9		
29		CLEAN BRIDGE DECK	SF	5980		
30		REMOVE METAL BEAM GUARD RAILING	LF	330		
31		BRIDGE REMOVAL (PORTION)	LS	1		
32	P	CLEARING AND GRUBBING	LS	1		
33		REMOVE TREE	EA	170		
34	P	DEVELOP WATER SUPPLY	LS	1		
35		ROADWAY EXCAVATION	CY	4790		
36		LEAD COMPLIANCE PLAN	LS	1		
37	F	STRUCTURE EXCAVATION (BRIDGE)	CY	196		
38	F	STRUCTURE BACKFILL (BRIDGE)	CY	82		
39		DITCH EXCAVATION	CY	1000		
40		IMPORTED BORROW	CY	8110		
41		IMPORTED MATERIAL (SHOULDER BACKING)	TON	120		
42		COMPOST (INCORPORATE)	SY	2840		
43		EROSION CONTROL (HYDROSEED)	SF	148000		
44		2" CONDUIT	LF	200		
45		3" CONDUIT	LF	89		
46		6" CONDUIT	LF	200		
47		CLASS 2 AGGREGATE BASE	CY	9620		
48		AGGREGATE BASE (APPROACH SLAB)	CY	2		
49		HOT MIX ASPHALT	TON	11600		
50		HOT MIX ASPHALT (OPEN GRADED FRICTION COURSE)	TON	2450		
51		PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	39		
52		PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF	400		

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
53		PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	50		
54		PLACE HOT MIX ASPHALT (MISC AREA)	SY	5		
55		COLD FOAM IN PLACE RECYCLING	SY	14200		
56	**P-F**	FURNISH PILING (CLASS 90) (ALTERNATIVE X)	LF	700		
57		DRIVE PILE (CLASS 90) (ALTERNATIVE X)	EA	16		
58	**P-F**	FURNISH PILING (15" PRECAST PILE EXTENSION)	LF	1596		
59		DRIVE PILE (15" PRECAST PILE EXTENSION)	EA	30		
60	**F**	STRUCTURAL CONCRETE, BRIDGE	CY	442		
61	**F**	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ)	CY	26		
62	**F**	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	CY	18		
63		PAVING NOTCH EXTENSION	CF	120		
64	**F**	DRILL AND BOND DOWEL	LF	432		
65		DRILL AND BOND DOWEL (CHEMICAL ADHESIVE)	EA	130		
66		JOINT SEAL (MR 1/2")	LF	230		
67	**P-F**	BAR REINFORCING STEEL (BRIDGE)	LB	102342		
68	**F**	TREAT BRIDGE DECK	SF	5972		
69		FURNISH BRIDGE DECK TREATMENT MATERIAL	GAL	67		
70	**P**	PRECAST CONCRETE SOUNDWALL	SF	50700		
71		FURNISH SINGLE SHEET ALUMINUM SIGN PANEL (0.063"-UNFRAMED)	SF	91		
72		FURNISH SINGLE SHEET ALUMINUM SIGN PANEL (0.080"-UNFRAMED)	SF	120		
73		FURNISH SINGLE SHEET ALUMINUM SIGN PANEL (0.063"-FRAMED)	SF	21		
74		ROADSIDE SIGN (ONE POST)	EA	12		
75		ROADSIDE SIGN (TWO POST)	EA	1		
76		INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	3		
77		18" APC	LF	20		
78		24" APC	LF	120		

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
79		18" AFES	EA	1		
80		24" AFES	EA	2		
81		DRAINAGE INLET	EA	2		
82		ROCK SLOPE PROTECTION (LIGHT, METHOD B)	CY	880		
83		ROCK SLOPE PROTECTION (BACKING No. 2, METHOD B)	CY	13		
84		ROCK SLOPE PROTECTION FABRIC	SY	1020		
85		MINOR CONCRETE (MEDIAN CURB)	CY	3		
86		MINOR CONCRETE (RETAINING CURB)	CY	7		
87		MINOR CONCRETE (CURB & GUTTER)	CY	27		
88		MINOR CONCRETE (SIDEWALK)	CY	22		
89		MINOR CONCRETE (CURB RAMP)	CY	11		
90		MINOR CONCRETE (TEXTURED PAVING)	CY	1		
91		MISCELLANEOUS IRON AND STEEL	LB	480		
92		DELINEATOR	EA	20		
93		HIGHWAY POST MARKER	EA	2		
94		OBJECT MARKER	EA	3		
95		METAL BEAM GUARD RAILING (WOOD POST)	LF	50		
96		MINOR CONCRETE (VEGETATION CONTROL)	CY	87		
97	**P-F**	TUBULAR BICYCLE RAILING	LF	288		
98		DOUBLE METAL BEAM GUARD RAILING (WOOD POST)	LF	200		
99	**P**	STEEL-BACKED TIMBER GUARD RAILING	LF	3520		
100	**P**	STEEL-BACKED TIMBER GUARD RAILING (DOUBLE SIDED)	LF	80		
101		TRANSITION RAILING (TYPE WB)	EA	2		
102		TERMINAL SYSTEM (TYPE CAT)	EA	2		
103		TEMINAL SYSTEM (TYPE CAT) BACKUP	EA	2		
104		ALTERNATIVE FLARED TERMINAL SYSTEM	EA	2		

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
105	**F**	CONCRETE BARRIER (TYPE 732R)	LF	141		
106	**F**	CONCRETE BARRIER (TYPE 732)	LF	147		
107		THERMOPLASTIC TRAFFIC STRIPE	LF	30200		
108		THERMOPLASTIC PAVEMENT MARKING	SF	1950		
109		PAVEMENT MARKER (RETRO-REFLECTIVE)	EA	760		
110		MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	1		
111		SIGNAL AND LIGHTING (TEMPORARY)	LS	1		
112		INTERCONNECTION CONDUIT AND CABLE	LS	1		
113		MODIFY SIGNAL AND LIGHTING (LOCATION 1)	LS	1		
114		MODIFY SIGNAL AND LIGHTING (LOCATION 2)	LS	1		
115		RAISED PLANTER WALL CAP	LF	340		
116		RAISED PLANTER WALL FOOTING	LF	340		
117		FRONT RAISED PLANTER WALL	SF	590		
118		BACK RAISED PLANTER WALL	SF	320		
119		IMPORT TOPSOIL AND PLACEMENT	CY	1660		
120		RAISED PLANTER BACKFILL	CY	75		
121		TREE PLANTING (15 GALLON SIZE, STAKED)	EA	88		
122		TREE PLANTING (15 GALLON SIZE,UN- STAKED)	EA	39		
123		SHRUB PLANTING (5 GALLON SIZE)	EA	1690		
124		SHRUBS (1 GALLON SIZE)	EA	620		
125		VINES (1 GALLON)	EA	590		
126		WEED CONTROL	SF	86800		
127		ROOT BARRIER	LF	1040		
128		WOOD CHIP MULCH	CY	790		
129		WATER POINT OF CONNECTION	EA	1		
130		BACKFLOW PREVENTER ASSEMBLY	EA	1		

CONTRACTORS PROPOSAL FORM FOR
STATE ROUTE 32 WIDENING PROJECT (PHASE 1)
PROJECT No. 15010
FROM EAST OF PARK AND RIDE LOT TO EL MONTE AVENUE
BUDGET ACCOUNT No. MAJGC/15010-300-4150

ITEM NO.	P-F	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
131		CONTROLLER	EA	1		
132		FLOW SENSING ASSEMBLY	EA	1		
133		ISOLATION VALVES	EA	9		
134		REMOTE CONTROL VALVES (SPRAY)	EA	3		
135		REMOTE CONTROL VALVES (DRIP)	EA	14		
136		2-WIRE DECODERS	EA	17		
137		QUICK COUPLER VALVES	EA	55		
138	**P**	PVC MAINLINE	LF	7400		
139	**P**	PVC LATERAL LINES	LF	23000		
140	**P**	CONDUIT	LF	6600		
141		SLEEVING	LF	80		
142		LIGHTING ARRESTOR	EA	14		
143		PULL BOXES	EA	15		
144		SWING PIPE	LF	23000		
145		EMITTERS	EA	5050		
146		IRRIGATION HEAD	EA	83		
147		2 WIRE DECODER CABLE	LF	6600		
148		WATER AUDIT	EA	1		
149		PLANT ESTABLISHMENT PERIOD	SF	243000		
150		MOBILIZATION	LS	1		
					TOTAL BID	

Notes: (a) Contractors must use this form to provide bids (no exceptions or alterations are permitted).
(b) In order to be considered responsive, the bid schedule included in the proposal form must be filled out in its entirety. The City reserves the right to accept or reject any and all bids.

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