

**Meeting of the Central Valley Flood Protection Board
July 22, 2011**

**Staff Report
Hidden Falls Regional Park Bridges
Placer County Parks, Auburn, CA**

1.0 – ITEM

Consider approval of Permit No. 18668 (Attachment B).

2.0 – APPLICANT

Placer County Parks Division

3.0 – LOCATION

The project is located in Hidden Falls Regional Park along the Coon Creek and Deadman Creek canyons between 500 foot and 900 foot elevations within the Sierra Nevada Foothills. The park is situated between the communities of Auburn and Lincoln within Placer County California (Attachment-C).

4.0 – DESCRIPTION

The proposed project consists of three bridges to be constructed over Coon Creek to facilitate emergency access, maintenance vehicles, and pedestrian trail use. Bridges are to be constructed over Coon Creek in generally steep foothill terrain where stream bank overflow into adjacent property is not possible. There are no levees within the project site. Hidden Falls Regional Park is a 1,200 acre open space park located along the Coon and Deadman Creek canyons

5.0 – PROJECT ANALYSIS

The Placer County Parks proposes to install three bridges crossing Coon Creek within the park area. The purpose of the project is to provide access over the river within the park. The proposed bridges consist of the following bridge types:

Bridge-1 is slated to be a single-span concrete arch bridge with concrete abutments. The County has designed the bridge in concept but will solicit bids from manufacturers to meet the intent while getting the best price of the actual bridge. The bridge is designed to take a concentrated load of HS20 ton-44 (Fire Truck loading) or semi-truck

load distribution: Cab=8,000lbs, Trailer front axle =32,000lbs, & Rear Trailer =32,000lbs for a total load of 72,000 lbs and a seismic loads for Site Class “C” with an importance factor of 1.0.

Bridges-2 is also designed in concept but is a single-span steel truss bridge with concrete abutments and footings with approach ramp fills. In the future it is planned to have a bridge cover which adds extra weight to the bridge span. Bids will be solicited from the manufacturers for final design while meeting the project intent. The bridge is designed to take a concentrated load of HS10 = 20,000 lbs and seismic loads for Site Class “C” with an importance factor of 1.0.

Bridges-3 is a single span steel truss bridge with stair stepped concrete abutments and retaining wall fill support to meet original ground. The bridge is designed to take a concentrated load of HS10 = 20,000 lbs and seismic loads for Site Class “C” with an importance factor of 1.0.

The County will restore all levee slopes and roadways to pre-project condition and follow all standards and guidelines as applicable, in Title 23 of the California Water Code for construction activities on levees and within the floodway. The relevant Title 23 sections are:

- 112. Streams Regulated and No permissible Work Periods
- 115. Dredged Spoil, and Waste Material
- 116. Borrow and Excavated Activities – Land and Channel
- 121. Erosion Control
- 128. Bridges
- 130. Patrol Roads and Access Ramps

5.1 – Background

The proposed project will be developed by the County in a phased manner, providing recreational and access facilities on the 979-acre former Spears Ranch property and expanding the existing parking area within the Didion Ranch portion of the Park to provide opportunities for passive recreation (i.e., hiking, biking, horseback riding, fishing and hunting) on the entire 1,200-acre Hidden Falls Regional Park. In addition, the project will improve access to the western portion of the property, including an on-site staging/parking area with access from Garden Bar Road.

The County will develop various recreational/ educational uses within the Park to include 14 miles of new multiple-use natural-surface trails in addition to the 10 miles of existing trails and bridge connections to other public trails within and near the Park property. The County’s plan will implement culvert and rock-lined creek crossings over intermittent drainages to support the trail network and to control sediment and erosion through rock check structures, water bars and rock rip-rap energy dissipaters.

5.2 – Hydraulic Analysis

The design hydraulic study for this project was prepared by Carlton Engineering Inc. in Shingle Springs, California and finalized March 2011. A HEC-RAS Model was used to determine the water surface profile. The estimated design flow for the 1 percent chance event (100 year storm) is:

Bridge #1 = 12,606 cfs begins to rise upstream of the bridge at 1,286 ft and at 109 feet upstream the flow maximizes with a WSE rise of 3.59 ft. The WSE returns to existing conditions 109 ft downstream of the bridge. There is a rise in channel velocities 39 feet downstream of the bridge from an existing stream velocity of 12.53 feet/second to 17.13 feet/second for the 100-year storm.

Bridge #2 = 11,182 cfs begins to rise upstream of the bridge at 433 ft and at 29 ft upstream the flow maximizes with a WSE rise of 2.01 ft. The WSE returns to existing conditions 71 ft downstream of the bridge. There is a rise in channel velocities 71 feet downstream of the bridge from an existing stream velocity of 10.27 feet/second to 20.09 feet/second for the 100-year storm.

Bridge #3 = 9,933 cfs begins to rise upstream of the bridge at 433 ft and at 29 ft upstream the flow maximizes with a WSE rise of 2.01 ft. The WSE returns to existing conditions 71 ft downstream of the bridge. There is a rise in channel velocities 71 feet downstream of the bridge from an existing stream velocity of 10.27 feet/second to 20.09 feet/second for the 100-year storm.

Pier scour potential:

While stream velocities are higher than is found within the main rivers of the Federal Flood Control System, this is a natural stream course which has established itself on parent rock material which can tolerate the steep riverine flows and velocities. Therefore, in stream velocities on slopes of up to 3.5 percent have little potential for in stream scour or lateral erosion.

There is a rise in water surface due to the bridge construction, however the river embankments are 100's of feet above the low flow stream. The nearest downstream federal levee is ~35 miles away at the Lower Feather River. Therefore, there should be no impact to the federal levee system or impacts to downstream rural communities.

5.3– Geotechnical Summary

Regional mapping within the area includes several publications by the California Geologic Survey (CGS) (1987 and 1995) which depicts the site within a large Mesozoic-aged, Jurassic period Smartville complex that consists of Copper Hill volcanic rock. The volcanic rock is primarily composed of mafic (a silicate mineral or rock) to intermediate flows with flow and tuff breccias (pieces of sedimentary rock from deeper parts of a volcano) and minor felsic porphyryite (volcanic rock, granite/ quartz).

Explorations were conducted by Carlton Engineering Inc. from October 8, 2008 to January 8, 2010. The Geotechnical Engineers performed rock cores, test pits, and borings around the bridge sites. Bulk samples were collected from the test pit walls and classified. Logs were prepared based on the field logging, visual examination of the soil samples in the laboratory, and the results of the laboratory testing. Schmidt Hammer readings were taken on representative rock. In conjunction with the Schmidt Hammer readings, an engineering hand probe was used in the study area. Rock location was visualized and located.

Rock dowels, Spin-Lock Rock Anchors and Bonded Rock Anchors are proposed methods recommended to tie in the bridge abutments to the native rock.

5.4 – Staff Comments

The three bridges are to be located within a wilderness type-setting of the Sierra Foothills, close to the headwaters of Coon Creek. Existing stream slopes are:

<u>Bridge</u>	<u>Minimum soffit Elevation</u>	<u>Existing/ Proposed stream slope</u>
1	418.0 feet	1.35 %
2	475.5	1.17 %
3	577.2	3.53 %

In comparison to Central Valley floor slopes, rivers of 0.001 percent and less, this project has a 3,500 times greater slope than the valley rivers. These steeper slopes increase velocities but the natural streams can handle this because of the bedrock stream inverts.

Plan drawings S01 through S07 depict the basic components of the three bridges sitting “Design Criteria”. Placer County is requesting bids from various manufacturers who will meet the basic criteria (i.e., Bridge type, minimum soffit elevation, bridge span and width) and bid the project accordingly. The County will choose the lowest responsive bidder for the Concrete Arch Bridge and the Steel Truss Bridges. Once the final design drawings are accepted by the County, those drawings should be passed through the Central Valley Flood Protection Board for final compliance check with California Code of Regulations Title 23. An Acceptance Letter will then be provided to the County from the Board’s Chief Engineer.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS:

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The U.S. Army Corps of Engineers 208.10 comment letter has been received for this application.

- Placer County Flood Control and Water Conservation District; Conditional Use Permit, dated January 28, 2010 (Attachment-B, Exhibit-B).

6.1 – Owners of the property on which the project is located

This is a park setting nested within Coon Creek and Deadman Creek canyons within the Sierra Nevada Foothills. There are no residential parcels that will be impacted by this rural development. The owner is Placer County Department of Facilities Services Parks and Grounds Division.

7.0 – PROPOSED CEQA FINDINGS:

Board staff has prepared the following CEQA Findings:

The Board, acting as a responsible agency under CEQA, has independently reviewed the Draft Environmental Impact Report (DEIR, June 2006), Final Environmental Impact Report (FEIR, December 2006), Mitigation Monitoring and Reporting Program, and the Finding of Fact and Statement of Overriding Considerations (January 21, 2010) for the Hidden Falls Regional Park Project (SCH No. 2007062084) prepared by the lead agency, Placer County. These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board website at <http://www.cvfpb.ca.gov/meetings/2011/7-22-2011.cfm> under a link for this agenda item.

7.1 – Impacts that can be Mitigated

The following are the significant impacts and the mitigation measures to reduce them to less than significant:

- Soils, Geology, and Seismicity: Implement erosion control and slope stability measures, including storm water runoff control systems and constructing sediment control basins. Project proponent will obtain and implement seismic engineering design recommendations to reduce the risk of damage or injury caused by strong seismic ground shaking or fault rupture.
- Hydrology and Water Quality: Project proponent will prepare and implement a grading and drainage plan to mitigate for short-term, construction-related soil erosion and impairment of water quality. Additionally, a Placer County Environmental Health Division Transient Non-community Water System Permit will be administered to reduce impacts to groundwater impacts related to the installation of a septic system.
- Biological Resources: The project proponent will reduce impact to aquatic habitats and native fish communities by limiting in-water construction to April 15 through October 15, replace, restore, or enhance affected jurisdictional waters of

the United States and Waters of the State. Additionally, the project proponent will implement measures to protect California red-legged frog, foothill yellow-legged frog, northwestern pond turtle, ringtails, Townsend's big-eared bats, Brandegee's clarkia, nesting raptors and other birds.

- Air Quality: Project proponent will conduct on-site soil testing and prepare and implement an asbestos dust control plan to reduce exposure of sensitive receptors to emissions of toxic air contaminants.
- Noise: Project proponent will restrict general public traffic to 6 a.m. to 30 minutes after sunset to mitigate for transportation-related noise impacts.
- Cultural Resources: Project proponent will modify project plans to avoid potentially significant cultural resources, actively monitor and protect cultural resources, and stop potentially damaging work if human remains are uncovered during construction.
- Hazards and Hazardous Materials: Project proponent will conduct on-site soil testing and prepare and implement an asbestos dust control plan to reduce exposure to asbestos, if needed.
- Transportation and Circulation: Implement traffic control measures during park reservation-based events to mitigate for the increase in traffic-related impacts.

Based on its independent review of the DEIR, FEIR, and Finding of Fact and Statement of Overriding Considerations, the Board finds that for each of the significant impacts described above, changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the FEIR. Moreover, such changes or alterations are within the responsibility and jurisdiction of another public agency, Placer County, and such changes have been adopted by that agency.

7.2 – Significant Unavoidable Adverse Impacts of the Project

- The long-term changes in visual resources associated with the improvements to Garden Bar Road.

The Board further finds that none of the significant unavoidable adverse impacts of the project are within the Board's jurisdiction. The Board also finds that the specific economic, legal, social, technological or other benefits of the project, as listed above, outweigh the unavoidable adverse environmental effects, which are thus considered to be "acceptable."

7.3 – Statement of Overriding Considerations

The Placer County Planning Commission approved Conditional Use Permit PCPA 20090391 and certified the EIR including the Finding of Fact and Statement of Overriding Considerations on January 28, 2010. The Board concurs with this Statement.

The Board has independently considered the significant and unavoidable environmental impacts of the proposed project. The Board has also considered the benefits of the project, including creation of open space consistent with the goals of the Placer Legacy Open Space and Agricultural Preservation Program. The proposed project will provide protection of blue oak woodland habitat for special-status species and will allow for environmental educational opportunities and awareness. Additionally, the proposed project will provide adequate recreational opportunities and minimize the need for maintenance, thereby reducing long-term costs and environmental impacts. The Board finds that economic, legal, social, technological, or other benefits of the proposed project outweigh the unavoidable adverse environmental effects of the project, and the adverse environmental effects are considered acceptable when these benefits of the project are considered.

The documents and other materials which constitute the record of the Central Valley Flood Board's proceedings in this matter are in the custody of Jay Punia, Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Rm. 151, Sacramento, California 95821.

8.0 – SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

This project has no negative impacts on the State Plan of Flood Control. Both hydraulic and structural impacts from the project construction are negligible.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

Climate change issues have not been taken into account in the hydraulic analysis for this project; however, it is assumed to be inland past the point tidal influence rises in WSE, and due to the excessive amount of freeboard in the channel at this location, the project would have an ample factor of safety built into it. Climate change WSE rises are only estimated from 6-inches to 1-foot of impact and would be well within the freeboard of this project in the event that tidal influences did reach further inland than expected. There are no other foreseeable projected future events that would impact this project.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board adopt the CEQA findings, approve the permit and direct staff to file a Notice of Determination with the State Clearinghouse.

10.0 – LIST OF ATTACHMENTS

- A. Resolution No. (None required under consent items)
- B. Draft Permit No. 18668
 - Exhibit A – U.S. Army Corps of Engineers 208.10 Comment Letter
 - Exhibit B – Placer County Planning Department, Conditional Use Permit
- C. Location Map
- D. Vicinity Map
- E. Coon Creek Bridge Project cover sheet and overall site layout (2 pages)
- F. Construction Drawings C-3, C-4, C-5, C-7, S-1, S-3, S-5
- G. Concrete Arch Bridge graphic
- H. HEC-RAS Water Surface Plan & Cross Section for Bridge-1
- I. 3 Photos; (1 page)

Report Completed by:	David R. Williams, P.E.
Design Review:	David R. Williams, P.E.
Environmental Review:	James Herota, E.S. and Andrea Mauro, E.S.
Document Review:	Dan S. Fua, P.E. – Supervising Engineer
	Len Marino, P.E. – Chief Engineer

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18668 BD

This Permit is issued to:

Placer County Parks Division
11476 C Avenue
Auburn , California 95603

To install three (3) bridges over Coon Creek to facilitate emergency access, maintenance vehicles and pedestrian trail use within the Hidden Falls Regional Park, located along the Coon and Deadman Creek canyons in the Sierra Nevada Foothills between the communities of Auburn and Lincoln, CA. Hidden Falls Regional Park, located along the Coon and Deadman Creek canyons in the Sierra Nevada Foothills between the communities of Auburn and Lincoln, CA (Section 16, 21, 22, AND 23, T13N, R7E, W, Placer County Flood Control and Water Conservation District, Coon Creek, Placer County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to

change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18668 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FOURTEEN: Prior to demolition and/or construction activities any and all easements, both temporary and permanent, shall be obtained by the applicant.

FIFTEEN: There shall be no plantings within the project area under this permit, except that of native grasses, which may be required for slope protection.

SIXTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims related to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SEVENTEEN: The mitigation measures approved by the CEQA lead agency and the permittee are found in the Final Initial Study/Mitigated Negative Declaration adopted by the CEQA lead agency. The permittee shall implement all such mitigation measures.

EIGHTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend and hold the Central Valley Flood Protection

Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

NINETEEN: The Central Valley Flood Protection Board, Department of Water Resources, and the American River Flood Control District shall not be held liable for damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

TWENTY: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-ONE: Prior to start of any demolition and/or construction activities within the floodway, the applicant shall provide the Central Valley Flood Protection Board with two sets of layout plans for any and all temporary, inchannel cofferdam(s), gravel workpad(s), work trestle(s), scaffolding, piles and/or other appurtenances that are to remain in the floodway during the flood season from November 1 through April 15.

TWENTY-TWO: Debris that may accumulate on the permitted encroachment(s) and/or any temporary falsework within the floodway shall be cleared off and disposed of outside the floodway after each period of high water.

TWENTY-THREE: The permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

TWENTY-FOUR: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board.

TWENTY-FIVE: Temporary staging, formwork, stockpiled material, equipment, and temporary buildings shall not remain in the floodway during the flood season from November 1 to April 15.

TWENTY-SIX: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to April 15.

TWENTY-SEVEN: Fill material shall be placed only within the area indicated on the approved plans.

TWENTY-EIGHT: Backfill material for excavations shall be placed in 4- to 6-inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

TWENTY-NINE: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the floodway.

THIRTY: The soffit of the bridges shall have a minimum elevation as follows:
Bridge#1 = 418.0 feet

Bridge#2 = 475.5 feet
 Bridge#3 = 577.2 feet
 Vertical datum is NAVD 88

THIRTY-ONE: Revetment shall be uniformly placed and properly transitioned into the bank, levee slope, or adjacent revetment and in a manner which avoids segregation.

THIRTY-TWO: Revetment shall be quarry stone or cobbles and shall at least meet the following grading:

Quarry Stone		Cobbles	
Stone Size	Percent Passing	Stone Size	Percent Passing
15 inches;	100	15 inches;	100
8 inches;	80-95	10 inches;	55-95
6 inches;	45-80	8 inches;	35-65
4 inches;	15-45	6 inches;	10-35
2 inches;	0-15	3 inches;	1-5

THIRTY-THREE: The revetment shall not contain any reinforcing steel, floatable, or objectionable material. Asphalt or other petroleum-based products may not be used as fill or erosion protection on the levee section or within the floodway.

THIRTY-FOUR: The recommended minimum thickness of revetment, measured perpendicular to the bank or levee slope, is 18 inches below the usual water surface and 12 inches above the usual water surface.

THIRTY-FIVE: All debris generated by this project shall be disposed of outside the floodway.

THIRTY-SIX: The work area shall be restored to the condition that existed prior to start of work.

THIRTY-SEVEN: The permittee shall submit as-built drawings to the Department of Water Resources' Flood Project Inspection Section upon completion of the project.

THIRTY-EIGHT: If the project result(s) in an adverse hydraulic impact, the permittee shall provide appropriate mitigation measures, to be approved by the Central Valley Flood Protection Board, prior to implementation of mitigation measures.

THIRTY-NINE: In the event that levee or bank erosion injurious to the adopted plan of flood control occurs at or adjacent to the permitted encroachment(s), the permittee shall repair the eroded area and propose measures, to be approved by the Central Valley Flood Protection Board, to prevent further erosion.

FORTY: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources or any other agency responsible for maintenance.

FORTY-ONE: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

FORTY-TWO: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

FORTY-THREE: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

FORTY-FOUR: The permittee shall comply with all conditions set forth in the letter from the U.S. Army Corps of Engineers dated _____, which is attached to this permit as Exhibit A and incorporated by reference.

FORTY-FIVE: The permittee shall comply with all conditions set forth in the Conditional Use Permit from Placer County Facilities Services-Parks Department dated January 2010, and letter dated February 9, 2010 which is attached to this permit as Exhibit B and is incorporated by reference.

FORTY-SIX: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

FORTY-SEVEN: This permit shall run with the land and all conditions are binding on permittee's successors and assigns.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Flood Protection and Navigation Section (18668)

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, California 95821

JUL 11 2011

Dear Mr. Punia:

We have reviewed a permit application by Placer County Parks Division (application number 18668). This project includes constructing three bridges over Coon Creek. The project is located at Hidden Falls Regional Park, about 6 miles northwest of Auburn, at 38.9558°N 121.1632°W NAD83, Placer County, California.

The District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project.

A Section 10 and/or Section 404 permit application (SPK-2009-1275) is in process for this work.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821.

Sincerely,

A handwritten signature in cursive script, reading "Meegan G. Nagy", is written over the typed name and title.

Meegan G. Nagy, P.E.
Chief, Flood Protection and Navigation Section



PLACER COUNTY PLANNING DEPARTMENT

Stamp

AUBURN OFFICE

3091 County Center Drive

Auburn, CA 95603

530-745-3000/FAX 530-745-3080

Website: www.placer.ca.gov/planning

TAHOE OFFICE

565 W. Lake Blvd./P. O. Box 1909

Tahoe City CA 96145

530-581-6280/FAX 530-581-6282

E-Mail: planning@placer.ca.gov

Reserved for Date

CONDITIONAL USE PERMIT/~~MINOR USE PERMIT~~Filing fee: \$ _____ Type: CUP

Receipt # _____

File # PCPA-20090391

Hearing Date _____

-----TO BE COMPLETED BY THE APPLICANT-----

1. Project Name Hidden Falls Regional Park
2. Applicant Placer County Facility Services, Parks Department
3. Project Description Please see attached

PLEASE SUBMIT A WELL-DETAILED SITE PLAN (see instructions for requirements)

4. Assessor's Parcel Number(s) Please see attached
5. Applicable County Code section requiring C.U.P. 17.14.010

SIGNATURE OF APPLICANT: [Signature]

INDEMNIFICATION AGREEMENT: I, the Applicant, will defend, indemnify, and hold harmless the County from any defense costs, including attorneys' fees or other loss connected with any legal challenge brought as a result of an approval concerning this Entitlement. I also agree to execute a formal agreement to this effect on a form provided by the County and available for my inspection.

SIGNATURE OF APPLICANT: N/A

PERMITS GRANTED FOR AN INDEFINITE PERIOD AUTOMATICALLY EXPIRE 24 MONTHS AFTER DATE OF ISSUANCE IF NOT EXERCISED BY THAT TIME, AS PROVIDED BY SECTION 17.58.160(B)(1) OF THE PLACER COUNTY ZONING ORDINANCE.

-----OFFICE USE ONLY-----

DECISION OF HEARING BODY: On January 28, 2010, the Planning Commission finding Administrative approved/denied this application subject to the attached list of _____ findings/conditions.

Kathy Heckert, Sr. Board Commission Clerk

-----FOR USE AFTER PUBLIC HEARING-----

I have read the above/attached conditions and will comply:

SIGNATURE OF APPLICANT: [Signature]

James Durfee, Director

PLEASE RETURN ONE SIGNED COPY



PLACER COUNTY PLANNING DEPARTMENT

AUBURN OFFICE
3091 County Center Drive
Auburn, CA 95603
530-745-3000/FAX 530-745-3080
Website: www.placer.ca.gov/planning

TAHOE OFFICE
565 W. Lake Blvd./P. O. Box 1909
Tahoe City CA 96145
530-581-6280/FAX 530-581-6282
E-Mail : planning@placer.ca.gov

Reserved for Date Stamp

Print Form

(Staff reports due 11/19/09)

INITIAL PROJECT APPLICATION

(For Office Use Only)

G.P. Designation AL / TIMBERLAND Posters _____ File #'s PCPA-20090391
General Plan/Community Plan PLACER CO. GP Affordable Housing _____ Taxes _____ Accepted by LC / ED B.
Zoning O / F-50 AC Tax Rate Area _____ Date filed 11/6/09
Major Project: Yes MAS184 Geographic Team: WEST Hearing Body PC
Pre-Development Meeting Date _____ Acceptable for EQ Filing _____

Planner Signature

-- TO BE COMPLETED BY THE APPLICANT --

- Project Name Hidden Falls Regional Park
- Property Owner Placer County Facility Services, Parks Department
Mailing Address 11476 C Street, Auburn, CA 95603
Telephone 530-889-6819 Fax 530-889-6809 E-Mail afisher@placer.ca.gov
- Applicant Placer County Facility Services, Parks Department
Mailing Address 11476 C Street, Auburn, CA 95603
Telephone 530-889-6819 Fax 530-889-6809 E-Mail afisher@placer.ca.gov
- Size of Property (acreage or square footage) 979 acres
- Assessor's Parcel Number(s) Please see attached
- Project Location East of Garden Bar Rd., north of Mt. Vernon and Mt. Pleasant roads, west of Bell and Hubbard roads, and south of Big Hill Road.

(Be specific: cross streets, distance and direction from nearest intersection, etc.)

7. What actions, approvals, or permits by Placer County does the proposed project require?
- | | | |
|--|--|--|
| <input type="checkbox"/> Additional Building Site | <input type="checkbox"/> Environmental Questionnaire | <input type="checkbox"/> Minor Use Permit |
| <input type="checkbox"/> Administrative Approval | <input type="checkbox"/> Extension of Time | <input type="checkbox"/> Project undertaken by County |
| <input type="checkbox"/> Administrative Review Permit | <input type="checkbox"/> General Plan Amendment | <input type="checkbox"/> Rezoning |
| <input type="checkbox"/> Certificate of Compliance | <input type="checkbox"/> Major Subdivision (5+ parcels) | <input type="checkbox"/> Variance |
| <input checked="" type="checkbox"/> Conditional Use Permit | <input type="checkbox"/> Minor Boundary Adjustment | <input checked="" type="checkbox"/> Other (Explain) <u>EIR Certif.</u> |
| <input type="checkbox"/> Design Review | <input type="checkbox"/> Minor Subdivision (4 and under parcels) | |

Does the proposed project need approval by other governmental agencies? ☒ Yes _____ No. If so, which agencies?

U.S. Army Corps of Engineers, RWQCB, CADFG, and USFWS

Planner: Lisa Carnahan
ESD: Rebecca Taber
ESD: Janelle Heinzler
APCD
Parks: Vance Kimbrell/Andy Fisher
Building
Environmental Health

ATTACHMENT B, EXHIBIT B

8. Which agencies, utility companies provide the following services? **This information must be ACCURATE!**

Electricity	PG&E	Fire Protection	CalFire	Sewer	N/A
Telephone	AT&T	Natural Gas	PG&E	Water	Well
High School	N/A	Elementary School	N/A	Other	

9. Describe the project in detail so that a person unfamiliar with the project would understand the purpose, size, phasing, duration and construction activities associated with the project. In response to this question, please attach additional pages, if necessary.

Please see attached description.


10. I hereby authorize the above-listed applicant to make application for project approvals by Placer County, to act as my agent regarding the above-described project, and to receive all notices, correspondence, etc. from Placer County regarding this project, or

11. As owner I will be acting as applicant. In addition, as owner, I will defend, indemnify, and hold Placer County harmless from any defense costs, including attorneys' fees or other loss connected with any legal challenge, brought as a result of an approval concerning this entitlement. I also agree to execute a formal agreement to this effect on a form provided by the County and available for my inspection.

12. The signature below authorizes any member of the Placer County Development Review Committee (DRC), and other County personnel as necessary, to enter the property/structure(s) that is (are) the subject of this application.

Signature(s) of Owner(s):

Please Print



James Durfee

If application is for a Boundary Line Adjustment, signature of both the transferring and acquiring property owners are required. Boundary Line Adjustments shall not be used to create new parcels.

Signature of Transferring Property Owner

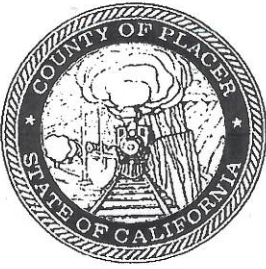
Please Print

Signature of Acquiring Property Owner

Please Print

The Planning Department is prohibited from accepting applications on tax delinquent properties pursuant to Board of Supervisors direction.

Prior to the commencement of any grading and/or construction activities on the property in question, that are based upon the entitlements conferred by Placer County permit approval(s), the applicant should consult with the California Department of Fish & Game (DFG) to determine whether or not a Streambed Alteration Agreement [§1603, CA Fish & Game Code] is required. The applicant should also consult with the U.S. Army Corps of Engineers to determine whether or not a permit is required for these activities pursuant to Section 404 of the Clean Water Act. Fees may be required to be paid to the Department of Fish and Game for their participation in the environmental review process as required by State law. **The applicant's signature on this application form signifies an acknowledgement that this statement has been read and understood.**



COUNTY OF PLACER
Community Development Resource Agency

Michael J. Johnson, AICP, Agency Director

PLANNING

February 9, 2010

Placer County Facility Services – Parks Department
Attn: Andy Fischer
11476 C Street
Auburn CA 95603

RECEIVED
FACILITY SERVICES
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SUBJECT: Hidden Falls Regional Park – Conditional Use Permit (PCPA 20090391)

This is to confirm the Planning Commission's action with regard to the above-listed project.

At a public hearing on January 28, 2010, the Placer County Planning Commission took action to approve an for a Conditional Use Permit for a 1,200-acre passive park, subject to the attached set of conditions.

Please sign and mail or fax the attached applications to the address or fax number below.

Sincerely,

Kathi Heckert
Senior Board/Commission Clerk

cc:

Chuck Grant, Engineering & Surveying
Engineering & Surveying
Facility Services
Environmental Health
Assessor
Parks Department
Air Pollution Control District
Sheriff's Department
Cal Trans



**CONDITIONS OF APPROVAL – CONDITIONAL USE PERMIT -
“HIDDEN FALLS REGIONAL PARK ”(PCPA 20090391)**

THE FOLLOWING CONDITIONS SHALL BE SATISFIED BY THE APPLICANT, OR AN AUTHORIZED AGENT. THE SATISFACTORY COMPLETION OF THESE REQUIREMENTS SHALL BE DETERMINED BY THE DEVELOPMENT REVIEW COMMITTEE (DRC), COUNTY SURVEYOR, AND/OR THE PLANNING COMMISSION.

1. This Conditional Use Permit authorizes the development and use of APN's 026-072-045, 026-072-047, 026-072-054, 026-072-055, 026-072-056, 026-072-057, 026-072-062, 026-072-063, 026-072-076, 026-072-049-510, 026-072-050-510, 026-080-065, 026-080-066, 026-080-067, 026-080-068, 026-080-069, 026-080-070, 026-080-071, 026-080-072, and 026-080-091 for a 1,200-acre passive park. Permitted Uses are those typically associated with a passive park (i.e. hiking, biking, horseback riding, etc). Specific facilities include:

- a. Approximately 14 miles of new multiple-use, natural-surface trails in addition to more than 10 miles of existing ranch roads for hikers, mountain bikers, and equestrians;
- b. Trail and bridge connections to other public trails near the Park property (in addition to the trail network constructed on-site);
- c. American's with Disabilities (ADA) accessible trails including access for ADA vehicles;
- d. Development of a nature/cultural education/commercial kitchen/conference center at the existing ranch house or other suitable location within the facility development zone;
- e. Bridge crossings over Coon Creek and other streams to support the trail network, provide emergency access, and connect to the existing trail system within the Didion Ranch portion of the Park;
- f. Culvert and rock-lined stream crossings over intermittent drainages to support the trails network;
- g. Permanent restroom facilities; portable, holding tank and/or vault-type restroom facilities;
- h. Groundwater wells for drinking water, restrooms, and fire suppression;
- i. Fire suppression facilities (i.e., helistops for emergency use and an emergency water system);
- j. Equestrian facilities (e.g., horse watering facilities, hitching posts);
- k. Picnic areas throughout the Park to accommodate use, including covered pavilions;
- l. Benches and rest areas throughout the Park;

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O:\PLUS\PLN\PROJECT FILES\CONDF 1-14-10 PCH HIDDEN FALLS

- m. Enclosed animal-proof trash receptacles throughout the Park to accommodate use;
- n. Suitable landscaping around parking areas and restrooms;
- o. Improvements to facilitate public access to viewing areas (i.e. pond-side boardwalk, falls observation deck);
- p. A disc golf course may be developed that would generally coincide with areas of shaded fuel breaks and other upland areas where the foot traffic pattern would not impact sensitive areas;
- q. Drinking fountains;
- r. Designated fishing locations along Coon Creek and/or ponds developed in coordination with the California Department of Fish and Game (DFG);
- s. New fishing ponds developed in conjunction with the fuel load reduction and/or grazing plans and in coordination with DFG;
- t. Film and theater production, subject to County Film Permit requirements;
- u. Hunting is prohibited on the project property other than as allowed by a valid deprivation permit.
- v. Interpretive programs, including signage, displays, and/or guided tours;
- w. A group camping area with one or more formalized fire pits, a group tent area, and/or bunkhouses for scheduled, supervised overnight use within the facility development zone;
- x. Restoration of various habitats within the Park;
- y. Phased construction of parking areas for automobiles and horse trailers via the Garden Bar Road entrance in conjunction with improvements to Garden Bar Road, and expansion of the Didion Ranch parking area;
- z. Use of the Park for grazing and other agricultural uses, educational classes, field trips and scheduled, supervised overnight group camping;
- aa. Reservation-based events consistent with passive recreation and nature enjoyment such as cross-country training and meets. Events with an aggregate of less than 200 people on-site at any given time, not including regular use of the Park, would obtain reservations through the standard reservation system of the Placer County Parks Division. Large events that exceed 200 individuals on-site at any given time or exceed parking capacity would be required to obtain a Temporary Outdoor Event Permit from the County Community Development Resources Agency.

This property is subject to applicable provisions of Article 12.24 et al of the Placer County Code, (hereinafter "County Parks Ordinance"). If conflict exists between this permit and the County Parks Ordinance, the County Parks Ordinance shall take precedence. Changes
JANUARY, 2010

to the County Parks Ordinance affecting the provisions of this permit shall be considered to automatically amend this permit provided, however, that nothing herein shall be construed as to relieve the applicant of any provisions of the California Environmental Quality Act.

Vehicle access to the Garden Bar side of the Park would be expanded in phases as funding becomes available. Prior to allowing expanded vehicle access for each phase, the corresponding road and parking improvements would be completed.

Construction of facilities or an expansion of the park beyond the description contained in Condition No. 1 above and described here in (with the exception of facilities which are clearly incidental to those listed above) shall be subject to evaluation through a modification of this use permit and a review of the Environmental Impact Report prepared for this use permit. Such facilities include, but are not limited to:

- Park area expansion (except as described in Condition 1 above).
- Construction of active recreation facilities such as ball fields or tennis courts
- Amplified sound

Subject to the Placer County Grading Ordinance and applicable federal and state regulations, ongoing alterations to the trail system to improve stability, avoid resources, and provide user enhancement shall be considered consistent with this permit without need for modification.

The following Conditions of Approval pertain to construction activities and not on-going maintenance activities unless specifically stated.

IMPROVEMENT PLANS

2. Any on-site sewage disposal area within 50' of any planned construction shall be shown on the Grading/Improvement Plans. (EHS)

GRADING

3. The applicant shall prepare and submit Grading and Drainage Plans (Plans) specifications and cost estimates (per the requirements of Section II of the Land Development Manual [LDM] that are in effect at the time of submittal) to the County for review and approval. The plans shall show all conditions for the project as well as pertinent topographical features both on- and off-site. All existing and proposed utilities and easements, on-site and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public

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easements), or landscaping within sight distance areas at intersections, shall be included in the Plans. The applicant shall pay plan check and inspection fees. (NOTE: Prior to plan approval, all applicable recording and reproduction costs shall be paid). The cost of the above-noted landscape and irrigation facilities shall be included in the estimates used to determine these fees. It is the applicant's responsibility to obtain all required agency signatures on the plans and to secure department approvals. If the Design/Site Review process and/or DRC review is required as a condition of approval for the project, said review process shall be completed prior to submittal of Plans. Record drawings shall be prepared and signed by a California Registered Civil Engineer at the applicant's expense and shall be submitted to the County prior to acceptance by the County of site improvements. Conceptual landscape plans submitted prior to project approval may require modification during the Plan review process to resolve issues of drainage and traffic safety. **(MM 11-1) (ESD)**

4. All proposed grading, drainage improvements, vegetation, tree impacts and tree removal shall be shown on the Plans and all work shall conform to provisions of the County Grading Ordinance (Section 15.48, Placer County Code) and the Placer County Flood Control District's Stormwater Management Manual. The applicant shall pay plan check fees and inspection fees as applicable. No grading, clearing, or tree disturbance shall occur until the Plans are approved and any required temporary construction fencing has been installed and inspected by a member of the DRC. All cut/fill slopes shall be at 2:1 (horizontal:vertical) unless a soils report supports a steeper slope and the County concurs with said recommendation. All facilities and/or easements dedicated or offered for dedication to Placer County or to other public agencies which encroach on the project site or within any area to be disturbed by the project construction shall be accurately located on the Plans. The intent of this requirement is to allow review by concerned agencies of any work that may affect their facilities. The applicant shall revegetate all disturbed areas unless alternate BMP's are approved by the DRC. Revegetation undertaken from April 1 to October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Plans. It is the applicant's responsibility to assure proper installation and maintenance of erosion control/winterization during project construction. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the County. If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the County for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the County to make a determination of substantial conformance may serve as grounds for a stop work notice and/or additional requirements to bring the project back into compliance. **(MM 11-1) (ESD)**

5. Staging Areas: Stockpiling and/or vehicle staging areas shall be identified on the plans and located as far as practical from existing dwellings and protected resources in the area.

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6. Water quality Best management Practices (BMP's) shall be designed according to the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development and Redevelopment and shall be shown on the Plans. Construction (temporary) BMPs for the project include, but are not limited to:

- a. Use temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils;
- b. Store materials and equipment to ensure that spills or leaks; cannot enter the storm drain system or surface water;
- c. Use water for dust control;
- d. Construct sediment control basins;
- e. Regular sweeping of entry and exit areas to minimize off-site sediment transport;
- f. Install traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and
- g. Use barriers, such as straw bales, perimeter silt fences, or placement of hay bales, to minimize the amount of uncontrolled runoff that could enter drains or surface water. (MM 5-1a, c) (ESD)

7. Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, or filters for entrapment of sediment, debris and oils/greases, and other identified pollutants, as approved by the County. BMPs shall be designed at a minimum in accordance with the Guidance Document for Volume and Flow-Based Sizing of Permanent Post-Construction Best Management Practices for Stormwater Quality Protection. Post-development (permanent) BMPs for the project include, but are not limited to:

- a. The project will have an effective system of erosion and sedimentation control, consisting of vegetative and structural measures and management practices, to reduce the damage of erosion and costly clean-up procedures.
- b. Following construction, wattles/fiber rolls and/or gravel filled bags will remain in place until permanent stabilization measures have proven successful.
- c. For the duration of the project, storm drainage within ditch systems associated with switchback construction will have stabilized ditch protection. This will consist of filter fabric, mulch, or a 3-inch gravel base.
- d. Plan development to fit the particular topography, soils, waterways, and natural vegetation of the site, to avoid the creation of erosion problems on the site.
- e. Reduce erosion hazards and runoff volumes and velocity by limiting the length and steepness of slopes. Slopes subject to erosion should not be steeper than 2:1 horizontal to vertical.
- f. Break up long steep slopes by benching, terracing, or diversion structures.

- g. Use existing vegetation to control erosion to (a) shield the soil surface from rain, (b) increase infiltration, (c) reduce velocity of runoff and (d) hold soil in place and act as a filter.
- h. Time the project so that grading and construction occur during the normal dry season to the extent feasible.
- i. The County shall also consult with the RWQCB to acquire the appropriate regulatory approvals that may be necessary to obtain Section 401 water quality certification.

No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by appropriate regulatory authorities. All BMPs shall be maintained as required to ensure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. (MM 5-1a, c) (ESD)

8. Projects with ground disturbance exceeding one acre that are subject to construction storm water quality permit requirements of the National Pollutant Discharge Elimination System (NPDES) program shall obtain such permit from the Regional Water Quality Control Board and shall obtain evidence of a state-issued Waste Discharge Identification number or filing of a Notice of Intent and fees prior to start of construction. (MM 5-1b) (ESD)

9. This project is located within the area covered by the County's municipal stormwater quality permit, pursuant to the NPDES Phase II program. Project-related storm water discharges are subject to all applicable requirements of said permit. BMPs shall be designed to mitigate (minimize, infiltrate, filter, or treat) storm water runoff in accordance with "Attachment 4" of Placer County's NPDES Municipal Stormwater Permit (State Water Resources Control Board NPDES General Permit No. CAS000004). (MM 5-1b) (ESD)

10. Obtain and Implement Seismic Engineering Design Recommendations. – Prior to approval of Plans, the applicant shall obtain the services of a qualified, licensed geotechnical engineer to examine for traces of the Bear Mountain fault within the project area. If traces of the Bear Mountain fault cross the project area, a qualified, licensed geotechnical engineer shall develop engineering design recommendations for the project area. The recommendations shall include calculation of seismic shaking hazards using the appropriate computer modeling software, and shall include specific structural design recommendations to minimize potential damage to buildings and structures from seismic events. The recommendations shall also include an examination of the traces of the Bear Mountain fault system within the project area, including surface reconnaissance, and shall make recommendations for building foundation and infrastructure design accordingly. All appropriate design recommendations shall be implemented during the project design and construction phases. (MM 5-2a) (ESD)

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11. No structures intended for human occupancy shall be constructed within a 100-foot-wide no building zone over the Bear Mountain fault traces. However, following completion of the seismic study required in (a) above, the no building zone may be modified if recommended by the geotechnical engineer. **(MM 5-2b) (ESD)**

12. Prior to approval of Plans, the County shall obtain the services of a qualified, licensed geotechnical engineer to prepare a comprehensive final geotechnical report for the entire project area with specific design recommendations sufficient to ensure the safety of soil conditions, project structures, and site occupants. The report shall include project design and construction recommendations to address:

- a. Site preparation and grading, including surface and subsurface prep work, engineered fill materials, fill placement and compaction, trench backfill, and surface drainage;
- b. Foundation requirements specific to the location of each component of the proposed project;
- c. Concrete slabs-on-grade, both interior and exterior;
- d. Retaining and below grade walls; and
- e. Pavements.

The seismic engineering design recommendations shall be incorporated into the project design. The County shall insure adequate field inspection during construction. **(MM 5-2c) (ESD)**

13. A drainage report in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of submittal shall be prepared and submitted with the Plans. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map, increases in downstream flows, proposed on- and off-site improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used both during construction and for long-term post construction water quality protection. Best Management Practice (BMP) measures shall be provided to reduce erosion, water quality degradation, and prevent the discharge of pollutants to stormwater to the maximum extent practicable. **(MM 11-1) (ESD)**

14. The location, size, and ownership of any canals on the property shall be described in the drainage report and shown on the plans. Provide the County with a letter from the agency controlling the canal describing any restrictions, requirements, easements, etc. relative to construction of the project. Said letter shall be provided to the County prior to the approval of the plans.

15. Provide the County with a letter from the appropriate fire protection district describing conditions under which service will be provided to this project. Said letter shall be provided prior to the approval of plans.

16. In order to protect site resources, no grading activities of any kind may take place within the 100-year flood plain of the stream/drainage ways, unless otherwise approved as a part of this project.

17. With Phase 2 and 3 improvements, submit, for review and approval, a striping and signing plan with the project Plans. The Plans shall include all on- and off-site traffic control devices and shall be reviewed by the County Traffic Engineer. A construction signing plan shall also be provided with the plans for review and approval by the County Traffic Engineer. These plans shall be consistent with the Traffic Safety Study for Garden Bar Road (Psomas: August 7, 2008) and shall include, but not be limited to, the following:

- a. The intersections of Garden Bar Road and Mt Pleasant Road shall be striped. A "STOP" pavement marking, stop limit line and Stop Sign (R1-1) shall be installed.
- b. The tee-intersection identified at Station 108+00 in the Traffic Safety Study for Garden Bar Road shall be striped. A "STOP" pavement marking, stop limit line and Stop Sign (R1-1) shall be installed.
- c. Directional warning signs, guidance signs and other signage shall be included, consistent with the Traffic Safety Study for Garden Bar Road.

18. All storm drain inlets and catch basins within the project area shall be permanently marked/embossed with prohibitive language such as "No Dumping! Flows to Creek" or other language as approved by the County and/or graphical icons to discourage illegal dumping. Message details, placement, and locations shall be included on the plans. County-approved signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, shall be posted at public access points along channels and creeks within the project area. The applicant is responsible for maintaining the legibility of stamped messages and signs.

19. All stormwater runoff shall be diverted around trash storage areas to minimize contact with pollutants. Trash container areas shall be screened or walled to prevent off-site transport of trash by the forces of water or wind. Trash containers shall not be allowed to leak and must remain covered when not in use.

20. Prior to Grading/Grading Permit or Improvement Plan approval and before any grading or clearing occurs on the project site, within 50' of any on-site sewage disposal area, the on-site sewage disposal area(s) on the project site shall be fenced off with fluorescent construction fencing or other barrier approved by Placer County Environmental Health Services and clearly marked with a sign that states "KEEP OFF! Reserved for Sewage Disposal Only". (EHS)

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ROADS/TRAILS

21. The following items shall be completed prior to Phase 1 uses as applicable to comply with the terms of the purchase and sale agreement with the Spears Family Trust, and shall be implemented prior to allowance of Phase 2 uses:

- a. Improve and show on the Plans Garden Bar Road entrance at the new access road to the following standards, consistent with the Traffic Safety Study for Garden Bar Road (Psomas:August 7, 2008). Construct a public road entrance/driveway onto Garden Bar Road to a Plate R-17 LDM standard. The design speed of Garden Bar Road shall be 25 mph, unless an alternate design speed is approved by the County. The improvements shall begin at the outside edge of any future lane(s) as directed by the County. An Encroachment Permit shall be obtained by the applicant or authorized agent from DPW. The Plate R-17 structural section within the main roadway right-of-way shall be designed for a Traffic Index of 7, but said section shall not be less than 3" AC/8" Class 2 AB unless otherwise approved by the County.
- b. Construct and show on the Plans approximately 200 feet of connecting road to existing access road from the intersection of Garden Bar near the existing access road to a Rural Minor Residential Plate R-3 LDM Standard, or as otherwise approved by the County. All access roads subject to public use shall be designed to meet 25 mph design speed criteria, as specified in the latest version of the Caltrans Highway Design Manual unless otherwise approved by the County.
- c. Construct and show on the Plans a new public access gate at the new access road from Garden Bar near the existing access road. Minimum Plate R-9 LDM turnaround shall be provided so that vehicles may enter Garden Bar Road in a forward facing direction, to the satisfaction of the servicing Fire Department, and as approved by the County.

Additional widening may be required to accommodate auxiliary lanes, intersection geometrics, bike lanes, or conformance to existing improvements. The roadway structural section shall be designed for a Traffic Index of 7, but said section shall not be less than 3" AC/8" Class 2 AB, unless otherwise approved by the County. (Ref. Section 4, LDM).

22. The following items shall be completed prior to allowance of Phase 2 uses:

- a. Improve and show on the Plans Garden Bar Road from Mt. Pleasant Road to the access road to a modified Rural Minor Residential Plate R-1 LDM Standard with 18-foot pavement with 2 2-foot AB shoulders, or as otherwise approved by the County. All access roads shall be designed to meet 25 mph design speed criteria, as specified in the latest version of the Caltrans Highway Design Manual unless otherwise approved by the County.

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b. Vertical curves, signing and striping along Garden Bar Road shall be improved and shown on the Plans in accordance with the Traffic Safety Study for Garden Bar Road.

c. Improve and show on the Plans the access road from Garden Bar to the western parking area to a Rural Minor Residential Plate R-3 LDM Standard, or as otherwise approved by the County. All on-site roads subject to public use shall be designed to meet 25 mph design speed criteria, as specified in the latest version of the Caltrans Highway Design Manual unless otherwise approved by the County.

Additional widening may be required to accommodate auxiliary lanes, intersection geometrics, bike lanes, or conformance to existing improvements. The roadway structural section shall be designed for a Traffic Index of 7, but said section shall not be less than 3" AC/8" Class 2 AB, unless otherwise approved by the County. (Ref. Section 4, LDM).

23. The following items shall be completed prior to allowance of Phase 3 uses:

a. Improve and show on the Plans Garden Bar Road from Mt. Pleasant Road to the access road to a Rural Minor Residential Plate R-1 LDM Standard, or as otherwise approved by the County. All access roads subject to public use shall be designed to meet 25 mph design speed criteria, as specified in the latest version of the Caltrans Highway Design Manual unless otherwise approved by the County.

b. Horizontal curves, roadway width, signing and striping along Garden Bar Road shall be improved and shown on the Plans in accordance with the Traffic Safety Study for Garden Bar Road.

Additional widening may be required to accommodate auxiliary lanes, intersection geometrics, bike lanes, or conformance to existing improvements. The roadway structural section shall be designed for a Traffic Index of 7, but said section shall not be less than 3" AC/8" Class 2 AB, unless otherwise approved by the County. (Ref. Section 4, LDM).

24. Reservation-based events (involving less than 200 people on-site at a given time) would be regulated by the County Parks Division Reservation System. The Reservation System would include, but not be limited to, applicable restrictions on:

a. event start and end times so as not to exceed peak usage capacity of Garden Bar Road or coincide with scheduled use of the road by school buses;

b. regulation of number and types of vehicles so as not to exceed parking capacity (i.e., 50 paved stalls and 20 truck and trailer gravel stalls) in combination with daily use;

c. the range of vehicle sizes allowed on Garden Bar Road during Phases 1 and 2 to be determined by the County Department of Public Works. Vehicles exceeding the maximum unrestricted size on Garden Bar Road shall be subject to County-imposed traffic controls.

The County may also regulate the days and/or times of reservation-based events to avoid peak days or times such as holiday weekends, as necessary. (MM 8-1) (ESD)

25. All on-site parking and circulation areas shall be improved with a minimum asphaltic concrete or Portland cement surface capable of supporting anticipated vehicle loadings, or as otherwise approved by the County. It is recommended that the pavement structural section be designed in accordance with recommendations of a soils/pavement analysis and should not be less than 2" AC over 4" Class 2 AB, or the equivalent.

An exception shall be made for equestrian and overflow areas, as identified in the project description, which shall be capable of supporting a 40,000-pound vehicle. It is recommended that the minimum surfacing be 6" aggregate base on 90% compacted soil.

26. Public roadway improvements, constructed with each project phase, shall include adequate vehicular turn-around improvements (e.g. cul-de-sac or hammerhead) to minimum Plate R-2 LDM standards and easements as required by the County. As each road is extended into other project phases, these turn-around improvements shall be removed or modified as required.

27. Proposed road names shall be submitted to the Engineering and Surveying Department (ESD) – Addressing (530-889-7530) for review and shall be approved by the County prior to plan approval.

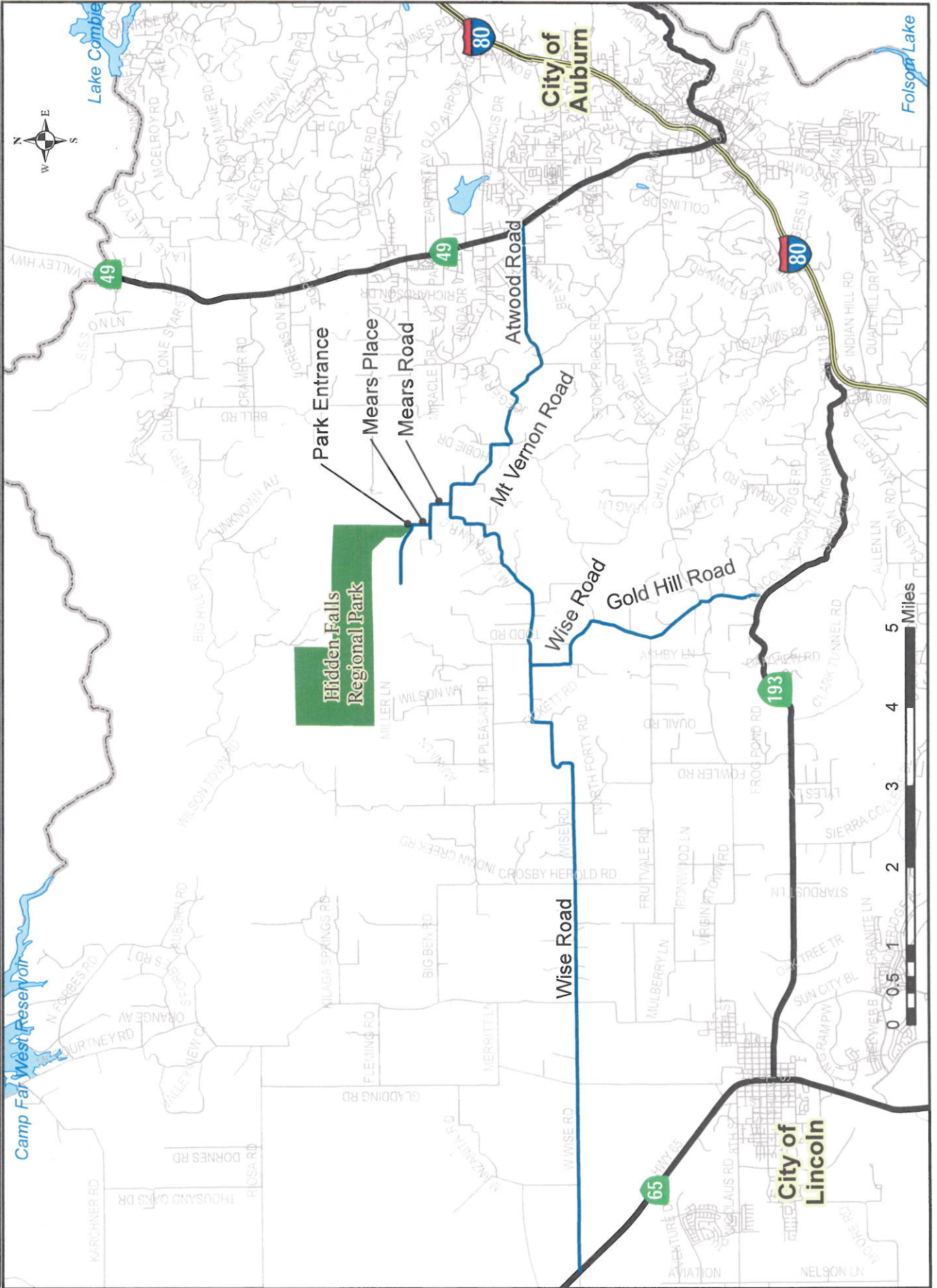
PUBLIC SERVICES

28. Calculate Water Demands for Fire Suppression - If groundwater is to be used for emergency fire suppression water, the County shall amend the April 7, 2009, Water Demand Calculation Report (Placer County 2009) to include fire suppression water requirements. If it is found that fire suppression requirements combined with water demands for other proposed uses is consistent with yields found in nearby private wells (1.3 to 7 gpm) then no further mitigation is required. If fire suppression requirement surpasses yields found in nearby private wells, one of the following shall be done:

- a. modify proposed uses at each well location to be consistent with available water that would not surpass similar yields of nearby wells;
- b. utilize Nevada Irrigation District raw irrigation water sources including but not limited to existing canals and ponds, new ponds, and/or irrigation fed underground storage tanks;
- c. fill storage tanks during off-peak periods when use is limited (i.e. winter and nighttime periods);
- d. import water needed to meet fire suppression requirements for emergency storage tanks via water trucks so that this water is not being pulled from the wells. (MM 11-3)

JANUARY, 2010

PLACER COUNTY **HIDDEN FALLS REGIONAL PARK** LOCATION MAP





HIDDEN FALLS REGIONAL PARK - 3 BRIDGES
 RIVER MILE FROM FEATHER RIVER
 BRIDGE #1 = 34.2 MI
 #2 = 35.5 MI
 #3 = 36.3 MI







COON CREEK BRIDGE PROJECT



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Trees

	oak
	spruce
	pine
	cedar
	as labeled
	to be removed

W6	RIGHT OF WAY
W5	REVERSE CURVE
W4	RIGHT TURNED WATER SERVICE
W3	9+2 PERCENTAGE
W2	SCHEDULE
W1	STON PAVIN
	9+0
	STAKING NUMBER
	35+0
	STON DEAN MANHOLE
	STANDARD PLAN NUMBER
	35
	SANITARY SEWER
	35+0
	STANDARD PLAN NUMBER
	37+0
	STON DEAN MANHOLE
	37+0
	SUPVISION
	9+0
	TELEPHONE
	TOP OF WALK
	9+0
	TOP OF CURB
	9+0
	TOP OF WALL
	9+0
	TOP OF WALK
	9+0
	VALVE
	9+0
	VARIABLES
	VERTICAL CURVE
	WATER METER
	WATER SERVICE
	WATER SURFACE ELEVATION
	WATER VALVE

[illegible]

1. RIGHTS TO ENTER AND CONSTRUCT SHALL BE OBTAINED PRIOR TO CONSTRUCTING ANY OFF-SITE WORK SHOWN IN THESE PLANS. COPIES OF SUCH DOCUMENTS SHALL BE KEPT ON-SITE AT ALL TIMES DURING THE PERFORMANCE OF OFF-SITE WORK.

THE MERIDIAN OF THIS SURVEY IS TRUE NORTH AS DETERMINED BY GPS OBSERVATION.

BRIDGE 1 - 026-070-076-000
BRIDGE 2 - 026-080-069-000
BRIDGE 3 - 026-080-071-000

A 3.5' CATHY IRON PIPE, LOCATED 6.7 MILES NORTH FROM LINCOLN,
A 3.4 MILES NORTH ALONG THE SOUTHERN PACIFIC CO. RAILROAD
COUNTY ROAD, THENCE 1/4 MILE NORTH ALONG A COUNTY ROAD .92
MILE NORTH OF A STEEL BRIDGE OVER DORY CREEK, IS FEET
SOUTHWEST OF A POWER LINE POLE 50 TO 70 FEET SOUTHWEST OF THE
CROSSING OF A FENCE LINE HIGHER THAN THE FENCE AND RAYLED
ON THE TOP OF A 3.5 INCH IRON PIPE PROJECTING 3 FEET ABOVE THE
GROUND (AND DBL) TO CONNECT ELEVATIONS FROM NAD 86 TO
NAD 83 SUPPLANT 2.40 FEET.

ELEVATION= 7771

**48 HOUR NOTICE REQUIRED
PRIOR TO COMMENCING WORK**

BEFORE COMMENCEMENT OF WORK, ALL PLANS, SCHEDULES, AND PROGRAMS MUST BE SUBMITTED AND APPROVED IN CONFORMANCE WITH THE REQUIREMENTS OF SECTION 7-1.07, 7-1.08 AND 7-1.09 OF THE PLACER COUNTY GENERAL ORDINANCES DATED AUGUST 1995, AND THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS DATED MAY 1996. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY THE PLACER COUNTY DEPARTMENT OF ENGINEERING & SURVEYING, CONSTRUCTION DIVISION 48 HOURS IN ADVANCE OF THE TIME OF COMMENCEMENT. ALL AUBURN (530) 745-7550.

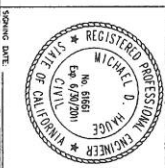
ALL INFORMATION SHOWN ON THESE PLANS HAS BEEN PREPARED BY OR UNDER DIRECTION OF THE UNDERSIGNED ENGINEER. ADJUSTMENTS MADE IN THE FIELD DURING CONSTRUCTION ARE INCLUDED HEREIN AND ARE BASED UPON FIELD OBSERVATIONS MADE UNDER THE DIRECTION OF OR BY THE UNDERSIGNED ENGINEER AND/OR INFORMATION RECEIVED FROM THE PROJECT OWNER, PROJECT CONTRACTORS, AND PUBLIC AGENCIES WHEN THE ENGINEER IS ADVISED IN WRITING OF SUCH CHANGE. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR CHANGES TO THESE PLANS NOT AUTHORIZED BY THE ENGINEER.

BRIDGE 1	
CUBIC YARDS - EXCAVATION:	<u>1500</u>
CUBIC YARDS - EMBANKMENT:	<u>3120</u>
BRIDGE 2	
CUBIC YARDS - EXCAVATION:	<u>770</u>
CUBIC YARDS - EMBANKMENT:	<u>750</u>
BRIDGE 3	
CUBIC YARDS - EXCAVATION:	<u>120</u>
CUBIC YARDS - EMBANKMENT:	<u>510</u>
BRIDGE 4	
CUBIC YARDS - EXPORT:	<u>0</u>
CUBIC YARDS - IMPORT:	<u>1600 (ON SITE)</u>
BRIDGE 5	
CUBIC YARDS - EXPORT:	<u>0</u>
CUBIC YARDS - IMPORT:	<u>550 (ON SITE)</u>

ALL INFORMATION SHOWN ON THESE PLANS HAS BEEN PREPARED BY, OR UNDER DIRECTION OF, THE UNDERSIGNED ENGINEER. ADJUSTMENTS MADE IN THE FIELD DURING CONSTRUCTION ARE INCLUDED HEREIN, AND ARE BASED UPON FIELD OBSERVATIONS MADE UNDER THE DIRECTION OF OR BY THE UNDERSIGNED AND/OR INFORMATION RECEIVED FROM THE PROJECT OWNER, PROJECT CONTRACTORS, AND PUBLIC AGENCIES WHEN THE ENGINEER IS ADVISED IN CONNECTION WITH THE REQUIREMENTS OF SECTION 7-1.03 AND 8-04 OF THE FLEETC COUNTY GENERAL ORDINANCE 2006. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY THE PLANNING COUNTY DEPARTMENT OF ENGINEERING & SURVEYING, CONSTRUCTION DIVISION 48 HOURS IN ADVANCE OF THE TIME OF COMMENCEMENT.
CALL ALBUQUERQUE (505) 745-7559.

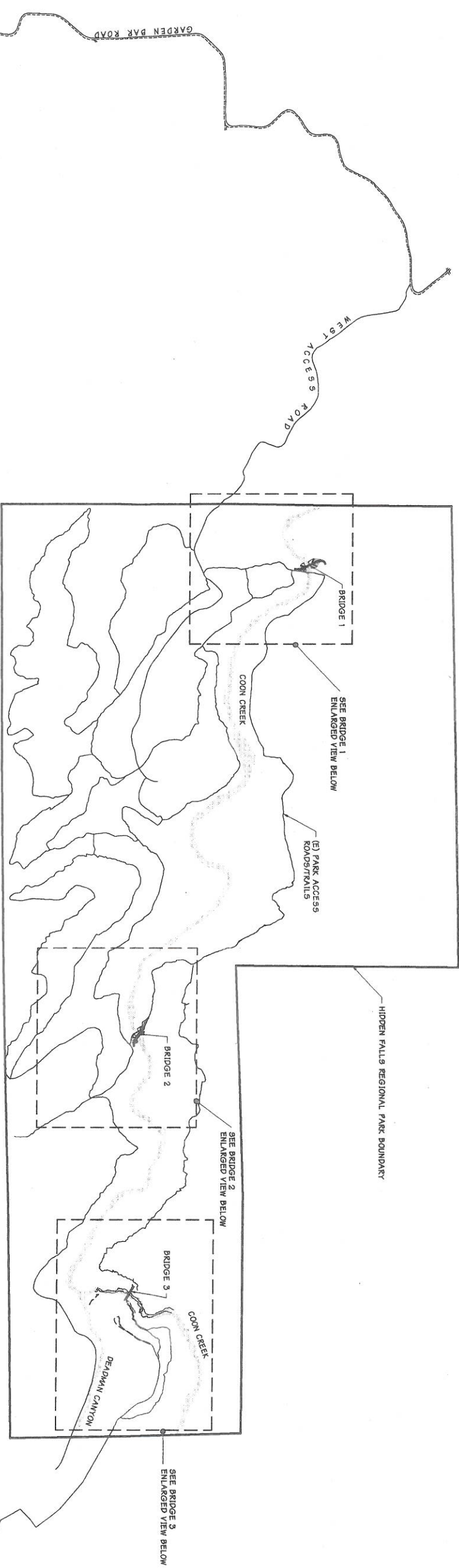
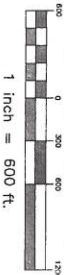
<p>Project Location: Placer County Auburn, California 95603</p>
<p>Ownership Information: Placer County Facility Services 11476 "C" Avenue Auburn, California 95603</p>

HIDDEN FALLS REGIONAL PARK COON CREEK BRIDGE PROJECT
COVER SHEET

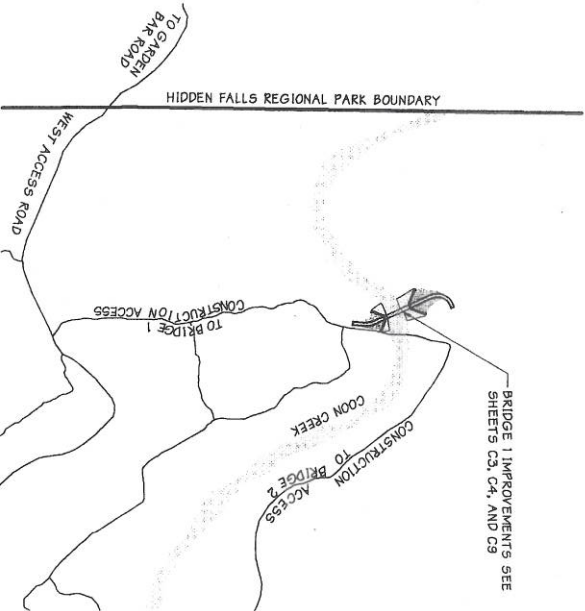


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Overall Site Layout

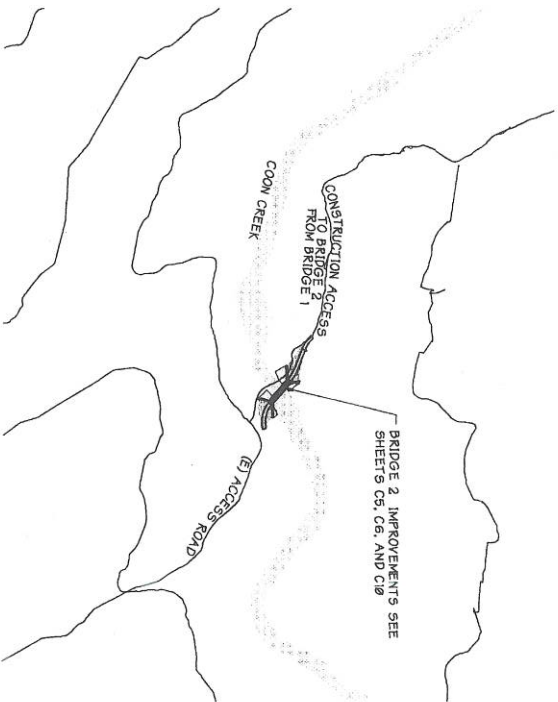


- NOTES:
1. CONTRACTOR TO VERIFY CONSTRUCTION EQUIPMENT AND BRIDGE MATERIAL ACCESSIBILITY TO CONSTRUCTION SITES AND TO PROVIDE NECESSARY ACCESS ROUTES TO GARDEN BAR ROAD OR PARK ACCESS ROUTES TO BE SHOWN IN THE BID PROPOSAL, COORDINATED WITH COUNTY STAFF, AND IMPLEMENTED BY THE CONTRACTOR.
 2. BORROW AREAS FOR BRIDGE EARTHWORK OPERATIONS TO BE COORDINATED WITH COUNTY STAFF AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO USE AS ENGINEERED FILL.
 3. STAGING AREAS TO BE COORDINATED WITH AND APPROVED BY COUNTY STAFF.



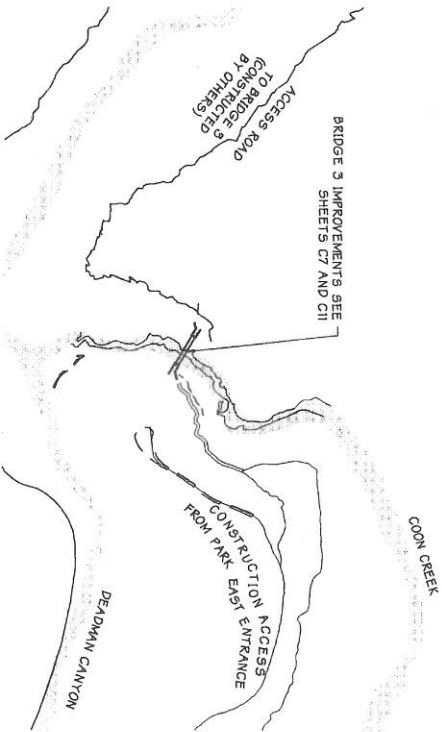
Bridge 1

1"=300'



Bridge 2

1"=300'



Bridge 3

1"=600'

90% REVIEW SUBMITTAL 12/23/2010

Project Location:
Placer County
Auburn, California 95603

Ownership Information:
Placer County Procurement
11476 "C" Avenue
Auburn, California 95603

HIDDEN FALLS REGIONAL PARK

OVERALL SITE LAYOUT

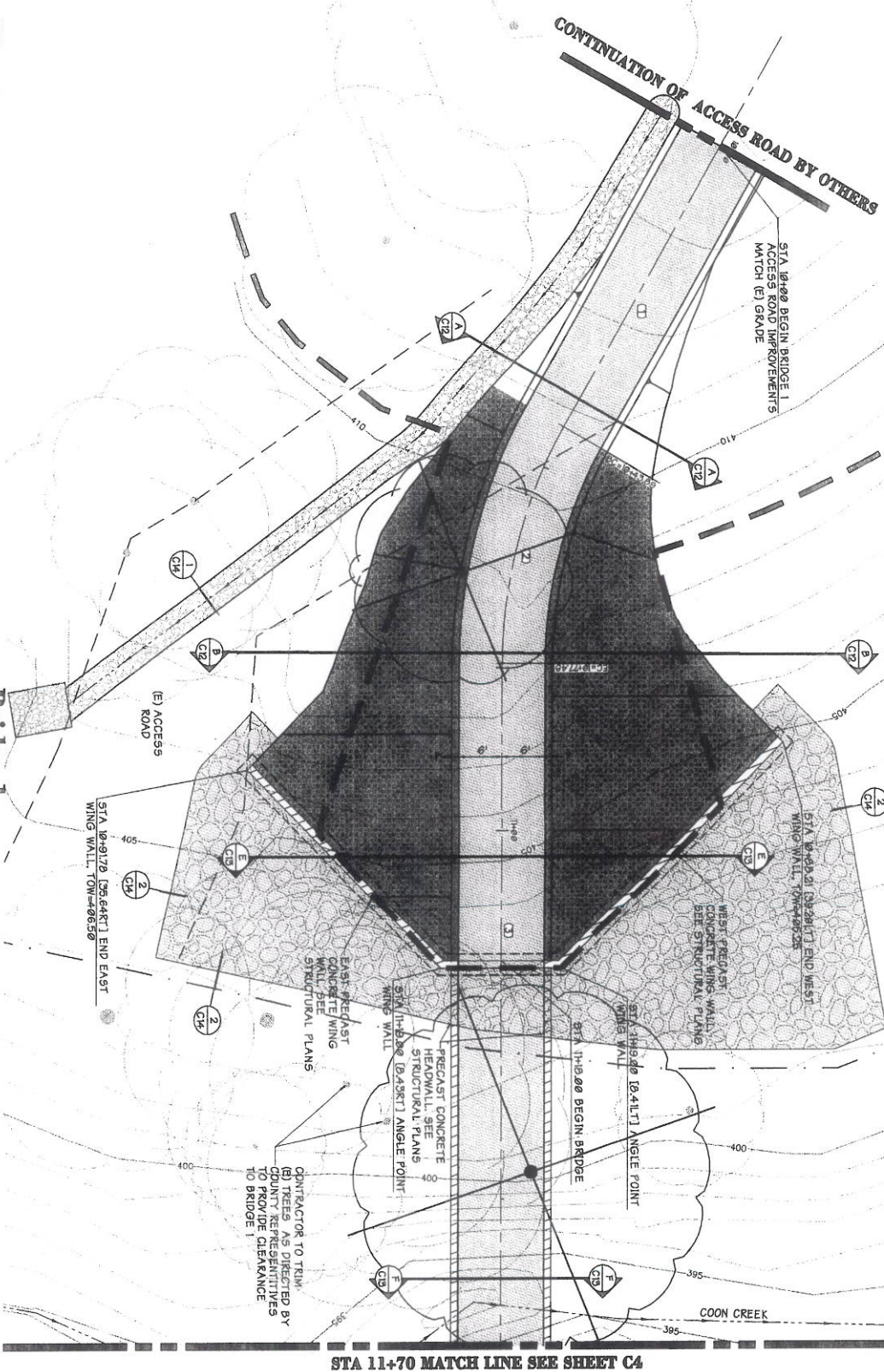
Revisions			
SYM	DESCRIPTION	DATE	BY




CARLTON
Engineering Inc.
10000 Rockledge Road, Suite 200, San Diego, CA 92121
Phone: 619.477.2000 Fax: 619.477.2001

C2

MDH: MDH 12/23/2010
N/A 12/23/2010
C309-02-10
C309-02-10



STA 11+70 MATCH LINE SEE SHEET C4



CARLTON
Engineering Inc.

3063 Piedmont Road, Suite 300, CA 95068
Phone: 530.877.2515 Fax: 530.877.6645

Ownership Information:
Placer County Procurement
11476 "C" Avenue
Auburn, California 95603





1. SEE SHEET C9 FOR EROSION CONTROL PLAN.
2. SEE STRUCTURAL SHEETS FOR BRIDGE AND WING WALL CONSTRUCTION DETAILS.

No	STATIONING	CHORD DIRECTION	& DIST	RADIUS	DELTA
(1)	12+77.45	N 24° 50' 00" W	225.00	225.00	
(2)	13+00.45	N 23° 14' 48" E	83.05	95.66	
(3)	13+84.04	N 40° 00' 00" E	5.96	5.96	

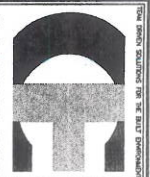
100 YEAR PEAK STORM

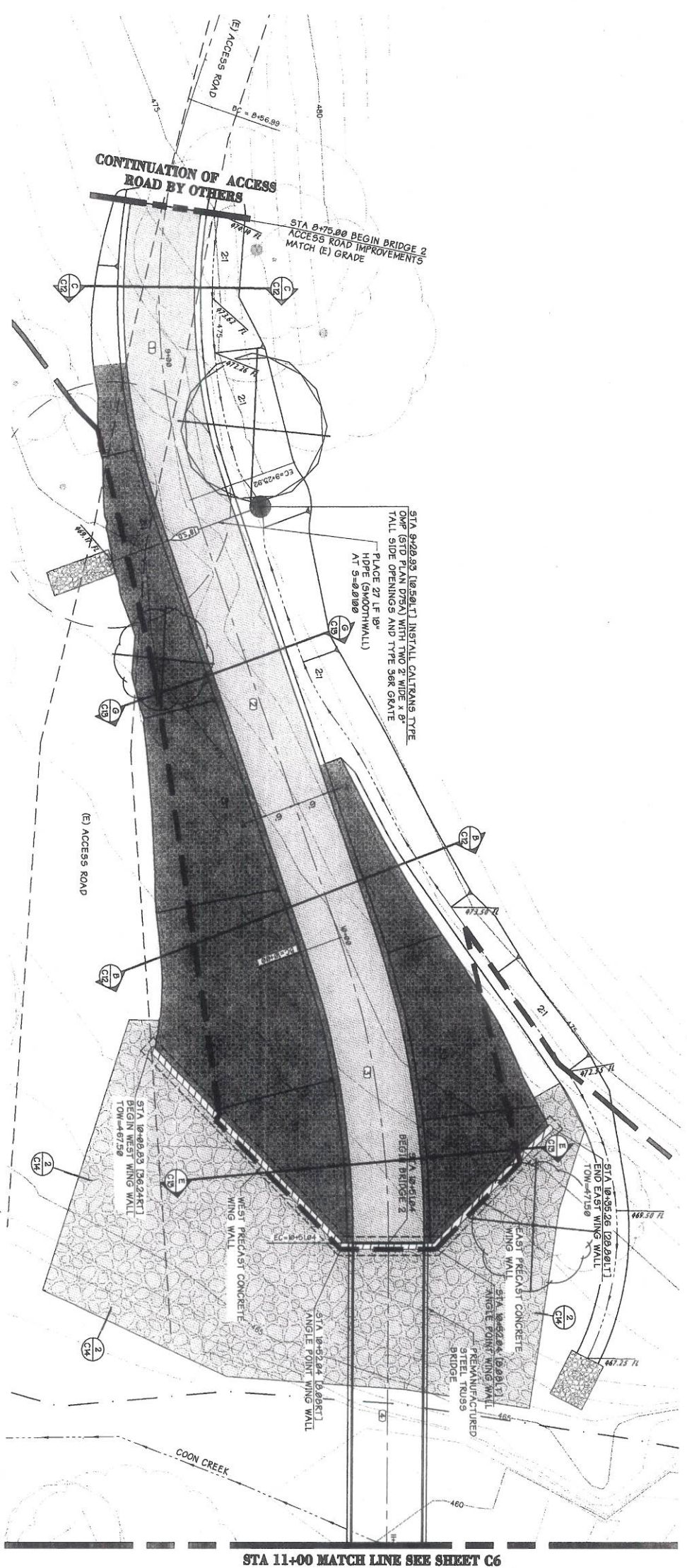
ORDINARY HIGH WATER MARK LOCATION PROVIDED
AS GIS DATA BY PLACER COUNTY

[illegible]

BRIDGE I PLAN AND PROFILE

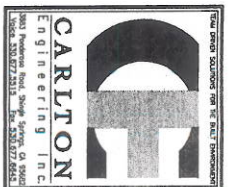
Ownership Information:
Placer County Procurement
11476 "C" Avenue
Auburn, California 95603





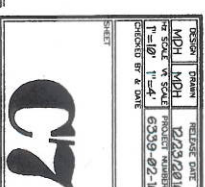
LIMITS OF WOVEN GEOTEXTILE
FABRIC 315 ST OR APPROVED
EQUIVALENT

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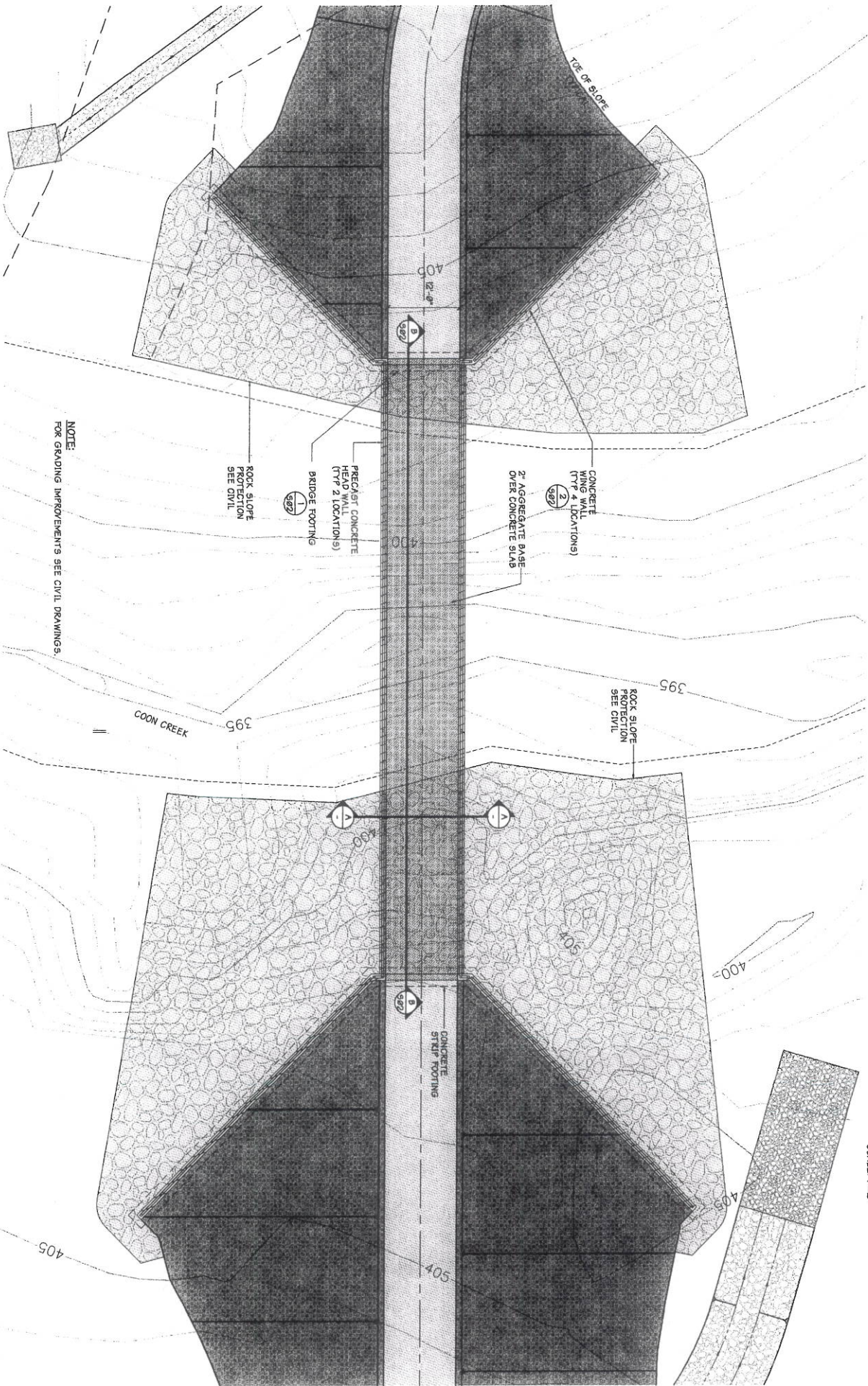
BRIDGE 3 PLAN AND PROFILE

Ownership Information:
Placer County Procurement
11476 "C" Avenue
Auburn, California 95603

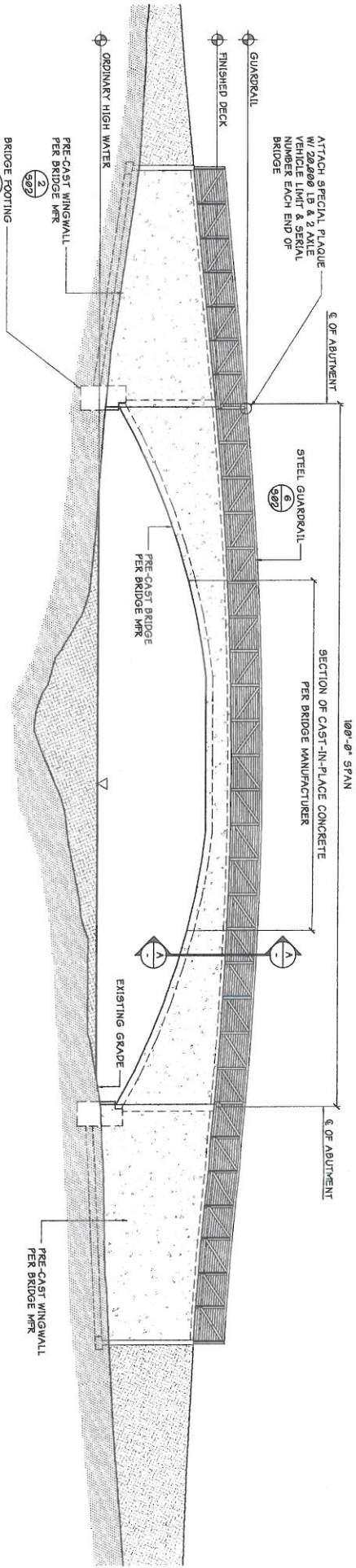


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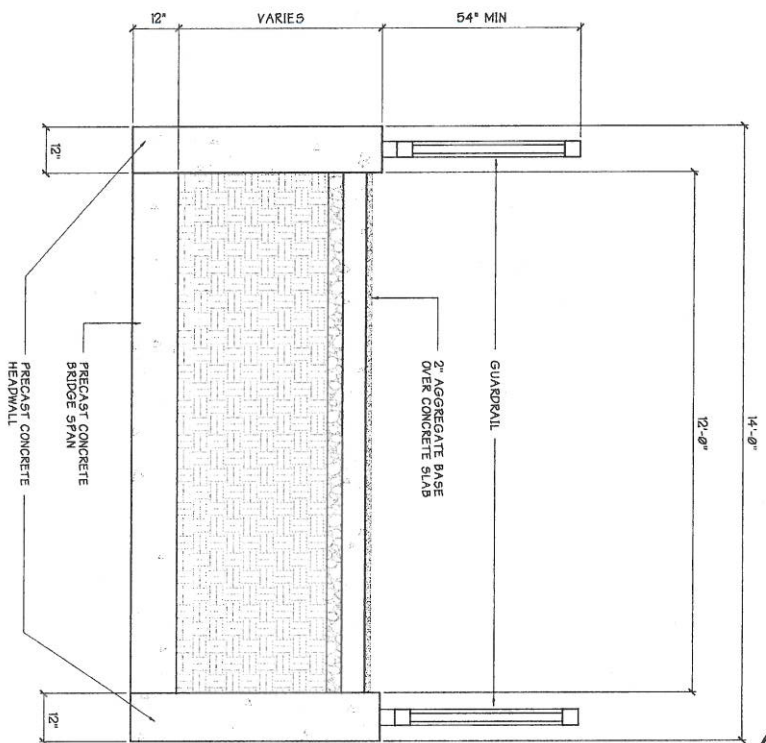
Bridge 1 - Foundation Plan



Bridge 1 - South Elevation



Bridge 1 - Section A-A



Design Criteria

- Design Criteria**
- Block Live Load: H20-44
Uniformly Distributed: 65 psf
Concentrated: H20-44
- Wind Design Data:**
Basic Wind Speed: V = 65 mph
Exposure Factor: K_z = 1.0
Directionality Factor: K_d = 1.0
Gust Factor: G_f = 1.0
Site Class: S₁ = 0.194
Spectral Response Coefficient: S_s = 0.41
- Seismic Importance:** I = 1.0
Site Class: S₁ = 0.194
Spectral Response Coefficient: S_s = 0.41
- Foundation Design Criteria:**
Foundation Design is based on criteria and recommendations in the report of 6/29/98 investigation by Carlton Engineering, Inc. dated March 2009.
- 1. BEARING PRESSURE:**
Based on footings bearing on rock.
- 2. LATERAL RESISTANCE:**
Allowable passive resistance at footing shall be 600 pcf at soil & 400 pcf at rock equivalent fluid pressure. Coefficient of friction shall be 0.30. Allowable resistance at rock shall be 800 pcf at rock. Friction and passive resistance may be combined provided the passive resistance is reduced 50%.
- 3. ALL FOOTINGS SHALL BEAR THE MINIMUM DEPTH BELOW THE LOWEST ADJACENT GRADE SPECIFIED IN THE GEOLOGICAL REPORT, BUT NOT LESS THAN 3'.**
- 4. ALL STRIP FOOTINGS SHALL BE MINIMUM 12 INCHES WIDE.**

NOTE:

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90% REVIEW SUBMITTAL 12/23/2010

Project Location:
Placer County
Auburn, California 95603

Ownership Information:
Placer County Procurement
1476 "C" Avenue
Auburn, California 95603

HIDDEN FALLS REGIONAL PARK

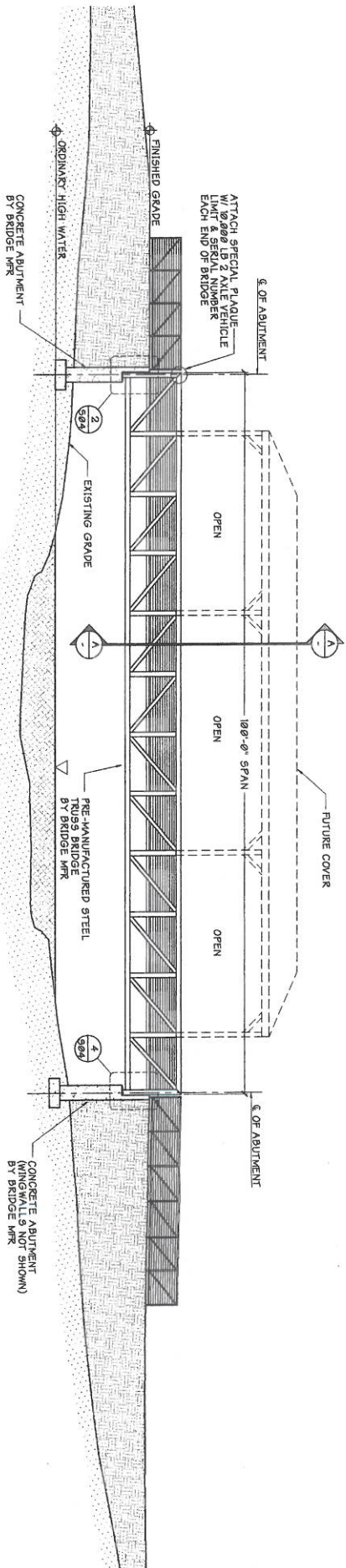
**BRIDGE 1
FOUNDATION AND ELEVATION**

Revisions			
SYM	DESCRIPTION	DATE	BY



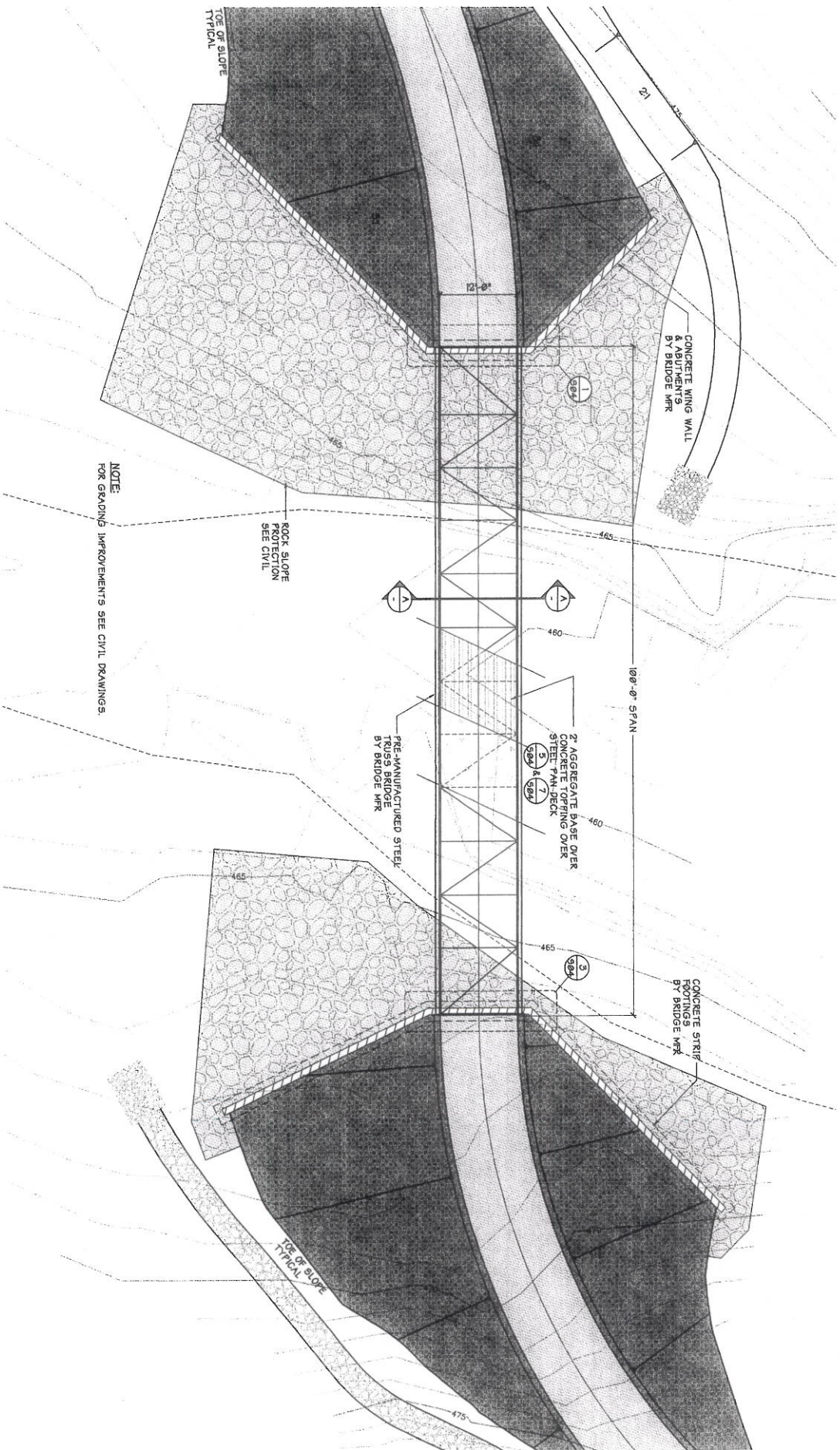
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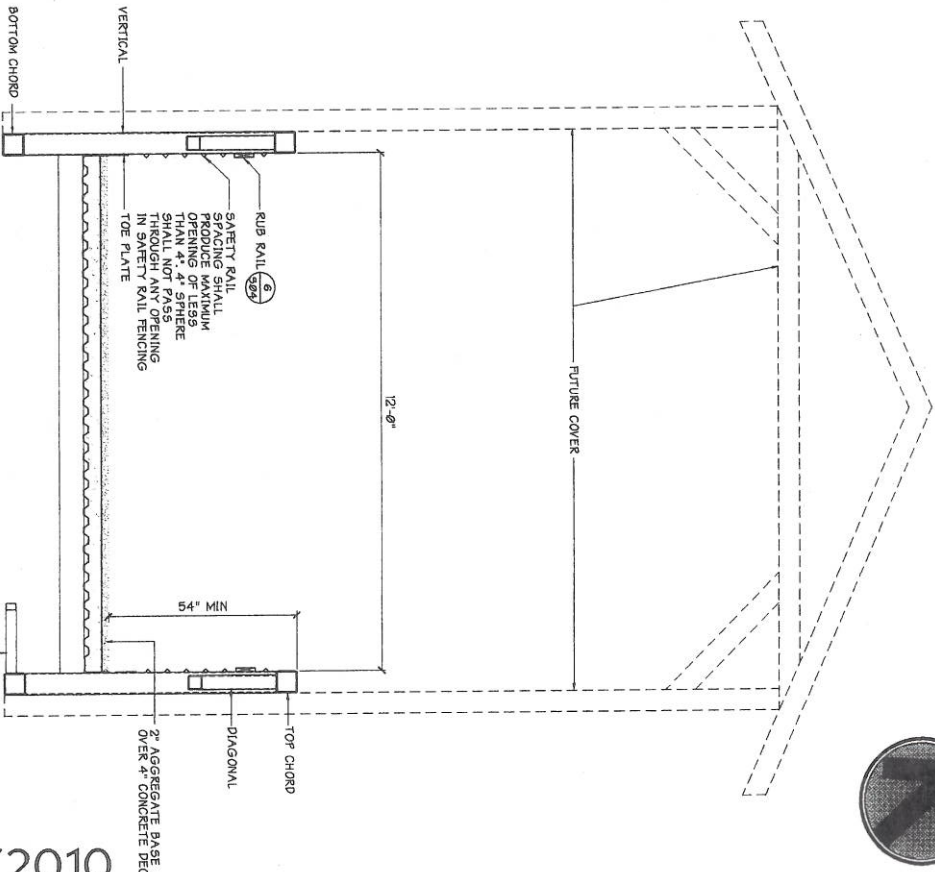
Bridge 2 - South Elevation

SCALE: 1"=10'



Bridge 2 - Foundation Plan

SCALE: 1"=10'



Bridge 2 - Section A-A

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

Design Criteria

- ROAD LIVE LOAD (AASHTO HS-20)**
UNIFORMLY DISTRIBUTED: 80 psf
CONCENTRATED: 160 psf
- WIND DESIGN DATA:**
BASIC WIND SPEED: 105 mph
WIND DIRECTION FACTOR: 1.0
SPECIFIC LOADING: FUTURE COVER
- DEAD LOAD:** 30 psf
ROAD LIVE LOAD: 80 psf
SNOW LOAD: 20 psf
- EARTHQUAKE DESIGN DATA:**
SEISMIC IMPORTANCE: I = 1.0
SITE CLASS: S₁ = 0.41
SPECTRAL RESPONSE COEFFICIENTS: S₁ = 0.154
- FOUNDATION DESIGN CRITERIA:**
FOUNDATION DESIGN IS BASED ON THE FOLLOWING CRITERIA AND RECOMMENDATIONS IN THE "FOUNDATION DESIGN MANUAL" FOR THE HIDDEN FALLS REGIONAL PARK, BY: CARLTON ENGINEERING, INC. DATED: MARCH 2010
1. BEARING CAPACITY: BASED ON FOOTINGS BEARING ON ROCK.
 2. LATERAL RESISTANCE: ALLOWABLE PASSIVE RESISTANCE AT FOOTING SHALL BE 100 PCF AT SOIL & 400 PCF AT ROCK EQUIVALENT. MINIMUM DEPTH SHALL BE 42" AT SOIL & 64" AT ROCK. FRICTION AND PASSIVE RESISTANCE MAY BE COMBINED PROVIDED THE PASSIVE PRESSURE IS REDUCED 50%.
 3. ALL FOOTINGS SHALL BEAR THE MINIMUM DEPTH BELOW THE LOWEST ADJACENT GRADE SPECIFIED IN THE PERMITS. (NOT FOR CONSTRUCTION OF THE BRIDGE, BUT NOT LESS THAN 12").
 4. ALL STRIP FOOTINGS SHALL BE MINIMUM 12 INCHES WIDE.

NOTE:

THE BRIDGE DETAILS SHOWN HERE ARE FOR REFERENCE ONLY TO SHOW GENERAL INFORMATION AND REQUIREMENTS. THE CONTRACTOR SHALL SUBMIT FULLY DETAILED BRIDGE PLANS AND STRUCTURAL CALCULATIONS INCLUDING ABUTMENT AND WINGWALLS STAMPED AND SIGNED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA. SEE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS INCLUDING LOADING.

90% REVIEW SUBMITTAL 12/23/2010

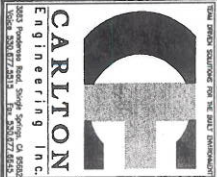
Project Location:
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Auburn, California 95603

Ownership Information:
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11476 "C" Avenue
Auburn, California 95603

HIDDEN FALLS REGIONAL PARK

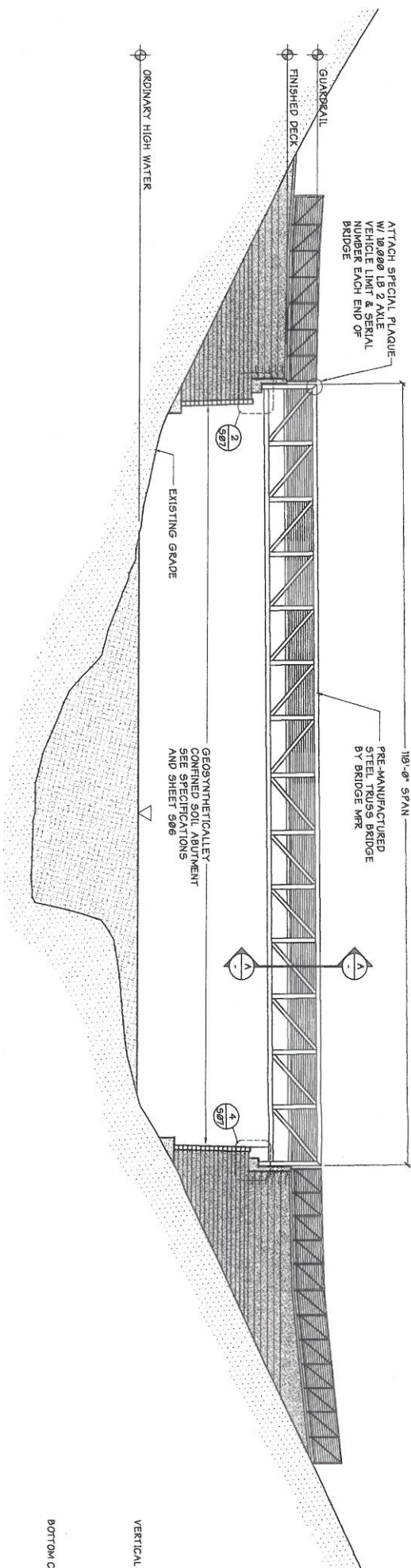
**BRIDGE 2
FOUNDATION AND ELEVATION**

Revisions			
NO.	DESCRIPTION	DATE	BY



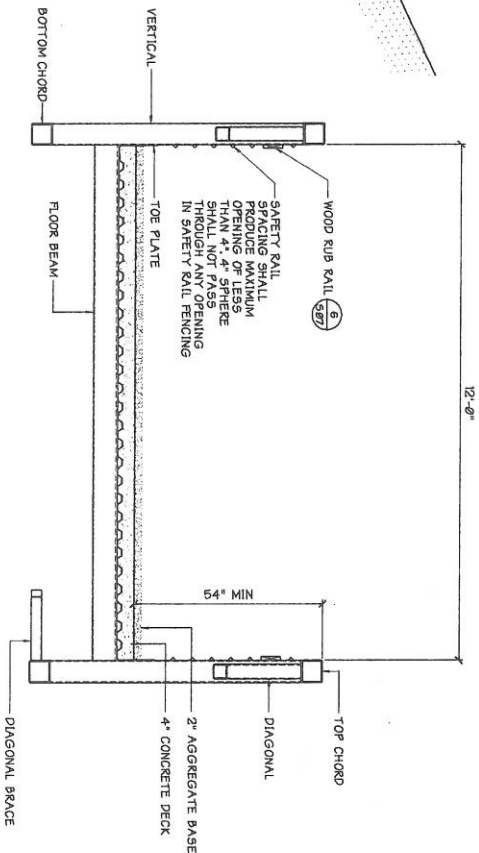
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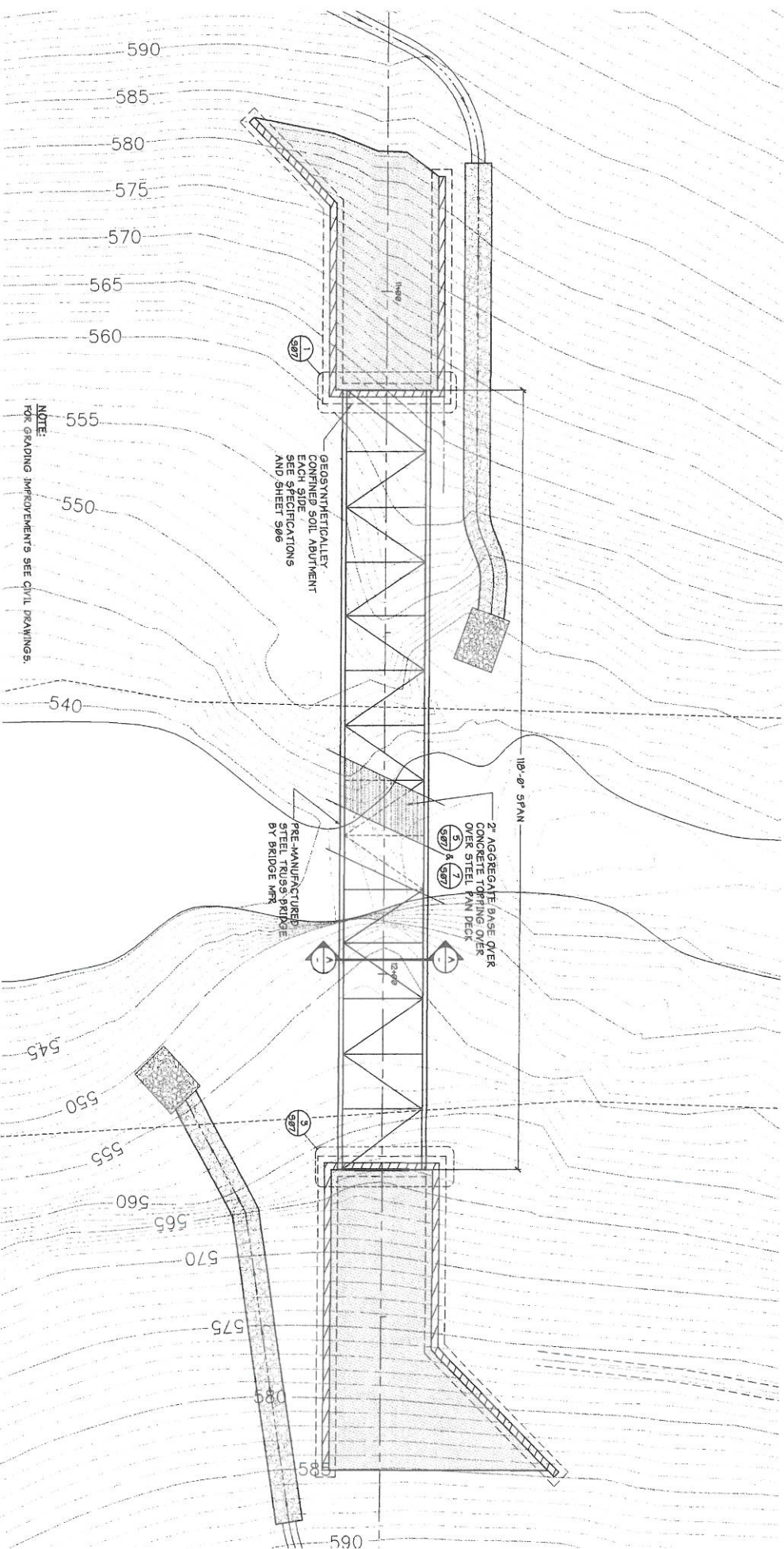
Bridge 3 - South Elevation

SCALE: 1"=10'



Bridge 3 - Section A-A

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



Bridge 3 - Foundation Plan

SCALE: 1"=10'

Design Criteria

FLOOR LIVE LOAD: LK1 ON PLANS

UNIFORM, Y DISTRIBUTED: 65 psf

CONCENTRATED: 1910

WIND DESIGN DATA

BASIC WIND SPEED: 75 mph

(3s gust)

WIND IMPORTANCE FACTOR: 1.0

EARTHQUAKE DESIGN DATA

SEISMIC IMPORTANCE: 1.0

SITE FACTOR: 0.6

SPECTRAL RESPONSE: 0.41

COEFFICIENTS: 0.194

FOUNDATION DESIGN CRITERIA

FOUNDATION DESIGN IS BASED ON THE CRITERIA AND RECOMMENDATIONS IN THE REPORT NO. 63308-01-08

FOR HIDDEN FALLS REGIONAL PARK

DESIGNED BY: J. L. HENDERSON, INC.

DATED: MARCH 28/10

1. BEARING PRESSURE:

BASED ON FOOTINGS BEARING ON ROCK.

2. DEAD AND LIVE LOAD:

COMBINED = 62,400 PSF

3. LATERAL RESISTANCE:

ALLOWABLE PASSIVE RESISTANCE AT 4' FROM FACE OF FOOTING = 62,400 PSF

FLUID PRESSURE, COEFFICIENT OF FRICTION SHALL BE 0.25 AT SOIL & 0.50 AT ROCK. REDUCED PASSIVE RESISTANCE SHALL BE 50%.

4. ALL FOOTINGS SHALL BEAR THE MINIMUM DEPTH BELOW THE LOWEST ADJACENT GRADE SPECIFIED IN THE GEOTECHNICAL REPORT, BUT NOT LESS THAN 12".

5. ALL STRIP FOOTINGS SHALL BE MINIMUM 12 INCHES WIDE.

NOTE:

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90% REVIEW SUBMITTAL 12/23/2010

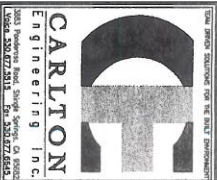
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11476 "C" Avenue
Auburn, California 95603

HIDDEN FALLS REGIONAL PARK

BRIDGE 3
FOUNDATION AND ELEVATION

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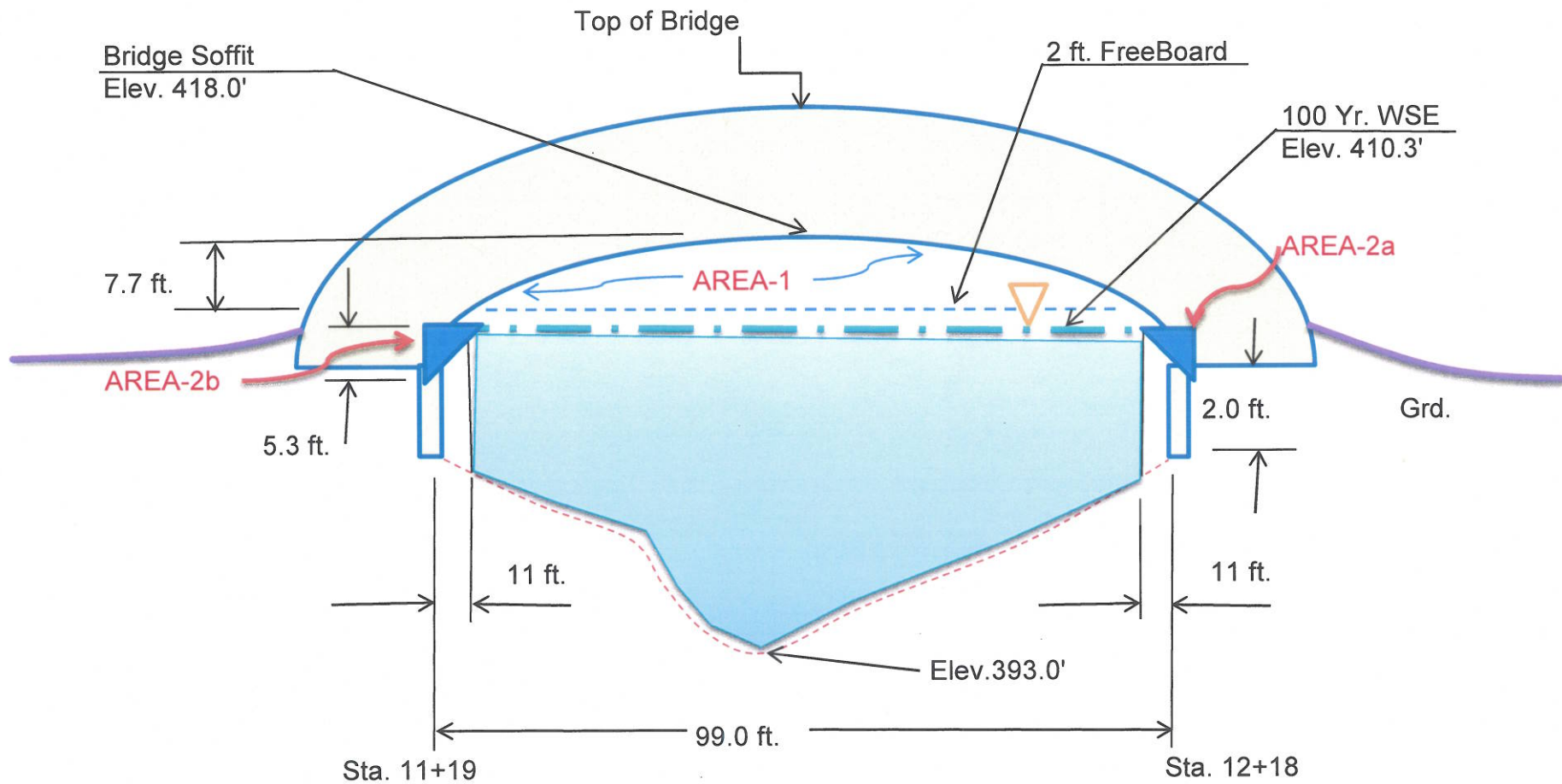


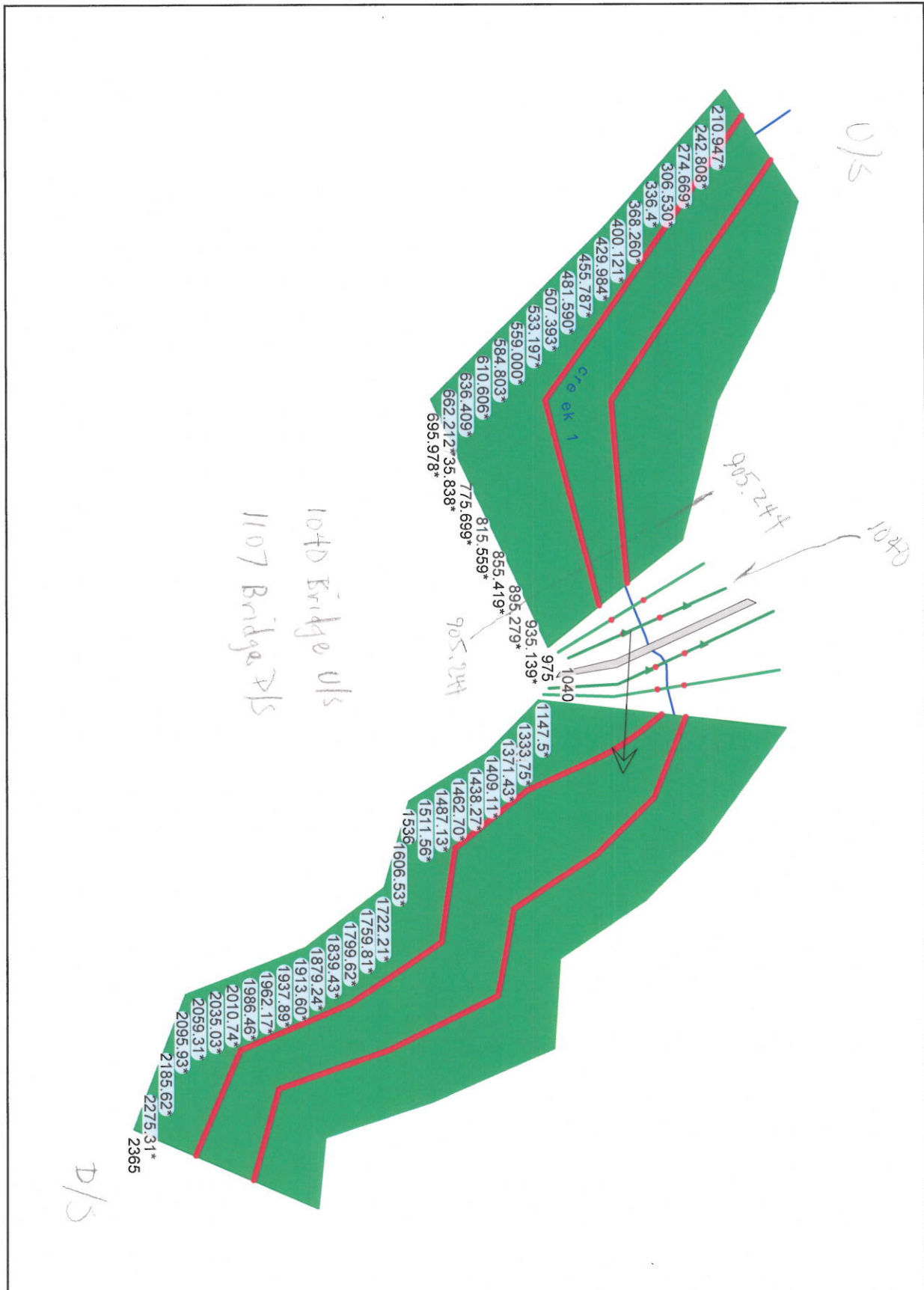
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BRIDGE No. 1

CONCRETE ARCH BRIDGE

ATTACHMENT G

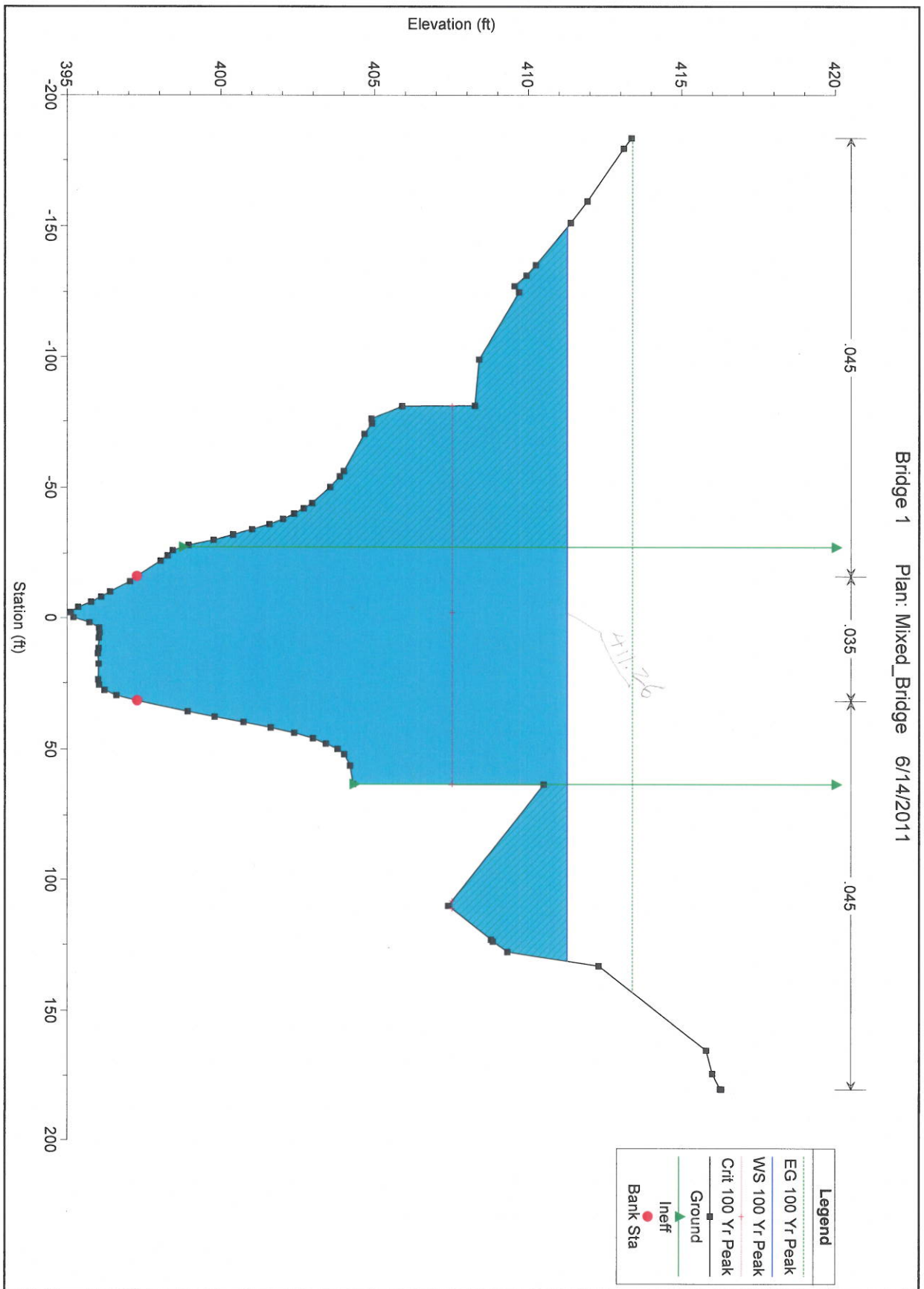




Bridge E @ 1079

Just D/S of Bridge

RS = 1107





BRIDGE SITE #1



BRIDGE SITE #2



BRIDGE SITE #3