

VALUE ENGINEERING CHANGE PROPOSAL

Wineville Extension Recycled Water Pipeline, Segment B
Project No. EN13045



INLAND EMPIRE UTILITIES AGENCY
Wineville Recycled Water Pipeline, Segment B
Value Engineering
Meeting

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VALUE ENGINEERING AGREEMENT

PUBLIC CONTRACT CODE
SECTION 7101

7101. The state or any other public entity in any public works contract awarded to the lowest bidder, may provide for the payment of extra compensation to the contractor for the cost reduction changes in the plans and specifications for the project made pursuant to a proposal submitted by the contractor. The extra compensation to the contractor shall be 50 percent of the net savings in construction costs as determined by the public entity. For projects under the supervision of the Department of Transportation or local or regional transportation entities, the extra compensation to the contractor shall be 60 percent of the net savings, if the cost reduction changes significantly reduce or avoid traffic congestion during construction of the project, in the opinion of the public entity. The contractor may not be required to perform the changes contained in an eligible change proposal submitted in compliance with the provisions of the contract unless the proposal was accepted by the public entity.

SUPPLEMENTAL AGREEMENT – VALUE ENGINEERING
FOR
INLAND EMPIRE UTILITIES AGENCY

Wineville Extension Recycled Water Pipeline, Segment B
Project No. EN13045

This Agreement is entered into this ____ day of December, 2014 (“Effective Date”) by and between Inland Empire Utilities Agency (hereinafter “IEUA”), a Municipal Water District and Mike Bubalo Construction Company (hereinafter “Contractor”) collectively (“the Parties”) for the purposes of value engineering IEUA’s Project No. EN13045 (hereinafter “Project”).

RECITALS

WHEREAS, on November 21, 2013, IEUA advertised the Project on The Network to the prequalified bidders for construction bids; and,

WHEREAS, on May 21, 2014, IEUA awarded the contract for the Project to Contractor for the low bid of \$8,900,000; and,

WHEREAS, Contractor submitted a Value Engineering Proposal to revise the alignment (Exhibit A) for the majority of the pipeline; and,

WHEREAS, the new alignment will eliminate extensive amounts of angle point deflections, elbows, thrust blocks, blow offs and vacuum values, as well as provide for fewer changes in elevation due to the underground utility corridor; and,

WHEREAS, the land for a portion of the Project (redevelopment land) is to be purchased by Contractor, who will then provide a perpetual easement to IEUA (Exhibit B) for the Project; and,

WHEREAS, Contractor shall secure a perpetual easement from SCE for the new alignment; and,

WHEREAS, GHD, the design engineering firm, has prepared the new alignment and concurs that the Project would benefit IEUA and provide cost savings; and,

WHEREAS, Contractor shall guarantee to IEUA that the new alignment will meet or exceed all necessary functionality including; performance, safety, operations, maintenance and quality, as well as provide for quality materials and/or methods as prescribed in the contract documents; and,

WHEREAS, Contractor has established that a fixed sum of \$1,247,249 dollars in cost savings will be realized with the proposed new alignment; and,

WHEREAS, Contractor has offered IEUA fifty (50) percent of the net cost savings, and IEUA has accepted Contractor's Conceptual Value Engineering Proposal; and,

WHEREAS, concurrent with this Supplemental Agreement, a Change Order shall be made to the Project Contract Document reducing the cost of the Project by \$623,625 to \$8,276,375.

NOW THEREFORE, incorporating the recitals above, the Parties hereto agree:

1. The Contractor shall construct the Project per the new alignment per the revised project plans prepared by the Project Engineer, GHD Inc. which shall be reviewed and approved by IEUA in accordance with the specifications for the Project.
2. Payment for the Project shall be in accordance with the Contract Documents and in any event shall not exceed \$8,276,375.
3. Contract schedule shall remain the same and shall not be affected by the new alignment.
4. This Supplemental Agreement covers the known and anticipated costs attributable to the work covered by this Supplemental Agreement. Upon acceptance of this Supplemental Agreement and change to the contract documents, should IEUA request any changes to the plans and specifications, then Contractor reserves the right to request additional adjustment to the contract amount or contract time in accordance with the contract documents. However, should Contractor incur unanticipated additional cost due to the new alignment, Contractor shall bear the responsibility for those additional cost.
5. All changes to the contract document plans and specifications shall be submitted as a Request for Deviation as defined in the Value Engineering Change Proposal process in accordance with the Project Specifications. All approvals of changes to plans and specification shall be in writing.
6. Contractor shall provide final "As-Built" drawing on completion of the Project.
7. The Contractor shall provide assurance prior to initiating work associated with the Value Engineering Change Proposal that Fontana Water Company (FWC) is in concurrence that the new alignment will not result in additional costs by FWC or have cost impacts to Fontana residents and that they will be responsible for those cost in the event they are identified.
8. Should Contractor be unable to obtain the easement, and SCE consent agreement for the VE alignment by February 18, 2015, then this agreement shall be null and

void and Contractor shall complete the Project in accordance with the original awarded design and specifications by July 25, 2015.

ALL OTHER TERMS AND CONDITIONS OF THE CONTRACT DOCUMENTS FOR THE PROJECT SHALL REMAIN UNCHANGED.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Agreement to be entered into as of the day and year written above.

INLAND EMPIRE UTILITIES AGENCY: MIKE BUBALO CONSTRUCTION COMPANY:

P. Joseph Grindstaff
General Manager

Dave Sorem, P.E.
Vice President

NOTE: IEUA does not agree with Contractor position and has referred this to IEUA's General Counsel

December 8, 2014

Mr. Chris Berch
Inland Empire Utilities Agency
Executive Manager of Engineering/
Assistant General Manager
P.O. Box 9020
Chino Hills, CA 91709

Mr. Berch:

REF. VALUE ENGINEERING LIFE CYCLE COST

Mike Bubalo Construction (MBC) has been notified by IEUA staff that the Supplemental Agreement – Value Engineering for the Wineville Extension Recycled Water Pipe Line Segment B Project No. EN13045 will not include Life Cycle Costs. MBC has expended extensive effort for IEUA to realize these savings. The Life Cycle Cost savings were calculated from the reduction of the original alignment of the 36" waterline by approximately 2600'. The savings associated with the Life Cycle Costs is estimated to be \$154,216 that will be split 50/50 between IEUA and MBC, exactly as previously agreed to in the Value Engineering Proposal of \$1,396,801.

IEUA staff was informed by MBC that Life Cycle Cost savings in Value Engineering is the law and should be considered as a savings. IEUA staff stated that it was not part of any law but a benefit only to the agency and only a perceived cost savings. MBC emphatically disagrees with this assumption that the reduction of approximately 2600' of 36" waterline is not a savings to be considered as a Life Cycle Cost.

By means of example, Value Engineering is specifically spelled out in U.S. Public Law 104-106 Sec. 4306. VALUE ENGINEERING FOR FEDERAL AGENCIES. "(b) DEFINITION.- As used in this section, the term 'value engineering' means an analysis of the functions of a program, project, system, product, item of equipment, building, facility, service or supply of an executive agency, performed by qualified agency or contractor personnel, directed at improving performance, reliability, quality, safety, and **life cycle costs.**" At a minimum MBC requests that our reservation of right to demand inclusion of these costs be respected and stated in the Supplemental Agreement – Value Engineering.

MBC does not agree with or understand IEUA staff position on denying our right to share in the savings of Life Cycle Costs. This is standard practice for agencies to equally share in the savings associated with Life Cycle Costs and is part of U.S. Public Law 104-106. The analysis of Life Cycle Costs for Value Engineering is incorporated at the National level with the Department of Defense, Environmental Protection Agency, Federal Highway Administration, Army Corps of Engineers and Federal Aviation Administration and locally with the State of California, County of Riverside, Metropolitan Water District, etc.

For IEUA to ignore the fact that Life Cycle Costs should be part of the shared savings shows lack of attention to the law and the significant effort that MBC has initiated to complete this realignment for the benefit of the constituents of Fontana and the rate payers of IEUA.

Again, I want to reiterate that we reserve the right to pursue the savings related to Life Cycle Costs. I look forward to discussing this with you in the near future.

Sincerely,

A handwritten signature in dark ink, appearing to read "Dave Sorem", with a stylized flourish extending to the right.

Dave Sorem

Vice President

Mike Bubalo Construction

VALUE ENGINEERING CHANGE PROPOSAL

A. General.

The CONTRACTOR is encouraged to and is authorized to develop, prepare, and submit in writing proposals for modifying the Plans, Specifications or other requirements of the Contract Documents for the sole purpose of reducing the total cost of construction (a.k.a. value engineering change proposals (VECP's)) voluntarily. The VECP shall not impair, in any manner, the essential functions or characteristics of the Project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, or design and safety standards. The CONTRACTOR shall receive extra compensation for the cost reduction changes in the Plans and Specifications for the Project realized from accepted VECP's submitted by the CONTRACTOR, in accordance with paragraph (F) of this clause.

B. Definitions.

1. "CONTRACTOR's development and implementation costs," as used in this clause, means those costs the CONTRACTOR incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the CONTRACTOR incurs to make the contractual changes required by IEUA acceptance of a VECP.
2. "IEUA costs," as used in this clause, means those IEUA costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term includes IEUA's costs of investigating and analyzing a VECP submitted by the CONTRACTOR, including any portion thereof paid by the CONTRACTOR pursuant to paragraph (E)(4). The term does not include the normal administrative costs of processing the VECP.
3. "Instant Contract savings," as used in this clause, means the estimated reduction in CONTRACTOR cost of performance resulting from acceptance of the VECP, minus allowable CONTRACTOR development and implementation costs, including Subcontractors' development and implementation costs (see paragraph (H) of this clause).
4. "Net Contract savings," as used in this clause, means the total instant Contract savings less IEUA cost.
5. "Value engineering change proposal (VECP)" means a proposal that:
 - a. Requires a change to the Contract Documents, to implement; and

- b. Results in reducing the Contract Price or estimated cost without impairing essential functions or characteristics; *provided*, that it does not involve a change:
 - i. In deliverable end item quantities only; or
 - ii. To the Contract type only.
- C. VECP Preparation. As a minimum, the CONTRACTOR shall include in each VECP the information described in paragraphs C (1) through (8) of this clause. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:
 - 1. A description of the difference between the existing Contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.
 - 2. A list and analysis of the Contract requirements that must be changed if the VECP is accepted, including any suggested Specification revisions.
 - 3. A separate, detailed cost estimate for (a) the affected portions of the existing Contract requirement and (b) the VECP. The cost reduction associated with the VECP shall take into account the CONTRACTOR's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (H) of this clause.
 - 4. A description and estimate of costs IEUA may incur in implementing the VECP, such as test and evaluation and operating and support costs.
 - 5. A prediction of any effects the proposed change would have on collateral costs to IEUA.
 - 6. A statement of the time by which a Contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the Contract completion time or delivery schedule.
 - 7. All required design documents, including Plans and Specifications, necessary to implement the changed Work pursuant to the VECP.
- D. Submission. The CONTRACTOR shall submit VECP's to the ENGINEER.

E. IEUA Action.

1. The ENGINEER will notify the CONTRACTOR of the status of the VECP after the ENGINEER receives it. IEUA will process VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP. If an executed Change Order or a Notice to Proceed with the change has not been issued by IEUA, as described in paragraph (E) (3) by the date upon which the CONTRACTOR's VECP specifies that a decision thereon should be made, or such other date as the CONTRACTOR as may subsequently have specified in writing, the VECP shall be deemed rejected.
2. If the VECP is not accepted, the ENGINEER will notify the CONTRACTOR in writing, explaining the reasons for rejection. The CONTRACTOR may withdraw any VECP, in whole or in part, at any time before it is accepted by IEUA. The ENGINEER may require that the CONTRACTOR provide written notification before undertaking significant expenditures for VECP effort.
3. Any VECP may be accepted, in whole or in part, by IEUA's award of a modification to this Contract via an approved Change Order citing this clause. IEUA may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the CONTRACTOR a Notice to Proceed with the change. Until a Notice to Proceed is issued or a Contract modification applies a VECP to this Contract, the CONTRACTOR shall perform in accordance with the existing Contract Documents. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of IEUA. The Change Order shall incorporate the changes in the Contract Documents which are necessary to permit the VECP or that part which has been accepted to be put into effect, and shall include any conditions upon which IEUA's approval thereof is based if IEUA's approval is conditional. The Change Order shall also set forth the estimated total net Contract savings in construction costs attributable to the cost reduction proposal effectuated by the Change Order as determined by IEUA, and shall further provide that the CONTRACTOR be paid fifty percent (50%) of the net Contract savings in construction costs in accordance with paragraph (F) below. The CONTRACTOR's cost of preparing the VECP and IEUA's costs of investigating a cost reduction incentive proposal, including any portion thereof paid by the CONTRACTOR, are excluded from the total estimated net Contract savings, as defined in paragraph (B), *infra*.
4. IEUA reserves the right where it deems such action appropriate to require the CONTRACTOR to share in IEUA's costs of investigating and analyzing a VECP submitted by the CONTRACTOR as a condition of considering a VECP. Where such condition is imposed, the CONTRACTOR shall indicate acceptance thereof in

writing, and that acceptance shall constitute full authority for IEUA to deduct amounts payable to IEUA from any monies due or that may become due to the CONTRACTOR under the Contract.

5. IEUA shall judge of the acceptability of a VECP and the net savings in construction costs from the adoption of all or any part of the VECP. In determining the net savings, the right is reserved to disregard the Contract Bid prices if in the judgment of IEUA those prices do not represent a fair measure of the value of Work to be performed or to be deleted.
6. Acceptance of the VECP and performance of the Work thereunder shall not extend the Contract time of completion unless specifically provided for in the Change Order authorizing the use of the VECP.
7. The amount specified to be paid to the CONTRACTOR in the Change Order which effectuates a VECP shall constitute full compensation to the CONTRACTOR for the VECP and the performance of the Work thereunder pursuant to the Change Order. This shall include any actual, consequential or other foreseeable or unforeseeable costs not already accounted for in the CONTRACTOR's development and implementation costs that the CONTRACTOR incurs in the course of performing the Work defined by the VECP. This shall also include damages arising from or relating to unknown or differing site conditions, delays arising from the VECP Work, escalation of construction costs, unanticipated construction costs, etc.

F. Sharing.

1. Rates. If the VECP is accepted, the CONTRACTOR shall receive extra compensation of fifty percent (50%) of the net savings in construction as follows: IEUA's share of savings is determined by multiplying the net savings in construction costs realized from accepted VECP's submitted by the CONTRACTOR by fifty percent (50%). CONTRACTOR's share of savings is determined by multiplying net savings in construction costs realized from accepted VECP's submitted by the CONTRACTOR by fifty percent (50%).
2. If IEUA does not accept and receive all items on which it paid the CONTRACTOR's share, the CONTRACTOR shall reimburse IEUA for the proportionate share of these payments.

G. Payment. Payment of the share due the CONTRACTOR for use of a VECP on this Contract shall be authorized by a modification to this Contract via an approved Change Order to:

1. Accept the VECP;

2. Reduce the Contract Price or estimated cost by the amount of instant Contract savings; and
 3. Provide the CONTRACTOR's share of net savings by adding the amount calculated to the Contract Price or fee pursuant to paragraph (F) (1), supra.
 4. No payments will be made to CONTRACTOR under this clause until the Contract and all Work on the Project has been completed (e.g., Project reaches Final Completion).
- H. Subcontracts. In computing any adjustment in this Contract's price under paragraph (F) of this clause, the CONTRACTOR's allowable development and implementation costs shall include any Subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by IEUA under this Contract, but shall exclude any value engineering incentive payments to a Subcontractor. The CONTRACTOR may choose any arrangement for Subcontractor value engineering incentive payments; *provided*, that these payments shall not reduce IEUA's share of the savings resulting from the VECP.
- I. Data. The CONTRACTOR may restrict IEUA's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering Change Proposal clause of the Contract shall not be disclosed outside IEUA or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit IEUA's right to use information contained in these data if it has been obtained or is otherwise available from the CONTRACTOR or from another source without limitations.

If a VECP is accepted, the CONTRACTOR hereby grants IEUA unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, IEUA shall have the rights specified in the Contract modification implementing the VECP and shall appropriately mark the data.

SHARED COST PROPOSAL

RFD 02 Value Engineering Cost Proposal for Wineville Segment B Alternative Pipeline Alignment

Original Alignment:

The Original alignment had the pipeline meandering through the streets in the City of Fontana beginning along Marlay Avenue from east of Mulberry Avenue, south on Banana Ave, east on Cherry Avenue, east on Live Oak Avenue, east on Village Drive, east along the Declez Channel to the Agency's RP-3 site west of Beech Ave and south of Jurupa Ave. It includes two jack and bores; a 27 ft deep jack and bore beneath Declez Channel along Cherry consisting of 120 ft of 48 inch 5/8 thick casing protecting the 36 inch carrier pipe ; another crossing south of Village Drive with the same configuration of casing and carrier pipe for a distance of 60 ft. In addition there is a Flow Control Facility and connection to cell 1 junction box at RP 3.

VECP Alignment:

The proposed VE alignment will also begin along Marlay Avenue from east of Mulberry Avenue and head **north** on Banana Avenue to the City of Fontana Property within which the Southern California Edison easement is located. The pipeline will then transverse within the open field area of the easement all the way to IEUA's RP 3 earthen basins. The Flow Control Facility and connection to Cell 1 junction box will also remain. However the Flow Control Facility may be relocated to the north to pick where the new alignment will enter the area of the basins.

WINEVILLE SEGMENT "B" ALTERNATE ALIGNMENT

PROPERTY LEGEND

FONTANA
REDEVELOPMENT
AGENCY
PROPERTY
38 ACRES SHOWN

PIPELINE ALIGNMENTS LEGEND

ALTERNATE = 12,410'

ORIGINAL = 15,100'



Performance:

GHD, IEUA's design engineer has performed hydraulic studies whose results show the performance of the pipeline in the realigned configuration is equivalent to the original design.

Reliability:

The new alignment reduces substantially the complexity of the pipe. Extensive amounts of angle point deflections, elbows, thrust blocks, blow offs and vacuum valves have been eliminated with the new alignment. The pipe is straighter and has fewer changes in elevation as it traverses the underutilized utility corridor that is bereft of any significant presence of underground conduits. The original alignment had to navigate the complicated underworld of utilities that cross beneath the various streets with all manner of different utilities.

Maintenance:

By reducing the complexity of the pipe and reducing the quantity of appurtenant items such as blow-offs, vacuum valves and other miscellaneous mechanical fixtures, fewer instances of maintenance are required. In addition to reducing the volume of items that require periodic maintenance and inspection, the new location along the utility corridor will also reduce the long term cost of inspections and maintenance operations by removing the work area from the public traveled right-of-way. Maintenance and repairs within dedicated easements outside of the public paths of travel are always safer, cheaper and faster to accomplish in comparison to pipelines located beneath major thoroughfares.

Safety:

The size and duration of traffic detours have been substantially reduced. The original alignment would have required extensive lane closures along the primary arterial streets that provide access to the local residents. These detours would have also impacted services for mass transit busses and shuttles. The delays caused by the traffic control necessary for the original alignment also would have impacted the response times for the communities' only local fire station (#74).

Risk:

Conflicts with existing utilities is tremendously impacted in a positive way. The new alignment is substantially vacant in terms of underground pipes and facilities. This will result in a very small number of necessary relocations to resolve conflicts. It also greatly reduces the chances of potential damages to dangerous utilities such as Natural Gas mains. It also reduces the likelihood of interruptions of services for essential public utilities.

Implementation Time:

Value Engineering Study and Time for Investigations have been considered along with the reduction of pipeline length to arrive at a completion date for implementation of the new alignment. There will be no change in the contract completion date as a result of VE performance. The pipeline will be available to the project stakeholders as originally planned by IEUA.

EN13045 WINEVILLE EXTENSION RECYCLED WATER PIPELINE: SEGMENT B

RFD 0002 Value Engineering Cost Proposal

Bonds / Insurance	145,000			145,000
Mobilization (5% Earned Pay = 50%) \$890,000	445,000			445,000
Mobilization (10% Earned Pay = 75%)	222,500			222,500
Mobilization (20% Earned Pay = 95%)	178,000			178,000
Mobilization (50% Earned Pay = 100%)	44,500			44,500
Preconstruction Video	12,100			12,100
Submittals and Material Procurement	12,100			12,100
Pothole Projectwide	24,200			24,200
Traffic Control Plan and Permits	12,100	(6,500)		5,600
Trailer Facility	12,100	(2,050)		10,050
SVPPP Implementation	3,025			3,025
Rodent Abatement	1,210			1,210
Demobilization	30,000			30,000
Bore and Jack Sht - Req'd for VE	80,000	16,219		96,219
Bore and Jack Sht. - Req'd for VE	72,061	13,849		85,910
Install New 36" CMLC Stations 145+00 to 157+39	135,138			135,138
Install New 36" CMLC Stations 157+39 to 173+08	171,131			171,131
Install New 36" CMLC Stations 173+08 to 296+00	1,340,688	(339,593)		1,001,095
CLSM - Pipe Zone	423,971	(75,529)		348,442
Delivery Steel Pipe CMLC	2,769,600	(493,392)		2,276,208
Delivery Valves and Appurtenances	1,540,600	(127,632)		1,412,968
Install 38" Butterfly Valves	5,445			5,445
Install 6" ARV Assemblies	31,855	(12,388)		19,467
Install 6" Blow-Off Assemblies	31,855	(12,388)		19,467
Install Anode Test Stations	77,526	(16,950)		60,576
Install Casing Test Stations	6,828			6,828
CCTV	11,616	(2,069)		9,547
Load, Pressure Test 36" CMLC 145+00 - 157+39	954			954
Load, Pressure Test 36" CMLC Stations 173+08 to 296+00	9,465	(1,856)		7,609
Sawcut Existing Concrete/Asphalt for Installation of New Pipeline Stations 157+39 to 173+08	3,766			3,766
Sawcut Existing Concrete/Asphalt for Installation of New Pipeline Stations 173+08 to 296+00	29,560	(21,560)		8,000
Sawcut Existing Concrete/Asphalt Stations 145+00 to 157+39	2,974			2,974
Set Up Traffic Control Stations 145+00 to 157+39	2,478			2,478
Set Up Traffic Control Stations 157+39 to 173+08	3,138			3,138
Set Up Traffic Control Stations 173+08 to 296+00	24,584	(13,000)		11,584
Install Valves and Specials	10,000			10,000
30" Pipe Penetration at Vault	14,520			14,520
Declez Channel - Jacking Pits	102,360			102,360
Jumper at 256+00	66,060	(66,060)		0
Flow Control Facility Concrete	39,628			39,628
CMU Wall	20,408			20,408
Install Chain Link Fencing & Gates	13,600			13,600
Deliver Electrical Control Panels, Transmitter and Disconnect Switches	96,800			96,800
Install Electrical Conduit	101,640			101,640
Install Electrical Wire	36,300			36,300
Install and Mod Control Panels	29,040			29,040
Start-up and Commissioning	2,420			2,420
Landscaping/Restoration	18,150			18,150
AC Paving incl Beech Ave	384,035	(274,000)		110,035
Traffic Striping and Markings	16,618	(9,500)		7,118
Traffic Loops	6,353	(4,050)		2,303
Water Line Relocations - Fontana Water	25,000	(8,000)		17,000
	8,900,000	(1,456,449)		7,443,551

PROJECTED

Design - GHD/MBCC			79,200	
Survey - MBCC/Elkins Easement Research			15,000	
SCE Fee - MBCC			5,000	
Property Acquisition - Dave Sorem				
RP-3 Splitter Box			75,000	
Legal Fees for Easement			10,000	
Electrical @ 16" Discharge		TBD		
Tom Dodson & Assoc. Fees				
Storm Drain Removal and Replacement			25,000	
	8,900,000	(1,247,249)		

Proposed RFD Value \$8,276,375 (\$623,625)

SCE EASEMENT CORRESPONDENCE

Southern California Edison (SCE) was contacted to determine the disposition of the overhead easement for the proposed realignment in July of 2014. It was determined that the property was owned by the former City of Fontana Redevelopment Agency not SCE as originally assumed. The property is under guardianship of The City of Fontana Oversight Board. SCE investigated the property and discovered that the easements include the installation of water lines. SCE has the consent on the use of the property without the right of ownership.

On September 26, 2014 SCE gave their preliminary consent/approval for the proposed 36-inch waterline 10 feet off of the northerly property line.

The 36-inch waterline plans showing the underground and temporary easements were sent to SCE to request their approval.



September 26, 2014

City of Fontana
C/O Mike Bubalo Construction Co., Inc.
5102 Gayhurst Avenue
Baldwin Park, CA 91706
Attn: Anton Brkic'

Re: Fontana/Wineville Recycle Water Pipeline
Preliminary Consent approval

Dear Anton,

Please be advised that the preliminary Consent review of the revised plans reflecting the 10' for the offset of the 36" pipeline along the northerly portion of our easement has been completed and approved by our Transmission team.

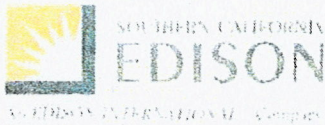
This is a preliminary approval only and is subject to the review and approval of the final construction drawings by our civil team. Once said final drawings are reviewed and approved, a Consent letter will follow, allowing your company to begin construction.

Should you have any questions, please don't hesitate to contact me.

Respectfully,

Carol Okray

Carol Okray
Right of Way Agent
Eastern Region, Land and Forest Management
Real Properties
Transmission and Distribution



July 2, 2014

Mike Bubalo Construction Co., Inc.
5102 Gayhurst Avenue
Baldwin Park, CA 91706
Attn: Anton Brkic

Via e-mail

Subject: Consent Request
Project Location: Wineville Extension Recycled Water Pipeline, Fontana
Line Name: Mira Loma - Vista

Dear Anton,

Southern California Edison Company (SCE) has completed a preliminary review of the subject Consent request and plans. This Consent will be processed on a completed cost basis. In order to commence with the Consent review by all operating departments involved, an initial estimated processing fee in the amount of \$5,000.00 will be required. The fee requested will cover the cost of, including, but not limited to, the Transmission and Distribution organizational unit (T&D) technical plan review and labor costs, an evaluation of SCE's land rights, Real Properties Agent labor, and transmission line sag calculations. Please note this initial estimated processing fee is based on estimated costs. SCE's work, however, is being performed on an actual cost basis. If the scope of the project changes or SCE determines an additional processing fee is required, a revised estimated billing letter will be provided to you. Upon receipt of the additional payment, the Consent review will continue.

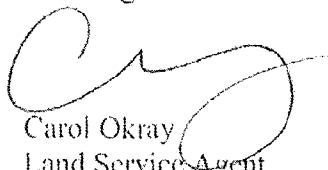
At the completion of the review and upon receipt of the executed Consent Agreement, you will be sent a final invoice and be billed or refunded any difference covering the actual cost of the job. Any amount owed by you to SCE at the completion of the project shall be due no later than 30 days after receipt of the final invoice.

Please acknowledge your understanding of SCE's Consent process, as stated above, by signing below.

Upon receipt of the estimated processing fee, the aforementioned requested items, (if any) and the original executed copy of this letter, the technical review of this Consent request will commence.

If your project will be delayed or canceled, please notify me immediately at (909) 421-6460 or e-mail Carol.Okray@sce.com

Best Regards,



Carol Okray
Land Service Agent
Eastern Region / Land Management
Real Properties
Southern California Edison Company
2885 Foothill Blvd.
San Bernardino, CA 92410
(909) 421-6460

ACKNOWLEDGEMENT OF SCE'S CONSENT PROCESS

Requestor/Developer Name: _____

By: _____ Date: _____

Signature _____

Printed Name _____

CITY OF FONTANA

CORRESPONDENCE

The City of Fontana (City) was contacted in June of 2014 to inquire into the disposition of the Redevelopment Agency parcels. It was determined that the property was owned by the former City of Fontana Redevelopment Agency and subject to sale as a part of the State mandated closure of the Redevelopment Agency. The property is under guardianship of The City of Fontana Oversight Board. The City is required to sell these parcels because they did not develop a plan for their continued ownership of the parcels as mandated by the State of California.

On October 14, 2014 an offer was made to purchase these parcels in order to install the Wineville Segment B pipeline.

The City will forward the offer with their endorsement and recommendation to the State to proceed with the sale. Numerous meetings have been held and everyone is supportive of the realignment through these parcels.

Dave Sorem

From: Elisa Grey <egrey@fontana.org>
Sent: Wednesday, November 12, 2014 8:20 AM
To: Dave Sorem
Cc: David Edgar; Chuck Hays
Subject: RE: LRPMP Properties - Approval Schedule

Dave

You're welcome!

If anything changes with the dates or if we see any room for expediting the process, we will keep you informed!

Thank you

EIG

From: Dave Sorem [mailto:Dave@bubalo.com]
Sent: Tuesday, November 11, 2014 12:10 PM
To: Elisa Grey
Cc: David Edgar; Chuck Hays
Subject: RE: LRPMP Properties - Approval Schedule

Elisa,

Thanks for the information and the earlier call back. Again I want to thank you and David for keeping me informed.

Regards,

Dave Sorem, P.E.
Vice President
Mike Bubalo Construction Co., Inc.
5102 Gayhurst Ave.
Baldwin Park, CA 91706
(626) 960-7787
FAX (626) 960-7897
Cell (626) 705-0528

From: Elisa Grey [mailto:egrey@fontana.org]
Sent: Monday, November 10, 2014 8:45 AM
To: Dave Sorem
Cc: David Edgar; Chuck Hays
Subject: RE: LRPMP Properties - Approval Schedule

Dave

I received your voicemail last Thursday – I was out of the office.

However, in addition to my voicemail I wanted to give you an outline of the timeline for the next phase in the process.

November 25, 2014 – Successor Agency
December 12, 2014 – Oversight Board
December 2014 – Department of Finance Approval (up to 120 days)

After the Oversight Board Approval we anticipate opening escrow and sending the executed offers to purchase to the Department of Finance for their ultimate and final approval. While we have been told they have up to 120 days to deliver that approval, we don't anticipate it taking that long.

We will keep you in the loop regularly so you can also update IEUA on the process.

Thank you

EIG

From: Dave Sorem [<mailto:Dave@bubalo.com>]
Sent: Thursday, November 06, 2014 2:14 PM
To: David Edgar
Cc: Elisa Grey
Subject: RE: LRPMP Properties - Approval Schedule

Thanks David & Elisa, much appreciated.

Dave Sorem, P.E.
Vice President
Mike Bubalo Construction Co., Inc.
5102 Gayhurst Ave.
Baldwin Park, CA 91706
Fax (626) 960-7787
Fax (626) 960-7897
Cell (626) 705-0528

From: David Edgar [<mailto:david@fontana.org>]
Sent: Thursday, November 06, 2014 1:26 PM
To: Dave Sorem
Cc: Elisa Grey
Subject: LRPMP Properties - Approval Schedule
Importance: High

David;

The current schedule for disposition of the "for sale" LRPMP properties is as follows;

- Successor Agency consideration;
day, November 25th Tues
- Oversight Board consideration;
ay, December 12th Frid

- State DOF
Review;
December 15th – April 15th
- Close of Escrow (pending DOF
approval);

May, 2015

Thanks !

David R. Edgar
Deputy City Manager
City of Fontana
909-350-6739 (W)

FONTANA



Dave Sorem

From: Larry Kosmont <lkosmont@kosmont.com>
Sent: Friday, October 17, 2014 9:07 AM
To: Dave Sorem
Cc: Christine Rodgers; Nick Leathers
Subject: RE: IEUA Fontana Property

Fantastic—will wait to hear back from you



Larry Kosmont, CRE®
President and CEO
Kosmont Companies | Kosmont Realty Corporation | California Golden Fund (EB-5)
865 S. Figueroa Street, Suite 3500 | Los Angeles, CA 90017
Cell: 213-507-9000 | Direct: 213-417-3333
lkosmont@kosmont.com | www.kosmont.com | CA BRE Broker #01182660



 [Receive Periodic Updates from Kosmont Companies](#)

From: Dave Sorem [mailto:Dave@bubalo.com]
Sent: Friday, October 17, 2014 8:52 AM
To: Larry Kosmont
Subject: RE: IEUA Fontana Property

Good Morning Larry,

I've been out of town this week but I did hear from Fontana Oversight Committee and we have agreed to a price on the property. After I have their blessing and they send it to the Department of Finance at the State that is when I believe I need your assistance. I will keep you informed of the progress. Thanks again for your help.

Take care,

Dave Sorem, P.E.
Vice President
Mike Bubalo Construction Co., Inc.
5102 Gayhurst Ave.
Baldwin Park, CA 91706
(626) 960-7787
FAX (626) 960-7897
Cell (626) 705-0528

From: Larry Kosmont [mailto:lkosmont@kosmont.com]
Sent: Friday, October 17, 2014 8:34 AM
To: Dave Sorem
Cc: Nick Leathers
Subject: RE: IEUA Fontana Property

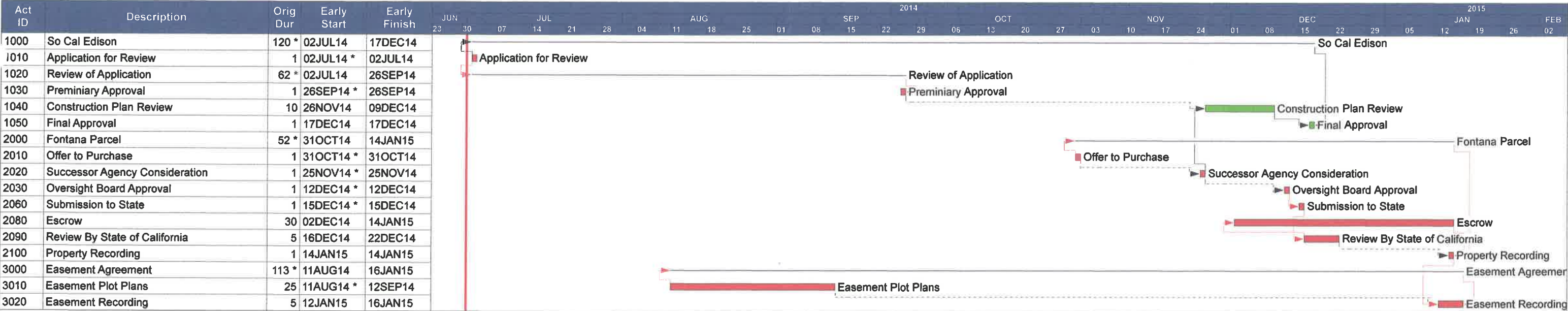
SCHEDULE FOR PROPERTY ACQUISITION

Schedule of Property Purchase for Realignment

Offer to purchase the necessary 38 acres was accepted.	October 14, 2014
Successor Agency (Fontana City Counsel) consideration.	November 25, 2014
Oversight Board consideration.	December 12, 2014
State Department of Finance review (120 days maximum).	December 15, 2014

Note:

The offer accepted for the 38 acres is consistent with the Land Management Plan that was previously approved by the State Department of Finance (DOF). DOF has a maximum of 120 days to review this purchase, generally it has taken less than 60 days for approval and to insure a more expeditious review we have hired the Kosmont Company to track this purchase. The Kosmont Company has extensive experience in this type of land transaction between public and private. The City of Fontana in a cooperative effort to save time will open escrow prior to the DOF approval.



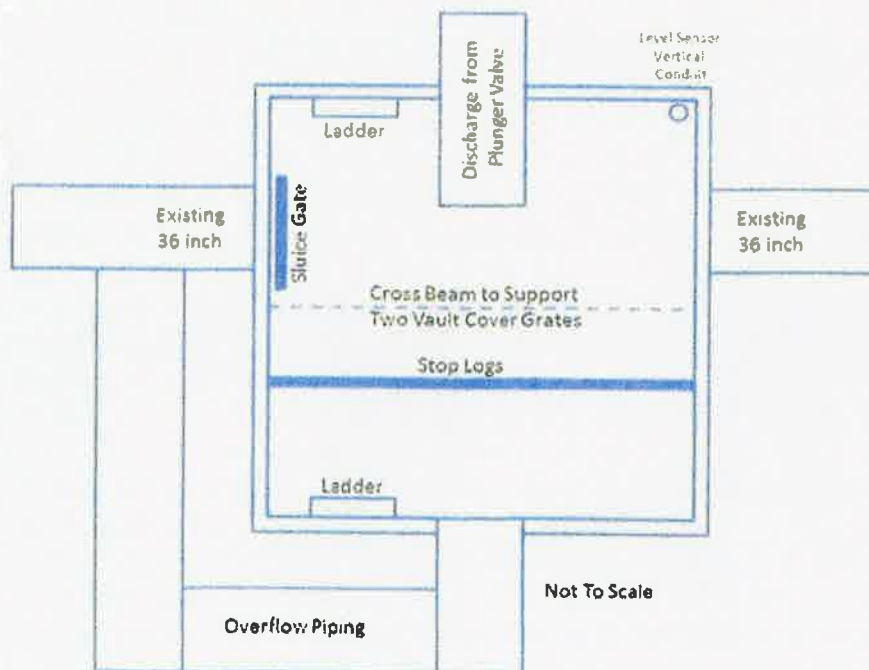
PRELIMINARY DESIGN DRAWINGS

Brian Rickey

From: Andy Campbell <acampbell@ieua.org>
Sent: Thursday, November 13, 2014 4:03 PM
To: 'Greg Watanabe'; Adham Almasri
Cc: Dave Sorem (dave@bubalo.com); Brian Bubalo Construction; Casey Harris (charris@butier.com); Bryan Wilson (bwilson@butier.com); Martin Bruneniek; Katie Squires (ksquires@butier.com); Eric Weber (eweber@butier.com)
Subject: RE: IEUA Wineville Pipeline - Proposed RP-3 Splitter Box

Greg

I like this design. I would recommend we double check all relative elevations and list/show a few others, such as the range of operation elevations in Cell 1 (I will send to you). I recommend you raise the MOV above the top of the junction box. I recommend you add a level transmitter for inside the box (upstream of stop logs). I would recommend a steel mesh style vault cover that is light weight for removal for when stop logs need adjusting or the sluice gate needs maintenance. Lastly, per the attached sketch, I would like to suggest repositioning the elements to allow for a two piece vault cover and for improved internal access for maintenance. Let me know if you have any questions.
Andy



Andy Campbell PG, CHg
Deputy Manager of Planning



Water Smart – Thinking in Terms of Tomorrow®
6076 Kimball Ave / Chino, California 91708
Tel: 909-993-1907

Connect with us: [Twitter](#) / [Facebook](#)

Andy Campbell PG, CHg



From: Greg Watanabe [mailto:Greg.Watanabe@ghd.com]
Sent: Thursday, November 06, 2014 6:10 PM
To: Adham Almasri; Andy Campbell
Cc: Dave Sorem (dave@bubalo.com); Brian Bubalo Construction; Casey Harris (charris@butler.com); Bryan Wilson (bwilson@butler.com); Martin Bruneniks; Katie Squires (ksquires@butler.com); Eric Weber (eweber@butler.com)
Subject: IEUA Wineville Pipeline - Proposed RP-3 Splitter Box

Gentlemen,

Please review, comment, and approve the design concept for the attached proposed RP-3 Splitter Box sketch. The Splitter Box will provide IEUA the ability to convey recycled water from the proposed 36" Wineville Pipeline for recharge operations via gravity throughout the RP-3 site (specifically Cells 1A, 1B, 3A, 3B, 4A and 4B). Upon receipt of your reply, GHD will work with MBC and prepare an applicable design.

Regards,

Greg Watanabe, PE

GHD Accomplish More Together

T: 1 949 585 5215 | V: 865215 | M: 1 714 496 1752 | E: greg.watanabe@ghd.com
16451 Scientific Way Irvine CA 92618 | <http://www.ghd.com/>
[Water](#) | [Energy & Resources](#) | [Environment](#) | [Property & Buildings](#) | [Transportation](#)

GHD and CRA have merged! To learn more, visit www.ghd.com/cra

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Brian Rickey

From: Andy Campbell <acampbell@ieua.org>
Sent: Thursday, November 13, 2014 5:02 PM
To: 'Greg Watanabe'; Adham Almasri
Cc: Dave Sorem (dave@bubalo.com); Brian Bubalo Construction; Casey Harris (charris@butier.com); Bryan Wilson (bwilson@butier.com); Martin Bruneniek; Katie Squires (ksquires@butier.com); Eric Weber (eweber@butier.com)
Subject: RE: IEUA Wineville Pipeline - Proposed RP-3 Splitter Box

Greg and Adham

Here is a table of nominal elevations that I pulled from the RP3 original design drawings and depths from operational experience. Please include these depths graphically on the profile view of the preliminary design of the new RP3 Junction Box for the Wineville extension. Some of these values may be refined once the site has been surveyed and with GHD design input.

Andy

Draft Assumptions for Operation and Design of a new RP3 Junction Box for the Wineville Extension		
Location	Nominal Elevation (feet MSL)	Corresponding Nominal Water Depth in Cell 1 (feet)
RP3 Cell 1A and 1B Basin Bottom	946	0
Historical Basin Max Operational Guideline	957	11
Ground Surface at New Junction Box in Design	957.5	11.5
Pour Over Weir Concrete Lip	957	11
Stop Logs added 1-foot depth (two 6-inch tall logs)	958	12
Top of Junction Box in Design (est. 2 feet over Max Stop Log)	960	14
RP3 Cell 1A Perimeter Berm Low (spill to street) Elevation SW Corner	961	15
Hemlock Avenue (West of the SW Corner of Cell 1A)	952	6

Andy Campbell PG, CHg
Deputy Manager of Planning



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175 Kimball Ave / Chino, California 91708
Tel: 909-993-1907
Mobile: 951 295 7523
Email: acampbel@ieua.org Website: <http://www.ieua.org>

Connect with us: [Twitter](#) / [Facebook](#)

Andy Campbell PG, CHg



From: Greg Watanabe [<mailto:Greg.Watanabe@ghd.com>]
Sent: Thursday, November 06, 2014 6:10 PM
To: Adham Almasri; Andy Campbell
Cc: Dave Sorem (dave@bubalo.com); Brian Bubalo Construction; Casey Harris (charris@butler.com); Bryan Wilson (bwilson@butler.com); Martin Brunenlefs; Katie Squires (ksquires@butler.com); Eric Weber (eweber@butler.com)
Subject: IEUA Wineville Pipeline - Proposed RP-3 Splitter Box

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Please review, comment, and approve the design concept for the attached proposed RP-3 Splitter Box sketch. The Splitter Box will provide IEUA the ability to convey recycled water from the proposed 36" Wineville Pipeline for recharge operations via gravity throughout the RP-3 site (specifically Cells 1A, 1B, 3A, 3B, 4A and 4B). Upon receipt of your reply, GHD will work with MBC and prepare an applicable design.

Regards,

Greg Watanabe, PE

GHD Accomplish More Together

T: 1 949 585 5215 | V: 865215 | M: 1 714 496 1752 | E: greg.watanabe@ghd.com
16451 Scientific Way Irvine CA 92618 | <http://www.ghd.com/>
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Brian Rickey

From: Greg Watanabe <Greg.Watanabe@ghd.com>
Sent: Friday, November 14, 2014 9:34 AM
To: Dave Sorem; 'Brian Ricky'
Cc: dan@bubalo.com
Subject: RE: Current Status of the VE Proposal (Butier)

Dave,

Our VE location of the proposed valving station and diversion/splitter box is tucked away from the proposed basin shown in place of the old treatment plant. This was a result of our meetings with Andy Campbell over the previous weeks. Since then, we have obtained their approval of the locations and are ready to begin the design.

We received comments from IEUA on the diversion/splitter box yesterday. Do you guys have any feedback on the sketch provided? Any constructability concerns before we put pen to paper?

Thanks,

Greg

From: Dave Sorem [mailto:Dave@bubalo.com]
Sent: Friday, November 14, 2014 9:07 AM
To: Greg Watanabe; 'Brian Ricky'
Cc: dan@bubalo.com
Subject: FW: Current Status of the VE Proposal (Butier)

Greg,

As you can see by the trail below Dave Mendez sent this to us for RP3, please check to see if the proposed alignment will "fit" with their future improvements.

Thanks,

Dave Sorem, P.E.
Vice President
Mike Bubalo Construction Co., Inc.
5102 Gayhurst Ave.
Baldwin Park, CA 91706
(626) 960-7787
FAX (626) 960-7897
Cell (626) 705-0528

From: David Mendez [mailto:dmendez@ieua.org]
Sent: Thursday, November 13, 2014 7:54 AM
To: Chris Berch; 'Casey Harris'; 'Mark Butier Jr.'; 'Dave Sorem - Mike Bubalo Construction Co (dave@bubalo.com)'; Majid Karim
Subject: RE: Current Status of the VE Proposal (Butier)

All,

Attached are the layouts of the basins & proposed basins at the RP3 site for your use.

David

David Mendez

Deputy Manager of Construction Management



"Water Smart -- Thinking in Terms of Tomorrow"

6075 Kimball Ave / Chino, California 91708

Tel: 909-993-1622

Mobile: 951-295-7610

Email: dmendez@ieua.org Website: <http://www.ieua.org>

Connect with us: [Twitter](#) [Facebook](#)

David Mendez



From: David Mendez

Sent: Wednesday, November 12, 2014 3:35 PM

To: Chris Berch; Casey Harris; Mark Butier Jr.; Dave Sorem - Mike Bubalo Construction Co (dave@bubalo.com); Majid Karim

Subject: RE: Current Status of the VE Proposal (Butier)

All,

Here are the guidelines discussed in September.

David

From: Chris Berch

Sent: Wednesday, November 12, 2014 12:50 PM

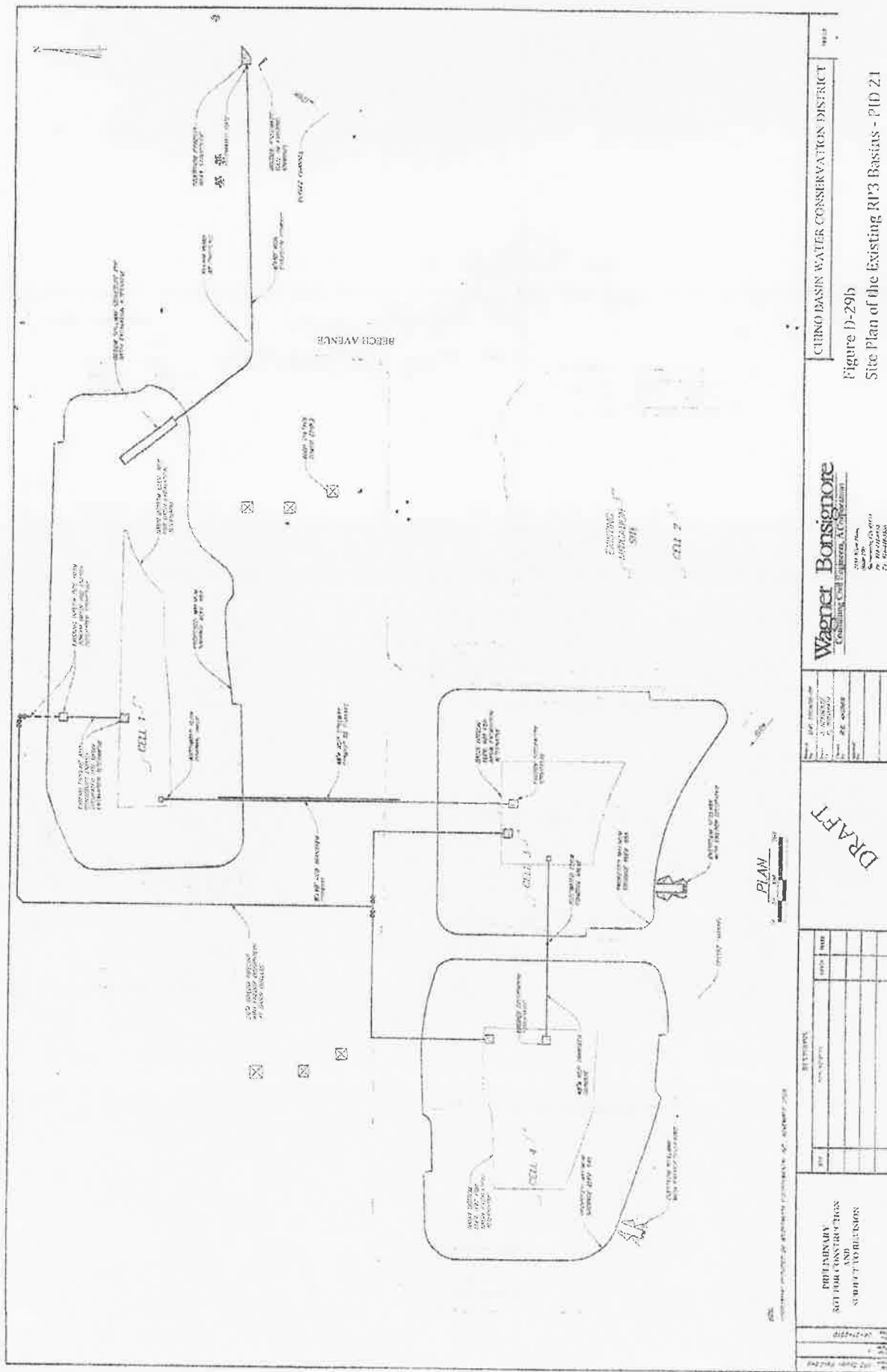
To: Casey Harris; Mark Butier Jr.; Dave Sorem - Mike Bubalo Construction Co (dave@bubalo.com); Majid Karim; David Mendez

Subject: RE: Current Status of the VE Proposal (Butier)

Dave,

Are we still meeting today? Unless I missed something, I have not seen the VE framework that we were going to review and provide feedback on.

Thanks,
Chris



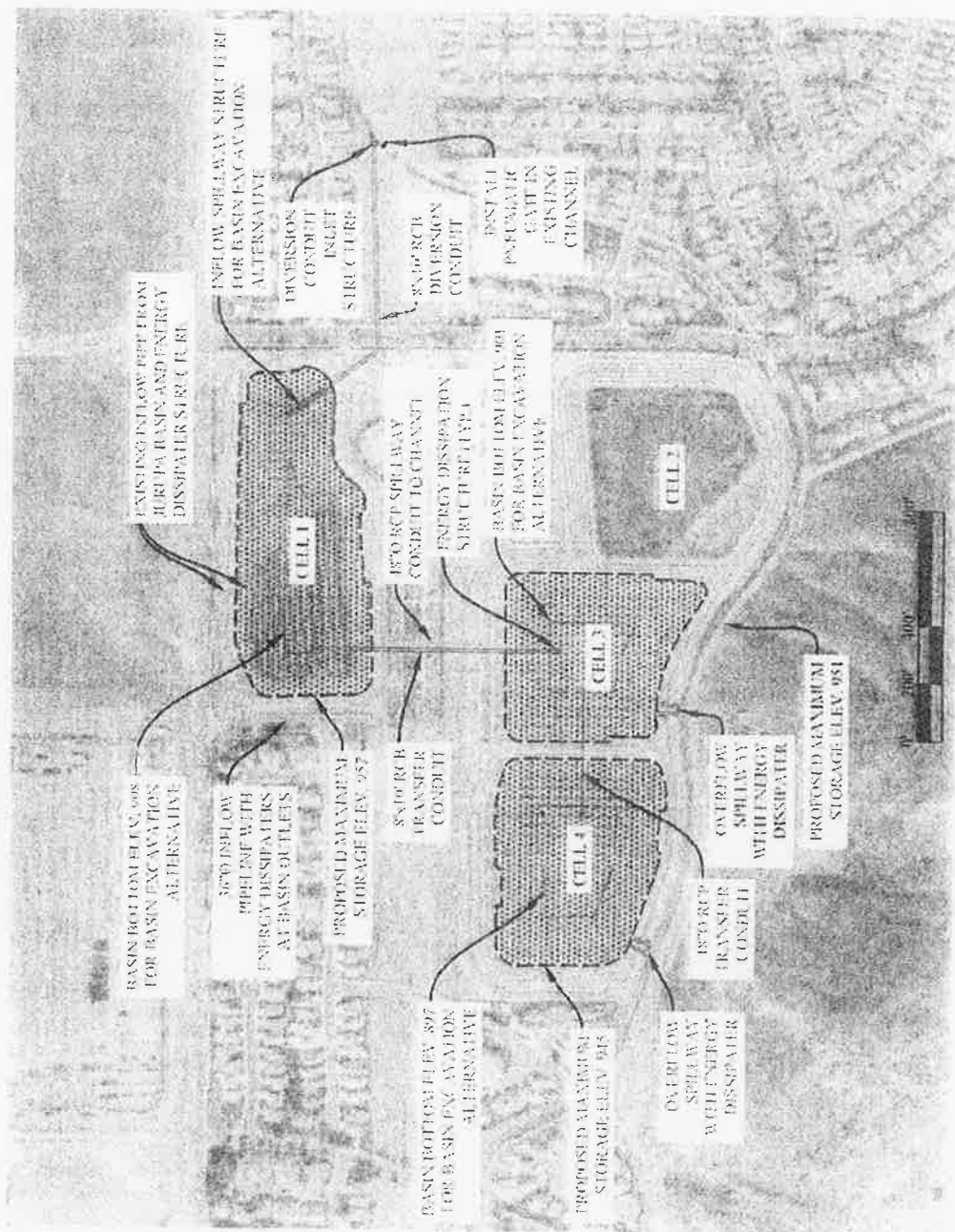
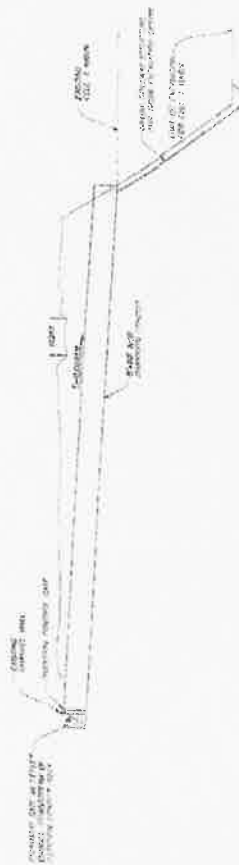


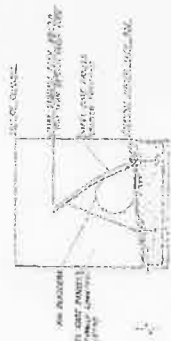
Figure D-29c

RP3 Basins Alternative Schematic- p10 21

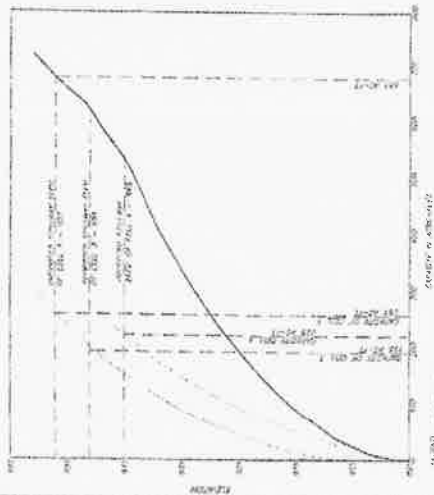
Source: 2010 RMPU



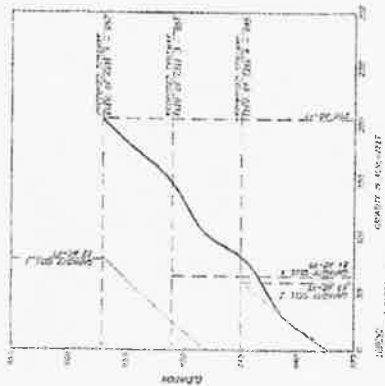
PROFILE OF DECLEZ CREEK DIVERSION CONDUIT



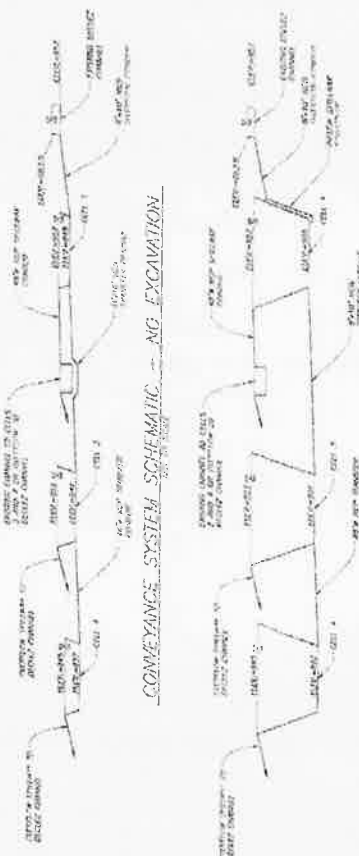
CONCEPTUAL DECLEZ CHANNEL GATE SECTION



CAPACITY CURVES (WITH BASIN EXCAVATION)



CAPACITY CURVES (NO BASIN EXCAVATION)



CONVEYANCE SYSTEM SCHEMATIC

REVISIONS		DATE	BY	CHKD
1	PRELIMINARY DESIGN	10/10/10	J. A. K.	
2	DESIGN	10/10/10	J. A. K.	
3	CONSTRUCTION	10/10/10	J. A. K.	

REVISIONS		DATE	BY	CHKD
1	PRELIMINARY DESIGN	10/10/10	J. A. K.	
2	DESIGN	10/10/10	J. A. K.	
3	CONSTRUCTION	10/10/10	J. A. K.	

REVISIONS		DATE	BY	CHKD
1	PRELIMINARY DESIGN	10/10/10	J. A. K.	
2	DESIGN	10/10/10	J. A. K.	
3	CONSTRUCTION	10/10/10	J. A. K.	

REVISIONS		DATE	BY	CHKD
1	PRELIMINARY DESIGN	10/10/10	J. A. K.	
2	DESIGN	10/10/10	J. A. K.	
3	CONSTRUCTION	10/10/10	J. A. K.	

REVISIONS		DATE	BY	CHKD
1	PRELIMINARY DESIGN	10/10/10	J. A. K.	
2	DESIGN	10/10/10	J. A. K.	
3	CONSTRUCTION	10/10/10	J. A. K.	

REVISIONS		DATE	BY	CHKD
1	PRELIMINARY DESIGN	10/10/10	J. A. K.	
2	DESIGN	10/10/10	J. A. K.	
3	CONSTRUCTION	10/10/10	J. A. K.	

REVISIONS		DATE	BY	CHKD
1	PRELIMINARY DESIGN	10/10/10	J. A. K.	
2	DESIGN	10/10/10	J. A. K.	
3	CONSTRUCTION	10/10/10	J. A. K.	

Wagner Bonsignore
Civil Engineer, A.C.E.C.

CHINO BASIN WATER CONSERVATION DISTRICT

Figure D-29d

RP3 Basins Internal Conveyance Details - PID 21

Source: 2010 RMP1

Brian Rickey

From: Casey Harris <charris@butler.com>
Sent: Thursday, November 13, 2014 2:25 PM
To: Brian Rickey - Mike Bubalo Construction Co. (brian@bubalo.com); Dave Sorem - Mike Bubalo Construction Co (dave@bubalo.com); anton@bubalo.com
Subject: FW: IEUA Wineville Seg B Pipeline Realignment
Attachments: 1235011001-VE-PRELIM-141110.pdf

This can also go under the City of Fontana or the FWC tab explaining that we are investigating the cost impact to the City of Fontana as a result of new connections for the FWC. See below:

From: Casey Harris
Sent: Thursday, November 13, 2014 10:26 AM
To: Josh Swift - Fontana Water Company (jmswift@fontanawater.com); Chuck Hays - City of Fontana (chays@fontana.org)
Cc: Dave Sorem - Mike Bubalo Construction Co (dave@bubalo.com); Adham Almasri
Subject: IEUA Wineville Seg B Pipeline Realignment

Good morning Josh,

Attached find the revised alignment drawings for the Wineville Segment B pipeline routing which diverges from the original plan to head north on Banana then east through the SCE utility easement. Would you please mark up the drawings showing your plans for connections to the pipeline. We previously received your communication of September 10th wherein it was related there would be only two customers to serve from the realignment, a park and a school and I would like to confirm. Would you also please relate whether this new alignment and your connections will result in additional costs to be passed on to the City of Fontana customers or result in a savings.

Thank you,

Casey L. Harris

Brian Rickey

From: Josh M. Swift <jmswift@fontanawater.com>
Sent: Wednesday, September 10, 2014 2:04 PM
To: Adham Almasri
Cc: Bryant Marroquin; Matt Y. Yucelen; David Mendez; Casey Harris; greg.watanabe@ghd.com
Subject: RE: RP-3 Site Visitgr

Good afternoon Adham,

Yesterday we reviewed the new alignment for potential recycled water customers ("Commercial / Industrial, Schools, Parks and Large Landscape") from Marlay and Banana along Edison easement to RP-3. Other than the park and school that are already identified there are no other recycled water users along the alignment. The alignment is primarily through residential neighborhoods with no Commercial or large landscape users. Any Commercial or large landscape users will have to be picked up throughout the distribution system to the south of the Edison easement.

Please contact me if you have any question.

Thank you,

From: Adham Almasri [mailto:aalmasri@jeua.org]
Sent: Wednesday, September 10, 2014 10:20 AM
To: Josh M. Swift
Cc: Bryant Marroquin; Matt Y. Yucelen; David Mendez; charris@butier.com; greg.watanabe@ghd.com
Subject: RE: RP-3 Site Visitgr

Good Morning Josh:

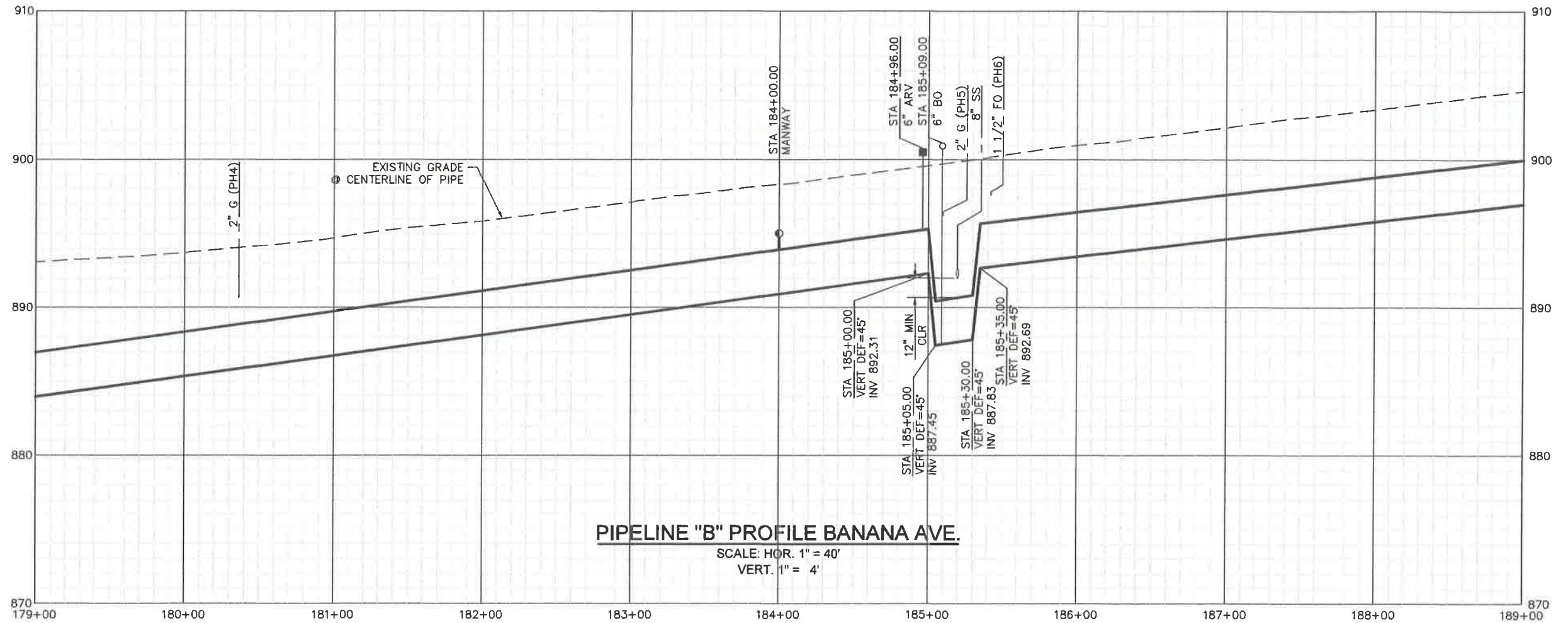
Wanted to follow up regarding the changes to the RW service connections. Has your Customer Service Specialist been able to highlight and provide the desired connections based on the revised alignment? Please let me know and it would be great to know when we should expect the data back.

Thanks a lot for your help on this.

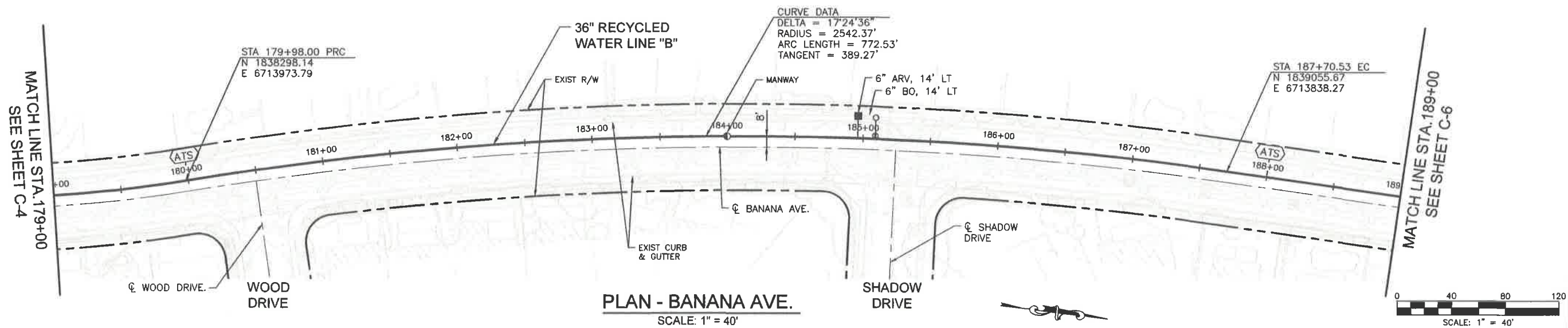
Adham Almasri



G:\LEGACYPROJECTS\12350 - INLAND EMPIRE UTILITIES AGENCY\12350-11-001 WINEVILLE PIPELINE EXTENSION\PROJECT\06-CAD\SHEETS\PROJ BIVE123501001-C-4 THRU C-14.DWG



PRELIMINARY - NOT FOR CONSTRUCTION



Designed	EA/MW	-							
Drawn	PS/SD	-							
Checked	MS	-							
	Date		REV. NO.	DATE	BY	APRVD	DESCRIPTION		

REVIEWED BY:

Project Manager for IEUA

Date:

SCALE
AS SHOWN

Bar Scale shown below is one
inch on original drawing. If
NOT one inch on this sheet,
adjust scales accordingly.
0" 1"



LOCATION
8075 Kimball Avenue
Chino, California 91710
Telephone (909) 953-1800

MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

WINEVILLE EXTENSION RECYCLED WATER PIPELINE
SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 179+00 TO 189+00

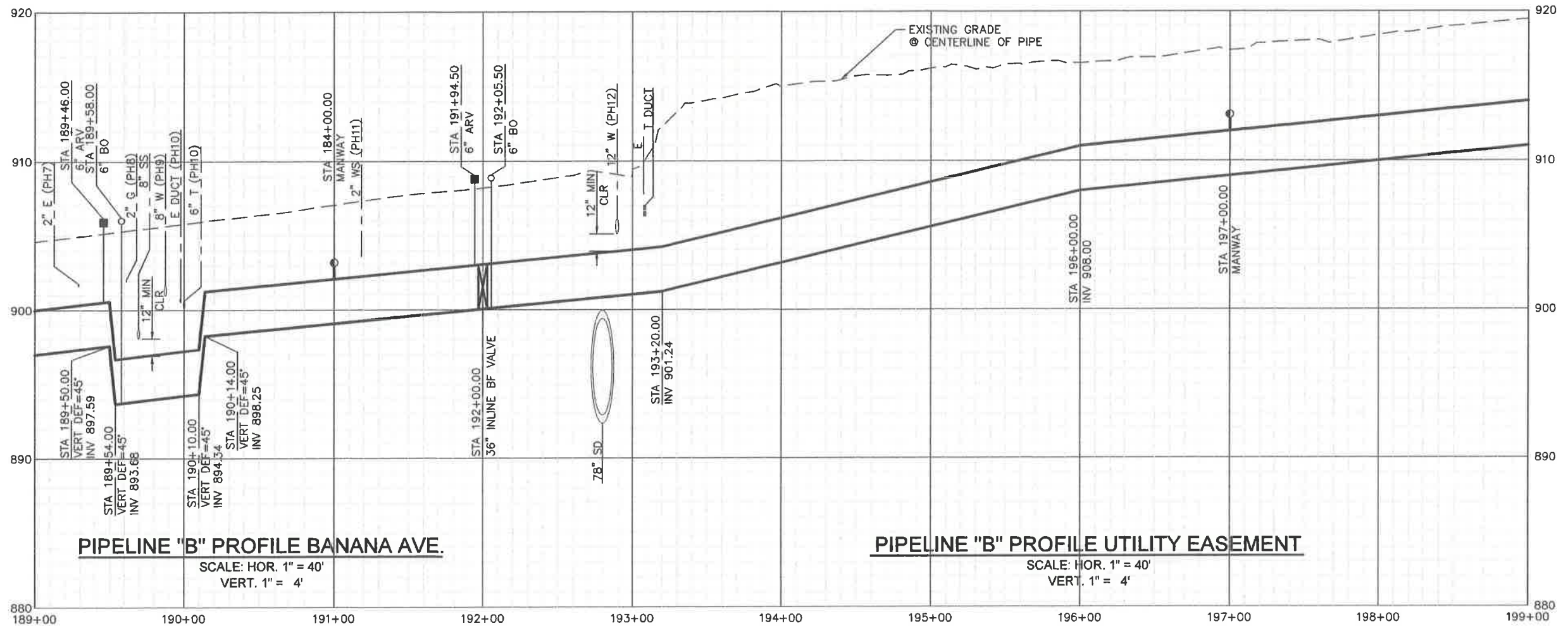
SHEET
C-5

SHEET NO.
10 OF 43

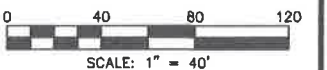
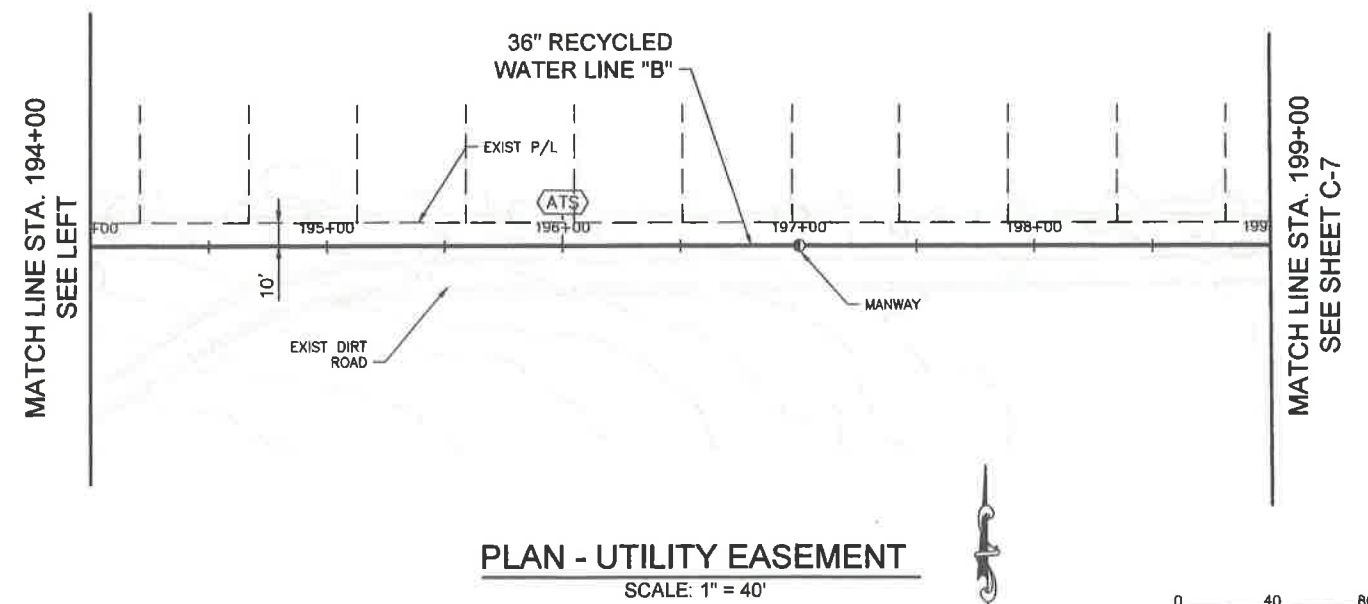
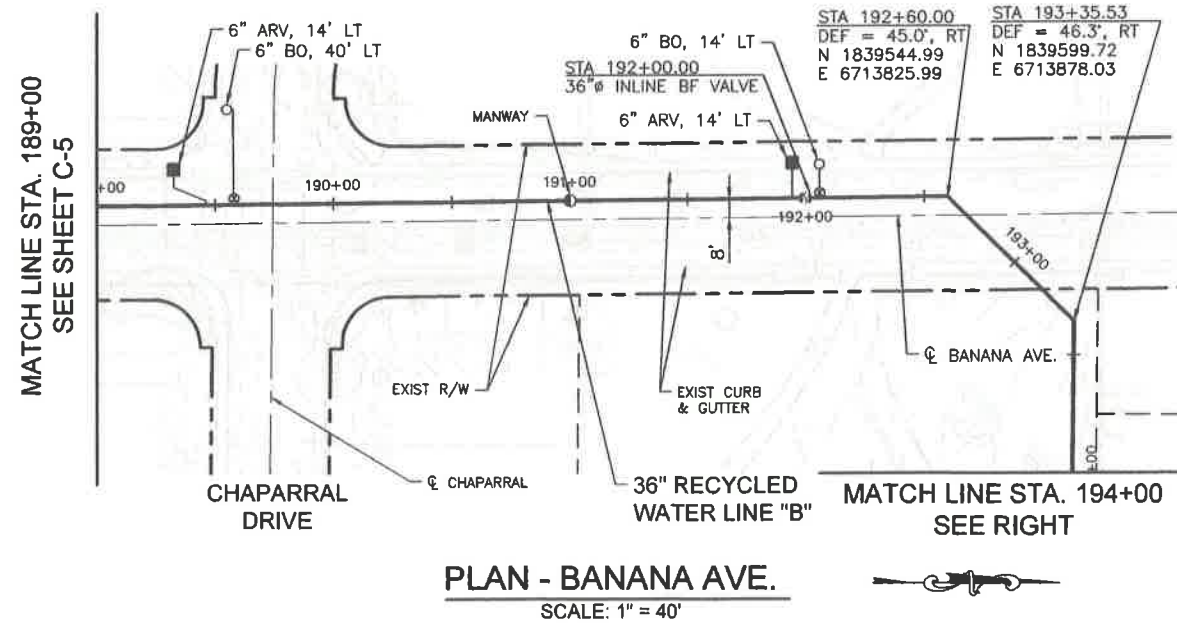
JOB NO.
EN13045.00

DRAWING NO.
D5153-009

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PRELIMINARY - NOT FOR CONSTRUCTION



GHD Inc.
19451 Scientific Way
Irvine, California 92618 USA
T 1 949 250 0501 F 1 949 250 0541
W www.ghd.com

Designed	<u>EA/MW</u>	<u>—</u>					
Drawn	<u>PS/SD</u>	<u>—</u>					
Checked	<u>MS</u>	<u>—</u>					
	Date		REV. NO.	DATE	BY	APRVD	DESCRIPTION

REVIEWED BY:

Project Manager for IEUA

Date

SCALE
AS SHOWN

Bar Scale shown below is one
inch on original drawing. If
NOT one inch on this sheet,
adjust scales accordingly.
0" 1"



LOCATION
6075 Kimball Avenue
Chino, California 91710
Telephone (909) 983-1800
MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

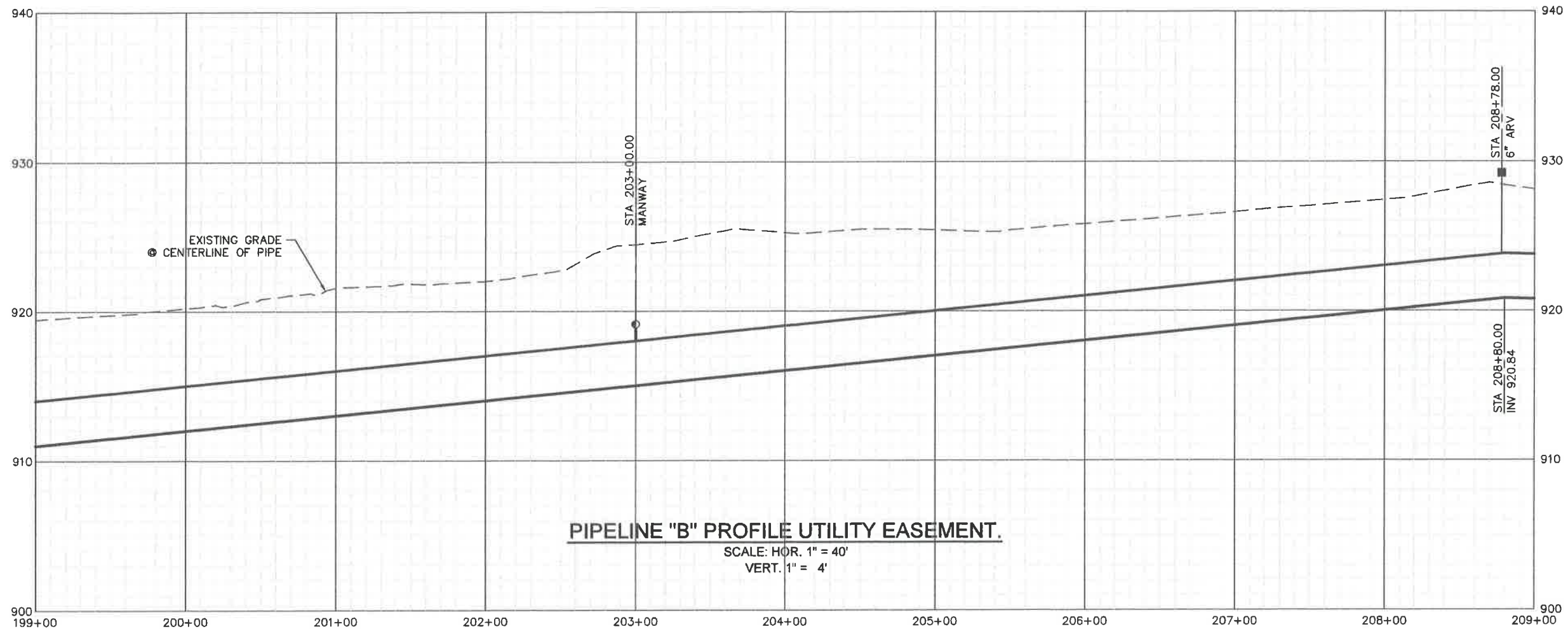
WINEVILLE EXTENSION RECYCLED WATER PIPELINE
SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 189+00 TO 199+00

SHEET
C-6

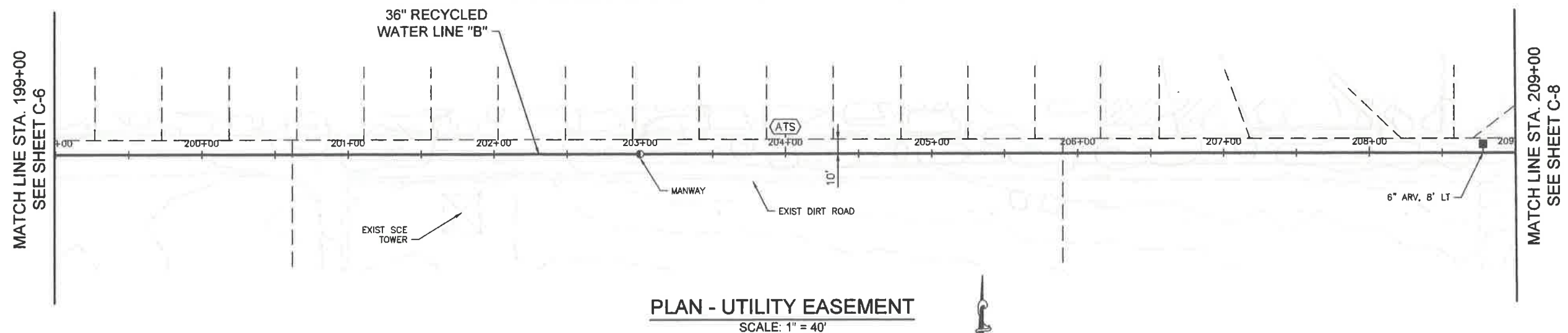
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11 OF 43

JOB NO.
EN13045.00
DRAWING NO.
D5153-009

G:\LEGACY\PROJECTS\12350 - INLAND EMPIRE UTILITIES AGENCY\12350-11-001 WINEVILLE PIPELINE EXTENSION PROJECT\06-CAD\SHEETS\PROJ BIVE\1235011001-C-4 THRU C-14.DWG



PRELIMINARY - NOT FOR CONSTRUCTION



GHD Inc.
16451 Scientific Way
Irvine, California 92618 USA
T 1 949 250 0501 F 1 949 250 0541
W www.ghd.com

Designed	EA/MW	-							
Drawn	PS/SD	-							
Checked	MS	-							
		Date							
REV. NO.	DATE	BY	APRVD	DESCRIPTION					

REVIEWED BY:

Project Manager for IEUA

Date

SCALE

AS SHOWN

Bar Scale shown below is one inch on original drawing. If NOT one inch on this sheet, adjust scales accordingly.

0" 1"



LOCATION
6075 Kimball Avenue
Chino, California 91710
Telephone (909) 993-1600

MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

WINEVILLE EXTENSION RECYCLED WATER PIPELINE
SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 199+00 TO 209+00

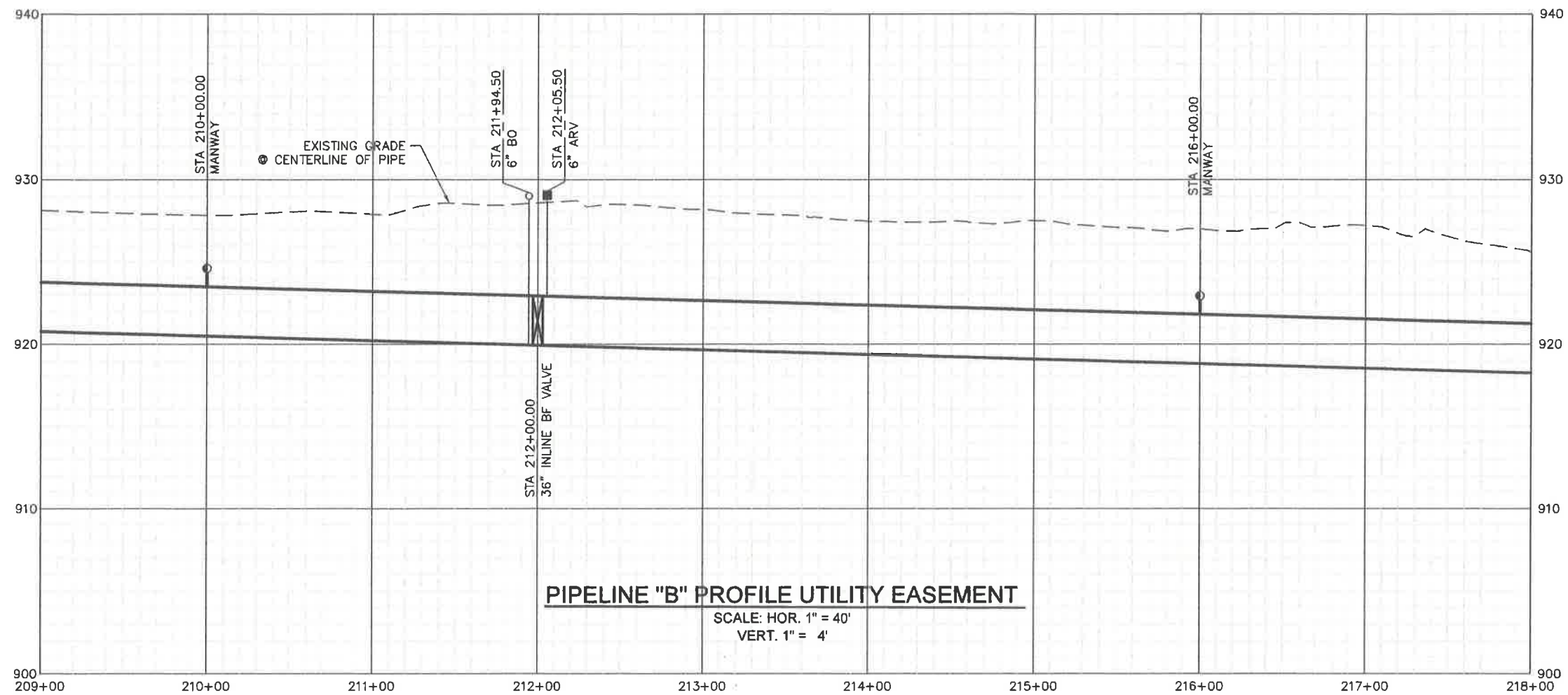
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12 OF 43

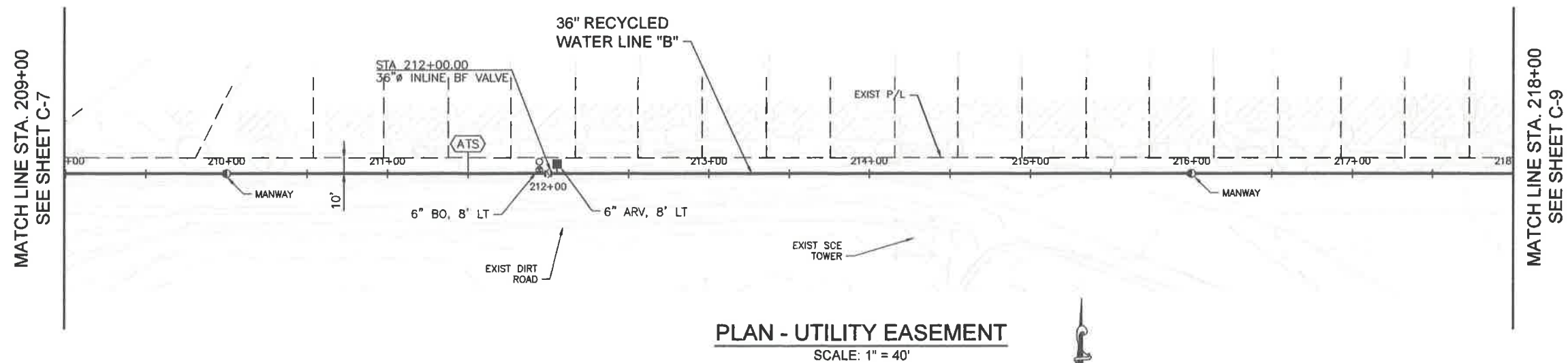
JOB NO.
EN13045.00

DRAWING NO.
D5153-009

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T 1 949 250 0501 F 1 949 250 0541
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Drawn	PS/SD								
Checked	MS								
REV. NO.	DATE	BY	APRVD	DESCRIPTION					

REVIEWED BY: _____ Date: _____
Project Manager for IEUA

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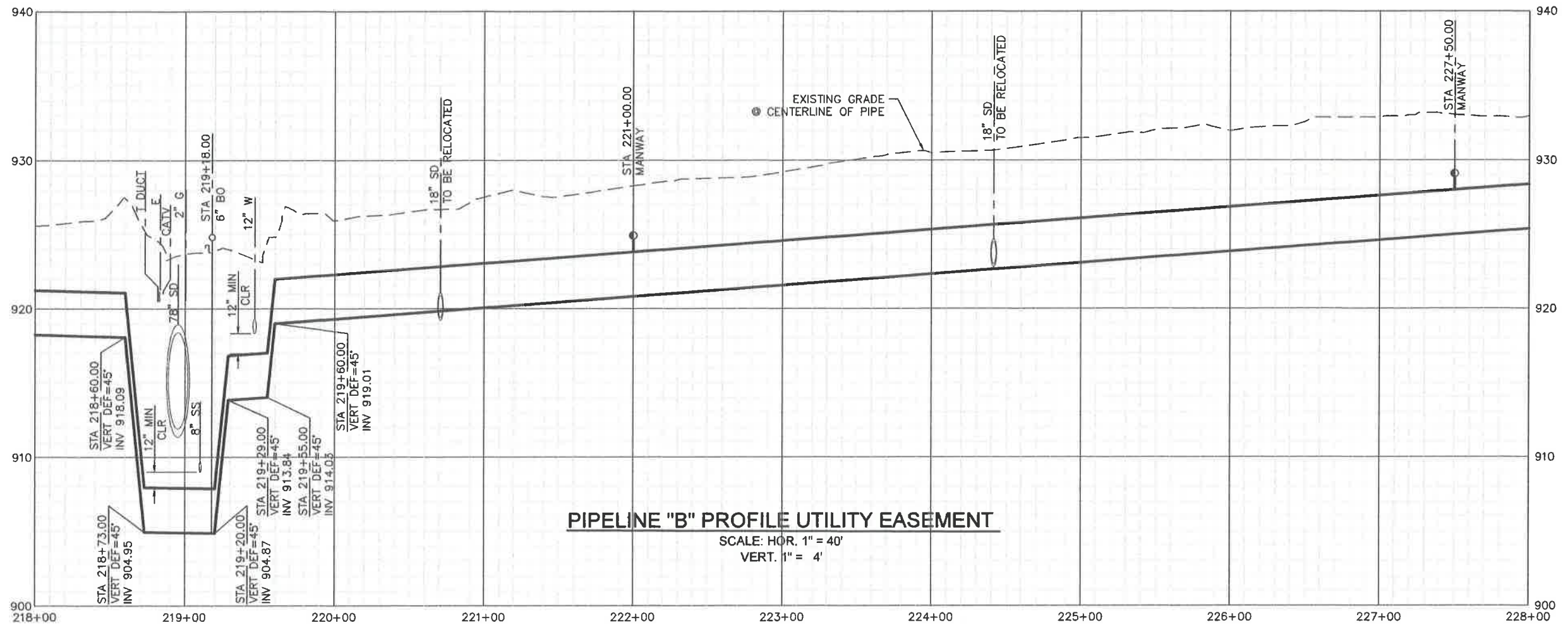


LOCATION
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Chino, California 91710
Telephone (909) 993-1600
MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

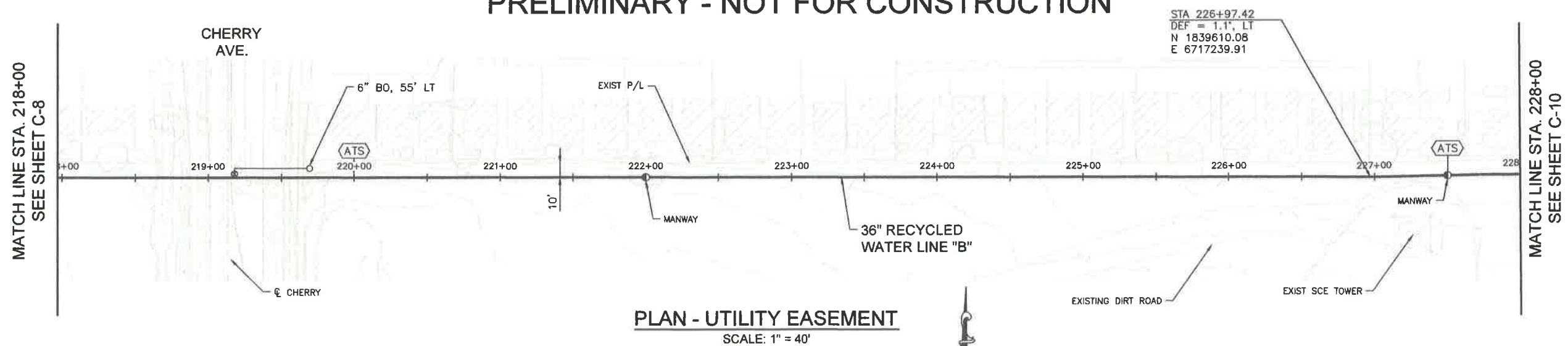
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SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 209+00 TO 218+00

SHEET
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SHEET NO.
13 OF 43
JOB NO.
EN13045.00
DRAWING NO.
DS153-009

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16451 Scientific Way
Irvine, California 92618 USA
T 1 949 250 0501 F 1 949 250 0541
W www.ghd.com

Designed EA/MW
Drawn PS/SD
Checked MS
Date

REV. NO.	DATE	BY	APRVD	DESCRIPTION

REVIEWED BY:

Project Manager for IEUA

Date

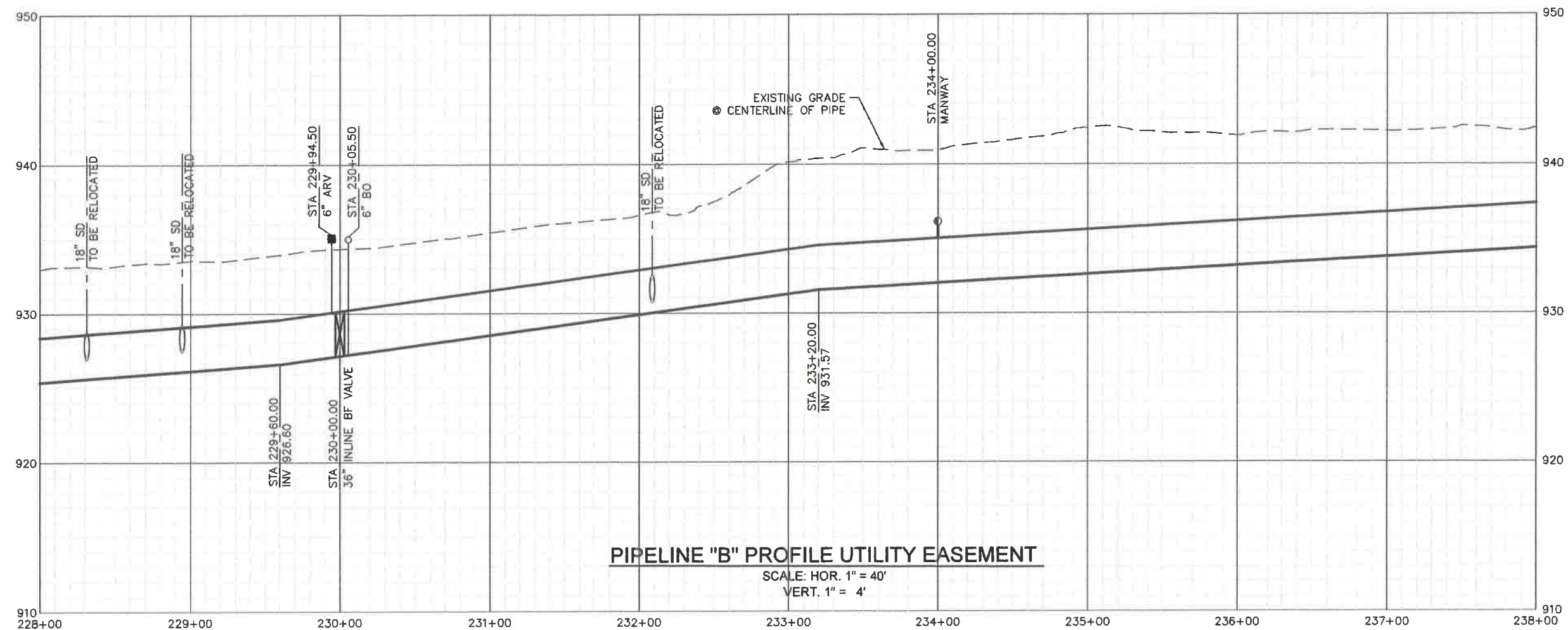
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inch on original drawing. If
NOT one inch on this sheet,
adjust scales accordingly.
0" 1"



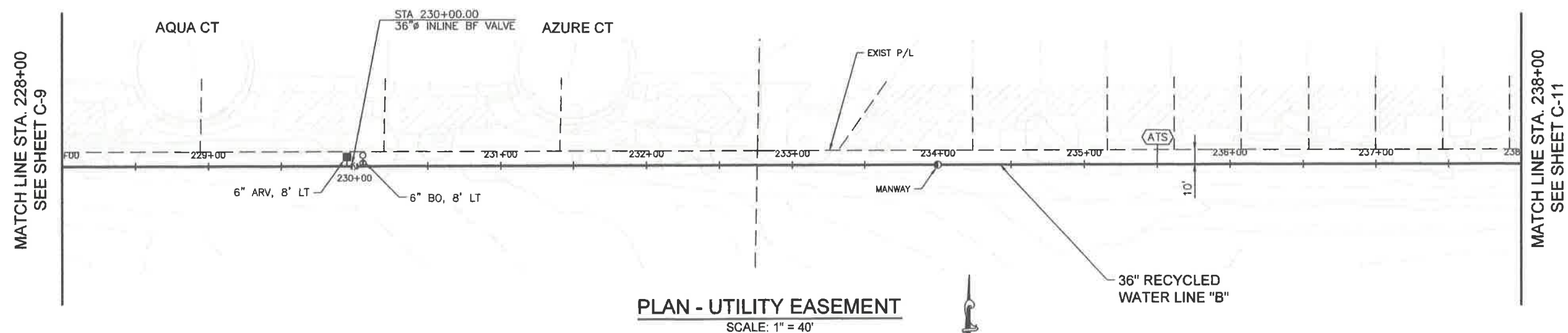
LOCATION
6075 Kimball Avenue
Chino, California 91710
Telephone (909) 993-1600
MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

WINEVILLE EXTENSION RECYCLED WATER PIPELINE
SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 218+00 TO 228+00

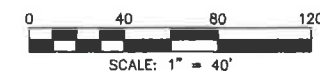
SHEET
C-9
SHEET NO.
14 OF 43
JOB NO.
EN13045.00
DRAWING NO.
D5153-009



PRELIMINARY - NOT FOR CONSTRUCTION



PLAN - UTILITY EASEMENT
SCALE: 1" = 40'




 16451 Scientific Way
Irvine, California 92618 USA
T 1 949 250 0501 F 1 949 250 0541
W www.ghd.com

Designed	EA/MW	—					
Drawn	PS/SD	—					
Checked	MS	—					
	Date		REV. NO.	DATE	BY	APRVD	DESCRIPTION

REVIEWED BY: _____ Date _____
Project Manager for IEUA

SCALE
AS SHOWN

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0"  1"



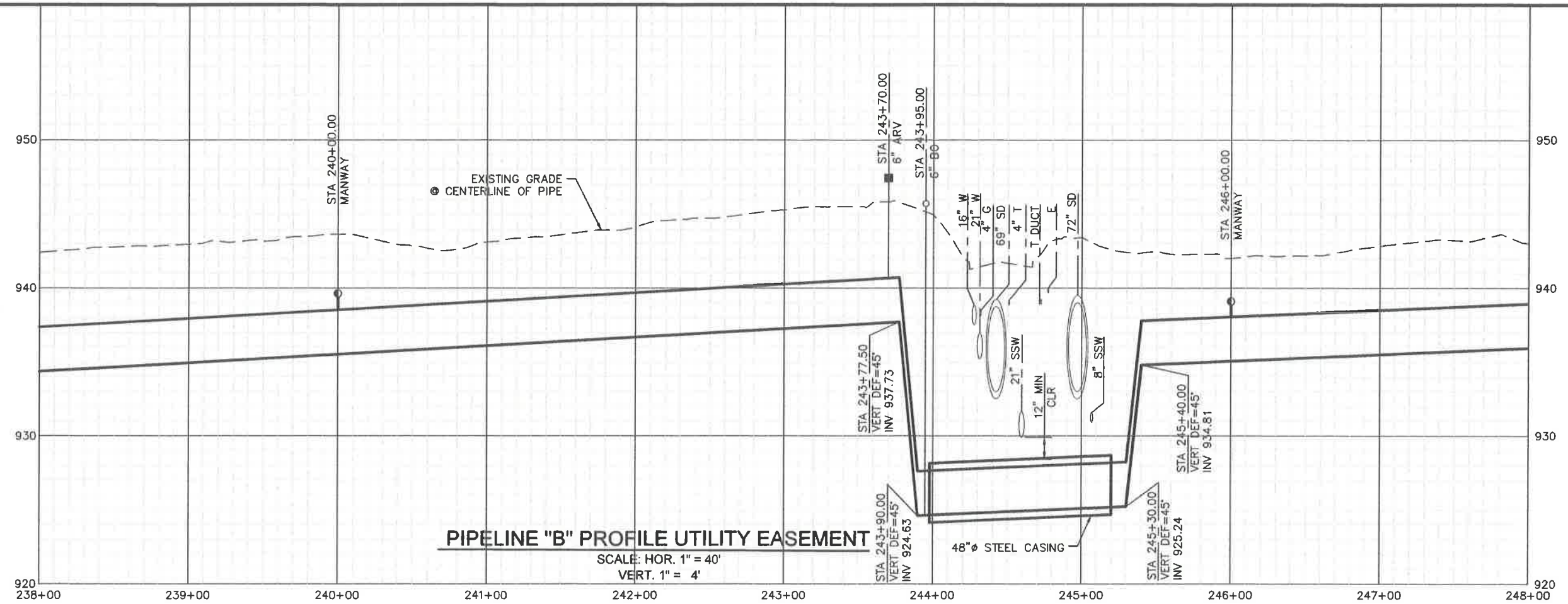
LOCATION
8075 Kimbark Avenue
Chino, California 91710
Telephone (909) 993-1600

MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

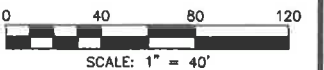
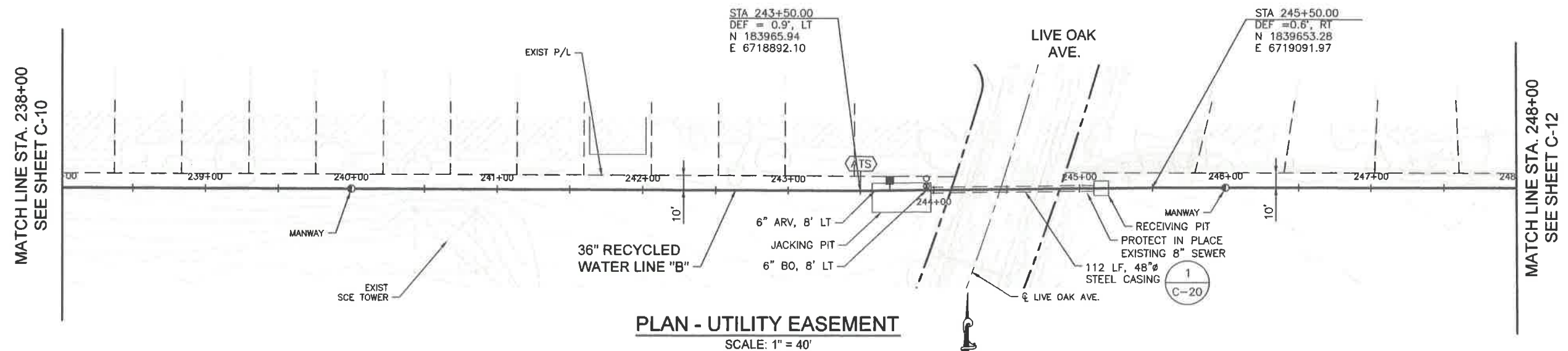
WINEVILLE EXTENSION RECYCLED WATER PIPELINE
SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 228+00 TO 238+00

SHEET	C-10
SHEET NO.	15 OF 43
JOB NO.	EN13045.00
DRAWING NO.	D5153-009

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PRELIMINARY - NOT FOR CONSTRUCTION



GHD Inc.
16451 Scientific Way
Irvine, California 92618 USA
T 1 949 250 0501 F 1 949 250 0541
W www.ghd.com

Designed	EA/MW								
Drawn	PS/SD								
Checked	MS								
		REV. NO.	DATE	BY	APRVD	DESCRIPTION			

REVIEWED BY:

Project Manager for IEUA

Date

SCALE
AS SHOWN

Bar Scale shown below is one
inch on original drawing. If
NOT one inch on this sheet,
adjust scales accordingly.

0" 1"



LOCATION
6075 Kimball Avenue
Chino, California 91710
Telephone (909) 993-1600

MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

WINEVILLE EXTENSION RECYCLED WATER PIPELINE
SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 238+00 TO 248+00

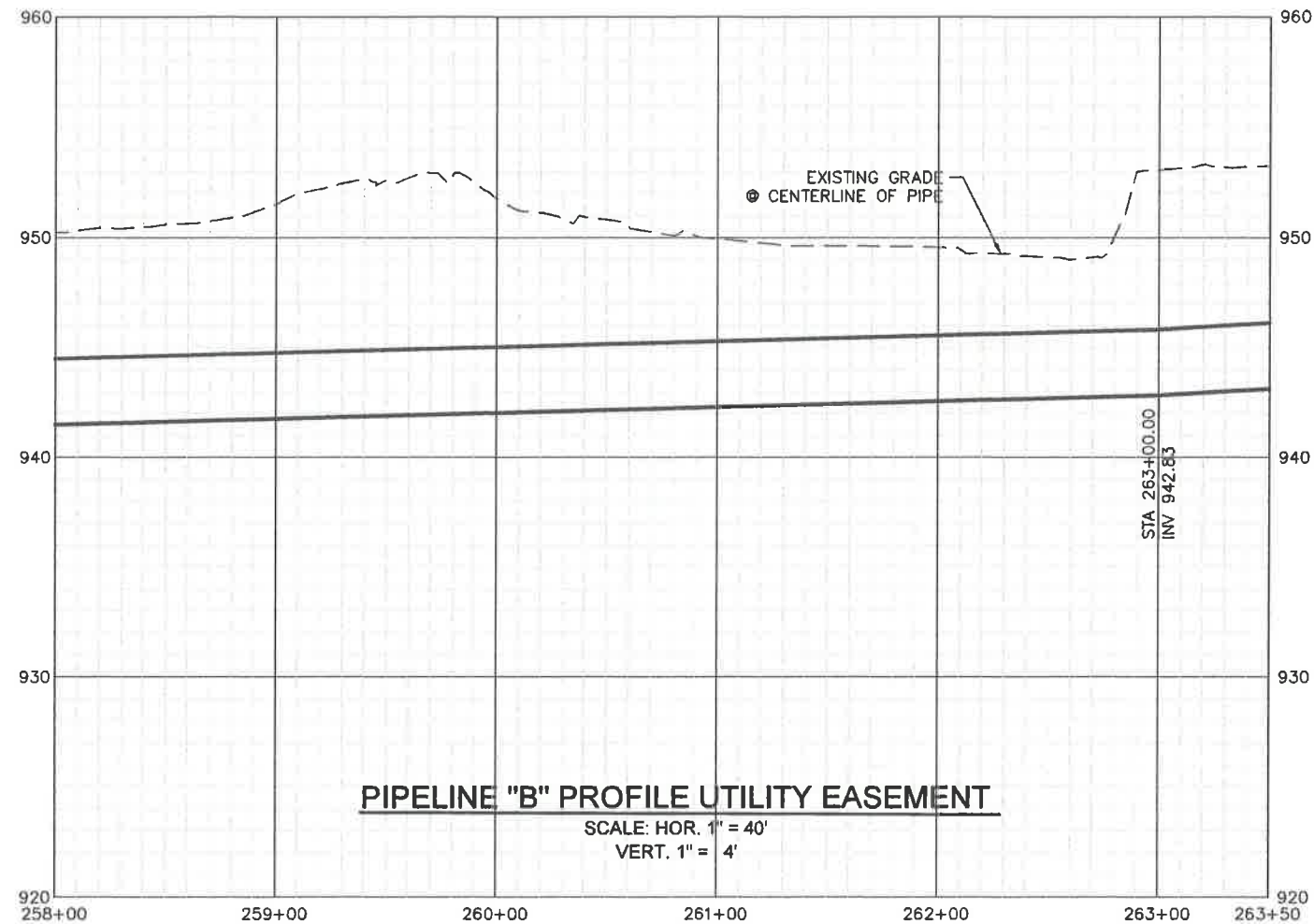
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SHEET NO.
16 OF 43

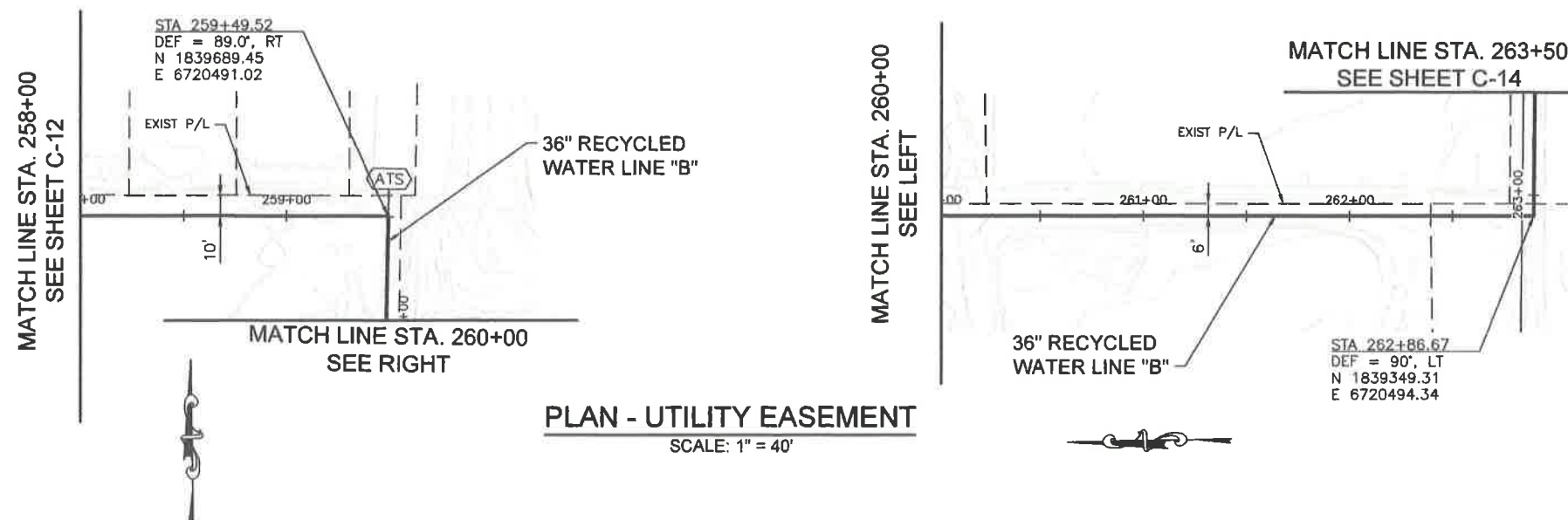
JOB NO.
EN13045.00

DRAWING NO.
D5153-009

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PRELIMINARY - NOT FOR CONSTRUCTION



GHD Inc.
16451 Scientific Way
Irvine, California 92618 USA
T 1 949 250 0501 F 1 949 250 0541
W www.ghd.com

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Drawn	PS/SD	-					
Checked	MS	-					
	Date		REV. NO.	DATE	BY	APRVD	DESCRIPTION

REVIEWED BY:

Project Manager for IEUA

Date

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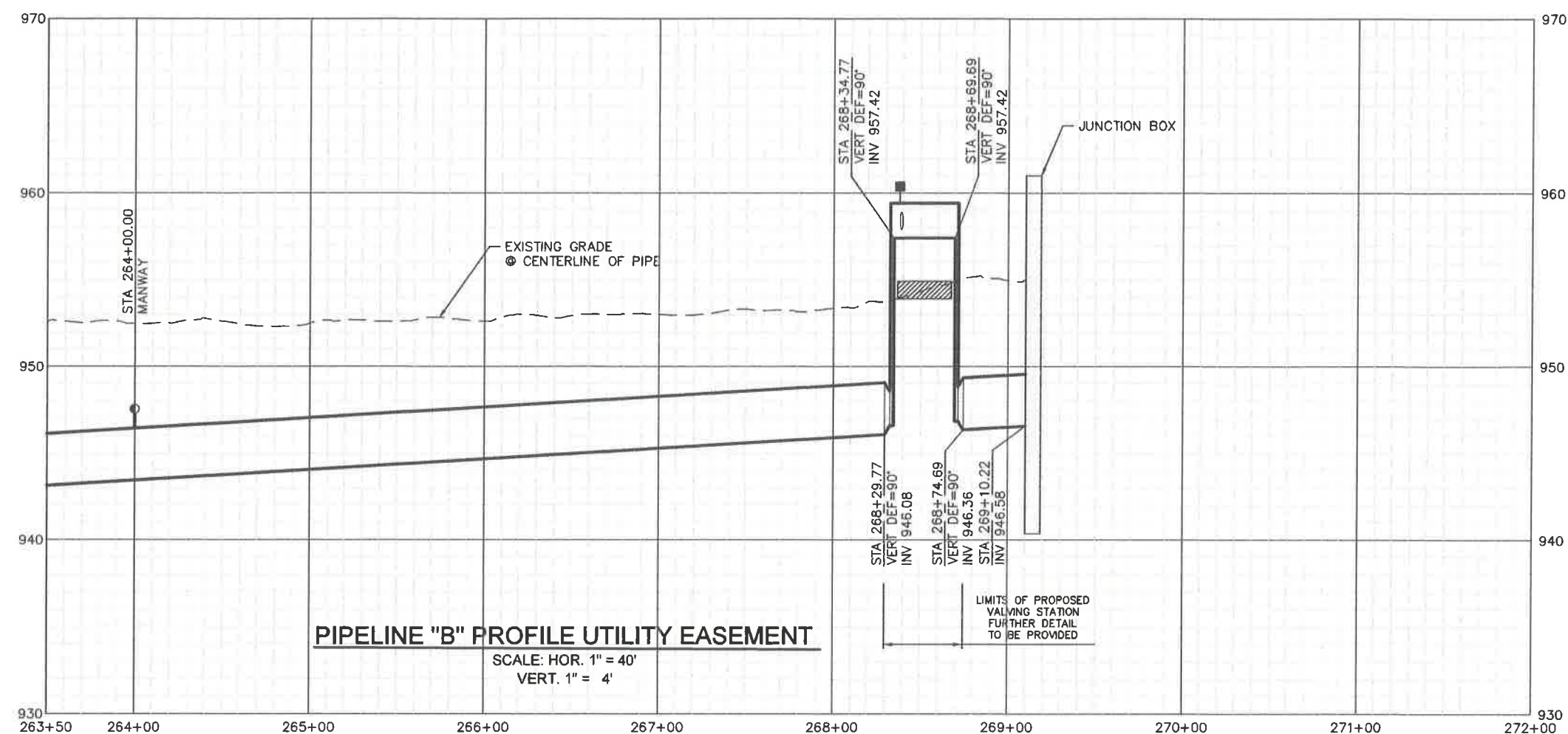


LOCATION
6075 Kimbell Avenue
Chino, California 91710
Telephone (909) 963-1600
MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

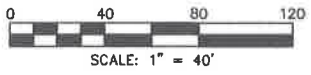
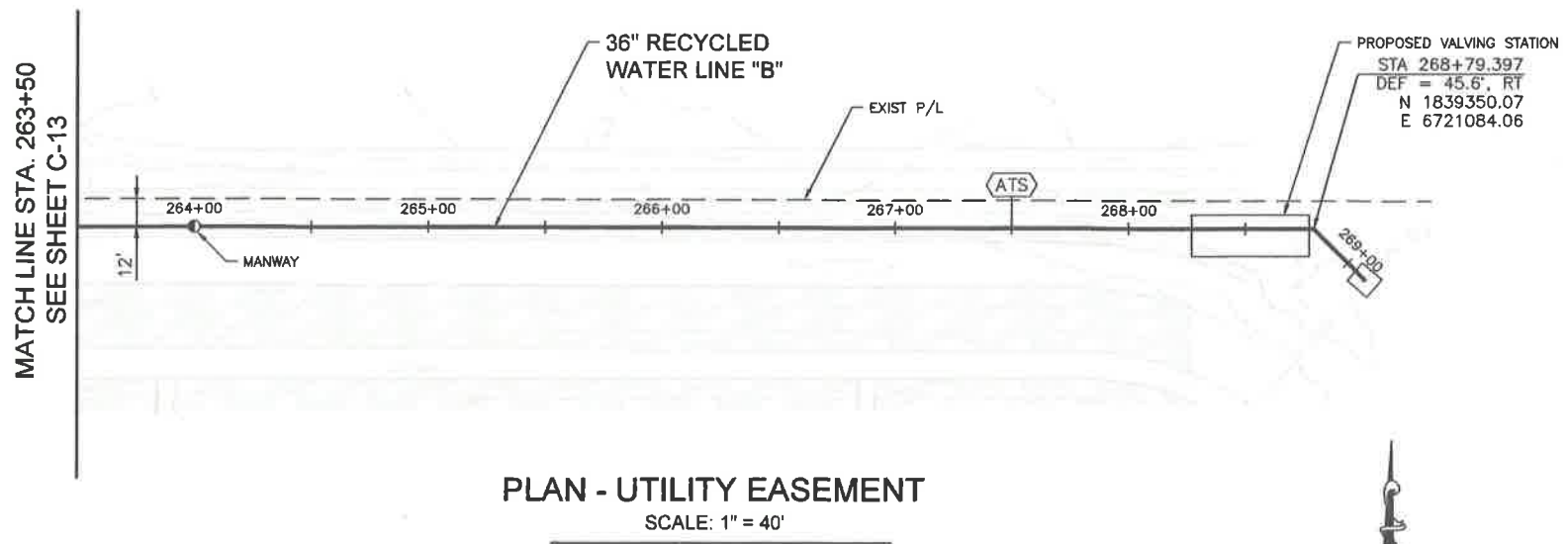
WINEVILLE EXTENSION RECYCLED WATER PIPELINE
SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 258+00 TO 268+00

SHEET
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SHEET NO.
18 OF 43
JOB NO.
EN13045.00
DRAWING NO.
D5153-009

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PRELIMINARY - NOT FOR CONSTRUCTION



18451 Scientific Way
Irvine, California 92618 USA
T 1 949 250 0501 F 1 949 250 0541
W www.ghd.com

GHD Inc.

Designed	EA/MW	—					
Drawn	PS/SD	—					
Checked	MS	—					
	Date						

REVIEWED BY: _____ Date: _____

Project Manager for IEUA

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0" 1"

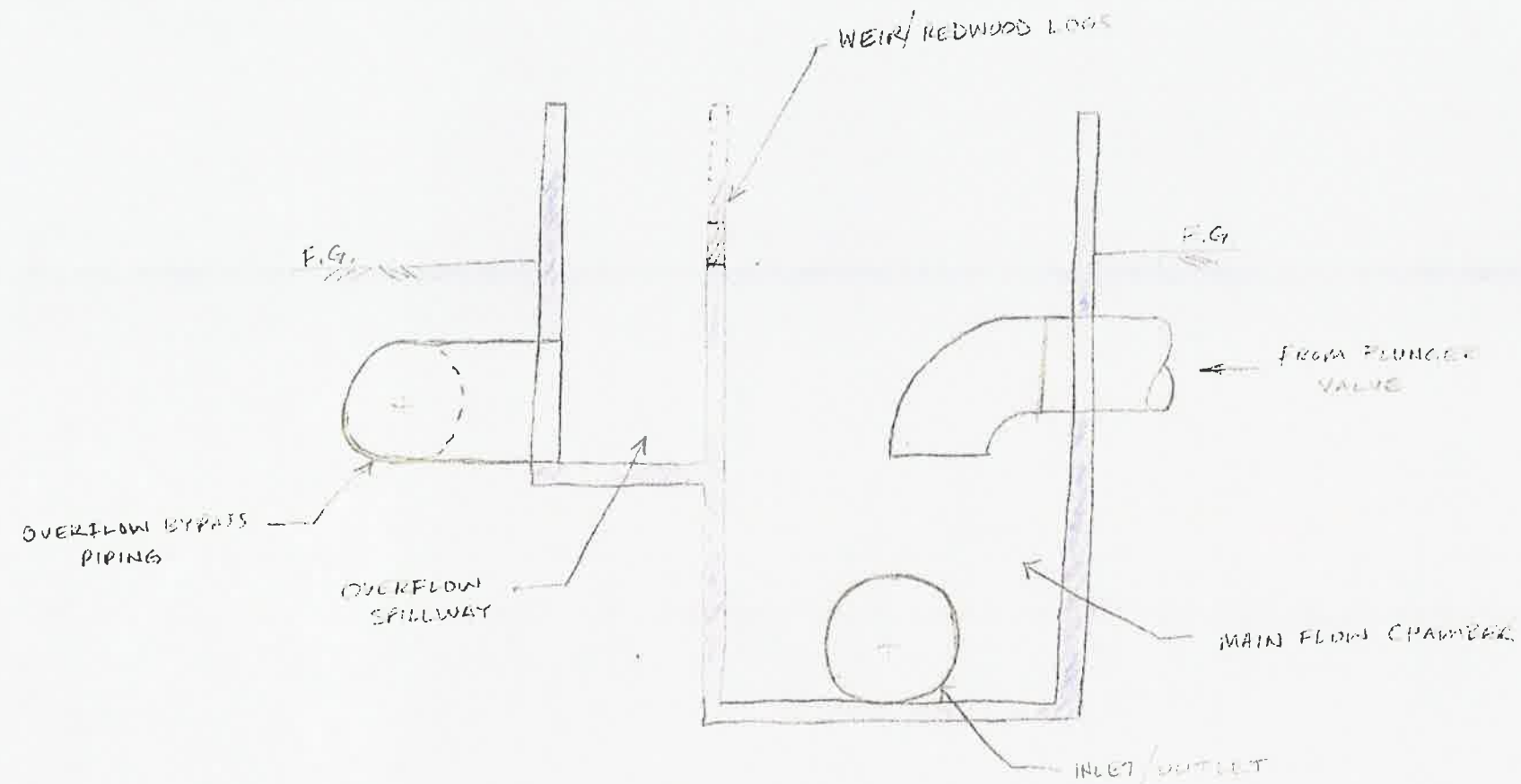


LOCATION
6075 Kimball Avenue
Chino, California 91710
Telephone (909) 993-1800

MAILING ADDRESS
Post Office Box 9020
Chino Hills, California 91709

WINEVILLE EXTENSION RECYCLED WATER PIPELINE
SEGMENT B
PROJECT No. EN13045
PLAN AND PROFILE
STA. 268+00 TO 269+10±

SHEET	C-14
SHEET NO.	19 OF 43
JOB NO.	EN13045.00
DRAWING NO.	D5153-009



PRELIMINARY - NOT FOR CONSTRUCTION

**SAMPLE
EASEMENT AGREEMENT**

Recording Requested by:
Inland Empire Utilities Agency

When Recorded Please return to:
Inland Empire Utilities Agency
6075 Kimball Ave.
Chino, CA 91708

No fee required per Government
Code Section 6103

Deed transfer tax: \$ None:
Exempt under Sec. 1192 of
Revenue Taxation Code

(Space above this line is for Recorder's use only)

GRANT OF EASEMENT

For a valuable consideration, in the amount of ~~One Dollar (\$1.00)~~, receipt of which is hereby acknowledged, ~~MIKE BUBALO CONSTRUCTION COMPANY~~, Grantor, hereby grants to INLAND EMPIRE UTILITIES AGENCY, a Municipal Water District, Grantee, its successors in interest and/or assigns, a perpetual easement and right-of-way, over, under and across including the right to enter upon the property herein described at any time that it may see fit to inspect, maintain, repair, replace, and operate underground reclaimed water pipelines for the purpose of conveying recycled water through and under the property herein described, together with the right to excavate and fill ditches and trenches for the location and maintenance, repair, replacement and operation of said recycled water pipelines and the further right to remove trees, bushes, undergrowth, crops and other obstructions interfering with the maintenance, repair, replacement and operation of said pipelines.

Except in emergencies, the Grantee shall notify the overlying property owner within a reasonable time prior to performing any work within the easement including removing trees, bushes, undergrowth, crops or other obstructions. If the Grantee determines that an emergency requiring immediate corrective action exists, the Grantee may proceed immediately with the corrective action and notify the overlying property owner as soon as reasonably possible. The Grantee shall replace any improvements removed by the Grantee for maintenance of the recycled water line which have been installed with the Grantee's approval. The Grantee shall return the property to the "like" condition prior to the maintenance or repair of the recycled water pipeline.

The Grantor, its lessees, assigns and successors will not allow any change in surface or subsurface conditions including but not limited to placing fences, trees, walls, buildings, structures earth fills, excavations, construction of loading surcharge on or over the Grantee's easement or hinder the Grantee's access to said facilities without approval of the Grantee. The Grantee will not unreasonably withhold or delay approval of changes in

surface conditions if those changes will not interfere with the maintenance, repair, replacement, operating integrity or structural integrity of said pipelines.

If this easement becomes no longer needed for either current or future use in the Grantee's recycled water distribution system, the Grantee will quitclaim this easement to the overlying property owner.

Grantee shall save and hold Grantor harmless from any and all liability for personal injury or property damage resulting from, or in any way connected with, any use or activity undertaken or permitted by Grantee, or any of its agents, employees, contractors or assigns, unless due to the willful and sole negligence of Grantor.

The property subject to this Easement (the "Easement Property") is located in the County of San Bernardino, City of Fontana, and is listed in the Office of the County Recorder of San Bernardino County, State of California, the northerly twenty feet of Lot 32 of Tract Number 12064-1, as per map recorded in Book 167, pages 29 through 49, inclusive of maps, more particularly described in Exhibits "A and B" attached to this Deed and such descriptions by this reference are made a part hereof as though set forth at length.

This Easement herein granted shall be appurtenant to, and run with the title to the real property encumbered thereby, and shall obligate and inure to the benefit of, the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, Grantor and Grantee have executed this Grant as of this _____ day of _____, 2014.

GRANTOR:

Mike Bubalo Construction Company →

By: _____
Name: _____
Title: _____

GRANTEE:

Inland Empire Utilities Agency
a Municipal Water District*

By: _____
Name: _____
Title: _____

NOTARY ACKNOWLEDGEMENTS ATTACHED

EXHIBIT "A"

PERMANENT RECYCLED WATER LINE EASEMENT

AN EASEMENT FOR RECYCLED WATER LINE IN THE CITY OF FONTANA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

THE NORTHERLY TWENTY FEET OF LOT 32 OF TRACT NO. 12064-1, IN THE CITY OF FONTANA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 167, PAGES 29 THROUGH 49, INCLUSIVE OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

AREA = 26,216.31 SQ. FT., (0.602 AC.) MORE OR LESS

ALL AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND BY REFERENCE MADE A PART HEREOF.

THIS LEGAL DESCRIPTION WAS PREPARED BY ME OR UNDER MY DIRECTION.



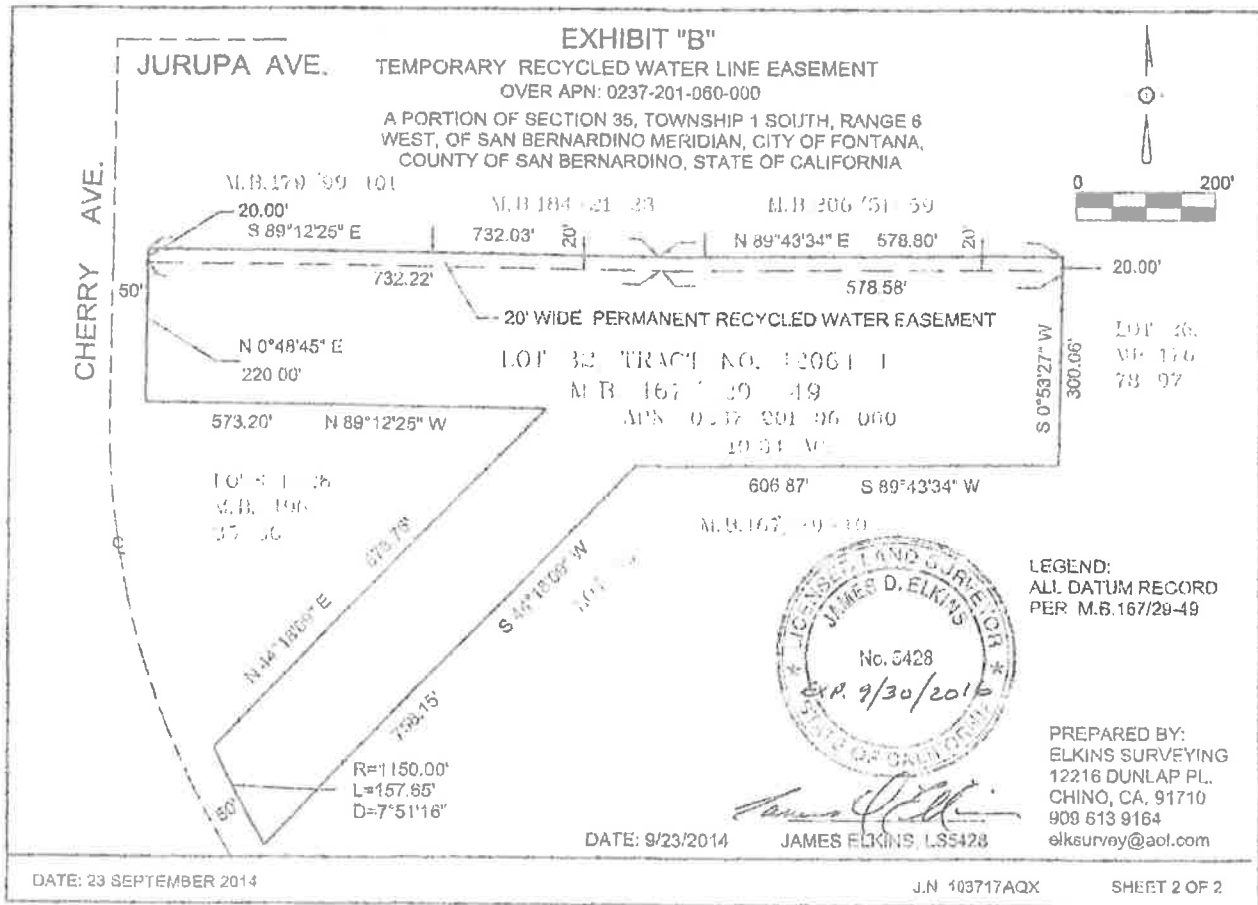
PREPARED BY :
ELKINS SURVEYING
12216 DUNLAP PL.
CHINO, CA. 91710
909 613 9164
elksurvey@aol.com

J.N.103717AQX

DATE: 23 September 2014

SHEET 1 OF 2


JAMES ELKINS, L.S.5428



Traverse PC.

FontEas.

C:\USERS\ELKINS\PC\DOCUMENTS\SURVEYS\14\MBCCPCL4.TRV

[[Traverse: 20' Easement 26216.31SqFt 0.602Acres]]

Point	Type	Bearing	Horiz Dist	Radius	Arc Length	Northing	Easting	Description
204						6212.6127	4313.8729	PC
Gap								
203		S89°43'34"W	578.80			6209.8459	3735.0795	PC
Gap								
202		N89°12'25"W	732.03			6219.9778	3003.1197	PC
216		S0°48'46"W	20.00			6199.9800	3002.8360	PC
217		S89°12'25"E	732.22			6189.8452	3734.9890	EAS
218		N89°43'34"E	578.58			6192.6110	4313.5619	EAS
204		N0°53'27"E	20.00			6212.6127	4313.8729	PC
219		N0°53'27"E	0.00			6212.6127	4313.8729	

Environmental & Archeological Research

The Inland Empire Utilities Agency (IEUA) commissioned a report prepared by Tom Dodson and Associates to investigate the condition of the parcels for compliance with State and Federal regulations for environmental and cultural resources. The study found no adverse impacts on the parcels.

State Water Resources Control Board (State Water Board)
Clean Water State Revolving Fund Program

Evaluation Form for Environmental Review and Federal Coordination

CWSRF No.: _____
Applicant Name: Inland Empire Utilities Agency
Date: _____
Project Title: Wineville Recycled Water Pipeline Project

1. **Federal Endangered Species Act (ESA), Section 7:**

Does the project involve any direct effects from construction activities, or indirect effects such as growth inducement that may affect federally listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur onsite, in the surrounding area, or in the service area?

- **Required documents: Attach project-level biological surveys, evaluations analyzing the project's direct and indirect effects on special-status species, and an up-to-date species list (from the U.S. Fish and Wildlife Service and the California Natural Diversity Database) for the project area.**

☒ No. Discuss why the project will not impact any federally listed special status species:

A biological resources survey and habitat evaluation was performed by Jericho Systems Inc. (the report summarizing findings is attached as Appendix 1 to this document). Based on the site specific survey of the Option A pipeline alignment, no substantial biological resource impacts, including no adverse impacts to any federal or state listed species, will occur from implementing this alternative alignment for the Wineville Recycled Water Pipeline Project.

☐ Yes. Provide information on federally listed species that could potentially be affected by this project and any proposed avoidance and compensation measures so that the State Water Board can initiate informal/formal consultation with the applicable federally designated agency. Document any previous ESA consultations that may have occurred with the project. Include any comments below:

2. **Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat:**

Does the project involve any direct effects from construction activities, or indirect effects such as growth inducement that may adversely affect essential fish habitats?

☒ No. Discuss why the project will not impact essential fish habitat:

The project area has no surface water resources. Therefore, the proposed project has no potential to impact such fisheries resources.

☐ Yes. Provide information on essential fish habitat that could potentially be affected by this project and any proposed avoidance and compensation measures. Document any consultations with the National Marine Fisheries Service that may have occurred with the project. Include any comments below:

3. **National Historic Preservation Act, Section 106:**

Identify the Area of Potential Effects (APE), including construction, staging areas, and depth of any excavation. (Note that the APE is three dimensional and includes all areas that may be affected by the project, including the surface area and extending below ground to the depth of any project excavations.)

- **Required documents: cultural Resources Assessment** prepared by a qualified researcher that meets the Secretary of the Interior's Professional Qualifications Standards (www.cr.nps.gov/local-law/arch_stnds_9.htm). **Current records search** with maps showing all sites and surveys drawn in relation to the project area, and records of Native **American consultation**. Include any comments below:

The alignment of the alternative pipeline alignment (Option A) is proposed within a highly disturbed transmission line easement located within a fully developed suburban setting. A cultural resources study performed by CRM TECH, refer to Appendix 2 to this document, concluded that no historic resources exist within the Option A alignment. Further, the cultural resources study found that the project area has a relatively low potential for buried archaeological resources. However, IEUA will implement cultural resources mitigation measure 4.12-2 (management for accidentally exposed cultural resources) if the pipeline is installed within this alternative pipeline alignment.

4. **Clean Air Act:**

Identify Air Basin Name: South Coast Air Basin

Name of the Local Air District for Project Area: South Coast Air Quality Management District

Is the project subject to a State Implementation Plan (SIP) conformity determination?

☐ No. The project is in an attainment or unclassified area for all federal criteria pollutants.

☒ Yes. The project is in a nonattainment area or attainment area subject to maintenance plans for a federal criteria pollutants. Include information to indicate the nonattainment designation (e.g. moderate, serious, severe or extreme), if applicable. If estimated emissions (below) are above the federal *de minimis* levels, but the project is sized to meet only the needs of current population projections that are used in the approved SIP for air quality, then quantitatively indicate how the proposed capacity increase was calculated using population projections.

The Wineville Pipeline project was subject to a previous conformity evaluation that was approved by the State Water Board. The construction activities associated with the proposed project will emit air pollutant emissions, both fugitive dust and equipment emissions. There will be no emissions during operations. Because the Option A pipeline alignment eliminates 2,400 feet of pipeline construction emissions, implementation of this alternative alignment will reduce total overall air pollutant emissions relative to the approved pipeline alignment. The following findings were reached in the previous air quality evaluation: Unmitigated emissions of criteria pollutants from construction and operation do not exceed South Coast Air Quality Management District significance thresholds; construction emissions do not exceed Local Significance Thresholds; construction and operational emissions do not exceed the *de minimis* thresholds in 40 CFR 93.153; and the project emissions do not exceed the tentative threshold of 10,000 tons per year of greenhouse gas emissions. In terms of air pollutant emission reductions, the use of recycled water, which this project facilitates, provides a substantial reduction in emissions as a result of offsetting emissions from transporting imported water to the Chino Basin from northern California and/or from the Colorado River.

- If you checked "Yes" above, provide the estimate project construction and operational air emissions (in tons per year) in the chart below, and attach supporting calculations.

Not Applicable

- Also, attach any air quality studies that may have been done for the project.

Pollutant	Federal Status (Attainment, Nonattainment, Maintenance or Unclassified)	Nonattainment Rates (i.e., moderate, serious, severe or extreme)	Threshold of Significance for the Project Air Basin (if applicable)	Construction Emissions (Tons/Year)	Operation Emissions (Tons/Year)
Ozone (O3)					
Carbon Monoxide (CO)					
Oxides of Nitrogen (NOx)					
Reactive Organic Gases (ROG)					
Volatile Organic Compounds (VOC)					
Lead (Pb)					
Particulate Matter less than 2.5 microns in diameter (PM2.5)					
Particulate Matter less than 10 microns in diameter (PM10)					
Sulfur Dioxide (SO2)					

5. Coastal Zone Management Act:

Is any portion of the project site located within the coastal zone?

☒ No. The project is not within the coastal zone.

The proposed project is located more than 30 miles from the Pacific Ocean coast. This project has no potential to conflict with the Coastal Zone Management Act.

☐ Yes. Describe the project location with respect to coastal areas and the status of the coastal zone permit, and provide a copy of the coastal zone permit or coastal exemption:

6. Coastal Barriers Resources Act:

Will the project impact or be located within or near the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near-shore waters? Note that since there is currently no Coastal Barrier Resources System in California, projects located in California are not expected to impact the Coastal Barrier Resources System in other states. If there is a special circumstance in which the project may impact a Coastal Barrier Resource System, indicate your reasoning below.

☒ No. The project will not impact or be located within or near the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near-shore waters.

The proposed project is located more than 30 miles from the Pacific Ocean coast. This project has no potential to conflict with the Coastal Barriers Resources Act.

☐ Yes. Describe the project location with respect to the Coastal Barrier Resources System, and the status of any consultation with the appropriate Coastal Zone management agency and the U.S. Fish and Wildlife Service:

7. Farmland Protection Policy Act:

Is any portion of the project site located on important farmland?

☒ No. The project will not impact farmland.

The proposed alternative pipeline alignment follows an existing SCE transmission line alignment and no farming has occurred within this alignment for many decades. Thus, this project will not impact any farmland.

☐ Yes. Include information on the acreage that would be converted from important farmland to other uses. Indicate if any portion of the project site is under a Williamson Act Contract and specify the amount of acreage affected:

8. Floodplain Management:

Is any portion of the project site located within a 100-year floodplain as depicted on a floodplain map or otherwise designated by the Federal Emergency Management Agency?

- **Required documents: Attach a floodplain map.**

☒ No. Provide a description of the project location with respect to streams and potential floodplains:

According to the FEMA Flood Insurance Rate Map Panels, the proposed Option A pipeline alignment is located outside of areas of potential flood hazard. The FEMA FIRM Panel that encompasses the Option A alignment (0607C68665H) is not published because it does not contain any 100-year flood hazard areas. Further, due to the fact that the proposed project does not include human occupancy structures and the proposed pipelines will be placed below the ground surface, no adverse flood-related impacts are forecast to occur due to project implementation.

☐ Yes. Describe the floodplain, and include a floodplain/wetlands assessment. Describe any measures and/or project design modifications that would be implemented to minimize or avoid project impacts:

9. Migratory Bird Treaty Act:

Will the project affect protected migratory birds that are known, or have a potential, to occur onsite, in the surrounding area, or in the service area?

☒ No. Provide an explanation below:

The alternative pipeline alignment contains a maintained landscape to minimize conflicts with the existing electricity transmission line facilities. Although the potential for any migratory or native birds to nest within this alternative alignment is low, the pipeline will be installed outside of the typical bird nesting season in southern California, which typically extends from March 1 to September 1 of a given year (with some exceptions for raptors, which can not occur within the project area due to lack of bird nesting habitat).

☐ Yes. Discuss the impacts (such as noise and vibration impacts, modifications of habitat) to migratory birds that may be directly or indirectly affected by the project and mitigation measures to reduce or eliminate these impacts. Include a list of all migratory birds that could occur where the project is located:

10. **Protection of Wetlands:**

Does any portion of the project boundaries contain areas that should be evaluated for wetland delineation or require a permit from the U.S. Army Corps of Engineers?

☒ No. Provide the basis for such determination:

The proposed pipeline alignment does not contain any wetlands, riparian areas or waters of the United States or State of California. Please refer to Appendix 1 of this document. Thus, no potential exists to adversely impact any wetlands or similar protected areas.

☐ Yes. Describe the impacts to wetlands, potential wetland areas, and other surface waters, and the avoidance, minimization, and mitigation measures to reduce such impacts. Provide the status of the permit and information on permit requirements:

11. **Wild and Scenic Rivers Act:**

Identify watershed where the project is located: Santa Ana River Basin

Is any portion of the project located within a wild and scenic river?

☒ No. The project is not located near a wild and scenic river.

The proposed project does not contain any channels or waters of the United States or State of California. There are no wild or scenic river designations within the Santa Ana River Basin which encompasses the proposed pipeline alignment. Thus, the proposed project cannot adversely impact and wild or scenic river resources.

☐ Yes. Identify the wild and scenic river watershed and project location relative to the affected wild and scenic river:

12. **Safe Drinking Water Act, Sole Source Aquifer Protection:**

Is the project located in an area designated by the U.S. Environmental Protection Agency, Region 9, as a Sole Source Aquifer?

☒ No. The project is not within the boundaries of a sole source aquifer.

There are no Sole Source Aquifers located within the Santa Ana River watershed; thus, the proposed project cannot adversely impact any area designated as such by the EPA.

☐ Yes. Contact USEPA, Region 9 staff to consult and identify the sole source aquifer (e.g., Santa Margarita Aquifer, Scott's Valley, and Fresno County Aquifer, the Campo/Cottonwood Creek Aquifer or the Ocotillo-Coyote Wells Aquifer) that will be impacted:

13. Environmental Justice:

Does the project involve an activity that is likely to be of particular interest to or have particular impact upon minority, low-income, or indigenous populations, or tribes?

☒ No. Selecting "No" means that this action is not likely to be of any particular interest to or have an impact on these populations or tribes. Explain.

The proposed project will not directly impact any specific segment of southern California's population. Indirectly, the provision of additional water (recycled water) to offset overall water demand within southern California and the IEUA service area specifically is a benefit to all population and income segments in the region.

☐ Yes. If you answer yes, please check at least one of the boxes and provide a brief explanation below:

- ☐ The project is likely to impact the health of these populations.
- ☐ The project is likely to impact the environmental conditions of these populations.
- ☐ The project is likely to present an opportunity to address an existing disproportionate impact of these populations.
- ☐ The project is likely to result in the collection of information or data that could be used to assess potential impacts on the health or environmental conditions of these populations.
- ☐ The project is likely to affect the availability of information to these populations.
- ☐ Other reasons, describe: _____

APPENDIX 1



September 1, 2014

Tom Dodson, President
Tom Dodson & Associates
2150 N. Arrowhead Avenue
San Bernardino, Ca 92405

SUBJECT: Delhi Sands Flower-Loving Fly Suitability Assessment for the Wineville Segment "B" Alternative Alignments Located in the City of Fontana, San Bernardino County, California.

Introduction

This report contains the findings of a habitat suitability assessment for the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) (DSF), a federally endangered species, for the Wineville Segment "B" Alternative Alignments Project (project site or site). The habitat suitability assessment was conducted by Jericho Systems, Inc. Ecologist Shay Lawrey on August 15, 2014 with a follow-on detailed assessment conducted by biologist Travis J. McGill August 25, 2014. The purpose of the assessment was to identify any sensitive species and to determine the quality of DSF habitat within the proposed Project boundaries. Portions of the project site have been mapped by the United States Geological Survey (USGS) Natural Resources Conservation Service Soil Survey as having Delhi Soils. Since Delhi Sand soils are wind deposited (aeolian) the boundaries established by USGS are not exact and change over time. As part of the DSF suitability assessment, a general habitat assessment was conducted to characterize existing site conditions and to assess the probability of occurrence of sensitive plant and wildlife species that could pose a constraint to development. Special attention was given to the suitability of the habitat onsite to support burrowing owl (*Athene cunicularia*), as well as other sensitive species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) and other electronic databases as potentially occurring in the vicinity of the project site.

Background

It has been generally acknowledged that DSF occur in Delhi sands, particularly clean dune formations composed of aeolian sands. Conversely, soils and sands deposited by fluvial processes from the surrounding alluvial fans do not support DSF. These alluvial soils are composed of course sands, cobble and gravel (Tujunga soils) or course sands, silts and clays (Cienega soils). In this part of San Bernardino County the separation of soil types, Delhi sand and Cienega or Tujunga soils, has been lost due to mixing and cross contamination from years of agricultural activities and other man-made disturbances.

Depending on the extent of mixing and contamination, some areas formally mapped in 1970 as Delhi Sands no longer have the potential to support DSF populations. Conversely, some areas formally mapped as Cienega soils may now have Delhi Sands and potential to support DSF. Six DSF experts (Ken Osborne, Greg Ballmen, Rudy Matoni, Karen Cleary-Rose, Alison Anderson

and Tom McGill) used this criterion, the relative abundance of clean Delhi Sands verses the amount of Cienba or other alluvial soils, to rate the suitability of the habitat to support DSF (Michael Brandman Associates, 2003). Soils high in gravel and alluvial materials, or high in fine materials such as silts and clays, were rated low, while soils that appear to be high in aeolian deposited sands were rated high. This qualitative assessment of DSF habitat was further refined by considering the relative degree of soil compaction. Alluvial soils have a tendency to solidify to a hard surface pavement, while aeolian soils are easier to penetrate and provide good substrate for DSF.

Although it has been common to attribute the presence of four common plant species buckwheat (*Eriogonum fasciculatum*), croton (*Croton californicus*), deerweed (*Acmispon glaber*), and telegraph weed (*Heterotheca grandiflora*) as indicators of habitat suitability, for the assessment, vegetation composition was not given much weight in making this habitat evaluation. These dominant plant species, and plant species composition of habitats, may not be directly relevant to larval development (due to likely predatory or parasitic habitat of DSF larvae) (Osborne, et al. 2003). The known immature life histories of the nine asiloid fly families, including that to which the DSF is classified, are primarily predatory and/or parasitic on other invertebrate species (mainly insects) and the presence or absence of plant species appears not to be relevant to the life history of these flies.

Land with suitable DSF habitat include only those areas with open, undisturbed Delhi Series soils that have not been permanently altered by residential, commercial, or industrial development, or other human actions. Areas known to contain Delhi Sands and/or to be occupied by DSF have been divided by United States Fish and Wildlife Service (USFWS) into three recovery units (Colton, Jurupa, and Ontario Recovery Units (USFWS, 1997)). These recovery units are defined as large geographic areas based on geographic proximity, similarity of habitat, and potential genetic exchange. Within these three recovery units, are areas that have been previously protected by conservation easements:

- Colton: Eight sites have been permanently protected in the Colton recovery unit:
- Jurupa: Approximately 21 ha (52-acres) of DSF habitat have been protected for this population along the Jurupa Hills. Approximately 12 ha (30-aces) are protected under a conservation easement within Riverside County ("I-15/Galena" Biological Opinion; FWS-WRIV-774). An additional 9 ha (22-acres) will be placed under a conservation easement and managed in San Bernardino County as a result of interagency consultation between the USFWS and the U. S. Army Corps of Engineers (Corps) ("Fontana Business Center" Biological Opinion; FWS-SB-1788.9), in accordance with section 7 of the Endangered Species Act.
- Ontario: In 2000, 4 ha (10-acres) of DSF habitat near the intersection of Greystone and Milliken Avenues in the City of Ontario, San Bernardino County, were acquired for conservation and an additional 1.2 ha (3-acres) of contiguous habitat was avoided but not permanently conserved. At that time, these properties were surrounded by undeveloped land with some characteristics of DSF habitat, and the USFWS anticipated that a larger DSF reserve would be created that could sustain a robust DSF population. However, most of the surrounding property has subsequently been developed for commercial or industrial uses, and it is unlikely that the existing population can be sustained over the long term.

The project site is located within the Ontario Recovery Unit, outside the areas protected under the conservation easements. The Ontario Recovery Unit includes all areas of Delhi Sands soils within the cities of Rancho Cucamonga, Ontario and parts of Fontana. In the USFWS five-year review of the DSF Recovery Plan (USFWS, 2008), the USFWS acknowledge that one area had

been identified as supporting DSF within the Ontario Recovery Unit, a 10-acre site near the intersection of Greystone and Milliken Avenues in the City of Ontario. Further, it is likely that there are no longer any existing populations of DSF within the Ontario Recovery Unit. Given the lack existing populations of DSF within the Ontario Recovery Unit and, in particular, the ongoing build-out within this recovery unit, this area is no longer considered sustainable DSF habitat.

Project Location

The project site is generally located north of State Route 60, south of Interstate 10, east of Interstate 15, and west of Sierra Avenue in the City of Fontana, San Bernardino County, California. The project site is located on the Fontana quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Sections 34, 35, and 36 of Township 1 south, Range 6 west. Specifically, the project site is located in south Fontana, south of Jurupa Avenue between Citrus Avenue and Cherry Avenue within the existing Southern California Edison (SCE) power line right-of-way (ROW).

Methodology

A literature review and records search was conducted to determine which sensitive biological resources have the potential to occur on the project site or within the general vicinity. In addition to the literature review, a general habitat assessment of the project site was conducted. The field survey provided information of the existing conditions on the site and potential for sensitive biological resources to occur.

Literature Review

Prior to conducting a field visit, a literature review and records search was conducted for sensitive biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CNDDDB Rarefind 5 software, the California Native Plant Society's (CNPS) Electronic Inventory of Rare, Threatened, and Endangered Plants of California, Calflora Database, compendia of special-status species published by the CDFW, and United States Fish and Wildlife Service (USFWS) species listings.

Suitability Assessment and Field Investigation

The suitability assessment consisted of a visual and tactile inspection of the project site in areas that contain Delhi Sand soils. Areas were evaluated for the quality or purity of Delhi Sands and for its potential to support DSF. Areas were assigned one or more ratings ranging between 1 and 5, with 5 being the best quality and most suitable habitat:

1. Soils dominated by heavy deposits of alluvial material including coarse sands and gravels with little or no Delhi sands and evidence of soil compaction. *Unsuitable Quality*
2. Delhi Sands are present but the soil characteristics include a predominance of alluvial materials (Tujunga Soils and Hilmar loamy sand). *Very Low Quality*
3. Although not clean, sufficient Delhi sands are present to prevent soil compaction. Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality*
4. Abundant clean Delhi sands with little or no alluvial material (Tujunga soils or Hilmar loamy sand) present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. *Moderate Quality*

5. Sand dune habitat with clean Delhi Sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. *High Quality*

The above criteria were used to rate the relative abundance of clean Delhi Sands verses the amount of Cienba or other alluvial soils, to rate the suitability of the habitat to support DSF. Soils high in gravel and alluvial materials, or high in fine materials such as silts and clays, were rated low, while soils that appear to be high in aeolian deposited sands were rated high. This qualitative assessment of DSF habitat was further refined by considering the relative degree of soil compaction. Alluvial soils have a tendency to solidify to a hard surface pavement, while aeolian soils are easier to penetrate and provide good substrate for DSF. In addition, plant communities were identified on aerial photographs and visually inspected from accessible areas along the boundary of the project site to document the extent of each plant community, and to assess the presence of suitable habitat for sensitive species. All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded in a standardized field notebook. Notes were taken during the survey of all plant and wildlife species observed and jurisdictional features were identified, if present. In addition, site characteristics such as soil condition, topography, presence of indicator species, slope, condition of the plant communities, hydrology, and evidence of human use of the site were noted.

Existing Conditions

The project site is located within a developed area in southwestern San Bernardino County at the northwestern foothills of the Jurupa Hills. Surrounding areas have converted natural habitats into residential, commercial, and industrial land uses, with the exception of the Jurupa Hills. The project has been routinely subject to human disturbances (i.e., grading/disking activities, surrounding development), and no longer supports native plant communities. These disturbances have degraded the on-site plant communities and limited their ability to provide suitable habitat for sensitive biological resources. The proposed project site is limited to areas that are already developed or are heavily disturbed. The proposed pipeline alignments are located within the SCE power line ROW. The SCE ROW is undeveloped, and has been subject to routine grading/disking activities. There is an unimproved dirt access road that traverses the SCE ROW. As a result of routine grading/disking activities within the boundaries of the project site, minimal vegetation was observed. The majority of the plant species observed on the project site consisted of non-native grasses and ruderal/weedy plant species.

Results

DSF Suitability Assessment

The soils within the boundaries of the project site have been mechanically disturbed by existing development in the general vicinity and grading/disking activities on the project site. These activities have mixed surface soils, which have ultimately removed or contaminated the Delhi Sand soils that have been mapped on-site. As a result, the open, undisturbed Delhi Sand soils required by DSF no longer occur on-site. The undeveloped areas within the project site were rated as Unsuitable/Very Low Quality with a habitat quality rating of 1/2 for DSF. There were no areas identified on the project site that provided restorable Delhi Sand soils (a habitat quality rating of 3/4), or suitable habitat (a habitat quality rating of 4 or 5), clean Delhi Sand soils.

General Habitat Assessment

Wildlife, in general, was limited due to the conversion of most of the native plant communities to residential development, and commercial land uses. The majority of the wildlife observed

consisted of avian species. Avian species observed and heard during the survey included lesser goldfinch (*Spinus psaltria*), mourning dove (*Zenaida macroura*), and American crow (*Corvus brachyrhynchos*). No burrowing owl, burrowing owl sign (pellets, feathers, castings, or white wash), or suitable burrows were observed on the project site during the habitat assessment. Existing development and heavy disturbance have kept burrowing owl from inhabiting the project site. Due to the lack of sign and no recent recorded occurrence within the general vicinity of the project site burrowing owl are presumed absent from the project site. However, given that the species does migrate and individuals may take residence in previously unoccupied areas, a burrowing owl pre-construction clearance survey is recommended prior to any ground disturbing activities in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation to document the continued absence of burrowing owl from the project site prior to implementation of the proposed project.

The project site provides suitable habitat for a limited number of mammalian species acclimated to human presence and disturbance. However, most mammal species are nocturnal and are difficult to observe during a diurnal field visit. Mammals and or sign detected during the field assessment included California ground squirrel (*Otospermophilus beecheyi*) and Botta's pocket gopher (*Thomomys bottae*). No standing water occurs on the project site, and no amphibian species were observed during the habitat assessment. Amphibians are not expected to occur on the project site or in the general vicinity. One lizard species was observed during the habitat assessment: western fence lizard (*Sceloporus occidentalis*). The project site consists of heavily disturbed, vacant land that has been subject to extensive impacts over the years that preclude a robust population of reptiles from becoming established on-site. Disturbed areas in the region, such as those present on the project site, have the potential to support a number of reptilian species including, common side-blotched lizard (*Uta stansburiana*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), gopher snake (*Pituophis catenifer*), and alligator lizard (*Elgaria multicarinata*).

Migratory Corridors and Linkages

The SCE power line ROW and access corridor, that allows SCE to maintain their power lines, serves to provide limited wildlife movement opportunities. This corridor is constrained by existing development and is generally heavily disturbed and no longer supports large blocks of native habitat that would facilitate wildlife movement. It has been acknowledged that DSF has the potential to utilize the SCE ROW for movement within and between the three DSF recovery units. However, the soils within the proposed project site no longer support open, undisturbed Delhi Series soils required by DSF. Based on the results of the DSF suitability assessment, DSF is presumed absent. Implementation of the proposed project is not anticipated to have any permanent impacts to the SCE ROW, and as a result would not have permanent impacts to potential wildlife movement.

Critical Habitat

Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. The project site is not located within federally designated Critical Habitat. However, the project site is located adjacent to coastal California gnatcatcher (*Poliophtila californica californica*) Critical Habitat Unit 10, Western Riverside County MSHCP (65 FR 63680 63743) immediately south of the project site.

Conclusion

The undeveloped areas on the project site were determined not to contain clean Delhi Sand soils and do not have the potential to provide suitable habitat for DSF. Based on the results of the DSF suitability assessment, it can be presumed that the DSF do not have the potential to occur on-site and focused surveys for DSF are not recommended. The project site is surrounded by existing development and no longer has connectivity to areas containing clean Delhi Sands soils or areas subject to aeolian processes. The long history of disturbance, continued grading/disking of the site, existing development, and lack of natural vegetation have eliminated suitable habitat for all of the sensitive plant and wildlife species that have the potential to occur in the general vicinity of the project site. Based on habitat requirements for specific species, availability and quality of habitats needed by sensitive plant species, it was determined that the project site does not provide suitable habitat for any of the sensitive plant or wildlife species known to occur within the general area.

Pursuant to the Migratory Bird Treaty Act and California Fish and Game Code, construction activities should be conducted outside the avian nesting season. The nesting season generally extends from February 1 through August 31, but can vary slightly from year to year based upon seasonal weather conditions. If construction activities occur during the avian nesting season a pre-construction nesting bird clearance survey for nesting birds, including burrowing owl, should be conducted within 3 days prior to any ground disturbing activities to. The biologist conducting the clearance survey should document a negative survey with a report indicating that no impacts to active avian nests or burrowing owl burrows will occur.

If you have any questions or need any clarifications, feel free to contact me at (909) 915-5900 or at shay@jericho-systems.com or Travis McGill at (909) 816-1646 or travismcgill@mbakerintl.com

Sincerely,



Shay Lawrey, President
Ecologist/Regulatory Specialist

APPENDIX 2

IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES
WINEVILLE SEGMENT “B” ALTERNATE ALIGNMENTS PROJECT

City of Fontana
San Bernardino County, California

For Submittal to:

Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708
and
State Water Resources Control Board
1001 I Street/P.O. Box 944212
Sacramento, CA 94244

Prepared for:

Tom Dodson and Associates
2150 North Arrowhead Avenue
San Bernardino, CA 92405

Prepared by:

CRM TECH
1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

Bai “Tom” Tang, Principal Investigator
Michael Hogan, Principal Investigator

October 26, 2014
CRM TECH Contract No. 2843

Title: Identification and Evaluation of Historic Properties: Wineville Segment "B"
Alternate Alignments Project, City of Fontana, San Bernardino County, California

Author(s): Bai "Tom" Tang, Principal Investigator/Historian/Architectural Historian
Mariam Dahdul, Archaeologist/Report Writer
Daniel Ballester, Archaeologist/Field Director
Nina Gallardo, Archaeologist/Native American Liaison

Consulting Firm: CRM TECH
1016 E. Cooley Drive, Suite A/B
Colton, CA 92324
(909) 824-6400

Date: October 26, 2014

For Submittal to: Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708
(909) 993-1983
and
State Water Resources Control Board
1001 I Street/P.O. Box 944212
Sacramento, CA 94244
(916) 341-5690

Prepared for: Tom Dodson, President
Tom Dodson and Associates
2150 North Arrowhead Avenue
San Bernardino, CA 92405
(909) 882-3612

USGS Quadrangle: Fontana, Calif., 7.5' quadrangle (Sections 34 and 35, T1S R6W, San Bernardino Baseline and Meridian)

Project Size: Approximately 2.5 linear miles of pipeline right-of-way (22' in width, 7'4" in depth)

Keywords: South Fontana area, San Bernardino Valley; Phase I historical/archaeological resources survey; Site 36-016417 (CPHI-SBr-021; San Bernardino-Sonora Road), Site 36-027692 (Etiwanda-San Bernardino 220kV and Southern California Edison West of Devers 230kV Transmission Lines), and Site 36-027693 (Mira Loma-Vista 230kV Transmission Line); no "historic properties" or "historical resources" affected

EXECUTIVE SUMMARY

Between August and October 2014, at the request of Tom Dodson and Associates, CRM TECH performed a cultural resources study on the Area of Potential Effects (APE) for the Wineville Segment "B" Alternate Alignments Project in the City of Fontana, San Bernardino County, California. As proposed by the Inland Empire Utilities Agency (IEUA), the primary objective of the undertaking is the installation of a 36"-diameter underground pipeline to convey recycled water. The undertaking will be completed through the excavation of a trench measuring approximately 22' in maximum width and 7'4" in depth.

The APE is delineated to encompass the maximum extent of ground disturbance required for the undertaking, and consists of a total of approximately 2.5 linear miles of pipeline right-of-way, including the various alternatives. It lies within an existing power transmission line easement and the Banana Avenue right-of-way, to the south of Jurupa Avenue and the west of Beech Avenue, on the southwestern edge of the City of Fontana, and across Sections 34 and 35 of T1S R6W, San Bernardino Baseline and Meridian. Since the undertaking involves no aboveground construction, no additional APE for visual, atmospheric, or other indirect effects was deemed necessary.

The study is a part of the environmental review process for the proposed undertaking, as required by the IEUA pursuant to the California Environmental Quality Act. Due to the potential involvement of federal funding administered by the State Water Resources Control Board (SWRCB), the study is also intended to comply with Section 106 of the National Historic Preservation Act. The purpose of the study is to provide the IEUA and the SWRCB with the necessary information and analysis to determine whether the proposed undertaking would have an effect on any "historic properties," as defined by 36 CFR 800.16(l), or "historical resources," as defined by Title 14 CCR §15064.5(a)(1)-(3), that may exist within the APE.

In order to accomplish this objective, CRM TECH conducted a cultural resources records search, pursued historical and geoarchaeological background research, contacted Native American representatives, and carried out an intensive-level field survey. The results of the records search indicate that small portions of a linear site from the historic period, 36-016417, were previously recorded as crossing the APE. The site represented the approximate route of the San Bernardino-Sonora Road, which dated at least to the 1820s but was largely abandoned by the 1890s. During the field survey, no evidence of the old wagon road was observed in or near the APE. Given the drastic changes in landscape in the area since the 19th century, Site 36-016417 evidently exists only on paper today.

During the field survey, two additional linear sites from the historic period, subsequently designated 36-027692 and 36-027693, were recorded in close proximity and partially within the APE. Site 36-027692 represents segments of the circa 1946 Southern California Edison West of Devers 230kV Transmission Line and the circa 1961 Etiwanda-San Bernardino 220kV Transmission Power Line, and Site 36-027693 represents a segment of the circa 1951 Mira Loma-Vista 230kV Transmission Line. These power lines, consisting of steel towers located near the APE and overhead wires, share the same public utilities corridor with the proposed pipeline.

As late-historic-period infrastructure features of standard design and construction, Sites 36-027692 and 36-027693 do not appear to meet the criteria for listing in the National Register of Historic Places or the California Register of Historical Resources, and thus do not constitute “historic properties” or “historical resources” under Section 106 and CEQA provisions. Furthermore, since none of the associated features of Sites 36-027692 and 36-027693 is located within the horizontal or vertical extent of the APE, and since the completion of the undertaking will not result in any substantial changes to the current visual and atmospheric characters of the utilities corridor, the undertaking has no potential for any effect on these sites, either directly or indirectly.

No other potential “historic properties” or “historical resources” were encountered within or adjacent to the APE, and the subsurface sediments at this location were found to be relatively low in sensitivity for significant archaeological remains of prehistoric origin. Based on these findings, and pursuant to 36 CFR 800.4(d)(1) and Calif. PRC §21084.1, CRM TECH recommends to the IEUA and the SWRCB a finding that *no historic properties or historical resources will be affected by the undertaking*. No further cultural resources investigation is recommended for the undertaking as currently proposed. However, if buried cultural materials are inadvertently discovered during the undertaking, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the find.

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INTRODUCTION

Between August and October 2014, at the request of Tom Dodson and Associates, CRM TECH performed a cultural resources study on the Area of Potential Effects (APE) for the Wineville Segment “B” Alternate Alignments Project in the City of Fontana, San Bernardino County, California (Fig. 1). As proposed by the Inland Empire Utilities Agency (IEUA), the primary objective of the undertaking is the installation of a 36”-diameter underground pipeline to convey recycled water. The undertaking will be completed through the excavation of a trench measuring approximately 22’ in maximum width and 7’4” in depth.

The APE is delineated to encompass the maximum extent of ground disturbance required for the undertaking, and consists of a total of approximately 2.5 linear miles of pipeline right-of-way, including the various alternatives. It lies within an existing power transmission line easement and the Banana Avenue right-of-way, to the south of Jurupa Avenue and the west of Beech Avenue, on the southwestern edge of the City of Fontana, and across Sections 34 and 35 of T1S R6W, San Bernardino Baseline and Meridian (Figs. 1, 2). Since the undertaking involves no aboveground construction, no additional APE for visual, atmospheric, or other indirect effects was deemed necessary.

The study is a part of the environmental review process for the proposed undertaking, as required by the IEUA pursuant to the California Environmental Quality Act (CEQA). Due to the potential involvement of federal funding administered by the State Water Resources Control Board (SWRCB), the study is also intended to comply with Section 106 of the National Historic Preservation Act. The purpose of the study is to provide the IEUA and the SWRCB with the necessary information and analysis to determine whether the proposed undertaking would have an effect on any “historic properties,” as defined by 36 CFR 800.16(l), or “historical resources,” as defined by Title 14 CCR §15064.5(a)(1)-(3), that may exist within the APE.

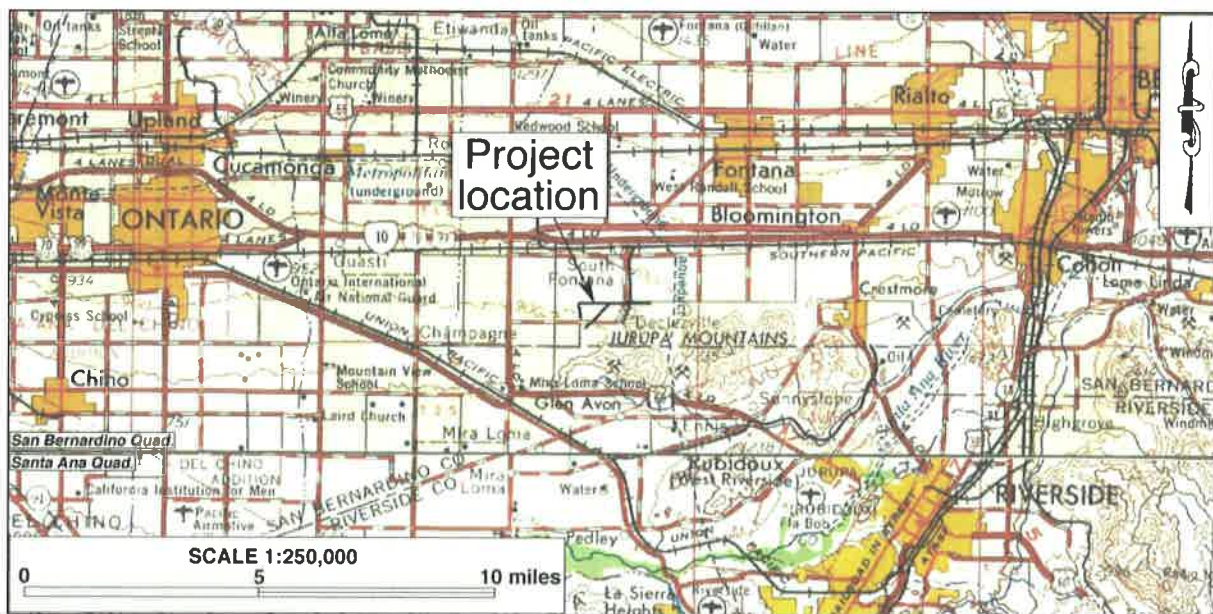
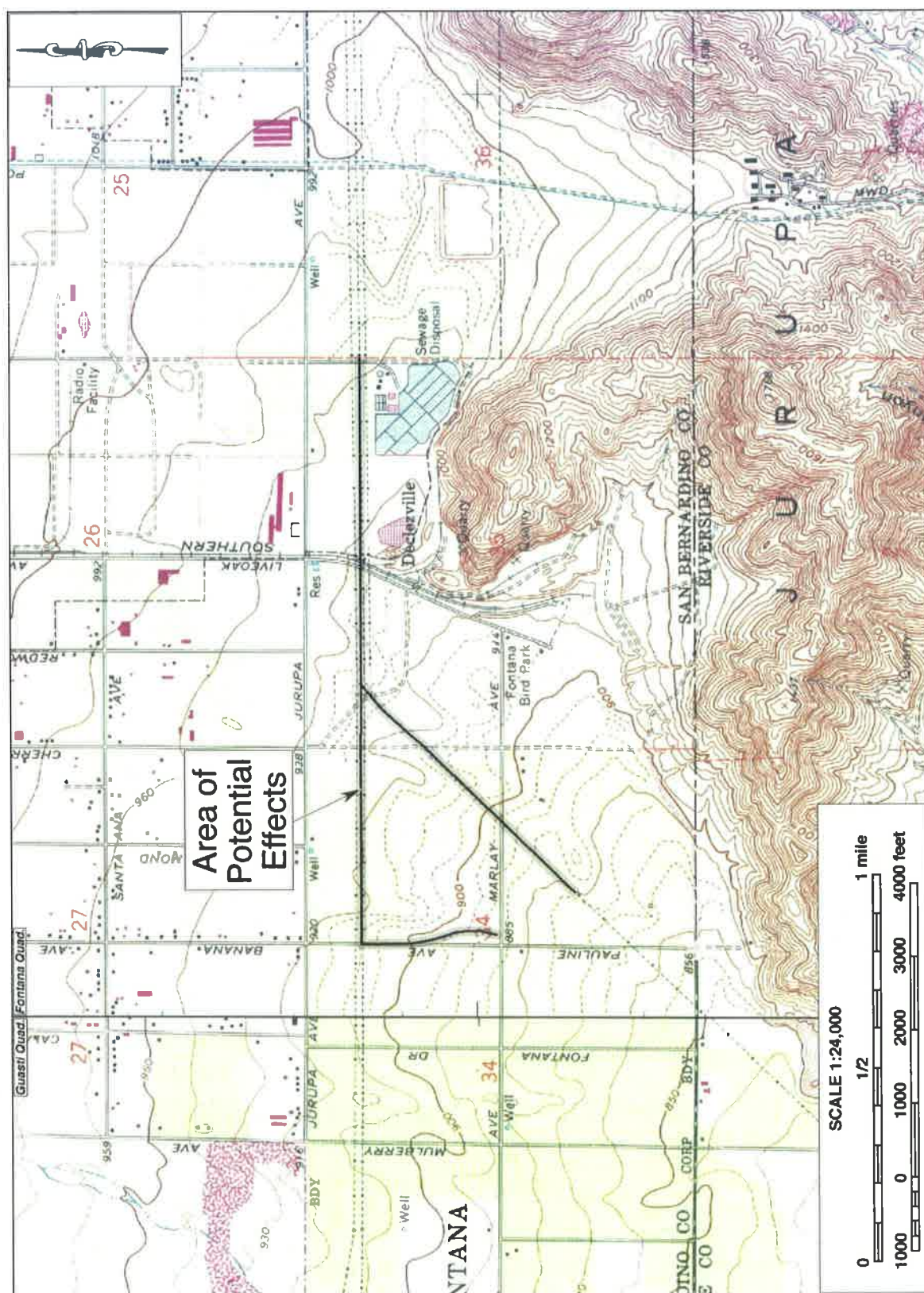


Figure 1. Project vicinity. (Based on USGS San Bernardino and Santa Ana, Calif., 1:250,000 quadrangles)



In order to accomplish this objective, CRM TECH conducted a cultural resources records search, pursued historical and geoarchaeological background research, contacted Native American representatives, and carried out an intensive-level field survey. The following report is a complete account of the methods and results of the various avenues of research, and the final conclusion of the study.

SETTING

CURRENT NATURAL SETTING

The APE is located on the southern edge of the San Bernardino Valley, a broad inland valley defined by the San Gabriel and San Bernardino Mountain Ranges on the north and a series of low rocky hills on the south, including the Jurupa Mountains. It extends across relatively level terrain, rising gradually in elevation from approximately 890 to 960 feet above mean sea level. The current environment of the area is dictated by its temperate Mediterranean climate, with the average maximum temperature in July reaching the 90s (Fahrenheit) and the average minimum temperature in January hovering around 35°. Rainfall is typically less than 20 inches annually.

The APE is situated in a largely urbanized setting with the existing land use characterized by retail businesses, offices, and residential neighborhoods. As stated above, most of the APE lies within a power line easement, which consists of undeveloped open land, in contrast with the adjacent properties (Fig. 3). The segment along Banana Avenue falls entirely within the paved roadway. Vegetation observed in and around the APE consists of both introduced landscaping plants and weeds, such as foxtails, tumbleweeds, and various small shrubs and grasses (Fig. 3).

CULTURAL SETTING

Prehistoric Context

In the history of the Americas, the term “prehistoric period” refers to the time prior to the arrival of non-Indians, when native lifeways and traditions remained intact and viable. It is widely acknowledged that human occupation in what is now the State of California began 8,000-12,000



Figure 3. Typical landscapes along the project route. *Left*: within the power line easement, view to the west; *right*: along Banana Avenue, view to the north. (Photographs taken on August 29, 2014)

years ago. In attempting to describe and understand the cultural processes that occurred in the ensuing years, archaeologists have developed a number of chronological frameworks that endeavor to correlate the technological and cultural changes that are observable in archaeological records to distinct time periods. Unfortunately, none of these chronological frameworks has been widely accepted, and none has been developed specifically for the San Jacinto Mountain area, the nearest ones being for the Colorado Desert and Peninsular Ranges area (Warren 1984) and for the Mojave Desert (Warren and Crabtree 1986).

The development of an overall chronological framework for the region is hindered by the lack of distinct stratigraphic layers of cultural sequences that could be dated by absolute dating methods to provide concrete dates. Since results from archaeological investigations in this region have yet to be synthesized into an overall chronological framework, most archaeologists tend to follow a chronology adapted from a scheme developed by William J. Wallace in 1955 and modified by others (Wallace 1955; 1978; Warren 1968; Chertkoff and Chertkoff 1984; Moratto 1984). Although the beginning and ending dates of the different horizons or periods may vary, the general framework of prehistory in this region under this chronology consists of the following four periods:

- Early Hunting Stage (ca. 10000 B.C.-6000 B.C.), which was characterized by human reliance on big game animals, as evidenced by large, archaic-style projectile points and the relative lack of plant-processing artifacts;
- Millingstone Horizon (ca. 6000 B.C.-1000 A.D.), when plant foods and small game animals came to the forefront of subsistence strategy, and from which a large number of millingstones, especially well-made, deep-basin metates, were left;
- Late Prehistoric Period (ca. 1000-1500 A.D.), during which a more complex social organization, a more diversified subsistence base—as evidenced by smaller projectile points, expedient millingstones and, later, pottery—and regional cultures and tribal territories began to develop;
- Protohistoric Period (ca. 1500-1700s A.D.), which ushered in long-distance contact with Europeans, and thereby led to the Historic Period.

Ethnohistoric Context

The City of Fontana lies in an area where the traditional territories of the Serrano and Gabrielino Indians adjoined and overlapped with each other, at least during the Late Prehistoric and Protohistoric Periods. The homeland of the Gabrielinos, probably the most influential Native American group in aboriginal southern California (Bean and Smith 1978a:538), was centered in the Los Angeles Basin, and reached as far east as the San Bernardino-Riverside area. The homeland of the Serranos was primarily the San Bernardino Mountains, but also included the slopes and lowlands on the north and south flanks of the mountain range.

Whatever the linguistic affiliation, Native Americans in and around the Fontana area exhibited similar social organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home/base sites are marked by midden deposits, often with bedrock mortars. During their seasonal rounds to exploit plant resources, small groups would migrate within their traditional territory in search of specific plants and animals. Their gathering strategies often left behind signs of special use sites, usually grinding slicks on bedrock boulders, at the locations of the resources.

As early as 1542, the Gabrielinos were in contact with the Spanish during the historic expedition of Juan Rodríguez Cabrillo, but it was not until 1769 that the Spaniards took steps to colonize Gabrielino territory. Shortly afterwards, most of the Gabrielino people were incorporated into Mission San Gabriel and other missions in southern California. Beginning in the 1810s, when an *asistencia* of Mission San Gabriel was established in present-day Loma Linda, the Serranos were also brought into the mission system. Due to introduced diseases, dietary deficiencies, and forceful reduction, Gabrielino and Serrano population dwindled rapidly. By 1900, the Gabrielinos had almost ceased to exist as a culturally identifiable group (Bean and Smith 1978a:540). The Serranos, meanwhile, were mostly settled on the San Manuel and the Morongo Indian Reservations (Bean and Smith 1978b:573).

Historic Context

In 1772, three years after the beginning of Spanish colonization of Alta California, Pedro Fages, *comandante* of the new province, and a small force of soldiers under his command became the first Europeans to set foot in the San Bernardino Valley (Beck and Haase 1974:15). They were followed in the next few years by two other famed Spanish explorers, Juan Bautista de Anza and Francisco Garcés, who traveled through the valley in the mid-1770s (*ibid.*). Despite these early visits, for the next 40 years the inland valley received little impact from the Spanish colonization activities in Alta California, which were concentrated predominantly in the coastal regions.

For the bulk of the Spanish-Mexican period, the valley was considered a part of the land holdings of Mission San Gabriel. The name "San Bernardino" was bestowed on the region at least by 1819, when a mission *asistencia* and an associated rancho were officially established under that name in the eastern end of the valley (Schuiling 1984:26-27). After gaining independence from Spain in 1821, the Mexican government began in 1834 the process of secularizing the mission system in Alta California, which in practice meant quite simply the confiscation of the Franciscan missions' vast land holdings, to be distributed later among prominent citizens of the province. During the 1830s and 1840s, several large land grants were made in the vicinity of present-day Fontana, but the core area of Fontana was not involved in any of these, and thus remained public land when California became a part of the United States in 1848.

Used primarily as cattle ranches, the ranchos around Fontana saw little development until the mid-19th century, when a group of Mormon settlers from Salt Lake City founded the town of San Bernardino in 1851. After the completion of the Southern Pacific Railway in the late 1870s, and especially after the Atchison, Topeka and Santa Fe Railway introduced a competing line in 1885, a phenomenal land boom swept through much of southern California, ushering in a number of new settlements in the San Bernardino Valley. In 1887, the Semi-Tropic Land and Water Company purchased a large tract of land near the mouth of Lytle Creek, together with the necessary water rights to the creek, and laid out the townsites of Rialto, Bloomington, and Rosena (Schuiling 1984:90). While Rialto and Bloomington were soon settled and began to grow, albeit slowly, little development took place at Rosena before the collapse of the 1880s land boom and the ensuing financial destruction of the Semi-Tropic Land and Water Company (*ibid.*).

It was not until the early 20th century that the community of Rosena, now renamed Fontana, finally came into being. Within the first 10 years of the century, an irrigation system was constructed in the area, and much of the land was planted in grain and citrus crops, largely resulting from the efforts of

A. B. Miller and his associates (Schuiling 1984:102). The town of Fontana was reborn in 1913, but it remained primarily an agricultural settlement until World War II, where poultry, hog, and rabbit raising played a particularly important role in the local economy (*ibid.*). During World War II, however, the coming of the Kaiser Steel Mill dramatically altered the agrarian setting of the Fontana area. With other industrial establishments moving into the area after Kaiser, Fontana soon became known as a center of heavy industry, an image that lasted until recent years (*ibid.*:106). Since the closure of the Kaiser Steel Mill in 1983, Fontana, like many other cities in the San Bernardino Valley, has increasingly taken on the characteristics of a “bedroom community.”

RESEARCH METHODS

RECORDS SEARCH

The cultural resources records search was carried out by CRM TECH archaeologist Nina Gallardo (see App. 1 for qualifications) at the Eastern Information Center (EIC) and the San Bernardino Archaeological Information Center (AIC) on August 15 and 27, 2014. The EIC and the AIC are the State of California’s official cultural resource records repositories for the County of Riverside and the County of San Bernardino, respectively. Both are part of the California Historical Resource Information System established and maintained under the auspices of the California Office of Historic Preservation.

During the records search, Gallardo examined maps, records, and electronic databases at the EIC and the AIC for previously identified cultural resources in or near the APE and existing cultural resources reports pertaining to the project vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside/San Bernardino County Historical Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

For this study, the scope of the records search included the standard one-mile radius from the perimeters of the APE and an expanded five-mile radius to identify cultural resources in similar geomorphologic contexts as the APE. The purpose of the expanded records search is to assess the sensitivity of the APE for similar cultural resources and help determine the potential of encountering significant subsurface archaeological deposits during earth-moving activities associated with the undertaking.

GEOARCHAEOLOGICAL ANALYSIS

As part of the research procedures, CRM TECH geologist Harry M. Quinn (see App. 1 for qualifications) pursued geoarchaeological analysis to assess the APE’s potential for the deposition and preservation of subsurface cultural deposits from the prehistoric period, which cannot be detected through a standard surface archaeological survey. Sources consulted for this purpose included primarily topographic, geologic, and soil maps and reports pertaining to the area. Findings from these sources were used to develop a geomorphologic history of the APE and address geoarchaeological sensitivity of the vertical APE.

HISTORICAL BACKGROUND RESEARCH

Bai “Tom” Tang, CRM TECH historian (see App. 1 for qualifications), conducted the historical background research on the basis of published literature in local history and historic maps of the Fontana area. Among maps consulted for this study were the U.S. General Land Office’s (GLO) land survey plat maps dated 1856-1857 and the U.S. Geological Survey’s (USGS) topographic maps dated 1901-1953. These maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, located in Moreno Valley.

NATIVE AMERICAN PARTICIPATION

On August 25, 2014, CRM TECH submitted a written request to the State of California’s Native American Heritage Commission for a records search in the commission’s sacred lands file. Following the Native American Heritage Commission’s recommendations, CRM TECH contacted seven tribal representatives in the region, both in writing and by telephone, on September 3-25 to solicit local Native American input regarding any potential cultural resources concerns over the proposed undertaking. The correspondences between CRM TECH and the Native American representatives are attached to this report in Appendix 2.

FIELD SURVEY

On August 29, 2014, CRM TECH archaeologist Daniel Ballester (see App. 1 for qualifications) carried out the archaeological field survey of the APE. The survey was conducted on foot at an intensive level by walking two parallel transects placed on either sides of the project alignment and at a distance of approximately five meters (15 feet) from each other, effectively covering the total width of the APE with visual inspections. In this way, the ground surface in and near the APE was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic period (i.e., 50 years or older). Visibility of the native ground surface was poor (0-20%) along Banana Avenue due to the presence of pavement, but was excellent (nearly 100%) in the rest of the APE because of the sparse vegetation growth.

RESULTS AND FINDINGS

PREVIOUS CULTURAL RESOURCES STUDIES IN THE VICINITY

The records search results indicate that the APE was covered, partially or entirely, by at least five previous cultural resources studies completed since 1973 (Fig. 4), and a linear site from the historic period, 36-016417, was previously recorded as crossing the APE (see App. 3). The site represented the approximate route of the San Bernardino-Sonora Road, also known as the northern branch of the Emigrant Trail, which has been designated a California Point of Historical Interest (CPHI-SBr-021). This site is discussed further below.

Outside the APE but within a one-mile radius, nearly 30 other previous studies have been reported on various tracts of land or linear features (Fig. 4), and eight additional sites and 12 isolates—i.e., localities with fewer than three artifacts—have been recorded into the California Historical

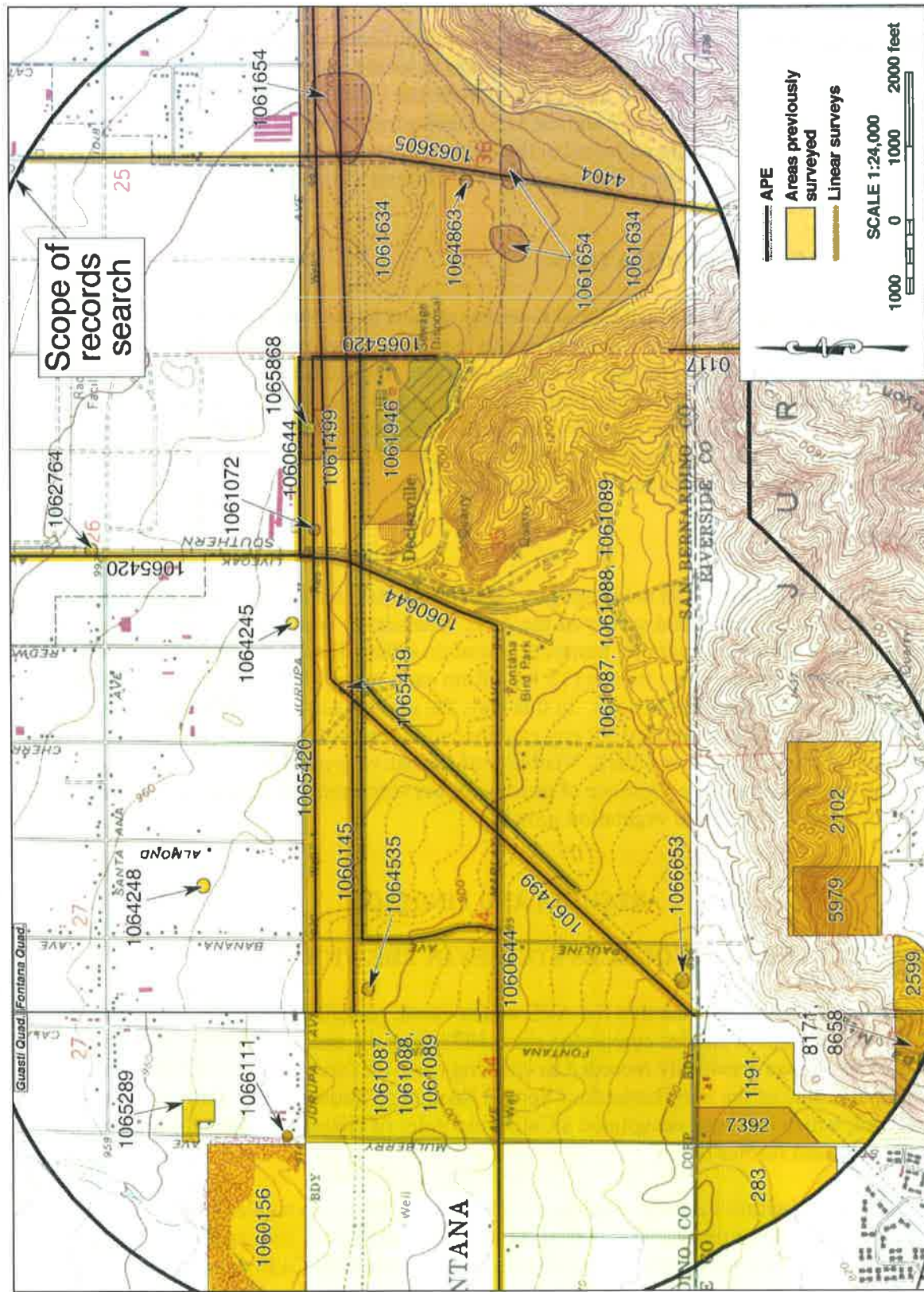


Table 1. Previously Recorded Cultural Resources within the Scope of the Records Search (See App. 3 for locations)		
Site No.	Recorded by/Date	Description
33-001237	Van Horn 1977	Lithic scatter
33-002101	Van Horn 1981; Miller 1989	Foundational remains of a circa 1875 winery
33-016935	Sanka 2007	Isolate: historic-period glass fragments
36-001632	Various	Milling-stone and chipped-stone scatter
36-004549	Various	Milling-stone and chipped-stone scatter
36-004550	Various	Milling-stone scatter
36-004551	Schroth 1981; McCarthy 1986	Chipped-stone scatter
36-004584	Various	Pepper Street House, 1905-1906 (National Register of Historic Places; California Point of Historical Interest)
36-007426	Brock 1993	Declezville Branch Line of the Southern Pacific Railroad (dismantled south of Jurupa Avenue)
36-016417*	Various	San Bernardino-Sonora Road (California Point of Historical Interest)
36-060215	Unknown	Isolate: metate
36-060216	Unknown	Isolate: two manos
36-060217	Unknown	Isolate: mano, flake, metate
36-060218	Unknown	Isolate: core
36-060219	Unknown	Isolate: flake
36-060220	Unknown	Isolate: core
36-060221	Unknown	Isolate: metate
36-060222	Unknown	Isolate: metate
36-060223	Unknown	Isolate: mano
36-060224	Unknown	Isolate: mano
36-060262	Unknown	Isolate: metate fragment

* Shown on AIC map as crossing two segments of the APE.

Resources Inventory (Table 1; App. 3). Five of the sites and 11 of the isolates were prehistoric—i.e., Native American—in origin, consisting primarily of milling-stone and chipped-stone artifacts found on the surface. The other three sites and one isolate dated to the historic period, and included a house, the remains of a winery, a railroad spur line, and a glass fragment.

As mentioned above, the expanded records search covered the area within a five-mile radius for the purpose of identifying any prehistoric archaeological sites situated in the same or a similar geomorphologic context as the APE. The results indicate that no prehistoric archaeological sites or isolates were previously recorded on the level valley floor to the north of the APE. In contrast, as within the one-mile radius, many prehistoric sites and isolates have been recorded along the foothills and on elevated terraces to the south, in the rugged terrains of the Jurupa Mountains.

Overall, the locations and types of prehistoric archaeological resources identified in the expanded records search appear to support the existing prehistoric hunter-gatherer settlement-subsistence models for inland southern California, which suggest that permanent or long-term settlement was more likely to occur on elevated terraces, hills, and finger ridges near reliable sources of water, while the valley floor was mostly used for resource procurement, traveling, and opportunistic camping.

GEOARCHAEOLOGICAL PROFILE

Based on the pertinent geological maps and literature, soils in the vicinity of the APE typically consist of alluvial sediments that are middle Holocene or older in age (Morton 1976:Plate 1B;

Bortugno and Spittler 1986; Morton 2003; Morton and Miller 2003). This older age limits the possibility for buried archaeological resources, suggesting that only Archaic-period cultural deposits might be present in the subsurface sediments at depth. It does not preclude the presence of later cultural materials in the shallow surface soils, but the possibility of significant archaeological deposits surviving intact in these soils is rather slim, given the ground disturbances that have occurred in and near the APE in association with the construction of the existing roadways and power transmission lines.

The area to the south of the APE, along the north flank of the Jurupa Mountains, is known to contain granitic bedrock outcrops, which have a high potential for Native American food-processing sites, such as boulders with grinding slicks. However, the area lacks a reliable water source nearby, and thus would not have been favored for long-term settlement in prehistoric times. Based on these findings, the subsurface sediments in and around the APE appear to be relatively low in sensitivity for significant archaeological remains of prehistoric origin.

HISTORICAL OVERVIEW

Despite its location along the San Bernardino-Sonora Road (Site 36-016417), a major transportation artery in the early 19th century, sources indicate that settlement and development activities in the vicinity of the APE lagged behind other areas nearby during the historic period, as the area remained sparsely populated and rural in character until the housing boom of the recent decades. In the 1850s, “Old San Bernardino Road,” the part of the San Bernardino-Sonora Road between Los Angeles and San Bernardino, was noted running a generally east-west course through the vicinity, crossing the APE at several locations (Fig. 5).

According to historical sources, Old San Bernardino Road was used in the 1820s by the San Gabriel Mission fathers to reach the San Bernardino *Asistencia*, and by Jedediah Smith in 1827 on his way out of southern California (OHP 1973). By the 1850s, however, its role as the main thoroughfare between Los Angeles and San Bernardino had been superseded by a “new” San Bernardino Road established along a more direct route a few miles to the north (Haenszel 1979). As a result, by the late 19th century Old San Bernardino Road had apparently fallen into disuse (Fig. 6). During the next four decades, the old wagon road was largely obliterated by subsequent development along its former route (Fig. 7).

In the 1890s, the area around the APE demonstrated a cultural landscape that was typical of rural southern California during much of the historic period, featuring crisscrossing roads connecting small communities and

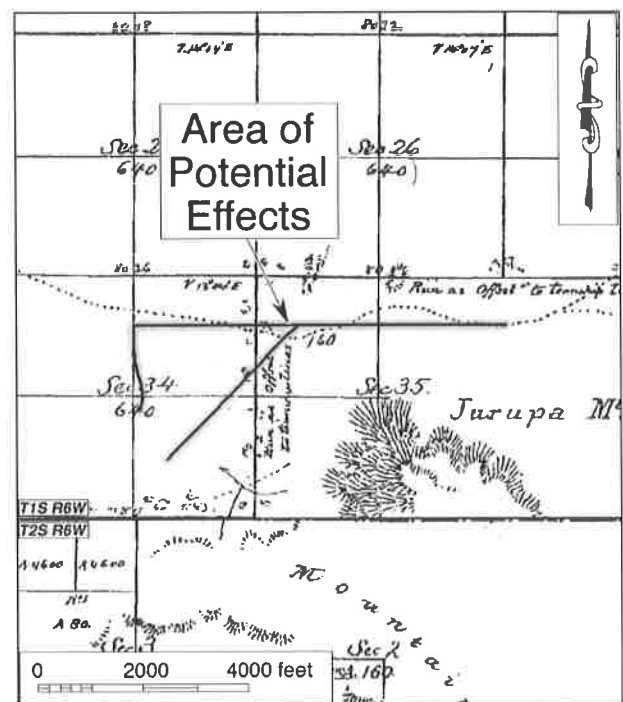


Figure 5. The APE and vicinity in 1852-1856. (Source: GLO 1856; 1857)

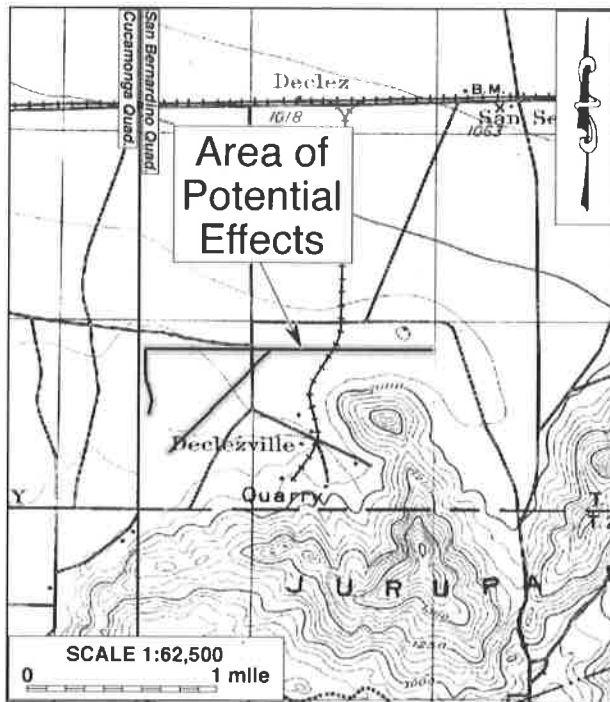


Figure 6. The APE and vicinity in 1893-1894. (Source: USGS 1901; 1903)

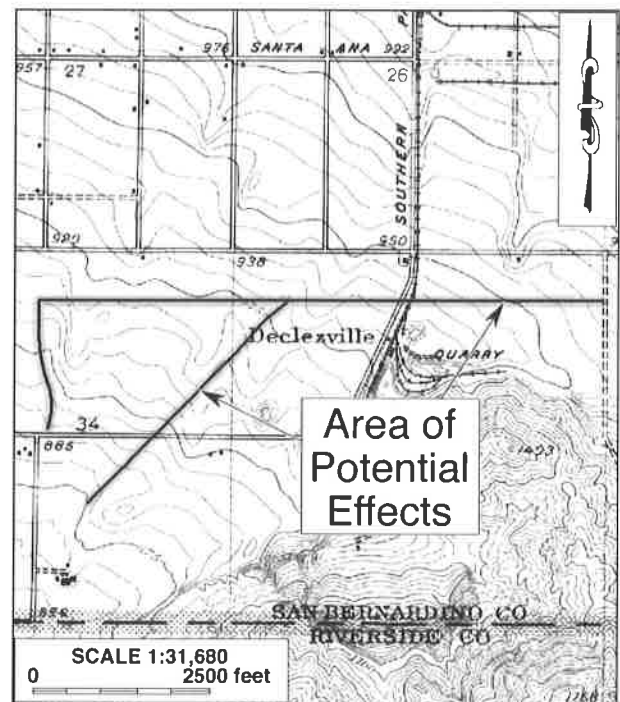


Figure 7. The APE and vicinity in 1938. (Source: USGS 1943)

scattered buildings (Fig. 6). The nearest settlement to the APE was Declezville at the foot of the Jurupa Mountains, a granulate quarry that produced rip-rap for construction projects in the region (Brock 1993; Fig. 6). The quarry was served by its own spur line on the Southern Pacific Railway system (Site 36-007426), which crossed the APE near Love Oak Avenue (Fig. 6). In 1993, however, the portion of the line across the APE was reported to have been removed (Brock 1993).

The rural pattern of settlement and growth continued in the project vicinity in the mid-20th century, with much of the land presumably used for agricultural purposes (Figs. 7, 8). In the 1950s, the land around the APE was almost entirely occupied by vineyards (Fig. 8). By that time, two power transmission lines had been established in the easement along the APE: the Southern California Edison West of Devers (WOD; i.e., west of the Devers Substation near Palm Springs) 230 kV Transmission Line, which dates to circa 1946, and the Mira Loma-Vista 230 kV Transmission Line, which dates to circa 1951 (Mike Bubalo Construction Company 2014; Edison International n.d.; Fig. 8). A third transmission line, the Etiwanda-San Bernardino 220kV Transmission Power Line, was later added on the north side of the WOD line, within the same easement, around 1961 (Mike Bubalo Construction Company 2014).

NATIVE AMERICAN INPUT

In response to CRM TECH's inquiry, the Native American Heritage Commission reports in a letter dated September 2, 2014, that the sacred lands record search identified no Native American cultural resources within the APE, but recommends that local Native American groups be contacted for

were recorded as one site, designated 36-027692, because they run the same course at this location, while the third is recorded as a separate site, designated Site 36-027693 (see App. 3, 4). These power lines, consisting of steel towers nearby carrying overhead wires across the project route, are located in close proximity and partially within the APE. The three sites in the APE are discussed further below.

Site 36-016417

In summary of the pertinent results of the records search and the historical background research, Site 36-016417, an officially designated California Point of Historical Interest (CPHI-SBr-021), represented the approximate route of the San Bernardino-Sonora Road, also known as the northern branch of the Emigrant Trail, which was known to be in use at least by the 1820s but was largely abandoned by the 1890s. The site was delineated solely on the basis of historic maps, and no physical remains of the road have been recorded. During the field survey, no evidence of the old wagon road was observed in or near the APE. Given the drastic changes in landscape since the 19th century, Site 36-016417 evidently no longer exists at this location.

Site 36-027692

Site 36-027692 represents an approximately 7,960-foot segment of two of the power lines along the APE, the Etiwanda-San Bernardino 220kV Transmission Power Line and the Southern California Edison West of Devers 230kV Transmission Line, which run on parallel east-west courses on either side of the APE (see App. 3). The former, on the northerly course, consists of A-shaped steel lattice towers with three cross-arms each, carrying six sets of circuits (Fig. 9). Records indicate that the 85-



Figure 9. Sites 36-027692 and 36-027693: the Etiwanda-San Bernardino 220kV Transmission Power Line (*right*), the Southern California Edison West of Devers 230kV Transmission Line (*center*), and the Mira Loma-Vista 230kV Transmission Line (*left*). (Photograph taken on August 29, 2014; view to the west)

foot easement for this line was recorded on June 9, 1961 (Mike Bubalo Construction Company 2014). The latter, on the southerly course, features H-shaped lattice towers with one cross-arm each, carrying three sets of circuits (Fig. 9). The 150-foot easement for this line was recorded on March 8, 1946 (Mike Bubalo Construction Company 2014).

Site 36-027693

Site 36-027693 an approximately 8,455-foot segment of the Mira Loma-Vista 230kV Transmission Line, which consists of a series of A-shaped steel lattice towers with three cross-arms each, carrying a total of 12 circuits in six pairs (Fig. 9). The route runs east-west along the eastern portion of the APE, and turns northeast-southwest in the western portion (see App. 3). Its 65-foot-wide easement, recorded on May 14, 1951, is the southernmost among the three transmission lines along the APE (Mike Bubalo Construction Company 2014).

MANAGEMENT CONSIDERATIONS

APPLICABLE STATUTORY/REGULATORY FRAMEWORK

The purpose of this study is to identify any “historic properties” or “historical resources” that may exist within or adjacent to the APE. “Historic properties,” as defined by the Advisory Council on Historic Preservation, include “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior” (36 CFR 800.16(l)). The eligibility for inclusion in the National Register is determined by applying the following criteria, developed by the National Park Service as per provision of the National Historic Preservation Act:

- The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
 - (b) that are associated with the lives of persons significant in our past; or
 - (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
 - (d) that have yielded, or may be likely to yield, information important in prehistory or history.
- (36 CFR 60.4)

For CEQA-compliance considerations, the State of California’s Public Resources Code (PRC) establishes the definitions and criteria for “historical resources,” which require similar protection to what NHPA Section 106 mandates for historic properties. “Historical resources,” according to PRC §5020.1(j), “includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.”

More specifically, CEQA guidelines state that the term “historical resources” applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the Lead Agency (Title 14 CCR §15064.5(a)(1)-(3)). Regarding the proper criteria of historical significance, CEQA guidelines mandate that “a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing on the California Register of Historical Resources” (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.
(PRC §5024.1(c))

DISCUSSION

In summary of the research results presented above, three linear sites from the historic period, 36-016417, 36-027692, and 36-027693, have been identified as lying partially within the APE. Among these, 36-016417, a California Point of Historical Interest representing the former route of the San Bernardino-Sonora Road, exists only on paper today, as the old wagon road was abandoned and subsequently obliterated by later developments a century ago. The proposed undertaking has no potential to affect the symbolic historic value of this early road, and thus the site requires no further consideration during this study.

The other two sites, 36-027692 and 36-027693, consist of a total of three power transmission lines traversing in recorded in close proximity and partially within the APE, all of them date to the 1946-1961 era. Utilitarian in character and plain in appearance, these power lines are of standard design and construction, and represent typical late-historic-period public utility infrastructure. As such, they do not demonstrate any notable architectural, aesthetic, or artistic merits, nor are they known to embody the professional accomplishment of any masters in the field of architecture, construction, or engineering. Additionally, no persons or events of recognized historic significance have been identified in association with these transmission lines.

In light of these findings, and in accordance with the criteria list above, this study concludes that Sites 36-027692 and 36-027693 do not appear to be eligible for listing in the National Register of Historic Places or the California Register of Historical Resources, and do not meet the definition of a “historic property” or a “historical resource.” Furthermore, since none of the associated features of Sites 36-027692 and 36-027693 is located within the horizontal or vertical extent of the APE, and since the completion of the undertaking will not result in any substantial changes to the current visual and atmospheric characters of the utilities corridor, the undertaking has no potential for any effect on these sites, either directly or indirectly.

CONCLUSION AND RECOMMENDATIONS

Section 106 of the National Historic Preservation Act mandates that federal agencies take into account the effects of their undertakings on historic properties and seek ways to avoid, minimize, or mitigate any adverse effects on such properties (36 CFR 800.1(a)). Similarly, CEQA establishes that “a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment” (PRC §21084.1). “Substantial adverse change,” according to PRC §5020.1(q), “means demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired.”

In conclusion, the present study encountered no “historic properties” or “historical resources,” as defined by Section 106 and CEQA provisions, within the APE, and the subsurface sediments at this location were found to be relatively low in sensitivity for significant archaeological remains of prehistoric origin. Based on these findings, and pursuant to 36 CFR 800.4(d)(1) and Calif. PRC §21084.1, CRM TECH presents the following recommendations to the IEUA and the SWRCB:

- No “historic properties” or “historical resources” are present within or adjacent to the APE, and thus no “historic properties” or “historical resources” will be affected by the proposed undertaking.
- No further cultural resources investigation will be necessary for the undertaking as currently proposed.
- If buried cultural materials are inadvertently discovered during the undertaking, all work in that area will be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the find.

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 1857 Plat Map: Township No. 2 South Range No. 6 West, San Bernardino Meridian; surveyed in 1853-1856.
- Haenszel, Arda M.
 1979 The Base Line Road. *Odyssey* I(4):29, 31. City of San Bernardino Historical and Pioneer Society, San Bernardino.
- Mike Bubalo Construction Company, Inc.
 2014 Cross Section of Lot 5 Tract No. 15117. Baldwin Park, California.
- Morton, Douglas M.
 1976 *Geologic, Fault, and Major Landslide and Slope Stability Maps*. California Division of Mines and Geology Special Report 113. Sacramento.
 2003 Preliminary Geologic Map of the Fontana 7.5' Quadrangle, San Bernardino and Riverside Counties, California; Version 1.0. United States Geological Survey Open-File Report 03-418. Digital preparation by K. R. Bovard.
- Morton, D. W., and F. K. Miller
 2003 Preliminary Digital Geologic Map of the San Bernardino 30'x60' quadrangle, California. United States Geological Survey Open-File Report 03-293. Digital preparation by P. M. Cossette and K. R. Bovard.
- Moratto, Michael J. (ed.)
 1984 *California Archaeology*. Academic Press, Orlando, Florida.
- OHP (Office of Historic Preservation, State of California)
 1973 California Point of Historical Interest designation form, CPHI-SBr-21 (36-016417). On file, Archaeological Information Center, San Bernardino County Museum, Redlands.
- Schuiling, Walter C.
 1984 *San Bernardino County: Land of Contrast*. Windsor Publications, Woodland Hills, California.

USGS (United States Geological Survey, U.S. Department of the Interior)

- 1901 Map: San Bernardino, Calif. (15', 1:62,500); surveyed in 1893-1894.
- 1903 Map: Cucamonga, Calif. (15', 1:62,500); surveyed in 1894.
- 1943 Map: Fontana, Calif. (1:31,680); surveyed in 1938.
- 1953a Map: Fontana, Calif. (7.5', 1:24,000); aerial photographs taken in 1952, field-checked in 1953.
- 1953b Map: Guasti, Calif. (7.5', 1:24,000); aerial photographs taken in 1952, field-checked in 1953.

Wallace, William J.

- 1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Archaeology* 11(3):214-230.
- 1978 Post-Pleistocene Archeology, 9,000 to 2,000 BC. In Robert F. Heizer (ed.): *Handbook of North American Indians*, Vol. 8: *California*; pp. 25-36. Smithsonian Institution, Washington, D.C.

Warren, Claude N.

- 1968 Cultural Traditions and Ecological Adaptations on the Southern California Coast. In Cynthia Irwin-Williams (ed.): *Archaic Prehistory in Western United States*; pp. 1-14. Eastern New Mexico University Contributions in Anthropology 1(3). Portales, New Mexico.
- 1984 The Desert Region. In Michael J. Moratto (ed.): *California Archaeology*; pp. 339-430. Academic Press, Orlando, Florida.

Warren, Claude N., and Robert H. Crabtree

- 1986 Prehistory of the Southwestern Area. In Warren L. D'Azevedo (ed.): *Handbook of North American Indians*, Vol. 11: *Great Basin*; pp. 183-193. Smithsonian Institution, Washington, D.C.

APPENDIX 1

PERSONNEL QUALIFICATIONS

PRINCIPAL INVESTIGATOR/HISTORIAN

Bai “Tom” Tang, M.A.

Education

- 1988-1993 Graduate Program in Public History/Historic Preservation, UC Riverside.
1987 M.A., American History, Yale University, New Haven, Connecticut.
1982 B.A., History, Northwestern University, Xi'an, China.
- 2000 “Introduction to Section 106 Review,” presented by the Advisory Council on Historic Preservation and the University of Nevada, Reno.
1994 “Assessing the Significance of Historic Archaeological Sites,” presented by the Historic Preservation Program, University of Nevada, Reno.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside/Colton, California.
1993-2002 Project Historian/Architectural Historian, CRM TECH, Riverside, California.
1993-1997 Project Historian, Greenwood and Associates, Pacific Palisades, California.
1991-1993 Project Historian, Archaeological Research Unit, UC Riverside.
1990 Intern Researcher, California State Office of Historic Preservation, Sacramento.
1990-1992 Teaching Assistant, History of Modern World, UC Riverside.
1988-1993 Research Assistant, American Social History, UC Riverside.
1985-1988 Research Assistant, Modern Chinese History, Yale University.
1985-1986 Teaching Assistant, Modern Chinese History, Yale University.
1982-1985 Lecturer, History, Xi'an Foreign Languages Institute, Xi'an, China.

Honors and Awards

- 1988-1990 University of California Graduate Fellowship, UC Riverside.
1985-1987 Yale University Fellowship, Yale University Graduate School.
1980, 1981 President's Honor List, Northwestern University, Xi'an, China.

Cultural Resources Management Reports

Preliminary Analyses and Recommendations Regarding California's Cultural Resources Inventory System (with Special Reference to Condition 14 of NPS 1990 Program Review Report). California State Office of Historic Preservation working paper, Sacramento, September 1990.

Numerous cultural resources management reports with the Archaeological Research Unit, Greenwood and Associates, and CRM TECH, since October 1991.

Membership

California Preservation Foundation.

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST

Michael Hogan, Ph.D., RPA*

Education

- 1991 Ph.D., Anthropology, University of California, Riverside.
- 1981 B.S., Anthropology, University of California, Riverside; with honors.
- 1980-1981 Education Abroad Program, Lima, Peru.

- 2002 Section 106—National Historic Preservation Act: Federal Law at the Local Level, UCLA Extension Course #888.
- 2002 “Recognizing Historic Artifacts,” workshop presented by Richard Norwood, Historical Archaeologist.
- 2002 “Wending Your Way through the Regulatory Maze,” symposium presented by the Association of Environmental Professionals.
- 1992 “Southern California Ceramics Workshop,” presented by Jerry Schaefer.
- 1992 “Historic Artifact Workshop,” presented by Anne Duffield-Stoll.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside/Colton, California.
- 1999-2002 Project Archaeologist/Field Director, CRM TECH, Riverside.
- 1996-1998 Project Director and Ethnographer, Statistical Research, Inc., Redlands.
- 1992-1998 Assistant Research Anthropologist, University of California, Riverside
- 1992-1995 Project Director, Archaeological Research Unit, U. C. Riverside.
- 1993-1994 Adjunct Professor, Riverside Community College, Mt. San Jacinto College, U.C. Riverside, Chapman University, and San Bernardino Valley College.
- 1991-1992 Crew Chief, Archaeological Research Unit, U. C. Riverside.
- 1984-1998 Archaeological Technician, Field Director, and Project Director for various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural Diversity.

Cultural Resources Management Reports

Author and co-author of, contributor to, and principal investigator for numerous cultural resources management study reports since 1986.

Memberships

* Register of Professional Archaeologists; Society for American Archaeology; Society for California Archaeology; Pacific Coast Archaeological Society; Coachella Valley Archaeological Society.

PROJECT ARCHAEOLOGIST/REPORT WRITER
Mariam Dahdul, Ph.D.

Education

- 2013 Ph.D., Anthropology, University of California, Santa Barbara.
2002 M.A., Anthropology, California State University, Fullerton.
1993 B.A., Geography, California State University, Fullerton.
- 2003 “Ceramics Analysis,” graduate seminar presented by Dr. Delaney-Rivera, California State University, Fullerton.
2002 “Section 106-National Historic Preservation Act: Federal Law at the Local Level,” presented by UCLA Extension.
2002 “Historic Archaeology Workshop,” presented by Richard H. Norwood, Base Archaeologist, Edwards Air Force Base.

Professional Experience

- 2000-2007 Project Archaeologist/Report Writer, CRM TECH, Riverside/Colton, California.
- Preparing cultural resources management reports, maps, and site records;
 - Analyzing beads, ornaments, and shell;
 - Conducting archaeological field surveys;
 - Participating in various archaeological testing and mitigation programs.

Laboratory and Field Experience

- 2001 Archaeological field school under the direction of Dr. Brian Byrd.
- Test excavations of sites at the San Elijo Lagoon Reserve, including flotation of soil samples and sorting and cataloguing of artifacts.
- 2000 Archaeological field class under the direction of Dr. Claude Warren.
- Excavated units at Soda Lake in the Mojave Desert and produced lake bottom stratigraphic profiles.
- 1999-2000 Archaeology Laboratory, California State University, Fullerton.
- Assisted in the cataloguing of artifacts.
- 1999 Field survey course under the direction of Dr. Phyllisa Eisentraut.
- Surveyed and mapped prehistoric site in the Mojave Desert.

Papers Presented

- 2002 “Shell Beads from the Coachella Valley,” Sixth Annual Symposium of the Coachella Valley Archaeological Society.
2002 “Shell Beads from the Coachella Valley,” Kelso Conference on the Archaeology of the California and Mojave Deserts.

Cultural Resources Management Reports

Co-author of and contributor to numerous cultural resources management study reports since 2000.

PROJECT ARCHAEOLOGIST/FIELD DIRECTOR
Daniel Ballester, B.A.

Education

- 1998 B.A., Anthropology, California State University, San Bernardino.
- 1997 Archaeological Field School, University of Las Vegas and University of California, Riverside.
- 1994 University of Puerto Rico, Rio Piedras, Puerto Rico.

- 2007 Certificate in Geographic Information Systems (GIS), California State University, San Bernardino.
- 2002 "Historic Archaeology Workshop," presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside, California.

Professional Experience

- 2002- Field Director, CRM TECH, Riverside/Colton, California.
- 1999-2002 Project Archaeologist, CRM TECH, Riverside, California.
- 1998-1999 Field Crew, K.E.A. Environmental, San Diego, California.
- 1998 Field Crew, A.S.M. Affiliates, Encinitas, California.
- 1998 Field Crew, Archaeological Research Unit, University of California, Riverside.

PROJECT ARCHAEOLOGIST
Nina Gallardo, B.A.

Education

- 2004 B.A., Anthropology/Law and Society, University of California, Riverside.

Professional Experience

- 2004- Project Archaeologist, CRM TECH, Riverside/Colton, California.

Honors and Awards

- 2000-2002 Dean's Honors List, University of California, Riverside.

PROJECT GEOLOGIST

Harry M. Quinn, M.S.

Education

1968 M.S., Geology, University of Southern California, Los Angeles, California.
1964 B. S, Geology, Long Beach State College, Long Beach.
1962 A.A., Los Angeles Harbor College, Wilmington North Palm Springs, California.

- Graduate work oriented toward invertebrate paleontology; M.S. thesis completed as a stratigraphic paleontology project on the Precambrian and Lower Cambrian rocks of Eastern California.

Professional Experience

2000- Project Paleontologist, CRM TECH, Riverside/Colton, California.
1998- Project Archaeologist, CRM TECH, Riverside/Colton, California.
1992-1998 Independent Geological /Environmental Consultant, Pinyon Pines, California.
1994-1996 Environmental Geologist, E.C E.S., Inc, Redlands, California.
1988-1992 Project Geologist/Director of Environmental Services, STE, San Bernardino, California.
1987-1988 Senior Geologist, Jirsa Environmental Services, Norco, California.
1986 Consulting Petroleum Geologist, LOCO Exploration, Inc. Aurora, Colorado.
1978-1986 Senior Exploration Geologist, Tenneco Oil E & P, Englewood, Colorado.
1965-1978 Exploration and Development Geologist, Texaco, Inc., Los Angeles, California.

Previous Work Experience in Paleontology

1969-1973 Attended Texaco company-wide seminars designed to acquaint all paleontological laboratories with the capability of one another and the procedures of mutual assistance in solving correlation and paleo-environmental reconstruction problems.
1967-1968 Attended Texaco seminars on Carboniferous coral zonation techniques and Carboniferous smaller foraminifera zonation techniques for Alaska and Nevada.
1966-1972, 1974, 1975 Conducted stratigraphic section measuring and field paleontological identification in Alaska for stratigraphic controls. Pursued more detailed fossil identification in the paleontological laboratory to establish closer stratigraphic controls, mainly with Paleozoic and Mesozoic rocks and some Tertiary rocks, including both megafossil and microfossil identification, as well as fossil plant identification.
1965 Conducted stratigraphic section measuring and field paleontological identification in Nevada for stratigraphic controls. Pursued more detailed fossil identification in the paleontological laboratory to establish closer stratigraphic controls, mainly with Paleozoic rocks and some Mesozoic and Tertiary rocks. The Tertiary work included identification of ostracods from the Humboldt and Sheep Pass Formations and vertebrate and plant remains from Miocene alluvial sediments.

Memberships

Society of Vertebrate Paleontology; American Association of Petroleum Geologists; Canadian Society of Petroleum Geologists; Rocky Mountain Association of Geologists, Pacific Section; Society of Economic Paleontologists and Mineralogists; San Bernardino County Museum.

Publications in Geology

Five publications in Geology concerning an oil field study, a ground water and earthquake study, a report on the geology of the Santa Rosa Mountain area, and papers on vertebrate and invertebrate Holocene Lake Cahuilla faunas.

APPENDIX 2

**CORRESPONDENCE WITH
NATIVE AMERICAN REPRESENTATIVES***

* Seven local Native American representatives were contacted; a sample letter is included in this report.

SACRED LANDS FILE & NATIVE AMERICAN CONTACTS LIST REQUEST

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd, Suite 100

West Sacramento, CA 95691

(916) 373-3710

(916) 373-5471 – Fax

nahc@nahc.ca.gov

Project: Wineville Segment "B" Alternate Alignments (CRM TECH Contract No. 2843)

County: San Bernardino

USGS Quadrangle Name: Fontana and Guasti, Calif.

Township 1 South **Range** 6 West **SB** BM; **Section(s)** 34-36

Company/Firm/Agency: CRM TECH

Contact Person: Nina Gallardo

Street Address: 1016 E. Cooley Drive, Suite A/B

City: Colton, CA **Zip:** 92324

Phone: (909) 824-6400 **Fax:** (909) 824-6405

Email: Ngallardo@crmtech.us

Project Description: The primary component of the project is to evaluate the proposed alternate alignments for the Wineville Segment "B" Recycled Water Pipeline in the City of Fontana, San Bernardino County, California.

August 25, 2014

STATE OF CALIFORNIAEdmund G. Brown, Jr., Governor**NATIVE AMERICAN HERITAGE COMMISSION**

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-6471



September 2, 2014

Nina Gallardo
CRM Tech
1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

Sent by Fax: (909) 824-6405
Number of Pages: 2

Re: Wineville Segment "B" Alternate Alignments (CRM TECH Contract No, 2843), San Bernardino County.

Dear Ms. Gallardo,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Government Program Analyst

Native American Contact List
San Bernardino County
August 29, 2014

San Manuel Band of Mission Indians
 Lynn Valbuena, Chairwoman
 26569 Community Center Serrano
 Highland, CA 92346
 (909) 864-8933
 (909) 864-3724 Fax
 (909) 864-3370 Fax

Serrano Nation of Mission Indians
 Goldie Walker, Chairwoman
 P.O. Box 343 Serrano
 Patton, CA 92369
 (909) 528-9027
 (909) 528-9032

San Fernando Band of Mission Indians
 John Valenzuela, Chairperson
 P.O. Box 221838
 Newhall, CA 91322 Fernandefio
 Tativiam
 Serrano
 Vanyume
 Kitanemuk
 tsen2u@hotmail.com
 (661) 753-9833 Office
 (760) 885-0955 Cell
 (760) 949-1604 Fax

Ernest H. Siva
 Morongo Band of Mission Indians Tribal Elder
 9570 Mias Canyon Road Serrano
 Banning, CA 92220 Cahuilla
 siva@dishmail.net
 (951) 849-4676

Morongo Band of Mission Indians
 William Madrigal, Jr., Cultural Resources Manager
 12700 Pumarra Road Cahuilla
 Banning, CA 92220 Serrano
 wmadrigal@morongo-nsn.gov
 (951) 201-1866 Cell
 (951) 572-6004 Fax

San Manuel Band of Mission Indians
 Daniel McCarthy, M.S., Director-CRM Dept.
 26569 Community Center Drive Serrano
 Highland, CA 92346
 dmccarthy@sanmanuel-nsn.gov
 (909) 864-8933 Ext 3248
 (909) 862-5152 Fax

Morongo Band of Mission Indians
 Robert Martin, Chairperson
 12700 Pumarra Road Cahuilla
 Banning, CA 92220 Serrano
 (951) 849-8807
 (951) 755-5200
 (951) 922-8146 Fax

*his list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Wineville Segment B" Alternate Alignments (CRM TECH Contract No. 2843), San Bernardino County.

September 3, 2014

William Madrigal, Jr., Cultural Heritage Program Coordinator
Morongo Band of Mission Indians
12700 Pumarra Road
Banning, CA 92220

RE: Wineville Segment "B" Alternate Alignments Project
2.5 Linear Miles in the City of Fontana
San Bernardino County, California
CRM TECH Contract #2843

Dear Mr. Madrigal:

Tom Dodson and Associates will be conducting environmental studies for the Wineville Segment "B" Alternate Alignments Project in the City of Fontana, San Bernardino County, California. The Area of Potential Effects (APE) encompasses approximately 2.4 linear miles of a proposed alternative water lines located south of Jurupa Avenue, west of Beech Avenue, along Banana Avenue, and north of Marlay Avenue, in both commercial and residential neighborhoods. The accompanying map, based on the USGS Fontana and Guasti, Calif., 7.5' quadrangles, depict the location of the APE in Sections 34-36, T1S R6W, SBBM. CRM TECH has been hired to conduct a cultural resource study, including the Native American scoping, for this project.

In a letter dated September 2, 2014, the Native American Heritage Commission reports that the sacred lands record search identified no Native American cultural resources within the APE, but recommends that local Native American groups be contacted for further information. Therefore, as part of the cultural resources study for this project, I am writing to request your input on potential Native American cultural resources in or near the APE.

According to records on file at the San Bernardino Archaeological Information Center and the Eastern Information Center, there is one known historical sites lying partially within the boundaries of the APE, Site 36-016417 (CPHI-SBr-21), a historic trail. Within a one-mile radius, three additional historical sites have been recorded, including a single-family residence, a railroad alignment, and the ruins of a winery. Six prehistoric sites and twelve prehistoric isolates have also been recorded within the one-mile radius, all of which were surface scatters of lithic artifacts. A systematic field survey of the APE on August 29, 2014, encountered three potential historical sites within the APE, all of them power transmission lines.

Please respond at your earliest convenience if you have any specific knowledge of sacred/religious sites or other sites of Native American traditional cultural value within or near the APE that need to be taken into consideration as part of the cultural resources investigation. Any information or concerns may be forwarded to CRM TECH by telephone, e-mail, facsimile, or standard mail. Requests for documentation or information we cannot provide will be forwarded to our client and/or the lead agency, which is the Inland Empire Utilities Agency. We would also like to clarify that CRM TECH, as the cultural resources consultant for the project, is not the appropriate entity to initiate government-to-government consultations. Thank you for the time and effort in addressing this important matter.

Respectfully,

Nina Gallardo
CRM TECH
Email: ngallardo@crmtech.us
Encl.: project area map

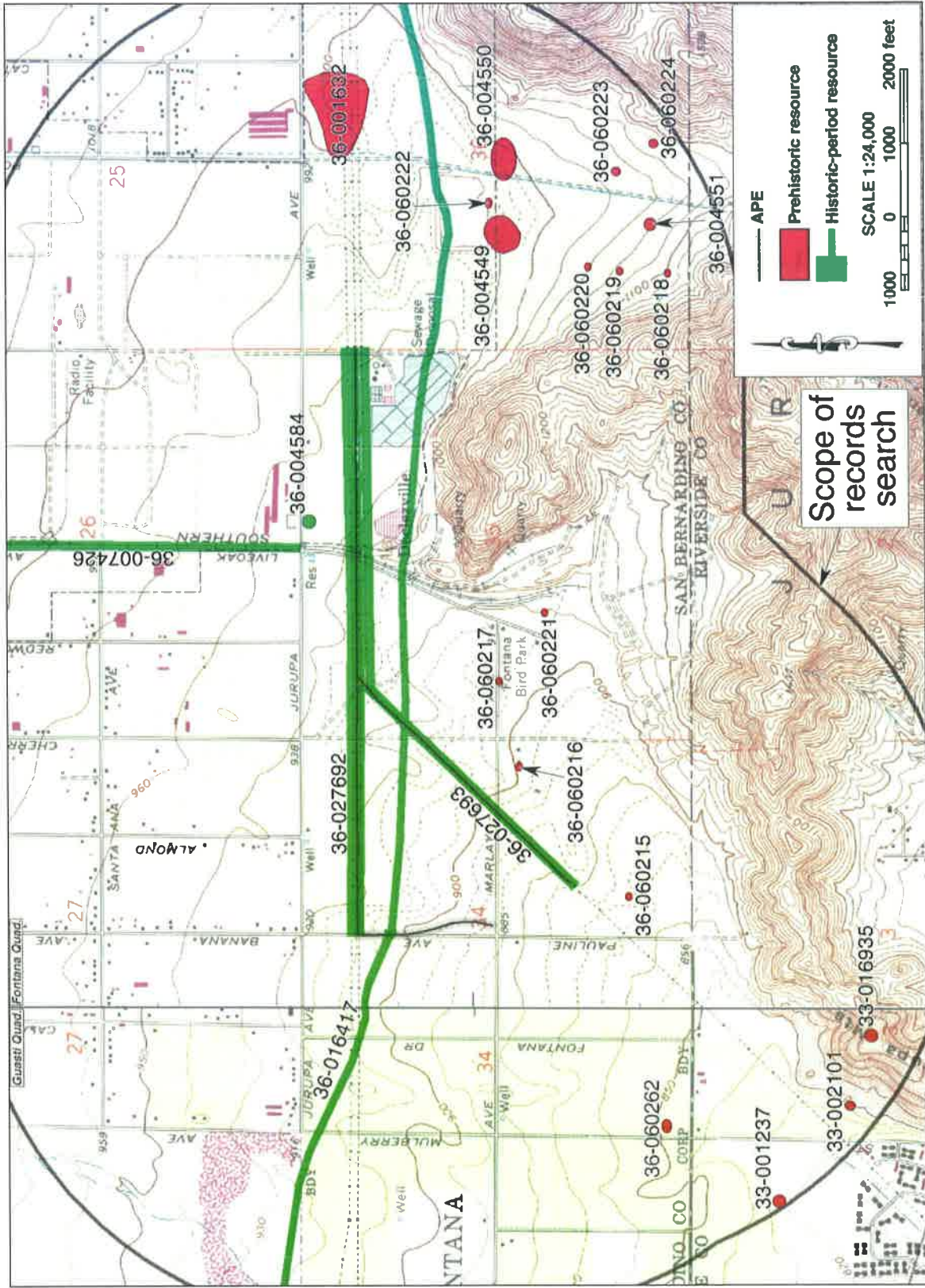
TELEPHONE LOG

Name	Tribe/Affiliation	Telephone Contacts	Comments
William Madrigal, Jr., Cultural Heritage Program Coordinator	Morongo Band of Mission Indians	11:14 am, September 24	The Morongo Band would defer to San Manuel Band of Serrano Mission Indians for this area.
Ernest Siva, Tribal Elder	Morongo Band of Mission Indians	11:24 am, September 24 1:18 pm, September 24	Mr. Siva had no comments or concerns regarding this undertaking.
Robert Martin, Chairperson	Morongo Band of Mission Indians	None	William Madrigal is the designated spokesperson for the tribe (see above).
John Valenzuela, Chairperson	San Fernando Band of Mission Indians	11:31 am, September 24	Mr. Valenzuela had no comments or concerns, but requested to be notified if any important cultural resources were found during the undertaking.
Lynn Valbuena, Chairperson	San Manuel Band of Serrano Mission Indians	None	Daniel McCarthy is the designated spokesperson for the tribe (see below).
Daniel McCarthy, Director of Cultural Resources Management Department	San Manuel Band of Serrano Mission Indians	11:17 am, September 24	Mr. McCarthy stated that the tribe was not aware of any cultural resources located within the APE or in the surrounding area.
Goldie Walker, Chairperson	Serrano Nation of Mission Indians	11:34 am, September 24 2:30 pm, September 25	Ms. Walker had no specific information or concerns, but requested to be notified if any cultural resources were found during the undertaking.

APPENDIX 3

**LOCATIONS OF RECORDED CULTURAL RESOURCES
IN THE VICINITY OF THE APE**

(Confidential)



APPENDIX 4

**CULTURAL RESOURCES
RECORDED DURING THIS STUDY**

(Confidential)

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 36-027692

HRI #

Trinomial CA-SBR-17228H

NRHP Status Code

Other Listings

Review Code

Reviewer

Date

Page 1 of 4

*Resource Name or # (Assigned by recorder) CRM TECH 2843-1H

P1. Other Identifier: Etiwanda-San Bernardino 220kV Transmission Power Line/Southern California Edison West of Devers (WOD) 230kV Transmission Line

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County San Bernardino

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Fontana, Calif. Date 1967, photorevised 1980

T 1S ; R 6W ; N 1/2 of N 1/2 of Sec 34-35 ; S.B. B.M.

Elevation: Approx. 911-953 feet above mean sea level

c. Address N/A City Zip

d. UTM: (Give more than one for large and/or linear resources) Zone 11 ; A: 456493 mE/ 3767413 mN ;
B: 454069 mE/ 3767404 mN ;
C: 456493 mE/ 3767372 mN ;
D: 454069 mE/ 3767372 mN

UTM Derivation: ☒ USGS Quad ☐ GPS

e. Other Locational Data: (e.g., parcel #, directions to resource, etc., as appropriate) The segments of these parallel linear features recorded are located to the south of Jurupa Avenue, between Beech Avenue and Banana Avenue

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This linear feature represents an approximately 7,960-foot segment of two parallel power lines known as the Etiwanda-San Bernardino 220kV Transmission Power Line and the Southern California Edison West of Devers (WOD; i.e., west of the Devers Substation near Palm Springs) 230kV Transmission Line. The former, on the northerly course, consists of A-shaped steel lattice towers with three cross-arms each, carrying six sets of circuits. Records indicate that the 85-foot easement for this line was recorded on June 9, 1961. The latter, on the southerly course, features H-shaped lattice towers with one cross-arm each, carrying three sets of (Continued on p. 4)

*P3b. Resource Attributes: (List attributes and codes) HP39 (Other)

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District
Isolate ☐ Other ☐

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession #) Photo taken on August 29, 2014; view to the west

*P6. Date Constructed/Age of Sources:

☒ Historic ☐ Prehistoric ☐ Both
Ca. 1951

*P7. Owner and Address:

Southern California Edison,
P.O. Box 800, Rosemead, CA
91770

*P8. Recorded by: (Name, affiliation, and address)

Daniel Ballester, CRM TECH,
1016 East Cooley Drive, Suite
A/B, Colton, CA 92324

*P9. Date Recorded: August 29, 2014

*P10. Survey Type: (Describe) Intensive-level survey for Section 106-compliance purpose

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") In progress

*Attachments: None ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☒ Linear Resource Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # 36-027692
HRI # _____
Trinomial CA-SBR-17228H

Page 2 of 4

*Resource Name or # (Assigned by recorder) CRM TECH 2843-1H

- L1. **Historic and/or Common Name:** Etiwanda-San Bernardino 220kV Transmission Power Line/SCE West of Devers (WOD) 230kV Transmission Line
- L2a. **Portion Described:** Entire Resource ☒ Segment ☐ Point Observation **Designation:** _____
- b. **Location of Point or Segment:** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) See Item P2
- L3. **Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.) See Item P3a

- L4. **Dimensions:** (In feet for historic features and meters for pre-historic features)
- a. **Top Width** _____
- b. **Bottom Width** 235 feet (combined easements)
- c. **Height or Depth** _____
- d. **Length of Segment** 7,960 feet
- L5. **Associated Resources:** None

L4e. **Sketch of Cross-Section** (Include scale)
Facing: _____

N/A

- L6. **Setting** (Describe natural features, landscape characteristics, slope, etc. as appropriate) The easement for the power lines lie on relatively level terrain, across former agricultural land that has been developed into single-family residential tracts in recent decades.
- L7. **Integrity Considerations:** The site appears to retain good integrity to relate to the period of origin.

L8a. **Photograph, Map or Drawing**

(See pp. 1, 3)

L8b. **Description of Photo, Map, or Drawing** (View, scale, etc.) _____

L9. **Remarks:** _____

L10. **Form Prepared by:** (Name, affiliation and address) Nina Gallardo

L11. **Date:** September 22, 2014

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # 36-027692

HRI #

Trinomial CA-SBR-17228H

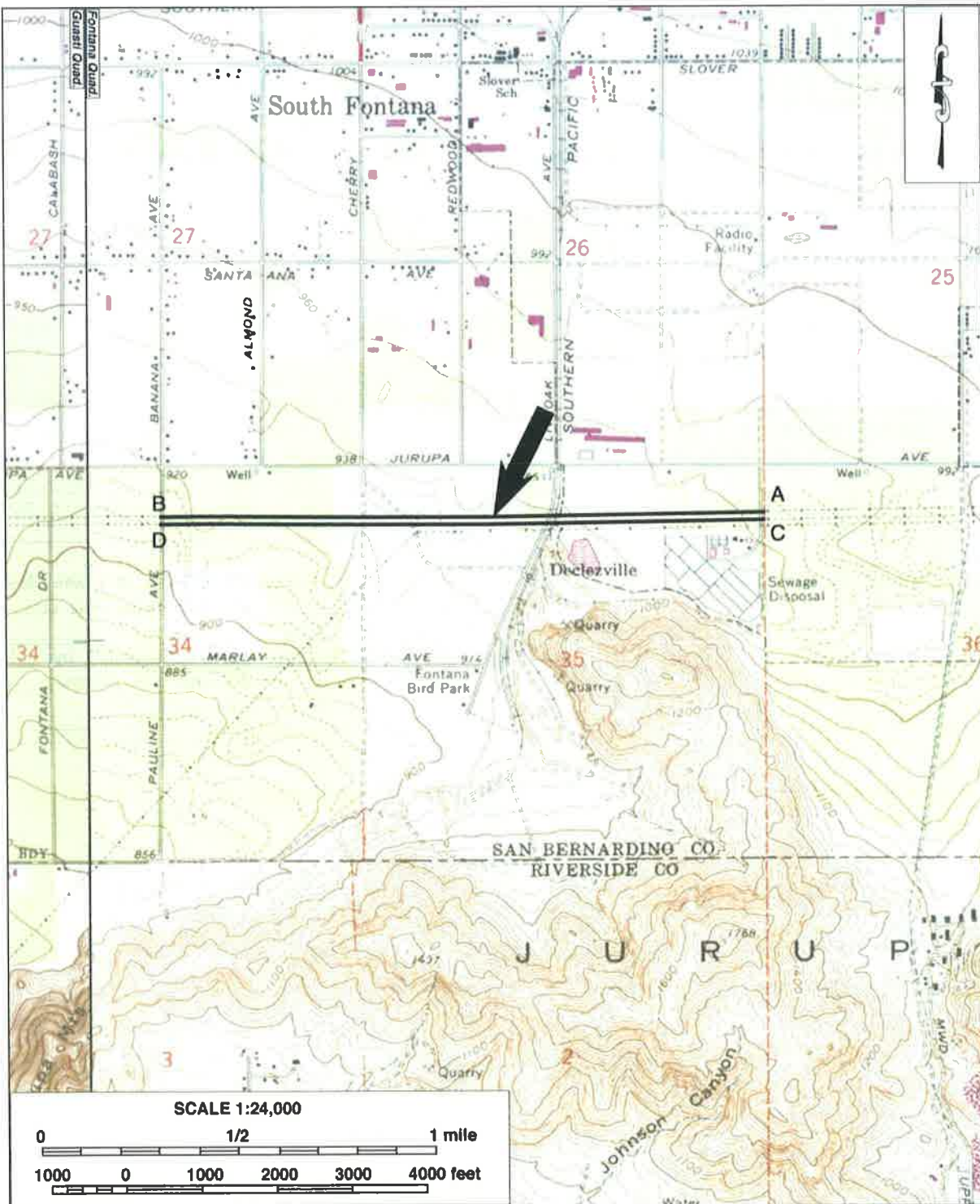
Page 3 of 4

*Resource Name or # (Assigned by recorder) CRM TECH 2843-1H

*Map Name: Fontana & Guasti, Calif.

*Scale: 1:24,000

*Date of Map: 1980/1981



State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # 36-027692
HRI # _____
Trinomial CA-SBR-17228H

Page 4 of 4

Resource name or # (Assigned by recorder) CRM TECH 2843-1H

Recorded by: Daniel Ballester

*Date: August 29, 2014

☒ Continuation ☐ Update

*P3a. **Description (continued):** circuits. The 150-foot easement for this line was recorded on March 8, 1946. The recorded segment runs in an east-west direction within an approximately 235- to 300-foot-wide corridor of vacant land, flanked by single-family residential neighborhoods of recent vintage.

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 36-027693

HRI #

Trinomial CA-SBR-17229H

NRHP Status Code

Other Listings

Review Code

Reviewer

Date

Page 1 of 3

*Resource Name or # (Assigned by recorder) CRM TECH 2843-2H

P1. Other Identifier: Mira Loma-Vista 230kV Transmission Line

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County San Bernardino

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Fontana, Calif. Date 1967, photorevised 1980

T 1S ; R 6W ; 1/4 of 1/4 of 1/4 of 1/4 of Sec 34-35 ; S.B. B.M.

Elevation: Approx. 883-971 feet above mean sea level

c. Address N/A City Zip

d. UTM: (Give more than one for large and/or linear resources) Zone 11 ; A: 456945 mE/ 3767349 mN;
B: 455100 mE/ 3767330 mN;
C: 454268 mE/ 3766490 mN

UTM Derivation: ☒ USGS Quad ☐ GPS

e. Other Locational Data: (e.g., parcel #, directions to resource, etc., as appropriate) The segment of this linear feature recorded is located to the south of Jurupa Avenue, between Beech Avenue and Banana Avenue

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This linear feature represents an approximately 8,455-foot segment of power line, currently a part of the Mira Loma-Vista 230kV Transmission Line. It consists of a series of A-shaped steel lattice towers with three cross-arms each, carrying a total of 12 circuits in six pairs. The route runs east-west in the eastern portion of the recorded segment, and turns northeast-southwest in the western portion, traversing in an approximately 65-foot-wide, undeveloped easement flanked by single-family residential neighborhoods of recent vintage. The easement for the power line was recorded on May 14, 1951.

*P3b. Resource Attributes: (List attributes and codes) HP39 (Other)

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District
☐ Isolate ☐ Other

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession #) Photo taken on August 29, 2014; view to the southwest

*P6. Date Constructed/Age of Sources:

☒ Historic ☐ Prehistoric ☐ Both
Ca. 1951

*P7. Owner and Address:

Southern California Edison,
P.O. Box 800, Rosemead, CA
91770

*P8. Recorded by: (Name, affiliation, and address)

Daniel Ballester, CRM TECH,
1016 East Cooley Drive, Suite
A/B, Colton, CA 92324

*P9. Date Recorded: August 29, 2014

*P10. Survey Type: (Describe) Intensive-level survey for Section 106-compliance purpose

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") In progress

*Attachments: ☐ None ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☒ Linear Resource Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # 36-027693
HRI # _____
Trinomial CA-SBR-17229H

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*Resource Name or # (Assigned by recorder) CRM TECH 2843-2H

- L1. **Historic and/or Common Name:** Mira Loma-Vista 230kV Transmission Line
- L2a. **Portion Described:** Entire Resource ☒ Segment ☐ Point Observation **Designation:** _____
- b. **Location of Point or Segment:** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) See Item P2
- L3. **Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.) See Item P3a

- L4. **Dimensions:** (In feet for historic features and meters for pre-historic features)

- a. **Top Width** _____
- b. **Bottom Width** 65 feet (easement)
- c. **Height or Depth** _____
- d. **Length of Segment** 8,455 feet

- L5. **Associated Resources:** _____

- L4e. **Sketch of Cross-Section** (Include scale)
Facing: _____

N/A

- L6. **Setting** (Describe natural features, landscape characteristics, slope, etc. as appropriate) The easement for the power line lies on relatively level terrain, across former agricultural land that has been developed into single-family residential tracts in recent decades.
- L7. **Integrity Considerations:** The site appears to retain good integrity to relate to the period of origin.

- L8a. **Photograph, Map or Drawing**

(See pp. 1, 3)

- L8b. **Description of Photo, Map, or Drawing** (View, scale, etc.) _____

- L9. **Remarks:** _____

- L10. **Form Prepared by:** (Name, affiliation and address) Nina Gallardo

- L11. **Date:** September 22, 2014

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # 36-027693

HRI #

Trinomial CA-SBR-17229H

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*Resource Name or # (Assigned by recorder) CRM TECH 2843-2H

*Map Name: Fontana & Guasti, Calif.

*Scale: 1:24,000

*Date of Map: 1980/1981

