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2006 MAY -3 PM 2: 02

CITY CLERK  
CITY OF  
HUNTINGTON BEACH

|                                                                                                                   |                                      |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Council/Agency Meeting Held: _____                                                                                | _____<br>City Clerk's Signature      |
| Deferred/Continued to: _____                                                                                      |                                      |
| <input type="checkbox"/> Approved <input type="checkbox"/> Conditionally Approved <input type="checkbox"/> Denied |                                      |
| Council Meeting Date:                      5/15/2006                                                              | Department ID Number:      PW 06-019 |

**CITY OF HUNTINGTON BEACH  
REQUEST FOR CITY COUNCIL ACTION**

**SUBMITTED TO:** HONORABLE MAYOR AND CITY COUNCIL MEMBERS

**SUBMITTED BY:** *Penelope Culbreth Graft*  
PENELOPE CULBRETH-GRAFT, CITY ADMINISTRATOR

**PREPARED BY:** ROBERT F. BEARDSLEY, PE, DIRECTOR OF PUBLIC WORKS

*EDW  
for RFP*

**SUBJECT:** Approve Amendment No. 1 for two As-Needed Corrosion Engineering Service Contracts

Statement of Issue, Funding Source, Recommended Action, Alternative Action(s), Analysis, Environmental Status, Attachment(s)

**Statement of Issue:** The Public Works Department requires professional corrosion engineering services on an as needed basis to support staff for the design and construction of capital projects.

**Funding Source:** Funds are available within budgeted water capital improvement projects. Additional City Council authorization will be requested for unbudgeted projects, if necessary.

**Recommended Action:** Motion to:

1. Approve and authorize the Mayor and City Clerk to execute Amendment No.1 to the Maintenance and Professional Service Contracts for DeC Consultants Inc. for as-needed Corrosion Engineering Service Contracts.
2. Approve and authorize the Mayor and City Clerk to execute Amendment No.1 to the Maintenance and Professional Service Contracts for M.J. Schiff & Associates Inc. for as-needed Corrosion Engineering Service Contracts.

**Alternative Action(s):** Do not authorize the amendments and direct staff to request proposals from other corrosion-engineering firms for maintenance and design services for various capital projects.

*E-7*

# REQUEST FOR ACTION

MEETING DATE: 5/15/2006

DEPARTMENT ID NUMBER: PW 06-019

**Analysis:** The City's potable water Capital Improvement Program is approximately \$11 million in FY 2005/06. Projects include the installation of new water mains, and corrosion control on more than 13 miles of the City's transmission mains. The design and maintenance of corrosion control facilities for these projects is assigned to either of the two firms specializing in corrosion engineering.

In April 2005, the City retained the services of two Corrosion Engineering firms, DeC Consultants Inc., and M. J. Schiff and Associates Inc. The original contracts were for three (3) year durations and for amounts not to exceed \$90,000 each. In the first year of these contracts the City has utilized approximately 45% of the value of the contracts. Amending these contracts to amounts not to exceed \$250,000 each will insure adequate funds are available through the contract term. The contract term is not changed by the amendments.

Project assignments are rotated between the two consultants. Proposals were requested and submitted in compliance with Chapter 3.03 of the Huntington Beach Municipal Code. Funding sources will be capital project accounts, using the approved project budgets.

**Public Works Commission Action:** Not Required

**Environmental Status:** Not Applicable

**Attachment(s):**

| City Clerk's Page Number | No. | Description                                                                                                |
|--------------------------|-----|------------------------------------------------------------------------------------------------------------|
| 3                        | 1.  | Amendment No. 1 to the Maintenance and Professional Services Contract with DeC Consultants Inc.            |
| 35                       | 2.  | Amendment No. 1 to the Maintenance and Professional Services Contract with M.J. Schiff and Associates Inc. |

E7. 2

E7.3

# ATTACHMENT #1

**INTENTIONALLY  
LEFT  
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AMENDMENT NO. 1 TO MAINTENANCE AND PROFESSIONAL SERVICES  
CONTRACT BETWEEN THE CITY OF HUNTINGTON BEACH AND  
DeC CONSULTANTS, INC. FOR AS-NEEDED CORROSION  
ENGINEERING AND MAINTENANCE SERVICES

THIS AMENDMENT is made and entered into by and between the City of Huntington Beach, a municipal corporation of the State of California, hereinafter referred to as "CITY," and DeC CONSULTANTS, INC., a California corporation, hereinafter referred to as "CONSULTANT."

WHEREAS, CITY and CONSULTANT are parties to that certain agreement, dated March 15, 2005, entitled "Maintenance and Professional Services Contract Between the City of Huntington Beach and DeC Consultants, Inc. for As-Needed Corrosion Engineering And Maintenance Services" which agreement shall hereinafter be referred to as the "Original Agreement," and

CITY and CONSULTANT wish to amend the Original Agreement to reflect additional compensation to be paid to CONSULTANT,

NOW, THEREFORE, it is agreed by CITY and CONSULTANT as follows:

1. ADDITIONAL COMPENSATION

Section 4 of the Original Agreement, entitled "Compensation," is hereby amended to read as follows:

In consideration of the performance of the services described herein, CITY agrees to pay CONSULTANT on a time and materials basis at the rates specified in Exhibit "B," ( the Fee Schedule) which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed Two Hundred Fifty Thousand Dollars (\$250,000.00).

2. REAFFIRMATION

Except as specifically modified herein, all other terms and conditions of the Original Agreement shall remain in full force and effect.

REST OF PAGE NOT USED

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officer on \_\_\_\_\_, 200\_\_\_\_\_.

DeC CONSULTANTS, INC.

CITY OF HUNTINGTON BEACH,  
a municipal corporation of the State of California

By:   
Eugene A. DeCarlo  
print name

\_\_\_\_\_  
Mayor

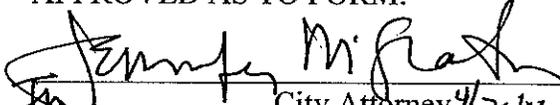
ITS: (circle one) Chairman/President Vice President

By:   
Eugene A. DeCarlo  
print name

\_\_\_\_\_  
City Clerk

ITS: (circle one) Secretary/Chief Financial Officer/Asst. Secretary - Treasurer

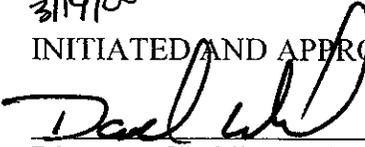
APPROVED AS TO FORM:

  
City Attorney 4/20/02 *kg 3/14/05*

REVIEWED AND APPROVED:

INITIATED AND APPROVED:

  
City Administrator

  
Director of Public Works  
For RFB

# ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY)  
12/29/05

PRODUCER **0A99520** 1-619-234-6848  
Cavignac & Associates  
450 B Street, Suite 1800  
San Diego, CA 92101-8005  
Jeffrey Steen

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

### INSURERS AFFORDING COVERAGE

INSURED  
DeC Consultants, Inc.  
8291 Aero Place, Suite 110  
San Diego, CA 92123

INSURER A: St. Paul Fire & Marine Insurance Company  
INSURER B: XL Specialty Insurance Company  
INSURER C: United States Fidelity & Guaranty Company  
INSURER D:  
INSURER E:

### COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR                                                            | TYPE OF INSURANCE                                                                                                                               | POLICY NUMBER | POLICY EFFECTIVE DATE (MM/DD/YY) | POLICY EXPIRATION DATE (MM/DD/YY) | LIMITS                                                  |              |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------|-----------------------------------|---------------------------------------------------------|--------------|
| C                                                                   | GENERAL LIABILITY                                                                                                                               | BK01274927    | 12/31/05                         | 12/31/06                          | EACH OCCURRENCE                                         | \$ 1,000,000 |
|                                                                     | <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY                                                                                |               |                                  |                                   | FIRE DAMAGE (Any one fire)                              | \$ 300,000   |
|                                                                     | <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR                                                                  |               |                                  |                                   | MED EXP (Any one person)                                | \$ 10,000    |
|                                                                     | <input checked="" type="checkbox"/> Broad Form                                                                                                  |               |                                  |                                   | PERSONAL & ADV INJURY                                   | \$ 1,000,000 |
|                                                                     | <input checked="" type="checkbox"/> Blanket Contractual                                                                                         |               |                                  |                                   | GENERAL AGGREGATE                                       | \$ 2,000,000 |
|                                                                     | GEN'L AGGREGATE LIMIT APPLIES PER:<br><input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC |               |                                  |                                   | PRODUCTS - COMP/OP AGG                                  | \$ 2,000,000 |
| C                                                                   | AUTOMOBILE LIABILITY                                                                                                                            | BA01377162    | 05/28/05                         | 05/28/06                          | COMBINED SINGLE LIMIT (Ea accident)                     | \$ 1,000,000 |
|                                                                     | <input checked="" type="checkbox"/> ANY AUTO                                                                                                    |               |                                  |                                   | BODILY INJURY (Per person)                              | \$           |
|                                                                     | <input type="checkbox"/> ALL OWNED AUTOS                                                                                                        |               |                                  |                                   | BODILY INJURY (Per accident)                            | \$           |
|                                                                     | <input type="checkbox"/> SCHEDULED AUTOS                                                                                                        |               |                                  |                                   | PROPERTY DAMAGE (Per accident)                          | \$           |
|                                                                     | <input type="checkbox"/> HIRED AUTOS                                                                                                            |               |                                  |                                   | AUTO ONLY - EA ACCIDENT                                 | \$           |
|                                                                     | <input type="checkbox"/> NON-OWNED AUTOS                                                                                                        |               |                                  |                                   | OTHER THAN AUTO ONLY: EA ACC AGG                        | \$           |
| GARAGE LIABILITY                                                    |                                                                                                                                                 |               |                                  |                                   |                                                         |              |
| <input type="checkbox"/> ANY AUTO                                   |                                                                                                                                                 |               |                                  |                                   |                                                         |              |
| EXCESS LIABILITY                                                    |                                                                                                                                                 |               |                                  |                                   |                                                         |              |
| <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE |                                                                                                                                                 |               |                                  |                                   |                                                         |              |
| <input type="checkbox"/> DEDUCTIBLE                                 |                                                                                                                                                 |               |                                  |                                   |                                                         |              |
| <input type="checkbox"/> RETENTION \$                               |                                                                                                                                                 |               |                                  |                                   |                                                         |              |
| A                                                                   | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY                                                                                                   | WVA2449951    | 12/31/05                         | 12/31/06                          | <input checked="" type="checkbox"/> WC STATUTORY LIMITS | OTH-ER       |
|                                                                     | E.L. EACH ACCIDENT                                                                                                                              |               |                                  |                                   | \$ 1,000,000                                            |              |
|                                                                     | E.L. DISEASE - EA EMPLOYEE                                                                                                                      |               |                                  |                                   | \$ 1,000,000                                            |              |
|                                                                     | E.L. DISEASE - POLICY LIMIT                                                                                                                     |               |                                  |                                   | \$ 1,000,000                                            |              |
| B                                                                   | OTHER Professional Liability                                                                                                                    | DPR9415323    | 12/31/05                         | 12/31/06                          | Each Claim                                              | \$ 1,000,000 |
|                                                                     | Aggregate                                                                                                                                       |               |                                  |                                   | \$ 1,000,000                                            |              |

APPROVED AS TO FORM  
JENNIFER McGRATH  
CITY ATTORNEY  
*Per W.B. W.*

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS  
Professional Liability - Claims made form, aggregate limit policy. Defense costs included within limit of liability. The City, its officers, and employees are named as Additional Insured Primary with respect to General Liability per attached endorsement. Waiver of subrogation applies to Workers Compensation, endorsement to follow.  
\*10 days notice of cancellation for non-payment of premium.

E7.6

|                                                                                                                            |                                                                           |                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CERTIFICATE HOLDER                                                                                                         | <input checked="" type="checkbox"/> ADDITIONAL INSURED; INSURER LETTER: C | CANCELLATION                                                                                                                                                                                                                                                                                                                                                                          |
| City of Huntington Beach<br>Attn: Andrew Ferrigno<br>2000 Main Street<br>P.O. Box 190<br>Huntington Beach, CA 92648<br>USA |                                                                           | SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.<br>AUTHORIZED REPRESENTATIVE <i>Jeffrey Steen</i> |



# INSURANCE AND INDEMNIFICATION WAIVER MODIFICATION REQUEST

RECEIVED

JAN 17 2006

City of Huntington Beach  
City Attorney's Office

- Requested by: Christi Mendoza, Risk Management
- Date: January 12, 2006
- Name of contractor/permittee: DeC Consultants, Inc.
- Description of work to be performed: As-needed corrosion engineering services
- Value and length of contract: \$90,000 maximum over three (3) years
- Waiver/modification request: \$5,000 deductible and cancellation clause wording
- Reason for request and why it should be granted: Unable to comply with the city's zero deductible and cancellation clause wording insurance requirements
- Identify the risks to the City in approving this waiver/modification: None.

*[Handwritten Signature]*  
 Department Head Signature

1/13/06  
 Date:

### APPROVALS

Approvals must be obtained in the order listed on this form. Two approvals are required for a request to be granted. Approval from the City Administrator's Office is only required if Risk Management and the City Attorney's Office disagree.

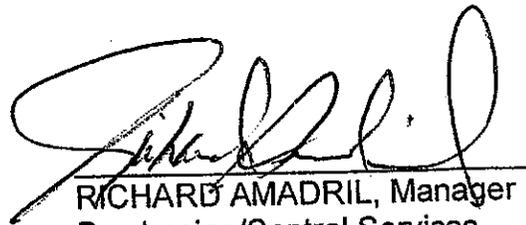
|                                |                                                                              |                    |                |
|--------------------------------|------------------------------------------------------------------------------|--------------------|----------------|
| 1. Risk Management             | <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied | <i>[Signature]</i> | <u>1/12/06</u> |
|                                |                                                                              | Signature          | Date           |
| 2. City Attorney's Office      | <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied | <i>[Signature]</i> | <u>1/17/06</u> |
|                                |                                                                              | Signature          | Date           |
| 3. City Administrator's Office | <input type="checkbox"/> Approved <input type="checkbox"/> Denied            | _____              | _____          |
|                                |                                                                              | Signature          | Date           |

If approved, the completed waiver/modification request is to be submitted to the City Attorney's Office along with the contract for approval. Once the contract has been approved, this form is to be filed with the Risk Management Division of Administrative Services.



# PROFESSIONAL SERVICE CONTRACTS PURCHASING CERTIFICATION

1. Requested by: Andrew Ferrigno / 5291
2. Date: March 23, 2005
3. Name of consultant: DeC Consultants, Inc.
4. Description of work to be performed: Corrosion Engineering
5. Amount of the contract: \$90,000.00
6. Are sufficient funds available to fund this contract?<sup>1</sup>  Yes,  No
7. Company number and object code where funds are budgeted: 50791017.82100
8. Is this contract generally described on the list of professional service contracts approved by the City Council?<sup>1</sup>  Yes,  No
9. Is this contract within \$25,000 or 25% (whichever is less) of the amount stated on the list of professional service contracts approved by the City Council?<sup>1</sup>  
 Yes,  No
10. Were (at least) informal written proposals requested of three consultants?  
 Yes,  No
11. Attach list of consultants from whom proposals were requested (including a contact telephone number).
12. Attach proposed scope of work.
13. Attach proposed payment schedule.

  
RICHARD AMADRIL, Manager  
Purchasing/Central Services

E7.8

<sup>1</sup> If the answer to any these questions is "No," the contract will require approval from the City Council.

**PROPOSAL  
for  
AS-NEEDED  
CORROSION ENGINEERING SERVICES  
City of Huntington Beach, California**

October 1, 2004

Submitted to:

Mr. Andrew Ferrigno, P.E.  
Engineering Division  
Public Works Department  
City of Huntington Beach  
City Hall  
2000 Main Street  
P.O. Box 190  
Huntington Beach, California 92648

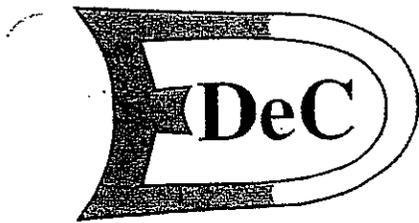
Submitted by:

DeC Consultants, Inc.  
8291 Aero Place,  
Suite 110  
San Diego, CA 92123  
(858) 576-0226

(Proposal No. 043926)



E.A. DeCarlo, P.E.



# CONSULTANTS, INC.

October 1, 2004

Mr. Andrew Ferrigno  
Associate Civil Engineer  
City of Huntington Beach  
Public Works Department  
2000 Main Street  
Huntington Beach, CA 92648

**SUBJECT:** RFP - As Needed Corrosion Engineering Services  
DeC Proposal No. 043926

Dear Mr. Ferrigno:

DeC Consultants, Inc. (DeC) is pleased to submit this proposal for professional corrosion engineering services. DeC is a corrosion engineering consulting firm that focuses on the Water Industry. Our proposal team has extensive experience with all of the listed tasks. We look forward to providing our services to the City of Huntington Beach.

Please note that three subconsultants are included on our proposal team. These are Mr. Steve Agor of Tetra Tech, Inc., Mr. Mark Schilling and Mr. Barry Barman of CSI Inc. As a qualified civil engineer, Mr. Agor is needed to design and sign-off on supporting installations such as retaining walls, street excavations and repair, electrical conduits, foundation slabs, etc. DeC can provide specifications and inspection services for pipeline coating but for other specialty coatings we prefer to retain the services of experts. Mr. Schilling can prepare specifications for any coatings you may need and Mr. Barman can provide inspection services. Both of these men have extensive experience in the coating field.

Attached is our proposal for your review. I believe it to be complete and fully responsive. Should however, you need additional information or clarification, we would be pleased to respond or to participate in an oral interview. This proposal is valid for a 60-day period. As the president of DeC Consultants Inc., I am authorized to commit DeC to providing the services proposed herein. I can also commit to providing these services in a professional and timely manner keeping your interests as our paramount goal. Thank you for this opportunity to offer our professional services.

Very truly yours,

E.A. DeCarlo, P.E.  
President, Corrosion Consultant

EAD:ss  
Enclosure: Proposal

E7.10

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**As-Needed Corrosion Engineering Services**  
**City of Huntington Beach, California**

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**PROPOSAL**  
**for**  
**AS-NEEDED CORROSION ENGINEERING SERVICES**  
**City of Huntington Beach, California**

Submitted by: DeC Consultants, Inc.  
October 1, 2004

**INTRODUCTION**

DeC Consultants, Inc. (DeC) is a corrosion consulting firm that has served the water and wastewater industry for 16 years. The tasks described in the scope of work are all part of DeC's primary services, with the exception of specifying specialty coating systems and the inspection of other than pipeline coatings. DeC can provide these services, however, through two very qualified subconsultants. They are Mr. Mark Schilling, a nationally known coating expert with 26 years of experience and Mr. Barry Barman, principal of Coating Specialist and Inspection Services (CSI Services), who will provide specialty coating inspection. In addition, we have civil engineering support through Tetra Tech, Inc. We have worked with Mr. Steve Agor, P.E. of Tetra Tech on many projects over the past 12 years. Mr. Agor will assist us where civil engineering design services and professional registration are needed to supplement corrosion protection design. Accordingly, if selected for this contract, DeC can provide all of the corrosion engineering services described in the City of Huntington Beach RFP.

**EXECUTIVE SUMMARY**

DeC provides corrosion engineering and related services. Our focus for 16 years has been on the water and wastewater industries. Our experience includes all major water industry and wastewater treatment equipment. DeC has completed numerous pipeline corrosivity studies, corrosion status assessments and corrosion control designs. We are experts in cathodic protection (CP) design, in the development and implementation of corrosion control programs and in the management of corrosion data for water transmission and distribution systems.

We are thoroughly familiar with all phases of design\bid\build projects (DBB) and have participated in several design\build (DB) projects. Although procedures for DB projects are not well standardized, our ultimate objectives are to provide the design\construction team with concise and complete direction regarding the owner's corrosion protection requirements and to see that they are installed properly. For conventional DBB projects, DeC has provided complete corrosion engineering services on numerous occasions including the tasks described in the Proposed Project Approach below.

DeC's staff includes registered professional corrosion engineers, trained and NACE qualified field engineers and technicians, a professional CAD drafter and competent office staff. With the combined resources of our subconsultants, DeC has the expertise and capacity to provide all of the City's corrosion engineering needs.

Creative, efficient and cost effective cathodic protection systems are best developed when there are no conflicts with the sales and inventory of cathodic protection products. DeC has no such conflicts; however, we offer limited repair services for corrosion monitoring systems. Assessment of corrosion status is made difficult when information is limited by damaged or missing test stations. Since many of our clients do not have the time to do these repairs, we created DeC's Water Industry Services (WIS) division. This optional service may be useful if monitoring facilities are in need of repair.

Through 16 years of experience, we have developed an effective quality control program. Our system of written objectives, signature reviews and checks and re-checks ensures that we have considered our client's stated objectives, all reasonable solutions, and that we produce very high quality engineering documents.

## **PROPOSED PROJECT APPROACH**

Several individual work items or tasks will be defined and authorized through the course of this project. The appropriate technical approach will depend on the type of task (i.e., corrosivity evaluation, failure analysis, corrosion protection status evaluation, CP design, or preparation of standards, training aids or manuals) and the specific requirements for each work item.

### **Pipeline Design Projects**

For a typical pipeline corrosion assessment and corrosion protection design project, DeC would employ the following general methodology that has been successful for many similar projects.

#### **Preliminary Design**

- Determine project requirements. Review client inquiries and reference documents and consult directly with the client in order to truly understand the problem and the specific goals of the client. This is the most important step.
- Prepare a detailed scope and fee estimate to accomplish the client goals.
- Develop a work plan that might include research of historical data, interviews with knowledgeable personnel, field inspection or testing, laboratory corrosivity analysis and design. This plan can be influenced by other on-going or future planned projects in the vicinity either by the client or by others.
- Prepare a schedule of tasks and deliverables for client approval.
- Conduct field tests, determine to the extent possible all factors that may influence the corrosion of the project facilities (pipeline).
- Evaluate test results and other factors of influence and conduct a design analysis with internal QC reviews as described in DeC's standard procedures.
- Evaluate supplementary project construction requirements such as: potholing; geotechnical testing; design of trench support, retaining walls and equipment slabs; traffic control; environmental issues; and permitting requirements.
- Prepare a corrosivity report, preliminary design report or basis of design report as directed by the client and as defined in the agreed scope. Specific recommendations to address client goals would be included.

#### **Design Phase**

- Review and consider client comments and review preliminary design recommendations. Modify as necessary to include new information.
- Coordinate with Tetra Tech to address all civil, mechanical or electrical design requirements and to obtain permits from regulating agencies.
- Proceed to the preparation of design documents, typically design drawings, specifications, cost estimate and supporting bid documents in accordance with client requirements and provided front-end documents. Submit first draft for client check and review.
- Consider client comments, resolve all identified issues, edit and improve design documents as needed and submit pre-final documents.

- Review client comments, revise as needed and submit final documents. This task may include preparing and providing approved documents to interested bidders.

#### Bid Assistance

- Conduct a pre-bid conference or job walk.
- Preparation of list of questions and answers from pre-bid conference. Distribute Q&A summary to all attendees.
- Prepare addenda as necessary.
- Response to bidder inquiries.
- Review contractor bids. Assist the client as needed to select the optimum contractor for the job.

#### Construction Support Services

- Conduct a pre-construction conference or kick-off meeting and prepare written minutes including all issues discussed that may affect scope, fees, schedule or performance.
- Respond to written contractor inquiries.
- Review and comment on shop drawing submittals. Document, record and distribute copies of all submittals to client.
- Conduct field meetings and inspections as necessary or as described in the project specifications.
- Review contractor invoices and percentage of completion for client.
- Provide testing, activation and final system checkout services. Prepare field memos and deficiency punch lists as needed.
- Re-inspect installations and re-activate systems as required.
- Resolve all punch list items to full compliance with contract documents.
- Prepare final system performance reports including recommendation of acceptance of contractors work.
- Provide client with all necessary operations and maintenance information. The preparation of system O&M manuals may be included.

#### **Coating Specifications and Inspection**

It is anticipated that the City may build new facilities other than pipelines, such as steel reservoirs, pump stations or other equipment that may require specialty coatings or full time coating inspection. A similar beginning-to-end approach, as described above would be used for these projects. Coating services, other than for pipeline coatings, would be provided by our subconsultants identified above. Mr. Schilling is familiar with state-of-the-art coating products, application methods and performance requirements. He has prepared many specifications and his experience will ensure high quality materials and application as well as minimize change orders. Through CSI Services, DeC can provide qualified inspectors for these projects. As you know, full time inspection by qualified inspectors is a critical part of a reservoir corrosion protection system. CSI can also provide periodic tank coating inspections services.

#### **Corrosion Training and Standards**

It is important to have clear standards for corrosion control and monitoring installations on pipelines and other facilities to ensure the consistency of new installations on all City facilities. It is not known if the City has such standards at this time. If reviews and/or modifications of existing standards are needed, or new standards need to be developed, DeC can provide this service. We have prepared similar standard documents, including drawings, specifications and O&M manuals. The approach for

this service would be to fully evaluate the City's needs as well as their customs and successful practices. With this information, good engineering practice standards would be developed. Additionally, both Mr. DeCarlo and Mr. Geving can provide training seminars for City personnel on various water industry corrosion control topics.

## **PROJECT ORGANIZATION AND KEY PERSONNEL**

DeC's staff is competent, efficient and works very well together. All of DeC's people will provide important contributions to the success of the City of Huntington Beach, As-Needed Corrosion Engineering Project. Full resumes of key DeC personnel are attached as Appendix "A." The organization of our proposed project team is straightforward and is charted in Appendix "B." Brief backgrounds of each of the key DeC project team members listed on the chart are given below.

**Principal-In-Charge** - Mr. Eugene A. DeCarlo, P.E. will be the principal-in-charge. Mr. DeCarlo has 32 years of corrosion engineering and project management experience, including managing water district corrosion control programs at the Otay WD, Sweetwater Authority and Moulton Niguel WD. For the last 22 years (including 16 as principal of DeC Consultants Inc.), he has focused on water and wastewater industry corrosion issues. Career experience includes: corrosion research, laboratory and field corrosion studies, liaison for international cooperative corrosion program, expert witness investigation and testimony, and project manager and principal corrosion engineer for many CP design projects.

**Project Manager** - The Project Manager and person directly in charge of the implementation and scheduling of the day-to-day work will be Mr. Randy Geving, P.E. Randy is DeC's Engineering Manager. He holds a BSMetE (metallurgical engineering) degree from California State Polytechnic University at San Luis Obispo and is a registered professional corrosion engineer in California. He has been with DeC for over four years and has accomplished a number of major water industry tasks.

Mr. Geving will be the direct contact for the City's project engineer. He will be in charge of preparing scope and fee estimates, maintaining project direction and budget and assigning and scheduling tasks. Randy and Mr. DeCarlo will also provide QC review for all corrosion control design documents.

Prior to joining DeC, Randy was a metallurgical\corrosion engineer for Unocal. He worked for the Brea Research Division for seven years with responsibilities that included cathodic protection design and troubleshooting, failure analysis, metallurgical examinations and materials selection. While at the Brea Research Center, Mr. Geving provided consulting and testing services for Unocal's offshore, manufacturing, geothermal and chemical divisions. Randy was assigned to the Unocal Pipeline Division for two years where he worked on cathodic protection, pipeline integrity and non-destructive testing projects. His final three years was with the Unocal\Tosco Los Angeles Refinery.

Randy currently manages the Otay Water District Corrosion Control Program which will conclude at the end of October. He also has been responsible for all of our inspection and failure analysis projects as well as several water district CP design projects. His projects include CP troubleshooting for several pipelines and reservoirs, corrosion control design for pipelines, reservoirs and pump stations and material selection reviews. Randy was also the project corrosion engineer for the Orange County Ground Water Recovery Project.

**Design Engineers** - Assisting Mr. Geving will be Mr. Robert Perks and Mr. Sean Tercheck. Mr. Perks will provide design assistance and direct most of the field testing tasks. Rob holds a MS degree in Ocean Engineering from Florida Atlantic University. He studied under Dr. William Hartt, a prominent corrosion researcher, and did his thesis on various aspects of corrosion initiation of reinforcement in

concrete. Rob is DeC's project manager for the Olivenhain Municipal Water District (OMWD) Corrosion Control Program. Rob has been instrumental in organizing data from over 30 steel pipelines, 24 rectifiers and 750 test stations within OMWD. Rob has also completed several CP projects.

Mr. Terchek is DeC's newest engineer. Sean comes to us from Columbia Gas Company where he was a project engineer for several gas development projects. He worked with Columbia's corrosion division where he became familiar with gas industry cathodic protection methods and corrosion monitoring systems. Sean also conducted integrity assessment studies for Columbia in which assets were evaluated on the basis of their production, corrosion status, risk of failure and consequences of failure. This assessment was used to prioritize the company's maintenance resources.

CAD Drafter – Mr. George Medina will provide vital assistance. Mr. Medina performs several functions at DeC. He is our AutoCAD design drafter, our MapInfo programmer and primary operator and our computer network administrator. Mr. Medina is an expert with AutoCAD 2002.

Project Administration – Project administrative assistance, such as scheduling, cost tracking, preparation of status reports, invoicing and administrative functions would be the responsibility of Ms. Sally Stewart who is DeC's business manager. Sally's experience with technical project management is a major benefit to DeC's overall operations. Her talents will be an important factor in the smooth implementation of this work.

Coating Subconsultants – Mr. Steve Agor of Tetra Tech, Inc. will provide any necessary civil, mechanical or electrical engineering design or support that is required to install corrosion protection facilities. Mr. Agor, who is familiar with Orange County permitting processes, will also assist DeC in obtaining any necessary permits.

Specialty coating specification preparation, if needed, will be done by Mr. Mark Schilling. Mark is an independent consultant with whom DeC has worked on several occasions. He was a senior staff engineer for Exxon/Mobil and for KTA-Tator Consultants. He was also a research chemist for Unocal Corporation, Science and Technology Division.

Coating inspection tasks would be accomplished by CSI Services, Inc. as a subconsultant to DeC. Coordination of inspection work would be done by Mr. Barry Barman. Mr. Barman is certified as a coating specialist and has provided both project management and coating inspection for over 250 water storage tank coating projects. CSI has inspectors that are fully qualified by SSPC and NACE

## THE FIRM'S QUALIFICATIONS

In addition to providing provided professional services to over 400 clients, DeC has completed over 600 projects on pipelines, storage tanks, treatment plants, pump stations and concrete structures of various sizes. These projects include over 1,000 miles of pipelines, 17 major treatment plants and numerous reservoirs. Most of DeC's clients are in Southern California,

Summary of Engineering Services – Services provide by DeC include engineering, consulting, field and laboratory testing, minor field maintenance, inspection, training, construction support services, and forensic services. Specific corrosion engineering services provided by DeC include:

- Corrosivity surveys
- Cathodic protection design and performance assessment
- Soil corrosivity testing (field and lab)
- Stray current analysis and mitigation (static and dynamic)

- Regular corrosion monitoring
- The development of in-house corrosion control programs
- Preparation of O&M manuals
- Development of GIS based mapping data management systems
- Over-the-pipe potential surveys
- Preparation of drawings and technical specifications
- Training for field corrosion technicians
- Corrosion Data Collection (CDC Program)

Pipeline CP Design Experience – Based on the RFP, it is anticipated that many, if not most of the tasks completed as part of this work will be pipeline related. DeC has participated numerous pipeline projects. These projects have included alignment corrosivity studies, CP system testing and evaluation, CP design and data management. Our key pipeline projects are described below under “Similar Projects.” A partial list of DeC’s pipeline projects is attached as Appendix “C.”

DeC’s pipeline projects have been done directly for pipeline owners as well as for prime civil engineering consultants to water industry clients. We have worked for most of the major civil engineering firms in Southern California. Some of these clients are identified in the specific project experience presented below and in Appendix “D.”

Pipeline Inspection, Monitoring and Integrity Assessment – The integrity assessment of pipelines is becoming more important as the nations infrastructure ages. DeC has assisted several clients in the inspection and evaluation of the condition and remaining life of pipelines and has helped prepare prioritized cost estimates for the allocation of maintenance and capital budget resources.

Pipeline Data Management and Data Collection – DeC has two special programs that may be of use to the City. These are the Corrosion Data Management System (CDMS) and the Corrosion Data Collection (CDS) service. These programs are available to assist the City with corrosion data management and collection. Additional information would be provided on the CDMS if requested.

Professional Society Involvement – DeC’s background includes direct involvement over the last 20 years with technical committees and symposia in national, regional and local branches of NACE International, formally the National Association of Corrosion Engineers. DeC’s principal is also a member of American Water Works Association (AWWA) and American Society of Metals (ASM).

## **SIMILAR PROJECTS AND REFERENCES**

DeC has provided similar consulting services directly to several water agencies and indirectly through prime engineering consultants. These projects and our clients are identified in the attached appendices. Similar projects with references are identified below:

### Otay Water District – District Corrosion Engineer

E7.17

Ref: Mr. Ron Ripperger  
Ms. Diane Kilwein

Telephone: 619-670-2279  
Telephone: 619-670-2247

DeC Consultants provided corrosion engineering support for all OWD projects from 1990 to 1997. From 2001 to the present, Mr. Geving has managed Otay’s corrosion control program and has completed several large District projects including a district-wide assessment of copper service corrosion and complete revisions to the District’s pipeline and reservoir corrosion control O&M

manuals. DeC, under the direction of Mr. DeCarlo, has also completed numerous projects for the District as a subconsultant to various engineering firms. These projects include pipeline and reservoir corrosion control design, ultrasonic inspections of reservoirs and the preparation of detailed reservoir and pipeline corrosion control operations and maintenance manuals.

Olivenhain Municipal Water District – As-needed Corrosion Engineering Services, Annual Cathodic Protection System Monitoring & Maintenance, and CDC Program

Ref: Mr. George Briest, District Engineer Telephone: 760-632-4640  
Mr. Tom Kennedy, Operations Manager Telephone: 760-753-6466

DeC has been OMWD's corrosion engineer for five years. Mr. Perks manages this program. The District has numerous steel pipelines under cathodic protection. There are approximately 24 rectifiers and over 600 test stations. DeC has been responsible for monitoring and maintaining the District's CP systems. This work includes assessing frequent system damage due to multiple developer projects in the District; evaluating system performance and repair or refurbishment requirements; and providing CP designs for new piping which has been or is being installed as part of approximately 45 independent projects. Additionally, DeC is providing annual corrosion test station and rectifier monitoring using the CDC program.

Vallecitos Water District – Cathodic Protection Design

Ref: Dennis Lamb Telephone: 760-744-0460

DeC began working for Vallecitos Water District in 1992 on projects involving verification of continuity and test station installation. A complete corrosivity evaluation was done in a residential community known as Belford Village. DeC has designed corrosion protection systems for all of the major pipelines installed in the District since 1992 including the 30-inch Mullberry Drive Pipeline, the 24-inch Woodland/Richland Parkway Pipeline, the 24-inch Twin Oaks Valley Road Pipeline, the 8-inch Mission Road Pipeline, the Twin Oaks Pipeline, the Mt. Belle Reservoir and Pipeline and the San Bijo Hill Development. Mr. DeCarlo, Mr. Geving and Mr. Perks have all managed VWD projects.

Sweetwater Authority – Various Cathodic Protection Designs

Ref: Hector Martinez Telephone: 619-422-8395  
Tom Justo Telephone: 619-409-6884

DeC Consultants has served the Sweetwater Authority on various corrosion projects since 1992. Work has included cathodic protection design for reservoirs and pipelines, corrosion control review of treatment plants and reservoir inspections. Major projects include the O.D. Arnold Tank, the Second Avenue 30-inch Pipeline, the National City Wells and various pipelines in Chula Vista. DeC has also developed a CDMS program for Sweetwater and provides CDC service on an annual basis.

Helix Water District – Overall CP Evaluation

Ref: Herman Lowenberg Telephone: 619-596-3860

For the last 12 years, DeC has provided corrosion consulting services on various projects for the Helix Water District. Most of this work was done by Mr. DeCarlo but Mr. Perks has also served this District. Our work has involved specific tasks such as inspection of reservoirs, testing of cathodic protection (CP) systems, design of new CP system, and assistance in evaluating corrosion data. A complete evaluation of interference from San Diego Trolley operations was accomplished along approximately 12 miles of pipe. DeC also designed cathodic protection for the 33-inch/27-inch Lemon Grove Feeder and for the new Fletcher Hills Combined (HWD/PDMWD) water storage tank.

Other Similar Pipeline Projects - DeC has completed or is currently working on numerous water and wastewater projects in addition to those identified above. A list of major pipeline projects is attached as Appendix C. Currently, DeC's largest projects include:

- South San Diego Pipeline No. 2 - corrosivity evaluation and cathodic protection design for approximately 20 miles of the 36 to 48-inch pipe.
- Orange County Water District Groundwater Replenishment Project - pipe materials and lining assessment for RO water lines and corrosion protection design for 13 miles of the 72-inch steel GWR line, large diameter plant piping and the 30-inch Barrier Pipeline Extension.
- San Diego County Water Authority San Vicente Pipeline – corrosion control assessment and design for 11 miles of 102-inch tunnel pipe and cathodic protection design for appurtenant cut and cover pipelines and pump station yard piping.
- City of San Diego Black Mountain GAP Pipeline – Impressed current CP design and activation.
- Olivenhain WD Unit G Parallel Pipeline – Remote area pipeline corrosivity evaluation and CP design. CP design includes over 10,000 feet of zinc ribbon anodes to accommodate the unique soil conditions.

Other Non-Pipeline Projects - DeC can demonstrate extensive experience with various corrosion engineering projects for steel and concrete reservoirs, large pump stations, water treatment plants and various other water industry assets.

#### **COMMITMENT AND MISCELLANEOUS PROPOSAL REQUIREMENTS**

Commitment – DeC Consultants, Inc. has the knowledge, ability and resources to provide the corrosion engineering services outlined in the RFP. The City has the commitment of DeC's principal and president, Mr. E.A. DeCarlo, P.E., to provide the mutually agreed upon services in a timely, professional and efficient manner.

Insurance – DeC carries general liability, workers' compensation and professional liability policies in the amounts indicated in the RFP. If selected, insurance certificates will be provided.

Hourly Billing Rates – Appendix "E" is the billing rate schedule for all DeC staff categories for the year 2005. Reimbursables are billed at cost plus 10%. Subconsultant fees would be billed at the rates indicated in Appendix E which reflects DeC's actual cost plus 5%.

Conflicts of Interest – None of DeC's employees or subconsultants are related to or have any business relationship (other than consulting) with City of Huntington Beach personnel. Additionally, DeC has no conflicts with inventoried cathodic protection products. We do not sell or install CP systems. DeC does, however, provide a corrosion test station repair services. We do not believe that this is a conflict.

Fees for Individual Tasks – DeC anticipates that each and every task performed by DeC will be defined by a detailed scope and not-to-exceed fee which have been proposed by DeC and approved by the City.

Quality Assurance Program – Quality assurance is a very important issue to DeC. We are committed to producing high quality consulting services and engineering reports and documents. One indication that our QA program is working is by our strong reputation and by the fact that a large percentage of our work is repeat business. DeC is very proud of our reputation and of the clients that we serve.

DeC has specific procedures and requirements for quality and completeness review of all documents generated. All reports, drawings and specifications are reviewed by two people in addition to the author. This includes a technical review and an editorial/format review. Frequent edits and re-plots are a common practice and are required until all documents are as error-free as possible. Final reports and drawings require signature approval by the designated QC reviewer. All reports and proposals are reviewed by the principal.

Proposal Validity Period – This proposal of professional services is valid for a period of 60 days.

City of Huntington Beach Standard Form of Agreement – The Sample Contract (for Design) which was attached to the RFP has been reviewed. We find the contract to be acceptable for the most part but take exception and would request reconsideration of the following paragraphs.

Paragraph 7 – DeC agrees that materials prepared for the City as part of this project belong to the City. However, we do not feel that these materials should be used for anything except the specific project for which they are intended. If the City chooses to apply these materials to other projects, we would expect that DeC would be released from all liability for their re-use. Paragraph 7 should be modified to include this release.

Paragraph 9 (final paragraph) – DeC fully intends to maintain professional liability insurance for as long we are in business. Furthermore we intend to be in business for a very long time. We will make every effort to maintain similar insurance beyond two years after all City of Huntington Beach projects are complete if, for any reason, this period extends beyond the date that DeC Consultants Inc. closes business with the condition that this insurance is available for a reasonable cost.

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**Eugene A. DeCarlo, P.E.**  
**Principal**

**POSITION:**

President, DeC Consultants, Inc., San Diego, CA - Corrosion Consultants

**EDUCATION:**

California State Polytechnic University, Pomona, BSME, 1972  
University of California at Los Angeles, Graduate studies in Materials Engineering  
Drexel University, Philadelphia, PA, Graduate studies in Metallurgical Engineering  
National Association of Corrosion Engineers, Course Two, Cathodic Protection  
University of Santa Clara, Lockheed Management Institute  
Appalachian Underground Corrosion Conference  
Western States Corrosion Conference

**PROFESSIONAL REGISTRATION:**

Registered Professional Corrosion Engineer, California (CR-1011)

**PROFESSIONAL AFFILIATIONS:**

NACE, National Association of Corrosion Engineers, Member since 1975  
NACE, T-7L Chairman and T-7 Group Committee Chairman  
NACE, Symposium Chairman, T-7L Cathodic Protection in Natural Waters, 1989  
NACE, San Diego Section Chairman, 1995-96  
NACE, Western Region Conference Technical Program Chairman, 1995  
ASM, AWWA, ASTM, ASCE

**PERTINENT EXPERIENCE:**

- Project engineer/manager for numerous corrosion investigation and cathodic protection design projects involving marine, natural water, soil, industrial and atmospheric environments.
  - **San Diego County Water Authority** work includes soil corrosivity surveys and corrosion protection designs for large diameter pipelines including: the 102" San Vicente Tunnel; the 78" and 48" Olivenhain Pipelines; the 8 mile, 78" Pipeline 4 Extension, Phase II; the 72" North County Distribution Pipeline; and several flow control facilities. DeC also conducted corrosion status surveys of the Ramona Pipeline and the North County Distribution Pipeline.
  - Consultant for **Otay Water District** from 1989 to 1997 and again in 2001\2003. Evaluated status of corrosion\cathodic protection of buried pipelines, storage tanks, and sewage plant. Developed priority list, pipeline and tank corrosion control philosophy and corrosion testing requirements. Prepared comprehensive corrosion control program including operation and maintenance manual for pipelines and reservoirs. Conducted a detailed study of copper water service leaks within the District.
- Project manager for all three **City of San Diego** major water treatment plant upgrade projects. The Miramar WTP upgraded included larger diameter plant piping and a 1500' tunnel. At the Alvarado WTP DeC designed a corrosion protection system for a large diameter plant piping as cathodic protection for both flocculation\sedimentation basins. The Otay WTP work included plant piping corrosion control systems for the new clearwell reservoirs.

- **Olivenhain Municipal Water District's** corrosion engineer since 1998. Districts include 74 steel pipelines, 28 cathodic protection rectifiers and over 650 corrosion test stations. DeC monitors District CP systems, determines and prioritizes repair requirements and provides design engineering services for all new pipelines and reservoirs.
- Corrosion consultant for **Helix Water District** since 1989. Conducted stray current testing on lines affected by the San Diego Trolley in 1900 and in 2002. Evaluated existing CP systems and provide cathodic protection designs for various steel pipelines.
- Corrosion consultant for **Vallecitos Water District** since 1992. Conducted soil corrosivity survey, reviewed District corrosion standards, and designed corrosion control systems for Mulberry and Mission Road P/Ls, Richland-Woodland TM, Mt. Belle Reservoir and P/L, Twin Oaks Valley Road P/L, the 24" sewer outfall, the Twin Oaks North P/L and the 30 MG Twin Oaks Reservoir. Also provided corrosion engineering design services for the San Elijo Development and for improvements on Rancho Santa Fe Road.
- Corrosion consultant for **Moulton Niguel Water District** from 1989 to 1996. Responsible for establishing a District corrosion control program. Evaluated and monitored existing cathodic protection systems, reviewed new projects and developed District corrosion standards.
- Provided corrosivity evaluation, pipe material and coating economic analysis and cathodic protection design for the **City of San Diego** 22 mile 48\30" South San Diego Pipeline No. 2. Project was split into 15 individual projects.
- Managed **Lockheed's Corrosion Protection** Division, manufactures of specialized cathodic protection equipment for the offshore and marine industries.
- Conducted laboratory and field corrosion test programs using weight loss and electrochemical techniques at **Mobil Research & Development** and at **Lockheed Corrosion Protection**.

**CAREER HISTORY:**

- DeC Consultants, Inc., San Diego, CA  
President 1/88 to present
- PSG Corrosion Engineering, Inc., San Diego, CA  
Staff Corrosion Engineer 8/82 to 12/87
- Lockheed Corrosion Protection, Sunnyvale, CA  
Manager 10/78 to 8/82
- Mobil Research and Development Corp., Paulsboro, NJ  
Senior Materials Engineer, 2/74 to 10/78
- Mobil Oil Corporation, Torrance Refinery, Torrance, CA  
Project/Maintenance/Inspection Engineer 6/72 to 2/74

**Randy J. Geving, P.E.**  
**Engineering Manager**

**POSITION:**

Senior Staff Engineer, DeC Consultants, Inc., San Diego, CA - Corrosion Consultants

**EDUCATION:**

California State Polytechnic University, San Luis Obispo, BSMetE, 1987  
National Association of Corrosion Engineers, Cathodic Protection Theory Course  
Western States Corrosion Conference

**PROFESSIONAL REGISTRATION:**

Registered Professional Corrosion Engineer, California (CR-1060)  
Certified API 653 Aboveground Storage Tank Inspector (Cert. #1742)

**PROFESSIONAL AFFILIATIONS:**

NACE, National Association of Corrosion Engineers

**PERTINENT EXPERIENCE:**

- **Orange County Water and Sanitation District Ground Water Replenishment Program** - Principal Investigator a detailed pipe materials investigation. Conducted a detailed review of piping material, including alloys and linings, suitable for handling large volumes of RO permeate. The selection of pipe materials capable of resisting deterioration in high purity water is critical to the success of this project.
- **Metropolitan Transit Development Board** – Design engineer for the stray current monitoring and mitigation system for the East Mission Valley LRT, San Diego State University Tunnel segment. The analysis included an evaluation of conventional stray current mitigation methods used on overpasses for both NATM and cut and cover tunnel segments. A unique approach involving the determination of the tunnel's stray current activity signature was developed.
- **City of San Diego, Point Loma Waste WTP** – Project lead in inspection of 84-inch north effluent connection to the Point Loma outfall pipeline. The inspection consisted of both a visual and ultrasonic thickness assessment of the pipeline internal surfaces. The general integrity of the pipeline internal lining and above-grade shotcrete coating was also assessed.
- **Metropolitan Transit Development Board** – Consultant to Washington Infrastructure to observe and evaluate the stray mitigation system testing on the East Mission Valley LRT. Testing includes the La Mesa and Grantville conventional reaches as well as the SDSU Tunnel segment.
- **Otay Water District** – Project engineer responsible for defining and implementing District cathodic protection program. Project includes reviewing and evaluating all existing corrosion control facilities for both piping and reservoirs, as well as defining future corrosion protection and monitoring needs.

- **Otay Water District** – Conducted investigation into the increasing rate of copper water service leaks within the District. Developed a retrofit action plan to minimize the number of future leaks on existing and new water services.
- **Olivenhain Water District/Santa Fe Irrigation District** – Designed corrosion control systems for joint pump station facilities and associated District water mains.
- **Sea World San Diego** – Project corrosion engineer for the development of the Journey to Atlantis attraction. Project included a complete review of materials used in the constantly wet environment of the passenger vehicle and other water features. Recommendations included changes in coatings, alloys and a cathodic protection design.
- DeC's project engineer for the **City of Corona** Temescal Desalter project. Conducted site soil corrosivity survey and prepared corrosion control recommendations.
- Designed corrosion control system for **Otay Water District** Reservoir 711-3 piping and Reservoir.
- **Tosco** technical consultant to outside contractors regarding material selection issues for all new construction projects including Reverse Osmosis Unit and Second Stage Desalter.
- Directed all material selection, failure analysis, and corrosion control activities for **Tosco's** Los Angeles Refinery.
- Responsible for the management of **Unocal's** domestic cathodic protection systems at multiple facilities including product storage terminals, refineries, offshore platforms and pipelines.
- Conducted metallurgical failure analysis for **Unocal's** refining, production, and geothermal facilities, including metallographic, SEM and micro-hardness examinations.

**CAREER HISTORY:**

- DeC Consultants, Inc., San Diego, CA  
Senior Staff Engineer 9/99 to present
- Unocal/Tosco, Brea, Wilmington, CA  
Materials Engineering Group, Corrosion Engineer 7/87 to 8/99
- City of San Diego, San Diego, CA  
Corrosion Control Group, Summer Internship 7/86 to 9/86

# Robert A. Perks Staff Engineer

## EDUCATION:

- Florida Atlantic University, Sea Tech, Dania Beach, FL-- Master of Science, Ocean Eng., Dec. 2000
- Florida Atlantic University, Sea Tech, Boca Raton, FL--B.S. Ocean Engineering, June 1998
- Western States Corrosion Conference, Pomona, CA, May 2001

## PROFESSIONAL REGISTRATION:

- State of Florida Engineer-In-Training
- NACE Cathodic Protection Technician II

## PROFESSIONAL AFFILIATIONS:

- NACE National Association of Corrosion Engineers, member

## PERTINENT EXPERIENCE:

- Project manager for **Olivenhain Municipal Water District's** Corrosion Maintenance Program. Responsible for over 50 miles of steel pipe, 28 rectifiers and over 650 test points.
- SeaWorld San Diego**— Designed and conducted a detailed rebar potential survey of the manatees pool at SeaWorld. Potential profile identified the extent of the rebar that was actively corroding beyond that which was obvious from spalling and rust bleed.
- Corrosion testing experience: soil resistivity, pipeline potential survey, cathodic protection evaluation, pipeline continuity testing (Linear Resistance Method); cathodic current requirement testing; and evaluations of stray current interference using field data logger.
- Helix Water District** – Conducted stray current interference survey of a main HWD transmission main that paralleled the San Diego Trolley. Data was captured and downloaded with a data logger and evaluated for stray current influence from Trolley movements.
- Corrosion Restoration Technologies Work Experience—design and installation of a thermal sprayed zinc cathodic protection system for corrosion damaged condominium balconies including establishing continuity, system installation, start up and testing.
- Florida Atlantic University Experience—development of threshold chloride to hydroxyl valves for improvement of concrete mixes to be used in coastal structures; participated in corrosion assessment of coastal bridges and structures.
- Conducted numerous Wenner 4-pin resistivity surveys for the assessment of the corrosivity of pipeline alignments and for other buried structures.
- Provided detailed assessment of tank corrosion for structural analysis purposes; testing analysis included an ultrasonic thickness survey of the tank's shell and an analysis using Extreme Value Statistical methods.

## CAREER HISTORY:

- |                                                                |                     |
|----------------------------------------------------------------|---------------------|
| • DeC Consultants, Inc., San Diego, CA                         | Dec 2000 to Present |
| • Corrosion Restoration Technologies, Inc.<br>Jupiter, Florida | 1998                |
| • Florida Atlantic University<br>Boca Raton, Florida           | 1997-1998           |

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**DeC Consultants, Inc.**  
**City of Huntington Beach Corrosion Engineering**

**E. A. DeCarlo, P.E.**  
**Principal in Charge**

**Randy J. Geving, P.E.**  
**Engineering Manager**  
**Project Manager**

**Sally Stewart**  
**Business Manager**

**Sean T. Tercheck**  
**Staff Engineer**

**Robert A. Perks**  
**Staff Engineer**

**George Medina**  
**Cad/IT**

**Michael Sherman**  
**NACE CP Tester I**

**Nick DeCarlo**  
**Technician**

**Mark Schilling**  
**Coating Subconsultant**

**CSI**  
**Barry Barman**  
**Coating Inspector**

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**LIST OF PIPELINE CORROSION CONTROL PROJECTS**

**DeC Consultants, Inc.**

**September 2004**

| <b>Project No.</b> | <b>Client\Project Name</b>              | <b>Date</b> | <b>Owner</b>                |
|--------------------|-----------------------------------------|-------------|-----------------------------|
| 003822             | Rice Canyon PL                          | 5/12/00     | Sweetwater Authority        |
| 003837             | IRWD 24" University RW PL CP Design     | 4/27/00     | Irvine Ranch WD             |
| 003838             | 36" College Blvd. TM                    | 2/17/00     | City of Carlsbad            |
| 003851             | La Mirage 12" DIP WL                    | 2/24/00     | City of San Marcos          |
| 003856             | Foothill PL Internal Inspection         | 3/06/00     | San Bernardino MWD          |
| 003873             | Otay 2nd PL North (Phase 2)             | 6/12/00     | City of San Diego           |
| 003891             | 24" Oxford St. PL Replacement           | 4/21/00     | Sweetwater Authority        |
| 003911             | San Elijo Hills 24" WL Relocation       | 6/02/00     | Vallecitos Water District   |
| 003936             | East H & Lane Avenue PLs                | 8/16/00     | Otay Water District         |
| 003960             | Black Mtn Ranch Unit 3 PL               | 10/10/00    | City of San Diego           |
| 003962             | Gravity Float Line                      | 10/13/00    | City of Escondido           |
| 003969             | San Pasqual RW Pipeline Study           | 2/28/01     | City of San Diego           |
| 003982             | Loma del Sol PL                         | 11/30/00    | Otay Water District         |
| 003993             | University Commons Various PLs          | 2/1/02      | Vallecitos Water District   |
| 013104             | Black Mtn. 24" RW PL                    | 1/25/01     | City of San Diego           |
| 013119             | Dictionary Hill 24" PL                  | 2/21/01     | Otay Water District         |
| 013121             | Irvine Ave. Water TM Rplmt.             | 7/01/01     | City of Newport Beach       |
| 013128             | Waterline Replacement                   | 6/12/01     | City of Newport Beach       |
| 013142             | Black Mtn. Road GAP RW PL               | 10/17/01    | City of San Diego           |
| 013172             | Talbert Channel PL                      | 4/24/01     | County of Orange            |
| 013180             | 30" PL Replacement                      | 4/30/01     | City of Glendale            |
| 013238             | San Pasqual RW Sys. Design              | 10/02/02    | City of San Diego           |
| 013242             | Area R SHE 30" WL Relocation            | 8/21/01     | Vallecitos Water District   |
| 013258             | 12" Sewer FM Poinsettia Lane            | 11/11/01    | Vallecitos Water District   |
| 013314             | San Vicente PL Tunnel Corr. Design      | 2/7/02      | San Diego CWA               |
| 013321             | Olympic Parkway 16" RW                  | 11/05/01    | Otay Water District         |
| 013998             | GWRS Final Design 72" PL                | 8/1/01      | Orange Co. Sanitation Dist. |
| 023359             | Olympic Pkway Tr. 96-04 PL              | 1/22/02     | Otay Water District         |
| 023364             | Otay 2 <sup>nd</sup> PL Skyline Terrace | 2/12/02     | City of San Diego           |
| 023368             | Reach 2, 3, 3A&B Survey/Inspection      | 2/17/02     | City of Newport Beach       |
| 023395             | Madrona Marsh RW Lateral CP Design      | 9/4/02      | West Basin MWD              |
| 023401             | Rancho Santa Fe Rd. PL                  | 4/11/02     | Vallecitos Water District   |

**LIST OF PIPELINE CORROSION CONTROL PROJECTS**  
**DeC Consultants, Inc.**  
**September 2004**

| <b>Project No.</b> | <b>Client\Project Name</b>                       | <b>Date</b> | <b>Owner</b>              |
|--------------------|--------------------------------------------------|-------------|---------------------------|
| 023404             | Unit X PL CP Design                              | 5/3/02      | Olivenhain MWD            |
| 023406             | Del Mark Hts. PL Relocation                      | 4/29/03     | City of San Diego         |
| 023416             | 30" WL Relocation Area R                         | 5/2/02      | Vallecitos Water District |
| 023458             | Raw Water Trans PL – Design Build                | 1/24/04     | Camp Pendleton            |
| 023490             | P-0071 Water PL Loop – Design Build              | 2/4/03      | Camp Pendleton            |
| 023498             | 16" & 20" RW Lines                               | 10/30/02    | Otay Water District       |
| 023517             | 4S PL, No. Segment CP Design                     | 1/29/03     | Olivenhain MWD            |
| 033554             | Otay 2 <sup>nd</sup> No. Encanto Reach CP Design | 1/20/04     | City of San Diego         |
| 033559             | Bonita Rd. PL Inpsection                         | 4/1/03      | Sweetwater Authority      |
| 033576             | Unit G Parallel PL CP Design                     | 4/15/03     | Olivenhain MWD            |
| 033584             | Montview 24" WM                                  | 4/9/03      | City of Escondido         |
| 033638             | Crown Valley RW PLs                              | 6/12/03     | Moulton Niguel WD         |
| 033640             | 30" RW PL Dairymart 450-1                        | 8/26/03     | Otay Water District       |
| 033708             | 10 <sup>th</sup> Avenue Terminal, Fuel Line      | 4/20/04     | San Diego Port Auth.      |
| 033735             | Unit V-3 & V-4 PLs CP Design                     | 11/1/03     | Olivenhain MWD            |
| 993778             | Flume CP Design & Construction Management        | 1/31/00     | Helix Water District      |
| 993806             | Camino Ruiz PL (Black Mtn)                       | 1/03/00     | City of San Diego         |
| 003891             | 24" Oxford Street Pipeline Replacement           | 4/21/00     | Sweetwater Authority      |
| 003960             | JP&A Black Mountain Ranch Unit 3                 | 10/10/00    | City of San Diego         |
| 013104             | PBS&J Black Mountain 24" Raw Water               | 1/25/01     | City of San Diego         |
| 013119             | Dictionary Hill 24" Pipeline                     | 2/21/01     | Otay Water District       |
| 893234             | JMM Otay 2nd Pipeline, Phase III                 | 8/24/90     | City of San Diego         |
| 903286             | Hirsch North Mission Valley Interceptor          | 1/03/90     | City of San Diego         |
| 903391             | MacDonald Stevens--Hillsdale 30" TM              | 10/18/90    | Otay Water District       |
| 903443             | ASL Pipeline 4 Extension Phase II                | 12/11/90    | SD County Water Authority |
| 913534             | ASL 27 Miles Raw Water                           | 10/01/91    | West Basin Water District |
| 913638             | Lee & Ro Mission Valley Pipeline NRP5A           | 12/05/91    | City of San Diego         |
| 913639             | Lee & Ro MV Raw Sludge Pipeline                  | 12/05/91    | City of San Diego         |
| 913645             | Dudek EMB P/L NRP2A/B                            | 9/06/91     | City of San Diego         |
| 913665             | Malcolm Pirnie Poway Raw S/L NSP4A/B             | 9/20/91     | City of San Diego         |
| 913742             | CDM Group 508 24" TM                             | 1/16/92     | City of San Diego         |
| 913757             | BSI Otay Valley Pipeline -Eastern                | 3/24/92     | City of San Diego         |

**LIST OF PIPELINE CORROSION CONTROL PROJECTS**

**DeC Consultants, Inc.**

**September 2004**

| <b>Project No.</b> | <b>Client\Project Name</b>                | <b>Date</b> | <b>Owner</b>              |
|--------------------|-------------------------------------------|-------------|---------------------------|
| 923161             | ESCI Pt. Loma Ocean O/F Parallel Pipeline | 6/05/92     | City of San Diego         |
| 923180             | Dudek La Jolla Shores Pipeline            | 5/15/92     | City of San Diego         |
| 923220             | HYA Genesee Avenue Subsystem              | 12/20/93    | City of San Diego         |
| 923314             | VWD Mulberry Drive 30" Pipeline           | 4/20/93     | Vallecitos Water District |
| 923325             | ENARTEC—FIRP, Phase II                    | 3/22/93     | City of San Diego         |
| 933354             | ASL North County Pipeline                 | 3/17/93     | SD County Water Authority |
| 933489             | SWA 30" Water Main on Second Avenue       | 10/27/93    | Sweetwater Authority      |
| 933496             | ASL Richland-Woodland Parkway Pipeline    | 10/27/93    | Vallecitos Water District |
| 933520             | ASL Water & Sewer Group 529, 530          | 7/01/94     | City of San Diego         |
| 943551             | Barrett Twin Oaks Valley Rd TM            | 1/26/94     | Vallecitos Water District |
| 943593             | PDC University City Raw Water Subsystem   | 9/01/94     | City of San Diego         |
| 943640             | Montgomery Watson No. Metro Interceptor   | 5/26/94     | City of San Diego         |
| 943691             | 30" TM Sweetwater Euclid 30" Pipeline     | 9/23/94     | Sweetwater Authority      |
| 943732             | BSI MWWD South Bay WRP & Pipeline         | 6/01/95     | City of San Diego         |
| 943747             | 36" Transmission Main CP Design           | 1/23/95     | Otay Water District       |
| 953807             | Daniel Boyle Point Loma Reservoir         | 5/10/95     | City of San Diego         |
| 953853             | Earth Tech Industrial Brine Mgmt          | 9/10/99     | City of San Diego         |
| 953958             | Malcolm Pirnie Advanced Water Treat Plant | 7/11/97     | City of San Diego         |
| 963102             | ESCO MWWD\Penasquitos Pipeline            | 4/03/96     | City of San Diego         |
| 963107             | Tresize Camino Pipeline                   | 3/13/96     | City of San Diego         |
| 963161             | ESCO North City RW & Sludge Pipeline      | 3/12/97     | City of San Diego         |
| 963221             | Pardee Carmel Country Rd Pipeline         | 10/03/96    | City of San Diego         |
| 973368             | ASL Twin Oaks Reservoir Pipeline          | 8/07/97     | Vallecitos Water District |
| 973414             | Wilson So San Diego PL No. 2              | 1/05/98     | City of San Diego         |
| 973418             | ASL 24" Sewer Outfall Replacement         | 12/17/97    | Vallecitos Water District |
| 983464             | OMWD Rancho Cielo PL Ext 144              | 2/27/98     | Olivenhain Water District |
| 983471             | Earth Tech Sorrento Valley Trunk Sew      | 10/07/98    | City of San Diego         |
| 983485             | Dudek Santa Fe Downs Pipeline             | 6/24/98     | City of San Diego         |
| 983502             | City of SD Alvarado WTP Expansion         | 6/01/98     | City of San Diego         |
| 983508             | Montgomery Watson Flume Line Rplmt.       | 4/08/99     | Helix Water District      |
| 983543             | CDM Olivenhain Pipelines                  | 9/21/98     | SD County Water Authority |
| 983563             | Malcolm Pirnie Alvarado WFP Phase II      | 7/19/99     | City of San Diego         |
| 983582             | Wilson Otay 2nd PL Replacement            | 12/01/98    | City of San Diego         |

**APPENDIX C**

**LIST OF PIPELINE CORROSION CONTROL PROJECTS**

**DeC Consultants, Inc.**

**September 2004**

| <b>Project No.</b> | <b>Client\Project Name</b>            | <b>Date</b> | <b>Owner</b>              |
|--------------------|---------------------------------------|-------------|---------------------------|
| 983608             | Hirsch Adobe Falls PS                 | 5/11/00     | City of San Diego         |
| 993649             | ASL Miramar RD Water Pipeline         | 8/06/99     | City of San Diego         |
| 993684             | VWD Twin Oaks Valley Pipeline South   | 4/30/99     | Vallecitos Water District |
| 993706             | BSI So. Bay Pipeline Redesign         | 6/22/99     | City of San Diego         |
| 993777             | Dudek Bonita Pipeline Phase II        | 1/10/01     | City of San Diego         |
| 993787             | Hunsaker Del Mar Heights PL           | 11/18/99    | City of San Diego         |
| 993794             | Kimley Horn Otay Valley Road PL       | 12/01/99    | City of San Diego         |
| 993806             | Powell Camino Ruiz Pipeline-(Blk Mtn) | 1/03/00     | City of San Diego         |

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**APPENDIX D**  
**LIST OF DeC CONSULTANTS, INC. CLIENTS**

|                                          |                                          |
|------------------------------------------|------------------------------------------|
| Atkinson, Johnson & Spurrier             | Kimley Horn & Associates, Inc.           |
| Baldwin Builders                         | Kleinfelder & Associates                 |
| Belt Collins & Associates                | Lockwood-Greene Engineers                |
| Bement Dainwood Sturgeon                 | Ludwig Engineering                       |
| Berryman & Henigar                       | McMillin Commercial                      |
| Black & Veatch                           | MacDonald-Stephens, Engineers, Inc.      |
| Blaylock Engineering Group               | Malcolm Pirnie                           |
| Boyle Engineering                        | MTDB                                     |
| Brehm Communities                        | Montgomery Watson Harza                  |
| Brown & Caldwell                         | Moulton Niguel Water District            |
| CalAm Water Company                      | Olivenhain Municipal Water District      |
| Camp, Dresser & McKee                    | Otay Water District                      |
| Carrier Johnson                          | Padre Dam Municipal Water District       |
| Cass Construction                        | Pardee Construction Company              |
| CH2M Hill                                | Parsons Brinckerhoff Quade & Douglas, In |
| City of Escondido                        | Parsons Engineering Science              |
| City of Imperial                         | PBS&J Consulting Engineers               |
| City of Newport Beach                    | Port of San Diego                        |
| City of Oceanside                        | Project Design Consultants               |
| City of San Diego                        | QUALCOMM                                 |
| City of Scottsdale                       | Rick Engineering                         |
| Converse Consultants                     | Roel Construction, Inc.                  |
| Daley Corporation                        | San Bernardino Valley MWD                |
| Dames & Moore                            | San Diego County Water Authority         |
| Daniel Boyle Engineering, Inc.           | San Diego Gas & Electric                 |
| Delawie Bretton Wilkes                   | SeaWorld                                 |
| Delawie, Wilkes, Rodriques, Bark & Brett | Sevier Engineering, Inc.                 |
| Dudek & Associates                       | Simon Wong Engineering                   |
| Earth Tech                               | Southland Geotechnical                   |
| Enartec Consulting Engineers, Inc.       | Southwest Marine                         |
| Fieldstone Homes                         | Sweetwater Authority                     |
| Helix Water District                     | Tetra Tech Inc.                          |
| Hirsch & Company                         | Twining & Associates                     |
| HydroScience & Technology                | Vallecitos Water District                |
| Imperial Irrigation District             | West Basin Municipal Water District      |
| Jacobs & Associates                      | Dexter Wilson Engineering                |
| Kennedy/Jenks Consultants                | Woodward-Clyde Consultants               |
|                                          | Yorba Linda Water District               |

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APPENDIX D

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EXHIBIT  
"B"

**FEE SCHEDULE**

**DeC Consultants, Inc.**  
8291 Aero Place, Suite 110  
San Diego, California

**Effective Dates**  
January 1, 2005 through December 31, 2005

---

| <u>Classification</u> | <u>Hourly Rate</u> |
|-----------------------|--------------------|
| Principal-in-charge   | \$130.00           |
| Project Manager       | \$120.00           |
| Consulting Engineer   | \$125.00           |
| Project Engineer      | \$105.00           |
| Field Engineer        | \$ 95.00           |
| CAD Drafter           | \$ 90.00           |
| Technician            | \$ 80.00           |
| Clerical Staff        | \$ 65.00           |

**Expenses**

Laboratory fees, rental of specialized equipment, reproduction, binding, and postage costs, subcontractor costs, contract secretarial services as well as travel, lodging, meals and other personal expenses incurred in conjunction with approved projects will be billed at cost plus 10% unless otherwise specified. Company or personal vehicle mileage will be billed at the rate of \$.38 per mile.

Subconsultant rates shown above include 5% mark-up.

**Terms and Conditions**

All invoices are due and payable upon receipt. Invoices are considered delinquent if not paid within 30 days. Delinquent accounts are subject to a one-and-one-half percent (1½%) per month (or any part of month) late charge on balance due over 30 days.

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APPENDIX E

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These Corrosion Engineering Companies were sent a request for proposal for Professional Consulting Services for As Needed Corrosion Engineering Services, dated September 2004. All of these firms submitted a proposal prior to the October 7, 2004 deadline as stated in the RFP.

Farwest Corrosion Control Company  
Jim Flake  
Engineering Manager  
1480 West Artesia Blvd.  
Gardenia, CA 90248

310-532-9524  
F 310-532-3934

DeC Consultants Inc.  
E. A. DeCarlo, P.E.  
Corrosion Consultant  
8291 Aero Place, Suite 110  
San Diego, CA 92123

858-576-0226  
F 858-592-9206

Corrpro Companies Inc.  
Mike Properi  
Technical Representative  
110807 E Smith Ave.  
Santa Fee Springs, CA 90670

562-942-8964  
F 562-942-2834

M. J. Schiff & Associates Inc.  
Graham Bell, PhD., P.E.  
431 W. Baseline Road  
Claremont, CA 91711

909-626-3316  
F 909-626-3316

RBF Consulting  
John Barnes  
Vice President Corrosion Engineering  
27555 Ynez Road  
Suite 400  
Temecula, CA 92591-4679

Phone: 909-676-8042  
Fax: 909-676-7240

Hedborg Associates Inc  
Erik Hedborg, P.E.  
Principal Engineer  
P.O. Box 94  
San Clement, CA 96274

949-492-3661  
F 949-492-5607

Richard Franklin Yeager Jr.  
9140 Creekford Drive  
Lakeside, CA 92040

619-647-6265  
619-64-24-2718

Conceco/Matcor  
Saibal Mitra  
Sales Engineer  
2160 Winifred Street  
Simi Valley, CA 93063

805-527-3266  
F 805-527-7668

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# ATTACHMENT #2

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AMENDMENT NO. 1 TO MAINTENANCE AND PROFESSIONAL SERVICES  
CONTRACT BETWEEN THE CITY OF HUNTINGTON BEACH AND  
M. J. SCHIFF & ASSOCIATES, INC. FOR AS-NEEDED CORROSION  
ENGINEERING AND MAINTENANCE SERVICES

THIS AMENDMENT is made and entered into by and between the City of Huntington Beach, a municipal corporation of the State of California, hereinafter referred to as "CITY," and M. J. SCHIFF & ASSOCIATES, INC., a California corporation, hereinafter referred to as "CONSULTANT."

WHEREAS, CITY and CONSULTANT are parties to that certain agreement, dated April 26, 2005, entitled "Maintenance and Professional Services Contract Between the City of Huntington Beach and M. J. Schiff & Associates, Inc. for As-Needed Corrosion Engineering And Maintenance Services" which agreement shall hereinafter be referred to as the "Original Agreement," and

CITY and CONSULTANT wish to amend the Original Agreement to reflect additional compensation to be paid to CONSULTANT,

NOW, THEREFORE, it is agreed by CITY and CONSULTANT as follows:

1. ADDITIONAL COMPENSATION

Section 4 of the Original Agreement, entitled "Compensation," is hereby amended to read as follows:

In consideration of the performance of the services described herein, CITY agrees to pay CONSULTANT on a time and materials basis at the rates specified in Exhibit "B," ( the Fee Schedule) which is attached hereto and incorporated by reference into this Agreement, a fee, including all costs and expenses, not to exceed Two Hundred Fifty Thousand Dollars (\$250,000.00).

2. REAFFIRMATION

Except as specifically modified herein, all other terms and conditions of the Original Agreement shall remain in full force and effect.

REST OF PAGE NOT USED

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their authorized officer on \_\_\_\_\_, 20<sup>0</sup>\_\_\_\_\_.

M. J. SCHIFF & ASSOCIATES, INC.

CITY OF HUNTINGTON BEACH,  
a municipal corporation of the State of California

By: *Graham Bell*  
*GRAHAM BELL*  
print name

\_\_\_\_\_  
Mayor

ITS: (circle one) Chairman President Vice President

AND  
By: *Angela Bates*  
*ANGELA L. BATES*  
print name

\_\_\_\_\_  
City Clerk

ITS: (circle one) Secretary/Chief Financial Officer/Asst. Secretary - Treasurer

APPROVED AS TO FORM:  
*Ernie McJah*  
City Attorney *3/14/06* *4/17/06* *3/14/06*

REVIEWED AND APPROVED:

*Penelope Cullin*  
City Administrator

INITIATED AND APPROVED:  
*Dan Hill*  
Director of Public Works  
For RFB





**IMPORTANT: THIS ENDORSEMENT CONTAINS DUTIES THAT APPLY TO THE ADDITIONAL INSURED IN THE EVENT OF OCCURRENCE, OFFENSE, CLAIM OR SUIT. SEE PARAGRAPH C.1. OF THIS ENDORSEMENT FOR THESE DUTIES.**

**ALSO, THIS ENDORSEMENT CHANGES THE CONTRACTUAL LIABILITY COVERAGE WITH RESPECTS TO THE "BODILY INJURY" OR "PROPERTY DAMAGE" ARISING OUT OF THE "PRODUCTS-COMPLETED OPERATIONS HAZARD". SEE PARAGRAPH B.3. OF THIS ENDORSEMENT FOR THIS COVERAGE CHANGE.**

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**CONTRACTOR'S SCHEDULED AND BLANKET ADDITIONAL INSURED  
ENDORSEMENT WITH LIMITED PRODUCTS-COMPLETED OPERATIONS  
COVERAGE**

This endorsement modifies insurance provided under the following:

**COMMERCIAL GENERAL LIABILITY COVERAGE PART**

**SCHEDULE**

**Name of Person or Organization:**

**Designated Project:**

CITY OF HUNTINGTON BEACH, OFFICERS,  
AGENTS AND EMPLOYEES

All Operations

**(Coverage under this endorsement is not affected by an entry or lack of entry in the Schedule above.)**

**A. WHO IS AN INSURED (Section II)** is amended to include as an insured any person or organization, including any person or organization shown in the schedule above, (called additional insured) whom you are required to add as an additional insured on this policy under a written contract or written agreement; but the written contract or written agreement must be:

1. Currently in effect or becoming effective during the term of this policy; and
2. Executed prior to the "bodily injury," "property damage," or "personal and advertising injury".

**B.** The insurance provided to the additional insured is limited as follows:

1. That person or organization is an additional insured solely for liability due to your negligence specifically resulting from "your work" for the additional insured which is the subject of the written contract or written agreement. No coverage applies to liability

resulting from the sole negligence of the additional insured.

2. The Limits of Insurance applicable to the additional insured are those specified in the written contract or written agreement or in the Declarations of this policy, whichever is less. These Limits of Insurance are inclusive of, and not in addition to, the Limits of Insurance shown in the Declarations.
3. The coverage provided to the additional insured by this endorsement and paragraph f. of the definition of "insured contract" under DEFINITIONS (Section V) do not apply to "bodily injury" or "property damage" arising out of the "products-completed operations hazard" unless required by the written contract or written agreement. When coverage does apply to "bodily injury" or "property damage" arising out of the "products-completed operations hazard" such coverage will not apply beyond:



- a. The period of time required by the written contract or written agreement; or
- b. 5 years from the completion of "your work" on the project which is the subject of the written contract or written agreement,

whichever is less.

4. The insurance provided to the additional insured does not apply to "bodily injury," "property damage," or "personal and advertising injury" arising out of an architect's, engineer's, or surveyor's rendering of or failure to render any professional services including:

- a. The preparing, approving, or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; and
- b. Supervisory, or inspection activities performed as part of any related architectural or engineering activities.

- C. As respects the coverage provided under this endorsement, **SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS** are amended as follows:

- 1. The following is added to the Duties In The Event of Occurrence, Offense, Claim or Suit Condition:
  - e. An additional insured under this endorsement will as soon as practicable:

- (1) Give written notice of an occurrence or an offense to us which may result in a claim or "suit" under this insurance;

- (2) Tender the defense and indemnity of any claim or "suit" to any other insurer which also has insurance for a loss we cover under this Coverage Part; and

- (3) Agree to make available any other insurance which the additional insured has for a loss we cover under this Coverage Part.

- f. We have no duty to defend or indemnify an additional insured under this endorsement until we receive written notice of a claim or "suit" from the additional insured.

2. Paragraph 4.b. of the Other Insurance Condition is deleted and replaced with the following:

**4. Other Insurance**

**b. Excess Insurance**

This insurance is excess over any other insurance naming the additional insured as an insured whether primary, excess, contingent or on any other basis unless a written contract or written agreement specifically requires that this insurance be either primary or primary and noncontributing.

NAME INSURED: M.J.SCHIFF & ASSOCIATES

POLICY NO: TCP1077864082



# PROFESSIONAL SERVICE CONTRACTS PURCHASING CERTIFICATION

1. Requested by: Andrew Ferrigno
2. Date: April 19, 2005
3. Name of consultant: M.J. Schiff and Associates, Inc.
4. Description of work to be performed: Corrosion Engineering
5. Amount of the contract: \$90,000.00
6. Are sufficient funds available to fund this contract?<sup>1</sup>  Yes,  No
7. Company number and object code where funds are budgeted: 50791017.82100
8. Is this contract generally described on the list of professional service contracts approved by the City Council?<sup>1</sup>  Yes,  No
9. Is this contract within \$25,000 or 25% (whichever is less) of the amount stated on the list of professional service contracts approved by the City Council?<sup>1</sup>  
 Yes,  No
10. Were (at least) informal written proposals requested of three consultants?  
 Yes,  No
11. Attach list of consultants from whom proposals were requested (including a contact telephone number).
12. Attach proposed scope of work.
13. Attach proposed payment schedule.

  
RICHARD AMADORIL, Manager  
Purchasing/Central Services

<sup>1</sup> If the answer to any these questions is "No," the contract will require approval from the City Council.

**M.J. SCHIFF & ASSOCIATES, INC.**

*Consulting Corrosion Engineers - Since 1959*  
431 West Baseline Road  
Claremont, CA 91711

Phone: (909) 626-0967/ Fax: (909) 626-3316

E-mail: [gbell@mjschiff.com](mailto:gbell@mjschiff.com)  
<http://www.mjschiff.com>

# Proposal for

## As-needed Corrosion Engineering Services

*Prepared for:*

Mr. Andrew Ferrigno, P.E.  
Engineering Division  
Public Works Department  
**City of Huntington Beach**  
2000 Main Street  
P.O. Box 190  
Huntington Beach, California 92648

*Prepared by*

**M.J. Schiff & Associates, Inc.**  
431 West Baseline Road  
Claremont, CA 91711  
MJS&A #P04-0199HQ

**DUE: THURSDAY, OCTOBER 7, 2007, 4:00 P.M.**

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PROOF OF INSURANCE.....1

## 1.0 PROJECT APPROACH

MJS&A submits this proposal for As-needed Corrosion Engineering Services as requested by the City of Huntington Beach Public Works Engineering Division (City) in their Request For Proposals dated September 9, 2004. MJS&A will provide qualified personnel to meet the needs of the City. Team members were chosen primarily based on extensive experience on similar projects. Our team members are well experienced in the implementation and development of corrosion control programs of this size and complexity, as we specialize primarily in water and wastewater corrosion mitigation. As can be seen from our discussion and layout of the Scope of Work below, our approach to the essential elements for this project will be a comprehensive and thorough completion of individual tasks or all scope-of-work items in an integrated fashion.

Mention is made in the description of scope of work the consultant shall perform corrosion engineering services on an "as-needed" basis and the scope for any one project may involve all phases of project development. This works well with MJS&A's philosophy that individual project tasks are integral to previous and subsequent tasks. Field services naturally lead into preliminary engineering and then into permits, etc. Any one task is important and can be accomplished as a stand-alone item, yet the overall project relies on successful completion of the individual tasks as building blocks in order to provide a comprehensive package. MJS&A recognizes this and our services are tailored to this effect.

A sometimes unstated, though basic goal, of corrosion evaluation on pipelines is to develop recommendations to meet the City's objective of an increased life cycle. Extending each pipeline's life cycle, and ultimately the entire pipeline network, utilizing the economical tools available to the corrosion engineer is the basic goal. For a pipeline network therefore, the goal of MJS&A's evaluation will be to: provide conclusions regarding the condition of the pipeline; a ranking of the pipelines based on overall corrosion susceptibility; and specific recommendations to extend pipeline life through monitoring, remedial repairs, cathodic protection, and maintenance.

### Field Services:

MJS&A has experience in collection of soil samples and evaluation of corrosivity of the soil environment. Soil resistivity is a major determiner of corrosion, and three methods are used to evaluate the soil resistivity:

- Wenner four-pin: this test method is done at a variety of depths to calculate the resistivity of the soil where the structure is buried;
- Electromagnetic conductivity (Emag): The advantage of the Emag is efficiency, where the data collection can be performed by a hand held unit. The Emag produces a measure of soil conductivity, however, so Wenner four-pin testing is used in combination with Emag to provide for evaluation against the industry accepted categories of corrosivity;
- Laboratory analysis: Additional soil resistivity data will be measured through laboratory analysis along with the concentration of soluble chemical species. Soil samples will be analyzed in MJS&A's in-house soil laboratory, measuring the resistivity in both the as-received and saturated state to determine the corrosivity of the soil based on the most

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corrosive condition. Laboratory testing will also provide the concentration of soluble chemical species that are known to contribute to corrosion. All of the soil corrosivity data types will be weighed to refine the evaluation and provide a quantitative basis of material selection.

MJS&A's laboratory will analyze more than 5,000 samples this year and our day-to-day work includes corrosivity evaluation. James Keegan is our laboratory manager and will be responsible for all soil analysis as well as water corrosivity analysis. MJS&A laboratories are also capable of analyzing paint samples for heavy metals.

With respect to forensic engineering services, MJS&A's approach is to investigate the corrosion problem, collecting all the information that can be retrieved in order to develop what is the most probable failure mode consistent with the test data and results, laboratory analysis, and physical findings. We collect the necessary on-site information and samples for metallurgical, chemical, and ASTM C856 petrographic analysis.

MJS&A personnel are experienced in collection of corrosion control data as part of our day-to-day business. These data give information on the corrosion condition and/or efficiency and sufficiency of cathodic protection. Proper positioning of reference electrodes is critical in providing accurate and repeatable data used in analysis of cathodic protection system efficacies. An integrated approach using soil data, pipe-to-soil potentials, knowledge of the structure (or facility) and if necessary, information derived from forensic services obtained from various existing facilities is analyzed and used to provide prioritized recommendations for corrosion mitigation methods based on the critical nature of the facility.

A unique approach that MJS&A has developed is the training of utility personnel in the accurate and proper collection of corrosion field data. This allows the people most familiar with the facilities to collect the data. Once data are collected, they are reviewed and if necessary, verified. This process has been put into practice with Irvine Ranch Water district, Calleguas Municipal Water district and San Diego County Water Authority.

### **Preliminary Engineering:**

To assure efficiency and consistency, MJS&A helps develop and implement standardized details and specifications for use in providing system wide conformance. Along with development of detail drawings, come alternative layouts, estimates for probable costs and calculations ~~the~~ <sup>the</sup> permit value engineering choices to be made. Development of alternate layouts is a culmination of efforts performed by a contractor, City and/or MJS&A personnel. Information obtained during the Field Services is utilized during the Preliminary Engineering.

### **Permits:**

MJS&A would be available to assist the City in developing the information necessary as well as performing the legwork in obtaining approvals from applicable agencies for environmental, and/or other permits as may be required. MJS&A has performed similar services for Irvine Ranch Water District, Orange County Sanitation District and Metropolitan Water district

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**Construction Documents:**

MJS&A regularly prepares documents for various agencies in our day-to day work. Documents would consist of engineering calculations, designs, plans, specifications, estimates of most probable cost and contract bidding documents. Documents suitable for Bidding including General Provisions (provided by the City), Special Provisions, Technical Specifications, Cathodic Protection system design drawings, Contract Documents (provided by the District), Bid Schedule and Cost Estimate are typically provided.

Submittals are typically made for review by the client (City) during the preliminary design phase, at 60% completion and final stage. Documentation would be submitted as required in a hardbound copy as well as electronically in Microsoft Office format. Drawings would be submitted electronically as well in AutoCAD 2000 and on inked mylars in size D (24x36).

**Bidding Stage:**

As part of our Project Management services, MJS&A would be available to assist the City in answering bidders' questions, attend pre-bid conferences and job walks, prepare addenda, analyze bids and recommend award.

**Construction Stage:**

Success in construction projects is often based in a solid and positive working relationship with the Owner and contractor personnel. This often begins with the pre-construction conference and lasts through the final completion and acceptance of the project by the Owner. MJS&A works hard to achieve a harmonious environment and would assist the engineer, contractor and inspector with the interpretation of the plans specifications, analysis of changed conditions, development of corrective action(s), review of shop drawings and other submittals and the review and negotiation of change orders with respect to the project. At the completion of a project, MJS&A often prepares "As-built" drawings.

**Construction Inspection:**

As part of the Construction Stage, MJS&A is often asked to coordinate and perform construction inspection services. Should these services be requested, they typically include either part-time or full-time inspection attendance. The inspection services, be they for cathodic protection appurtenances or for coatings, include daily inspection reports and assessment reports for records keeping.

A regular part of MJS&A's daily operations is Coatings Consulting. Services provided include: Review or develop specifications for coatings and/or linings projects. Investigate sources of coatings failures or defects and make recommendations for corrective actions. Provide expertise in selecting materials for various service environments.

MJS&A maintains full time Coatings Inspectors. Services provided include: Provide full time or develop surveillance inspection programs to ensure specification compliance of major coatings projects. These services include survey assessments of existing structures, specification development, failure analysis, material selection, and installation inspection of both liquid applied and solid sheet linings (t-lock). MJS&A field inspectors have years of experience and

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diverse backgrounds in the industrial coatings industry. Each inspector is assigned to projects based on their level of experience with the individual project scope.

### **Design/Build:**

Should the City identify the need at the onset of a project, MJS&A could and has teamed or partnered with a contractor to provide design/build services. Services provided would typically be a compilation of the above services and result in a functionally operable system upon completion.

## **2.0 PROJECT TEAM**

*Dr. Graham E.C. Bell, P.E.*, is the Principal Engineer. Dr. Bell will be the Project Principal, and will have a time commitment of 10%. Dr. Bell has more than 20 years of experience in the designing and testing of corrosion control facilities and in the forensic evaluating of corrosion damage on buried and submerged structures, and his commitment to excellence was reflected in the NACE International Western Region Engineer of the Year. Dr. Bell spent more than seven years in basic corrosion research at Oak Ridge National Laboratory. Dr. Bell has managed multi-million-dollar research programs as well as tests for hundreds of structures and pipelines. Dr. Bell is a registered Corrosion Engineer in the State of California and a registered Mechanical Engineer in the States of Tennessee, Nevada, and Arizona. He is a NACE International Certified Corrosion Specialist P and Cathodic Protection Specialist.

*Mr. John W. French, P.E.*, is Chief Engineer with M.J. Schiff & Associates. Mr. French will be responsible for the technical direction of the project and have QA/QC responsibility, and will have a time commitment of 15%. Mr. French is registered in the State of California as a Corrosion Engineer and is a Certified NACE International Cathodic Protection Specialist. Mr. French has 20 plus years experience in the corrosion engineering field, extending from design, testing, and troubleshooting of corrosion control systems for a variety of buried and submerged structures. He has experience with investigation and control of corrosion on transmission and distribution pipeline systems within the water/wastewater and oil and gas industries, working for private and public agencies, both domestically and internationally. Work has included investigations to evaluate extent of corrosion and the need for corrosion mitigation measures where required.

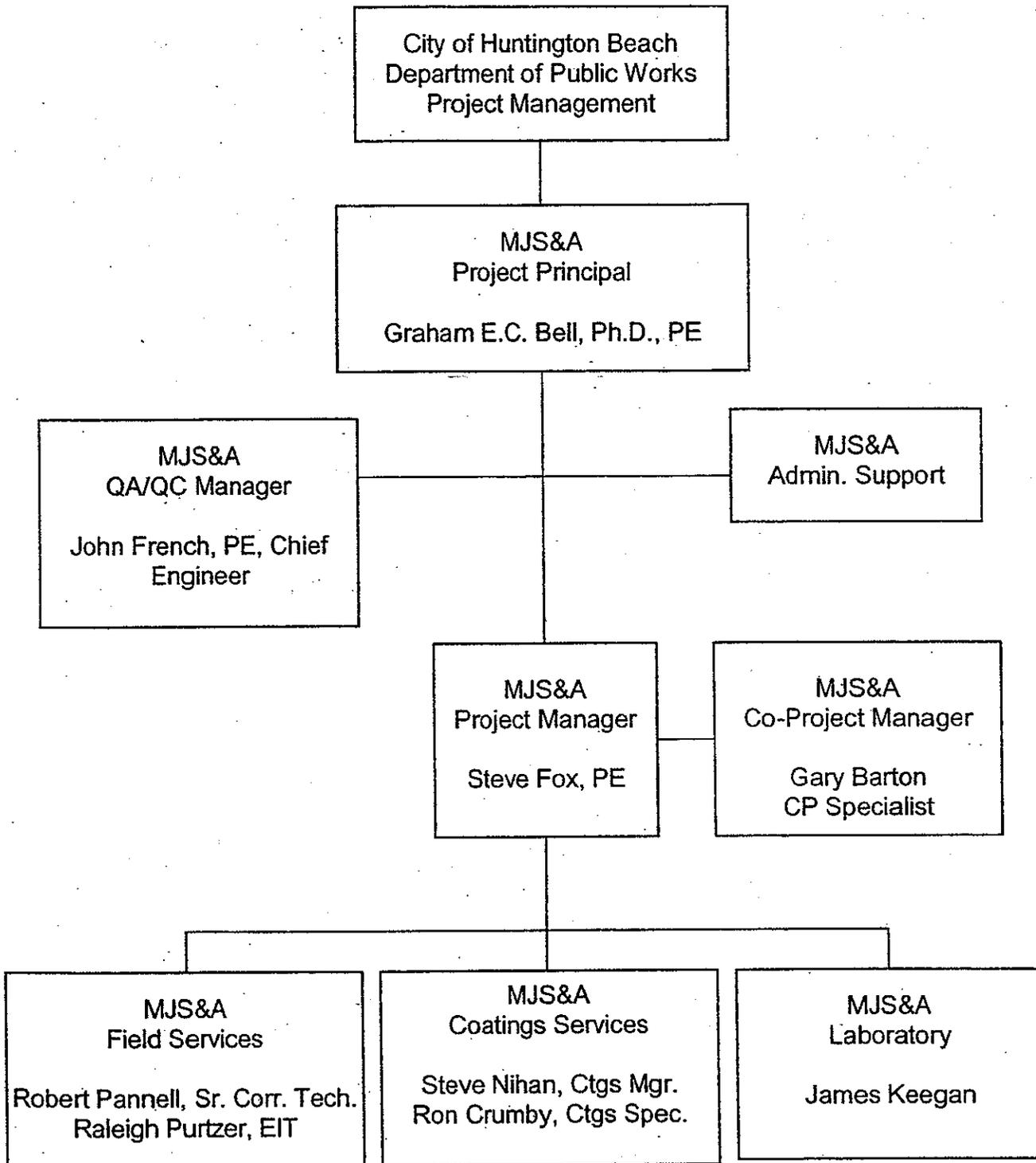
*Mr. Steven Fox, P.E.*, a Corrosion Engineer with our staff, and will be Project Manager with a time commitment of 50%. Mr. Fox's experience of more than 8 years in the field of corrosion engineering has been in soil corrosivity evaluations, corrosion protection design, cathodic protection surveys and troubleshooting, and internal inspections of large diameter pipe. Mr. Fox is registered in the State of California as a Corrosion Engineer and is a Certified NACE International Cathodic Protection Specialist.

*Mr. Gary Barton*, a Cathodic Protection Specialist with our staff, and will be Assistant Project Manager with a time commitment of 50%. Mr. Barton's experience of more than 20 years in the field of corrosion engineering has been widely diversified including corrosion control for water distribution systems, ship berthing facilities, fuel and water storage reservoirs and systems, soil corrosivity evaluations, corrosion protection design, cathodic protection surveys and troubleshooting, and corrosion control of large diameter pipe. Mr. Barton is a Certified NACE International Cathodic Protection Specialist.

*Mr. Eric Frechette, E.I.T.*, is General Manager with our staff and will provide administrative support. Mr. Frechette is registered in the State of California as an Engineer-in-Training, and is registered in Canada as a Professional Engineer. Mr. Frechette has more than 10 years of experience in the field of cathodic protection and corrosion control. He has extensive experience on water transmission and distribution piping, bridges, heat exchangers, storage tanks, wastewater piping systems and digesters. He has worked with private industry, public, and governmental agency in North America and the Middle East, performing various corrosion engineering tasks including field surveys, analysis, and reports for corrosion studies, and construction inspection. Mr. Frechette is a Certified NACE International Cathodic Protection Specialist.

Other MJS&A personnel proposed for the projects are Sr. Corrosion Technologist Robert Pannell, Field Engineer Raleigh Purtzer, E.I.T., Coatings Manager - Steve Nihan, Sr. Coatings Specialist - Ron Crumby and James Keegan, Laboratory Manager.

### 3.0 PROJECT TEAM ORGANIZATION CHART



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#### 4.0 STATEMENT OF QUALIFICATIONS

M.J. Schiff & Associates (MJS&A) has provided corrosion engineering consulting services for more than 45 years. Established in 1959 by our founding engineer, Mr. Melvin Schiff, MJS&A is one of the oldest independently owned and operated corrosion engineering firms in the United States.

Our firm focuses on corrosion engineering, corrosivity and coating-related services to assist architects/engineers and owners in having structures with low maintenance costs and long trouble-free lives. MJS&A neither sells nor installs cathodic protection or corrosion control equipment, nor are we connected in any way with firms that do. This independence allows us to provide unbiased recommendations, specifications, and designs. If clients request or require corrosion control materials and facility installation, MJS&A assists them in obtaining and evaluating bids from qualified contractors.

MJS&A is one of the very few consulting corrosion engineering firms that have continuously carried professional liability insurance. Our no-claims-made track record is attributable to MJS&A's attention to detail, quality assurance, and quality control for its projects.

MJS&A operated as a sole proprietorship until December 31, 1993, at which time we incorporated. M.J. Schiff & Associates, Inc., operates as a succeeding entity to the previous sole proprietorship. The corporation is closely held in the state of California and operates under subchapter S of the federal tax code with two principal shareholders. MJS&A is financially stable and has adequate access to capital. The corporation, its predecessor, and its officers have never filed for bankruptcy or for protection under the bankruptcy laws. There are no plans for dissolution of the Company, and plans for continued operation and expansion are in place.

##### Services Provided

*Failure Analysis and Corrosion Damage Assessments* – Determine cause and extent of corrosion problems or failures. Make recommendations for corrective action. Provide expert witness services where litigation may be involved.

*Surveys of Existing Structures* – Perform periodic surveys of existing structures and corrosion control facilities (i.e., site inspections, over-the-line surveys, and interference testing), to assist owners in corrosion risk assessment and asset management during the operating life of the structure.

*Site Corrosivity Study* – Perform field and laboratory tests to determine corrosivity of environment. Analyze data. Provide general recommendations to protect materials likely to be used for construction.

*Design and Construction Documents* – Review plans and specifications for proper corrosion control measures. Design corrosion monitoring and corrosion control facilities. Prepare plans or sketches and specifications for bid and construction.

*Coatings Consulting* – Review or develop specifications for coatings and/or linings projects. Investigate sources of coatings failures or defects and make recommendations for corrective actions. Provide expertise in selecting materials for various service environments.

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*Construction Document Review and Conformance Testing* – Review bid submittals and construction documents. Test completed corrosion monitoring and control facilities for proper installation. Provide baseline data for corrosion management and maintenance recommendations.

*Coatings Inspection* – Provide full time or develop surveillance inspection programs to ensure specification compliance of major coatings projects. These services include survey assessments of existing structures, specification development, failure analysis, material selection, and installation inspection of both liquid applied and solid sheet linings (t-lock). MJS&A field inspectors have years of experience and diverse backgrounds in the industrial coatings industry. Each inspector is assigned to projects based on their level of experience with the individual project scope.

*Periodic Inspection* – Inspect and test corrosion control facilities. Monitor protected and unprotected structures, report condition of protection system and structures. Provide recommendations for maintenance and corrective action.

## 5.0 LIST OF RELAVANT PROJECTS

### As-needed Corrosion Engineering Services, San Diego Co., California

**Client:** San Diego County Water Authority (SDCWA)

**Key Project Personnel:** Graham Bell - Project Manager  
Brendan Sheehan - Sr. Corrosion Engineer  
Gary Barton, Robert Pannell - Senior Technicians  
Steven Fox - Project Engineer

**Services Provided:**

- Annual Cathodic Protection and Corrosion Monitoring Surveys
- Corrosion and Cathodic Protection Troubleshooting
- Stray Current Interference Testing
- Corrosion Database Development
- Pulsed Rectifier Interference Study
- Laboratory Tests of Soil and Mortar Samples and Analysis of Test Data
- Electromagnetic Conductivity Survey of First Aqueduct
- Consultation for Metallurgical/Materials and Coatings Questions

**Client Representative:** John Galleher, P.E. (858) 522-6839  
San Diego County Water Authority  
4677 Overland Avenue  
San Diego, CA 92123

**Situation:**

In order to meet and maintain the expanding water needs of San Diego County, SDCWA initiated Capital Improvement and Aqueduct Protection Programs. Capital improvement included over 63 miles of new pipelines, ranging from 108 to 72 inches in diameter, new flow control facilities, pipeline relocations, and rehabilitation or replacement of existing pipelines. Aqueduct protection includes inspections, surveys, and development of long-term operation and maintenance of corrosion control and cathodic protection systems.

**MJS&A's Response:**

Since 1997, MJS&A has been an Authority consultant for corrosion engineering services. In addition, MJS&A has teamed with Civil Engineering firms for pipeline design and construction.

**As-Needed Corrosion Engineering Services, Riverside Co., California**

**Client:** Eastern Municipal Water District (EMWD)

**Key Project Personnel:** Graham E. C. Bell, Project Manager  
Paul R. Smith, Project Engineer  
Dr. Dan Townley, Project Cathodic Protection Specialist  
Gary Barton, Cathodic Protection Specialist  
Robert Pannell, Senior Technician  
James Keegan, Technician

**Services Provided:**

- Soil Corrosivity Evaluations and Corrosion Control Recommendations for Candidate Pipe Materials.
- Corrosion Control and Cathodic Protection Designs for New Construction
- Tested Corrosion Control Facilities for Conformance and Effective Operation
- Performed Corrosion Investigations of Existing Waterlines
- Designed Cathodic Protection for Existing Waterlines

**Client Representative:** Mr. Sia Azimie (909) 928-3777  
Eastern Municipal Water District  
P. O. Box 8300  
San Jacinto, CA 92572-8300

**Situation:**

In order to meet the expanding water needs of Riverside County, EMWD has constructed numerous domestic and reclaimed water pipelines. The District required corrosion evaluation, recommendations, and construction-phase corrosion engineering services for new construction. Now in a maintenance mode, with the majority of new construction complete, corrosion evaluations are required on the older backbone of EMWD's system

**MJS&A's Response:**

At initial project stages, MJS&A works with civil and geotechnical engineers to evaluate route corrosivity and provide corrosion control for candidate pipe materials. During construction, MJS&A performs testing to ensure corrosion control facilities are installed as specified. For existing pipelines, MJS&A provides corrosion evaluation as requested which includes physical inspection, metal thickness testing, tests of mortar for chloride, laboratory tests of soil samples, pipe-to-soil measurements, continuity and current requirement testing, and recommendations and design for cathodic protection.

**Corrosion Engineering Services, Lake Elsinore, California**

**Client:** Elsinore Valley Municipal Water District (EVMWD) - 2003 Water Reservoir Improvements Project

**Key Project Personnel:** Graham E. C. Bell - Project Principal  
Eric Frechette - Project Manager  
Gary Barton - Cathodic Protection Specialist  
Robert Pannell - Senior Technician  
Steve Nihan and Ron Crumby - Coatings Inspection

**Nature of Firm's Responsibility:** Design, Construction Services for Coatings and Cathodic Protection

**Type of Contract:** Design/bid/build

**Client Representative:** Joe Mouawad, P.E. (909) 674-3146  
31315 Chaney Street  
Lake Elsinore, CA 92531

**Prime Contractor:** Superior Tank Company Inc. (909) 538-0369  
Larry Wombles  
6456 Canal Street, Riverside, CA 92509

**Date started:** December 1999      **Estimated Completion date:** November 2004

**Cost:** \$2.1 M (construction)

**Size of project:** 34 water reservoirs, ranging from 0.1M to 8M Gallons

**Narrative:** MJS&A performed a condition assessment of the District's 43 water reservoirs in 2000, and prepared a Corrosion Control Master Plan (contract value of \$44,000). From the Master Plan, 34 tanks were identified for coatings, cathodic protection, structural and water circulation improvements. MJS&A prepared the plans and specifications and assisted the owner during the bid process completed in 2003 (contract value \$94,000). MJS&A was selected to perform construction services (contract value of \$256,000) to review submittals and inspect coating and cathodic protection work, and hired a civil engineering firm to inspect water circulation and structural work.

The work must be performed during the winter when water demands are lower, and the work schedule must consider tank clusters where certain tanks cannot be removed from service simultaneously.

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**As-Needed Corrosion Engineering Services, LA & Ventura Counties****Client:** Calleguas Municipal Water District (CMWD)**Key Project Personnel:** Graham Bell - Project Manager  
James Keegan - Technician  
Robert Pannell - Senior Technician  
Gary Barton - CP Specialist**Services Provided:**

- Develop PCCP Corrosion Maintenance Master Plan
- Evaluate Cathodic Protection Designs
- Troubleshoot Cathodic Protection Systems
- Design Cathodic Protection
- Evaluate Coating and Cathodic Protection For Steel Reservoirs

**Client Representative:** Ms. Susan Mulligan (805) 579-7115  
Calleguas Municipal Water District  
2100 Olsen Road  
Thousand Oaks CA 91360-6800**Situation:**

CMWD provides water wholesale to communities in the eastern Ventura County including Moorpark, Simi Valley, Thousand Oaks, and to the west to include Camarillo and Oxnard. CMWD receives water from MWD in western Los Angeles County and delivers it through two conduits to the Bard Reservoir and treatment facility. CMWD's infrastructure includes water treatment, storage, and hundreds of miles of water transmission pipelines. Corrosion control ranges from cement-mortar coatings, joint bonds, insulated joints, and test stations to active impressed current cathodic protection systems. In 1986 and 1997, CMWD experienced failures in one of its PCCP conduits.

**MJS&A's Response:**

MJS&A has reviewed existing reports, designs, and survey data and developed work plans for the next step of investigation of CMWD's existing steel and PCCP pipelines. Recommendations for continued operation have been made based on soil and groundwater corrosivity in conjunction with the needs of CMWD and affected communities. Our work has included electromagnetic conductivity surveys, corrosion and cathodic protection surveys, obtaining and testing soil and groundwater samples, internal inspections, cathodic protection and coating evaluation for steel reservoirs, cathodic protection and corrosion control design, and stray current tests.

**6.0 REFERENCES**

| <b>Client</b>                                                                    | <b>Contact</b>     | <b>Title</b>              | <b>Phone &amp; Fax</b>                                                                         |
|----------------------------------------------------------------------------------|--------------------|---------------------------|------------------------------------------------------------------------------------------------|
| San Diego County Water Authority<br>4677 Overland Avenue<br>San Diego, CA 92123  | John Galleher, PE  | Senior Corrosion Engineer | P: 858-522-6839<br>F: 858-522-6560                                                             |
| Eastern Municipal Water District<br>P.O. Box 8300<br>Perris, CA 92522            | Sia Azimie, PE     | Engineer                  | <sup>951</sup><br>P: <del>909</del> -928-3777<br><sup>951</sup><br>F: <del>909</del> -928-6416 |
| Calleguas Municipal Water District<br>2100 Olsen Road<br>Thousand Oaks, CA 91360 | Susan Mulligan, PE | Director of Engineering   | P: 805-526-9323<br>F: 805-526-2675                                                             |

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**APPENDIX A**

**RESUMES OF KEY PERSONNEL**

# **M.J. SCHIFF & ASSOCIATES, INC.**

**Consulting Corrosion Engineers - Since 1959**  
431 West Baseline Road  
Claremont, CA 91711

Phone: (909) 626-0967/ Fax: (909) 626-3316

E-mail: [gbell@mjschiff.com](mailto:gbell@mjschiff.com)

<http://www.mjschiff.com>

## **DR. GRAHAM E.C. BELL, P.E.**

### **President and Principal Engineer**

Dr. Graham E.C. Bell, P.E. is the President and Principal Engineer of M.J. Schiff & Associates, Inc. Dr. Bell has more than 20 years of experience in designing and testing of corrosion control facilities and in forensic evaluation of corrosion damage on buried and submerged structures. Dr. Bell is a registered Corrosion Engineer in the State of California and a registered Mechanical Engineer in the States of Tennessee and Nevada. Dr. Bell is certified by NACE International as both a Corrosion and Cathodic Protection Specialist. In 2002, the Western Area of NACE International named Dr. Bell Engineer of the Year and he is the youngest recipient of this honor. Dr. Bell has authored and co-authored more than fifty technical papers and given more than one hundred technical conference presentations.

### **EDUCATION:**

Ph.D. - Nuclear Engineering, University of California, Los Angeles

M.S. - Engineering, University of California, Los Angeles

B.S. - Engineering, University of California, Los Angeles

### **REGISTRATIONS AND CERTIFICATIONS:**

State of Tennessee - Professional Engineer - #00100976

State of California - Corrosion Engineer - #CR 1064

State of Nevada - Professional Engineer - #11869

State of Arizona - Professional Engineer - #33070

NACE International- Certified Cathodic Protection Specialist - #5350

NACE International- Certified Corrosion Specialist, P - #5350

### **RELATED PROJECT EXPERIENCE:**

As an engineer with M.J. Schiff & Associates, Inc., Dr. Bell has:

Developed corrosion control management programs including standard drawings and specifications for City of San Buena Ventura, City and County of San Francisco, Calleguas Municipal Water District, Las Virgenes Municipal Water District, City of Roseville, and San Diego County Water Authority.

Designed cathodic protection systems and other corrosion control facilities and prepared plans and specifications for the Southern Nevada Water Systems 170A and 135A pipelines and the Foothills and River Mountains Pumping Stations.

Design-build experience includes corrosion engineering responsibility with Barnard Construction as the constructor for the Owens Lake Dry Lake Project, which won the 2003 Honor Award from Excellence in Engineering Design.

Tested and inspected corrosion control devices after installation to determine conformance with plans and specifications, including over-the-line surveys for the Alfred Merritt Smith Water Treatment Plant.

Specified or performed soil tests, analyzed data, and made recommendations for corrosion control measures to protect underground structures in the for hundreds of miles of pipelines and hundreds of civil engineering related structures.

Field work, analysis, and reports for corrosion studies of existing structures including over-the-line surveys on prestressed concrete cylinder pipe in Western U.S. for clients including the City of Phoenix and San Diego County Water Authority.

Performed stray current interference investigations involving foreign rectifiers and transit systems in Las Vegas, Los Angeles, San Francisco and San Diego.

Inspected and tested various types of structures and reported on cause of corrosion failures including pump and pipeline (ductile iron, concrete, steel, and copper) failures for water utilities coast to coast.

Dr. Bell is the current chairman for the AWWA Committee on Corrosion (519) and was the Chairman of the NACE International Task Group T-10A-21 on Corrosion Control for Cast and Ductile Iron Pipe. These committees are preparing a new version of their state of the art reports for corrosion control and condition assessment of pipe materials used in the water industry.

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<http://www.mjschiff.com>

## **JOHN W. FRENCH, P.E.**

### **Chief Engineer**

Mr. John W. French, P.E. is the Chief Engineer of M.J. Schiff & Associates, Inc. Mr. French has been in the field of corrosion engineering for over 20 years and is experienced in the design, testing, and troubleshooting of corrosion control systems for a variety of buried and submerged structures. Mr. French is a registered Corrosion Engineer in the State of California and is certified by NACE International as a Cathodic Protection Specialist.

#### **EDUCATION:**

B.S. - Mechanical Engineering, University of California, Irvine

#### **REGISTRATIONS AND CERTIFICATIONS:**

State of California - Corrosion Engineer - #CR 1023  
NACE International - Certified Cathodic Protection Specialist - #3441

#### **RELATED EXPERIENCE:**

As a corrosion engineer, Mr. French has performed the following tasks:

Project Manager for five segments of Los Angeles Metropolitan Transportation District Metrorail transit project including development of design criteria, specifications, drawings, construction acceptance testing, and system troubleshooting.

Corrosion failure analysis on facility-wide steam and condensate distribution system and evaluation of buried utility pipeline systems, including close interval survey and investigative excavations at California State Prisons Avenal and Corcoran facilities.

Design of cathodic protection including preparation of drawings and specifications for pipelines, tank interiors and exteriors, and marine structures.

Conducted close-interval surveys of distribution and transmission pipeline systems to troubleshoot system deficiencies and to measure and evaluate stray currents.

Directed collection of soil samples for laboratory chemical analysis in order to assess required measures for corrosion mitigation on buried pipelines.

Conducted Operations and Management training for facility personnel for collection of corrosion and cathodic protection data.

Conducted failure analysis on various pipe materials including dielectric coated steel, cement mortar coated steel, ductile iron, and copper.

Coating specification and failure analysis on bridge, quay wall, and water storage tank coating systems including specification of hazardous paint removal.

#### **PROFESSIONAL ACTIVITIES:**

NACE International ♦ American Water Works Association ♦ Steel Structures Painting Council

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<http://www.mjschiff.com>

## **STEVEN R. FOX, P.E.**

### **Corrosion Engineer**

#### **EDUCATION:**

B.S. – Aerospace Engineering, Cum Laude, San Diego State University, CA

#### **REGISTRATION:**

State of California – Corrosion Engineer #CR 1137  
NACE International – Certified Cathodic Protection Specialist #7883  
Certified Adult/Pediatric CPR and First Aid – Cuyamaca College  
Confined Space Entry Training – Cuyamaca College  
40-Hour HAZWOPER Training – Cuyamaca College

#### **EXPERIENCE:**

Mr. Fox is familiar with water, gas, and multi-product petroleum piping. Mr. Fox has 8 years of “hands on” experience in designing, evaluating, inspecting, and adjusting impressed current and galvanic cathodic protection (CP) systems for various pipelines, underground fuel storage tanks, water reservoirs, barges, and mooring dolphins. Typical projects have included CP system designs, CP system inspection services, and corrosion related failure investigations. He has performed contract work on water systems with the San Diego Water Authority the past three years.

Designed cathodic protection systems, prepared plans, and specifications for various utility agencies.

Prepared detailed cathodic protection survey reports that provided failure mechanisms and recommendations.

Performed construction acceptance inspections.

Performed internal inspections of large diameter reinforced concrete pipe, prestressed concrete cylinder pipe, pretensioned concrete cylinder pipe, and cement mortar lined and coated pipe.

Performed stray current interference investigations.

Identified electrical pipeline shorts that compromise the functionality of cathodic protection systems.

Prepared Cathodic Protection System Operations & Maintenance manuals for various utility agencies.

Taught in several corrosion control seminars.

Prepared soil corrosivity reports for new and existing structures.

#### **PROFESSIONAL ACTIVITIES:**

- ◆ NACE International
- ◆ Tau Beta Pi National Honor Engineering Society

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E-mail: [gbarton@mjschiff.com](mailto:gbarton@mjschiff.com)  
<http://www.mjschiff.com>

## GARY L. BARTON

Cathodic Protection Specialist

### EDUCATION:

AA - Civil Engineering, University of Maine, Orono

### CERTIFICATIONS:

NACE International: Certified Cathodic Protection Specialist #6426  
Certified Senior Corrosion Technologist

### EXPERIENCE:

Here is a partial listing of projects Mr. Barton has performed or been associated with:

Project Manager, Corrosion Control Master Plan, 7 steel potable water reservoirs. Included coatings assessments, corrosion investigations, prioritized recommendations and schedule for corrosion control including coating refurbishment and maintenance. Las Virgenes Municipal Water District (LVMWD).

Project Manager, pipeline alignment corrosivity study resulting in soils evaluation, pipe coating recommendations and cathodic protection design, 3-miles of 60-inch inch Prestressed Concrete Cylinder Pipeline, Muskegon, Michigan.

Project Manager, Corrosion Control Master Plan, 40 steel potable water reservoirs. Included coatings assessments, corrosion investigations, prioritized recommendations and schedule for corrosion control including coating refurbishment and maintenance. Elsinore Valley Municipal Water District (EVMWD).

Project Manager, pipeline alignment corrosivity study resulting in soils evaluation, pipe coating recommendations, cathodic protection design, construction supervision and final checkout/commissioning, various phases, Mojave River Pipeline Project.

Project Manager, design and construction management support for 7 cathodic protection systems, various pipelines including ductile iron, cement mortar coated and dielectrically coated steel, Irvine Ranch Water District, Irvine, CA.

Specified or performed soil tests, analyzed data, and made recommendations for corrosion control measures to protect underground structures.

Tested and inspected corrosion control devices after installation to determine conformance with plans and specifications, including over-the-line surveys.

Performed field surveys, analysis, and reports for corrosion studies of pumping plants, filtration plants, reservoirs, cathodically protected, and unprotected pipelines.

Prior to joining MJS&A, Mr. Barton had over 14 years experience directly in the field of corrosion control, most recently as a technical services manager for a large corrosion control firm. His experience in all phases of corrosion control projects range from on-grade storage tanks, to sub-sea structures, from service stations to nuclear power plants, in environments ranging from the tropics to the poles.

### PROFESSIONAL ACTIVITIES:

◆ NACE International ◆ American Water Works Association (AWWA)

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<http://www.mjschiff.com>

## **ERIC P. FRECHETTE, EIT**

### **General Manager**

#### **EDUCATION:**

B.Ing. - Civil Engineering, École Polytechnique de Montréal, Quebec, Canada

#### **REGISTRATIONS AND CERTIFICATIONS:**

|                     |                                                    |
|---------------------|----------------------------------------------------|
| State of California | - Engineer-in-Training - #110811                   |
| Province of Quebec  | - Professional Engineer - #110477                  |
| NACE International  | - Certified Cathodic Protection Specialist - #7511 |

#### **RELATED EXPERIENCE:**

As a corrosion engineer since 1994, Mr. Frechette has performed the following tasks:

Designed cathodic protection systems and prepared plans and specifications for pipelines, storage tanks, concrete bridge decks and substructures.

Completed fieldwork, analysis, and reports for corrosion studies of existing cathodically protected and unprotected structures such as post-tension bridge deck beams, jetty piles, wharf sheet piling, underground pipelines, aboveground storage tanks and digesters.

Performed construction supervision, tested and inspected corrosion control devices after installation to determine conformance with plans and specifications. Major projects include 16 condenser water boxes and crossover piping (Israel Electric Co.), 9 reinforced concrete bridges (Israel Railways Co.), 22km of ductile iron pipeline (City of Brossard, Quebec), 2 wharves (Public Works Canada).

Specified or performed soil tests, analyzed data, and made recommendations for corrosion control measures to protect underground structures.

Inspected and tested various types of structures, such as pipelines and concrete structures and reported on cause of corrosion failures.

Prior to joining MJS&A in July 2002, Mr. Frechette had over 8 years experience directly in the field of corrosion control, most recently as a project manager for a large corrosion control firm. His experience in all phases of corrosion control projects range from concrete bridges to sub-sea structures, from service stations to electric power plants, in North America and the Middle East.

#### **PROFESSIONAL ACTIVITIES:**

NACE International ♦ American Water Works Association

**E7.63**

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**APPENDIX B**

*EXHIBIT "B"*

**FEE SCHEDULE**

**E7.64**

## FEE SCHEDULE

| <i>Title</i>                                                                         | <i>Hourly<br/>Rate</i> |
|--------------------------------------------------------------------------------------|------------------------|
| Principal Engineer – <b>Graham Bell</b>                                              | \$162                  |
| Associate Engineer/Chief Engineer – <b>John French</b>                               | \$139                  |
| Senior Staff Corrosion Scientist                                                     | \$139                  |
| Coating Consultant                                                                   | \$125                  |
| Senior Corrosion Engineer                                                            | \$116                  |
| Corrosion Specialist                                                                 | \$108                  |
| Water Chemist/Analyst                                                                | \$101                  |
| Coating Specialist                                                                   | \$101                  |
| Corrosion Engineer/CP Specialist – <b>Gary Barton, Steve Fox,<br/>Eric Frechette</b> | \$101                  |
| Senior Corrosion Technologist – <b>Robert Pannell</b>                                | \$90                   |
| Field Engr/Corrosion Technologist – <b>Raleigh Purtzer</b>                           | \$90                   |
| Corrosion Technician                                                                 | \$84                   |
| Construction Inspector                                                               | \$75                   |
| NACE Certified Coatings Inspector                                                    | \$65                   |
| Coating Inspector                                                                    | \$55                   |
| Drafting, including Equipment                                                        | \$65                   |
| Word Processing/Clerical                                                             | \$55                   |

Personnel time is billed in one-hour increments. These rates apply to regular and travel time. Charges for travel time will be limited to eight (8) hours per day. Overtime, if required in the interest of the project, will be charged at the above rates for professional personnel and 1.5 times the above rates for inspector, technician, and clerical personnel. Coating inspection has a four (4) hour minimum charge.

### EQUIPMENT AND MISCELLANEOUS CHARGES:

Personnel charges include the indicating instruments commonly used in corrosion testing. However, specialized instrumentation, test equipment, and facilities may require an additional charge. Other direct costs, such as outside consultants and rental equipment, will be charged at cost plus fifteen percent (15%). Travel expenses including subsistence and local transportation, special permits and fees, special reproduction, binding, overnight mail or courier services, insurance, and other similar expenses are charged at cost plus eight percent (8%).

Vehicles will be charged at \$0.50 per mile or \$50/day, whichever is greater.

Photographs and micrographs are \$5 per image and include report, client and record files copies. Digital copies of images can be provided on CD-ROM for an additional charge of \$1 per image.

E7.65

**APPENDIX C**

**PROOF OF INSURANCE**

# ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY)  
03/08/05

X3291 ~~X3292~~ Andy Ferrigno

PRODUCER  
Lib Rogal & Hobbs  
Professional Practice Insurance Brokers, Inc.  
130 Main Street  
Suite 350  
Irvine, CA 92614

1-949-729-0777

Lynette X129  
P: 949-729-8778

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED  
J. SCHIFF & ASSOCIATES  
11 WEST BASELINE ROAD  
SARASOTA, FL 34231

INSURERS AFFORDING COVERAGE

|                                               |
|-----------------------------------------------|
| INSURER A: TRANSPORTATION INSURANCE COMPANY   |
| INSURER B: TRANSCONTINENTAL INSURANCE COMPANY |
| INSURER C: CONTINENTAL CASUALTY COMPANY       |
| INSURER D: CLARENDON NATIONAL INSURANCE       |
| INSURER E:                                    |

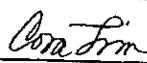
COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| TYPE OF INSURANCE                                                                                                                                                                                                                                                                                                                | POLICY NUMBER | POLICY EFFECTIVE DATE (MM/DD/YY) | POLICY EXPIRATION DATE (MM/DD/YY) | LIMITS                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>GENERAL LIABILITY</b><br><input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY<br><input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR<br>GEN'L AGGREGATE LIMIT APPLIES PER:<br><input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC | C1077864082   | 07/11/04                         | 07/11/05                          | EACH OCCURRENCE \$ 1,000,000<br>FIRE DAMAGE (Any one fire) \$ 300,000<br>MED EXP (Any one person) \$ 5,000<br>PERSONAL & ADV INJURY \$ 1,000,000<br>GENERAL AGGREGATE \$ 2,000,000<br>PRODUCTS - COMP/OP AGG \$ 2,000,000            |
| <b>AUTOMOBILE LIABILITY</b><br><input checked="" type="checkbox"/> ANY AUTO<br><input type="checkbox"/> ALL OWNED AUTOS<br><input type="checkbox"/> SCHEDULED AUTOS<br><input checked="" type="checkbox"/> HIRED AUTOS<br><input checked="" type="checkbox"/> NON-OWNED AUTOS                                                    | 2071953330    | 07/11/04                         | 07/11/05                          | COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000<br>BODILY INJURY (Per person) \$<br>BODILY INJURY (Per accident) \$<br>PROPERTY DAMAGE (Per accident) \$<br>AUTO ONLY - EA ACCIDENT \$<br>OTHER THAN AUTO ONLY: EA ACC \$<br>AGG \$ |
| <b>EXCESS LIABILITY</b><br><input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE<br>DEDUCTIBLE \$<br>RETENTION \$                                                                                                                                                                                       | C1077864096   | 07/11/04                         | 07/11/05                          | EACH OCCURRENCE \$ 2,000,000<br>AGGREGATE \$ 2,000,000<br>\$<br>\$<br>\$                                                                                                                                                             |
| <b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>                                                                                                                                                                                                                                                                             | 02KR0028877   | 09/01/04                         | 09/01/05                          | <input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER<br>E.L. EACH ACCIDENT \$ 1,000,000<br>E.L. DISEASE - EA EMPLOYEE \$ 1,000,000<br>E.L. DISEASE - POLICY LIMIT \$ 1,000,000                     |
| <b>OTHER PROFESSIONAL LIABILITY</b>                                                                                                                                                                                                                                                                                              | BEA254115640  | 07/11/04                         | 07/11/05                          | PERCLAIM/AGGREGATE \$ 2,000,000<br>\$<br>\$                                                                                                                                                                                          |

APPROVED AS TO FORM  
 JENNIFER MARRAS 3/21/05

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENTS/SPECIAL PROVISIONS  
 OPERATIONS OF NAMED INSURED. GENERAL LIABILITY: CERTIFICATE HOLDER IS NAMED ADDITIONAL INSURED PER ATTACHED ENDORSEMENT.

|                                                                                              |                                                                           |                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CERTIFICATE HOLDER                                                                           | <input checked="" type="checkbox"/> ADDITIONAL INSURED; INSURER LETTER: C | CANCELLATION                                                                                                                                                                                                                                                |
| City of Huntington Beach<br>Andrew Ferrigno<br>100 Main Street<br>Huntington Beach, CA 92648 | E7.67                                                                     | SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL SEND BY MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BY THE INSURER'S AGENTS OR AUTHORIZED REPRESENTATIVE. |
| ACORD 25-S (7/97) MJSA<br>2527129                                                            |                                                                           | AUTHORIZED REPRESENTATIVE<br>                                                                                                                                          |



**IMPORTANT: THIS ENDORSEMENT CONTAINS DUTIES THAT APPLY TO THE ADDITIONAL INSURED IN THE EVENT OF OCCURRENCE, OFFENSE, CLAIM OR SUIT. SEE PARAGRAPH C.1. OF THIS ENDORSEMENT FOR THESE DUTIES.**

**ALSO, THIS ENDORSEMENT CHANGES THE CONTRACTUAL LIABILITY COVERAGE WITH RESPECTS TO THE "BODILY INJURY" OR "PROPERTY DAMAGE" ARISING OUT OF THE "PRODUCTS-COMPLETED OPERATIONS HAZARD". SEE PARAGRAPH B.3. OF THIS ENDORSEMENT FOR THIS COVERAGE CHANGE.**

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**CONTRACTOR'S SCHEDULED AND BLANKET ADDITIONAL INSURED ENDORSEMENT WITH LIMITED PRODUCTS-COMPLETED OPERATIONS COVERAGE**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

Name of Person or Organization:

Designated Project: ALL OPERATIONS

CITY OF HUNTINGTON BEACH, ITS OFFICERS, AGENTS AND EMPLOYEES

(Coverage under this endorsement is not affected by an entry or lack of entry in the Schedule above.)

**A. WHO IS AN INSURED (Section II)** is amended to include as an insured any person or organization, including any person or organization shown in the schedule above, (called additional insured) whom you are required to add as an additional insured on this policy under a written contract or written agreement; but the written contract or written agreement must be:

1. Currently in effect or becoming effective during the term of this policy; and
2. Executed prior to the "bodily injury," "property damage," or "personal and advertising injury".

**B. The insurance provided to the additional insured is limited as follows:**

1. That person or organization is an additional insured solely for liability due to your negligence specifically resulting from "your work" for the additional insured which is the subject of the written contract or written agreement. No coverage applies to liability resulting from the sole negligence of the additional insured.
2. The Limits of Insurance applicable to the additional insured are those specified in the written contract or written agreement or in the Declarations of this policy, whichever is less.

These Limits of Insurance are inclusive of, and not in addition to, the Limits of Insurance shown in the Declarations.

3. The coverage provided to the additional insured by this endorsement and paragraph f. of the definition of "insured contract" under DEFINITIONS (Section V) do not apply to "bodily injury" or "property damage" arising out of the "products-completed operations hazard" unless required by the written contract or written agreement. When coverage does apply to "bodily injury" or "property damage" arising out of the "products-completed operations hazard" such coverage will not apply beyond:

- a. The period of time required by the written contract or written agreement; or
- b. 5 years from the completion of "your work" on the project which is the subject of the written contract or written agreement, whichever is less.

4. The insurance provided to the additional insured does not apply to "bodily injury," "property damage," or "personal and advertising injury" arising out of an architect's, engineer's, or surveyor's rendering of or failure to render any professional services including:

APPROVED AS TO FORM:

JENNIFER McGRATH, City Attorney  
3/21/05



- a. The preparing, approving, or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; and
  - b. Supervisory, or inspection activities performed as part of any related architectural or engineering activities.
- C. As respects the coverage provided under this endorsement, **SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS** are amended as follows:
- 1. The following is added to the Duties In The Event of Occurrence, Offense, Claim or Suit Condition:
    - e. An additional insured under this endorsement will as soon as practicable:
      - (1) Give written notice of an occurrence or an offense to us which may result in a claim or "suit" under this insurance;
      - (2) Tender the defense and indemnity of any claim or "suit" to any other insurer

NAME INSURED: M. J. SCHIFF & ASSOCIATES  
POLICY NO: C1077864082

which also has insurance for a loss we cover under this Coverage Part; and

- (3) Agree to make available any other insurance which the additional insured has for a loss we cover under this Coverage Part.
  - f. We have no duty to defend or indemnify an additional insured under this endorsement until we receive written notice of a claim or "suit" from the additional insured.
- 2. Paragraph 4.b. of the Other Insurance Condition is deleted and replaced with the following:
    - 4. Other Insurance
      - b. Excess Insurance

This insurance is excess over any other insurance naming the additional insured as an insured whether primary, excess, contingent or on any other basis unless a written contract or written agreement specifically requires that this insurance be either primary or primary and noncontributing.

These Corrosion Engineering Companies were sent a request for proposal for Professional Consulting Services for As Needed Corrosion Engineering Services, dated September 2004. All of these firms submitted a proposal prior to the October 7, 2004 deadline as stated in the RFP.

Farwest Corrosion Control Company  
Jim Flake  
Engineering Manager  
1480 West Artesia Blvd.  
Gardenia, CA 90248

310-532-9524  
F 310-532-3934

DeC Consultants Inc.  
E. A. DeCarlo, P.E.  
Corrosion Consultant  
8291 Aero Place, Suite 110  
San Diego, CA 92123

858-576-0226  
F 858-592-9206

Corpro Companies Inc.  
Mike Properi  
Technical Representative  
110807 E Smith Ave.  
Santa Fee Springs, CA 90670

562-942-8964  
F 562-942-2834

M. J. Schiff & Associates Inc.  
Graham Bell, PhD., P.E.  
431 W. Baseline Road  
Claremont, CA 91711

909-626-3316  
F 909-626-3316

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RBF Consulting  
John Barnes  
Vice President Corrosion Engineering  
27555 Ynez Road  
Suite 400  
Temecula, CA 92591-4679

Phone: 909-676-8042  
Fax: 909-676-7240

Hedborg Associates Inc  
Erik Hedborg, P.E.  
Principal Engineer  
P.O. Box 94  
San Clement, CA 96274

949-492-3661  
F 949-492-5607

Richard Franklin Yeager Jr.  
9140 Creekford Drive  
Lakeside, CA 92040

619-647-6265  
619-64-24-2718

Conceco/Matcor  
Saibal Mitra  
Sales Engineer  
2160 Winifred Street  
Simi Valley, CA 93063

805-527-3266  
F 805-527-7668