



moulton niguel water district

**TECHNICAL COMMITTEE MEETING
MOULTON NIGUEL WATER DISTRICT
BOARD OF DIRECTORS**

26880 Aliso Viejo Pkwy, Suite 150, Aliso Viejo

June 7, 2021

7:30 AM

Approximate Meeting Time: 1 Hour

IN AN EFFORT TO PREVENT THE SPREAD OF COVID-19 (CORONAVIRUS), AND IN ACCORDANCE WITH THE GOVERNOR'S EXECUTIVE ORDER N-29-20, THERE WILL BE NO PUBLIC LOCATION FOR THE PUBLIC TO ATTEND THIS BOARD MEETING IN PERSON. MEMBERS OF THE PUBLIC MAY LISTEN AND PROVIDE PUBLIC COMMENT TELEPHONICALLY BY CALLING THE FOLLOWING NUMBER:

DIAL: 1-669-900-9128

MEETING ID: 942-941-7034#

PASSCODE: 26161#

1. CALL MEETING TO ORDER
2. APPROVE THE MINUTES OF THE MAY 10, 2021 TECHNICAL COMMITTEE MEETING
3. PUBLIC COMMENTS

As permitted under the Brown Act, and in order to provide an equal opportunity for members of the public to provide comment without everyone talking over one another, the Board of Directors will receive all public comments, on items on or off the agenda, during the Public Comment portion of this meeting. Comments are limited to five minutes unless further time is granted by the Presiding Officer.

DISCUSSION ITEMS

4. Professional Services Agreement for the Plant 3A Subsidence Mitigation and Site Improvements

INFORMATION ITEMS

5. Pipeline Asset Prioritization Program
6. 2020 Water Quality Report

ADJOURNMENT

The Board of Directors' Meeting Room is wheelchair accessible. If you require any special disability related accommodations (i.e., access to an amplified sound system, etc.), please contact the Moulton Niguel Water District Secretary's office at (949) 831-2500 at least forty-eight (48) hours prior to the scheduled meeting. This agenda can be obtained in alternate format upon written request to the Moulton Niguel Water District Secretary at least forty-eight (48) hours prior to the scheduled meeting.

Agenda exhibits and other writings that are disclosable public records distributed to all, or a majority of, the members of the Moulton Niguel Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection at the District Office, 26880 Aliso Viejo Parkway, Suite 150, Aliso Viejo, CA ("District Office"). If such writings are distributed to members of the Board less than seventy-two (72) hours prior to the meeting, they will be available in the reception area of the District Office at the same time as they are distributed except that, if such writings are distributed immediately prior to, or during the meeting, they will be available in the Board meeting room and on the District website at www.mnwd.com.



moulton niguel water district

DRAFT

**MINUTES OF THE TECHNICAL COMMITTEE MEETING
MOULTON NIGUEL WATER DISTRICT
BOARD OF DIRECTORS**

May 10, 2021

A Regular Meeting of the Technical Committee of the Moulton Niguel Water District was held in accordance with the Governor’s Executive Order N-29-20 in an effort to prevent the spread of COVID-19 (Coronavirus). As a result, there was no public location for the public to attend in person. The meeting was called to order at 7:31 AM on May 10, 2021. There were present and participating at 26880 Aliso Viejo Pkwy, Suite 150, Aliso Viejo, CA:

DIRECTORS

Duane Cave	Vice President/Chair
Donald Froelich	Vice President
Bill Moorhead	Director

Also present and participating were:

STAFF MEMBERS IN-PERSON

Matt Collings	Assistant General Manager
Rod Woods	Director of Engineering
Paige Gulck	Board Secretary

STAFF MEMBERS, LEGAL COUNSEL, AND MEMBERS OF THE PUBLIC TELEPHONICALLY

Joone Lopez	General Manager
Johnathan Cruz	Director of Financial Planning & Innovation
Gina Hillary	Director of Human Resources
Todd Novacek	Director of Operations
Jose Solorio	Government Affairs Officer
Jeff Ferre	Best, Best, & Krieger (General Counsel)
Tim Bonita	Recording Secretary
Trevor Agrelius	MNWD
Matt Brown	MNWD
Todd Dmytryshyn	MNWD

Patrick Garner	MNWD
Bryan Hong	MNWD
David Larsen	MNWD
Steve Merk	MNWD
Adrian Tasso	MNWD
Kaden Young	MNWD
Sheldon Yu	MNWD

1. CALL MEETING TO ORDER

The meeting was called to order by Chairman Cave at 7:31 a.m. Chairman Cave stated that the meeting was being conducted by teleconference pursuant to the Brown Act waivers provided under the Governor's Executive Orders in response to the COVID-19 State of Emergency. As stated on the agenda, there was no public location for attending the meeting in person. The agenda also stated that the public could listen and provide comment telephonically by calling the number listed on the agenda.

2. APPROVE THE MINUTES OF THE APRIL 5, 2021 TECHNICAL COMMITTEE MEETING

MOTION DULY MADE BY DONALD FROELICH AND SECONDED BY BILL MOORHEAD, ITEM 2 WAS APPROVED AS PRESENTED. THE VOTE WAS UNANIMOUS WITH DIRECTORS DUANE CAVE, DONALD FROELICH AND BILL MOORHEAD ALL VOTING 'AYE'.

3. PUBLIC COMMENTS

Chairman Cave stated that as permitted under the Brown Act, and in order to provide an equal opportunity for members of the public to provide comment without everyone talking over one another, public comments, on items on or off the agenda, would be taken during the Public Comment portion of the meeting. Chairman Cave then asked if there was anyone on the phone who would like to provide comment. Hearing none, the Public Comment portion of the meeting was closed.

DISCUSSION ITEMS

4. Construction Contract Award for Upper Salada Lift Station Auxiliary Generator Replacement

Dave Larsen presented the item. Discussion ensued and the committee recommended sending this item to the Board.

5. Amendment No.1 for On-Call Construction Support Services

Steve Merk presented the item. Discussion ensued regarding the contract and the committee recommended sending this item to the Board.

6. Purchase of Service Truck with Crane

Adrian Tasso presented the item. Discussion ensued regarding the item and the committee recommended sending this item to the Board.

7. Fiscal Year 2021-22 Proposed Budget

Matt Collings presented a brief update on this item.

ADJOURNMENT

The meeting was adjourned at 8:14 a.m.

Respectfully submitted,

Tim Bonita
Recording Secretary



moulton niguel water district

STAFF REPORT

TO: Board of Directors **MEETING DATE:** June 7, 2021

FROM: Rod Woods, Director of Engineering
Dave Larsen, Engineering Manager

SUBJECT: Professional Services Agreement for the Plant 3A Subsidence Mitigation and Site Improvements

SUMMARY:

Issue: Board action is required to execute a Professional Services Agreement (PSA) for the Plant 3A Subsidence Mitigation and Site Improvements, Project No. 2019.301.

Recommendation: It is recommended that the Board of Directors approve the Professional Services Agreement for engineering services with Dudek in the amount of \$579,892; authorize the General Manager or Assistant General Manager to execute the agreement; and to approve amendments up to 15% of the contract value.

Fiscal Impact: Project No. 2019.301 is budgeted in Fund 7, Rehabilitation and Replacement with a current project budget of \$4,350,000.

Reviewed by Legal: Yes

BACKGROUND:

The District's Plant 3A facility, located at 26801 Camino Capistrano, Mission Viejo, was constructed in 1991 and generally included liquid treatment facilities only. The solids handling facilities were added in 1997 and have been operating in the current configuration since that time. Shortly after completing construction of the facility, settlement of the ground surfaces surrounding the structures, known as subsidence, was observed. Although the initial subsidence showed settlement up to one inch, over time, settlement has now exceeded six inches in certain areas.

The existing surfacing of the site generally consists of asphalt concrete pavement, concrete flatwork, and localized sections of concrete aprons and ribbon gutters. Subsidence in areas around deep structures has caused issues in the form of distress to concrete flatwork; level

Professional Services Agreement for the Plant 3A Subsidence Mitigation and Site Improvements

June 7, 2021

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differences of concrete and asphalt pavement; undermining of adjacent structures and concrete flatwork; undermining above ground piping support systems; and ponding of rainwater during storm events. It is believed subsidence may also be causing distress to underground piping and electrical utilities installed at various depths throughout the Plant 3A boundary.

Various issues, caused by the subsidence, need to be addressed for the long-term reliable operation of the treatment plant. At the same time, the cause of the subsidence needs to be remediated to the extent practical to reduce the potential for continued subsidence and damage to underground yard piping and electrical infrastructure.

Since the construction of Plant 3A, several investigations of the ground subsidence issue have been completed, including a geotechnical exploration (1993), distress evaluation (2004), geotechnical evaluation (2011), and a settlement monitoring program (1997-2019). In 2019, the District contracted with Hushmand and Associates, Inc. to review these documents and subsequently complete a current and comprehensive geotechnical evaluation of the facility. Included in this effort was the identification of potentially applicable ground modification procedures, including the use of polyurethane resin injection, leveling techniques, polymer and grout injection, as well as the replacement of the native compressible soils with alternative materials.

This project is intended to evaluate the most appropriate means to remediate the ground subsidence at Plant 3A, improve the site drainage infrastructure, and rehabilitate or replace the existing surface pavement. Additionally, this project will convert the existing plant water system to recycled water, as well as other necessary improvements which should be completed prior to constructing new pavement surfaces throughout the facility to avoid future rework.

The engineering services will include engineering evaluations; preliminary design; final design; construction cost estimates; permit acquisition support; bid period assistance, and construction engineering services.

DISCUSSION:

On April 14, 2021, staff issued a Request for Proposals for engineering consulting services to five qualified engineering consulting firms. Two proposals were received and are summarized below:

Consultant / Firm	Proposal Fee
Dudek	\$579,892
Tetra Tech	\$640,000

Staff performed a thorough review of the proposals received to determine the overall best value for the professional services required. Based on the consultants' specific project understanding and approach, overall proposal quality, project specific experience, proposed project team expertise, and cost, staff recommends that the Board approve the professional services agreement with Dudek.

Additionally, due to the increased likelihood for unforeseen conditions to be encountered during the design and construction of this project, as well as the expedited project timeline required because of other upcoming projects within Plant 3A, staff is recommending approval of future amendments up to 15% of the contract value, if required.

This project is part of the capital improvement program costs for the Plant 3A facility, of which Santa Margarita Water District's proportionate share is 28-percent.

SUMMARY OF PROJECT BUDGET:

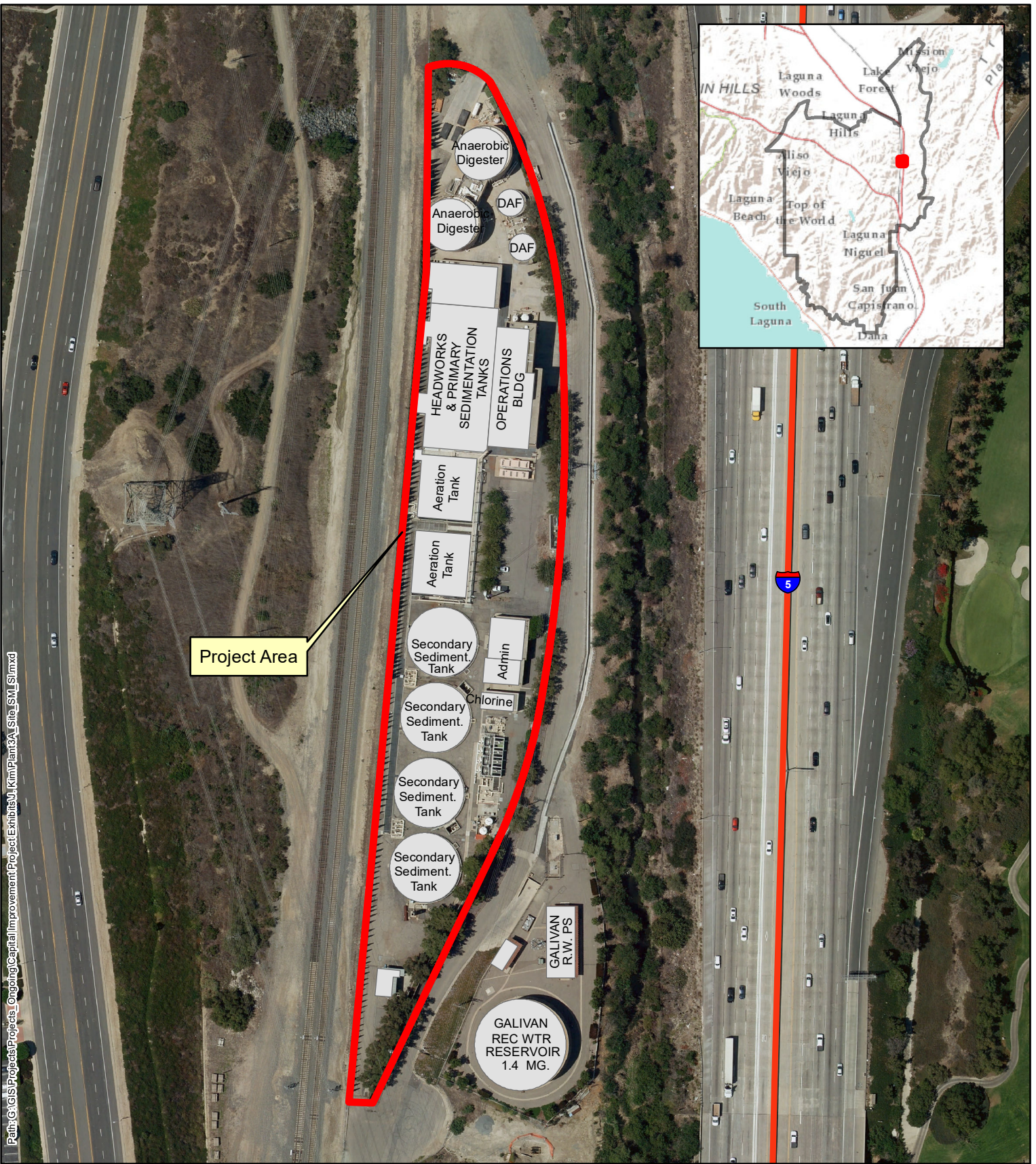
Project Items	Project Budget*	Proposed / Approved Contract	Proposed / Authorized Contingency	Total Proposed / Authorized Amount
Engineering	\$675,000	\$579,892	\$86,984	\$666,876
Geotechnical	\$50,000	\$50,000	\$0	\$50,000
Construction	\$3,175,000	\$3,183,124	\$0	\$3,183,124
Construction Management and Inspection	\$400,000	\$400,000	\$0	\$400,000
Legal, Permits, District Labor	\$50,000	\$50,000	\$0	\$50,000
Totals	\$4,350,000	\$4,263,016	\$86,984	\$4,350,000

*\$102,461 has been expended to date.

 Currently Proposed Amount

Attachments:

1. Exhibit A - Location Map
2. Exhibit B - Photos
3. Exhibit C - Professional Service Agreement



0 50 100 200 Feet

Scale = 1:1,700

**Exhibit "A" Location Map
Plant 3A Subsidence Mitigation
and Site Improvements**



Ground Subsidence at Stair Landing



Pavement Distress at Manhole and Pipe Riser



Concrete Settlement and Distress at Pipe Tunnel



Settlement at Pipe Support

**PROFESSIONAL SERVICES AGREEMENT
BETWEEN
MOULTON NIGUEL WATER DISTRICT AND
DUDEK
MNWD PROJECT: PLANT 3A SUBSIDENCE MITIGATION AND SITE IMPROVEMENTS
CONTRACT NO. 2019.301**

This Agreement (the "Agreement") is made and entered into on _____, ("Effective Date") by and between the Moulton Niguel WATER DISTRICT ("MNWD") and Dudek, a corporation with its principal place of business at 27372 Calle Arroyo, San Juan Capistrano, CA 92675 ("Consultant"). MNWD and Consultant are sometimes individually referred to as "Party" and collectively as "Parties" in this Agreement.

SECTION I – PURPOSE

Consultant shall provide certain professional services required by MNWD on the terms and conditions set forth in this Agreement. Consultant represents that it has the qualifications, experience, licenses, and facilities necessary to properly perform engineering consulting services in a competent and professional manner.

SECTION II – TERM

The term of this Agreement shall be from the Effective Date to **August 31, 2022**, unless earlier terminated as provided herein.

SECTION III – SCOPE OF SERVICES

Section 3.1. Scope of Services. The scope of services to be provided by Consultant is set forth on Exhibit "A" attached hereto and by this reference incorporated herein ("Services"). Consultant warrants that it will perform the Services as set forth herein in a competent, professional and satisfactory manner. All Services shall be subject to, and performed in accordance with, this Agreement, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules, and regulations.

Section 3.2. Schedule of Services. Consultant shall complete the Services within the term of this Agreement and shall meet any other established schedules and deadlines, including any schedule of services set forth in Exhibit "A."

Section 3.3. Permits, Licenses, Fees and Other Charges. Consultant shall, in accordance with applicable laws and ordinances, obtain at his/her/its expense all permits and licenses necessary to accomplish the Services. Failure to maintain a required license or permit may result in immediate termination of this Agreement.

SECTION IV – COMPENSATION

Section 4.1. Payment for Services Rendered. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "B" attached hereto and incorporated herein by reference. The total compensation shall not exceed **Five Hundred Seventy-Nine Thousand Eight Hundred Ninety-Two Dollars (\$579,892)** without written approval by MNWD. Extra Work may be authorized, as

described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

Section 4.2. Invoices. Consultant shall submit to MNWD a monthly itemized statement which indicates work completed and hours of Services rendered by Consultant. The statement shall describe the Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. MNWD shall, within 45 days of receiving such statement, review the statement and pay all approved charges thereon.

- A. Payment shall not constitute acceptance of any work completed by Consultant.
- B. The making of final payment shall not constitute a waiver of any claims by MNWD for any reason whatsoever.

Section 4.3. Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized in writing by MNWD.

Section 4.4. Extra Work. At any time during the term of this Agreement, MNWD may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by MNWD to be necessary for the proper completion of the Project, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization by MNWD.

SECTION V – REPRESENTATIVES OF THE PARTIES

Section 5.1. MNWD's Representative. MNWD hereby designates its Director of Engineering, or his or her designee, to act as its representative for the performance of this Agreement ("MNWD's Representative"). Consultant shall not accept direction or orders from any person other than MNWD's Representative or his or her designee.

Section 5.2. Consultant's Representative. Consultant hereby designates Russ Bergholz, or his designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences, and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

SECTION VI – RESPONSIBILITIES OF CONSULTANT

Section 6.1. Control and Payment of Subordinates; Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. MNWD retains Consultant on an independent contractor basis and not as an employee. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of MNWD and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this

Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

Section 6.2. Standard of Care; Performance of Employees. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and subconsultants shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subconsultants have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Consultant shall perform, at its own cost and expense and without reimbursement from MNWD, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein.

Section 6.3. Conformance to Applicable Requirements. All work prepared by Consultant shall be subject to the approval of MNWD.

Section 6.4. Substitution of Key Personnel. Consultant has represented to MNWD that certain key personnel will perform and coordinate the Services under this Agreement. The key personnel for performance of this Agreement are as follows: Russ Bergholz. Should he become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval of MNWD. In the event that MNWD and Consultant cannot agree as to the substitution of key personnel, MNWD shall be entitled to terminate this Agreement for cause. Furthermore, any personnel who fail or refuse to perform the Services in a manner acceptable to MNWD, or who are determined by MNWD to be uncooperative, incompetent, a threat to the adequate or timely completion of the Services or a threat to the safety of persons or property, shall be promptly removed from performing Services by the Consultant at the request of MNWD.

Section 6.5. Coordination of Services. Consultant agrees to work closely with MNWD staff in the performance of Services and shall be available to MNWD's staff, consultants and other staff at all reasonable times.

Section 6.6. Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold MNWD, its officials, directors, officers, employees, and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

SECTION VII – LABOR CODE PROVISIONS

Section 7.1. Prevailing Wages. Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., (“Prevailing Wage Laws”), which require the payment of prevailing wage rates and the performance of other requirements on “public works” and “maintenance” projects. If the Services are being performed as part of an applicable “public works” or “maintenance” project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. A copy of these prevailing wage rates are on file with the Department of Industrial Relations and can be found online with the State of California at <http://www.dir.ca.gov/dlsr/pwd>. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested Parties upon request, and shall post copies at the Consultant’s principal place of business and at the project site. It is the intent of the Parties to effectuate the requirements of sections 1771, 1774, 1775, 1776, 1777.5, 1813, and 1815 of the Labor Code within this Agreement, and Consultant shall therefore comply with such Labor Code sections to the fullest extent required by law. Consultant shall defend, indemnify and hold MNWD, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

Section 7.2. Registration and Labor Compliance. If the services are being performed as part of an applicable “public works” or “maintenance” project, then, in addition to the foregoing, pursuant to Labor Code sections 1725.5 and 1771.1, the Consultant and all subconsultants must be registered with the Department of Industrial Relations (“DIR”). Consultant shall maintain registration for the duration of the project and require the same of any subconsultants. This project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant’s sole responsibility to comply with all applicable registration and labor compliance requirements, including the submission of payroll records directly to the DIR.

Section 7.3. Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker’s Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

SECTION VIII – INDEMNIFICATION

To the fullest extent permitted by law, Consultant shall immediately indemnify, defend, and hold MNWD, its directors, officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions of Consultant, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Consultant’s Services or this Agreement, including without limitation the payment of all consequential damages, expert witness fees and attorneys’ fees and other related costs and expenses. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against MNWD or its directors, officials, officers, employees, volunteers and agents as part of any such claim, suit, action or other proceeding. Consultant shall also reimburse MNWD for the cost of any settlement paid by MNWD or its directors, officials, officers, employees, agents or volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement

shall include payment for MNWD's attorneys' fees and costs, including expert witness fees. Consultant shall reimburse MNWD and its directors, officials, officers, employees, agents, and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by MNWD, its directors, officials, officers, employees, agents, or volunteers. Notwithstanding the foregoing, to the extent Consultant's Services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant.

SECTION IX – INSURANCE

Section 9.1. Time for Compliance. Consultant shall not commence Work under this Agreement until it has provided evidence satisfactory to MNWD that it has secured all insurance required under this section. In addition, Consultant shall not allow any subconsultant to commence work on any subcontract until it has provided evidence satisfactory to MNWD that the subconsultant has secured all insurance required under this section. Failure to provide and maintain all required insurance shall be grounds for MNWD to terminate this Agreement for cause.

Section 9.2. Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subconsultants. Consultant shall also require all of its subconsultants to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

A. Commercial General Liability. Coverage for commercial general liability insurance shall be at least as broad as Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 0001). Consultant shall maintain limits no less than \$2,000,000 per occurrence, or the full per occurrence limits of the policies available, whichever is greater, for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit or product-completed operations aggregate limit is used, including but not limited to form CG 2503, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit. The general liability policy shall include or be endorsed (amended) to state that: (1) MNWD, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insured with respect to the Work or operations performed by or on behalf of the Consultant, including materials, parts or equipment furnished in connection with such work using as broad a form as CG 20 10 11 85 or the latest versions of both CG 20 10 and CG 20 37; and (2) the insurance coverage shall be primary insurance as respects MNWD, its directors, officials, officers, employees, agents, and volunteers using as broad a form as CG 20 01 04 13, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by MNWD, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way.

B. Automobile Liability. Coverage shall be at least as broad as the latest version of the Insurance Services Office Business Auto Coverage form number CA 0001, code 1

(any auto). Consultant shall maintain limits no less than \$1,000,000 per accident for bodily injury and property damage. The automobile liability policy shall include or be endorsed (amended) to state that: (1) MNWD, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects MNWD, its directors, officials, officers, employees, agents, and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by MNWD, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way. The automobile liability policy shall cover all owned, non-owned, and hired automobiles.

C. Workers' Compensation and Employer's Liability Insurance. Consultant shall maintain Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance in an amount no less than \$1,000,000 per accident for bodily injury or disease. The insurer shall agree to waive all rights of subrogation against MNWD, its directors, officials, officers, employees, agents, and volunteers for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

D. Professional Liability. Consultant shall procure and maintain, and require its subconsultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession covering Consultant's wrongful acts, negligent actions, errors or omissions. The retroactive date (if any) is to be no later than the effective date of this agreement. Consultant shall purchase a one-year extended reporting period: i) if the retroactive date is advanced past the effective date of this Agreement; ii) if the policy is canceled or not renewed; or iii) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement. Such insurance shall be in an amount not less than \$2,000,000 per claim.

E. Excess Liability (if necessary). The limits of Insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess coverage shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of MNWD (if agreed to in a written contract or agreement) before MNWD's own primary or self-insurance shall be called upon to protect it as a named insured. The policy shall be endorsed to state that MNWD, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insured at least as broad a form as CG 20 10 11 85 or the latest versions of both CG 20 10 and CG 20 37. The coverage shall contain no special limitations on the scope of protection afforded to MNWD, its directors, officials, officers, employees, agents, and volunteers.

Section 9.3. All Coverages. The Consultant is required by this Agreement to state that: (i) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to MNWD; If any of the required coverages expire or cancel during the term of this agreement, the Consultant shall deliver the renewal certificate(s) including the general liability additional insured endorsement to MNWD at least ten (10) days prior to the cancellation or expiration date; and (ii) any failure to comply with

reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to MNWD, its directors, officials, officers, employees, agents, and volunteers.

Section 9.4. Separation of Insureds; No Special Limitations. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to MNWD, its directors, officials, officers, employees, agents, and volunteers.

Section 9.5. Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by MNWD. Consultant shall guarantee that, at the option of MNWD, either: (i) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects MNWD, its directors, officials, officers, employees, agents, and volunteers; and insurer shall provide or be endorsed to provide that the deductibles or SIR may be satisfied by either the named or additional insureds, co-insurers, and/or insureds other than the First Named Insured or (ii) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims, and administrative and defense expenses.

Section 9.6. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A-:VII or equivalent, or as otherwise approved by MNWD.

Section 9.7. Verification of Coverage. Consultant shall furnish MNWD with certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to MNWD. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by MNWD if requested. All certificates and endorsements must be received and approved by MNWD before work commences. MNWD reserves the right to require complete, certified copies of all required insurance policies, at any time. In the event that the Consultant employs other consultants (sub-consultants) as part of the services covered by this agreement, it shall be the Consultant's responsibility to require and confirm that each sub-consultant meets the minimum insurance requirements specified above.

Section 9.8. Reporting of Claims. Consultant shall report to MNWD, in addition to Consultant's insurer, any and all insurance claims submitted by Consultant in connection with the Services under this Agreement.

SECTION X – TERMINATION

Section 10.1. Grounds for Termination. MNWD may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof, at least seven (7) days before the effective date of such termination. Upon termination, Consultant shall be compensated only for those services which have been adequately rendered to MNWD, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause.

Section 10.2. Effect of Termination. If this Agreement is terminated as provided herein, MNWD may require Consultant to provide all finished or unfinished Documents and Data and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such document and other information within fifteen (15) days of the request.

Section 10.3. Additional Services. In the event this Agreement is terminated in whole or in part as provided herein, MNWD may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

SECTION XI – OWNERSHIP OF MATERIALS AND CONFIDENTIALITY

Section 11.1. Documents & Data; Licensing of Intellectual Property. This Agreement creates a non-exclusive and perpetual license for MNWD to copy, use, modify, reuse, or sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement (“Documents & Data”). All Documents & Data shall be and remain the property of MNWD, and shall not be used in whole or in substantial part by Consultant on other projects without MNWD’s express written permission. Within thirty (30) days following the completion, suspension, abandonment or termination of this Agreement, Consultant shall provide to MNWD reproducible copies of all Documents & Data, in a form and amount required by MNWD. MNWD reserves the right to select the method of document reproduction and to establish where the reproduction will be accomplished. The reproduction expense shall be borne by MNWD at the actual cost of duplication. In the event of a dispute regarding the amount of compensation to which the Consultant is entitled under the termination provisions of this Agreement, Consultant shall provide all Documents & Data to MNWD upon payment of the undisputed amount. Consultant shall have no right to retain or fail to provide to MNWD any such documents pending resolution of the dispute. In addition, Consultant shall retain copies of all Documents & Data on file for a minimum of fifteen (15) years following completion of the Project, and shall make copies available to MNWD upon the payment of actual reasonable duplication costs. Before destroying the Documents & Data following this retention period, Consultant shall make a reasonable effort to notify MNWD and provide MNWD with the opportunity to obtain the documents.

Section 11.2. Subconsultants. Consultant shall require all subconsultants to agree in writing that MNWD is granted a non-exclusive and perpetual license for any Documents & Data the subconsultant prepares under this Agreement. Consultant represents and warrants that Consultant has the legal right to license any and all Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or its subconsultants, or those provided to Consultant by MNWD.

Section 11.3. Right to Use. MNWD shall not be limited in any way in its use or reuse of the Documents and Data or any part of them at any time for purposes of this Project or another project, provided that any such use not within the purposes intended by this Agreement or on a project other than this Project without employing the services of Consultant shall be at MNWD’s sole risk. If MNWD uses or reuses the Documents & Data on any project other than this Project, it shall remove the Consultant’s seal from the Documents & Data and indemnify and hold harmless Consultant and its officers, directors, agents and employees from claims arising out of the negligent use or re-use of the Documents & Data on such other project. Consultant shall be responsible and liable for its Documents & Data, pursuant to the terms of this Agreement, only with respect to the condition of the Documents & Data at the time they are provided to MNWD upon completion, suspension, abandonment or termination. Consultant shall not be responsible or liable for any revisions to the Documents & Data made by any party other than Consultant, a

party for whom the Consultant is legally responsible or liable, or anyone approved by the Consultant.

Section 11.4. Intellectual Property Indemnification. Consultant shall defend, indemnify and hold MNWD, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by MNWD of the Documents & Data, including any method, process, product, or concept specified or depicted.

Section 11.5. Confidentiality. All Documents & Data, either created by or provided to Consultant in connection with the performance of this Agreement, shall be held confidential by Consultant. All Documents & Data shall not, without the prior written consent of MNWD, be used or reproduced by Consultant for any purposes other than the performance of the Services. Consultant shall not disclose, cause or facilitate the disclosure of the Documents & Data to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant that is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use MNWD's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of MNWD.

SECTION XII – ACCOUNTING, INSPECTION AND AUDIT

Section 12.1. Records. Consultant shall keep and shall preserve for four (4) years after final completion of the services, accurate and detailed records of all ledgers, books of account, invoices, vouchers, cancelled checks, and other documents or records evidencing or relating to the work, services and disbursements charged to MNWD under this Agreement (collectively, "Books and Records"). Any and all Books and Records must be maintained in accordance with generally accepted accounting principles and must be sufficiently complete and detailed so as to permit an accurate evaluation of the services provided by Consultant under this Agreement. During such four (4) year period, Consultant shall give MNWD and its agents, during normal business hours, access to such Books and Records. MNWD and its agents shall have the right to make copies of any of the said Books and Records.

Section 12.2. Custody. Where MNWD has reason to believe that any of the Books and Records required to be maintained by this Article may be lost or discarded due to dissolution or termination of Consultant's business, MNWD may, by written request, require that custody of such Books and Records be given to a person or entity mutually agreed upon and such Books and Records thereafter shall be maintained by such person or entity at Consultant's expense. Access to the Books and Records shall be granted to MNWD and its Representatives.

SECTION XIII – GENERAL PROVISIONS

Section 13.1. Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective Parties may provide in writing for this purpose:

MNWD:

Moulton Niguel Water District
P.O. Box 30203
Laguna Niguel, CA 92607
Attn: Director of Engineering

CONSULTANT:

Dudek
27372 Calle Arroyo
San Juan Capistrano, CA 92675
Attn: Russ Bergholz

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

Section 13.2. Subcontracting/Subconsulting. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of MNWD. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

Section 13.3. Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subconsultant, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Consultant shall also comply with all relevant provisions of MNWD's Minority Business Enterprise program, Affirmative Action Plan or other related programs or guidelines currently in effect or hereinafter enacted.

Section 13.4. Time of Essence. Time is of the essence for each and every provision of this Agreement.

Section 13.5. MNWD's Right to Employ Other Consultants. MNWD reserves right to employ other consultants in connection with this Project.

Section 13.6. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

Section 13.7. Assignment or Transfer. Consultant shall not assign, hypothecate or transfer, either directly or by operation of law, this Agreement or any interest herein without the prior written consent of MNWD. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

Section 13.8. Construction; References; Captions. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Consultant include all personnel, employees, agents, and subconsultants of Consultant, except as otherwise specified in this Agreement. All references to MNWD include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Agreement. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content or intent of this Agreement.

Section 13.9. Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

Section 13.10. Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

Section 13.11. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

Section 13.12. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

Section 13.13. Prohibited Interests. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. Consultant further agrees to file, or shall cause its employees or subconsultants to file, a Statement of Economic Interest with MNWD's Filing Officer as required under state law in the performance of the Services. For breach or violation of this warranty, MNWD shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of MNWD, during the term of his or her service with MNWD, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

Section 13.14. Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

Section 13.15. Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Orange County.

Section 13.16. Government Code Claim Compliance. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Consultant must comply with the claim procedures set forth in Government Code sections 900 et seq. prior to filing any lawsuit against MNWD. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Consultant. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Consultant shall be barred from bringing and maintaining a valid lawsuit against MNWD.

Section 13.17. Attorneys' Fees. If either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing Party in such litigation shall be entitled to have and recover from the losing Party reasonable attorneys' fees and all other costs of such action.

Section 13.18. Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

Section 13.19. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

Section 13.20. Entire Agreement. This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a written amendment signed by both Parties.

MOULTON NIGUEL WATER DISTRICT:

DUDEK:

By: _____

By: _____

(Authorized Representative of
Consultant)

Printed Name: _____

Printed Name: _____

Title: _____

Title: _____

Dated: _____

Dated: _____

The Consultant shall provide comprehensive engineering services for each of the Tasks listed below.

Project Management and Meetings

The Consultants shall provide project management services for the duration of the project. The Consultant shall provide a project schedule and provide biweekly updates. Project meetings shall include, but not be limited to, a project kick-off meeting, project design workshops and review meetings after each design submittal (as identified in the Tasks below), a coordination meeting with OCTA and the consultant for the Solids Handling Facilities Improvement project (if required). The Consultant shall prepare meeting agendas and presentation materials and submit minutes after each meeting.

Deliverables: Agendas, presentations, and minutes for seven (7) meetings/workshops; biweekly schedule updates

Review of Available Data

HAI has performed a geotechnical investigation of the subsidence occurring at the site. Their report, including preliminary ground treatment zoning with yard piping summaries and recommendations for remediation, is provided on the share file below for reference.

Photos of existing site conditions are included in the geotechnical report, with some additional photos included separately within the MNWD ShareFile below.

Bush and Associates, Inc. has performed elevation surveys at settlement monitoring points throughout Plant 3A since 1997. The locations and survey results are provided in the MNWD ShareFile site, along with a survey of manhole inverts throughout Plant 3A.

The existing SWPPP prepared in 2019 by Yorke Engineering provides a general overview of stormwater drainage at Plant 3A. The trench drain construction referenced in the SWPPP has since been completed; refer *1505_06 Misc. Improvements - 2014 - As-Built Drawings*.

Other relevant record drawings and previous studies are also contained within the share file below.

The District has made the following information available for download at the link below:

<https://mnwd.sharefile.com/d-sc5aa3c7c4f2241e0a964647ac3dade73>

- A. Geotechnical Engineering Investigation of Ground Subsidence, MNWD Plant 3A (HAI, 2019)
- B. Geotechnical Evaluation - Plant 3A Geotechnical Stabilization and Infrastructure Repairs (Ninyo & Moore, 2011)
- C. Plant 3A Settlement Monitoring Points and Manhole Survey (Bush and Associates)
- D. SWPPP (Yorke Engineering, 2019)
- E. Interim Report of Geotechnical Exploration (Converse, 1993)
- F. Geotechnical Distress Evaluation - Phase II (Converse, 2004)

- G. Geotechnical Report (Kleinfelder, 1986)
- H. Plant 3A Design Drawings (CWC-HDR, 1987)
- I. Plant 3A Solids Handling Facilities Improvements Project, Preliminary Design Report and 30% Design Drawings (Hazen & Sawyer, 2021)

This task covers detailed review of these records. After award, the District will furnish other available information requested by the Consultant.

Geotechnical Investigation

The Consultant shall conduct geotechnical investigations as needed to supplement or expand the work completed by HAI. The Consultant may retain the services of HAI or other qualified subconsultant as appropriate to evaluate the feasibility of ground improvement alternatives and to develop remediation recommendations to be incorporated into the construction documents.

[Deliverables: Supplemental Geotechnical Investigation Report \(Draft/Final\)](#)

Subsidence Mitigation Alternatives Analysis

The Consultant is to investigate options to remediate the backfill around deep structure that may be implemented in conjunction with the repair or replacement of damaged or vulnerable yard piping. Depending on underground utilities and piping present, different areas within Plant 3A may require different ground improvement techniques.

The Consultant is to investigate what methods or combinations are feasible, constructable and cost-effective in the constrained and congested site. Evaluate at least three (3) alternatives and determine their associated costs. Highlight the risks, advantages, and disadvantages of each alternative before making a recommendation on a preferred option in the Subsidence Mitigation Alternatives Analysis Report.

The HAI Geotechnical Report provided a range of recommended mitigation measures. As the Engineer of Record, the Consultant shall conduct its own investigation as needed and determine the suitable ground improvement techniques for the various zones of subsidence.

[Deliverables: Subsidence Mitigation Alternatives Analysis Report \(Draft/Final\)](#)

Survey and AutoCAD Drawings

There are no AutoCAD files available for the Plant 3A and the Consultant shall produce AutoCAD files for the entire Plant 3A within its boundary. The Consultant shall conduct field and aerial surveys as required. Topographic information used on the construction plans for the subsidence mitigation and site improvements shall be generated from a field survey and an aerial mapping process.

The Consultant shall prepare the scope of work for field and aerial surveys required for AutoCAD files for the entire Plant 3A. The benchmark for this survey will be Orange County

Benchmark located in the Westerly corner of the intersection of Oso Parkway and Bridlewood. The field survey shall be used to establish both horizontal and vertical alignment of the facilities and shall note all survey monuments, topographic features, property lines, and elevations. The basis of bearings and benchmarks shall be indicated on the drawings. Control shall meet or exceed NAVD 88 requirements and shall be based on the Plant Local Coordinate System and datum.

The aerial topography shall be required to meet the following criteria:

- The final product shall be delivered in AutoCAD.
- The aerial shall be based on the plant coordinate system.
- The CAD file shall adhere to the District's CAD compliance.
- Site contours shall be in 0.5 foot intervals.
- Contour and spot elevations shall be 3D; all other features should be 2D.

The Consultant shall provide all final native files including AutoCAD files for plans (including all reference files; NAD-83, State Plane Zone 6, NAVD-88 of all sheets).

The Consultant shall include the survey-related documents with the submittal of Preliminary Design.

3W Water System Conversion and Odor Reduction Tower (ORT) Water Supply

The District wants to replace the 3W water source with recycled water from nearby recycled water distribution system and the existing ORT will require an alternative secondary effluent supply system which may require a new pump system and dedicated piping.

The Consultant shall provide the following:

- Identify and present the best connection point to connect and supply the 3W water system with recycled water.
- Provide condition assessment for the existing 3W water piping system for the entire plant.
- Identify and present the best location for the required secondary effluent pump system and piping system for the existing ORT including alternatives evaluation (minimum 2 alternatives evaluation for pump system including pump type and piping routing).
- Provide preliminary and final design based on the selected connection point and pump system location including any isolation valves and valve box, flow meter and meter box, and any other associated pipe appurtenances.

Preliminary Design

Preliminary Design shall include the following items at a minimum:

- Design criteria for subsidence mitigation and site drainage improvements
- Preliminary locations and sizes of areas for subsidence mitigation
- Preliminary design of stormwater drainage infrastructure, including a new drainage pump station, if required

- Survey data including entire Plant 3A site layout in AutoCAD
- Preliminary location of the recycled water connection point to the existing 3W water piping including existing pipe condition assessment
- Preliminary design of new pump system for the secondary effluent supply to the existing ORT including piping routing.
- Preliminary site plans and construction details for subsidence mitigation, yard piping.
- Preliminary opinion of construction cost estimate for 30% design

For the purpose of estimating level of effort for Tasks 2.5 and Task 2.6, assume design will, as a minimum, include the following:

1. Design for ground improvement (subsidence mitigation) in the areas that have subsided beyond primary structures identified as Medium to High Priority in Figure 6b of the HAI Geotechnical Report.
2. In locations where there is subsidence but no yard piping or electrical infrastructure are present (refer Figure 6a of the HAI Geotechnical Report), design only for removal and recompaction of backfill soils down to 2.5 to 3 ft.in depth and restoration of existing concrete flatwork or AC pavement.
3. In locations where there is subsidence and yard piping or electrical infrastructure are present, design to remove and replace all underground yard piping within 2.5 to 3 ft.in depth. Provide design to replace concrete flatwork or AC pavement in these areas.
4. Provide design for grading to new surface levels throughout Plant 3A. Provide design to adjust manholes and utility boxes as required.
5. Provide design to reinstate foundations and supports for aboveground yard piping to new grading levels. Assume aboveground yard piping is in acceptable condition and will not require design for replacement.
6. Provide drainage design for drainage improvements as described in Section 1 of this Request for Proposal to contain the 85th percentile storm within the Plant 3A boundary for treatment within the Plant 3A facility.
7. Provide concrete and AC Pavement design for pavement rehabilitation outside of subsidence areas identified as Medium to High Priority in Figure 6b of the HAI Geotechnical Report.

Deliverables: Five (5) hard copies and a searchable PDF copy of Preliminary Design Submittal

Preparation of Contract Documents

The Consultant shall prepare a complete set of Contract Documents (Construction Drawings and Specifications) for construction of the proposed improvements. The Contract Documents shall comply with, and utilize, the District's standard format, standard forms, standard agreement, standard bonds, General Provisions, pertinent Special Provisions, pertinent Technical Specifications, and pertinent Standard Drawings. The District will provide the latest versions of these documents prior to the Consultant commencing this task.

The Contract Documents shall include a detailed construction sequencing plan that enables the Contractor to perform work efficiently while minimizing impacts on plant operations. Any facility shutdown requirements, including frequency and duration, shall be coordinated with the

District during design.

The Contract Documents shall adequately provide a basis of bid for any specialty ground-improvement work needed for subsidence mitigation, such as pressure grout or resin injection. This may include, but is not limited to, providing detailed performance specifications for the completion of this work. Specifications should also include a periodic post-repair monitoring plan for 3 to 5 years following the subsidence mitigation completion.

The Consultant shall be required to provide three (3) submittals as follows.

75% Design Submittal

A set of in-progress construction drawings and specifications representing approximately 75% design shall be submitted. The submittal shall include:

- All major plans and sections for design drawings
- All major technical specifications
- Updated construction cost estimate
- Draft Storm Water Pollution Prevention Plan (SWPPP)

100% Design Submittal

Fully completed set of construction drawings and specifications shall be submitted. The submittal shall adequately address all District comments on the 75% Design Submittal Review. Also submit the final Engineer's construction cost estimate and Final Storm Water Pollution Prevention Plan (SWPPP).

Bid Set

After the District completes a cursory review of the 100% Design Submittal, the Consultant will be instructed to prepare the Bid Set Contract Documents. The Bid set shall incorporate District Comments on the 100% Design Submittal.

Deliverables:

- 75% Design Submittal – One (1) full size set of construction plans, five (5) sets of bound construction specifications with 11"x17" reduced construction drawings enclosed as an exhibit and Five (5) copies of the SWPPP. A fully searchable PDF copy will also be required for each. An updated construction cost estimate is to be provided with this submittal.
- 100% Design Submittal – One (1) full size set of construction plans, five (5) sets of bound construction specifications with 11"x17" reduced construction drawings enclosed as an exhibit and Five (5) copies of the Final SWPPP. A fully searchable PDF copy will also be required for each. The final construction cost estimate is to be provided with this submittal.
- Bid Set Contract Documents – Seven (7) set of bound full-size construction plans and seven (7) sets of bound construction specifications with 11"x17" reduced construction drawings enclosed as an exhibit. For the bid set submittal, specifications shall be

provided with colored pages as follows: Bid Forms – White, General Provisions – Blue, Special Provisions – Pink, and Technical Specifications – Green. A fully searchable PDF copy will also be required. Provide all final native files including AutoCAD files for plans (including all reference files; NAD-83, State Plane Zone 6, NAVD-88 of all sheets), MS Word files for specifications, and MS Excel file for cost estimate.

Note: “Full size” Drawings/Plans shall be 22” x 34” such that 11” x 17” prints are true half size. Also, construction drawings shall be tied to the State Plane Coordinate System.

Note: The completion of these services, including the delivery of the Bid Set Contract Documents, shall be completed no later than December 31, 2021.

Construction Cost Estimates

The Consultant shall provide, and update, an estimate of the probable construction cost for the project. Construction cost estimates shall be provided with Preliminary, 75%, and 100% Design Submittals.

Deliverables: Construction Cost Estimates for Preliminary, 75%, and 100% Design Submittals

Note: The completion of these services, including the delivery of the Bid Set Contract Documents shall be completed no later than December 31, 2021.

Permit Acquisition Support

The Consultant shall determine all required permits and plan check requirements for the project. The Consultant shall prepare all permit applications and plan check packages and submit to the proper authorities on the District’s behalf. The District will pay applicable permit and plan check fees. It is anticipated that a Right of Entry permit will be required from OCTA. The Consultant will also provide acquisition support services, including, but not necessarily limited to the following:

- A. Attendance at coordination meetings with the OCTA (covered under Task 2.1).
- B. Providing technical support for application materials and acquisition efforts.
- C. Incorporating all permit conditions into the Contract Documents.

Deliverables: Permit applications and plan check packages

Bid Phase Support

During bid period, the Consultant shall assist with providing information and clarification of the Contract Documents to prospective bidders as requested. The Consultant shall assume three (3) addenda will be required during bid phase for budgeting purpose. The Consultant shall also conduct an onsite pre-bid meeting.

Deliverables: Three (3) Addenda if required; pre-bid meeting agenda and minutes

Construction Phase Services

During construction, the Consultant shall provide the following services:

- A. Pre-Construction Meeting: Conduct pre-construction meeting with the District and Contractor prior to beginning construction and prepare agenda and minutes.
- B. Contractor's RFI: Respond to approximately fifty (50) Requests for Information from the Contractor and the District.
- C. Shop Drawing Reviews: Review and acceptance of at least fifty (50) shop drawing submittals. If the Consultant anticipates that more shop drawing submittals than the above stated number will be required, the fee estimate shall state the number of shop drawings and the hours required to review and process that quantity. The Consultant shall include an adequate fee amount to perform a second review of each shop drawing submittal. Each shop drawing review will be two (2) hours.
- D. Site Visits: Ten (10) visits of two hours as requested by District staff.
- E. Record Drawings: At the conclusion of the construction, the District will provide the Consultant with a single, consolidated set of red-lined as-built drawings. The Consultant shall prepare the final record drawings accordingly. Record drawings shall be prepared in AutoCAD.

Deliverables:

- Pre-Construction meeting agenda and minutes
- RFI responses and Submittal Review Comments.
- Three (3) full size sets of draft record drawings. Upon the District's review and approval, one (1) full size set of mylars with original signatures and one (1) full size set bond copy. In addition, provide electronic files in both AutoCAD (including all reference files; NAD-83, State Plane Zone 6, NAVD-88 of all sheets) and PDF.

Note: "Full size" Drawings/Plans shall be 22"x34" such that 11"x17" prints are true half size.

Scope of Work

Dudek has reviewed the Scope of Work included in the project RFP and provides the following additional, comments, additions, clarifications, and/or limitations:

Task 1: Project Management. Consistent with past project, Dudek will provide requested typical project management services, meetings, and accounting services.

Task 2: Review of Available Data. Primary focus, in addition to previously provided information, will be the review and inventory of subsurface infrastructure within the areas of known ground movement, particularly those interface locations between the pipelines and structures susceptible to shear stresses. In addition, the feasibility of interviewing past operations staff to identify undocumented issues, risks or improvements will be explored.

Task 3: Geotechnical Investigation The extent of analysis in the 2020 HAI report is substantial and well presented. Dudek has included HAI to support the consideration of mitigation measure alternatives and review construction bid documents. Level of effort at this time is limited to consultation, meetings, and review of deliverables. Additional geotechnical exploration and testing may be recommended during the PDR phase, but considered optional at this time and not included as part of the base proposal. Limited level of effort has also been included if any newly discovered or discussed concepts warrant preparation of a supplemental report to the 2020 HAI Report.

Task 4A: Subsidence Mitigation Alternatives Analysis – Subsurface. Under this task, Dudek is proposing to conduct a series of condition assessment efforts to pipelines identified within Task 2 as high risk, where each differential settlement coincides with subsurface pipe penetrations into existing structures. We feel this physical assessment is necessary to determine the appropriate mitigation for the subsurface utilities to minimize risk.

Three degrees of assessment are proposed to be available as part of the project. We have included TE Roberts Inc., and ProPipe onto our team to address the field construction investigative work.

1. To determine if there have already been issues within the distribution systems, TE Roberts can conduct either a pressure test or acoustic correlator test for leak detection. The feasibility of either of these two methods of assessment is highly dependent on both the accessibility of the pipe and ability to isolate the pipe for the testing operation. An allowance has been included within our proposal to allow for the recommendation of up to 10 pipelines to undergo either test. By obtaining validation, either of integrity or failed condition, the appropriate recommendation within the preliminary design can be achieved.
2. Similarly, for gravity flow pipelines, such as storm drains or gravity sewers, CCTV inspection can be provided for visual inspection of the internal pipe condition. We have allocated up to 1,000 LF of CCTV inspection to be applied as recommended and accepted by the District to provide validation of pipe integrity.
3. The final assessment approach includes potholing and visual inspection of the pipeline. Our approach, unique to this project and with acceptance from the District, will be to utilize an 8" vacuum extraction

bore hole for the excavation, and following the visual validation of the pipe exterior, insertion of a 6" PVC pipe sleeve extending to the surface with a cap and annular space backfilled. For these locations, our surveyor can then use the access point to establish a horizontal and vertical monument point directly on the pipeline. *This approach provides a new data point by which the physical pipe movement (if any) can be monitored directly adjacent to the structure it is entering.* We have included budget for up to 10 potholes with monitoring well access as part of our base proposal.

Task 4B: Subsidence Mitigation Alternatives Analysis – Surface. In addition to the subsurface utility condition assessment, the extent of surface level paving and concrete flatwork, along with pull boxes and related features will be assessed as part of this task. As discussed in our approach, we will divide the study area into small areas and assess severity, operator access risk, and surface drainage problems, and provided a recommended remediation score. Then various remediation options will be identified, from remove and reconstruct, to chemical injection, to “do nothing”. Then each study area will be assigned a preliminary recommended remediation. With this “first pass” assessment, we intend to conduct a workshop with the District and our team, including HAI, to debate and determine the appropriate mitigation for surface remediation.

Task 4C: Stormwater/Surface Water Analysis. Following the creation of the plant site topographic mapping, Dudek will proceed with evaluating the current surface water flow conveyance, relative to the originally design stormwater collection system infrastructure to identify where corrections are necessary. Of particular importance is correcting areas of localized ponding (over electrical pull boxes), and where runoff is being conveyed into the pipe tunnels. A quantification of anticipated 10-year storm water flow will be used to evaluate existing system sizing and identify if there is a need for additional collection system piping or pumping.

Task 5: Survey and AutoCAD Drawings. Dudek will conduct the topographic aerial survey of the Plant 3A site, including 3 additional days of ground topo surveying to provide accurate documentation of the existing site conditions. No easements documentation preparation is anticipated at this time.

Task 6: 3W Water System Conversion and ORT Water Supply. This task will both address the necessary infrastructure elements necessary to convert the 3W distribution system to recycled water and identify the means of supplying the ORT with plant water. The anticipated approach will be a dedicated pumped supply pipeline. Therefore, the specific location and sizing of recommended infrastructure will be developed (2 alternatives).



moulton niguel water district

Pipeline Asset Prioritization Program

Technical Committee Meeting

June 7, 2021

ASSET CATEGORIES

HORIZONTAL ASSETS

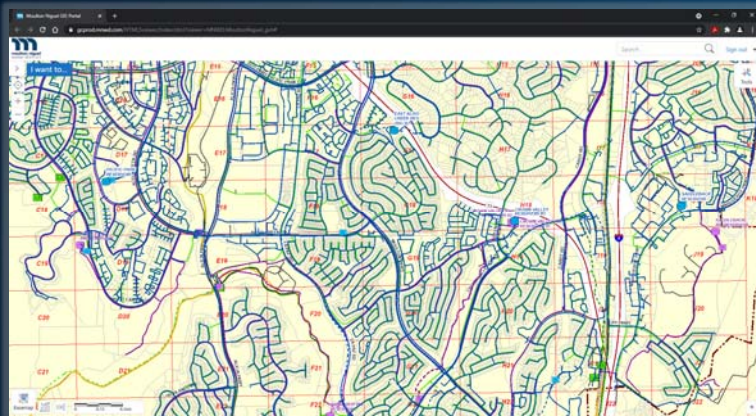


VERTICAL ASSETS



TOOLS OF ASSET MANAGEMENT

GEOGRAPHIC INFORMATION SYSTEM (GIS)



WATER LOSS TRACKING

ArcGIS Su... - [X]

Water Loss Tracking Form

Form for collecting water loss points and data.

Work Order No. *
2192165

FacilityID of Leaking Asset
Only enter if you know it.
PLI09018

First Department (Reporting) *
If you are the first person reporting this leak, enter your department.
Customer Service

Employee Name *
Andrew McCormick

Work Order: S2259681

Work Order: S2259681

Work Description: SERVICE REPAIR IFO 24451 LOS SERRANOS

Equipment: D#1 F-25 WATER SECTIONAL MAP

Area: PSS, Department: S35, Priority: [], Project: PSS-43

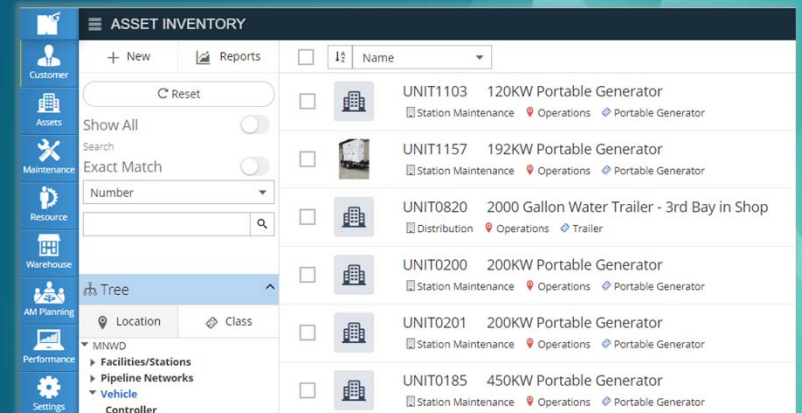
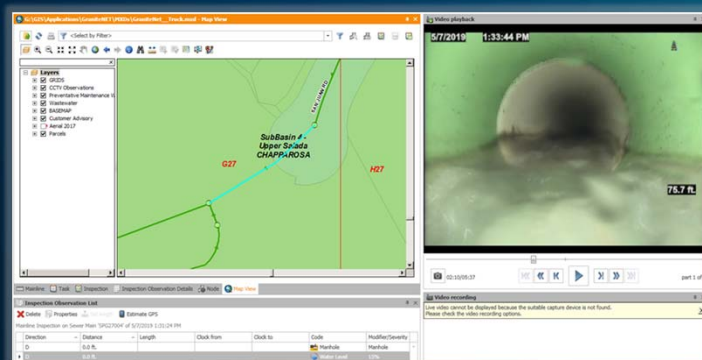
Criticality: LOW, Work Class: S35, Account: [], Status: Ready to Work

Requested Completion: []

Planner: e466, WO Type: Routine, Supervisor: [], Safety: [], Shop: [], Shutdown: [], Assigned To: [], Requestor: Sanders, James

MAINTENANCE MANAGEMENT SYSTEM (CMMS)

SEWER PIPE CCTV INSPECTION



PIPELINE PRIORITIZATION PROCESS

$$\text{PRIORITY} = \text{PoF} \times \text{CoF}$$

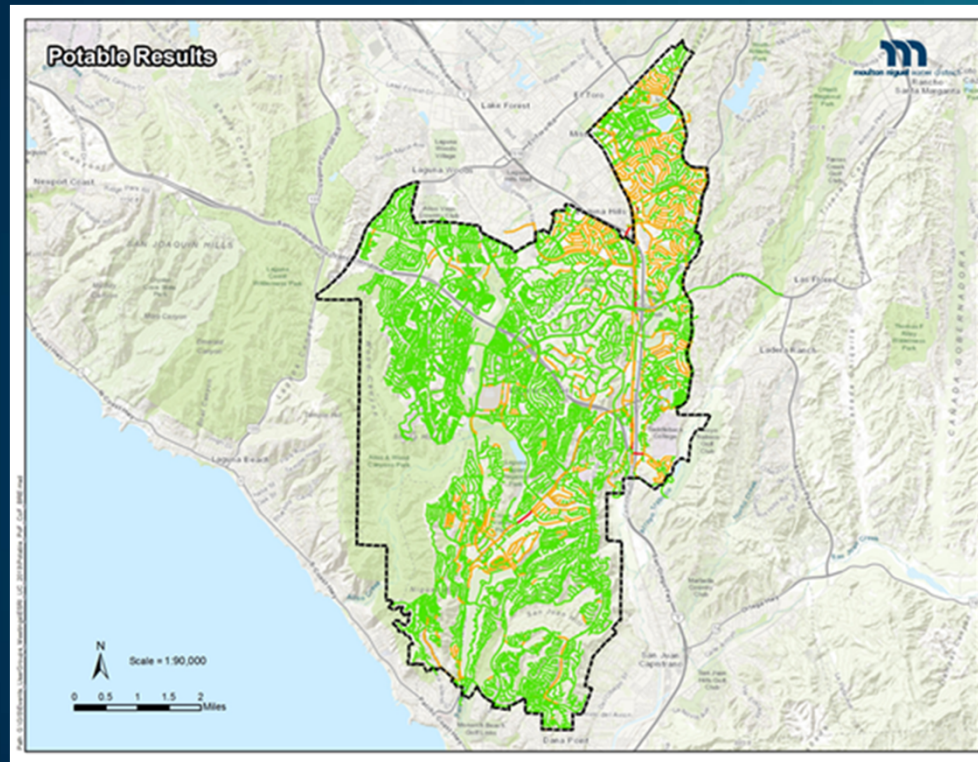
PROBABILITY OF FAILURE (PoF) FACTORS

AGE
LEAK HISTORY
CCTV GRADING
SOIL CORROSIVITY

CONSEQUENCE OF FAILURE (CoF) FACTORS

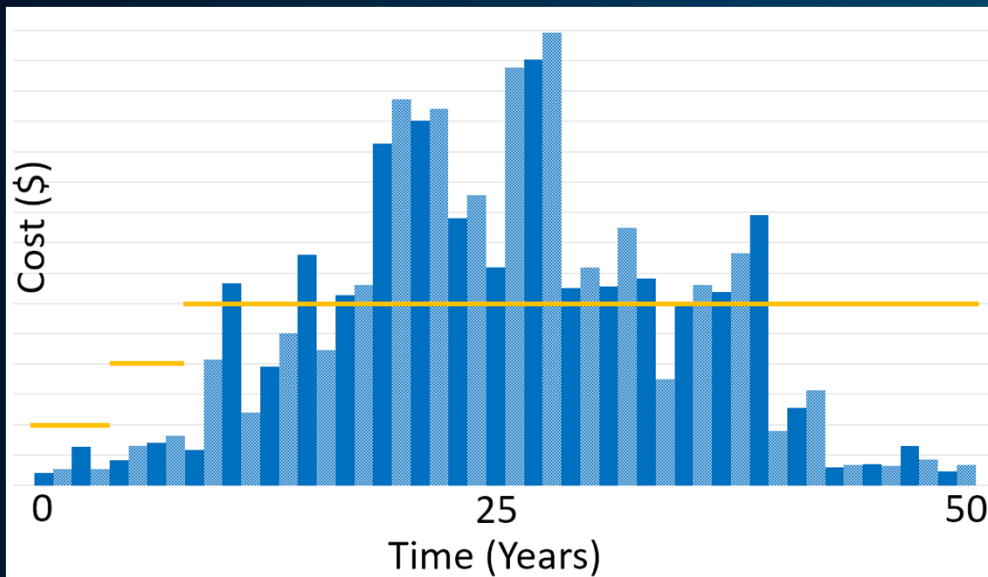
FLOW
PRESSURE
NUMBER OF SERVICES IMPACTED BY OUTAGE
NUMBER OF HYDRANTS IMPACTED BY OUTAGE
PROXIMITY TO WATERCOURSE
PROXIMITY TO OTHER MAJOR UTILITIES
LAND USE
PUBLIC IMPACT TO ROADWAYS AND RAILWAYS
ACCESSIBILITY
COST

PIPELINE PRIORITIZATION RESULTS

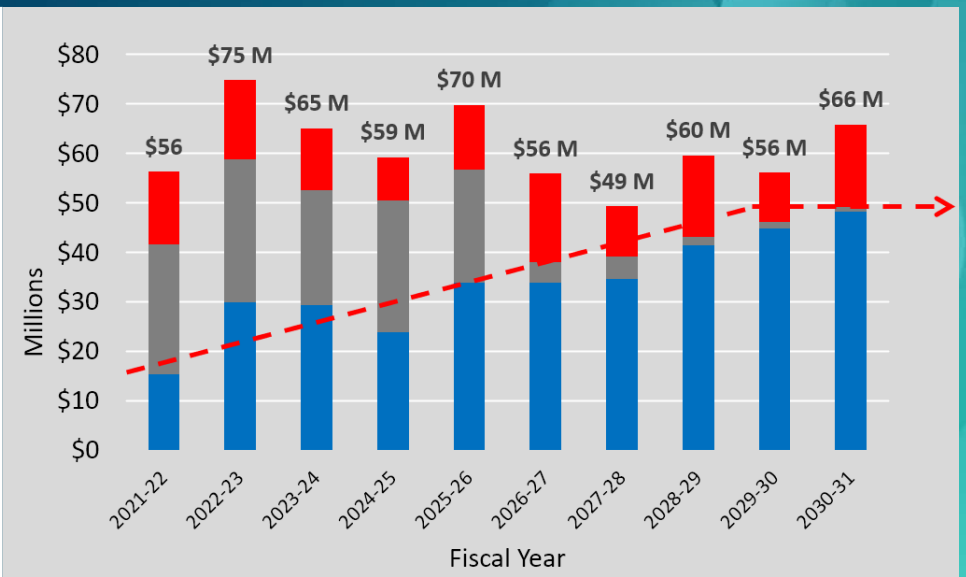


CALCULATED RESULTS

CAPITAL PLANNING FOR PIPELINE REHABILITATION AND REPLACEMENT



LONG-TERM PIPELINE R&R TREND



STEP-UP IN 10-YEAR CIP



moulton niguel water district

Questions?