

**Request for Proposal (RFP) for
Wastewater Flow Monitoring Equipment, Software and Services REBID
Addendum A**

Solicitation Number:	10089830-22-J
Solicitation Issue Date:	November 24, 2021
Mandatory Pre-Proposal Conference:	December 2, 2021 @ 11:00 a.m.
Questions and Comments Due:	December 9, 2021 @ 12:00 p.m.
Proposal Due Date and Time (“Closing Date”):	December 28, 2021 @ 2:00 p.m.
Contract Terms:	Two (2) years from Effective Date with three (3) one-year options to renew, as defined in Article I, Section 1.2 of the City’s General Contract Terms and Conditions.
City Contact:	Janet Polite, Senior Procurement Contracting Officer 1200 Third Avenue, Suite 200 San Diego, California 92101 jpolite@sandiego.gov
Submissions:	Proposer is required to provide one (1) original and one (1) electronic copy (e.g. thumb drive or CD) of their response as described herein. Completed and signed RFP signature page is required, with most recent addendum listed as acknowledgement of all addenda issued. Note: Emailed submissions will not be accepted. Due to COVID-19, electronic copies submitted through PlanetBids will be accepted. Instructions for electronic submissions are provided as an attachment in PlanetBids.

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ORIGINAL

**CONTRACT RESULTING FROM REQUEST FOR PROPOSAL NUMBER 10089830-22-J
Wastewater Flow Monitoring Equipment, Software and Services REBID**

This Contract (Contract) is entered into by and between the City of San Diego, a municipal corporation (City), and the successful proposer to Request for Proposal (RFP) # 10089830-22-J Wastewater Flow Monitoring Equipment, Software and Services REBID (Contractor).

RECITALS

On or about 11/24/2021, City issued an RFP to prospective proposers on services to be provided to the City. The RFP and any addenda and exhibits thereto are collectively referred to as the "RFP." The RFP is attached hereto as Exhibit A.

City has determined that Contractor has the expertise, experience, and personnel necessary to provide the services.

City wishes to retain Contractor to provide security services as further described in the Scope of Work, attached hereto as Exhibit B. (Services).

For good and valuable consideration, the sufficiency of which is acknowledged, City and Contractor agree as follows:

**ARTICLE I
CONTRACTOR SERVICES**

1.1 Scope of Work. Contractor shall provide the Services to City as described in Exhibit B which is incorporated herein by reference. Contractor will submit all required forms and information described in Exhibit A to the Purchasing Agent before providing Services.

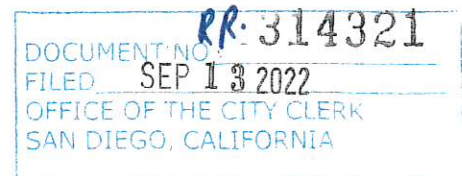
1.2 General Contract Terms and Provisions. This Contract incorporates by reference the General Contract Terms and Provisions, attached hereto as Exhibit C.

1.3 Contract Administrator. The Public Utilities Department (Department) is the Contract Administrator for this Agreement. Contractor shall provide the Services under the direction of a designated representative of the Department as follows:

Surraya Rashid, Deputy Director
Engineering & Program Management Division
Public Utilities Department
9192 Topaz Way
San Diego, CA 92123
srashid@sandiego.gov

**ARTICLE II
DURATION OF CONTRACT**

2.1 Term. This Contract shall be for a period of two (2) years beginning on the Effective Date with three (3) one-year options to renew. Unless otherwise terminated, this Contract shall be effective until completion of the Scope of Services or five (5) years from the Effective Date, whichever is earliest. The term of this Contract shall not exceed five years unless approved by the City Council by ordinance.



ORIGINAL

2.2 Effective Date. This Contract shall be effective on the date it is executed by the last Party to sign the Contract, and approved by the City Attorney in accordance with San Diego Charter Section 40.

ARTICLE III COMPENSATION

3.1 Amount of Compensation. City shall pay Contractor for performance of all Services rendered in accordance with this Contract in an amount not to exceed \$9,041,042.00.

ARTICLE IV WAGE REQUIREMENTS

4.1 By submitting a response to this RFP, Contractor certifies that he or she is aware of, and agrees to comply with, the wage provisions described in Exhibit D, Wage Requirements, which is incorporated herein by reference, before commencing Services.

ARTICLE V CONTRACT DOCUMENTS

5.1 Contract Documents. The following documents comprise the Contract between the City and Contractor: this Contract and all exhibits thereto, the RFP; the Notice to Proceed; and the City's written acceptance of exceptions or clarifications to the RFP, if any.

5.2 Contract Interpretation. The Contract Documents completely describe the Services to be provided. Contractor will provide any Services that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result whether or not specifically called for or identified in the Contract Documents. Words or phrases which have a well-known technical or construction industry or trade meaning and are used to describe Services will be interpreted in accordance with that meaning unless a definition has been provided in the Contract Documents.

5.3 Precedence. In resolving conflicts resulting from errors or discrepancies in any of the Contract Documents, the Parties will use the order of precedence as set forth below. The 1st document has the highest priority. Inconsistent provisions in the Contract Documents that address the same subject, are consistent, and have different degrees of specificity, are not in conflict and the more specific language will control. The order of precedence from highest to lowest is as follows:

- 1st Any properly executed written amendment to the Contract
- 2nd The Contract
- 3rd The RFP and the City's written acceptance of any exceptions or clarifications to the RFP, if any
- 4th Contractor's Pricing

5.4 **Counterparts.** This Contract may be executed in counterparts which, when taken together, shall constitute a single signed original as though all Parties had executed the same page.

5.5 **Public Agencies.** Other public agencies, as defined by California Government Code section 6500, may choose to use the terms of this Contract, subject to Contractor's acceptance. The City is not liable or responsible for any obligations related to a subsequent Contract between Contractor and another public agency.

IN WITNESS WHEREOF, this Contract is executed by City and Contractor acting by and through their authorized officers.

CONTRACTOR

CITY OF SAN DIEGO
A Municipal Corporation

ADS Corp.
Proposer

BY:



340 The Bridge Street, Suite 204
Street Address

Print Name:

Claudia C. Abarca
Director, Purchasing & Contracting
Department

Huntsville, AL 35806
City

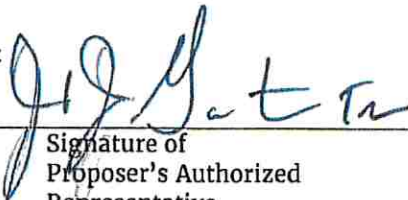
(256)430-3366
Telephone No.

September 30, 2022

Date Signed

jgoustin@idexcorp.com
E-Mail

BY:



Signature of
Proposer's Authorized
Representative

Approved as to form this 5 day of

Oct, 2022.
MARA W. ELLIOTT, City Attorney

Joseph J. Goustin
Print Name

BY:



Deputy City Attorney

Treasurer
Title

12/20/2021
Date

**EXHIBIT A
PROPOSAL SUBMISSION AND REQUIREMENTS**

A. PROPOSAL SUBMISSION

1. Timely Proposal Submittal. Proposals must be submitted as described herein to the Purchasing & Contracting Department (P&C).

1.1 Reserved.

1.2 Paper Proposals. The City will accept paper proposals in lieu of eProposals. Paper proposals must be submitted in a sealed envelope to the Purchasing & Contracting Department (P&C) located at 1200 Third Avenue, Suite 200, San Diego, CA 92101. The Solicitation Number and Closing Date must be referenced in the lower left-hand corner of the outside of the envelope. Faxed proposals will not be accepted.

1.2.1 Due to Covid-19, electronic copies submitted through PlanetBids will be accepted. Instructions for electronic submissions are provided as an attachment in PlanetBids.

1.3 Proposal Due Date. Proposals must be submitted prior to the Closing Date indicated on the eBidding System. E-mailed and/or faxed proposals will not be accepted.

1.4 Pre-Proposal Conference. Pre-proposal conference information is noted on the eBidding System.

1.4.1 Proposers are required to attend the pre-proposal conference. Proposer's failure to attend will result in disqualification.

1.5 Questions and Comments. Written questions and comments must be submitted electronically via the eBidding System no later than the date specified on the eBidding System. Only written communications relative to the procurement shall be considered. The City's eBidding System is the only acceptable method for submission of questions. All questions will be answered in writing. The City will distribute questions and answers without identification of the inquirer(s) to all proposers who are on record as having received this RFP, via its eBidding System. No oral communications can be relied upon for this RFP. Addenda will be issued addressing questions or comments that are determined by the City to cause a change to any part of this RFP.

1.6 Contact with City Staff. Unless otherwise authorized herein, proposers who are considering submitting a proposal in response to this RFP, or who submit a proposal in response to this RFP, are prohibited from communicating with City staff about this RFP from the date this RFP is issued until a contract is awarded.

2. Proposal Format and Organization. Unless electronically submitted, all proposals should be securely bound and must include the following completed and executed forms and information presented in the manner indicated below:

Tab A - Submission of Information and Forms.

2.1 Completed and signed Contract Signature Page. If any addenda are issued, the latest Addendum Contract Signature Page is required.

2.2 Exceptions requested by proposer, if any. The proposer must present written factual or legal justification for any exception requested to the Scope of Work, the Contract, or the Exhibits thereto. Any exceptions to the Contract that have not been accepted by the City in writing are deemed rejected. The City, in its sole discretion, may accept some or all of proposer's exceptions, reject proposer's exceptions, and deem the proposal non-responsive, or award the Contract without proposer's proposed exceptions. The City will not consider exceptions addressed elsewhere in the proposal.

2.3 The Contractor Standards Pledge of Compliance Form.

2.4 Equal Opportunity Contracting forms including the Work Force Report and Contractors Certification of Pending Actions.

2.5 Reserved.

2.6 Licenses as required in Exhibit B.

2.7 Reserved.

2.8 Additional Information as required in Exhibit B.

2.9 Energy Efficiency Certificates, if applicable, from an energy efficiency program such as the U.S. Environmental Protection Agency's Energy Star Efficiency Program.

Tab B - Executive Summary and Responses to Specifications.

2.10 A title page.

2.11 A table of contents.

2.12 An executive summary, limited to one typewritten page, that provides a high-level description of the proposer's ability to meet the requirements of the RFP and the reasons the proposer believes itself to be best qualified to provide the identified services.

2.13 Proposer's response to the RFP.

Tab C - Cost/Price Proposal (if applicable). Proposers shall submit a cost proposal in the form and format described herein. Failure to provide cost(s) in the form and format requested may result in proposal being declared non-responsive and rejected.

3. Proposal Review. Proposers are responsible for carefully examining the RFP, the Specifications, this Contract, and all documents incorporated into the Contract by reference before submitting a proposal. If selected for award of contract, proposer shall be bound by same unless the City has accepted proposer's exceptions, if any, in writing.

4. Addenda. The City may issue addenda to this RFP as necessary. All addenda are incorporated into the Contract. The proposer is responsible for determining whether addenda were issued prior to a proposal submission. Failure to respond to or properly address addenda may result in rejection of a proposal.

5. Quantities. The estimated quantities provided by the City are not guaranteed. These quantities are listed for informational purposes only. Quantities vary depending on the demands of the City. Any variations from the estimated quantities shall not entitle the proposer to an adjustment in the unit price or any additional compensation.

6. Quality. Unless otherwise required, all goods furnished shall be new and the best of their kind.

6.1 Items Offered. Proposer shall state the applicable trade name, brand, catalog, manufacturer, and/or product number of the required good, if any, in the proposal.

6.2 Brand Names. Any reference to a specific brand name in a solicitation is illustrative only and describes a component best meeting the specific operational, design, performance, maintenance, quality, or reliability standards and requirements of the City. Proposer may offer an equivalent or equal in response to a brand name referenced (Proposed Equivalent). The City may consider the Proposed Equivalent after it is subjected to testing and evaluation which must be completed prior to the award of contract. If the proposer offers an item of a manufacturer or vendor other than that specified, the proposer must identify the maker, brand, quality, manufacturer number, product number, catalog number, or other trade designation. The City has complete discretion in determining if a Proposed Equivalent will satisfy its requirements. It is the proposer's responsibility to provide, at their expense, any product information, test data, or other information or documents the City requests to properly evaluate or demonstrate the acceptability of the Proposed Equivalent, including independent testing, evaluation at qualified test facilities, or destructive testing.

7. Modifications, Withdrawals, or Mistakes. Proposer is responsible for verifying all prices and extensions before submitting a proposal.

7.1 Modification or Withdrawal of Proposal Before Proposal Opening. Prior to the Closing Date, the proposer or proposer's authorized representative may modify or withdraw the proposal by providing written notice of the proposal modification or withdrawal to the City Contact via the eBidding System. E-mail or telephonic withdrawals or modifications are not permissible.

7.2 Proposal Modification or Withdrawal of Proposal After Proposal Opening. Any proposer who seeks to modify or withdraw a proposal because of the proposer's inadvertent computational error affecting the proposal price shall notify the City Contact identified on the eBidding System no later than three working days following the Closing Date. The proposer shall provide worksheets and such other information as may be required by the City to substantiate the claim of inadvertent error. Failure to do so may bar relief and allow the City recourse from the bid surety. The burden is upon the proposer to prove the inadvertent error. If, as a result of a proposal modification, the proposer is no longer the apparent successful proposer, the City will award to the newly established apparent successful proposer. The City's decision is final.

8. Incurred Expenses. The City is not responsible for any expenses incurred by proposers in participating in this solicitation process.

9. Public Records. By submitting a proposal, the proposer acknowledges that any information submitted in response to this RFP is a public record subject to disclosure unless the City determines that a specific exemption in the California Public Records Act (CPRA) applies. If the proposer submits information clearly marked confidential or proprietary, the City may protect such information and treat it with confidentiality to the extent permitted by law. However, it will be the responsibility of the proposer to provide to the City the specific legal grounds on which the City can rely in withholding information requested under the CPRA should the City choose to withhold such information. General references to sections of the CPRA will not suffice. Rather, the proposer must provide a specific and detailed legal basis, including applicable case law, that clearly establishes the requested information is exempt from the disclosure under the CPRA. If the proposer does not provide a specific and detailed legal basis for requesting the City to withhold proposer's confidential or proprietary information at the time of proposal submittal, City will release the information as required by the CPRA and proposer will hold the City, its elected officials, officers, and employees harmless for release of this information. It will be the proposer's obligation to defend, at proposer's expense, any legal actions or challenges seeking to obtain from the City any information requested under the CPRA withheld by the City at the proposer's request. Furthermore, the proposer shall indemnify and hold harmless the City, its elected officials, officers, and employees from and against any claim or liability, and defend any action brought against the City, resulting from the City's refusal to release information requested under the CPRA which was withheld at proposer's request. Nothing in the Contract resulting from this proposal creates any obligation on the part of the City to notify the proposer or obtain the proposer's approval or consent before releasing information subject to disclosure under the CPRA.

10. Right to Audit. The City Auditor may access proposer's records as described in San Diego Charter section 39.2 to confirm contract compliance.

B. PRICING

1. Fixed Price. All prices shall be firm, fixed, fully burdened, FOB destination, and include any applicable delivery or freight charges, and any other costs required to provide the requirements as specified in this RFP. The lowest total estimated contract price of all the proposals that meet the requirements of this RFP will receive the maximum assigned points to this category as set forth in this RFP. The other price schedules will be scored based on how much higher their total estimated contract prices compare with the lowest:

$$(1 - \frac{(\text{contract price} - \text{lowest price})}{\text{lowest price}}) \times \text{maximum points} = \text{points received}$$

For example, if the lowest total estimated contract price of all proposals is \$100, that proposal would receive the maximum allowable points for the price category. If the total estimated contract price of another proposal is \$105 and the maximum allowable points is 60 points, then that proposal would receive $(1 - ((105 - 100) / 100) \times 60 = 57$ points, or 95% of the maximum points. The lowest score a proposal can receive for this category is zero points (the score cannot be a negative number). The City will perform this calculation for each Proposal.

2. Taxes and Fees. Taxes and applicable local, state, and federal regulatory fees should not be included in the price proposal. Applicable taxes and regulatory fees will be added to the net amount invoiced. The City is liable for state, city, and county sales taxes but is exempt from Federal Excise Tax and will furnish exemption certificates upon request. All or any portion of the City sales tax returned to the City will be considered in the evaluation of proposals.

3. Escalation. An escalation factor is not allowed unless called for in this RFP. If escalation is allowed, proposer must notify the City in writing in the event of a decline in market price(s) below the proposal price. At that time, the City will make an adjustment in the Contract or may elect to re-solicit.

4. Unit Price. Unless the proposer clearly indicates that the price is based on consideration of being awarded the entire lot and that an adjustment to the price was made based on receiving the entire proposal, any difference between the unit price correctly extended and the total price shown for all items shall be offered shall be resolved in favor of the unit price.

C. EVALUATION OF PROPOSALS

1. Award. The City shall evaluate each responsive proposal to determine which proposal offers the City the best value consistent with the evaluation criteria set forth herein. The proposer offering the lowest overall price will not necessarily be awarded a contract.

2. Sustainable Materials. Consistent with Council Policy 100-14, the City encourages use of readily recyclable submittal materials that contain post-consumer recycled content.

3. Evaluation Process.

3.1 Process for Award. A City-designated evaluation committee (Evaluation Committee) will evaluate and score all responsive proposals. The Evaluation Committee may require proposer to provide additional written or oral information to clarify responses. Upon completion of the evaluation process, the Evaluation Committee will recommend to the Purchasing Agent that award be made to the proposer with the highest scoring proposal.

3.2 Reserved.

3.3 Optional Interview/Oral Presentation. The City may require only the top three (3) proposers scoring within 7 points of the highest scoring proposal to interview and/or make an oral presentation. The interviews and/or oral presentations will be scored as part of the selection process. The City will complete all reference checks prior to any oral interview. Additionally, the Evaluation Committee may require proposer's key personnel to interview. Interviews may be by teleconference and/or in person. Multiple interviews may be required. Proposers are required to complete their oral presentation and/or interviews within seven (7) workdays after the City's request. Proposers should be prepared to discuss and substantiate any of the areas of the proposal submitted, as well as proposer's qualifications to furnish the subject goods and services. Notwithstanding the possibility of a request for an oral interview and presentation of the key personnel, Proposers shall not rely upon the possibility of such request and shall submit a complete and comprehensive written response to this solicitation. Proposer is responsible for any costs incurred for the oral presentation and interview of the key personnel.

3.4 Discussions/Negotiations. The City has the right to accept the proposal that serves the best interest of the City, as submitted, without discussion or negotiation. Contractors should, therefore, not rely on having a chance to discuss, negotiate, and adjust their proposals. The City may negotiate the terms of a contract with the winning proposer based on the RFP and the proposer’s proposal, or award the contract without further negotiation.

3.5 Inspection. The City reserves the right to inspect the proposer’s equipment and facilities to determine if the proposer is capable of fulfilling this Contract. Inspection will include, but not limited to, survey of proposer’s physical assets and financial capability. Proposer, by signing the proposal agrees to the City’s right of access to physical assets and financial records for the sole purpose of determining proposer’s capability to perform the Contract. Should the City conduct this inspection, the City reserves the right to disqualify a proposer who does not, in the City’s judgment, exhibit the sufficient physical and financial resources to perform this Contract.

3.6 Evaluation Criteria. The following elements represent the evaluation criteria that will be considered during the evaluation process:

	MAXIMUM EVALUATION POINTS
A. Responsiveness to the RFP.	<hr/> 25
<ul style="list-style-type: none"> 1. Requested information included and thoroughness of response 2. Understanding of the project and ability to deliver as exhibited in the scope of work 3. Equipment and Software Technical Aspects meet requirements of Exhibit B, Section C.2.2.2. (Equipment and Software Requirements) 	
B. Qualifications and Staffing Plan.	20
<ul style="list-style-type: none"> 1. Resumes of key personnel assigned to the project that demonstrate qualifications consistent with requirements 2. Project Team organization chart that identifies management, technical, and site teams. 3. Availability/Geographical location of personnel for required tasks 4. Clearly defined Roles/Responsibilities of personnel 5. Documentation proof for Staff who have passed/cleared any security background checks 	
C. Firm's Capability to provide the services and expertise and Past Performance.	35
<ul style="list-style-type: none"> 1. Past performance of similar project with public agencies 2. Experience with similar size and type of wastewater systems where the major functions for the flow monitoring program (Event Notification System, Participating Agency Billing and Reporting, and Sewer Modeling) 3. Relevant experience of the Firm and subcontractors 4. Previous relationship of firm and subcontractors on similar projects 5. Location in the general geographical area of the project and knowledge of the locality of the Project 6. Capacity/Capability to meet the City’s needs in a timely manner 	

	MAXIMUM EVALUATION POINTS
7. Transition Plan detailing the proposed migration from the current monitoring system as outlined in Exhibit B, Section C.10. (Transition Plan)	
8. Reference checks	
D. Price.	10
E. Optional Interview/Oral Presentation.	10
1. Equipment	
2. Software	
3. Support Model	
4. Thoroughness and Clarity of Presentation	
SUB TOTAL MAXIMUM EVALUATION POINTS:	100
F. Participation by Small Local Business Enterprise (SLBE) or Emerging Local Business Enterprise (ELBE) Firms*	12
FINAL MAXIMUM EVALUATION POINTS INCLUDING SLBE/ELBE:	112

*The City shall apply a maximum of an additional 12 percentage points to the proposer's final score for SLBE OR ELBE participation. Refer to Equal Opportunity Contracting Form, Section V.

D. ANNOUNCEMENT OF AWARD

1. Award of Contract. The City will inform all proposers of its intent to award a Contract in writing.

2. Obtaining Proposal Results. No solicitation results can be obtained until the City announces the proposal or proposals best meeting the City's requirements. Proposal results may be obtained by: (1) e-mailing a request to the City Contact identified on the eBidding System or (2) visiting the P&C eBidding System to review the proposal results. To ensure an accurate response, requests should reference the Solicitation Number. Proposal results will not be released over the phone.

3. Multiple Awards. City may award more than one contract by awarding separate items or groups of items to various proposers. Awards will be made for items, or combinations of items, which result in the lowest aggregate price and/or best meet the City's requirements. The additional administrative costs associated with awarding more than one Contract will be considered in the determination.

E. PROTESTS. The City's protest procedures are codified in Chapter 2, Article 2, Division 30 of the San Diego Municipal Code (SDMC). These procedures provide unsuccessful proposers with the opportunity to challenge the City's determination on legal and factual grounds. The City will not consider or otherwise act upon an untimely protest.

F. SUBMITTALS REQUIRED UPON NOTICE TO PROCEED. The successful proposer is required to submit the following documents to P&C **within ten (10) business days** from the date on the Notice to Proceed letter:

1. Insurance Documents. Evidence of all required insurance, including all required endorsements, as specified in Article VII of the General Contract Terms and Provisions.

2. Taxpayer Identification Number. Internal Revenue Service (IRS) regulations require the City to have the correct name, address, and Taxpayer Identification Number (TIN) or Social Security Number (SSN) on file for businesses or persons who provide goods or services to the City. This information is necessary to complete Form 1099 at the end of each tax year. To comply with IRS regulations, the City requires each Contractor to provide a Form W-9 prior to the award of a Contract.

3. Business Tax Certificate. Unless the City Treasurer determines a business is exempt, all businesses that contract with the City must have a current business tax certificate.

4. Bond. A bond as described in Exhibit B.

5. Payment Card Industry Data Security Documents. Evidence of all required documents, as described in Exhibit B.

The City may find the proposer to be non-responsive and award the Contract to the next highest scoring responsible and responsive proposer if the apparent successful proposer fails to timely provide the required information or documents.

EXHIBIT B SCOPE OF WORK

A. OVERVIEW

The City of San Diego (City) Public Utilities Department (PUD) manages and operates the wastewater collection and treatment system for the Metropolitan area of southwestern San Diego County. This system collects and treats the wastewater generated by a regional population of 2.3 million, producing approximately 147 million gallons of wastewater per day. This system, referred to as the Metro System, is comprised of 15 cities and districts (Participating Agencies (PA)) including the City of San Diego. Each Participating Agency maintains its own wastewater collection system, which ties into the City wastewater system. The City also conveys and treats wastewater for other large facilities including state and county prisons and military installations.

The City is seeking a Contractor to provide accurate, reliable, defensible, and timely data for sewer revenue billing, sewer capacity assessment modeling and sewage spill detection alarms, in accordance with this Scope of Work. The Engineer's estimate for a two-year contract is approximately \$2,850,000.

B. MANDATORY PRE-PROPOSAL CONFERENCE

All proposers are required to attend a pre-proposal conference on **December 2, 2021 at 11:00 a.m.** Late attendance is not permitted. Any bidder arriving after the start time will be unable to participate in this bidding opportunity. The Pre-proposal conference will be held remotely as follows:

1. The Pre-proposal conference will be held via Microsoft Teams.
2. In preparation for upcoming virtual Teams conference, all proposers are required to download the Teams App to their computer. If proposers are unable to install Teams, there is an option to open Teams in a web browser; however, we recommend using the App where possible as this ensures that proposers have access to all the features. Please note the preferred browsers are Microsoft Edge and Google Chrome. **City shall not be liable for a Proposer's failure to access Microsoft Teams.**
3. Test that the Teams App is working.
4. Click the following link to attend the pre-bid conference: [Click here to join the meeting](#). The link will be activated 10 minutes before the meeting.

C. SPECIFICATIONS

1. FLOW MONITORING PROGRAM

Existing flow monitoring sites are located throughout southwestern San Diego County and are situated in canyons, military installations, major roadways, and streets. The flow monitoring program will collect data from approximately 162 sites. The major functions for the flow monitoring program are:

- a) Event Notification System (ENS)
- b) Participating Agency Billing and Reporting
- c) Sewer Modeling

These functions require real time and periodic data processing, analysis and reporting of the wastewater flows. The Contractor shall continue to provide flow monitoring equipment parts, sensors, battery replacements, necessary software, data analysis, reporting, and maintenance services in support of these functions. ADS Environmental Services is the current provider of wastewater flow monitoring services to the City.

The City serves a wide variety of wastewater generators, including military installations, correctional facilities, industrial facilities and residential areas. The contractor will be required at some locations to have their service personnel pass security clearance to access flow monitors, such as military installations.

2. CORE REQUIREMENTS, DELIVERABLES AND TIMELINE

2.1. Location of Monitor Sites

Existing flow monitoring sites are located throughout **San Diego County** and are sited in canyons, military installations, major roadways, streets, parking lots, riverbanks and at or adjacent to sewer pump stations. Most installations are inside manholes that may range in depth from 3 feet to 30 feet. All confined space entries are to comply with Cal OSHA and PUD entry requirements. The majority of the sites require open channel monitoring equipment, however some sites (e.g. pump stations or low flow sites) may require alternative monitoring equipment and have ability to process 4-20 mA signals for use at or near pump stations. The primary transmission of data and signals will be via cellular (wireless) phone signals of 4G technology or equivalent and must have good coverage in the remote areas for canyon trunk sewers.

The configuration of the manholes and piping at the manholes will vary from location to location. Anticipated conditions may include drop manholes, bends, variations in materials, offset joints in the piping, pre-existing flumes or weirs, offset entry hatches requiring personnel to move away from the entry location in order to install and maintain sensors or equipment and high flow and low flow conditions. Sampling is conducted at some monitor site locations. Some monitor sites are built and maintained by the Participating Agencies (PAs) or may be located within military or other restricted facilities. The City shall coordinate with PAs and other restricted facilities for the conditions or access but shall not be responsible for these monitor sites. The City Contract Manager shall be advised (via e-mail with photos) of any conditions or situations that impact the collection and reliability of flow data.

2.2. Equipment and Software Requirements

The Contractor shall provide to the City equipment and software that meet the following requirements. Equipment must be listed on City-provided Contractor Standards form.

2.2.1. Equipment Requirements

- a. The minimum requirements are that monitors are battery powered; have telemetry capabilities for remote data access and diagnostics; provide

depth and velocity readings in English system units suitable for use in performing accurate flow rate calculations; have sufficient on-board memory storage to prevent data loss over a period of 60 days; and are able to withstand extreme sewer environmental conditions (wastewater composition, surcharge conditions and the presence of vectors in the system). Sensors must measure accurately in a variety of flow conditions (e.g. low flow, pump station activity, surcharge conditions, reverse flows, high flow, etc.) and small to large pipe diameters.

- b. The Contractor shall provide equipment specifications and identify any equipment limitation that may impact data reliability or accuracy for various hydraulic conditions.
- c. The installation shall provide velocity, depth and flow rates (Q), information.
- d. The installation shall be configured so that redundancy is able to insure accurate flow data in case of failure of a system component.
- e. The equipment must: provide event notification immediately upon detection of critical alarm condition; (depth of flow exceeds pipe diameter or depth is less than the value set for low flow alarm parameter, or flow is less than various threshold values); record data at intervals between 5 to 15 minutes; and be capable of self-uploading data at least every 30 minutes or upon remote call up.
- f. The accuracy of the depth and velocity sensors shall be within $\pm 1\%$ for depth and $\pm 2\%$ for velocity. The Contractor shall certify the accuracy of all sensors.
- g. The depth and velocity sensors shall be verified at the monitor site so that the average of the set of readings used to calibrate the sensors are within 5% of the actual measured depth or velocity.
- h. The Contractor shall maintain an adequate inventory of replacement parts in San Diego throughout the duration of this Agreement. Advise the City Contract Manager if replacement parts exceed one-week delivery/installation.
- i. The Contractor shall provide a price list for replacement items, which shall remain in force for the duration of the Agreement.
- j. The flow meter shall have the capability for accurate flow measurement in open channel flow situations and shall be capable of providing accurate data during all anticipated hydraulic conditions including surcharging.
- k. The flow monitor at ELCAJON_EC2B (EC2B) will provide flow information to divert flow to both the trunk sewer and pump station during high flow storm events. The flow monitor at this location shall provide a 4 to 20 ma output signal at the flow monitor in every five (5) minutes that shall be connected to the existing cable routed to the pump station controls located about 100 yards from EC2B.

- l. The flow monitoring station shall be covered by a five-year manufacturer's warranty for materials and equipment. Similarly, a five-year installation warranty shall be provided by the Contractor.
- m. All new equipment supplied under this RFP, including the Temporary Monitoring Sites, become the property of the City.
- n. All costs and associated fees are for the equipment, installation, operation, and maintenance of the additional permanent and temporary monitor sites.
- o. The City may request the contractor to perform meter installation or maintenance at nighttime to avoid high traffic volumes and high sewer flows in the large diameter trunk sewers.
- p. The new selected Contractor will have two options for "transition plan":
 - (1) If the proposed plan includes the continued use of the currently installed ADS Model TRITON+ monitors, the Contractor shall verify the methodology for diagnostics, data downloads and integration with the ENS. In addition, the Contractor shall demonstrate the capability to repair, replace and maintain the ADS Model TRITON+ monitors.
 - (2) If the proposed plan calls for the replacement of the current monitors, the Contractor shall provide a comprehensive schedule for monitor removal and replacement at current sites and priority sites.

2.2.2. Velocity Sensor

- a. The data logger unit shall be capable of recording velocity measurements made by a Doppler sensor. The sensors must be proven to accurately measure velocity for pipes up to 114 inches in diameter.
- b. Sensor shall measure velocities at multiple locations within cross-section of flow sufficient for calculating the average flow rate through the pipe.
- c. Velocity sensor housing shall be composed of materials suitable for installation in a potentially toxic sewer and manhole environment given the conditions of service described herein.

2.2.3. Depth Sensor(s)

The data logger unit shall be capable of recording depth measurements through a pressure transducer and an ultrasonic sensor. Both sensors are required to provide the redundancy.

2.2.4. Pressure Transducer Depth Sensor

- a. The pressure transducer depth sensor shall be capable of measuring surcharge levels in closed conduits up to 30 feet of head.
- b. Pressure transducer depth sensor housing shall be composed of materials suitable for installation in a potentially toxic sewer and manhole environment given the conditions of service described herein.
- c. The pressure transducer in the sensor shall be factory calibrated with the calibration data stored as digital values in a microcontroller in the sensor. The sensor shall not contain potentiometers to calibrate the pressure transducer. The analog output of the pressure transducer shall be converted to a digital value in the sensor, and the sensor shall transmit to the flow module a digital signal corresponding to the current level measurement.

2.2.5. Data Logger

- a. The flow meter shall be microprocessor based and shall contain all necessary circuitry to utilize the signals from the velocity and depth sensors. The flow meter shall be capable of indicating system status and alarm conditions to the central processor in real time.
- b. The flow meter shall be enclosed in a waterproof, pressurized housing composed of materials suitable for installation in a potentially toxic sewer and manhole environment given the conditions of service described herein. Flow meter shall have a handle that is easily grasped to facilitate installation and removal.
- c. The flow meter shall be powered at minimum by internal batteries with a minimum life of 12 months at a 15-minute sampling rate (logging depth and velocity) and download frequency of one (1) time per day. Minimum life shall take into account meter data download by both City of San Diego Public Utilities Department and the Contractor. Flow meter shall also have the capability of being powered by an external DC power unit. All electrical connections to the enclosure shall be mechanically weather-tight.
- d. At no time shall the battery life of the meter decrease past the level required for:
 - Collect and store specific data
 - Storage of data
 - Critical flow measurement
- e. The flow meter shall function over an ambient temperature range appropriate for all monitoring locations, some of which experience relatively high temperatures due to industrial flows. Contractor to provide flow meter operating temperature specifications. Flow meter shall monitor internal temperature inside the unit as well as voltage.

- f. The flow meter shall be capable of converting area-velocity to flow rates in real time then compared with alarm threshold at the meter level to detect flow loss or equivalent.
- g. The internal data storage memory in the flow meter shall have a minimum capacity of 30 days of level and velocity readings at 15-minute intervals. A memory capacity of 60 days is preferred for flexibility in manual data download scheduling. As a minimum, the data logger shall be capable of storing level, velocity, flow rate, total flow, and battery voltage data which are associated to the correct date and time.
- h. Data logger shall have battery-backed crystal-controlled hardware real-time clock/calendar. Data logger shall be developed by a company capable of providing ISO 9001 certification documentation.

2.2.6. Modem

A modem shall be provided with each flow monitoring station to communicate collected data to the third-party database, Contractor, and Contract Manager. The modem shall be capable of operating on 4G LTE network.

2.2.7. Comprehensive Service Program

In lieu of an equipment warranty, the Contractor shall provide a comprehensive service program for the equipment provided under this Agreement. The program shall include:

- a. Onsite and remote diagnostic inspection of all equipment and materials.
- b. Repair, replacement, cleaning and preventive maintenance services for the equipment, including sensors, cables, monitors and telemetry equipment, and materials, including battery and desiccant replacement, necessary to keep the equipment operating in accordance with the manufacturer's specifications and the requirements of this Agreement.
- c. The service shall be performed in accordance with Section 5.0 of this Scope of Work.

2.2.8. Software and Server Requirements

- a. Software is to be Windows and/or web based, fully capable of meeting the City's requirements at project inception.
- b. Compatible software upgrades and enhancements to be provided to City as available and free of charge.
- c. City shall be provided a license to use the software in perpetuity at no additional cost, after the **24-month initial term** of this Agreement.

- d. Software must allow for remote access to flow monitoring data on a real-time basis and on a periodic basis.
- e. Software shall provide remote data access, reporting, data analysis and editing capabilities with the ability to:
 - (1) Review data in a graphical format for all monitor sites with a user defined interval for time and date (5-minute, 15-minute, 30-minute, hourly, daily, weekly and monthly time periods.
 - (2) Easily produce graphs and tabular reports in 5-minute, 15-minute, 30-minute, hourly, daily, weekly and monthly time periods.
 - (3) Electronically produce tabular reports (i.e. “batch mode” reports for multiple sites using the same entities and format), in various time increments (5-min, 15-min, 30-min, hourly, daily, weekly and monthly) with different data entities, i.e. calculated flow rate, average depth, average velocity, etc.
 - (4) Ability to download tabular reports in batch mode producing separate Excel files for each metered location.
 - (5) Set up groups of monitoring sites and view groups graphically with the same data entities, i.e. depth, velocity, final flow rate.
 - (6) Make minor data changes (toggle off/on the data points) to data without deleting any original data points.
 - (7) Remove any drips or spikes in depth and velocity that do not follow the hydraulic condition.
 - (8) Allow visibility of all raw data points including the edited data points.
 - (9) View at a glance (e.g. a data table) the dates and offsets that were applied to each monitor.
 - (10) View all data history for each monitor site.
 - (11) Output data to ACCESS database and/or EXCEL spreadsheet.
 - (12) Date stamp time using a 24-hour clock and adjust to PST and PDT. Time stamps shall be consistent throughout the system.
 - (13) The Contractor shall provide a demonstration/test procedure to prove that the software is capable of performing the tasks in this section. Refer to SOW 3.1.k below.
- f. The Contractor’s software and hardware shall be capable of providing data in English measurement units.

- g. The Contractor's software and hardware shall be capable of providing a seamless transition from the City's current systems to the Contractor's installed systems pursuant to Section 10.0 of this Scope of Work.
- h. The software and servers shall be capable of providing data access and processing to City and Participating Agency (PA) staff on a select basis as determined by the City.
- i. The data management platform will collect and store data once per day for all flow meter and rainfall gauging equipment and provide notification when any of the monitoring equipment fails to send the 24-hour recorded data. Access to the data by the CITY, shall be gained through a dedicated web-based portal using a pre-established username and password. Access rights shall be capable of limitations to data sets based on user definitions set by Contractor or the City. The web-portal browsers shall utilize Microsoft Edge, 'Chrome' or 'Fire Fox' for access.
- j. Once accessed the data management platform shall have a graphical interface that allows for identification of equipment location, as well as identifying equipment communication status and remaining battery life. The data management platform shall also allow for the following actions:
 - Review of Transient Data
 - Creation of Flow, Level and Velocity Hydrographs for Selected Time Periods
 - Ability to Export Created Hydrographs, Bar Graphs and Tabular Data to .pdf, .txt, csv
- k. A graphical time-series plot (hydrograph) of flow rate vs. time data shall be presented for each specific flow meter site. An average seven (7) day dry weather hydrograph will also be prepared/presented and flow data from any significant rainfall event (greater than 0.5-inches over 24-hours) during any specific seven (7) day period will be added to the hydrograph and RDII volumes for each significant event shall be calculated and displayed on the hydrograph. Additional graphs will also be required:
 - Monthly graph (scatter graph) of flow depth versus velocity readings
 - Monthly flow graph depicting daily maximum, average and minimum flow rates with daily rainfall accumulations
 - Daily wet weather 24-hour flow volume versus recorded rainfall magnitude for events greater than 0.5-inches (regression analysis)
 - Flow balance schematic depicting flow meter connectivity and measured flow volumes over each 24-hour rainfall event greater than 0.5-inches (with downstream flow volumes isolated from upstream flow meters)
- l. The Contractor's software shall be capable of evaluating data transmitted periodically to the Cloud by machine learning (ML) algorithm and looking for tell-tale signs of developing blockages, surcharge and overflow.

3. EVENT NOTIFICATION SYSTEM (ENS)

3.1. Event Notification System Requirements

The City's flow monitoring program maintains approximately 162 (152 permanent and 10 temporary) flow monitoring sites. The ENS is intended to provide alarm information, which will allow the City to dispatch crews to avert or minimize wastewater spills. The ENS is configured to monitor most of trunk sewers, including all canyon trunk sewers.

One hundred twenty (120) of the flow monitor sites are used for the ENS, also referred to as the Flow Metering Alarm System (FMAS). The ENS is intended to provide real-time early warning of potential and/or existing wastewater overflows based on flow data collected from the designated alarm monitors. The City currently utilizes a web based ENS provided by the current flow monitoring Contractor. The Contractor shall provide a seamless transition from the City's current systems to the Contractor's installed systems.

The Contractor shall implement an ENS according to the following requirements.

- a. Provide to the City the specifications for desktop computers stationed at the City's offices to receive and view ENS related data and alarm information.
- b. Provide wireless communication system to collect the flow data (depth, velocity, battery voltage, etc.) and to process the data on a real-time basis for the detection of any potential and/or existing overflows.
- c. Provide ENS software applications to analyze the real-time flow data collected from the monitor sites and to issue alarms via on-screen warnings, audio annunciations, pagers, e-mails, etc. for any flow anomalies caused by the potential and/or existing overflows at either the upstream or downstream side of the monitors.
- d. The ENS shall be able to detect any low flow (LF) anomaly, which may be indicative of an overflow condition upstream of the monitor, and any high level (HF) anomaly, which may be indicative of flow backup downstream of the monitor.
- e. The software application shall detect any reduction in flow of more than 25% of the average dry weather flow offset diurnal curve from typical measured by the monitor located downstream of a suspected spill location.
- f. As a requirement for the Low Flow Alarm System, the ENS must be capable of detecting and notifying City staff within one hour of reductions in flow of 25% or more of the average dry weather flow during both DRY and WET weather conditions.
- g. As a minimum, the ENS must be capable of detecting and notifying City staff within one hour of the increase of flow depth exceeding a pre-determined level (e.g. pipe crown) during both DRY and WET weather conditions.

- h. The software applications must be capable of conducting automated QA/QC processes to provide a quality assured screening of all alarm potentials and to minimize false alarms induced by erroneous data, data fluctuations, equipment malfunctions and other system defects.
- i. The Contractor shall perform regularly scheduled maintenance of the software and hardware of the ENS in order to provide alarming data for not less than 95% of the time, both system wide and at individual ENS sites. The Contractor shall acknowledge issues (identified by the City and/or Contractor) related to the ENS components (including sensors, cables, communication connections, monitors, computer hardware and software) within 24 hours for alarming monitors and 48 hours for non-alarming monitors and shall guarantee completion of all repair/maintenance within an additional 24-hour time period, including weekends and holidays. All service/maintenance records shall be posted in a timely manner not exceeding two days.
- j. The Contractor's ENS shall provide accurate and reliable blockage and overflow detection.
- k. The Contractor shall complete a satisfactory lab test of its ENS in its own facility and subsequently a satisfactory field test in the City's wastewater facility with the City as witness. The latter test shall demonstrate the capability of wireless/landline communication, blockage, and overflow detection under both dry and wet weather conditions at a site selected by the City. (Wet weather condition will be simulated using the City's flow control facilities). As a minimum, these tests shall demonstrate the ability to detect both low flow and high-level anomalies and the fulfillment with the required functions listed herein. These tests and test reports shall be witnessed and approved by the City after the proposal presentation but prior to the Agreement award. This activity shall be completed within 21 days of notification by the City to initiate testing.
- l. The Contractor shall provide a comprehensive implementation plan within 7 days of Notice to Proceed (NTP), and prior to the implementation of the ENS, for the City's approval.
- m. The ENS shall be implemented and in full operation within 7 days of the City's approval of the implementation plan. As monitors are installed, they shall be checked, verified and connected to the ENS.
- n. The Contractor shall stock the parts locally and provide 24-hour crew and supervisory support to the City.
- o. The Contractor shall provide communication protocols, CDPD, CDMA, landline, etc., according to the site-specific conditions.

4. SITE INSPECTION AND ACCEPTANCE

4.1. Installation

The Contractor is responsible for accurate flow measurement. The City will provide a site installation document, which will identify monitor site location and configuration

information, to the Contractor for reference only. The Contractor shall correct and update the monitor and site information.

As part of the installation the Contractor shall prepare a field calibration document and submit for approval a procedure for performing field calibration. The field calibration shall demonstrate that the installed sensors are installed and calibrated so that the depth, velocity and flow volume Q_v are all within the accuracy identified in Section 2.2.1. (Equipment Requirements). The field calibrations that are not within the required accuracy for all measurement parameters shall be repeated and or sensors shall be replaced and calibrated so that the field calibration results are within the required accuracy. The field calibrations at the monitor sites shall take place during a variety of flow conditions; low flow, high flow and average flow conditions, so that the Contractor is able to demonstrate to the City that the installed sensors are reliable over a wide range of flow conditions.

The City shall specify the sequence/schedule of monitor site installation and calibrations.

- a. The Contractor shall investigate site locations and configurations prior to monitor installation. The Contractor shall confirm that the monitor site is a suitable site or identify an alternative site.
- b. Submit the scheduled installation time and date to the City, 5 working days in advance of the planned installation. The City may determine the day and or the time of day for the calibration of any monitor site.
- c. Install the sensors, cables, monitors and antenna/communication service.
- d. Verify/correct and update the site installation document to identify the current site conditions.
- e. Field calibrate the installed sensors.
- f. Document the site condition/installation with digital photos.
- g. Submit to the City, in hard copy and electronic format, and post online if available, the site installation document, field calibration document, and photos within 5 working days of the installation.

4.2. Site Acceptance Procedure

The submitted site installation document, field calibration document, and photos must be correct and available electronically for review and downloading by City and PA staff. The City will proceed with the acceptance of the monitor site installation based on the following criteria:

- a. The site acceptance package submitted by the Contractor shall include the site installation document, field calibration document, site photos, and flow data for the 30-day evaluation period, the alarm history report for the site for the 30-day evaluation period and flow information for the 30-day evaluation period for the site.

- b. The Contractor shall submit to the City for approval a minimum of 30 continuous days of flow data. The data within the 30-day evaluation period must be continuous and shall show reliable, repeatable and consistent data (no fouled data, no sensor malfunctions, no field calibration(s), no loss of connectivity or data) for a time period of at least 95% of the 30-day evaluation time period.
- c. The City will verify the Contractor's acceptance submittal based on the available resources such as the Contractor's monitor readings, City/third party temporary monitors, City's field verification, the City's historical data or the Contractor's own historical data (if it's a second submittal for the same site), Manning's calculation, Hydraulic Radius Coefficient (HRC), knowledge of current population within monitoring drainage basin, and calculation of the flow balance among multiple monitor locations.
- d. The City may request the Contractor to participate with the City in performing monitor site verifications for up to 10% of the monitor sites included in the Agreement. The monitor site verifications may occur at various times of the day or night during high, medium or low flow periods.
- e. The City may request the Contractor to perform a site profile and submit a site profile report for up to an additional 10% of the monitor sites included in this Agreement. The monitor site profiles may occur at various times of the day or night during high, medium or low flow periods.
- f. City staff shall carry out a site inspection after the acceptance package is submitted and prior to acceptance.

5. MONITOR MAINTENANCE AND SERVICE

After monitor acceptance, the Contractor shall maintain the same level of data quality (reliable, repeatable and consistent). The City will continue to verify the monitor data based on the same criteria described in Section 4.2.c above. If, for any reason, the data quality is not maintained, the Contractor shall provide solutions to resolve the data quality issue. If the quality is not improved, the City shall have the option to reject and stop payment for the monitor site. The monitor site will then have to be resubmitted for acceptance per Section 4.2. (Site Acceptance Procedure).

The maintenance and service shall include the following:

- a. Staffing: Contractor shall maintain in San Diego a permanent field service crew dedicated to the monitor sites identified under this contract. The Contractor shall identify a person, who is located on a full-time basis in San Diego, as the Contractor's primary contact for the supervision and scheduling of the field service crew. Written notification of any change, either temporary or permanent, of the primary contact must be provided to the City at least 5 working days in advance of the change. The primary contact shall be on call 24 hours per day, 7 days a week and the service crew shall be available to service the monitor sites in accordance with the requirements of this contract.

In addition, the Contractor shall acknowledge issues (identified by the City and/or Contractor) related to the non ENS monitor site components (including sensors,

cables, communication connections, monitors, computer hardware and software) within 24 hours and shall guarantee completion of all repair/maintenance within an additional 48-hour time period, excluding weekends and holidays. Refer to Section 3.1.i, for the time requirements for ENS monitors.

- b. **Planning:** Contractor's primary contact shall meet each workday, or less frequently as mutually agreed by the City and Contractor, with the City to plan and verify maintenance/service activities for the following workday and report on conditions and activities from the previous workday. The City shall notify the Contractor when mainline or Pump Station wet well cleaning is planned.
- c. **Diagnostics:** Contractor shall monitor the data being transmitted from the monitor sites and shall carry out a diagnostic inspection of the data on a daily basis to ensure that the monitor site is connected to the flow monitoring system and that the data that is provided is reliable and consistent data.
- d. **Repair:** Contractor shall repair and carry out all preventative maintenance services needed for the reliable operation of the monitor sites. The repair and maintenance services shall include but is not limited to: communication links, sensors, cables, power sources (batteries), monitors and cards, desiccants and all other components necessary for the monitor sites to provide reliable and consistent data to the City. Manual data collection shall be provided weekly for sites with data transmission problems, the data shall be posted/reported within two working days of collection.
- e. **Routine Site Service:** Field calibrations will be completed in accordance with the Contractor's needs-based confirmation procedure, or at a minimum of twice a year and may coincide with a service call. The term "confirmation" is used to describe the verification that the flow monitor is properly configured to its environment and the pipe curve is stable and validated by two independent field measurements. If no service calls are required, the Contractor shall carry out a field calibration (new Field Calibration and Site Document verification) within (12) months of the last monitor confirmation. A field calibration may also be required if the City determines that the data is not reliable. The City may require, for any reason, that quarterly calibrations be performed on up to 15% of the monitor sites.
- f. **Access to Monitor Sites:** The City may be unable to control the access to the monitor sites. The monitor sites are located at a variety of locations throughout southwestern San Diego County. Some monitor sites may have secured and or sealed manhole covers to reduce odor emissions, these will require un-securing (bolt or cross bar removal) unsealing and securing and resealing after accessing the monitor sites. The Contractor is responsible to comply with the requirements of the owner of the facility where monitor sites are located. It is advisable to document the frame and cover being secured by photos upon completion of any work within the manhole on the flow monitoring equipment or appurtenances/sensor/rings or other devices. The Contractor shall not be reimbursed for the cost of a crew that is unable to access a monitor site.
- g. **Documentation.**
 - (1) Access to completed service and maintenance reports for all monitor sites shall be provided to the City, within two working days of the site visit, in electronic format – either through an easily accessible web site or by e-mail.

- (2) Access to previous service and maintenance reports for each monitor site, shall be available to the City in electronic format – either through an easily accessible web site or by a downloadable spreadsheet.
- (3) Access to all field calibration forms and other site documents (i.e. installation, repairs and replacements, quarterly calibrations, etc.) including all historical field calibrations and other documents shall be available to the City in electronic format – either through an easily accessible web site or be a downloadable spreadsheet.
- (4) Service crew's hours of operation for workdays, holiday and weekend work schedules, if needed, and emergency contact telephone numbers.

6. REPORTING AND POSTING INFORMATION

Data and related information must be available to the City and Participating Agencies staff. The Contractor shall provide a system that permits authorized staff to view, download and print information at any time.

6.1. Staffing

- a. The Contractor shall provide the services of a trained and knowledgeable data analyst, who shall be available during normal work (0800 hours to 1600 hours PST/PDT) hours to review data, resolve issues and answer questions.
- b. The data analyst shall be available as-needed to provide ad-hoc analysis, editing and reporting during critical time sensitive events (e.g. rain events, lab requests, facility shutdowns, etc.)
- c. The Contractor's data analyst shall be available for up to 8 hours, bi-weekly, to participate in bi-weekly person to person meetings at City facilities.
- d. The data analyst shall verify and certify that raw data (depth, velocity, and flow), for each monitor site, is accurate, unchanged, continuously on-line, and is accessible by City and PA staff on a daily basis.

6.2. Monitor Site Maintenance Reports

The Contractor shall provide a system to record and track service records for each of the monitor sites, refer to Section 5.g. (Documentation). The system shall provide online data with the following information:

- a. Site name
- b. Work order number
- c. Description of the problem or service at the monitor
- d. Date of site visit
- e. Date of completion for any work performed (including calibration data when sensors are replaced)

- f. List of parts used
- g. Name of the person requesting work to be performed
- h. Name of the person who performed the work

The Contractor shall maintain this data base in chronological order and provide historical data for each monitor site that has been serviced.

6.3. ENS Report Requirements

The ENS reports shall conform to the requirements identified in Section 3.0. The ENS report system shall be capable of being viewed, downloaded, and printed at all times and shall include the following:

- a. An online ENS alarm screen that shall provide the following information in chronological order:
 - (1) The identification of the site in alarm with a link, in a map and tabular format that will take the user to a screen that will allow the user to construct a hydrograph to investigate the alarm condition.
 - (2) Identify the type of alarm, i.e. Hi Level, Low Flow, or Battery Warning the type of alarm, i.e. Hi Level, Low Flow, or Battery Warning
 - (3) Identify the time of the alarm.
 - (4) Identify the time the alarm was acknowledged.
 - (5) Identify the name of the person acknowledging the alarm.
 - (6) Identify the time the alarm cleared.
 - (7) Provide a reset/refresh button to remove the alarm from the ENS screen. If the alarm does not clear, the Contractor shall remedy the problem immediately.
 - (8) Passwords shall be assigned to City staff to allow staff to access and use the ENS Alarm Screen.
- b. An Alarm History Report shall be created to report historical alarm data. The data shall be maintained in chronological order for each monitor site. This information will be available to everyone having access to the ENS alarm screen.
- c. The Contractor shall provide a system which allows City staff to quickly review real time hydrographs at monitor sites to show at least three days of flow data (depth, velocity, flow quantity, and battery level). The data shall show no less than three-hour increments of flow data. This information will be reviewed daily by City staff to assist in determining the operational status of each monitor site.

6.4. Engineering / Sewer Modeling Reports

The City will use the flow data to model flows to evaluate the wastewater collection system's capacity for a variety of flow conditions. The data recorded at the monitor sites are the primary data used to carry out these evaluations. As specified in Section 2.2.8 (Software and Server Requirements) the Contractor shall provide a system that will post data and permit the City to access that information in a variety of configurations. As a minimum the following information for each monitor site shall be online and available for use by the City for engineering and sewer modeling:

- a. Raw Depth and Velocity (un-edited data measured by the monitor sensors)
- b. Calculated Flow (Q) based on the Continuity Equation
- c. Provide the ability to view, in a graphical format, one data type (i.e. Depth) versus another data type (i.e. Q or velocity).
- d. Provide the ability to simultaneously download multiple monitor sites in a tabular CSV, txt, and Excel file format(s).
- e. Provide the ability to view and download data with user-defined intervals for time and date (5 minutes, 15 minutes, daily, weekly, monthly, yearly).

7. TRAINING

7.1. Training for Online Access

The Contractor shall provide training at City facilities for City and PA staff, which will allow staff to access, download and analyze flow data from the monitor sites. The Contractor shall provide an outline and handouts for each training session. The Contractor shall allow for sixteen (16) hours of training per month for the first six (6) months of the Agreement and eight (8) hours per month for the remainder of the Agreement duration. The training sessions shall not exceed four (4) hours per session.

7.2. Training for Monitor Service and Maintenance

The Contractor shall provide training to City staff for monitor service, replacement, repair and calibration. The Contractor shall provide an outline; handouts; operating, repair and parts manuals for the training. The Contractor shall provide a trainer who will train at City facilities and accompany City staff to the monitor sites to demonstrate the proper procedures for servicing, repairing, replacing and calibrating the sensors and monitors. The trainer shall instruct, observe and evaluate the performance of City staff to carry out the maintenance activities at the monitor site.

The Contractor shall perform up to ten (10) training sessions throughout the duration of the Agreement. The training will not exceed two days per session

8. SAFETY

The Contractor shall comply with the requirements of Cal OSHA, and the City of San Diego PUD Safety requirements. The Contractor shall identify a safety representative

who is located at San Diego to ensure compliance with safe working procedures. These duties shall include but not be limited to site inspections, incident investigation, employee training, preparation and updating site specific safety and health plans, preparation of Job Safety Analysis (JSA), enforcement of safety requirements, and reports as required by Cal OSHA and the City.

9. TEMPORARY MONITOR SITES

The Contractor shall install ten (10) new temporary ENS monitors provided by the city and relocate those 10 monitors each year. All new temporary monitors are to be incorporated into the ENS. The City will provide a list of trunk sewers that are proposed for temporary monitor installation in the first year. Future temporary monitor sites will be evaluated and identified on an annual basis with those locations identified in each year. The proposed manhole ID is preliminary and provided here as a general location. The installation and acceptance of the ten new temporary monitors shall be completed within 60 days of the Notice to Proceed date.

10. TRANSITION PLAN

The Contractor shall provide a comprehensive Transition Plan detailing the proposed migration from the current monitoring system. The transition plan shall ensure: continued maintenance of the existing monitors until the Contractor has completed the replacement/assessment of the existing meters; continued operation of and access to the ENS; continued access to data; installation and acceptance of the 10 new temporary monitor sites; and monitor site acceptance of all existing monitor sites. The plan shall provide specifics regarding schedule, manpower, equipment removal, equipment installation, software, data reporting, and training for City and PA staff. The schedule shall include milestones necessary for on-time completion of the transition. The transition plan shall explicitly state any requirements for input or assistance from the City or PAs.

The following are minimum requirements to be addressed in the Transition Plan:

- a. A fully functional and fully tested ENS providing both high level alarms and low flow alarming capabilities.
- b. Software installation at City and PA locations providing remote access to monitors and data reporting capabilities.
- c. Weekly meetings with City staff to report on project/transition status.
- d. If the proposed plan includes the continued use of the currently installed monitors, the Contractor shall verify the methodology for diagnostics, data downloads and integration with the ENS. In addition, the Contractor shall demonstrate the capability to repair, replace and maintain the currently installed monitors.
- e. If the proposed plan calls for the replacement of the current monitors, the Contractor shall provide a comprehensive schedule for monitor removal and replacement at current sites and priority sites.

- f. If the proposal includes a *phased* transition from current to alternative equipment, the Contractor shall provide a plan for operating the “dual” system.
- g. The Contractor shall specify the type and installation requirements of the telemetry proposed for remote access to monitor sites.
- h. Ongoing monitor maintenance.
- i. Establishment and support for a local office.
- j. Training for City and PA staff.

D. QUALIFICATIONS AND EXPERIENCE

Acceptable Contractors shall meet the following minimum qualifications:

1. Minimum 5 years of direct experience maintaining and monitoring sanitary sewer flow metering equipment with Contractor’s employees. Experience using contract or third-party employees is not acceptable.
2. Contractor shall have documented experience for providing sewer system flow monitoring services on at least three (3) different municipalities with a minimum of 100 flow monitoring stations, requiring similar services as required under this contract.
3. Contractor shall provide documentation of demonstrated experience maintaining the types of flow monitoring stations currently within the City system and the specified new flow monitoring stations.
4. Provide resumes for the proposed client manager and/or project manager, field engineer, and data collection manager.
5. Provide a minimum of three (3) positive references of previous work from three (3) different municipalities. References for previous works shall be for contracts of similar size and include the customer name, the primary contact name, telephone number, and email address, the annual dollar value of the contract, and a brief description of the services provided. These references shall demonstrate direct experience of the employees of the Contractor and not that of a contractor or third party. The City of San Diego cannot be used as a reference on a City solicitation.

E. DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER. Per Section II.A.9:

	Registration No.	Expiration Date	Name
DIR Registration No.	1000016715	6/30/2022	ADS Corp

F. LICENSES. To perform the work described in this solicitation, proposers must hold a current **General Contractor License**. The Contractor shall provide/perform traffic control for the installation of flow meters at locations that may require traffic control. Not all locations will require traffic control, but the Contractor must include traffic control for at least 1/3 of the metering sites in his/her proposal. The contractor shall, without additional expense to the City, be responsible for preparing traffic control plans and obtaining any necessary

permits for complying with municipal laws, codes, and regulations applicable to Contract performance. The Contractor will be compensated accordingly for any additional traffic control than specified above.

	License Number	Expiration Date	Name
State of California General Contractor License	Class A 911453	2/29/2024	ADS Corp.

Any proposer holding a different license who feels qualified to bid on this work must notify the City Contact in writing at least seven (7) days prior to the bid closing. After a thorough review of the proposed license substitution, the City will inform the proposer, in writing, of its decision prior to the bid closing. The City’s decision is final.

G. PERFORMANCE BOND

Contractor shall be required to furnish the City of San Diego with a surety bond executed by a surety company authorized to do business in the State of California, and approved by the City of San Diego, in a sum equal to one-hundred percent (100%) of the Contract amount, conditional for the performance of the Contract. The performance bond shall be submitted to Purchasing & Contracting within ten (10) days of request. Failure to provide the bond within the time frame specified by the City shall be cause for the bid to be rejected as non-responsive. The bond shall be maintained by the Contractor in full force and effect during the entire period of performance under Contract. Failure to do so shall be cause for termination of the Contract. Refer to Article VIII of the City’s Contracting Term’s and Provisions for additional information.

H. TECHNICAL REPRESENTATIVE.

The Technical Representative for this Contract is identified in the notice of award and is responsible for overseeing and monitoring this Contract.

I. PAYMENT CARD INDUSTRY DATA SECURITY DOCUMENTS

1. Contractor Certification. Contractor certifies that it will implement and at all times comply with the most current Payment Card Industry Data Security Standards (PCI DSS) regarding data security. Contractor will provide written annual confirmation of PCI DSS compliance from the credit card types used by the City (i.e. VISA, MasterCard, Discover, and American Express). Contractor will immediately notify the City if it undergoes, or has reason to believe that it will undergo, an adverse change resulting in the loss of compliance with the PCI DSS standards and/or other material payment card industry standards. In addition, Contractor shall provide payment card companies, acquiring financial institutions, and their respective designees required access to the Contractor's facilities and all pertinent records as deemed necessary by the City to verify Contractor's compliance with the PCI DSS requirements.

2. Data Security. Contractor acknowledges responsibility for the security of cardholder data as defined within PCI DSS standards. Contractor shall undergo independent third party quarterly system scans that audit for all known methods hackers use to access private information, in addition to vulnerabilities that would allow malicious software (i.e., viruses and worms) to gain access to or disrupt network devices. Upon request, Contractor

will provide the City's Chief Information Security Officer with copies of the quarterly scans for verification. Contractor will provide reasonable care and efforts to detect fraudulent credit card activity in connection with credit card transactions processed during the performance of this Contract.

3. Use of Data. Contractor acknowledges and agrees that Contractor may only use cardholder data for completing the work as described in the Contract Specifications consistent with PCI DSS standards or applicable law. Contractor shall maintain and protect in accordance with all applicable laws and PCI DSS standards the security of all cardholder data when performing the Services.

4. Notification Requirements. Contractor shall immediately notify the City's Chief Information Security Officer of any breach, intrusion, or unauthorized card access to allow the proper PCI DSS breach notification process to commence. Contractor agrees to assume responsibility for informing all affected individuals in accordance with applicable law. All notifications and required compliance documents regarding PCI DSS shall be sent to:

Chief Information Security Officer
1010 2nd Avenue, Suite 500
San Diego, CA 92101
Cybersecurity@sandiego.gov
619-533-4840

5. Indemnity. Contractor shall indemnify and hold harmless the City, its officers, and employees from and against any claims, loss, damages, or other harm related to a data security breach or Contractor's failure to maintain PCI DSS compliance standards.

J. PRICING SCHEDULE

Proposer must complete **Section A** of the Pricing Schedule (Attachment 1) in its entirety or the proposal may be deemed non-responsive. Each line item must include all costs associated with providing the required equipment, software, and services as specified within the RFP.

Section B (Additional Services) as described below shall be included with the bid submittal but will not be part of City's evaluation for award.

In addition to the scope of work outlined in this RFP, the City may ask the Contractor to provide additional services which will be directly related to the sewer flow monitoring for unforeseen conditions. This additional work will be evaluated by the City's Technical Representative and the Contractor to determine compensation.

ATTACHMENT 1
PRICING SCHEDULE

NOTE: ADS pricing on next page.

Section A: General				Initial Contract Term				Option Years					
Item No.	Description of Service	Qty.	U/M	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
				Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price
1	Monitor Server, Software, Servicing and Equipment. Includes testing and installation of the monitor system components. (Per Exhibit B; Section C - 2.2.2 Equipment and Software Requirements)	162	EA										
2	Event Notification System (ENS) (Per Exhibit B; Section C - 3)	1											
3	Additional Monitor Equipment, Maintenance, and Installation	1											
4.	Uninstall/Remove current flow monitoring equipment	162	EA										

Section B: Additional Services for Unforeseen Conditions					
Item	Description	Quantity	U/M	Unit Price	Extension
1	Additional Services	1	LOT	\$150,000.00	\$150,000.00

Tab C – Cost/Price Proposal

ATTACHMENT 1 PRICING SCHEDULE													
				Initial Contract Term				Option Years					
				YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
Item No.	Description of Service	Qty.	U/M	Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price
1	Monitor Server, Software, Servicing and Equipment. Includes testing and installation of the monitor system components. (Per Exhibit B; Section C - 2.2.2 Equipment and Software Requirements)	162	EA	\$ 8,313	\$ 1,346,706	\$ 8,313	\$ 1,346,706	\$ 8,527	\$ 1,381,406	\$ 8,792	\$ 1,424,369	\$ 9,051	\$ 1,466,223
2	Event Notification System (ENS) (Per Exhibit B; Section C - 3)	1		\$ 237,654	\$ 237,654	\$ 237,654	\$ 237,654	\$ 243,778	\$ 243,778	\$ 251,359	\$ 251,359	\$ 258,745	\$ 258,745
3	*Additional Monitor Equipment, Maintenance, and Installation	1		\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,800	\$ 12,800	\$ 13,250	\$ 13,250	\$ 13,650	\$ 13,650
4	**Uninstall/Remove current flow monitoring equipment	1		\$ 750	\$ 750	\$ 750	\$ 750	\$ 775	\$ 775	\$ 800	\$ 800	\$ 825	\$ 825

* Optional cost of installing an additional monitor above currently installed 162 meters.

** Optional cost to remove one (1) currently installed monitor if directed by City.

Section B: Additional Services for Unforeseen Conditions					
Item	Description	Quantity	U/M	Unit Price	Extension
1	Additional Services	1	LOT	\$150,000.00	\$150,000.00



THE CITY OF SAN DIEGO
GENERAL CONTRACT TERMS AND PROVISIONS
APPLICABLE TO GOODS, SERVICES, AND CONSULTANT CONTRACTS

ARTICLE I SCOPE AND TERM OF CONTRACT

1.1 Scope of Contract. The scope of contract between the City and a provider of goods and/or services (Contractor) is described in the Contract Documents. The Contract Documents are comprised of the Request for Proposal, Invitation to Bid, or other solicitation document (Solicitation); the successful bid or proposal; the letter awarding the contract to Contractor; the City's written acceptance of exceptions or clarifications to the Solicitation, if any; and these General Contract Terms and Provisions.

1.2 Effective Date. A contract between the City and Contractor (Contract) is effective on the last date that the contract is signed by the parties and approved by the City Attorney in accordance with Charter section 40. Unless otherwise terminated, this Contract is effective until it is completed or as otherwise agreed upon in writing by the parties, whichever is the earliest. A Contract term cannot exceed five (5) years unless approved by the City Council by ordinance.

1.3 Contract Extension. The City may, in its sole discretion, unilaterally exercise an option to extend the Contract as described in the Contract Documents. In addition, the City may, in its sole discretion, unilaterally extend the Contract on a month-to-month basis following contract expiration if authorized under Charter section 99 and the Contract Documents. Contractor shall not increase its pricing in excess of the percentage increase described in the Contract.

ARTICLE II CONTRACT ADMINISTRATOR

2.1 Contract Administrator. The Purchasing Agent or designee is the Contract Administrator for purposes of this Contract, and has the responsibilities described in this Contract, in the San Diego Charter, and in Chapter 2, Article 2, Divisions 5, 30, and 32.

2.1.1 Contractor Performance Evaluations. The Contract Administrator will evaluate Contractor's performance as often as the Contract Administrator deems necessary throughout the term of the contract. This evaluation will be based on criteria including the quality of goods or services, the timeliness of performance, and adherence to applicable laws, including prevailing wage and living wage. City will provide Contractors who receive an unsatisfactory rating with a copy of the evaluation and an opportunity to respond. City may consider final evaluations, including Contractor's response, in evaluating future proposals and bids for contract award.

2.2 Notices. Unless otherwise specified, in all cases where written notice is required under this Contract, service shall be deemed sufficient if the notice is personally delivered or deposited in the United States mail, with first class postage paid, attention to the Purchasing Agent. Proper notice is effective on the date of personal delivery or five (5) days after deposit in a United States postal mailbox unless provided otherwise in the Contract. Notices to the City shall be sent to:

Purchasing Agent
City of San Diego, Purchasing and Contracting Division
1200 3rd Avenue, Suite 200
San Diego, CA 92101-4195

ARTICLE III COMPENSATION

3.1 Manner of Payment. Contractor will be paid monthly, in arrears, for goods and/or services provided in accordance with the terms and provisions specified in the Contract.

3.2 Invoices.

3.2.1 Invoice Detail. Contractor's invoice must be on Contractor's stationary with Contractor's name, address, and remittance address if different. Contractor's invoice must have a date, an invoice number, a purchase order number, a description of the goods or services provided, and an amount due.

3.2.2 Service Contracts. Contractor must submit invoices for services to City by the 10th of the month following the month in which Contractor provided services. Invoices must include the address of the location where services were performed and the dates in which services were provided.

3.2.3 Goods Contracts. Contractor must submit invoices for goods to City within seven days of the shipment. Invoices must describe the goods provided.

3.2.4 Parts Contracts. Contractor must submit invoices for parts to City within seven calendar (7) days of the date the parts are shipped. Invoices must include the manufacturer of the part, manufacturer's published list price, percentage discount applied in accordance with Pricing Page(s), the net price to City, and an item description, quantity, and extension.

3.2.5 Extraordinary Work. City will not pay Contractor for extraordinary work unless Contractor receives prior written authorization from the Contract Administrator. Failure to do so will result in payment being withheld for services. If approved, Contractor will include an invoice that describes the work performed and the location where the work was performed, and a copy of the Contract Administrator's written authorization.

3.2.6 Reporting Requirements. Contractor must submit the following reports using the City's web-based contract compliance portal. Incomplete and/or delinquent reports may cause payment delays, non-payment of invoice, or both. For questions, please view the City's online tutorials on how to utilize the City's web-based contract compliance portal.

3.2.6.1 Monthly Employment Utilization Reports. Contractor and Contractor's subcontractors and suppliers must submit Monthly Employment Utilization Reports by the fifth (5th) day of the subsequent month.

3.2.6.2 Monthly Invoicing and Payments. Contractor and Contractor's subcontractors and suppliers must submit Monthly Invoicing and Payment Reports by the fifth (5th) day of the subsequent month.

3.3 Annual Appropriation of Funds. Contractor acknowledges that the Contract term may extend over multiple City fiscal years, and that work and compensation under this Contract is contingent on the City Council appropriating funding for and authorizing such work and compensation for those fiscal years. This Contract may be terminated at the end of the fiscal year for which sufficient funding is not appropriated and authorized. City is not obligated to pay Contractor for any amounts not duly appropriated and authorized by City Council.

3.4 Price Adjustments. Based on Contractor's written request and justification, the City may approve an increase in unit prices on Contractor's pricing pages consistent with the amount requested in the justification in an amount not to exceed the increase in the Consumer Price Index, San Diego Area, for All Urban Customers (CPI-U) as published by the Bureau of Labor Statistics, or 5.0%, whichever is less, during the preceding one year term. If the CPI-U is a negative number, then the unit prices shall not be adjusted for that option year (the unit prices will not be decreased). A negative CPI-U shall be counted against any subsequent increases in the CPI-U when calculating the unit prices for later option years. Contractor must provide such written request and justification no less than sixty days before the date in which City may exercise the option to renew the contract, or sixty days before the anniversary date of the Contract. Justification in support of the written request must include a description of the basis for the adjustment, the proposed effective date and reasons for said date, and the amount of the adjustment requested with documentation to support the requested change (e.g. CPI-U or 5.0%, whichever is less). City's approval of this request must be in writing.

ARTICLE IV SUSPENSION AND TERMINATION

4.1 City's Right to Suspend for Convenience. City may suspend all or any portion of Contractor's performance under this Contract at its sole option and for its convenience for a reasonable period of time not to exceed six (6) months. City must first give ten (10) days' written notice to Contractor of such suspension. City will pay to Contractor a sum equivalent to the reasonable value of the goods and/or services satisfactorily provided up to the date of suspension. City may rescind the suspension prior to or at six (6) months by providing Contractor with written notice of the rescission, at which time Contractor would be required to resume performance in compliance with the terms and provisions of this Contract. Contractor will be entitled to an extension of time to complete performance under the Contract equal to the length of the suspension unless otherwise agreed to in writing by the Parties.

4.2 City's Right to Terminate for Convenience. City may, at its sole option and for its convenience, terminate all or any portion of this Contract by giving thirty (30) days' written notice of such termination to Contractor. The termination of the Contract shall be effective upon receipt of the notice by Contractor. After termination of all or any portion of the Contract, Contractor shall: (1) immediately discontinue all affected performance (unless the notice directs otherwise); and (2) complete any and all additional work necessary for the orderly filing of

documents and closing of Contractor's affected performance under the Contract. After filing of documents and completion of performance, Contractor shall deliver to City all data, drawings, specifications, reports, estimates, summaries, and such other information and materials created or received by Contractor in performing this Contract, whether completed or in process. By accepting payment for completion, filing, and delivering documents as called for in this section, Contractor discharges City of all of City's payment obligations and liabilities under this Contract with regard to the affected performance.

4.3 City's Right to Terminate for Default. Contractor's failure to satisfactorily perform any obligation required by this Contract constitutes a default. Examples of default include a determination by City that Contractor has: (1) failed to deliver goods and/or perform the services of the required quality or within the time specified; (2) failed to perform any of the obligations of this Contract; and (3) failed to make sufficient progress in performance which may jeopardize full performance.

4.3.1 If Contractor fails to satisfactorily cure a default within ten (10) calendar days of receiving written notice from City specifying the nature of the default, City may immediately cancel and/or terminate this Contract, and terminate each and every right of Contractor, and any person claiming any rights by or through Contractor under this Contract.

4.3.2 If City terminates this Contract, in whole or in part, City may procure, upon such terms and in such manner as the Purchasing Agent may deem appropriate, equivalent goods or services and Contractor shall be liable to City for any excess costs. Contractor shall also continue performance to the extent not terminated.

4.4 Termination for Bankruptcy or Assignment for the Benefit of Creditors. If Contractor files a voluntary petition in bankruptcy, is adjudicated bankrupt, or makes a general assignment for the benefit of creditors, the City may at its option and without further notice to, or demand upon Contractor, terminate this Contract, and terminate each and every right of Contractor, and any person claiming rights by and through Contractor under this Contract.

4.5 Contractor's Right to Payment Following Contract Termination.

4.5.1 Termination for Convenience. If the termination is for the convenience of City an equitable adjustment in the Contract price shall be made. No amount shall be allowed for anticipated profit on unperformed services, and no amount shall be paid for an as needed contract beyond the Contract termination date.

4.5.2 Termination for Default. If, after City gives notice of termination for failure to fulfill Contract obligations to Contractor, it is determined that Contractor had not so failed, the termination shall be deemed to have been effected for the convenience of City. In such event, adjustment in the Contract price shall be made as provided in Section 4.3.2. City's rights and remedies are in addition to any other rights and remedies provided by law or under this Contract.

4.6 Remedies Cumulative. City's remedies are cumulative and are not intended to be exclusive of any other remedies or means of redress to which City may be lawfully entitled in case of any breach or threatened breach of any provision of this Contract.

ARTICLE V ADDITIONAL CONTRACTOR OBLIGATIONS

5.1 Inspection and Acceptance. The City will inspect and accept goods provided under this Contract at the shipment destination unless specified otherwise. Inspection will be made and acceptance will be determined by the City department shown in the shipping address of the Purchase Order or other duly authorized representative of City.

5.2 Responsibility for Lost or Damaged Shipments. Contractor bears the risk of loss or damage to goods prior to the time of their receipt and acceptance by City. City has no obligation to accept damaged shipments and reserves the right to return damaged goods, at Contractor's sole expense, even if the damage was not apparent or discovered until after receipt.

5.3 Responsibility for Damages. Contractor is responsible for all damage that occurs as a result of Contractor's fault or negligence or that of its' employees, agents, or representatives in connection with the performance of this Contract. Contractor shall immediately report any such damage to people and/or property to the Contract Administrator.

5.4 Delivery. Delivery shall be made on the delivery day specified in the Contract Documents. The City, in its sole discretion, may extend the time for delivery. The City may order, in writing, the suspension, delay or interruption of delivery of goods and/or services.

5.5 Delay. Unless otherwise specified herein, time is of the essence for each and every provision of the Contract. Contractor must immediately notify City in writing if there is, or it is anticipated that there will be, a delay in performance. The written notice must explain the cause for the delay and provide a reasonable estimate of the length of the delay. City may terminate this Contract as provided herein if City, in its sole discretion, determines the delay is material.

5.5.1 If a delay in performance is caused by any unforeseen event(s) beyond the control of the parties, City may allow Contractor to a reasonable extension of time to complete performance, but Contractor will not be entitled to damages or additional compensation. Any such extension of time must be approved in writing by City. The following conditions may constitute such a delay: war; changes in law or government regulation; labor disputes; strikes; fires, floods, adverse weather or other similar condition of the elements necessitating cessation of the performance; inability to obtain materials, equipment or labor; or other specific reasons agreed to between City and Contractor. This provision does not apply to a delay caused by Contractor's acts or omissions. Contractor is not entitled to an extension of time to perform if a delay is caused by Contractor's inability to obtain materials, equipment, or labor unless City has received, in a timely manner, documentary proof satisfactory to City of Contractor's inability to obtain materials, equipment, or labor, in which case City's approval must be in writing.

5.6 Restrictions and Regulations Requiring Contract Modification. Contractor shall immediately notify City in writing of any regulations or restrictions that may or will require Contractor to alter the material, quality, workmanship, or performance of the goods and/or services to be provided. City reserves the right to accept any such alteration, including any resulting reasonable price adjustments, or to cancel the Contract at no expense to the City.

5.7 Warranties. All goods and/or services provided under the Contract must be warranted by Contractor or manufacturer for at least twelve (12) months after acceptance by City, except automotive equipment. Automotive equipment must be warranted for a minimum of 12,000 miles or 12 months, whichever occurs first, unless otherwise stated in the Contract. Contractor is responsible to City for all warranty service, parts, and labor. Contractor is required to ensure that warranty work is performed at a facility acceptable to City and that services, parts, and labor are available and provided to meet City's schedules and deadlines. Contractor may establish a warranty service contract with an agency satisfactory to City instead of performing the warranty service itself. If Contractor is not an authorized service center and causes any damage to equipment being serviced, which results in the existing warranty being voided, Contractor will be liable for all costs of repairs to the equipment, or the costs of replacing the equipment with new equipment that meets City's operational needs.

5.8 Industry Standards. Contractor shall provide goods and/or services acceptable to City in strict conformance with the Contract. Contractor shall also provide goods and/or services in accordance with the standards customarily adhered to by an experienced and competent provider of the goods and/or services called for under this Contract using the degree of care and skill ordinarily exercised by reputable providers of such goods and/or services. Where approval by City, the Mayor, or other representative of City is required, it is understood to be general approval only and does not relieve Contractor of responsibility for complying with all applicable laws, codes, policies, regulations, and good business practices.

5.9 Records Retention and Examination. Contractor shall retain, protect, and maintain in an accessible location all records and documents, including paper, electronic, and computer records, relating to this Contract for five (5) years after receipt of final payment by City under this Contract. Contractor shall make all such records and documents available for inspection, copying, or other reproduction, and auditing by authorized representatives of City, including the Purchasing Agent or designee. Contractor shall make available all requested data and records at reasonable locations within City or County of San Diego at any time during normal business hours, and as often as City deems necessary. If records are not made available within the City or County of San Diego, Contractor shall pay City's travel costs to the location where the records are maintained and shall pay for all related travel expenses. Failure to make requested records available for inspection, copying, or other reproduction, or auditing by the date requested may result in termination of the Contract. Contractor must include this provision in all subcontracts made in connection with this Contract.

5.9.1 Contractor shall maintain records of all subcontracts entered into with all firms, all project invoices received from Subcontractors and Suppliers, all purchases of materials and services from Suppliers, and all joint venture participation. Records shall show name, telephone number including area code, and business address of each Subcontractor and Supplier, and joint venture partner, and the total amount actually paid to each firm. Project relevant records, regardless of tier, may be periodically reviewed by the City.

5.10 Quality Assurance Meetings. Upon City's request, Contractor shall schedule one or more quality assurance meetings with City's Contract Administrator to discuss Contractor's performance. If requested, Contractor shall schedule the first quality assurance meeting no later than eight (8) weeks from the date of commencement of work under the Contract. At the quality assurance meeting(s), City's Contract Administrator will provide Contractor with feedback, will note any deficiencies in Contract performance, and provide Contractor with an opportunity to address and correct such deficiencies. The total number of quality assurance meetings that may be required by City will depend upon Contractor's performance.

5.11 Duty to Cooperate with Auditor. The City Auditor may, in his sole discretion, at no cost to the City, and for purposes of performing his responsibilities under Charter section 39.2, review Contractor's records to confirm contract compliance. Contractor shall make reasonable efforts to cooperate with Auditor's requests.

5.12 Safety Data Sheets. If specified by City in the solicitation or otherwise required by this Contract, Contractor must send with each shipment one (1) copy of the Safety Data Sheet (SDS) for each item shipped. Failure to comply with this procedure will be cause for immediate termination of the Contract for violation of safety procedures.

5.13 Project Personnel. Except as formally approved by the City, the key personnel identified in Contractor's bid or proposal shall be the individuals who will actually complete the work. Changes in staffing must be reported in writing and approved by the City.

5.13.1 Criminal Background Certification. Contractor certifies that all employees working on this Contract have had a criminal background check and that said employees are clear of any sexual and drug related convictions. Contractor further certifies that all employees hired by Contractor or a subcontractor shall be free from any felony convictions.

5.13.2 Photo Identification Badge. Contractor shall provide a company photo identification badge to any individual assigned by Contractor or subcontractor to perform services or deliver goods on City premises. Such badge must be worn at all times while on City premises. City reserves the right to require Contractor to pay fingerprinting fees for personnel assigned to work in sensitive areas. All employees shall turn in their photo identification badges to Contractor upon completion of services and prior to final payment of invoice.

5.14 Standards of Conduct. Contractor is responsible for maintaining standards of employee competence, conduct, courtesy, appearance, honesty, and integrity satisfactory to the City.

5.14.1 Supervision. Contractor shall provide adequate and competent supervision at all times during the Contract term. Contractor shall be readily available to meet with the City. Contractor shall provide the telephone numbers where its representative(s) can be reached.

5.14.2 City Premises. Contractor's employees and agents shall comply with all City rules and regulations while on City premises.

5.14.3 Removal of Employees. City may request Contractor immediately remove from assignment to the City any employee found unfit to perform duties at the City. Contractor shall comply with all such requests.

5.15 Licenses and Permits. Contractor shall, without additional expense to the City, be responsible for obtaining any necessary licenses, permits, certifications, accreditations, fees and approvals for complying with any federal, state, county, municipal, and other laws, codes, and regulations applicable to Contract performance. This includes, but is not limited to, any laws or regulations requiring the use of licensed contractors to perform parts of the work.

5.16 Contractor and Subcontractor Registration Requirements. Prior to the award of the Contract or Task Order, Contractor and Contractor's subcontractors and suppliers must register with the City's web-based vendor registration and bid management system. The City may not award the Contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified by the City, the City reserves the right to rescind the Contract award and to make the award to the next responsive and responsible proposer of bidder.

ARTICLE VI INTELLECTUAL PROPERTY RIGHTS

6.1 Rights in Data. If, in connection with the services performed under this Contract, Contractor or its employees, agents, or subcontractors, create artwork, audio recordings, blueprints, designs, diagrams, documentation, photographs, plans, reports, software, source code, specifications, surveys, system designs, video recordings, or any other original works of authorship, whether written or readable by machine (Deliverable Materials), all rights of Contractor or its subcontractors in the Deliverable Materials, including, but not limited to publication, and registration of copyrights, and trademarks in the Deliverable Materials, are the sole property of City. Contractor, including its employees, agents, and subcontractors, may not use any Deliverable Material for purposes unrelated to Contractor's work on behalf of the City without prior written consent of City. Contractor may not publish or reproduce any Deliverable Materials, for purposes unrelated to Contractor's work on behalf of the City, without the prior written consent of the City.

6.2 Intellectual Property Rights Assignment. For no additional compensation, Contractor hereby assigns to City all of Contractor's rights, title, and interest in and to the content of the Deliverable Materials created by Contractor or its employees, agents, or subcontractors, including copyrights, in connection with the services performed under this Contract. Contractor

shall promptly execute and deliver, and shall cause its employees, agents, and subcontractors to promptly execute and deliver, upon request by the City or any of its successors or assigns at any time and without further compensation of any kind, any power of attorney, assignment, application for copyright, patent, trademark or other intellectual property right protection, or other papers or instruments which may be necessary or desirable to fully secure, perfect or otherwise protect to or for the City, its successors and assigns, all right, title and interest in and to the content of the Deliverable Materials. Contractor also shall cooperate and assist in the prosecution of any action or opposition proceeding involving such intellectual property rights and any adjudication of those rights.

6.3 Contractor Works. Contractor Works means tangible and intangible information and material that: (a) had already been conceived, invented, created, developed or acquired by Contractor prior to the effective date of this Contract; or (b) were conceived, invented, created, or developed by Contractor after the effective date of this Contract, but only to the extent such information and material do not constitute part or all of the Deliverable Materials called for in this Contract. All Contractor Works, and all modifications or derivatives of such Contractor Works, including all intellectual property rights in or pertaining to the same, shall be owned solely and exclusively by Contractor.

6.4 Subcontracting. In the event that Contractor utilizes a subcontractor(s) for any portion of the work that comprises the whole or part of the specified Deliverable Materials to the City, the agreement between Contractor and the subcontractor shall include a statement that identifies the Deliverable Materials as a “works for hire” as described in the United States Copyright Act of 1976, as amended, and that all intellectual property rights in the Deliverable Materials, whether arising in copyright, trademark, service mark or other forms of intellectual property rights, belong to and shall vest solely with the City. Further, the agreement between Contractor and its subcontractor shall require that the subcontractor, if necessary, shall grant, transfer, sell and assign, free of charge, exclusively to City, all titles, rights and interests in and to the Deliverable Materials, including all copyrights, trademarks and other intellectual property rights. City shall have the right to review any such agreement for compliance with this provision.

6.5 Intellectual Property Warranty and Indemnification. Contractor represents and warrants that any materials or deliverables, including all Deliverable Materials, provided under this Contract are either original, or not encumbered, and do not infringe upon the copyright, trademark, patent or other intellectual property rights of any third party, or are in the public domain. If Deliverable Materials provided hereunder become the subject of a claim, suit or allegation of copyright, trademark or patent infringement, City shall have the right, in its sole discretion, to require Contractor to produce, at Contractor’s own expense, new non-infringing materials, deliverables or works as a means of remedying any claim of infringement in addition to any other remedy available to the City under law or equity. Contractor further agrees to indemnify, defend, and hold harmless the City, its officers, employees and agents from and against any and all claims, actions, costs, judgments or damages, of any type, alleging or threatening that any Deliverable Materials, supplies, equipment, services or works provided under this contract infringe the copyright, trademark, patent or other intellectual property or proprietary rights of any third party (Third Party Claim of Infringement). If a Third Party Claim

of Infringement is threatened or made before Contractor receives payment under this Contract, City shall be entitled, upon written notice to Contractor, to withhold some or all of such payment.

6.6 Software Licensing. Contractor represents and warrants that the software, if any, as delivered to City, does not contain any program code, virus, worm, trap door, back door, time or clock that would erase data or programming or otherwise cause the software to become inoperable, inaccessible, or incapable of being used in accordance with its user manuals, either automatically, upon the occurrence of licensor-selected conditions or manually on command. Contractor further represents and warrants that all third party software, delivered to City or used by Contractor in the performance of the Contract, is fully licensed by the appropriate licensor.

6.7 Publication. Contractor may not publish or reproduce any Deliverable Materials, for purposes unrelated to Contractor's work on behalf of the City without prior written consent from the City.

6.8 Royalties, Licenses, and Patents. Unless otherwise specified, Contractor shall pay all royalties, license, and patent fees associated with the goods that are the subject of this solicitation. Contractor warrants that the goods, materials, supplies, and equipment to be supplied do not infringe upon any patent, trademark, or copyright, and further agrees to defend any and all suits, actions and claims for infringement that are brought against the City, and to defend, indemnify and hold harmless the City, its elected officials, officers, and employees from all liability, loss and damages, whether general, exemplary or punitive, suffered as a result of any actual or claimed infringement asserted against the City, Contractor, or those furnishing goods, materials, supplies, or equipment to Contractor under the Contract.

ARTICLE VII INDEMNIFICATION AND INSURANCE

7.1 Indemnification. To the fullest extent permitted by law, Contractor shall defend (with legal counsel reasonably acceptable to City), indemnify, protect, and hold harmless City and its elected officials, officers, employees, agents, and representatives (Indemnified Parties) from and against any and all claims, losses, costs, damages, injuries (including, without limitation, injury to or death of an employee of Contractor or its subcontractors), expense, and liability of every kind, nature and description (including, without limitation, incidental and consequential damages, court costs, and litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigation) that arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, any goods provided or performance of services under this Contract by Contractor, any subcontractor, anyone directly or indirectly employed by either of them, or anyone that either of them control. Contractor's duty to defend, indemnify, protect and hold harmless shall not include any claims or liabilities arising from the sole negligence or willful misconduct of the Indemnified Parties.

7.2 Insurance. Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or

in connection with the performance of the work hereunder and the results of that work by Contractor, his agents, representatives, employees or subcontractors.

Contractor shall provide, at a minimum, the following:

7.2.1 Commercial General Liability. Insurance Services Office Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury, and personal and advertising injury with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

7.2.2 Commercial Automobile Liability. Insurance Services Office Form Number CA 0001 covering Code 1 (any auto) or, if Contractor has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than \$1,000,000 per accident for bodily injury and property damage.

7.2.3 Workers' Compensation. Insurance as required by the State of California, with Statutory Limits, and Employer’s Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.

7.2.4 Professional Liability (Errors and Omissions). For consultant contracts, insurance appropriate to Consultant’s profession, with limit no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

If Contractor maintains broader coverage and/or higher limits than the minimums shown above, City requires and shall be entitled to the broader coverage and/or the higher limits maintained by Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to City.

7.2.5 Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

7.2.5.1 Additional Insured Status. The City, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to Contractor’s insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 if a later edition is used).

7.2.5.2 Primary Coverage. For any claims related to this contract, Contractor's insurance coverage shall be primary coverage at least as broad as ISO CG 20 01 04 13 as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by City, its officers, officials, employees, or volunteers shall be excess of Contractor's insurance and shall not contribute with it.

7.2.5.3 Notice of Cancellation. Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to City.

7.2.5.4 Waiver of Subrogation. Contractor hereby grants to City a waiver of any right to subrogation which the Workers' Compensation insurer of said Contractor may acquire against City by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

7.2.5.5 Claims Made Policies (applicable only to professional liability). The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, Contractor must purchase "extended reporting" coverage for a minimum of five (5) years after completion of work.

7.3 Self Insured Retentions. Self-insured retentions must be declared to and approved by City. City may require Contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

7.4 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-VI, unless otherwise acceptable to City.

City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State of California and is included on the List of Approved Surplus Lines Insurers (LASLI list). All policies of insurance carried by non-admitted carriers are subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

7.5 Verification of Coverage. Contractor shall furnish City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive Contractor's obligation to provide them. City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

7.6 Special Risks or Circumstances. City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

7.7 Additional Insurance. Contractor may obtain additional insurance not required by this Contract.

7.8 Excess Insurance. All policies providing excess coverage to City shall follow the form of the primary policy or policies including but not limited to all endorsements.

7.9 Subcontractors. Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City is an additional insured on insurance required from subcontractors. For CGL coverage, subcontractors shall provide coverage with a format at least as broad as the CG 20 38 04 13 endorsement.

ARTICLE VIII BONDS

8.1 Payment and Performance Bond. Prior to the execution of this Contract, City may require Contractor to post a payment and performance bond (Bond). The Bond shall guarantee Contractor's faithful performance of this Contract and assure payment to contractors, subcontractors, and to persons furnishing goods and/or services under this Contract.

8.1.1 Bond Amount. The Bond shall be in a sum equal to twenty-five percent (25%) of the Contract amount, unless otherwise stated in the Specifications. City may file a claim against the Bond if Contractor fails or refuses to fulfill the terms and provisions of the Contract.

8.1.2 Bond Term. The Bond shall remain in full force and effect at least until complete performance of this Contract and payment of all claims for materials and labor, at which time it will convert to a ten percent (10%) warranty bond, which shall remain in place until the end of the warranty periods set forth in this Contract. The Bond shall be renewed annually, at least sixty (60) days in advance of its expiration, and Contractor shall provide timely proof of annual renewal to City.

8.1.3 Bond Surety. The Bond must be furnished by a company authorized by the State of California Department of Insurance to transact surety business in the State of California and which has a current A.M. Best rating of at least "A-, VIII."

8.1.4 Non-Renewal or Cancellation. The Bond must provide that City and Contractor shall be provided with sixty (60) days' advance written notice in the event of non-renewal, cancellation, or material change to its terms. In the event of non-renewal, cancellation, or material change to the Bond terms, Contractor shall provide City with evidence of the new source of surety within twenty-one (21) calendar days after the date of the notice of non-renewal, cancellation, or material change. Failure to maintain the Bond, as required herein, in full force

and effect as required under this Contract, will be a material breach of the Contract subject to termination of the Contract.

8.2 Alternate Security. City may, at its sole discretion, accept alternate security in the form of an endorsed certificate of deposit, a money order, a certified check drawn on a solvent bank, or other security acceptable to the Purchasing Agent in an amount equal to the required Bond.

ARTICLE IX CITY-MANDATED CLAUSES AND REQUIREMENTS

9.1 Contractor Certification of Compliance. By signing this Contract, Contractor certifies that Contractor is aware of, and will comply with, these City-mandated clauses throughout the duration of the Contract.

9.1.1 Drug-Free Workplace Certification. Contractor shall comply with City's Drug-Free Workplace requirements set forth in Council Policy 100-17, which is incorporated into the Contract by this reference.

9.1.2 Contractor Certification for Americans with Disabilities Act (ADA) and State Access Laws and Regulations: Contractor shall comply with all accessibility requirements under the ADA and under Title 24 of the California Code of Regulations (Title 24). When a conflict exists between the ADA and Title 24, Contractor shall comply with the most restrictive requirement (i.e., that which provides the most access). Contractor also shall comply with the City's ADA Compliance/City Contractors requirements as set forth in Council Policy 100-04, which is incorporated into this Contract by reference. Contractor warrants and certifies compliance with all federal and state access laws and regulations and further certifies that any subcontract agreement for this contract contains language which indicates the subcontractor's agreement to abide by the provisions of the City's Council Policy and any applicable access laws and regulations.

9.1.3 Non-Discrimination Requirements.

9.1.3.1 Compliance with City's Equal Opportunity Contracting Program (EOCP). Contractor shall comply with City's EOCP Requirements. Contractor shall not discriminate against any employee or applicant for employment on any basis prohibited by law. Contractor shall provide equal opportunity in all employment practices. Prime Contractors shall ensure that their subcontractors comply with this program. Nothing in this Section shall be interpreted to hold a Prime Contractor liable for any discriminatory practice of its subcontractors.

9.1.3.2 Non-Discrimination Ordinance. Contractor shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring or treatment of subcontractors, vendors or suppliers. Contractor shall provide equal opportunity for subcontractors to participate in subcontracting opportunities. Contractor understands and agrees that violation of this clause shall be considered a material breach of the Contract and may result

in Contract termination, debarment, or other sanctions. Contractor shall ensure that this language is included in contracts between Contractor and any subcontractors, vendors and suppliers.

9.1.3.3 Compliance Investigations. Upon City's request, Contractor agrees to provide to City, within sixty calendar days, a truthful and complete list of the names of all subcontractors, vendors, and suppliers that Contractor has used in the past five years on any of its contracts that were undertaken within San Diego County, including the total dollar amount paid by Contractor for each subcontract or supply contract. Contractor further agrees to fully cooperate in any investigation conducted by City pursuant to City's Nondiscrimination in Contracting Ordinance. Contractor understands and agrees that violation of this clause shall be considered a material breach of the Contract and may result in Contract termination, debarment, and other sanctions.

9.1.4 Equal Benefits Ordinance Certification. Unless an exception applies, Contractor shall comply with the Equal Benefits Ordinance (EBO) codified in the San Diego Municipal Code (SDMC). Failure to maintain equal benefits is a material breach of the Contract.

9.1.5 Contractor Standards. Contractor shall comply with Contractor Standards provisions codified in the SDMC. Contractor understands and agrees that violation of Contractor Standards may be considered a material breach of the Contract and may result in Contract termination, debarment, and other sanctions.

9.1.6 Noise Abatement. Contractor shall operate, conduct, or construct without violating the City's Noise Abatement Ordinance codified in the SDMC.

9.1.7 Storm Water Pollution Prevention Program. Contractor shall comply with the City's Storm Water Management and Discharge Control provisions codified in Division 3 of Chapter 4 of the SDMC, as may be amended, and any and all applicable Best Management Practice guidelines and pollution elimination requirements in performing or delivering services at City owned, leased, or managed property, or in performance of services and activities on behalf of City regardless of location.

Contractor shall comply with the City's Jurisdictional Urban Runoff Management Plan encompassing Citywide programs and activities designed to prevent and reduce storm water pollution within City boundaries as adopted by the City Council on January 22, 2008, via Resolution No. 303351, as may be amended.

Contractor shall comply with each City facility or work site's Storm Water Pollution Prevention Plan, as applicable, and institute all controls needed while completing the services to minimize any negative impact to the storm water collection system and environment.

9.1.8 Service Worker Retention Ordinance. If applicable, Contractor shall comply with the Service Worker Retention Ordinance (SWRO) codified in the SDMC.

9.1.9 Product Endorsement. Contractor shall comply with Council Policy 000-41 which requires that other than listing the City as a client and other limited endorsements, any advertisements, social media, promotions or other marketing referring to the City as a user of a product or service will require prior written approval of the Mayor or designee. Use of the City Seal or City logos is prohibited.

9.1.10 Business Tax Certificate. Unless the City Treasurer determines in writing that a contractor is exempt from the payment of business tax, any contractor doing business with the City of San Diego is required to obtain a Business Tax Certificate (BTC) and to provide a copy of its BTC to the City before a Contract is executed.

9.1.11 Equal Pay Ordinance. Unless an exception applies, Contractor shall comply with the Equal Pay Ordinance codified in San Diego Municipal Code sections 22.4801 through 22.4809. Contractor shall certify in writing that it will comply with the requirements of the EPO.

9.1.11.1 Contractor and Subcontract Requirement. The Equal Pay Ordinance applies to any subcontractor who performs work on behalf of a Contractor to the same extent as it would apply to that Contractor. Any Contractor subject to the Equal Pay Ordinance shall require all of its subcontractors to certify compliance with the Equal Pay Ordinance in its written subcontracts.

ARTICLE X CONFLICT OF INTEREST AND VIOLATIONS OF LAW

10.1 Conflict of Interest Laws. Contractor is subject to all federal, state and local conflict of interest laws, regulations, and policies applicable to public contracts and procurement practices including, but not limited to, California Government Code sections 1090, *et. seq.* and 81000, *et. seq.*, and the Ethics Ordinance, codified in the SDMC. City may determine that Contractor must complete one or more statements of economic interest disclosing relevant financial interests. Upon City's request, Contractor shall submit the necessary documents to City.

10.2 Contractor's Responsibility for Employees and Agents. Contractor is required to establish and make known to its employees and agents appropriate safeguards to prohibit employees from using their positions for a purpose that is, or that gives the appearance of being, motivated by the desire for private gain for themselves or others, particularly those with whom they have family, business or other relationships.

10.3 Contractor's Financial or Organizational Interests. In connection with any task, Contractor shall not recommend or specify any product, supplier, or contractor with whom Contractor has a direct or indirect financial or organizational interest or relationship that would violate conflict of interest laws, regulations, or policies.

10.4 Certification of Non-Collusion. Contractor certifies that: (1) Contractor's bid or proposal was not made in the interest of or on behalf of any person, firm, or corporation not identified; (2) Contractor did not directly or indirectly induce or solicit any other bidder or proposer to put in a sham bid or proposal; (3) Contractor did not directly or indirectly induce or

solicit any other person, firm or corporation to refrain from bidding; and (4) Contractor did not seek by collusion to secure any advantage over the other bidders or proposers.

10.5 Hiring City Employees. This Contract shall be unilaterally and immediately terminated by City if Contractor employs an individual who within the twelve (12) months immediately preceding such employment did in his/her capacity as a City officer or employee participate in negotiations with or otherwise have an influence on the selection of Contractor.

ARTICLE XI DISPUTE RESOLUTION

11.1 Mediation. If a dispute arises out of or relates to this Contract and cannot be settled through normal contract negotiations, Contractor and City shall use mandatory non-binding mediation before having recourse in a court of law.

11.2 Selection of Mediator. A single mediator that is acceptable to both parties shall be used to mediate the dispute. The mediator will be knowledgeable in the subject matter of this Contract, if possible.

11.3 Expenses. The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator, and the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the parties, unless they agree otherwise.

11.4 Conduct of Mediation Sessions. Mediation hearings will be conducted in an informal manner and discovery will not be allowed. The discussions, statements, writings and admissions will be confidential to the proceedings (pursuant to California Evidence Code sections 1115 through 1128) and will not be used for any other purpose unless otherwise agreed by the parties in writing. The parties may agree to exchange any information they deem necessary. Both parties shall have a representative attend the mediation who is authorized to settle the dispute, though City's recommendation of settlement may be subject to the approval of the Mayor and City Council. Either party may have attorneys, witnesses or experts present.

11.5 Mediation Results. Any agreements resulting from mediation shall be memorialized in writing. The results of the mediation shall not be final or binding unless otherwise agreed to in writing by the parties. Mediators shall not be subject to any subpoena or liability, and their actions shall not be subject to discovery.

ARTICLE XII MANDATORY ASSISTANCE

12.1 Mandatory Assistance. If a third party dispute or litigation, or both, arises out of, or relates in any way to the services provided to the City under a Contract, Contractor, its agents, officers, and employees agree to assist in resolving the dispute or litigation upon City's request. Contractor's assistance includes, but is not limited to, providing professional consultations,

attending mediations, arbitrations, depositions, trials or any event related to the dispute resolution and/or litigation.

12.2 Compensation for Mandatory Assistance. City will compensate Contractor for fees incurred for providing Mandatory Assistance. If, however, the fees incurred for the Mandatory Assistance are determined, through resolution of the third party dispute or litigation, or both, to be attributable in whole, or in part, to the acts or omissions of Contractor, its agents, officers, and employees, Contractor shall reimburse City for all fees paid to Contractor, its agents, officers, and employees for Mandatory Assistance.

12.3 Attorneys' Fees Related to Mandatory Assistance. In providing City with dispute or litigation assistance, Contractor or its agents, officers, and employees may incur expenses and/or costs. Contractor agrees that any attorney fees it may incur as a result of assistance provided under Section 12.2 are not reimbursable.

ARTICLE XIII MISCELLANEOUS

13.1 Headings. All headings are for convenience only and shall not affect the interpretation of this Contract.

13.2 Non-Assignment. Contractor may not assign the obligations under this Contract, whether by express assignment or by sale of the company, nor any monies due or to become due under this Contract, without City's prior written approval. Any assignment in violation of this paragraph shall constitute a default and is grounds for termination of this Contract at the City's sole discretion. In no event shall any putative assignment create a contractual relationship between City and any putative assignee.

13.3 Independent Contractors. Contractor and any subcontractors employed by Contractor are independent contractors and not agents of City. Any provisions of this Contract that may appear to give City any right to direct Contractor concerning the details of performing or providing the goods and/or services, or to exercise any control over performance of the Contract, shall mean only that Contractor shall follow the direction of City concerning the end results of the performance.

13.4 Subcontractors. All persons assigned to perform any work related to this Contract, including any subcontractors, are deemed to be employees of Contractor, and Contractor shall be directly responsible for their work.

13.5 Covenants and Conditions. All provisions of this Contract expressed as either covenants or conditions on the part of City or Contractor shall be deemed to be both covenants and conditions.

13.6 Compliance with Controlling Law. Contractor shall comply with all applicable local, state, and federal laws, regulations, and policies. Contractor's act or omission in violation of applicable local, state, and federal laws, regulations, and policies is grounds for contract

termination. In addition to all other remedies or damages allowed by law, Contractor is liable to City for all damages, including costs for substitute performance, sustained as a result of the violation. In addition, Contractor may be subject to suspension, debarment, or both.

13.7 Governing Law. The Contract shall be deemed to be made under, construed in accordance with, and governed by the laws of the State of California without regard to the conflicts or choice of law provisions thereof.

13.8 Venue. The venue for any suit concerning solicitations or the Contract, the interpretation of application of any of its terms and conditions, or any related disputes shall be in the County of San Diego, State of California.

13.9 Successors in Interest. This Contract and all rights and obligations created by this Contract shall be in force and effect whether or not any parties to the Contract have been succeeded by another entity, and all rights and obligations created by this Contract shall be vested and binding on any party's successor in interest.

13.10 No Waiver. No failure of either City or Contractor to insist upon the strict performance by the other of any covenant, term or condition of this Contract, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this Contract, shall constitute a waiver of any such breach of such covenant, term or condition. No waiver of any breach shall affect or alter this Contract, and each and every covenant, condition, and term hereof shall continue in full force and effect without respect to any existing or subsequent breach.

13.11 Severability. The unenforceability, invalidity, or illegality of any provision of this Contract shall not render any other provision of this Contract unenforceable, invalid, or illegal.

13.12 Drafting Ambiguities. The parties acknowledge that they have the right to be advised by legal counsel with respect to the negotiations, terms and conditions of this Contract, and the decision of whether to seek advice of legal counsel with respect to this Contract is the sole responsibility of each party. This Contract shall not be construed in favor of or against either party by reason of the extent to which each party participated in the drafting of the Contract.

13.13 Amendments. Neither this Contract nor any provision hereof may be changed, modified, amended or waived except by a written agreement executed by duly authorized representatives of City and Contractor. Any alleged oral amendments have no force or effect. The Purchasing Agent must sign all Contract amendments.

13.14 Conflicts Between Terms. If this Contract conflicts with an applicable local, state, or federal law, regulation, or court order, applicable local, state, or federal law, regulation, or court order shall control. Varying degrees of stringency among the main body of this Contract, the exhibits or attachments, and laws, regulations, or orders are not deemed conflicts, and the most stringent requirement shall control. Each party shall notify the other immediately upon the identification of any apparent conflict or inconsistency concerning this Contract.

13.15 Survival of Obligations. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with this Contract, as well as all continuing obligations indicated in this Contract, shall survive, completion and acceptance of performance and termination, expiration or completion of the Contract.

13.16 Confidentiality of Services. All services performed by Contractor, and any sub-contractor(s) if applicable, including but not limited to all drafts, data, information, correspondence, proposals, reports of any nature, estimates compiled or composed by Contractor, are for the sole use of City, its agents, and employees. Neither the documents nor their contents shall be released by Contractor or any subcontractor to any third party without the prior written consent of City. This provision does not apply to information that: (1) was publicly known, or otherwise known to Contractor, at the time it was disclosed to Contractor by City; (2) subsequently becomes publicly known through no act or omission of Contractor; or (3) otherwise becomes known to Contractor other than through disclosure by City.

13.17 Insolvency. If Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the Contract, written notification of the bankruptcy to the Purchasing Agent and the Contract Administrator responsible for administering the Contract. This notification shall be furnished within five (5) days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of City contract numbers and contracting offices for all City contracts against which final payment has not been made. This obligation remains in effect until final payment is made under this Contract.

13.18 No Third Party Beneficiaries. Except as may be specifically set forth in this Contract, none of the provisions of this Contract are intended to benefit any third party not specifically referenced herein. No party other than City and Contractor shall have the right to enforce any of the provisions of this Contract.

13.19 Actions of City in its Governmental Capacity. Nothing in this Contract shall be interpreted as limiting the rights and obligations of City in its governmental or regulatory capacity.

**WAGE REQUIREMENTS: SERVICE AND MAINTENANCE CONTRACTS EXECUTED ON OR
AFTER JANUARY 1, 2015**

By signing this Contract, Bidder certifies that he or she is aware of the wage provisions described herein and shall comply with such provisions before commencing services.

A. PREVAILING WAGES. Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, Bidder and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below. This requirement is in addition to the requirement to pay Living Wage pursuant to San Diego Municipal Code Chapter 2, Article 2, Division 4.2. Bidder must determine which per diem rate is highest for each classification of work (i.e. Prevailing Wage Rate or Living Wage Rate), and pay the highest of the two rates to their employees. Living Wage applies to workers who are not subject to Prevailing Wage Rates.

1. Compliance with Prevailing Wage Requirements. Pursuant to sections 1720 through 1861 of the California Labor Code, Bidder and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.

1.1. Copies of such prevailing rate of per diem wages are on file at the City of San Diego's Equal Opportunity Contracting Department and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Bidder and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.

1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires

during the life of this Contract, such wage rate shall apply to the balance of the Contract.

2. Penalties for Violations. Bidder and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed. This shall be in addition to any other applicable penalties allowed under Labor Code sections 1720 – 1861.

3. Payroll Records. Bidder and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Bidder shall require its subcontractors to also comply with section 1776. Bidder and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Bidder is responsible for ensuring its subcontractors submit certified payroll records to the City. Bidder and its subcontractors shall also furnish the records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required in Labor Code section 1771.4.

4. Apprentices. Bidder and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Bidder shall be held responsible for their compliance as well as the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.

5. Working Hours. Bidder and its subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.

6. Required Provisions for Subcontracts. Bidder shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.

7. Labor Code Section 1861 Certification. Bidder in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Bidder certifies that "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract."

8. Labor Compliance Program. The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or

other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Equal Opportunity Contracting Department at 619-236-6000.

9. Contractor and Subcontractor Registration Requirements. This project is subject to compliance monitoring and enforcement by the DIR. A Bidder or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or enter into any contract for public work, as defined in this chapter of the Labor Code unless currently registered and qualified to perform the work pursuant to Section 1725.5. In accordance with Labor Code section 1771.1(a), "[i]t is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded."

9.1. A Bidder's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in a response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered contractor pursuant to Public Contract Code section 4107.

9.2. A Contract entered into with any Bidder or subcontractor in violation of Labor Code section 1771.1(a) shall be subject to cancellation, provided that a Contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, Bidder, or any subcontractor to comply with the requirements of section 1725.5 of this section.

9.3. By submitting a bid or proposal to the City, Bidder is certifying that he or she has verified that all subcontractors used on this public works project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Bidder shall provide proof of registration for themselves and all listed subcontractors to the City at the time of bid or proposal due date or upon request.

10. Stop Order. For Bidder or its subcontractor(s) engaging in the performance of any public work contract without having been registered in violation of Labor Code sections 1725.5 or 1771.1, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered Bidder or unregistered subcontractor(s) on ALL public works until the unregistered Bidder or unregistered subcontractor(s) is registered. Failure to observe a stop order is a misdemeanor.

11. List of all Subcontractors. The City may ask Bidder for the most current list of subcontractors (regardless of tier), along with their DIR registration numbers, utilized on this contract at any time during performance of this contract, and Bidder shall provide the list within ten (10) working days of the City's request. Additionally,

Bidder shall provide the City with a complete list of all subcontractors utilized on this contract (regardless of tier), within ten working days of the completion of the contract, along with their DIR registration numbers. The City shall withhold final payment to Bidder until at least 30 days after this information is provided to the City.

12. Exemptions for Small Projects. There are limited exemptions for installation, alteration, demolition, or repair work done on projects of \$25,000 or less. The Bidder shall still comply with Labor Code sections 1720 et. seq. The only recognized exemptions are listed below:

12.1. Registration. The Bidder will not be required to register with the DIR for small projects. (Labor Code section 1771.1).

12.2. Certified Payroll Records. The records required in Labor Code section 1776 shall be required to be kept and submitted to the City of San Diego, but will not be required to be submitted online with the DIR directly. The Bidder will need to keep those records for at least three years following the completion of the contract. (Labor Code section 1771.4).

12.3. List of all Subcontractors. The Bidder shall not be required to hire only registered subcontractors and is exempt from submitting the list of all subcontractors that is required in section 11 above. (Labor Code section 1773.3).

B. Living Wages. This Contract is subject to the City's Living Wage Ordinance (LWO), codified in San Diego Municipal Code Chapter 2, Article 2, Division 42. Bidder agrees to require all of its subcontractors, sublessees, and concessionaires subject to the LWO to comply with the LWO and all applicable regulations and rules.

1. Payment of Living Wages. Pursuant to San Diego Municipal Code section 22.4220(a), Bidder and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the required minimum hourly wage rates and health benefits rate unless an exemption applies.

1.1 Copies of such living wage rates are available on the City website at <https://www.sandiego.gov/purchasing/programs/livingwage/>. Bidder and its subcontractors shall post a notice informing workers of their rights at each job site or a site frequently accessed by covered employees in a prominent and accessible place in accordance with San Diego Municipal Code section 22.4225(e).

1.2 LWO wage and health benefit rates are adjusted annually in accordance with San Diego Municipal Code section 22.4220(b) to reflect the Consumer Price Index. Service contracts, financial assistance agreements, and City facilities agreements must include this upward adjustment of wage rates to covered employees on July 1 of each year.

2. Compensated Leave. Pursuant to San Diego Municipal Code section 22.4220(c), Bidder and its subcontractors shall provide a minimum of eighty (80) hours per year of compensated leave. Part-time employees must accrue compensated leave at a rate proportional to full-time employees.

3. Uncompensated Leave. Bidder and its subcontractors must also permit workers to take a minimum of eighty (80) hours of uncompensated leave per year to be used for the illness of the worker or a member of his or her immediate family when the worker has exhausted all accrued compensated leave.

4. Enforcement and Remedies. City will take any one or more of the actions listed in San Diego Municipal Code section 22.4230 should Bidder or its subcontractors are found to be in violation of any of the provisions of the LWO.

5. Payroll Records. Bidder and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Bidder is responsible for ensuring its subcontractors submit certified payroll records to the City.

5.1 For contracts subject to both living wage and prevailing wage requirements, only one submittal will be required. Submittals by a Bidder and all subcontractors must comply with both ordinance requirements.

6. Certification of Compliance. San Diego Municipal Code section 22.4225 requires each Bidder to fill out and file a living wage certification with the Living Wage Program Manager within thirty (30) days of Award of the Contract.

7. Annual Compliance Report. Bidder and its subcontractors must file an annual report documenting compliance with the LWO pursuant to San Diego Municipal Code section 22.4225(d). Records documenting compliance must be maintained for a minimum of three (3) years after the City's final payment on the service contract or agreement.

1.3. Exemption from Living Wage Ordinance. Pursuant to San Diego Municipal Code section 22.4215, this Contract may be exempt from the LWO. For a determination on this exemption, Bidder must complete the Living Wage Ordinance Application for Exemption.

C. Highest Wage Rate Applies. Bidder is required to pay the highest applicable wage rate where more than one wage rate applies.

CITY OF SAN DIEGO

PURCHASING & CONTRACTING DEPARTMENT
1200 Third Avenue, Suite 200
San Diego, CA 92101-4195
Fax: (619) 236-5904

ADDENDUM A

Request for Proposal (RFP) 10089830-22-J

Closing Date: December 28, 2021
@ 2:00 p.m.

RFP to provide the City of San Diego with **Wastewater Flow Monitoring Equipment, Software and Services REBID**

The following changes to the specifications are hereby made effective as though they were originally shown and/or written:

1. Remove the original cover sheet and replace with the attached Addendum A, cover sheet. (**NOTE**: Changes are made in **bold font**.)
2. Remove the original RFP, Signature Page (Page 3) and replace with the attached Addendum A, Signature Page (Page 3).
3. Remove the original Exhibit B, Scope of Work pages 2, 6, and 18 through 21 and replace with the attached Addendum A, Exhibit B, Scope of Work pages 2, 6, and 18 through 21.
4. Add three (3) Pages "Questions and Answers". (**NOTE**: The questions and answers are being provided for informational purposes only and are not part of any resulting contract from this RFP.)

CITY OF SAN DIEGO PURCHASING & CONTRACTING DEPARTMENT

Janet Polite

Janet Polite
Senior Procurement Contracting Office

December 17, 2021

Addendum A
December 17, 2021

**RFP 10089830-22-J,
Wastewater Flow Monitoring Equipment, Software & Services REBID
Questions and Answers**

Question 1: Can you confirm that submittals to Planet Bids solely (no paper submittal) will be acceptable for this bid due to current Covid-19 restrictions?

Response: Yes, submittal in Planet Bids solely is acceptable, however a paper bid may be required at a later date.

Question 2: Exhibit B, Section C.2.2.1.m (Equipment Requirements) reads “all new equipment supplied under this RFP, including the Temporary Monitoring Sites, become the property of the City.” We are requesting further clarification. Does the equipment become property of the City upon installation or at the end of the contract?

Response: The replacement equipment supplied upon this contract becomes the property of City of San Diego upon installation.

Question 3: Exhibit B, Section F. (Licenses) identifies the contractor licenses required to perform the work described in this RFP. While a detailed explanation is provided for the necessity of a C31 license, there is no explanation why a Class A license is required to perform the work. Class A licenses are typically required for contractors who work on projects requiring significant specialized knowledge in structural engineering, such as civil engineering firms. Companies installing flow monitoring systems in existing sewer structures are not performing any structural work that would require a Class A contractor’s license. Could the City identify work tasks typically performed in the scope that would require the Class A license?

Response: The requirement for a specific license has been removed. A contractor is only required to have a current General Contractor License issued by the State of California. The change has been made to Exhibit B, Section F (Licenses) in this addendum.

Question 4: Exhibit B, Section 2.2.8, c, requires that the city be provided a software license in perpetuity at no additional cost, after the 30-month initial term. However, the Contract Terms shown on the RFP coversheet is two (2) years from Effective Date with three (3) one-year options to renew. Is the initial term of this agreement 24 months or 30 months?

Response: The initial contract term is 24 months. Exhibit B, Section C.2.2.8.c. has been corrected in this addendum.

Question 5: If the contractor opts to replace all of the ADS equipment, does the City want the equipment returned to the City or will it become the property of the new selected contractor?

Response: The old ADS meters need to be returned to the City accordingly.

Question 6: Exhibit B, Section C, 2.2.7 outlines a Comprehensive Service Program. We assume the Comprehensive Service Program will run concurrently with the contract, i.e., if the City opts to terminate the contract after year 2, the contractor's obligation to continue with the Comprehensive Service Program would also terminate. Is that assumption correct?

Response: Yes. The contractor's obligation to continue with the Comprehensive Service Program would also terminate.

Question 7: Please confirm the condition of the existing flow meters. Are all locations currently functional?

Response: Currently, all existing flow meters are functional/operational.

Question 8: Please provide a complete list of locations and the meter types at each location (or confirmation that all sites use the ADS Triton+ meter)

Response: The sites are not at fixed locations but are within San Diego County per Exhibit B, Section C.2.2.1. (Location of Monitor Sites), which has been revised in this addendum. They are typically installed in sewer pipelines in the streets, canyon, treatment plants and pump stations. All flow meters are currently ADS Triton and some are depth-only measurement devices.

Question 9: Are all meters currently setup for Verizon 4G network or will they need to be upgraded from the 3G network?

Response: All meters are currently set up for Verizon 4G network.

Question 10: Please confirm if the contractor will be able to use the City's ADS Prism Software License during the contract terms for monitoring.

Response: The City does not have ADS Prism Software License. The new Contractor shall obtain its own license.

Question 11: How many sites require Manual Data Collection due to data transmission problems as of now?

Response: Currently, none of the sites require Manual Data Collection due to data transmission problems.

Question 12: Are the meters that are installed all currently activated, tied to an account, and have sim cards installed? Does the new contractor need to activate their own Verizon M2M account for 4g service?

Response: Current meters are activated, and the new contractor is responsible to activate their own network account.

Question 13: Please provide pricing from the previous contract.

Response: The previous contract was at \$1,375,000 per year.

Question 14: Are all meters currently setup to stream their data to an existing ADS Prism software setup? If not, how many are not currently setup to do this?

Response: Yes. All meters are currently set up to stream and view data, including scatter graph analysis via ADS Prism web-based software.

Question 15: Does the City currently own the ADS Prism software and have rights to the data and current setup/configuration? Can those rights be transferred to the new contractor?

Response: No. A new contractor must obtain rights for the new software interface on their own.

Question 16: All new equipment supplied under this RFP, including the Temporary Monitoring Sites, become the property of the City. Will the existing contractor need to supply 100% new equipment under this contract?

Response: Per Exhibit B, Section C.2.2.1.p, a new contractor can continue using existing ADS meters, or replace them as they become non-functional. City also owns ten (10) temporary monitoring sites.

Question 17: Does the City own the existing hardware in the system?

Response: Yes, the City owns the flow meters ONLY.

Question 18: Can the existing hardware be used as part of the new contract?

Response: Refer to Question 16.

Question 19: Does the City currently own spare parts for the existing system?

Response: No. The contractor is responsible for flow meters/spare parts to maintain equipment fully functional during the contract term.

Question 20: Does the City have an inventory of spare parts of the existing system?

Response: Refer to Question 19.



DUE: December 28, 2021 2:00 PM

SUBMITTED TO: THE CITY OF SAN DIEGO RFP#
10089830-22-J
WASTEWATER FLOW MONITORING
EQUIPMENT, SOFTWARE & SERVICES REBID

Submitted By: ADS CORP.

340 The Bridge Street, Suite 204
Huntsville, AL 35806
O - 256-430-3366
F - 256-430-6633

ADS ENVIRONMENTAL SERVICES®

Tab A – Submission of Information and Forms.

Exceptions: ADS requests the following exception:

- Indemnification Language. ADS requests to use the same language that we have previously agreed upon and are using currently under our existing contract.

Energy Efficiency: ADS as an organization is committed to procedures and practices that promote environmental sustainability. The ADS San Diego, CA office servicing this project routinely takes the following measures to minimize the effect our local work efforts have on the environment:

- We use wireless modems to collect data and troubleshoot sites, which limits travel and carbon emissions created by driving to sites.
- We continue to advance power saving features by using a new business-to-business (B2B) level, industrial IoT modem that provides for significant power saving advantages over consumer-grade modems used in other devices. This new modem allows for further reductions in travel and carbon emissions by using extended Discontinuous Reception (eDRX) rather than an “always on” modem.
- We recycle batteries used in our flow meters, level meters and rain gauges.
- Our office uses energy conservation lightbulbs/appliances.
- We recycle paper, cardboard, plastics, glass, etc. to reduce our waste to the landfill.
- We double-side print and reuse one-sided prints and save on paper.
- We electronically conduct business whenever possible including training and certification modules, O&M manuals, training manuals, procedure manuals, communication through e-mail and phone, data editing and review, monthly and final reports, staffing and HR, presentations, Webinars, Team Meetings, conference calls, etc.
- We participate in the PG&E “Smart Days” program to reduce energy consumption on extremely hot days when the demand for electricity can reach an extreme level.

Licenses Required:

ADS CORP. holds a California Contractor Class A License: #911453 Exp 2/28/22

DIR Registration Number: ADS Corp. #1000016715 exp. 6/30/2022

City of San Diego
CONTRACTOR STANDARDS
Pledge of Compliance

The City of San Diego has adopted a Contractor Standards Ordinance (CSO) codified in section 22.3004 of the San Diego Municipal Code (SDMC). The City of San Diego uses the criteria set forth in the CSO to determine whether a contractor (bidder or proposer) has the capacity to fully perform the contract requirements and the business integrity to justify the award of public funds. This completed Pledge of Compliance signed under penalty of perjury must be submitted with each bid and proposal. If an informal solicitation process is used, the bidder must submit this completed Pledge of Compliance to the City prior to execution of the contract. All responses must be typewritten or printed in ink. If an explanation is requested or additional space is required, Contractors must provide responses on Attachment A to the Pledge of Compliance and sign each page. Failure to submit a signed and completed Pledge of Compliance may render a bid or proposal non-responsive. In the case of an informal solicitation or cooperative procurement, the contract will not be awarded unless a signed and completed Pledge of Compliance is submitted. A submitted Pledge of Compliance is a public record and information contained within will be available for public review except to the extent that such information is exempt from disclosure pursuant to applicable law.

By signing and submitting this form, the contractor is certifying, to the best of their knowledge, that the contractor and any of its Principals have not within a five (5) year period – preceding this offer, been convicted of or had a civil judgement rendered against them for commission of a fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) contract or subcontract.

“Principal” means an officer, director, owner, partner or a person having primary management or supervisory responsibilities within the firm. The Contractor shall provide immediate written notice to the Procurement Contracting Officer handling the solicitation, at any time prior to award should they learn that this Representations and Certifications was inaccurate or incomplete.

This form contains 10 pages, additional information may be submitted as part of *Attachment A*.

A. BID/PROPOSAL/SOLICITATION TITLE:

 10089830-22-J

 Wastewater Flow Monitoring Equipment, Software, and Services

B. BIDDER/PROPOSER INFORMATION:

ADS Corp.			
Legal Name		DBA	
340 The Bridge Street, Suite 204	Huntsville	AL	35806
Street Address	City	State	Zip
Heather McPherson	(213) 393-8705	(256) 430-6633	
Contact Person, Title	Phone	Fax	

Provide the name, identity, and precise nature of the interest* of all persons who are directly or indirectly involved** in this proposed transaction (SDMC § 21.0103). Use additional pages if necessary.

* The precise nature of the interest includes:

- the percentage ownership interest in a party to the transaction,
- the percentage ownership interest in any firm, corporation, or partnership that will receive funds from the transaction,
- the value of any financial interest in the transaction,
- any contingent interest in the transaction and the value of such interest should the contingency be satisfied, and
- any philanthropic, scientific, artistic, or property interest in the transaction.

** Directly or indirectly involved means pursuing the transaction by:

- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City, or
- directing or supervising the actions of persons engaged in the above activity.

none

Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)

Interest in the transaction

Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)

Interest in the transaction

Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)

Interest in the transaction

Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)

Interest in the transaction

Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)

Interest in the transaction

Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)

Interest in the transaction

Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)
Interest in the transaction	
Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)
Interest in the transaction	
Name	Title/Position
City and State of Residence	Employer (if different than Bidder/Proposer)
Interest in the transaction	

C. OWNERSHIP AND NAME CHANGES:

1. In the past five ten (5) years, has your firm changed its name?
 Yes No

If **Yes**, use Attachment A to list all prior legal and DBA names, addresses, and dates each firm name was used. Explain the specific reasons for each name change.

2. Is your firm a non-profit?
 Yes No

If **Yes**, attach proof of status to this submission.

3. In the past five (5) years, has a firm owner, partner, or officer operated a similar business?
 Yes No

If **Yes**, use Attachment A to list names and addresses of all businesses and the person who operated the business. Include information about a similar business only if an owner, partner, or officer of your firm holds or has held a similar position in another firm.

D. BUSINESS ORGANIZATION/STRUCTURE:

Indicate the organizational structure of your firm. Fill in only one section on this page. Use Attachment A if more space is required.

Corporation Date incorporated: 10/11/2007 State of incorporation: Delaware

List corporation's current officers: President: Brian Truesdale
Vice Pres: Bret A. Prybylski
Secretary: Denise R. Cade
Treasurer: Joseph J. Goustin

Type of corporation: C Subchapter S

Is the corporation authorized to do business in California: **Yes** **No**

If **Yes**, after what date: 07/01/2019

Is your firm a publicly traded corporation? Yes No

If **Yes**, how and where is the stock traded? _____

If **Yes**, list the name, title and address of those who own ten percent (10 %) or more of the corporation's stocks:

Do the President, Vice President, Secretary and/or Treasurer of your corporation have a third party interest or other financial interests in a business/enterprise that performs similar work, services or provides similar goods? Yes No

If **Yes**, please use Attachment A to disclose.

Please list the following:	Authorized	Issued	Outstanding
a. Number of voting shares:	_____	_____	_____
b. Number of nonvoting shares:	_____	_____	_____
c. Number of shareholders:			_____
d. Value per share of common stock:		Par	\$ _____
		Book	\$ _____
		Market	\$ _____

Limited Liability Company Date formed: _____ State of formation: _____

List the name, title and address of members who own ten percent (10%) or more of the company:

Partnership Date formed: _____ State of formation: _____

List names of all firm partners:

Sole Proprietorship Date started: _____

List all firms you have been an owner, partner or officer with during the past five (5) years. Do not include ownership of stock in a publicly traded company:

Joint Venture Date formed: _____

List each firm in the joint venture and its percentage of ownership:

Note: To be responsive, each member of a Joint Venture or Partnership must complete a separate *Contractor Standards form*.

E. FINANCIAL RESOURCES AND RESPONSIBILITY:

1. Is your firm preparing to be sold, in the process of being sold, or in negotiations to be sold?

Yes **No**

If **Yes**, use Attachment A to explain the circumstances, including the buyer's name and principal contact information.

2. In the past five (5) years, has your firm been denied bonding?

Yes **No**

If **Yes**, use Attachment A to explain specific circumstances; include bonding company name.

3. In the past five (5) years, has a bonding company made any payments to satisfy claims made against a bond issued on your firm's behalf or a firm where you were the principal?

Yes **No**

If **Yes**, use Attachment A to explain specific circumstances.

4. In the past five (5) years, has any insurance carrier, for any form of insurance, refused to renew the insurance policy for your firm?

Yes **No**

If **Yes**, use Attachment A to explain specific circumstances.

5. Within the last five years, has your firm filed a voluntary petition in bankruptcy, been adjudicated bankrupt, or made a general assignment for the benefit of creditors?

Yes **No**

If **Yes**, use Attachment A to explain specific circumstances.

6. Are there any claims, liens or judgements that are outstanding against your firm?

Yes **No**

If **Yes**, please use Attachment A to provide detailed information on the action.

7. Please provide the name of your principal financial institution for financial reference. By submitting a response to this Solicitation Contractor authorizes a release of credit information for verification of financial responsibility.

Name of Bank: Bank of America

Point of Contact: Account Number 8765131540

Address: w-ww.bankvod.com

Phone Number: _____

8. By submitting a response to a City solicitation, Contractor certifies that he or she has sufficient operating capital and/or financial reserves to properly fund the requirements identified in the solicitation. At City's request, Contractor will promptly provide to City

a copy of Contractor's most recent balance sheet and/or other necessary financial statements to substantiate financial ability to perform.

9. In order to do business in the City of San Diego, a current Business Tax Certificate is required. Business Tax Certificates are issued by the City Treasurer's Office. If you do not have one at the time of submission, one must be obtained prior to award.

Business Tax Certificate No.: B2010019046 Year Issued: 2020

F. PERFORMANCE HISTORY:

1. In the past five (5) years, has your firm been found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement, for defaulting or breaching a contract with a government agency?

Yes No

If **Yes**, use Attachment A to explain specific circumstances.

2. In the past five (5) years, has a public entity terminated your firm's contract for cause prior to contract completion?

Yes No

If **Yes**, use Attachment A to explain specific circumstances and provide principal contact information.

3. In the past five (5) years, has your firm entered into any settlement agreement for any lawsuit that alleged contract default, breach of contract, or fraud with or against a public entity?

Yes No

If **Yes**, use Attachment A to explain specific circumstances.

4. Is your firm currently involved in any lawsuit with a government agency in which it is alleged that your firm has defaulted on a contract, breached a contract, or committed fraud?

Yes No

If **Yes**, use Attachment A to explain specific circumstances.

5. In the past five (5) years, has your firm, or any firm with which any of your firm's owners, partners, or officers is or was associated, been debarred, disqualified, removed, or otherwise prevented from bidding on or completing any government or public agency contract for any reason?

Yes No

If **Yes**, use Attachment A to explain specific circumstances.

6. In the past five (5) years, has your firm received a notice to cure or a notice of default on a contract with any public agency?

Yes No

If **Yes**, use Attachment A to explain specific circumstances and how the matter resolved.

7. Performance References:

Please provide a minimum of three (3) references familiar with work performed by your firm which was of a similar size and nature to the subject solicitation within the last five (5) years.

Please note that any references required as part of your bid/proposal submittal are in addition to those references required as part of this form.

Company Name: Fulton County - Department of Public Works

Contact Name and Phone Number: Terry Peters (404) 612-7485
Contact Email: terry.peters@fultoncountyga.gov
Address: 141 Pryor Street, Suite 6001
Contract Date: August 15, 2014
Contract Amount: \$ 9,000,000.00
Requirements of Contract: Operation and Maintenance of Long Term Monitoring Network

Company Name: Metro Water Services
Contact Name and Phone Number: David Pendley 615-862-4599
Contact Email: david.pendley@nashville.gov
Address: 1600 Second Avenue, North Nashville, TN 37208
Contract Date: January 15, 2015
Contract Amount: \$ 6,500,000.00
Requirements of Contract: Operations and Maintenance of Long Term Monitoring Network

Company Name: Seattle Public Utilities
Contact Name and Phone Number: Kara Peck 206-684-3547
Contact Email: kara.peck@seattle.gov
Address: 700 5th Avenue, Seattle, WA
Contract Date: August 1, 2017
Contract Amount: \$ 8,500,000.00
Requirements of Contract: Operation and Maintenance of Long Term Monitoring Network

G. COMPLIANCE:

1. In the past five (5) years, has your firm or any firm owner, partner, officer, executive, or manager been criminally penalized or found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement, for violating any federal, state, or local law in performance of a contract, including but not limited to, laws regarding health and safety, labor and employment, permitting, and licensing laws?

Yes No

If **Yes**, use Attachment A to explain specific circumstances surrounding each instance. Include the name of the entity involved, the specific infraction(s) or violation(s), dates of instances, and outcome with current status.

2. In the past five (5) years, has your firm been determined to be non-responsible by a public entity?

Yes No

If **Yes**, use Attachment A to explain specific circumstances of each instance. Include the name of the entity involved, the specific infraction, dates, and outcome.

H. BUSINESS INTEGRITY:

1. In the past five (5) years, has your firm been convicted of or found liable in a civil suit for making a false claim or material misrepresentation to a private or public entity?

Yes No

If **Yes**, use Attachment A to explain specific circumstances of each instance. Include the entity involved, specific violation(s), dates, outcome and current status.

2. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a crime, including misdemeanors, or been found liable in a civil suit involving the bidding, awarding, or performance of a government contract?

Yes No

If **Yes**, use Attachment A to explain specific circumstances of each instance; include the entity involved, specific infraction(s), dates, outcome and current status.

3. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a federal, state, or local crime of fraud, theft, or any other act of dishonesty?

Yes No

If **Yes**, use Attachment A to explain specific circumstances of each instance; include the entity involved, specific infraction(s), dates, outcome and current status.

4. Do any of the Principals of your firm have relatives that are either currently employed by the City or were employed by the City in the past five (5) years?

Yes No

If **Yes**, please disclose the names of those relatives in Attachment A.

I. BUSINESS REPRESENTATION:

1. Are you a local business with a physical address within the County of San Diego?

Yes No

2. Are you a certified Small and Local Business Enterprise certified by the City of San Diego?

Yes No

Certification # _____

3. Are you certified as any of the following:

- a. Disabled Veteran Business Enterprise Certification # _____
- b. Woman or Minority Owned Business Enterprise Certification # _____
- c. Disadvantaged Business Enterprise Certification # _____

J. WAGE COMPLIANCE:

In the past five (5) years, has your firm been required to pay back wages or penalties for failure to comply with the federal, state or local **prevailing, minimum, or living wage laws**? Yes No If **Yes**, use Attachment A to explain the specific circumstances of each instance. Include the entity involved, the specific infraction(s), dates, outcome, and current status.

By signing this Pledge of Compliance, your firm is certifying to the City that you will comply with the requirements of the Equal Pay Ordinance set forth in SDMC sections 22.4801 through 22.4809.

K. STATEMENT OF SUBCONTRACTORS & SUPPLIERS:

Please provide the names and information for all subcontractors and suppliers used in the performance of the proposed contract, and what portion of work will be assigned to each subcontractor. Subcontractors may not be substituted without the written consent of the City. Use Attachment A if additional pages are necessary. If no subcontractors or suppliers will be used, please write "Not Applicable."

Company Name: N/A

Address: _____

Contact Name: _____ Phone: _____ Email: _____

Contractor License No.: _____ DIR Registration No.: _____

Sub-Contract Dollar Amount: \$_____ (per year) \$_____ (total contract term)

Scope of work subcontractor will perform: _____

Identify whether company is a subcontractor or supplier: _____

Certification type (check all that apply): DBE DVBE ELBE MBE SLBE WBE Not Certified

Contractor must provide valid proof of certification with the response to the bid or proposal to receive participation credit.

Company Name: N/A

Address: _____

Contact Name: _____ Phone: _____ Email: _____

Contractor License No.: _____ DIR Registration No.: _____

Sub-Contract Dollar Amount: \$_____ (per year) \$_____ (total contract term)

Scope of work subcontractor will perform: _____

Identify whether company is a subcontractor or supplier: _____

Certification type (check all that apply): DBE DVBE ELBE MBE SLBE WBE Not Certified

Contractor must provide valid proof of certification with the response to the bid or proposal to receive participation credit.

L. STATEMENT OF AVAILABLE EQUIPMENT:

A full inventoried list of all necessary equipment to complete the work specified may be a requirement of the bid/proposal submission.

By signing and submitting this form, the Contractor certifies that all required equipment included in this bid or proposal will be made available one week (7 days) before work shall commence. In instances where the required equipment is not owned by the Contractor, Contractor shall explain how the equipment will be made available before the commencement of work. The City of San

Diego reserves the right to reject any response, in its opinion, if the Contractor has not demonstrated he or she will be properly equipped to perform the work in an efficient, effective matter for the duration of the contract period.

M. TYPE OF SUBMISSION: This document is submitted as:

- Initial submission of *Contractor Standards Pledge of Compliance*
- Initial submission of *Contractor Standards Pledge of Compliance* as part of a Cooperative agreement
- Initial submission of *Contractor Standards Pledge of Compliance* as part of a Sole Source agreement
- Update of prior *Contractor Standards Pledge of Compliance* dated _____.

Complete all questions and sign below.

Under penalty of perjury under the laws of the State of California, I certify that I have read and understand the questions contained in this Pledge of Compliance, that I am responsible for completeness and accuracy of the responses contained herein, and that all information provided is true, full and complete to the best of my knowledge and belief. I agree to provide written notice to the Purchasing Agent within five (5) business days if, at any time, I learn that any portion of this Pledge of Compliance is inaccurate. Failure to timely provide the Purchasing Agent with written notice is grounds for Contract termination.


I, on behalf of the firm, further certify that I and my firm will comply with the following provisions of SDMC section 22.3004:

- (a) I and my firm will comply with all applicable local, State and Federal laws, including health and safety, labor and employment, and licensing laws that affect the employees, worksite or performance of the contract.
- (b) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of receiving notice that a government agency has begun an investigation of me or my firm that may result in a finding that I or my firm is or was not in compliance with laws stated in paragraph (a).
- (c) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of a finding by a government agency or court of competent jurisdiction of a violation by the Contractor of laws stated in paragraph (a).
- (d) I and my firm will notify the Purchasing Agent in writing within fifteen (15) calendar days of becoming aware of an investigation or finding by a government agency or court of competent jurisdiction of a violation by a subcontractor of laws stated in paragraph (a).
- (e) I and my firm will cooperate fully with the City during any investigation and to respond to a request for information within ten (10) working days.

Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed *Pledge of Compliance* is submitted.

Joseph J. Goustin, Treasurer

Name and Title

 _____
Signature

12/16/2021

Date

City of San Diego
CONTRACTOR STANDARDS
Attachment "A"

Provide additional information in space below. Use additional Attachment "A" pages as needed. Each page must be signed.
Print in ink or type responses and indicate question being answered.

n/a

I have read the matters and statements made in this Contractor Standards Pledge of Compliance and attachments thereto and I know the same to be true of my own knowledge, except as to those matters stated upon information or belief and as to such matters, I believe the same to be true. I certify under penalty of perjury that the foregoing is true and correct.

Joseph J. Goustin, Treasurer

Print Name, Title



Signature

12/16/2021

Date

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)
GOODS AND SERVICES CONTRACTOR REQUIREMENTS

I. City's Equal Opportunity Contracting Commitment.

The City of San Diego (City) promotes equal employment and subcontracting opportunities. The City is committed to ensuring that taxpayer dollars spent on public contracts are not paid to businesses that practice discrimination in employment or subcontracting. The City encourages all companies seeking to do business with the City to share this commitment. Contractors are encouraged to take positive steps to diversify and expand their subcontractor and supplier solicitation base and to offer opportunities to all eligible business firms.

Contractors must submit the required EOCP documentation indicated below with their proposals. Contractors who fail to provide the required EOCP documentation are considered non-responsive.

II. Definitions.

Commercially Useful Function: a Small Local Business Enterprise or Emerging Local Business Enterprise (SLBE/ELBE) performs a commercially useful function when it is responsible for execution of the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the SLBE/ELBE shall also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quantity and quality, ordering the material, and installing (where applicable) and paying for the material itself.

To determine whether an SLBE/ELBE is performing a commercially useful function, an evaluation will be performed of the amount of work subcontracted, normal industry practices, whether the amount the SLBE/ELBE firm is to be paid under the contract is commensurate with the work it is actually performing and the SLBE/ELBE credit claimed for its performance of the work, and other relevant factors. Specifically, an SLBE/ELBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of meaningful and useful SLBE/ELBE participation, when in similar transactions in which SLBE/ELBE firms do not participate, there is no such role performed.

Disadvantaged Business Enterprise (DBE): a certified business that is (1) at least fifty-one (51%) owned by socially and economically Disadvantaged Individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more socially and economically Disadvantaged Individuals; and (2) whose daily business operations are managed and directed by one or more socially and economically disadvantaged owners. Disadvantaged Individuals include Black Americans, Hispanic Americans, Asian Americans, and other minorities, or individual found to be disadvantaged by the Small Business Administration pursuant to Section 8 of the Small Business Reauthorization Act.

Disabled Veteran Business Enterprise (DVBE): a certified business that is (1) at least fifty-one percent (51%) owned by one or more Disabled Veterans; and (2) business operations must be managed and controlled by one or more Disabled Veterans. A Disabled Veteran is a veteran of the U.S. military, naval, or air service who resides in California and has a service-connected disability of at least 10% or more. The firm shall be certified by the State of California's Department of General Services, Office of Small and Minority Business.

Emerging Business Enterprise (EBE): a business whose gross annual receipts do not exceed the amount set by the City Manager, and which meets all other criteria set forth in the regulations implementing the City's Small and Local Business Preference Program. The City Manager shall review the threshold amount for EBEs on an annual basis, and adjust as necessary to reflect changes in the marketplace.

Emerging Local Business Enterprise (ELBE): a Local Business Enterprise that is also an Emerging Business Enterprise.

Local Business Enterprise (LBE): a business that has both a principal place of business and a significant employment presence in the County of San Diego, and that has been in operation for twelve (12) consecutive months.

Minority Business Enterprise (MBE): a certified business that is (1) at least fifty-one percent (51%) owned by one or more minority individuals, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more minority individuals; and (2) whose daily business operations are managed and directed by one or more minorities owners. Minorities include the groups with the following ethnic origins: African, Asian Pacific, Asian Subcontinent, Hispanic, Native Alaskan, Native American, and Native Hawaiian.

Other Business Enterprise (OBE): any business which does not otherwise qualify as Minority, Woman, Disadvantaged, or Disabled Veteran Business Enterprise.

Principal Place of Business: a location wherein a business maintains a physical office and through which it obtains no less than fifty percent (50%) of gross annual receipts.

Significant Employee Presence: no less than twenty-five percent (25%) of a business's total number of employees.

Small Business Enterprise (SBE): a business whose gross annual receipts do not exceed the amount set by the City Manager, and that meets all other criteria set forth in regulations implementing the City's Small and Local Business Preference Program. The City Manager shall review the threshold amount for SBEs on an annual basis, and adjust as necessary to reflect changes in the marketplace. A business certified as a DVBE by the State of California, and that has provided proof of such certification to the City manager, shall be deemed to be an SBE.

Small Local Business Enterprise (SLBE): a Local Business Enterprise that is also a Small Business Enterprise.

Women Business Enterprise (WBE): a certified business that is (1) at least fifty-one percent (51 %) owned by a woman or women, or, in the case of a publicly owned business at least fifty-one percent (51%) of the stock is owned by one or more women; and (2) whose daily business operations are managed and directed by one or more women owners.

III. Disclosure of Discrimination Complaints.

As part of its proposal, Contractor shall provide to the City a list of all instances within the past ten (10) years where a complaint was filed or pending against Contractor in a legal or administrative proceeding alleging that Contractor discriminated against its employees, subcontractors, vendors, or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken. (Attachment AA).

IV. Work Force Report and Equal Opportunity Outreach Plan.

- A. Work Force Report. Contractors shall submit with their proposal a Work Force Report (WFR) for approval by the City. (Attachment BB). If the City determines that there are under representations when compared to County Labor Force Availability data, then the Contractor will also be required to submit an Equal Employment Opportunity Plan (EEOP) to the City for approval. Questions regarding the WFR should be directed to the Equal Opportunity Contracting Department.
- B. Duty to Comply with Equal Opportunity Outreach Plan. A Contractor for whom an EEOP has been approved by the City shall use best efforts to comply with that EEOP.

V. Small and Local Business Program Requirements.

The City has adopted a Small and Local Business Enterprise program for goods, services, and consultant contracts. The SLBE requirements are set forth in Council Policy 100-10. For contracts in which the Purchasing Agent is required to advertise for sealed proposals in the City's official newspaper or consultant contracts valued over \$50,000, the City shall:

- A. Apply a maximum of an additional 12% of the total possible evaluation points to the Contractor's final score for SLBE or ELBE participation. Additional points will be awarded as follows:
 - a. If the Contractor achieves 20% participation, apply 5% of the total possible evaluation points to the Contractor's score; or
 - b. If the Contractor achieves 25% participation, apply 10% of the total possible evaluation points to the Contractor's score; or
 - c. If the prime contractor is a SLBE or an ELBE, apply 12% of the total possible evaluation points to the Contractor's score.

VI. Maintaining Participation Levels.

- A. Additional points are based on the Contractor's level of participation proposed prior to the award of the goods, services, or consultant contract. Contractors are required to achieve and maintain the SLBE or ELBE participation levels throughout the duration of the goods, services, or consultant contract.
- B. If the City modifies the original specifications, the Contractor shall make reasonable efforts to maintain the SLBE or ELBE participation for which the additional points were awarded. The City must approve in writing a reduction in SLBE or ELBE participation levels.
- C. Contractor shall notify and obtain written approval from the City in advance of any reduction in subcontract scope, termination, or substitution for a designated SLBE or ELBE subcontractor.
- D. Contractor's failure to maintain SLBE or ELBE participation levels as specified in the goods, services, or consultant contract shall constitute a default and grounds for debarment under Chapter 2, Article 2, Division 8, of the San Diego Municipal Code.
- E. The remedies available to the City under Council Policy 100-10 are cumulative to all other rights and remedies available to the City.

VII. Certifications.

The City accepts certifications of MBE, WBE, DBE, or DVBE from the following certifying agencies:

- A. Current certification by the State of California Department of Transportation (CALTRANS) as DBE.
- B. Current MBE or WBE certification from the California Public Utilities Commission.
- C. DVBE certification is received from the State of California's Department of General Services, Office of Small and Minority Business.
- D. Current certification by the City of Los Angeles as DBE, WBE, or MBE.

Subcontractors' valid proof of certification status e.g., copy of MBE, WBE, DBE, or DVBE certification must be submitted with the proposal or contract documents. MBE, WBE, DBE, or DVBE certifications are listed for informational purposes only.

VIII. List of Attachments.

- AA. Contractors Certification of Pending Actions
- BB. Work Force Report

AA. CONTRACTORS CERTIFICATION OF PENDING ACTIONS

As part of this Contract, the Contractor must provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Contractor in a legal or administrative proceeding alleging that Contractor discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

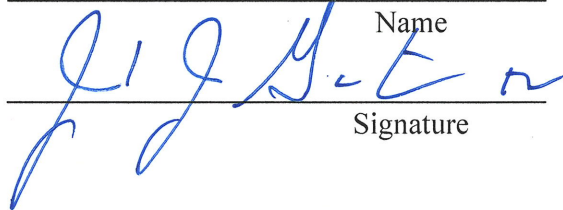
CHECK ONE BOX ONLY.

- The undersigned certifies that within the past 10 years the Contractor has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Contractor discriminated against its employees, subcontractors, vendors or suppliers.
- The undersigned certifies that within the past 10 years the Contractor has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Contractor discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/ REMEDIAL ACTION TAKEN

Contractor Name: ADS Corp

Certified By Joseph J. Goustin Title Treasurer

 Name
Signature Date December 16, 2021

EQUAL OPPORTUNITY CONTRACTING (EOC)

1200 Third Avenue, Suite 200 • San Diego, CA 92101
Phone: (619) 236-6000 • Fax: (619) 236-5904

BB. WORK FORCE REPORT

The objective of the *Equal Employment Opportunity Outreach Program*, San Diego Municipal Code Sections 22.3501 through 22.3517, is to ensure that contractors doing business with the City, or receiving funds from the City, do not engage in unlawful discriminatory employment practices prohibited by State and Federal law. Such employment practices include, but are not limited to unlawful discrimination in the following: employment, promotion or upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training, including apprenticeship. Contractors are required to provide a completed *Work Force Report (WFR)*.

**NO OTHER FORMS WILL BE ACCEPTED
CONTRACTOR IDENTIFICATION**

Type of Contractor: Construction Vendor/Supplier Financial Institution Lessee/Lessor
 Consultant Grant Recipient Insurance Company Other

Name of Company: ADS Corp.

ADA/DBA: _____

Address (Corporate Headquarters, where applicable): 340 The Bridge Street, Suite 204

City: Huntsville County: Madison State: AL Zip: 35806

Telephone Number: 256-430-3366 Fax Number: 256-430-6633

Name of Company CEO: Brian Truesdale

Address(es), phone and fax number(s) of company facilities located in San Diego County (if different from above):

Address: 4820 Mercury Street, Suite B

City: San Diego County: San Diego State: CA Zip: 92111

Telephone Number: 858-571-0045 Fax Number: _____ Email: hmcpherson@idexcorp.com

Type of Business: Water/wastewater diagnostic mgmt and info svc Type of License: Contractor License Type A

The Company has appointed: Ramona Bolden Fether

As its Equal Employment Opportunity Officer (EEOO). The EEOO has been given authority to establish, disseminate and enforce equal employment and affirmative action policies of this company. The EEOO may be contacted at:

Address: 340 The Bridge Street, Suite 204, Huntsville, AL 35806

Telephone Number: 256-430-3366 Fax Number: 256-430-6633 Email: rfether@idexcorp.com

- One San Diego County (or Most Local County) Work Force - Mandatory
 Branch Work Force *
 Managing Office Work Force

Check the box above that applies to this WFR.

*Submit a separate Work Force Report for all participating branches. Combine WFRs if more than one branch per county.

I, the undersigned representative of ADS Corp.
(Firm Name)

Madison, AL hereby certify that information provided
(County) (State)

herein is true and correct. This document was executed on this 16th day of December, 2021

[Signature]
(Authorized Signature)

Joseph J. Gustin
(Print Authorized Signature Name)

WORK FORCE REPORT – Page 2

NAME OF FIRM: ADS Corp. DATE: 12/16/2021

OFFICE(S) or BRANCH(ES): San Diego, CA Office COUNTY: San Diego

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

- (1) Black or African-American
- (2) Hispanic or Latino
- (3) Asian
- (4) American Indian or Alaska Native
- (5) Native Hawaiian or Pacific Islander
- (6) White
- (7) Other race/ethnicity; not falling into other groups

Definitions of the race and ethnicity categories can be found on Page 4

ADMINISTRATION OCCUPATIONAL CATEGORY	(1) Black or African American		(2) Hispanic or Latino		(3) Asian		(4) American Indian/ Nat. Alaskan		(5) Pacific Islander		(6) White		(7) Other Race/ Ethnicity	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Management & Financial												1		
Professional												2	1	
A&E, Science, Computer														
Technical												1		
Sales														
Administrative Support														
Services			6											1
Crafts														
Operative Workers														
Transportation														
Laborers*														

*Construction laborers and other field employees are not to be included on this page

Totals Each Column			6									4	1	1	
--------------------	--	--	---	--	--	--	--	--	--	--	--	---	---	---	--

Grand Total All Employees 12

Indicate by Gender and Ethnicity the Number of Above Employees Who Are Disabled:

Disabled														
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Non-Profit Organizations Only:

Board of Directors														
Volunteers														
Artists														

Work Force Report

HISTORY

The Work Force Report (WFR) is the document that allows the City of San Diego to analyze the work forces of all firms wishing to do business with the City. We are able to compare the firm's work force data to County Labor Force Availability (CLFA) data derived from the United States Census. CLFA data is a compilation of lists of occupations and includes the percentage of each ethnicity we track (American Indian or Alaska Native, Asian, Black or African-American, Native Hawaiian or Pacific Islander, White, and Other) for each occupation. Currently, our CLFA data is taken from the 2010 Census. In order to compare one firm to another, it is important that the data we receive from the consultant firm is accurate and organized in the manner that allows for this fair comparison.

WORK FORCE & BRANCH WORK FORCE REPORTS

When submitting a WFR, especially if the WFR is for a specific project or activity, we would like to have information about the firm's work force that is actually participating in the project or activity. That is, if the project is in San Diego and the work force is from San Diego, we want a San Diego County Work Force Report¹. By the same token, if the project is in San Diego, but the work force is from another county, such as Orange or Riverside County, we want a Work Force Report from that county². If participation in a San Diego project is by work forces from San Diego County and, for example, from Los Angeles County and from Sacramento County, we ask for separate Work Force Reports representing your firm from each of the three counties.

MANAGING OFFICE WORK FORCE

Equal Opportunity Contracting may occasionally ask for a Managing Office Work Force (MOWF) Report. This may occur in an instance where the firm involved is a large national or international firm but the San Diego or other local work force is very small. In this case, we may ask for both a local and a MOWF Report^{1, 3}. In another case, when work is done only by the Managing Office, only the MOWF Report may be necessary.³

TYPES OF WORK FORCE REPORTS:

Please note, throughout the preceding text of this page, the superscript numbers one ¹, two ² & three ³. These numbers coincide with the types of work force report required in the example. See below:

- ¹ One San Diego County (or Most Local County) Work Force – Mandatory in most cases
- ² Branch Work Force *
- ³ Managing Office Work Force

**Submit a separate Work Force Report for all participating branches. Combine WFRs if more than one branch per county.*

RACE/ETHNICITY CATEGORIES

American Indian or Alaska Native – A person having origins in any of the peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.

Asian – A person having origins in any of the peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American – A person having origins in any of the Black racial groups of Africa.

Native Hawaiian or Pacific Islander – A person having origins in any of the peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White – A person having origins in any of the peoples of Europe, the Middle East, or North Africa.

Hispanic or Latino – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin.

Exhibit A: Work Force Report Job Categories – Administration

Refer to this table when completing your firm's Work Force Report form(s).

Management & Financial

Advertising, Marketing, Promotions, Public Relations, and Sales Managers
Business Operations Specialists
Financial Specialists
Operations Specialties Managers
Other Management Occupations
Top Executives

Professional

Art and Design Workers
Counselors, Social Workers, and Other Community and Social Service Specialists
Entertainers and Performers, Sports and Related Workers
Health Diagnosing and Treating Practitioners
Lawyers, Judges, and Related Workers
Librarians, Curators, and Archivists
Life Scientists
Media and Communication Workers
Other Teachers and Instructors
Postsecondary Teachers
Primary, Secondary, and Special Education School Teachers
Religious Workers
Social Scientists and Related Workers

Architecture & Engineering, Science, Computer

Architects, Surveyors, and Cartographers
Computer Specialists
Engineers
Mathematical Science Occupations
Physical Scientists

Technical

Drafters, Engineering, and Mapping Technicians
Health Technologists and Technicians
Life, Physical, and Social Science Technicians
Media and Communication Equipment Workers

Sales

Other Sales and Related Workers
Retail Sales Workers
Sales Representatives, Services
Sales Representatives, Wholesale and Manufacturing
Supervisors, Sales Workers

Administrative Support

Financial Clerks
Information and Record Clerks
Legal Support Workers

Material Recording, Scheduling, Dispatching, and Distributing Workers
Other Education, Training, and Library Occupations
Other Office and Administrative Support Workers
Secretaries and Administrative Assistants
Supervisors, Office and Administrative Support Workers

Services

Building Cleaning and Pest Control Workers
Cooks and Food Preparation Workers
Entertainment Attendants and Related Workers
Fire Fighting and Prevention Workers
First-Line Supervisors/Managers, Protective Service Workers
Food and Beverage Serving Workers
Funeral Service Workers
Law Enforcement Workers
Nursing, Psychiatric, and Home Health Aides
Occupational and Physical Therapist Assistants and Aides
Other Food Preparation and Serving Related Workers
Other Healthcare Support Occupations
Other Personal Care and Service Workers
Other Protective Service Workers
Personal Appearance Workers
Supervisors, Food Preparation and Serving Workers
Supervisors, Personal Care and Service Workers
Transportation, Tourism, and Lodging Attendants

Crafts

Construction Trades Workers
Electrical and Electronic Equipment Mechanics, Installers, and Repairers
Extraction Workers
Material Moving Workers
Other Construction and Related Workers
Other Installation, Maintenance, and Repair Occupations
Plant and System Operators
Supervisors of Installation, Maintenance, and Repair Workers
Supervisors, Construction and Extraction Workers
Vehicle and Mobile Equipment Mechanics,

Installers, and Repairers
Woodworkers

Operative Workers

Assemblers and Fabricators
Communications Equipment Operators
Food Processing Workers
Metal Workers and Plastic Workers
Motor Vehicle Operators
Other Production Occupations
Printing Workers
Supervisors, Production Workers
Textile, Apparel, and Furnishings Workers

Transportation

Air Transportation Workers
Other Transportation Workers
Rail Transportation Workers
Supervisors, Transportation and Material
Moving Workers
Water Transportation Workers

Laborers

Agricultural Workers
Animal Care and Service Workers
Fishing and Hunting Workers
Forest, Conservation, and Logging Workers
Grounds Maintenance Workers
Helpers, Construction Trades
Supervisors, Building and Grounds Cleaning
and Maintenance Workers
Supervisors, Farming, Fishing, and Forestry
Workers

Exhibit B: Work Force Report Job Categories-Trade

Brick, Block or Stone Masons

Brickmasons and Blockmasons
Stonemasons

Carpenters

Carpet, floor and Tile Installers and Finishers

Carpet Installers
Floor Layers, except Carpet, Wood and Hard
Tiles
Floor Sanders and Finishers
Tile and Marble Setters

Cement Masons, Concrete Finishers

Cement Masons and Concrete Finishers
Terrazzo Workers and Finishers

Construction Laborers

Drywall Installers, Ceiling Tile Inst

Drywall and Ceiling Tile Installers
Tapers

Electricians

Elevator Installers and Repairers

First-Line Supervisors/Managers

First-line Supervisors/Managers of
Construction Trades and Extraction Workers

Glaziers

Helpers, Construction Trade

Brickmasons, Blockmasons, and Tile and
Marble Setters
Carpenters
Electricians
Painters, Paperhangers, Plasterers and Stucco
Pipelayers, Plumbers, Pipefitters and
Steamfitters
Roofers
All other Construction Trades

Millwrights

Heating, Air Conditioning and Refrigeration
Mechanics and Installers
Mechanical Door Repairers
Control and Valve Installers and Repairers
Other Installation, Maintenance and Repair
Occupations

Misc. Const. Equipment Operators

Paving, Surfacing and Tamping Equipment
Operators
Pile-Driver Operators
Operating Engineers and Other Construction
Equipment Operators

Painters, Const. Maintenance

Painters, Construction and Maintenance
Paperhangers

Pipelayers and Plumbers

Pipelayers
Plumbers, Pipefitters and Steamfitters

Plasterers and Stucco Masons**Roofers****Security Guards & Surveillance Officers****Sheet Metal Workers****Structural Iron and Steel Workers****Welding, Soldering and Brazing Workers**

Welders, Cutter, Solderers and Brazers
Welding, Soldering and Brazing Machine
Setter, Operators and Tenders

Workers, Extractive Crafts, Miners

Tab B – Executive Summary and Responses to Specifications

Title Page

Submittal by ADS CORP. d/b/a ADS Environmental Services
By: Heather McPherson P.E., Business Development Manager
4820 Mercury Street, Suite C
San Diego, CA 92111
Phone: 213.393.8705
Email: HMCPerson@idexcorp.com
Website: www.adsenv.com

For

**City of San Diego, Request for Proposal No. 10089830-22-J,
Wastewater Flow Monitoring Equipment, Software and Services**

Submitted To:

The City of San Diego
Purchasing & Contracting Department
1200 Third Avenue, Suite 200, San Diego, CA 92101

Proposal Due Date and Time (“Closing Date”): December 28, 2021 @ 2:00 p.m.

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Executive Summary

The City of San Diego is seeking a Contractor to provide accurate, reliable, defensible, and timely data for sewer revenue billing, sewer capacity assessment modeling and sewage spill detection alarms. ADS is honored to submit this thorough and complete proposal to the City of San Diego (City). **Our submittal is constructed from our deep understanding of the City's objectives and founded on 16+ years of continuous servicing of your flow monitoring network from our local San Diego office.** Our approach provides the industry's most reliable and accurate flow meters, a state-of-the art web data delivery platform, the most qualified, dedicated and educated workforce, and the very best transition plan at the lowest lifecycle cost that requires minimal City staff participation.

This project requires the Contractor to provide a fully turn-key approach, an end-to-end solution, and a company that is fully in control of their future, their people, and achieves high customer satisfaction marks. This project exemplifies the need for accurate, reliable, and defensible data that form the foundation of your wastewater flow monitoring alarming, billing, and modeling program. Partnered with ADS, the City will have the highest confidence that the network will generate reliable alarms, that sewer bills will be accurate, thereby strengthening trust between the stakeholders, and that your confidence in your InfoWorks ICM model will be strengthened for capacity planning, evaluation for rehab projects, and ultimately, your capital improvement program. There is simply no better match for this project than ADS. ADS has proven for decades we can be trusted with your flow monitoring requirements, and we look forward to continuing to earn your trust for this highly important project.

No other Contractor has the depth of knowledge and experience with the City's wastewater flow monitoring system and people than ADS. We know the City, the City know us, and as a result, ADS is the lowest risk and a proven provider for the requested SOW. As the City completes the evaluation process, we are optimistic that you will reach the conclusion that ADS was the right choice for the City 16-years ago when a different provider was terminated, and up through the present day, and for the next 5 years through this RFP process. Below we present the reasons ADS believes we are the best qualified to provide the identified services.

- **Responsiveness to the RFP:** Our proposal is comprehensive, thorough, and clearly laid out. We understand the project from start-to-finish, our products meet and/or exceed the technical aspects and more importantly, the needs of the City.
- **Qualifications, and Staffing Plan:** Our key personnel assigned to this project have the demonstrated qualifications required. They have clearly defined roles/responsibilities that only a company structured like ADS can provide. Our personnel have unmatched knowledge and experience working with the City's currently installed flow monitoring equipment and software. Our field Staff have passed and cleared their background checks. ADS has maintained an office in San Diego for over 30 years.
- **Firm's Capability and Past Performance:** Our performance and experience for the last 16 years with the City, and our related experience with similar size and type of collection systems is unmatched in the industry. No other company has our capacity and capabilities nationally, and certainly not locally. We have taken complete inventory of your monitoring system and have set forward the best transition plan available.
- **Price:** ADS completely understands this project and our pricing takes into consideration the following: the equipment upgrades needed, prevailing wage pay requirements and the commitment necessary to deliver high quality, reliable data, while maintaining a local qualified workforce.

By selecting ADS, the City will continue to demonstrate to ratepayers, stakeholders and regulators that you will receive the very best data from the very best flow monitoring firm in the country.

ADS CORP. Response to RFP

Project Understanding

The City of San Diego's (City) Public Utilities Department (PUD) manages and operates the wastewater collection and treatment system for the Metropolitan area of southwestern San Diego County. This system collects and treats the wastewater generated by a regional population of 2.3 million, producing approximately 147 million gallons of wastewater per day. This system, referred to as the Metro System, is comprised of 15 cities and district Participating Agencies (PA) including the City of San Diego. Each PA maintains its own wastewater collection system, which ties into the City wastewater system. The City also conveys and treats wastewater for other large facilities including State and County prisons and military installations.

ADS has thoroughly read and understands all RFP requirements and the Scope of Work. **As the incumbent Flow Service Provider (FSP) for over 16 continuous years, there simply is no other firm who understands the City's unique and complex flow monitoring solution needs, your personnel, your collection system, your operations, your flow meters, and the RFP requirements better than ADS.** The City is seeking a highly qualified and proven FSP to continue to provide accurate, reliable, defensible, and timely data for sewage spill detection alarms, sewer revenue billing, and sewer capacity assessment modeling, in accordance with the stated RFP Scope of Work for the 162 installed flow meters. ADS is the City's proven provider. Key deliverable and requirements are listed below;



- ENS Data Accuracy:** The City and the PAs require the latest Web-Based Software Platform and Event Notification System (ENS) to perform many tasks under this RFP. The ENS is intended to provide real-time early warning of potential and/or existing wastewater overflows based on flow data collected from the designated alarm monitors. The City is interested in adopting the latest machine learning technology to help predict developing blockages to reduce the number of SSO's. The ENS is configured to monitor most trunk sewers, including all canyon trunk sewers.
- Billing Data Accuracy:** The City and the PAs rely on accurate sewer flow monitoring data to ensure billing is precise, repeatable and reliable from day one of the contract. Getting this right is critical as it will help the City avoid possible loss in income and PA friction due to billing errors or changes from current billing data. ADS completely understands the project requirements, current site configurations, hydraulics, and technology to ensure reliable and accurate data during the transition to a new contract and for the next 5-years.
- Modeling Data Accuracy:** Hydraulic Sewer Modeling is a key component of this program. The City requires detailed data analysis to better plan for capital and operations improvements to ensure sufficient long-term capacity and the reduction of SSOs. Accurate flow data in both dry and wet weather conditions is critical towards maintaining the City's InfoWorks ICM hydraulic model at peak calibration. ADS maintains a team of Data Analysts devoted to analyzing the City's flow monitoring data.
- Local Office:** The City requires local qualified staffing and a local office to execute this project at optimal performance and respond in a timely manner. The local FSP shall repair and carry out all preventative maintenance services needed for the reliable operation of the monitor sites at a minimum of 95% network uptime.

Under our current contract with the City, ADS field personnel visited each flow monitoring site on at least sixty (60) separate occasions, totaling 7,500 visits over the past 10 years. This level of first-hand experience gives ADS a unique position to meet or exceed all requirements for the next 5-years!

Below we present and summarize our knowledge of the City and the SOW for this project:

- **Experience as Incumbent:** We have a long standing and trusted relationship with City personnel, we believe ADS is a “Trusted Advisor” to the City and the PA’s. We know the installed equipment and understand exactly what equipment/components will require upgrades over the next 5-years. We fully understand the Prevailing Wage requirements and have priced this project accordingly.
- **Coordination with City:** We are in daily contact with the City’s personnel, mainly May Zidan, to review project operational issues, coordinate our work schedule and discuss the closeout out of any outstanding items. When Edgar Patino’s group has PA billing data questions, ADS Project Manager Neil Volk has and will continue to make this a priority and resolve them quickly. We will continue to work closely, coordinate all facets of this project, take direction, respond to requests and serve the Contract Manager.
- **System Knowledge:** We have the most extensive level of knowledge of the City’s complex collection system including site locations, site equipment, safety requirements, traffic control, and permitting requirements. We have local experience with all hazards in the City’s collection system; high flow, difficult access, low oxygen, high H2S, all of which enable ADS to be fully prepared for meter maintenance. We are familiar with the City’s pump station network and where the system will be stressed when large pump stations are shut down for system maintenance. We understand all security clearance protocols entering sensitive area such as military bases and prisons.
- **Site Knowledge:** Our Data Analysts have a comprehensive understanding of each monitoring location’s equipment, hydraulics, trends, data quality, flow balancing, and reporting requirements. We are familiar with the City land use areas and currently the flows are in-line with EDU’s; The ADS Data Analysts “live” in the City’s data on a daily basis.
- **Equipment Knowledge:** Our Field Staff and Data Analysts have unparalleled knowledge of the currently installed Triton+ equipment and Prism Software. **No other company** has comparable experience troubleshooting and maintaining the Triton+ meters than ADS. This knowledge and experience ensure the City will continue to receive accurate Event Notification Alarms and the highest quality data. By having ADS who is an expert with the Triton+ equipment installed in the City, you remove the risk of alarms being missed and data loss, which can occur when FSPs that are much less familiar with the equipment attempt to maintain large and complex flow monitoring networks like the City’s.
- **Technical Expertise:** Our Engineers and Technical Advisors are always available to the City and the PAs for consultations, training, presentations, data review, and scattergraph analyses. This year, ADS Product Manager Kevin Enfinger, P.E., ADS Regional Engineer Paul Mitchell, P.E., and ADS VP of Engineering Pat Stevens, P.E. presented a seven-part series about Infiltration and Inflow measurement and methods that City staff took part in. In the fall of 2020, Kevin Enfinger, P.E. presented to and trained City staff on the ADS PRISM™ Blockage PREDICT Machine Learning application on how to identify a developing blockage, which was followed by Paul Mitchell, P.E. presenting “The Ten Types of Sewer Hydraulics, Using Scattergraphs to Identify Hydraulic Performance and Capacity Robbers” to City staff. And in April 2020, Paul and Pat Stevens, P.E. reviewed the SM02 SSO event, and assisted in estimating the SSO volume using Advanced Scattergraph Analysis and SLiCER software tools.
- **Machine Learning (Artificial Intelligence):** Early in the morning, every morning, ADS’ PRISM Machine Learning algorithms are reviewing, learning, understanding, and alerting from every monitor installed in the collection system. For the last year and a half that the ADS ECHO™ level meters have been installed, ADS

has been providing our Blockage PREDICT™ early blockage prediction Machine Learning tool for the City's flow meters and the ECHO's. To date, this program has provided excellent results reducing the City's cleaning efforts (monthly, bi-monthly and quarterly cleaning sites have been reduced by over 85%), and we have been meeting with and in frequent contact with the Jesus Escalona and Kevin Murphy to assist in reducing SSOs and to help maximize the efficiency of cleaning efforts. ADS has the right tools and system knowledge to continue assisting the City in these impactful productivity initiatives.

Firm Qualifications

ADS CORP., d/b/a ADS Environmental Services (ADS), is a premier USA based, international sewer collection system flow monitoring service provider and most importantly, local to the City of San Diego and the PAs. Established in 1975, ADS employs approximately 300 people with 25 field offices. ADS is a Fluid & Metering Business Unit of IDEX Corporation based in Lake Forest, IL. IDEX is traded on the NYSE and has USD \$2.5 billion-dollar of annual revenue and a market cap of \$12.74 billion. ADS adheres to the IDEX Mission statement: *to engage our customers, shareholders, and employees to create value and positively impact the communities in which we live and work.* We do this through Leadership & Education, Community Engagement and a rigorous Health & Safety program. Everything we do at ADS revolves around our people. The proof of our success is in the long tenure of numerous employees, many who have been at the firm for over 20 years. This type of retention is evident at ADS offices throughout the country and is exemplified in our San Diego office. Attracting and retaining the highest caliber talent is critical to our success, which we achieve through effective training programs, a highly ethical and inclusive culture, and a great work environment for our people to thrive.

As the largest and most financially stable sewer flow meter manufacturer and service provider in the wastewater flow metering industry, we offer an extensive but focused range of equipment, software and services that fulfills the requirements of this RFP. We are confident in this statement based on our deep knowledge of the City's system and as demonstrated in the ADS mission statement: *to provide the easiest and most affordable answers to when, where, and how collection systems fail in time to prevent them.* Our fully integrated, turn-key approach ensures project success. Most flow service providers buy metering equipment and software platforms from others and will hire key functions such as field service and data analysis. ADS will maintain the equipment and adhere to the schedule, we will provide the highest uptime and the most accurate data; we will implement and use the most advanced analytical and machine learning data tools in our market, and we will staff the project with the highest quality workforce in the industry.

At ADS we believe that investment in technology development and in our people is critical. In the past 5 years we have invested over \$13M in the development of new hardware, software and people. We have a lot to show from this investment including our new unified data model, the Microsoft Azure cloud-based software platform PRISM™. In the past few years our hardware releases have included the AV|GATED™ sensor, a World Wide Modem, and the ECHO™ depth monitor. In Q2 '22 ADS will release the ParaFlow™, our new non-contact, surface mounted area-velocity (A/V) sensor that can be mounted in the pipe for highest accuracy, or in the manhole allowing for "top-side" service (no confined space entry) for highest safety and ease of maintenance. These innovations are described later in our submittal.

As a result of our deep experience, ADS has had the unique opportunity to observe some of the most challenging flow conditions in our industry and record our observations in white papers. ADS has published numerous white papers regarding flow metering, rainfall monitoring, hydraulic conditions and challenges, Infiltration & Inflow (I/I), large project execution, and recently, depth metering and machine learning to reduce cleaning efforts. With over 50 published papers, multiple published online training seminars, and hundreds of conference presentations, it is safe to say no other flow service provider has the depth of knowledge or has published more papers than ADS. ADS pioneered and developed the science of "Scattergraph Principals and Practice" including the industry-reference poster shown below. This poster hangs on the walls of the majority of engineers involved with wastewater flow monitoring. The scattergraph is a powerful tool that displays depth and velocity data from a sewer flow monitor. The resulting patterns form characteristic signatures that provide insight into the conditions within a

sewer. The flow monitoring data also leaves distinct patterns that even allow the performance of the flow monitor itself to be evaluated. Examples of conditions that scattergraph analysis can detect include:

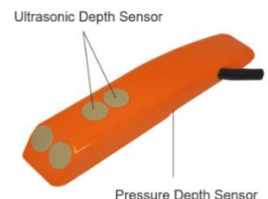
- Downstream restrictions
- Sags in sewer lines
- Hydraulic jumps
- Shifting debris
- SSO detection and estimation
- Flow meter bias and precision
- Pressure drift (not applicable to ADS meters)



In 2020, ADS provided a 10-part Scattergraph Principles and Practice webinar series designed as an educational resource for wastewater professionals. This series helped to advance the use of Scattergraphs to recognize various flow conditions and understand how they impact sewer capacity and performance. Over 1,200 unique attendees, including representatives of the City, attended this webinar series. These free of charge webinars exemplify the dedication from ADS to continually inform and educate our industry.

ADS believes in providing Intrinsically Safe (IS) equipment as our standard offering, thus ensuring a safe system. Of paramount importance is complying with both the National Fire Protection Association - 820 Standard Fire Protection in Wastewater Treatment and Collection Facilities, and the US Electrical Code - Chapter 30 requirements for Class I, Division 1, Group D locations to ensure the City is minimizing its risk and proactively seeking the safest solution for its citizens.

One of the reasons ADS is selected to conduct so many flow monitoring projects is our dedication in the use of ultrasonic technology as our primary depth measurement. Like many manufacturers, we offer an integrated pressure sensor, as well as a separate down-looking ultrasonic sensor for sites with challenging hydraulics or low depth of flow. ADS is unique, however, in that we also integrate an up-looking ultrasonic sensor in our standard A/V sensors. **The drift-free ultrasonic technology is the primary depth measurement**, while the pressure depth technology is used for redundancy and for measuring surcharge depth. Relying on pressure-depth as the only depth measurement technology exposes the City to increased risk of erroneous data and poor information for making important, multi-million-dollar infrastructure decisions. The standard ADS A/V sensors use an ADS-patented continuous doppler wave technology to measure velocity throughout the cross-section of the flow allowing for highly accurate average velocity to be calculated.



ADS is fully committed to the International Organization for Standardization 9001:2015 Quality Management System, certifying us in the “Design, development and manufacture of equipment (including intrinsically safe products) for measuring and collecting fluid data in pipe and channel systems. Certification encompasses customer support, installation, data analysis and repair services.” ADS certification includes flow monitoring services which is expensive to maintain, is detailed oriented, has rigorous requirements, and is subject to yearly audits. This all-encompassing certification ensures predictable high-quality results, extremely high customer satisfaction, and safe equipment across our integrated platforms.




ADS is committed to our long-term flow metering partners like the City of San Diego. ADS does not leave our clients behind because of new technology, communications platforms, or software platforms evolution. ADS always provides an upgrade path that is cost effective, uninterruptible and beneficial to our clients. Since 2005, ADS has provided The City of San Diego a path of continually upgrading the flow metering system at the lowest possible lifecycle costs, highest quality, and **with zero** billing disputes.

Project References of Similar Requested Services

Below we present 4 positive project references that are similar in scope and services to those the City is soliciting under the RFP requirements. Like San Diego, these references have been our partners for decades, are some of the largest monitoring networks in the US, and all require accurate and reliable data. It is an honor and a privilege for us to be put in such high regard as a Trusted Advisor and as a company that delivers superior results.

Project Reference #1.

Operation & Maintenance of Flow Monitoring Equipment	
 <p>Fulton County Department of Public Works 141 Pryor Street, Suite 6001. Atlanta, GA 30303</p>	<p>Terry Peters Assistant Director Phone: (404) 612-7485 terry.peters@fultoncountyga.gov</p>

Since 1992, ADS Environmental Services has completed a series of contracts to provide a full range of sewer system services for the Fulton County Department of Public Works. Recently, ADS was selected through an RFP process to continue this contract for another 5-years. ADS has been a partner in the County’s comprehensive infrastructure evaluation program which includes tasks such as long term and temporary flow monitoring, manhole inspection, smoke testing, CCTV/cleaning, I/I studies with reporting and recommendations.

This program developed from an initial temporary flow monitoring study after which a number of locations were converted to long term sites. As the County expanded and developed, additional sites were added to evaluate system capacity, identify areas of infiltration and inflow and manage system operation. A total of 59 flow meters were placed to measure flows either sent to or received from neighboring municipalities. These 59 Interjurisdictional billing locations allow the County to verify bills received from other jurisdictions and properly bill other jurisdictions for flow received and treated by Fulton County.


Currently the County has 228 ADS Triton+ area-velocity flow monitors, 36 LRD depth only sensors and 26 RainAlertIII rain gauges installed for collecting level, flow and rainfall data for which ADS provides comprehensive maintenance. Pipe sizes range from 8” to 60”. The PRISM web-based software platform is utilized to collect the data and report alarms. This data provides critical system information that enables Fulton County to continually assess flow conditions and direct operation and maintenance on the County’s separate northern and southern collection systems as well as calibrate its hydraulic model.

Annually, ADS conducts several additional temporary monitoring studies in sub-basins as informed by the long-term flow data and directed by the County. Sliicer.com software is provided for the DPW’s staff to perform I/I analysis system-wide or for individual basins as needed. Seasonal analysis allows DPW to track the effectiveness of rehabilitation activities.

ADS provides training for DPW staff to keep them up-to-date with any changes that occur with the PRISM data hosting platform and the SLiCER analysis tool.

Annual Contract Amount = \$1.9 Million

Project Reference #2.

Operation & Maintenance of Monitoring Equipment		
	<p>Oakland County Water Resources One Public Works Drive – Building 95W Waterford, MI 48328-1907</p>	<p>Carrie Ricker Cox Chief Engineer Phone: (248) 470-1314 coxco@oakgov.com</p>


ADS provides comprehensive field services for OCWRC for both permanent and temporary flow monitoring programs. The work encompasses over 150 Triton+ and ECHO Meters that provide data for a hydraulic model, capacity analysis, and agency billing. ADS has been a partner to the WRC for the last 30 years (Since 1991) in operating, servicing and maintaining the County’s existing flow monitoring network. This experience has allowed for a seamless continuation of the current system performance over the years, especially with regards to agency billing and modelling.

ADS provides the County with (1) a single point of accountability for their level, flow and rain fall monitoring program, (2) accurate and reliable data that has been utilized for agency billing and hydraulic modelling, (3) contractor capacity in supplying a large fleet of hardware and experienced staff to quickly respond to ongoing maintenance needs.

ADS provides comprehensive field services for all the ADS and non-ADS hardware systems being utilized by the County and for equipment that falls under our service contract. ADS provides data analysis and data QAQC services that has provided the County with data uptime of 98% or greater over the course of the historical monitoring period. ADS also provides meter calibration and confirmations for both new and existing monitoring locations located around the County’s services area along with detailed site hydraulic verification if data from any of the meters comes into question from one of the billing agencies. The monitoring data is verified and checked against ongoing dye-dilution testing to identify high or low adjustment factors and helps establish site confidence rankings for each of the 16 billing agencies monitoring network.

Annual Contract Amount = \$1.2 Million

Project Reference #3.

Long Term Flow Monitoring and Infiltration/Inflow Analysis		
	<p>Metro Water Services 1600 Second Avenue, North Nashville, TN 37208</p>	<p style="text-align: right;">David Pendley Project Manager (615) 862-4599 david.pendley@nashville.gov</p>

ADS installed 119 flow monitors in 1990 following the issuance of an EPA Consent Decree. Since that time, ADS has been monitoring 100% of the Nashville wastewater system which includes pipes that range from 8” to 198”. Many of the largest pipes are CSO outfalls which require special attention to data quality. The flow data gathered from these monitors and analyzed by ADS Environmental Services provides the Metro Water Services with data required to proactively manage their collection system by identifying and addressing I/I problems before they turn into overflows. Additionally, ADS provides comprehensive monitoring and reporting of interjurisdictional flows to assist in billing.


ADS provides Nashville with long term flow monitoring, comprehensive field services, data analysis, temporary flow monitoring, I/I analysis, and Flowview and PRISM webhosted software platforms. The web-hosting system was implemented and programmed to alarm for high depths, flow loss, and rain events. Over the life of this project, temporary flow monitoring has been performed at over 700 locations. ADS has also performed a comprehensive inventory and field reconnaissance of Nashville’s combined sewer system to confirm the physical dimensions and condition of the system.

MWS has used this information to target 223 rehabilitation projects necessary to reduce overflows and address other consent decree mandates. In 2002 they celebrated the removal of the Cumberland River from the 303(d) list. To date 75% of overflows from the sanitary sewers and pump stations have been eliminated.

ADS is currently in year five of a 5-year contract with MWS. Our current installations include 100 Triton+ Flow Monitors and 21 ADS RainAlert II rain gauges and 10 ECHO level monitors permanently installed and 65 temporary flow monitors installed in 2021.

Annual Contract Amount = \$1.2 Million

Project Reference #4.

Long & Short Term Flow/Rain Monitoring Services	
	<p>Seattle Public Utilities 700 5th Ave. Seattle, WA</p>
	<p>Kara Peck, Systems Operation, Planning & Analysis 206-684-3547 Kara.Peck@seattle.gov</p>

ADS has been the flow service provider for Seattle Public Utilities since 2005, most recently being awarded a 6-year contract in 2017 for 75-150 temporary flow monitoring (TFM) sites per year to help with pre/post construction, I&I and planning/capacity. Additionally, a 7-year contract was awarded in 2018 for 81 permanent CSO sites and 11 rain gauges for an NPDES permit with the State of Washington Department of Ecology. ADS also did a temporary flow study over the last 3 years at over 250 storm and sanitary sites to help calibrate the City’s Hydraulic Model. Data from the flow, CSO and rain gauges sites is sent via wireless telemetry to a Web Hosted System.

Seattle hired ADS to better understand the flow characteristics at their CSO structures, including refining overflow calculations. When ADS started monitoring the CSO sites in Seattle, the City was struggling to calculate overflow volumes based on the technologies, equipment and methods used by their previous flow service provider. CSO structures can be complicated, but ADS was diligent in finding the best solution for the sensor placement at each structure in order to achieve a high-quality data set. With the variety of sensors available with ADS technology and our proven methodology, we were able to help the City determine that they had less than 50% of the overflows they had previously been reporting.

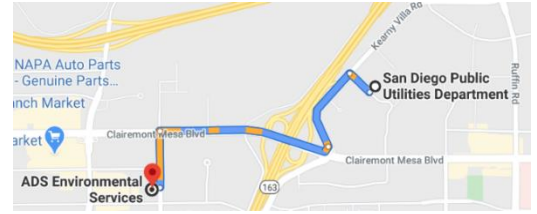
To help SPU comply with their EPA Consent Decree and Washington State Department of Ecology (DOE) regulatory requirements for the CSO (NPDES) sites, ADS performs daily data analysis and 24/7 alarm review before warning SPU staff about potential dry-weather overflows, and we finalize data on a monthly basis including calculating overflow volume.

ADS was able to overcome these obstacles utilizing our multi-sensor technology and CSO installation experience to provide accurate data to the client. ADS employs over 6 different sensor configurations in the Seattle CSO system.

Annual Contract Value = \$1.5 Million

Local Project Office and Experience

As the selected provider, ADS will continue to execute the work under this RFP from our San Diego office, which is less than two (2) miles away from the City’s office. This location has served the City and ADS well, and we are confident it will continue to assure optimum response and communication for the City staff. If needed, ADS will supplement local staff with other regional staff located Huntington Beach, San Jose, or Seattle offices as needed.



ADS has been providing flow metering services in California and in San Diego for over 30 years. The table to the right is a sample of our local and regional projects. Many of these clients, like the City of San Diego, San Jose, EBMUD, Fresno, and OCS D have continued to use ADS’ services and equipment for over 20 years!

Large West Region Clients	# of Meters
San Diego, CA	162
EBMUD, CA	150-400/yr
San Jose, CA	500+
SPU, WA	150-250/yr
Clark County, NV	100
City of Los Angeles, CA	150+
OCS D, CA	300+
Calgary, Canada	150
King County, WA	732
Honolulu, HI	140

ADS has extensive capacity and capabilities to meet any project size. Our local San Diego staff has completed many projects of similar meter count, scope, or dollar value meeting the RFP requirements. Shown below are four projects that our San Diego office staff have either, completed or continue to service, all while maintaining the City’s network **at over a 98% uptime**.

1) City of San Diego, Sewer Flow Monitoring and Event Notification Services, San Diego, CA. Five-year contract with the City of San Diego worth \$5,700,000. Monitor 162 sanitary flow monitoring sites in pipes ranging from 8” to 114” on a continuous basis since 2005. Provide daily updates of flow, hydraulic performance and event notification via wireless communication to the ADS PRISM web-based data delivery platform. Daily service summaries and 98% or better uptime performance are provided along with monthly data analysis and finalization / certification of data used for billing, modeling and overflow alarming.

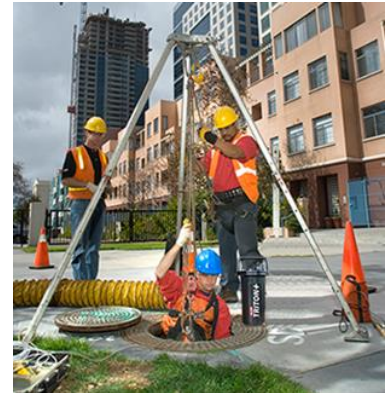
2) City of Las Vegas, Clark County Water Reclamation District and City of Henderson, Permanent Sewer Flow Monitoring, Las Vegas, NV. Operation, maintenance, and reporting on 30 permanent sanitary sewer flow monitoring sites on a continuous basis since 1997 in Las Vegas, 100 permanent sites in Clark County since 2017, and 25 sites in City of Henderson since 2019. Flow data is used for modeling, capacity/planning, billing, flow verification during diversion activities and operational control. Provide daily updates of flow, hydraulic performance and event notification via wireless communication to the ADS PRISM web-based data delivery platform. Scope of services includes comprehensive turn-key provision of hardware, data analysis, field service, event notification and data finalization/reporting. Deliverables also include as-needed temporary flow monitoring and removing and reinstalling monitoring stations.

3) Encina Wastewater Authority, Permanent Sewer Flow Monitoring, Carlsbad, CA. Operations, Maintenance and Reporting on Twenty-seven (27) sewer flow monitoring locations including 4-20mA applications serving 7 Participating Agencies on a continuous basis since 1995. Scope of work includes permanent sewer flow monitoring, comprehensive service, data analysis and event notification services. The data is used for billing, modeling, and ENS purposes as well as pump station status and third-party flow meter logging.

4) City of Phoenix, Citywide Mega Metering Project, Phoenix, AZ. One hundred and seventy (170) sanitary sewer flow monitoring locations for a period of thirty (30) days. Scope of work included field inspections, monitoring equipment installation and maintenance, and data analysis and reporting to assist the City with model calibration and to isolate and quantify system diversions and bypasses. Due to the success of the Mega Metering Project, follow up work was requested by the City to further identify and quantify bypasses, and to profile indoor and outdoor water use by correlating water use to its sewer flows. Data collected will assist in forecasting water demands for single-family subdivisions. The project’s success and results were presented at AZ-Water in 2019 by Brown and Caldwell.

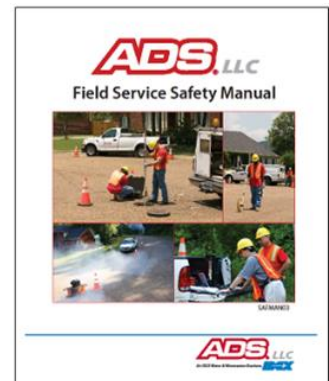
Workplace Safety and Training Programs:

At ADS, nothing is more important than the safety of our workers. We understand from past flow monitoring projects with the City and with other municipalities throughout the country that safety is paramount to these organizations as well. ADS has extensive experience meeting and exceeding all federal, Cal OSHA and PUD safety standards and regulations, and we will continue to follow these standards and regulations throughout the duration of this project.



ADS has an integrated, comprehensive safety process that is headed by a full-time Safety Manager with over 20 years of ADS experience. The safety process encompasses safety policies, training, hazard identification and abatement, audits, equipment and safe work procedures. Field personnel training includes OSHA 10 hour, confined space entry certification, personal protective equipment, blood borne pathogens, gas meter operation, hazard communication, defensive driving, distracted driving, fleet safety, egress and emergency action, heat stress, fall protection, ladder safety, scaffold safety, slips, trips and falls, respiratory protection, hot works, fire extinguisher, preventing back injury, electrical safety, lock out tag out and first aid/CPR. Records of training are documented in centralized files and field personnel also receive a comprehensive physical examination bi-annually.

ADS has achieved a 0.84 indexed Experience Modification Rate (EMR) score from Marsh & McLennan Companies as part of our parent company’s overall safety rating. (Below 1 is good!) This index looks at risk management for professional services firms and provides annual scores for trend analysis and comparison.



ADS maintains OSHA-reportable KPIs for safety incidents in our workplaces company-wide. These are discussed monthly at our mandatory weekly safety meetings to provide feedback and reinforce good, safe behavior. Throughout the 2020 contract year we were well below the KPI standards for our industry (average TCIR or Total Case Incident Rate over the year of 0.87 vs. industry 4.0) and we posted similar results for the previous five years.

Staff Training: ADS maintains an internal training certification program for the field managers, field technicians, and data analysts who work on any ADS project. There are 18 training modules for field managers and 8 flow monitoring modules for field technicians. Data Analysts must complete classroom training plus a 6-month internship. This training will provide City’s staff high confidence that obtaining quality flow data is not only possible but is almost guaranteed by recruiting and training quality personnel and using a documented set of procedures.

Project Team

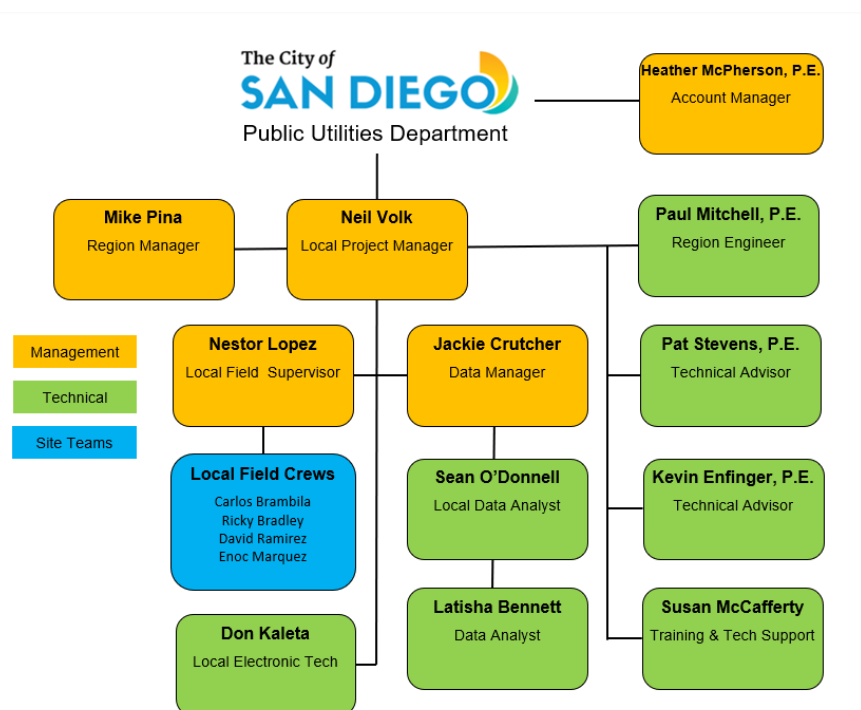
Wastewater flow monitoring manufacturing and services has always been our primary business focus. Many of our staff members listed below have been with ADS over 20 years and have dedicated their careers to servicing the City and the PA’s over this period. ADS believes the best way to ensure project success is to assign the most qualified personnel and have defined roles and responsibilities throughout the contract term. Not only has this formula worked for the City, but it has worked time and time again producing high quality datasets, the highest uptime, and data delivered on-time. Open channel flow monitoring is not simply a small segment of our products and/or services, but rather is our core business!

Our project risk assessment and mitigation regarding staffing is designed to ensure project success does not hinge on the level of participation of any one individual. Rather, ADS ensures that each member of the team selected for this project is capable of performing their job independently. Each has a co-worker(s) who can step in and perform their job if for some unforeseen reason they are unavailable to do so without network interruption or billing disputes.

Our track record, our commitment, our obligation to the City and the PAs is structured to meet the project objectives stated in the RFP with the following key traits listed below;

- ADS will staff this project with local, full-time employees, dedicated to maintaining and exceeding the level of services required in the RFP. We take pride in our ability to staff all projects with highly qualified and certified company employees.
- Staff must have extensive knowledge of the City’s wastewater collection systems and the installed flow monitoring network, and the ability to work closely and seamlessly as one entity towards the project goals.
- ADS will remain your Trusted Advisor and continue to oversee the City and provide a seamless transition to the new 2022 contract. There is no learning curve by choosing ADS; we will hit the ground running!

We present our team’s Organization Chart with clearly defined roles and responsibilities with Mr. Neil Volk continuing to serve as our Local Project Manager to lead this project. Neil has all resources available to him, both locally and around the Country to serve the City and the PAs for the next 5 years.



Below we present our team’s Title, Experience and Credentials> This team has over **250 years of direct combined ADS flow monitoring experience.**

STAFF MEMBER Title / Role	ADS FLOW MONITORING EXPERIENCE	CREDENTIALS
Neil Volk, PMP. Senior Project Manager	26 Years	<ul style="list-style-type: none"> ✓ Graduate Studies – Statistics ✓ B.S. Business Management ✓ AAS – Electronics Systems
Nestor Lopez Field Supervisor	9 Years	<ul style="list-style-type: none"> ✓ OSHA 10-hour Safety and Health Training
Local Field Crew	20+ Years	<ul style="list-style-type: none"> ✓ Various
Jackie Crutcher Data Manager	35 Years	<ul style="list-style-type: none"> ✓ B.S. – Computer Science Technology
Sean O’Donnell Data Analyst III	12 Years	<ul style="list-style-type: none"> ✓ B.S. – Geography
Latisha Bennett Data Analyst III	11 Years	<ul style="list-style-type: none"> ✓ B.S. – Biology ✓ M.S. – Biology
Don Kaleta Sr. Electronics Technician	30 Years	<ul style="list-style-type: none"> ✓ AS, Applied Electronics and Computer Technology,
Susan McCafferty Client Services / Training	28 Years	<ul style="list-style-type: none"> ✓ AS, Applied Electronics and Computer Technology,
Paul Mitchell, P.E. Senior Region Engineer	19 Years (31 years in wastewater industry)	<ul style="list-style-type: none"> ✓ B.S. – Chemical Engineering ✓ M.S. – Civil Program Core Courses ✓ P.E. Licensed, CA, NV, UT
Kevin Enfinger, P.E. Technical Advisor	20 Years	<ul style="list-style-type: none"> ✓ B.S. – Chemical Engineering ✓ P.E Licensed, AL, KY, NC, SC, TN, TX
Pat Stevens, P.E. Technical Advisor	28 Years (49 years in wastewater industry)	<ul style="list-style-type: none"> ✓ B.S. – Aeronautical Engineering ✓ M.S. – Environmental Engineering ✓ P.E. Licensed, IN, MD ✓ WEF Fellow – 2019
Mike Pina West Region Manager	20 Years	<ul style="list-style-type: none"> ✓ Graduate Studies Statistics ✓ B.S. – Business Management ✓ AAS – Electronics systems License (Class A)
Heather McPherson, P.E. Business Development Manager	15 Years (21 years in wastewater industry)	<ul style="list-style-type: none"> ✓ B.S. – Chemical Engineering ✓ P.E. Licensed, CA

Below we present our team's condensed resume, full resumes can be provided as requested.



Neil Volk, PMP. Senior Project Manager

Years with ADS: 27

Residence: San Diego, CA

Experience: Neil has been with ADS since 1993 and has successfully managed over 400 Temporary and Permanent Sewer Flow Monitoring Projects. He currently serves as Sr. Project Manager in the San Diego, CA office and is responsible for overseeing all phases of projects within a territory that includes California (southern), Nevada, Arizona, Utah and Hawaii. Projects Neil manages include long-term and temporary flow monitoring services, model verification, capacity studies, infiltration and inflow (I/I) analysis; sewer system evaluation surveys such as physical inspections, smoke testing, and reporting. Neil has been assigned to the City of San Diego projects for decades and is intimately familiar with City personnel and collection system.

Role for this project: Sr. Project Manager. Neil will continually monitor the quality of the work through routine ongoing inspections, review of completed work, and process quality metrics. He will also communicate with the City by phone, email, or in person at meetings to report on work status and resolve any issues. Neil is the City's go to person.



Nestor Lopez, Field Supervisor

Years with ADS: 9

Residence: San Diego, CA

Experience: As a Field Supervisor, Nestor has successfully managed the field operations from beginning to end on over 50 temporary flow monitoring projects totaling more than 300 monitoring sites. These projects include studies required to obtain data for modeling, inflow and infiltration, billing, Event Notification Services (ENS), flow proportional sampling, sanitary sewer evaluation services (SSES) and pump station calibrations. Nestor presently manages 14 long-term projects totaling over 350 monitoring sites.

Role for this project: Field Supervisor. Responsible for the direct supervision of ADS field personnel. Trains and leads ADS field representatives including safety training coordination, field record organization, quality control, and overall field performance. In this role he certifies that all ADS field crews are trained to the proper level of competence for Confined Space Entry, and that they understand all of ADS' ISO 9001 standards for flow monitoring tasks. Jesse immediately trains on all upgrades to ADS technology and has been implementing these upgrades to the City's flow meters and level devices. His passion is teaching and training, and he ensures the City project instruments remain in optimal operating conditions, as well as constantly updating his crew leader's knowledge and expectations.



Field Rep (FR), Carlos Brambila, David Ramirez, Ricky Bradley and Enoc Martinez

Years with ADS: 25+

Residence: San Diego, CA

Experience: The ADS field crew of is the same group of Field Technicians who have been servicing the flow monitoring program at the City the last 5+ years, Every FR has been thoroughly trained to perform maintenance, confined space entry, safe driving, and has been certified in each of these areas. They are intimately familiar with the City's flow/depth meters, collection system, safety hazards, and project deliverables.

Role for this project: Responsible for operating and maintaining all ADS monitors and equipment that includes, installation, hydraulic calibration, collection of data and review for accuracy, monitor troubleshooting and repair. In addition FR's will maintain accurate, legible organized records in accordance to all ADS Operations Quality Work Instructions, maintain vehicle and equipment to ensure safety, mechanically soundness and productive operation. They must adhere to all safety procedures and ADS policies/procedures.



Jackie Crutcher, Senior Data Manager

Years with ADS: 36

Residence: Huntsville, AL

Experience: Jackie has over 36 years of experience in project management, analysis, data collection, and final report preparation for the data portions of ADS projects. In addition, she provides complex flow monitoring analysis, software training, and product support. Data management responsibilities also include coordinating work assignments and schedules for a group of data analysts, conducting data reviews, data audits, quality control

for flow data, and assisting with training of analysis team members.

Role for this project: Data Manager. Jackie is responsible for data analysis scheduling and coordination, project management, analysis, data collection, and final report preparation. Her data management responsibilities also include coordinating work assignments and schedules for data analysts, conducting data reviews, data audits, quality control and assisting with training of data analysis team members.



Sean O'Donnell, Data Analyst III

Years with ADS: 13

Residence: San Diego, CA

Experience: Sean has over 13 years of experience as a Data Analyst with ADS. His experience encompasses analysis, data collection, and final report preparation. He currently serves as the lead Data Analyst for the City of San Diego Metropolitan Flow Meter Network. Sean works with all members of the San Diego team to ensure that strict contract guidelines are met. He also has worked on numerous temporary flow monitoring projects involving capacity analyses, sewer system evaluation, and infiltration/inflow determination.

Role for this project: Lead Data Analyst. Sean is responsible for data analysis scheduling, data collection, and final report preparation. As a Data Analyst for ADS Environmental Services, he is responsible for analyzing data from the City collection system. He is responsible for directing field maintenance activities, data finalization and preparing monthly reports for the City.



Latisha Bennett, Data Analyst III

Years with ADS: 12

Residence: Huntsville, AL

Experience: As a Data Analyst for ADS Environmental Services. She is responsible for reviewing flow data on a bi-weekly or daily basis to check for any abnormalities that would adversely impact the quality of the data. She is also responsible for analyzing the data using many variables such as calculations, system schematics, rain data, field hydraulic

confirmations, and preparing monthly reports on the analysis of data.

Role for this project: Latisha is responsible for data analysis scheduling, data collection, and final report preparation. As a Data Analyst for ADS Environmental Services, he is responsible for analyzing data from the City collection system. He is responsible for directing field maintenance activities, data finalization and preparing monthly reports for the City.



Don Kaleta, Sr. Electronic Service Technician

Years with ADS: 31

Residence: San Diego, CA

Experience: Don has over 30 years of wastewater flow monitoring and equipment service experience. Don is a certified electronic service technician responsible for the testing and repair of ADS technology including intrinsically safe equipment. Don has worked in several different regions of the country and the world for ADS including Australia and Singapore.

He has trained numerous ADS employees and clients to operate and maintain ADS flow monitoring hardware and software.

Role for this project: Responsible for servicing all monitors and pump station loggers for the ADS West Region. Activities include troubleshooting and repairing monitors and circuit boards to the component level. Additional responsibilities include maintaining the West Region’s supply of spare parts and processing of all equipment warranty issues, and custom integration of hardware.



Paul Mitchell, P.E., Senior Region Engineer

Years with ADS: 20

Residence: Huntington Beach, CA

Experience: Paul has over 31 years of technical and engineering experience with an emphasis in wastewater collection systems, municipal waste, and environmental assessment/site remediation. He currently serves as Senior Region Engineer and Project Manager. His background includes work with long-term flow monitoring services, model verification, capacity studies for siphons, pump stations, and critical sewer segments, infiltration and inflow (I/I) analysis and prioritization studies, sewer system evaluation surveys such as physical inspections, smoke testing, as well as technical reporting and presentation.

Role for this project: Professional Engineer. Paul will provide engineering support as required including review of challenging hydraulic conditions, advanced data analysis, engineering calculations, and review and certification of any final project reports.



Pat Stevens, P.E., VP of Engineering

Years with ADS: 29

Residence: Huntsville, AL

Experience: Pat has nearly 50 years of professional experience in the environmental field and works closely with consulting engineers, municipal officials, and EPA officials to develop information for successful management of sanitary sewers. Mr. Stevens has published over 50 papers including dozens of WEF and ASCE papers, and he was the driving force behind the development of the ADS SLiCER RDII analysis software.

He is a nationally recognized expert in sewer flow monitoring and was just recently award the prestigious 2019 WEF Fellow Award.

Role for this project: Technical Advisor. Resource for advanced data analysis, specialized troubleshooting, I&I analysis and characterization of system-wide hydraulic signatures.



Kevin Enfinger, P.E

Years with ADS: 21

Residence: Huntsville, AL

Experience: Kevin has served at ADS since 2000 and has worked on hundreds of sewer flow monitoring projects throughout the United States from coast to coast. Kevin currently serves as a Product Manager when he leads teams working on advanced data analytics, data science, and machine learning initiatives.

Role for this project: Technical Advisor. Resource for advanced data analysis, machine learning, blockage prediction tools, alarming, and rain gauging.



Susan McCafferty
Years with ADS: 29
Residence: Huntsville, AL

Experience: Susan has served in many aspects of flow monitoring at ADS since 1982 and has worked on a variety of flow monitoring projects in the US, Canada and Europe. Susan currently serves as the corporate software trainer, not only demonstrating multiple software but also testing and utilizing the software for project analyses. Projects include evaluation of combined sewer overflows, event notification projects, capacity analyses, inflow/infiltration studies and industrial discharge analyses.

Role for this project: PRISM software advisor including training city staff. Resource for data analysis, alarming, and hardware/software support.



Mike Pina, Regional Manager
Years with ADS: 20
Residence: Spokane, WA

Experience: Mr. Pina has P&L, project, and staffing responsibility for the fifteen-state West Region. Responsibility for the combined regions includes overall customer satisfaction and the management of approximately 30 engineering, technical, administrative, and field personnel.

Role for this project: Region Manager. Resource allocation and support.



Heather McPherson, Account Manager
Years with ADS: 15
Residence: Huntington Beach, CA

Experience: As a Business Development Manager, Ms. McPherson assists in the development of business partnerships between ADS and the clients in the West Region including; California, Arizona and new Mexico. Ms. McPherson has twenty-one years of experience in the water/wastewater industry

Role for this project: Sales, Contracts, Project Scoping, and Coordination.

Shown to the right is documented proof requested in the RFP for local staff, who has proper security clearance to continue to service the installed flow metering network on military and sensitive areas.



Transition Plan

Our transition plan is simple, easy and straight-forward and provides the City with the lowest risk. The current meters installed in the City are the ADS Triton+, which is our most advanced meter to date. We see no reason to transition/replace the currently installed Triton+ wireless flow meter platform. The Triton+ is the flagship flow meter at ADS. We have taken complete inventory of the installed system and we have included in the price submittal this Transition Plan presented below.

- Continue to upgrade all meter modems to 4G LTE. All meters to be upgraded by March 2022:
- Continue to provide high-quality service, hardware and software systems as our standard offering;
- Continue to upgrade the installed platform with the latest technology at the lowest lifecycle costs;
- Provide uninterrupted data delivery and uptime for the duration of the contract term;
- Guarantee high-quality and consistent flow data for PAs billing, with no disputes!

Communication Upgrade - ADS released a new World Wide modem upgrade in Q1 2020 across our product line with Telit 4G LTE Cat M1/NB1 modem modules. ADS has been upgrading all the City meters with the new 4G LTE modem. All City meters are planned to be upgraded by March 2022. In addition, ADS recently released a new 4G LTE antenna designed for sewer flow metering. This important upgrade greatly increases the durability and life expectancy of the antenna, as well as provides opportunities for improved cellular signal strength. ADS has been installing these new antennas in City meter locations to increase communication robustness and reliability thus ensuring Event Notification dependability.



The AV/Gated® Sensor (model CS7) for sites with large pipes and complex hydraulics, where applicable; ADS will upgrade sensors as needed to our new AV|GATED sensor, a gated area-velocity sensor that combines proven upward-looking ultrasonic depth measurement methods with state-of-the-art gated velocity technology. ADS is the first company who has been successful at making a gated velocity sensor that has a small form factor, small dead-band and that works with a battery powered flow meter, such as the Triton+ meters deployed in the City's system. The AV|GATED sensor has up to 26 velocity gates thereby providing an incredibly accurate flow profile. The number of gates increases with the depth, making possible real-time profiling of the velocity in the pipe as the depths approach full pipe. The AV|GATED sensor profiles the velocity with each reading, delivering the most accurate average velocity readings we have been able to produce to date.



ADS PRISM™ Web Based Event Notification System – The City's flow monitoring network was transitioned this year to our newest ADS cloud-based platform ADS **PRISM**. PRISM is ADS's revolutionary new advanced web application that puts critical data at your fingertips to support management, engineering, and operational decisions within your wastewater collection system. PRISM connects clients to their monitoring network, delivering near real-time operational intelligence on the status of your wastewater collection system. It is the fastest and easiest way to visualize the condition of your collection system. PRISM offers dynamic analytical functions to fuel discoveries that will lead to the enhanced management of your collection system and can access your data and device status on this new cloud-based Collection System Management platform. The intuitive interface allows you to quickly manage alarms, check collection and device status, generate reports, and link third party data through our self-service API to automate and enhance your specific workflow. PRISM is the City's portal to some of the most advanced machine learning and analytical tools on the market today. PRISM provides the City with a complete, low risk, high value platform for visualizing and answering complex flow monitoring problems. PRISM is growing daily in its machine learning and is the standard by which other offerings are measured.



Technical Submittal / Execution Plan

ADS has read the RFP in complete detail, and we have a thorough understanding of the Project Scope of Work (SOW) that must be accomplished via this RFP. The flow data reporting and the availability of software tools for use by the City in their own analyses is the same that ADS has been executing successfully for the last 16 years for the City as the incumbent Flow Service Provider.

Therefore, ADS has extensive experience not only with the SOW, but also with the City's Collection System, personnel, policies, and the requirement to deliver high quality data with unmatched network uptime. Selecting ADS ensures the City and PAs will not have to transition to a new unproven FSP and can continue to make informed infrastructure decisions based on a highly calibrated model, accurate billing, and event notification with confidence.

TASK I – Maintenance and Operations

ADS has maintained an office in San Diego, CA since the 1980's when flow monitoring activities were just getting underway in the metro area. The local office houses an inventory of the spare replacement parts required to service this project, all replacement parts will be **new and will not compromise the IS rating**. Multiple local Field Crews are servicing the flow monitoring network daily, being vigilant, detailed and resolute maintaining your flow metering network at peak performance. ADS currently maintains a greater than 98% uptime of the City's flow monitoring network. This is higher than the stated RFP specifications of 95% and helps to ensure continual data availability. Our field staff will continue to perform the following daily tasks:

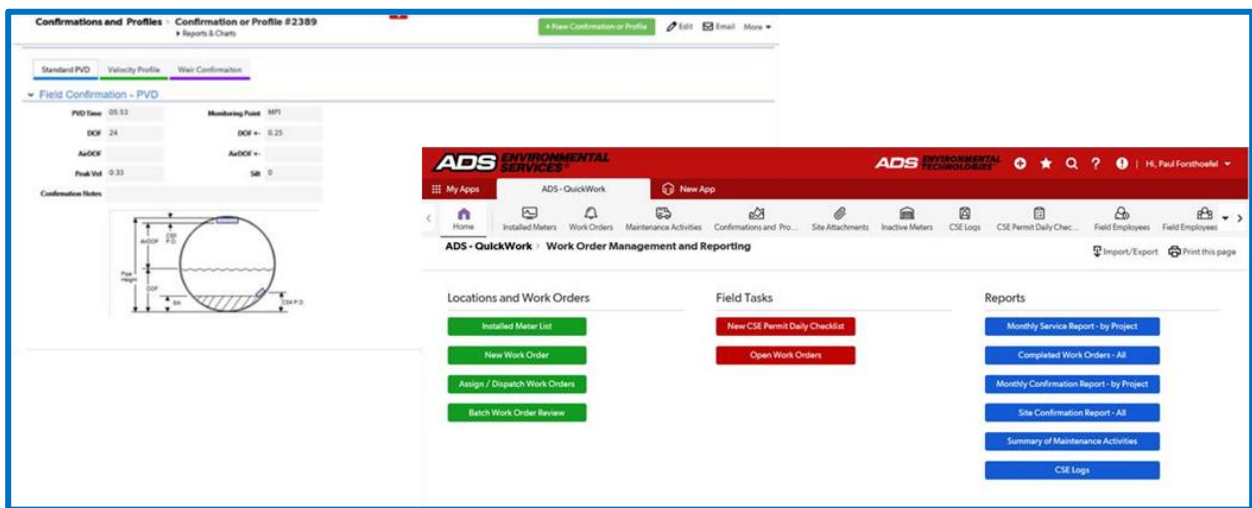
- Coordinate and inform the City of our work and discuss any urgent needs the City may have,
- Coordinate and with the local ADS Project Team, most importantly with the Data Analyst,
- Clean, repair, and replace malfunctioning flow monitors and sensors to ensure data quality and uptime requirements are met or surpassed,
- Replace flow monitor batteries prior to when the battery voltage would be sufficiently low that would result in lost data or communications,
- Resolve all communication issues,
- Respond to service needs within one business day following diagnosis for billing monitors and two days following diagnosis for the operation and maintenance monitors,
- Perform yearly monitor confirmations, and additional confirmations requested by ADS Data Analyst staff in the event of changing flow conditions will continue to be performed on an additional "as needed basis" as part of the full-service contract, and
- Perform equipment upgrades as discussed in the Transition Plan.

Additional confirmations will be performed as needed for these sites during a repair and maintenance service call, for the removal and/or replacement of the ring and sensors (such as for cleaning by City) or at the request by an ADS employee (Data Analyst, Project Manager, Field Manager or Engineer) when questions regarding either the data or functionality of the equipment requires one. To help perform field confirmations/verifications, ADS field staff are 1) provided on the job training materials 2) certified in flow monitoring training modules 3) given written procedures that fall under our ISO 9001 documentation system. Each Field Crew Leader and Field Assistant works one-on-one with the Field Manager (FM) to achieve field certification in Confirmations. The FM only certifies the crew when he knows the crew has a full understanding of the confirmations process.

Temporary Monitoring Sites: ADS will relocate up to ten (10) ENS installed monitors on a yearly schedule. The new temporary monitors are to be incorporated into the ENS. The City will provide a list of trunk sewers that are proposed for temporary monitor installation in the first year. Future temporary monitor sites will be evaluated and identified on an annual basis with those locations identified in each year. The installation and acceptance of the 10 temporary monitors shall be completed within 60 days of the Notice to Proceed date.

Training: ADS will continue to provide training at City facilities and/or remotely for City and PA staff, which will allow staff to access, download and analyze flow data from the monitor sites. ADS will provide an outline and handouts for each training session. ADS will also provide training to City staff for monitor service, replacement, repair and calibration as requested. ADS will accompany City staff to the monitor sites to demonstrate the proper procedures for servicing, repairing, replacing, and calibrating the sensors and monitors. Our trainer shall instruct, observe, and evaluate the performance of City staff to carry out the maintenance activities at the monitor site.

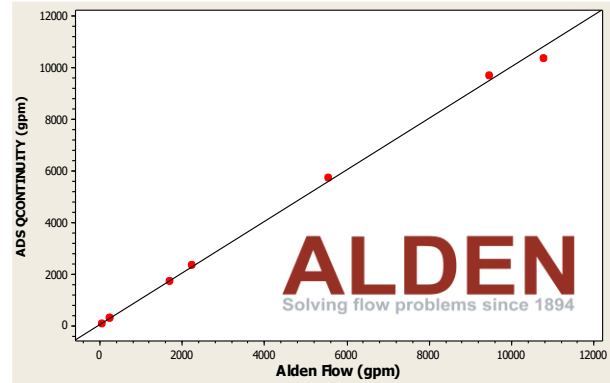
New ADS Work Order System: ADS recently implemented a new cloud-based workorder system, QuickWork™, which will allow ADS to respond and remedy problems more quickly and integrate our field service and data analyst functions into the PRISM platform using API connectivity. Although this will be mostly behind the scenes from the City’s day to day PRISM interaction, one key feature will allow City personnel the ability to plot/view field confirmations seamlessly in the PRISM environment. Below are two screenshots of our new workorder system.



Monitoring Equipment: ADS will continue to provide our latest model Triton+ AV wireless flow monitor when additional flow monitors are needed for this project. The Triton+ was released in August 2014, updated in 2019, and ~10,000 units are currently installed throughout the US and Canada.

The Triton+ AV flow meter accommodates up to two (2) sensors simultaneously to accommodate a variety of hydraulic and other site conditions. Having two sensors provides redundancy and the wireless modem in the Triton+ allows data to be uploaded to PRISM cloud-based data platform for review by ADS data analysts. ADS manufactures our own flow meters and sensors, and our crews have an unmatched knowledgeable about their installation and operation. This comprehensive knowledge of the equipment allows the field crews to resolve all issues quickly and minimize meter downtime. The performance, durability and reliability of the Triton+ meters and Peak Combo and Surface Combo sensors lead to high uptime and high data quality, which is very important to the City since this data will be used for interjurisdictional billing and planning decisions worth millions of dollars to the City.

Lab Certified: Judging the accuracy of flow monitoring equipment, procedures and manufacturer claims can be a difficult task. The Triton+ monitor was independently tested in a 35" pipe at Alden Labs in 2014. The testing was performed under different flow conditions with independent flow quantification and the Triton+ provided excellent precision and accuracy. **The chart to the right presents the test results.** Analysis indicates that the flow measurement uncertainty is within 0.50% of the true value for each test run for flow above 2000 GPM and +/- 0.25% for flows down to 50 GPM. Calibrations of the test instrumentation are traceable to the National Institute of Standards.



Sensors: The Triton+ can be configured with a single sensor or dual sensors, and ADS has 5 different sensors to deploy with the Triton+, thereby giving great flexibility to find the sensor or sensors that are best suited to each hydraulic condition. Sensor choices include a **Peak Combo™ sensor** (model CS4) that is mounted in the invert of the pipe, the **AV|GATED™** velocity profiling sensor which is mounted in the invert of the pipe, an **Ultrasonic Depth** (model CS5-D) and **Surface Combo** (model CS5-V2) sensors mounted in the crown of the pipe, and a **Long Range Depth sensor** that has great flexibility for placement location inside a manhole as a redundant level sensor.

ADS Peak Combo Sensor is our mainstay sensor, and includes three types of sensor technologies:

- *Continuous Wave Peak Doppler Velocity:* Uses ultrasound waves reflected off particles to measure Doppler frequency shift which correlates to peak velocity.
- *Up-Looking Ultrasonic Depth:* Uses ultrasound waves from two independent transceivers to measure the distance from the sensor upward toward the flow surface; applying the speed of sound in the water and the temperature measured by the sensor to calculate depth.
- *Pressure Depth:* Uses a piezo-resistive crystal to determine the difference between hydrostatic and atmospheric pressure. The pressure sensor is temperature compensated and vented to the atmosphere through a desiccant filled breather tube.



ADS continues to research and develop new sensor technology. As new sensors are released to the market we will notify the City so that they may be included in future upgrades. ADS sensors meet the requirements of the RFP, and, as a complete integrated solution, exceed the needs of the City for flow data accuracy, reliability, and uptime.

Innovative ADS Products That Can Be Used on This Project are listed below.

Level Monitor: The ADS® ECHO™ is a new generation level monitor. It gives users up to 10X more monitoring range and uses ADS PRISM's machine learning software to predict overflows long before they occur. The ECHO gives the user total manhole visibility. Typical ultrasonic sensors' measurement ranges are 2-10 ft into an 8 in pipe, but the ECHO's unique narrow beam technology provides 20 feet of ultrasonic depth measurement range while an integrated pressure sensor provides an additional 8 ft measurement range above the ECHO for a total of 28 feet of measurement range from the invert uninterrupted to the top of manhole. The ECHO is a low-cost solution with a wide range of applications such as Hydraulic Modeling, I&I Scouting, Regulatory Reporting, Bypass Monitoring, SSO Mitigation, Lift/Pump Station Backup detection, and Cleaning Optimization.



Rain Gauge(s): The ADS RainAlertIII is used to collect and alarm on precipitation data for use in many applications including precipitation analysis, infiltration/Inflow programs, rainfall insight for CSO and SSO monitoring, sewer capacity studies, rehabilitation effectiveness, sewer master plan studies, and early warning and notification based on rain intensity.



ADS is committed to providing a safe project for the City its citizens, and our own employees. All monitors provided by ADS and located in the sanitary sewers or potentially explosive areas will be Intrinsically Safe (IS), suitable for use in hazardous conditions and approved for use in Class I, Division 1, Group D or Class I, Zone 0, Group IIA hazardous locations. Our monitors bear the certification mark of a Nationally Recognized Testing Laboratory demonstrating compliance with applicable intrinsic safety standards adopted by the National Fire Protection Association – National Electric Code, NFPA 820 – Standard for Fire Protection in Wastewater Treatment and Collection Facilities.

Additionally, ADS flow monitors maintain the international standard rating of **IP68** to withstand dust, dirt and sand, and are resistant to submersion. Monitors located outside sanitary sewers shall be NEMA Type 4X, IP67, and UL Rated.

Equipment specifications, sensor information, and auxiliary components can be found in “Tab D – Supplemental Material / Documentation” section of the proposal.

TASK II – Data Collection, Review, Finalization and Reporting

Data Collection: Data will be collected daily and wirelessly uploaded to the ADS PRISM cloud-based software platform, where it will be QA/QC reviewed by ADS Data Analysts. ADS utilizes “Static” SIMs, which provide 2-way communication and are unlike “Dynamic” SIMS that can only “push” data to a web server. The Triton+ flow meters can be “called up” on demand allowing the Data Analysts to remotely monitor performance, make configuration changes, download the data, and perform troubleshooting operations, This is a critical benefit to the City as it decreases the time between when an issue is detected and when it is resolved. This also minimizes traffic disturbances caused by site visits and it increases safety by minimizing confined space entries.

The City’s data is secure with the ADS solution. Data is transmitted wirelessly over private carrier networks (APNs) to PRISM. PRISM is hosted on the world’s leading cloud-based data solution Microsoft Azure. Azure maintains data security protocols for Department of Defense, banking, insurance, medical, and other applications requiring the highest level of data security.

Data Review: In the past, ADS Data Analysts reviewed raw data frequently as part of the contract requirements and our ISO 9001 process for QA/QC. With the new ADS PRISM system, ADS has developed proprietary Machine Learning algorithms and techniques to help guide and prioritize potential monitor/data issues on a daily basis. This combination of human review coupled with advanced machine learning will allow for problem sites to be identified sooner, response time for repairs to be reduced, and result in higher uptime and data quality. Additional PRISM Machine Learning information is presented later in this proposal.

Finalization of Data Review and Reporting: While data review is conducted throughout the month, the Data Analyst will review, edit and process the raw data to final data for the monthly delivery. This finalization includes:

Data Editing: While ADS maintains that very high rates of raw data quality are possible through frequent site reviews and prompt field service, because the equipment is located in a harsh sewer environment there will always be the potential for anomalous readings to be recorded. The process of data finalization examines and prompts decisions regarding those readings. Data finalization is implemented through the ADS Data Analysis Work Instruction QI 684004 data finalization 41-step flowchart, which involves an iteration of the tasks described below.

Data Reconstitution: Reconstitution of data is an industry accepted method using scattergraph-based processes for restoring invalid data to an established pipe curve for the metering site. The process requires that the hydraulics at the metering site be regular and repeatable. A curve is fit to the scattergraph of valid data that best represents the historical depth-velocity relationship for the metering site during the specific

flow regimes at that time and is supported by field confirmations. Only depth or velocity data individually may be reconstituted for a limited period of time.

Data Finalization: The data finalization that occurs for the delivery of the final flow volume requires a specific set of steps to be completed. These include:

- Determine final depth entity (review ultrasonic depth versus pressure depth, assess confirmations for bias, save setting to final data set.)
- Determine final silt level (assess from confirmations, save setting to final data set).
- Determine final velocity average to peak ratio (obtain from confirmations, save setting to final data set).
- Edit depth and velocity data (remove erroneous data points) or reconstitute depth and velocity data (estimate invalid data).
- Select quantity (flow) equation (save to final data set).
- Complete system flow (mass) balance.

Service Statements and Reporting: ADS and the City are in communications daily ensuring the flow monitoring network is working properly, resolving issues, scheduling meter removal for City maintenance, via the Daily Checklist Report. This ensures communication is open and no item are left unresolved. In addition, ADS posts completed Work Orders to the PRISM document Vault for transparency. A report is delivered monthly to provide the City the data you need for PA flow billing (monthly Billing Report, delivered on the 15th of the following month. Final data is posted to PRISM at the end of each month, and Yearly the Confirmations report will be delivered detailing the confirmations performed for the billing monitoring stations. In Summary, ADS will provide:

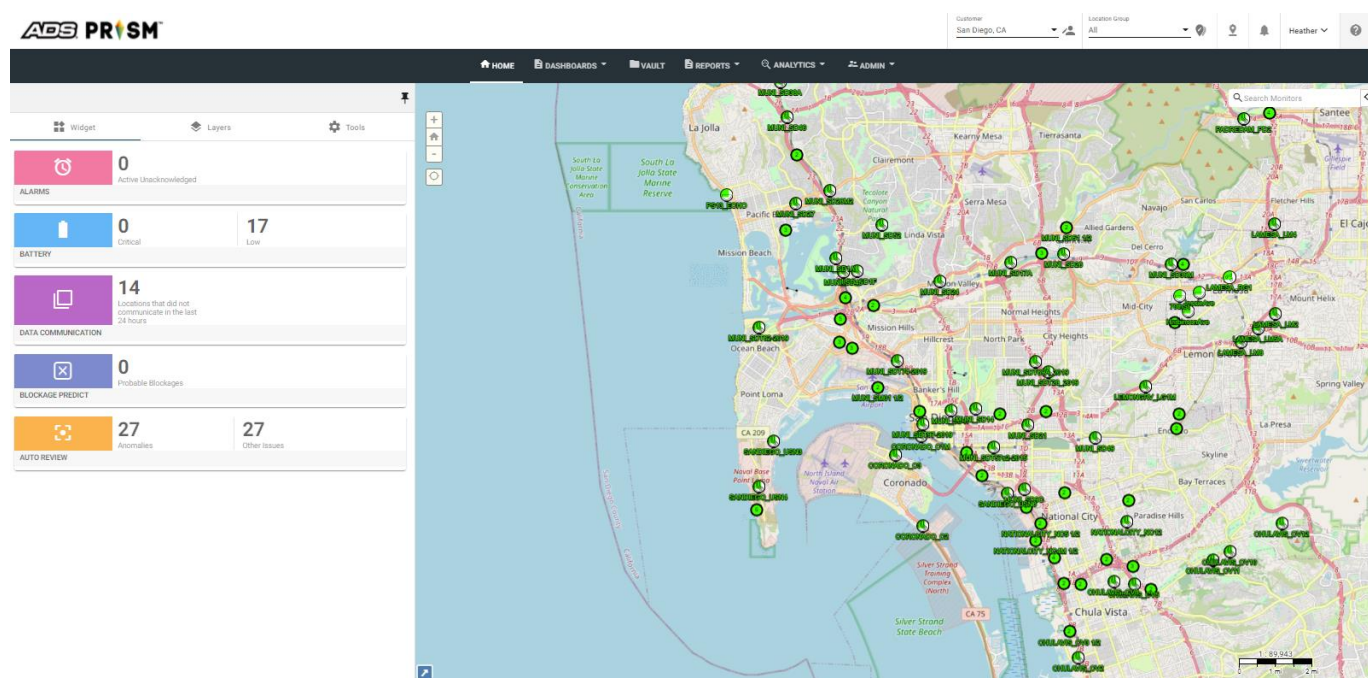
- Monthly Billing Report
- Monthly Service History Report
- Confirmations Reports
- Monthly Final Data posted to PRISM
- Monthly Invoice

ADS will schedule project meeting at the City's staff convenience to provide informational updates, review data concerns, deliver requested reports, make recommendations and schedule the subsequent month's activities.

TASK III. Web-based Software

The City’s flow monitoring network was upgraded in 2020 from the ADS FlowView™ server-based software platform to the newest cloud-based platform ADS PRISM™ at no additional charge to the City. PRISM has some significant advantages over the server based FlowView system the City has been using the last several years. Cloud storage is “unlimited,” eliminating the need for multiple databases for archiving the City’s data. Having all data in one place improves data management efficiencies and allows for the application of Machine Learning/Artificial Intelligence to help analyze data, thereby increasing the speed to identify potential issues which helps increase data uptime and data quality. Below is the home page of the San Diego network in the PRISM environment.

The PRISM home page is a Google-map based display of the City’s flow and level monitoring locations. Navigation to individual site details can be done from the icons on the map or from drop-down lists. At the top of the home page are several tiles that allow access to many of the machine-learning based tools built into PRISM. Basic system status tools are there, as well, enabling the user to see Alarm status, Battery Voltage status for all instruments within the system, as well as communication status for each monitor.



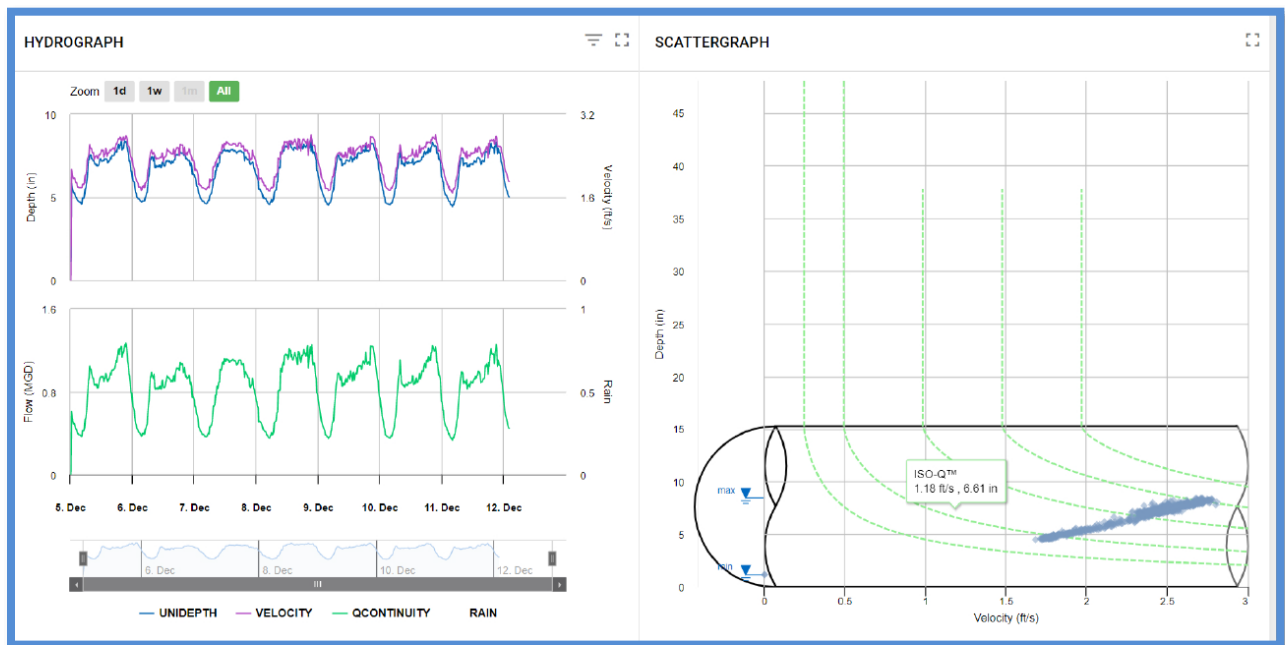
The system delivers near real-time operational intelligence on the status of flow activity throughout the network of installed flow meters in the wastewater collection system. PRISM is a dynamic tool for the management and oversight of collection system operation. This state-of-the-art system provides knowledge and early detection of potential problems with access to the monitoring data as needed. It offers dynamic analytical functions fueling discoveries that can lead to enhanced management of the sewer collection system.

PRISM performs Data Collection, Storage, Event Notification, Alarm Management and Data Presentation functions. The City and PA staff can quickly access the data they need for collection system management. PRISM allows the staff the flexibility to customize the way in which they view and share data with others. The system is password protected, with a unique login for each user. Permission-based security allows clients to specify which users have authorization to acknowledge alarms, access data, and access other system settings. Customer/project administrators can control data views through location restrictions on a per-user basis. PRISM provides functionality to customize exactly what kind of data each user can access. Individual documents can be available to all users or can be restricted, allowing selective sharing of information.

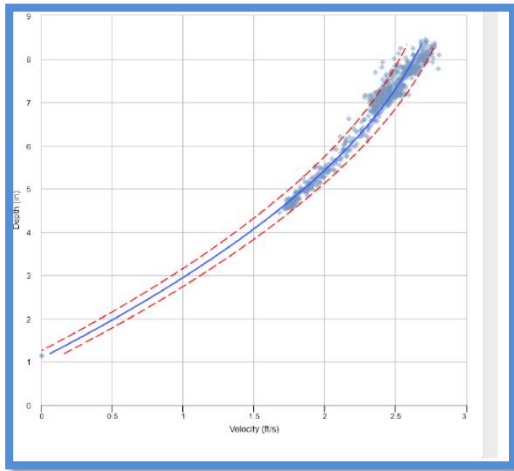
Each monitoring site's information, data and attachments are accessible via PRISM using a rich set of features. The Web interface provides versatile graphs and reports for easy access to current monitor data. PRISM allows staff and designated consultants to view monitor data in hydrograph and scattergraph format as well as run tabular reports which summarize data in daily, weekly or monthly formats. Examples of data outputs available from PRISM are listed below:

- Raw data which is uploaded to the platform on a daily basis.
- Final data that is uploaded monthly
- View Hydrographs, Scattergraphs and Reports.
- View Alarm, Battery and Notification status
- View any files uploaded to the Site Location/Vault folder such as site reports, photos, notes, etc.
- Meter Flow Balance Reports
- Meter confirmation overlaid on both hydro and scattergraphs
- Export reports and graphs.
- Export data as CSV or EXCEL files.
- Create custom reports.

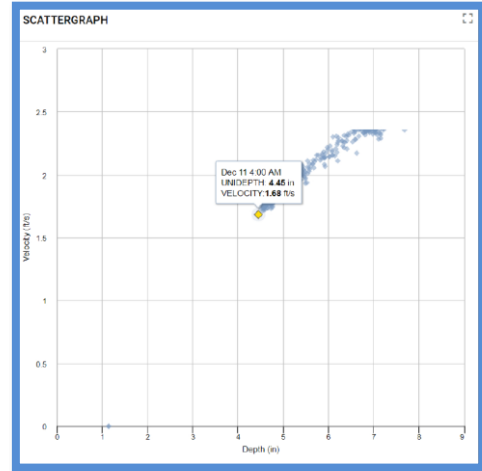
Viewing Data: New in PRISM, both **Hydrographs and Scattergraphs** are shown on the same site-location page, as shown in the example below. PRISM allows for great flexibility to choose individual sites, groups of sites, entities such as velocity, depth and flow, raw or finalized data, data ranges, etc.



The example above shows overlays of **Iso-Q lines and Pipe Overlay** on the scattergraph, but other overlay choices for the hydrographs and scattergraphs include alarms, pipe height, manhole depth, data quality, confirmation points, rain and silt. For estimating data quality, there are **Stevens-Schutzbach** curves, and as shown in the example below on the left, **Best Fit and Tolerance Lines**. The default for the scattergraph is to have velocity on the horizontal and depth on the vertical axis, but as shown in the example below on the right, the axis can be inverted to have velocity on vertical axis and depth on horizontal axis.



Best Fit & Tolerance Lines



Inverted Depth & Velocity Axis

Each site location also has a **Site Details page** as shown below, with a location map, monitor installation details, confirmation points data, and a Files folder for storing site reports, photos, notes, etc.

CCWRD_168 - DETAILS

DETAILS

ANSR™ ENGINE

CONFIRMATION POINTS

FILES

FLOW BALANCE REPORT

CCWRD_168

SCHEDULE COLLECT COLLECT

Monitor Model	TRITON+	IP Address	10.4.2.222	Location Description	
Manhole Address		Latitude	36.190556	Longitude	-115.06528
Installation Type/Shape	Pipe: Elliptical	Pipe Height (ft)	15.25	Pipe Width (ft)	15.13
Manhole Depth(ft)		Assigned Rain Gauge		Serial Number	40480

MAX PERCENT FULL - 12/11/2019 - 12/11/2019

54 %

DAILY SUMMARY - 12/11/2019 - 12/11/2019

Parameter	Max	Avg	Min
CONTINUITY	~1.5	~1.0	~0.5
UNDEPTH	~8.0	~6.5	~4.5
VELOCITY	~2.5	~2.0	~1.5

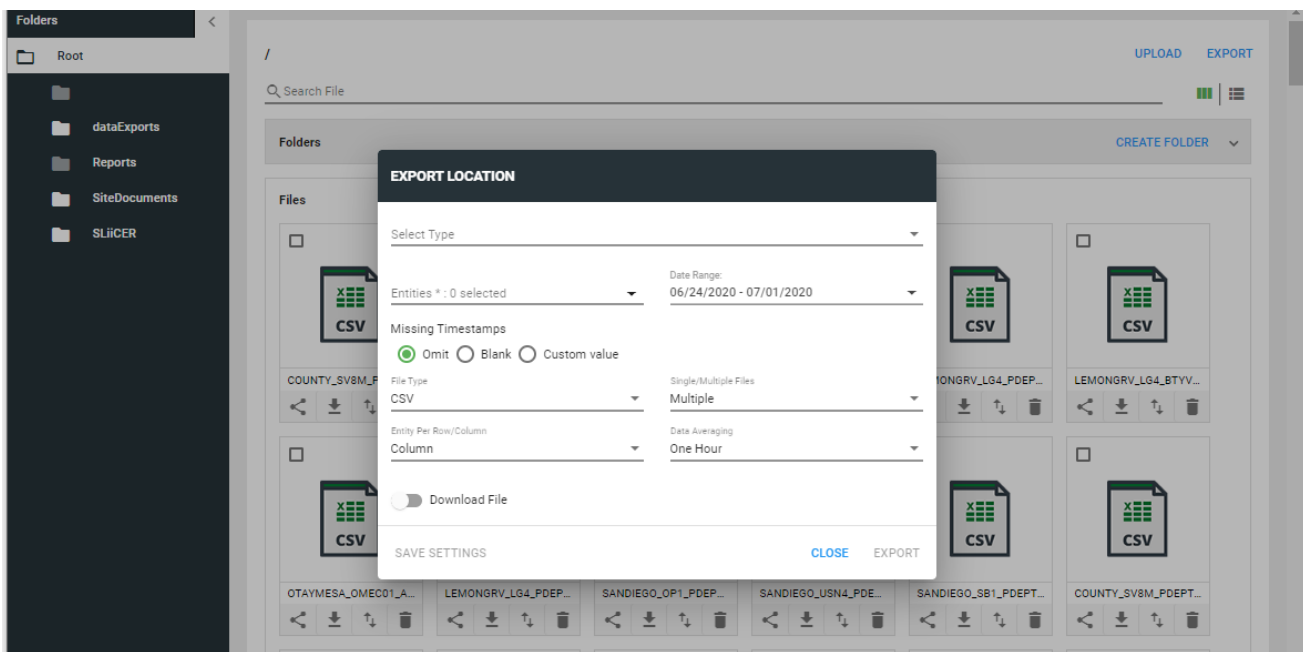
UPTIME - 12/11/2019 - 12/11/2019

100 %

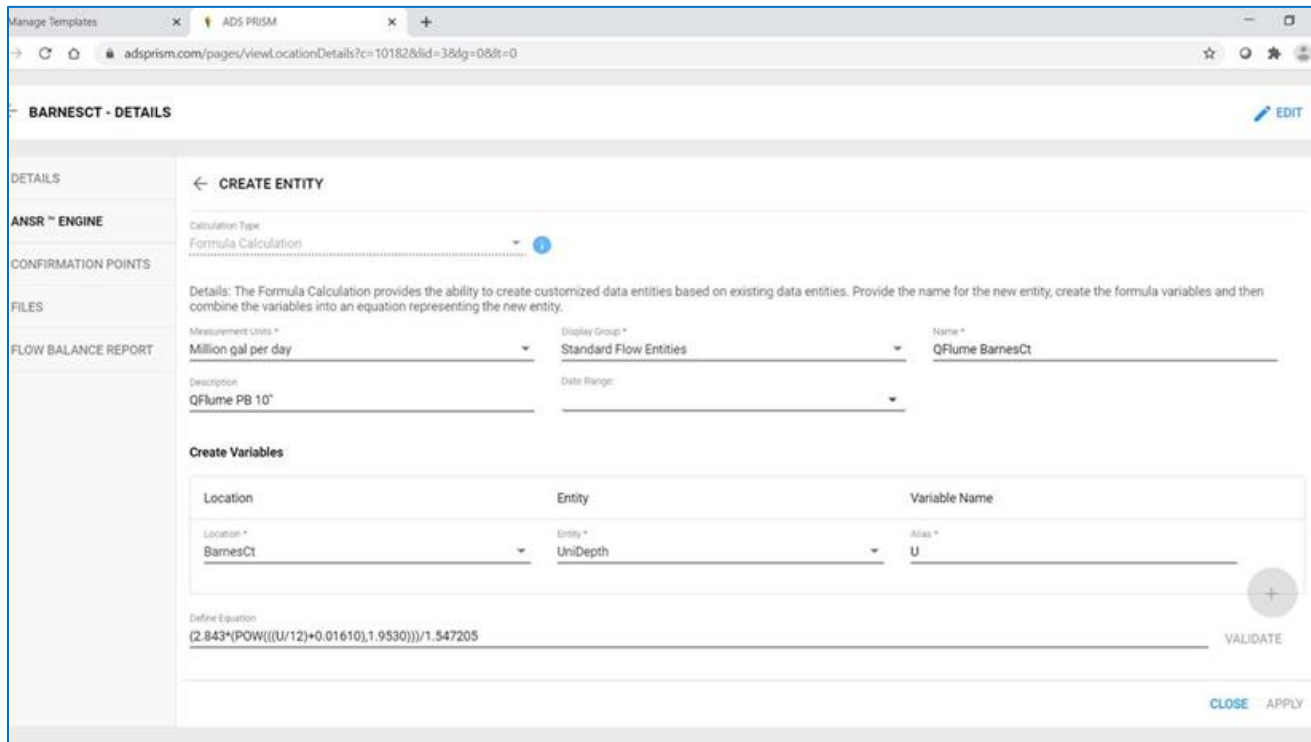
When you click on the quick-reference graphs shown above for either **Percent Full**, **Daily Summary** or **Uptime**, it opens the associated report page for viewing of the data in tabular form as shown below.

DATE	UNIDEPH			VELOCITY			QCONTINUITY			RAIN	
	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	TOTAL	TOTAL
12/05/2019	20.09 in 10:45 AM	13.37 in 6:15 AM	17.73 in	3.04 ft/s 12:00 AM	2.14 ft/s 7:00 AM	2.68 ft/s	11.303 MGD 11:00 PM	4.362 MGD 7:00 AM	8.529 MGD	8.529 MG	-
12/06/2019	20.04 in 11:00 AM	13.47 in 5:45 AM	17.63 in	3.01 ft/s 12:00 AM	2.14 ft/s 7:15 AM	2.71 ft/s	10.842 MGD 11:00 AM	4.441 MGD 7:15 AM	8.521 MGD	8.521 MG	-
12/07/2019	21.59 in 1:45 PM	13.41 in 6:45 AM	17.94 in	3.03 ft/s 1:00 PM	2.19 ft/s 7:15 AM	2.71 ft/s	12.599 MGD 1:00 PM	4.364 MGD 7:15 AM	8.776 MGD	8.776 MG	-
12/08/2019	22.41 in 1:15 PM	13.32 in 6:45 AM	18.43 in	3.06 ft/s 11:30 PM	2.24 ft/s 7:45 AM	2.70 ft/s	12.678 MGD 2:15 PM	4.447 MGD 7:45 AM	9.142 MGD	9.142 MG	-
12/09/2019	20.48 in 10:00 PM	13.29 in 6:30 AM	18.03 in	3.13 ft/s 11:45 PM	2.26 ft/s 7:00 AM	2.73 ft/s	11.784 MGD 10:45 PM	4.502 MGD 7:00 AM	8.903 MGD	8.903 MG	-
12/10/2019	20.18 in 10:45 AM	13.65 in 5:45 AM	17.96 in	3.09 ft/s 12:15 AM	2.22 ft/s 6:45 AM	2.72 ft/s	11.541 MGD 11:30 PM	4.588 MGD 6:45 AM	8.816 MGD	8.816 MG	-
12/11/2019	20.14 in 10:45 PM	13.57 in 7:00 AM	17.85 in	3.05 ft/s 12:15 AM	2.16 ft/s 7:00 AM	2.71 ft/s	11.281 MGD 10:45 PM	4.395 MGD 7:00 AM	8.717 MGD	8.717 MG	-

Exporting Data: Hydrographs, scattergraphs, reports, tables, etc. can be exported as a .PDF or .CSV file depending on the nature of the report/graph which then can be incorporated by City personnel into hydraulic models, I&I software, capacity studies, etc. A key feature of our export rich environment is the ability to export multiple site data into one file or separate files (.csv or .xlsx), with multiple averaging intervals available (e.g. 5 min., 15, min, hourly, daily). Also, data entities (Depth/Velocity/Q-flow rate) can be segregated onto individual tabs with all sites on each tab (a common modeling data input format), or separate tab for each site with all entities on each site/tab. Shown below is the Vault and Export menu page.

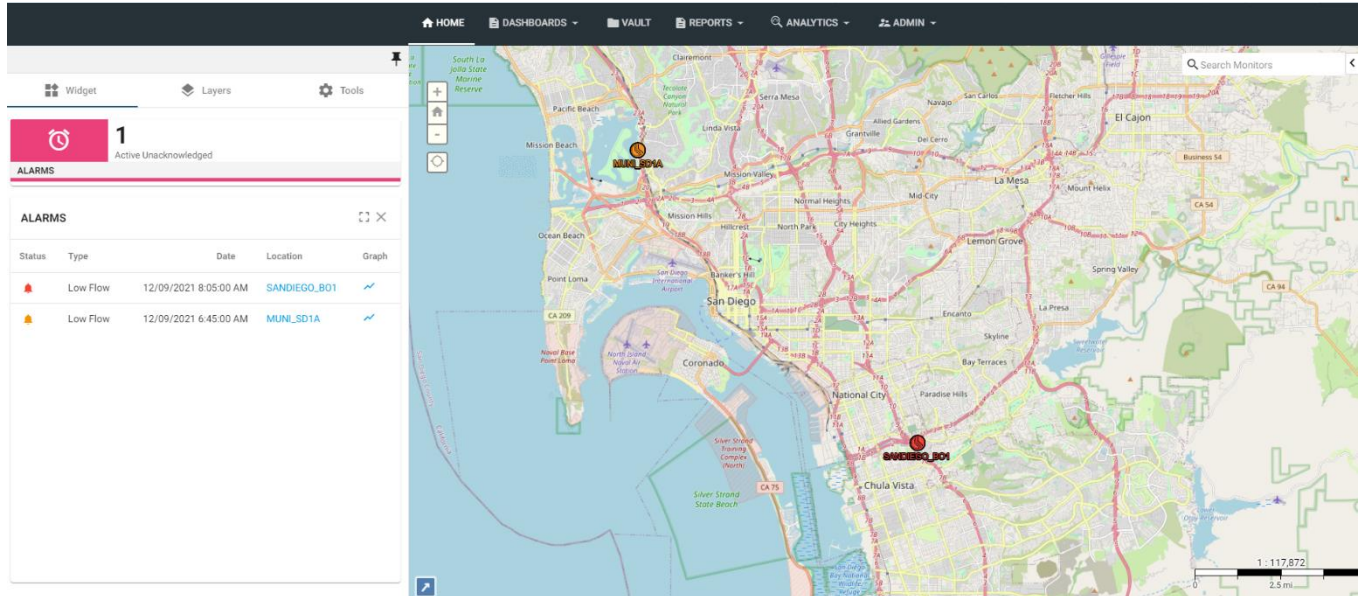


PRISM ANSR Engine: ANSR (Advanced Numerical Solver) provides access to mathematical and engineering principles to exercise and manipulate data into actionable intelligence. Whether using a predefined equation or one you create yourself, data is used to create new entities based on you're the input criteria to generate the information needed. These new ANSR entities can then be displayed on the hydrographs along with other default entities and, in future releases, users will have the option to execute alarms based on calculated ANSR entities. Below is an example of an ADS ECHO measuring flume depth and converting depth to flow rate using the flume equation.



Event Notification System: ADS will continue to provide the ENS to deliver near real-time alarming functionality to the City which will allow the City to dispatch crews to avert or minimize wastewater spills. The ENS is currently configured to monitor most of the trunk sewers, including all canyon trunk sewers. Alarms are forwarded from PRISM to COMC staff via email and /or text messages for review, enabling each person to immediately focus efforts to identify and remediate the cause of the alarm. The current ENS has been developed with close coordination between ADS and the City over the past contracts. By selecting ADS for this contract, this deep institutional knowledge will not only be maintained, but will be used to enhance and expand the ENS capabilities for years to come.

Below is a screenshot of the alarming tile and widget in PRISM.



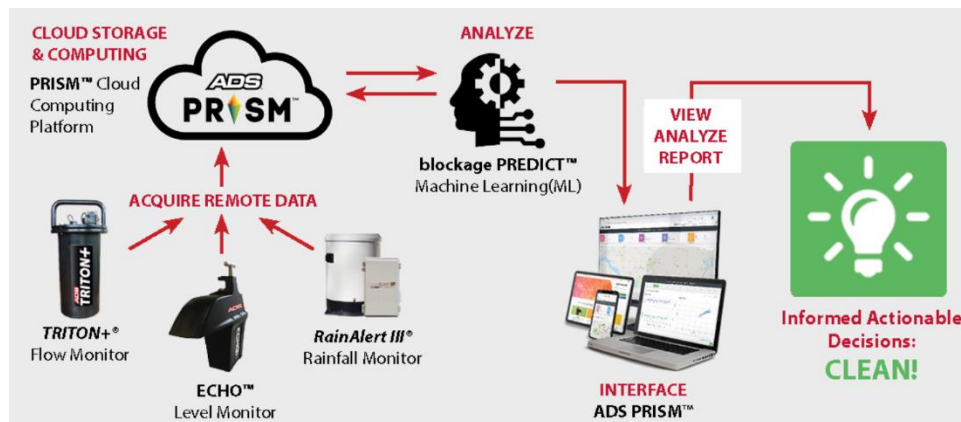
Key Features and Functionality of PRISM ENS:

- A robust wireless communication system to collect the flow data (depth, velocity, battery voltage, etc.) and to process the data on a real-time basis for the detection of any potential and/or existing overflows
- Software applications to analyze the real-time flow data collected from the monitor sites and to issue alarms via on-screen warnings, audio annunciations, pagers, e-mails, etc. for flow anomalies caused by the potentially forming and/or existing overflows at either the upstream or downstream side of the monitors
- The ability to detect any low flow (LF) anomaly, which may be indicative of an overflow condition upstream of the monitor, and any high level (HF) anomaly, which may be indicative of flow backup downstream of the monitor
- The ability to detect a reduction in flow of more than 25% of the average dry weather flow offset diurnal curve from typical measured by the monitor located downstream of a suspected spill location. Unique to the Triton+ monitor is our “Flow Loss” alarming functionality. Flow Loss alarming compares each flow meter reading to a continually updated 24-hour hydrograph in the monitor and if the flow rate falls below a set threshold along the hydrograph time curve, the Triton+ will send out a Flow Loss alarm.
- The Triton+ Flow Meter has automated QA/QC processes to provide a quality assured screening of all alarm potentials and to minimize false alarms induced by erroneous data, data fluctuations, equipment malfunctions and other system defects. ADS has developed algorithms within the monitor to help reduce the occurrence of erroneous reading. This technology is called Monitor Level Intelligence (MLI™). MLI™ automatically adjusts to site conditions to extract accurate, reliable measurements. MLI™ is flow dependent. MLI™ optimizes sensor performance and readings by continually learning the site-specific hydraulics and the changing dynamics of depth/velocity relationships. MLI™ uses built in intelligence to learn the hydraulics of the specific monitoring location. Once MLI understands the site hydraulics, it looks at previous and historical readings to ensure consistency and repeatability and eliminates erroneous firings. MLI also drives our alarming scheme; the Triton+ monitor can directly deliver alarms via SMS text messaging and/or email.
- Provide accurate and reliable blockage and overflow detection using Machine Learning technology.

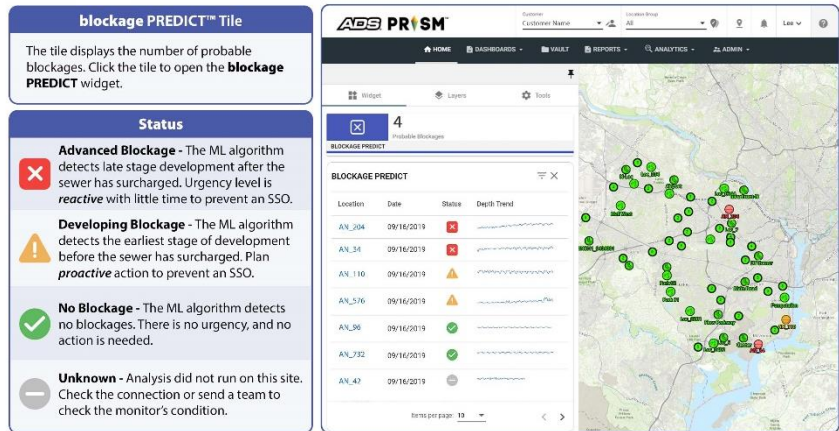
PRISM Machine Learning: As the complexity of flow, rain and level metering continues to come down due to advances in technology, more and more monitors are being installed in Collections Systems. Higher number of meters means more data to be managed. To help with that endeavor, PRISM has Machine Learning (ML) applications that help automatic analysis of data. The process begins when the monitor sends data (flow, level and rain) to PRISM, where it is processed through the Machine Learning application and the results are then displayed in the PRISM platform. The user can interface with PRISM through a laptop, tablet or phone and view these reports which then can be analyzed by the user, allowing an Informed Actional Decision to be made.

Over the past few years, ADS has endeavored to lead the marketplace in the development of ML algorithms and applications to improve our operations, reliability, and response time. These applications also aid in the management of our client’s collection system. ADS has what is likely the largest repository of velocity, depth, site information, and I&I statistics in the world. ADS has over 30 Data Analysts who have been training the ML by reviewing and classifying datasets. This analysis identifies what a developing blockage looks like, what pressure drift looks like, “pops and drops”, what good flow looks like, what bad flow data looks like, fouled/failing sensor patterns, and many more classifications of the data to “teach” the ML these scenarios. This has been an enormous effort and will continue to be a top priority for ADS – the machine’s “learning” never stops. ADS hopes the City is excited as we are with our future app development plan over the next 5-years. Below we present our applications to date:

- **Auto Review** - driven data QA/QC for data anomaly detection. Auto Review provides an automated assessment of monitor data using a suite of data analytics tools. Sewer flow monitors often operate in tough environments and have traditionally required “eyes on the data” to identify emerging data problems. Auto Review provides a faster review and identified monitors with potential problems for priority review. Prior to Auto Review, the assigned Data Analyst would have reviewed all 162 flow meter datasets to determine which monitors need services, this was and is time consuming effort. Now with Auto Review, the analytics prioritize monitors needing services and alerts the project team very quickly.
- **Auto Correct** - The first generation of Auto Correct, planned for release later in 2020, is designed to identify and correct data anomalies like isolated “pops” and “drops” that can occur from time-to-time at some monitor locations. “Pops” and “drops” can result from a variety of reasons, such as debris on wetted sensors or condensation on non-contact sensors. Auto Correct will identify “pops” and “drops” and automatically adjust them to more appropriate values based on sound and proven hydraulic principles using the surrounding data points and the normal statistical variation in flow patterns. The value of Auto Correct is rapid screening and QA/QC of data so that your time making decisions about your sewer system and not making decisions about your data.
- **Blockage PREDICT™** is an application that is specifically designed to detect the earliest signs of blockages, predict overflows, and tell you how much time you have to act. Blockage PREDICT analyzes monitor data daily and applies a combination of ML algorithms and ADS expertise to show you the level status and recommend a response timeframe. You’ll have all the information you need to deploy sewer cleaning resources proactively and prevent overflows long before problems occur. A diagram of this process is presented below.



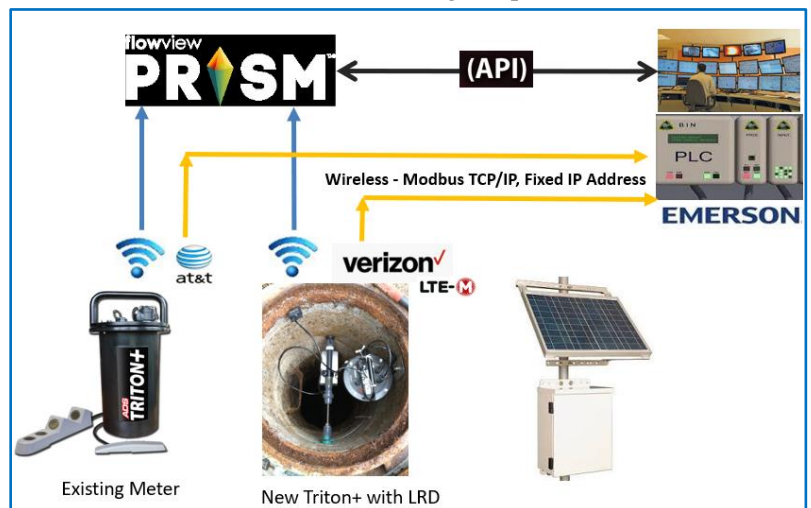
The Blockage PREDICT app helps with Cleaning Optimization and SSO prevention and works entirely within PRISM. When the user clicks the Blockage PREDICT Tile at the top of the PRISM home page, the Blockage PREDICT screen is presented with a map with color coded icons, a summary table with the sites listed in order or priority of needing cleaning, color coded status icons, and a “quick-graph” showing depth trends that also serves as a link to a details page with full size graphs.



PRISM uses color coding to help show status so that actions can be easily identified. In the Blockage PREDICT app, the sites that need immediate attention are shown in Red (depth is over the pipe height) or Yellow (blockage exists but depth is less than pipe height). Sites that show no indication of developing blockages are shown in Green. The user can open the PRISM website each morning and simply look at the Blockage PREDICT Tile and the color coded-coded icons to see if the application found any developing blockages overnight or since the last scheduled collect.

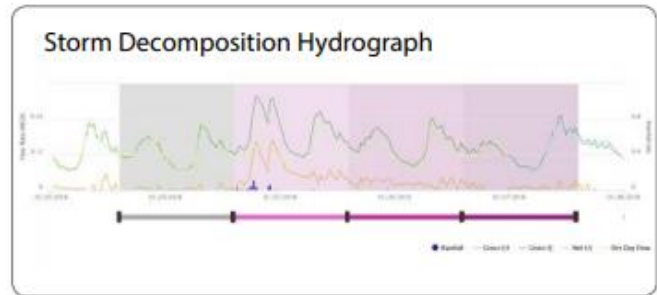
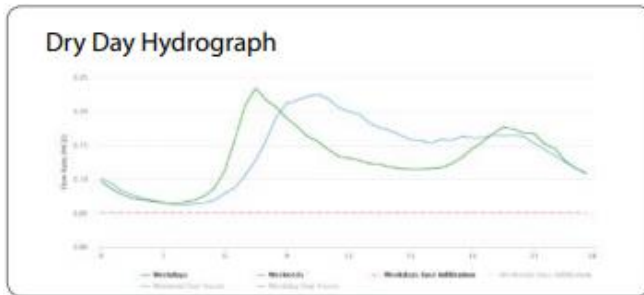
PRISM Application Programming Interface (API) is an interface that allows different pieces of software to communicate with each other without constant management. PRISM’s customer-facing API allows the City to automate data exchange between various ADS and 3rd-party software and hardware. This allows you to seamlessly use data measured by ADS monitors in other software applications. The old method of exporting data out of one database and importing it into another is slow and frustrating. Using APIs and webhooks we have created the capability to exchange data with 3rd party applications in both directions. The exchange requires no human intervention, can happen in near-real-time, and is error free. You can create new ways to put your data to use in a way that suits your needs.

The example to the right was our solution to the City to provide a fully redundant system at 5 critical locations. API’s also can automatically export data to InfoWorks ICM rather than manually exporting the data from the PRISM Vault. It also provides the ability to connect the IAM San Diego SAP Maintenance System with PRISM data and ML alerts as well as develop customized dashboards of critical data to make real-time operational and business decisions.



SLiICER™ will be the newest ADS I/I Analytics Application within the PRISM environment and is expected to be released in 2022. SLiICER is the next generation I/I tool, utilizing the same award-winning analytical Infiltration and Inflow (I/I) tools of the legacy ADS Sliicer and Sliicer.com tools that have been in use in the industry for over 20 years. SLiICER in PRISM uses the advanced processing power of cloud-based PRISM providing the City with the industry’s most trusted and complete I/I evaluation solution at their fingertips. SLiICER makes it easy to

evaluate your entire collection system as a single solution, tracking down I/I to guide rehabilitation programs, eliminate overflows, and validate results. The SLiCER app, as a valuable addition to the ADS PRISM platform, leverages the power of seamless data integration, immediate data availability, trusted analytics, and flexible reporting in a single, unified platform. Use SLiCER to **SEE**, **UNDERSTAND**, and **ACT**. SLiCER provides you the answers to difficult questions regarding your wastewater collection system performance by analyzing accurate data for technical assignments that require rigorous and defensible analysis.



Use SLiCER to gain actionable insight for:

- Rainfall Analysis
- RDII Calculations
- Rainfall Depth-Duration-Frequency (DDF)
- Storm-by-Storm RDII
- System-wide RDII
- Q vs. i Relationships
- Seasons and Regimes - *Coming 2020*
- RTK and More - *Coming 2020*

ADS’ Commitment to Leading the Market

ADS is committed to continuous market leading advancements. From our current technologies like the ADS machine learning and analytical applications of Blockage PREDICT and Auto Review/Auto Correct, our powerful unified database platform PRISM, and our advanced measurement technologies in the AV|GATED and ParaFlow sensors, we are working on even more exciting advancements. Current projects in development at ADS include software solutions that identify and alert on maintenance issues well before they become an issue, integration of satellite rain data to provide better quality control of rain gauge measurements and wet weather alarming, seamless integration of industry leading GIS platforms, and near real-time “finalized” data feeds for continuously running modeling platforms. Current hardware projects include the ability to maintain monitors and sensors from ground level improving safety for crews and motorists, advanced communication technologies like NB-IoT and LoRa, and true edge computing capabilities using dense networks of small, inexpensive sensors continuously feeding data into powerful ML software platforms.

We envision a day in the not-to-distant future where ADS’ solutions help create a world that is free of environmental contamination due to wastewater collection system failures. *This is the ADS Vision.*

How do we get there? We believe it can be achieved by developing solutions that allow our clients like the City of San Diego to **SEE** into your collection system like you have never been able before, to **UNDERSTAND** your system data in ways that allow for fast, valuable, and impactful decisions, allowing you to **ACT** on this information in powerful, cost effective ways.

We are honored to have the City of San Diego as a participant and partner in this vision of world free of environmental contamination.

Tab C – Cost/Price Proposal

ATTACHMENT 1 PRICING SCHEDULE													
				Initial Contract Term				Option Years					
				YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
Item No.	Description of Service	Qty.	U/M	Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price	Unit Price	Ext. Price
1	Monitor Server, Software, Servicing and Equipment. Includes testing and installation of the monitor system components. (Per Exhibit B; Section C - 2.2.2 Equipment and Software Requirements)	162	EA	\$ 8,313	\$ 1,346,706	\$ 8,313	\$ 1,346,706	\$ 8,527	\$ 1,381,406	\$ 8,792	\$ 1,424,369	\$ 9,051	\$ 1,466,223
2	Event Notification System (ENS) (Per Exhibit B; Section C - 3)	1		\$ 237,654	\$ 237,654	\$ 237,654	\$ 237,654	\$ 243,778	\$ 243,778	\$ 251,359	\$ 251,359	\$ 258,745	\$ 258,745
3	*Additional Monitor Equipment, Maintenance, and Installation	1		\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,800	\$ 12,800	\$ 13,250	\$ 13,250	\$ 13,650	\$ 13,650
4	**Uninstall/Remove current flow monitoring equipment	1		\$ 750	\$ 750	\$ 750	\$ 750	\$ 775	\$ 775	\$ 800	\$ 800	\$ 825	\$ 825

* Optional cost of installing an additional monitor above currently installed 162 meters.

** Optional cost to remove one (1) currently installed monitor if directed by City.

Section B: Additional Services for Unforeseen Conditions					
Item	Description	Quantity	U/M	Unit Price	Extension
1	Additional Services	1	LOT	\$150,000.00	\$150,000.00

Tab D – Supplemental Material / Documentation

EXPERIENCE SUMMARY

Neil has over 27 years of field and project management experience with an emphasis in wastewater collection and water distribution systems. He currently serves as Sr. Project Manager in the San Diego, CA office and is responsible for overseeing all phases of projects within a territory that includes the States of California, Hawaii, Arizona, Nevada and Utah. This includes long-term and temporary flow monitoring services, model verification, capacity studies, infiltration and inflow (I/I) analysis; sewer system evaluation surveys such as physical inspections, smoke testing, and reporting.

**Assignment**

Senior Project Manager

Education

*Mesa College, San Diego, CA. 1989
California Conservation Corps,
College of the Redwoods, 1990
Cal State University Sacramento, 1999*

Credentials/Certificates

*PMP - Project Management Institute,
2012*

Professional Associations

*Water Environment Federation
CWEA
Project Management Institute*

Experience

27 Years

Joined Firm

1993

Relevant Experience

- Successfully Managed over 400 Temporary and Permanent Sewer Flow Monitoring Projects
- Expertise in Flow Monitoring, Water Loss Control and SSES
- Software, Hardware, Data Analysis and Field Experience

RELEVANT PROJECT EXPERIENCE**City of San Diego, Sewer Flow Monitoring and Event Notification Services, San Diego, California**

Project Manager. Five-year contract with Metropolitan Wastewater worth \$5,700,000. Monitor 161 sanitary flow monitoring sites in pipes ranging from 8" to 114" on a continuous basis since 2005. Provide daily updates of flow, hydraulic performance and event notification via wireless communication to a web based data delivery platform, Flow View Operations™. Daily service summaries and 95% or better uptime performance are provided along with monthly data analysis and finalization / certification of data used for billing, modeling and overflow alarming to meet EPA requirements. Deliverables also include seasonal flow metering for I/I analysis, sewer system evaluation surveys, removing and reinstalling metering stations and as-needed services such as supplying and installing additional metering equipment.

Encina Wastewater Authority, Sewer Flow Monitoring and Event Notification Services, Carlsbad, California

Project Manager. Twenty sanitary sewer flow monitoring locations within 7 Sewer Districts on a continuous basis since 1995. Scope of work includes permanent sewer flow monitoring, comprehensive service, data analysis and event notification services. The data are used for billing, modeling, and ENS purposes as well as pump station status and third-party flow meter logging. Deliverables also include as-needed temporary flow monitoring and flow proportional sampling.

City of Las Vegas and Clark County Water Reclamation District, Permanent Sewer Flow Monitoring, Las Vegas, Nevada

Project Manager. Between thirty and ninety sanitary sewer flow monitoring sites on a continuous basis since 1997. Flow data is used for billing, modeling and flow verification during diversion activities. Scope of services includes comprehensive service, data analysis and event notification services. Deliverables also include as-needed temporary flow monitoring and removing and reinstalling monitoring stations.

Citywide Mega Metering Project, City of Phoenix, Arizona

Project Manager. One hundred and seventy sanitary sewer flow monitoring locations for a period of 30 days. Scope of work included field inspections, monitoring equipment installation and maintenance, and data analysis and reporting to assist the City with model calibration and to isolate and quantify system diversions and bypasses. Due to the success of the Mega Metering Project, follow up work was requested by the City to further identify and quantify bypasses, and to profile indoor and outdoor water use by correlating water use to its sewer flows. Data collected will assist in forecasting water demands for single-family subdivisions.

Lake Arrowhead Community Services District, Wet Weather Sewer Flow Monitoring Study, Lake Arrowhead, California

Project Manager. ADS was awarded a 10+ year wet season sewer performance and capacity evaluation project in 2012 resulting from an EPA Stipulated Order. This project involves evaluation of capacity and Rainfall Dependent Infiltration & Inflow (RDII) performance in metered tributary zones using Slicer software to assist in identifying problematic areas of their system. Challenges include varying weather and extremely small basins with low flow conditions.

City of Westminster, Dry and Wet Weather Sewer Flow Monitoring Study, Westminster, Colorado

Project Manager. ADS was sub-contracted by HDR Engineering to conduct temporary sewer flow monitoring at 41 gravity locations for a period of 7 months. This included the deployment of wireless flow monitors in lines ranging in size from 8" to 60", flow and map verification and validation of return to sewer ratio. The purpose of the study was to evaluate capacity and Rainfall Dependent Infiltration & Inflow.

City of El Cajon, Sewer System Evaluation Services, El Cajon, California,

Project Manager. ADS was contracted by the City of El Cajon to conduct 164,000 lf of sanitary sewer smoke testing as a follow-up to a system-wide flow monitoring effort to identify RDII. The project involved locating cracks, breaks and illegal connections, and after extensive investigation, over 250 defects were found which assisted the City in developing a rehabilitation plan and identifying necessary sewer repairs and replacement.

City of San Diego, Sewer System Evaluation Services, San Diego, California

Project Manager. City of San Diego Manhole Inspections Phase I-III. Scope of services included a physical inspection of over 7500 manholes in remote canyons and easements with pole-mounted cameras. The data was used to assist the City with developing a manhole rehabilitation plan.

SUMMARY OF EXPERIENCE

As a Field Supervisor, Nestor has successfully managed the field operations from beginning to end on over 50 temporary flow monitoring projects totaling more than 300 monitoring sites. These projects include studies required to obtain data for modeling, inflow and infiltration, billing, Event Notification Services (ENS), flow proportional sampling sanitary sewer evaluation services (SSES) and pump station calibrations. Nestor presently manages 14 long-term projects totaling over 350 monitoring sites.

**Assignment**

Field Supervisor

Education

*Chula Vista High School
Humanitas University
Accounting and business
management*

Experience 9 Years

Joined Firm

2012

Relevant Experience

- Successfully Managed over 50 Temporary and Permanent Sewer Flow Monitoring Projects
- Expertise in Field Management, Field Supervision, Leadership, Flow Monitoring, Water Loss Control and SSES
- Software, Hardware, Data Analysis and Field Experience
- Safety Training Coordinator
- 100% of projects have meet a 95% uptime rate or better
- Site Reports/Site Safety Plan development
- Traffic Management Development
- Field Crew Scheduling and Safety Preparation

RELEVANT PROJECT EXPERIENCE**City of San Diego, Sewer Flow Monitoring and Event Notification Services, San Diego, California**

Field Supervisor. Five-year contract with Metropolitan Wastewater worth \$5,700,000. Monitor 161 sanitary flow monitoring sites in pipes ranging from 8” to 114” on a continuous basis since 2005. Provide daily updates of flow, hydraulic performance and event notification via wireless and landline telemetry to a web-based data delivery platform, PRISM. Daily service summaries and 95% or better uptime performance are provided along with monthly data analysis and finalization / certification of data used for billing, modeling and overflow alarming to meet EPA requirements.

City of La Mesa, Sewer System Evaluation Services, La Mesa, California,

Field Supervisor. ADS was contracted by the City of Le Mesa to conduct 100,000 Ft of sanitary sewer smoke testing as a follow-up to a system-wide flow monitoring effort to identify RDII. The project involved locating cracks, breaks and illegal connections, and after extensive investigation, over 200 defects were found which assisted the City in developing a rehabilitation plan and identifying necessary sewer repairs and replacement.

Citywide Mega Metering Project, City of Phoenix, Arizona

Field Supervisor. One hundred and seventy sanitary sewer flow monitoring locations for a period of 30 days. Scope of work included field inspections, monitoring equipment installation and maintenance, and data analysis and reporting to assist the City with model calibration and to isolate and quantify system diversions and bypasses.

Encina Wastewater Authority, Sewer Flow Monitoring and Event Notification Services, Carlsbad, California

Field Supervisor. Twenty sanitary sewer flow monitoring locations within 7 Sewer Districts on a continuous basis since 1995. Scope of work includes permanent sewer flow monitoring, comprehensive service, data analysis and event notification services. The data are used for billing, modeling, and ENS purposes as well as pump station status and third-party flow meter logging. Deliverables also include as-needed temporary flow monitoring and flow proportional sampling.

EXPERIENCE SUMMARY

Jackie is one of ADS' most experienced Data Managers with demonstrated performance record spanning both field and corporate operations. Jackie has conducted numerous sewer system flow monitoring and evaluation projects involving infiltration/inflow determination, combined sewer overflow evaluations, capacity analyses, sewer system evaluation surveys and permanent flow monitoring. Her experience encompasses key project control disciplines in project scheduling and coordination, project management, analysis, data collection, and final report preparation. In addition, she has provided analysis and software training, and customer software and product support. As a data manager for ADS, Jackie is responsible for cultivating proactive team relationships, maximizing resources and ensuring that data analysis requirements for assigned projects are achieved. She independently analyzes data, which may include sanitary, combined, and storm sewer flow data. Data management responsibilities also include coordinating work assignments and schedules for a group of data analysts, conducting data reviews, data audits, quality control and assisting with training of analysis team members.



Assignment

Data Manager

TEMPORAY SEWER FLOW MONITORING & RAINFALL DEPENDENT INFLOW & INFILTRATION STUDIES

Education

*B.S., Computer Science Technology,
Alabama A&M University, 1983*

City of San Jose, Numerous Sewer Flow Monitoring Studies, San Jose, California

Experience

36 Years

Data Manager. 52 sanitary flow monitoring sites and 16 rain gauges on a continuous basis and provide daily updates of flow and hydraulic performance via wireless telemetry to a web based data delivery platform called FlowView™. Weekly service summaries and monthly uptime performance metrics are provided along with monthly data analysis and finalization / certification of data. Deliverables also includes seasonal flow metering (up to 100 meters at a time) and Rainfall Dependent Infiltration and Inflow (RDII) performance reports that provide trend analysis of dry and wet weather performance.

Joined Firm

1985

Recent additions of 68 storm system flow monitoring locations and 9 more temporary rain gauging stations will enable the City to get a better handle on their storm system model. Most of these will be re-deployed each wet season (6 months) and some new sites will be added each year for the next 5 years.

Relevant Experience

- ✓ Industry's Most Experienced Data Analyst
- ✓ Flow Monitoring Data Expert
- ✓ Software, Hardware, and Field Experience

City of Los Angeles, Wet Weather Sewer Flow Monitoring Study, Los Angeles, California

Data Manager. ADS was awarded a 2-year comprehensive sewer system performance evaluation for the City of Los Angeles, CA. This included deployment of 93 wireless flow monitors in lines ranging in size from 12-inch to 99-inch, flow and map verification, capacity evaluation, preparing an Web-based master database of flow data and capacity performance data. Rainfall Dependent Infiltration & Inflow (RDII) performance evaluations were conducted in metered tributary zones using Slicer software to assist in the preparation and calibration of their wet weather performance model.

Orange County Sanitation District, Rain Dependent Inflow and Infiltration Study, Fountain Valley, California

Data Manager. ADS was awarded a 4-year - \$6,200,000 project completed in 2005. The project involved delineation of 120 master basins and deployment of 150 wireless flow monitors to support the Cooperative Projects Program wherein RDII was targeted for reduction within the 24 Member Agencies comprising the District service area. This was the foundation project for all future RDII reduction efforts District wide.

East Bay Municipal Utility District, Wet Weather Sewer Flow Monitoring Study, Oakland, California

Data Manager. ADS was awarded a \$2.5 million, 2-wet season sewer performance and capacity evaluation project resulting from an EPA Stipulated Order. This project involved evaluation of capacity in over 100 locations and flow contributions from satellite agencies to a high standard of performance and accuracy in pipes ranging in size from 8-inch to 105-inch.

San Francisco Public Utilities Commission, Wet Weather Sewer Flow Monitoring Study, San Francisco, California

Technical Advisor. Scope includes temporary sewer flow monitoring at 109 sites for 112 days for year 1, and 32 sites for 120 days for year 2.

Port of Long Beach, Long Beach, Temporary Sewer Flow Monitoring Study, Long Beach, California,

Data Manager. ADS was sub-contracted by RBF Engineers to conduct temporary sewer flow monitoring at 25 gravity locations and 6 lift stations for a period of 3 months study for a wet period and 14 day dry study.

City of San Bernardino, Temporary Sewer Flow Monitoring Study, San Bernardino, California

Data Manager. ADS was sub-contracted by AKM Consulting Engineers to conduct temporary sewer flow monitoring at 25 gravity locations for a period of 14 days for dry weather model calibration.

Santa Cruz Count, Temporary Sewer Flow Monitoring Study, Santa Cruz, California

Data Manager. ADS was sub-contracted by ARCADIS to perform turn-key sewer and rainfall monitoring for a period of 60 days at 10 flow metering stations and 3 rain gauge stations for a Wet Season Study and 30 day monitoring period at 10 sites for the Dry Season Study

City of Santa Barbara, Rain Dependent Inflow and Infiltration Study, Santa Barbara, California

Data Manager. The project involved delineation of 40 master basins and deployment of 45 wireless flow monitors and 8 rain gauges, RDII analysis, reporting, and future SSES recommendations.

City of Burbank, Burbank, Rain Dependent Inflow and Infiltration Study, California

Data Manager. ADS was sub-contracted by Kennedy Jenks Consultants, the project involved delineation of 15 master basins and deployment of 20 wireless flow monitors and 3 rain gauges, RDII analysis, reporting, and future SSES recommendations.

City of Fullerton, Rain Dependent Inflow and Infiltration Study, Fullerton, California

Data Manager. The project involved delineation of 18 master basins and deployment of 27 wireless flow monitors and 3 rain gauges, RDII analysis, reporting, and SSES recommendations resulting in ADS performing smoke testing of 125,000 linear feet.

Midway Sanitary District, Rain Dependent Inflow and Infiltration Study, Westminster, California

Data Manager. The project involved delineation of 16 master basins and deployment of 28 wireless flow monitors and 3 rain gauges, RDII analysis, reporting, and SSES recommendations.

EXPERIENCE SUMMARY

Paul has over 31 years of technical and engineering experience with an emphasis in wastewater collection systems, municipal waste, and environmental assessment/site remediation. He currently serves as Senior Region Engineer and Project Manager. His background includes work with long-term flow monitoring services for model verification, capacity studies for siphons, pump stations, and critical sewer segments, infiltration and inflow (I/I) analysis and prioritization studies, sewer system evaluation surveys such as physical inspections, smoke testing, as well as technical reporting and presentation.

**Assignment**

Sr. Project Engineer/Manager

TEMPORAY SEWER FLOW MONITORING & RAINFALL DEPENDENT INFLOW & INFILTRATION STUDIES**Education**

B.S., Chemical Engineering - Cal State Polytechnic University Pomona, 1986

M.S. Program Core Courses, Civil/Environmental Engineering – Cal State University Long Beach, 1991

East Bay Municipal Utility District, Wet Weather Sewer Flow Monitoring Study, Oakland, California

Sr. Project Manager. Had primary responsibility for running this 109 meter, 9 rain gauge, 3 year project to identify basins with substantial I/I issues. Responsibilities for the project included cost control, ensuring deliverables were met, and oversight of all field and data analysis activities. Also prepared the final data report that was included as a deliverable to Cal EPA.

Registration

Professional Engineer, California, No 049435

Professional Engineer, Nevada, No 016878

Professional Engineer, Utah, No 8972209-2202

City of San Jose, Numerous Sewer Flow Monitoring Studies, San Jose, California

Sr. Project Manager. Fifty-two sanitary flow monitoring sites and 16 rain gauges on a continuous basis and provide daily updates of flow and hydraulic performance via wireless telemetry to a web based data delivery platform called Flowview™. Weekly service summaries and monthly uptime performance metrics are provided along with monthly data analysis and finalization / certification of data. Deliverables also include seasonal flow metering (up to 100 meters at a time) and Rainfall Dependent Infiltration and Inflow (RDII) performance reports that provide trend analysis of dry and wet weather performance.

Additions of up to 85 storm system flow monitoring locations and 9 more temporary rain gauging stations will enable the City to get a better handle on their storm system model.

Experience

32 Years

Joined Firm

2000

City of Los Angeles, Wet Weather Sewer Flow Monitoring Study, Los Angeles, California

Sr. Project Manager. ADS was awarded a 2-year comprehensive sewer system performance evaluation for the City of Los Angeles, CA. This included deployment of 93 wireless flow monitors in lines ranging in size from 12-inch to 99-inch, flow and map verification, capacity evaluation, preparing an Web-based master database of flow data and capacity performance data. Rainfall Dependent Infiltration & Inflow (RDII) performance evaluations were conducted in metered tributary zones using Slicer software to assist in the preparation and calibration of their wet weather performance model.

Relevant Experience

- ✓ Managed over 300 Temporary Sewer Flow Monitoring Projects
- ✓ Expertise in Rain Dependent Inflow and Infiltration
- ✓ Critical Site Flow verification and Capacity Evaluation Expertise

Orange County Sanitation District, Rain Dependent Inflow and Infiltration Study, Fountain Valley, California

Sr. Project Manager. ADS was awarded a 4-year - \$6,200,000 project. The project involved delineation of 120 master basins and deployment of 150 wireless flow monitors to support the Cooperative Projects Program wherein RDII was targeted for reduction within the 24 Member Agencies comprising the District service area. This was the foundation project for all future RDII reduction efforts District wide.

San Francisco Public Utilities Commission, Wet Weather Sewer Flow Monitoring Study, San Francisco, California

Technical Advisor. Scope includes temporary sewer flow monitoring at 109 sites for 112 days for year 1, and 32 sites for 120 days for year 2.

City of San Bernardino, Temporary Sewer Flow Monitoring Study, San Bernardino, California

Sr. Project Manager. ADS was sub-contracted by AKM Consulting Engineers to conduct temporary sewer flow monitoring at 25 gravity locations for a period of 14 days for dry weather model calibration.

Santa Cruz Count, Temporary Sewer Flow Monitoring Study, Santa Cruz, California

Sr. Project Manager. ADS was sub-contracted by ARCADIS to perform turn-key sewer and rainfall monitoring for a period of 60 days at 10 flow metering stations and 3 rain gauge stations for a Wet Season Study and 30 day monitoring period at 10 sites for the Dry Season Study

City of Santa Barbara, Rain Dependent Inflow and Infiltration Study, Santa Barbara, California

Sr. Project Manager. The project involved delineation of 40 master basins and deployment of 45 wireless flow monitors and 8 rain gauges, RDII analysis, reporting, and future SSES recommendations. The technical report became a foundational reference for the City for future sewer system evaluations.

City of Burbank, Burbank, Rain Dependent Inflow and Infiltration Study, California

Sr. Project Manager. ADS was sub-contracted by Kennedy Jenks Consultants, the project involved delineation of 15 master basins and deployment of 20 wireless flow monitors and 3 rain gauges, RDII analysis, reporting, and future SSES recommendations.

City of Fullerton, Rain Dependent Inflow and Infiltration Study, Fullerton, California

Sr. Project Manager. The project involved delineation of 18 master basins and deployment of 27 wireless flow monitors and 3 rain gauges, RDII analysis, reporting, and SSES recommendations resulting in ADS performing smoke testing of 125,000 linear feet.

Midway Sanitary District, Rain Dependent Inflow and Infiltration Study, Westminster, California

Sr. Project Manager. The project involved delineation of 16 master basins and deployment of 28 wireless flow monitors and 3 rain gauges, RDII analysis, reporting, and SSES recommendations.

PUBLICATION AND PRESENTATIONS

Mitchell, P.S., Enfinger, K.L., "Scattergraph Principles and Practice – Evaluating Self-Cleansing in Existing Sewers Using the Tractive Force Method" Proceedings of the World Environmental & Water Resources Congress 2010; Providence, RI; American Society of Civil Engineers: Reston, VA

Mitchell, P.S., Stevens, P.L., "Gated Cross Correlation Velocity – A Breakthrough Technology for Wastewater Flow Management" WEF Specialty Conference, Louisville, KY, 2009.

Mitchell, P.S., Stevens, P.L., Nazaroff, A., "Demystifying Base Infiltration in Sewers." WEF Specialty Conference, Detroit, MI, 2006.

Mitchell, P.S., Stevens, P.L., "How to Maximize the Value of Sewer Flow Information." ASCE Pipelines Technical Conference, Houston, TX. 2005.

EXPERIENCE SUMMARY

As Regional Manager, Mr. Piña has P&L, project, and staffing responsibility for the fourteen state West Region and Western Canada. Responsibility for the combined regions includes overall customer satisfaction and the management of approximately 35 engineering, technical, administrative, and field personnel. Mr. Piña assists Sales in project design, pricing, proposal writing, client presentations and contract negotiations.



He also serves as the Region's program manager providing management support to many large regional projects in San Diego, Los Angeles, San Jose, Seattle, British Columbia and Calgary. Mr. Piña has 20 years of ADS experience working in virtually every aspect of sewer collection system management including: hydraulic selection, meter calibration, installation, data analysis, smoke testing, physical inspections, flow isolations and micro-monitoring. Mr. Piña also serves as the Region's trainer for project management, flow monitoring and physical inspection work.

Current Assignment

Region Manager

Education

Graduate studies through University of Oklahoma in statistics and adult education 1995

*Bachelor of Science, 1989
Business Management
University of Maryland*

AAS Electronics Systems, USAF 1985

EXPERIENCE

- *20 Years ADS Environmental Services*
- *20 Years Unites States Air Force RADAR deployment, installation, repair and service*

**Joined ADS Environmental Services
2000**

Summary of Relevant Experience

- *Managed over 750 ADS projects*
- *Expert CSO, Sanitary Sewer and Drainage Flow monitoring*
- *Established First ADS office in British Columbia, Canada*

Community Activities during ADS tenure

- *Board of Directors Non-Profit - One Heart Sacred Alliance*
- *Volunteer for First Place Scholars Charter School for Homeless Students*
- *Donor and Sponsor for Community Shelter for Indigenous Women*

PROFESSIONAL EXPERIENCE

Senior Project Manager – Mr. Piña was responsible for the leadership, management, and assistance of business development of the Pacific Northwest, British Columbia, Alberta, and Manitoba provinces of Canada. He had responsibility for project implementation, schedules, budgets, pricing, logistics allocation, data review, overflow alarming to meet state regulatory requirements and quality control of projects with a yearly total of up to 700 sites valued at up to \$5 million in annual revenue.

Electronics Facility Manager – Mr. Piña was responsible for all ADS electronics repair and service resources. He scheduled work, maintained budgets, provided repair costs, and managed logistics for all ADS Spare Parts Inventory. Mr. Piña also provided recommendations and solutions to R&D, material control and to ADS contract manufacturers.

Project Experience**Seattle Public Utilities, CSO and Temporary Flow Monitoring and Event Notification Services, Seattle Washington**

Senior Project Manager – Mr. Piña's service to Seattle Public Utilities (SPU) included the ADS management of four consecutive vendor contracts valued at over \$15,000,000 from year 2006 - present. His leadership ensured an overall 99% uptime rate for SPU's CSO NPDES Permit which currently includes monitoring up to 82 permanent sites and 11 rain gauges. He has also managed over 300 temporary flow monitoring storm, drainage and sanitary sites at one time as well as managed projects providing data to improve the efficiency of many of the SPU's pump stations. This work has resulted in better than 97% uptime rates which have been instrumental toward ensuring SPU's success meeting its regulatory requirements, capacity studies, modeling efforts and the successful management of its wastewater system network.

The City of Calgary, Sanitary Sewer and Stormwater Monitoring Program, Calgary Alberta

Senior Project Manager – Mr. Piña has managed the City of Calgary’s 140 wireless sanitary sewer and stormwater monitoring network from 2014 to present. The project has been instrumental in assisting the City, decrease its inflow and infiltration issues as well provide data for the modeling, capacity evaluation, and master planning. Field service, data analysis, monthly service, reporting, and data delivered to a web-based system for client review and approval has been provided under Mr. Piña’s leadership. International operations which include regulatory, safety and operational requirements unique to this international project have all been professionally and successfully completed.

The City of Surrey, City of Vancouver, District of Metrovancouver, City New Westminster, City of Victoria, City of Maple Ridge, City of North Vancouver, and City of Burnaby Temporary Flow Monitoring Projects (2008 to present)

Senior Project Manager – Mr. Piña’s office continues to provide monitoring services for up to 75 wireless CSO, sanitary sewer and drainage temporary flow monitors in the lower mainland. Field service, data analysis, reporting and the utilization of a web-based system for client review and evaluation have been provided. International operations which include regulatory, safety and operational requirements unique to this province have been provided with a consistent 95% uptime rate.

The City of Bellevue, Somerset, and Medina Basins Micro-monitoring projects. (2019 – present)

Senior Project Manager – Mr. Piña managed projects as a subcontractor to Jacobs Engineering in the City of Bellevue. The micro-monitoring projects assisted determine areas of high I/I. Consistent uptime rates over 97% were delivered.

City of Snohomish and City of Port Angeles CSO Flow Monitoring and Event Notification Services, Washington (2006 – 2012)

Project Manager – Mr. Piña lead operations for six year and four-year contracts for the Cities of Snohomish and Port Angeles. These projects support the CSO NPDES Permit requirements by monitoring a total of 8 permanent sites and 2 rain gauges. The consistent 99% uptime rate has ensured Mr. Piña’s continued success assisting the Cities meet their Dept of Ecology regulatory requirements.

TRITON+[®]

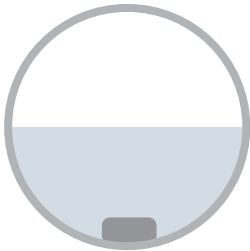
Sensor Specifications

The ADS[®] TRITON+[®] features three depths and two velocities with five sensor options. Each sensor provides multiple technologies for continuous running of comparisons.

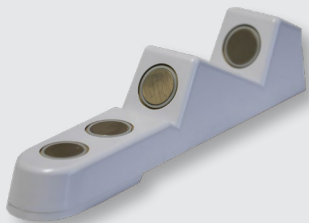


Peak Combo Sensor

This versatile and economical sensor includes three measurement technologies in a single housing: ADS-patented continuous wave *peak velocity*, *uplooking ultrasonic depth*, and *pressure depth*.

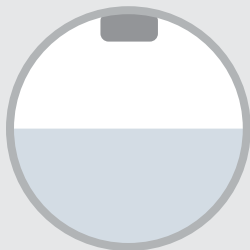


Dimensions	Height: 0.83 in (21 mm), Width: 1.23 in (31 mm), Length: 6.76 in (172 mm)
Continuous Wave Velocity	Operating Range: -30 fps to +30 fps (-9.1 m/s to +9.1 m/s) Resolution: 0.01 fps (0.003 m/s) Accuracy: +/- 0.04 fps (0.01 m/s) in velocities < 1 fps; +/- 2% of actual velocity in velocities > 1 fps (0.30 m/s) in uniform flow
Uplooking Ultrasonic Depth	Performs with rotation of up to 15 degrees from the center of the invert; up to 30 degrees rotation with Silt Mount Adapter Operating Range: 1.0 in (25 mm) to 5 ft (152 cm) Resolution: 0.01 in (0.254 mm) Accuracy: 0.5% of reading or 0.125 in (3.2 mm), whichever is greater
Pressure Depth	Operating Range Option: 0 - 05 PSI up to 11.5 ft (3.5 m) 0 - 15 PSI up to 34.5 ft (10.5 m) 0 - 30 PSI up to 69 ft (21.0 m) Resolution: 0.01 in (0.25 mm) Accuracy: +/-1.0% of full scale



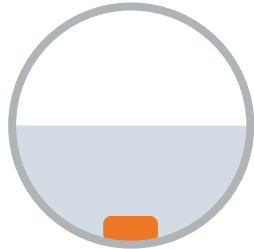
Surface Combo Sensor

This sensor features four technologies including surface velocity, ultrasonic depth, surcharge continuous wave velocity, and pressure depth.



Dimensions	Height: 2.45 in (62 mm), Width: 2.03 in (52 mm), Length: 10.61 in (269 mm)
Surface Velocity	Minimum air range: 3 in (76 mm) from bottom of rear, descended sensor Maximum air range: 42 in (107 cm) Range: 1.00 to 15 fps (0.30 to 4.57 m/s) Resolution: 0.01 fps (0.003 m/s) Accuracy: +/-0.25 fps (0.08 m/s) or 5% of actual reading (whichever is greater) in flow velocities between 1.00 and 15 fps (0.30 and 4.57 m/s)
Ultrasonic Depth	Minimum dead band: 1.0 in (25.4 mm) from the face of the sensor or 5% of the maximum range, whichever is greater Maximum operating air range: 10 ft (3.05 m) Resolution: 0.01 in (0.25 mm) Accuracy: +/- 0.125 in (3.2 mm) with 0.0 in (0 mm) drift, compensating for variations in air temperature
Surcharge Continuous Wave Velocity	<i>When submerged, this technology provides the same accuracy and range as Continuous Wave Velocity for Peak Combo Sensor</i>
Surcharge Pressure Depth	<i>When submerged, this technology provides the same accuracy and range as Pressure Depth for Peak Combo Sensor</i>

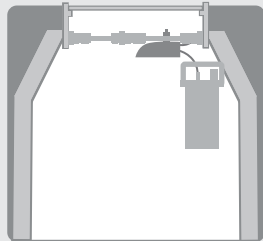
The **Ultrasonic Depth Sensor** version of this sensor specializes in depth measurement. This non-intrusive, zero-drift sensing method results in stable, accurate, and reliable flow depth calculation. Two independent ultrasonic transducers allow for independent cross-checking.



AV|GATED®

This sensor combines proven depth measurement methods with state-of-the-art gated velocity measurement technology to provide accurate and reliable area-velocity measurements to calculate accurate sewer flow rate.

Dimensions	Height: 0.825 in (21 mm), Width: 1.5 in (31 mm), Length: 7.106 in (172 mm)
Weight	2 lbs (0.91 kg)
Operating Temperature	-4° to 140° F (-20° to 60° C)
Operating Range	Ultrasonic Depth: 1 in to 72 in (2.54 cm to 182.88 cm) Pressure Depth (standard): 0 in to 277 in at 10 psi (0 cm to 703.58 cm at 10 psi) Velocity: -20 fps to +20 fps (-6.09 m/s to +6.09 m/s); minimum depth for velocity = 5 in (12.70 cm)
Accuracy	Ultrasonic Depth: ±0.125 in or ±0.5% of flow depth; whichever is greater Pressure Depth: ±1% of full range Velocity: ±0.2 fps (0.06 m/s) or ±4% of average velocity; whichever is greater
Resolution	Ultrasonic Depth: 0.01 in (0.03 cm) Pressure Depth: 0.01 in (0.03 cm) Velocity: 0.01 fps (0.003 m/s)



Long Range Depth Sensor

A narrow, powerful ultrasonic beam allows this depth sensor to perform well over long ranges. Integral Submersion Sensor provides detection of flooding at the point of interest.

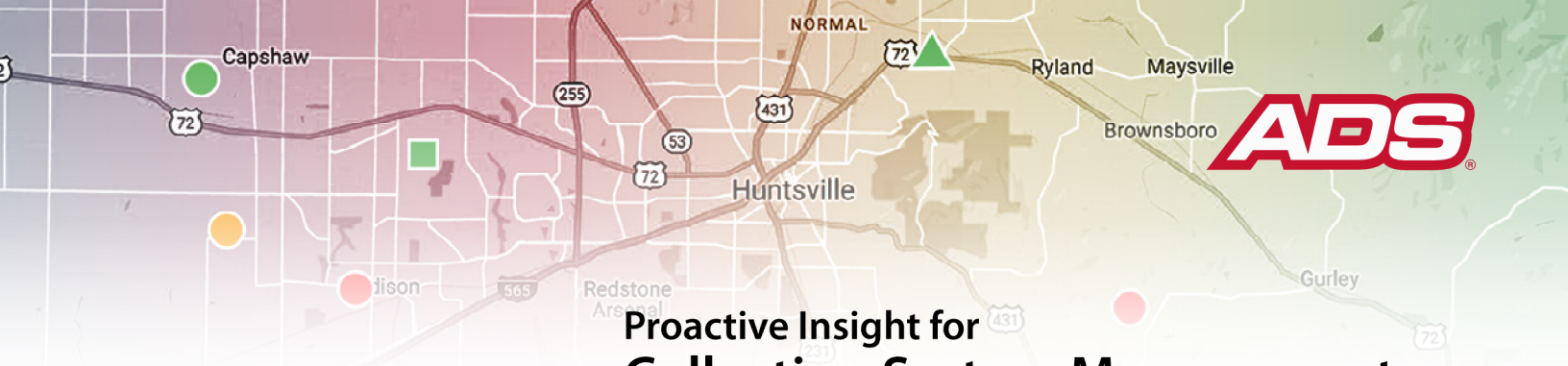
Dimensions	Height: 4.22 in (107.2 mm), Width: 4.40 in (111.8 mm), Length: 9.15 in (232.4 mm)
Long Range Ultrasonic Depth	Minimum Dead Band: 0.0 in (0.0 mm) from the bottom of sensor housing Maximum Operating Air Range: 20 ft (6.1 m) Beam Angle: +/- 3° Resolution: 0.01 in (0.24 mm) Accuracy: +/- 0.25% of sensor range measurement or 0.13 in (3.2 mm) whichever is greater, in a homogeneous temperature air column Drift: 0.0 in (0.0 mm) Temperature Compensation: Additional compensation for variable temperature air column supported
Submersion	Detects submersion when fully covered with liquid



INCLINOMETER

This sensor utilizes an integrated accelerometer to accurately determine the state of a flood gate's positioning in water control and management systems.

Dimensions	Height: 0.87 in (2.20 cm), Width: 2.03 in (5.16 cm), Length: 3.00 in (7.62 cm)
Housing	Solid molded ABS, high impact and abrasion resistant, fully sealed device
Weight	1.5 lbs (0.68 kg) including 25 ft communication cable and connector
Operating Range	0° to 90°
Accuracy	+/- 0.25 between 0° and 40°
Resolution	0° to 60° = 0.03° 60° to 90° = 0.3°
Mounting Options	Mount on flat surface of the wastewater side of closed flood gate, or a closed door or hatch for intrusion alarms Construction adhesive, stainless steel screws, zip ties, stainless steel clamp



Proactive Insight for Collection System Management

PRISM™



PRISM Transforms Your System Management

PRISM™ is a web application that puts critical data at your fingertips to support management, engineering, and operational decisions within your wastewater collection system. **PRISM** connects clients to an **ADS®** monitoring network, delivering near real-time operational intelligence on the status of your wastewater collection system. It is the fastest and easiest way to visualize the condition of your collection system. It offers dynamic analytical functions to fuel discoveries that will lead to enhanced management of your system.

System Wide Performance at a Glance

Access your data and device status on our cloud-based Collection System Management platform, **PRISM**. The home page provides immediate system insight including a map view reflecting flow, level, and rainfall monitors with location and condition details, leaderboard tiles with system status, and quick access to the data vault as well as specialized reports. The intuitive interface allows you to quickly manage alarms, check collection and device status, generate reports, and link third party data through our self-service API to automate and enhance your specific workflow.



Visualize sewer system performance through intuitive dashboards and graphical displays



Transform data into **actionable insight** with powerful analytics



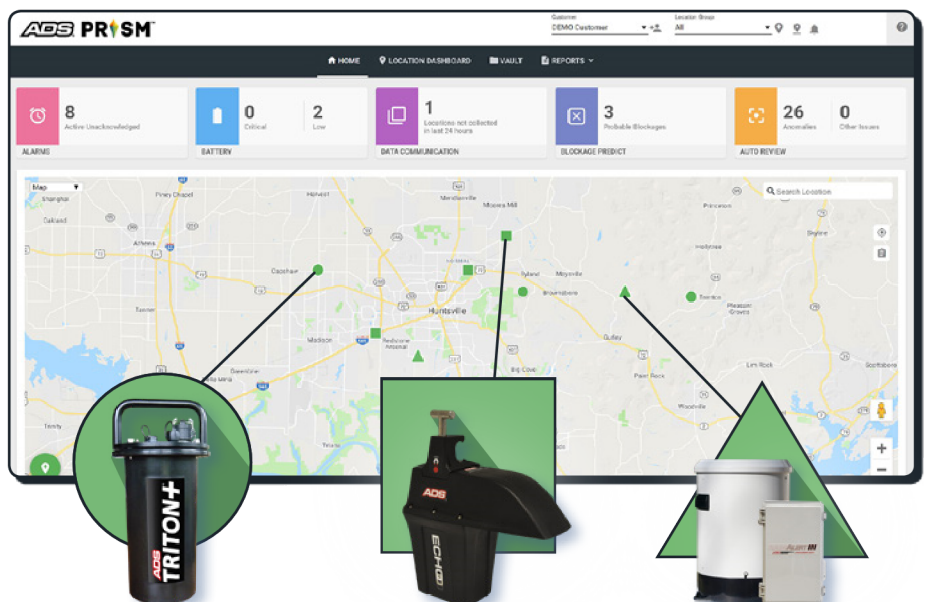
Ensure timely **performance notifications** with configurable alarms for advance notice of developing problems



Provides an **easy and transformative** user experience for sewer data management



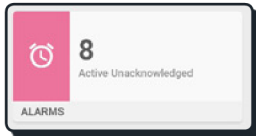
Collaborate for success by sharing data, reports, and related files among cross-functional groups



Easy, Intuitive, Actionable

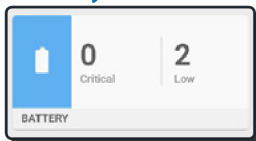
PRISM's dashboard transforms your experience. Get in-depth system analysis that places operational intelligence at your fingertips.

Alarms



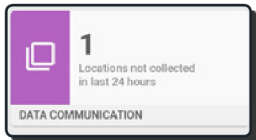
Self manage and review alarms to inform you of events, performance, and data anomalies at flow, level, or rainfall monitoring locations.

Battery Status

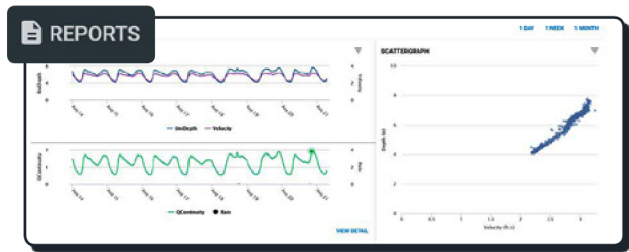


Easy battery status management ensures seamless operation of flow, level, and rainfall monitors.

Data Communication

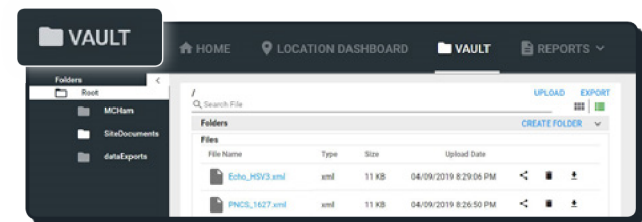


Track monitor communication status to identify any data collection problems that may arise.



Visualizing and Reporting

Graphing and reporting capabilities include side-by-side Hydrograph and Scattergraph comparisons for rapid viewing of each site's status.

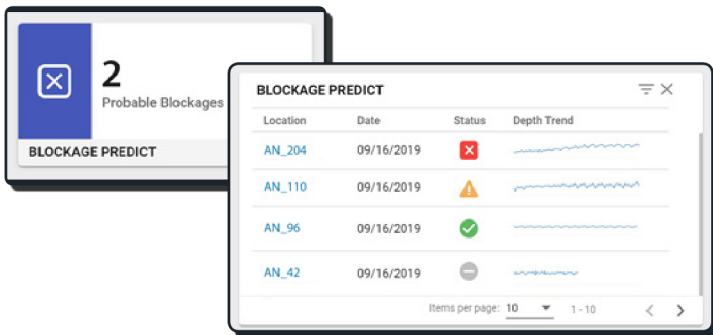


Data Vault

Upload, store, organize, and delete any files pertinent to your project. Share a time-sensitive link of your files with PRISM users or non-users.

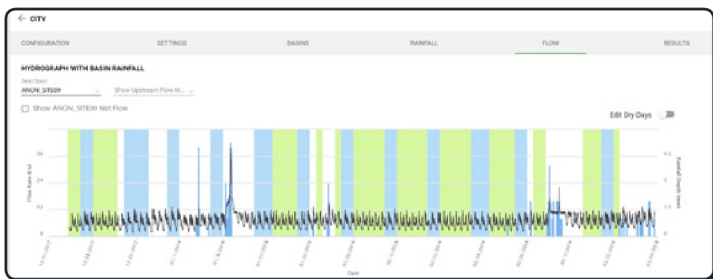
Advanced Features

ADS is introducing new advanced features so you can stay on top of your collection system with in-depth insights and specialized tools. Contact us for demos or purchase.



blockage PREDICT™

Prevent sewer overflows by coupling flow depth data with smart algorithms to sense developing sewer blockages. This *advanced machine learning* application recognizes flow anomalies and provides advance notifications so you can direct resources in a timely, cost-effective manner to pro-actively prevent sewer overflows before they become a problem.



New SLiCER™ (Q4 2019)

Together, PRISM and SLiCER provide a powerful set of online engineering tools designed to extract rigorous Dry and Wet Weather performance analytics from sewer flow and rain data with speed and precision.

PRISM Updates:
www.adsenv.com/prism-updates

Access PRISM:
www.adsprism.com

Talk to a Trained Representative:
T: 800.633.7246
E: adssales@idexcorp.com



blockage PREDICT™

Higher Performance, Less Stress

Cleaning Optimization with **blockage PREDICT™**

The Problem: Conventional Practices Are Not Working

With sewer blockages from grease, roots, sediment and debris being a leading cause of SSOs, utilities turn to a cleaning regimen. Typically, the total system is cleaned on a long-term basis while selected “hot spot” locations, each with regularly occurring build-up, are aggressively cleaned at high-frequency.

High-frequency cleaning reduces SSOs, but it comes with the unintended consequence of overcleaning. Utilities are challenged to stay on schedule with limited resources. Moreover, flow behavior changes between cleanings cannot be detected. Aging pipes raise another concern when regularly exposed to high-pressure sprays.

Relief Through a Smarter Method

New relief is being realized with smart technology where remote site monitoring coupled with advanced machine learning (ML) algorithm enables utilities to have continuous collection system visibility. The new, patent-pending **blockage PREDICT™** web app, analyzes all monitored, remote site conditions and identifies developing blockages in their earliest stage, giving the utility advance notice long before problems occur.

CLOUD STORAGE & COMPUTING

PRISM™ Cloud Computing Platform



ANALYZE



blockage PREDICT™ Machine Learning (ML)

ACQUIRE REMOTE DATA



TRITON+® Flow Monitor



ECHO™ Level Monitor



RainAlert III® Rainfall Monitor

VIEW ANALYZE REPORT



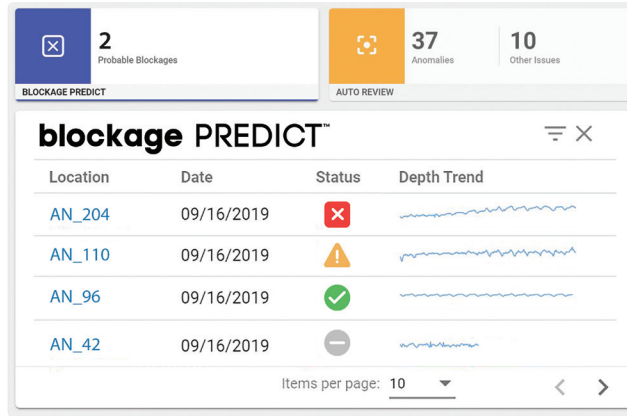
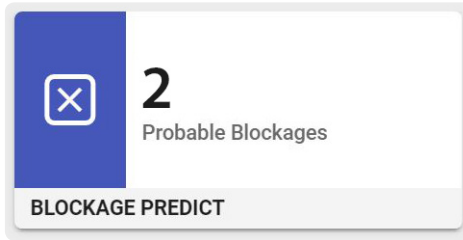
INTERFACE ADS PRISM™







Informed Actionable Decisions: **CLEAN!**

Easy, Fast Viewing

Login to ADS' PRISM™ cloud-based software to access the **blockage PREDICT** results.



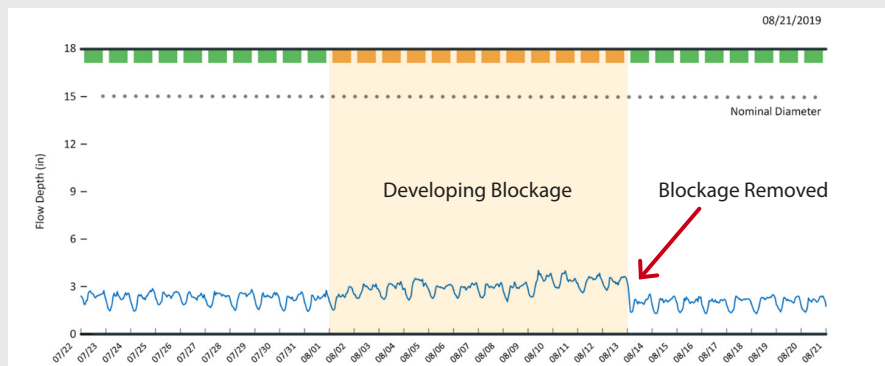
The blockage status of each location is conveyed by one of four simple icons:

-  **GREEN:** A blockage is not detected based on the ML algorithm. There is no urgency, and no action is needed. You can breathe easy.
-  **YELLOW:** A blockage is probable based on the ML algorithm and is in an early stage of development before the sewer has surcharged. The response urgency level is **proactive**, and you may have a few days to a week or more to intervene and prevent an SSO.
-  **RED:** A blockage is probable based on the ML algorithm and is in a more advanced stage of development after the sewer has surcharged. The response urgency level is **reactive**, and you may have a few days or less to intervene and prevent an SSO.
-  **GRAY:** Analysis did not run on this site. The ML algorithm has not yet run or does not have any data to evaluate for this date. If this continues, you may want to check the connection or condition of your monitor.

Case Study


A developing blockage was identified by **blockage PREDICT** and tracked over a 12-day period (note green turning to yellow on upper the bar). **blockage PREDICT** identified the initial level change anomaly and tracked the overall 1-inch change in this 15" pipe. Advanced detection meant that the utility simply scheduled a field crew to investigate the site.

What did they find? A stick was discovered lodged and collecting debris at the outgoing sewer pipe. Once removed, flow conditions returned to normal as evidenced on the hydrograph. This utility appreciated the value of **blockage PREDICT's** ability to identify a developing issue and avoid a more severe outcome.



 **Learn About Blockage Prediction:**
www.adsenv.com/blockagepredict

 **Sewer Cleaning Optimization Video:**
www.adsenv.com/video-library/

 **Call: 800.633.7246**
Email: adssales@idexcorp.com

Trusted Solutions for Level Monitoring

ECHO™



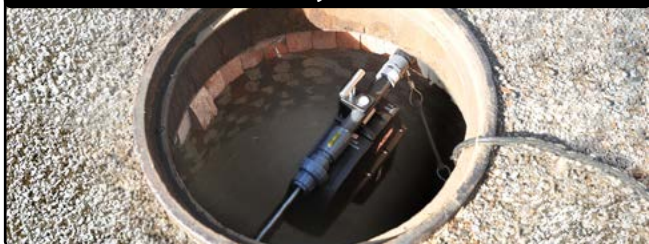
Level Monitoring for Open Channel Flows

The ADS® **ECHO**™ is an all-new generation level monitor. It gives users up to 10X more monitoring range and uses machine learning software to predict overflows long before they occur.

Coupled with its wide range of uses and low cost, **ECHO** is the leading solution for level monitoring applications.

Collection Systems, Plants, Surface and Storm Water Structures

Sanitary Sewers



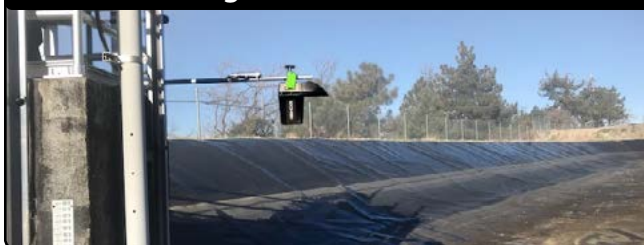
Combined Sewers



Wastewater Treatment Plants



Lagoons and Ponds



Rivers and Streams



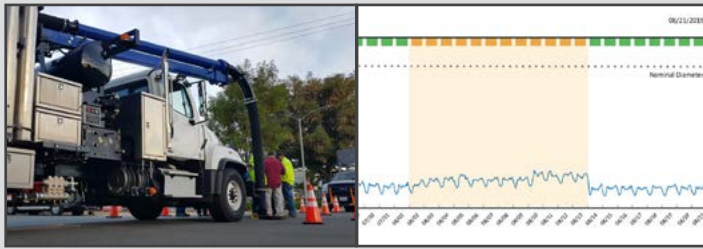
Canals



The Wide Range of ECHO Applications Gives You Flexibility

Operations, Engineering, Planning, Modeling, and Contractor Professionals

Efficient Cleaning Process



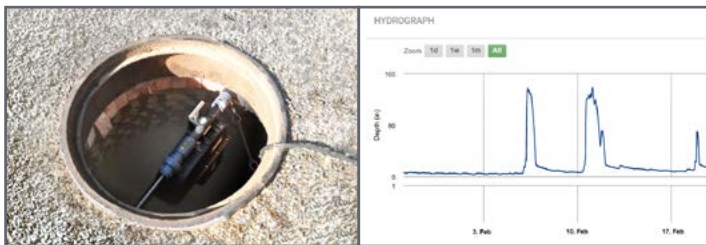
Reduce cleaning frequency and mitigate SSOs with continuous monitoring and blockage prediction software.

CSO Data and Reporting



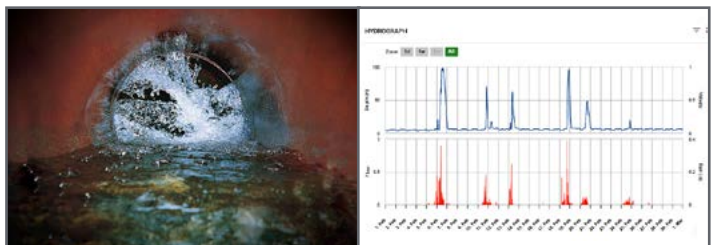
Monitor CSO activation and de-activation in real-time. Calculate overflows, prepare reports.

Hydraulic Model Validation



Acquire data for updating and validating hydraulic models. Low cost means higher sensor density.

I/I Scouting



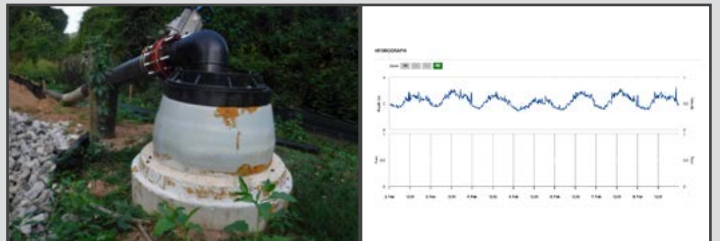
TRITON+® flow monitor, **PRISM**™ software and field services coupled with **ECHO** comprise a comprehensive I/I assessment solution.

Wastewater Pump Station Back-up



Avoid pump station overflows from power failures, partial pump blockages or failed alarms with ECHO back-up.

Bypass Monitoring



Secure 24/7 protection from overflows with bypass monitoring.

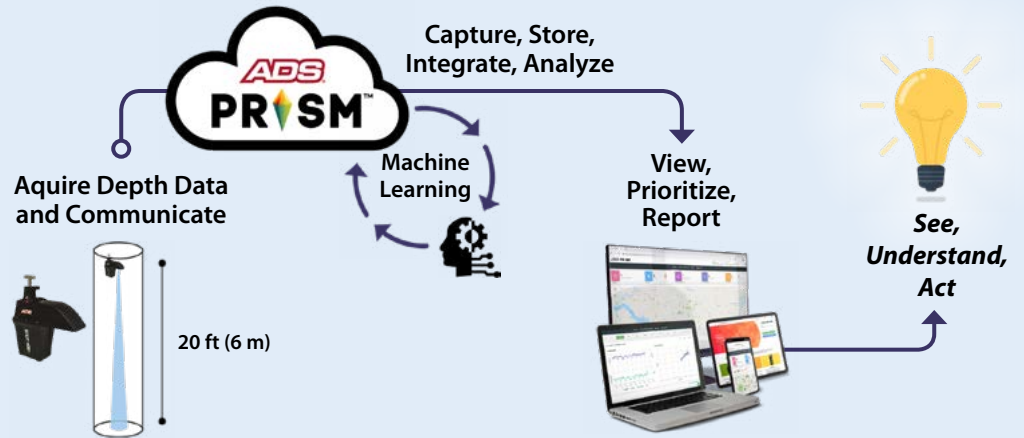
New SSO Mitigation Advancements Give You More Assurance



- ECHO is more advanced, less expensive
- Superior redundancy - five water-level alarms
- Simultaneous up/downstream monitoring
- Total Manhole Visibility™ 20 ft (6 m) below, 8 ft (2.5 m) above **ECHO**
- True readings with sensor alignment alarm, stable mount

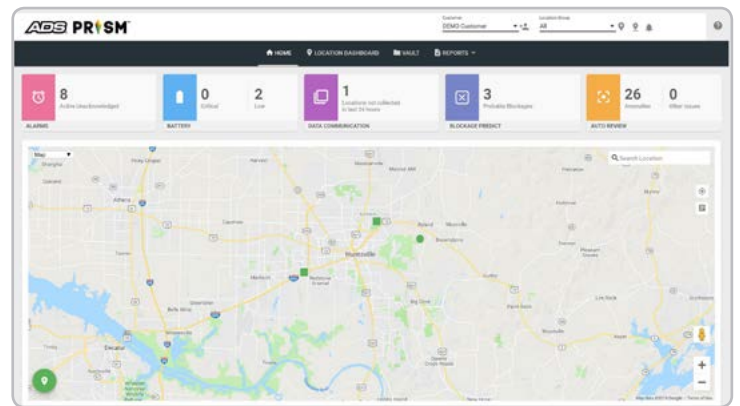
Continuous Monitoring Drives Informed Actions

Real-time depth data is collected and communicated to the cloud-based **PRISM** software and analytics. With continuous user access, informed actions are enabled.



ABS PRISM™ Software Enhances Understanding

PRISM is a cloud-based, secure software system that acquires, stores and presents data with ongoing user access. Its home page (right) provides a map view and a dashboard for quick access to essential parameters. Individual site details, hydrographs and remote site system settings are all accessible. **PRISM** APIs enable third party data exchange.



PRISM's new **blockage PREDICT™** app (below) uses machine learning and will predictively detect blockages, with days' or weeks' worth of warning. When detected, blockages are presented in the dashboard.

Dashboard Reveals Prioritized List

2
Probable Blockages
BLOCKAGE PREDICT

blockage PREDICT lists prioritized, colored-coded symbols and access to details for sites of interest (below).

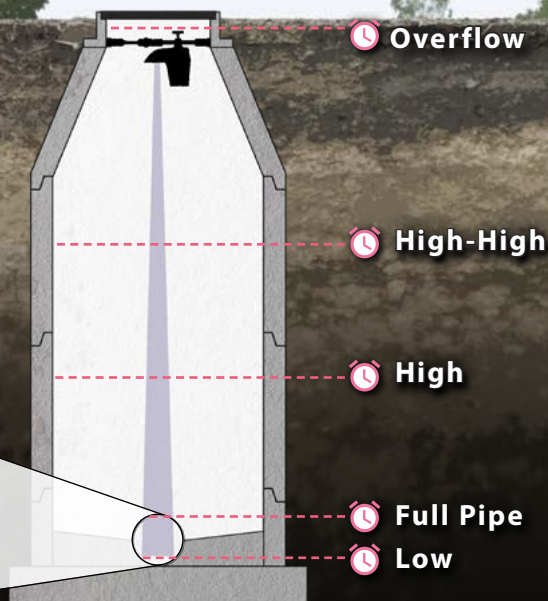
Location	Date	Status	Depth Trend
AN_204	09/16/2019	✘	
AN_110	09/16/2019	⚠	
AN_96	09/16/2019	✔	

Real-Time Alarms

5
Active Unacknowledged
ALARMS

Dashboard summarizes Alarms and gives access details. Five redundant SSO alarms (below) guard against fast developing events.

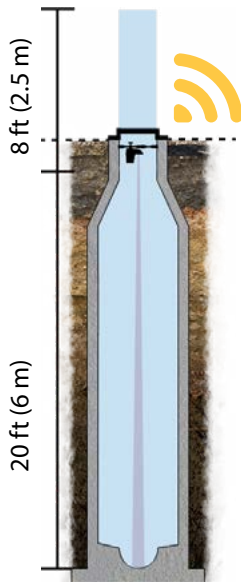
- Advanced Blockage ✘
- Developing Blockage ⚠
- No Blockage ✔



The ECHO Difference Means New Standards in Performance:

New LTE-M communications
 LTE-M communications provide improved reliability often allowing the antenna to be installed in the manhole, eliminating drilling. Set-up is fast and easy, taking just minutes.

Total manhole visibility
 Typical ultrasonic sensors' measurement range is 2 ft (60 cm) into an 8 in (20 cm) pipe. **ECHO's** unique narrow beam technology provides 20 ft (6 m). Its pressure sensor provides 8 ft (2.5 m) measurement range above **ECHO**.



ECHO System Components:



Installation Options:

ECHO with Tension Bar Installation



Wall Mount Bracket and Bar



The ADS **ECHO** installs quickly making it easy to move from one location to another.

Adjustable Tension Bar



SPECIFICATIONS	
System	dual-measurement sensor (ultrasonic and pressure), tilt alarm for sensor alignment, battery powered, wireless communication
Software	PRISM , cloud-based with data storage, dashboard, analytics and reports
Modem	universal for all SIM cards
Communications	LTE-M, 3G/4G / Worldwide MODEM
Battery Life	2-years (average)
Submersible	meets IP68
Manufacturing Standard	ISO-9001
Intrinsically Safe	CE, CSA, ATEX and IECEx certifications Multiple intrinsic safety certifications set the ADS ECHO apart with an intense focus on safety

Tailored, Affordable Purchase Programs

Purchase

The ADS **ECHO** can be purchased bundled with communications and software. Every **ECHO** comes with a two-year product warranty.

D-Site Turn-Key Service

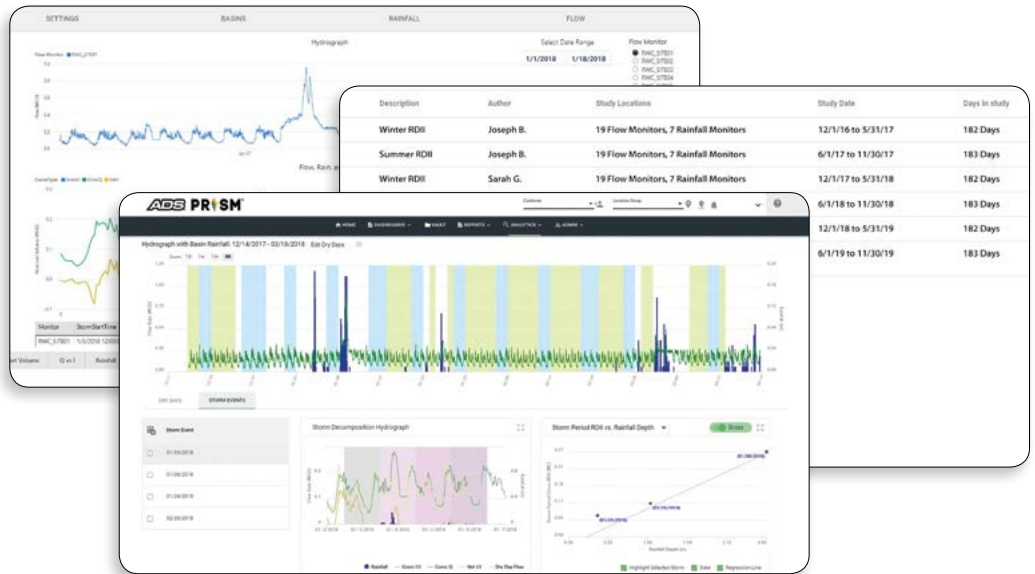
ADS takes care of your monitoring network including equipment, software, and onsite maintenance through one low monthly fee.



2 Year Warranty

Our two-year warranty gives you added assurance of its quality and reliability.

SLiCER™



The Future of I/I Analytics

SLiCER™ is the Newest ADS I/I Analytics App

The new **SLiCER** in **PRISM™** puts the power and control of your Infiltration and Inflow (I/I) studies directly in your hands, providing the industry's most trusted and complete I/I evaluation solution. **SLiCER** makes it easy to evaluate your entire collection system as a single solution, tracking down I/I to guide rehabilitation programs, eliminate overflows, and validate results. The **SLiCER** app, as a valuable addition to the ADS **PRISM** platform, leverages the power of seamless data integration, trusted analytics, and flexible reporting in a single, unified platform.

Use SLiCER to See, Understand, and Act

Make ADS your wet weather expert and partner for I/I removal projects with SLiCER. Collect accurate data for technical assignments that require rigorous and defensible analysis. SLiCER provides you the answers to difficult questions regarding your wastewater collection system performance.



SLiCER Users

Municipal Engineers

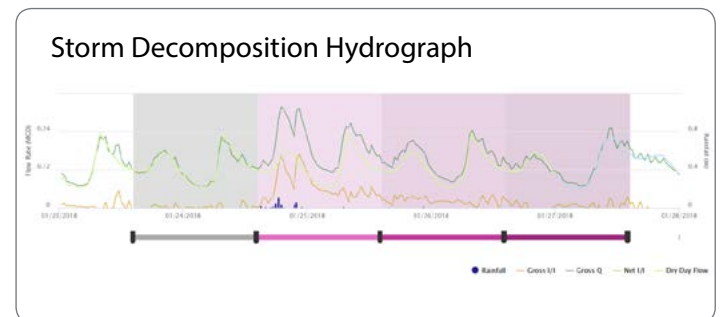
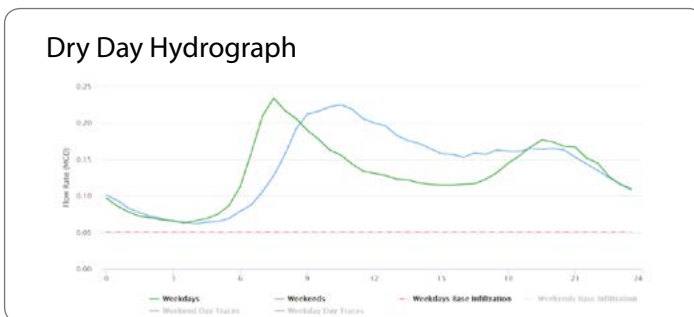
Answer wet weather questions and track sewer performance with SLiCER. Get the answers you need quickly and get back to the rest of your work day.

- Answer sewer performance storm-by-storm
- Understand rainfall return frequencies
- Get results quickly

Consulting Engineers

SLiCER's powerful analytics keep you focused on engineering tasks with automated, industry-accepted methods that provide a rigorous and defensible analysis.

- Vary assumptions, visualize results, and apply engineering judgment
- Take your results with you, and leverage them in reports, presentations, and hydraulic models



Use SLiCER to gain actionable insight for:

- Rainfall Analysis
- RDII Calculations
- Rainfall Depth-Duration-Frequency (DDF)
- Storm-by-Storm RDII
- System-wide RDII
- Q vs. i Relationships
- Seasons and Regimes - *Coming 2020*
- RTK and More - *Coming 2020*

QUALITY MANAGEMENT SYSTEM CERTIFICATE

This is to Certify that the Quality Management System of

ADS LLC

340 The Bridge Street
Suite 204
Huntsville
AL 35806
USA

has been assessed by Sira Certification Service
and found to comply with

ISO 9001:2015

for the

Design, development and manufacture of equipment (including intrinsically safe products)
for measuring and collecting fluid data in pipe and channel systems. Certification
encompasses customer support including: installation, data analysis and repair services.

Certificate No: 940056
Date of Initial Certification: 29 November 2017
Date of Issue/Reissue: 29 November 2017
Renewal Due: 13 August 2018



On behalf of SCS



0011



This certificate is subject to the company maintaining its system to the required standards, which will be monitored by Sira.
The use of this Certificate and the Sira Certification Mark are subject to the Regulations Applicable to Holders of Sira Certificates.

Sira Certification Service

This certificate is the property of Sira and shall be returned when requested. It may only be reproduced in its entirety and without change.
Unit 6 Hawarden Industrial Park, Hawarden, CH5 3US, UK Email: management.systems@csagroup.org

Contractor Information

Legal Entity Name ADS CORP.
 Corporation
 Active
 1000016715
 7/1/2021
 6/30/2022
 340 THE BRIDGE STREET, SUITE 204 HUNTSVILLE 35806 AL United States of America
 340 THE BRIDGE STREET, SUITE 204 HUNTSVILLE 35806 AL United States of America

 ADS ENVIRONMENTAL SERVICES
 CSLB:911453
 CSLB:911453

Legal Entity Information

Corporation Number:
Federal Employment Identification Number:
President Name: Brian Truesdale
Vice President Name: Netta Washington
Treasurer Name: JOSEPH J. GOUSTIN
Secretary Name: DENISE CADE
CEO Name: Brian Truesdale

Agent of Service Name: CT CORPORATION SYSTEM
Agent of Service Mailing Address: 818 WEST SEVENTH STREET LOS ANGELES 90017 CA United States of America

Workers Compensation

Do you lease employees through Professional Employer Organization (PEO)?: Yes
Please provide your current workers compensation insurance information below:

PEO InformationName	PEO MTSI	PEO Phone	(256) 880-0446	PEO Email

Insured by Carrier
Policy Holder Name: ADS CORP.
Insurance Carrier: LIBERTY INSURANCE CORPORATION
Policy Number: WA7-68D-004088-511
Inception date: 1/1/2021
Expiration Date: 1/1/2022

[Home](#) | [Online Services](#) | License Details

Contractor's License Detail for License # 911453

DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

- ▶ CSLB complaint disclosure is restricted by law ([B&P 7124.6](#)) If this entity is subject to public complaint disclosure click on link that will appear below for more information. Click [here](#) for a definition of disclosable actions.
- ▶ Only construction related civil judgments reported to CSLB are disclosed ([B&P 7071.17](#)).
- ▶ Arbitrations are not listed unless the contractor fails to comply with the terms.
- ▶ Due to workload, there may be relevant information that has not yet been entered into the board's license database.

Business Information

A D S CORP
340 THE BRIDGE ST STE 204
HUNTSVILLE, AL 35806
Business Phone Number:(256) 430-3366

Entity Corporation
Issue Date 02/28/2008
Expire Date **02/29/2024**

License Status

This license is current and active.

All information below should be reviewed.

Classifications

[A - GENERAL ENGINEERING](#)

Bonding Information

Contractor's Bond

This license filed a Contractor's Bond with [AMERICAN CONTRACTORS INDEMNITY COMPANY](#).

Bond Number: SC1047044

Bond Amount: \$15,000

Effective Date: 01/01/2016

[Contractor's Bond History](#)

Bond of Qualifying Individual

This license filed Bond of Qualifying Individual number **354225910** for PAUL SCOTT MITCHELL in the amount of **\$12,500** with [LIBERTY MUTUAL INSURANCE COMPANY](#).

Effective Date: 05/20/2021

Workers' Compensation

This license has workers compensation insurance with the [LIBERTY INSURANCE CORPORATION](#)

Policy Number:WA768D004088512

Effective Date: 01/01/2022

Expire Date: 01/01/2023

[Workers' Compensation History](#)

RESOLUTION NUMBER R- 314321

DATE OF FINAL PASSAGE SEP 21 2022

A RESOLUTION OF THE COUNCIL OF THE CITY OF SAN DIEGO TO APPROVE A FIVE-YEAR AGREEMENT WITH ADS CORPORATION FOR WASTEWATER FLOW MONITORING EQUIPMENT, SOFTWARE, AND SERVICES (RFP 10089830-22-J) AND RELATED ACTIONS.

WHEREAS, the City of San Diego (City) Public Utilities Department (PUD) manages and operates the City's own Municipal wastewater collection and treatment system (Muni System); and

WHEREAS, the City also manages and operates the wastewater collection and treatment system for the Metropolitan area of southwestern San Diego County (Metro System), consisting of 15 cities and districts (Participating Agencies), including the City of San Diego; and

WHEREAS, each Participating Agency maintains its own wastewater collection system, which ties into the City wastewater system, which also conveys and treats wastewater for other large facilities, including state and county prisons and military installations; and

WHEREAS, on November 24, 2021, PUD issued RFP 10089830-22-J, for Wastewater Flow Monitoring Equipment, Software and Services, and the City received and evaluated three responsive proposals, with ADS Corporation selected as the top ranked proposer based on the evaluation criteria of the RFP; and

WHEREAS, under the terms of the proposed agreement, ADS will provide sewer flow monitoring services which includes equipment, installation, repair, and maintenance services that are used for revenue billing, sewer modeling and early warning alarms for sewer spill detections

for a period of two years, with three one-year options for a total not to exceed amount of \$9,041,042 (Agreement); and

WHEREAS, the total not-to-exceed amount for the Agreement is \$9,041,042, and expenditures under the Agreement are estimated to be spent and funded over five years as follows:

FY2023: \$1,748,360.00 (Muni = \$718,400.40; Metro = \$1,029,959.60)

FY2024: \$1,748,360.00 (Muni = \$718,400.40; Metro = \$1,029,959.60)

FY2025 through FY2027 (Option Years 1-3): \$5,544,322.00 (Muni = \$2,162,285.20; Metro = \$3,382,036.80); and

WHEREAS, the Office of the City Attorney has drafted this Resolution based on the information provided by City staff, with the understanding that this information is complete, true, and accurate; NOW, THEREFORE,

BE IT RESOLVED, by the City Council of the City of San Diego, that:

1. That the Mayor, or his designee, is authorized to execute the five-year Agreement with ADS Corporation for Wastewater Flow Monitoring Equipment, Software and Services, for an amount not to exceed \$3,496,720.00 for the first two (2) years with three (3) one (1) year options, for a cumulative total not to exceed \$9,041,042.00, under the terms and conditions set forth in the Agreement on file in the Office of the City Clerk as Doc. No. RR- 314321.

2. That the Chief Financial Officer is authorized to expend funds in an amount not to exceed a total amount of \$9,041,042.00, with an estimated amount of \$3,599,086.00 to be paid from Fund 700000, Muni Sewer Revenue, and an estimated amount of \$5,441,956.00 to be paid from Fund 700001, Metro Sewer Utility, contingent upon the adoption of the Annual

Appropriation Ordinance for the applicable fiscal year, and contingent upon the Chief Financial Officer first furnishing one or more certificates certifying that funds necessary for expenditure are, or will be, on deposit with the City Treasurer.

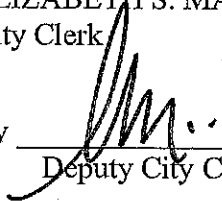
APPROVED: MARA W. ELLIOTT, City Attorney

By /s/ Raymond C. Palmucci
Raymond C. Palmucci
Deputy City Attorney

RCP:cw
08/22/22
Or.Dept: PUD
CC No. 3000014980
Doc. No.: 3068358

I certify that the foregoing Resolution was passed by the Council of the City of San Diego, at this meeting of SEP 13 2022

ELIZABETH S. MALAND
City Clerk

By 
Deputy City Clerk

Approved: 9/20/22
(date)


TODD GLORIA, Mayor

Vetoed: _____
(date)

TODD GLORIA, Mayor

The City of San Diego
COMPTROLLER'S CERTIFICATE

CERTIFICATE OF UNALLOTTED BALANCE

ORIGINATING CC 3000014980
 DEPT. NO.: 2000

I HEREBY CERTIFY that the money required for the allotment of funds for the purpose set forth in the foregoing resolution is available in the Treasury, or is anticipated to come into the Treasury, and is otherwise unallotted.

Amount: _____

Purpose: _____

Date: _____ By: _____
 COMPTROLLER'S DEPARTMENT

ACCOUNTING DATA									
Doc. Item	Funded Program	Fund	Grant Number	G/L Account	Functional Area	Business Area	Fund Center or Cost Center	Internal Order or WBS Element	Original Amount
TOTAL AMOUNT									

FUND OVERRIDE

CERTIFICATION OF UNENCUMBERED BALANCE

I HEREBY CERTIFY that the indebtedness and obligation to be incurred by the contract or agreement authorized by the hereto attached resolution, can be incurred without the violation of any of the provisions of the Charter of the City of San Diego; and I do hereby further certify, in conformity with the requirements of the Charter of the City of San Diego, that sufficient moneys have been appropriated for the purpose of said contract, that sufficient moneys to meet the obligations of said contract are actually in the Treasury, or are anticipated to come into the Treasury, to the credit of the appropriation from which the same are to be drawn, and that the said money now actually in the Treasury, together with the moneys anticipated to come into the Treasury, to the credit of said appropriation, are otherwise unencumbered.

Not to Exceed: \$1,748,360.00

Vendor: ADS Corp.

Purpose: To authorize the expenditure of funds, not to exceed \$1,748,360.00, to ADS Corp. for Wastewater Flow Monitoring Equipment, Software and Services REBID - (RFP 10089830-22-J).

Date: July 8, 2022 By: Elizabeth Warnock
 COMPTROLLER'S DEPARTMENT

ACCOUNTING DATA									
Doc. Item	Funded Program	Fund	Grant Number	G/L Account	Functional Area	Business Area	Fund Center	IO or WBS Element	Original Amount
001	Non-Program	700000	N/A	512055	OTHR-00000000-SU	2000	2000181511	N/A	\$699,541.80
001	Non-Program	700000	N/A	512055	OTHR-00000000-SU	2000	2000191231	N/A	\$18,858.60
001	Non-Program	700001	N/A	512055	OTHR-00000000-SU	2000	2000111213	N/A	\$929,183.00
001	Non-Program	700001	N/A	512055	OTHR-00000000-SU	2000	2000191231	N/A	\$100,776.60
TOTAL AMOUNT									\$1,748,360.00

FUND OVERRIDE

Passed by the Council of The City of San Diego on SEP 13 2022, by the following vote:

Councilmembers	Yeas	Nays	Not Present	Recused
Joe LaCava	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jennifer Campbell	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stephen Whitburn	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monica Montgomery Steppe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marni von Wilpert	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chris Cate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Raul A. Campillo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vivian Moreno	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sean Elo-Rivera	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Date of final passage SEP 21 2022.

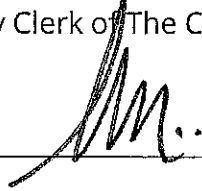
(Please note: When a resolution is approved by the Mayor, the date of final passage is the date the approved resolution was returned to the Office of the City Clerk.)

AUTHENTICATED BY:

TODD GLORIA
Mayor of The City of San Diego, California.

(Seal)

ELIZABETH S. MALAND
City Clerk of The City of San Diego, California.

By , Deputy

Office of the City Clerk, San Diego, California
Resolution Number R- <u>314321</u>

Passed by the Council of The City of San Diego on September 13, 2022, by the following vote:

YEAS: LACAVA, CAMPBELL, WHITBURN, MONTGOMERY STEPPE, VON WILPERT, CATE, CAMPILLO, & ELO-RIVERA.
NAYS: NONE.
NOT PRESENT: MORENO.
RECUSED: NONE.

AUTHENTICATED BY:

TODD GLORIA

Mayor of The City of San Diego, California

ELIZABETH S. MALAND

City Clerk of The City of San Diego, California

(Seal)

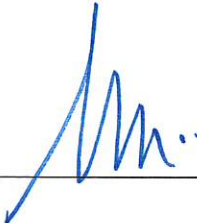
By: Matthew R. Hilario, Deputy

I HEREBY CERTIFY that the above and foregoing is a full, true, and correct copy of RESOLUTION NO. R-314321 approved on September 13, 2022. The date of final passage is September 21, 2022.

ELIZABETH S. MALAND

City Clerk of the City of San Diego, California

(Seal)

By:  _____, Deputy